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Lamezia Terme (CZ), 29/10/2020

Ubicazione:
Gizzeria Marina (cz)
via "Amerigo Vespucci"

Richiedente:
COMUNE DI GIZZERIA

PROGETTO DEFINITIVO

OGGETTO: *Lavori di demolizione e ricostruzione dell'Istituto Tecnico Agrario A.Pugliese*

Ing. Dario Arcieri

Ing. Raffaele Mastroianni

Arch. Antonio BUONO

CO.MA.TE.C. SRL

ST03_RELAZIONE DI CALCOLO STRUTTURALE E FASCICOLI DEI CALCOLI

REV.	DATA	DESCRIZIONE	REDATTO	VERIFICATO	APPROVATO

IL RESPONSABILE UNICO DEL PROCEDIMENTO: Ing. Domenico MAZZOCCA

PRO_SAP

PROfessional Structural Analysis Program

Relazione di calcolo strutturale impostata e redatta secondo le modalità previste nel D.M. 17 Gennaio 2018 cap. 10 “Redazione dei progetti strutturali esecutivi e delle relazioni di calcolo”.

Origine e Caratteristiche dei Codici di Calcolo	
Codice di calcolo:	PRO_SAP PROfessional Structural Analysis Program
Versione:	PROFESSIONAL (build 2020-09-190)
Produttore- Distributore:	2S.I. Software e Servizi per l’Ingegneria s.r.l. Via Garibaldi, 90 44121 Ferrara FE (Italy) Tel. +39 0532 200091 www.2si.it
Codice Licenza:	Licenza dsi4693

Descrizione	
Progetto	Lavori di demolizione e ricostruzione dell'Istituto Tecnico Agrario A.Pugliese
Ubicazione	Comune di GIZZERIA (CZ) (Regione CALABRIA)
	Località GIZZERIA (CZ)
	Longitudine 16.152, Latitudine 38.968
Progettista	CO.MA.TE.C. SRL

In merito al punto 10.2 delle Norme Tecniche per le Costruzioni (*Affidabilità dei codici utilizzati*), si fa riferimento al **Documento di Affidabilità** “Test di validazione del software di calcolo PRO_SAP e dei moduli aggiuntivi PRO_SAP Modulo Geotecnico, PRO_CAD nodi acciaio e PRO_MST” - versione Agosto 2020, disponibile per il download sul sito: https://www.2si.it/it/prodotti/affidabilita/

INTESTAZIONE E CONTENUTI DELLA RELAZIONE

Progetto
LAVORI DI DEMOLIZIONE E RICOSTRUZIONE DELL'ISTITUTO TECNICO AGRARIO A.PUGLIESE

Contenuti della relazione:
RELAZIONE DI CALCOLO STRUTTURALE
- Origine e Caratteristiche dei Codici di Calcolo
- Affidabilità dei codici utilizzati
- Validazione dei codici
- Tipo di analisi svolta
- Modalità di presentazione dei risultati
- Informazioni generali sull'elaborazione
- Giudizio motivato di accettabilità dei risultati
STAMPA DEI DATI DI INGRESSO
- Normative prese a riferimento
- Criteri adottati per le misure di sicurezza
- Criteri seguiti nella schematizzazione della struttura, dei vincoli e delle sconessioni
- Interazione tra terreno e struttura
- Legami costitutivi adottati per la modellazione dei materiali e dei terreni
- Schematizzazione delle azioni, condizioni e combinazioni di carico
- Metodologie numeriche utilizzate per l' analisi strutturale
-Metodologie numeriche utilizzate per la progettazione e la verifica degli elementi strutturali
STAMPA DEI RISULTATI

Il Progettista:

30 dicembre 2020

RELAZIONE DI CALCOLO STRUTTURALE

Premessa

La presente relazione di calcolo strutturale, in conformità al §10.1 del DM 17/01/18, è comprensiva di una descrizione generale dell'opera e dei criteri generali di analisi e verifica. Segue inoltre le indicazioni fornite al §10.2 del DM stesso per quanto concerne analisi e verifiche svolte con l'ausilio di codici di calcolo.

Nella presente parte sono riportati i principali elementi di inquadramento del progetto esecutivo riguardante le strutture, in relazione agli strumenti urbanistici, al progetto architettonico, al progetto delle componenti tecnologiche in generale ed alle prestazioni attese dalla struttura.

Descrizione generale dell'opera

Descrizione generale dell'opera	
Fabbricato ad uso	
Ubicazione	Comune di GIZZERIA (CZ) (Regione CALABRIA)
	Località GIZZERIA (CZ)
	Longitudine 16.152, Latitudine 38.968
Numero di piani	Fuori terra
	Interrati
	le dimensioni dell'opera in pianta sono racchiuse in un rettangolo di

Parametri della struttura			
Classe d'uso	Vita Vn [anni]	Coeff. Uso	Periodo Vr [anni]
III	50.0	1.5	75.0

Quadro normativo di riferimento adottato

Le norme ed i documenti assunti quale riferimento per la progettazione strutturale vengono indicati di seguito.

Nel capitolo "normativa di riferimento" è comunque presente l'elenco completo delle normative disponibili.

Progetto-verifica degli elementi	
Progetto cemento armato	D.M. 17-01-2018
Progetto acciaio	D.M. 17-01-2018
Progetto legno	D.M. 17-01-2018
Progetto muratura	D.M. 17-01-2018
Azione sismica	
Norma applicata per l' azione sismica	D.M. 17-01-2018

Azioni di progetto sulla costruzione

Nei capitoli "modellazione delle azioni" e "schematizzazione dei casi di carico" sono indicate le azioni sulla costruzioni.

Nel prosieguo si indicano tipo di analisi strutturale condotta (statico,dinamico, lineare o non lineare) e il metodo adottato per la risoluzione del problema strutturale nonché le metodologie seguite per la verifica o per il progetto-verifica delle sezioni. Si riportano le combinazioni di carico adottate e, nel caso di calcoli non lineari, i percorsi di carico seguiti; le configurazioni studiate per la struttura in esame *sono risultate effettivamente esaustive per la progettazione-verifica.*

La verifica della sicurezza degli elementi strutturali avviene con i metodi della scienza delle costruzioni. L'analisi strutturale è condotta con il metodo degli spostamenti per la valutazione dello stato tensodeformativo indotto da carichi statici. L'analisi strutturale è condotta con il metodo dell'analisi modale e dello spettro di risposta in termini di accelerazione per la valutazione dello stato tensodeformativo indotto da carichi dinamici (tra cui quelli di tipo sismico).

L'analisi strutturale viene effettuata con il metodo degli elementi finiti. Il metodo sopraindicato si basa sulla schematizzazione della struttura in elementi connessi solo in corrispondenza di un numero prefissato di punti denominati nodi. I nodi sono definiti dalle tre coordinate cartesiane in un sistema di riferimento globale. Le incognite del problema (nell'ambito del metodo degli spostamenti) sono le componenti di spostamento dei nodi riferite al sistema di riferimento globale (traslazioni secondo X, Y, Z, rotazioni attorno X, Y, Z). La soluzione del problema si ottiene con un sistema di equazioni algebriche lineari i cui termini noti sono costituiti dai carichi agenti sulla struttura opportunamente concentrati ai nodi:

K * u = F dove **K** = matrice di rigidezza

u = vettore spostamenti nodali

F = vettore forze nodali

Dagli spostamenti ottenuti con la risoluzione del sistema vengono quindi dedotte le sollecitazioni e/o le tensioni di ogni elemento, riferite generalmente ad una terna locale all'elemento stesso.

Il sistema di riferimento utilizzato è costituito da una terna cartesiana destrorsa XYZ. Si assume l'asse Z verticale ed orientato verso l'alto.

Gli elementi utilizzati per la modellazione dello schema statico della struttura sono i seguenti:

Elemento tipo ***TRUSS*** (biella-D2)

Elemento tipo ***BEAM*** (trave-D2)

Elemento tipo ***MEMBRANE*** (membrana-D3)

Elemento tipo ***PLATE*** (piastra-guscio-D3)

Elemento tipo ***BOUNDARY*** (molla)

Elemento tipo ***STIFFNESS*** (matrice di rigidezza)

Elemento tipo ***BRICK*** (elemento solido)

Elemento tipo ***SOLAIO*** (macro elemento composto da più membrane)

Modello numerico

In questa parte viene descritto il modello numerico utilizzato (o i modelli numerici utilizzati) per l'analisi della struttura. La presentazione delle informazioni deve essere, coerentemente con le prescrizioni del paragrafo 10.2 e relativi sottoparagrafi delle NTC-18, tale da garantirne la leggibilità, la corretta interpretazione e la riproducibilità

Tipo di analisi strutturale	
Carichi verticali	SI
Sismica statica lineare	NO
Sismica dinamica lineare	SI
Sismica statica non lineare (prop. masse)	NO

Sismica statica non lineare (prop. modo)	NO
Sismica statica non lineare (triangolare)	NO
Non linearità geometriche (fattore P delta)	SI

Di seguito si indicano l'origine e le caratteristiche dei codici di calcolo utilizzati riportando titolo, produttore e distributore, versione, estremi della licenza d'uso:

Informazioni sul codice di calcolo	
Titolo:	PRO_SAP PROfessional Structural Analysis Program
Versione:	PROFESSIONAL (build 2020-09-190)
Produttore-Distributore:	2S.I. Software e Servizi per l'Ingegneria s.r.l., Ferrara
Codice Licenza:	Licenza dsi4693

Un attento esame preliminare della documentazione a corredo del software ***ha consentito di valutarne l'affidabilità e soprattutto l'idoneità al caso specifico***. La documentazione, fornita dal produttore e distributore del software, contiene una esauriente descrizione delle basi teoriche e degli algoritmi impiegati, l'individuazione dei campi d'impiego, nonché casi prova interamente risolti e commentati, corredati dei file di input necessari a riprodurre l'elaborazione:

Affidabilità dei codici utilizzati
2S.I. ha verificato l'affidabilità e la robustezza del codice di calcolo attraverso un numero significativo di casi prova in cui i risultati dell'analisi numerica sono stati confrontati con soluzioni teoriche. E' possibile reperire la documentazione contenente alcuni dei più significativi casi trattati al seguente link: https://www.2si.it/it/prodotti/affidabilita/

Modellazione della geometria e proprietà meccaniche:	
nodi	3138
elementi D2 (per aste, travi, pilastri…)	445
elementi D3 (per pareti, platee, gusci…)	2988
elementi solaio	16
elementi solidi	0
Dimensione del modello strutturale [cm]:	
X min =	-116.50
Xmax =	1281.50
Ymin =	-125.33
Ymax =	2018.99
Zmin =	0.00
Zmax =	835.00

Strutture verticali:	
Elementi di tipo asta	NO
Pilastri	SI
Pareti	NO
Setti (a comportamento membranale)	NO
Strutture non verticali:	
Elementi di tipo asta	NO
Travi	SI
Gusci	NO
Membrane	NO
Orizzontamenti:	
Solai con la proprietà piano rigido	SI
Solai senza la proprietà piano rigido	NO
Tipo di vincoli:	
Nodi vincolati rigidamente	NO
Nodi vincolati elasticamente	NO
Nodi con isolatori sismici	NO
Fondazioni puntuali (plinti/plinti su palo)	NO
Fondazioni di tipo trave	SI
Fondazioni di tipo platea	SI
Fondazioni con elementi solidi	NO

Modellazione delle azioni

Si veda il capitolo **"Schematizzazione dei casi di carico"** per le informazioni necessarie alla comprensione ed alla ricostruzione delle azioni applicate al modello numerico, coerentemente con quanto indicato nella parte "*2.6. Azioni di progetto sulla costruzione*".

Combinazioni e/o percorsi di carico

Si veda il capitolo **"Definizione delle combinazioni"** in cui sono indicate le combinazioni di carico adottate e, nel caso di calcoli non lineari, i percorsi di carico seguiti.

Combinazioni dei casi di carico	
APPROCCIO PROGETTUALE	Approccio 2
Tensioni ammissibili	NO
SLU	SI
SLV (SLU con sisma)	SI

SLC	NO
SLD	SI
SLO	NO
SLU GEO A2 (per approccio 1)	NO
SLU EQU	NO
Combinazione caratteristica (rara)	SI
Combinazione frequente	SI
Combinazione quasi permanente (SLE)	SI
SLA (accidentale quale incendio)	NO

Principali risultati

I risultati devono costituire una sintesi completa ed efficace, presentata in modo da riassumere il comportamento della struttura, per ogni tipo di analisi svolta.

Nella presente relazione di calcolo sono riportati i seguenti risultati che il progettista ritiene di interesse per la descrizione e la compresione del/i modello/i e del comportamento della struttura:

per l'analisi modale:

- periodi dei modi di vibrare della struttura
- masse eccitate dai singoli modi
- massa eccitata totale

deformate e sollecitazioni:

- spostamenti e rotazioni dei singoli nodi della struttura
- reazioni vincolari (nel caso siano presenti nodi vincolati rigidamente)
- pressioni sul terreno (nel caso siano presenti elementi di fondazione)
- sollecitazioni sugli elementi d2 nelle combinazioni di calcolo più significative
- tensioni sugli elementi d3 nelle combinazioni di calcolo più significative
- sollecitazioni sui macroelementi da elementi d3 nelle combinazioni di calcolo più significative

altri risultati significativi:

La presente relazione, oltre ad illustrare in modo esaustivo i dati in ingresso ed i risultati delle analisi in forma tabellare, riporta una serie di immagini:

per i dati in ingresso:

- modello solido della struttura
- numerazione di nodi e ed elementi
- configurazioni di carico statiche
- configurazioni di carico sismiche con baricentri delle masse e eccentricità

per le combinazioni più significative (statisticamente più gravose per la struttura):

- configurazioni deformate
- diagrammi e inviluppi delle azioni interne
- mappe delle tensioni
- reazioni vincolari
- mappe delle pressioni sul terreno

per il progetto-verifica degli elementi:

- diagrammi di armatura
- percentuali di sfruttamento
- mappe delle verifiche più significative per i vari stati limite

Informazioni generali sull'elaborazione e giudizio motivato di accettabilità dei risultati.

Il programma prevede una serie di controlli automatici (check) che consentono l'individuazione di errori di modellazione. Al termine dell'analisi un controllo automatico identifica la presenza di spostamenti o rotazioni abnormi. Si può pertanto asserire che l' elaborazione sia corretta e completa. I risultati delle elaborazioni sono stati sottoposti a controlli che ne comprovano l'attendibilità. Tale valutazione ha compreso il confronto con i risultati di semplici calcoli, eseguiti con metodi tradizionali e adottati, anche in fase di primo proporzionamento della struttura. Inoltre, sulla base di considerazioni riguardanti gli stati tensionali e deformativi determinati, si è valutata la validità delle scelte operate in sede di schematizzazione e di modellazione della struttura e delle azioni. Si allega al termine della presente relazione elenco sintetico dei controlli svolti (verifiche di equilibrio tra reazioni vincolari e carichi applicati, comparazioni tra i risultati delle analisi e quelli di valutazioni semplificate, etc.) .

Verifiche agli stati limite ultimi

Nel capitolo relativo alla progettazione degli elementi strutturali agli SLU vengono indicate, con riferimento alla normativa adottata, le modalità ed i criteri seguiti per valutare la sicurezza della struttura nei confronti delle possibili situazioni di crisi ed i risultati delle valutazioni svolte. In via generale, oltre alle verifiche di resistenza e di spostamento, devono essere prese in considerazione verifiche nei confronti dei fenomeni di instabilità, locale e globale, di fatica, di duttilità, di degrado.

Verifiche agli stati limite di esercizio

Nel capitolo relativo alla progettazione degli elementi strutturali agli SLE vengono indicate, con riferimento alla normativa adottata, le modalità seguite per valutare l'affidabilità della struttura nei confronti delle possibili situazioni di perdita di funzionalità (per eccessive deformazioni, fessurazioni, vibrazioni, etc.) ed i risultati delle valutazioni svolte.

RELAZIONE SUI MATERIALI

Il capitolo Materiali riportata informazioni esaustive relative all'elenco dei materiali impiegati e loro modalità di posa in opera e ai valori di calcolo.

NORMATIVA DI RIFERIMENTO

1. D.Min. Infrastrutture Min. Interni e Prot. Civile 17 Gennaio 2018 e allegate "Norme tecniche per le costruzioni".
2. Circolare 21/01/19, n. 7 C.S.LL.PP "Istruzioni per l'applicazione dell'aggiornamento delle Norme Tecniche delle Costruzioni di cui al decreto ministeriale 17 gennaio 2018"
3. D.Min. Infrastrutture e trasporti 14 Settembre 2005 e allegate "Norme tecniche per le costruzioni".
4. D.M. LL.PP. 9 Gennaio 1996 "Norme tecniche per il calcolo, l'esecuzione ed il collaudo delle strutture in cemento armato, normale e precompresso e per le strutture metalliche".
5. D.M. LL.PP. 16 Gennaio 1996 "Norme tecniche relative ai <<Criteri generali per la verifica di sicurezza delle costruzioni e dei carichi e sovraccarichi>>".
6. D.M. LL.PP. 16 Gennaio 1996 "Norme tecniche per le costruzioni in zone sismiche".
7. Circolare 4/07/96, n.156AA.GG./STC. istruzioni per l'applicazione delle "Norme tecniche relative ai <<Criteri generali per la verifica di sicurezza delle costruzioni e dei carichi e sovraccarichi>>" di cui al D.M. 16/01/96.
8. Circolare 10/04/97, n.65AA.GG. istruzioni per l'applicazione delle "Norme tecniche per le costruzioni in zone sismiche" di cui al D.M. 16/01/96.
9. D.M. LL.PP. 20 Novembre 1987 "Norme tecniche per la progettazione, esecuzione e collaudo degli edifici in muratura e per il loro consolidamento".
10. Circolare 4 Gennaio 1989 n. 30787 "Istruzioni in merito alle norme tecniche per la progettazione, esecuzione e collaudo degli edifici in muratura e per il loro consolidamento".
11. D.M. LL.PP. 11 Marzo 1988 "Norme tecniche riguardanti le indagini sui terreni e sulle rocce, la stabilità dei pendii naturali e delle scarpate, i criteri generali e le prescrizioni per la progettazione, l'esecuzione e il collaudo delle opere di sostegno delle terre e delle opere di fondazione".
12. D.M. LL.PP. 3 Dicembre 1987 "Norme tecniche per la progettazione, esecuzione e collaudo delle costruzioni prefabbricate".
13. UNI 9502 - Procedimento analitico per valutare la resistenza al fuoco degli elementi costruttivi di conglomerato cementizio armato, normale e precompresso - edizione maggio 2001
14. Ordinanza del Presidente del Consiglio dei Ministri n. 3274 del 20 marzo 2003 "Primi elementi in materia di criteri generali per la classificazione sismica del territorio nazionale e di normative tecniche per le costruzioni in zona sismica" e successive modificazioni e integrazioni.
15. UNI EN 1990:2006 13/04/2006 Eurocodice 0 - Criteri generali di progettazione strutturale.
16. UNI EN 1991-1-1:2004 01/08/2004 Eurocodice 1 - Azioni sulle strutture - Parte 1-1: Azioni in generale - Pesi per unità di volume, pesi propri e sovraccarichi per gli edifici.
17. UNI EN 1991-2:2005 01/03/2005 Eurocodice 1 - Azioni sulle strutture - Parte 2: Carichi da traffico sui ponti.
18. UNI EN 1991-1-3:2004 01/10/2004 Eurocodice 1 - Azioni sulle strutture - Parte 1-3: Azioni in generale - Carichi da neve.
19. UNI EN 1991-1-4:2005 01/07/2005 Eurocodice 1 - Azioni sulle strutture - Parte 1-4: Azioni in generale - Azioni del vento.
20. UNI EN 1991-1-5:2004 01/10/2004 Eurocodice 1 - Azioni sulle strutture - Parte 1-5: Azioni in generale - Azioni termiche.
21. UNI EN 1992-1-1:2005 24/11/2005 Eurocodice 2 - Progettazione delle strutture di calcestruzzo - Parte 1-1: Regole generali e regole per gli edifici.
22. UNI EN 1992-1-2:2005 01/04/2005 Eurocodice 2 - Progettazione delle strutture di calcestruzzo - Parte 1-2: Regole generali - Progettazione strutturale contro l'incendio.
23. UNI EN 1993-1-1:2005 01/08/2005 Eurocodice 3 - Progettazione delle strutture di acciaio - Parte 1-1: Regole generali e regole per gli edifici.
24. UNI EN 1993-1-8:2005 01/08/2005 Eurocodice 3 - Progettazione delle strutture di acciaio - Parte 1-8: Progettazione dei collegamenti.
25. UNI EN 1994-1-1:2005 01/03/2005 Eurocodice 4 - Progettazione delle strutture composte acciaio-calcestruzzo - Parte 1-1: Regole generali e regole per gli edifici.
26. UNI EN 1994-2:2006 12/01/2006 Eurocodice 4 - Progettazione delle strutture composte acciaio-calcestruzzo - Parte 2: Regole generali e regole per i ponti.
27. UNI EN 1995-1-1:2005 01/02/2005 Eurocodice 5 - Progettazione delle strutture di legno - Parte 1-1: Regole generali – Regole comuni e regole per gli edifici.
28. UNI EN 1995-2:2005 01/01/2005 Eurocodice 5 - Progettazione delle strutture di legno - Parte 2: Ponti.
29. UNI EN 1996-1-1:2006 26/01/2006 Eurocodice 6 - Progettazione delle strutture di muratura - Parte 1-1: Regole generali per strutture di muratura armata e non armata.
30. UNI EN 1996-3:2006 09/03/2006 Eurocodice 6 - Progettazione delle strutture di muratura - Parte 3: Metodi di calcolo semplificato per strutture di muratura non armata.

31. UNI EN 1997-1:2005 01/02/2005 Eurocodice 7 - Progettazione geotecnica - Parte 1: Regole generali.
32. UNI EN 1998-1:2005 01/03/2005 Eurocodice 8 - Progettazione delle strutture per la resistenza sismica - Parte 1: Regole generali, azioni sismiche e regole per gli edifici.
33. UNI EN 1998-3:2005 01/08/2005 Eurocodice 8 - Progettazione delle strutture per la resistenza sismica - Parte 3: Valutazione e adeguamento degli edifici.
34. UNI EN 1998-5:2005 01/01/2005 Eurocodice 8 - Progettazione delle strutture per la resistenza sismica - Parte 5: Fondazioni, strutture di contenimento ed aspetti geotecnici.

NOTA il capitolo "normativa di riferimento": riporta l' elenco delle normative implementate nel software. Le norme utilizzate per la struttura oggetto della presente relazione sono indicate nel precedente capitolo "RELAZIONE DI CALCOLO STRUTTURALE" "ANALISI E VERIFICHE SVOLTE CON L'AUSILIO DI CODICI DI CALCOLO". Laddove nei capitoli successivi vengano richiamate norme antecedenti al DM 17.01.18 è dovuto o a progettazione simulata di edifico esistente.

CARATTERISTICHE MATERIALI UTILIZZATI

LEGENDA TABELLA DATI MATERIALI

Il programma consente l'uso di materiali diversi. Sono previsti i seguenti tipi di materiale:

1	materiale tipo cemento armato
2	materiale tipo acciaio
3	materiale tipo muratura
4	materiale tipo legno
5	materiale tipo generico

I materiali utilizzati nella modellazione sono individuati da una sigla identificativa ed un codice numerico (gli elementi strutturali richiamano quest'ultimo nella propria descrizione). Per ogni materiale vengono riportati in tabella i seguenti dati:

Young	modulo di elasticità normale E
Poisson	coefficiente di contrazione trasversale ni
G	modulo di elasticità tangenziale
Gamma	peso specifico
Alfa	coefficiente di dilatazione termica
Fattore di confidenza FC m	Fattore di confidenza specifico per materiale; (è riportato solo se diverso da quello globale della struttura)
Fattore di confidenza FC a	Fattore di confidenza specifico per l'armatura (è riportato solo se diverso da quello globale della struttura)
Elasto-plastico	Materiale elastico perfettamente plastico per aste non lineari
Massima compressione	Massima tensione di compressione per aste non lineari
Massima trazione	Massima tensione di trazione per aste non lineari
Fattore attrito	Coefficinete di attrito per aste non lineari
Rapporto HRDb	Rapporto di hardening a flessione
Rapporto HRDv	Rapporto di hardening a taglio

I dati soprariportati vengono utilizzati per la modellazione dello schema statico e per la determinazione dei carichi inerziali e termici. In relazione al tipo di materiale vengono riportati inoltre:

1	c.a.		
		Resistenza Rc	resistenza a cmpressione cubica
		Resistenza fctm	resistenza media a trazione semplice
		Coefficiente ksb	Coefficiente di riduzione della resistenza a compressione da utilizzare nello stress block
2	acciaio		
		Tensione ft	Valore della tensione di rottura
		Tensione fy	Valore della tensione di snervamento
		Resistenza fd	Resistenza di calcolo per SL CNR-UNI 10011
		Resistenza fd (>40)	Resistenza di calcolo per SL CNR-UNI 10011 per spessori > 40mm
		Tensione ammissibile	Tensione ammissibile CNR-UNI 10011
		Tensione ammissibile(>40)	Tensione ammissibile CNR-UNI 10011 per spessori > 40mm
3	muratura		

	Muratura consolidata	Muratura per la quale si prevedono interventi di rinforzo"
	Incremento resistenza	Incremento conseguito in termini di resistenza
	Incremento rigidezza	Incremento conseguito in termini di rigidezza
	Resistenza f	Valore della resistenza a compressione
	Resistenza fv0	Valore della resistenza a taglio in assenza di tensioni normali
	Resistenza fh	Valore della resistenza a compressione orizzontale
	Resistenza fb	Valore della resistenza a compressione dei blocchi
	Resistenza fbh	Valore della resistenza a compressione dei blocchi in direzione orizzontale
	Resistenza fv0h	Valore della resistenza a taglio in assenza di tensioni normali per le travi
	Resistenza ft	Valore della resistenza a trazione per fessurazione diagonale
	Resistenza fvlim	Valore della massima resistenza a taglio
	Resistenza fbt	Valore della resistenza a trazione dei blocchi
	Coefficiente mu	Coefficiente d'attrito utilizzato per la resistenza a taglio (tipicamente 0.4)
	Coefficiente fi	Coefficiente d'ingranamento utilizzato per la resistenza a taglio
	Coefficiente ksb	Coefficiente di riduzione della resistenza a compressione da utilizzare nello stress block
4 legno		
	E0,05	Modulo di elasticità corrispondente ad un frattile del 5%
	Resistenza fc0	Valore della resistenza a compressione parallela
	Resistenza ft0	Valore della resistenza a trazione parallela
	Resistenza fm	Valore della resistenza a flessione
	Resistenza fv	Valore della resistenza a taglio
	Resist. ft0k	Resistenza caratteristica (tensione amm. per REGLES) per trazione
	Resist. fmk	Resistenza caratteristica (tensione amm. per REGLES) per flessione
	Resist. fvk	Resistenza caratteristica (tensione amm. per REGLES) per taglio
	Modulo E0,05	Modulo elastico parallelo caratteristico
	Lamellare	lamellare o massiccio

Nel tabulato si riportano sia i valori caratteristici che medi utilizzando gli uni e/o gli altri in relazione alle richieste di normativa ed alla tipologia di verifica. (Cap.7 NTC18 per materiali nuovi, Cap.8 NTC18 e relativa circolare 21/01/2019 per materiali esistenti, Linee Guida Reluis per incamiciatura CAM, CNR-DT 200 per interventi con FRP)

Vengono inoltre riportate le tabelle contenenti il riassunto delle informazioni assegnate nei criteri di progetto in uso.

Id	Tipo / Note	V. caratt.	V. medio	Young	Poisson	G	Gamma	Alfa	Altri
		daN/cm2	daN/cm2	daN/cm2		daN/cm2	daN/cm3		
3	Calcestruzzo Classe C28/35			3.260e+05	0.20	1.358e+05	2.50e-03	1.00e-05	
	Resistenza Rc	350.0							
	Resistenza fctm		28.4						
	Rapporto Rfessurata								1.00
	Coefficiente ksb								0.85
	Rapporto HRDb								1.00e-05
	Rapporto HRDv								1.00e-05

Gusci c.a.	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Armatura						
Inclinazione Ax [gradi]	0.0	0.0	0.0			
Angolo Ax-Ay [gradi]	90.00	90.00	90.00			
Minima tesa	0.31	0.20	0.20			
Massima tesa	0.78	0.78	0.78			

Gusci c.a.	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Maglia unica centrale	NO	NO	NO			
Copriferro [cm]	2.00	3.00	3.00			
Maglia x						
diametro	10	12	16			
passo	20	20	5			
diametro aggiuntivi	12	12	16			
Maglia y						
diametro	10	12	16			
passo	20	20	5			
diametro aggiuntivi	12	12	16			
Stati limite ultimi						
Tensione fy [daN/cm2]	4500.00	4500.00	4500.00			
Tipo acciaio	tipo C	tipo C	tipo C			
Coefficiente gamma s	1.15	1.15	1.15			
Coefficiente gamma c	1.50	1.50	1.50			
Verifiche con N costante	SI	SI	SI			
Applica SLU da DIN	NO	NO	NO			
Tensioni ammissibili						
Tensione amm. cls [daN/cm2]	97.50	97.50	97.50			
Tensione amm. acciaio [daN/cm2]	2600.00	2600.00	2600.00			
Rapporto omogeneizzazione N	15.00	15.00	15.00			
Massimo rapporto area compressa/tesa	1.00	1.00	1.00			
Resistenza al fuoco						
3- intradosso	NO	NO	NO			
3+ estradosso	NO	NO	NO			
Tempo di esposizione R	15	15	15			

Travi c.a.	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Generalità						
Progetta a filo	SI	NO	NO			
Af inf: da q*L*L /	0.0	0.0	0.0			
Armatura						
Minima tesa	0.31	0.20	0.20			
Minima compressa	0.31	0.20	0.20			
Massima tesa	0.78	0.78	0.78			
Da sezione	SI	SI	SI			
Usa armatura teorica	NO	NO	NO			
Stati limite ultimi						
Tensione fy [daN/cm2]	4500.00	4500.00	4500.00			
Tensione fy staffe [daN/cm2]	4500.00	4500.00	4500.00			
Tipo acciaio	tipo C	tipo C	tipo C			
Coefficiente gamma s	1.15	1.15	1.15			
Coefficiente gamma c	1.50	1.50	1.50			
Verifiche con N costante	SI	SI	SI			
Fattore di ridistribuzione	0.0	0.0	0.0			
Modello per il confinamento						
Relazione tensio-deformativa	Mander	Mander	Mander			
Incrudimento acciaio	5.000e-03	5.000e-03	5.000e-03			
Fattore lambda	1.00	1.00	1.00			
epsilon max,s	4.000e-02	4.000e-02	4.000e-02			
epsilon cu2	4.500e-03	4.500e-03	4.500e-03			
epsilon c2	0.0	0.0	0.0			
epsilon cy	0.0	0.0	0.0			
Tensioni ammissibili						
Tensione amm. cls [daN/cm2]	97.50	97.50	97.50			
Tensione amm. acciaio [daN/cm2]	2600.00	2600.00	2600.00			
Rapporto omogeneizzazione N	15.00	15.00	15.00			
Massimo rapporto area compressa/tesa	1.00	1.00	1.00			
Staffe						
Diametro staffe	10.00	0.0	0.0			
Passo minimo [cm]	3.00	3.00	3.00			
Passo massimo [cm]	30.00	15.00	15.00			
Passo raffittito [cm]	5.00	15.00	15.00			
Lunghezza zona raffittita [cm]	0.0	0.0	0.0			
Ctg(Teta) Max	2.50	2.50	2.50			
Percentuale sagomati	0.0	0.0	0.0			
Luce di taglio per GR [cm]	1.00	1.00	1.00			
Adotta scorrimento medio	NO	NO	NO			
Torsione non essenziale inclusa	NO	NO	NO			

Pilastri c.a.	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Generalità						
Progetto armatura	Privilegia spigoli	Privilegia lati	Privilegia lati			
Progetta a filo	NO	NO	NO			
Effetti del 2 ordine	SI	SI	SI			
Beta per 2-2	1.00	1.00	1.00			
Beta per 3-3	1.00	1.00	1.00			
Armatura						
Massima tesa	4.00	4.00	4.00			
Minima tesa	1.00	1.00	1.00			
Stati limite ultimi						
Tensione fy [daN/cm2]	4500.00	4500.00	4500.00			
Tensione fy staffe [daN/cm2]	4500.00	4500.00	4500.00			
Tipo acciaio	tipo C	tipo C	tipo C			
Coefficiente gamma s	1.15	1.15	1.15			
Coefficiente gamma c	1.50	1.50	1.50			
Verifiche con N costante	SI	SI	SI			
Modello per il confinamento						
Relazione tensio-deformativa	Mander	Mander	Mander			
Incrudimento acciaio	5.000e-03	5.000e-03	5.000e-03			
Fattore lambda	1.00	1.00	1.00			
epsilon max,s	4.000e-02	4.000e-02	4.000e-02			
epsilon cu2	4.500e-03	4.500e-03	4.500e-03			
epsilon c2	0.0	0.0	0.0			
epsilon cy	0.0	0.0	0.0			
Tensioni ammissibili						
Tensione amm. cls [daN/cm2]	97.50	97.50	97.50			
Tensione amm. acciaio [daN/cm2]	2600.00	2600.00	2600.00			
Rapporto omogeneizzazione N	15.00	15.00	15.00			
Staffe						
Diametro staffe	10.00	0.0	0.0			
Passo minimo [cm]	3.00	5.00	5.00			
Passo massimo [cm]	25.00	25.00	25.00			
Passo raffittito [cm]	15.00	15.00	15.00			
Lunghezza zona raffittita [cm]	45.00	45.00	45.00			
Ctg(Teta) Max	2.50	2.50	2.50			
Luce di taglio per GR [cm]	1.00	1.00	1.00			
Massimizza gerarchia	SI	SI	SI			

Solai e pannelli	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Generalità						
Usa tensioni ammissibili	NO	NO	NO			
Af inf: da traliccio	SI	SI	SI			
Consenti armatura a taglio	NO	NO	NO			
Incrementa armatura longitudinale per taglio	SI	SI	SI			
Af inf: da q*L*L /	20.00	20.00	20.00			
Incremento fascia piena [cm]	5.00	5.00	5.00			
Armatura						
Minima tesa	0.15	0.15	0.15			
Massima tesa	3.00	3.00	3.00			
Minima compressa	0.0	0.0	0.0			
Af/h [cm]	7.000e-02	7.000e-02	7.000e-02			
Stati limite ultimi						
Tensione fy [daN/cm2]	4500.00	4500.00	4500.00			
Tipo acciaio	tipo C	tipo C	tipo C			
Coefficiente gamma s	1.15	1.15	1.15			
Coefficiente gamma c	1.50	1.50	1.50			
Fattore di ridistribuzione	0.0	0.0	0.0			
Tensioni ammissibili						
Tensione amm. cls [daN/cm2]	85.00	85.00	85.00			
Tensione amm. acciaio [daN/cm2]	2600.00	2600.00	2600.00			
Rapporto omogeneizzazione N	15.00	15.00	15.00			
Massimo rapporto area compressa/tesa	1.00	1.00	1.00			
Verifica freccia						
Infinita	250.00	250.00	250.00			
Istantanea	500.00	500.00	500.00			
Fattore viscosità	3.00	3.00	3.00			
Usa J non fessurato	NO	NO	NO			
Elementi non strutturali						

Solai e pannelli	**1/7/..**	**2/8/..**	**3/9/..**	**4/10/..**	**5/11/..**	**6/12/..**
Tamponatura antiespulsione	NO	NO	NO			
Tamponatura con armatura	NO	NO	NO			
Fattore di struttura/comportamento	2.00	2.00	2.00			
Coefficiente gamma m	0.0	0.0	0.0			
Periodo Ta	0.0	0.0	0.0			
Altezza pannello	0.0	0.0	0.0			

MODELLAZIONE DELLE SEZIONI

LEGENDA TABELLA DATI SEZIONI

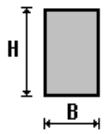
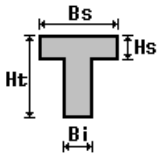
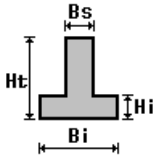
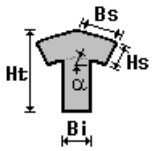
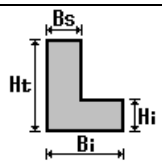
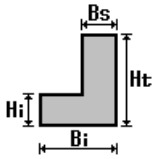
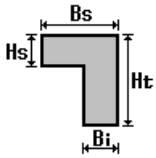
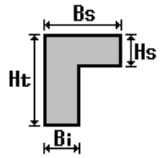
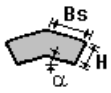
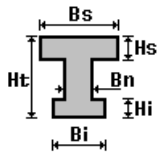
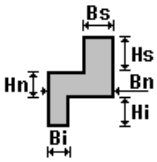
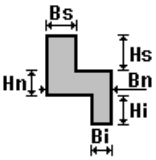
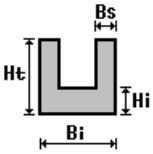
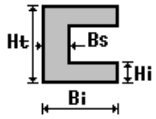
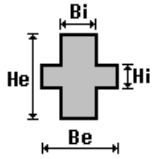
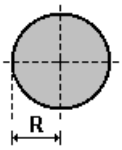
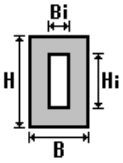
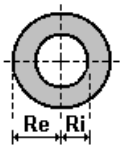
Il programma consente l'uso di sezioni diverse. Sono previsti i seguenti tipi di sezione:

1. sezione di tipo generico
2. profilati semplici
3. profilati accoppiati e speciali

Le sezioni utilizzate nella modellazione sono individuate da una sigla identificativa ed un codice numerico (gli elementi strutturali richiamano quest'ultimo nella propria descrizione). Per ogni sezione vengono riportati in tabella i seguenti dati:

Area	area della sezione
A V2	area della sezione/fattore di taglio (per il taglio in direzione 2)
A V3	area della sezione/fattore di taglio (per il taglio in direzione 3)
Jt	fattore torsionale di rigidezza
J2-2	momento d'inerzia della sezione riferito all'asse 2
J3-3	momento d'inerzia della sezione riferito all'asse 3
W2-2	modulo di resistenza della sezione riferito all'asse 2
W3-3	modulo di resistenza della sezione riferito all'asse 3
Wp2-2	modulo di resistenza plastico della sezione riferito all'asse 2
Wp3-3	modulo di resistenza plastico della sezione riferito all'asse 3

I dati sopra riportati vengono utilizzati per la determinazione dei carichi inerziali e per la definizione delle rigidezze degli elementi strutturali; qualora il valore di Area V2 (e/o Area V3) sia nullo la deformabilità per taglio V2 (e/o V3) è trascurata. La valutazione delle caratteristiche inerziali delle sezioni è condotta nel riferimento 2-3 dell'elemento.

 rettangolare	 a T	 a T rovescia	 a T di colmo	 a L	 a L specchiata
 a L specchiata rovescia	 a L rovescia	 a L di colmo	 a doppio T	 a quattro specchiata	 a quattro
 a U	 a C	 a croce	 circolare	 rettangolare cava	 circolare cava

Per quanto concerne i profilati semplici ed accoppiati l'asse 2 del riferimento coincide con l'asse x riportato nei più diffusi profilatari.

Per quanto concerne le sezioni di tipo generico (tipo 1.):
i valori dimensionali con prefisso B sono riferiti all'asse 2
i valori dimensionali con prefisso H sono riferiti all'asse 3

Id	Tipo	Area	A V2	A V3	Jt	J 2-2	J 3-3	W 2-2	W 3-3	Wp 2-2	Wp 3-3
		cm2	cm2	cm2	cm4	cm4	cm4	cm3	cm3	cm3	cm3
1	TRAVE FONDAZIONE-Rettangolare: b=60 h=120	7200.00	6000.00	6000.00	5.918e+06	2.160e+06	8.640e+06	7.200e+04	1.440e+05	1.080e+05	2.160e+05
2	PILASTRI PT-Rettangolare: b=40 h=80	3200.00	2666.67	2666.67	1.169e+06	4.267e+05	1.707e+06	2.133e+04	4.267e+04	3.200e+04	6.400e+04
3	TRAVI 1° E 2° IMPALCATO-Rettangolare: b=40 h=60	2400.00	2000.00	2000.00	7.424e+05	3.200e+05	7.200e+05	1.600e+04	2.400e+04	2.400e+04	3.600e+04
4	PILASTRI P1-Rettangolare: b=40 h=80	3200.00	2666.67	2666.67	1.169e+06	4.267e+05	1.707e+06	2.133e+04	4.267e+04	3.200e+04	6.400e+04
8	TRAVE SOLAIO-T ribassata: bi=12 ht=25 bs=50 hs=5	490.00	0.0	0.0	1.200e+04	5.496e+04	2.765e+04	2198.53	1688.50	3845.00	3024.51
14	PILASTRI PT modificati-Rettangolare: b=50 h=80	4000.00	3333.33	3333.33	2.021e+06	8.333e+05	2.133e+06	3.333e+04	5.333e+04	5.000e+04	8.000e+04
15	TRAVI 1°modificate-Rettangolare: b=50 h=60	3000.00	2500.00	2500.00	1.246e+06	6.250e+05	9.000e+05	2.500e+04	3.000e+04	3.750e+04	4.500e+04

MODELLAZIONE STRUTTURA: NODI

LEGENDA TABELLA DATI NODI

Il programma utilizza per la modellazione nodi strutturali.
Ogni nodo è individuato dalle coordinate cartesiane nel sistema di riferimento globale (X Y Z).
Ad ogni nodo è eventualmente associato un codice di vincolamento rigido, un codice di fondazione speciale, ed un set di sei molle (tre per le traslazioni, tre per le rotazioni). Le tabelle sottoriportate riflettono le succitate possibilità. In particolare per ogni nodo viene indicato in tabella:

Nodo	numero del nodo.
X	valore della coordinata X
Y	valore della coordinata Y
Z	valore della coordinata Z

Per i nodi ai quali sia associato un codice di vincolamento rigido, un codice di fondazione speciale o un set di molle viene indicato in tabella:

Nodo	numero del nodo.
X	valore della coordinata X
Y	valore della coordinata Y
Z	valore della coordinata Z
Note	eventuale codice di vincolo (es. v=110010 sei valori relativi ai sei gradi di libertà previsti per il nodo TxTyTzRxRyRz, il valore 1 indica che lo spostamento o rotazione relativo è impedito, il valore 0 indica che lo spostamento o rotazione relativo è libero).
Note	(FS = 1, 2,…) eventuale codice del tipo di fondazione speciale (1, 2,… fanno riferimento alle tipologie: plinto, palo, plinto su pali,…) che è collegato al nodo. (ISO = "id SIGLA") indice e sigla identificativa dell' eventuale isolatore sismico assegnato al nodo
Rig. TX	valore della rigidezza dei vincoli elastici eventualmente applicati al nodo, nello specifico TX (idem per TY, TZ, RX, RY, RZ).

Per strutture sismicamente isolate viene inoltre inserita la tabella delle caratteristiche per gli isolatori utilizzati; le caratteristiche sono indicate in conformità al cap. 7.10 del D.M. 17/01/18

TABELLA DATI NODI

Nodo	X	Y	Z	Nodo	X	Y	Z	Nodo	X	Y	Z
	cm	cm	cm		cm	cm	cm		cm	cm	cm
1	0.0	0.0	0.0	2	582.5	0.0	0.0	3	1165.0	0.0	0.0
4	0.0	0.0	428.0	5	582.5	0.0	428.0	6	1165.0	0.0	428.0
7	0.0	0.0	835.0	8	582.5	0.0	835.0	9	1165.0	0.0	835.0
10	0.0	470.0	0.0	11	582.5	470.0	0.0	12	1165.0	470.0	0.0
13	0.0	470.0	428.0	14	1165.0	1925.0	428.0	15	1165.0	470.0	428.0
16	0.0	470.0	835.0	17	0.0	1925.0	835.0	18	1165.0	470.0	835.0
19	0.0	870.0	0.0	20	582.5	870.0	0.0	21	1165.0	870.0	0.0
22	0.0	870.0	428.0	23	1165.0	1925.0	835.0	24	1165.0	870.0	428.0
25	0.0	870.0	835.0	26	582.5	1925.0	835.0	27	1165.0	870.0	835.0
28	0.0	1220.0	0.0	29	582.5	1220.0	0.0	30	1165.0	1220.0	0.0
31	0.0	1220.0	428.0	32	582.5	1220.0	428.0	33	1165.0	1220.0	428.0
34	0.0	1220.0	835.0	35	582.5	1220.0	835.0	36	1165.0	1220.0	835.0
37	0.0	1925.0	0.0	38	582.5	1925.0	0.0	39	1165.0	1925.0	0.0
40	0.0	1925.0	428.0	41	582.5	1925.0	428.0	42	582.5	470.0	428.0
43	582.5	870.0	428.0	44	582.5	470.0	835.0	45	582.5	870.0	835.0
46	38.8	0.0	0.0	47	38.8	31.3	0.0	48	0.0	31.3	0.0
49	77.7	0.0	0.0	50	77.7	31.3	0.0	51	116.5	0.0	0.0
52	116.5	31.3	0.0	53	155.3	0.0	0.0	54	155.3	31.3	0.0
55	194.2	0.0	0.0	56	194.2	31.3	0.0	57	233.0	0.0	0.0
58	233.0	31.3	0.0	59	271.8	0.0	0.0	60	271.8	31.3	0.0

61	310.7	0.0	0.0	62	310.7	31.3	0.0	63	349.5	0.0	0.0
64	349.5	31.3	0.0	65	388.3	0.0	0.0	66	388.3	31.3	0.0
67	427.2	0.0	0.0	68	427.2	31.3	0.0	69	466.0	0.0	0.0
70	466.0	31.3	0.0	71	504.8	0.0	0.0	72	504.8	31.3	0.0
73	543.7	0.0	0.0	74	543.7	31.3	0.0	75	582.5	31.3	0.0
76	38.8	62.7	0.0	77	0.0	62.7	0.0	78	77.7	62.7	0.0
79	116.5	62.7	0.0	80	155.3	62.7	0.0	81	194.2	62.7	0.0
82	233.0	62.7	0.0	83	271.8	62.7	0.0	84	310.7	62.7	0.0
85	349.5	62.7	0.0	86	388.3	62.7	0.0	87	427.2	62.7	0.0
88	466.0	62.7	0.0	89	504.8	62.7	0.0	90	543.7	62.7	0.0
91	582.5	62.7	0.0	92	38.8	94.0	0.0	93	0.0	94.0	0.0
94	77.7	94.0	0.0	95	116.5	94.0	0.0	96	155.3	94.0	0.0
97	194.2	94.0	0.0	98	233.0	94.0	0.0	99	271.8	94.0	0.0
100	310.7	94.0	0.0	101	349.5	94.0	0.0	102	388.3	94.0	0.0
103	427.2	94.0	0.0	104	466.0	94.0	0.0	105	504.8	94.0	0.0
106	543.7	94.0	0.0	107	582.5	94.0	0.0	108	38.8	125.3	0.0
109	0.0	125.3	0.0	110	77.7	125.3	0.0	111	116.5	125.3	0.0
112	155.3	125.3	0.0	113	194.2	125.3	0.0	114	233.0	125.3	0.0
115	271.8	125.3	0.0	116	310.7	125.3	0.0	117	349.5	125.3	0.0
118	388.3	125.3	0.0	119	427.2	125.3	0.0	120	466.0	125.3	0.0
121	504.8	125.3	0.0	122	543.7	125.3	0.0	123	582.5	125.3	0.0
124	38.8	156.7	0.0	125	0.0	156.7	0.0	126	77.7	156.7	0.0
127	116.5	156.7	0.0	128	155.3	156.7	0.0	129	194.2	156.7	0.0
130	233.0	156.7	0.0	131	271.8	156.7	0.0	132	310.7	156.7	0.0
133	349.5	156.7	0.0	134	388.3	156.7	0.0	135	427.2	156.7	0.0
136	466.0	156.7	0.0	137	504.8	156.7	0.0	138	543.7	156.7	0.0
139	582.5	156.7	0.0	140	38.8	188.0	0.0	141	0.0	188.0	0.0
142	77.7	188.0	0.0	143	116.5	188.0	0.0	144	155.3	188.0	0.0
145	194.2	188.0	0.0	146	233.0	188.0	0.0	147	271.8	188.0	0.0
148	310.7	188.0	0.0	149	349.5	188.0	0.0	150	388.3	188.0	0.0
151	427.2	188.0	0.0	152	466.0	188.0	0.0	153	504.8	188.0	0.0
154	543.7	188.0	0.0	155	582.5	188.0	0.0	156	38.8	219.3	0.0
157	0.0	219.3	0.0	158	77.7	219.3	0.0	159	116.5	219.3	0.0
160	155.3	219.3	0.0	161	194.2	219.3	0.0	162	233.0	219.3	0.0
163	271.8	219.3	0.0	164	310.7	219.3	0.0	165	349.5	219.3	0.0
166	388.3	219.3	0.0	167	427.2	219.3	0.0	168	466.0	219.3	0.0
169	504.8	219.3	0.0	170	543.7	219.3	0.0	171	582.5	219.3	0.0
172	38.8	250.7	0.0	173	0.0	250.7	0.0	174	77.7	250.7	0.0
175	116.5	250.7	0.0	176	155.3	250.7	0.0	177	194.2	250.7	0.0
178	233.0	250.7	0.0	179	271.8	250.7	0.0	180	310.7	250.7	0.0
181	349.5	250.7	0.0	182	388.3	250.7	0.0	183	427.2	250.7	0.0
184	466.0	250.7	0.0	185	504.8	250.7	0.0	186	543.7	250.7	0.0
187	582.5	250.7	0.0	188	38.8	282.0	0.0	189	0.0	282.0	0.0
190	77.7	282.0	0.0	191	116.5	282.0	0.0	192	155.3	282.0	0.0
193	194.2	282.0	0.0	194	233.0	282.0	0.0	195	271.8	282.0	0.0
196	310.7	282.0	0.0	197	349.5	282.0	0.0	198	388.3	282.0	0.0
199	427.2	282.0	0.0	200	466.0	282.0	0.0	201	504.8	282.0	0.0
202	543.7	282.0	0.0	203	582.5	282.0	0.0	204	38.8	313.3	0.0
205	0.0	313.3	0.0	206	77.7	313.3	0.0	207	116.5	313.3	0.0
208	155.3	313.3	0.0	209	194.2	313.3	0.0	210	233.0	313.3	0.0
211	271.8	313.3	0.0	212	310.7	313.3	0.0	213	349.5	313.3	0.0
214	388.3	313.3	0.0	215	427.2	313.3	0.0	216	466.0	313.3	0.0
217	504.8	313.3	0.0	218	543.7	313.3	0.0	219	582.5	313.3	0.0
220	38.8	344.7	0.0	221	0.0	344.7	0.0	222	77.7	344.7	0.0
223	116.5	344.7	0.0	224	155.3	344.7	0.0	225	194.2	344.7	0.0
226	233.0	344.7	0.0	227	271.8	344.7	0.0	228	310.7	344.7	0.0
229	349.5	344.7	0.0	230	388.3	344.7	0.0	231	427.2	344.7	0.0
232	466.0	344.7	0.0	233	504.8	344.7	0.0	234	543.7	344.7	0.0
235	582.5	344.7	0.0	236	38.8	376.0	0.0	237	0.0	376.0	0.0
238	77.7	376.0	0.0	239	116.5	376.0	0.0	240	155.3	376.0	0.0
241	194.2	376.0	0.0	242	233.0	376.0	0.0	243	271.8	376.0	0.0
244	310.7	376.0	0.0	245	349.5	376.0	0.0	246	388.3	376.0	0.0
247	427.2	376.0	0.0	248	466.0	376.0	0.0	249	504.8	376.0	0.0
250	543.7	376.0	0.0	251	582.5	376.0	0.0	252	38.8	407.3	0.0
253	0.0	407.3	0.0	254	77.7	407.3	0.0	255	116.5	407.3	0.0
256	155.3	407.3	0.0	257	194.2	407.3	0.0	258	233.0	407.3	0.0
259	271.8	407.3	0.0	260	310.7	407.3	0.0	261	349.5	407.3	0.0
262	388.3	407.3	0.0	263	427.2	407.3	0.0	264	466.0	407.3	0.0
265	504.8	407.3	0.0	266	543.7	407.3	0.0	267	582.5	407.3	0.0
268	38.8	438.7	0.0	269	0.0	438.7	0.0	270	77.7	438.7	0.0
271	116.5	438.7	0.0	272	155.3	438.7	0.0	273	194.2	438.7	0.0
274	233.0	438.7	0.0	275	271.8	438.7	0.0	276	310.7	438.7	0.0
277	349.5	438.7	0.0	278	388.3	438.7	0.0	279	427.2	438.7	0.0
280	466.0	438.7	0.0	281	504.8	438.7	0.0	282	543.7	438.7	0.0
283	582.5	438.7	0.0	284	38.8	470.0	0.0	285	77.7	470.0	0.0
286	116.5	470.0	0.0	287	155.3	470.0	0.0	288	194.2	470.0	0.0
289	233.0	470.0	0.0	290	271.8	470.0	0.0	291	310.7	470.0	0.0

292	349.5	470.0	0.0	293	388.3	470.0	0.0	294	427.2	470.0	0.0
295	466.0	470.0	0.0	296	504.8	470.0	0.0	297	543.7	470.0	0.0
298	38.8	496.7	0.0	299	0.0	496.7	0.0	300	77.7	496.7	0.0
301	116.5	496.7	0.0	302	155.3	496.7	0.0	303	194.2	496.7	0.0
304	233.0	496.7	0.0	305	271.8	496.7	0.0	306	310.7	496.7	0.0
307	349.5	496.7	0.0	308	388.3	496.7	0.0	309	427.2	496.7	0.0
310	466.0	496.7	0.0	311	504.8	496.7	0.0	312	543.7	496.7	0.0
313	582.5	496.7	0.0	314	38.8	523.3	0.0	315	0.0	523.3	0.0
316	77.7	523.3	0.0	317	116.5	523.3	0.0	318	155.3	523.3	0.0
319	194.2	523.3	0.0	320	233.0	523.3	0.0	321	271.8	523.3	0.0
322	310.7	523.3	0.0	323	349.5	523.3	0.0	324	388.3	523.3	0.0
325	427.2	523.3	0.0	326	466.0	523.3	0.0	327	504.8	523.3	0.0
328	543.7	523.3	0.0	329	582.5	523.3	0.0	330	38.8	550.0	0.0
331	0.0	550.0	0.0	332	77.7	550.0	0.0	333	116.5	550.0	0.0
334	155.3	550.0	0.0	335	194.2	550.0	0.0	336	233.0	550.0	0.0
337	271.8	550.0	0.0	338	310.7	550.0	0.0	339	349.5	550.0	0.0
340	388.3	550.0	0.0	341	427.2	550.0	0.0	342	466.0	550.0	0.0
343	504.8	550.0	0.0	344	543.7	550.0	0.0	345	582.5	550.0	0.0
346	38.8	576.7	0.0	347	0.0	576.7	0.0	348	77.7	576.7	0.0
349	116.5	576.7	0.0	350	155.3	576.7	0.0	351	194.2	576.7	0.0
352	233.0	576.7	0.0	353	271.8	576.7	0.0	354	310.7	576.7	0.0
355	349.5	576.7	0.0	356	388.3	576.7	0.0	357	427.2	576.7	0.0
358	466.0	576.7	0.0	359	504.8	576.7	0.0	360	543.7	576.7	0.0
361	582.5	576.7	0.0	362	38.8	603.3	0.0	363	0.0	603.3	0.0
364	77.7	603.3	0.0	365	116.5	603.3	0.0	366	155.3	603.3	0.0
367	194.2	603.3	0.0	368	233.0	603.3	0.0	369	271.8	603.3	0.0
370	310.7	603.3	0.0	371	349.5	603.3	0.0	372	388.3	603.3	0.0
373	427.2	603.3	0.0	374	466.0	603.3	0.0	375	504.8	603.3	0.0
376	543.7	603.3	0.0	377	582.5	603.3	0.0	378	38.8	630.0	0.0
379	0.0	630.0	0.0	380	77.7	630.0	0.0	381	116.5	630.0	0.0
382	155.3	630.0	0.0	383	194.2	630.0	0.0	384	233.0	630.0	0.0
385	271.8	630.0	0.0	386	310.7	630.0	0.0	387	349.5	630.0	0.0
388	388.3	630.0	0.0	389	427.2	630.0	0.0	390	466.0	630.0	0.0
391	504.8	630.0	0.0	392	543.7	630.0	0.0	393	582.5	630.0	0.0
394	38.8	656.7	0.0	395	0.0	656.7	0.0	396	77.7	656.7	0.0
397	116.5	656.7	0.0	398	155.3	656.7	0.0	399	194.2	656.7	0.0
400	233.0	656.7	0.0	401	271.8	656.7	0.0	402	310.7	656.7	0.0
403	349.5	656.7	0.0	404	388.3	656.7	0.0	405	427.2	656.7	0.0
406	466.0	656.7	0.0	407	504.8	656.7	0.0	408	543.7	656.7	0.0
409	582.5	656.7	0.0	410	38.8	683.3	0.0	411	0.0	683.3	0.0
412	77.7	683.3	0.0	413	116.5	683.3	0.0	414	155.3	683.3	0.0
415	194.2	683.3	0.0	416	233.0	683.3	0.0	417	271.8	683.3	0.0
418	310.7	683.3	0.0	419	349.5	683.3	0.0	420	388.3	683.3	0.0
421	427.2	683.3	0.0	422	466.0	683.3	0.0	423	504.8	683.3	0.0
424	543.7	683.3	0.0	425	582.5	683.3	0.0	426	38.8	710.0	0.0
427	0.0	710.0	0.0	428	77.7	710.0	0.0	429	116.5	710.0	0.0
430	155.3	710.0	0.0	431	194.2	710.0	0.0	432	233.0	710.0	0.0
433	271.8	710.0	0.0	434	310.7	710.0	0.0	435	349.5	710.0	0.0
436	388.3	710.0	0.0	437	427.2	710.0	0.0	438	466.0	710.0	0.0
439	504.8	710.0	0.0	440	543.7	710.0	0.0	441	582.5	710.0	0.0
442	38.8	736.7	0.0	443	0.0	736.7	0.0	444	77.7	736.7	0.0
445	116.5	736.7	0.0	446	155.3	736.7	0.0	447	194.2	736.7	0.0
448	233.0	736.7	0.0	449	271.8	736.7	0.0	450	310.7	736.7	0.0
451	349.5	736.7	0.0	452	388.3	736.7	0.0	453	427.2	736.7	0.0
454	466.0	736.7	0.0	455	504.8	736.7	0.0	456	543.7	736.7	0.0
457	582.5	736.7	0.0	458	38.8	763.3	0.0	459	0.0	763.3	0.0
460	77.7	763.3	0.0	461	116.5	763.3	0.0	462	155.3	763.3	0.0
463	194.2	763.3	0.0	464	233.0	763.3	0.0	465	271.8	763.3	0.0
466	310.7	763.3	0.0	467	349.5	763.3	0.0	468	388.3	763.3	0.0
469	427.2	763.3	0.0	470	466.0	763.3	0.0	471	504.8	763.3	0.0
472	543.7	763.3	0.0	473	582.5	763.3	0.0	474	38.8	790.0	0.0
475	0.0	790.0	0.0	476	77.7	790.0	0.0	477	116.5	790.0	0.0
478	155.3	790.0	0.0	479	194.2	790.0	0.0	480	233.0	790.0	0.0
481	271.8	790.0	0.0	482	310.7	790.0	0.0	483	349.5	790.0	0.0
484	388.3	790.0	0.0	485	427.2	790.0	0.0	486	466.0	790.0	0.0
487	504.8	790.0	0.0	488	543.7	790.0	0.0	489	582.5	790.0	0.0
490	38.8	816.7	0.0	491	0.0	816.7	0.0	492	77.7	816.7	0.0
493	116.5	816.7	0.0	494	155.3	816.7	0.0	495	194.2	816.7	0.0
496	233.0	816.7	0.0	497	271.8	816.7	0.0	498	310.7	816.7	0.0
499	349.5	816.7	0.0	500	388.3	816.7	0.0	501	427.2	816.7	0.0
502	466.0	816.7	0.0	503	504.8	816.7	0.0	504	543.7	816.7	0.0
505	582.5	816.7	0.0	506	38.8	843.3	0.0	507	0.0	843.3	0.0
508	77.7	843.3	0.0	509	116.5	843.3	0.0	510	155.3	843.3	0.0
511	194.2	843.3	0.0	512	233.0	843.3	0.0	513	271.8	843.3	0.0
514	310.7	843.3	0.0	515	349.5	843.3	0.0	516	388.3	843.3	0.0
517	427.2	843.3	0.0	518	466.0	843.3	0.0	519	504.8	843.3	0.0
520	543.7	843.3	0.0	521	582.5	843.3	0.0	522	38.8	870.0	0.0

523	77.7	870.0	0.0	524	116.5	870.0	0.0	525	155.3	870.0	0.0
526	194.2	870.0	0.0	527	233.0	870.0	0.0	528	271.8	870.0	0.0
529	310.7	870.0	0.0	530	349.5	870.0	0.0	531	388.3	870.0	0.0
532	427.2	870.0	0.0	533	466.0	870.0	0.0	534	504.8	870.0	0.0
535	543.7	870.0	0.0	536	38.8	893.3	0.0	537	0.0	893.3	0.0
538	77.7	893.3	0.0	539	116.5	893.3	0.0	540	155.3	893.3	0.0
541	194.2	893.3	0.0	542	233.0	893.3	0.0	543	271.8	893.3	0.0
544	310.7	893.3	0.0	545	349.5	893.3	0.0	546	388.3	893.3	0.0
547	427.2	893.3	0.0	548	466.0	893.3	0.0	549	504.8	893.3	0.0
550	543.7	893.3	0.0	551	582.5	893.3	0.0	552	38.8	916.7	0.0
553	0.0	916.7	0.0	554	77.7	916.7	0.0	555	116.5	916.7	0.0
556	155.3	916.7	0.0	557	194.2	916.7	0.0	558	233.0	916.7	0.0
559	271.8	916.7	0.0	560	310.7	916.7	0.0	561	349.5	916.7	0.0
562	388.3	916.7	0.0	563	427.2	916.7	0.0	564	466.0	916.7	0.0
565	504.8	916.7	0.0	566	543.7	916.7	0.0	567	582.5	916.7	0.0
568	38.8	940.0	0.0	569	0.0	940.0	0.0	570	77.7	940.0	0.0
571	116.5	940.0	0.0	572	155.3	940.0	0.0	573	194.2	940.0	0.0
574	233.0	940.0	0.0	575	271.8	940.0	0.0	576	310.7	940.0	0.0
577	349.5	940.0	0.0	578	388.3	940.0	0.0	579	427.2	940.0	0.0
580	466.0	940.0	0.0	581	504.8	940.0	0.0	582	543.7	940.0	0.0
583	582.5	940.0	0.0	584	38.8	963.3	0.0	585	0.0	963.3	0.0
586	77.7	963.3	0.0	587	116.5	963.3	0.0	588	155.3	963.3	0.0
589	194.2	963.3	0.0	590	233.0	963.3	0.0	591	271.8	963.3	0.0
592	310.7	963.3	0.0	593	349.5	963.3	0.0	594	388.3	963.3	0.0
595	427.2	963.3	0.0	596	466.0	963.3	0.0	597	504.8	963.3	0.0
598	543.7	963.3	0.0	599	582.5	963.3	0.0	600	38.8	986.7	0.0
601	0.0	986.7	0.0	602	77.7	986.7	0.0	603	116.5	986.7	0.0
604	155.3	986.7	0.0	605	194.2	986.7	0.0	606	233.0	986.7	0.0
607	271.8	986.7	0.0	608	310.7	986.7	0.0	609	349.5	986.7	0.0
610	388.3	986.7	0.0	611	427.2	986.7	0.0	612	466.0	986.7	0.0
613	504.8	986.7	0.0	614	543.7	986.7	0.0	615	582.5	986.7	0.0
616	38.8	1010.0	0.0	617	0.0	1010.0	0.0	618	77.7	1010.0	0.0
619	116.5	1010.0	0.0	620	155.3	1010.0	0.0	621	194.2	1010.0	0.0
622	233.0	1010.0	0.0	623	271.8	1010.0	0.0	624	310.7	1010.0	0.0
625	349.5	1010.0	0.0	626	388.3	1010.0	0.0	627	427.2	1010.0	0.0
628	466.0	1010.0	0.0	629	504.8	1010.0	0.0	630	543.7	1010.0	0.0
631	582.5	1010.0	0.0	632	38.8	1033.3	0.0	633	0.0	1033.3	0.0
634	77.7	1033.3	0.0	635	116.5	1033.3	0.0	636	155.3	1033.3	0.0
637	194.2	1033.3	0.0	638	233.0	1033.3	0.0	639	271.8	1033.3	0.0
640	310.7	1033.3	0.0	641	349.5	1033.3	0.0	642	388.3	1033.3	0.0
643	427.2	1033.3	0.0	644	466.0	1033.3	0.0	645	504.8	1033.3	0.0
646	543.7	1033.3	0.0	647	582.5	1033.3	0.0	648	38.8	1056.7	0.0
649	0.0	1056.7	0.0	650	77.7	1056.7	0.0	651	116.5	1056.7	0.0
652	155.3	1056.7	0.0	653	194.2	1056.7	0.0	654	233.0	1056.7	0.0
655	271.8	1056.7	0.0	656	310.7	1056.7	0.0	657	349.5	1056.7	0.0
658	388.3	1056.7	0.0	659	427.2	1056.7	0.0	660	466.0	1056.7	0.0
661	504.8	1056.7	0.0	662	543.7	1056.7	0.0	663	582.5	1056.7	0.0
664	38.8	1080.0	0.0	665	0.0	1080.0	0.0	666	77.7	1080.0	0.0
667	116.5	1080.0	0.0	668	155.3	1080.0	0.0	669	194.2	1080.0	0.0
670	233.0	1080.0	0.0	671	271.8	1080.0	0.0	672	310.7	1080.0	0.0
673	349.5	1080.0	0.0	674	388.3	1080.0	0.0	675	427.2	1080.0	0.0
676	466.0	1080.0	0.0	677	504.8	1080.0	0.0	678	543.7	1080.0	0.0
679	582.5	1080.0	0.0	680	38.8	1103.3	0.0	681	0.0	1103.3	0.0
682	77.7	1103.3	0.0	683	116.5	1103.3	0.0	684	155.3	1103.3	0.0
685	194.2	1103.3	0.0	686	233.0	1103.3	0.0	687	271.8	1103.3	0.0
688	310.7	1103.3	0.0	689	349.5	1103.3	0.0	690	388.3	1103.3	0.0
691	427.2	1103.3	0.0	692	466.0	1103.3	0.0	693	504.8	1103.3	0.0
694	543.7	1103.3	0.0	695	582.5	1103.3	0.0	696	38.8	1126.7	0.0
697	0.0	1126.7	0.0	698	77.7	1126.7	0.0	699	116.5	1126.7	0.0
700	155.3	1126.7	0.0	701	194.2	1126.7	0.0	702	233.0	1126.7	0.0
703	271.8	1126.7	0.0	704	310.7	1126.7	0.0	705	349.5	1126.7	0.0
706	388.3	1126.7	0.0	707	427.2	1126.7	0.0	708	466.0	1126.7	0.0
709	504.8	1126.7	0.0	710	543.7	1126.7	0.0	711	582.5	1126.7	0.0
712	38.8	1150.0	0.0	713	0.0	1150.0	0.0	714	77.7	1150.0	0.0
715	116.5	1150.0	0.0	716	155.3	1150.0	0.0	717	194.2	1150.0	0.0
718	233.0	1150.0	0.0	719	271.8	1150.0	0.0	720	310.7	1150.0	0.0
721	349.5	1150.0	0.0	722	388.3	1150.0	0.0	723	427.2	1150.0	0.0
724	466.0	1150.0	0.0	725	504.8	1150.0	0.0	726	543.7	1150.0	0.0
727	582.5	1150.0	0.0	728	38.8	1173.3	0.0	729	0.0	1173.3	0.0
730	77.7	1173.3	0.0	731	116.5	1173.3	0.0	732	155.3	1173.3	0.0
733	194.2	1173.3	0.0	734	233.0	1173.3	0.0	735	271.8	1173.3	0.0
736	310.7	1173.3	0.0	737	349.5	1173.3	0.0	738	388.3	1173.3	0.0
739	427.2	1173.3	0.0	740	466.0	1173.3	0.0	741	504.8	1173.3	0.0
742	543.7	1173.3	0.0	743	582.5	1173.3	0.0	744	38.8	1196.7	0.0
745	0.0	1196.7	0.0	746	77.7	1196.7	0.0	747	116.5	1196.7	0.0
748	155.3	1196.7	0.0	749	194.2	1196.7	0.0	750	233.0	1196.7	0.0
751	271.8	1196.7	0.0	752	310.7	1196.7	0.0	753	349.5	1196.7	0.0

754	388.3	1196.7	0.0	755	427.2	1196.7	0.0	756	466.0	1196.7	0.0
757	504.8	1196.7	0.0	758	543.7	1196.7	0.0	759	582.5	1196.7	0.0
760	38.8	1220.0	0.0	761	77.7	1220.0	0.0	762	116.5	1220.0	0.0
763	155.3	1220.0	0.0	764	194.2	1220.0	0.0	765	233.0	1220.0	0.0
766	271.8	1220.0	0.0	767	310.7	1220.0	0.0	768	349.5	1220.0	0.0
769	388.3	1220.0	0.0	770	427.2	1220.0	0.0	771	466.0	1220.0	0.0
772	504.8	1220.0	0.0	773	543.7	1220.0	0.0	774	38.8	1243.5	0.0
775	0.0	1243.5	0.0	776	77.7	1243.5	0.0	777	116.5	1243.5	0.0
778	155.3	1243.5	0.0	779	194.2	1243.5	0.0	780	233.0	1243.5	0.0
781	271.8	1243.5	0.0	782	310.7	1243.5	0.0	783	349.5	1243.5	0.0
784	388.3	1243.5	0.0	785	427.2	1243.5	0.0	786	466.0	1243.5	0.0
787	504.8	1243.5	0.0	788	543.7	1243.5	0.0	789	582.5	1243.5	0.0
790	38.8	1267.0	0.0	791	0.0	1267.0	0.0	792	77.7	1267.0	0.0
793	116.5	1267.0	0.0	794	155.3	1267.0	0.0	795	194.2	1267.0	0.0
796	233.0	1267.0	0.0	797	271.8	1267.0	0.0	798	310.7	1267.0	0.0
799	349.5	1267.0	0.0	800	388.3	1267.0	0.0	801	427.2	1267.0	0.0
802	466.0	1267.0	0.0	803	504.8	1267.0	0.0	804	543.7	1267.0	0.0
805	582.5	1267.0	0.0	806	38.8	1290.5	0.0	807	0.0	1290.5	0.0
808	77.7	1290.5	0.0	809	116.5	1290.5	0.0	810	155.3	1290.5	0.0
811	194.2	1290.5	0.0	812	233.0	1290.5	0.0	813	271.8	1290.5	0.0
814	310.7	1290.5	0.0	815	349.5	1290.5	0.0	816	388.3	1290.5	0.0
817	427.2	1290.5	0.0	818	466.0	1290.5	0.0	819	504.8	1290.5	0.0
820	543.7	1290.5	0.0	821	582.5	1290.5	0.0	822	38.8	1314.0	0.0
823	0.0	1314.0	0.0	824	77.7	1314.0	0.0	825	116.5	1314.0	0.0
826	155.3	1314.0	0.0	827	194.2	1314.0	0.0	828	233.0	1314.0	0.0
829	271.8	1314.0	0.0	830	310.7	1314.0	0.0	831	349.5	1314.0	0.0
832	388.3	1314.0	0.0	833	427.2	1314.0	0.0	834	466.0	1314.0	0.0
835	504.8	1314.0	0.0	836	543.7	1314.0	0.0	837	582.5	1314.0	0.0
838	38.8	1337.5	0.0	839	0.0	1337.5	0.0	840	77.7	1337.5	0.0
841	116.5	1337.5	0.0	842	155.3	1337.5	0.0	843	194.2	1337.5	0.0
844	233.0	1337.5	0.0	845	271.8	1337.5	0.0	846	310.7	1337.5	0.0
847	349.5	1337.5	0.0	848	388.3	1337.5	0.0	849	427.2	1337.5	0.0
850	466.0	1337.5	0.0	851	504.8	1337.5	0.0	852	543.7	1337.5	0.0
853	582.5	1337.5	0.0	854	38.8	1361.0	0.0	855	0.0	1361.0	0.0
856	77.7	1361.0	0.0	857	116.5	1361.0	0.0	858	155.3	1361.0	0.0
859	194.2	1361.0	0.0	860	233.0	1361.0	0.0	861	271.8	1361.0	0.0
862	310.7	1361.0	0.0	863	349.5	1361.0	0.0	864	388.3	1361.0	0.0
865	427.2	1361.0	0.0	866	466.0	1361.0	0.0	867	504.8	1361.0	0.0
868	543.7	1361.0	0.0	869	582.5	1361.0	0.0	870	38.8	1384.5	0.0
871	0.0	1384.5	0.0	872	77.7	1384.5	0.0	873	116.5	1384.5	0.0
874	155.3	1384.5	0.0	875	194.2	1384.5	0.0	876	233.0	1384.5	0.0
877	271.8	1384.5	0.0	878	310.7	1384.5	0.0	879	349.5	1384.5	0.0
880	388.3	1384.5	0.0	881	427.2	1384.5	0.0	882	466.0	1384.5	0.0
883	504.8	1384.5	0.0	884	543.7	1384.5	0.0	885	582.5	1384.5	0.0
886	38.8	1408.0	0.0	887	0.0	1408.0	0.0	888	77.7	1408.0	0.0
889	116.5	1408.0	0.0	890	155.3	1408.0	0.0	891	194.2	1408.0	0.0
892	233.0	1408.0	0.0	893	271.8	1408.0	0.0	894	310.7	1408.0	0.0
895	349.5	1408.0	0.0	896	388.3	1408.0	0.0	897	427.2	1408.0	0.0
898	466.0	1408.0	0.0	899	504.8	1408.0	0.0	900	543.7	1408.0	0.0
901	582.5	1408.0	0.0	902	38.8	1431.5	0.0	903	0.0	1431.5	0.0
904	77.7	1431.5	0.0	905	116.5	1431.5	0.0	906	155.3	1431.5	0.0
907	194.2	1431.5	0.0	908	233.0	1431.5	0.0	909	271.8	1431.5	0.0
910	310.7	1431.5	0.0	911	349.5	1431.5	0.0	912	388.3	1431.5	0.0
913	427.2	1431.5	0.0	914	466.0	1431.5	0.0	915	504.8	1431.5	0.0
916	543.7	1431.5	0.0	917	582.5	1431.5	0.0	918	38.8	1455.0	0.0
919	0.0	1455.0	0.0	920	77.7	1455.0	0.0	921	116.5	1455.0	0.0
922	155.3	1455.0	0.0	923	194.2	1455.0	0.0	924	233.0	1455.0	0.0
925	271.8	1455.0	0.0	926	310.7	1455.0	0.0	927	349.5	1455.0	0.0
928	388.3	1455.0	0.0	929	427.2	1455.0	0.0	930	466.0	1455.0	0.0
931	504.8	1455.0	0.0	932	543.7	1455.0	0.0	933	582.5	1455.0	0.0
934	38.8	1478.5	0.0	935	0.0	1478.5	0.0	936	77.7	1478.5	0.0
937	116.5	1478.5	0.0	938	155.3	1478.5	0.0	939	194.2	1478.5	0.0
940	233.0	1478.5	0.0	941	271.8	1478.5	0.0	942	310.7	1478.5	0.0
943	349.5	1478.5	0.0	944	388.3	1478.5	0.0	945	427.2	1478.5	0.0
946	466.0	1478.5	0.0	947	504.8	1478.5	0.0	948	543.7	1478.5	0.0
949	582.5	1478.5	0.0	950	38.8	1502.0	0.0	951	0.0	1502.0	0.0
952	77.7	1502.0	0.0	953	116.5	1502.0	0.0	954	155.3	1502.0	0.0
955	194.2	1502.0	0.0	956	233.0	1502.0	0.0	957	271.8	1502.0	0.0
958	310.7	1502.0	0.0	959	349.5	1502.0	0.0	960	388.3	1502.0	0.0
961	427.2	1502.0	0.0	962	466.0	1502.0	0.0	963	504.8	1502.0	0.0
964	543.7	1502.0	0.0	965	582.5	1502.0	0.0	966	38.8	1525.5	0.0
967	0.0	1525.5	0.0	968	77.7	1525.5	0.0	969	116.5	1525.5	0.0
970	155.3	1525.5	0.0	971	194.2	1525.5	0.0	972	233.0	1525.5	0.0
973	271.8	1525.5	0.0	974	310.7	1525.5	0.0	975	349.5	1525.5	0.0
976	388.3	1525.5	0.0	977	427.2	1525.5	0.0	978	466.0	1525.5	0.0
979	504.8	1525.5	0.0	980	543.7	1525.5	0.0	981	582.5	1525.5	0.0
982	38.8	1549.0	0.0	983	0.0	1549.0	0.0	984	77.7	1549.0	0.0

985	116.5	1549.0	0.0	986	155.3	1549.0	0.0	987	194.2	1549.0	0.0
988	233.0	1549.0	0.0	989	271.8	1549.0	0.0	990	310.7	1549.0	0.0
991	349.5	1549.0	0.0	992	388.3	1549.0	0.0	993	427.2	1549.0	0.0
994	466.0	1549.0	0.0	995	504.8	1549.0	0.0	996	543.7	1549.0	0.0
997	582.5	1549.0	0.0	998	38.8	1572.5	0.0	999	0.0	1572.5	0.0
1000	77.7	1572.5	0.0	1001	116.5	1572.5	0.0	1002	155.3	1572.5	0.0
1003	194.2	1572.5	0.0	1004	233.0	1572.5	0.0	1005	271.8	1572.5	0.0
1006	310.7	1572.5	0.0	1007	349.5	1572.5	0.0	1008	388.3	1572.5	0.0
1009	427.2	1572.5	0.0	1010	466.0	1572.5	0.0	1011	504.8	1572.5	0.0
1012	543.7	1572.5	0.0	1013	582.5	1572.5	0.0	1014	38.8	1596.0	0.0
1015	0.0	1596.0	0.0	1016	77.7	1596.0	0.0	1017	116.5	1596.0	0.0
1018	155.3	1596.0	0.0	1019	194.2	1596.0	0.0	1020	233.0	1596.0	0.0
1021	271.8	1596.0	0.0	1022	310.7	1596.0	0.0	1023	349.5	1596.0	0.0
1024	388.3	1596.0	0.0	1025	427.2	1596.0	0.0	1026	466.0	1596.0	0.0
1027	504.8	1596.0	0.0	1028	543.7	1596.0	0.0	1029	582.5	1596.0	0.0
1030	38.8	1619.5	0.0	1031	0.0	1619.5	0.0	1032	77.7	1619.5	0.0
1033	116.5	1619.5	0.0	1034	155.3	1619.5	0.0	1035	194.2	1619.5	0.0
1036	233.0	1619.5	0.0	1037	271.8	1619.5	0.0	1038	310.7	1619.5	0.0
1039	349.5	1619.5	0.0	1040	388.3	1619.5	0.0	1041	427.2	1619.5	0.0
1042	466.0	1619.5	0.0	1043	504.8	1619.5	0.0	1044	543.7	1619.5	0.0
1045	582.5	1619.5	0.0	1046	38.8	1643.0	0.0	1047	0.0	1643.0	0.0
1048	77.7	1643.0	0.0	1049	116.5	1643.0	0.0	1050	155.3	1643.0	0.0
1051	194.2	1643.0	0.0	1052	233.0	1643.0	0.0	1053	271.8	1643.0	0.0
1054	310.7	1643.0	0.0	1055	349.5	1643.0	0.0	1056	388.3	1643.0	0.0
1057	427.2	1643.0	0.0	1058	466.0	1643.0	0.0	1059	504.8	1643.0	0.0
1060	543.7	1643.0	0.0	1061	582.5	1643.0	0.0	1062	38.8	1666.5	0.0
1063	0.0	1666.5	0.0	1064	77.7	1666.5	0.0	1065	116.5	1666.5	0.0
1066	155.3	1666.5	0.0	1067	194.2	1666.5	0.0	1068	233.0	1666.5	0.0
1069	271.8	1666.5	0.0	1070	310.7	1666.5	0.0	1071	349.5	1666.5	0.0
1072	388.3	1666.5	0.0	1073	427.2	1666.5	0.0	1074	466.0	1666.5	0.0
1075	504.8	1666.5	0.0	1076	543.7	1666.5	0.0	1077	582.5	1666.5	0.0
1078	38.8	1690.0	0.0	1079	0.0	1690.0	0.0	1080	77.7	1690.0	0.0
1081	116.5	1690.0	0.0	1082	155.3	1690.0	0.0	1083	194.2	1690.0	0.0
1084	233.0	1690.0	0.0	1085	271.8	1690.0	0.0	1086	310.7	1690.0	0.0
1087	349.5	1690.0	0.0	1088	388.3	1690.0	0.0	1089	427.2	1690.0	0.0
1090	466.0	1690.0	0.0	1091	504.8	1690.0	0.0	1092	543.7	1690.0	0.0
1093	582.5	1690.0	0.0	1094	38.8	1713.5	0.0	1095	0.0	1713.5	0.0
1096	77.7	1713.5	0.0	1097	116.5	1713.5	0.0	1098	155.3	1713.5	0.0
1099	194.2	1713.5	0.0	1100	233.0	1713.5	0.0	1101	271.8	1713.5	0.0
1102	310.7	1713.5	0.0	1103	349.5	1713.5	0.0	1104	388.3	1713.5	0.0
1105	427.2	1713.5	0.0	1106	466.0	1713.5	0.0	1107	504.8	1713.5	0.0
1108	543.7	1713.5	0.0	1109	582.5	1713.5	0.0	1110	38.8	1737.0	0.0
1111	0.0	1737.0	0.0	1112	77.7	1737.0	0.0	1113	116.5	1737.0	0.0
1114	155.3	1737.0	0.0	1115	194.2	1737.0	0.0	1116	233.0	1737.0	0.0
1117	271.8	1737.0	0.0	1118	310.7	1737.0	0.0	1119	349.5	1737.0	0.0
1120	388.3	1737.0	0.0	1121	427.2	1737.0	0.0	1122	466.0	1737.0	0.0
1123	504.8	1737.0	0.0	1124	543.7	1737.0	0.0	1125	582.5	1737.0	0.0
1126	38.8	1760.5	0.0	1127	0.0	1760.5	0.0	1128	77.7	1760.5	0.0
1129	116.5	1760.5	0.0	1130	155.3	1760.5	0.0	1131	194.2	1760.5	0.0
1132	233.0	1760.5	0.0	1133	271.8	1760.5	0.0	1134	310.7	1760.5	0.0
1135	349.5	1760.5	0.0	1136	388.3	1760.5	0.0	1137	427.2	1760.5	0.0
1138	466.0	1760.5	0.0	1139	504.8	1760.5	0.0	1140	543.7	1760.5	0.0
1141	582.5	1760.5	0.0	1142	38.8	1784.0	0.0	1143	0.0	1784.0	0.0
1144	77.7	1784.0	0.0	1145	116.5	1784.0	0.0	1146	155.3	1784.0	0.0
1147	194.2	1784.0	0.0	1148	233.0	1784.0	0.0	1149	271.8	1784.0	0.0
1150	310.7	1784.0	0.0	1151	349.5	1784.0	0.0	1152	388.3	1784.0	0.0
1153	427.2	1784.0	0.0	1154	466.0	1784.0	0.0	1155	504.8	1784.0	0.0
1156	543.7	1784.0	0.0	1157	582.5	1784.0	0.0	1158	38.8	1807.5	0.0
1159	0.0	1807.5	0.0	1160	77.7	1807.5	0.0	1161	116.5	1807.5	0.0
1162	155.3	1807.5	0.0	1163	194.2	1807.5	0.0	1164	233.0	1807.5	0.0
1165	271.8	1807.5	0.0	1166	310.7	1807.5	0.0	1167	349.5	1807.5	0.0
1168	388.3	1807.5	0.0	1169	427.2	1807.5	0.0	1170	466.0	1807.5	0.0
1171	504.8	1807.5	0.0	1172	543.7	1807.5	0.0	1173	582.5	1807.5	0.0
1174	38.8	1831.0	0.0	1175	0.0	1831.0	0.0	1176	77.7	1831.0	0.0
1177	116.5	1831.0	0.0	1178	155.3	1831.0	0.0	1179	194.2	1831.0	0.0
1180	233.0	1831.0	0.0	1181	271.8	1831.0	0.0	1182	310.7	1831.0	0.0
1183	349.5	1831.0	0.0	1184	388.3	1831.0	0.0	1185	427.2	1831.0	0.0
1186	466.0	1831.0	0.0	1187	504.8	1831.0	0.0	1188	543.7	1831.0	0.0
1189	582.5	1831.0	0.0	1190	38.8	1854.5	0.0	1191	0.0	1854.5	0.0
1192	77.7	1854.5	0.0	1193	116.5	1854.5	0.0	1194	155.3	1854.5	0.0
1195	194.2	1854.5	0.0	1196	233.0	1854.5	0.0	1197	271.8	1854.5	0.0
1198	310.7	1854.5	0.0	1199	349.5	1854.5	0.0	1200	388.3	1854.5	0.0
1201	427.2	1854.5	0.0	1202	466.0	1854.5	0.0	1203	504.8	1854.5	0.0
1204	543.7	1854.5	0.0	1205	582.5	1854.5	0.0	1206	38.8	1878.0	0.0
1207	0.0	1878.0	0.0	1208	77.7	1878.0	0.0	1209	116.5	1878.0	0.0
1210	155.3	1878.0	0.0	1211	194.2	1878.0	0.0	1212	233.0	1878.0	0.0
1213	271.8	1878.0	0.0	1214	310.7	1878.0	0.0	1215	349.5	1878.0	0.0

1216	388.3	1878.0	0.0	1217	427.2	1878.0	0.0	1218	466.0	1878.0	0.0
1219	504.8	1878.0	0.0	1220	543.7	1878.0	0.0	1221	582.5	1878.0	0.0
1222	38.8	1901.5	0.0	1223	0.0	1901.5	0.0	1224	77.7	1901.5	0.0
1225	116.5	1901.5	0.0	1226	155.3	1901.5	0.0	1227	194.2	1901.5	0.0
1228	233.0	1901.5	0.0	1229	271.8	1901.5	0.0	1230	310.7	1901.5	0.0
1231	349.5	1901.5	0.0	1232	388.3	1901.5	0.0	1233	427.2	1901.5	0.0
1234	466.0	1901.5	0.0	1235	504.8	1901.5	0.0	1236	543.7	1901.5	0.0
1237	582.5	1901.5	0.0	1238	38.8	1925.0	0.0	1239	77.7	1925.0	0.0
1240	116.5	1925.0	0.0	1241	155.3	1925.0	0.0	1242	194.2	1925.0	0.0
1243	233.0	1925.0	0.0	1244	271.8	1925.0	0.0	1245	310.7	1925.0	0.0
1246	349.5	1925.0	0.0	1247	388.3	1925.0	0.0	1248	427.2	1925.0	0.0
1249	466.0	1925.0	0.0	1250	504.8	1925.0	0.0	1251	543.7	1925.0	0.0
1252	621.3	1220.0	0.0	1253	621.3	1243.5	0.0	1254	660.2	1220.0	0.0
1255	660.2	1243.5	0.0	1256	699.0	1220.0	0.0	1257	699.0	1243.5	0.0
1258	737.8	1220.0	0.0	1259	737.8	1243.5	0.0	1260	776.7	1220.0	0.0
1261	776.7	1243.5	0.0	1262	815.5	1220.0	0.0	1263	815.5	1243.5	0.0
1264	854.3	1220.0	0.0	1265	854.3	1243.5	0.0	1266	893.2	1220.0	0.0
1267	893.2	1243.5	0.0	1268	932.0	1220.0	0.0	1269	932.0	1243.5	0.0
1270	970.8	1220.0	0.0	1271	970.8	1243.5	0.0	1272	1009.7	1220.0	0.0
1273	1009.7	1243.5	0.0	1274	1048.5	1220.0	0.0	1275	1048.5	1243.5	0.0
1276	1087.3	1220.0	0.0	1277	1087.3	1243.5	0.0	1278	1126.2	1220.0	0.0
1279	1126.2	1243.5	0.0	1280	1165.0	1243.5	0.0	1281	621.3	1267.0	0.0
1282	660.2	1267.0	0.0	1283	699.0	1267.0	0.0	1284	737.8	1267.0	0.0
1285	776.7	1267.0	0.0	1286	815.5	1267.0	0.0	1287	854.3	1267.0	0.0
1288	893.2	1267.0	0.0	1289	932.0	1267.0	0.0	1290	970.8	1267.0	0.0
1291	1009.7	1267.0	0.0	1292	1048.5	1267.0	0.0	1293	1087.3	1267.0	0.0
1294	1126.2	1267.0	0.0	1295	1165.0	1267.0	0.0	1296	621.3	1290.5	0.0
1297	660.2	1290.5	0.0	1298	699.0	1290.5	0.0	1299	737.8	1290.5	0.0
1300	776.7	1290.5	0.0	1301	815.5	1290.5	0.0	1302	854.3	1290.5	0.0
1303	893.2	1290.5	0.0	1304	932.0	1290.5	0.0	1305	970.8	1290.5	0.0
1306	1009.7	1290.5	0.0	1307	1048.5	1290.5	0.0	1308	1087.3	1290.5	0.0
1309	1126.2	1290.5	0.0	1310	1165.0	1290.5	0.0	1311	621.3	1314.0	0.0
1312	660.2	1314.0	0.0	1313	699.0	1314.0	0.0	1314	737.8	1314.0	0.0
1315	776.7	1314.0	0.0	1316	815.5	1314.0	0.0	1317	854.3	1314.0	0.0
1318	893.2	1314.0	0.0	1319	932.0	1314.0	0.0	1320	970.8	1314.0	0.0
1321	1009.7	1314.0	0.0	1322	1048.5	1314.0	0.0	1323	1087.3	1314.0	0.0
1324	1126.2	1314.0	0.0	1325	1165.0	1314.0	0.0	1326	621.3	1337.5	0.0
1327	660.2	1337.5	0.0	1328	699.0	1337.5	0.0	1329	737.8	1337.5	0.0
1330	776.7	1337.5	0.0	1331	815.5	1337.5	0.0	1332	854.3	1337.5	0.0
1333	893.2	1337.5	0.0	1334	932.0	1337.5	0.0	1335	970.8	1337.5	0.0
1336	1009.7	1337.5	0.0	1337	1048.5	1337.5	0.0	1338	1087.3	1337.5	0.0
1339	1126.2	1337.5	0.0	1340	1165.0	1337.5	0.0	1341	621.3	1361.0	0.0
1342	660.2	1361.0	0.0	1343	699.0	1361.0	0.0	1344	737.8	1361.0	0.0
1345	776.7	1361.0	0.0	1346	815.5	1361.0	0.0	1347	854.3	1361.0	0.0
1348	893.2	1361.0	0.0	1349	932.0	1361.0	0.0	1350	970.8	1361.0	0.0
1351	1009.7	1361.0	0.0	1352	1048.5	1361.0	0.0	1353	1087.3	1361.0	0.0
1354	1126.2	1361.0	0.0	1355	1165.0	1361.0	0.0	1356	621.3	1384.5	0.0
1357	660.2	1384.5	0.0	1358	699.0	1384.5	0.0	1359	737.8	1384.5	0.0
1360	776.7	1384.5	0.0	1361	815.5	1384.5	0.0	1362	854.3	1384.5	0.0
1363	893.2	1384.5	0.0	1364	932.0	1384.5	0.0	1365	970.8	1384.5	0.0
1366	1009.7	1384.5	0.0	1367	1048.5	1384.5	0.0	1368	1087.3	1384.5	0.0
1369	1126.2	1384.5	0.0	1370	1165.0	1384.5	0.0	1371	621.3	1408.0	0.0
1372	660.2	1408.0	0.0	1373	699.0	1408.0	0.0	1374	737.8	1408.0	0.0
1375	776.7	1408.0	0.0	1376	815.5	1408.0	0.0	1377	854.3	1408.0	0.0
1378	893.2	1408.0	0.0	1379	932.0	1408.0	0.0	1380	970.8	1408.0	0.0
1381	1009.7	1408.0	0.0	1382	1048.5	1408.0	0.0	1383	1087.3	1408.0	0.0
1384	1126.2	1408.0	0.0	1385	1165.0	1408.0	0.0	1386	621.3	1431.5	0.0
1387	660.2	1431.5	0.0	1388	699.0	1431.5	0.0	1389	737.8	1431.5	0.0
1390	776.7	1431.5	0.0	1391	815.5	1431.5	0.0	1392	854.3	1431.5	0.0
1393	893.2	1431.5	0.0	1394	932.0	1431.5	0.0	1395	970.8	1431.5	0.0
1396	1009.7	1431.5	0.0	1397	1048.5	1431.5	0.0	1398	1087.3	1431.5	0.0
1399	1126.2	1431.5	0.0	1400	1165.0	1431.5	0.0	1401	621.3	1455.0	0.0
1402	660.2	1455.0	0.0	1403	699.0	1455.0	0.0	1404	737.8	1455.0	0.0
1405	776.7	1455.0	0.0	1406	815.5	1455.0	0.0	1407	854.3	1455.0	0.0
1408	893.2	1455.0	0.0	1409	932.0	1455.0	0.0	1410	970.8	1455.0	0.0
1411	1009.7	1455.0	0.0	1412	1048.5	1455.0	0.0	1413	1087.3	1455.0	0.0
1414	1126.2	1455.0	0.0	1415	1165.0	1455.0	0.0	1416	621.3	1478.5	0.0
1417	660.2	1478.5	0.0	1418	699.0	1478.5	0.0	1419	737.8	1478.5	0.0
1420	776.7	1478.5	0.0	1421	815.5	1478.5	0.0	1422	854.3	1478.5	0.0
1423	893.2	1478.5	0.0	1424	932.0	1478.5	0.0	1425	970.8	1478.5	0.0
1426	1009.7	1478.5	0.0	1427	1048.5	1478.5	0.0	1428	1087.3	1478.5	0.0
1429	1126.2	1478.5	0.0	1430	1165.0	1478.5	0.0	1431	621.3	1502.0	0.0
1432	660.2	1502.0	0.0	1433	699.0	1502.0	0.0	1434	737.8	1502.0	0.0
1435	776.7	1502.0	0.0	1436	815.5	1502.0	0.0	1437	854.3	1502.0	0.0
1438	893.2	1502.0	0.0	1439	932.0	1502.0	0.0	1440	970.8	1502.0	0.0
1441	1009.7	1502.0	0.0	1442	1048.5	1502.0	0.0	1443	1087.3	1502.0	0.0
1444	1126.2	1502.0	0.0	1445	1165.0	1502.0	0.0	1446	621.3	1525.5	0.0

1447	660.2	1525.5	0.0	1448	699.0	1525.5	0.0	1449	737.8	1525.5	0.0
1450	776.7	1525.5	0.0	1451	815.5	1525.5	0.0	1452	854.3	1525.5	0.0
1453	893.2	1525.5	0.0	1454	932.0	1525.5	0.0	1455	970.8	1525.5	0.0
1456	1009.7	1525.5	0.0	1457	1048.5	1525.5	0.0	1458	1087.3	1525.5	0.0
1459	1126.2	1525.5	0.0	1460	1165.0	1525.5	0.0	1461	621.3	1549.0	0.0
1462	660.2	1549.0	0.0	1463	699.0	1549.0	0.0	1464	737.8	1549.0	0.0
1465	776.7	1549.0	0.0	1466	815.5	1549.0	0.0	1467	854.3	1549.0	0.0
1468	893.2	1549.0	0.0	1469	932.0	1549.0	0.0	1470	970.8	1549.0	0.0
1471	1009.7	1549.0	0.0	1472	1048.5	1549.0	0.0	1473	1087.3	1549.0	0.0
1474	1126.2	1549.0	0.0	1475	1165.0	1549.0	0.0	1476	621.3	1572.5	0.0
1477	660.2	1572.5	0.0	1478	699.0	1572.5	0.0	1479	737.8	1572.5	0.0
1480	776.7	1572.5	0.0	1481	815.5	1572.5	0.0	1482	854.3	1572.5	0.0
1483	893.2	1572.5	0.0	1484	932.0	1572.5	0.0	1485	970.8	1572.5	0.0
1486	1009.7	1572.5	0.0	1487	1048.5	1572.5	0.0	1488	1087.3	1572.5	0.0
1489	1126.2	1572.5	0.0	1490	1165.0	1572.5	0.0	1491	621.3	1596.0	0.0
1492	660.2	1596.0	0.0	1493	699.0	1596.0	0.0	1494	737.8	1596.0	0.0
1495	776.7	1596.0	0.0	1496	815.5	1596.0	0.0	1497	854.3	1596.0	0.0
1498	893.2	1596.0	0.0	1499	932.0	1596.0	0.0	1500	970.8	1596.0	0.0
1501	1009.7	1596.0	0.0	1502	1048.5	1596.0	0.0	1503	1087.3	1596.0	0.0
1504	1126.2	1596.0	0.0	1505	1165.0	1596.0	0.0	1506	621.3	1619.5	0.0
1507	660.2	1619.5	0.0	1508	699.0	1619.5	0.0	1509	737.8	1619.5	0.0
1510	776.7	1619.5	0.0	1511	815.5	1619.5	0.0	1512	854.3	1619.5	0.0
1513	893.2	1619.5	0.0	1514	932.0	1619.5	0.0	1515	970.8	1619.5	0.0
1516	1009.7	1619.5	0.0	1517	1048.5	1619.5	0.0	1518	1087.3	1619.5	0.0
1519	1126.2	1619.5	0.0	1520	1165.0	1619.5	0.0	1521	621.3	1643.0	0.0
1522	660.2	1643.0	0.0	1523	699.0	1643.0	0.0	1524	737.8	1643.0	0.0
1525	776.7	1643.0	0.0	1526	815.5	1643.0	0.0	1527	854.3	1643.0	0.0
1528	893.2	1643.0	0.0	1529	932.0	1643.0	0.0	1530	970.8	1643.0	0.0
1531	1009.7	1643.0	0.0	1532	1048.5	1643.0	0.0	1533	1087.3	1643.0	0.0
1534	1126.2	1643.0	0.0	1535	1165.0	1643.0	0.0	1536	621.3	1666.5	0.0
1537	660.2	1666.5	0.0	1538	699.0	1666.5	0.0	1539	737.8	1666.5	0.0
1540	776.7	1666.5	0.0	1541	815.5	1666.5	0.0	1542	854.3	1666.5	0.0
1543	893.2	1666.5	0.0	1544	932.0	1666.5	0.0	1545	970.8	1666.5	0.0
1546	1009.7	1666.5	0.0	1547	1048.5	1666.5	0.0	1548	1087.3	1666.5	0.0
1549	1126.2	1666.5	0.0	1550	1165.0	1666.5	0.0	1551	621.3	1690.0	0.0
1552	660.2	1690.0	0.0	1553	699.0	1690.0	0.0	1554	737.8	1690.0	0.0
1555	776.7	1690.0	0.0	1556	815.5	1690.0	0.0	1557	854.3	1690.0	0.0
1558	893.2	1690.0	0.0	1559	932.0	1690.0	0.0	1560	970.8	1690.0	0.0
1561	1009.7	1690.0	0.0	1562	1048.5	1690.0	0.0	1563	1087.3	1690.0	0.0
1564	1126.2	1690.0	0.0	1565	1165.0	1690.0	0.0	1566	621.3	1713.5	0.0
1567	660.2	1713.5	0.0	1568	699.0	1713.5	0.0	1569	737.8	1713.5	0.0
1570	776.7	1713.5	0.0	1571	815.5	1713.5	0.0	1572	854.3	1713.5	0.0
1573	893.2	1713.5	0.0	1574	932.0	1713.5	0.0	1575	970.8	1713.5	0.0
1576	1009.7	1713.5	0.0	1577	1048.5	1713.5	0.0	1578	1087.3	1713.5	0.0
1579	1126.2	1713.5	0.0	1580	1165.0	1713.5	0.0	1581	621.3	1737.0	0.0
1582	660.2	1737.0	0.0	1583	699.0	1737.0	0.0	1584	737.8	1737.0	0.0
1585	776.7	1737.0	0.0	1586	815.5	1737.0	0.0	1587	854.3	1737.0	0.0
1588	893.2	1737.0	0.0	1589	932.0	1737.0	0.0	1590	970.8	1737.0	0.0
1591	1009.7	1737.0	0.0	1592	1048.5	1737.0	0.0	1593	1087.3	1737.0	0.0
1594	1126.2	1737.0	0.0	1595	1165.0	1737.0	0.0	1596	621.3	1760.5	0.0
1597	660.2	1760.5	0.0	1598	699.0	1760.5	0.0	1599	737.8	1760.5	0.0
1600	776.7	1760.5	0.0	1601	815.5	1760.5	0.0	1602	854.3	1760.5	0.0
1603	893.2	1760.5	0.0	1604	932.0	1760.5	0.0	1605	970.8	1760.5	0.0
1606	1009.7	1760.5	0.0	1607	1048.5	1760.5	0.0	1608	1087.3	1760.5	0.0
1609	1126.2	1760.5	0.0	1610	1165.0	1760.5	0.0	1611	621.3	1784.0	0.0
1612	660.2	1784.0	0.0	1613	699.0	1784.0	0.0	1614	737.8	1784.0	0.0
1615	776.7	1784.0	0.0	1616	815.5	1784.0	0.0	1617	854.3	1784.0	0.0
1618	893.2	1784.0	0.0	1619	932.0	1784.0	0.0	1620	970.8	1784.0	0.0
1621	1009.7	1784.0	0.0	1622	1048.5	1784.0	0.0	1623	1087.3	1784.0	0.0
1624	1126.2	1784.0	0.0	1625	1165.0	1784.0	0.0	1626	621.3	1807.5	0.0
1627	660.2	1807.5	0.0	1628	699.0	1807.5	0.0	1629	737.8	1807.5	0.0
1630	776.7	1807.5	0.0	1631	815.5	1807.5	0.0	1632	854.3	1807.5	0.0
1633	893.2	1807.5	0.0	1634	932.0	1807.5	0.0	1635	970.8	1807.5	0.0
1636	1009.7	1807.5	0.0	1637	1048.5	1807.5	0.0	1638	1087.3	1807.5	0.0
1639	1126.2	1807.5	0.0	1640	1165.0	1807.5	0.0	1641	621.3	1831.0	0.0
1642	660.2	1831.0	0.0	1643	699.0	1831.0	0.0	1644	737.8	1831.0	0.0
1645	776.7	1831.0	0.0	1646	815.5	1831.0	0.0	1647	854.3	1831.0	0.0
1648	893.2	1831.0	0.0	1649	932.0	1831.0	0.0	1650	970.8	1831.0	0.0
1651	1009.7	1831.0	0.0	1652	1048.5	1831.0	0.0	1653	1087.3	1831.0	0.0
1654	1126.2	1831.0	0.0	1655	1165.0	1831.0	0.0	1656	621.3	1854.5	0.0
1657	660.2	1854.5	0.0	1658	699.0	1854.5	0.0	1659	737.8	1854.5	0.0
1660	776.7	1854.5	0.0	1661	815.5	1854.5	0.0	1662	854.3	1854.5	0.0
1663	893.2	1854.5	0.0	1664	932.0	1854.5	0.0	1665	970.8	1854.5	0.0
1666	1009.7	1854.5	0.0	1667	1048.5	1854.5	0.0	1668	1087.3	1854.5	0.0
1669	1126.2	1854.5	0.0	1670	1165.0	1854.5	0.0	1671	621.3	1878.0	0.0
1672	660.2	1878.0	0.0	1673	699.0	1878.0	0.0	1674	737.8	1878.0	0.0
1675	776.7	1878.0	0.0	1676	815.5	1878.0	0.0	1677	854.3	1878.0	0.0

1678	893.2	1878.0	0.0	1679	932.0	1878.0	0.0	1680	970.8	1878.0	0.0
1681	1009.7	1878.0	0.0	1682	1048.5	1878.0	0.0	1683	1087.3	1878.0	0.0
1684	1126.2	1878.0	0.0	1685	1165.0	1878.0	0.0	1686	621.3	1901.5	0.0
1687	660.2	1901.5	0.0	1688	699.0	1901.5	0.0	1689	737.8	1901.5	0.0
1690	776.7	1901.5	0.0	1691	815.5	1901.5	0.0	1692	854.3	1901.5	0.0
1693	893.2	1901.5	0.0	1694	932.0	1901.5	0.0	1695	970.8	1901.5	0.0
1696	1009.7	1901.5	0.0	1697	1048.5	1901.5	0.0	1698	1087.3	1901.5	0.0
1699	1126.2	1901.5	0.0	1700	1165.0	1901.5	0.0	1701	621.3	1925.0	0.0
1702	660.2	1925.0	0.0	1703	699.0	1925.0	0.0	1704	737.8	1925.0	0.0
1705	776.7	1925.0	0.0	1706	815.5	1925.0	0.0	1707	854.3	1925.0	0.0
1708	893.2	1925.0	0.0	1709	932.0	1925.0	0.0	1710	970.8	1925.0	0.0
1711	1009.7	1925.0	0.0	1712	1048.5	1925.0	0.0	1713	1087.3	1925.0	0.0
1714	1126.2	1925.0	0.0	1715	621.3	870.0	0.0	1716	621.3	893.3	0.0
1717	660.2	870.0	0.0	1718	660.2	893.3	0.0	1719	699.0	870.0	0.0
1720	699.0	893.3	0.0	1721	737.8	870.0	0.0	1722	737.8	893.3	0.0
1723	776.7	870.0	0.0	1724	776.7	893.3	0.0	1725	815.5	870.0	0.0
1726	815.5	893.3	0.0	1727	854.3	870.0	0.0	1728	854.3	893.3	0.0
1729	893.2	870.0	0.0	1730	893.2	893.3	0.0	1731	932.0	870.0	0.0
1732	932.0	893.3	0.0	1733	970.8	870.0	0.0	1734	970.8	893.3	0.0
1735	1009.7	870.0	0.0	1736	1009.7	893.3	0.0	1737	1048.5	870.0	0.0
1738	1048.5	893.3	0.0	1739	1087.3	870.0	0.0	1740	1087.3	893.3	0.0
1741	1126.2	870.0	0.0	1742	1126.2	893.3	0.0	1743	1165.0	893.3	0.0
1744	621.3	916.7	0.0	1745	660.2	916.7	0.0	1746	699.0	916.7	0.0
1747	737.8	916.7	0.0	1748	776.7	916.7	0.0	1749	815.5	916.7	0.0
1750	854.3	916.7	0.0	1751	893.2	916.7	0.0	1752	932.0	916.7	0.0
1753	970.8	916.7	0.0	1754	1009.7	916.7	0.0	1755	1048.5	916.7	0.0
1756	1087.3	916.7	0.0	1757	1126.2	916.7	0.0	1758	1165.0	916.7	0.0
1759	621.3	940.0	0.0	1760	660.2	940.0	0.0	1761	699.0	940.0	0.0
1762	737.8	940.0	0.0	1763	776.7	940.0	0.0	1764	815.5	940.0	0.0
1765	854.3	940.0	0.0	1766	893.2	940.0	0.0	1767	932.0	940.0	0.0
1768	970.8	940.0	0.0	1769	1009.7	940.0	0.0	1770	1048.5	940.0	0.0
1771	1087.3	940.0	0.0	1772	1126.2	940.0	0.0	1773	1165.0	940.0	0.0
1774	621.3	963.3	0.0	1775	660.2	963.3	0.0	1776	699.0	963.3	0.0
1777	737.8	963.3	0.0	1778	776.7	963.3	0.0	1779	815.5	963.3	0.0
1780	854.3	963.3	0.0	1781	893.2	963.3	0.0	1782	932.0	963.3	0.0
1783	970.8	963.3	0.0	1784	1009.7	963.3	0.0	1785	1048.5	963.3	0.0
1786	1087.3	963.3	0.0	1787	1126.2	963.3	0.0	1788	1165.0	963.3	0.0
1789	621.3	986.7	0.0	1790	660.2	986.7	0.0	1791	699.0	986.7	0.0
1792	737.8	986.7	0.0	1793	776.7	986.7	0.0	1794	815.5	986.7	0.0
1795	854.3	986.7	0.0	1796	893.2	986.7	0.0	1797	932.0	986.7	0.0
1798	970.8	986.7	0.0	1799	1009.7	986.7	0.0	1800	1048.5	986.7	0.0
1801	1087.3	986.7	0.0	1802	1126.2	986.7	0.0	1803	1165.0	986.7	0.0
1804	621.3	1010.0	0.0	1805	660.2	1010.0	0.0	1806	699.0	1010.0	0.0
1807	737.8	1010.0	0.0	1808	776.7	1010.0	0.0	1809	815.5	1010.0	0.0
1810	854.3	1010.0	0.0	1811	893.2	1010.0	0.0	1812	932.0	1010.0	0.0
1813	970.8	1010.0	0.0	1814	1009.7	1010.0	0.0	1815	1048.5	1010.0	0.0
1816	1087.3	1010.0	0.0	1817	1126.2	1010.0	0.0	1818	1165.0	1010.0	0.0
1819	621.3	1033.3	0.0	1820	660.2	1033.3	0.0	1821	699.0	1033.3	0.0
1822	737.8	1033.3	0.0	1823	776.7	1033.3	0.0	1824	815.5	1033.3	0.0
1825	854.3	1033.3	0.0	1826	893.2	1033.3	0.0	1827	932.0	1033.3	0.0
1828	970.8	1033.3	0.0	1829	1009.7	1033.3	0.0	1830	1048.5	1033.3	0.0
1831	1087.3	1033.3	0.0	1832	1126.2	1033.3	0.0	1833	1165.0	1033.3	0.0
1834	621.3	1056.7	0.0	1835	660.2	1056.7	0.0	1836	699.0	1056.7	0.0
1837	737.8	1056.7	0.0	1838	776.7	1056.7	0.0	1839	815.5	1056.7	0.0
1840	854.3	1056.7	0.0	1841	893.2	1056.7	0.0	1842	932.0	1056.7	0.0
1843	970.8	1056.7	0.0	1844	1009.7	1056.7	0.0	1845	1048.5	1056.7	0.0
1846	1087.3	1056.7	0.0	1847	1126.2	1056.7	0.0	1848	1165.0	1056.7	0.0
1849	621.3	1080.0	0.0	1850	660.2	1080.0	0.0	1851	699.0	1080.0	0.0
1852	737.8	1080.0	0.0	1853	776.7	1080.0	0.0	1854	815.5	1080.0	0.0
1855	854.3	1080.0	0.0	1856	893.2	1080.0	0.0	1857	932.0	1080.0	0.0
1858	970.8	1080.0	0.0	1859	1009.7	1080.0	0.0	1860	1048.5	1080.0	0.0
1861	1087.3	1080.0	0.0	1862	1126.2	1080.0	0.0	1863	1165.0	1080.0	0.0
1864	621.3	1103.3	0.0	1865	660.2	1103.3	0.0	1866	699.0	1103.3	0.0
1867	737.8	1103.3	0.0	1868	776.7	1103.3	0.0	1869	815.5	1103.3	0.0
1870	854.3	1103.3	0.0	1871	893.2	1103.3	0.0	1872	932.0	1103.3	0.0
1873	970.8	1103.3	0.0	1874	1009.7	1103.3	0.0	1875	1048.5	1103.3	0.0
1876	1087.3	1103.3	0.0	1877	1126.2	1103.3	0.0	1878	1165.0	1103.3	0.0
1879	621.3	1126.7	0.0	1880	660.2	1126.7	0.0	1881	699.0	1126.7	0.0
1882	737.8	1126.7	0.0	1883	776.7	1126.7	0.0	1884	815.5	1126.7	0.0
1885	854.3	1126.7	0.0	1886	893.2	1126.7	0.0	1887	932.0	1126.7	0.0
1888	970.8	1126.7	0.0	1889	1009.7	1126.7	0.0	1890	1048.5	1126.7	0.0
1891	1087.3	1126.7	0.0	1892	1126.2	1126.7	0.0	1893	1165.0	1126.7	0.0
1894	621.3	1150.0	0.0	1895	660.2	1150.0	0.0	1896	699.0	1150.0	0.0
1897	737.8	1150.0	0.0	1898	776.7	1150.0	0.0	1899	815.5	1150.0	0.0
1900	854.3	1150.0	0.0	1901	893.2	1150.0	0.0	1902	932.0	1150.0	0.0
1903	970.8	1150.0	0.0	1904	1009.7	1150.0	0.0	1905	1048.5	1150.0	0.0
1906	1087.3	1150.0	0.0	1907	1126.2	1150.0	0.0	1908	1165.0	1150.0	0.0

1909	621.3	1173.3	0.0	1910	660.2	1173.3	0.0	1911	699.0	1173.3	0.0
1912	737.8	1173.3	0.0	1913	776.7	1173.3	0.0	1914	815.5	1173.3	0.0
1915	854.3	1173.3	0.0	1916	893.2	1173.3	0.0	1917	932.0	1173.3	0.0
1918	970.8	1173.3	0.0	1919	1009.7	1173.3	0.0	1920	1048.5	1173.3	0.0
1921	1087.3	1173.3	0.0	1922	1126.2	1173.3	0.0	1923	1165.0	1173.3	0.0
1924	621.3	1196.7	0.0	1925	660.2	1196.7	0.0	1926	699.0	1196.7	0.0
1927	737.8	1196.7	0.0	1928	776.7	1196.7	0.0	1929	815.5	1196.7	0.0
1930	854.3	1196.7	0.0	1931	893.2	1196.7	0.0	1932	932.0	1196.7	0.0
1933	970.8	1196.7	0.0	1934	1009.7	1196.7	0.0	1935	1048.5	1196.7	0.0
1936	1087.3	1196.7	0.0	1937	1126.2	1196.7	0.0	1938	1165.0	1196.7	0.0
1939	621.3	470.0	0.0	1940	621.3	496.7	0.0	1941	660.2	470.0	0.0
1942	660.2	496.7	0.0	1943	699.0	470.0	0.0	1944	699.0	496.7	0.0
1945	737.8	470.0	0.0	1946	737.8	496.7	0.0	1947	776.7	470.0	0.0
1948	776.7	496.7	0.0	1949	815.5	470.0	0.0	1950	815.5	496.7	0.0
1951	854.3	470.0	0.0	1952	854.3	496.7	0.0	1953	893.2	470.0	0.0
1954	893.2	496.7	0.0	1955	932.0	470.0	0.0	1956	932.0	496.7	0.0
1957	970.8	470.0	0.0	1958	970.8	496.7	0.0	1959	1009.7	470.0	0.0
1960	1009.7	496.7	0.0	1961	1048.5	470.0	0.0	1962	1048.5	496.7	0.0
1963	1087.3	470.0	0.0	1964	1087.3	496.7	0.0	1965	1126.2	470.0	0.0
1966	1126.2	496.7	0.0	1967	1165.0	496.7	0.0	1968	621.3	523.3	0.0
1969	660.2	523.3	0.0	1970	699.0	523.3	0.0	1971	737.8	523.3	0.0
1972	776.7	523.3	0.0	1973	815.5	523.3	0.0	1974	854.3	523.3	0.0
1975	893.2	523.3	0.0	1976	932.0	523.3	0.0	1977	970.8	523.3	0.0
1978	1009.7	523.3	0.0	1979	1048.5	523.3	0.0	1980	1087.3	523.3	0.0
1981	1126.2	523.3	0.0	1982	1165.0	523.3	0.0	1983	621.3	550.0	0.0
1984	660.2	550.0	0.0	1985	699.0	550.0	0.0	1986	737.8	550.0	0.0
1987	776.7	550.0	0.0	1988	815.5	550.0	0.0	1989	854.3	550.0	0.0
1990	893.2	550.0	0.0	1991	932.0	550.0	0.0	1992	970.8	550.0	0.0
1993	1009.7	550.0	0.0	1994	1048.5	550.0	0.0	1995	1087.3	550.0	0.0
1996	1126.2	550.0	0.0	1997	1165.0	550.0	0.0	1998	621.3	576.7	0.0
1999	660.2	576.7	0.0	2000	699.0	576.7	0.0	2001	737.8	576.7	0.0
2002	776.7	576.7	0.0	2003	815.5	576.7	0.0	2004	854.3	576.7	0.0
2005	893.2	576.7	0.0	2006	932.0	576.7	0.0	2007	970.8	576.7	0.0
2008	1009.7	576.7	0.0	2009	1048.5	576.7	0.0	2010	1087.3	576.7	0.0
2011	1126.2	576.7	0.0	2012	1165.0	576.7	0.0	2013	621.3	603.3	0.0
2014	660.2	603.3	0.0	2015	699.0	603.3	0.0	2016	737.8	603.3	0.0
2017	776.7	603.3	0.0	2018	815.5	603.3	0.0	2019	854.3	603.3	0.0
2020	893.2	603.3	0.0	2021	932.0	603.3	0.0	2022	970.8	603.3	0.0
2023	1009.7	603.3	0.0	2024	1048.5	603.3	0.0	2025	1087.3	603.3	0.0
2026	1126.2	603.3	0.0	2027	1165.0	603.3	0.0	2028	621.3	630.0	0.0
2029	660.2	630.0	0.0	2030	699.0	630.0	0.0	2031	737.8	630.0	0.0
2032	776.7	630.0	0.0	2033	815.5	630.0	0.0	2034	854.3	630.0	0.0
2035	893.2	630.0	0.0	2036	932.0	630.0	0.0	2037	970.8	630.0	0.0
2038	1009.7	630.0	0.0	2039	1048.5	630.0	0.0	2040	1087.3	630.0	0.0
2041	1126.2	630.0	0.0	2042	1165.0	630.0	0.0	2043	621.3	656.7	0.0
2044	660.2	656.7	0.0	2045	699.0	656.7	0.0	2046	737.8	656.7	0.0
2047	776.7	656.7	0.0	2048	815.5	656.7	0.0	2049	854.3	656.7	0.0
2050	893.2	656.7	0.0	2051	932.0	656.7	0.0	2052	970.8	656.7	0.0
2053	1009.7	656.7	0.0	2054	1048.5	656.7	0.0	2055	1087.3	656.7	0.0
2056	1126.2	656.7	0.0	2057	1165.0	656.7	0.0	2058	621.3	683.3	0.0
2059	660.2	683.3	0.0	2060	699.0	683.3	0.0	2061	737.8	683.3	0.0
2062	776.7	683.3	0.0	2063	815.5	683.3	0.0	2064	854.3	683.3	0.0
2065	893.2	683.3	0.0	2066	932.0	683.3	0.0	2067	970.8	683.3	0.0
2068	1009.7	683.3	0.0	2069	1048.5	683.3	0.0	2070	1087.3	683.3	0.0
2071	1126.2	683.3	0.0	2072	1165.0	683.3	0.0	2073	621.3	710.0	0.0
2074	660.2	710.0	0.0	2075	699.0	710.0	0.0	2076	737.8	710.0	0.0
2077	776.7	710.0	0.0	2078	815.5	710.0	0.0	2079	854.3	710.0	0.0
2080	893.2	710.0	0.0	2081	932.0	710.0	0.0	2082	970.8	710.0	0.0
2083	1009.7	710.0	0.0	2084	1048.5	710.0	0.0	2085	1087.3	710.0	0.0
2086	1126.2	710.0	0.0	2087	1165.0	710.0	0.0	2088	621.3	736.7	0.0
2089	660.2	736.7	0.0	2090	699.0	736.7	0.0	2091	737.8	736.7	0.0
2092	776.7	736.7	0.0	2093	815.5	736.7	0.0	2094	854.3	736.7	0.0
2095	893.2	736.7	0.0	2096	932.0	736.7	0.0	2097	970.8	736.7	0.0
2098	1009.7	736.7	0.0	2099	1048.5	736.7	0.0	2100	1087.3	736.7	0.0
2101	1126.2	736.7	0.0	2102	1165.0	736.7	0.0	2103	621.3	763.3	0.0
2104	660.2	763.3	0.0	2105	699.0	763.3	0.0	2106	737.8	763.3	0.0
2107	776.7	763.3	0.0	2108	815.5	763.3	0.0	2109	854.3	763.3	0.0
2110	893.2	763.3	0.0	2111	932.0	763.3	0.0	2112	970.8	763.3	0.0
2113	1009.7	763.3	0.0	2114	1048.5	763.3	0.0	2115	1087.3	763.3	0.0
2116	1126.2	763.3	0.0	2117	1165.0	763.3	0.0	2118	621.3	790.0	0.0
2119	660.2	790.0	0.0	2120	699.0	790.0	0.0	2121	737.8	790.0	0.0
2122	776.7	790.0	0.0	2123	815.5	790.0	0.0	2124	854.3	790.0	0.0
2125	893.2	790.0	0.0	2126	932.0	790.0	0.0	2127	970.8	790.0	0.0
2128	1009.7	790.0	0.0	2129	1048.5	790.0	0.0	2130	1087.3	790.0	0.0
2131	1126.2	790.0	0.0	2132	1165.0	790.0	0.0	2133	621.3	816.7	0.0
2134	660.2	816.7	0.0	2135	699.0	816.7	0.0	2136	737.8	816.7	0.0
2137	776.7	816.7	0.0	2138	815.5	816.7	0.0	2139	854.3	816.7	0.0

2140	893.2	816.7	0.0	2141	932.0	816.7	0.0	2142	970.8	816.7	0.0
2143	1009.7	816.7	0.0	2144	1048.5	816.7	0.0	2145	1087.3	816.7	0.0
2146	1126.2	816.7	0.0	2147	1165.0	816.7	0.0	2148	621.3	843.3	0.0
2149	660.2	843.3	0.0	2150	699.0	843.3	0.0	2151	737.8	843.3	0.0
2152	776.7	843.3	0.0	2153	815.5	843.3	0.0	2154	854.3	843.3	0.0
2155	893.2	843.3	0.0	2156	932.0	843.3	0.0	2157	970.8	843.3	0.0
2158	1009.7	843.3	0.0	2159	1048.5	843.3	0.0	2160	1087.3	843.3	0.0
2161	1126.2	843.3	0.0	2162	1165.0	843.3	0.0	2163	621.3	0.0	0.0
2164	621.3	31.3	0.0	2165	660.2	0.0	0.0	2166	660.2	31.3	0.0
2167	699.0	0.0	0.0	2168	699.0	31.3	0.0	2169	737.8	0.0	0.0
2170	737.8	31.3	0.0	2171	776.7	0.0	0.0	2172	776.7	31.3	0.0
2173	815.5	0.0	0.0	2174	815.5	31.3	0.0	2175	854.3	0.0	0.0
2176	854.3	31.3	0.0	2177	893.2	0.0	0.0	2178	893.2	31.3	0.0
2179	932.0	0.0	0.0	2180	932.0	31.3	0.0	2181	970.8	0.0	0.0
2182	970.8	31.3	0.0	2183	1009.7	0.0	0.0	2184	1009.7	31.3	0.0
2185	1048.5	0.0	0.0	2186	1048.5	31.3	0.0	2187	1087.3	0.0	0.0
2188	1087.3	31.3	0.0	2189	1126.2	0.0	0.0	2190	1126.2	31.3	0.0
2191	1165.0	31.3	0.0	2192	621.3	62.7	0.0	2193	660.2	62.7	0.0
2194	699.0	62.7	0.0	2195	737.8	62.7	0.0	2196	776.7	62.7	0.0
2197	815.5	62.7	0.0	2198	854.3	62.7	0.0	2199	893.2	62.7	0.0
2200	932.0	62.7	0.0	2201	970.8	62.7	0.0	2202	1009.7	62.7	0.0
2203	1048.5	62.7	0.0	2204	1087.3	62.7	0.0	2205	1126.2	62.7	0.0
2206	1165.0	62.7	0.0	2207	621.3	94.0	0.0	2208	660.2	94.0	0.0
2209	699.0	94.0	0.0	2210	737.8	94.0	0.0	2211	776.7	94.0	0.0
2212	815.5	94.0	0.0	2213	854.3	94.0	0.0	2214	893.2	94.0	0.0
2215	932.0	94.0	0.0	2216	970.8	94.0	0.0	2217	1009.7	94.0	0.0
2218	1048.5	94.0	0.0	2219	1087.3	94.0	0.0	2220	1126.2	94.0	0.0
2221	1165.0	94.0	0.0	2222	621.3	125.3	0.0	2223	660.2	125.3	0.0
2224	699.0	125.3	0.0	2225	737.8	125.3	0.0	2226	776.7	125.3	0.0
2227	815.5	125.3	0.0	2228	854.3	125.3	0.0	2229	893.2	125.3	0.0
2230	932.0	125.3	0.0	2231	970.8	125.3	0.0	2232	1009.7	125.3	0.0
2233	1048.5	125.3	0.0	2234	1087.3	125.3	0.0	2235	1126.2	125.3	0.0
2236	1165.0	125.3	0.0	2237	621.3	156.7	0.0	2238	660.2	156.7	0.0
2239	699.0	156.7	0.0	2240	737.8	156.7	0.0	2241	776.7	156.7	0.0
2242	815.5	156.7	0.0	2243	854.3	156.7	0.0	2244	893.2	156.7	0.0
2245	932.0	156.7	0.0	2246	970.8	156.7	0.0	2247	1009.7	156.7	0.0
2248	1048.5	156.7	0.0	2249	1087.3	156.7	0.0	2250	1126.2	156.7	0.0
2251	1165.0	156.7	0.0	2252	621.3	188.0	0.0	2253	660.2	188.0	0.0
2254	699.0	188.0	0.0	2255	737.8	188.0	0.0	2256	776.7	188.0	0.0
2257	815.5	188.0	0.0	2258	854.3	188.0	0.0	2259	893.2	188.0	0.0
2260	932.0	188.0	0.0	2261	970.8	188.0	0.0	2262	1009.7	188.0	0.0
2263	1048.5	188.0	0.0	2264	1087.3	188.0	0.0	2265	1126.2	188.0	0.0
2266	1165.0	188.0	0.0	2267	621.3	219.3	0.0	2268	660.2	219.3	0.0
2269	699.0	219.3	0.0	2270	737.8	219.3	0.0	2271	776.7	219.3	0.0
2272	815.5	219.3	0.0	2273	854.3	219.3	0.0	2274	893.2	219.3	0.0
2275	932.0	219.3	0.0	2276	970.8	219.3	0.0	2277	1009.7	219.3	0.0
2278	1048.5	219.3	0.0	2279	1087.3	219.3	0.0	2280	1126.2	219.3	0.0
2281	1165.0	219.3	0.0	2282	621.3	250.7	0.0	2283	660.2	250.7	0.0
2284	699.0	250.7	0.0	2285	737.8	250.7	0.0	2286	776.7	250.7	0.0
2287	815.5	250.7	0.0	2288	854.3	250.7	0.0	2289	893.2	250.7	0.0
2290	932.0	250.7	0.0	2291	970.8	250.7	0.0	2292	1009.7	250.7	0.0
2293	1048.5	250.7	0.0	2294	1087.3	250.7	0.0	2295	1126.2	250.7	0.0
2296	1165.0	250.7	0.0	2297	621.3	282.0	0.0	2298	660.2	282.0	0.0
2299	699.0	282.0	0.0	2300	737.8	282.0	0.0	2301	776.7	282.0	0.0
2302	815.5	282.0	0.0	2303	854.3	282.0	0.0	2304	893.2	282.0	0.0
2305	932.0	282.0	0.0	2306	970.8	282.0	0.0	2307	1009.7	282.0	0.0
2308	1048.5	282.0	0.0	2309	1087.3	282.0	0.0	2310	1126.2	282.0	0.0
2311	1165.0	282.0	0.0	2312	621.3	313.3	0.0	2313	660.2	313.3	0.0
2314	699.0	313.3	0.0	2315	737.8	313.3	0.0	2316	776.7	313.3	0.0
2317	815.5	313.3	0.0	2318	854.3	313.3	0.0	2319	893.2	313.3	0.0
2320	932.0	313.3	0.0	2321	970.8	313.3	0.0	2322	1009.7	313.3	0.0
2323	1048.5	313.3	0.0	2324	1087.3	313.3	0.0	2325	1126.2	313.3	0.0
2326	1165.0	313.3	0.0	2327	621.3	344.7	0.0	2328	660.2	344.7	0.0
2329	699.0	344.7	0.0	2330	737.8	344.7	0.0	2331	776.7	344.7	0.0
2332	815.5	344.7	0.0	2333	854.3	344.7	0.0	2334	893.2	344.7	0.0
2335	932.0	344.7	0.0	2336	970.8	344.7	0.0	2337	1009.7	344.7	0.0
2338	1048.5	344.7	0.0	2339	1087.3	344.7	0.0	2340	1126.2	344.7	0.0
2341	1165.0	344.7	0.0	2342	621.3	376.0	0.0	2343	660.2	376.0	0.0
2344	699.0	376.0	0.0	2345	737.8	376.0	0.0	2346	776.7	376.0	0.0
2347	815.5	376.0	0.0	2348	854.3	376.0	0.0	2349	893.2	376.0	0.0
2350	932.0	376.0	0.0	2351	970.8	376.0	0.0	2352	1009.7	376.0	0.0
2353	1048.5	376.0	0.0	2354	1087.3	376.0	0.0	2355	1126.2	376.0	0.0
2356	1165.0	376.0	0.0	2357	621.3	407.3	0.0	2358	660.2	407.3	0.0
2359	699.0	407.3	0.0	2360	737.8	407.3	0.0	2361	776.7	407.3	0.0
2362	815.5	407.3	0.0	2363	854.3	407.3	0.0	2364	893.2	407.3	0.0
2365	932.0	407.3	0.0	2366	970.8	407.3	0.0	2367	1009.7	407.3	0.0
2368	1048.5	407.3	0.0	2369	1087.3	407.3	0.0	2370	1126.2	407.3	0.0

2371	1165.0	407.3	0.0	2372	621.3	438.7	0.0	2373	660.2	438.7	0.0
2374	699.0	438.7	0.0	2375	737.8	438.7	0.0	2376	776.7	438.7	0.0
2377	815.5	438.7	0.0	2378	854.3	438.7	0.0	2379	893.2	438.7	0.0
2380	932.0	438.7	0.0	2381	970.8	438.7	0.0	2382	1009.7	438.7	0.0
2383	1048.5	438.7	0.0	2384	1087.3	438.7	0.0	2385	1126.2	438.7	0.0
2386	1165.0	438.7	0.0	2387	0.0	-31.3	0.0	2388	582.5	-31.3	0.0
2389	1165.0	-31.3	0.0	2390	38.8	-31.3	0.0	2391	77.7	-31.3	0.0
2392	116.5	-31.3	0.0	2393	155.3	-31.3	0.0	2394	194.2	-31.3	0.0
2395	233.0	-31.3	0.0	2396	271.8	-31.3	0.0	2397	310.7	-31.3	0.0
2398	349.5	-31.3	0.0	2399	388.3	-31.3	0.0	2400	427.2	-31.3	0.0
2401	466.0	-31.3	0.0	2402	504.8	-31.3	0.0	2403	543.7	-31.3	0.0
2404	621.3	-31.3	0.0	2405	660.2	-31.3	0.0	2406	699.0	-31.3	0.0
2407	737.8	-31.3	0.0	2408	776.7	-31.3	0.0	2409	815.5	-31.3	0.0
2410	854.3	-31.3	0.0	2411	893.2	-31.3	0.0	2412	932.0	-31.3	0.0
2413	970.8	-31.3	0.0	2414	1009.7	-31.3	0.0	2415	1048.5	-31.3	0.0
2416	1087.3	-31.3	0.0	2417	1126.2	-31.3	0.0	2418	0.0	-62.7	0.0
2419	582.5	-62.7	0.0	2420	1165.0	-62.7	0.0	2421	38.8	-62.7	0.0
2422	77.7	-62.7	0.0	2423	116.5	-62.7	0.0	2424	155.3	-62.7	0.0
2425	194.2	-62.7	0.0	2426	233.0	-62.7	0.0	2427	271.8	-62.7	0.0
2428	310.7	-62.7	0.0	2429	349.5	-62.7	0.0	2430	388.3	-62.7	0.0
2431	427.2	-62.7	0.0	2432	466.0	-62.7	0.0	2433	504.8	-62.7	0.0
2434	543.7	-62.7	0.0	2435	621.3	-62.7	0.0	2436	660.2	-62.7	0.0
2437	699.0	-62.7	0.0	2438	737.8	-62.7	0.0	2439	776.7	-62.7	0.0
2440	815.5	-62.7	0.0	2441	854.3	-62.7	0.0	2442	893.2	-62.7	0.0
2443	932.0	-62.7	0.0	2444	970.8	-62.7	0.0	2445	1009.7	-62.7	0.0
2446	1048.5	-62.7	0.0	2447	1087.3	-62.7	0.0	2448	1126.2	-62.7	0.0
2449	0.0	-94.0	0.0	2450	582.5	-94.0	0.0	2451	1165.0	-94.0	0.0
2452	38.8	-94.0	0.0	2453	77.7	-94.0	0.0	2454	116.5	-94.0	0.0
2455	155.3	-94.0	0.0	2456	194.2	-94.0	0.0	2457	233.0	-94.0	0.0
2458	271.8	-94.0	0.0	2459	310.7	-94.0	0.0	2460	349.5	-94.0	0.0
2461	388.3	-94.0	0.0	2462	427.2	-94.0	0.0	2463	466.0	-94.0	0.0
2464	504.8	-94.0	0.0	2465	543.7	-94.0	0.0	2466	621.3	-94.0	0.0
2467	660.2	-94.0	0.0	2468	699.0	-94.0	0.0	2469	737.8	-94.0	0.0
2470	776.7	-94.0	0.0	2471	815.5	-94.0	0.0	2472	854.3	-94.0	0.0
2473	893.2	-94.0	0.0	2474	932.0	-94.0	0.0	2475	970.8	-94.0	0.0
2476	1009.7	-94.0	0.0	2477	1048.5	-94.0	0.0	2478	1087.3	-94.0	0.0
2479	1126.2	-94.0	0.0	2480	0.0	-125.3	0.0	2481	582.5	-125.3	0.0
2482	1165.0	-125.3	0.0	2483	38.8	-125.3	0.0	2484	77.7	-125.3	0.0
2485	116.5	-125.3	0.0	2486	155.3	-125.3	0.0	2487	194.2	-125.3	0.0
2488	233.0	-125.3	0.0	2489	271.8	-125.3	0.0	2490	310.7	-125.3	0.0
2491	349.5	-125.3	0.0	2492	388.3	-125.3	0.0	2493	427.2	-125.3	0.0
2494	466.0	-125.3	0.0	2495	504.8	-125.3	0.0	2496	543.7	-125.3	0.0
2497	621.3	-125.3	0.0	2498	660.2	-125.3	0.0	2499	699.0	-125.3	0.0
2500	737.8	-125.3	0.0	2501	776.7	-125.3	0.0	2502	815.5	-125.3	0.0
2503	854.3	-125.3	0.0	2504	893.2	-125.3	0.0	2505	932.0	-125.3	0.0
2506	970.8	-125.3	0.0	2507	1009.7	-125.3	0.0	2508	1048.5	-125.3	0.0
2509	1087.3	-125.3	0.0	2510	1126.2	-125.3	0.0	2511	1203.8	0.0	0.0
2512	1203.8	470.0	0.0	2513	1203.8	870.0	0.0	2514	1203.8	1220.0	0.0
2515	1203.8	1925.0	0.0	2516	1203.8	1243.5	0.0	2517	1203.8	1267.0	0.0
2518	1203.8	1290.5	0.0	2519	1203.8	1314.0	0.0	2520	1203.8	1337.5	0.0
2521	1203.8	1361.0	0.0	2522	1203.8	1384.5	0.0	2523	1203.8	1408.0	0.0
2524	1203.8	1431.5	0.0	2525	1203.8	1455.0	0.0	2526	1203.8	1478.5	0.0
2527	1203.8	1502.0	0.0	2528	1203.8	1525.5	0.0	2529	1203.8	1549.0	0.0
2530	1203.8	1572.5	0.0	2531	1203.8	1596.0	0.0	2532	1203.8	1619.5	0.0
2533	1203.8	1643.0	0.0	2534	1203.8	1666.5	0.0	2535	1203.8	1690.0	0.0
2536	1203.8	1713.5	0.0	2537	1203.8	1737.0	0.0	2538	1203.8	1760.5	0.0
2539	1203.8	1784.0	0.0	2540	1203.8	1807.5	0.0	2541	1203.8	1831.0	0.0
2542	1203.8	1854.5	0.0	2543	1203.8	1878.0	0.0	2544	1203.8	1901.5	0.0
2545	1203.8	893.3	0.0	2546	1203.8	916.7	0.0	2547	1203.8	940.0	0.0
2548	1203.8	963.3	0.0	2549	1203.8	986.7	0.0	2550	1203.8	1010.0	0.0
2551	1203.8	1033.3	0.0	2552	1203.8	1056.7	0.0	2553	1203.8	1080.0	0.0
2554	1203.8	1103.3	0.0	2555	1203.8	1126.7	0.0	2556	1203.8	1150.0	0.0
2557	1203.8	1173.3	0.0	2558	1203.8	1196.7	0.0	2559	1203.8	496.7	0.0
2560	1203.8	523.3	0.0	2561	1203.8	550.0	0.0	2562	1203.8	576.7	0.0
2563	1203.8	603.3	0.0	2564	1203.8	630.0	0.0	2565	1203.8	656.7	0.0
2566	1203.8	683.3	0.0	2567	1203.8	710.0	0.0	2568	1203.8	736.7	0.0
2569	1203.8	763.3	0.0	2570	1203.8	790.0	0.0	2571	1203.8	816.7	0.0
2572	1203.8	843.3	0.0	2573	1203.8	31.3	0.0	2574	1203.8	62.7	0.0
2575	1203.8	94.0	0.0	2576	1203.8	125.3	0.0	2577	1203.8	156.7	0.0
2578	1203.8	188.0	0.0	2579	1203.8	219.3	0.0	2580	1203.8	250.7	0.0
2581	1203.8	282.0	0.0	2582	1203.8	313.3	0.0	2583	1203.8	344.7	0.0
2584	1203.8	376.0	0.0	2585	1203.8	407.3	0.0	2586	1203.8	438.7	0.0
2587	1203.8	-31.3	0.0	2588	1203.8	-62.7	0.0	2589	1203.8	-94.0	0.0
2590	1203.8	-125.3	0.0	2591	1242.7	0.0	0.0	2592	1242.7	470.0	0.0
2593	1242.7	870.0	0.0	2594	1242.7	1220.0	0.0	2595	1242.7	1925.0	0.0
2596	1242.7	1243.5	0.0	2597	1242.7	1267.0	0.0	2598	1242.7	1290.5	0.0
2599	1242.7	1314.0	0.0	2600	1242.7	1337.5	0.0	2601	1242.7	1361.0	0.0

2602	1242.7	1384.5	0.0	2603	1242.7	1408.0	0.0	2604	1242.7	1431.5	0.0
2605	1242.7	1455.0	0.0	2606	1242.7	1478.5	0.0	2607	1242.7	1502.0	0.0
2608	1242.7	1525.5	0.0	2609	1242.7	1549.0	0.0	2610	1242.7	1572.5	0.0
2611	1242.7	1596.0	0.0	2612	1242.7	1619.5	0.0	2613	1242.7	1643.0	0.0
2614	1242.7	1666.5	0.0	2615	1242.7	1690.0	0.0	2616	1242.7	1713.5	0.0
2617	1242.7	1737.0	0.0	2618	1242.7	1760.5	0.0	2619	1242.7	1784.0	0.0
2620	1242.7	1807.5	0.0	2621	1242.7	1831.0	0.0	2622	1242.7	1854.5	0.0
2623	1242.7	1878.0	0.0	2624	1242.7	1901.5	0.0	2625	1242.7	893.3	0.0
2626	1242.7	916.7	0.0	2627	1242.7	940.0	0.0	2628	1242.7	963.3	0.0
2629	1242.7	986.7	0.0	2630	1242.7	1010.0	0.0	2631	1242.7	1033.3	0.0
2632	1242.7	1056.7	0.0	2633	1242.7	1080.0	0.0	2634	1242.7	1103.3	0.0
2635	1242.7	1126.7	0.0	2636	1242.7	1150.0	0.0	2637	1242.7	1173.3	0.0
2638	1242.7	1196.7	0.0	2639	1242.7	496.7	0.0	2640	1242.7	523.3	0.0
2641	1242.7	550.0	0.0	2642	1242.7	576.7	0.0	2643	1242.7	603.3	0.0
2644	1242.7	630.0	0.0	2645	1242.7	656.7	0.0	2646	1242.7	683.3	0.0
2647	1242.7	710.0	0.0	2648	1242.7	736.7	0.0	2649	1242.7	763.3	0.0
2650	1242.7	790.0	0.0	2651	1242.7	816.7	0.0	2652	1242.7	843.3	0.0
2653	1242.7	31.3	0.0	2654	1242.7	62.7	0.0	2655	1242.7	94.0	0.0
2656	1242.7	125.3	0.0	2657	1242.7	156.7	0.0	2658	1242.7	188.0	0.0
2659	1242.7	219.3	0.0	2660	1242.7	250.7	0.0	2661	1242.7	282.0	0.0
2662	1242.7	313.3	0.0	2663	1242.7	344.7	0.0	2664	1242.7	376.0	0.0
2665	1242.7	407.3	0.0	2666	1242.7	438.7	0.0	2667	1242.7	-31.3	0.0
2668	1242.7	-62.7	0.0	2669	1242.7	-94.0	0.0	2670	1242.7	-125.3	0.0
2671	1281.5	0.0	0.0	2672	1281.5	470.0	0.0	2673	1281.5	870.0	0.0
2674	1281.5	1220.0	0.0	2675	1281.5	1925.0	0.0	2676	1281.5	1243.5	0.0
2677	1281.5	1267.0	0.0	2678	1281.5	1290.5	0.0	2679	1281.5	1314.0	0.0
2680	1281.5	1337.5	0.0	2681	1281.5	1361.0	0.0	2682	1281.5	1384.5	0.0
2683	1281.5	1408.0	0.0	2684	1281.5	1431.5	0.0	2685	1281.5	1455.0	0.0
2686	1281.5	1478.5	0.0	2687	1281.5	1502.0	0.0	2688	1281.5	1525.5	0.0
2689	1281.5	1549.0	0.0	2690	1281.5	1572.5	0.0	2691	1281.5	1596.0	0.0
2692	1281.5	1619.5	0.0	2693	1281.5	1643.0	0.0	2694	1281.5	1666.5	0.0
2695	1281.5	1690.0	0.0	2696	1281.5	1713.5	0.0	2697	1281.5	1737.0	0.0
2698	1281.5	1760.5	0.0	2699	1281.5	1784.0	0.0	2700	1281.5	1807.5	0.0
2701	1281.5	1831.0	0.0	2702	1281.5	1854.5	0.0	2703	1281.5	1878.0	0.0
2704	1281.5	1901.5	0.0	2705	1281.5	893.3	0.0	2706	1281.5	916.7	0.0
2707	1281.5	940.0	0.0	2708	1281.5	963.3	0.0	2709	1281.5	986.7	0.0
2710	1281.5	1010.0	0.0	2711	1281.5	1033.3	0.0	2712	1281.5	1056.7	0.0
2713	1281.5	1080.0	0.0	2714	1281.5	1103.3	0.0	2715	1281.5	1126.7	0.0
2716	1281.5	1150.0	0.0	2717	1281.5	1173.3	0.0	2718	1281.5	1196.7	0.0
2719	1281.5	496.7	0.0	2720	1281.5	523.3	0.0	2721	1281.5	550.0	0.0
2722	1281.5	576.7	0.0	2723	1281.5	603.3	0.0	2724	1281.5	630.0	0.0
2725	1281.5	656.7	0.0	2726	1281.5	683.3	0.0	2727	1281.5	710.0	0.0
2728	1281.5	736.7	0.0	2729	1281.5	763.3	0.0	2730	1281.5	790.0	0.0
2731	1281.5	816.7	0.0	2732	1281.5	843.3	0.0	2733	1281.5	31.3	0.0
2734	1281.5	62.7	0.0	2735	1281.5	94.0	0.0	2736	1281.5	125.3	0.0
2737	1281.5	156.7	0.0	2738	1281.5	188.0	0.0	2739	1281.5	219.3	0.0
2740	1281.5	250.7	0.0	2741	1281.5	282.0	0.0	2742	1281.5	313.3	0.0
2743	1281.5	344.7	0.0	2744	1281.5	376.0	0.0	2745	1281.5	407.3	0.0
2746	1281.5	438.7	0.0	2747	1281.5	-31.3	0.0	2748	1281.5	-62.7	0.0
2749	1281.5	-94.0	0.0	2750	1281.5	-125.3	0.0	2751	0.0	1948.5	0.0
2752	582.5	1948.5	0.0	2753	1165.0	1948.5	0.0	2754	38.8	1948.5	0.0
2755	77.7	1948.5	0.0	2756	116.5	1948.5	0.0	2757	155.3	1948.5	0.0
2758	194.2	1948.5	0.0	2759	233.0	1948.5	0.0	2760	271.8	1948.5	0.0
2761	310.7	1948.5	0.0	2762	349.5	1948.5	0.0	2763	388.3	1948.5	0.0
2764	427.2	1948.5	0.0	2765	466.0	1948.5	0.0	2766	504.8	1948.5	0.0
2767	543.7	1948.5	0.0	2768	621.3	1948.5	0.0	2769	660.2	1948.5	0.0
2770	699.0	1948.5	0.0	2771	737.8	1948.5	0.0	2772	776.7	1948.5	0.0
2773	815.5	1948.5	0.0	2774	854.3	1948.5	0.0	2775	893.2	1948.5	0.0
2776	932.0	1948.5	0.0	2777	970.8	1948.5	0.0	2778	1009.7	1948.5	0.0
2779	1048.5	1948.5	0.0	2780	1087.3	1948.5	0.0	2781	1126.2	1948.5	0.0
2782	1203.8	1948.5	0.0	2783	1242.7	1948.5	0.0	2784	1281.5	1948.5	0.0
2785	0.0	1972.0	0.0	2786	582.5	1972.0	0.0	2787	1165.0	1972.0	0.0
2788	38.8	1972.0	0.0	2789	77.7	1972.0	0.0	2790	116.5	1972.0	0.0
2791	155.3	1972.0	0.0	2792	194.2	1972.0	0.0	2793	233.0	1972.0	0.0
2794	271.8	1972.0	0.0	2795	310.7	1972.0	0.0	2796	349.5	1972.0	0.0
2797	388.3	1972.0	0.0	2798	427.2	1972.0	0.0	2799	466.0	1972.0	0.0
2800	504.8	1972.0	0.0	2801	543.7	1972.0	0.0	2802	621.3	1972.0	0.0
2803	660.2	1972.0	0.0	2804	699.0	1972.0	0.0	2805	737.8	1972.0	0.0
2806	776.7	1972.0	0.0	2807	815.5	1972.0	0.0	2808	854.3	1972.0	0.0
2809	893.2	1972.0	0.0	2810	932.0	1972.0	0.0	2811	970.8	1972.0	0.0
2812	1009.7	1972.0	0.0	2813	1048.5	1972.0	0.0	2814	1087.3	1972.0	0.0
2815	1126.2	1972.0	0.0	2816	1203.8	1972.0	0.0	2817	1242.7	1972.0	0.0
2818	1281.5	1972.0	0.0	2819	0.0	1995.5	0.0	2820	582.5	1995.5	0.0
2821	1165.0	1995.5	0.0	2822	38.8	1995.5	0.0	2823	77.7	1995.5	0.0
2824	116.5	1995.5	0.0	2825	155.3	1995.5	0.0	2826	194.2	1995.5	0.0
2827	233.0	1995.5	0.0	2828	271.8	1995.5	0.0	2829	310.7	1995.5	0.0
2830	349.5	1995.5	0.0	2831	388.3	1995.5	0.0	2832	427.2	1995.5	0.0

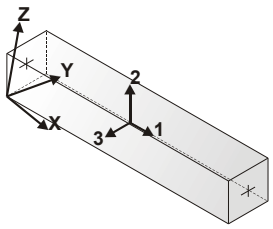
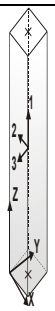
2833	466.0	1995.5	0.0	2834	504.8	1995.5	0.0	2835	543.7	1995.5	0.0
2836	621.3	1995.5	0.0	2837	660.2	1995.5	0.0	2838	699.0	1995.5	0.0
2839	737.8	1995.5	0.0	2840	776.7	1995.5	0.0	2841	815.5	1995.5	0.0
2842	854.3	1995.5	0.0	2843	893.2	1995.5	0.0	2844	932.0	1995.5	0.0
2845	970.8	1995.5	0.0	2846	1009.7	1995.5	0.0	2847	1048.5	1995.5	0.0
2848	1087.3	1995.5	0.0	2849	1126.2	1995.5	0.0	2850	1203.8	1995.5	0.0
2851	1242.7	1995.5	0.0	2852	1281.5	1995.5	0.0	2853	0.0	2019.0	0.0
2854	582.5	2019.0	0.0	2855	1165.0	2019.0	0.0	2856	38.8	2019.0	0.0
2857	77.7	2019.0	0.0	2858	116.5	2019.0	0.0	2859	155.3	2019.0	0.0
2860	194.2	2019.0	0.0	2861	233.0	2019.0	0.0	2862	271.8	2019.0	0.0
2863	310.7	2019.0	0.0	2864	349.5	2019.0	0.0	2865	388.3	2019.0	0.0
2866	427.2	2019.0	0.0	2867	466.0	2019.0	0.0	2868	504.8	2019.0	0.0
2869	543.7	2019.0	0.0	2870	621.3	2019.0	0.0	2871	660.2	2019.0	0.0
2872	699.0	2019.0	0.0	2873	737.8	2019.0	0.0	2874	776.7	2019.0	0.0
2875	815.5	2019.0	0.0	2876	854.3	2019.0	0.0	2877	893.2	2019.0	0.0
2878	932.0	2019.0	0.0	2879	970.8	2019.0	0.0	2880	1009.7	2019.0	0.0
2881	1048.5	2019.0	0.0	2882	1087.3	2019.0	0.0	2883	1126.2	2019.0	0.0
2884	1203.8	2019.0	0.0	2885	1242.7	2019.0	0.0	2886	1281.5	2019.0	0.0
2887	-38.8	1925.0	0.0	2888	-38.8	31.3	0.0	2889	-38.8	62.7	0.0
2890	-38.8	94.0	0.0	2891	-38.8	125.3	0.0	2892	-38.8	156.7	0.0
2893	-38.8	188.0	0.0	2894	-38.8	219.3	0.0	2895	-38.8	250.7	0.0
2896	-38.8	282.0	0.0	2897	-38.8	313.3	0.0	2898	-38.8	344.7	0.0
2899	-38.8	376.0	0.0	2900	-38.8	407.3	0.0	2901	-38.8	438.7	0.0
2902	-38.8	496.7	0.0	2903	-38.8	523.3	0.0	2904	-38.8	550.0	0.0
2905	-38.8	576.7	0.0	2906	-38.8	603.3	0.0	2907	-38.8	630.0	0.0
2908	-38.8	656.7	0.0	2909	-38.8	683.3	0.0	2910	-38.8	710.0	0.0
2911	-38.8	736.7	0.0	2912	-38.8	763.3	0.0	2913	-38.8	790.0	0.0
2914	-38.8	816.7	0.0	2915	-38.8	843.3	0.0	2916	-38.8	893.3	0.0
2917	-38.8	916.7	0.0	2918	-38.8	940.0	0.0	2919	-38.8	963.3	0.0
2920	-38.8	986.7	0.0	2921	-38.8	1010.0	0.0	2922	-38.8	1033.3	0.0
2923	-38.8	1056.7	0.0	2924	-38.8	1080.0	0.0	2925	-38.8	1103.3	0.0
2926	-38.8	1126.7	0.0	2927	-38.8	1150.0	0.0	2928	-38.8	1173.3	0.0
2929	-38.8	1196.7	0.0	2930	-38.8	1243.5	0.0	2931	-38.8	1267.0	0.0
2932	-38.8	1290.5	0.0	2933	-38.8	1314.0	0.0	2934	-38.8	1337.5	0.0
2935	-38.8	1361.0	0.0	2936	-38.8	1384.5	0.0	2937	-38.8	1408.0	0.0
2938	-38.8	1431.5	0.0	2939	-38.8	1455.0	0.0	2940	-38.8	1478.5	0.0
2941	-38.8	1502.0	0.0	2942	-38.8	1525.5	0.0	2943	-38.8	1549.0	0.0
2944	-38.8	1572.5	0.0	2945	-38.8	1596.0	0.0	2946	-38.8	1619.5	0.0
2947	-38.8	1643.0	0.0	2948	-38.8	1666.5	0.0	2949	-38.8	1690.0	0.0
2950	-38.8	1713.5	0.0	2951	-38.8	1737.0	0.0	2952	-38.8	1760.5	0.0
2953	-38.8	1784.0	0.0	2954	-38.8	1807.5	0.0	2955	-38.8	1831.0	0.0
2956	-38.8	1854.5	0.0	2957	-38.8	1878.0	0.0	2958	-38.8	1901.5	0.0
2959	-38.8	-31.3	0.0	2960	-38.8	-62.7	0.0	2961	-38.8	-94.0	0.0
2962	-38.8	-125.3	0.0	2963	-38.8	1948.5	0.0	2964	-38.8	1972.0	0.0
2965	-38.8	1995.5	0.0	2966	-38.8	2019.0	0.0	2967	-77.7	1925.0	0.0
2968	-77.7	31.3	0.0	2969	-77.7	62.7	0.0	2970	-77.7	94.0	0.0
2971	-77.7	125.3	0.0	2972	-77.7	156.7	0.0	2973	-77.7	188.0	0.0
2974	-77.7	219.3	0.0	2975	-77.7	250.7	0.0	2976	-77.7	282.0	0.0
2977	-77.7	313.3	0.0	2978	-77.7	344.7	0.0	2979	-77.7	376.0	0.0
2980	-77.7	407.3	0.0	2981	-77.7	438.7	0.0	2982	-77.7	496.7	0.0
2983	-77.7	523.3	0.0	2984	-77.7	550.0	0.0	2985	-77.7	576.7	0.0
2986	-77.7	603.3	0.0	2987	-77.7	630.0	0.0	2988	-77.7	656.7	0.0
2989	-77.7	683.3	0.0	2990	-77.7	710.0	0.0	2991	-77.7	736.7	0.0
2992	-77.7	763.3	0.0	2993	-77.7	790.0	0.0	2994	-77.7	816.7	0.0
2995	-77.7	843.3	0.0	2996	-77.7	893.3	0.0	2997	-77.7	916.7	0.0
2998	-77.7	940.0	0.0	2999	-77.7	963.3	0.0	3000	-77.7	986.7	0.0
3001	-77.7	1010.0	0.0	3002	-77.7	1033.3	0.0	3003	-77.7	1056.7	0.0
3004	-77.7	1080.0	0.0	3005	-77.7	1103.3	0.0	3006	-77.7	1126.7	0.0
3007	-77.7	1150.0	0.0	3008	-77.7	1173.3	0.0	3009	-77.7	1196.7	0.0
3010	-77.7	1243.5	0.0	3011	-77.7	1267.0	0.0	3012	-77.7	1290.5	0.0
3013	-77.7	1314.0	0.0	3014	-77.7	1337.5	0.0	3015	-77.7	1361.0	0.0
3016	-77.7	1384.5	0.0	3017	-77.7	1408.0	0.0	3018	-77.7	1431.5	0.0
3019	-77.7	1455.0	0.0	3020	-77.7	1478.5	0.0	3021	-77.7	1502.0	0.0
3022	-77.7	1525.5	0.0	3023	-77.7	1549.0	0.0	3024	-77.7	1572.5	0.0
3025	-77.7	1596.0	0.0	3026	-77.7	1619.5	0.0	3027	-77.7	1643.0	0.0
3028	-77.7	1666.5	0.0	3029	-77.7	1690.0	0.0	3030	-77.7	1713.5	0.0
3031	-77.7	1737.0	0.0	3032	-77.7	1760.5	0.0	3033	-77.7	1784.0	0.0
3034	-77.7	1807.5	0.0	3035	-77.7	1831.0	0.0	3036	-77.7	1854.5	0.0
3037	-77.7	1878.0	0.0	3038	-77.7	1901.5	0.0	3039	-77.7	-31.3	0.0
3040	-77.7	-62.7	0.0	3041	-77.7	-94.0	0.0	3042	-77.7	-125.3	0.0
3043	-77.7	1948.5	0.0	3044	-77.7	1972.0	0.0	3045	-77.7	1995.5	0.0
3046	-77.7	2019.0	0.0	3047	-116.5	1925.0	0.0	3048	-116.5	31.3	0.0
3049	-116.5	62.7	0.0	3050	-116.5	94.0	0.0	3051	-116.5	125.3	0.0
3052	-116.5	156.7	0.0	3053	-116.5	188.0	0.0	3054	-116.5	219.3	0.0
3055	-116.5	250.7	0.0	3056	-116.5	282.0	0.0	3057	-116.5	313.3	0.0
3058	-116.5	344.7	0.0	3059	-116.5	376.0	0.0	3060	-116.5	407.3	0.0
3061	-116.5	438.7	0.0	3062	-116.5	496.7	0.0	3063	-116.5	523.3	0.0

3064	-116.5	550.0	0.0	3065	-116.5	576.7	0.0	3066	-116.5	603.3	0.0
3067	-116.5	630.0	0.0	3068	-116.5	656.7	0.0	3069	-116.5	683.3	0.0
3070	-116.5	710.0	0.0	3071	-116.5	736.7	0.0	3072	-116.5	763.3	0.0
3073	-116.5	790.0	0.0	3074	-116.5	816.7	0.0	3075	-116.5	843.3	0.0
3076	-116.5	893.3	0.0	3077	-116.5	916.7	0.0	3078	-116.5	940.0	0.0
3079	-116.5	963.3	0.0	3080	-116.5	986.7	0.0	3081	-116.5	1010.0	0.0
3082	-116.5	1033.3	0.0	3083	-116.5	1056.7	0.0	3084	-116.5	1080.0	0.0
3085	-116.5	1103.3	0.0	3086	-116.5	1126.7	0.0	3087	-116.5	1150.0	0.0
3088	-116.5	1173.3	0.0	3089	-116.5	1196.7	0.0	3090	-116.5	1243.5	0.0
3091	-116.5	1267.0	0.0	3092	-116.5	1290.5	0.0	3093	-116.5	1314.0	0.0
3094	-116.5	1337.5	0.0	3095	-116.5	1361.0	0.0	3096	-116.5	1384.5	0.0
3097	-116.5	1408.0	0.0	3098	-116.5	1431.5	0.0	3099	-116.5	1455.0	0.0
3100	-116.5	1478.5	0.0	3101	-116.5	1502.0	0.0	3102	-116.5	1525.5	0.0
3103	-116.5	1549.0	0.0	3104	-116.5	1572.5	0.0	3105	-116.5	1596.0	0.0
3106	-116.5	1619.5	0.0	3107	-116.5	1643.0	0.0	3108	-116.5	1666.5	0.0
3109	-116.5	1690.0	0.0	3110	-116.5	1713.5	0.0	3111	-116.5	1737.0	0.0
3112	-116.5	1760.5	0.0	3113	-116.5	1784.0	0.0	3114	-116.5	1807.5	0.0
3115	-116.5	1831.0	0.0	3116	-116.5	1854.5	0.0	3117	-116.5	1878.0	0.0
3118	-116.5	1901.5	0.0	3119	-116.5	-31.3	0.0	3120	-116.5	-62.7	0.0
3121	-116.5	-94.0	0.0	3122	-116.5	-125.3	0.0	3123	-116.5	1948.5	0.0
3124	-116.5	1972.0	0.0	3125	-116.5	1995.5	0.0	3126	-116.5	2019.0	0.0
3127	-38.8	0.0	0.0	3128	-38.8	470.0	0.0	3129	-38.8	870.0	0.0
3130	-38.8	1220.0	0.0	3131	-77.7	0.0	0.0	3132	-77.7	470.0	0.0
3133	-77.7	870.0	0.0	3134	-77.7	1220.0	0.0	3135	-116.5	0.0	0.0
3136	-116.5	470.0	0.0	3137	-116.5	870.0	0.0	3138	-116.5	1220.0	0.0

MODELLAZIONE STRUTTURA: ELEMENTI TRAVE

TABELLA DATI TRAVI

Il programma utilizza per la modellazione elementi a due nodi denominati in generale travi.
Ogni elemento trave è individuato dal nodo iniziale e dal nodo finale.
Ogni elemento è caratterizzato da un insieme di proprietà riportate in tabella che ne completano la modellazione.

 orientamento elementi 2D non verticali	 orientamento elementi 2D verticali

In particolare per ogni elemento viene indicato in tabella:

Elem.	numero dell'elemento
Note	codice di comportamento: trave, trave di fondazione, pilastro, asta, asta tesa, asta compressa,
Nodo I (J)	numero del nodo iniziale (finale)
Mat.	codice del materiale assegnato all'elemento
Sez.	codice della sezione assegnata all'elemento
Rotaz.	valore della rotazione dell'elemento, attorno al proprio asse, nel caso in cui l'orientamento di default non sia adottabile; l'orientamento di default prevede per gli elementi non verticali l'asse 2 contenuto nel piano verticale e l'asse 3 orizzontale, per gli elementi verticali l'asse 2 diretto secondo X negativo e l'asse 3 diretto secondo Y negativo
Svincolo I (J)	codici di svincolo per le azioni interne; i primi sei codici si riferiscono al nodo iniziale, i restanti sei al nodo finale (il valore 1 indica che la relativa azione interna non è attiva)
Wink V	costante di sottofondo (coefficiente di Winkler) per la modellazione della trave su suolo elastico
Wink O	costante di sottofondo (coefficiente di Winkler) per la modellazione del suolo elastico orizzontale

Elem.	Note	Nodo I	Nodo J	Mat.	Sez.	Crit.	Rotaz. gradi	Svincolo I	Svincolo J	Wink V daN/cm3	Wink O daN/cm3
1	Trave	22	31	3	3	1					
2	Trave	31	40	3	3	1					
3	Trave	5	6	3	3	1					
4	Trave	8	9	3	3	1					
5	Pilas.	2	5	3	2	1					
6	Pilas.	3	6	3	2	1					
7	Pilas.	1	4	3	2	1					
8	Trave	7	8	3	3	1					
9	Trave	4	5	3	3	1					
10	Pilas.	4	7	3	4	1					
11	Pilas.	5	8	3	4	1					
12	Pilas.	6	9	3	4	1					
13	Trave	7	16	3	3	1					
14	Trave	16	25	3	3	1					
15	Trave	25	34	3	3	1					
16	Trave	41	14	3	3	1					
17	Trave	40	41	3	3	1					
18	Pilas.	12	15	3	14	1	90.00				
19	Pilas.	10	13	3	2	1	90.00				
20	Trave	26	23	3	3	1					
21	Trave	34	17	3	3	1					
22	Pilas.	13	16	3	4	1	90.00				
23	Pilas.	40	17	3	4	1					
24	Pilas.	15	18	3	14	1	90.00				
25	Trave	13	42	3	3	1					
26	Trave	42	15	3	3	1					
27	Pilas.	37	40	3	2	1					
28	Pilas.	38	41	3	2	1					
29	Pilas.	41	26	3	4	1					
30	Pilas.	21	24	3	2	1	90.00				
31	Pilas.	19	22	3	2	1	90.00				
32	Pilas.	39	14	3	2	1					
33	Trave	17	26	3	3	1					
34	Pilas.	22	25	3	4	1	90.00				
35	Pilas.	14	23	3	4	1					
36	Pilas.	24	27	3	4	1	90.00				
37	Trave	22	43	3	3	1					
38	Trave	43	24	3	3	1					
39	Trave	32	33	3	3	1					
40	Trave	35	36	3	3	1					
41	Pilas.	29	32	3	14	1	90.00				
42	Pilas.	30	33	3	2	1	90.00				
43	Pilas.	28	31	3	2	1	90.00				
44	Trave	34	35	3	3	1					
45	Trave	31	32	3	3	1					
46	Pilas.	31	34	3	4	1	90.00				
47	Pilas.	32	35	3	14	1	90.00				
48	Pilas.	33	36	3	4	1	90.00				
49	Trave	9	18	3	3	1					
50	Trave	18	27	3	3	1					
51	Trave	27	36	3	3	1					
52	Trave	36	23	3	3	1					
53	Trave	6	15	3	3	1					
54	Trave	15	24	3	3	1					
55	Trave	24	33	3	3	1					
56	Trave	33	14	3	3	1					
57	Trave	5	42	3	3	1					
58	Trave	42	43	3	15	1					
59	Trave	43	32	3	3	1					
60	Trave	16	44	3	3	1					
61	Trave	44	18	3	3	1					
62	Trave	25	45	3	3	1					
63	Trave	45	27	3	3	1					
64	Trave	8	44	3	3	1					
65	Trave	44	45	3	3	1					
66	Trave	45	35	3	3	1					
67	Trave	35	26	3	3	1					
68	Trave	32	41	3	3	1					
69	Trave	4	13	3	3	1					
70	Trave	13	22	3	3	1					
71	Trave f.	1	46	3	1	2				0.59	0.36
72	Trave f.	2	2163	3	1	2				0.59	0.36
73	Trave f.	10	284	3	1	2				0.59	0.36

74	Trave f.	11	1939	3	1	2	0.59	0.36
75	Trave f.	19	522	3	1	2	0.59	0.36
76	Trave f.	20	1715	3	1	2	0.59	0.36
77	Trave f.	28	760	3	1	2	0.59	0.36
78	Trave f.	29	1252	3	1	2	0.59	0.36
79	Trave f.	37	1238	3	1	2	0.59	0.36
80	Trave f.	38	1701	3	1	2	0.59	0.36
81	Trave f.	30	1280	3	1	2	0.59	0.36
82	Trave f.	21	1743	3	1	2	0.59	0.36
83	Trave f.	12	1967	3	1	2	0.59	0.36
84	Trave f.	3	2191	3	1	2	0.59	0.36
85	Trave f.	10	299	3	1	2	0.59	0.36
86	Trave f.	1640	1655	3	1	2	0.59	0.36
87	Trave f.	29	789	3	1	2	0.59	0.36
88	Trave f.	20	551	3	1	2	0.59	0.36
89	Trave f.	11	313	3	1	2	0.59	0.36
90	Trave f.	2	75	3	1	2	0.59	0.36
91	Trave f.	1	48	3	1	2	0.59	0.36
92	Trave f.	19	537	3	1	2	0.59	0.36
93	Trave f.	28	775	3	1	2	0.59	0.36
94	Trave f.	46	49	3	1	2	0.59	0.36
95	Trave f.	2163	2165	3	1	2	0.59	0.36
96	Trave f.	284	285	3	1	2	0.59	0.36
97	Trave f.	1939	1941	3	1	2	0.59	0.36
98	Trave f.	522	523	3	1	2	0.59	0.36
99	Trave f.	1715	1717	3	1	2	0.59	0.36
100	Trave f.	760	761	3	1	2	0.59	0.36
101	Trave f.	1252	1254	3	1	2	0.59	0.36
102	Trave f.	1238	1239	3	1	2	0.59	0.36
103	Trave f.	1701	1702	3	1	2	0.59	0.36
104	Trave f.	1280	1295	3	1	2	0.59	0.36
105	Trave f.	1743	1758	3	1	2	0.59	0.36
106	Trave f.	1967	1982	3	1	2	0.59	0.36
107	Trave f.	2191	2206	3	1	2	0.59	0.36
108	Trave f.	299	315	3	1	2	0.59	0.36
109	Trave f.	1173	1189	3	1	2	0.59	0.36
110	Trave f.	789	805	3	1	2	0.59	0.36
111	Trave f.	551	567	3	1	2	0.59	0.36
112	Trave f.	313	329	3	1	2	0.59	0.36
113	Trave f.	75	91	3	1	2	0.59	0.36
114	Trave f.	48	77	3	1	2	0.59	0.36
115	Trave f.	537	553	3	1	2	0.59	0.36
116	Trave f.	775	791	3	1	2	0.59	0.36
117	Trave f.	49	51	3	1	2	0.59	0.36
118	Trave f.	2165	2167	3	1	2	0.59	0.36
119	Trave f.	285	286	3	1	2	0.59	0.36
120	Trave f.	1941	1943	3	1	2	0.59	0.36
121	Trave f.	523	524	3	1	2	0.59	0.36
122	Trave f.	1717	1719	3	1	2	0.59	0.36
123	Trave f.	761	762	3	1	2	0.59	0.36
124	Trave f.	1254	1256	3	1	2	0.59	0.36
125	Trave f.	1239	1240	3	1	2	0.59	0.36
126	Trave f.	1702	1703	3	1	2	0.59	0.36
127	Trave f.	1295	1310	3	1	2	0.59	0.36
128	Trave f.	1758	1773	3	1	2	0.59	0.36
129	Trave f.	1982	1997	3	1	2	0.59	0.36
130	Trave f.	2206	2221	3	1	2	0.59	0.36
131	Trave f.	315	331	3	1	2	0.59	0.36
132	Trave f.	1159	1175	3	1	2	0.59	0.36
133	Trave f.	805	821	3	1	2	0.59	0.36
134	Trave f.	567	583	3	1	2	0.59	0.36
135	Trave f.	329	345	3	1	2	0.59	0.36
136	Trave f.	91	107	3	1	2	0.59	0.36
137	Trave f.	77	93	3	1	2	0.59	0.36
138	Trave f.	553	569	3	1	2	0.59	0.36
139	Trave f.	791	807	3	1	2	0.59	0.36
140	Trave f.	51	53	3	1	2	0.59	0.36
141	Trave f.	2167	2169	3	1	2	0.59	0.36
142	Trave f.	286	287	3	1	2	0.59	0.36
143	Trave f.	1943	1945	3	1	2	0.59	0.36
144	Trave f.	524	525	3	1	2	0.59	0.36
145	Trave f.	1719	1721	3	1	2	0.59	0.36
146	Trave f.	762	763	3	1	2	0.59	0.36
147	Trave f.	1256	1258	3	1	2	0.59	0.36
148	Trave f.	1240	1241	3	1	2	0.59	0.36
149	Trave f.	1703	1704	3	1	2	0.59	0.36
150	Trave f.	1310	1325	3	1	2	0.59	0.36

151	Trave f.	1773	1788	3	1	2	0.59	0.36
152	Trave f.	1997	2012	3	1	2	0.59	0.36
153	Trave f.	2221	2236	3	1	2	0.59	0.36
154	Trave f.	331	347	3	1	2	0.59	0.36
155	Trave f.	1655	1670	3	1	2	0.59	0.36
156	Trave f.	821	837	3	1	2	0.59	0.36
157	Trave f.	583	599	3	1	2	0.59	0.36
158	Trave f.	345	361	3	1	2	0.59	0.36
159	Trave f.	107	123	3	1	2	0.59	0.36
160	Trave f.	93	109	3	1	2	0.59	0.36
161	Trave f.	569	585	3	1	2	0.59	0.36
162	Trave f.	807	823	3	1	2	0.59	0.36
163	Trave f.	53	55	3	1	2	0.59	0.36
164	Trave f.	2169	2171	3	1	2	0.59	0.36
165	Trave f.	287	288	3	1	2	0.59	0.36
166	Trave f.	1945	1947	3	1	2	0.59	0.36
167	Trave f.	525	526	3	1	2	0.59	0.36
168	Trave f.	1721	1723	3	1	2	0.59	0.36
169	Trave f.	763	764	3	1	2	0.59	0.36
170	Trave f.	1258	1260	3	1	2	0.59	0.36
171	Trave f.	1241	1242	3	1	2	0.59	0.36
172	Trave f.	1704	1705	3	1	2	0.59	0.36
173	Trave f.	1325	1340	3	1	2	0.59	0.36
174	Trave f.	1788	1803	3	1	2	0.59	0.36
175	Trave f.	2012	2027	3	1	2	0.59	0.36
176	Trave f.	2236	2251	3	1	2	0.59	0.36
177	Trave f.	347	363	3	1	2	0.59	0.36
178	Trave f.	1189	1205	3	1	2	0.59	0.36
179	Trave f.	837	853	3	1	2	0.59	0.36
180	Trave f.	599	615	3	1	2	0.59	0.36
181	Trave f.	361	377	3	1	2	0.59	0.36
182	Trave f.	123	139	3	1	2	0.59	0.36
183	Trave f.	109	125	3	1	2	0.59	0.36
184	Trave f.	585	601	3	1	2	0.59	0.36
185	Trave f.	823	839	3	1	2	0.59	0.36
186	Trave f.	55	57	3	1	2	0.59	0.36
187	Trave f.	2171	2173	3	1	2	0.59	0.36
188	Trave f.	288	289	3	1	2	0.59	0.36
189	Trave f.	1947	1949	3	1	2	0.59	0.36
190	Trave f.	526	527	3	1	2	0.59	0.36
191	Trave f.	1723	1725	3	1	2	0.59	0.36
192	Trave f.	764	765	3	1	2	0.59	0.36
193	Trave f.	1260	1262	3	1	2	0.59	0.36
194	Trave f.	1242	1243	3	1	2	0.59	0.36
195	Trave f.	1705	1706	3	1	2	0.59	0.36
196	Trave f.	1340	1355	3	1	2	0.59	0.36
197	Trave f.	1803	1818	3	1	2	0.59	0.36
198	Trave f.	2027	2042	3	1	2	0.59	0.36
199	Trave f.	2251	2266	3	1	2	0.59	0.36
200	Trave f.	363	379	3	1	2	0.59	0.36
201	Trave f.	1175	1191	3	1	2	0.59	0.36
202	Trave f.	853	869	3	1	2	0.59	0.36
203	Trave f.	615	631	3	1	2	0.59	0.36
204	Trave f.	377	393	3	1	2	0.59	0.36
205	Trave f.	139	155	3	1	2	0.59	0.36
206	Trave f.	125	141	3	1	2	0.59	0.36
207	Trave f.	601	617	3	1	2	0.59	0.36
208	Trave f.	839	855	3	1	2	0.59	0.36
209	Trave f.	57	59	3	1	2	0.59	0.36
210	Trave f.	2173	2175	3	1	2	0.59	0.36
211	Trave f.	289	290	3	1	2	0.59	0.36
212	Trave f.	1949	1951	3	1	2	0.59	0.36
213	Trave f.	527	528	3	1	2	0.59	0.36
214	Trave f.	1725	1727	3	1	2	0.59	0.36
215	Trave f.	765	766	3	1	2	0.59	0.36
216	Trave f.	1262	1264	3	1	2	0.59	0.36
217	Trave f.	1243	1244	3	1	2	0.59	0.36
218	Trave f.	1706	1707	3	1	2	0.59	0.36
219	Trave f.	1355	1370	3	1	2	0.59	0.36
220	Trave f.	1818	1833	3	1	2	0.59	0.36
221	Trave f.	2042	2057	3	1	2	0.59	0.36
222	Trave f.	2266	2281	3	1	2	0.59	0.36
223	Trave f.	379	395	3	1	2	0.59	0.36
224	Trave f.	1670	1685	3	1	2	0.59	0.36
225	Trave f.	869	885	3	1	2	0.59	0.36
226	Trave f.	631	647	3	1	2	0.59	0.36
227	Trave f.	393	409	3	1	2	0.59	0.36

228	Trave f.	155	171	3	1	2	0.59	0.36
229	Trave f.	141	157	3	1	2	0.59	0.36
230	Trave f.	617	633	3	1	2	0.59	0.36
231	Trave f.	855	871	3	1	2	0.59	0.36
232	Trave f.	59	61	3	1	2	0.59	0.36
233	Trave f.	2175	2177	3	1	2	0.59	0.36
234	Trave f.	290	291	3	1	2	0.59	0.36
235	Trave f.	1951	1953	3	1	2	0.59	0.36
236	Trave f.	528	529	3	1	2	0.59	0.36
237	Trave f.	1727	1729	3	1	2	0.59	0.36
238	Trave f.	766	767	3	1	2	0.59	0.36
239	Trave f.	1264	1266	3	1	2	0.59	0.36
240	Trave f.	1244	1245	3	1	2	0.59	0.36
241	Trave f.	1707	1708	3	1	2	0.59	0.36
242	Trave f.	1370	1385	3	1	2	0.59	0.36
243	Trave f.	1833	1848	3	1	2	0.59	0.36
244	Trave f.	2057	2072	3	1	2	0.59	0.36
245	Trave f.	2281	2296	3	1	2	0.59	0.36
246	Trave f.	395	411	3	1	2	0.59	0.36
247	Trave f.	1205	1221	3	1	2	0.59	0.36
248	Trave f.	885	901	3	1	2	0.59	0.36
249	Trave f.	647	663	3	1	2	0.59	0.36
250	Trave f.	409	425	3	1	2	0.59	0.36
251	Trave f.	171	187	3	1	2	0.59	0.36
252	Trave f.	157	173	3	1	2	0.59	0.36
253	Trave f.	633	649	3	1	2	0.59	0.36
254	Trave f.	871	887	3	1	2	0.59	0.36
255	Trave f.	61	63	3	1	2	0.59	0.36
256	Trave f.	2177	2179	3	1	2	0.59	0.36
257	Trave f.	291	292	3	1	2	0.59	0.36
258	Trave f.	1953	1955	3	1	2	0.59	0.36
259	Trave f.	529	530	3	1	2	0.59	0.36
260	Trave f.	1729	1731	3	1	2	0.59	0.36
261	Trave f.	767	768	3	1	2	0.59	0.36
262	Trave f.	1266	1268	3	1	2	0.59	0.36
263	Trave f.	1245	1246	3	1	2	0.59	0.36
264	Trave f.	1708	1709	3	1	2	0.59	0.36
265	Trave f.	1385	1400	3	1	2	0.59	0.36
266	Trave f.	1848	1863	3	1	2	0.59	0.36
267	Trave f.	2072	2087	3	1	2	0.59	0.36
268	Trave f.	2296	2311	3	1	2	0.59	0.36
269	Trave f.	411	427	3	1	2	0.59	0.36
270	Trave f.	1191	1207	3	1	2	0.59	0.36
271	Trave f.	901	917	3	1	2	0.59	0.36
272	Trave f.	663	679	3	1	2	0.59	0.36
273	Trave f.	425	441	3	1	2	0.59	0.36
274	Trave f.	187	203	3	1	2	0.59	0.36
275	Trave f.	173	189	3	1	2	0.59	0.36
276	Trave f.	649	665	3	1	2	0.59	0.36
277	Trave f.	887	903	3	1	2	0.59	0.36
278	Trave f.	63	65	3	1	2	0.59	0.36
279	Trave f.	2179	2181	3	1	2	0.59	0.36
280	Trave f.	292	293	3	1	2	0.59	0.36
281	Trave f.	1955	1957	3	1	2	0.59	0.36
282	Trave f.	530	531	3	1	2	0.59	0.36
283	Trave f.	1731	1733	3	1	2	0.59	0.36
284	Trave f.	768	769	3	1	2	0.59	0.36
285	Trave f.	1268	1270	3	1	2	0.59	0.36
286	Trave f.	1246	1247	3	1	2	0.59	0.36
287	Trave f.	1709	1710	3	1	2	0.59	0.36
288	Trave f.	1400	1415	3	1	2	0.59	0.36
289	Trave f.	1863	1878	3	1	2	0.59	0.36
290	Trave f.	2087	2102	3	1	2	0.59	0.36
291	Trave f.	2311	2326	3	1	2	0.59	0.36
292	Trave f.	427	443	3	1	2	0.59	0.36
293	Trave f.	1685	1700	3	1	2	0.59	0.36
294	Trave f.	917	933	3	1	2	0.59	0.36
295	Trave f.	679	695	3	1	2	0.59	0.36
296	Trave f.	441	457	3	1	2	0.59	0.36
297	Trave f.	203	219	3	1	2	0.59	0.36
298	Trave f.	189	205	3	1	2	0.59	0.36
299	Trave f.	665	681	3	1	2	0.59	0.36
300	Trave f.	903	919	3	1	2	0.59	0.36
301	Trave f.	65	67	3	1	2	0.59	0.36
302	Trave f.	2181	2183	3	1	2	0.59	0.36
303	Trave f.	293	294	3	1	2	0.59	0.36
304	Trave f.	1957	1959	3	1	2	0.59	0.36

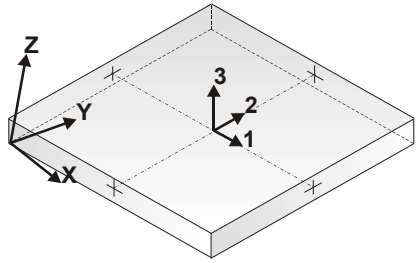
305	Trave f.	531	532	3	1	2	0.59	0.36
306	Trave f.	1733	1735	3	1	2	0.59	0.36
307	Trave f.	769	770	3	1	2	0.59	0.36
308	Trave f.	1270	1272	3	1	2	0.59	0.36
309	Trave f.	1247	1248	3	1	2	0.59	0.36
310	Trave f.	1710	1711	3	1	2	0.59	0.36
311	Trave f.	1415	1430	3	1	2	0.59	0.36
312	Trave f.	1878	1893	3	1	2	0.59	0.36
313	Trave f.	2102	2117	3	1	2	0.59	0.36
314	Trave f.	2326	2341	3	1	2	0.59	0.36
315	Trave f.	443	459	3	1	2	0.59	0.36
316	Trave f.	1221	1237	3	1	2	0.59	0.36
317	Trave f.	933	949	3	1	2	0.59	0.36
318	Trave f.	695	711	3	1	2	0.59	0.36
319	Trave f.	457	473	3	1	2	0.59	0.36
320	Trave f.	219	235	3	1	2	0.59	0.36
321	Trave f.	205	221	3	1	2	0.59	0.36
322	Trave f.	681	697	3	1	2	0.59	0.36
323	Trave f.	919	935	3	1	2	0.59	0.36
324	Trave f.	67	69	3	1	2	0.59	0.36
325	Trave f.	2183	2185	3	1	2	0.59	0.36
326	Trave f.	294	295	3	1	2	0.59	0.36
327	Trave f.	1959	1961	3	1	2	0.59	0.36
328	Trave f.	532	533	3	1	2	0.59	0.36
329	Trave f.	1735	1737	3	1	2	0.59	0.36
330	Trave f.	770	771	3	1	2	0.59	0.36
331	Trave f.	1272	1274	3	1	2	0.59	0.36
332	Trave f.	1248	1249	3	1	2	0.59	0.36
333	Trave f.	1711	1712	3	1	2	0.59	0.36
334	Trave f.	1430	1445	3	1	2	0.59	0.36
335	Trave f.	1893	1908	3	1	2	0.59	0.36
336	Trave f.	2117	2132	3	1	2	0.59	0.36
337	Trave f.	2341	2356	3	1	2	0.59	0.36
338	Trave f.	459	475	3	1	2	0.59	0.36
339	Trave f.	1207	1223	3	1	2	0.59	0.36
340	Trave f.	949	965	3	1	2	0.59	0.36
341	Trave f.	711	727	3	1	2	0.59	0.36
342	Trave f.	473	489	3	1	2	0.59	0.36
343	Trave f.	235	251	3	1	2	0.59	0.36
344	Trave f.	221	237	3	1	2	0.59	0.36
345	Trave f.	697	713	3	1	2	0.59	0.36
346	Trave f.	935	951	3	1	2	0.59	0.36
347	Trave f.	69	71	3	1	2	0.59	0.36
348	Trave f.	2185	2187	3	1	2	0.59	0.36
349	Trave f.	295	296	3	1	2	0.59	0.36
350	Trave f.	1961	1963	3	1	2	0.59	0.36
351	Trave f.	533	534	3	1	2	0.59	0.36
352	Trave f.	1737	1739	3	1	2	0.59	0.36
353	Trave f.	771	772	3	1	2	0.59	0.36
354	Trave f.	1274	1276	3	1	2	0.59	0.36
355	Trave f.	1249	1250	3	1	2	0.59	0.36
356	Trave f.	1712	1713	3	1	2	0.59	0.36
357	Trave f.	1445	1460	3	1	2	0.59	0.36
358	Trave f.	1908	1923	3	1	2	0.59	0.36
359	Trave f.	2132	2147	3	1	2	0.59	0.36
360	Trave f.	2356	2371	3	1	2	0.59	0.36
361	Trave f.	475	491	3	1	2	0.59	0.36
362	Trave f.	1700	39	3	1	2	0.59	0.36
363	Trave f.	965	981	3	1	2	0.59	0.36
364	Trave f.	727	743	3	1	2	0.59	0.36
365	Trave f.	489	505	3	1	2	0.59	0.36
366	Trave f.	251	267	3	1	2	0.59	0.36
367	Trave f.	237	253	3	1	2	0.59	0.36
368	Trave f.	713	729	3	1	2	0.59	0.36
369	Trave f.	951	967	3	1	2	0.59	0.36
370	Trave f.	71	73	3	1	2	0.59	0.36
371	Trave f.	2187	2189	3	1	2	0.59	0.36
372	Trave f.	296	297	3	1	2	0.59	0.36
373	Trave f.	1963	1965	3	1	2	0.59	0.36
374	Trave f.	534	535	3	1	2	0.59	0.36
375	Trave f.	1739	1741	3	1	2	0.59	0.36
376	Trave f.	772	773	3	1	2	0.59	0.36
377	Trave f.	1276	1278	3	1	2	0.59	0.36
378	Trave f.	1250	1251	3	1	2	0.59	0.36
379	Trave f.	1713	1714	3	1	2	0.59	0.36
380	Trave f.	1460	1475	3	1	2	0.59	0.36
381	Trave f.	1923	1938	3	1	2	0.59	0.36

382	Trave f.	2147	2162	3	1	2	0.59	0.36
383	Trave f.	2371	2386	3	1	2	0.59	0.36
384	Trave f.	491	507	3	1	2	0.59	0.36
385	Trave f.	1237	38	3	1	2	0.59	0.36
386	Trave f.	981	997	3	1	2	0.59	0.36
387	Trave f.	743	759	3	1	2	0.59	0.36
388	Trave f.	505	521	3	1	2	0.59	0.36
389	Trave f.	267	283	3	1	2	0.59	0.36
390	Trave f.	253	269	3	1	2	0.59	0.36
391	Trave f.	729	745	3	1	2	0.59	0.36
392	Trave f.	967	983	3	1	2	0.59	0.36
393	Trave f.	73	2	3	1	2	0.59	0.36
394	Trave f.	2189	3	3	1	2	0.59	0.36
395	Trave f.	297	11	3	1	2	0.59	0.36
396	Trave f.	1965	12	3	1	2	0.59	0.36
397	Trave f.	535	20	3	1	2	0.59	0.36
398	Trave f.	1741	21	3	1	2	0.59	0.36
399	Trave f.	773	29	3	1	2	0.59	0.36
400	Trave f.	1278	30	3	1	2	0.59	0.36
401	Trave f.	1251	38	3	1	2	0.59	0.36
402	Trave f.	1714	39	3	1	2	0.59	0.36
403	Trave f.	1475	1490	3	1	2	0.59	0.36
404	Trave f.	1938	30	3	1	2	0.59	0.36
405	Trave f.	2162	21	3	1	2	0.59	0.36
406	Trave f.	2386	12	3	1	2	0.59	0.36
407	Trave f.	507	19	3	1	2	0.59	0.36
408	Trave f.	1223	37	3	1	2	0.59	0.36
409	Trave f.	997	1013	3	1	2	0.59	0.36
410	Trave f.	759	29	3	1	2	0.59	0.36
411	Trave f.	521	20	3	1	2	0.59	0.36
412	Trave f.	283	11	3	1	2	0.59	0.36
413	Trave f.	269	10	3	1	2	0.59	0.36
414	Trave f.	745	28	3	1	2	0.59	0.36
415	Trave f.	983	999	3	1	2	0.59	0.36
416	Trave f.	1490	1505	3	1	2	0.59	0.36
417	Trave f.	1013	1029	3	1	2	0.59	0.36
418	Trave f.	999	1015	3	1	2	0.59	0.36
419	Trave f.	1505	1520	3	1	2	0.59	0.36
420	Trave f.	1029	1045	3	1	2	0.59	0.36
421	Trave f.	1015	1031	3	1	2	0.59	0.36
422	Trave f.	1520	1535	3	1	2	0.59	0.36
423	Trave f.	1045	1061	3	1	2	0.59	0.36
424	Trave f.	1031	1047	3	1	2	0.59	0.36
425	Trave f.	1535	1550	3	1	2	0.59	0.36
426	Trave f.	1061	1077	3	1	2	0.59	0.36
427	Trave f.	1047	1063	3	1	2	0.59	0.36
428	Trave f.	1550	1565	3	1	2	0.59	0.36
429	Trave f.	1077	1093	3	1	2	0.59	0.36
430	Trave f.	1063	1079	3	1	2	0.59	0.36
431	Trave f.	1565	1580	3	1	2	0.59	0.36
432	Trave f.	1093	1109	3	1	2	0.59	0.36
433	Trave f.	1079	1095	3	1	2	0.59	0.36
434	Trave f.	1580	1595	3	1	2	0.59	0.36
435	Trave f.	1109	1125	3	1	2	0.59	0.36
436	Trave f.	1095	1111	3	1	2	0.59	0.36
437	Trave f.	1595	1610	3	1	2	0.59	0.36
438	Trave f.	1125	1141	3	1	2	0.59	0.36
439	Trave f.	1111	1127	3	1	2	0.59	0.36
440	Trave f.	1610	1625	3	1	2	0.59	0.36
441	Trave f.	1141	1157	3	1	2	0.59	0.36
442	Trave f.	1127	1143	3	1	2	0.59	0.36
443	Trave f.	1625	1640	3	1	2	0.59	0.36
444	Trave f.	1157	1173	3	1	2	0.59	0.36
445	Trave f.	1143	1159	3	1	2	0.59	0.36

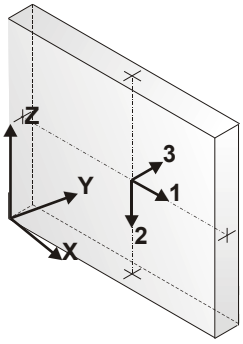
MODELLAZIONE STRUTTURA: ELEMENTI SHELL

LEGENDA TABELLA DATI SHELL

Il programma utilizza per la modellazione elementi a tre o quattro nodi denominati in generale shell.
Ogni elemento shell è individuato dai nodi I, J, K, L (L=I per gli elementi a tre nodi).
Ogni elemento è caratterizzato da un insieme di proprietà riportate in tabella che ne completano la modellazione.



orientamento elementi 3D non verticali



orientamento elementi 3D verticali

In particolare per ogni elemento viene indicato in tabella:

Elem.	numero dell'elemento
Note	codice di comportamento: *Guscio* (elemento guscio in elevazione non verticale) *Guscio fond.* (elemento guscio su suolo elastico) *Setto* (elemento guscio in elevazione verticale) *Membrana* (elemento guscio con comportamento membranale)
Nodo I (J, K, L)	numero del nodo I (J, K, L)
Mat.	codice del materiale assegnato all'elemento
Spessore	spessore dell'elemento (costante)
Wink V	costante di sottofondo (coefficiente di Winkler) per la modellazione del suolo elastico verticale
Wink O	costante di sottofondo (coefficiente di Winkler) per la modellazione del suolo elastico orizzontale

Elem.	Note	Nodo I	Nodo J	Nodo K	Nodo L	Mat.	Crit.	Spessore	Svincolo	Wink V	Wink O
								cm		daN/cm3	daN/cm3
1	Guscio fond.	1	46	47	48	3	2	40.0		0.09	0.06
2	Guscio fond.	46	49	50	47	3	2	40.0		0.09	0.06
3	Guscio fond.	49	51	52	50	3	2	40.0		0.09	0.06
4	Guscio fond.	51	53	54	52	3	2	40.0		0.09	0.06
5	Guscio fond.	53	55	56	54	3	2	40.0		0.09	0.06
6	Guscio fond.	55	57	58	56	3	2	40.0		0.09	0.06
7	Guscio fond.	57	59	60	58	3	2	40.0		0.09	0.06
8	Guscio fond.	59	61	62	60	3	2	40.0		0.09	0.06
9	Guscio fond.	61	63	64	62	3	2	40.0		0.09	0.06
10	Guscio fond.	63	65	66	64	3	2	40.0		0.09	0.06
11	Guscio fond.	65	67	68	66	3	2	40.0		0.09	0.06
12	Guscio fond.	67	69	70	68	3	2	40.0		0.09	0.06
13	Guscio fond.	69	71	72	70	3	2	40.0		0.09	0.06
14	Guscio fond.	71	73	74	72	3	2	40.0		0.09	0.06
15	Guscio fond.	73	2	75	74	3	2	40.0		0.09	0.06
16	Guscio fond.	48	47	76	77	3	2	40.0		0.09	0.06
17	Guscio fond.	47	50	78	76	3	2	40.0		0.09	0.06
18	Guscio fond.	50	52	79	78	3	2	40.0		0.09	0.06
19	Guscio fond.	52	54	80	79	3	2	40.0		0.09	0.06
20	Guscio fond.	54	56	81	80	3	2	40.0		0.09	0.06
21	Guscio fond.	56	58	82	81	3	2	40.0		0.09	0.06
22	Guscio fond.	58	60	83	82	3	2	40.0		0.09	0.06
23	Guscio fond.	60	62	84	83	3	2	40.0		0.09	0.06
24	Guscio fond.	62	64	85	84	3	2	40.0		0.09	0.06
25	Guscio fond.	64	66	86	85	3	2	40.0		0.09	0.06
26	Guscio fond.	66	68	87	86	3	2	40.0		0.09	0.06
27	Guscio fond.	68	70	88	87	3	2	40.0		0.09	0.06
28	Guscio fond.	70	72	89	88	3	2	40.0		0.09	0.06
29	Guscio fond.	72	74	90	89	3	2	40.0		0.09	0.06
30	Guscio fond.	74	75	91	90	3	2	40.0		0.09	0.06
31	Guscio fond.	77	76	92	93	3	2	40.0		0.09	0.06
32	Guscio fond.	76	78	94	92	3	2	40.0		0.09	0.06
33	Guscio fond.	78	79	95	94	3	2	40.0		0.09	0.06
34	Guscio fond.	79	80	96	95	3	2	40.0		0.09	0.06
35	Guscio fond.	80	81	97	96	3	2	40.0		0.09	0.06
36	Guscio fond.	81	82	98	97	3	2	40.0		0.09	0.06
37	Guscio fond.	82	83	99	98	3	2	40.0		0.09	0.06
38	Guscio fond.	83	84	100	99	3	2	40.0		0.09	0.06
39	Guscio fond.	84	85	101	100	3	2	40.0		0.09	0.06
40	Guscio fond.	85	86	102	101	3	2	40.0		0.09	0.06
41	Guscio fond.	86	87	103	102	3	2	40.0		0.09	0.06
42	Guscio fond.	87	88	104	103	3	2	40.0		0.09	0.06
43	Guscio fond.	88	89	105	104	3	2	40.0		0.09	0.06
44	Guscio fond.	89	90	106	105	3	2	40.0		0.09	0.06
45	Guscio fond.	90	91	107	106	3	2	40.0		0.09	0.06
46	Guscio fond.	93	92	108	109	3	2	40.0		0.09	0.06
47	Guscio fond.	92	94	110	108	3	2	40.0		0.09	0.06
48	Guscio fond.	94	95	111	110	3	2	40.0		0.09	0.06
49	Guscio fond.	95	96	112	111	3	2	40.0		0.09	0.06
50	Guscio fond.	96	97	113	112	3	2	40.0		0.09	0.06
51	Guscio fond.	97	98	114	113	3	2	40.0		0.09	0.06
52	Guscio fond.	98	99	115	114	3	2	40.0		0.09	0.06
53	Guscio fond.	99	100	116	115	3	2	40.0		0.09	0.06
54	Guscio fond.	100	101	117	116	3	2	40.0		0.09	0.06
55	Guscio fond.	101	102	118	117	3	2	40.0		0.09	0.06
56	Guscio fond.	102	103	119	118	3	2	40.0		0.09	0.06
57	Guscio fond.	103	104	120	119	3	2	40.0		0.09	0.06
58	Guscio fond.	104	105	121	120	3	2	40.0		0.09	0.06
59	Guscio fond.	105	106	122	121	3	2	40.0		0.09	0.06
60	Guscio fond.	106	107	123	122	3	2	40.0		0.09	0.06
61	Guscio fond.	109	108	124	125	3	2	40.0		0.09	0.06
62	Guscio fond.	108	110	126	124	3	2	40.0		0.09	0.06
63	Guscio fond.	110	111	127	126	3	2	40.0		0.09	0.06
64	Guscio fond.	111	112	128	127	3	2	40.0		0.09	0.06
65	Guscio fond.	112	113	129	128	3	2	40.0		0.09	0.06
66	Guscio fond.	113	114	130	129	3	2	40.0		0.09	0.06
67	Guscio fond.	114	115	131	130	3	2	40.0		0.09	0.06
68	Guscio fond.	115	116	132	131	3	2	40.0		0.09	0.06
69	Guscio fond.	116	117	133	132	3	2	40.0		0.09	0.06
70	Guscio fond.	117	118	134	133	3	2	40.0		0.09	0.06
71	Guscio fond.	118	119	135	134	3	2	40.0		0.09	0.06
72	Guscio fond.	119	120	136	135	3	2	40.0		0.09	0.06
73	Guscio fond.	120	121	137	136	3	2	40.0		0.09	0.06

74	Guscio fond.	121	122	138	137	3	2	40.0	0.09	0.06
75	Guscio fond.	122	123	139	138	3	2	40.0	0.09	0.06
76	Guscio fond.	125	124	140	141	3	2	40.0	0.09	0.06
77	Guscio fond.	124	126	142	140	3	2	40.0	0.09	0.06
78	Guscio fond.	126	127	143	142	3	2	40.0	0.09	0.06
79	Guscio fond.	127	128	144	143	3	2	40.0	0.09	0.06
80	Guscio fond.	128	129	145	144	3	2	40.0	0.09	0.06
81	Guscio fond.	129	130	146	145	3	2	40.0	0.09	0.06
82	Guscio fond.	130	131	147	146	3	2	40.0	0.09	0.06
83	Guscio fond.	131	132	148	147	3	2	40.0	0.09	0.06
84	Guscio fond.	132	133	149	148	3	2	40.0	0.09	0.06
85	Guscio fond.	133	134	150	149	3	2	40.0	0.09	0.06
86	Guscio fond.	134	135	151	150	3	2	40.0	0.09	0.06
87	Guscio fond.	135	136	152	151	3	2	40.0	0.09	0.06
88	Guscio fond.	136	137	153	152	3	2	40.0	0.09	0.06
89	Guscio fond.	137	138	154	153	3	2	40.0	0.09	0.06
90	Guscio fond.	138	139	155	154	3	2	40.0	0.09	0.06
91	Guscio fond.	141	140	156	157	3	2	40.0	0.09	0.06
92	Guscio fond.	140	142	158	156	3	2	40.0	0.09	0.06
93	Guscio fond.	142	143	159	158	3	2	40.0	0.09	0.06
94	Guscio fond.	143	144	160	159	3	2	40.0	0.09	0.06
95	Guscio fond.	144	145	161	160	3	2	40.0	0.09	0.06
96	Guscio fond.	145	146	162	161	3	2	40.0	0.09	0.06
97	Guscio fond.	146	147	163	162	3	2	40.0	0.09	0.06
98	Guscio fond.	147	148	164	163	3	2	40.0	0.09	0.06
99	Guscio fond.	148	149	165	164	3	2	40.0	0.09	0.06
100	Guscio fond.	149	150	166	165	3	2	40.0	0.09	0.06
101	Guscio fond.	150	151	167	166	3	2	40.0	0.09	0.06
102	Guscio fond.	151	152	168	167	3	2	40.0	0.09	0.06
103	Guscio fond.	152	153	169	168	3	2	40.0	0.09	0.06
104	Guscio fond.	153	154	170	169	3	2	40.0	0.09	0.06
105	Guscio fond.	154	155	171	170	3	2	40.0	0.09	0.06
106	Guscio fond.	157	156	172	173	3	2	40.0	0.09	0.06
107	Guscio fond.	156	158	174	172	3	2	40.0	0.09	0.06
108	Guscio fond.	158	159	175	174	3	2	40.0	0.09	0.06
109	Guscio fond.	159	160	176	175	3	2	40.0	0.09	0.06
110	Guscio fond.	160	161	177	176	3	2	40.0	0.09	0.06
111	Guscio fond.	161	162	178	177	3	2	40.0	0.09	0.06
112	Guscio fond.	162	163	179	178	3	2	40.0	0.09	0.06
113	Guscio fond.	163	164	180	179	3	2	40.0	0.09	0.06
114	Guscio fond.	164	165	181	180	3	2	40.0	0.09	0.06
115	Guscio fond.	165	166	182	181	3	2	40.0	0.09	0.06
116	Guscio fond.	166	167	183	182	3	2	40.0	0.09	0.06
117	Guscio fond.	167	168	184	183	3	2	40.0	0.09	0.06
118	Guscio fond.	168	169	185	184	3	2	40.0	0.09	0.06
119	Guscio fond.	169	170	186	185	3	2	40.0	0.09	0.06
120	Guscio fond.	170	171	187	186	3	2	40.0	0.09	0.06
121	Guscio fond.	173	172	188	189	3	2	40.0	0.09	0.06
122	Guscio fond.	172	174	190	188	3	2	40.0	0.09	0.06
123	Guscio fond.	174	175	191	190	3	2	40.0	0.09	0.06
124	Guscio fond.	175	176	192	191	3	2	40.0	0.09	0.06
125	Guscio fond.	176	177	193	192	3	2	40.0	0.09	0.06
126	Guscio fond.	177	178	194	193	3	2	40.0	0.09	0.06
127	Guscio fond.	178	179	195	194	3	2	40.0	0.09	0.06
128	Guscio fond.	179	180	196	195	3	2	40.0	0.09	0.06
129	Guscio fond.	180	181	197	196	3	2	40.0	0.09	0.06
130	Guscio fond.	181	182	198	197	3	2	40.0	0.09	0.06
131	Guscio fond.	182	183	199	198	3	2	40.0	0.09	0.06
132	Guscio fond.	183	184	200	199	3	2	40.0	0.09	0.06
133	Guscio fond.	184	185	201	200	3	2	40.0	0.09	0.06
134	Guscio fond.	185	186	202	201	3	2	40.0	0.09	0.06
135	Guscio fond.	186	187	203	202	3	2	40.0	0.09	0.06
136	Guscio fond.	189	188	204	205	3	2	40.0	0.09	0.06
137	Guscio fond.	188	190	206	204	3	2	40.0	0.09	0.06
138	Guscio fond.	190	191	207	206	3	2	40.0	0.09	0.06
139	Guscio fond.	191	192	208	207	3	2	40.0	0.09	0.06
140	Guscio fond.	192	193	209	208	3	2	40.0	0.09	0.06
141	Guscio fond.	193	194	210	209	3	2	40.0	0.09	0.06
142	Guscio fond.	194	195	211	210	3	2	40.0	0.09	0.06
143	Guscio fond.	195	196	212	211	3	2	40.0	0.09	0.06
144	Guscio fond.	196	197	213	212	3	2	40.0	0.09	0.06
145	Guscio fond.	197	198	214	213	3	2	40.0	0.09	0.06
146	Guscio fond.	198	199	215	214	3	2	40.0	0.09	0.06
147	Guscio fond.	199	200	216	215	3	2	40.0	0.09	0.06
148	Guscio fond.	200	201	217	216	3	2	40.0	0.09	0.06
149	Guscio fond.	201	202	218	217	3	2	40.0	0.09	0.06
150	Guscio fond.	202	203	219	218	3	2	40.0	0.09	0.06

151Guscio fond.	205	204	220	221	3	2	40.0	0.09	0.06
152Guscio fond.	204	206	222	220	3	2	40.0	0.09	0.06
153Guscio fond.	206	207	223	222	3	2	40.0	0.09	0.06
154Guscio fond.	207	208	224	223	3	2	40.0	0.09	0.06
155Guscio fond.	208	209	225	224	3	2	40.0	0.09	0.06
156Guscio fond.	209	210	226	225	3	2	40.0	0.09	0.06
157Guscio fond.	210	211	227	226	3	2	40.0	0.09	0.06
158Guscio fond.	211	212	228	227	3	2	40.0	0.09	0.06
159Guscio fond.	212	213	229	228	3	2	40.0	0.09	0.06
160Guscio fond.	213	214	230	229	3	2	40.0	0.09	0.06
161Guscio fond.	214	215	231	230	3	2	40.0	0.09	0.06
162Guscio fond.	215	216	232	231	3	2	40.0	0.09	0.06
163Guscio fond.	216	217	233	232	3	2	40.0	0.09	0.06
164Guscio fond.	217	218	234	233	3	2	40.0	0.09	0.06
165Guscio fond.	218	219	235	234	3	2	40.0	0.09	0.06
166Guscio fond.	221	220	236	237	3	2	40.0	0.09	0.06
167Guscio fond.	220	222	238	236	3	2	40.0	0.09	0.06
168Guscio fond.	222	223	239	238	3	2	40.0	0.09	0.06
169Guscio fond.	223	224	240	239	3	2	40.0	0.09	0.06
170Guscio fond.	224	225	241	240	3	2	40.0	0.09	0.06
171Guscio fond.	225	226	242	241	3	2	40.0	0.09	0.06
172Guscio fond.	226	227	243	242	3	2	40.0	0.09	0.06
173Guscio fond.	227	228	244	243	3	2	40.0	0.09	0.06
174Guscio fond.	228	229	245	244	3	2	40.0	0.09	0.06
175Guscio fond.	229	230	246	245	3	2	40.0	0.09	0.06
176Guscio fond.	230	231	247	246	3	2	40.0	0.09	0.06
177Guscio fond.	231	232	248	247	3	2	40.0	0.09	0.06
178Guscio fond.	232	233	249	248	3	2	40.0	0.09	0.06
179Guscio fond.	233	234	250	249	3	2	40.0	0.09	0.06
180Guscio fond.	234	235	251	250	3	2	40.0	0.09	0.06
181Guscio fond.	237	236	252	253	3	2	40.0	0.09	0.06
182Guscio fond.	236	238	254	252	3	2	40.0	0.09	0.06
183Guscio fond.	238	239	255	254	3	2	40.0	0.09	0.06
184Guscio fond.	239	240	256	255	3	2	40.0	0.09	0.06
185Guscio fond.	240	241	257	256	3	2	40.0	0.09	0.06
186Guscio fond.	241	242	258	257	3	2	40.0	0.09	0.06
187Guscio fond.	242	243	259	258	3	2	40.0	0.09	0.06
188Guscio fond.	243	244	260	259	3	2	40.0	0.09	0.06
189Guscio fond.	244	245	261	260	3	2	40.0	0.09	0.06
190Guscio fond.	245	246	262	261	3	2	40.0	0.09	0.06
191Guscio fond.	246	247	263	262	3	2	40.0	0.09	0.06
192Guscio fond.	247	248	264	263	3	2	40.0	0.09	0.06
193Guscio fond.	248	249	265	264	3	2	40.0	0.09	0.06
194Guscio fond.	249	250	266	265	3	2	40.0	0.09	0.06
195Guscio fond.	250	251	267	266	3	2	40.0	0.09	0.06
196Guscio fond.	253	252	268	269	3	2	40.0	0.09	0.06
197Guscio fond.	252	254	270	268	3	2	40.0	0.09	0.06
198Guscio fond.	254	255	271	270	3	2	40.0	0.09	0.06
199Guscio fond.	255	256	272	271	3	2	40.0	0.09	0.06
200Guscio fond.	256	257	273	272	3	2	40.0	0.09	0.06
201Guscio fond.	257	258	274	273	3	2	40.0	0.09	0.06
202Guscio fond.	258	259	275	274	3	2	40.0	0.09	0.06
203Guscio fond.	259	260	276	275	3	2	40.0	0.09	0.06
204Guscio fond.	260	261	277	276	3	2	40.0	0.09	0.06
205Guscio fond.	261	262	278	277	3	2	40.0	0.09	0.06
206Guscio fond.	262	263	279	278	3	2	40.0	0.09	0.06
207Guscio fond.	263	264	280	279	3	2	40.0	0.09	0.06
208Guscio fond.	264	265	281	280	3	2	40.0	0.09	0.06
209Guscio fond.	265	266	282	281	3	2	40.0	0.09	0.06
210Guscio fond.	266	267	283	282	3	2	40.0	0.09	0.06
211Guscio fond.	269	268	284	10	3	2	40.0	0.09	0.06
212Guscio fond.	268	270	285	284	3	2	40.0	0.09	0.06
213Guscio fond.	270	271	286	285	3	2	40.0	0.09	0.06
214Guscio fond.	271	272	287	286	3	2	40.0	0.09	0.06
215Guscio fond.	272	273	288	287	3	2	40.0	0.09	0.06
216Guscio fond.	273	274	289	288	3	2	40.0	0.09	0.06
217Guscio fond.	274	275	290	289	3	2	40.0	0.09	0.06
218Guscio fond.	275	276	291	290	3	2	40.0	0.09	0.06
219Guscio fond.	276	277	292	291	3	2	40.0	0.09	0.06
220Guscio fond.	277	278	293	292	3	2	40.0	0.09	0.06
221Guscio fond.	278	279	294	293	3	2	40.0	0.09	0.06
222Guscio fond.	279	280	295	294	3	2	40.0	0.09	0.06
223Guscio fond.	280	281	296	295	3	2	40.0	0.09	0.06
224Guscio fond.	281	282	297	296	3	2	40.0	0.09	0.06
225Guscio fond.	282	283	11	297	3	2	40.0	0.09	0.06
226Guscio fond.	10	284	298	299	3	2	40.0	0.09	0.06
227Guscio fond.	284	285	300	298	3	2	40.0	0.09	0.06

228Guscio fond.	285	286	301	300	3	2	40.0	0.09	0.06
229Guscio fond.	286	287	302	301	3	2	40.0	0.09	0.06
230Guscio fond.	287	288	303	302	3	2	40.0	0.09	0.06
231Guscio fond.	288	289	304	303	3	2	40.0	0.09	0.06
232Guscio fond.	289	290	305	304	3	2	40.0	0.09	0.06
233Guscio fond.	290	291	306	305	3	2	40.0	0.09	0.06
234Guscio fond.	291	292	307	306	3	2	40.0	0.09	0.06
235Guscio fond.	292	293	308	307	3	2	40.0	0.09	0.06
236Guscio fond.	293	294	309	308	3	2	40.0	0.09	0.06
237Guscio fond.	294	295	310	309	3	2	40.0	0.09	0.06
238Guscio fond.	295	296	311	310	3	2	40.0	0.09	0.06
239Guscio fond.	296	297	312	311	3	2	40.0	0.09	0.06
240Guscio fond.	297	11	313	312	3	2	40.0	0.09	0.06
241Guscio fond.	299	298	314	315	3	2	40.0	0.09	0.06
242Guscio fond.	298	300	316	314	3	2	40.0	0.09	0.06
243Guscio fond.	300	301	317	316	3	2	40.0	0.09	0.06
244Guscio fond.	301	302	318	317	3	2	40.0	0.09	0.06
245Guscio fond.	302	303	319	318	3	2	40.0	0.09	0.06
246Guscio fond.	303	304	320	319	3	2	40.0	0.09	0.06
247Guscio fond.	304	305	321	320	3	2	40.0	0.09	0.06
248Guscio fond.	305	306	322	321	3	2	40.0	0.09	0.06
249Guscio fond.	306	307	323	322	3	2	40.0	0.09	0.06
250Guscio fond.	307	308	324	323	3	2	40.0	0.09	0.06
251Guscio fond.	308	309	325	324	3	2	40.0	0.09	0.06
252Guscio fond.	309	310	326	325	3	2	40.0	0.09	0.06
253Guscio fond.	310	311	327	326	3	2	40.0	0.09	0.06
254Guscio fond.	311	312	328	327	3	2	40.0	0.09	0.06
255Guscio fond.	312	313	329	328	3	2	40.0	0.09	0.06
256Guscio fond.	315	314	330	331	3	2	40.0	0.09	0.06
257Guscio fond.	314	316	332	330	3	2	40.0	0.09	0.06
258Guscio fond.	316	317	333	332	3	2	40.0	0.09	0.06
259Guscio fond.	317	318	334	333	3	2	40.0	0.09	0.06
260Guscio fond.	318	319	335	334	3	2	40.0	0.09	0.06
261Guscio fond.	319	320	336	335	3	2	40.0	0.09	0.06
262Guscio fond.	320	321	337	336	3	2	40.0	0.09	0.06
263Guscio fond.	321	322	338	337	3	2	40.0	0.09	0.06
264Guscio fond.	322	323	339	338	3	2	40.0	0.09	0.06
265Guscio fond.	323	324	340	339	3	2	40.0	0.09	0.06
266Guscio fond.	324	325	341	340	3	2	40.0	0.09	0.06
267Guscio fond.	325	326	342	341	3	2	40.0	0.09	0.06
268Guscio fond.	326	327	343	342	3	2	40.0	0.09	0.06
269Guscio fond.	327	328	344	343	3	2	40.0	0.09	0.06
270Guscio fond.	328	329	345	344	3	2	40.0	0.09	0.06
271Guscio fond.	331	330	346	347	3	2	40.0	0.09	0.06
272Guscio fond.	330	332	348	346	3	2	40.0	0.09	0.06
273Guscio fond.	332	333	349	348	3	2	40.0	0.09	0.06
274Guscio fond.	333	334	350	349	3	2	40.0	0.09	0.06
275Guscio fond.	334	335	351	350	3	2	40.0	0.09	0.06
276Guscio fond.	335	336	352	351	3	2	40.0	0.09	0.06
277Guscio fond.	336	337	353	352	3	2	40.0	0.09	0.06
278Guscio fond.	337	338	354	353	3	2	40.0	0.09	0.06
279Guscio fond.	338	339	355	354	3	2	40.0	0.09	0.06
280Guscio fond.	339	340	356	355	3	2	40.0	0.09	0.06
281Guscio fond.	340	341	357	356	3	2	40.0	0.09	0.06
282Guscio fond.	341	342	358	357	3	2	40.0	0.09	0.06
283Guscio fond.	342	343	359	358	3	2	40.0	0.09	0.06
284Guscio fond.	343	344	360	359	3	2	40.0	0.09	0.06
285Guscio fond.	344	345	361	360	3	2	40.0	0.09	0.06
286Guscio fond.	347	346	362	363	3	2	40.0	0.09	0.06
287Guscio fond.	346	348	364	362	3	2	40.0	0.09	0.06
288Guscio fond.	348	349	365	364	3	2	40.0	0.09	0.06
289Guscio fond.	349	350	366	365	3	2	40.0	0.09	0.06
290Guscio fond.	350	351	367	366	3	2	40.0	0.09	0.06
291Guscio fond.	351	352	368	367	3	2	40.0	0.09	0.06
292Guscio fond.	352	353	369	368	3	2	40.0	0.09	0.06
293Guscio fond.	353	354	370	369	3	2	40.0	0.09	0.06
294Guscio fond.	354	355	371	370	3	2	40.0	0.09	0.06
295Guscio fond.	355	356	372	371	3	2	40.0	0.09	0.06
296Guscio fond.	356	357	373	372	3	2	40.0	0.09	0.06
297Guscio fond.	357	358	374	373	3	2	40.0	0.09	0.06
298Guscio fond.	358	359	375	374	3	2	40.0	0.09	0.06
299Guscio fond.	359	360	376	375	3	2	40.0	0.09	0.06
300Guscio fond.	360	361	377	376	3	2	40.0	0.09	0.06
301Guscio fond.	363	362	378	379	3	2	40.0	0.09	0.06
302Guscio fond.	362	364	380	378	3	2	40.0	0.09	0.06
303Guscio fond.	364	365	381	380	3	2	40.0	0.09	0.06
304Guscio fond.	365	366	382	381	3	2	40.0	0.09	0.06

305Guscio fond.	366	367	383	382	3	2	40.0	0.09	0.06
306Guscio fond.	367	368	384	383	3	2	40.0	0.09	0.06
307Guscio fond.	368	369	385	384	3	2	40.0	0.09	0.06
308Guscio fond.	369	370	386	385	3	2	40.0	0.09	0.06
309Guscio fond.	370	371	387	386	3	2	40.0	0.09	0.06
310Guscio fond.	371	372	388	387	3	2	40.0	0.09	0.06
311Guscio fond.	372	373	389	388	3	2	40.0	0.09	0.06
312Guscio fond.	373	374	390	389	3	2	40.0	0.09	0.06
313Guscio fond.	374	375	391	390	3	2	40.0	0.09	0.06
314Guscio fond.	375	376	392	391	3	2	40.0	0.09	0.06
315Guscio fond.	376	377	393	392	3	2	40.0	0.09	0.06
316Guscio fond.	379	378	394	395	3	2	40.0	0.09	0.06
317Guscio fond.	378	380	396	394	3	2	40.0	0.09	0.06
318Guscio fond.	380	381	397	396	3	2	40.0	0.09	0.06
319Guscio fond.	381	382	398	397	3	2	40.0	0.09	0.06
320Guscio fond.	382	383	399	398	3	2	40.0	0.09	0.06
321Guscio fond.	383	384	400	399	3	2	40.0	0.09	0.06
322Guscio fond.	384	385	401	400	3	2	40.0	0.09	0.06
323Guscio fond.	385	386	402	401	3	2	40.0	0.09	0.06
324Guscio fond.	386	387	403	402	3	2	40.0	0.09	0.06
325Guscio fond.	387	388	404	403	3	2	40.0	0.09	0.06
326Guscio fond.	388	389	405	404	3	2	40.0	0.09	0.06
327Guscio fond.	389	390	406	405	3	2	40.0	0.09	0.06
328Guscio fond.	390	391	407	406	3	2	40.0	0.09	0.06
329Guscio fond.	391	392	408	407	3	2	40.0	0.09	0.06
330Guscio fond.	392	393	409	408	3	2	40.0	0.09	0.06
331Guscio fond.	395	394	410	411	3	2	40.0	0.09	0.06
332Guscio fond.	394	396	412	410	3	2	40.0	0.09	0.06
333Guscio fond.	396	397	413	412	3	2	40.0	0.09	0.06
334Guscio fond.	397	398	414	413	3	2	40.0	0.09	0.06
335Guscio fond.	398	399	415	414	3	2	40.0	0.09	0.06
336Guscio fond.	399	400	416	415	3	2	40.0	0.09	0.06
337Guscio fond.	400	401	417	416	3	2	40.0	0.09	0.06
338Guscio fond.	401	402	418	417	3	2	40.0	0.09	0.06
339Guscio fond.	402	403	419	418	3	2	40.0	0.09	0.06
340Guscio fond.	403	404	420	419	3	2	40.0	0.09	0.06
341Guscio fond.	404	405	421	420	3	2	40.0	0.09	0.06
342Guscio fond.	405	406	422	421	3	2	40.0	0.09	0.06
343Guscio fond.	406	407	423	422	3	2	40.0	0.09	0.06
344Guscio fond.	407	408	424	423	3	2	40.0	0.09	0.06
345Guscio fond.	408	409	425	424	3	2	40.0	0.09	0.06
346Guscio fond.	411	410	426	427	3	2	40.0	0.09	0.06
347Guscio fond.	410	412	428	426	3	2	40.0	0.09	0.06
348Guscio fond.	412	413	429	428	3	2	40.0	0.09	0.06
349Guscio fond.	413	414	430	429	3	2	40.0	0.09	0.06
350Guscio fond.	414	415	431	430	3	2	40.0	0.09	0.06
351Guscio fond.	415	416	432	431	3	2	40.0	0.09	0.06
352Guscio fond.	416	417	433	432	3	2	40.0	0.09	0.06
353Guscio fond.	417	418	434	433	3	2	40.0	0.09	0.06
354Guscio fond.	418	419	435	434	3	2	40.0	0.09	0.06
355Guscio fond.	419	420	436	435	3	2	40.0	0.09	0.06
356Guscio fond.	420	421	437	436	3	2	40.0	0.09	0.06
357Guscio fond.	421	422	438	437	3	2	40.0	0.09	0.06
358Guscio fond.	422	423	439	438	3	2	40.0	0.09	0.06
359Guscio fond.	423	424	440	439	3	2	40.0	0.09	0.06
360Guscio fond.	424	425	441	440	3	2	40.0	0.09	0.06
361Guscio fond.	427	426	442	443	3	2	40.0	0.09	0.06
362Guscio fond.	426	428	444	442	3	2	40.0	0.09	0.06
363Guscio fond.	428	429	445	444	3	2	40.0	0.09	0.06
364Guscio fond.	429	430	446	445	3	2	40.0	0.09	0.06
365Guscio fond.	430	431	447	446	3	2	40.0	0.09	0.06
366Guscio fond.	431	432	448	447	3	2	40.0	0.09	0.06
367Guscio fond.	432	433	449	448	3	2	40.0	0.09	0.06
368Guscio fond.	433	434	450	449	3	2	40.0	0.09	0.06
369Guscio fond.	434	435	451	450	3	2	40.0	0.09	0.06
370Guscio fond.	435	436	452	451	3	2	40.0	0.09	0.06
371Guscio fond.	436	437	453	452	3	2	40.0	0.09	0.06
372Guscio fond.	437	438	454	453	3	2	40.0	0.09	0.06
373Guscio fond.	438	439	455	454	3	2	40.0	0.09	0.06
374Guscio fond.	439	440	456	455	3	2	40.0	0.09	0.06
375Guscio fond.	440	441	457	456	3	2	40.0	0.09	0.06
376Guscio fond.	443	442	458	459	3	2	40.0	0.09	0.06
377Guscio fond.	442	444	460	458	3	2	40.0	0.09	0.06
378Guscio fond.	444	445	461	460	3	2	40.0	0.09	0.06
379Guscio fond.	445	446	462	461	3	2	40.0	0.09	0.06
380Guscio fond.	446	447	463	462	3	2	40.0	0.09	0.06
381Guscio fond.	447	448	464	463	3	2	40.0	0.09	0.06

382Guscio fond.	448	449	465	464	3	2	40.0	0.09	0.06
383Guscio fond.	449	450	466	465	3	2	40.0	0.09	0.06
384Guscio fond.	450	451	467	466	3	2	40.0	0.09	0.06
385Guscio fond.	451	452	468	467	3	2	40.0	0.09	0.06
386Guscio fond.	452	453	469	468	3	2	40.0	0.09	0.06
387Guscio fond.	453	454	470	469	3	2	40.0	0.09	0.06
388Guscio fond.	454	455	471	470	3	2	40.0	0.09	0.06
389Guscio fond.	455	456	472	471	3	2	40.0	0.09	0.06
390Guscio fond.	456	457	473	472	3	2	40.0	0.09	0.06
391Guscio fond.	459	458	474	475	3	2	40.0	0.09	0.06
392Guscio fond.	458	460	476	474	3	2	40.0	0.09	0.06
393Guscio fond.	460	461	477	476	3	2	40.0	0.09	0.06
394Guscio fond.	461	462	478	477	3	2	40.0	0.09	0.06
395Guscio fond.	462	463	479	478	3	2	40.0	0.09	0.06
396Guscio fond.	463	464	480	479	3	2	40.0	0.09	0.06
397Guscio fond.	464	465	481	480	3	2	40.0	0.09	0.06
398Guscio fond.	465	466	482	481	3	2	40.0	0.09	0.06
399Guscio fond.	466	467	483	482	3	2	40.0	0.09	0.06
400Guscio fond.	467	468	484	483	3	2	40.0	0.09	0.06
401Guscio fond.	468	469	485	484	3	2	40.0	0.09	0.06
402Guscio fond.	469	470	486	485	3	2	40.0	0.09	0.06
403Guscio fond.	470	471	487	486	3	2	40.0	0.09	0.06
404Guscio fond.	471	472	488	487	3	2	40.0	0.09	0.06
405Guscio fond.	472	473	489	488	3	2	40.0	0.09	0.06
406Guscio fond.	475	474	490	491	3	2	40.0	0.09	0.06
407Guscio fond.	474	476	492	490	3	2	40.0	0.09	0.06
408Guscio fond.	476	477	493	492	3	2	40.0	0.09	0.06
409Guscio fond.	477	478	494	493	3	2	40.0	0.09	0.06
410Guscio fond.	478	479	495	494	3	2	40.0	0.09	0.06
411Guscio fond.	479	480	496	495	3	2	40.0	0.09	0.06
412Guscio fond.	480	481	497	496	3	2	40.0	0.09	0.06
413Guscio fond.	481	482	498	497	3	2	40.0	0.09	0.06
414Guscio fond.	482	483	499	498	3	2	40.0	0.09	0.06
415Guscio fond.	483	484	500	499	3	2	40.0	0.09	0.06
416Guscio fond.	484	485	501	500	3	2	40.0	0.09	0.06
417Guscio fond.	485	486	502	501	3	2	40.0	0.09	0.06
418Guscio fond.	486	487	503	502	3	2	40.0	0.09	0.06
419Guscio fond.	487	488	504	503	3	2	40.0	0.09	0.06
420Guscio fond.	488	489	505	504	3	2	40.0	0.09	0.06
421Guscio fond.	491	490	506	507	3	2	40.0	0.09	0.06
422Guscio fond.	490	492	508	506	3	2	40.0	0.09	0.06
423Guscio fond.	492	493	509	508	3	2	40.0	0.09	0.06
424Guscio fond.	493	494	510	509	3	2	40.0	0.09	0.06
425Guscio fond.	494	495	511	510	3	2	40.0	0.09	0.06
426Guscio fond.	495	496	512	511	3	2	40.0	0.09	0.06
427Guscio fond.	496	497	513	512	3	2	40.0	0.09	0.06
428Guscio fond.	497	498	514	513	3	2	40.0	0.09	0.06
429Guscio fond.	498	499	515	514	3	2	40.0	0.09	0.06
430Guscio fond.	499	500	516	515	3	2	40.0	0.09	0.06
431Guscio fond.	500	501	517	516	3	2	40.0	0.09	0.06
432Guscio fond.	501	502	518	517	3	2	40.0	0.09	0.06
433Guscio fond.	502	503	519	518	3	2	40.0	0.09	0.06
434Guscio fond.	503	504	520	519	3	2	40.0	0.09	0.06
435Guscio fond.	504	505	521	520	3	2	40.0	0.09	0.06
436Guscio fond.	507	506	522	19	3	2	40.0	0.09	0.06
437Guscio fond.	506	508	523	522	3	2	40.0	0.09	0.06
438Guscio fond.	508	509	524	523	3	2	40.0	0.09	0.06
439Guscio fond.	509	510	525	524	3	2	40.0	0.09	0.06
440Guscio fond.	510	511	526	525	3	2	40.0	0.09	0.06
441Guscio fond.	511	512	527	526	3	2	40.0	0.09	0.06
442Guscio fond.	512	513	528	527	3	2	40.0	0.09	0.06
443Guscio fond.	513	514	529	528	3	2	40.0	0.09	0.06
444Guscio fond.	514	515	530	529	3	2	40.0	0.09	0.06
445Guscio fond.	515	516	531	530	3	2	40.0	0.09	0.06
446Guscio fond.	516	517	532	531	3	2	40.0	0.09	0.06
447Guscio fond.	517	518	533	532	3	2	40.0	0.09	0.06
448Guscio fond.	518	519	534	533	3	2	40.0	0.09	0.06
449Guscio fond.	519	520	535	534	3	2	40.0	0.09	0.06
450Guscio fond.	520	521	20	535	3	2	40.0	0.09	0.06
451Guscio fond.	19	522	536	537	3	2	40.0	0.09	0.06
452Guscio fond.	522	523	538	536	3	2	40.0	0.09	0.06
453Guscio fond.	523	524	539	538	3	2	40.0	0.09	0.06
454Guscio fond.	524	525	540	539	3	2	40.0	0.09	0.06
455Guscio fond.	525	526	541	540	3	2	40.0	0.09	0.06
456Guscio fond.	526	527	542	541	3	2	40.0	0.09	0.06
457Guscio fond.	527	528	543	542	3	2	40.0	0.09	0.06
458Guscio fond.	528	529	544	543	3	2	40.0	0.09	0.06

459Guscio fond.	529	530	545	544	3	2	40.0	0.09	0.06
460Guscio fond.	530	531	546	545	3	2	40.0	0.09	0.06
461Guscio fond.	531	532	547	546	3	2	40.0	0.09	0.06
462Guscio fond.	532	533	548	547	3	2	40.0	0.09	0.06
463Guscio fond.	533	534	549	548	3	2	40.0	0.09	0.06
464Guscio fond.	534	535	550	549	3	2	40.0	0.09	0.06
465Guscio fond.	535	20	551	550	3	2	40.0	0.09	0.06
466Guscio fond.	537	536	552	553	3	2	40.0	0.09	0.06
467Guscio fond.	536	538	554	552	3	2	40.0	0.09	0.06
468Guscio fond.	538	539	555	554	3	2	40.0	0.09	0.06
469Guscio fond.	539	540	556	555	3	2	40.0	0.09	0.06
470Guscio fond.	540	541	557	556	3	2	40.0	0.09	0.06
471Guscio fond.	541	542	558	557	3	2	40.0	0.09	0.06
472Guscio fond.	542	543	559	558	3	2	40.0	0.09	0.06
473Guscio fond.	543	544	560	559	3	2	40.0	0.09	0.06
474Guscio fond.	544	545	561	560	3	2	40.0	0.09	0.06
475Guscio fond.	545	546	562	561	3	2	40.0	0.09	0.06
476Guscio fond.	546	547	563	562	3	2	40.0	0.09	0.06
477Guscio fond.	547	548	564	563	3	2	40.0	0.09	0.06
478Guscio fond.	548	549	565	564	3	2	40.0	0.09	0.06
479Guscio fond.	549	550	566	565	3	2	40.0	0.09	0.06
480Guscio fond.	550	551	567	566	3	2	40.0	0.09	0.06
481Guscio fond.	553	552	568	569	3	2	40.0	0.09	0.06
482Guscio fond.	552	554	570	568	3	2	40.0	0.09	0.06
483Guscio fond.	554	555	571	570	3	2	40.0	0.09	0.06
484Guscio fond.	555	556	572	571	3	2	40.0	0.09	0.06
485Guscio fond.	556	557	573	572	3	2	40.0	0.09	0.06
486Guscio fond.	557	558	574	573	3	2	40.0	0.09	0.06
487Guscio fond.	558	559	575	574	3	2	40.0	0.09	0.06
488Guscio fond.	559	560	576	575	3	2	40.0	0.09	0.06
489Guscio fond.	560	561	577	576	3	2	40.0	0.09	0.06
490Guscio fond.	561	562	578	577	3	2	40.0	0.09	0.06
491Guscio fond.	562	563	579	578	3	2	40.0	0.09	0.06
492Guscio fond.	563	564	580	579	3	2	40.0	0.09	0.06
493Guscio fond.	564	565	581	580	3	2	40.0	0.09	0.06
494Guscio fond.	565	566	582	581	3	2	40.0	0.09	0.06
495Guscio fond.	566	567	583	582	3	2	40.0	0.09	0.06
496Guscio fond.	569	568	584	585	3	2	40.0	0.09	0.06
497Guscio fond.	568	570	586	584	3	2	40.0	0.09	0.06
498Guscio fond.	570	571	587	586	3	2	40.0	0.09	0.06
499Guscio fond.	571	572	588	587	3	2	40.0	0.09	0.06
500Guscio fond.	572	573	589	588	3	2	40.0	0.09	0.06
501Guscio fond.	573	574	590	589	3	2	40.0	0.09	0.06
502Guscio fond.	574	575	591	590	3	2	40.0	0.09	0.06
503Guscio fond.	575	576	592	591	3	2	40.0	0.09	0.06
504Guscio fond.	576	577	593	592	3	2	40.0	0.09	0.06
505Guscio fond.	577	578	594	593	3	2	40.0	0.09	0.06
506Guscio fond.	578	579	595	594	3	2	40.0	0.09	0.06
507Guscio fond.	579	580	596	595	3	2	40.0	0.09	0.06
508Guscio fond.	580	581	597	596	3	2	40.0	0.09	0.06
509Guscio fond.	581	582	598	597	3	2	40.0	0.09	0.06
510Guscio fond.	582	583	599	598	3	2	40.0	0.09	0.06
511Guscio fond.	585	584	600	601	3	2	40.0	0.09	0.06
512Guscio fond.	584	586	602	600	3	2	40.0	0.09	0.06
513Guscio fond.	586	587	603	602	3	2	40.0	0.09	0.06
514Guscio fond.	587	588	604	603	3	2	40.0	0.09	0.06
515Guscio fond.	588	589	605	604	3	2	40.0	0.09	0.06
516Guscio fond.	589	590	606	605	3	2	40.0	0.09	0.06
517Guscio fond.	590	591	607	606	3	2	40.0	0.09	0.06
518Guscio fond.	591	592	608	607	3	2	40.0	0.09	0.06
519Guscio fond.	592	593	609	608	3	2	40.0	0.09	0.06
520Guscio fond.	593	594	610	609	3	2	40.0	0.09	0.06
521Guscio fond.	594	595	611	610	3	2	40.0	0.09	0.06
522Guscio fond.	595	596	612	611	3	2	40.0	0.09	0.06
523Guscio fond.	596	597	613	612	3	2	40.0	0.09	0.06
524Guscio fond.	597	598	614	613	3	2	40.0	0.09	0.06
525Guscio fond.	598	599	615	614	3	2	40.0	0.09	0.06
526Guscio fond.	601	600	616	617	3	2	40.0	0.09	0.06
527Guscio fond.	600	602	618	616	3	2	40.0	0.09	0.06
528Guscio fond.	602	603	619	618	3	2	40.0	0.09	0.06
529Guscio fond.	603	604	620	619	3	2	40.0	0.09	0.06
530Guscio fond.	604	605	621	620	3	2	40.0	0.09	0.06
531Guscio fond.	605	606	622	621	3	2	40.0	0.09	0.06
532Guscio fond.	606	607	623	622	3	2	40.0	0.09	0.06
533Guscio fond.	607	608	624	623	3	2	40.0	0.09	0.06
534Guscio fond.	608	609	625	624	3	2	40.0	0.09	0.06
535Guscio fond.	609	610	626	625	3	2	40.0	0.09	0.06

536Guscio fond.	610	611	627	626	3	2	40.0	0.09	0.06
537Guscio fond.	611	612	628	627	3	2	40.0	0.09	0.06
538Guscio fond.	612	613	629	628	3	2	40.0	0.09	0.06
539Guscio fond.	613	614	630	629	3	2	40.0	0.09	0.06
540Guscio fond.	614	615	631	630	3	2	40.0	0.09	0.06
541Guscio fond.	617	616	632	633	3	2	40.0	0.09	0.06
542Guscio fond.	616	618	634	632	3	2	40.0	0.09	0.06
543Guscio fond.	618	619	635	634	3	2	40.0	0.09	0.06
544Guscio fond.	619	620	636	635	3	2	40.0	0.09	0.06
545Guscio fond.	620	621	637	636	3	2	40.0	0.09	0.06
546Guscio fond.	621	622	638	637	3	2	40.0	0.09	0.06
547Guscio fond.	622	623	639	638	3	2	40.0	0.09	0.06
548Guscio fond.	623	624	640	639	3	2	40.0	0.09	0.06
549Guscio fond.	624	625	641	640	3	2	40.0	0.09	0.06
550Guscio fond.	625	626	642	641	3	2	40.0	0.09	0.06
551Guscio fond.	626	627	643	642	3	2	40.0	0.09	0.06
552Guscio fond.	627	628	644	643	3	2	40.0	0.09	0.06
553Guscio fond.	628	629	645	644	3	2	40.0	0.09	0.06
554Guscio fond.	629	630	646	645	3	2	40.0	0.09	0.06
555Guscio fond.	630	631	647	646	3	2	40.0	0.09	0.06
556Guscio fond.	633	632	648	649	3	2	40.0	0.09	0.06
557Guscio fond.	632	634	650	648	3	2	40.0	0.09	0.06
558Guscio fond.	634	635	651	650	3	2	40.0	0.09	0.06
559Guscio fond.	635	636	652	651	3	2	40.0	0.09	0.06
560Guscio fond.	636	637	653	652	3	2	40.0	0.09	0.06
561Guscio fond.	637	638	654	653	3	2	40.0	0.09	0.06
562Guscio fond.	638	639	655	654	3	2	40.0	0.09	0.06
563Guscio fond.	639	640	656	655	3	2	40.0	0.09	0.06
564Guscio fond.	640	641	657	656	3	2	40.0	0.09	0.06
565Guscio fond.	641	642	658	657	3	2	40.0	0.09	0.06
566Guscio fond.	642	643	659	658	3	2	40.0	0.09	0.06
567Guscio fond.	643	644	660	659	3	2	40.0	0.09	0.06
568Guscio fond.	644	645	661	660	3	2	40.0	0.09	0.06
569Guscio fond.	645	646	662	661	3	2	40.0	0.09	0.06
570Guscio fond.	646	647	663	662	3	2	40.0	0.09	0.06
571Guscio fond.	649	648	664	665	3	2	40.0	0.09	0.06
572Guscio fond.	648	650	666	664	3	2	40.0	0.09	0.06
573Guscio fond.	650	651	667	666	3	2	40.0	0.09	0.06
574Guscio fond.	651	652	668	667	3	2	40.0	0.09	0.06
575Guscio fond.	652	653	669	668	3	2	40.0	0.09	0.06
576Guscio fond.	653	654	670	669	3	2	40.0	0.09	0.06
577Guscio fond.	654	655	671	670	3	2	40.0	0.09	0.06
578Guscio fond.	655	656	672	671	3	2	40.0	0.09	0.06
579Guscio fond.	656	657	673	672	3	2	40.0	0.09	0.06
580Guscio fond.	657	658	674	673	3	2	40.0	0.09	0.06
581Guscio fond.	658	659	675	674	3	2	40.0	0.09	0.06
582Guscio fond.	659	660	676	675	3	2	40.0	0.09	0.06
583Guscio fond.	660	661	677	676	3	2	40.0	0.09	0.06
584Guscio fond.	661	662	678	677	3	2	40.0	0.09	0.06
585Guscio fond.	662	663	679	678	3	2	40.0	0.09	0.06
586Guscio fond.	665	664	680	681	3	2	40.0	0.09	0.06
587Guscio fond.	664	666	682	680	3	2	40.0	0.09	0.06
588Guscio fond.	666	667	683	682	3	2	40.0	0.09	0.06
589Guscio fond.	667	668	684	683	3	2	40.0	0.09	0.06
590Guscio fond.	668	669	685	684	3	2	40.0	0.09	0.06
591Guscio fond.	669	670	686	685	3	2	40.0	0.09	0.06
592Guscio fond.	670	671	687	686	3	2	40.0	0.09	0.06
593Guscio fond.	671	672	688	687	3	2	40.0	0.09	0.06
594Guscio fond.	672	673	689	688	3	2	40.0	0.09	0.06
595Guscio fond.	673	674	690	689	3	2	40.0	0.09	0.06
596Guscio fond.	674	675	691	690	3	2	40.0	0.09	0.06
597Guscio fond.	675	676	692	691	3	2	40.0	0.09	0.06
598Guscio fond.	676	677	693	692	3	2	40.0	0.09	0.06
599Guscio fond.	677	678	694	693	3	2	40.0	0.09	0.06
600Guscio fond.	678	679	695	694	3	2	40.0	0.09	0.06
601Guscio fond.	681	680	696	697	3	2	40.0	0.09	0.06
602Guscio fond.	680	682	698	696	3	2	40.0	0.09	0.06
603Guscio fond.	682	683	699	698	3	2	40.0	0.09	0.06
604Guscio fond.	683	684	700	699	3	2	40.0	0.09	0.06
605Guscio fond.	684	685	701	700	3	2	40.0	0.09	0.06
606Guscio fond.	685	686	702	701	3	2	40.0	0.09	0.06
607Guscio fond.	686	687	703	702	3	2	40.0	0.09	0.06
608Guscio fond.	687	688	704	703	3	2	40.0	0.09	0.06
609Guscio fond.	688	689	705	704	3	2	40.0	0.09	0.06
610Guscio fond.	689	690	706	705	3	2	40.0	0.09	0.06
611Guscio fond.	690	691	707	706	3	2	40.0	0.09	0.06
612Guscio fond.	691	692	708	707	3	2	40.0	0.09	0.06

613Guscio fond.	692	693	709	708	3	3	40.0	0.09	0.06
614Guscio fond.	693	694	710	709	3	3	40.0	0.09	0.06
615Guscio fond.	694	695	711	710	3	3	40.0	0.09	0.06
616Guscio fond.	697	696	712	713	3	2	40.0	0.09	0.06
617Guscio fond.	696	698	714	712	3	2	40.0	0.09	0.06
618Guscio fond.	698	699	715	714	3	2	40.0	0.09	0.06
619Guscio fond.	699	700	716	715	3	2	40.0	0.09	0.06
620Guscio fond.	700	701	717	716	3	2	40.0	0.09	0.06
621Guscio fond.	701	702	718	717	3	2	40.0	0.09	0.06
622Guscio fond.	702	703	719	718	3	2	40.0	0.09	0.06
623Guscio fond.	703	704	720	719	3	2	40.0	0.09	0.06
624Guscio fond.	704	705	721	720	3	2	40.0	0.09	0.06
625Guscio fond.	705	706	722	721	3	2	40.0	0.09	0.06
626Guscio fond.	706	707	723	722	3	2	40.0	0.09	0.06
627Guscio fond.	707	708	724	723	3	2	40.0	0.09	0.06
628Guscio fond.	708	709	725	724	3	3	40.0	0.09	0.06
629Guscio fond.	709	710	726	725	3	3	40.0	0.09	0.06
630Guscio fond.	710	711	727	726	3	3	40.0	0.09	0.06
631Guscio fond.	713	712	728	729	3	2	40.0	0.09	0.06
632Guscio fond.	712	714	730	728	3	2	40.0	0.09	0.06
633Guscio fond.	714	715	731	730	3	2	40.0	0.09	0.06
634Guscio fond.	715	716	732	731	3	2	40.0	0.09	0.06
635Guscio fond.	716	717	733	732	3	2	40.0	0.09	0.06
636Guscio fond.	717	718	734	733	3	2	40.0	0.09	0.06
637Guscio fond.	718	719	735	734	3	2	40.0	0.09	0.06
638Guscio fond.	719	720	736	735	3	2	40.0	0.09	0.06
639Guscio fond.	720	721	737	736	3	2	40.0	0.09	0.06
640Guscio fond.	721	722	738	737	3	2	40.0	0.09	0.06
641Guscio fond.	722	723	739	738	3	2	40.0	0.09	0.06
642Guscio fond.	723	724	740	739	3	2	40.0	0.09	0.06
643Guscio fond.	724	725	741	740	3	3	40.0	0.09	0.06
644Guscio fond.	725	726	742	741	3	3	40.0	0.09	0.06
645Guscio fond.	726	727	743	742	3	3	40.0	0.09	0.06
646Guscio fond.	729	728	744	745	3	2	40.0	0.09	0.06
647Guscio fond.	728	730	746	744	3	2	40.0	0.09	0.06
648Guscio fond.	730	731	747	746	3	2	40.0	0.09	0.06
649Guscio fond.	731	732	748	747	3	2	40.0	0.09	0.06
650Guscio fond.	732	733	749	748	3	2	40.0	0.09	0.06
651Guscio fond.	733	734	750	749	3	2	40.0	0.09	0.06
652Guscio fond.	734	735	751	750	3	2	40.0	0.09	0.06
653Guscio fond.	735	736	752	751	3	2	40.0	0.09	0.06
654Guscio fond.	736	737	753	752	3	2	40.0	0.09	0.06
655Guscio fond.	737	738	754	753	3	2	40.0	0.09	0.06
656Guscio fond.	738	739	755	754	3	2	40.0	0.09	0.06
657Guscio fond.	739	740	756	755	3	2	40.0	0.09	0.06
658Guscio fond.	740	741	757	756	3	3	40.0	0.09	0.06
659Guscio fond.	741	742	758	757	3	3	40.0	0.09	0.06
660Guscio fond.	742	743	759	758	3	3	40.0	0.09	0.06
661Guscio fond.	745	744	760	28	3	2	40.0	0.09	0.06
662Guscio fond.	744	746	761	760	3	2	40.0	0.09	0.06
663Guscio fond.	746	747	762	761	3	2	40.0	0.09	0.06
664Guscio fond.	747	748	763	762	3	2	40.0	0.09	0.06
665Guscio fond.	748	749	764	763	3	2	40.0	0.09	0.06
666Guscio fond.	749	750	765	764	3	2	40.0	0.09	0.06
667Guscio fond.	750	751	766	765	3	2	40.0	0.09	0.06
668Guscio fond.	751	752	767	766	3	2	40.0	0.09	0.06
669Guscio fond.	752	753	768	767	3	2	40.0	0.09	0.06
670Guscio fond.	753	754	769	768	3	2	40.0	0.09	0.06
671Guscio fond.	754	755	770	769	3	2	40.0	0.09	0.06
672Guscio fond.	755	756	771	770	3	2	40.0	0.09	0.06
673Guscio fond.	756	757	772	771	3	3	40.0	0.09	0.06
674Guscio fond.	757	758	773	772	3	3	40.0	0.09	0.06
675Guscio fond.	758	759	29	773	3	3	40.0	0.09	0.06
676Guscio fond.	28	760	774	775	3	2	40.0	0.09	0.06
677Guscio fond.	760	761	776	774	3	2	40.0	0.09	0.06
678Guscio fond.	761	762	777	776	3	2	40.0	0.09	0.06
679Guscio fond.	762	763	778	777	3	2	40.0	0.09	0.06
680Guscio fond.	763	764	779	778	3	2	40.0	0.09	0.06
681Guscio fond.	764	765	780	779	3	2	40.0	0.09	0.06
682Guscio fond.	765	766	781	780	3	2	40.0	0.09	0.06
683Guscio fond.	766	767	782	781	3	2	40.0	0.09	0.06
684Guscio fond.	767	768	783	782	3	2	40.0	0.09	0.06
685Guscio fond.	768	769	784	783	3	2	40.0	0.09	0.06
686Guscio fond.	769	770	785	784	3	2	40.0	0.09	0.06
687Guscio fond.	770	771	786	785	3	2	40.0	0.09	0.06
688Guscio fond.	771	772	787	786	3	3	40.0	0.09	0.06
689Guscio fond.	772	773	788	787	3	3	40.0	0.09	0.06

690Guscio fond.	773	29	789	788	3	3	40.0	0.09	0.06
691Guscio fond.	775	774	790	791	3	2	40.0	0.09	0.06
692Guscio fond.	774	776	792	790	3	2	40.0	0.09	0.06
693Guscio fond.	776	777	793	792	3	2	40.0	0.09	0.06
694Guscio fond.	777	778	794	793	3	2	40.0	0.09	0.06
695Guscio fond.	778	779	795	794	3	2	40.0	0.09	0.06
696Guscio fond.	779	780	796	795	3	2	40.0	0.09	0.06
697Guscio fond.	780	781	797	796	3	2	40.0	0.09	0.06
698Guscio fond.	781	782	798	797	3	2	40.0	0.09	0.06
699Guscio fond.	782	783	799	798	3	2	40.0	0.09	0.06
700Guscio fond.	783	784	800	799	3	2	40.0	0.09	0.06
701Guscio fond.	784	785	801	800	3	2	40.0	0.09	0.06
702Guscio fond.	785	786	802	801	3	2	40.0	0.09	0.06
703Guscio fond.	786	787	803	802	3	3	40.0	0.09	0.06
704Guscio fond.	787	788	804	803	3	3	40.0	0.09	0.06
705Guscio fond.	788	789	805	804	3	3	40.0	0.09	0.06
706Guscio fond.	791	790	806	807	3	2	40.0	0.09	0.06
707Guscio fond.	790	792	808	806	3	2	40.0	0.09	0.06
708Guscio fond.	792	793	809	808	3	2	40.0	0.09	0.06
709Guscio fond.	793	794	810	809	3	2	40.0	0.09	0.06
710Guscio fond.	794	795	811	810	3	2	40.0	0.09	0.06
711Guscio fond.	795	796	812	811	3	2	40.0	0.09	0.06
712Guscio fond.	796	797	813	812	3	2	40.0	0.09	0.06
713Guscio fond.	797	798	814	813	3	2	40.0	0.09	0.06
714Guscio fond.	798	799	815	814	3	2	40.0	0.09	0.06
715Guscio fond.	799	800	816	815	3	2	40.0	0.09	0.06
716Guscio fond.	800	801	817	816	3	2	40.0	0.09	0.06
717Guscio fond.	801	802	818	817	3	2	40.0	0.09	0.06
718Guscio fond.	802	803	819	818	3	3	40.0	0.09	0.06
719Guscio fond.	803	804	820	819	3	3	40.0	0.09	0.06
720Guscio fond.	804	805	821	820	3	3	40.0	0.09	0.06
721Guscio fond.	807	806	822	823	3	2	40.0	0.09	0.06
722Guscio fond.	806	808	824	822	3	2	40.0	0.09	0.06
723Guscio fond.	808	809	825	824	3	2	40.0	0.09	0.06
724Guscio fond.	809	810	826	825	3	2	40.0	0.09	0.06
725Guscio fond.	810	811	827	826	3	2	40.0	0.09	0.06
726Guscio fond.	811	812	828	827	3	2	40.0	0.09	0.06
727Guscio fond.	812	813	829	828	3	2	40.0	0.09	0.06
728Guscio fond.	813	814	830	829	3	2	40.0	0.09	0.06
729Guscio fond.	814	815	831	830	3	2	40.0	0.09	0.06
730Guscio fond.	815	816	832	831	3	2	40.0	0.09	0.06
731Guscio fond.	816	817	833	832	3	2	40.0	0.09	0.06
732Guscio fond.	817	818	834	833	3	2	40.0	0.09	0.06
733Guscio fond.	818	819	835	834	3	3	40.0	0.09	0.06
734Guscio fond.	819	820	836	835	3	3	40.0	0.09	0.06
735Guscio fond.	820	821	837	836	3	3	40.0	0.09	0.06
736Guscio fond.	823	822	838	839	3	2	40.0	0.09	0.06
737Guscio fond.	822	824	840	838	3	2	40.0	0.09	0.06
738Guscio fond.	824	825	841	840	3	2	40.0	0.09	0.06
739Guscio fond.	825	826	842	841	3	2	40.0	0.09	0.06
740Guscio fond.	826	827	843	842	3	2	40.0	0.09	0.06
741Guscio fond.	827	828	844	843	3	2	40.0	0.09	0.06
742Guscio fond.	828	829	845	844	3	2	40.0	0.09	0.06
743Guscio fond.	829	830	846	845	3	2	40.0	0.09	0.06
744Guscio fond.	830	831	847	846	3	2	40.0	0.09	0.06
745Guscio fond.	831	832	848	847	3	2	40.0	0.09	0.06
746Guscio fond.	832	833	849	848	3	2	40.0	0.09	0.06
747Guscio fond.	833	834	850	849	3	2	40.0	0.09	0.06
748Guscio fond.	834	835	851	850	3	3	40.0	0.09	0.06
749Guscio fond.	835	836	852	851	3	3	40.0	0.09	0.06
750Guscio fond.	836	837	853	852	3	3	40.0	0.09	0.06
751Guscio fond.	839	838	854	855	3	2	40.0	0.09	0.06
752Guscio fond.	838	840	856	854	3	2	40.0	0.09	0.06
753Guscio fond.	840	841	857	856	3	2	40.0	0.09	0.06
754Guscio fond.	841	842	858	857	3	2	40.0	0.09	0.06
755Guscio fond.	842	843	859	858	3	2	40.0	0.09	0.06
756Guscio fond.	843	844	860	859	3	2	40.0	0.09	0.06
757Guscio fond.	844	845	861	860	3	2	40.0	0.09	0.06
758Guscio fond.	845	846	862	861	3	2	40.0	0.09	0.06
759Guscio fond.	846	847	863	862	3	2	40.0	0.09	0.06
760Guscio fond.	847	848	864	863	3	2	40.0	0.09	0.06
761Guscio fond.	848	849	865	864	3	2	40.0	0.09	0.06
762Guscio fond.	849	850	866	865	3	2	40.0	0.09	0.06
763Guscio fond.	850	851	867	866	3	2	40.0	0.09	0.06
764Guscio fond.	851	852	868	867	3	2	40.0	0.09	0.06
765Guscio fond.	852	853	869	868	3	2	40.0	0.09	0.06
766Guscio fond.	855	854	870	871	3	2	40.0	0.09	0.06

767	Guscio fond.	854	856	872	870	3	2	40.0	0.09	0.06
768	Guscio fond.	856	857	873	872	3	2	40.0	0.09	0.06
769	Guscio fond.	857	858	874	873	3	2	40.0	0.09	0.06
770	Guscio fond.	858	859	875	874	3	2	40.0	0.09	0.06
771	Guscio fond.	859	860	876	875	3	2	40.0	0.09	0.06
772	Guscio fond.	860	861	877	876	3	2	40.0	0.09	0.06
773	Guscio fond.	861	862	878	877	3	2	40.0	0.09	0.06
774	Guscio fond.	862	863	879	878	3	2	40.0	0.09	0.06
775	Guscio fond.	863	864	880	879	3	2	40.0	0.09	0.06
776	Guscio fond.	864	865	881	880	3	2	40.0	0.09	0.06
777	Guscio fond.	865	866	882	881	3	2	40.0	0.09	0.06
778	Guscio fond.	866	867	883	882	3	2	40.0	0.09	0.06
779	Guscio fond.	867	868	884	883	3	2	40.0	0.09	0.06
780	Guscio fond.	868	869	885	884	3	2	40.0	0.09	0.06
781	Guscio fond.	871	870	886	887	3	2	40.0	0.09	0.06
782	Guscio fond.	870	872	888	886	3	2	40.0	0.09	0.06
783	Guscio fond.	872	873	889	888	3	2	40.0	0.09	0.06
784	Guscio fond.	873	874	890	889	3	2	40.0	0.09	0.06
785	Guscio fond.	874	875	891	890	3	2	40.0	0.09	0.06
786	Guscio fond.	875	876	892	891	3	2	40.0	0.09	0.06
787	Guscio fond.	876	877	893	892	3	2	40.0	0.09	0.06
788	Guscio fond.	877	878	894	893	3	2	40.0	0.09	0.06
789	Guscio fond.	878	879	895	894	3	2	40.0	0.09	0.06
790	Guscio fond.	879	880	896	895	3	2	40.0	0.09	0.06
791	Guscio fond.	880	881	897	896	3	2	40.0	0.09	0.06
792	Guscio fond.	881	882	898	897	3	2	40.0	0.09	0.06
793	Guscio fond.	882	883	899	898	3	2	40.0	0.09	0.06
794	Guscio fond.	883	884	900	899	3	2	40.0	0.09	0.06
795	Guscio fond.	884	885	901	900	3	2	40.0	0.09	0.06
796	Guscio fond.	887	886	902	903	3	2	40.0	0.09	0.06
797	Guscio fond.	886	888	904	902	3	2	40.0	0.09	0.06
798	Guscio fond.	888	889	905	904	3	2	40.0	0.09	0.06
799	Guscio fond.	889	890	906	905	3	2	40.0	0.09	0.06
800	Guscio fond.	890	891	907	906	3	2	40.0	0.09	0.06
801	Guscio fond.	891	892	908	907	3	2	40.0	0.09	0.06
802	Guscio fond.	892	893	909	908	3	2	40.0	0.09	0.06
803	Guscio fond.	893	894	910	909	3	2	40.0	0.09	0.06
804	Guscio fond.	894	895	911	910	3	2	40.0	0.09	0.06
805	Guscio fond.	895	896	912	911	3	2	40.0	0.09	0.06
806	Guscio fond.	896	897	913	912	3	2	40.0	0.09	0.06
807	Guscio fond.	897	898	914	913	3	2	40.0	0.09	0.06
808	Guscio fond.	898	899	915	914	3	2	40.0	0.09	0.06
809	Guscio fond.	899	900	916	915	3	2	40.0	0.09	0.06
810	Guscio fond.	900	901	917	916	3	2	40.0	0.09	0.06
811	Guscio fond.	903	902	918	919	3	2	40.0	0.09	0.06
812	Guscio fond.	902	904	920	918	3	2	40.0	0.09	0.06
813	Guscio fond.	904	905	921	920	3	2	40.0	0.09	0.06
814	Guscio fond.	905	906	922	921	3	2	40.0	0.09	0.06
815	Guscio fond.	906	907	923	922	3	2	40.0	0.09	0.06
816	Guscio fond.	907	908	924	923	3	2	40.0	0.09	0.06
817	Guscio fond.	908	909	925	924	3	2	40.0	0.09	0.06
818	Guscio fond.	909	910	926	925	3	2	40.0	0.09	0.06
819	Guscio fond.	910	911	927	926	3	2	40.0	0.09	0.06
820	Guscio fond.	911	912	928	927	3	2	40.0	0.09	0.06
821	Guscio fond.	912	913	929	928	3	2	40.0	0.09	0.06
822	Guscio fond.	913	914	930	929	3	2	40.0	0.09	0.06
823	Guscio fond.	914	915	931	930	3	2	40.0	0.09	0.06
824	Guscio fond.	915	916	932	931	3	2	40.0	0.09	0.06
825	Guscio fond.	916	917	933	932	3	2	40.0	0.09	0.06
826	Guscio fond.	919	918	934	935	3	2	40.0	0.09	0.06
827	Guscio fond.	918	920	936	934	3	2	40.0	0.09	0.06
828	Guscio fond.	920	921	937	936	3	2	40.0	0.09	0.06
829	Guscio fond.	921	922	938	937	3	2	40.0	0.09	0.06
830	Guscio fond.	922	923	939	938	3	2	40.0	0.09	0.06
831	Guscio fond.	923	924	940	939	3	2	40.0	0.09	0.06
832	Guscio fond.	924	925	941	940	3	2	40.0	0.09	0.06
833	Guscio fond.	925	926	942	941	3	2	40.0	0.09	0.06
834	Guscio fond.	926	927	943	942	3	2	40.0	0.09	0.06
835	Guscio fond.	927	928	944	943	3	2	40.0	0.09	0.06
836	Guscio fond.	928	929	945	944	3	2	40.0	0.09	0.06
837	Guscio fond.	929	930	946	945	3	2	40.0	0.09	0.06
838	Guscio fond.	930	931	947	946	3	2	40.0	0.09	0.06
839	Guscio fond.	931	932	948	947	3	2	40.0	0.09	0.06
840	Guscio fond.	932	933	949	948	3	2	40.0	0.09	0.06
841	Guscio fond.	935	934	950	951	3	2	40.0	0.09	0.06
842	Guscio fond.	934	936	952	950	3	2	40.0	0.09	0.06
843	Guscio fond.	936	937	953	952	3	2	40.0	0.09	0.06

844	Guscio fond.	937	938	954	953	3	2	40.0	0.09	0.06
845	Guscio fond.	938	939	955	954	3	2	40.0	0.09	0.06
846	Guscio fond.	939	940	956	955	3	2	40.0	0.09	0.06
847	Guscio fond.	940	941	957	956	3	2	40.0	0.09	0.06
848	Guscio fond.	941	942	958	957	3	2	40.0	0.09	0.06
849	Guscio fond.	942	943	959	958	3	2	40.0	0.09	0.06
850	Guscio fond.	943	944	960	959	3	2	40.0	0.09	0.06
851	Guscio fond.	944	945	961	960	3	2	40.0	0.09	0.06
852	Guscio fond.	945	946	962	961	3	2	40.0	0.09	0.06
853	Guscio fond.	946	947	963	962	3	2	40.0	0.09	0.06
854	Guscio fond.	947	948	964	963	3	2	40.0	0.09	0.06
855	Guscio fond.	948	949	965	964	3	2	40.0	0.09	0.06
856	Guscio fond.	951	950	966	967	3	2	40.0	0.09	0.06
857	Guscio fond.	950	952	968	966	3	2	40.0	0.09	0.06
858	Guscio fond.	952	953	969	968	3	2	40.0	0.09	0.06
859	Guscio fond.	953	954	970	969	3	2	40.0	0.09	0.06
860	Guscio fond.	954	955	971	970	3	2	40.0	0.09	0.06
861	Guscio fond.	955	956	972	971	3	2	40.0	0.09	0.06
862	Guscio fond.	956	957	973	972	3	2	40.0	0.09	0.06
863	Guscio fond.	957	958	974	973	3	2	40.0	0.09	0.06
864	Guscio fond.	958	959	975	974	3	2	40.0	0.09	0.06
865	Guscio fond.	959	960	976	975	3	2	40.0	0.09	0.06
866	Guscio fond.	960	961	977	976	3	2	40.0	0.09	0.06
867	Guscio fond.	961	962	978	977	3	2	40.0	0.09	0.06
868	Guscio fond.	962	963	979	978	3	2	40.0	0.09	0.06
869	Guscio fond.	963	964	980	979	3	2	40.0	0.09	0.06
870	Guscio fond.	964	965	981	980	3	2	40.0	0.09	0.06
871	Guscio fond.	967	966	982	983	3	2	40.0	0.09	0.06
872	Guscio fond.	966	968	984	982	3	2	40.0	0.09	0.06
873	Guscio fond.	968	969	985	984	3	2	40.0	0.09	0.06
874	Guscio fond.	969	970	986	985	3	2	40.0	0.09	0.06
875	Guscio fond.	970	971	987	986	3	2	40.0	0.09	0.06
876	Guscio fond.	971	972	988	987	3	2	40.0	0.09	0.06
877	Guscio fond.	972	973	989	988	3	2	40.0	0.09	0.06
878	Guscio fond.	973	974	990	989	3	2	40.0	0.09	0.06
879	Guscio fond.	974	975	991	990	3	2	40.0	0.09	0.06
880	Guscio fond.	975	976	992	991	3	2	40.0	0.09	0.06
881	Guscio fond.	976	977	993	992	3	2	40.0	0.09	0.06
882	Guscio fond.	977	978	994	993	3	2	40.0	0.09	0.06
883	Guscio fond.	978	979	995	994	3	2	40.0	0.09	0.06
884	Guscio fond.	979	980	996	995	3	2	40.0	0.09	0.06
885	Guscio fond.	980	981	997	996	3	2	40.0	0.09	0.06
886	Guscio fond.	983	982	998	999	3	2	40.0	0.09	0.06
887	Guscio fond.	982	984	1000	998	3	2	40.0	0.09	0.06
888	Guscio fond.	984	985	1001	1000	3	2	40.0	0.09	0.06
889	Guscio fond.	985	986	1002	1001	3	2	40.0	0.09	0.06
890	Guscio fond.	986	987	1003	1002	3	2	40.0	0.09	0.06
891	Guscio fond.	987	988	1004	1003	3	2	40.0	0.09	0.06
892	Guscio fond.	988	989	1005	1004	3	2	40.0	0.09	0.06
893	Guscio fond.	989	990	1006	1005	3	2	40.0	0.09	0.06
894	Guscio fond.	990	991	1007	1006	3	2	40.0	0.09	0.06
895	Guscio fond.	991	992	1008	1007	3	2	40.0	0.09	0.06
896	Guscio fond.	992	993	1009	1008	3	2	40.0	0.09	0.06
897	Guscio fond.	993	994	1010	1009	3	2	40.0	0.09	0.06
898	Guscio fond.	994	995	1011	1010	3	2	40.0	0.09	0.06
899	Guscio fond.	995	996	1012	1011	3	2	40.0	0.09	0.06
900	Guscio fond.	996	997	1013	1012	3	2	40.0	0.09	0.06
901	Guscio fond.	999	998	1014	1015	3	2	40.0	0.09	0.06
902	Guscio fond.	998	1000	1016	1014	3	2	40.0	0.09	0.06
903	Guscio fond.	1000	1001	1017	1016	3	2	40.0	0.09	0.06
904	Guscio fond.	1001	1002	1018	1017	3	2	40.0	0.09	0.06
905	Guscio fond.	1002	1003	1019	1018	3	2	40.0	0.09	0.06
906	Guscio fond.	1003	1004	1020	1019	3	2	40.0	0.09	0.06
907	Guscio fond.	1004	1005	1021	1020	3	2	40.0	0.09	0.06
908	Guscio fond.	1005	1006	1022	1021	3	2	40.0	0.09	0.06
909	Guscio fond.	1006	1007	1023	1022	3	2	40.0	0.09	0.06
910	Guscio fond.	1007	1008	1024	1023	3	2	40.0	0.09	0.06
911	Guscio fond.	1008	1009	1025	1024	3	2	40.0	0.09	0.06
912	Guscio fond.	1009	1010	1026	1025	3	2	40.0	0.09	0.06
913	Guscio fond.	1010	1011	1027	1026	3	2	40.0	0.09	0.06
914	Guscio fond.	1011	1012	1028	1027	3	2	40.0	0.09	0.06
915	Guscio fond.	1012	1013	1029	1028	3	2	40.0	0.09	0.06
916	Guscio fond.	1015	1014	1030	1031	3	2	40.0	0.09	0.06
917	Guscio fond.	1014	1016	1032	1030	3	2	40.0	0.09	0.06
918	Guscio fond.	1016	1017	1033	1032	3	2	40.0	0.09	0.06
919	Guscio fond.	1017	1018	1034	1033	3	2	40.0	0.09	0.06
920	Guscio fond.	1018	1019	1035	1034	3	2	40.0	0.09	0.06

921Guscio fond.	1019	1020	1036	1035	3	2	40.0	0.09	0.06
922Guscio fond.	1020	1021	1037	1036	3	2	40.0	0.09	0.06
923Guscio fond.	1021	1022	1038	1037	3	2	40.0	0.09	0.06
924Guscio fond.	1022	1023	1039	1038	3	2	40.0	0.09	0.06
925Guscio fond.	1023	1024	1040	1039	3	2	40.0	0.09	0.06
926Guscio fond.	1024	1025	1041	1040	3	2	40.0	0.09	0.06
927Guscio fond.	1025	1026	1042	1041	3	2	40.0	0.09	0.06
928Guscio fond.	1026	1027	1043	1042	3	2	40.0	0.09	0.06
929Guscio fond.	1027	1028	1044	1043	3	2	40.0	0.09	0.06
930Guscio fond.	1028	1029	1045	1044	3	2	40.0	0.09	0.06
931Guscio fond.	1031	1030	1046	1047	3	2	40.0	0.09	0.06
932Guscio fond.	1030	1032	1048	1046	3	2	40.0	0.09	0.06
933Guscio fond.	1032	1033	1049	1048	3	2	40.0	0.09	0.06
934Guscio fond.	1033	1034	1050	1049	3	2	40.0	0.09	0.06
935Guscio fond.	1034	1035	1051	1050	3	2	40.0	0.09	0.06
936Guscio fond.	1035	1036	1052	1051	3	2	40.0	0.09	0.06
937Guscio fond.	1036	1037	1053	1052	3	2	40.0	0.09	0.06
938Guscio fond.	1037	1038	1054	1053	3	2	40.0	0.09	0.06
939Guscio fond.	1038	1039	1055	1054	3	2	40.0	0.09	0.06
940Guscio fond.	1039	1040	1056	1055	3	2	40.0	0.09	0.06
941Guscio fond.	1040	1041	1057	1056	3	2	40.0	0.09	0.06
942Guscio fond.	1041	1042	1058	1057	3	2	40.0	0.09	0.06
943Guscio fond.	1042	1043	1059	1058	3	2	40.0	0.09	0.06
944Guscio fond.	1043	1044	1060	1059	3	2	40.0	0.09	0.06
945Guscio fond.	1044	1045	1061	1060	3	2	40.0	0.09	0.06
946Guscio fond.	1047	1046	1062	1063	3	2	40.0	0.09	0.06
947Guscio fond.	1046	1048	1064	1062	3	2	40.0	0.09	0.06
948Guscio fond.	1048	1049	1065	1064	3	2	40.0	0.09	0.06
949Guscio fond.	1049	1050	1066	1065	3	2	40.0	0.09	0.06
950Guscio fond.	1050	1051	1067	1066	3	2	40.0	0.09	0.06
951Guscio fond.	1051	1052	1068	1067	3	2	40.0	0.09	0.06
952Guscio fond.	1052	1053	1069	1068	3	2	40.0	0.09	0.06
953Guscio fond.	1053	1054	1070	1069	3	2	40.0	0.09	0.06
954Guscio fond.	1054	1055	1071	1070	3	2	40.0	0.09	0.06
955Guscio fond.	1055	1056	1072	1071	3	2	40.0	0.09	0.06
956Guscio fond.	1056	1057	1073	1072	3	2	40.0	0.09	0.06
957Guscio fond.	1057	1058	1074	1073	3	2	40.0	0.09	0.06
958Guscio fond.	1058	1059	1075	1074	3	2	40.0	0.09	0.06
959Guscio fond.	1059	1060	1076	1075	3	2	40.0	0.09	0.06
960Guscio fond.	1060	1061	1077	1076	3	2	40.0	0.09	0.06
961Guscio fond.	1063	1062	1078	1079	3	2	40.0	0.09	0.06
962Guscio fond.	1062	1064	1080	1078	3	2	40.0	0.09	0.06
963Guscio fond.	1064	1065	1081	1080	3	2	40.0	0.09	0.06
964Guscio fond.	1065	1066	1082	1081	3	2	40.0	0.09	0.06
965Guscio fond.	1066	1067	1083	1082	3	2	40.0	0.09	0.06
966Guscio fond.	1067	1068	1084	1083	3	2	40.0	0.09	0.06
967Guscio fond.	1068	1069	1085	1084	3	2	40.0	0.09	0.06
968Guscio fond.	1069	1070	1086	1085	3	2	40.0	0.09	0.06
969Guscio fond.	1070	1071	1087	1086	3	2	40.0	0.09	0.06
970Guscio fond.	1071	1072	1088	1087	3	2	40.0	0.09	0.06
971Guscio fond.	1072	1073	1089	1088	3	2	40.0	0.09	0.06
972Guscio fond.	1073	1074	1090	1089	3	2	40.0	0.09	0.06
973Guscio fond.	1074	1075	1091	1090	3	2	40.0	0.09	0.06
974Guscio fond.	1075	1076	1092	1091	3	2	40.0	0.09	0.06
975Guscio fond.	1076	1077	1093	1092	3	2	40.0	0.09	0.06
976Guscio fond.	1079	1078	1094	1095	3	2	40.0	0.09	0.06
977Guscio fond.	1078	1080	1096	1094	3	2	40.0	0.09	0.06
978Guscio fond.	1080	1081	1097	1096	3	2	40.0	0.09	0.06
979Guscio fond.	1081	1082	1098	1097	3	2	40.0	0.09	0.06
980Guscio fond.	1082	1083	1099	1098	3	2	40.0	0.09	0.06
981Guscio fond.	1083	1084	1100	1099	3	2	40.0	0.09	0.06
982Guscio fond.	1084	1085	1101	1100	3	2	40.0	0.09	0.06
983Guscio fond.	1085	1086	1102	1101	3	2	40.0	0.09	0.06
984Guscio fond.	1086	1087	1103	1102	3	2	40.0	0.09	0.06
985Guscio fond.	1087	1088	1104	1103	3	2	40.0	0.09	0.06
986Guscio fond.	1088	1089	1105	1104	3	2	40.0	0.09	0.06
987Guscio fond.	1089	1090	1106	1105	3	2	40.0	0.09	0.06
988Guscio fond.	1090	1091	1107	1106	3	2	40.0	0.09	0.06
989Guscio fond.	1091	1092	1108	1107	3	2	40.0	0.09	0.06
990Guscio fond.	1092	1093	1109	1108	3	2	40.0	0.09	0.06
991Guscio fond.	1095	1094	1110	1111	3	2	40.0	0.09	0.06
992Guscio fond.	1094	1096	1112	1110	3	2	40.0	0.09	0.06
993Guscio fond.	1096	1097	1113	1112	3	2	40.0	0.09	0.06
994Guscio fond.	1097	1098	1114	1113	3	2	40.0	0.09	0.06
995Guscio fond.	1098	1099	1115	1114	3	2	40.0	0.09	0.06
996Guscio fond.	1099	1100	1116	1115	3	2	40.0	0.09	0.06
997Guscio fond.	1100	1101	1117	1116	3	2	40.0	0.09	0.06

998	Guscio fond.	1101	1102	1118	1117	3	2	40.0	0.09	0.06
999	Guscio fond.	1102	1103	1119	1118	3	2	40.0	0.09	0.06
1000	Guscio fond.	1103	1104	1120	1119	3	2	40.0	0.09	0.06
1001	Guscio fond.	1104	1105	1121	1120	3	2	40.0	0.09	0.06
1002	Guscio fond.	1105	1106	1122	1121	3	2	40.0	0.09	0.06
1003	Guscio fond.	1106	1107	1123	1122	3	2	40.0	0.09	0.06
1004	Guscio fond.	1107	1108	1124	1123	3	2	40.0	0.09	0.06
1005	Guscio fond.	1108	1109	1125	1124	3	2	40.0	0.09	0.06
1006	Guscio fond.	1111	1110	1126	1127	3	2	40.0	0.09	0.06
1007	Guscio fond.	1110	1112	1128	1126	3	2	40.0	0.09	0.06
1008	Guscio fond.	1112	1113	1129	1128	3	2	40.0	0.09	0.06
1009	Guscio fond.	1113	1114	1130	1129	3	2	40.0	0.09	0.06
1010	Guscio fond.	1114	1115	1131	1130	3	2	40.0	0.09	0.06
1011	Guscio fond.	1115	1116	1132	1131	3	2	40.0	0.09	0.06
1012	Guscio fond.	1116	1117	1133	1132	3	2	40.0	0.09	0.06
1013	Guscio fond.	1117	1118	1134	1133	3	2	40.0	0.09	0.06
1014	Guscio fond.	1118	1119	1135	1134	3	2	40.0	0.09	0.06
1015	Guscio fond.	1119	1120	1136	1135	3	2	40.0	0.09	0.06
1016	Guscio fond.	1120	1121	1137	1136	3	2	40.0	0.09	0.06
1017	Guscio fond.	1121	1122	1138	1137	3	2	40.0	0.09	0.06
1018	Guscio fond.	1122	1123	1139	1138	3	2	40.0	0.09	0.06
1019	Guscio fond.	1123	1124	1140	1139	3	2	40.0	0.09	0.06
1020	Guscio fond.	1124	1125	1141	1140	3	2	40.0	0.09	0.06
1021	Guscio fond.	1127	1126	1142	1143	3	2	40.0	0.09	0.06
1022	Guscio fond.	1126	1128	1144	1142	3	2	40.0	0.09	0.06
1023	Guscio fond.	1128	1129	1145	1144	3	2	40.0	0.09	0.06
1024	Guscio fond.	1129	1130	1146	1145	3	2	40.0	0.09	0.06
1025	Guscio fond.	1130	1131	1147	1146	3	2	40.0	0.09	0.06
1026	Guscio fond.	1131	1132	1148	1147	3	2	40.0	0.09	0.06
1027	Guscio fond.	1132	1133	1149	1148	3	2	40.0	0.09	0.06
1028	Guscio fond.	1133	1134	1150	1149	3	2	40.0	0.09	0.06
1029	Guscio fond.	1134	1135	1151	1150	3	2	40.0	0.09	0.06
1030	Guscio fond.	1135	1136	1152	1151	3	2	40.0	0.09	0.06
1031	Guscio fond.	1136	1137	1153	1152	3	2	40.0	0.09	0.06
1032	Guscio fond.	1137	1138	1154	1153	3	2	40.0	0.09	0.06
1033	Guscio fond.	1138	1139	1155	1154	3	2	40.0	0.09	0.06
1034	Guscio fond.	1139	1140	1156	1155	3	2	40.0	0.09	0.06
1035	Guscio fond.	1140	1141	1157	1156	3	2	40.0	0.09	0.06
1036	Guscio fond.	1143	1142	1158	1159	3	2	40.0	0.09	0.06
1037	Guscio fond.	1142	1144	1160	1158	3	2	40.0	0.09	0.06
1038	Guscio fond.	1144	1145	1161	1160	3	2	40.0	0.09	0.06
1039	Guscio fond.	1145	1146	1162	1161	3	2	40.0	0.09	0.06
1040	Guscio fond.	1146	1147	1163	1162	3	2	40.0	0.09	0.06
1041	Guscio fond.	1147	1148	1164	1163	3	2	40.0	0.09	0.06
1042	Guscio fond.	1148	1149	1165	1164	3	2	40.0	0.09	0.06
1043	Guscio fond.	1149	1150	1166	1165	3	2	40.0	0.09	0.06
1044	Guscio fond.	1150	1151	1167	1166	3	2	40.0	0.09	0.06
1045	Guscio fond.	1151	1152	1168	1167	3	2	40.0	0.09	0.06
1046	Guscio fond.	1152	1153	1169	1168	3	2	40.0	0.09	0.06
1047	Guscio fond.	1153	1154	1170	1169	3	2	40.0	0.09	0.06
1048	Guscio fond.	1154	1155	1171	1170	3	2	40.0	0.09	0.06
1049	Guscio fond.	1155	1156	1172	1171	3	2	40.0	0.09	0.06
1050	Guscio fond.	1156	1157	1173	1172	3	2	40.0	0.09	0.06
1051	Guscio fond.	1159	1158	1174	1175	3	2	40.0	0.09	0.06
1052	Guscio fond.	1158	1160	1176	1174	3	2	40.0	0.09	0.06
1053	Guscio fond.	1160	1161	1177	1176	3	2	40.0	0.09	0.06
1054	Guscio fond.	1161	1162	1178	1177	3	2	40.0	0.09	0.06
1055	Guscio fond.	1162	1163	1179	1178	3	2	40.0	0.09	0.06
1056	Guscio fond.	1163	1164	1180	1179	3	2	40.0	0.09	0.06
1057	Guscio fond.	1164	1165	1181	1180	3	2	40.0	0.09	0.06
1058	Guscio fond.	1165	1166	1182	1181	3	2	40.0	0.09	0.06
1059	Guscio fond.	1166	1167	1183	1182	3	2	40.0	0.09	0.06
1060	Guscio fond.	1167	1168	1184	1183	3	2	40.0	0.09	0.06
1061	Guscio fond.	1168	1169	1185	1184	3	2	40.0	0.09	0.06
1062	Guscio fond.	1169	1170	1186	1185	3	2	40.0	0.09	0.06
1063	Guscio fond.	1170	1171	1187	1186	3	2	40.0	0.09	0.06
1064	Guscio fond.	1171	1172	1188	1187	3	2	40.0	0.09	0.06
1065	Guscio fond.	1172	1173	1189	1188	3	2	40.0	0.09	0.06
1066	Guscio fond.	1175	1174	1190	1191	3	2	40.0	0.09	0.06
1067	Guscio fond.	1174	1176	1192	1190	3	2	40.0	0.09	0.06
1068	Guscio fond.	1176	1177	1193	1192	3	2	40.0	0.09	0.06
1069	Guscio fond.	1177	1178	1194	1193	3	2	40.0	0.09	0.06
1070	Guscio fond.	1178	1179	1195	1194	3	2	40.0	0.09	0.06
1071	Guscio fond.	1179	1180	1196	1195	3	2	40.0	0.09	0.06
1072	Guscio fond.	1180	1181	1197	1196	3	2	40.0	0.09	0.06
1073	Guscio fond.	1181	1182	1198	1197	3	2	40.0	0.09	0.06
1074	Guscio fond.	1182	1183	1199	1198	3	2	40.0	0.09	0.06

1075	Guscio fond.	1183	1184	1200	1199	3	2	40.0	0.09	0.06
1076	Guscio fond.	1184	1185	1201	1200	3	2	40.0	0.09	0.06
1077	Guscio fond.	1185	1186	1202	1201	3	2	40.0	0.09	0.06
1078	Guscio fond.	1186	1187	1203	1202	3	2	40.0	0.09	0.06
1079	Guscio fond.	1187	1188	1204	1203	3	2	40.0	0.09	0.06
1080	Guscio fond.	1188	1189	1205	1204	3	2	40.0	0.09	0.06
1081	Guscio fond.	1191	1190	1206	1207	3	2	40.0	0.09	0.06
1082	Guscio fond.	1190	1192	1208	1206	3	2	40.0	0.09	0.06
1083	Guscio fond.	1192	1193	1209	1208	3	2	40.0	0.09	0.06
1084	Guscio fond.	1193	1194	1210	1209	3	2	40.0	0.09	0.06
1085	Guscio fond.	1194	1195	1211	1210	3	2	40.0	0.09	0.06
1086	Guscio fond.	1195	1196	1212	1211	3	2	40.0	0.09	0.06
1087	Guscio fond.	1196	1197	1213	1212	3	2	40.0	0.09	0.06
1088	Guscio fond.	1197	1198	1214	1213	3	2	40.0	0.09	0.06
1089	Guscio fond.	1198	1199	1215	1214	3	2	40.0	0.09	0.06
1090	Guscio fond.	1199	1200	1216	1215	3	2	40.0	0.09	0.06
1091	Guscio fond.	1200	1201	1217	1216	3	2	40.0	0.09	0.06
1092	Guscio fond.	1201	1202	1218	1217	3	2	40.0	0.09	0.06
1093	Guscio fond.	1202	1203	1219	1218	3	2	40.0	0.09	0.06
1094	Guscio fond.	1203	1204	1220	1219	3	2	40.0	0.09	0.06
1095	Guscio fond.	1204	1205	1221	1220	3	2	40.0	0.09	0.06
1096	Guscio fond.	1207	1206	1222	1223	3	2	40.0	0.09	0.06
1097	Guscio fond.	1206	1208	1224	1222	3	2	40.0	0.09	0.06
1098	Guscio fond.	1208	1209	1225	1224	3	2	40.0	0.09	0.06
1099	Guscio fond.	1209	1210	1226	1225	3	2	40.0	0.09	0.06
1100	Guscio fond.	1210	1211	1227	1226	3	2	40.0	0.09	0.06
1101	Guscio fond.	1211	1212	1228	1227	3	2	40.0	0.09	0.06
1102	Guscio fond.	1212	1213	1229	1228	3	2	40.0	0.09	0.06
1103	Guscio fond.	1213	1214	1230	1229	3	2	40.0	0.09	0.06
1104	Guscio fond.	1214	1215	1231	1230	3	2	40.0	0.09	0.06
1105	Guscio fond.	1215	1216	1232	1231	3	2	40.0	0.09	0.06
1106	Guscio fond.	1216	1217	1233	1232	3	2	40.0	0.09	0.06
1107	Guscio fond.	1217	1218	1234	1233	3	2	40.0	0.09	0.06
1108	Guscio fond.	1218	1219	1235	1234	3	2	40.0	0.09	0.06
1109	Guscio fond.	1219	1220	1236	1235	3	2	40.0	0.09	0.06
1110	Guscio fond.	1220	1221	1237	1236	3	2	40.0	0.09	0.06
1111	Guscio fond.	1223	1222	1238	37	3	2	40.0	0.09	0.06
1112	Guscio fond.	1222	1224	1239	1238	3	2	40.0	0.09	0.06
1113	Guscio fond.	1224	1225	1240	1239	3	2	40.0	0.09	0.06
1114	Guscio fond.	1225	1226	1241	1240	3	2	40.0	0.09	0.06
1115	Guscio fond.	1226	1227	1242	1241	3	2	40.0	0.09	0.06
1116	Guscio fond.	1227	1228	1243	1242	3	2	40.0	0.09	0.06
1117	Guscio fond.	1228	1229	1244	1243	3	2	40.0	0.09	0.06
1118	Guscio fond.	1229	1230	1245	1244	3	2	40.0	0.09	0.06
1119	Guscio fond.	1230	1231	1246	1245	3	2	40.0	0.09	0.06
1120	Guscio fond.	1231	1232	1247	1246	3	2	40.0	0.09	0.06
1121	Guscio fond.	1232	1233	1248	1247	3	2	40.0	0.09	0.06
1122	Guscio fond.	1233	1234	1249	1248	3	2	40.0	0.09	0.06
1123	Guscio fond.	1234	1235	1250	1249	3	2	40.0	0.09	0.06
1124	Guscio fond.	1235	1236	1251	1250	3	2	40.0	0.09	0.06
1125	Guscio fond.	1236	1237	38	1251	3	2	40.0	0.09	0.06
1126	Guscio fond.	29	1252	1253	789	3	3	40.0	0.09	0.06
1127	Guscio fond.	1252	1254	1255	1253	3	3	40.0	0.09	0.06
1128	Guscio fond.	1254	1256	1257	1255	3	3	40.0	0.09	0.06
1129	Guscio fond.	1256	1258	1259	1257	3	2	40.0	0.09	0.06
1130	Guscio fond.	1258	1260	1261	1259	3	2	40.0	0.09	0.06
1131	Guscio fond.	1260	1262	1263	1261	3	2	40.0	0.09	0.06
1132	Guscio fond.	1262	1264	1265	1263	3	2	40.0	0.09	0.06
1133	Guscio fond.	1264	1266	1267	1265	3	2	40.0	0.09	0.06
1134	Guscio fond.	1266	1268	1269	1267	3	2	40.0	0.09	0.06
1135	Guscio fond.	1268	1270	1271	1269	3	2	40.0	0.09	0.06
1136	Guscio fond.	1270	1272	1273	1271	3	2	40.0	0.09	0.06
1137	Guscio fond.	1272	1274	1275	1273	3	2	40.0	0.09	0.06
1138	Guscio fond.	1274	1276	1277	1275	3	2	40.0	0.09	0.06
1139	Guscio fond.	1276	1278	1279	1277	3	2	40.0	0.09	0.06
1140	Guscio fond.	1278	30	1280	1279	3	2	40.0	0.09	0.06
1141	Guscio fond.	789	1253	1281	805	3	3	40.0	0.09	0.06
1142	Guscio fond.	1253	1255	1282	1281	3	3	40.0	0.09	0.06
1143	Guscio fond.	1255	1257	1283	1282	3	3	40.0	0.09	0.06
1144	Guscio fond.	1257	1259	1284	1283	3	2	40.0	0.09	0.06
1145	Guscio fond.	1259	1261	1285	1284	3	2	40.0	0.09	0.06
1146	Guscio fond.	1261	1263	1286	1285	3	2	40.0	0.09	0.06
1147	Guscio fond.	1263	1265	1287	1286	3	2	40.0	0.09	0.06
1148	Guscio fond.	1265	1267	1288	1287	3	2	40.0	0.09	0.06
1149	Guscio fond.	1267	1269	1289	1288	3	2	40.0	0.09	0.06
1150	Guscio fond.	1269	1271	1290	1289	3	2	40.0	0.09	0.06
1151	Guscio fond.	1271	1273	1291	1290	3	2	40.0	0.09	0.06

1152	Guscio fond.	1273	1275	1292	1291	3	2	40.0	0.09	0.06
1153	Guscio fond.	1275	1277	1293	1292	3	2	40.0	0.09	0.06
1154	Guscio fond.	1277	1279	1294	1293	3	2	40.0	0.09	0.06
1155	Guscio fond.	1279	1280	1295	1294	3	2	40.0	0.09	0.06
1156	Guscio fond.	805	1281	1296	821	3	3	40.0	0.09	0.06
1157	Guscio fond.	1281	1282	1297	1296	3	3	40.0	0.09	0.06
1158	Guscio fond.	1282	1283	1298	1297	3	3	40.0	0.09	0.06
1159	Guscio fond.	1283	1284	1299	1298	3	2	40.0	0.09	0.06
1160	Guscio fond.	1284	1285	1300	1299	3	2	40.0	0.09	0.06
1161	Guscio fond.	1285	1286	1301	1300	3	2	40.0	0.09	0.06
1162	Guscio fond.	1286	1287	1302	1301	3	2	40.0	0.09	0.06
1163	Guscio fond.	1287	1288	1303	1302	3	2	40.0	0.09	0.06
1164	Guscio fond.	1288	1289	1304	1303	3	2	40.0	0.09	0.06
1165	Guscio fond.	1289	1290	1305	1304	3	2	40.0	0.09	0.06
1166	Guscio fond.	1290	1291	1306	1305	3	2	40.0	0.09	0.06
1167	Guscio fond.	1291	1292	1307	1306	3	2	40.0	0.09	0.06
1168	Guscio fond.	1292	1293	1308	1307	3	2	40.0	0.09	0.06
1169	Guscio fond.	1293	1294	1309	1308	3	2	40.0	0.09	0.06
1170	Guscio fond.	1294	1295	1310	1309	3	2	40.0	0.09	0.06
1171	Guscio fond.	821	1296	1311	837	3	3	40.0	0.09	0.06
1172	Guscio fond.	1296	1297	1312	1311	3	3	40.0	0.09	0.06
1173	Guscio fond.	1297	1298	1313	1312	3	3	40.0	0.09	0.06
1174	Guscio fond.	1298	1299	1314	1313	3	2	40.0	0.09	0.06
1175	Guscio fond.	1299	1300	1315	1314	3	2	40.0	0.09	0.06
1176	Guscio fond.	1300	1301	1316	1315	3	2	40.0	0.09	0.06
1177	Guscio fond.	1301	1302	1317	1316	3	2	40.0	0.09	0.06
1178	Guscio fond.	1302	1303	1318	1317	3	2	40.0	0.09	0.06
1179	Guscio fond.	1303	1304	1319	1318	3	2	40.0	0.09	0.06
1180	Guscio fond.	1304	1305	1320	1319	3	2	40.0	0.09	0.06
1181	Guscio fond.	1305	1306	1321	1320	3	2	40.0	0.09	0.06
1182	Guscio fond.	1306	1307	1322	1321	3	2	40.0	0.09	0.06
1183	Guscio fond.	1307	1308	1323	1322	3	2	40.0	0.09	0.06
1184	Guscio fond.	1308	1309	1324	1323	3	2	40.0	0.09	0.06
1185	Guscio fond.	1309	1310	1325	1324	3	2	40.0	0.09	0.06
1186	Guscio fond.	837	1311	1326	853	3	3	40.0	0.09	0.06
1187	Guscio fond.	1311	1312	1327	1326	3	3	40.0	0.09	0.06
1188	Guscio fond.	1312	1313	1328	1327	3	3	40.0	0.09	0.06
1189	Guscio fond.	1313	1314	1329	1328	3	2	40.0	0.09	0.06
1190	Guscio fond.	1314	1315	1330	1329	3	2	40.0	0.09	0.06
1191	Guscio fond.	1315	1316	1331	1330	3	2	40.0	0.09	0.06
1192	Guscio fond.	1316	1317	1332	1331	3	2	40.0	0.09	0.06
1193	Guscio fond.	1317	1318	1333	1332	3	2	40.0	0.09	0.06
1194	Guscio fond.	1318	1319	1334	1333	3	2	40.0	0.09	0.06
1195	Guscio fond.	1319	1320	1335	1334	3	2	40.0	0.09	0.06
1196	Guscio fond.	1320	1321	1336	1335	3	2	40.0	0.09	0.06
1197	Guscio fond.	1321	1322	1337	1336	3	2	40.0	0.09	0.06
1198	Guscio fond.	1322	1323	1338	1337	3	2	40.0	0.09	0.06
1199	Guscio fond.	1323	1324	1339	1338	3	2	40.0	0.09	0.06
1200	Guscio fond.	1324	1325	1340	1339	3	2	40.0	0.09	0.06
1201	Guscio fond.	853	1326	1341	869	3	2	40.0	0.09	0.06
1202	Guscio fond.	1326	1327	1342	1341	3	2	40.0	0.09	0.06
1203	Guscio fond.	1327	1328	1343	1342	3	2	40.0	0.09	0.06
1204	Guscio fond.	1328	1329	1344	1343	3	2	40.0	0.09	0.06
1205	Guscio fond.	1329	1330	1345	1344	3	2	40.0	0.09	0.06
1206	Guscio fond.	1330	1331	1346	1345	3	2	40.0	0.09	0.06
1207	Guscio fond.	1331	1332	1347	1346	3	2	40.0	0.09	0.06
1208	Guscio fond.	1332	1333	1348	1347	3	2	40.0	0.09	0.06
1209	Guscio fond.	1333	1334	1349	1348	3	2	40.0	0.09	0.06
1210	Guscio fond.	1334	1335	1350	1349	3	2	40.0	0.09	0.06
1211	Guscio fond.	1335	1336	1351	1350	3	2	40.0	0.09	0.06
1212	Guscio fond.	1336	1337	1352	1351	3	2	40.0	0.09	0.06
1213	Guscio fond.	1337	1338	1353	1352	3	2	40.0	0.09	0.06
1214	Guscio fond.	1338	1339	1354	1353	3	2	40.0	0.09	0.06
1215	Guscio fond.	1339	1340	1355	1354	3	2	40.0	0.09	0.06
1216	Guscio fond.	869	1341	1356	885	3	2	40.0	0.09	0.06
1217	Guscio fond.	1341	1342	1357	1356	3	2	40.0	0.09	0.06
1218	Guscio fond.	1342	1343	1358	1357	3	2	40.0	0.09	0.06
1219	Guscio fond.	1343	1344	1359	1358	3	2	40.0	0.09	0.06
1220	Guscio fond.	1344	1345	1360	1359	3	2	40.0	0.09	0.06
1221	Guscio fond.	1345	1346	1361	1360	3	2	40.0	0.09	0.06
1222	Guscio fond.	1346	1347	1362	1361	3	2	40.0	0.09	0.06
1223	Guscio fond.	1347	1348	1363	1362	3	2	40.0	0.09	0.06
1224	Guscio fond.	1348	1349	1364	1363	3	2	40.0	0.09	0.06
1225	Guscio fond.	1349	1350	1365	1364	3	2	40.0	0.09	0.06
1226	Guscio fond.	1350	1351	1366	1365	3	2	40.0	0.09	0.06
1227	Guscio fond.	1351	1352	1367	1366	3	2	40.0	0.09	0.06
1228	Guscio fond.	1352	1353	1368	1367	3	2	40.0	0.09	0.06

1229	Guscio fond.	1353	1354	1369	1368	3	2	40.0	0.09	0.06
1230	Guscio fond.	1354	1355	1370	1369	3	2	40.0	0.09	0.06
1231	Guscio fond.	885	1356	1371	901	3	2	40.0	0.09	0.06
1232	Guscio fond.	1356	1357	1372	1371	3	2	40.0	0.09	0.06
1233	Guscio fond.	1357	1358	1373	1372	3	2	40.0	0.09	0.06
1234	Guscio fond.	1358	1359	1374	1373	3	2	40.0	0.09	0.06
1235	Guscio fond.	1359	1360	1375	1374	3	2	40.0	0.09	0.06
1236	Guscio fond.	1360	1361	1376	1375	3	2	40.0	0.09	0.06
1237	Guscio fond.	1361	1362	1377	1376	3	2	40.0	0.09	0.06
1238	Guscio fond.	1362	1363	1378	1377	3	2	40.0	0.09	0.06
1239	Guscio fond.	1363	1364	1379	1378	3	2	40.0	0.09	0.06
1240	Guscio fond.	1364	1365	1380	1379	3	2	40.0	0.09	0.06
1241	Guscio fond.	1365	1366	1381	1380	3	2	40.0	0.09	0.06
1242	Guscio fond.	1366	1367	1382	1381	3	2	40.0	0.09	0.06
1243	Guscio fond.	1367	1368	1383	1382	3	2	40.0	0.09	0.06
1244	Guscio fond.	1368	1369	1384	1383	3	2	40.0	0.09	0.06
1245	Guscio fond.	1369	1370	1385	1384	3	2	40.0	0.09	0.06
1246	Guscio fond.	901	1371	1386	917	3	2	40.0	0.09	0.06
1247	Guscio fond.	1371	1372	1387	1386	3	2	40.0	0.09	0.06
1248	Guscio fond.	1372	1373	1388	1387	3	2	40.0	0.09	0.06
1249	Guscio fond.	1373	1374	1389	1388	3	2	40.0	0.09	0.06
1250	Guscio fond.	1374	1375	1390	1389	3	2	40.0	0.09	0.06
1251	Guscio fond.	1375	1376	1391	1390	3	2	40.0	0.09	0.06
1252	Guscio fond.	1376	1377	1392	1391	3	2	40.0	0.09	0.06
1253	Guscio fond.	1377	1378	1393	1392	3	2	40.0	0.09	0.06
1254	Guscio fond.	1378	1379	1394	1393	3	2	40.0	0.09	0.06
1255	Guscio fond.	1379	1380	1395	1394	3	2	40.0	0.09	0.06
1256	Guscio fond.	1380	1381	1396	1395	3	2	40.0	0.09	0.06
1257	Guscio fond.	1381	1382	1397	1396	3	2	40.0	0.09	0.06
1258	Guscio fond.	1382	1383	1398	1397	3	2	40.0	0.09	0.06
1259	Guscio fond.	1383	1384	1399	1398	3	2	40.0	0.09	0.06
1260	Guscio fond.	1384	1385	1400	1399	3	2	40.0	0.09	0.06
1261	Guscio fond.	917	1386	1401	933	3	2	40.0	0.09	0.06
1262	Guscio fond.	1386	1387	1402	1401	3	2	40.0	0.09	0.06
1263	Guscio fond.	1387	1388	1403	1402	3	2	40.0	0.09	0.06
1264	Guscio fond.	1388	1389	1404	1403	3	2	40.0	0.09	0.06
1265	Guscio fond.	1389	1390	1405	1404	3	2	40.0	0.09	0.06
1266	Guscio fond.	1390	1391	1406	1405	3	2	40.0	0.09	0.06
1267	Guscio fond.	1391	1392	1407	1406	3	2	40.0	0.09	0.06
1268	Guscio fond.	1392	1393	1408	1407	3	2	40.0	0.09	0.06
1269	Guscio fond.	1393	1394	1409	1408	3	2	40.0	0.09	0.06
1270	Guscio fond.	1394	1395	1410	1409	3	2	40.0	0.09	0.06
1271	Guscio fond.	1395	1396	1411	1410	3	2	40.0	0.09	0.06
1272	Guscio fond.	1396	1397	1412	1411	3	2	40.0	0.09	0.06
1273	Guscio fond.	1397	1398	1413	1412	3	2	40.0	0.09	0.06
1274	Guscio fond.	1398	1399	1414	1413	3	2	40.0	0.09	0.06
1275	Guscio fond.	1399	1400	1415	1414	3	2	40.0	0.09	0.06
1276	Guscio fond.	933	1401	1416	949	3	2	40.0	0.09	0.06
1277	Guscio fond.	1401	1402	1417	1416	3	2	40.0	0.09	0.06
1278	Guscio fond.	1402	1403	1418	1417	3	2	40.0	0.09	0.06
1279	Guscio fond.	1403	1404	1419	1418	3	2	40.0	0.09	0.06
1280	Guscio fond.	1404	1405	1420	1419	3	2	40.0	0.09	0.06
1281	Guscio fond.	1405	1406	1421	1420	3	2	40.0	0.09	0.06
1282	Guscio fond.	1406	1407	1422	1421	3	2	40.0	0.09	0.06
1283	Guscio fond.	1407	1408	1423	1422	3	2	40.0	0.09	0.06
1284	Guscio fond.	1408	1409	1424	1423	3	2	40.0	0.09	0.06
1285	Guscio fond.	1409	1410	1425	1424	3	2	40.0	0.09	0.06
1286	Guscio fond.	1410	1411	1426	1425	3	2	40.0	0.09	0.06
1287	Guscio fond.	1411	1412	1427	1426	3	2	40.0	0.09	0.06
1288	Guscio fond.	1412	1413	1428	1427	3	2	40.0	0.09	0.06
1289	Guscio fond.	1413	1414	1429	1428	3	2	40.0	0.09	0.06
1290	Guscio fond.	1414	1415	1430	1429	3	2	40.0	0.09	0.06
1291	Guscio fond.	949	1416	1431	965	3	2	40.0	0.09	0.06
1292	Guscio fond.	1416	1417	1432	1431	3	2	40.0	0.09	0.06
1293	Guscio fond.	1417	1418	1433	1432	3	2	40.0	0.09	0.06
1294	Guscio fond.	1418	1419	1434	1433	3	2	40.0	0.09	0.06
1295	Guscio fond.	1419	1420	1435	1434	3	2	40.0	0.09	0.06
1296	Guscio fond.	1420	1421	1436	1435	3	2	40.0	0.09	0.06
1297	Guscio fond.	1421	1422	1437	1436	3	2	40.0	0.09	0.06
1298	Guscio fond.	1422	1423	1438	1437	3	2	40.0	0.09	0.06
1299	Guscio fond.	1423	1424	1439	1438	3	2	40.0	0.09	0.06
1300	Guscio fond.	1424	1425	1440	1439	3	2	40.0	0.09	0.06
1301	Guscio fond.	1425	1426	1441	1440	3	2	40.0	0.09	0.06
1302	Guscio fond.	1426	1427	1442	1441	3	2	40.0	0.09	0.06
1303	Guscio fond.	1427	1428	1443	1442	3	2	40.0	0.09	0.06
1304	Guscio fond.	1428	1429	1444	1443	3	2	40.0	0.09	0.06
1305	Guscio fond.	1429	1430	1445	1444	3	2	40.0	0.09	0.06

1306	Guscio fond.	965	1431	1446	981	3	2	40.0	0.09	0.06
1307	Guscio fond.	1431	1432	1447	1446	3	2	40.0	0.09	0.06
1308	Guscio fond.	1432	1433	1448	1447	3	2	40.0	0.09	0.06
1309	Guscio fond.	1433	1434	1449	1448	3	2	40.0	0.09	0.06
1310	Guscio fond.	1434	1435	1450	1449	3	2	40.0	0.09	0.06
1311	Guscio fond.	1435	1436	1451	1450	3	2	40.0	0.09	0.06
1312	Guscio fond.	1436	1437	1452	1451	3	2	40.0	0.09	0.06
1313	Guscio fond.	1437	1438	1453	1452	3	2	40.0	0.09	0.06
1314	Guscio fond.	1438	1439	1454	1453	3	2	40.0	0.09	0.06
1315	Guscio fond.	1439	1440	1455	1454	3	2	40.0	0.09	0.06
1316	Guscio fond.	1440	1441	1456	1455	3	2	40.0	0.09	0.06
1317	Guscio fond.	1441	1442	1457	1456	3	2	40.0	0.09	0.06
1318	Guscio fond.	1442	1443	1458	1457	3	2	40.0	0.09	0.06
1319	Guscio fond.	1443	1444	1459	1458	3	2	40.0	0.09	0.06
1320	Guscio fond.	1444	1445	1460	1459	3	2	40.0	0.09	0.06
1321	Guscio fond.	981	1446	1461	997	3	2	40.0	0.09	0.06
1322	Guscio fond.	1446	1447	1462	1461	3	2	40.0	0.09	0.06
1323	Guscio fond.	1447	1448	1463	1462	3	2	40.0	0.09	0.06
1324	Guscio fond.	1448	1449	1464	1463	3	2	40.0	0.09	0.06
1325	Guscio fond.	1449	1450	1465	1464	3	2	40.0	0.09	0.06
1326	Guscio fond.	1450	1451	1466	1465	3	2	40.0	0.09	0.06
1327	Guscio fond.	1451	1452	1467	1466	3	2	40.0	0.09	0.06
1328	Guscio fond.	1452	1453	1468	1467	3	2	40.0	0.09	0.06
1329	Guscio fond.	1453	1454	1469	1468	3	2	40.0	0.09	0.06
1330	Guscio fond.	1454	1455	1470	1469	3	2	40.0	0.09	0.06
1331	Guscio fond.	1455	1456	1471	1470	3	2	40.0	0.09	0.06
1332	Guscio fond.	1456	1457	1472	1471	3	2	40.0	0.09	0.06
1333	Guscio fond.	1457	1458	1473	1472	3	2	40.0	0.09	0.06
1334	Guscio fond.	1458	1459	1474	1473	3	2	40.0	0.09	0.06
1335	Guscio fond.	1459	1460	1475	1474	3	2	40.0	0.09	0.06
1336	Guscio fond.	997	1461	1476	1013	3	2	40.0	0.09	0.06
1337	Guscio fond.	1461	1462	1477	1476	3	2	40.0	0.09	0.06
1338	Guscio fond.	1462	1463	1478	1477	3	2	40.0	0.09	0.06
1339	Guscio fond.	1463	1464	1479	1478	3	2	40.0	0.09	0.06
1340	Guscio fond.	1464	1465	1480	1479	3	2	40.0	0.09	0.06
1341	Guscio fond.	1465	1466	1481	1480	3	2	40.0	0.09	0.06
1342	Guscio fond.	1466	1467	1482	1481	3	2	40.0	0.09	0.06
1343	Guscio fond.	1467	1468	1483	1482	3	2	40.0	0.09	0.06
1344	Guscio fond.	1468	1469	1484	1483	3	2	40.0	0.09	0.06
1345	Guscio fond.	1469	1470	1485	1484	3	2	40.0	0.09	0.06
1346	Guscio fond.	1470	1471	1486	1485	3	2	40.0	0.09	0.06
1347	Guscio fond.	1471	1472	1487	1486	3	2	40.0	0.09	0.06
1348	Guscio fond.	1472	1473	1488	1487	3	2	40.0	0.09	0.06
1349	Guscio fond.	1473	1474	1489	1488	3	2	40.0	0.09	0.06
1350	Guscio fond.	1474	1475	1490	1489	3	2	40.0	0.09	0.06
1351	Guscio fond.	1013	1476	1491	1029	3	2	40.0	0.09	0.06
1352	Guscio fond.	1476	1477	1492	1491	3	2	40.0	0.09	0.06
1353	Guscio fond.	1477	1478	1493	1492	3	2	40.0	0.09	0.06
1354	Guscio fond.	1478	1479	1494	1493	3	2	40.0	0.09	0.06
1355	Guscio fond.	1479	1480	1495	1494	3	2	40.0	0.09	0.06
1356	Guscio fond.	1480	1481	1496	1495	3	2	40.0	0.09	0.06
1357	Guscio fond.	1481	1482	1497	1496	3	2	40.0	0.09	0.06
1358	Guscio fond.	1482	1483	1498	1497	3	2	40.0	0.09	0.06
1359	Guscio fond.	1483	1484	1499	1498	3	2	40.0	0.09	0.06
1360	Guscio fond.	1484	1485	1500	1499	3	2	40.0	0.09	0.06
1361	Guscio fond.	1485	1486	1501	1500	3	2	40.0	0.09	0.06
1362	Guscio fond.	1486	1487	1502	1501	3	2	40.0	0.09	0.06
1363	Guscio fond.	1487	1488	1503	1502	3	2	40.0	0.09	0.06
1364	Guscio fond.	1488	1489	1504	1503	3	2	40.0	0.09	0.06
1365	Guscio fond.	1489	1490	1505	1504	3	2	40.0	0.09	0.06
1366	Guscio fond.	1029	1491	1506	1045	3	2	40.0	0.09	0.06
1367	Guscio fond.	1491	1492	1507	1506	3	2	40.0	0.09	0.06
1368	Guscio fond.	1492	1493	1508	1507	3	2	40.0	0.09	0.06
1369	Guscio fond.	1493	1494	1509	1508	3	2	40.0	0.09	0.06
1370	Guscio fond.	1494	1495	1510	1509	3	2	40.0	0.09	0.06
1371	Guscio fond.	1495	1496	1511	1510	3	2	40.0	0.09	0.06
1372	Guscio fond.	1496	1497	1512	1511	3	2	40.0	0.09	0.06
1373	Guscio fond.	1497	1498	1513	1512	3	2	40.0	0.09	0.06
1374	Guscio fond.	1498	1499	1514	1513	3	2	40.0	0.09	0.06
1375	Guscio fond.	1499	1500	1515	1514	3	2	40.0	0.09	0.06
1376	Guscio fond.	1500	1501	1516	1515	3	2	40.0	0.09	0.06
1377	Guscio fond.	1501	1502	1517	1516	3	2	40.0	0.09	0.06
1378	Guscio fond.	1502	1503	1518	1517	3	2	40.0	0.09	0.06
1379	Guscio fond.	1503	1504	1519	1518	3	2	40.0	0.09	0.06
1380	Guscio fond.	1504	1505	1520	1519	3	2	40.0	0.09	0.06
1381	Guscio fond.	1045	1506	1521	1061	3	2	40.0	0.09	0.06
1382	Guscio fond.	1506	1507	1522	1521	3	2	40.0	0.09	0.06

1383	Guscio fond.	1507	1508	1523	1522	3	2	40.0	0.09	0.06
1384	Guscio fond.	1508	1509	1524	1523	3	2	40.0	0.09	0.06
1385	Guscio fond.	1509	1510	1525	1524	3	2	40.0	0.09	0.06
1386	Guscio fond.	1510	1511	1526	1525	3	2	40.0	0.09	0.06
1387	Guscio fond.	1511	1512	1527	1526	3	2	40.0	0.09	0.06
1388	Guscio fond.	1512	1513	1528	1527	3	2	40.0	0.09	0.06
1389	Guscio fond.	1513	1514	1529	1528	3	2	40.0	0.09	0.06
1390	Guscio fond.	1514	1515	1530	1529	3	2	40.0	0.09	0.06
1391	Guscio fond.	1515	1516	1531	1530	3	2	40.0	0.09	0.06
1392	Guscio fond.	1516	1517	1532	1531	3	2	40.0	0.09	0.06
1393	Guscio fond.	1517	1518	1533	1532	3	2	40.0	0.09	0.06
1394	Guscio fond.	1518	1519	1534	1533	3	2	40.0	0.09	0.06
1395	Guscio fond.	1519	1520	1535	1534	3	2	40.0	0.09	0.06
1396	Guscio fond.	1061	1521	1536	1077	3	2	40.0	0.09	0.06
1397	Guscio fond.	1521	1522	1537	1536	3	2	40.0	0.09	0.06
1398	Guscio fond.	1522	1523	1538	1537	3	2	40.0	0.09	0.06
1399	Guscio fond.	1523	1524	1539	1538	3	2	40.0	0.09	0.06
1400	Guscio fond.	1524	1525	1540	1539	3	2	40.0	0.09	0.06
1401	Guscio fond.	1525	1526	1541	1540	3	2	40.0	0.09	0.06
1402	Guscio fond.	1526	1527	1542	1541	3	2	40.0	0.09	0.06
1403	Guscio fond.	1527	1528	1543	1542	3	2	40.0	0.09	0.06
1404	Guscio fond.	1528	1529	1544	1543	3	2	40.0	0.09	0.06
1405	Guscio fond.	1529	1530	1545	1544	3	2	40.0	0.09	0.06
1406	Guscio fond.	1530	1531	1546	1545	3	2	40.0	0.09	0.06
1407	Guscio fond.	1531	1532	1547	1546	3	2	40.0	0.09	0.06
1408	Guscio fond.	1532	1533	1548	1547	3	2	40.0	0.09	0.06
1409	Guscio fond.	1533	1534	1549	1548	3	2	40.0	0.09	0.06
1410	Guscio fond.	1534	1535	1550	1549	3	2	40.0	0.09	0.06
1411	Guscio fond.	1077	1536	1551	1093	3	2	40.0	0.09	0.06
1412	Guscio fond.	1536	1537	1552	1551	3	2	40.0	0.09	0.06
1413	Guscio fond.	1537	1538	1553	1552	3	2	40.0	0.09	0.06
1414	Guscio fond.	1538	1539	1554	1553	3	2	40.0	0.09	0.06
1415	Guscio fond.	1539	1540	1555	1554	3	2	40.0	0.09	0.06
1416	Guscio fond.	1540	1541	1556	1555	3	2	40.0	0.09	0.06
1417	Guscio fond.	1541	1542	1557	1556	3	2	40.0	0.09	0.06
1418	Guscio fond.	1542	1543	1558	1557	3	2	40.0	0.09	0.06
1419	Guscio fond.	1543	1544	1559	1558	3	2	40.0	0.09	0.06
1420	Guscio fond.	1544	1545	1560	1559	3	2	40.0	0.09	0.06
1421	Guscio fond.	1545	1546	1561	1560	3	2	40.0	0.09	0.06
1422	Guscio fond.	1546	1547	1562	1561	3	2	40.0	0.09	0.06
1423	Guscio fond.	1547	1548	1563	1562	3	2	40.0	0.09	0.06
1424	Guscio fond.	1548	1549	1564	1563	3	2	40.0	0.09	0.06
1425	Guscio fond.	1549	1550	1565	1564	3	2	40.0	0.09	0.06
1426	Guscio fond.	1093	1551	1566	1109	3	2	40.0	0.09	0.06
1427	Guscio fond.	1551	1552	1567	1566	3	2	40.0	0.09	0.06
1428	Guscio fond.	1552	1553	1568	1567	3	2	40.0	0.09	0.06
1429	Guscio fond.	1553	1554	1569	1568	3	2	40.0	0.09	0.06
1430	Guscio fond.	1554	1555	1570	1569	3	2	40.0	0.09	0.06
1431	Guscio fond.	1555	1556	1571	1570	3	2	40.0	0.09	0.06
1432	Guscio fond.	1556	1557	1572	1571	3	2	40.0	0.09	0.06
1433	Guscio fond.	1557	1558	1573	1572	3	2	40.0	0.09	0.06
1434	Guscio fond.	1558	1559	1574	1573	3	2	40.0	0.09	0.06
1435	Guscio fond.	1559	1560	1575	1574	3	2	40.0	0.09	0.06
1436	Guscio fond.	1560	1561	1576	1575	3	2	40.0	0.09	0.06
1437	Guscio fond.	1561	1562	1577	1576	3	2	40.0	0.09	0.06
1438	Guscio fond.	1562	1563	1578	1577	3	2	40.0	0.09	0.06
1439	Guscio fond.	1563	1564	1579	1578	3	2	40.0	0.09	0.06
1440	Guscio fond.	1564	1565	1580	1579	3	2	40.0	0.09	0.06
1441	Guscio fond.	1109	1566	1581	1125	3	2	40.0	0.09	0.06
1442	Guscio fond.	1566	1567	1582	1581	3	2	40.0	0.09	0.06
1443	Guscio fond.	1567	1568	1583	1582	3	2	40.0	0.09	0.06
1444	Guscio fond.	1568	1569	1584	1583	3	2	40.0	0.09	0.06
1445	Guscio fond.	1569	1570	1585	1584	3	2	40.0	0.09	0.06
1446	Guscio fond.	1570	1571	1586	1585	3	2	40.0	0.09	0.06
1447	Guscio fond.	1571	1572	1587	1586	3	2	40.0	0.09	0.06
1448	Guscio fond.	1572	1573	1588	1587	3	2	40.0	0.09	0.06
1449	Guscio fond.	1573	1574	1589	1588	3	2	40.0	0.09	0.06
1450	Guscio fond.	1574	1575	1590	1589	3	2	40.0	0.09	0.06
1451	Guscio fond.	1575	1576	1591	1590	3	2	40.0	0.09	0.06
1452	Guscio fond.	1576	1577	1592	1591	3	2	40.0	0.09	0.06
1453	Guscio fond.	1577	1578	1593	1592	3	2	40.0	0.09	0.06
1454	Guscio fond.	1578	1579	1594	1593	3	2	40.0	0.09	0.06
1455	Guscio fond.	1579	1580	1595	1594	3	2	40.0	0.09	0.06
1456	Guscio fond.	1125	1581	1596	1141	3	2	40.0	0.09	0.06
1457	Guscio fond.	1581	1582	1597	1596	3	2	40.0	0.09	0.06
1458	Guscio fond.	1582	1583	1598	1597	3	2	40.0	0.09	0.06
1459	Guscio fond.	1583	1584	1599	1598	3	2	40.0	0.09	0.06

1460	Guscio fond.	1584	1585	1600	1599	3	2	40.0	0.09	0.06
1461	Guscio fond.	1585	1586	1601	1600	3	2	40.0	0.09	0.06
1462	Guscio fond.	1586	1587	1602	1601	3	2	40.0	0.09	0.06
1463	Guscio fond.	1587	1588	1603	1602	3	2	40.0	0.09	0.06
1464	Guscio fond.	1588	1589	1604	1603	3	2	40.0	0.09	0.06
1465	Guscio fond.	1589	1590	1605	1604	3	2	40.0	0.09	0.06
1466	Guscio fond.	1590	1591	1606	1605	3	2	40.0	0.09	0.06
1467	Guscio fond.	1591	1592	1607	1606	3	2	40.0	0.09	0.06
1468	Guscio fond.	1592	1593	1608	1607	3	2	40.0	0.09	0.06
1469	Guscio fond.	1593	1594	1609	1608	3	2	40.0	0.09	0.06
1470	Guscio fond.	1594	1595	1610	1609	3	2	40.0	0.09	0.06
1471	Guscio fond.	1141	1596	1611	1157	3	2	40.0	0.09	0.06
1472	Guscio fond.	1596	1597	1612	1611	3	2	40.0	0.09	0.06
1473	Guscio fond.	1597	1598	1613	1612	3	2	40.0	0.09	0.06
1474	Guscio fond.	1598	1599	1614	1613	3	2	40.0	0.09	0.06
1475	Guscio fond.	1599	1600	1615	1614	3	2	40.0	0.09	0.06
1476	Guscio fond.	1600	1601	1616	1615	3	2	40.0	0.09	0.06
1477	Guscio fond.	1601	1602	1617	1616	3	2	40.0	0.09	0.06
1478	Guscio fond.	1602	1603	1618	1617	3	2	40.0	0.09	0.06
1479	Guscio fond.	1603	1604	1619	1618	3	2	40.0	0.09	0.06
1480	Guscio fond.	1604	1605	1620	1619	3	2	40.0	0.09	0.06
1481	Guscio fond.	1605	1606	1621	1620	3	2	40.0	0.09	0.06
1482	Guscio fond.	1606	1607	1622	1621	3	2	40.0	0.09	0.06
1483	Guscio fond.	1607	1608	1623	1622	3	2	40.0	0.09	0.06
1484	Guscio fond.	1608	1609	1624	1623	3	2	40.0	0.09	0.06
1485	Guscio fond.	1609	1610	1625	1624	3	2	40.0	0.09	0.06
1486	Guscio fond.	1157	1611	1626	1173	3	2	40.0	0.09	0.06
1487	Guscio fond.	1611	1612	1627	1626	3	2	40.0	0.09	0.06
1488	Guscio fond.	1612	1613	1628	1627	3	2	40.0	0.09	0.06
1489	Guscio fond.	1613	1614	1629	1628	3	2	40.0	0.09	0.06
1490	Guscio fond.	1614	1615	1630	1629	3	2	40.0	0.09	0.06
1491	Guscio fond.	1615	1616	1631	1630	3	2	40.0	0.09	0.06
1492	Guscio fond.	1616	1617	1632	1631	3	2	40.0	0.09	0.06
1493	Guscio fond.	1617	1618	1633	1632	3	2	40.0	0.09	0.06
1494	Guscio fond.	1618	1619	1634	1633	3	2	40.0	0.09	0.06
1495	Guscio fond.	1619	1620	1635	1634	3	2	40.0	0.09	0.06
1496	Guscio fond.	1620	1621	1636	1635	3	2	40.0	0.09	0.06
1497	Guscio fond.	1621	1622	1637	1636	3	2	40.0	0.09	0.06
1498	Guscio fond.	1622	1623	1638	1637	3	2	40.0	0.09	0.06
1499	Guscio fond.	1623	1624	1639	1638	3	2	40.0	0.09	0.06
1500	Guscio fond.	1624	1625	1640	1639	3	2	40.0	0.09	0.06
1501	Guscio fond.	1173	1626	1641	1189	3	2	40.0	0.09	0.06
1502	Guscio fond.	1626	1627	1642	1641	3	2	40.0	0.09	0.06
1503	Guscio fond.	1627	1628	1643	1642	3	2	40.0	0.09	0.06
1504	Guscio fond.	1628	1629	1644	1643	3	2	40.0	0.09	0.06
1505	Guscio fond.	1629	1630	1645	1644	3	2	40.0	0.09	0.06
1506	Guscio fond.	1630	1631	1646	1645	3	2	40.0	0.09	0.06
1507	Guscio fond.	1631	1632	1647	1646	3	2	40.0	0.09	0.06
1508	Guscio fond.	1632	1633	1648	1647	3	2	40.0	0.09	0.06
1509	Guscio fond.	1633	1634	1649	1648	3	2	40.0	0.09	0.06
1510	Guscio fond.	1634	1635	1650	1649	3	2	40.0	0.09	0.06
1511	Guscio fond.	1635	1636	1651	1650	3	2	40.0	0.09	0.06
1512	Guscio fond.	1636	1637	1652	1651	3	2	40.0	0.09	0.06
1513	Guscio fond.	1637	1638	1653	1652	3	2	40.0	0.09	0.06
1514	Guscio fond.	1638	1639	1654	1653	3	2	40.0	0.09	0.06
1515	Guscio fond.	1639	1640	1655	1654	3	2	40.0	0.09	0.06
1516	Guscio fond.	1189	1641	1656	1205	3	2	40.0	0.09	0.06
1517	Guscio fond.	1641	1642	1657	1656	3	2	40.0	0.09	0.06
1518	Guscio fond.	1642	1643	1658	1657	3	2	40.0	0.09	0.06
1519	Guscio fond.	1643	1644	1659	1658	3	2	40.0	0.09	0.06
1520	Guscio fond.	1644	1645	1660	1659	3	2	40.0	0.09	0.06
1521	Guscio fond.	1645	1646	1661	1660	3	2	40.0	0.09	0.06
1522	Guscio fond.	1646	1647	1662	1661	3	2	40.0	0.09	0.06
1523	Guscio fond.	1647	1648	1663	1662	3	2	40.0	0.09	0.06
1524	Guscio fond.	1648	1649	1664	1663	3	2	40.0	0.09	0.06
1525	Guscio fond.	1649	1650	1665	1664	3	2	40.0	0.09	0.06
1526	Guscio fond.	1650	1651	1666	1665	3	2	40.0	0.09	0.06
1527	Guscio fond.	1651	1652	1667	1666	3	2	40.0	0.09	0.06
1528	Guscio fond.	1652	1653	1668	1667	3	2	40.0	0.09	0.06
1529	Guscio fond.	1653	1654	1669	1668	3	2	40.0	0.09	0.06
1530	Guscio fond.	1654	1655	1670	1669	3	2	40.0	0.09	0.06
1531	Guscio fond.	1205	1656	1671	1221	3	2	40.0	0.09	0.06
1532	Guscio fond.	1656	1657	1672	1671	3	2	40.0	0.09	0.06
1533	Guscio fond.	1657	1658	1673	1672	3	2	40.0	0.09	0.06
1534	Guscio fond.	1658	1659	1674	1673	3	2	40.0	0.09	0.06
1535	Guscio fond.	1659	1660	1675	1674	3	2	40.0	0.09	0.06
1536	Guscio fond.	1660	1661	1676	1675	3	2	40.0	0.09	0.06

1537	Guscio fond.	1661	1662	1677	1676	3	2	40.0	0.09	0.06
1538	Guscio fond.	1662	1663	1678	1677	3	2	40.0	0.09	0.06
1539	Guscio fond.	1663	1664	1679	1678	3	2	40.0	0.09	0.06
1540	Guscio fond.	1664	1665	1680	1679	3	2	40.0	0.09	0.06
1541	Guscio fond.	1665	1666	1681	1680	3	2	40.0	0.09	0.06
1542	Guscio fond.	1666	1667	1682	1681	3	2	40.0	0.09	0.06
1543	Guscio fond.	1667	1668	1683	1682	3	2	40.0	0.09	0.06
1544	Guscio fond.	1668	1669	1684	1683	3	2	40.0	0.09	0.06
1545	Guscio fond.	1669	1670	1685	1684	3	2	40.0	0.09	0.06
1546	Guscio fond.	1221	1671	1686	1237	3	2	40.0	0.09	0.06
1547	Guscio fond.	1671	1672	1687	1686	3	2	40.0	0.09	0.06
1548	Guscio fond.	1672	1673	1688	1687	3	2	40.0	0.09	0.06
1549	Guscio fond.	1673	1674	1689	1688	3	2	40.0	0.09	0.06
1550	Guscio fond.	1674	1675	1690	1689	3	2	40.0	0.09	0.06
1551	Guscio fond.	1675	1676	1691	1690	3	2	40.0	0.09	0.06
1552	Guscio fond.	1676	1677	1692	1691	3	2	40.0	0.09	0.06
1553	Guscio fond.	1677	1678	1693	1692	3	2	40.0	0.09	0.06
1554	Guscio fond.	1678	1679	1694	1693	3	2	40.0	0.09	0.06
1555	Guscio fond.	1679	1680	1695	1694	3	2	40.0	0.09	0.06
1556	Guscio fond.	1680	1681	1696	1695	3	2	40.0	0.09	0.06
1557	Guscio fond.	1681	1682	1697	1696	3	2	40.0	0.09	0.06
1558	Guscio fond.	1682	1683	1698	1697	3	2	40.0	0.09	0.06
1559	Guscio fond.	1683	1684	1699	1698	3	2	40.0	0.09	0.06
1560	Guscio fond.	1684	1685	1700	1699	3	2	40.0	0.09	0.06
1561	Guscio fond.	1237	1686	1701	38	3	2	40.0	0.09	0.06
1562	Guscio fond.	1686	1687	1702	1701	3	2	40.0	0.09	0.06
1563	Guscio fond.	1687	1688	1703	1702	3	2	40.0	0.09	0.06
1564	Guscio fond.	1688	1689	1704	1703	3	2	40.0	0.09	0.06
1565	Guscio fond.	1689	1690	1705	1704	3	2	40.0	0.09	0.06
1566	Guscio fond.	1690	1691	1706	1705	3	2	40.0	0.09	0.06
1567	Guscio fond.	1691	1692	1707	1706	3	2	40.0	0.09	0.06
1568	Guscio fond.	1692	1693	1708	1707	3	2	40.0	0.09	0.06
1569	Guscio fond.	1693	1694	1709	1708	3	2	40.0	0.09	0.06
1570	Guscio fond.	1694	1695	1710	1709	3	2	40.0	0.09	0.06
1571	Guscio fond.	1695	1696	1711	1710	3	2	40.0	0.09	0.06
1572	Guscio fond.	1696	1697	1712	1711	3	2	40.0	0.09	0.06
1573	Guscio fond.	1697	1698	1713	1712	3	2	40.0	0.09	0.06
1574	Guscio fond.	1698	1699	1714	1713	3	2	40.0	0.09	0.06
1575	Guscio fond.	1699	1700	39	1714	3	2	40.0	0.09	0.06
1576	Guscio fond.	20	1715	1716	551	3	2	40.0	0.09	0.06
1577	Guscio fond.	1715	1717	1718	1716	3	2	40.0	0.09	0.06
1578	Guscio fond.	1717	1719	1720	1718	3	2	40.0	0.09	0.06
1579	Guscio fond.	1719	1721	1722	1720	3	2	40.0	0.09	0.06
1580	Guscio fond.	1721	1723	1724	1722	3	2	40.0	0.09	0.06
1581	Guscio fond.	1723	1725	1726	1724	3	2	40.0	0.09	0.06
1582	Guscio fond.	1725	1727	1728	1726	3	2	40.0	0.09	0.06
1583	Guscio fond.	1727	1729	1730	1728	3	2	40.0	0.09	0.06
1584	Guscio fond.	1729	1731	1732	1730	3	2	40.0	0.09	0.06
1585	Guscio fond.	1731	1733	1734	1732	3	2	40.0	0.09	0.06
1586	Guscio fond.	1733	1735	1736	1734	3	2	40.0	0.09	0.06
1587	Guscio fond.	1735	1737	1738	1736	3	2	40.0	0.09	0.06
1588	Guscio fond.	1737	1739	1740	1738	3	2	40.0	0.09	0.06
1589	Guscio fond.	1739	1741	1742	1740	3	2	40.0	0.09	0.06
1590	Guscio fond.	1741	21	1743	1742	3	2	40.0	0.09	0.06
1591	Guscio fond.	551	1716	1744	567	3	2	40.0	0.09	0.06
1592	Guscio fond.	1716	1718	1745	1744	3	2	40.0	0.09	0.06
1593	Guscio fond.	1718	1720	1746	1745	3	2	40.0	0.09	0.06
1594	Guscio fond.	1720	1722	1747	1746	3	2	40.0	0.09	0.06
1595	Guscio fond.	1722	1724	1748	1747	3	2	40.0	0.09	0.06
1596	Guscio fond.	1724	1726	1749	1748	3	2	40.0	0.09	0.06
1597	Guscio fond.	1726	1728	1750	1749	3	2	40.0	0.09	0.06
1598	Guscio fond.	1728	1730	1751	1750	3	2	40.0	0.09	0.06
1599	Guscio fond.	1730	1732	1752	1751	3	2	40.0	0.09	0.06
1600	Guscio fond.	1732	1734	1753	1752	3	2	40.0	0.09	0.06
1601	Guscio fond.	1734	1736	1754	1753	3	2	40.0	0.09	0.06
1602	Guscio fond.	1736	1738	1755	1754	3	2	40.0	0.09	0.06
1603	Guscio fond.	1738	1740	1756	1755	3	2	40.0	0.09	0.06
1604	Guscio fond.	1740	1742	1757	1756	3	2	40.0	0.09	0.06
1605	Guscio fond.	1742	1743	1758	1757	3	2	40.0	0.09	0.06
1606	Guscio fond.	567	1744	1759	583	3	2	40.0	0.09	0.06
1607	Guscio fond.	1744	1745	1760	1759	3	2	40.0	0.09	0.06
1608	Guscio fond.	1745	1746	1761	1760	3	2	40.0	0.09	0.06
1609	Guscio fond.	1746	1747	1762	1761	3	2	40.0	0.09	0.06
1610	Guscio fond.	1747	1748	1763	1762	3	2	40.0	0.09	0.06
1611	Guscio fond.	1748	1749	1764	1763	3	2	40.0	0.09	0.06
1612	Guscio fond.	1749	1750	1765	1764	3	2	40.0	0.09	0.06
1613	Guscio fond.	1750	1751	1766	1765	3	2	40.0	0.09	0.06

1614	Guscio fond.	1751	1752	1767	1766	3	2	40.0	0.09	0.06
1615	Guscio fond.	1752	1753	1768	1767	3	2	40.0	0.09	0.06
1616	Guscio fond.	1753	1754	1769	1768	3	2	40.0	0.09	0.06
1617	Guscio fond.	1754	1755	1770	1769	3	2	40.0	0.09	0.06
1618	Guscio fond.	1755	1756	1771	1770	3	2	40.0	0.09	0.06
1619	Guscio fond.	1756	1757	1772	1771	3	2	40.0	0.09	0.06
1620	Guscio fond.	1757	1758	1773	1772	3	2	40.0	0.09	0.06
1621	Guscio fond.	583	1759	1774	599	3	2	40.0	0.09	0.06
1622	Guscio fond.	1759	1760	1775	1774	3	2	40.0	0.09	0.06
1623	Guscio fond.	1760	1761	1776	1775	3	2	40.0	0.09	0.06
1624	Guscio fond.	1761	1762	1777	1776	3	2	40.0	0.09	0.06
1625	Guscio fond.	1762	1763	1778	1777	3	2	40.0	0.09	0.06
1626	Guscio fond.	1763	1764	1779	1778	3	2	40.0	0.09	0.06
1627	Guscio fond.	1764	1765	1780	1779	3	2	40.0	0.09	0.06
1628	Guscio fond.	1765	1766	1781	1780	3	2	40.0	0.09	0.06
1629	Guscio fond.	1766	1767	1782	1781	3	2	40.0	0.09	0.06
1630	Guscio fond.	1767	1768	1783	1782	3	2	40.0	0.09	0.06
1631	Guscio fond.	1768	1769	1784	1783	3	2	40.0	0.09	0.06
1632	Guscio fond.	1769	1770	1785	1784	3	2	40.0	0.09	0.06
1633	Guscio fond.	1770	1771	1786	1785	3	2	40.0	0.09	0.06
1634	Guscio fond.	1771	1772	1787	1786	3	2	40.0	0.09	0.06
1635	Guscio fond.	1772	1773	1788	1787	3	2	40.0	0.09	0.06
1636	Guscio fond.	599	1774	1789	615	3	2	40.0	0.09	0.06
1637	Guscio fond.	1774	1775	1790	1789	3	2	40.0	0.09	0.06
1638	Guscio fond.	1775	1776	1791	1790	3	2	40.0	0.09	0.06
1639	Guscio fond.	1776	1777	1792	1791	3	2	40.0	0.09	0.06
1640	Guscio fond.	1777	1778	1793	1792	3	2	40.0	0.09	0.06
1641	Guscio fond.	1778	1779	1794	1793	3	2	40.0	0.09	0.06
1642	Guscio fond.	1779	1780	1795	1794	3	2	40.0	0.09	0.06
1643	Guscio fond.	1780	1781	1796	1795	3	2	40.0	0.09	0.06
1644	Guscio fond.	1781	1782	1797	1796	3	2	40.0	0.09	0.06
1645	Guscio fond.	1782	1783	1798	1797	3	2	40.0	0.09	0.06
1646	Guscio fond.	1783	1784	1799	1798	3	2	40.0	0.09	0.06
1647	Guscio fond.	1784	1785	1800	1799	3	2	40.0	0.09	0.06
1648	Guscio fond.	1785	1786	1801	1800	3	2	40.0	0.09	0.06
1649	Guscio fond.	1786	1787	1802	1801	3	2	40.0	0.09	0.06
1650	Guscio fond.	1787	1788	1803	1802	3	2	40.0	0.09	0.06
1651	Guscio fond.	615	1789	1804	631	3	2	40.0	0.09	0.06
1652	Guscio fond.	1789	1790	1805	1804	3	2	40.0	0.09	0.06
1653	Guscio fond.	1790	1791	1806	1805	3	2	40.0	0.09	0.06
1654	Guscio fond.	1791	1792	1807	1806	3	2	40.0	0.09	0.06
1655	Guscio fond.	1792	1793	1808	1807	3	2	40.0	0.09	0.06
1656	Guscio fond.	1793	1794	1809	1808	3	2	40.0	0.09	0.06
1657	Guscio fond.	1794	1795	1810	1809	3	2	40.0	0.09	0.06
1658	Guscio fond.	1795	1796	1811	1810	3	2	40.0	0.09	0.06
1659	Guscio fond.	1796	1797	1812	1811	3	2	40.0	0.09	0.06
1660	Guscio fond.	1797	1798	1813	1812	3	2	40.0	0.09	0.06
1661	Guscio fond.	1798	1799	1814	1813	3	2	40.0	0.09	0.06
1662	Guscio fond.	1799	1800	1815	1814	3	2	40.0	0.09	0.06
1663	Guscio fond.	1800	1801	1816	1815	3	2	40.0	0.09	0.06
1664	Guscio fond.	1801	1802	1817	1816	3	2	40.0	0.09	0.06
1665	Guscio fond.	1802	1803	1818	1817	3	2	40.0	0.09	0.06
1666	Guscio fond.	631	1804	1819	647	3	2	40.0	0.09	0.06
1667	Guscio fond.	1804	1805	1820	1819	3	2	40.0	0.09	0.06
1668	Guscio fond.	1805	1806	1821	1820	3	2	40.0	0.09	0.06
1669	Guscio fond.	1806	1807	1822	1821	3	2	40.0	0.09	0.06
1670	Guscio fond.	1807	1808	1823	1822	3	2	40.0	0.09	0.06
1671	Guscio fond.	1808	1809	1824	1823	3	2	40.0	0.09	0.06
1672	Guscio fond.	1809	1810	1825	1824	3	2	40.0	0.09	0.06
1673	Guscio fond.	1810	1811	1826	1825	3	2	40.0	0.09	0.06
1674	Guscio fond.	1811	1812	1827	1826	3	2	40.0	0.09	0.06
1675	Guscio fond.	1812	1813	1828	1827	3	2	40.0	0.09	0.06
1676	Guscio fond.	1813	1814	1829	1828	3	2	40.0	0.09	0.06
1677	Guscio fond.	1814	1815	1830	1829	3	2	40.0	0.09	0.06
1678	Guscio fond.	1815	1816	1831	1830	3	2	40.0	0.09	0.06
1679	Guscio fond.	1816	1817	1832	1831	3	2	40.0	0.09	0.06
1680	Guscio fond.	1817	1818	1833	1832	3	2	40.0	0.09	0.06
1681	Guscio fond.	647	1819	1834	663	3	2	40.0	0.09	0.06
1682	Guscio fond.	1819	1820	1835	1834	3	2	40.0	0.09	0.06
1683	Guscio fond.	1820	1821	1836	1835	3	2	40.0	0.09	0.06
1684	Guscio fond.	1821	1822	1837	1836	3	2	40.0	0.09	0.06
1685	Guscio fond.	1822	1823	1838	1837	3	2	40.0	0.09	0.06
1686	Guscio fond.	1823	1824	1839	1838	3	2	40.0	0.09	0.06
1687	Guscio fond.	1824	1825	1840	1839	3	2	40.0	0.09	0.06
1688	Guscio fond.	1825	1826	1841	1840	3	2	40.0	0.09	0.06
1689	Guscio fond.	1826	1827	1842	1841	3	2	40.0	0.09	0.06
1690	Guscio fond.	1827	1828	1843	1842	3	2	40.0	0.09	0.06

1691	Guscio fond.	1828	1829	1844	1843	3	2	40.0	0.09	0.06
1692	Guscio fond.	1829	1830	1845	1844	3	2	40.0	0.09	0.06
1693	Guscio fond.	1830	1831	1846	1845	3	2	40.0	0.09	0.06
1694	Guscio fond.	1831	1832	1847	1846	3	2	40.0	0.09	0.06
1695	Guscio fond.	1832	1833	1848	1847	3	2	40.0	0.09	0.06
1696	Guscio fond.	663	1834	1849	679	3	2	40.0	0.09	0.06
1697	Guscio fond.	1834	1835	1850	1849	3	2	40.0	0.09	0.06
1698	Guscio fond.	1835	1836	1851	1850	3	2	40.0	0.09	0.06
1699	Guscio fond.	1836	1837	1852	1851	3	2	40.0	0.09	0.06
1700	Guscio fond.	1837	1838	1853	1852	3	2	40.0	0.09	0.06
1701	Guscio fond.	1838	1839	1854	1853	3	2	40.0	0.09	0.06
1702	Guscio fond.	1839	1840	1855	1854	3	2	40.0	0.09	0.06
1703	Guscio fond.	1840	1841	1856	1855	3	2	40.0	0.09	0.06
1704	Guscio fond.	1841	1842	1857	1856	3	2	40.0	0.09	0.06
1705	Guscio fond.	1842	1843	1858	1857	3	2	40.0	0.09	0.06
1706	Guscio fond.	1843	1844	1859	1858	3	2	40.0	0.09	0.06
1707	Guscio fond.	1844	1845	1860	1859	3	2	40.0	0.09	0.06
1708	Guscio fond.	1845	1846	1861	1860	3	2	40.0	0.09	0.06
1709	Guscio fond.	1846	1847	1862	1861	3	2	40.0	0.09	0.06
1710	Guscio fond.	1847	1848	1863	1862	3	2	40.0	0.09	0.06
1711	Guscio fond.	679	1849	1864	695	3	2	40.0	0.09	0.06
1712	Guscio fond.	1849	1850	1865	1864	3	2	40.0	0.09	0.06
1713	Guscio fond.	1850	1851	1866	1865	3	2	40.0	0.09	0.06
1714	Guscio fond.	1851	1852	1867	1866	3	2	40.0	0.09	0.06
1715	Guscio fond.	1852	1853	1868	1867	3	2	40.0	0.09	0.06
1716	Guscio fond.	1853	1854	1869	1868	3	2	40.0	0.09	0.06
1717	Guscio fond.	1854	1855	1870	1869	3	2	40.0	0.09	0.06
1718	Guscio fond.	1855	1856	1871	1870	3	2	40.0	0.09	0.06
1719	Guscio fond.	1856	1857	1872	1871	3	2	40.0	0.09	0.06
1720	Guscio fond.	1857	1858	1873	1872	3	2	40.0	0.09	0.06
1721	Guscio fond.	1858	1859	1874	1873	3	2	40.0	0.09	0.06
1722	Guscio fond.	1859	1860	1875	1874	3	2	40.0	0.09	0.06
1723	Guscio fond.	1860	1861	1876	1875	3	2	40.0	0.09	0.06
1724	Guscio fond.	1861	1862	1877	1876	3	2	40.0	0.09	0.06
1725	Guscio fond.	1862	1863	1878	1877	3	2	40.0	0.09	0.06
1726	Guscio fond.	695	1864	1879	711	3	3	40.0	0.09	0.06
1727	Guscio fond.	1864	1865	1880	1879	3	3	40.0	0.09	0.06
1728	Guscio fond.	1865	1866	1881	1880	3	3	40.0	0.09	0.06
1729	Guscio fond.	1866	1867	1882	1881	3	2	40.0	0.09	0.06
1730	Guscio fond.	1867	1868	1883	1882	3	2	40.0	0.09	0.06
1731	Guscio fond.	1868	1869	1884	1883	3	2	40.0	0.09	0.06
1732	Guscio fond.	1869	1870	1885	1884	3	2	40.0	0.09	0.06
1733	Guscio fond.	1870	1871	1886	1885	3	2	40.0	0.09	0.06
1734	Guscio fond.	1871	1872	1887	1886	3	2	40.0	0.09	0.06
1735	Guscio fond.	1872	1873	1888	1887	3	2	40.0	0.09	0.06
1736	Guscio fond.	1873	1874	1889	1888	3	2	40.0	0.09	0.06
1737	Guscio fond.	1874	1875	1890	1889	3	2	40.0	0.09	0.06
1738	Guscio fond.	1875	1876	1891	1890	3	2	40.0	0.09	0.06
1739	Guscio fond.	1876	1877	1892	1891	3	2	40.0	0.09	0.06
1740	Guscio fond.	1877	1878	1893	1892	3	2	40.0	0.09	0.06
1741	Guscio fond.	711	1879	1894	727	3	3	40.0	0.09	0.06
1742	Guscio fond.	1879	1880	1895	1894	3	3	40.0	0.09	0.06
1743	Guscio fond.	1880	1881	1896	1895	3	3	40.0	0.09	0.06
1744	Guscio fond.	1881	1882	1897	1896	3	2	40.0	0.09	0.06
1745	Guscio fond.	1882	1883	1898	1897	3	2	40.0	0.09	0.06
1746	Guscio fond.	1883	1884	1899	1898	3	2	40.0	0.09	0.06
1747	Guscio fond.	1884	1885	1900	1899	3	2	40.0	0.09	0.06
1748	Guscio fond.	1885	1886	1901	1900	3	2	40.0	0.09	0.06
1749	Guscio fond.	1886	1887	1902	1901	3	2	40.0	0.09	0.06
1750	Guscio fond.	1887	1888	1903	1902	3	2	40.0	0.09	0.06
1751	Guscio fond.	1888	1889	1904	1903	3	2	40.0	0.09	0.06
1752	Guscio fond.	1889	1890	1905	1904	3	2	40.0	0.09	0.06
1753	Guscio fond.	1890	1891	1906	1905	3	2	40.0	0.09	0.06
1754	Guscio fond.	1891	1892	1907	1906	3	2	40.0	0.09	0.06
1755	Guscio fond.	1892	1893	1908	1907	3	2	40.0	0.09	0.06
1756	Guscio fond.	727	1894	1909	743	3	3	40.0	0.09	0.06
1757	Guscio fond.	1894	1895	1910	1909	3	3	40.0	0.09	0.06
1758	Guscio fond.	1895	1896	1911	1910	3	3	40.0	0.09	0.06
1759	Guscio fond.	1896	1897	1912	1911	3	2	40.0	0.09	0.06
1760	Guscio fond.	1897	1898	1913	1912	3	2	40.0	0.09	0.06
1761	Guscio fond.	1898	1899	1914	1913	3	2	40.0	0.09	0.06
1762	Guscio fond.	1899	1900	1915	1914	3	2	40.0	0.09	0.06
1763	Guscio fond.	1900	1901	1916	1915	3	2	40.0	0.09	0.06
1764	Guscio fond.	1901	1902	1917	1916	3	2	40.0	0.09	0.06
1765	Guscio fond.	1902	1903	1918	1917	3	2	40.0	0.09	0.06
1766	Guscio fond.	1903	1904	1919	1918	3	2	40.0	0.09	0.06
1767	Guscio fond.	1904	1905	1920	1919	3	2	40.0	0.09	0.06

1768	Guscio fond.	1905	1906	1921	1920	3	2	40.0	0.09	0.06
1769	Guscio fond.	1906	1907	1922	1921	3	2	40.0	0.09	0.06
1770	Guscio fond.	1907	1908	1923	1922	3	2	40.0	0.09	0.06
1771	Guscio fond.	743	1909	1924	759	3	3	40.0	0.09	0.06
1772	Guscio fond.	1909	1910	1925	1924	3	3	40.0	0.09	0.06
1773	Guscio fond.	1910	1911	1926	1925	3	3	40.0	0.09	0.06
1774	Guscio fond.	1911	1912	1927	1926	3	2	40.0	0.09	0.06
1775	Guscio fond.	1912	1913	1928	1927	3	2	40.0	0.09	0.06
1776	Guscio fond.	1913	1914	1929	1928	3	2	40.0	0.09	0.06
1777	Guscio fond.	1914	1915	1930	1929	3	2	40.0	0.09	0.06
1778	Guscio fond.	1915	1916	1931	1930	3	2	40.0	0.09	0.06
1779	Guscio fond.	1916	1917	1932	1931	3	2	40.0	0.09	0.06
1780	Guscio fond.	1917	1918	1933	1932	3	2	40.0	0.09	0.06
1781	Guscio fond.	1918	1919	1934	1933	3	2	40.0	0.09	0.06
1782	Guscio fond.	1919	1920	1935	1934	3	2	40.0	0.09	0.06
1783	Guscio fond.	1920	1921	1936	1935	3	2	40.0	0.09	0.06
1784	Guscio fond.	1921	1922	1937	1936	3	2	40.0	0.09	0.06
1785	Guscio fond.	1922	1923	1938	1937	3	2	40.0	0.09	0.06
1786	Guscio fond.	759	1924	1252	29	3	3	40.0	0.09	0.06
1787	Guscio fond.	1924	1925	1254	1252	3	3	40.0	0.09	0.06
1788	Guscio fond.	1925	1926	1256	1254	3	3	40.0	0.09	0.06
1789	Guscio fond.	1926	1927	1258	1256	3	2	40.0	0.09	0.06
1790	Guscio fond.	1927	1928	1260	1258	3	2	40.0	0.09	0.06
1791	Guscio fond.	1928	1929	1262	1260	3	2	40.0	0.09	0.06
1792	Guscio fond.	1929	1930	1264	1262	3	2	40.0	0.09	0.06
1793	Guscio fond.	1930	1931	1266	1264	3	2	40.0	0.09	0.06
1794	Guscio fond.	1931	1932	1268	1266	3	2	40.0	0.09	0.06
1795	Guscio fond.	1932	1933	1270	1268	3	2	40.0	0.09	0.06
1796	Guscio fond.	1933	1934	1272	1270	3	2	40.0	0.09	0.06
1797	Guscio fond.	1934	1935	1274	1272	3	2	40.0	0.09	0.06
1798	Guscio fond.	1935	1936	1276	1274	3	2	40.0	0.09	0.06
1799	Guscio fond.	1936	1937	1278	1276	3	2	40.0	0.09	0.06
1800	Guscio fond.	1937	1938	30	1278	3	2	40.0	0.09	0.06
1801	Guscio fond.	11	1939	1940	313	3	2	40.0	0.09	0.06
1802	Guscio fond.	1939	1941	1942	1940	3	2	40.0	0.09	0.06
1803	Guscio fond.	1941	1943	1944	1942	3	2	40.0	0.09	0.06
1804	Guscio fond.	1943	1945	1946	1944	3	2	40.0	0.09	0.06
1805	Guscio fond.	1945	1947	1948	1946	3	2	40.0	0.09	0.06
1806	Guscio fond.	1947	1949	1950	1948	3	2	40.0	0.09	0.06
1807	Guscio fond.	1949	1951	1952	1950	3	2	40.0	0.09	0.06
1808	Guscio fond.	1951	1953	1954	1952	3	2	40.0	0.09	0.06
1809	Guscio fond.	1953	1955	1956	1954	3	2	40.0	0.09	0.06
1810	Guscio fond.	1955	1957	1958	1956	3	2	40.0	0.09	0.06
1811	Guscio fond.	1957	1959	1960	1958	3	2	40.0	0.09	0.06
1812	Guscio fond.	1959	1961	1962	1960	3	2	40.0	0.09	0.06
1813	Guscio fond.	1961	1963	1964	1962	3	2	40.0	0.09	0.06
1814	Guscio fond.	1963	1965	1966	1964	3	2	40.0	0.09	0.06
1815	Guscio fond.	1965	12	1967	1966	3	2	40.0	0.09	0.06
1816	Guscio fond.	313	1940	1968	329	3	2	40.0	0.09	0.06
1817	Guscio fond.	1940	1942	1969	1968	3	2	40.0	0.09	0.06
1818	Guscio fond.	1942	1944	1970	1969	3	2	40.0	0.09	0.06
1819	Guscio fond.	1944	1946	1971	1970	3	2	40.0	0.09	0.06
1820	Guscio fond.	1946	1948	1972	1971	3	2	40.0	0.09	0.06
1821	Guscio fond.	1948	1950	1973	1972	3	2	40.0	0.09	0.06
1822	Guscio fond.	1950	1952	1974	1973	3	2	40.0	0.09	0.06
1823	Guscio fond.	1952	1954	1975	1974	3	2	40.0	0.09	0.06
1824	Guscio fond.	1954	1956	1976	1975	3	2	40.0	0.09	0.06
1825	Guscio fond.	1956	1958	1977	1976	3	2	40.0	0.09	0.06
1826	Guscio fond.	1958	1960	1978	1977	3	2	40.0	0.09	0.06
1827	Guscio fond.	1960	1962	1979	1978	3	2	40.0	0.09	0.06
1828	Guscio fond.	1962	1964	1980	1979	3	2	40.0	0.09	0.06
1829	Guscio fond.	1964	1966	1981	1980	3	2	40.0	0.09	0.06
1830	Guscio fond.	1966	1967	1982	1981	3	2	40.0	0.09	0.06
1831	Guscio fond.	329	1968	1983	345	3	2	40.0	0.09	0.06
1832	Guscio fond.	1968	1969	1984	1983	3	2	40.0	0.09	0.06
1833	Guscio fond.	1969	1970	1985	1984	3	2	40.0	0.09	0.06
1834	Guscio fond.	1970	1971	1986	1985	3	2	40.0	0.09	0.06
1835	Guscio fond.	1971	1972	1987	1986	3	2	40.0	0.09	0.06
1836	Guscio fond.	1972	1973	1988	1987	3	2	40.0	0.09	0.06
1837	Guscio fond.	1973	1974	1989	1988	3	2	40.0	0.09	0.06
1838	Guscio fond.	1974	1975	1990	1989	3	2	40.0	0.09	0.06
1839	Guscio fond.	1975	1976	1991	1990	3	2	40.0	0.09	0.06
1840	Guscio fond.	1976	1977	1992	1991	3	2	40.0	0.09	0.06
1841	Guscio fond.	1977	1978	1993	1992	3	2	40.0	0.09	0.06
1842	Guscio fond.	1978	1979	1994	1993	3	2	40.0	0.09	0.06
1843	Guscio fond.	1979	1980	1995	1994	3	2	40.0	0.09	0.06
1844	Guscio fond.	1980	1981	1996	1995	3	2	40.0	0.09	0.06

1845	Guscio fond.	1981	1982	1997	1996	3	2	40.0	0.09	0.06
1846	Guscio fond.	345	1983	1998	361	3	2	40.0	0.09	0.06
1847	Guscio fond.	1983	1984	1999	1998	3	2	40.0	0.09	0.06
1848	Guscio fond.	1984	1985	2000	1999	3	2	40.0	0.09	0.06
1849	Guscio fond.	1985	1986	2001	2000	3	2	40.0	0.09	0.06
1850	Guscio fond.	1986	1987	2002	2001	3	2	40.0	0.09	0.06
1851	Guscio fond.	1987	1988	2003	2002	3	2	40.0	0.09	0.06
1852	Guscio fond.	1988	1989	2004	2003	3	2	40.0	0.09	0.06
1853	Guscio fond.	1989	1990	2005	2004	3	2	40.0	0.09	0.06
1854	Guscio fond.	1990	1991	2006	2005	3	2	40.0	0.09	0.06
1855	Guscio fond.	1991	1992	2007	2006	3	2	40.0	0.09	0.06
1856	Guscio fond.	1992	1993	2008	2007	3	2	40.0	0.09	0.06
1857	Guscio fond.	1993	1994	2009	2008	3	2	40.0	0.09	0.06
1858	Guscio fond.	1994	1995	2010	2009	3	2	40.0	0.09	0.06
1859	Guscio fond.	1995	1996	2011	2010	3	2	40.0	0.09	0.06
1860	Guscio fond.	1996	1997	2012	2011	3	2	40.0	0.09	0.06
1861	Guscio fond.	361	1998	2013	377	3	2	40.0	0.09	0.06
1862	Guscio fond.	1998	1999	2014	2013	3	2	40.0	0.09	0.06
1863	Guscio fond.	1999	2000	2015	2014	3	2	40.0	0.09	0.06
1864	Guscio fond.	2000	2001	2016	2015	3	2	40.0	0.09	0.06
1865	Guscio fond.	2001	2002	2017	2016	3	2	40.0	0.09	0.06
1866	Guscio fond.	2002	2003	2018	2017	3	2	40.0	0.09	0.06
1867	Guscio fond.	2003	2004	2019	2018	3	2	40.0	0.09	0.06
1868	Guscio fond.	2004	2005	2020	2019	3	2	40.0	0.09	0.06
1869	Guscio fond.	2005	2006	2021	2020	3	2	40.0	0.09	0.06
1870	Guscio fond.	2006	2007	2022	2021	3	2	40.0	0.09	0.06
1871	Guscio fond.	2007	2008	2023	2022	3	2	40.0	0.09	0.06
1872	Guscio fond.	2008	2009	2024	2023	3	2	40.0	0.09	0.06
1873	Guscio fond.	2009	2010	2025	2024	3	2	40.0	0.09	0.06
1874	Guscio fond.	2010	2011	2026	2025	3	2	40.0	0.09	0.06
1875	Guscio fond.	2011	2012	2027	2026	3	2	40.0	0.09	0.06
1876	Guscio fond.	377	2013	2028	393	3	2	40.0	0.09	0.06
1877	Guscio fond.	2013	2014	2029	2028	3	2	40.0	0.09	0.06
1878	Guscio fond.	2014	2015	2030	2029	3	2	40.0	0.09	0.06
1879	Guscio fond.	2015	2016	2031	2030	3	2	40.0	0.09	0.06
1880	Guscio fond.	2016	2017	2032	2031	3	2	40.0	0.09	0.06
1881	Guscio fond.	2017	2018	2033	2032	3	2	40.0	0.09	0.06
1882	Guscio fond.	2018	2019	2034	2033	3	2	40.0	0.09	0.06
1883	Guscio fond.	2019	2020	2035	2034	3	2	40.0	0.09	0.06
1884	Guscio fond.	2020	2021	2036	2035	3	2	40.0	0.09	0.06
1885	Guscio fond.	2021	2022	2037	2036	3	2	40.0	0.09	0.06
1886	Guscio fond.	2022	2023	2038	2037	3	2	40.0	0.09	0.06
1887	Guscio fond.	2023	2024	2039	2038	3	2	40.0	0.09	0.06
1888	Guscio fond.	2024	2025	2040	2039	3	2	40.0	0.09	0.06
1889	Guscio fond.	2025	2026	2041	2040	3	2	40.0	0.09	0.06
1890	Guscio fond.	2026	2027	2042	2041	3	2	40.0	0.09	0.06
1891	Guscio fond.	393	2028	2043	409	3	2	40.0	0.09	0.06
1892	Guscio fond.	2028	2029	2044	2043	3	2	40.0	0.09	0.06
1893	Guscio fond.	2029	2030	2045	2044	3	2	40.0	0.09	0.06
1894	Guscio fond.	2030	2031	2046	2045	3	2	40.0	0.09	0.06
1895	Guscio fond.	2031	2032	2047	2046	3	2	40.0	0.09	0.06
1896	Guscio fond.	2032	2033	2048	2047	3	2	40.0	0.09	0.06
1897	Guscio fond.	2033	2034	2049	2048	3	2	40.0	0.09	0.06
1898	Guscio fond.	2034	2035	2050	2049	3	2	40.0	0.09	0.06
1899	Guscio fond.	2035	2036	2051	2050	3	2	40.0	0.09	0.06
1900	Guscio fond.	2036	2037	2052	2051	3	2	40.0	0.09	0.06
1901	Guscio fond.	2037	2038	2053	2052	3	2	40.0	0.09	0.06
1902	Guscio fond.	2038	2039	2054	2053	3	2	40.0	0.09	0.06
1903	Guscio fond.	2039	2040	2055	2054	3	2	40.0	0.09	0.06
1904	Guscio fond.	2040	2041	2056	2055	3	2	40.0	0.09	0.06
1905	Guscio fond.	2041	2042	2057	2056	3	2	40.0	0.09	0.06
1906	Guscio fond.	409	2043	2058	425	3	2	40.0	0.09	0.06
1907	Guscio fond.	2043	2044	2059	2058	3	2	40.0	0.09	0.06
1908	Guscio fond.	2044	2045	2060	2059	3	2	40.0	0.09	0.06
1909	Guscio fond.	2045	2046	2061	2060	3	2	40.0	0.09	0.06
1910	Guscio fond.	2046	2047	2062	2061	3	2	40.0	0.09	0.06
1911	Guscio fond.	2047	2048	2063	2062	3	2	40.0	0.09	0.06
1912	Guscio fond.	2048	2049	2064	2063	3	2	40.0	0.09	0.06
1913	Guscio fond.	2049	2050	2065	2064	3	2	40.0	0.09	0.06
1914	Guscio fond.	2050	2051	2066	2065	3	2	40.0	0.09	0.06
1915	Guscio fond.	2051	2052	2067	2066	3	2	40.0	0.09	0.06
1916	Guscio fond.	2052	2053	2068	2067	3	2	40.0	0.09	0.06
1917	Guscio fond.	2053	2054	2069	2068	3	2	40.0	0.09	0.06
1918	Guscio fond.	2054	2055	2070	2069	3	2	40.0	0.09	0.06
1919	Guscio fond.	2055	2056	2071	2070	3	2	40.0	0.09	0.06
1920	Guscio fond.	2056	2057	2072	2071	3	2	40.0	0.09	0.06
1921	Guscio fond.	425	2058	2073	441	3	2	40.0	0.09	0.06

1922	Guscio fond.	2058	2059	2074	2073	3	2	40.0	0.09	0.06
1923	Guscio fond.	2059	2060	2075	2074	3	2	40.0	0.09	0.06
1924	Guscio fond.	2060	2061	2076	2075	3	2	40.0	0.09	0.06
1925	Guscio fond.	2061	2062	2077	2076	3	2	40.0	0.09	0.06
1926	Guscio fond.	2062	2063	2078	2077	3	2	40.0	0.09	0.06
1927	Guscio fond.	2063	2064	2079	2078	3	2	40.0	0.09	0.06
1928	Guscio fond.	2064	2065	2080	2079	3	2	40.0	0.09	0.06
1929	Guscio fond.	2065	2066	2081	2080	3	2	40.0	0.09	0.06
1930	Guscio fond.	2066	2067	2082	2081	3	2	40.0	0.09	0.06
1931	Guscio fond.	2067	2068	2083	2082	3	2	40.0	0.09	0.06
1932	Guscio fond.	2068	2069	2084	2083	3	2	40.0	0.09	0.06
1933	Guscio fond.	2069	2070	2085	2084	3	2	40.0	0.09	0.06
1934	Guscio fond.	2070	2071	2086	2085	3	2	40.0	0.09	0.06
1935	Guscio fond.	2071	2072	2087	2086	3	2	40.0	0.09	0.06
1936	Guscio fond.	441	2073	2088	457	3	2	40.0	0.09	0.06
1937	Guscio fond.	2073	2074	2089	2088	3	2	40.0	0.09	0.06
1938	Guscio fond.	2074	2075	2090	2089	3	2	40.0	0.09	0.06
1939	Guscio fond.	2075	2076	2091	2090	3	2	40.0	0.09	0.06
1940	Guscio fond.	2076	2077	2092	2091	3	2	40.0	0.09	0.06
1941	Guscio fond.	2077	2078	2093	2092	3	2	40.0	0.09	0.06
1942	Guscio fond.	2078	2079	2094	2093	3	2	40.0	0.09	0.06
1943	Guscio fond.	2079	2080	2095	2094	3	2	40.0	0.09	0.06
1944	Guscio fond.	2080	2081	2096	2095	3	2	40.0	0.09	0.06
1945	Guscio fond.	2081	2082	2097	2096	3	2	40.0	0.09	0.06
1946	Guscio fond.	2082	2083	2098	2097	3	2	40.0	0.09	0.06
1947	Guscio fond.	2083	2084	2099	2098	3	2	40.0	0.09	0.06
1948	Guscio fond.	2084	2085	2100	2099	3	2	40.0	0.09	0.06
1949	Guscio fond.	2085	2086	2101	2100	3	2	40.0	0.09	0.06
1950	Guscio fond.	2086	2087	2102	2101	3	2	40.0	0.09	0.06
1951	Guscio fond.	457	2088	2103	473	3	2	40.0	0.09	0.06
1952	Guscio fond.	2088	2089	2104	2103	3	2	40.0	0.09	0.06
1953	Guscio fond.	2089	2090	2105	2104	3	2	40.0	0.09	0.06
1954	Guscio fond.	2090	2091	2106	2105	3	2	40.0	0.09	0.06
1955	Guscio fond.	2091	2092	2107	2106	3	2	40.0	0.09	0.06
1956	Guscio fond.	2092	2093	2108	2107	3	2	40.0	0.09	0.06
1957	Guscio fond.	2093	2094	2109	2108	3	2	40.0	0.09	0.06
1958	Guscio fond.	2094	2095	2110	2109	3	2	40.0	0.09	0.06
1959	Guscio fond.	2095	2096	2111	2110	3	2	40.0	0.09	0.06
1960	Guscio fond.	2096	2097	2112	2111	3	2	40.0	0.09	0.06
1961	Guscio fond.	2097	2098	2113	2112	3	2	40.0	0.09	0.06
1962	Guscio fond.	2098	2099	2114	2113	3	2	40.0	0.09	0.06
1963	Guscio fond.	2099	2100	2115	2114	3	2	40.0	0.09	0.06
1964	Guscio fond.	2100	2101	2116	2115	3	2	40.0	0.09	0.06
1965	Guscio fond.	2101	2102	2117	2116	3	2	40.0	0.09	0.06
1966	Guscio fond.	473	2103	2118	489	3	2	40.0	0.09	0.06
1967	Guscio fond.	2103	2104	2119	2118	3	2	40.0	0.09	0.06
1968	Guscio fond.	2104	2105	2120	2119	3	2	40.0	0.09	0.06
1969	Guscio fond.	2105	2106	2121	2120	3	2	40.0	0.09	0.06
1970	Guscio fond.	2106	2107	2122	2121	3	2	40.0	0.09	0.06
1971	Guscio fond.	2107	2108	2123	2122	3	2	40.0	0.09	0.06
1972	Guscio fond.	2108	2109	2124	2123	3	2	40.0	0.09	0.06
1973	Guscio fond.	2109	2110	2125	2124	3	2	40.0	0.09	0.06
1974	Guscio fond.	2110	2111	2126	2125	3	2	40.0	0.09	0.06
1975	Guscio fond.	2111	2112	2127	2126	3	2	40.0	0.09	0.06
1976	Guscio fond.	2112	2113	2128	2127	3	2	40.0	0.09	0.06
1977	Guscio fond.	2113	2114	2129	2128	3	2	40.0	0.09	0.06
1978	Guscio fond.	2114	2115	2130	2129	3	2	40.0	0.09	0.06
1979	Guscio fond.	2115	2116	2131	2130	3	2	40.0	0.09	0.06
1980	Guscio fond.	2116	2117	2132	2131	3	2	40.0	0.09	0.06
1981	Guscio fond.	489	2118	2133	505	3	2	40.0	0.09	0.06
1982	Guscio fond.	2118	2119	2134	2133	3	2	40.0	0.09	0.06
1983	Guscio fond.	2119	2120	2135	2134	3	2	40.0	0.09	0.06
1984	Guscio fond.	2120	2121	2136	2135	3	2	40.0	0.09	0.06
1985	Guscio fond.	2121	2122	2137	2136	3	2	40.0	0.09	0.06
1986	Guscio fond.	2122	2123	2138	2137	3	2	40.0	0.09	0.06
1987	Guscio fond.	2123	2124	2139	2138	3	2	40.0	0.09	0.06
1988	Guscio fond.	2124	2125	2140	2139	3	2	40.0	0.09	0.06
1989	Guscio fond.	2125	2126	2141	2140	3	2	40.0	0.09	0.06
1990	Guscio fond.	2126	2127	2142	2141	3	2	40.0	0.09	0.06
1991	Guscio fond.	2127	2128	2143	2142	3	2	40.0	0.09	0.06
1992	Guscio fond.	2128	2129	2144	2143	3	2	40.0	0.09	0.06
1993	Guscio fond.	2129	2130	2145	2144	3	2	40.0	0.09	0.06
1994	Guscio fond.	2130	2131	2146	2145	3	2	40.0	0.09	0.06
1995	Guscio fond.	2131	2132	2147	2146	3	2	40.0	0.09	0.06
1996	Guscio fond.	505	2133	2148	521	3	2	40.0	0.09	0.06
1997	Guscio fond.	2133	2134	2149	2148	3	2	40.0	0.09	0.06
1998	Guscio fond.	2134	2135	2150	2149	3	2	40.0	0.09	0.06

1999	Guscio fond.	2135	2136	2151	2150	3	2	40.0	0.09	0.06
2000	Guscio fond.	2136	2137	2152	2151	3	2	40.0	0.09	0.06
2001	Guscio fond.	2137	2138	2153	2152	3	2	40.0	0.09	0.06
2002	Guscio fond.	2138	2139	2154	2153	3	2	40.0	0.09	0.06
2003	Guscio fond.	2139	2140	2155	2154	3	2	40.0	0.09	0.06
2004	Guscio fond.	2140	2141	2156	2155	3	2	40.0	0.09	0.06
2005	Guscio fond.	2141	2142	2157	2156	3	2	40.0	0.09	0.06
2006	Guscio fond.	2142	2143	2158	2157	3	2	40.0	0.09	0.06
2007	Guscio fond.	2143	2144	2159	2158	3	2	40.0	0.09	0.06
2008	Guscio fond.	2144	2145	2160	2159	3	2	40.0	0.09	0.06
2009	Guscio fond.	2145	2146	2161	2160	3	2	40.0	0.09	0.06
2010	Guscio fond.	2146	2147	2162	2161	3	2	40.0	0.09	0.06
2011	Guscio fond.	521	2148	1715	20	3	2	40.0	0.09	0.06
2012	Guscio fond.	2148	2149	1717	1715	3	2	40.0	0.09	0.06
2013	Guscio fond.	2149	2150	1719	1717	3	2	40.0	0.09	0.06
2014	Guscio fond.	2150	2151	1721	1719	3	2	40.0	0.09	0.06
2015	Guscio fond.	2151	2152	1723	1721	3	2	40.0	0.09	0.06
2016	Guscio fond.	2152	2153	1725	1723	3	2	40.0	0.09	0.06
2017	Guscio fond.	2153	2154	1727	1725	3	2	40.0	0.09	0.06
2018	Guscio fond.	2154	2155	1729	1727	3	2	40.0	0.09	0.06
2019	Guscio fond.	2155	2156	1731	1729	3	2	40.0	0.09	0.06
2020	Guscio fond.	2156	2157	1733	1731	3	2	40.0	0.09	0.06
2021	Guscio fond.	2157	2158	1735	1733	3	2	40.0	0.09	0.06
2022	Guscio fond.	2158	2159	1737	1735	3	2	40.0	0.09	0.06
2023	Guscio fond.	2159	2160	1739	1737	3	2	40.0	0.09	0.06
2024	Guscio fond.	2160	2161	1741	1739	3	2	40.0	0.09	0.06
2025	Guscio fond.	2161	2162	21	1741	3	2	40.0	0.09	0.06
2026	Guscio fond.	2	2163	2164	75	3	2	40.0	0.09	0.06
2027	Guscio fond.	2163	2165	2166	2164	3	2	40.0	0.09	0.06
2028	Guscio fond.	2165	2167	2168	2166	3	2	40.0	0.09	0.06
2029	Guscio fond.	2167	2169	2170	2168	3	2	40.0	0.09	0.06
2030	Guscio fond.	2169	2171	2172	2170	3	2	40.0	0.09	0.06
2031	Guscio fond.	2171	2173	2174	2172	3	2	40.0	0.09	0.06
2032	Guscio fond.	2173	2175	2176	2174	3	2	40.0	0.09	0.06
2033	Guscio fond.	2175	2177	2178	2176	3	2	40.0	0.09	0.06
2034	Guscio fond.	2177	2179	2180	2178	3	2	40.0	0.09	0.06
2035	Guscio fond.	2179	2181	2182	2180	3	2	40.0	0.09	0.06
2036	Guscio fond.	2181	2183	2184	2182	3	2	40.0	0.09	0.06
2037	Guscio fond.	2183	2185	2186	2184	3	2	40.0	0.09	0.06
2038	Guscio fond.	2185	2187	2188	2186	3	2	40.0	0.09	0.06
2039	Guscio fond.	2187	2189	2190	2188	3	2	40.0	0.09	0.06
2040	Guscio fond.	2189	3	2191	2190	3	2	40.0	0.09	0.06
2041	Guscio fond.	75	2164	2192	91	3	2	40.0	0.09	0.06
2042	Guscio fond.	2164	2166	2193	2192	3	2	40.0	0.09	0.06
2043	Guscio fond.	2166	2168	2194	2193	3	2	40.0	0.09	0.06
2044	Guscio fond.	2168	2170	2195	2194	3	2	40.0	0.09	0.06
2045	Guscio fond.	2170	2172	2196	2195	3	2	40.0	0.09	0.06
2046	Guscio fond.	2172	2174	2197	2196	3	2	40.0	0.09	0.06
2047	Guscio fond.	2174	2176	2198	2197	3	2	40.0	0.09	0.06
2048	Guscio fond.	2176	2178	2199	2198	3	2	40.0	0.09	0.06
2049	Guscio fond.	2178	2180	2200	2199	3	2	40.0	0.09	0.06
2050	Guscio fond.	2180	2182	2201	2200	3	2	40.0	0.09	0.06
2051	Guscio fond.	2182	2184	2202	2201	3	2	40.0	0.09	0.06
2052	Guscio fond.	2184	2186	2203	2202	3	2	40.0	0.09	0.06
2053	Guscio fond.	2186	2188	2204	2203	3	2	40.0	0.09	0.06
2054	Guscio fond.	2188	2190	2205	2204	3	2	40.0	0.09	0.06
2055	Guscio fond.	2190	2191	2206	2205	3	2	40.0	0.09	0.06
2056	Guscio fond.	91	2192	2207	107	3	2	40.0	0.09	0.06
2057	Guscio fond.	2192	2193	2208	2207	3	2	40.0	0.09	0.06
2058	Guscio fond.	2193	2194	2209	2208	3	2	40.0	0.09	0.06
2059	Guscio fond.	2194	2195	2210	2209	3	2	40.0	0.09	0.06
2060	Guscio fond.	2195	2196	2211	2210	3	2	40.0	0.09	0.06
2061	Guscio fond.	2196	2197	2212	2211	3	2	40.0	0.09	0.06
2062	Guscio fond.	2197	2198	2213	2212	3	2	40.0	0.09	0.06
2063	Guscio fond.	2198	2199	2214	2213	3	2	40.0	0.09	0.06
2064	Guscio fond.	2199	2200	2215	2214	3	2	40.0	0.09	0.06
2065	Guscio fond.	2200	2201	2216	2215	3	2	40.0	0.09	0.06
2066	Guscio fond.	2201	2202	2217	2216	3	2	40.0	0.09	0.06
2067	Guscio fond.	2202	2203	2218	2217	3	2	40.0	0.09	0.06
2068	Guscio fond.	2203	2204	2219	2218	3	2	40.0	0.09	0.06
2069	Guscio fond.	2204	2205	2220	2219	3	2	40.0	0.09	0.06
2070	Guscio fond.	2205	2206	2221	2220	3	2	40.0	0.09	0.06
2071	Guscio fond.	107	2207	2222	123	3	2	40.0	0.09	0.06
2072	Guscio fond.	2207	2208	2223	2222	3	2	40.0	0.09	0.06
2073	Guscio fond.	2208	2209	2224	2223	3	2	40.0	0.09	0.06
2074	Guscio fond.	2209	2210	2225	2224	3	2	40.0	0.09	0.06
2075	Guscio fond.	2210	2211	2226	2225	3	2	40.0	0.09	0.06

2076	Guscio fond.	2211	2212	2227	2226	3	2	40.0	0.09	0.06
2077	Guscio fond.	2212	2213	2228	2227	3	2	40.0	0.09	0.06
2078	Guscio fond.	2213	2214	2229	2228	3	2	40.0	0.09	0.06
2079	Guscio fond.	2214	2215	2230	2229	3	2	40.0	0.09	0.06
2080	Guscio fond.	2215	2216	2231	2230	3	2	40.0	0.09	0.06
2081	Guscio fond.	2216	2217	2232	2231	3	2	40.0	0.09	0.06
2082	Guscio fond.	2217	2218	2233	2232	3	2	40.0	0.09	0.06
2083	Guscio fond.	2218	2219	2234	2233	3	2	40.0	0.09	0.06
2084	Guscio fond.	2219	2220	2235	2234	3	2	40.0	0.09	0.06
2085	Guscio fond.	2220	2221	2236	2235	3	2	40.0	0.09	0.06
2086	Guscio fond.	123	2222	2237	139	3	2	40.0	0.09	0.06
2087	Guscio fond.	2222	2223	2238	2237	3	2	40.0	0.09	0.06
2088	Guscio fond.	2223	2224	2239	2238	3	2	40.0	0.09	0.06
2089	Guscio fond.	2224	2225	2240	2239	3	2	40.0	0.09	0.06
2090	Guscio fond.	2225	2226	2241	2240	3	2	40.0	0.09	0.06
2091	Guscio fond.	2226	2227	2242	2241	3	2	40.0	0.09	0.06
2092	Guscio fond.	2227	2228	2243	2242	3	2	40.0	0.09	0.06
2093	Guscio fond.	2228	2229	2244	2243	3	2	40.0	0.09	0.06
2094	Guscio fond.	2229	2230	2245	2244	3	2	40.0	0.09	0.06
2095	Guscio fond.	2230	2231	2246	2245	3	2	40.0	0.09	0.06
2096	Guscio fond.	2231	2232	2247	2246	3	2	40.0	0.09	0.06
2097	Guscio fond.	2232	2233	2248	2247	3	2	40.0	0.09	0.06
2098	Guscio fond.	2233	2234	2249	2248	3	2	40.0	0.09	0.06
2099	Guscio fond.	2234	2235	2250	2249	3	2	40.0	0.09	0.06
2100	Guscio fond.	2235	2236	2251	2250	3	2	40.0	0.09	0.06
2101	Guscio fond.	139	2237	2252	155	3	2	40.0	0.09	0.06
2102	Guscio fond.	2237	2238	2253	2252	3	2	40.0	0.09	0.06
2103	Guscio fond.	2238	2239	2254	2253	3	2	40.0	0.09	0.06
2104	Guscio fond.	2239	2240	2255	2254	3	2	40.0	0.09	0.06
2105	Guscio fond.	2240	2241	2256	2255	3	2	40.0	0.09	0.06
2106	Guscio fond.	2241	2242	2257	2256	3	2	40.0	0.09	0.06
2107	Guscio fond.	2242	2243	2258	2257	3	2	40.0	0.09	0.06
2108	Guscio fond.	2243	2244	2259	2258	3	2	40.0	0.09	0.06
2109	Guscio fond.	2244	2245	2260	2259	3	2	40.0	0.09	0.06
2110	Guscio fond.	2245	2246	2261	2260	3	2	40.0	0.09	0.06
2111	Guscio fond.	2246	2247	2262	2261	3	2	40.0	0.09	0.06
2112	Guscio fond.	2247	2248	2263	2262	3	2	40.0	0.09	0.06
2113	Guscio fond.	2248	2249	2264	2263	3	2	40.0	0.09	0.06
2114	Guscio fond.	2249	2250	2265	2264	3	2	40.0	0.09	0.06
2115	Guscio fond.	2250	2251	2266	2265	3	2	40.0	0.09	0.06
2116	Guscio fond.	155	2252	2267	171	3	2	40.0	0.09	0.06
2117	Guscio fond.	2252	2253	2268	2267	3	2	40.0	0.09	0.06
2118	Guscio fond.	2253	2254	2269	2268	3	2	40.0	0.09	0.06
2119	Guscio fond.	2254	2255	2270	2269	3	2	40.0	0.09	0.06
2120	Guscio fond.	2255	2256	2271	2270	3	2	40.0	0.09	0.06
2121	Guscio fond.	2256	2257	2272	2271	3	2	40.0	0.09	0.06
2122	Guscio fond.	2257	2258	2273	2272	3	2	40.0	0.09	0.06
2123	Guscio fond.	2258	2259	2274	2273	3	2	40.0	0.09	0.06
2124	Guscio fond.	2259	2260	2275	2274	3	2	40.0	0.09	0.06
2125	Guscio fond.	2260	2261	2276	2275	3	2	40.0	0.09	0.06
2126	Guscio fond.	2261	2262	2277	2276	3	2	40.0	0.09	0.06
2127	Guscio fond.	2262	2263	2278	2277	3	2	40.0	0.09	0.06
2128	Guscio fond.	2263	2264	2279	2278	3	2	40.0	0.09	0.06
2129	Guscio fond.	2264	2265	2280	2279	3	2	40.0	0.09	0.06
2130	Guscio fond.	2265	2266	2281	2280	3	2	40.0	0.09	0.06
2131	Guscio fond.	171	2267	2282	187	3	2	40.0	0.09	0.06
2132	Guscio fond.	2267	2268	2283	2282	3	2	40.0	0.09	0.06
2133	Guscio fond.	2268	2269	2284	2283	3	2	40.0	0.09	0.06
2134	Guscio fond.	2269	2270	2285	2284	3	2	40.0	0.09	0.06
2135	Guscio fond.	2270	2271	2286	2285	3	2	40.0	0.09	0.06
2136	Guscio fond.	2271	2272	2287	2286	3	2	40.0	0.09	0.06
2137	Guscio fond.	2272	2273	2288	2287	3	2	40.0	0.09	0.06
2138	Guscio fond.	2273	2274	2289	2288	3	2	40.0	0.09	0.06
2139	Guscio fond.	2274	2275	2290	2289	3	2	40.0	0.09	0.06
2140	Guscio fond.	2275	2276	2291	2290	3	2	40.0	0.09	0.06
2141	Guscio fond.	2276	2277	2292	2291	3	2	40.0	0.09	0.06
2142	Guscio fond.	2277	2278	2293	2292	3	2	40.0	0.09	0.06
2143	Guscio fond.	2278	2279	2294	2293	3	2	40.0	0.09	0.06
2144	Guscio fond.	2279	2280	2295	2294	3	2	40.0	0.09	0.06
2145	Guscio fond.	2280	2281	2296	2295	3	2	40.0	0.09	0.06
2146	Guscio fond.	187	2282	2297	203	3	2	40.0	0.09	0.06
2147	Guscio fond.	2282	2283	2298	2297	3	2	40.0	0.09	0.06
2148	Guscio fond.	2283	2284	2299	2298	3	2	40.0	0.09	0.06
2149	Guscio fond.	2284	2285	2300	2299	3	2	40.0	0.09	0.06
2150	Guscio fond.	2285	2286	2301	2300	3	2	40.0	0.09	0.06
2151	Guscio fond.	2286	2287	2302	2301	3	2	40.0	0.09	0.06
2152	Guscio fond.	2287	2288	2303	2302	3	2	40.0	0.09	0.06

2153	Guscio fond.	2288	2289	2304	2303	3	2	40.0	0.09	0.06
2154	Guscio fond.	2289	2290	2305	2304	3	2	40.0	0.09	0.06
2155	Guscio fond.	2290	2291	2306	2305	3	2	40.0	0.09	0.06
2156	Guscio fond.	2291	2292	2307	2306	3	2	40.0	0.09	0.06
2157	Guscio fond.	2292	2293	2308	2307	3	2	40.0	0.09	0.06
2158	Guscio fond.	2293	2294	2309	2308	3	2	40.0	0.09	0.06
2159	Guscio fond.	2294	2295	2310	2309	3	2	40.0	0.09	0.06
2160	Guscio fond.	2295	2296	2311	2310	3	2	40.0	0.09	0.06
2161	Guscio fond.	203	2297	2312	219	3	2	40.0	0.09	0.06
2162	Guscio fond.	2297	2298	2313	2312	3	2	40.0	0.09	0.06
2163	Guscio fond.	2298	2299	2314	2313	3	2	40.0	0.09	0.06
2164	Guscio fond.	2299	2300	2315	2314	3	2	40.0	0.09	0.06
2165	Guscio fond.	2300	2301	2316	2315	3	2	40.0	0.09	0.06
2166	Guscio fond.	2301	2302	2317	2316	3	2	40.0	0.09	0.06
2167	Guscio fond.	2302	2303	2318	2317	3	2	40.0	0.09	0.06
2168	Guscio fond.	2303	2304	2319	2318	3	2	40.0	0.09	0.06
2169	Guscio fond.	2304	2305	2320	2319	3	2	40.0	0.09	0.06
2170	Guscio fond.	2305	2306	2321	2320	3	2	40.0	0.09	0.06
2171	Guscio fond.	2306	2307	2322	2321	3	2	40.0	0.09	0.06
2172	Guscio fond.	2307	2308	2323	2322	3	2	40.0	0.09	0.06
2173	Guscio fond.	2308	2309	2324	2323	3	2	40.0	0.09	0.06
2174	Guscio fond.	2309	2310	2325	2324	3	2	40.0	0.09	0.06
2175	Guscio fond.	2310	2311	2326	2325	3	2	40.0	0.09	0.06
2176	Guscio fond.	219	2312	2327	235	3	2	40.0	0.09	0.06
2177	Guscio fond.	2312	2313	2328	2327	3	2	40.0	0.09	0.06
2178	Guscio fond.	2313	2314	2329	2328	3	2	40.0	0.09	0.06
2179	Guscio fond.	2314	2315	2330	2329	3	2	40.0	0.09	0.06
2180	Guscio fond.	2315	2316	2331	2330	3	2	40.0	0.09	0.06
2181	Guscio fond.	2316	2317	2332	2331	3	2	40.0	0.09	0.06
2182	Guscio fond.	2317	2318	2333	2332	3	2	40.0	0.09	0.06
2183	Guscio fond.	2318	2319	2334	2333	3	2	40.0	0.09	0.06
2184	Guscio fond.	2319	2320	2335	2334	3	2	40.0	0.09	0.06
2185	Guscio fond.	2320	2321	2336	2335	3	2	40.0	0.09	0.06
2186	Guscio fond.	2321	2322	2337	2336	3	2	40.0	0.09	0.06
2187	Guscio fond.	2322	2323	2338	2337	3	2	40.0	0.09	0.06
2188	Guscio fond.	2323	2324	2339	2338	3	2	40.0	0.09	0.06
2189	Guscio fond.	2324	2325	2340	2339	3	2	40.0	0.09	0.06
2190	Guscio fond.	2325	2326	2341	2340	3	2	40.0	0.09	0.06
2191	Guscio fond.	235	2327	2342	251	3	2	40.0	0.09	0.06
2192	Guscio fond.	2327	2328	2343	2342	3	2	40.0	0.09	0.06
2193	Guscio fond.	2328	2329	2344	2343	3	2	40.0	0.09	0.06
2194	Guscio fond.	2329	2330	2345	2344	3	2	40.0	0.09	0.06
2195	Guscio fond.	2330	2331	2346	2345	3	2	40.0	0.09	0.06
2196	Guscio fond.	2331	2332	2347	2346	3	2	40.0	0.09	0.06
2197	Guscio fond.	2332	2333	2348	2347	3	2	40.0	0.09	0.06
2198	Guscio fond.	2333	2334	2349	2348	3	2	40.0	0.09	0.06
2199	Guscio fond.	2334	2335	2350	2349	3	2	40.0	0.09	0.06
2200	Guscio fond.	2335	2336	2351	2350	3	2	40.0	0.09	0.06
2201	Guscio fond.	2336	2337	2352	2351	3	2	40.0	0.09	0.06
2202	Guscio fond.	2337	2338	2353	2352	3	2	40.0	0.09	0.06
2203	Guscio fond.	2338	2339	2354	2353	3	2	40.0	0.09	0.06
2204	Guscio fond.	2339	2340	2355	2354	3	2	40.0	0.09	0.06
2205	Guscio fond.	2340	2341	2356	2355	3	2	40.0	0.09	0.06
2206	Guscio fond.	251	2342	2357	267	3	2	40.0	0.09	0.06
2207	Guscio fond.	2342	2343	2358	2357	3	2	40.0	0.09	0.06
2208	Guscio fond.	2343	2344	2359	2358	3	2	40.0	0.09	0.06
2209	Guscio fond.	2344	2345	2360	2359	3	2	40.0	0.09	0.06
2210	Guscio fond.	2345	2346	2361	2360	3	2	40.0	0.09	0.06
2211	Guscio fond.	2346	2347	2362	2361	3	2	40.0	0.09	0.06
2212	Guscio fond.	2347	2348	2363	2362	3	2	40.0	0.09	0.06
2213	Guscio fond.	2348	2349	2364	2363	3	2	40.0	0.09	0.06
2214	Guscio fond.	2349	2350	2365	2364	3	2	40.0	0.09	0.06
2215	Guscio fond.	2350	2351	2366	2365	3	2	40.0	0.09	0.06
2216	Guscio fond.	2351	2352	2367	2366	3	2	40.0	0.09	0.06
2217	Guscio fond.	2352	2353	2368	2367	3	2	40.0	0.09	0.06
2218	Guscio fond.	2353	2354	2369	2368	3	2	40.0	0.09	0.06
2219	Guscio fond.	2354	2355	2370	2369	3	2	40.0	0.09	0.06
2220	Guscio fond.	2355	2356	2371	2370	3	2	40.0	0.09	0.06
2221	Guscio fond.	267	2357	2372	283	3	2	40.0	0.09	0.06
2222	Guscio fond.	2357	2358	2373	2372	3	2	40.0	0.09	0.06
2223	Guscio fond.	2358	2359	2374	2373	3	2	40.0	0.09	0.06
2224	Guscio fond.	2359	2360	2375	2374	3	2	40.0	0.09	0.06
2225	Guscio fond.	2360	2361	2376	2375	3	2	40.0	0.09	0.06
2226	Guscio fond.	2361	2362	2377	2376	3	2	40.0	0.09	0.06
2227	Guscio fond.	2362	2363	2378	2377	3	2	40.0	0.09	0.06
2228	Guscio fond.	2363	2364	2379	2378	3	2	40.0	0.09	0.06
2229	Guscio fond.	2364	2365	2380	2379	3	2	40.0	0.09	0.06

2230	Guscio fond.	2365	2366	2381	2380	3	2	40.0	0.09	0.06
2231	Guscio fond.	2366	2367	2382	2381	3	2	40.0	0.09	0.06
2232	Guscio fond.	2367	2368	2383	2382	3	2	40.0	0.09	0.06
2233	Guscio fond.	2368	2369	2384	2383	3	2	40.0	0.09	0.06
2234	Guscio fond.	2369	2370	2385	2384	3	2	40.0	0.09	0.06
2235	Guscio fond.	2370	2371	2386	2385	3	2	40.0	0.09	0.06
2236	Guscio fond.	283	2372	1939	11	3	2	40.0	0.09	0.06
2237	Guscio fond.	2372	2373	1941	1939	3	2	40.0	0.09	0.06
2238	Guscio fond.	2373	2374	1943	1941	3	2	40.0	0.09	0.06
2239	Guscio fond.	2374	2375	1945	1943	3	2	40.0	0.09	0.06
2240	Guscio fond.	2375	2376	1947	1945	3	2	40.0	0.09	0.06
2241	Guscio fond.	2376	2377	1949	1947	3	2	40.0	0.09	0.06
2242	Guscio fond.	2377	2378	1951	1949	3	2	40.0	0.09	0.06
2243	Guscio fond.	2378	2379	1953	1951	3	2	40.0	0.09	0.06
2244	Guscio fond.	2379	2380	1955	1953	3	2	40.0	0.09	0.06
2245	Guscio fond.	2380	2381	1957	1955	3	2	40.0	0.09	0.06
2246	Guscio fond.	2381	2382	1959	1957	3	2	40.0	0.09	0.06
2247	Guscio fond.	2382	2383	1961	1959	3	2	40.0	0.09	0.06
2248	Guscio fond.	2383	2384	1963	1961	3	2	40.0	0.09	0.06
2249	Guscio fond.	2384	2385	1965	1963	3	2	40.0	0.09	0.06
2250	Guscio fond.	2385	2386	12	1965	3	2	40.0	0.09	0.06
2251	Guscio fond.	2387	2390	46	1	3	2	40.0	0.09	0.06
2252	Guscio fond.	2390	2391	49	46	3	2	40.0	0.09	0.06
2253	Guscio fond.	2391	2392	51	49	3	2	40.0	0.09	0.06
2254	Guscio fond.	2392	2393	53	51	3	2	40.0	0.09	0.06
2255	Guscio fond.	2393	2394	55	53	3	2	40.0	0.09	0.06
2256	Guscio fond.	2394	2395	57	55	3	2	40.0	0.09	0.06
2257	Guscio fond.	2395	2396	59	57	3	2	40.0	0.09	0.06
2258	Guscio fond.	2396	2397	61	59	3	2	40.0	0.09	0.06
2259	Guscio fond.	2397	2398	63	61	3	2	40.0	0.09	0.06
2260	Guscio fond.	2398	2399	65	63	3	2	40.0	0.09	0.06
2261	Guscio fond.	2399	2400	67	65	3	2	40.0	0.09	0.06
2262	Guscio fond.	2400	2401	69	67	3	2	40.0	0.09	0.06
2263	Guscio fond.	2401	2402	71	69	3	2	40.0	0.09	0.06
2264	Guscio fond.	2402	2403	73	71	3	2	40.0	0.09	0.06
2265	Guscio fond.	2403	2388	2	73	3	2	40.0	0.09	0.06
2266	Guscio fond.	2388	2404	2163	2	3	2	40.0	0.09	0.06
2267	Guscio fond.	2404	2405	2165	2163	3	2	40.0	0.09	0.06
2268	Guscio fond.	2405	2406	2167	2165	3	2	40.0	0.09	0.06
2269	Guscio fond.	2406	2407	2169	2167	3	2	40.0	0.09	0.06
2270	Guscio fond.	2407	2408	2171	2169	3	2	40.0	0.09	0.06
2271	Guscio fond.	2408	2409	2173	2171	3	2	40.0	0.09	0.06
2272	Guscio fond.	2409	2410	2175	2173	3	2	40.0	0.09	0.06
2273	Guscio fond.	2410	2411	2177	2175	3	2	40.0	0.09	0.06
2274	Guscio fond.	2411	2412	2179	2177	3	2	40.0	0.09	0.06
2275	Guscio fond.	2412	2413	2181	2179	3	2	40.0	0.09	0.06
2276	Guscio fond.	2413	2414	2183	2181	3	2	40.0	0.09	0.06
2277	Guscio fond.	2414	2415	2185	2183	3	2	40.0	0.09	0.06
2278	Guscio fond.	2415	2416	2187	2185	3	2	40.0	0.09	0.06
2279	Guscio fond.	2416	2417	2189	2187	3	2	40.0	0.09	0.06
2280	Guscio fond.	2417	2389	3	2189	3	2	40.0	0.09	0.06
2281	Guscio fond.	2418	2421	2390	2387	3	2	40.0	0.09	0.06
2282	Guscio fond.	2421	2422	2391	2390	3	2	40.0	0.09	0.06
2283	Guscio fond.	2422	2423	2392	2391	3	2	40.0	0.09	0.06
2284	Guscio fond.	2423	2424	2393	2392	3	2	40.0	0.09	0.06
2285	Guscio fond.	2424	2425	2394	2393	3	2	40.0	0.09	0.06
2286	Guscio fond.	2425	2426	2395	2394	3	2	40.0	0.09	0.06
2287	Guscio fond.	2426	2427	2396	2395	3	2	40.0	0.09	0.06
2288	Guscio fond.	2427	2428	2397	2396	3	2	40.0	0.09	0.06
2289	Guscio fond.	2428	2429	2398	2397	3	2	40.0	0.09	0.06
2290	Guscio fond.	2429	2430	2399	2398	3	2	40.0	0.09	0.06
2291	Guscio fond.	2430	2431	2400	2399	3	2	40.0	0.09	0.06
2292	Guscio fond.	2431	2432	2401	2400	3	2	40.0	0.09	0.06
2293	Guscio fond.	2432	2433	2402	2401	3	2	40.0	0.09	0.06
2294	Guscio fond.	2433	2434	2403	2402	3	2	40.0	0.09	0.06
2295	Guscio fond.	2434	2419	2388	2403	3	2	40.0	0.09	0.06
2296	Guscio fond.	2419	2435	2404	2388	3	2	40.0	0.09	0.06
2297	Guscio fond.	2435	2436	2405	2404	3	2	40.0	0.09	0.06
2298	Guscio fond.	2436	2437	2406	2405	3	2	40.0	0.09	0.06
2299	Guscio fond.	2437	2438	2407	2406	3	2	40.0	0.09	0.06
2300	Guscio fond.	2438	2439	2408	2407	3	2	40.0	0.09	0.06
2301	Guscio fond.	2439	2440	2409	2408	3	2	40.0	0.09	0.06
2302	Guscio fond.	2440	2441	2410	2409	3	2	40.0	0.09	0.06
2303	Guscio fond.	2441	2442	2411	2410	3	2	40.0	0.09	0.06
2304	Guscio fond.	2442	2443	2412	2411	3	2	40.0	0.09	0.06
2305	Guscio fond.	2443	2444	2413	2412	3	2	40.0	0.09	0.06
2306	Guscio fond.	2444	2445	2414	2413	3	2	40.0	0.09	0.06

2307Guscio fond.	2445	2446	2415	2414	3	2	40.0	0.09	0.06
2308Guscio fond.	2446	2447	2416	2415	3	2	40.0	0.09	0.06
2309Guscio fond.	2447	2448	2417	2416	3	2	40.0	0.09	0.06
2310Guscio fond.	2448	2420	2389	2417	3	2	40.0	0.09	0.06
2311Guscio fond.	2449	2452	2421	2418	3	2	40.0	0.09	0.06
2312Guscio fond.	2452	2453	2422	2421	3	2	40.0	0.09	0.06
2313Guscio fond.	2453	2454	2423	2422	3	2	40.0	0.09	0.06
2314Guscio fond.	2454	2455	2424	2423	3	2	40.0	0.09	0.06
2315Guscio fond.	2455	2456	2425	2424	3	2	40.0	0.09	0.06
2316Guscio fond.	2456	2457	2426	2425	3	2	40.0	0.09	0.06
2317Guscio fond.	2457	2458	2427	2426	3	2	40.0	0.09	0.06
2318Guscio fond.	2458	2459	2428	2427	3	2	40.0	0.09	0.06
2319Guscio fond.	2459	2460	2429	2428	3	2	40.0	0.09	0.06
2320Guscio fond.	2460	2461	2430	2429	3	2	40.0	0.09	0.06
2321Guscio fond.	2461	2462	2431	2430	3	2	40.0	0.09	0.06
2322Guscio fond.	2462	2463	2432	2431	3	2	40.0	0.09	0.06
2323Guscio fond.	2463	2464	2433	2432	3	2	40.0	0.09	0.06
2324Guscio fond.	2464	2465	2434	2433	3	2	40.0	0.09	0.06
2325Guscio fond.	2465	2450	2419	2434	3	2	40.0	0.09	0.06
2326Guscio fond.	2450	2466	2435	2419	3	2	40.0	0.09	0.06
2327Guscio fond.	2466	2467	2436	2435	3	2	40.0	0.09	0.06
2328Guscio fond.	2467	2468	2437	2436	3	2	40.0	0.09	0.06
2329Guscio fond.	2468	2469	2438	2437	3	2	40.0	0.09	0.06
2330Guscio fond.	2469	2470	2439	2438	3	2	40.0	0.09	0.06
2331Guscio fond.	2470	2471	2440	2439	3	2	40.0	0.09	0.06
2332Guscio fond.	2471	2472	2441	2440	3	2	40.0	0.09	0.06
2333Guscio fond.	2472	2473	2442	2441	3	2	40.0	0.09	0.06
2334Guscio fond.	2473	2474	2443	2442	3	2	40.0	0.09	0.06
2335Guscio fond.	2474	2475	2444	2443	3	2	40.0	0.09	0.06
2336Guscio fond.	2475	2476	2445	2444	3	2	40.0	0.09	0.06
2337Guscio fond.	2476	2477	2446	2445	3	2	40.0	0.09	0.06
2338Guscio fond.	2477	2478	2447	2446	3	2	40.0	0.09	0.06
2339Guscio fond.	2478	2479	2448	2447	3	2	40.0	0.09	0.06
2340Guscio fond.	2479	2451	2420	2448	3	2	40.0	0.09	0.06
2341Guscio fond.	2480	2483	2452	2449	3	2	40.0	0.09	0.06
2342Guscio fond.	2483	2484	2453	2452	3	2	40.0	0.09	0.06
2343Guscio fond.	2484	2485	2454	2453	3	2	40.0	0.09	0.06
2344Guscio fond.	2485	2486	2455	2454	3	2	40.0	0.09	0.06
2345Guscio fond.	2486	2487	2456	2455	3	2	40.0	0.09	0.06
2346Guscio fond.	2487	2488	2457	2456	3	2	40.0	0.09	0.06
2347Guscio fond.	2488	2489	2458	2457	3	2	40.0	0.09	0.06
2348Guscio fond.	2489	2490	2459	2458	3	2	40.0	0.09	0.06
2349Guscio fond.	2490	2491	2460	2459	3	2	40.0	0.09	0.06
2350Guscio fond.	2491	2492	2461	2460	3	2	40.0	0.09	0.06
2351Guscio fond.	2492	2493	2462	2461	3	2	40.0	0.09	0.06
2352Guscio fond.	2493	2494	2463	2462	3	2	40.0	0.09	0.06
2353Guscio fond.	2494	2495	2464	2463	3	2	40.0	0.09	0.06
2354Guscio fond.	2495	2496	2465	2464	3	2	40.0	0.09	0.06
2355Guscio fond.	2496	2481	2450	2465	3	2	40.0	0.09	0.06
2356Guscio fond.	2481	2497	2466	2450	3	2	40.0	0.09	0.06
2357Guscio fond.	2497	2498	2467	2466	3	2	40.0	0.09	0.06
2358Guscio fond.	2498	2499	2468	2467	3	2	40.0	0.09	0.06
2359Guscio fond.	2499	2500	2469	2468	3	2	40.0	0.09	0.06
2360Guscio fond.	2500	2501	2470	2469	3	2	40.0	0.09	0.06
2361Guscio fond.	2501	2502	2471	2470	3	2	40.0	0.09	0.06
2362Guscio fond.	2502	2503	2472	2471	3	2	40.0	0.09	0.06
2363Guscio fond.	2503	2504	2473	2472	3	2	40.0	0.09	0.06
2364Guscio fond.	2504	2505	2474	2473	3	2	40.0	0.09	0.06
2365Guscio fond.	2505	2506	2475	2474	3	2	40.0	0.09	0.06
2366Guscio fond.	2506	2507	2476	2475	3	2	40.0	0.09	0.06
2367Guscio fond.	2507	2508	2477	2476	3	2	40.0	0.09	0.06
2368Guscio fond.	2508	2509	2478	2477	3	2	40.0	0.09	0.06
2369Guscio fond.	2509	2510	2479	2478	3	2	40.0	0.09	0.06
2370Guscio fond.	2510	2482	2451	2479	3	2	40.0	0.09	0.06
2371Guscio fond.	30	2514	2516	1280	3	2	40.0	0.09	0.06
2372Guscio fond.	1280	2516	2517	1295	3	2	40.0	0.09	0.06
2373Guscio fond.	1295	2517	2518	1310	3	2	40.0	0.09	0.06
2374Guscio fond.	1310	2518	2519	1325	3	2	40.0	0.09	0.06
2375Guscio fond.	1325	2519	2520	1340	3	2	40.0	0.09	0.06
2376Guscio fond.	1340	2520	2521	1355	3	2	40.0	0.09	0.06
2377Guscio fond.	1355	2521	2522	1370	3	2	40.0	0.09	0.06
2378Guscio fond.	1370	2522	2523	1385	3	2	40.0	0.09	0.06
2379Guscio fond.	1385	2523	2524	1400	3	2	40.0	0.09	0.06
2380Guscio fond.	1400	2524	2525	1415	3	2	40.0	0.09	0.06
2381Guscio fond.	1415	2525	2526	1430	3	2	40.0	0.09	0.06
2382Guscio fond.	1430	2526	2527	1445	3	2	40.0	0.09	0.06
2383Guscio fond.	1445	2527	2528	1460	3	2	40.0	0.09	0.06

2384	Guscio fond.	1460	2528	2529	1475	3	2	40.0	0.09	0.06
2385	Guscio fond.	1475	2529	2530	1490	3	2	40.0	0.09	0.06
2386	Guscio fond.	1490	2530	2531	1505	3	2	40.0	0.09	0.06
2387	Guscio fond.	1505	2531	2532	1520	3	2	40.0	0.09	0.06
2388	Guscio fond.	1520	2532	2533	1535	3	2	40.0	0.09	0.06
2389	Guscio fond.	1535	2533	2534	1550	3	2	40.0	0.09	0.06
2390	Guscio fond.	1550	2534	2535	1565	3	2	40.0	0.09	0.06
2391	Guscio fond.	1565	2535	2536	1580	3	2	40.0	0.09	0.06
2392	Guscio fond.	1580	2536	2537	1595	3	2	40.0	0.09	0.06
2393	Guscio fond.	1595	2537	2538	1610	3	2	40.0	0.09	0.06
2394	Guscio fond.	1610	2538	2539	1625	3	2	40.0	0.09	0.06
2395	Guscio fond.	1625	2539	2540	1640	3	2	40.0	0.09	0.06
2396	Guscio fond.	1640	2540	2541	1655	3	2	40.0	0.09	0.06
2397	Guscio fond.	1655	2541	2542	1670	3	2	40.0	0.09	0.06
2398	Guscio fond.	1670	2542	2543	1685	3	2	40.0	0.09	0.06
2399	Guscio fond.	1685	2543	2544	1700	3	2	40.0	0.09	0.06
2400	Guscio fond.	1700	2544	2515	39	3	2	40.0	0.09	0.06
2401	Guscio fond.	21	2513	2545	1743	3	2	40.0	0.09	0.06
2402	Guscio fond.	1743	2545	2546	1758	3	2	40.0	0.09	0.06
2403	Guscio fond.	1758	2546	2547	1773	3	2	40.0	0.09	0.06
2404	Guscio fond.	1773	2547	2548	1788	3	2	40.0	0.09	0.06
2405	Guscio fond.	1788	2548	2549	1803	3	2	40.0	0.09	0.06
2406	Guscio fond.	1803	2549	2550	1818	3	2	40.0	0.09	0.06
2407	Guscio fond.	1818	2550	2551	1833	3	2	40.0	0.09	0.06
2408	Guscio fond.	1833	2551	2552	1848	3	2	40.0	0.09	0.06
2409	Guscio fond.	1848	2552	2553	1863	3	2	40.0	0.09	0.06
2410	Guscio fond.	1863	2553	2554	1878	3	2	40.0	0.09	0.06
2411	Guscio fond.	1878	2554	2555	1893	3	2	40.0	0.09	0.06
2412	Guscio fond.	1893	2555	2556	1908	3	2	40.0	0.09	0.06
2413	Guscio fond.	1908	2556	2557	1923	3	2	40.0	0.09	0.06
2414	Guscio fond.	1923	2557	2558	1938	3	2	40.0	0.09	0.06
2415	Guscio fond.	1938	2558	2514	30	3	2	40.0	0.09	0.06
2416	Guscio fond.	12	2512	2559	1967	3	2	40.0	0.09	0.06
2417	Guscio fond.	1967	2559	2560	1982	3	2	40.0	0.09	0.06
2418	Guscio fond.	1982	2560	2561	1997	3	2	40.0	0.09	0.06
2419	Guscio fond.	1997	2561	2562	2012	3	2	40.0	0.09	0.06
2420	Guscio fond.	2012	2562	2563	2027	3	2	40.0	0.09	0.06
2421	Guscio fond.	2027	2563	2564	2042	3	2	40.0	0.09	0.06
2422	Guscio fond.	2042	2564	2565	2057	3	2	40.0	0.09	0.06
2423	Guscio fond.	2057	2565	2566	2072	3	2	40.0	0.09	0.06
2424	Guscio fond.	2072	2566	2567	2087	3	2	40.0	0.09	0.06
2425	Guscio fond.	2087	2567	2568	2102	3	2	40.0	0.09	0.06
2426	Guscio fond.	2102	2568	2569	2117	3	2	40.0	0.09	0.06
2427	Guscio fond.	2117	2569	2570	2132	3	2	40.0	0.09	0.06
2428	Guscio fond.	2132	2570	2571	2147	3	2	40.0	0.09	0.06
2429	Guscio fond.	2147	2571	2572	2162	3	2	40.0	0.09	0.06
2430	Guscio fond.	2162	2572	2513	21	3	2	40.0	0.09	0.06
2431	Guscio fond.	3	2511	2573	2191	3	2	40.0	0.09	0.06
2432	Guscio fond.	2191	2573	2574	2206	3	2	40.0	0.09	0.06
2433	Guscio fond.	2206	2574	2575	2221	3	2	40.0	0.09	0.06
2434	Guscio fond.	2221	2575	2576	2236	3	2	40.0	0.09	0.06
2435	Guscio fond.	2236	2576	2577	2251	3	2	40.0	0.09	0.06
2436	Guscio fond.	2251	2577	2578	2266	3	2	40.0	0.09	0.06
2437	Guscio fond.	2266	2578	2579	2281	3	2	40.0	0.09	0.06
2438	Guscio fond.	2281	2579	2580	2296	3	2	40.0	0.09	0.06
2439	Guscio fond.	2296	2580	2581	2311	3	2	40.0	0.09	0.06
2440	Guscio fond.	2311	2581	2582	2326	3	2	40.0	0.09	0.06
2441	Guscio fond.	2326	2582	2583	2341	3	2	40.0	0.09	0.06
2442	Guscio fond.	2341	2583	2584	2356	3	2	40.0	0.09	0.06
2443	Guscio fond.	2356	2584	2585	2371	3	2	40.0	0.09	0.06
2444	Guscio fond.	2371	2585	2586	2386	3	2	40.0	0.09	0.06
2445	Guscio fond.	2386	2586	2512	12	3	2	40.0	0.09	0.06
2446	Guscio fond.	2389	2587	2511	3	3	2	40.0	0.09	0.06
2447	Guscio fond.	2420	2588	2587	2389	3	2	40.0	0.09	0.06
2448	Guscio fond.	2451	2589	2588	2420	3	2	40.0	0.09	0.06
2449	Guscio fond.	2482	2590	2589	2451	3	2	40.0	0.09	0.06
2450	Guscio fond.	2514	2594	2596	2516	3	2	40.0	0.09	0.06
2451	Guscio fond.	2516	2596	2597	2517	3	2	40.0	0.09	0.06
2452	Guscio fond.	2517	2597	2598	2518	3	2	40.0	0.09	0.06
2453	Guscio fond.	2518	2598	2599	2519	3	2	40.0	0.09	0.06
2454	Guscio fond.	2519	2599	2600	2520	3	2	40.0	0.09	0.06
2455	Guscio fond.	2520	2600	2601	2521	3	2	40.0	0.09	0.06
2456	Guscio fond.	2521	2601	2602	2522	3	2	40.0	0.09	0.06
2457	Guscio fond.	2522	2602	2603	2523	3	2	40.0	0.09	0.06
2458	Guscio fond.	2523	2603	2604	2524	3	2	40.0	0.09	0.06
2459	Guscio fond.	2524	2604	2605	2525	3	2	40.0	0.09	0.06
2460	Guscio fond.	2525	2605	2606	2526	3	2	40.0	0.09	0.06

2461	Guscio fond.	2526	2606	2607	2527	3	2	40.0	0.09	0.06
2462	Guscio fond.	2527	2607	2608	2528	3	2	40.0	0.09	0.06
2463	Guscio fond.	2528	2608	2609	2529	3	2	40.0	0.09	0.06
2464	Guscio fond.	2529	2609	2610	2530	3	2	40.0	0.09	0.06
2465	Guscio fond.	2530	2610	2611	2531	3	2	40.0	0.09	0.06
2466	Guscio fond.	2531	2611	2612	2532	3	2	40.0	0.09	0.06
2467	Guscio fond.	2532	2612	2613	2533	3	2	40.0	0.09	0.06
2468	Guscio fond.	2533	2613	2614	2534	3	2	40.0	0.09	0.06
2469	Guscio fond.	2534	2614	2615	2535	3	2	40.0	0.09	0.06
2470	Guscio fond.	2535	2615	2616	2536	3	2	40.0	0.09	0.06
2471	Guscio fond.	2536	2616	2617	2537	3	2	40.0	0.09	0.06
2472	Guscio fond.	2537	2617	2618	2538	3	2	40.0	0.09	0.06
2473	Guscio fond.	2538	2618	2619	2539	3	2	40.0	0.09	0.06
2474	Guscio fond.	2539	2619	2620	2540	3	2	40.0	0.09	0.06
2475	Guscio fond.	2540	2620	2621	2541	3	2	40.0	0.09	0.06
2476	Guscio fond.	2541	2621	2622	2542	3	2	40.0	0.09	0.06
2477	Guscio fond.	2542	2622	2623	2543	3	2	40.0	0.09	0.06
2478	Guscio fond.	2543	2623	2624	2544	3	2	40.0	0.09	0.06
2479	Guscio fond.	2544	2624	2595	2515	3	2	40.0	0.09	0.06
2480	Guscio fond.	2513	2593	2625	2545	3	2	40.0	0.09	0.06
2481	Guscio fond.	2545	2625	2626	2546	3	2	40.0	0.09	0.06
2482	Guscio fond.	2546	2626	2627	2547	3	2	40.0	0.09	0.06
2483	Guscio fond.	2547	2627	2628	2548	3	2	40.0	0.09	0.06
2484	Guscio fond.	2548	2628	2629	2549	3	2	40.0	0.09	0.06
2485	Guscio fond.	2549	2629	2630	2550	3	2	40.0	0.09	0.06
2486	Guscio fond.	2550	2630	2631	2551	3	2	40.0	0.09	0.06
2487	Guscio fond.	2551	2631	2632	2552	3	2	40.0	0.09	0.06
2488	Guscio fond.	2552	2632	2633	2553	3	2	40.0	0.09	0.06
2489	Guscio fond.	2553	2633	2634	2554	3	2	40.0	0.09	0.06
2490	Guscio fond.	2554	2634	2635	2555	3	2	40.0	0.09	0.06
2491	Guscio fond.	2555	2635	2636	2556	3	2	40.0	0.09	0.06
2492	Guscio fond.	2556	2636	2637	2557	3	2	40.0	0.09	0.06
2493	Guscio fond.	2557	2637	2638	2558	3	2	40.0	0.09	0.06
2494	Guscio fond.	2558	2638	2594	2514	3	2	40.0	0.09	0.06
2495	Guscio fond.	2512	2592	2639	2559	3	2	40.0	0.09	0.06
2496	Guscio fond.	2559	2639	2640	2560	3	2	40.0	0.09	0.06
2497	Guscio fond.	2560	2640	2641	2561	3	2	40.0	0.09	0.06
2498	Guscio fond.	2561	2641	2642	2562	3	2	40.0	0.09	0.06
2499	Guscio fond.	2562	2642	2643	2563	3	2	40.0	0.09	0.06
2500	Guscio fond.	2563	2643	2644	2564	3	2	40.0	0.09	0.06
2501	Guscio fond.	2564	2644	2645	2565	3	2	40.0	0.09	0.06
2502	Guscio fond.	2565	2645	2646	2566	3	2	40.0	0.09	0.06
2503	Guscio fond.	2566	2646	2647	2567	3	2	40.0	0.09	0.06
2504	Guscio fond.	2567	2647	2648	2568	3	2	40.0	0.09	0.06
2505	Guscio fond.	2568	2648	2649	2569	3	2	40.0	0.09	0.06
2506	Guscio fond.	2569	2649	2650	2570	3	2	40.0	0.09	0.06
2507	Guscio fond.	2570	2650	2651	2571	3	2	40.0	0.09	0.06
2508	Guscio fond.	2571	2651	2652	2572	3	2	40.0	0.09	0.06
2509	Guscio fond.	2572	2652	2593	2513	3	2	40.0	0.09	0.06
2510	Guscio fond.	2511	2591	2653	2573	3	2	40.0	0.09	0.06
2511	Guscio fond.	2573	2653	2654	2574	3	2	40.0	0.09	0.06
2512	Guscio fond.	2574	2654	2655	2575	3	2	40.0	0.09	0.06
2513	Guscio fond.	2575	2655	2656	2576	3	2	40.0	0.09	0.06
2514	Guscio fond.	2576	2656	2657	2577	3	2	40.0	0.09	0.06
2515	Guscio fond.	2577	2657	2658	2578	3	2	40.0	0.09	0.06
2516	Guscio fond.	2578	2658	2659	2579	3	2	40.0	0.09	0.06
2517	Guscio fond.	2579	2659	2660	2580	3	2	40.0	0.09	0.06
2518	Guscio fond.	2580	2660	2661	2581	3	2	40.0	0.09	0.06
2519	Guscio fond.	2581	2661	2662	2582	3	2	40.0	0.09	0.06
2520	Guscio fond.	2582	2662	2663	2583	3	2	40.0	0.09	0.06
2521	Guscio fond.	2583	2663	2664	2584	3	2	40.0	0.09	0.06
2522	Guscio fond.	2584	2664	2665	2585	3	2	40.0	0.09	0.06
2523	Guscio fond.	2585	2665	2666	2586	3	2	40.0	0.09	0.06
2524	Guscio fond.	2586	2666	2592	2512	3	2	40.0	0.09	0.06
2525	Guscio fond.	2587	2667	2591	2511	3	2	40.0	0.09	0.06
2526	Guscio fond.	2588	2668	2667	2587	3	2	40.0	0.09	0.06
2527	Guscio fond.	2589	2669	2668	2588	3	2	40.0	0.09	0.06
2528	Guscio fond.	2590	2670	2669	2589	3	2	40.0	0.09	0.06
2529	Guscio fond.	2594	2674	2676	2596	3	2	40.0	0.09	0.06
2530	Guscio fond.	2596	2676	2677	2597	3	2	40.0	0.09	0.06
2531	Guscio fond.	2597	2677	2678	2598	3	2	40.0	0.09	0.06
2532	Guscio fond.	2598	2678	2679	2599	3	2	40.0	0.09	0.06
2533	Guscio fond.	2599	2679	2680	2600	3	2	40.0	0.09	0.06
2534	Guscio fond.	2600	2680	2681	2601	3	2	40.0	0.09	0.06
2535	Guscio fond.	2601	2681	2682	2602	3	2	40.0	0.09	0.06
2536	Guscio fond.	2602	2682	2683	2603	3	2	40.0	0.09	0.06
2537	Guscio fond.	2603	2683	2684	2604	3	2	40.0	0.09	0.06

2538	Guscio fond.	2604	2684	2685	2605	3	2	40.0	0.09	0.06
2539	Guscio fond.	2605	2685	2686	2606	3	2	40.0	0.09	0.06
2540	Guscio fond.	2606	2686	2687	2607	3	2	40.0	0.09	0.06
2541	Guscio fond.	2607	2687	2688	2608	3	2	40.0	0.09	0.06
2542	Guscio fond.	2608	2688	2689	2609	3	2	40.0	0.09	0.06
2543	Guscio fond.	2609	2689	2690	2610	3	2	40.0	0.09	0.06
2544	Guscio fond.	2610	2690	2691	2611	3	2	40.0	0.09	0.06
2545	Guscio fond.	2611	2691	2692	2612	3	2	40.0	0.09	0.06
2546	Guscio fond.	2612	2692	2693	2613	3	2	40.0	0.09	0.06
2547	Guscio fond.	2613	2693	2694	2614	3	2	40.0	0.09	0.06
2548	Guscio fond.	2614	2694	2695	2615	3	2	40.0	0.09	0.06
2549	Guscio fond.	2615	2695	2696	2616	3	2	40.0	0.09	0.06
2550	Guscio fond.	2616	2696	2697	2617	3	2	40.0	0.09	0.06
2551	Guscio fond.	2617	2697	2698	2618	3	2	40.0	0.09	0.06
2552	Guscio fond.	2618	2698	2699	2619	3	2	40.0	0.09	0.06
2553	Guscio fond.	2619	2699	2700	2620	3	2	40.0	0.09	0.06
2554	Guscio fond.	2620	2700	2701	2621	3	2	40.0	0.09	0.06
2555	Guscio fond.	2621	2701	2702	2622	3	2	40.0	0.09	0.06
2556	Guscio fond.	2622	2702	2703	2623	3	2	40.0	0.09	0.06
2557	Guscio fond.	2623	2703	2704	2624	3	2	40.0	0.09	0.06
2558	Guscio fond.	2624	2704	2675	2595	3	2	40.0	0.09	0.06
2559	Guscio fond.	2593	2673	2705	2625	3	2	40.0	0.09	0.06
2560	Guscio fond.	2625	2705	2706	2626	3	2	40.0	0.09	0.06
2561	Guscio fond.	2626	2706	2707	2627	3	2	40.0	0.09	0.06
2562	Guscio fond.	2627	2707	2708	2628	3	2	40.0	0.09	0.06
2563	Guscio fond.	2628	2708	2709	2629	3	2	40.0	0.09	0.06
2564	Guscio fond.	2629	2709	2710	2630	3	2	40.0	0.09	0.06
2565	Guscio fond.	2630	2710	2711	2631	3	2	40.0	0.09	0.06
2566	Guscio fond.	2631	2711	2712	2632	3	2	40.0	0.09	0.06
2567	Guscio fond.	2632	2712	2713	2633	3	2	40.0	0.09	0.06
2568	Guscio fond.	2633	2713	2714	2634	3	2	40.0	0.09	0.06
2569	Guscio fond.	2634	2714	2715	2635	3	2	40.0	0.09	0.06
2570	Guscio fond.	2635	2715	2716	2636	3	2	40.0	0.09	0.06
2571	Guscio fond.	2636	2716	2717	2637	3	2	40.0	0.09	0.06
2572	Guscio fond.	2637	2717	2718	2638	3	2	40.0	0.09	0.06
2573	Guscio fond.	2638	2718	2674	2594	3	2	40.0	0.09	0.06
2574	Guscio fond.	2592	2672	2719	2639	3	2	40.0	0.09	0.06
2575	Guscio fond.	2639	2719	2720	2640	3	2	40.0	0.09	0.06
2576	Guscio fond.	2640	2720	2721	2641	3	2	40.0	0.09	0.06
2577	Guscio fond.	2641	2721	2722	2642	3	2	40.0	0.09	0.06
2578	Guscio fond.	2642	2722	2723	2643	3	2	40.0	0.09	0.06
2579	Guscio fond.	2643	2723	2724	2644	3	2	40.0	0.09	0.06
2580	Guscio fond.	2644	2724	2725	2645	3	2	40.0	0.09	0.06
2581	Guscio fond.	2645	2725	2726	2646	3	2	40.0	0.09	0.06
2582	Guscio fond.	2646	2726	2727	2647	3	2	40.0	0.09	0.06
2583	Guscio fond.	2647	2727	2728	2648	3	2	40.0	0.09	0.06
2584	Guscio fond.	2648	2728	2729	2649	3	2	40.0	0.09	0.06
2585	Guscio fond.	2649	2729	2730	2650	3	2	40.0	0.09	0.06
2586	Guscio fond.	2650	2730	2731	2651	3	2	40.0	0.09	0.06
2587	Guscio fond.	2651	2731	2732	2652	3	2	40.0	0.09	0.06
2588	Guscio fond.	2652	2732	2673	2593	3	2	40.0	0.09	0.06
2589	Guscio fond.	2591	2671	2733	2653	3	2	40.0	0.09	0.06
2590	Guscio fond.	2653	2733	2734	2654	3	2	40.0	0.09	0.06
2591	Guscio fond.	2654	2734	2735	2655	3	2	40.0	0.09	0.06
2592	Guscio fond.	2655	2735	2736	2656	3	2	40.0	0.09	0.06
2593	Guscio fond.	2656	2736	2737	2657	3	2	40.0	0.09	0.06
2594	Guscio fond.	2657	2737	2738	2658	3	2	40.0	0.09	0.06
2595	Guscio fond.	2658	2738	2739	2659	3	2	40.0	0.09	0.06
2596	Guscio fond.	2659	2739	2740	2660	3	2	40.0	0.09	0.06
2597	Guscio fond.	2660	2740	2741	2661	3	2	40.0	0.09	0.06
2598	Guscio fond.	2661	2741	2742	2662	3	2	40.0	0.09	0.06
2599	Guscio fond.	2662	2742	2743	2663	3	2	40.0	0.09	0.06
2600	Guscio fond.	2663	2743	2744	2664	3	2	40.0	0.09	0.06
2601	Guscio fond.	2664	2744	2745	2665	3	2	40.0	0.09	0.06
2602	Guscio fond.	2665	2745	2746	2666	3	2	40.0	0.09	0.06
2603	Guscio fond.	2666	2746	2672	2592	3	2	40.0	0.09	0.06
2604	Guscio fond.	2667	2747	2671	2591	3	2	40.0	0.09	0.06
2605	Guscio fond.	2668	2748	2747	2667	3	2	40.0	0.09	0.06
2606	Guscio fond.	2669	2749	2748	2668	3	2	40.0	0.09	0.06
2607	Guscio fond.	2670	2750	2749	2669	3	2	40.0	0.09	0.06
2608	Guscio fond.	37	1238	2754	2751	3	2	40.0	0.09	0.06
2609	Guscio fond.	1238	1239	2755	2754	3	2	40.0	0.09	0.06
2610	Guscio fond.	1239	1240	2756	2755	3	2	40.0	0.09	0.06
2611	Guscio fond.	1240	1241	2757	2756	3	2	40.0	0.09	0.06
2612	Guscio fond.	1241	1242	2758	2757	3	2	40.0	0.09	0.06
2613	Guscio fond.	1242	1243	2759	2758	3	2	40.0	0.09	0.06
2614	Guscio fond.	1243	1244	2760	2759	3	2	40.0	0.09	0.06

2615	Guscio fond.	1244	1245	2761	2760	3	2	40.0	0.09	0.06
2616	Guscio fond.	1245	1246	2762	2761	3	2	40.0	0.09	0.06
2617	Guscio fond.	1246	1247	2763	2762	3	2	40.0	0.09	0.06
2618	Guscio fond.	1247	1248	2764	2763	3	2	40.0	0.09	0.06
2619	Guscio fond.	1248	1249	2765	2764	3	2	40.0	0.09	0.06
2620	Guscio fond.	1249	1250	2766	2765	3	2	40.0	0.09	0.06
2621	Guscio fond.	1250	1251	2767	2766	3	2	40.0	0.09	0.06
2622	Guscio fond.	1251	38	2752	2767	3	2	40.0	0.09	0.06
2623	Guscio fond.	38	1701	2768	2752	3	2	40.0	0.09	0.06
2624	Guscio fond.	1701	1702	2769	2768	3	2	40.0	0.09	0.06
2625	Guscio fond.	1702	1703	2770	2769	3	2	40.0	0.09	0.06
2626	Guscio fond.	1703	1704	2771	2770	3	2	40.0	0.09	0.06
2627	Guscio fond.	1704	1705	2772	2771	3	2	40.0	0.09	0.06
2628	Guscio fond.	1705	1706	2773	2772	3	2	40.0	0.09	0.06
2629	Guscio fond.	1706	1707	2774	2773	3	2	40.0	0.09	0.06
2630	Guscio fond.	1707	1708	2775	2774	3	2	40.0	0.09	0.06
2631	Guscio fond.	1708	1709	2776	2775	3	2	40.0	0.09	0.06
2632	Guscio fond.	1709	1710	2777	2776	3	2	40.0	0.09	0.06
2633	Guscio fond.	1710	1711	2778	2777	3	2	40.0	0.09	0.06
2634	Guscio fond.	1711	1712	2779	2778	3	2	40.0	0.09	0.06
2635	Guscio fond.	1712	1713	2780	2779	3	2	40.0	0.09	0.06
2636	Guscio fond.	1713	1714	2781	2780	3	2	40.0	0.09	0.06
2637	Guscio fond.	1714	39	2753	2781	3	2	40.0	0.09	0.06
2638	Guscio fond.	39	2515	2782	2753	3	2	40.0	0.09	0.06
2639	Guscio fond.	2515	2595	2783	2782	3	2	40.0	0.09	0.06
2640	Guscio fond.	2595	2675	2784	2783	3	2	40.0	0.09	0.06
2641	Guscio fond.	2751	2754	2788	2785	3	2	40.0	0.09	0.06
2642	Guscio fond.	2754	2755	2789	2788	3	2	40.0	0.09	0.06
2643	Guscio fond.	2755	2756	2790	2789	3	2	40.0	0.09	0.06
2644	Guscio fond.	2756	2757	2791	2790	3	2	40.0	0.09	0.06
2645	Guscio fond.	2757	2758	2792	2791	3	2	40.0	0.09	0.06
2646	Guscio fond.	2758	2759	2793	2792	3	2	40.0	0.09	0.06
2647	Guscio fond.	2759	2760	2794	2793	3	2	40.0	0.09	0.06
2648	Guscio fond.	2760	2761	2795	2794	3	2	40.0	0.09	0.06
2649	Guscio fond.	2761	2762	2796	2795	3	2	40.0	0.09	0.06
2650	Guscio fond.	2762	2763	2797	2796	3	2	40.0	0.09	0.06
2651	Guscio fond.	2763	2764	2798	2797	3	2	40.0	0.09	0.06
2652	Guscio fond.	2764	2765	2799	2798	3	2	40.0	0.09	0.06
2653	Guscio fond.	2765	2766	2800	2799	3	2	40.0	0.09	0.06
2654	Guscio fond.	2766	2767	2801	2800	3	2	40.0	0.09	0.06
2655	Guscio fond.	2767	2752	2786	2801	3	2	40.0	0.09	0.06
2656	Guscio fond.	2752	2768	2802	2786	3	2	40.0	0.09	0.06
2657	Guscio fond.	2768	2769	2803	2802	3	2	40.0	0.09	0.06
2658	Guscio fond.	2769	2770	2804	2803	3	2	40.0	0.09	0.06
2659	Guscio fond.	2770	2771	2805	2804	3	2	40.0	0.09	0.06
2660	Guscio fond.	2771	2772	2806	2805	3	2	40.0	0.09	0.06
2661	Guscio fond.	2772	2773	2807	2806	3	2	40.0	0.09	0.06
2662	Guscio fond.	2773	2774	2808	2807	3	2	40.0	0.09	0.06
2663	Guscio fond.	2774	2775	2809	2808	3	2	40.0	0.09	0.06
2664	Guscio fond.	2775	2776	2810	2809	3	2	40.0	0.09	0.06
2665	Guscio fond.	2776	2777	2811	2810	3	2	40.0	0.09	0.06
2666	Guscio fond.	2777	2778	2812	2811	3	2	40.0	0.09	0.06
2667	Guscio fond.	2778	2779	2813	2812	3	2	40.0	0.09	0.06
2668	Guscio fond.	2779	2780	2814	2813	3	2	40.0	0.09	0.06
2669	Guscio fond.	2780	2781	2815	2814	3	2	40.0	0.09	0.06
2670	Guscio fond.	2781	2753	2787	2815	3	2	40.0	0.09	0.06
2671	Guscio fond.	2753	2782	2816	2787	3	2	40.0	0.09	0.06
2672	Guscio fond.	2782	2783	2817	2816	3	2	40.0	0.09	0.06
2673	Guscio fond.	2783	2784	2818	2817	3	2	40.0	0.09	0.06
2674	Guscio fond.	2785	2788	2822	2819	3	2	40.0	0.09	0.06
2675	Guscio fond.	2788	2789	2823	2822	3	2	40.0	0.09	0.06
2676	Guscio fond.	2789	2790	2824	2823	3	2	40.0	0.09	0.06
2677	Guscio fond.	2790	2791	2825	2824	3	2	40.0	0.09	0.06
2678	Guscio fond.	2791	2792	2826	2825	3	2	40.0	0.09	0.06
2679	Guscio fond.	2792	2793	2827	2826	3	2	40.0	0.09	0.06
2680	Guscio fond.	2793	2794	2828	2827	3	2	40.0	0.09	0.06
2681	Guscio fond.	2794	2795	2829	2828	3	2	40.0	0.09	0.06
2682	Guscio fond.	2795	2796	2830	2829	3	2	40.0	0.09	0.06
2683	Guscio fond.	2796	2797	2831	2830	3	2	40.0	0.09	0.06
2684	Guscio fond.	2797	2798	2832	2831	3	2	40.0	0.09	0.06
2685	Guscio fond.	2798	2799	2833	2832	3	2	40.0	0.09	0.06
2686	Guscio fond.	2799	2800	2834	2833	3	2	40.0	0.09	0.06
2687	Guscio fond.	2800	2801	2835	2834	3	2	40.0	0.09	0.06
2688	Guscio fond.	2801	2786	2820	2835	3	2	40.0	0.09	0.06
2689	Guscio fond.	2786	2802	2836	2820	3	2	40.0	0.09	0.06
2690	Guscio fond.	2802	2803	2837	2836	3	2	40.0	0.09	0.06
2691	Guscio fond.	2803	2804	2838	2837	3	2	40.0	0.09	0.06

2692	Guscio fond.	2804	2805	2839	2838	3	2	40.0	0.09	0.06
2693	Guscio fond.	2805	2806	2840	2839	3	2	40.0	0.09	0.06
2694	Guscio fond.	2806	2807	2841	2840	3	2	40.0	0.09	0.06
2695	Guscio fond.	2807	2808	2842	2841	3	2	40.0	0.09	0.06
2696	Guscio fond.	2808	2809	2843	2842	3	2	40.0	0.09	0.06
2697	Guscio fond.	2809	2810	2844	2843	3	2	40.0	0.09	0.06
2698	Guscio fond.	2810	2811	2845	2844	3	2	40.0	0.09	0.06
2699	Guscio fond.	2811	2812	2846	2845	3	2	40.0	0.09	0.06
2700	Guscio fond.	2812	2813	2847	2846	3	2	40.0	0.09	0.06
2701	Guscio fond.	2813	2814	2848	2847	3	2	40.0	0.09	0.06
2702	Guscio fond.	2814	2815	2849	2848	3	2	40.0	0.09	0.06
2703	Guscio fond.	2815	2787	2821	2849	3	2	40.0	0.09	0.06
2704	Guscio fond.	2787	2816	2850	2821	3	2	40.0	0.09	0.06
2705	Guscio fond.	2816	2817	2851	2850	3	2	40.0	0.09	0.06
2706	Guscio fond.	2817	2818	2852	2851	3	2	40.0	0.09	0.06
2707	Guscio fond.	2819	2822	2856	2853	3	2	40.0	0.09	0.06
2708	Guscio fond.	2822	2823	2857	2856	3	2	40.0	0.09	0.06
2709	Guscio fond.	2823	2824	2858	2857	3	2	40.0	0.09	0.06
2710	Guscio fond.	2824	2825	2859	2858	3	2	40.0	0.09	0.06
2711	Guscio fond.	2825	2826	2860	2859	3	2	40.0	0.09	0.06
2712	Guscio fond.	2826	2827	2861	2860	3	2	40.0	0.09	0.06
2713	Guscio fond.	2827	2828	2862	2861	3	2	40.0	0.09	0.06
2714	Guscio fond.	2828	2829	2863	2862	3	2	40.0	0.09	0.06
2715	Guscio fond.	2829	2830	2864	2863	3	2	40.0	0.09	0.06
2716	Guscio fond.	2830	2831	2865	2864	3	2	40.0	0.09	0.06
2717	Guscio fond.	2831	2832	2866	2865	3	2	40.0	0.09	0.06
2718	Guscio fond.	2832	2833	2867	2866	3	2	40.0	0.09	0.06
2719	Guscio fond.	2833	2834	2868	2867	3	2	40.0	0.09	0.06
2720	Guscio fond.	2834	2835	2869	2868	3	2	40.0	0.09	0.06
2721	Guscio fond.	2835	2820	2854	2869	3	2	40.0	0.09	0.06
2722	Guscio fond.	2820	2836	2870	2854	3	2	40.0	0.09	0.06
2723	Guscio fond.	2836	2837	2871	2870	3	2	40.0	0.09	0.06
2724	Guscio fond.	2837	2838	2872	2871	3	2	40.0	0.09	0.06
2725	Guscio fond.	2838	2839	2873	2872	3	2	40.0	0.09	0.06
2726	Guscio fond.	2839	2840	2874	2873	3	2	40.0	0.09	0.06
2727	Guscio fond.	2840	2841	2875	2874	3	2	40.0	0.09	0.06
2728	Guscio fond.	2841	2842	2876	2875	3	2	40.0	0.09	0.06
2729	Guscio fond.	2842	2843	2877	2876	3	2	40.0	0.09	0.06
2730	Guscio fond.	2843	2844	2878	2877	3	2	40.0	0.09	0.06
2731	Guscio fond.	2844	2845	2879	2878	3	2	40.0	0.09	0.06
2732	Guscio fond.	2845	2846	2880	2879	3	2	40.0	0.09	0.06
2733	Guscio fond.	2846	2847	2881	2880	3	2	40.0	0.09	0.06
2734	Guscio fond.	2847	2848	2882	2881	3	2	40.0	0.09	0.06
2735	Guscio fond.	2848	2849	2883	2882	3	2	40.0	0.09	0.06
2736	Guscio fond.	2849	2821	2855	2883	3	2	40.0	0.09	0.06
2737	Guscio fond.	2821	2850	2884	2855	3	2	40.0	0.09	0.06
2738	Guscio fond.	2850	2851	2885	2884	3	2	40.0	0.09	0.06
2739	Guscio fond.	2851	2852	2886	2885	3	2	40.0	0.09	0.06
2740	Guscio fond.	3127	1	48	2888	3	2	40.0	0.09	0.06
2741	Guscio fond.	2888	48	77	2889	3	2	40.0	0.09	0.06
2742	Guscio fond.	2889	77	93	2890	3	2	40.0	0.09	0.06
2743	Guscio fond.	2890	93	109	2891	3	2	40.0	0.09	0.06
2744	Guscio fond.	2891	109	125	2892	3	2	40.0	0.09	0.06
2745	Guscio fond.	2892	125	141	2893	3	2	40.0	0.09	0.06
2746	Guscio fond.	2893	141	157	2894	3	2	40.0	0.09	0.06
2747	Guscio fond.	2894	157	173	2895	3	2	40.0	0.09	0.06
2748	Guscio fond.	2895	173	189	2896	3	2	40.0	0.09	0.06
2749	Guscio fond.	2896	189	205	2897	3	2	40.0	0.09	0.06
2750	Guscio fond.	2897	205	221	2898	3	2	40.0	0.09	0.06
2751	Guscio fond.	2898	221	237	2899	3	2	40.0	0.09	0.06
2752	Guscio fond.	2899	237	253	2900	3	2	40.0	0.09	0.06
2753	Guscio fond.	2900	253	269	2901	3	2	40.0	0.09	0.06
2754	Guscio fond.	2901	269	10	3128	3	2	40.0	0.09	0.06
2755	Guscio fond.	3128	10	299	2902	3	2	40.0	0.09	0.06
2756	Guscio fond.	2902	299	315	2903	3	2	40.0	0.09	0.06
2757	Guscio fond.	2903	315	331	2904	3	2	40.0	0.09	0.06
2758	Guscio fond.	2904	331	347	2905	3	2	40.0	0.09	0.06
2759	Guscio fond.	2905	347	363	2906	3	2	40.0	0.09	0.06
2760	Guscio fond.	2906	363	379	2907	3	2	40.0	0.09	0.06
2761	Guscio fond.	2907	379	395	2908	3	2	40.0	0.09	0.06
2762	Guscio fond.	2908	395	411	2909	3	2	40.0	0.09	0.06
2763	Guscio fond.	2909	411	427	2910	3	2	40.0	0.09	0.06
2764	Guscio fond.	2910	427	443	2911	3	2	40.0	0.09	0.06
2765	Guscio fond.	2911	443	459	2912	3	2	40.0	0.09	0.06
2766	Guscio fond.	2912	459	475	2913	3	2	40.0	0.09	0.06
2767	Guscio fond.	2913	475	491	2914	3	2	40.0	0.09	0.06
2768	Guscio fond.	2914	491	507	2915	3	2	40.0	0.09	0.06

2769	Guscio fond.	2915	507	19	3129	3	2	40.0	0.09	0.06
2770	Guscio fond.	3129	19	537	2916	3	2	40.0	0.09	0.06
2771	Guscio fond.	2916	537	553	2917	3	2	40.0	0.09	0.06
2772	Guscio fond.	2917	553	569	2918	3	2	40.0	0.09	0.06
2773	Guscio fond.	2918	569	585	2919	3	2	40.0	0.09	0.06
2774	Guscio fond.	2919	585	601	2920	3	2	40.0	0.09	0.06
2775	Guscio fond.	2920	601	617	2921	3	2	40.0	0.09	0.06
2776	Guscio fond.	2921	617	633	2922	3	2	40.0	0.09	0.06
2777	Guscio fond.	2922	633	649	2923	3	2	40.0	0.09	0.06
2778	Guscio fond.	2923	649	665	2924	3	2	40.0	0.09	0.06
2779	Guscio fond.	2924	665	681	2925	3	2	40.0	0.09	0.06
2780	Guscio fond.	2925	681	697	2926	3	2	40.0	0.09	0.06
2781	Guscio fond.	2926	697	713	2927	3	2	40.0	0.09	0.06
2782	Guscio fond.	2927	713	729	2928	3	2	40.0	0.09	0.06
2783	Guscio fond.	2928	729	745	2929	3	2	40.0	0.09	0.06
2784	Guscio fond.	2929	745	28	3130	3	2	40.0	0.09	0.06
2785	Guscio fond.	3130	28	775	2930	3	2	40.0	0.09	0.06
2786	Guscio fond.	2930	775	791	2931	3	2	40.0	0.09	0.06
2787	Guscio fond.	2931	791	807	2932	3	2	40.0	0.09	0.06
2788	Guscio fond.	2932	807	823	2933	3	2	40.0	0.09	0.06
2789	Guscio fond.	2933	823	839	2934	3	2	40.0	0.09	0.06
2790	Guscio fond.	2934	839	855	2935	3	2	40.0	0.09	0.06
2791	Guscio fond.	2935	855	871	2936	3	2	40.0	0.09	0.06
2792	Guscio fond.	2936	871	887	2937	3	2	40.0	0.09	0.06
2793	Guscio fond.	2937	887	903	2938	3	2	40.0	0.09	0.06
2794	Guscio fond.	2938	903	919	2939	3	2	40.0	0.09	0.06
2795	Guscio fond.	2939	919	935	2940	3	2	40.0	0.09	0.06
2796	Guscio fond.	2940	935	951	2941	3	2	40.0	0.09	0.06
2797	Guscio fond.	2941	951	967	2942	3	2	40.0	0.09	0.06
2798	Guscio fond.	2942	967	983	2943	3	2	40.0	0.09	0.06
2799	Guscio fond.	2943	983	999	2944	3	2	40.0	0.09	0.06
2800	Guscio fond.	2944	999	1015	2945	3	2	40.0	0.09	0.06
2801	Guscio fond.	2945	1015	1031	2946	3	2	40.0	0.09	0.06
2802	Guscio fond.	2946	1031	1047	2947	3	2	40.0	0.09	0.06
2803	Guscio fond.	2947	1047	1063	2948	3	2	40.0	0.09	0.06
2804	Guscio fond.	2948	1063	1079	2949	3	2	40.0	0.09	0.06
2805	Guscio fond.	2949	1079	1095	2950	3	2	40.0	0.09	0.06
2806	Guscio fond.	2950	1095	1111	2951	3	2	40.0	0.09	0.06
2807	Guscio fond.	2951	1111	1127	2952	3	2	40.0	0.09	0.06
2808	Guscio fond.	2952	1127	1143	2953	3	2	40.0	0.09	0.06
2809	Guscio fond.	2953	1143	1159	2954	3	2	40.0	0.09	0.06
2810	Guscio fond.	2954	1159	1175	2955	3	2	40.0	0.09	0.06
2811	Guscio fond.	2955	1175	1191	2956	3	2	40.0	0.09	0.06
2812	Guscio fond.	2956	1191	1207	2957	3	2	40.0	0.09	0.06
2813	Guscio fond.	2957	1207	1223	2958	3	2	40.0	0.09	0.06
2814	Guscio fond.	2958	1223	37	2887	3	2	40.0	0.09	0.06
2815	Guscio fond.	2959	2387	1	3127	3	2	40.0	0.09	0.06
2816	Guscio fond.	2960	2418	2387	2959	3	2	40.0	0.09	0.06
2817	Guscio fond.	2961	2449	2418	2960	3	2	40.0	0.09	0.06
2818	Guscio fond.	2962	2480	2449	2961	3	2	40.0	0.09	0.06
2819	Guscio fond.	2887	37	2751	2963	3	2	40.0	0.09	0.06
2820	Guscio fond.	2963	2751	2785	2964	3	2	40.0	0.09	0.06
2821	Guscio fond.	2964	2785	2819	2965	3	2	40.0	0.09	0.06
2822	Guscio fond.	2965	2819	2853	2966	3	2	40.0	0.09	0.06
2823	Guscio fond.	3131	3127	2888	2968	3	2	40.0	0.09	0.06
2824	Guscio fond.	2968	2888	2889	2969	3	2	40.0	0.09	0.06
2825	Guscio fond.	2969	2889	2890	2970	3	2	40.0	0.09	0.06
2826	Guscio fond.	2970	2890	2891	2971	3	2	40.0	0.09	0.06
2827	Guscio fond.	2971	2891	2892	2972	3	2	40.0	0.09	0.06
2828	Guscio fond.	2972	2892	2893	2973	3	2	40.0	0.09	0.06
2829	Guscio fond.	2973	2893	2894	2974	3	2	40.0	0.09	0.06
2830	Guscio fond.	2974	2894	2895	2975	3	2	40.0	0.09	0.06
2831	Guscio fond.	2975	2895	2896	2976	3	2	40.0	0.09	0.06
2832	Guscio fond.	2976	2896	2897	2977	3	2	40.0	0.09	0.06
2833	Guscio fond.	2977	2897	2898	2978	3	2	40.0	0.09	0.06
2834	Guscio fond.	2978	2898	2899	2979	3	2	40.0	0.09	0.06
2835	Guscio fond.	2979	2899	2900	2980	3	2	40.0	0.09	0.06
2836	Guscio fond.	2980	2900	2901	2981	3	2	40.0	0.09	0.06
2837	Guscio fond.	2981	2901	3128	3132	3	2	40.0	0.09	0.06
2838	Guscio fond.	3132	3128	2902	2982	3	2	40.0	0.09	0.06
2839	Guscio fond.	2982	2902	2903	2983	3	2	40.0	0.09	0.06
2840	Guscio fond.	2983	2903	2904	2984	3	2	40.0	0.09	0.06
2841	Guscio fond.	2984	2904	2905	2985	3	2	40.0	0.09	0.06
2842	Guscio fond.	2985	2905	2906	2986	3	2	40.0	0.09	0.06
2843	Guscio fond.	2986	2906	2907	2987	3	2	40.0	0.09	0.06
2844	Guscio fond.	2987	2907	2908	2988	3	2	40.0	0.09	0.06
2845	Guscio fond.	2988	2908	2909	2989	3	2	40.0	0.09	0.06

2846	Guscio fond.	2989	2909	2910	2990	3	2	40.0	0.09	0.06
2847	Guscio fond.	2990	2910	2911	2991	3	2	40.0	0.09	0.06
2848	Guscio fond.	2991	2911	2912	2992	3	2	40.0	0.09	0.06
2849	Guscio fond.	2992	2912	2913	2993	3	2	40.0	0.09	0.06
2850	Guscio fond.	2993	2913	2914	2994	3	2	40.0	0.09	0.06
2851	Guscio fond.	2994	2914	2915	2995	3	2	40.0	0.09	0.06
2852	Guscio fond.	2995	2915	3129	3133	3	2	40.0	0.09	0.06
2853	Guscio fond.	3133	3129	2916	2996	3	2	40.0	0.09	0.06
2854	Guscio fond.	2996	2916	2917	2997	3	2	40.0	0.09	0.06
2855	Guscio fond.	2997	2917	2918	2998	3	2	40.0	0.09	0.06
2856	Guscio fond.	2998	2918	2919	2999	3	2	40.0	0.09	0.06
2857	Guscio fond.	2999	2919	2920	3000	3	2	40.0	0.09	0.06
2858	Guscio fond.	3000	2920	2921	3001	3	2	40.0	0.09	0.06
2859	Guscio fond.	3001	2921	2922	3002	3	2	40.0	0.09	0.06
2860	Guscio fond.	3002	2922	2923	3003	3	2	40.0	0.09	0.06
2861	Guscio fond.	3003	2923	2924	3004	3	2	40.0	0.09	0.06
2862	Guscio fond.	3004	2924	2925	3005	3	2	40.0	0.09	0.06
2863	Guscio fond.	3005	2925	2926	3006	3	2	40.0	0.09	0.06
2864	Guscio fond.	3006	2926	2927	3007	3	2	40.0	0.09	0.06
2865	Guscio fond.	3007	2927	2928	3008	3	2	40.0	0.09	0.06
2866	Guscio fond.	3008	2928	2929	3009	3	2	40.0	0.09	0.06
2867	Guscio fond.	3009	2929	3130	3134	3	2	40.0	0.09	0.06
2868	Guscio fond.	3134	3130	2930	3010	3	2	40.0	0.09	0.06
2869	Guscio fond.	3010	2930	2931	3011	3	2	40.0	0.09	0.06
2870	Guscio fond.	3011	2931	2932	3012	3	2	40.0	0.09	0.06
2871	Guscio fond.	3012	2932	2933	3013	3	2	40.0	0.09	0.06
2872	Guscio fond.	3013	2933	2934	3014	3	2	40.0	0.09	0.06
2873	Guscio fond.	3014	2934	2935	3015	3	2	40.0	0.09	0.06
2874	Guscio fond.	3015	2935	2936	3016	3	2	40.0	0.09	0.06
2875	Guscio fond.	3016	2936	2937	3017	3	2	40.0	0.09	0.06
2876	Guscio fond.	3017	2937	2938	3018	3	2	40.0	0.09	0.06
2877	Guscio fond.	3018	2938	2939	3019	3	2	40.0	0.09	0.06
2878	Guscio fond.	3019	2939	2940	3020	3	2	40.0	0.09	0.06
2879	Guscio fond.	3020	2940	2941	3021	3	2	40.0	0.09	0.06
2880	Guscio fond.	3021	2941	2942	3022	3	2	40.0	0.09	0.06
2881	Guscio fond.	3022	2942	2943	3023	3	2	40.0	0.09	0.06
2882	Guscio fond.	3023	2943	2944	3024	3	2	40.0	0.09	0.06
2883	Guscio fond.	3024	2944	2945	3025	3	2	40.0	0.09	0.06
2884	Guscio fond.	3025	2945	2946	3026	3	2	40.0	0.09	0.06
2885	Guscio fond.	3026	2946	2947	3027	3	2	40.0	0.09	0.06
2886	Guscio fond.	3027	2947	2948	3028	3	2	40.0	0.09	0.06
2887	Guscio fond.	3028	2948	2949	3029	3	2	40.0	0.09	0.06
2888	Guscio fond.	3029	2949	2950	3030	3	2	40.0	0.09	0.06
2889	Guscio fond.	3030	2950	2951	3031	3	2	40.0	0.09	0.06
2890	Guscio fond.	3031	2951	2952	3032	3	2	40.0	0.09	0.06
2891	Guscio fond.	3032	2952	2953	3033	3	2	40.0	0.09	0.06
2892	Guscio fond.	3033	2953	2954	3034	3	2	40.0	0.09	0.06
2893	Guscio fond.	3034	2954	2955	3035	3	2	40.0	0.09	0.06
2894	Guscio fond.	3035	2955	2956	3036	3	2	40.0	0.09	0.06
2895	Guscio fond.	3036	2956	2957	3037	3	2	40.0	0.09	0.06
2896	Guscio fond.	3037	2957	2958	3038	3	2	40.0	0.09	0.06
2897	Guscio fond.	3038	2958	2887	2967	3	2	40.0	0.09	0.06
2898	Guscio fond.	3039	2959	3127	3131	3	2	40.0	0.09	0.06
2899	Guscio fond.	3040	2960	2959	3039	3	2	40.0	0.09	0.06
2900	Guscio fond.	3041	2961	2960	3040	3	2	40.0	0.09	0.06
2901	Guscio fond.	3042	2962	2961	3041	3	2	40.0	0.09	0.06
2902	Guscio fond.	2967	2887	2963	3043	3	2	40.0	0.09	0.06
2903	Guscio fond.	3043	2963	2964	3044	3	2	40.0	0.09	0.06
2904	Guscio fond.	3044	2964	2965	3045	3	2	40.0	0.09	0.06
2905	Guscio fond.	3045	2965	2966	3046	3	2	40.0	0.09	0.06
2906	Guscio fond.	3135	3131	2968	3048	3	2	40.0	0.09	0.06
2907	Guscio fond.	3048	2968	2969	3049	3	2	40.0	0.09	0.06
2908	Guscio fond.	3049	2969	2970	3050	3	2	40.0	0.09	0.06
2909	Guscio fond.	3050	2970	2971	3051	3	2	40.0	0.09	0.06
2910	Guscio fond.	3051	2971	2972	3052	3	2	40.0	0.09	0.06
2911	Guscio fond.	3052	2972	2973	3053	3	2	40.0	0.09	0.06
2912	Guscio fond.	3053	2973	2974	3054	3	2	40.0	0.09	0.06
2913	Guscio fond.	3054	2974	2975	3055	3	2	40.0	0.09	0.06
2914	Guscio fond.	3055	2975	2976	3056	3	2	40.0	0.09	0.06
2915	Guscio fond.	3056	2976	2977	3057	3	2	40.0	0.09	0.06
2916	Guscio fond.	3057	2977	2978	3058	3	2	40.0	0.09	0.06
2917	Guscio fond.	3058	2978	2979	3059	3	2	40.0	0.09	0.06
2918	Guscio fond.	3059	2979	2980	3060	3	2	40.0	0.09	0.06
2919	Guscio fond.	3060	2980	2981	3061	3	2	40.0	0.09	0.06
2920	Guscio fond.	3061	2981	3132	3136	3	2	40.0	0.09	0.06
2921	Guscio fond.	3136	3132	2982	3062	3	2	40.0	0.09	0.06
2922	Guscio fond.	3062	2982	2983	3063	3	2	40.0	0.09	0.06

2923	Guscio fond.	3063	2983	2984	3064	3	2	40.0	0.09	0.06
2924	Guscio fond.	3064	2984	2985	3065	3	2	40.0	0.09	0.06
2925	Guscio fond.	3065	2985	2986	3066	3	2	40.0	0.09	0.06
2926	Guscio fond.	3066	2986	2987	3067	3	2	40.0	0.09	0.06
2927	Guscio fond.	3067	2987	2988	3068	3	2	40.0	0.09	0.06
2928	Guscio fond.	3068	2988	2989	3069	3	2	40.0	0.09	0.06
2929	Guscio fond.	3069	2989	2990	3070	3	2	40.0	0.09	0.06
2930	Guscio fond.	3070	2990	2991	3071	3	2	40.0	0.09	0.06
2931	Guscio fond.	3071	2991	2992	3072	3	2	40.0	0.09	0.06
2932	Guscio fond.	3072	2992	2993	3073	3	2	40.0	0.09	0.06
2933	Guscio fond.	3073	2993	2994	3074	3	2	40.0	0.09	0.06
2934	Guscio fond.	3074	2994	2995	3075	3	2	40.0	0.09	0.06
2935	Guscio fond.	3075	2995	3133	3137	3	2	40.0	0.09	0.06
2936	Guscio fond.	3137	3133	2996	3076	3	2	40.0	0.09	0.06
2937	Guscio fond.	3076	2996	2997	3077	3	2	40.0	0.09	0.06
2938	Guscio fond.	3077	2997	2998	3078	3	2	40.0	0.09	0.06
2939	Guscio fond.	3078	2998	2999	3079	3	2	40.0	0.09	0.06
2940	Guscio fond.	3079	2999	3000	3080	3	2	40.0	0.09	0.06
2941	Guscio fond.	3080	3000	3001	3081	3	2	40.0	0.09	0.06
2942	Guscio fond.	3081	3001	3002	3082	3	2	40.0	0.09	0.06
2943	Guscio fond.	3082	3002	3003	3083	3	2	40.0	0.09	0.06
2944	Guscio fond.	3083	3003	3004	3084	3	2	40.0	0.09	0.06
2945	Guscio fond.	3084	3004	3005	3085	3	2	40.0	0.09	0.06
2946	Guscio fond.	3085	3005	3006	3086	3	2	40.0	0.09	0.06
2947	Guscio fond.	3086	3006	3007	3087	3	2	40.0	0.09	0.06
2948	Guscio fond.	3087	3007	3008	3088	3	2	40.0	0.09	0.06
2949	Guscio fond.	3088	3008	3009	3089	3	2	40.0	0.09	0.06
2950	Guscio fond.	3089	3009	3134	3138	3	2	40.0	0.09	0.06
2951	Guscio fond.	3138	3134	3010	3090	3	2	40.0	0.09	0.06
2952	Guscio fond.	3090	3010	3011	3091	3	2	40.0	0.09	0.06
2953	Guscio fond.	3091	3011	3012	3092	3	2	40.0	0.09	0.06
2954	Guscio fond.	3092	3012	3013	3093	3	2	40.0	0.09	0.06
2955	Guscio fond.	3093	3013	3014	3094	3	2	40.0	0.09	0.06
2956	Guscio fond.	3094	3014	3015	3095	3	2	40.0	0.09	0.06
2957	Guscio fond.	3095	3015	3016	3096	3	2	40.0	0.09	0.06
2958	Guscio fond.	3096	3016	3017	3097	3	2	40.0	0.09	0.06
2959	Guscio fond.	3097	3017	3018	3098	3	2	40.0	0.09	0.06
2960	Guscio fond.	3098	3018	3019	3099	3	2	40.0	0.09	0.06
2961	Guscio fond.	3099	3019	3020	3100	3	2	40.0	0.09	0.06
2962	Guscio fond.	3100	3020	3021	3101	3	2	40.0	0.09	0.06
2963	Guscio fond.	3101	3021	3022	3102	3	2	40.0	0.09	0.06
2964	Guscio fond.	3102	3022	3023	3103	3	2	40.0	0.09	0.06
2965	Guscio fond.	3103	3023	3024	3104	3	2	40.0	0.09	0.06
2966	Guscio fond.	3104	3024	3025	3105	3	2	40.0	0.09	0.06
2967	Guscio fond.	3105	3025	3026	3106	3	2	40.0	0.09	0.06
2968	Guscio fond.	3106	3026	3027	3107	3	2	40.0	0.09	0.06
2969	Guscio fond.	3107	3027	3028	3108	3	2	40.0	0.09	0.06
2970	Guscio fond.	3108	3028	3029	3109	3	2	40.0	0.09	0.06
2971	Guscio fond.	3109	3029	3030	3110	3	2	40.0	0.09	0.06
2972	Guscio fond.	3110	3030	3031	3111	3	2	40.0	0.09	0.06
2973	Guscio fond.	3111	3031	3032	3112	3	2	40.0	0.09	0.06
2974	Guscio fond.	3112	3032	3033	3113	3	2	40.0	0.09	0.06
2975	Guscio fond.	3113	3033	3034	3114	3	2	40.0	0.09	0.06
2976	Guscio fond.	3114	3034	3035	3115	3	2	40.0	0.09	0.06
2977	Guscio fond.	3115	3035	3036	3116	3	2	40.0	0.09	0.06
2978	Guscio fond.	3116	3036	3037	3117	3	2	40.0	0.09	0.06
2979	Guscio fond.	3117	3037	3038	3118	3	2	40.0	0.09	0.06
2980	Guscio fond.	3118	3038	2967	3047	3	2	40.0	0.09	0.06
2981	Guscio fond.	3119	3039	3131	3135	3	2	40.0	0.09	0.06
2982	Guscio fond.	3120	3040	3039	3119	3	2	40.0	0.09	0.06
2983	Guscio fond.	3121	3041	3040	3120	3	2	40.0	0.09	0.06
2984	Guscio fond.	3122	3042	3041	3121	3	2	40.0	0.09	0.06
2985	Guscio fond.	3047	2967	3043	3123	3	2	40.0	0.09	0.06
2986	Guscio fond.	3123	3043	3044	3124	3	2	40.0	0.09	0.06
2987	Guscio fond.	3124	3044	3045	3125	3	2	40.0	0.09	0.06
2988	Guscio fond.	3125	3045	3046	3126	3	2	40.0	0.09	0.06

MODELLAZIONE DELLA STRUTTURA: ELEMENTI SOLAIO-PANNELLO

LEGENDA TABELLA DATI SOLAI-PANNELLI

Il programma utilizza per la modellazione elementi a tre o più nodi denominati in generale solaio o pannello.
Ogni elemento solaio-pannello è individuato da una poligonale di nodi 1,2, ..., N.
L'elemento solaio è utilizzato in primo luogo per la modellazione dei carichi agenti sugli elementi strutturali. In secondo luogo può essere utilizzato per la corretta ripartizione delle forze orizzontali agenti nel proprio piano. L'elemento balcone è derivato dall'elemento solaio.
I carichi agenti sugli elementi solaio, raccolti in un archivio, sono direttamente assegnati agli elementi utilizzando le informazioni raccolte nell' archivio (es. i coefficienti combinatori). La tabella seguente riporta i dati utilizzati per la definizione dei carichi e delle masse.
L'elemento pannello è utilizzato solo per l'applicazione dei carichi, quali pesi delle tamponature o spinte dovute al vento o terre. In questo caso i carichi sono applicati in analogia agli altri elementi strutturali (si veda il cap. SCHEMATIZZAZIONE DEI CASI DI CARICO).

Id.Arch.	Identificativo dell' archivio
Tipo	Tipo di carico ***Variab.*** Carico variabile generico ***Var. rid.*** Carico variabile generico con riduzione in funzione dell' area (c.5.5. …) ***Neve*** Carico di neve
G1k	carico permanente (comprensivo del peso proprio)
G2k	carico permanente non strutturale e non compiutamente definito
Qk	carico variabile
Fatt. A	fattore di riduzione del carico variabile (0.5 o 0.75) per tipo "Var.rid."
S sis.	fattore di riduzione del carico variabile per la definizione delle masse sismiche per D.M. 96 (vedi NOTA sul capitolo "normativa di riferimento")
Psi 0	Coefficiente combinatorio dei valori caratteristici delle azioni variabili: ***per valore raro***
Psi 1	Coefficiente combinatorio dei valori caratteristici delle azioni variabili: ***per valore frequente***
Psi 2	Coefficiente combinatorio dei valori caratteristici delle azioni variabili: ***per valore quasi permanente***
Psi S 2	Coefficiente di combinazione che fornisce il valore quasi-permanente dell'azione variabile: ***per la definizione delle masse sismiche***
Fatt. Fi	Coefficiente di correlazione dei carichi per edifici

Ogni elemento è caratterizzato da un insieme di proprietà riportate in tabella che ne completano la modellazione. In particolare per ogni elemento viene indicato in tabella:

Elem	numero dell'elemento
Tipo	codice di comportamento ***S*** elemento utilizzato solo per scarico ***C*** elemento utilizzato per scarico e per modellazione piano rigido ***P*** elemento utilizzato come pannello ***M*** scarico monodirezionale ***B*** scarico bidirezionale
Id.Arch.	Identificativo dell' archivio
Mat	codice del materiale assegnato all'elemento
Spessore	spessore dell'elemento (costante)
Orditura	angolo (rispetto all'asse X) della direzione dei travetti principali

Gk	carico permanente solaio (comprensivo del peso proprio)
Qk	carico variabile solaio
Nodi	numero dei nodi che definiscono l'elemento (5 per riga)

Nel caso in cui si sia proceduto alla progettazione dei solai con le tensioni ammissibili vengono riportate le massime tensioni nell'elemento (massima compressione nel calcestruzzo, massima tensione nell'acciaio, massima tensione tangenziale); nel caso in cui si sia proceduto alla progettazione con il metodo degli stati limite vengono riportati il rapporto x/d e le verifiche per sollecitazioni proporzionali nonché le verifiche in esercizio.

In particolare i simboli utilizzati in tabella assumono il seguente significato:

Elem.	numero identificativo dell'elemento
Stato	Codici di verifica relativi alle tensioni normali e alle tensioni tangenziali
Note	Viene riportato il codice relativo alla sezione(s) e relativo al materiale(m);
Pos.	Ascissa del punto di verifica
F ist, F infi	Frecce instantanee e a tempo infinito
Momento	Momento flettente
Taglio	Sollecitazione di taglio
Af inf.	Area di armatura longitudinale posta all'intradosso della trave
Af sup.	Area di armatura longitudinale posta all'estradosso della trave
AfV	Area dell'armatura atta ad assorbire le azioni di taglio
Beff	Base della sezione di cls per l'assorbimento del taglio
	simboli utilizzati con il metodo delle tensioni ammissibili:
sc max	Massima tensione di compressione del calcestruzzo
sf max	Massima tensione nell'acciaio
tau max	Massima tensione tangenziale nel cls
	simboli utilizzati con il metodo degli stati limite:
x/d	rapporto tra posizione dell'asse neutro e altezza utile alla rottura della sezione (per sola flessione)
verif.	rapporto Sd/Su con sollecitazioni ultime proporzionali: valore minore o uguale a 1 per verifica positiva
Verif.V	rapporto Sd/Su con sollecitazioni taglianti proporzionali valore minore o uguale a 1 per verifica positiva
rRfck	rapporto tra la massima compressione nel calcestruzzo e la tensione fck in combinazioni rare [normalizzato a 1]
rFfck	rapporto tra la massima compressione nel calcestruzzo e la tensione fck in combinazioni frequenti [normalizzato a 1]
rPfck	rapporto tra la massima compressione nel calcestruzzo e la tensione fck in combinazioni quasi permanenti [normalizzato a 1]
rRfyk	rapporto tra la massima tensione nell'acciaio e la tensione fyk in combinazioni frequenti [normalizzato a 1]
rFyk	rapporto tra la massima tensione nell'acciaio e la tensione fyk in combinazioni rare [normalizzato a 1]
rPfyk	rapporto tra la massima tensione nell'acciaio e la tensione fyk in combinazioni quasi permanenti [normalizzato a 1]
wR	apertura caratteristica delle fessure in combinazioni rare [mm]
wF	apertura caratteristica delle fessure in combinazioni frequenti [mm]
wP	apertura caratteristica delle fessure in combinazioni quasi permanenti [mm]

Nel caso in cui si sia proceduto alla verifica delle tamponature secondo il D.M. 17.01.2018 - §7.2.3 viene riportata una tabella riassuntiva delle verifiche degli elementi pannello. La verifica confronta i momenti sollecitanti indotti dal sisma con i momenti resistenti, secondo tre ipotesi, due basate sulla resistenza a pressoflessione della tamponatura ed una basata sul cinematismo a seguito della formazione di tre cerniere plastiche sulla tamponatura (rif. Ufficio di

Vigilanza sulle Costruzioni, Provincia di Terni).
Qualora la tamponatura sia di tipo antiespulsione (nelle due possibili varianti ordinaria o armata) viene condotta una verifica con meccanismo ad arco con degrado di resistenza. La verifica confronta le pressioni sollecitanti indotte dal sisma con le pressioni resistenti che la tamponatura sviluppa attraverso il meccanismo ad arco. La verifica considera anche il degrado di resistenza dovuto al danneggiamento nel piano della tamponatura.
Per quest'ultima tamponatura sono disponibili, in funzione del materiale impiegato (materiale [52] o materiale [53]):

- **Tamponatura Antiespulsione ordinaria Poroton® Cis Edil** sp.30 cm; con metodo di verifica per meccanismo ad arco con degrado di resistenza, sviluppato attraverso i risultati di un progetto di ricerca sperimentale condotto dall'Università degli Studi di Padova.
  Utilizzabile per il materiale [52].
- **Tamponatura Antiespulsione armata Poroton® Cis Edil** sp.30 cm; con metodo di verifica per meccanismo ad arco con degrado di resistenza, sviluppato attraverso i risultati di un progetto di ricerca sperimentale condotto dall'Università degli Studi di Padova.
  Utilizzabile per il materiale [53].

La verifica è stata calibrata sulla base di prove sperimentali sul sistema di Tamponatura Antiespulsione anche in presenza di aperture.
(rif. Rapporti di Prova redatti dal Dipartimento ICEA - Università degli Studi di Padova di test sperimentali condotti sul sistema Tamponatura Antiespulsione di Cis Edil)

In particolare i simboli utilizzati in tabella assumono il seguente significato:

Elem.	Numero identificativo dell'elemento
Stato	Codice di verifica
Ver. c.c.	Verifica nell'ipotesi di trave appoggiata con carico concentrato in mezzeria
Ver. c.d.	Verifica nell'ipotesi di trave appoggiata con carico distribuito
Ver. c.cin.	Verifica nell'ipotesi di cinematismo con formazione di cerniere plastiche in appoggio e mezzeria
Ver. CIS	Rapporto pa/pr (valore minore o uguale a 1 per verifica positiva)
Z	Quota del baricentro dell'elemento
T1	Periodo proprio dell'edificio nella direzione di interesse (ortogonale al pannello)
Ta	Periodo proprio della parete
Sa	Accelerazione massima, adimensionalizzata allo SLV
pa	Pressione sulla parete causata dall'azione sismica
pr	Pressione resistente del meccanismo ad arco
Drift	Spostamento relativo interpiano allo SLV valutato secondo il D.M. 14.01.2018 - § 7.3.3.3
Beta a	Coef. riduttivo per tener conto del danneggiamento del piano dipendente dallo spostamento, ottenuto sperimentalmente

ID Arch.	Tipo	G1k	G2k	Qk	Fatt. A	s sis.	Psi 0	Psi 1	Psi 2	Psi S 2	Fatt. Fi
		daN/cm2	daN/cm2	daN/cm2							
1	Variab.	3.42e-02	3.76e-02	3.00e-02		1.00	0.70	0.70	0.60	0.60	1.00
2	Variab.	3.42e-02	5.00e-02	5.00e-03		1.00	0.70	0.50	0.30	0.30	1.00

Elem.	Tipo	ID Arch.	Mat.	Spessore	Orditura	G1k	G2k	Qk	Nodo 1/6..	Nodo 2/7..	Nodo 3/8..	Nodo..	Nodo..
						daN/cm2	daN/cm2	daN/cm2					
1	CB	1	m=3	5.0	90.0	3.42e-02	3.76e-02	3.00e-02	5	42	13	4	
2	CB	1	m=3	5.0	0.0	3.42e-02	3.76e-02	3.00e-02	42	43	22	13	
3	CB	1	m=3	5.0	90.0	3.42e-02	3.76e-02	3.00e-02	43	32	31	22	
4	CB	1	m=3	5.0	0.0	3.42e-02	3.76e-02	3.00e-02	32	41	40	31	
5	CB	1	m=3	5.0	0.0	3.42e-02	3.76e-02	3.00e-02	6	15	42	5	
6	CB	1	m=3	5.0	90.0	3.42e-02	3.76e-02	3.00e-02	15	24	43	42	
7	CB	1	m=3	5.0	0.0	3.42e-02	3.76e-02	3.00e-02	24	33	32	43	
8	CB	1	m=3	5.0	90.0	3.42e-02	3.76e-02	3.00e-02	33	14	41	32	
9	CB	2	m=3	5.0	90.0	3.42e-02	5.00e-02	5.00e-03	8	44	16	7	
10	CB	2	m=3	5.0	0.0	3.42e-02	5.00e-02	5.00e-03	44	45	25	16	
11	CB	2	m=3	5.0	90.0	3.42e-02	5.00e-02	5.00e-03	45	35	34	25	
12	CB	2	m=3	5.0	0.0	3.42e-02	5.00e-02	5.00e-03	35	26	17	34	

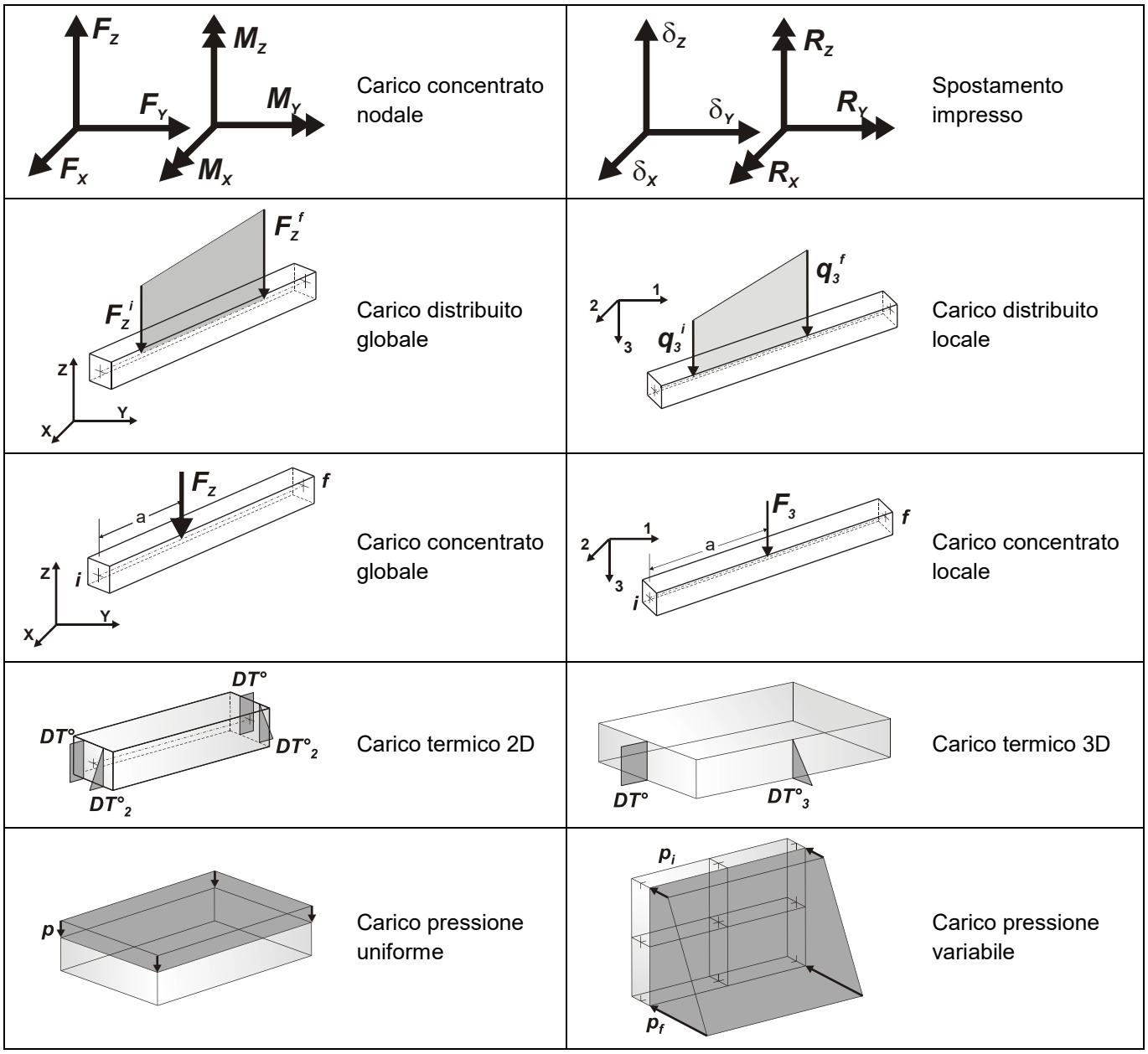
13	CB	2	m=3	5.0	0.0	3.42e-02	5.00e-02	5.00e-03	9	18	44	8
14	CB	2	m=3	5.0	90.0	3.42e-02	5.00e-02	5.00e-03	18	27	45	44
15	CB	2	m=3	5.0	0.0	3.42e-02	5.00e-02	5.00e-03	27	36	35	45
16	CB	2	m=3	5.0	90.0	3.42e-02	5.00e-02	5.00e-03	36	23	26	35

MODELLAZIONE DELLE AZIONI

LEGENDA TABELLA DATI AZIONI

Il programma consente l'uso di diverse tipologie di carico (azioni). Le azioni utilizzate nella modellazione sono individuate da una sigla identificativa ed un codice numerico (gli elementi strutturali richiamano quest'ultimo nella propria descrizione). Per ogni azione applicata alla struttura viene di riportato il codice, il tipo e la sigla identificativa. Le tabelle successive dettagliano i valori caratteristici di ogni azione in relazione al tipo. Le tabelle riportano infatti i seguenti dati in relazione al tipo:

1	**carico concentrato nodale** 6 dati (forza Fx, Fy, Fz, momento Mx, My, Mz)
2	**spostamento nodale impresso** 6 dati (spostamento Tx,Ty,Tz, rotazione Rx,Ry,Rz)
3	**carico distribuito globale su elemento tipo trave** 7 dati (fx,fy,fz,mx,my,mz,ascissa di inizio carico) 7 dati (fx,fy,fz,mx,my,mz,ascissa di fine carico)
4	**carico distribuito locale su elemento tipo trave** 7 dati (f1,f2,f3,m1,m2,m3,ascissa di inizio carico) 7 dati (f1,f2,f3,m1,m2,m3,ascissa di fine carico)
5	**carico concentrato globale su elemento tipo trave** 7 dati (Fx,Fy,Fz,Mx,My,Mz,ascissa di carico)
6	**carico concentrato locale su elemento tipo trave** 7 dati (F1, F2, F3, M1, M2, M3, ascissa di carico)
7	**variazione termica applicata ad elemento tipo trave** 7 dati (variazioni termiche: uniforme, media e differenza in altezza e larghezza al nodo iniziale e finale)
8	**carico di pressione uniforme su elemento tipo piastra** 1 dato (pressione)
9	**carico di pressione variabile su elemento tipo piastra** 4 dati (pressione, quota, pressione, quota)
10	**variazione termica applicata ad elemento tipo piastra** 2 dati (variazioni termiche: media e differenza nello spessore)
11	**carico variabile generale su elementi tipo trave e piastra** 1 dato descrizione della tipologia 4 dati per segmento (posizione, valore, posizione, valore) la tipologia precisa l'ascissa di definizione, la direzione del carico, la modalità di carico e la larghezza d'influenza per gli elementi tipo trave
12	**gruppo di carichi con impronta su piastra** 9 dati (numero di ripetizioni in direzione X e Y, valore di ciascun carico, posizione centrale del primo, dimensioni dell' impronta, interasse tra i carichi



Tipo	carico distribuito globale su trave

Id	Tipo	Pos.	fx	fy	fz	mx	my	mz
		cm	daN/cm	daN/cm	daN/cm	daN	daN	daN
2	TAMP.P1-DG:Fzi=-9.48 Fzf=-9.48	0.0	0.0	0.0	-9.48	0.0	0.0	0.0
		0.0	0.0	0.0	-9.48	0.0	0.0	0.0

SCHEMATIZZAZIONE DEI CASI DI CARICO

LEGENDA TABELLA CASI DI CARICO

Il programma consente l'applicazione di diverse tipologie di casi di carico.
Sono previsti i seguenti 11 tipi di casi di carico:

	Sigla	***Tipo***	***Descrizione***
1	**Ggk**	A	caso di carico comprensivo del peso proprio struttura
2	**Gk**	NA	caso di carico con azioni permanenti
3	**Qk**	NA	caso di carico con azioni variabili
4	**Gsk**	A	caso di carico comprensivo dei carichi permanenti sui solai e sulle coperture
5	**Qsk**	A	caso di carico comprensivo dei carichi variabili sui solai
6	**Qnk**	A	caso di carico comprensivo dei carichi di neve sulle coperture
7	**Qtk**	SA	caso di carico comprensivo di una variazione termica agente sulla struttura
8	**Qvk**	NA	caso di carico comprensivo di azioni da vento sulla struttura
9	**Esk**	SA	caso di carico sismico con analisi statica equivalente
10	**Edk**	SA	caso di carico sismico con analisi dinamica
11	**Etk**	NA	caso di carico comprensivo di azioni derivanti dall' incremento di spinta delle terre in condizione sismica
12	**Pk**	NA	caso di carico comprensivo di azioni derivanti da coazioni, cedimenti e precompressioni

Sono di tipo automatico A (ossia non prevedono introduzione dati da parte dell'utente) i seguenti casi di carico: 1-Ggk; 4-Gsk; 5-Qsk; 6-Qnk.

Sono di tipo semi-automatico SA (ossia prevedono una minima introduzione dati da parte dell'utente) i seguenti casi di carico:
7-Qtk, in quanto richiede solo il valore della variazione termica;
9-Esk e 10-Edk, in quanto richiedono il valore dell'angolo di ingresso del sisma e l'individuazione dei casi di carico partecipanti alla definizione delle masse.

Sono di tipo non automatico NA ossia prevedono la diretta applicazione di carichi generici agli elementi strutturali (si veda il precedente punto Modellazione delle Azioni) i restanti casi di carico.

Nella tabella successiva vengono riportati i casi di carico agenti sulla struttura, con l'indicazione dei dati relativi al caso di carico stesso:
Numero Tipo e *Sigla identificativa*, *Valore di riferimento* del caso di carico (se previsto).

In successione, per i casi di carico non automatici, viene riportato l'elenco di nodi ed elementi direttamente caricati con la sigla identificativa del carico.

Per i casi di carico di tipo sismico (9-Esk e 10-Edk), viene riportata la tabella di definizione delle masse: per ogni caso di carico partecipante alla definizione delle masse viene indicata la relativa aliquota (partecipazione) considerata. Si precisa che per i caso di carico 5-Qsk e 6-Qnk la partecipazione è prevista localmente per ogni elemento solaio o copertura presente nel modello (si confronti il valore Sksol nel capitolo relativo agli elementi solaio) e pertanto la loro partecipazione è di norma pari a uno.

CDC	Tipo	Sigla Id	Note
1	Ggk	CDC=Ggk (peso proprio della struttura)	
2	Gsk	CDC=G1sk (permanente solai-coperture)	
3	Gsk	CDC=G2sk (permanente solai-coperture n.c.d.)	
4	Qsk	CDC=Qsk (variabile solai)	
5	Edk	CDC=Ed (dinamico SLU) alfa=0.0 (ecc. +)	partecipazione:1.00 per 1 CDC=Ggk (peso proprio della struttura)
			partecipazione:1.00 per 2 CDC=G1sk (permanente solai-coperture)
			partecipazione:1.00 per 3 CDC=G2sk (permanente solai-coperture n.c.d.)

CDC	Tipo	Sigla Id	Note
			partecipazione:1.00 per 4 CDC=Qsk (variabile solai)
6	Edk	CDC=Ed (dinamico SLU) alfa=0.0 (ecc. -)	come precedente CDC sismico
7	Edk	CDC=Ed (dinamico SLU) alfa=90.00 (ecc. +)	come precedente CDC sismico
8	Edk	CDC=Ed (dinamico SLU) alfa=90.00 (ecc. -)	come precedente CDC sismico
9	Edk	CDC=Ed (dinamico SLD) alfa=0.0 (ecc. +)	come precedente CDC sismico
10	Edk	CDC=Ed (dinamico SLD) alfa=0.0 (ecc. -)	come precedente CDC sismico
11	Edk	CDC=Ed (dinamico SLD) alfa=90.00 (ecc. +)	come precedente CDC sismico
12	Edk	CDC=Ed (dinamico SLD) alfa=90.00 (ecc. -)	come precedente CDC sismico
13	Gk	CDC=G1k (permanente generico) TAMPONATURA	Azioni applicate:
			D2 :da 1 a 3 Azione : TAMP.P1-DG:Fzi=-9.48 Fzf=-9.48
			D2 : 9 Azione : TAMP.P1-DG:Fzi=-9.48 Fzf=-9.48
			D2 :da 16 a 17 Azione : TAMP.P1-DG:Fzi=-9.48 Fzf=-9.48
			D2 :da 53 a 56 Azione : TAMP.P1-DG:Fzi=-9.48 Fzf=-9.48
			D2 :da 69 a 70 Azione : TAMP.P1-DG:Fzi=-9.48 Fzf=-9.48

DEFINIZIONE DELLE COMBINAZIONI

LEGENDA TABELLA COMBINAZIONI DI CARICO

Il programma combina i diversi tipi di casi di carico (CDC) secondo le regole previste dalla normativa vigente.
Le combinazioni previste sono destinate al controllo di sicurezza della struttura ed alla verifica degli spostamenti e delle sollecitazioni.

La prima tabella delle combinazioni riportata di seguito comprende le seguenti informazioni: Numero, Tipo, Sigla identificativa. Una seconda tabella riporta il peso nella combinazione assunto per ogni caso di carico.

Ai fini delle verifiche degli stati limite si definiscono le seguenti combinazioni delle azioni:
***Combinazione fondamentale** SLU*

$\gamma G1 \cdot G1 + \gamma G2 \cdot G2 + \gamma P \cdot P + \gamma Q1 \cdot Qk1 + \gamma Q2 \cdot \psi 02 \cdot Qk2 + \gamma Q3 \cdot \psi 03 \cdot Qk3 + \ldots$

***Combinazione caratteristica** (rara) SLE*

$G1 + G2 + P + Qk1 + \psi 02 \cdot Qk2 + \psi 03 \cdot Qk3 + \ldots$

***Combinazione frequente** SLE*

$G1 + G2 + P + \psi 11 \cdot Qk1 + \psi 22 \cdot Qk2 + \psi 23 \cdot Qk3 + \ldots$

***Combinazione quasi permanente** SLE*

$G1 + G2 + P + \psi 21 \cdot Qk1 + \psi 22 \cdot Qk2 + \psi 23 \cdot Qk3 + \ldots$

***Combinazione sismica**, impiegata per gli stati limite ultimi e di esercizio connessi all'azione sismica E*

$E + G1 + G2 + P + \psi 21 \cdot Qk1 + \psi 22 \cdot Qk2 + \ldots$

***Combinazione eccezionale**, impiegata per gli stati limite connessi alle azioni eccezionali*

$G1 + G2 + Ad + P + \psi 21 \cdot Qk1 + \psi 22 \cdot Qk2 + \ldots$

Dove:

NTC 2018 Tabella 2.5.I

Destinazione d'uso/azione	**ψ0**	**ψ1**	**ψ2**
Categoria A residenziali	0,70	0,50	0,30
Categoria B uffici	0,70	0,50	0,30
Categoria C ambienti suscettibili di affollamento	0,70	0,70	0,60
Categoria D ambienti ad uso commerciale	0,70	0,70	0,60
Categoria E biblioteche, archivi, magazzini,…	1,00	0,90	0,80
Categoria F Rimesse e parcheggi (autoveicoli <= 30kN)	0,70	0,70	0,60
Categoria G Rimesse e parcheggi (autoveicoli > 30kN)	0,70	0,50	0,30
Categoria H Coperture	0,00	0,00	0,00
Vento	0,60	0,20	0,00
Neve a quota <= 1000 m	0,50	0,20	0,00
Neve a quota > 1000 m	0,70	0,50	0,20
Variazioni Termiche	0,60	0,50	0,00

Nelle verifiche possono essere adottati in alternativa due diversi approcci progettuali:
- per l'approccio 1 si considerano due diverse combinazioni di gruppi di coefficienti di sicurezza parziali per le azioni, per i materiali e per la resistenza globale (combinazione 1 con coefficienti A1 e combinazione 2 con coefficienti A2),
- per l'approccio 2 si definisce un'unica combinazione per le azioni, per la resistenza dei materiali e per la resistenza globale (con coefficienti A1).

NTC 2018 Tabella 2.6.I

	Coefficiente γf	**EQU**	**A1**	**A2**

Carichi permanenti	*Favorevoli*	*$\gamma G1$*	*0,9*	*1,0*	*1,0*
	Sfavorevoli		*1,1*	*1,3*	*1,0*
Carichi permanenti non strutturali *(Non compiutamente definiti)*	*Favorevoli*	*$\gamma G2$*	*0,8*	*0,8*	*0,8*
	Sfavorevoli		*1,5*	*1,5*	*1,3*
Carichi variabili	*Favorevoli*	*γQi*	*0,0*	*0,0*	*0,0*
	Sfavorevoli		*1,5*	*1,5*	*1,3*

Cmb	Tipo	Sigla Id	effetto P-delta
1	SLU	Comb. SLU A1 1	
2	SLU	Comb. SLU A1 2	
3	SLU	Comb. SLU A1 3	
4	SLU	Comb. SLU A1 4	
5	SLE(r)	Comb. SLE(rara) 5	
6	SLE(r)	Comb. SLE(rara) 6	
7	SLU	Comb. SLU A1 (SLV sism.) 7	SI
8	SLU	Comb. SLU A1 (SLV sism.) 8	SI
9	SLU	Comb. SLU A1 (SLV sism.) 9	SI
10	SLU	Comb. SLU A1 (SLV sism.) 10	SI
11	SLU	Comb. SLU A1 (SLV sism.) 11	SI
12	SLU	Comb. SLU A1 (SLV sism.) 12	SI
13	SLU	Comb. SLU A1 (SLV sism.) 13	SI
14	SLU	Comb. SLU A1 (SLV sism.) 14	SI
15	SLU	Comb. SLU A1 (SLV sism.) 15	SI
16	SLU	Comb. SLU A1 (SLV sism.) 16	SI
17	SLU	Comb. SLU A1 (SLV sism.) 17	SI
18	SLU	Comb. SLU A1 (SLV sism.) 18	SI
19	SLU	Comb. SLU A1 (SLV sism.) 19	SI
20	SLU	Comb. SLU A1 (SLV sism.) 20	SI
21	SLU	Comb. SLU A1 (SLV sism.) 21	SI
22	SLU	Comb. SLU A1 (SLV sism.) 22	SI
23	SLU	Comb. SLU A1 (SLV sism.) 23	SI
24	SLU	Comb. SLU A1 (SLV sism.) 24	SI
25	SLU	Comb. SLU A1 (SLV sism.) 25	SI
26	SLU	Comb. SLU A1 (SLV sism.) 26	SI
27	SLU	Comb. SLU A1 (SLV sism.) 27	SI
28	SLU	Comb. SLU A1 (SLV sism.) 28	SI
29	SLU	Comb. SLU A1 (SLV sism.) 29	SI
30	SLU	Comb. SLU A1 (SLV sism.) 30	SI
31	SLU	Comb. SLU A1 (SLV sism.) 31	SI
32	SLU	Comb. SLU A1 (SLV sism.) 32	SI
33	SLU	Comb. SLU A1 (SLV sism.) 33	SI
34	SLU	Comb. SLU A1 (SLV sism.) 34	SI
35	SLU	Comb. SLU A1 (SLV sism.) 35	SI
36	SLU	Comb. SLU A1 (SLV sism.) 36	SI
37	SLU	Comb. SLU A1 (SLV sism.) 37	SI
38	SLU	Comb. SLU A1 (SLV sism.) 38	SI
39	SLD(sis)	Comb. SLE (SLD Danno sism.) 39	SI
40	SLD(sis)	Comb. SLE (SLD Danno sism.) 40	SI
41	SLD(sis)	Comb. SLE (SLD Danno sism.) 41	SI
42	SLD(sis)	Comb. SLE (SLD Danno sism.) 42	SI
43	SLD(sis)	Comb. SLE (SLD Danno sism.) 43	SI
44	SLD(sis)	Comb. SLE (SLD Danno sism.) 44	SI
45	SLD(sis)	Comb. SLE (SLD Danno sism.) 45	SI
46	SLD(sis)	Comb. SLE (SLD Danno sism.) 46	SI
47	SLD(sis)	Comb. SLE (SLD Danno sism.) 47	SI
48	SLD(sis)	Comb. SLE (SLD Danno sism.) 48	SI
49	SLD(sis)	Comb. SLE (SLD Danno sism.) 49	SI
50	SLD(sis)	Comb. SLE (SLD Danno sism.) 50	SI
51	SLD(sis)	Comb. SLE (SLD Danno sism.) 51	SI
52	SLD(sis)	Comb. SLE (SLD Danno sism.) 52	SI
53	SLD(sis)	Comb. SLE (SLD Danno sism.) 53	SI
54	SLD(sis)	Comb. SLE (SLD Danno sism.) 54	SI
55	SLD(sis)	Comb. SLE (SLD Danno sism.) 55	SI
56	SLD(sis)	Comb. SLE (SLD Danno sism.) 56	SI
57	SLD(sis)	Comb. SLE (SLD Danno sism.) 57	SI
58	SLD(sis)	Comb. SLE (SLD Danno sism.) 58	SI

Cmb	Tipo	Sigla Id	effetto P-delta
59	SLD(sis)	Comb. SLE (SLD Danno sism.) 59	SI
60	SLD(sis)	Comb. SLE (SLD Danno sism.) 60	SI
61	SLD(sis)	Comb. SLE (SLD Danno sism.) 61	SI
62	SLD(sis)	Comb. SLE (SLD Danno sism.) 62	SI
63	SLD(sis)	Comb. SLE (SLD Danno sism.) 63	SI
64	SLD(sis)	Comb. SLE (SLD Danno sism.) 64	SI
65	SLD(sis)	Comb. SLE (SLD Danno sism.) 65	SI
66	SLD(sis)	Comb. SLE (SLD Danno sism.) 66	SI
67	SLD(sis)	Comb. SLE (SLD Danno sism.) 67	SI
68	SLD(sis)	Comb. SLE (SLD Danno sism.) 68	SI
69	SLD(sis)	Comb. SLE (SLD Danno sism.) 69	SI
70	SLD(sis)	Comb. SLE (SLD Danno sism.) 70	SI
71	SLE(f)	Comb. SLE(freq.) 71	
72	SLE(f)	Comb. SLE(freq.) 72	
73	SLE(p)	Comb. SLE(perm.) 73	
74	SLE(p)	Comb. SLE(perm.) 74	

Cmb	CDC 1/15...	CDC 2/16...	CDC 3/17...	CDC 4/18...	CDC 5/19...	CDC 6/20...	CDC 7/21...	CDC 8/22...	CDC 9/23...	CDC 10/24...	CDC 11/25...	CDC 12/26...	CDC 13/27...	CDC 14/28...
1	1.30	1.30	1.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	1.30	1.30	1.30	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	1.00	1.00	1.00	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	1.00	1.00	1.00	0.60	-1.00	0.0	-0.30	0.0	0.0	0.0	0.0	0.0	0.0	
8	1.00	1.00	1.00	0.60	-1.00	0.0	0.30	0.0	0.0	0.0	0.0	0.0	0.0	
9	1.00	1.00	1.00	0.60	1.00	0.0	-0.30	0.0	0.0	0.0	0.0	0.0	0.0	
10	1.00	1.00	1.00	0.60	1.00	0.0	0.30	0.0	0.0	0.0	0.0	0.0	0.0	
11	1.00	1.00	1.00	0.60	-1.00	0.0	0.0	-0.30	0.0	0.0	0.0	0.0	0.0	
12	1.00	1.00	1.00	0.60	-1.00	0.0	0.0	0.30	0.0	0.0	0.0	0.0	0.0	
13	1.00	1.00	1.00	0.60	1.00	0.0	0.0	-0.30	0.0	0.0	0.0	0.0	0.0	
14	1.00	1.00	1.00	0.60	1.00	0.0	0.0	0.30	0.0	0.0	0.0	0.0	0.0	
15	1.00	1.00	1.00	0.60	0.0	-1.00	-0.30	0.0	0.0	0.0	0.0	0.0	0.0	
16	1.00	1.00	1.00	0.60	0.0	-1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	
17	1.00	1.00	1.00	0.60	0.0	1.00	-0.30	0.0	0.0	0.0	0.0	0.0	0.0	
18	1.00	1.00	1.00	0.60	0.0	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	
19	1.00	1.00	1.00	0.60	0.0	-1.00	0.0	-0.30	0.0	0.0	0.0	0.0	0.0	
20	1.00	1.00	1.00	0.60	0.0	-1.00	0.0	0.30	0.0	0.0	0.0	0.0	0.0	
21	1.00	1.00	1.00	0.60	0.0	1.00	0.0	-0.30	0.0	0.0	0.0	0.0	0.0	
22	1.00	1.00	1.00	0.60	0.0	1.00	0.0	0.30	0.0	0.0	0.0	0.0	0.0	
23	1.00	1.00	1.00	0.60	-0.30	0.0	-1.00	0.0	0.0	0.0	0.0	0.0	0.0	
24	1.00	1.00	1.00	0.60	-0.30	0.0	1.00	0.0	0.0	0.0	0.0	0.0	0.0	
25	1.00	1.00	1.00	0.60	0.30	0.0	-1.00	0.0	0.0	0.0	0.0	0.0	0.0	
26	1.00	1.00	1.00	0.60	0.30	0.0	1.00	0.0	0.0	0.0	0.0	0.0	0.0	
27	1.00	1.00	1.00	0.60	0.0	-0.30	-1.00	0.0	0.0	0.0	0.0	0.0	0.0	
28	1.00	1.00	1.00	0.60	0.0	-0.30	1.00	0.0	0.0	0.0	0.0	0.0	0.0	
29	1.00	1.00	1.00	0.60	0.0	0.30	-1.00	0.0	0.0	0.0	0.0	0.0	0.0	
30	1.00	1.00	1.00	0.60	0.0	0.30	1.00	0.0	0.0	0.0	0.0	0.0	0.0	
31	1.00	1.00	1.00	0.60	-0.30	0.0	0.0	-1.00	0.0	0.0	0.0	0.0	0.0	
32	1.00	1.00	1.00	0.60	-0.30	0.0	0.0	1.00	0.0	0.0	0.0	0.0	0.0	
33	1.00	1.00	1.00	0.60	0.30	0.0	0.0	-1.00	0.0	0.0	0.0	0.0	0.0	
34	1.00	1.00	1.00	0.60	0.30	0.0	0.0	1.00	0.0	0.0	0.0	0.0	0.0	
35	1.00	1.00	1.00	0.60	0.0	-0.30	0.0	-1.00	0.0	0.0	0.0	0.0	0.0	
36	1.00	1.00	1.00	0.60	0.0	-0.30	0.0	1.00	0.0	0.0	0.0	0.0	0.0	
37	1.00	1.00	1.00	0.60	0.0	0.30	0.0	-1.00	0.0	0.0	0.0	0.0	0.0	
38	1.00	1.00	1.00	0.60	0.0	0.30	0.0	1.00	0.0	0.0	0.0	0.0	0.0	
39	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	-1.00	0.0	-0.30	0.0	0.0	
40	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	-1.00	0.0	0.30	0.0	0.0	
41	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	1.00	0.0	-0.30	0.0	0.0	
42	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	1.00	0.0	0.30	0.0	0.0	
43	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	-1.00	0.0	0.0	-0.30	0.0	
44	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	-1.00	0.0	0.0	0.30	0.0	
45	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	1.00	0.0	0.0	-0.30	0.0	
46	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.30	0.0	
47	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	-1.00	-0.30	0.0	0.0	
48	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	-1.00	0.30	0.0	0.0	
49	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	1.00	-0.30	0.0	0.0	
50	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	1.00	0.30	0.0	0.0	
51	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	-0.30	0.0	

Cmb	CDC 1/15...	CDC 2/16...	CDC 3/17...	CDC 4/18...	CDC 5/19...	CDC 6/20...	CDC 7/21...	CDC 8/22...	CDC 9/23...	CDC 10/24...	CDC 11/25...	CDC 12/26...	CDC 13/27...	CDC 14/28...
52	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.30	0.0	
53	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	1.00	0.0	-0.30	0.0	
54	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.30	0.0	
55	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	-0.30	0.0	-1.00	0.0	0.0	
56	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	-0.30	0.0	1.00	0.0	0.0	
57	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.30	0.0	-1.00	0.0	0.0	
58	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.30	0.0	1.00	0.0	0.0	
59	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	-0.30	-1.00	0.0	0.0	
60	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	-0.30	1.00	0.0	0.0	
61	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	0.30	-1.00	0.0	0.0	
62	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	0.30	1.00	0.0	0.0	
63	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	-1.00	0.0	
64	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	1.00	0.0	
65	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.30	0.0	0.0	-1.00	0.0	
66	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.30	0.0	0.0	1.00	0.0	
67	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	-1.00	0.0	
68	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	1.00	0.0	
69	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	0.30	0.0	-1.00	0.0	
70	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	0.30	0.0	1.00	0.0	
71	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
72	1.00	1.00	1.00	0.70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
73	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
74	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

AZIONE SISMICA

VALUTAZIONE DELL' AZIONE SISMICA

L'azione sismica sulle costruzioni è valutata a partire dalla "pericolosità sismica di base", in condizioni ideali di sito di riferimento rigido con superficie topografica orizzontale.
Allo stato attuale, la pericolosità sismica su reticolo di riferimento nell'intervallo di riferimento è fornita dai dati pubblicati sul sito http://esse1.mi.ingv.it/. Per punti non coincidenti con il reticolo di riferimento e periodi di ritorno non contemplati direttamente si opera come indicato nell' allegato alle NTC (rispettivamente media pesata e interpolazione).

L' azione sismica viene definita in relazione ad un periodo di riferimento Vr che si ricava, per ciascun tipo di costruzione, moltiplicandone la vita nominale per il coefficiente d'uso (vedi tabella Parametri della struttura). Fissato il periodo di riferimento Vr e la probabilità di superamento Pver associata a ciascuno degli stati limite considerati, si ottiene il periodo di ritorno Tr e i relativi parametri di pericolosità sismica (vedi tabella successiva):
ag: accelerazione orizzontale massima del terreno;
Fo: valore massimo del fattore di amplificazione dello spettro in accelerazione orizzontale;
T*c: periodo di inizio del tratto a velocità costante dello spettro in accelerazione orizzontale;

Parametri della struttura					
Classe d'uso	Vita Vn [anni]	Coeff. Uso	Periodo Vr [anni]	Tipo di suolo	Categoria topografica
III	50.0	1.5	75.0	B	T1

Per la struttura in esame si sono adottati i parametri di pericolosità sismica da analisi di Risposta Sismica locale; si sono adottati i parametri spettrali riportati nelle seguenti tabelle; i parametri consentono la definizione degli spettri elastici come previsto al cap. 3.2 delle norme tecniche:
lo spettro di risposta elastico in accelerazione della componente orizzontale del moto sismico, Se, è definito dalle seguenti espressioni:

$$0 \le T < T_B \qquad S_e(T) = a_g \cdot S \cdot \eta \cdot F_o \cdot \left[\frac{T}{T_B} + \frac{1}{\eta \cdot F_o}\left(1 - \frac{T}{T_B}\right)\right]$$

$$T_B \le T < T_C \qquad S_e(T) = a_g \cdot S \cdot \eta \cdot F_o$$

$$T_C \le T < T_D \qquad S_e(T) = a_g \cdot S \cdot \eta \cdot F_o \cdot \left(\frac{T_C}{T}\right)$$

$$T_D \le T \qquad S_e(T) = a_g \cdot S \cdot \eta \cdot F_o \cdot \left(\frac{T_C \cdot T_D}{T^2}\right)$$

Lo spettro di risposta elastico in accelerazione della componente verticale del moto sismico, Sve, è definito dalle espressioni:

$$0 \le T < T_B \qquad S_{ve}(T) = a_g \cdot S \cdot \eta \cdot F_v \cdot \left[\frac{T}{T_B} + \frac{1}{\eta \cdot F_o}\left(1 - \frac{T}{T_B}\right)\right]$$

$$T_B \le T < T_C \qquad S_{ve}(T) = a_g \cdot S \cdot \eta \cdot F_v$$

$$T_C \le T < T_D \qquad S_{ve}(T) = a_g \cdot S \cdot \eta \cdot F_v \cdot \left(\frac{T_C}{T}\right)$$

$$T_D \le T \qquad S_{ve}(T) = a_g \cdot S \cdot \eta \cdot F_v \cdot \left(\frac{T_C \cdot T_D}{T^2}\right)$$

I valori di S_S, T_B, T_C e T_D, sono riportati nella seguenteTabella

Categoria di sottosuolo	S_S	T_B	T_C	T_D
A, B, C, D, E	1,0	0,05 s	0,15 s	1,0 s

S è il coefficiente che tiene conto della categoria di sottosuolo e delle condizioni topografiche mediante la relazione seguente S = Ss*St (3.2.3); nel caso di RSL i valori sono unitari
Fo è il fattore che quantifica l'amplificazione spettrale massima, su sito in esame
Fv è il fattore che quantifica l'amplificazione spettrale massima verticale, in termini di accelerazione orizzontale massima del terreno ag su sito in esame
Tb è il periodo corrispondente all'inizio del tratto dello spettro ad accelerazione costante.
Tc è il periodo corrispondente all'inizio del tratto dello spettro a velocità costante.
Td è il periodo corrispondente all'inizio del tratto dello spettro a spostamento costante.

Simbologia adottata nelle tabelle

Se(t)	Accelerazioni dello spettro di input
Tr	Periodo di ritorno
Tmin	Valore minore tra i tre periodi di vibrazione dell'edificio con massa partecipante più elevata
2Tmax	Valore maggiore tra i tre periodi di vibrazione dell'edificio con massa partecipante più elevata moltiplicato per due
Integrale RSL	Integrale dello spettro di risposta sismica locale valutato nell'intervallo compreso tra Tmin e 2Tmax
Integrale NTC*1.2	Integrale dello spettro da normativa amplificato del 20% valutato nell'intervallo compreso tra Tmin e 2Tmax
Rapporto	Rapporto tra Integrale RSL e Integrale NTC*1.2;
Esito confronto RSL vs NTC	- Possibile l'uso dello spettro NTC se Rapporto minore di 1 e RSL < NTC*1.3 - Non ammesso l'uso dello spettro NTC se RSL ≥ NTC*1.3 e Rapporto maggiore di 1 - Non ammesso l'uso dello spettro NTC (30% superato) se RSL ≥ NTC*1.3 - Non ammasso l'uso dello spettro NTC (rapporto integrali) se Rapporto maggiore di 1
Se(t) RSL	Accelerazioni dello spettro di risposta sismica locale
Se(t) NTC*1.3	Accelerazioni dello spettro da normativa amplificate del 30%
Confronto ord.55	Confronto tra lo spettro di risposta sismica locale e lo spettro da normativa amplificato del 30% nell'intervallo compreso tra Tmin e 2Tmax secondo l'Ordinanza n. 55 – 24/04/2018: - Non richiesto (ad di fuori dell'intervallo compreso tra Tmin e 2Tmax); - RSL <= NTC*1.3; - RSL > NTC*1.3
Esito confronto RSL vs NTC (0.7 A)	Se lo spettro di risposta sismica locale è minore del 70% dello spettro da normativa non è consentito l'uso dello spettro di risposta sismica locale (7.2.6 NTC 2018): - Possibile l'uso dello spettro RSL; - Non ammesso l'uso di RSL (0.7 non superato).
Se(t) NTC*0.7 suolo tipo A	70% delle Accelerazioni dello spettro da normativa valutato per categoria A di sottosuolo
Confronto NTC	Confronto tra lo spettro di risposta sismica locale e il 70% dello spettro da normativa: - RSL >= NTC_A*0.7; - RSL < NTC_A*0.7

A seguire sono riportati i confronti tra pericolosità sismica RSL e NTC come previsto da Ordinanza n.55 – 24/04/2018 e NTC (7.2.6)

Id nodo	Longitudine	Latitudine	Distanza
			Km
Loc.	16.152	38.968	
41444	16.123	38.953	3.008
41445	16.187	38.952	3.505
41223	16.189	39.002	4.927
41222	16.125	39.003	4.513

SL	Pver	Tr	ag	Fo	T*c
		Anni	g		sec
SLO	81.0	45.0	0.156	2.105	0.320
SLD	63.0	75.0	0.203	2.115	0.337
SLV	10.0	712.0	0.555	2.224	0.412
SLC	5.0	1462.0	0.732	2.262	0.443

SL	ag	S	Fo	Fv	Tb	Tc	Td
	g				sec	sec	sec
SLO	0.156	1.000	2.105	1.123	0.107	0.320	2.224
SLD	0.203	1.000	2.115	1.287	0.112	0.337	2.413
SLV	0.555	1.000	2.224	2.237	0.137	0.412	3.820
SLC	0.732	1.000	2.262	2.612	0.148	0.443	4.527

Periodo di ritorno <Tr>	Accelerazione max <ag>	Amplificazione <Fo>	Inizio v=costante <T*c>
	[g]		[s]
30	0.125	2.119	0.297
50	0.165	2.101	0.326
72	0.199	2.113	0.336
101	0.235	2.127	0.347
140	0.275	2.150	0.357
201	0.326	2.166	0.367
475	0.472	2.213	0.388
975	0.630	2.232	0.431
2475	0.889	2.302	0.460

Confronto spettri RSL vs NTC	
Tmin	0.100
2Tmax	0.700
Integrale RSL	0.540
Integrale NTC*1.2	0.449
Rapporto	1.202
Esito confronto	Non ammesso l'uso dello spettro NTC

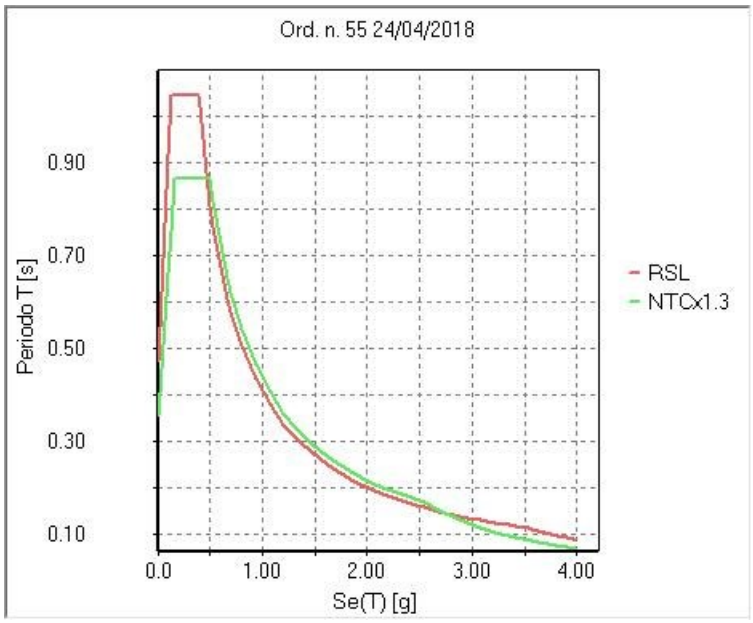


Fig. 1

Periodo	Se(t) RSL	Se(t) NTC*1.3	Confronto ord.55
[s]	[g]	[g]	
0.000	0.472	0.355	Non richiesto
0.100	0.915	0.660	RSL > NTC*1.3
0.129	1.045	0.750	RSL > NTC*1.3
0.167	1.045	0.866	RSL > NTC*1.3
0.264	1.045	0.866	RSL > NTC*1.3
0.388	1.045	0.866	RSL > NTC*1.3
0.398	1.018	0.866	RSL > NTC*1.3
0.502	0.807	0.866	RSL <= NTC*1.3
0.532	0.761	0.816	RSL <= NTC*1.3
0.667	0.608	0.652	RSL <= NTC*1.3
0.700	0.579	0.621	RSL <= NTC*1.3
0.801	0.506	0.542	Non richiesto
0.935	0.433	0.465	Non richiesto
1.070	0.379	0.406	Non richiesto
1.204	0.337	0.361	Non richiesto
1.338	0.303	0.325	Non richiesto
1.473	0.275	0.295	Non richiesto
1.607	0.252	0.270	Non richiesto
1.741	0.233	0.250	Non richiesto
1.876	0.216	0.232	Non richiesto
2.010	0.202	0.216	Non richiesto
2.145	0.189	0.203	Non richiesto
2.279	0.178	0.191	Non richiesto
2.413	0.168	0.180	Non richiesto
2.530	0.160	0.172	Non richiesto
2.548	0.159	0.169	Non richiesto
2.682	0.151	0.153	Non richiesto
2.816	0.144	0.139	Non richiesto

Periodo	Se(t) RSL	Se(t) NTC*1.3	Confronto ord.55
2.951	0.137	0.126	Non richiesto
3.085	0.131	0.116	Non richiesto
3.219	0.126	0.106	Non richiesto
3.354	0.121	0.098	Non richiesto
3.488	0.116	0.090	Non richiesto
3.508	0.115	0.089	Non richiesto
3.529	0.114	0.088	Non richiesto
3.549	0.112	0.087	Non richiesto
3.570	0.111	0.086	Non richiesto
3.590	0.110	0.085	Non richiesto
3.611	0.108	0.084	Non richiesto
3.631	0.107	0.083	Non richiesto
3.652	0.106	0.082	Non richiesto
3.672	0.105	0.082	Non richiesto
3.693	0.104	0.081	Non richiesto
3.713	0.103	0.080	Non richiesto
3.734	0.101	0.079	Non richiesto
3.754	0.100	0.078	Non richiesto
3.775	0.099	0.077	Non richiesto
3.795	0.098	0.076	Non richiesto
3.816	0.097	0.076	Non richiesto
3.836	0.096	0.075	Non richiesto
3.857	0.095	0.074	Non richiesto
3.877	0.094	0.073	Non richiesto
3.898	0.093	0.072	Non richiesto
3.918	0.092	0.072	Non richiesto
3.939	0.091	0.071	Non richiesto
3.959	0.090	0.070	Non richiesto
3.980	0.089	0.069	Non richiesto
4.000	0.088	0.069	Non richiesto

Confronto spettro RSL vs NTC (0.7 A)	
Esito confronto	Possibile l'uso dello spettro RSL

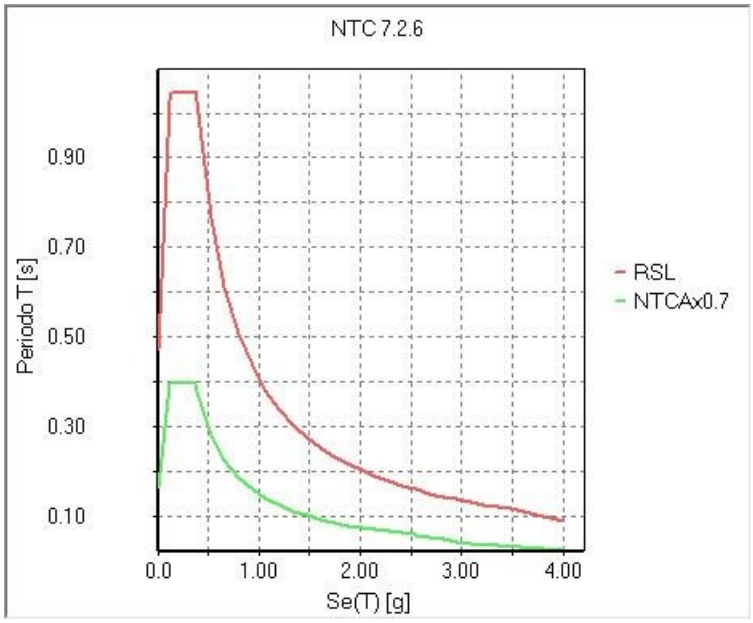


Fig. 2

Periodo	Se(t) RSL	Se(t) NTC*0.7 suolo tipo A	Confronto NTC
[s]	[g]	[g]	
0.000	0.472	0.163	RSL >= NTC_A*0.7
0.125	1.025	0.397	RSL >= NTC_A*0.7
0.129	1.045	0.397	RSL >= NTC_A*0.7
0.260	1.045	0.397	RSL >= NTC_A*0.7
0.375	1.045	0.397	RSL >= NTC_A*0.7
0.388	1.045	0.384	RSL >= NTC_A*0.7
0.394	1.029	0.378	RSL >= NTC_A*0.7
0.529	0.767	0.282	RSL >= NTC_A*0.7
0.663	0.611	0.225	RSL >= NTC_A*0.7
0.798	0.508	0.187	RSL >= NTC_A*0.7
0.932	0.435	0.160	RSL >= NTC_A*0.7
1.067	0.380	0.140	RSL >= NTC_A*0.7
1.201	0.337	0.124	RSL >= NTC_A*0.7
1.336	0.303	0.112	RSL >= NTC_A*0.7
1.470	0.276	0.101	RSL >= NTC_A*0.7
1.605	0.253	0.093	RSL >= NTC_A*0.7
1.739	0.233	0.086	RSL >= NTC_A*0.7
1.874	0.216	0.080	RSL >= NTC_A*0.7
2.008	0.202	0.074	RSL >= NTC_A*0.7
2.143	0.189	0.070	RSL >= NTC_A*0.7
2.277	0.178	0.065	RSL >= NTC_A*0.7
2.412	0.168	0.062	RSL >= NTC_A*0.7
2.530	0.160	0.059	RSL >= NTC_A*0.7
2.546	0.159	0.058	RSL >= NTC_A*0.7
2.681	0.151	0.052	RSL >= NTC_A*0.7
2.815	0.144	0.048	RSL >= NTC_A*0.7
2.950	0.137	0.043	RSL >= NTC_A*0.7
3.084	0.131	0.040	RSL >= NTC_A*0.7
3.219	0.126	0.036	RSL >= NTC_A*0.7
3.353	0.121	0.034	RSL >= NTC_A*0.7
3.488	0.116	0.031	RSL >= NTC_A*0.7
3.508	0.115	0.031	RSL >= NTC_A*0.7

Periodo	Se(t) RSL	Se(t) NTC*0.7 suolo tipo A	Confronto NTC
3.529	0.114	0.030	RSL >= NTC_A*0.7
3.549	0.112	0.030	RSL >= NTC_A*0.7
3.570	0.111	0.030	RSL >= NTC_A*0.7
3.590	0.110	0.029	RSL >= NTC_A*0.7
3.611	0.108	0.029	RSL >= NTC_A*0.7
3.631	0.107	0.029	RSL >= NTC_A*0.7
3.652	0.106	0.028	RSL >= NTC_A*0.7
3.672	0.105	0.028	RSL >= NTC_A*0.7
3.693	0.104	0.028	RSL >= NTC_A*0.7
3.713	0.103	0.027	RSL >= NTC_A*0.7
3.734	0.101	0.027	RSL >= NTC_A*0.7
3.754	0.100	0.027	RSL >= NTC_A*0.7
3.775	0.099	0.026	RSL >= NTC_A*0.7
3.795	0.098	0.026	RSL >= NTC_A*0.7
3.816	0.097	0.026	RSL >= NTC_A*0.7
3.836	0.096	0.026	RSL >= NTC_A*0.7
3.857	0.095	0.025	RSL >= NTC_A*0.7
3.877	0.094	0.025	RSL >= NTC_A*0.7
3.898	0.093	0.025	RSL >= NTC_A*0.7
3.918	0.092	0.025	RSL >= NTC_A*0.7
3.939	0.091	0.024	RSL >= NTC_A*0.7
3.959	0.090	0.024	RSL >= NTC_A*0.7
3.980	0.089	0.024	RSL >= NTC_A*0.7
4.000	0.088	0.024	RSL >= NTC_A*0.7

Periodo di ritorno <Tr>	Esito confronto
30	Possibile l'uso dello spettro RSL
50	Possibile l'uso dello spettro RSL
72	Possibile l'uso dello spettro RSL
101	Possibile l'uso dello spettro RSL
140	Possibile l'uso dello spettro RSL
201	Possibile l'uso dello spettro RSL
475	Possibile l'uso dello spettro RSL
975	Possibile l'uso dello spettro RSL
2475	Possibile l'uso dello spettro RSL

RISULTATI ANALISI SISMICHE

LEGENDA TABELLA ANALISI SISMICHE

Il programma consente l'analisi di diverse configurazioni sismiche.

Sono previsti, infatti, i seguenti casi di carico:

9. Esk caso di carico sismico con analisi statica equivalente
10. Edk caso di carico sismico con analisi dinamica

Ciascun caso di carico è caratterizzato da un angolo di ingresso e da una configurazione di masse determinante la forza sismica complessiva (si rimanda al capitolo relativo ai casi di carico per chiarimenti inerenti questo aspetto).

Nella colonna Note, in funzione della norma in uso sono riportati i parametri fondamentali che caratterizzano l' azione sismica: in particolare possono essere presenti i seguenti valori:

Angolo di ingresso	Angolo di ingresso dell'azione sismica orizzontale
Fattore di importanza	Fattore di importanza dell'edificio, in base alla categoria di appartenenza
Zona sismica	Zona sismica
Accelerazione ag	Accelerazione orizzontale massima sul suolo
Categoria suolo	Categoria di profilo stratigrafico del suolo di fondazione
Fattore q	Fattore di struttura/di comportamento. Dipendente dalla tipologia strutturale
Fattore di sito S	Fattore dipendente dalla stratigrafia e dal profilo topografico
Classe di duttilità CD	Classe di duttilità della struttura – "A" duttilità alta, "B" duttilità bassa
Fattore riduz. SLD	Fattore di riduzione dello spettro elastico per lo stato limite di danno
Periodo proprio T1	Periodo proprio di vibrazione della struttura
Coefficiente Lambda	Coefficiente dipendente dal periodo proprio T1 e dal numero di piani della struttura
Ordinata spettro Sd(T1)	Valore delle ordinate dello spettro di progetto per lo stato limite ultimo, componente orizzontale (verticale Svd)
Ordinata spettro Se(T1)	Valore delle ordinate dello spettro elastico ridotta del fattore SLD per lo stato limite di danno, componente orizzontale (verticale Sve)
Ordinata spettro S (Tb-Tc)	Valore dell' ordinata dello spettro in uso nel tratto costante
numero di modi considerati	Numero di modi di vibrare della struttura considerati nell'analisi dinamica

Per ciascun caso di carico sismico viene riportato l'insieme di dati sotto riportati (le masse sono espresse in unità di forza):

a) **analisi sismica statica equivalente**:
   - quota, posizione del centro di applicazione e azione orizzontale risultante, posizione del baricentro delle rigidezze, rapporto r/Ls (per strutture a nucleo), indici di regolarità e/r secondo EC8 4.2.3.2
   - azione sismica complessiva

b) **analisi sismica dinamica con spettro di risposta**:
   - quota, posizione del centro di massa e massa risultante, posizione del baricentro delle rigidezze, rapporto r/Ls (per strutture a nucleo) **,** indici di regolarità e/r secondo EC8 4.2.3.2
   - frequenza, periodo, accelerazione spettrale, massa eccitata nelle tre direzioni globali per tutti i modi

- massa complessiva ed aliquota di massa complessiva eccitata.

Per ciascuna combinazione sismica definita SLD o SLO viene riportato il livello di deformazione etaT (dr) degli elementi strutturali verticali. Per semplicità di consultazione il livello è espresso anche in unità 1000*etaT/h da confrontare direttamente con i valori forniti nella norma (es. 5 per edifici con tamponamenti collegati rigidamente alla struttura, 10.0 per edifici con tamponamenti collegati elasticamente, 3 per edifici in muratura ordinaria, 4 per edifici in muratura armata).

Qualora si applichi il D.M. 96 (vedi NOTA sul capitolo "normativa di riferimento") l'analisi sismica dinamica può essere comprensiva di sollecitazione verticale contemporanea a quella orizzontale, nel qual caso è effettuata una sovrapposizione degli effetti in ragione della radice dei quadrati degli effetti stessi. Per ciascuna combinazione sismica - analisi effettuate con il D.M. 96 (vedi NOTA sul capitolo "normativa di riferimento") - viene riportato il livello di deformazione etaT, etaP e etaD degli elementi strutturali verticali. Per semplicità di consultazione il livello è espresso in unità 1000*etaT/h da confrontare direttamente con il valore 2 o 4 per la verifica.

Per gli edifici sismicamente isolati si riportano di seguito le verifiche condotte sui dispositivi di isolamento. Le verifiche sono effettuate secondo la circolare n.7/2019 del C.S.LL.PP nelle combinazioni in SLC come previsto dal DM 17-01-2018. Per ogni combinazione è riportato il codice di verifica ed i valori utilizzati per la verifica: spostamento dE, area ridotta e dimensione A2, azione verticale, deformazioni di taglio dell'elastomero e tensioni nell'acciaio.
Qualora si applichi l'Ordinanza 3274 e s.m.i. le verifiche sono eseguite in accordo con l'allegato 10.A.
In particolare la tabella, per ogni combinazione di calcolo, riporta:

Nodo	Nodo di appoggio dell' isolatore
Cmb	Combinazione oggetto della verifica
Verif.	Codice di verifica ok – verifica positiva , NV – verifica negativa, ND – verifica non completata
dE	Spostamento relativo tra le due facce (amplificato del 20% per Ordinanza 3274 e smi) combinato con la regola del 30%
Ang fi	Angolo utilizzato per il calcolo dell' area ridotta Ar (per dispositivi circolari)
V	Azione verticale agente
Ar	Area ridotta efficace
Dim A2	Dimensione utile per il calcolo della deformazione per rotazione
Sig s	Tensione nell' inserto in acciaio
Gam c(a,s,t)	Deformazioni di taglio dell' elestomero
Vcr	Carico critico per instabilità

Affinché la verifica sia positiva deve essere:

1) V > 0
2) Sig s < fyk
3) Gam t < 5
4) Gam s < Gam * (caratteristica dell' elastomero)
5) Gam s < 2
6) V < 0.5 Vcr

Calcolo dei fattori di comportamento secondo il D.M. 17/01/2018

La costruzione, nuova, è caratterizzata da non regolarità sia in pianta sia in altezza ed è progettata in classe di duttilità media (CD"B").

Parametri fattore in direzione x e y

Sistema costruttivo: calcestruzzo

Tipologia strutturale: strutture a telaio, a pareti accoppiate, miste

Definizione rapporto α_u/α_1: media tra 1 e il valore da normativa

Riferimento normativo α_u/α_1: strutture a telaio con più piani e più campate

Valore rapporto α_u/α_1 = 1.150

Valore base fattore q_0 = 3.000 α_u/α_1 = 3.450

Fattore pareti k_w = 1.000

Fattore di regolarità K_R = 0.8

Fattore dissipativo $q_D = q_0 \cdot k_w \cdot K_R$ = 2.760

Fattori di comportamento utilizzati

	Dissipativi
q SLU x	2.760
q SLU y	2.760
q SLU z	1.500

CDC	Tipo	Sigla Id	Note
5	Edk	CDC=Ed (dinamico SLU) alfa=0.0 (ecc. +)	
			categoria suolo: B
			fattore di sito S = 1.000
			ordinata spettro (tratto Tb-Tc) = 0.447 g
			angolo di ingresso:0.0
			eccentricità aggiuntiva: positiva
			periodo proprio T1: 0.544 sec.
			fattore q: 2.760
			fattore per spost. mu d: 2.760
			classe di duttilità CD: B
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
835.00	2.838e+05	583.34	951.81	0.0	-96.25	596.88	943.61	2.168	0.014	0.008
428.00	3.167e+05	584.04	949.90	0.0	-96.25	596.88	943.61	2.168	0.013	0.006
Risulta	6.004e+05									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	1.839	0.544	0.339	5.279e+05	87.9	9.85	1.64e-03	2.12	3.52e-04	0.0	0.0
2	2.244	0.446	0.414	11.36	1.89e-03	5.390e+05	89.8	15.33	2.55e-03	0.0	0.0
3	2.919	0.343	0.447	1740.62	0.3	52.60	8.76e-03	0.16	2.68e-05	0.0	0.0
4	4.692	0.213	0.447	0.27	4.57e-05	2253.98	0.4	4.954e+05	82.5	0.0	0.0
5	5.808	0.172	0.447	0.50	8.35e-05	3.815e+04	6.4	4.964e+04	8.3	0.0	0.0
6	6.381	0.157	0.447	2.797e+04	4.7	535.49	8.92e-02	646.84	0.1	0.0	0.0
7	6.739	0.148	0.447	4.044e+04	6.7	654.89	0.1	957.40	0.2	0.0	0.0
8	8.106	0.123	0.458	57.56	9.59e-03	4871.97	0.8	5.235e+04	8.7	0.0	0.0
9	9.269	0.108	0.470	67.12	1.12e-02	1.483e+04	2.5	1292.01	0.2	0.0	0.0
Risulta				5.982e+05		6.003e+05		6.003e+05			
In percentuale				99.63		99.98		99.98			

CDC	Tipo	Sigla Id	Note
6	Edk	CDC=Ed (dinamico SLU) alfa=0.0 (ecc. -)	
			categoria suolo: B
			fattore di sito S = 1.000
			ordinata spettro (tratto Tb-Tc) = 0.447 g
			angolo di ingresso:0.0
			eccentricità aggiuntiva: negativa

CDC	Tipo	Sigla Id	Note
			periodo proprio T1: 0.546 sec.
			fattore q: 2.760
			fattore per spost. mu d: 2.760
			classe di duttilità CD: B
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
835.00	2.838e+05	583.34	951.81	0.0	96.25	596.88	943.61	2.168	0.014	0.008
428.00	3.167e+05	584.04	949.90	0.0	96.25	596.88	943.61	2.168	0.013	0.006
Risulta	6.004e+05									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	1.830	0.546	0.337	5.247e+05	87.4	0.68	1.13e-04	2.04	3.39e-04	0.0	0.0
2	2.244	0.446	0.414	6.16e-03	1.03e-06	5.390e+05	89.8	15.42	2.57e-03	0.0	0.0
3	2.862	0.349	0.447	4790.50	0.8	61.35	1.02e-02	0.14	2.31e-05	0.0	0.0
4	4.692	0.213	0.447	0.37	6.17e-05	2252.23	0.4	4.954e+05	82.5	0.0	0.0
5	5.808	0.172	0.447	8.37	1.39e-03	3.819e+04	6.4	4.953e+04	8.2	0.0	0.0
6	6.423	0.156	0.447	431.82	7.19e-02	919.68	0.2	1458.56	0.2	0.0	0.0
7	6.586	0.152	0.447	6.810e+04	11.3	63.88	1.06e-02	5.03	8.37e-04	0.0	0.0
8	8.101	0.123	0.458	0.44	7.29e-05	5039.65	0.8	5.254e+04	8.8	0.0	0.0
9	9.271	0.108	0.470	50.39	8.39e-03	1.485e+04	2.5	1335.42	0.2	0.0	0.0
Risulta				5.981e+05		6.004e+05		6.003e+05			
In percentuale				99.61		99.99		99.98			

CDC	Tipo	Sigla Id	Note
7	Edk	CDC=Ed (dinamico SLU) alfa=90.00 (ecc. +)	
			categoria suolo: B
			fattore di sito S = 1.000
			ordinata spettro (tratto Tb-Tc) = 0.447 g
			angolo di ingresso:90.00
			eccentricità aggiuntiva: positiva
			periodo proprio T1: 0.447 sec.
			fattore q: 2.760
			fattore per spost. mu d: 2.760
			classe di duttilità CD: B
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
835.00	2.838e+05	583.34	951.81	58.25	0.0	596.88	943.61	2.168	0.014	0.008
428.00	3.167e+05	584.04	949.90	58.25	0.0	596.88	943.61	2.168	0.013	0.006
Risulta	6.004e+05									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	1.845	0.542	0.340	5.293e+05	88.1	33.68	5.61e-03	2.17	3.61e-04	0.0	0.0
2	2.235	0.447	0.412	50.19	8.36e-03	5.331e+05	88.8	14.54	2.42e-03	0.0	0.0
3	2.853	0.351	0.447	184.74	3.08e-02	5915.95	1.0	2.34	3.89e-04	0.0	0.0

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
4	4.692	0.213	0.447	0.25	4.23e-05	2259.76	0.4	4.955e+05	82.5	0.0	0.0
5	5.813	0.172	0.447	1.04e-03	0.0	3.757e+04	6.3	5.023e+04	8.4	0.0	0.0
6	6.317	0.158	0.447	5.431e+04	9.0	16.23	2.70e-03	0.13	2.09e-05	0.0	0.0
7	8.016	0.125	0.457	863.08	0.1	9420.21	1.6	4.567e+04	7.6	0.0	0.0
8	8.467	0.118	0.462	1.306e+04	2.2	594.31	9.90e-02	5408.01	0.9	0.0	0.0
9	8.825	0.113	0.466	2394.97	0.4	1.059e+04	1.8	3513.44	0.6	0.0	0.0
Risulta				6.001e+05		5.995e+05		6.003e+05			
In percentuale				99.95		99.84		99.98			

CDC	Tipo	Sigla Id	Note
8	Edk	CDC=Ed (dinamico SLU) alfa=90.00 (ecc. -)	
			categoria suolo: B
			fattore di sito S = 1.000
			ordinata spettro (tratto Tb-Tc) = 0.447 g
			angolo di ingresso:90.00
			eccentricità aggiuntiva: negativa
			periodo proprio T1: 0.448 sec.
			fattore q: 2.760
			fattore per spost. mu d: 2.760
			classe di duttilità CD: B
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
835.00	2.838e+05	583.34	951.81	-58.25	0.0	596.88	943.61	2.168	0.014	0.008
428.00	3.167e+05	584.04	949.90	-58.25	0.0	596.88	943.61	2.168	0.013	0.006
Risulta	6.004e+05									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	1.845	0.542	0.340	5.293e+05	88.2	2.84	4.73e-04	2.12	3.53e-04	0.0	0.0
2	2.232	0.448	0.411	12.71	2.12e-03	5.307e+05	88.4	14.57	2.43e-03	0.0	0.0
3	2.855	0.350	0.447	188.11	3.13e-02	8317.69	1.4	2.33	3.89e-04	0.0	0.0
4	4.692	0.213	0.447	0.23	3.77e-05	2260.46	0.4	4.955e+05	82.5	0.0	0.0
5	5.812	0.172	0.447	4.36	7.26e-04	3.760e+04	6.3	5.021e+04	8.4	0.0	0.0
6	6.317	0.158	0.447	5.431e+04	9.0	2.50	4.16e-04	22.20	3.70e-03	0.0	0.0
7	8.025	0.125	0.457	109.77	1.83e-02	9787.24	1.6	4.709e+04	7.8	0.0	0.0
8	8.434	0.119	0.462	1.310e+04	2.2	1430.28	0.2	2887.08	0.5	0.0	0.0
9	8.805	0.114	0.466	3108.26	0.5	9320.66	1.6	4621.96	0.8	0.0	0.0
Risulta				6.001e+05		5.994e+05		6.003e+05			
In percentuale				99.95		99.83		99.98			

CDC	Tipo	Sigla Id	Note
9	Edk	CDC=Ed (dinamico SLD) alfa=0.0 (ecc. +)	
			categoria suolo: B
			fattore di sito S = 1.000
			ordinata spettro (tratto Tb-Tc) = 0.430 g
			angolo di ingresso:0.0
			eccentricità aggiuntiva: positiva
			periodo proprio T1: 0.544 sec.
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
835.00	2.838e+05	583.34	951.81	0.0	-96.25	596.88	943.61	2.168	0.014	0.008
428.00	3.167e+05	584.04	949.90	0.0	-96.25	596.88	943.61	2.168	0.013	0.006
Risulta	6.004e+05									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	1.839	0.544	0.266	5.279e+05	87.9	9.85	1.64e-03	2.12	3.52e-04	0.0	0.0
2	2.244	0.446	0.325	11.36	1.89e-03	5.390e+05	89.8	15.33	2.55e-03	0.0	0.0
3	2.919	0.343	0.423	1740.62	0.3	52.60	8.76e-03	0.16	2.68e-05	0.0	0.0
4	4.692	0.213	0.430	0.27	4.57e-05	2253.98	0.4	4.954e+05	82.5	0.0	0.0
5	5.808	0.172	0.430	0.50	8.35e-05	3.815e+04	6.4	4.964e+04	8.3	0.0	0.0
6	6.381	0.157	0.430	2.797e+04	4.7	535.49	8.92e-02	646.84	0.1	0.0	0.0
7	6.739	0.148	0.430	4.044e+04	6.7	654.89	0.1	957.40	0.2	0.0	0.0
8	8.106	0.123	0.430	57.56	9.59e-03	4871.97	0.8	5.235e+04	8.7	0.0	0.0
9	9.269	0.108	0.421	67.12	1.12e-02	1.483e+04	2.5	1292.01	0.2	0.0	0.0
Risulta				5.982e+05		6.003e+05		6.003e+05			
In percentuale				99.63		99.98		99.98			

CDC	Tipo	Sigla Id	Note
10	Edk	CDC=Ed (dinamico SLD) alfa=0.0 (ecc. -)	
			categoria suolo: B
			fattore di sito S = 1.000
			ordinata spettro (tratto Tb-Tc) = 0.430 g
			angolo di ingresso:0.0
			eccentricità aggiuntiva: negativa
			periodo proprio T1: 0.546 sec.
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
835.00	2.838e+05	583.34	951.81	0.0	96.25	596.88	943.61	2.168	0.014	0.008
428.00	3.167e+05	584.04	949.90	0.0	96.25	596.88	943.61	2.168	0.013	0.006
Risulta	6.004e+05									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	1.830	0.546	0.265	5.247e+05	87.4	0.68	1.13e-04	2.04	3.39e-04	0.0	0.0
2	2.244	0.446	0.325	6.16e-03	1.03e-06	5.390e+05	89.8	15.42	2.57e-03	0.0	0.0
3	2.862	0.349	0.415	4790.50	0.8	61.35	1.02e-02	0.14	2.31e-05	0.0	0.0
4	4.692	0.213	0.430	0.37	6.17e-05	2252.23	0.4	4.954e+05	82.5	0.0	0.0
5	5.808	0.172	0.430	8.37	1.39e-03	3.819e+04	6.4	4.953e+04	8.2	0.0	0.0
6	6.423	0.156	0.430	431.82	7.19e-02	919.68	0.2	1458.56	0.2	0.0	0.0
7	6.586	0.152	0.430	6.810e+04	11.3	63.88	1.06e-02	5.03	8.37e-04	0.0	0.0
8	8.101	0.123	0.430	0.44	7.29e-05	5039.65	0.8	5.254e+04	8.8	0.0	0.0
9	9.271	0.108	0.421	50.39	8.39e-03	1.485e+04	2.5	1335.42	0.2	0.0	0.0
Risulta				5.981e+05		6.004e+05		6.003e+05			
In percentuale				99.61		99.99		99.98			

CDC	Tipo	Sigla Id	Note
11	Edk	CDC=Ed (dinamico SLD) alfa=90.00 (ecc. +)	
			categoria suolo: B
			fattore di sito S = 1.000
			ordinata spettro (tratto Tb-Tc) = 0.430 g
			angolo di ingresso:90.00
			eccentricità aggiuntiva: positiva
			periodo proprio T1: 0.447 sec.
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
835.00	2.838e+05	583.34	951.81	58.25	0.0	596.88	943.61	2.168	0.014	0.008
428.00	3.167e+05	584.04	949.90	58.25	0.0	596.88	943.61	2.168	0.013	0.006
Risulta	6.004e+05									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	1.845	0.542	0.267	5.293e+05	88.1	33.68	5.61e-03	2.17	3.61e-04	0.0	0.0
2	2.235	0.447	0.324	50.19	8.36e-03	5.331e+05	88.8	14.54	2.42e-03	0.0	0.0
3	2.853	0.351	0.413	184.74	3.08e-02	5915.95	1.0	2.34	3.89e-04	0.0	0.0
4	4.692	0.213	0.430	0.25	4.23e-05	2259.76	0.4	4.955e+05	82.5	0.0	0.0
5	5.813	0.172	0.430	1.04e-03	0.0	3.757e+04	6.3	5.023e+04	8.4	0.0	0.0
6	6.317	0.158	0.430	5.431e+04	9.0	16.23	2.70e-03	0.13	2.09e-05	0.0	0.0
7	8.016	0.125	0.430	863.08	0.1	9420.21	1.6	4.567e+04	7.6	0.0	0.0
8	8.467	0.118	0.430	1.306e+04	2.2	594.31	9.90e-02	5408.01	0.9	0.0	0.0
9	8.825	0.113	0.430	2394.97	0.4	1.059e+04	1.8	3513.44	0.6	0.0	0.0
Risulta				6.001e+05		5.995e+05		6.003e+05			
In percentuale				99.95		99.84		99.98			

CDC	Tipo	Sigla Id	Note
12	Edk	CDC=Ed (dinamico SLD) alfa=90.00 (ecc. -)	
			categoria suolo: B
			fattore di sito S = 1.000
			ordinata spettro (tratto Tb-Tc) = 0.430 g
			angolo di ingresso:90.00
			eccentricità aggiuntiva: negativa
			periodo proprio T1: 0.448 sec.
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
835.00	2.838e+05	583.34	951.81	-58.25	0.0	596.88	943.61	2.168	0.014	0.008
428.00	3.167e+05	584.04	949.90	-58.25	0.0	596.88	943.61	2.168	0.013	0.006
Risulta	6.004e+05									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	1.845	0.542	0.267	5.293e+05	88.2	2.84	4.73e-04	2.12	3.53e-04	0.0	0.0
2	2.232	0.448	0.323	12.71	2.12e-03	5.307e+05	88.4	14.57	2.43e-03	0.0	0.0
3	2.855	0.350	0.414	188.11	3.13e-02	8317.69	1.4	2.33	3.89e-04	0.0	0.0

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
4	4.692	0.213	0.430	0.23	3.77e-05	2260.46	0.4	4.955e+05	82.5	0.0	0.0
5	5.812	0.172	0.430	4.36	7.26e-04	3.760e+04	6.3	5.021e+04	8.4	0.0	0.0
6	6.317	0.158	0.430	5.431e+04	9.0	2.50	4.16e-04	22.20	3.70e-03	0.0	0.0
7	8.025	0.125	0.430	109.77	1.83e-02	9787.24	1.6	4.709e+04	7.8	0.0	0.0
8	8.434	0.119	0.430	1.310e+04	2.2	1430.28	0.2	2887.08	0.5	0.0	0.0
9	8.805	0.114	0.430	3108.26	0.5	9320.66	1.6	4621.96	0.8	0.0	0.0
Risulta				6.001e+05		5.994e+05		6.003e+05			
In percentuale				99.95		99.83		99.98			

Cmb	Pilas.	1000 etaT/h	etaT	inter. h	Pilas.	1000 etaT/h	etaT	inter. h	Pilas.	1000 etaT/h	etaT	inter. h
			cm	cm			cm	cm			cm	cm
39	5	2.37	1.01	428.0	6	2.34	1.00	428.0	7	2.31	0.99	428.0
	10	2.39	0.97	407.0	11	2.39	0.97	407.0	12	2.41	0.98	407.0
	18	2.28	0.98	428.0	19	2.38	1.02	428.0	22	2.29	0.93	407.0
	23	2.02	0.82	407.0	24	2.28	0.93	407.0	27	1.94	0.83	428.0
	28	1.99	0.85	428.0	29	2.03	0.83	407.0	30	2.23	0.95	428.0
	31	2.32	0.99	428.0	32	1.98	0.85	428.0	34	2.21	0.90	407.0
	35	2.06	0.84	407.0	36	2.22	0.90	407.0	41	2.19	0.94	428.0
	42	2.18	0.93	428.0	43	2.19	0.94	428.0	46	2.15	0.87	407.0
	47	2.15	0.88	407.0	48	2.18	0.89	407.0				
40	5	2.21	0.95	428.0	6	2.15	0.92	428.0	7	2.24	0.96	428.0
	10	2.29	0.93	407.0	11	2.27	0.92	407.0	12	2.25	0.92	407.0
	18	2.16	0.93	428.0	19	2.36	1.01	428.0	22	2.26	0.92	407.0
	23	2.18	0.89	407.0	24	2.19	0.89	407.0	27	2.09	0.89	428.0
	28	2.10	0.90	428.0	29	2.16	0.88	407.0	30	2.17	0.93	428.0
	31	2.34	1.00	428.0	32	2.07	0.89	428.0	34	2.23	0.91	407.0
	35	2.15	0.88	407.0	36	2.17	0.88	407.0	41	2.23	0.96	428.0
	42	2.17	0.93	428.0	43	2.24	0.96	428.0	46	2.21	0.90	407.0
	47	2.19	0.89	407.0	48	2.17	0.88	407.0				
41	5	2.22	0.95	428.0	6	2.17	0.93	428.0	7	2.19	0.94	428.0
	10	2.27	0.93	407.0	11	2.26	0.92	407.0	12	2.27	0.92	407.0
	18	2.27	0.97	428.0	19	2.18	0.93	428.0	22	2.22	0.90	407.0
	23	2.14	0.87	407.0	24	2.25	0.92	407.0	27	2.06	0.88	428.0
	28	2.07	0.88	428.0	29	2.12	0.86	407.0	30	2.28	0.98	428.0
	31	2.18	0.93	428.0	32	2.05	0.88	428.0	34	2.19	0.89	407.0
	35	2.11	0.86	407.0	36	2.21	0.90	407.0	41	2.20	0.94	428.0
	42	2.21	0.95	428.0	43	2.17	0.93	428.0	46	2.18	0.89	407.0
	47	2.18	0.89	407.0	48	2.17	0.88	407.0				
42	5	2.29	0.98	428.0	6	2.34	1.00	428.0	7	2.24	0.96	428.0
	10	2.38	0.97	407.0	11	2.39	0.97	407.0	12	2.44	0.99	407.0
	18	2.39	1.02	428.0	19	2.19	0.94	428.0	22	2.26	0.92	407.0
	23	2.00	0.81	407.0	24	2.36	0.96	407.0	27	1.93	0.83	428.0
	28	1.96	0.84	428.0	29	2.02	0.82	407.0	30	2.33	1.00	428.0
	31	2.15	0.92	428.0	32	1.97	0.85	428.0	34	2.18	0.89	407.0
	35	2.06	0.84	407.0	36	2.28	0.93	407.0	41	2.17	0.93	428.0
	42	2.20	0.94	428.0	43	2.11	0.90	428.0	46	2.13	0.87	407.0
	47	2.16	0.88	407.0	48	2.19	0.89	407.0				
43	5	2.23	0.96	428.0	6	2.19	0.94	428.0	7	2.19	0.94	428.0
	10	2.26	0.92	407.0	11	2.25	0.92	407.0	12	2.25	0.92	407.0
	18	2.19	0.94	428.0	19	2.32	0.99	428.0	22	2.23	0.91	407.0
	23	2.16	0.88	407.0	24	2.20	0.89	407.0	27	2.08	0.89	428.0
	28	2.11	0.90	428.0	29	2.16	0.88	407.0	30	2.20	0.94	428.0
	31	2.31	0.99	428.0	32	2.08	0.89	428.0	34	2.20	0.90	407.0
	35	2.17	0.88	407.0	36	2.18	0.89	407.0	41	2.22	0.95	428.0
	42	2.19	0.94	428.0	43	2.24	0.96	428.0	46	2.19	0.89	407.0
	47	2.18	0.89	407.0	48	2.19	0.89	407.0				
44	5	2.35	1.01	428.0	6	2.28	0.98	428.0	7	2.39	1.02	428.0
	10	2.44	0.99	407.0	11	2.40	0.98	407.0	12	2.38	0.97	407.0
	18	2.23	0.95	428.0	19	2.45	1.05	428.0	22	2.35	0.96	407.0
...												
70	47	1.72	0.70	407.0	48	1.57	0.64	407.0	46	1.85	0.75	407.0
Cmb		**1000 etaT/h**										
		2.53										

RISULTATI NODALI

LEGENDA RISULTATI NODALI

Il controllo dei risultati delle analisi condotte, per quanto concerne i nodi strutturali, è possibile in relazione alle tabelle sottoriportate.

Una prima tabella riporta infatti per ogni nodo e per ogni combinazione (o caso di carico) gli spostamenti nodali.

Una seconda tabella riporta per ogni nodo a cui sia associato un vincolo rigido e/o elastico o una fondazione speciale e per ogni combinazione (o caso di carico) i valori delle azioni esercitate dalla struttura sui vincoli (reazioni vincolari cambiate di segno).

Una terza tabella, infine riassume per ogni nodo le sei combinazioni in cui si attingono i valori minimi e massimi della reazione Fz, della reazione Mx e della reazione My.

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
		cm	cm	cm			
1	2	-9.66e-03	-7.47e-03	-2.24	7.45e-05	-1.12e-04	-3.54e-06
1	6	-7.31e-03	-5.71e-03	-1.70	5.74e-05	-8.44e-05	-2.67e-06
1	10	-0.66	-0.11	-2.72	5.86e-04	-1.75e-03	-1.65e-04
1	38	0.04	-0.68	-2.62	9.74e-04	-6.36e-04	2.17e-04
1	42	-0.52	-0.08	-2.49	4.72e-04	-1.39e-03	-1.34e-04
1	70	0.03	-0.53	-2.42	7.75e-04	-5.19e-04	1.78e-04
1	72	-7.07e-03	-5.66e-03	-1.67	5.76e-05	-8.15e-05	-2.57e-06
1	74	-6.99e-03	-5.64e-03	-1.66	5.77e-05	-8.05e-05	-2.54e-06
2	2	-2.25e-03	-0.04	-2.21	4.15e-04	-2.19e-05	2.65e-06
2	6	-1.69e-03	-0.03	-1.68	3.14e-04	-1.64e-05	1.97e-06
2	13	-0.64	0.14	-1.45	6.77e-05	-1.49e-03	-1.62e-04
2	26	-0.33	-0.59	-2.33	1.20e-03	-4.99e-04	-1.83e-04
2	45	-0.51	0.10	-1.50	1.24e-04	-1.17e-03	-1.31e-04
2	58	-0.26	-0.47	-2.18	1.01e-03	-3.96e-04	-1.49e-04
2	72	-1.61e-03	-0.03	-1.65	3.03e-04	-1.54e-05	1.85e-06
2	74	-1.58e-03	-0.03	-1.64	2.99e-04	-1.51e-05	1.80e-06
3	1	9.73e-03	-5.57e-03	-2.08	5.41e-05	1.27e-04	1.81e-06
3	2	0.01	-5.55e-03	-2.24	4.97e-05	1.43e-04	2.15e-06
3	5	7.49e-03	-4.28e-03	-1.60	4.16e-05	9.80e-05	1.39e-06
3	6	8.28e-03	-4.27e-03	-1.71	3.87e-05	1.08e-04	1.62e-06
3	12	0.67	-0.11	-2.74	5.62e-04	1.82e-03	1.68e-04
3	28	-0.02	-0.68	-2.65	9.75e-04	6.90e-04	-2.03e-04
3	44	0.53	-0.08	-2.51	4.50e-04	1.45e-03	1.36e-04
3	60	-0.02	-0.53	-2.43	7.72e-04	5.66e-04	-1.65e-04
3	71	7.49e-03	-4.28e-03	-1.60	4.16e-05	9.80e-05	1.39e-06
3	72	8.04e-03	-4.28e-03	-1.67	3.96e-05	1.05e-04	1.55e-06
3	73	7.49e-03	-4.28e-03	-1.60	4.16e-05	9.80e-05	1.39e-06
3	74	7.96e-03	-4.28e-03	-1.66	3.99e-05	1.04e-04	1.53e-06
4	2	8.84e-03	8.03e-03	-2.24	-1.34e-04	9.47e-05	-1.29e-05
4	6	6.66e-03	5.92e-03	-1.71	-9.93e-05	7.03e-05	-1.00e-05
4	10	-1.88	-0.28	-2.76	4.11e-04	-2.94e-03	-2.46e-04
4	12	1.90	-0.58	-1.02	3.64e-04	3.09e-03	2.45e-04
4	35	0.12	1.64	-0.69	-1.81e-03	4.80e-04	-4.17e-04
4	42	-1.47	-0.21	-2.53	3.06e-04	-2.29e-03	-2.04e-04
4	44	1.49	-0.45	-1.16	2.60e-04	2.43e-03	1.99e-04
4	67	0.09	1.28	-0.90	-1.43e-03	3.79e-04	-3.42e-04
4	72	6.40e-03	5.41e-03	-1.68	-9.18e-05	6.53e-05	-1.02e-05
4	74	6.32e-03	5.24e-03	-1.66	-8.93e-05	6.36e-05	-1.02e-05
5	2	8.64e-03	0.02	-2.25	-1.18e-03	3.84e-05	5.60e-05
5	6	6.56e-03	0.01	-1.71	-8.69e-04	2.87e-05	4.28e-05
5	12	1.90	-0.43	-1.90	-2.16e-04	2.86e-03	2.75e-04
5	25	-0.27	1.47	-0.97	-2.38e-03	-5.69e-04	2.68e-04
5	32	0.85	-1.44	-2.37	8.34e-04	1.15e-03	3.67e-04
5	44	1.49	-0.33	-1.85	-3.25e-04	2.25e-03	2.34e-04
5	57	-0.20	1.15	-1.12	-2.03e-03	-4.30e-04	2.26e-04
5	64	0.67	-1.12	-2.21	4.87e-04	9.12e-04	3.10e-04
5	72	6.40e-03	0.01	-1.68	-7.98e-04	2.71e-05	4.22e-05
5	74	6.35e-03	0.01	-1.66	-7.75e-04	2.65e-05	4.20e-05

...

3138	74	-8.08e-03	-6.11e-03	-1.68	4.58e-05	-9.88e-05	0.0
Nodo		**Traslazione X**	**Traslazione Y**	**Traslazione Z**	**Rotazione X**	**Rotazione Y**	**Rotazione Z**
		-3.23	-2.53	-3.31	-2.38e-03	-3.08e-03	-5.70e-04
		3.27	2.52	-0.68	2.01e-03	3.17e-03	5.82e-04

Nodo	**Cmb**	**Azione X**	**Azione Y**	**Azione Z**	**Azione RX**	**Azione RY**	**Azione RZ**
		daN	daN	daN	daN cm	daN cm	daN cm

Nodo	**Azione X**	**Azione Y**	**Azione Z**	**Azione RX**	**Azione RY**	**Azione RZ**

Nodo	**Cmb**	**Azione X**	**Azione Y**	**Azione Z**	**Azione RX**	**Azione RY**	**Azione RZ**
		daN	daN	daN	daN cm	daN cm	daN cm

RISULTATI OPERE DI FONDAZIONE

LEGENDA RISULTATI OPERE DI FONDAZIONE

Il controllo dei risultati delle analisi condotte, per quanto concerne le opere di fondazione, è possibile in relazione alle tabelle sotto riportate.

La prima tabella è riferita alle fondazioni tipo palo e plinto su pali.
Per questo tipo di fondazione vengono riportate le sei componenti di sollecitazione (espresse nel riferimento globale della struttura) per ogni palo componente l'opera.
In particolare viene riportato:

Nodo	numero del nodo a cui è applicato il plinto
Tipo	codice corrispondente al nome assegnato al tipo di plinto di fondazione: 3) palo singolo (*PALO*) 4) plinto su palo 5) plinto su due pali (*PL.2P*) 6) plinto su tre pali (*PL.3P*) 7) plinto su quattro pali (*PL.4P*) 8) plinto rettangolare su cinque pali (*PL.5P.R*) 9) plinto pentagonale su cinque pali (*PL.5P*) 10) plinto su sei pali (*PL.6P*)
Palo	numero del palo
Comb.	combinazione di carico in cui si verificano le sei componenti di sollecitazione.
Quota	quota assoluta della sezione del palo per cui si riportano le sei componenti di sollecitazione.

L'azione Fz (corrispondente allo sforzo normale nel palo) è costante poiché il peso del palo stesso non è considerato nella modellazione.

La seconda tabella è riferita alle fondazioni tipo plinto su suolo elastico.
Per questo tipo di fondazione vengono riportate le pressioni nei quattro vertici dell'impronta sul terreno.
In particolare viene riportato:

Nodo		numero del nodo a cui è applicato il plinto
Tipo		Codice identificativo del nome assegnato al plinto
area		area dell'impronta del plinto
Wink O	**Wink V**	coefficienti di Winkler (orizzontale e verticale) adottati
Comb		Combinazione di carico in cui si verificano i valori riportati
Pt (P1 P2 P3 P4)		valori di pressione nei vertici

La terza tabella è riferita alle fondazioni tipo platea su suolo elastico.
Per questo tipo di fondazione vengono riportate le pressioni in ogni vertice (nodo) degli elementi costituenti la platea.

La quarta tabella è riferita alle fondazioni tipo trave su suolo elastico.
Per questo tipo di fondazione vengono riportate le pressioni alle estremità dell'elemento e la massima (in valore assoluto) pressione lungo lo sviluppo dell'elemento.
Vengono inoltre riportati, con funzione statistica, i valori massimo e minimo delle pressioni che compaiono nella tabella.

Nodo (G) **Pt 1/12** **Pt 2/13** **Pt 3...** **Pt 4...**

	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2
1	-0.21	-0.16	-0.25	-0.23	-0.16	-0.15					
2	-0.21	-0.16	-0.22	-0.20	-0.15	-0.15					
3	-0.21	-0.16	-0.26	-0.23	-0.16	-0.15					
10	-0.21	-0.16	-0.23	-0.22	-0.16	-0.15					
11	-0.19	-0.15	-0.17	-0.17	-0.14	-0.14					
12	-0.21	-0.16	-0.23	-0.22	-0.16	-0.16					
19	-0.21	-0.16	-0.22	-0.21	-0.16	-0.16					
20	-0.20	-0.15	-0.15	-0.15	-0.15	-0.15					
21	-0.21	-0.16	-0.22	-0.21	-0.16	-0.16					
28	-0.21	-0.16	-0.23	-0.21	-0.16	-0.16					
29	-0.21	-0.16	-0.17	-0.17	-0.16	-0.15					
30	-0.21	-0.16	-0.23	-0.21	-0.16	-0.16					
37	-0.21	-0.16	-0.26	-0.24	-0.16	-0.16					
38	-0.21	-0.16	-0.22	-0.21	-0.16	-0.16					
39	-0.21	-0.16	-0.26	-0.24	-0.16	-0.16					
46	-0.21	-0.16	-0.25	-0.23	-0.16	-0.15					
47	-0.21	-0.16	-0.25	-0.23	-0.15	-0.15					
48	-0.21	-0.16	-0.25	-0.23	-0.16	-0.15					
49	-0.21	-0.16	-0.24	-0.22	-0.15	-0.15					
50	-0.21	-0.16	-0.24	-0.22	-0.15	-0.15					
51	-0.21	-0.16	-0.24	-0.22	-0.15	-0.15					
52	-0.21	-0.16	-0.24	-0.22	-0.15	-0.15					
53	-0.21	-0.16	-0.24	-0.22	-0.15	-0.15					
54	-0.21	-0.16	-0.24	-0.22	-0.15	-0.15					
55	-0.21	-0.16	-0.24	-0.22	-0.15	-0.15					
56	-0.21	-0.16	-0.23	-0.22	-0.15	-0.15					
57	-0.21	-0.16	-0.23	-0.22	-0.15	-0.15					
58	-0.21	-0.16	-0.23	-0.21	-0.15	-0.15					
59	-0.21	-0.16	-0.23	-0.21	-0.15	-0.15					
60	-0.21	-0.16	-0.23	-0.21	-0.15	-0.15					
61	-0.21	-0.16	-0.23	-0.21	-0.15	-0.15					
62	-0.20	-0.16	-0.23	-0.21	-0.15	-0.15					
63	-0.21	-0.16	-0.23	-0.21	-0.15	-0.15					
64	-0.20	-0.16	-0.22	-0.21	-0.15	-0.15					
65	-0.21	-0.16	-0.23	-0.21	-0.15	-0.15					
66	-0.20	-0.16	-0.22	-0.21	-0.15	-0.15					
67	-0.21	-0.16	-0.22	-0.21	-0.15	-0.15					
68	-0.20	-0.16	-0.22	-0.21	-0.15	-0.15					
69	-0.21	-0.16	-0.22	-0.21	-0.15	-0.15					
70	-0.20	-0.16	-0.22	-0.20	-0.15	-0.15					
71	-0.21	-0.16	-0.22	-0.21	-0.15	-0.15					
72	-0.20	-0.16	-0.22	-0.20	-0.15	-0.15					
73	-0.21	-0.16	-0.22	-0.20	-0.15	-0.15					
74	-0.20	-0.16	-0.21	-0.20	-0.15	-0.15					
75	-0.20	-0.16	-0.21	-0.20	-0.15	-0.15					
76	-0.21	-0.16	-0.24	-0.22	-0.15	-0.15					
77	-0.21	-0.16	-0.25	-0.23	-0.16	-0.15					
78	-0.21	-0.16	-0.24	-0.22	-0.15	-0.15					
...											
3138	-0.21	-0.16	-0.24	-0.23	-0.16	-0.16					
Nodo (G)	**Pt 1/12**	**Pt 2/13**	**Pt 3...**	**Pt 4...**							
	-0.29										
	-0.14										

Elem.	**Cmb**	**Pt ini**	**Pt fin**	**Pt max**	**Cmb**	**Pt ini**	**Pt fin**	**Pt max**	**Cmb**	**Pt ini**	**Pt fin**	**Pt max**
		daN/cm2	daN/cm2	daN/cm2		daN/cm2	daN/cm2	daN/cm2		daN/cm2	daN/cm2	daN/cm2
71	2	-1.33	-1.33	-1.33	6	-1.01	-1.01	-1.01	7	-1.63	-1.59	-1.63
	39	-1.49	-1.46	-1.49	72	-0.99	-0.99	-0.99	74	-0.99	-0.98	-0.99
72	2	-1.32	-1.32	-1.32	6	-1.00	-1.00	-1.00	31	-1.41	-1.41	-1.41
	63	-1.32	-1.32	-1.32	72	-0.98	-0.98	-0.98	74	-0.98	-0.98	-0.98
73	2	-1.33	-1.32	-1.33	6	-1.01	-1.00	-1.01	7	-1.49	-1.45	-1.49
	39	-1.38	-1.34	-1.38	72	-0.99	-0.98	-0.99	74	-0.98	-0.98	-0.98
74	2	-1.23	-1.23	-1.23	6	-0.93	-0.93	-0.93	31	-1.11	-1.11	-1.11
	63	-1.07	-1.07	-1.07	72	-0.92	-0.92	-0.92	74	-0.91	-0.91	-0.91
75	2	-1.34	-1.33	-1.34	6	-1.02	-1.01	-1.02	7	-1.42	-1.38	-1.42
	39	-1.32	-1.29	-1.32	72	-1.00	-0.99	-1.00	74	-0.99	-0.98	-0.99
76	2	-1.26	-1.26	-1.26	6	-0.96	-0.96	-0.96	31	-0.98	-0.99	-0.99
	63	-0.97	-0.98	-0.98	72	-0.94	-0.94	-0.94	74	-0.94	-0.94	-0.94
77	2	-1.34	-1.34	-1.34	6	-1.02	-1.02	-1.02	11	-1.46	-1.43	-1.46
	43	-1.36	-1.33	-1.36	72	-1.00	-1.00	-1.00	74	-0.99	-0.99	-0.99
78	2	-1.33	-1.33	-1.33	6	-1.02	-1.02	-1.02	23	-1.13	-1.14	-1.14
	55	-1.10	-1.11	-1.11	72	-0.99	-0.99	-0.99	74	-0.99	-0.99	-0.99
79	2	-1.37	-1.37	-1.37	6	-1.04	-1.04	-1.04	15	-1.68	-1.64	-1.68
	47	-1.53	-1.50	-1.53	72	-1.02	-1.02	-1.02	74	-1.01	-1.01	-1.01

80	2	-1.37	-1.37	-1.37	6	-1.04	-1.04	-1.04	35	-1.43	-1.44	-1.44
	67	-1.34	-1.35	-1.35	72	-1.02	-1.02	-1.02	74	-1.01	-1.01	-1.01
81	2	-1.34	-1.34	-1.34	6	-1.02	-1.02	-1.02	7	-1.48	-1.49	-1.49
	39	-1.38	-1.38	-1.38	72	-1.00	-1.00	-1.00	74	-0.99	-0.99	-0.99
82	2	-1.35	-1.35	-1.35	6	-1.02	-1.02	-1.02	11	-1.44	-1.44	-1.44
	43	-1.35	-1.35	-1.35	72	-1.00	-1.00	-1.00	74	-1.00	-1.00	-1.00
83	2	-1.34	-1.34	-1.34	6	-1.02	-1.02	-1.02	11	-1.52	-1.51	-1.52
	43	-1.40	-1.40	-1.40	72	-1.00	-1.00	-1.00	74	-0.99	-0.99	-0.99
84	2	-1.33	-1.33	-1.33	6	-1.01	-1.01	-1.01	11	-1.65	-1.64	-1.65
	43	-1.51	-1.50	-1.51	72	-0.99	-0.99	-0.99	74	-0.98	-0.98	-0.98
85	2	-1.33	-1.33	-1.33	6	-1.01	-1.01	-1.01	7	-1.50	-1.50	-1.50
	39	-1.39	-1.38	-1.39	72	-0.99	-0.99	-0.99	74	-0.98	-0.98	-0.98
86	2	-1.34	-1.35	-1.35	6	-1.02	-1.03	-1.03	19	-1.64	-1.65	-1.65
	51	-1.50	-1.51	-1.51	72	-1.00	-1.00	-1.00	74	-1.00	-1.00	-1.00
87	2	-1.32	-1.33	-1.33	6	-1.01	-1.01	-1.01	23	-1.12	-1.13	-1.13
	55	-1.09	-1.10	-1.10	72	-0.99	-0.99	-0.99	74	-0.98	-0.98	-0.98
88	2	-1.25	-1.25	-1.25	6	-0.95	-0.96	-0.96	11	-0.97	-0.97	-0.97
	43	-0.96	-0.96	-0.96	72	-0.93	-0.94	-0.94	74	-0.93	-0.93	-0.93
89	2	-1.22	-1.22	-1.22	6	-0.93	-0.93	-0.93	23	-1.10	-1.08	-1.10
	55	-1.05	-1.04	-1.05	72	-0.91	-0.91	-0.91	74	-0.90	-0.90	-0.90
90	2	-1.31	-1.30	-1.31	6	-0.99	-0.99	-0.99	23	-1.39	-1.37	-1.39
	55	-1.30	-1.28	-1.30	72	-0.97	-0.97	-0.97	74	-0.97	-0.96	-0.97
91	2	-1.32	-1.32	-1.32	6	-1.01	-1.01	-1.01	7	-1.64	-1.63	-1.64
	39	-1.50	-1.49	-1.50	72	-0.99	-0.99	-0.99	74	-0.98	-0.98	-0.98
92	2	-1.34	-1.34	-1.34	6	-1.02	-1.02	-1.02	7	-1.43	-1.43	-1.43
	39	-1.34	-1.34	-1.34	72	-1.00	-1.00	-1.00	74	-0.99	-0.99	-0.99
93	2	-1.34	-1.34	-1.34	6	-1.02	-1.02	-1.02	11	-1.47	-1.48	-1.48
	43	-1.37	-1.37	-1.37	72	-1.00	-1.00	-1.00	74	-0.99	-0.99	-0.99
94	2	-1.33	-1.32	-1.33	6	-1.01	-1.01	-1.01	23	-1.59	-1.58	-1.59
	55	-1.46	-1.45	-1.46	72	-0.99	-0.99	-0.99	74	-0.98	-0.98	-0.98
...												
445	47	-1.49	-1.50	-1.50	72	-1.00	-1.00	-1.00	74	-0.99	-0.99	-0.99
Elem.		**Pt ini**	**Pt fin**	**Pt max**		**Pt ini**	**Pt fin**	**Pt max**		**Pt ini**	**Pt fin**	**Pt max**
		-1.69										
		-0.90										

RISULTATI ELEMENTI TIPO TRAVE

LEGENDA RISULTATI ELEMENTI TIPO TRAVE

Il controllo dei risultati delle analisi condotte, per quanto concerne gli elementi tipo trave, è possibile in relazione alle tabelle sotto riportate.

Gli elementi vengono suddivisi in relazione alle proprietà in elementi:

- tipo **pilastro**
- tipo **trave in elevazione**
- tipo **trave in fondazione**

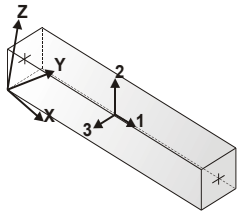
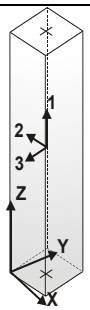
Per ogni elemento e per ogni combinazione (o caso di carico) vengono riportati i risultati più significativi.

Per gli elementi tipo *pilastro* sono riportati in tabella i seguenti valori:

Pilas.	numero dell'elemento pilastro
Cmb	combinazione in cui si verificano i valori riportati
M3 mx/mn	momento flettente in campata M3 max (prima riga) / min (seconda riga)
M2 mx/mn	momento flettente in campata M2 max (prima riga) / min (seconda riga)
D2/D3	freccia massima in direzione 2 (prima riga) / direzione 3 (seconda riga)
Q2/Q3	carico totale in direzione 2 (prima riga) / direzione 3 (seconda riga)
Pos.	ascissa del punto iniziale e finale dell'elemento
N, V2, ecc..	sei componenti di sollecitazione al piede ed in sommità dell'elemento

Per gli elementi tipo *trave in elevazione* sono riportati, oltre al numero dell'elemento, i medesimi risultati visti per i pilastri.

Per gli elementi tipo *trave in fondazione* (trave f.) sono riportati, oltre al numero dell'elemento, i medesimi risultati visti per i pilastri e la massima pressione sul terreno.

 orientamento elementi 2D non verticali	 orientamento elementi 2D verticali

Pilas.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
		daN cm	daN cm	cm	daN	cm	daN	daN	daN	daN cm	daN cm	daN cm
5	1	5.232e+04	-1.500e+05	-9.68e-03	0.0	0.0	-7.652e+04	532.77	-1097.18	1.892e+04	-1.500e+05	-1.757e+05
		-1.757e+05	-6.196e+05	-0.05	0.0	428.0	-7.207e+04	532.77	-1097.18	1.892e+04	-6.196e+05	5.232e+04
5	2	4.362e+04	-5.203e+04	-0.01	0.0	0.0	-8.890e+04	570.03	-2175.18	1.979e+04	-5.203e+04	-2.004e+05
		-2.004e+05	-9.830e+05	-0.06	0.0	428.0	-8.445e+04	570.03	-2175.18	1.979e+04	-9.830e+05	4.362e+04
5	3	4.025e+04	-1.154e+05	-7.44e-03	0.0	0.0	-5.886e+04	409.82	-843.98	1.456e+04	-1.154e+05	-1.352e+05
		-1.352e+05	-4.766e+05	-0.04	0.0	428.0	-5.544e+04	409.82	-843.98	1.456e+04	-4.766e+05	4.025e+04
5	4	3.155e+04	-1.741e+04	-8.65e-03	0.0	0.0	-7.124e+04	447.09	-1921.98	1.542e+04	-1.741e+04	-1.598e+05
		-1.598e+05	-8.400e+05	-0.05	0.0	428.0	-6.781e+04	447.09	-1921.98	1.542e+04	-8.400e+05	3.155e+04
5	5	4.025e+04	-1.154e+05	-7.44e-03	0.0	0.0	-5.886e+04	409.82	-843.98	1.456e+04	-1.154e+05	-1.352e+05
		-1.352e+05	-4.766e+05	-0.04	0.0	428.0	-5.544e+04	409.82	-843.98	1.456e+04	-4.766e+05	4.025e+04
5	6	3.445e+04	-5.008e+04	-8.25e-03	0.0	0.0	-6.711e+04	434.67	-1562.65	1.514e+04	-5.008e+04	-1.516e+05
		-1.516e+05	-7.189e+05	-0.04	0.0	428.0	-6.369e+04	434.67	-1562.65	1.514e+04	-7.189e+05	3.445e+04
5	12	3.945e+06	4.635e+05	-1.26	0.0	0.0	-6.780e+04	2.686e+04	-3384.59	1.211e+04	4.635e+05	-7.563e+06
		-7.563e+06	-9.690e+05	0.24	0.0	428.0	-6.438e+04	2.686e+04	-3384.59	1.211e+04	-9.690e+05	3.945e+06
5	13	7.273e+06	-2.750e+05	1.25	0.0	0.0	-5.982e+04	-2.602e+04	834.22	1.770e+04	-6.159e+05	7.273e+06
		-3.871e+06	-6.159e+05	-0.32	0.0	428.0	-5.640e+04	-2.602e+04	834.22	1.770e+04	-2.750e+05	-3.871e+06
5	23	1.779e+06	7.862e+05	-0.48	0.0	0.0	-4.453e+04	1.199e+04	6301.59	5.519e+04	-1.916e+06	-3.357e+06
		-3.357e+06	-1.916e+06	-0.93	0.0	428.0	-4.111e+04	1.199e+04	6301.59	5.519e+04	7.862e+05	1.779e+06
5	26	3.067e+06	1.764e+06	0.47	0.0	0.0	-8.310e+04	-1.114e+04	-8851.96	-2.538e+04	1.764e+06	3.067e+06
		-1.706e+06	-2.030e+06	0.84	0.0	428.0	-7.967e+04	-1.114e+04	-8851.96	-2.538e+04	-2.030e+06	-1.706e+06
5	34	6.863e+05	1.774e+06	0.22	0.0	0.0	-8.274e+04	-2599.02	-8884.15	6.024e+04	1.774e+06	6.863e+05
		-4.279e+05	-2.033e+06	0.84	0.0	428.0	-7.932e+04	-2599.02	-8884.15	6.024e+04	-2.033e+06	-4.279e+05
5	38	1.443e+05	1.776e+06	0.17	0.0	0.0	-8.258e+04	-663.60	-8871.72	7.365e+04	1.776e+06	1.443e+05
		-1.417e+05	-2.022e+06	0.84	0.0	428.0	-7.915e+04	-663.60	-8871.72	7.365e+04	-2.022e+06	-1.417e+05
5	44	3.132e+06	3.447e+05	-0.99	0.0	0.0	-6.691e+04	2.127e+04	-2900.34	1.172e+04	3.447e+05	-5.981e+06
		-5.981e+06	-8.820e+05	0.19	0.0	428.0	-6.349e+04	2.127e+04	-2900.34	1.172e+04	-8.820e+05	3.132e+06
5	45	5.691e+06	-3.620e+05	0.97	0.0	0.0	-6.071e+04	-2.042e+04	349.98	1.809e+04	-4.971e+05	5.691e+06
		-3.059e+06	-4.971e+05	-0.26	0.0	428.0	-5.729e+04	-2.042e+04	349.98	1.809e+04	-3.620e+05	-3.059e+06
5	55	1.429e+06	4.836e+05	-0.38	0.0	0.0	-4.839e+04	9641.08	4661.28	4.717e+04	-1.516e+06	-2.702e+06
		-2.702e+06	-1.516e+06	-0.73	0.0	428.0	-4.496e+04	9641.08	4661.28	4.717e+04	4.836e+05	1.429e+06
5	58	2.412e+06	1.364e+06	0.37	0.0	0.0	-7.924e+04	-8791.63	-7211.64	-1.737e+04	1.364e+06	2.412e+06
		-1.355e+06	-1.728e+06	0.65	0.0	428.0	-7.581e+04	-8791.63	-7211.64	-1.737e+04	-1.728e+06	-1.355e+06
5	66	4.624e+05	1.372e+06	0.17	0.0	0.0	-7.897e+04	-1793.87	-7237.08	5.295e+04	1.372e+06	4.624e+05
		-3.077e+05	-1.730e+06	0.65	0.0	428.0	-7.555e+04	-1793.87	-7237.08	5.295e+04	-1.730e+06	-3.077e+05
5	70	4.550e+04	1.373e+06	0.12	0.0	0.0	-7.881e+04	-307.00	-7220.20	6.321e+04	1.373e+06	4.550e+04
		-8.828e+04	-1.718e+06	0.65	0.0	428.0	-7.539e+04	-307.00	-7220.20	6.321e+04	-1.718e+06	-8.828e+04
5	71	4.025e+04	-1.154e+05	-7.44e-03	0.0	0.0	-5.886e+04	409.82	-843.98	1.456e+04	-1.154e+05	-1.352e+05
		-1.352e+05	-4.766e+05	-0.04	0.0	428.0	-5.544e+04	409.82	-843.98	1.456e+04	-4.766e+05	4.025e+04
5	72	3.619e+04	-6.968e+04	-8.01e-03	0.0	0.0	-6.464e+04	427.21	-1347.05	1.496e+04	-6.968e+04	-1.467e+05
		-1.467e+05	-6.462e+05	-0.04	0.0	428.0	-6.121e+04	427.21	-1347.05	1.496e+04	-6.462e+05	3.619e+04
5	73	4.025e+04	-1.154e+05	-7.44e-03	0.0	0.0	-5.886e+04	409.82	-843.98	1.456e+04	-1.154e+05	-1.352e+05
		-1.352e+05	-4.766e+05	-0.04	0.0	428.0	-5.544e+04	409.82	-843.98	1.456e+04	-4.766e+05	4.025e+04
5	74	3.677e+04	-7.621e+04	-7.93e-03	0.0	0.0	-6.381e+04	424.73	-1275.18	1.490e+04	-7.621e+04	-1.450e+05
		-1.450e+05	-6.220e+05	-0.04	0.0	428.0	-6.039e+04	424.73	-1275.18	1.490e+04	-6.220e+05	3.677e+04
6	1	5.817e+05	-3.856e+04	-8.38e-03	0.0	0.0	-2.990e+04	-1754.84	-102.66	106.54	-3.856e+04	5.817e+05
		-1.694e+05	-8.250e+04	-0.01	0.0	428.0	-2.545e+04	-1754.84	-102.66	106.54	-8.250e+04	-1.694e+05
6	2	6.477e+05	-9839.71	-9.44e-03	0.0	0.0	-3.358e+04	-1899.68	-316.96	-41.74	-9839.71	6.477e+05
		-1.654e+05	-1.455e+05	-0.01	0.0	428.0	-2.913e+04	-1899.68	-316.96	-41.74	-1.455e+05	-1.654e+05
...												
48	74	-4.964e+05	-4.948e+05	0.01	0.0	407.0	-1.872e+04	-1985.04	-2303.24	-875.88	-4.948e+05	-4.964e+05

Pilas.	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	N	V 2	V 3	T
	-8.490e+06	-4.791e+06	-1.30	0.0	-1.677e+05	-3.150e+04	-1.894e+04	-1.066e+05
	8.695e+06	4.801e+06	1.29	0.0	2907.22	3.162e+04	1.902e+04	9.710e+04

Trave	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
		daN cm	daN cm	cm	daN	cm	daN	daN	daN	daN cm	daN cm	daN cm
1	2	4.985e+04	3.510e+04	-6.54e-03	-6960.51	0.0	-9236.10	3188.72	-202.09	-1.427e+05	3.510e+04	-2.053e+05
		-3.073e+05	-3.563e+04	-3.38e-03	0.0	350.0	-9236.10	-3771.79	-202.09	-1.427e+05	-3.563e+04	-3.073e+05
1	3	3.498e+04	1.929e+04	-3.83e-03	-4295.67	0.0	-5125.25	2047.34	-110.55	-7.729e+04	1.929e+04	-1.354e+05
		-1.705e+05	-1.940e+04	-1.65e-03	0.0	350.0	-5125.25	-2248.34	-110.55	-7.729e+04	-1.940e+04	-1.705e+05
1	5	3.498e+04	1.929e+04	-3.83e-03	-4295.67	0.0	-5125.25	2047.34	-110.55	-7.729e+04	1.929e+04	-1.354e+05
		-1.705e+05	-1.940e+04	-1.65e-03	0.0	350.0	-5125.25	-2248.34	-110.55	-7.729e+04	-1.940e+04	-1.705e+05
1	6	3.780e+04	2.597e+04	-4.87e-03	-5213.10	0.0	-6840.77	2398.79	-149.47	-1.055e+05	2.597e+04	-1.549e+05
		-2.276e+05	-2.634e+04	-2.48e-03	0.0	350.0	-6840.77	-2814.31	-149.47	-1.055e+05	-2.634e+04	-2.276e+05
1	11	8.147e+05	-5408.30	-0.08	-4846.13	0.0	-1.240e+04	-3232.12	1.33	-1.096e+05	-5896.12	8.147e+05
		-1.164e+06	-5896.12	-0.04	0.0	350.0	-1.240e+04	-8078.24	1.33	-1.096e+05	-5408.30	-1.164e+06
1	13	1.232e+06	5.709e+04	-0.11	-4846.13	0.0	-1927.53	-5828.16	-302.72	-5.107e+04	5.709e+04	1.232e+06
		-1.657e+06	-4.890e+04	0.10	0.0	350.0	-1927.53	-1.067e+04	-302.72	-5.107e+04	-4.890e+04	-1.657e+06
1	14	7.541e+05	5.249e+04	0.07	-4846.13	0.0	86.02	7748.53	-269.13	-7.880e+04	5.249e+04	-1.109e+06
		-1.109e+06	-4.172e+04	0.04	0.0	350.0	86.02	2902.41	-269.13	-7.880e+04	-4.172e+04	7.541e+05

1	35	3.959e+06	2.295e+04	-0.31	-4846.13	0.0	-1.106e+04	-2.152e+04	-154.32	-4.366e+04	2.295e+04	3.959e+06
		-4.421e+06	-3.105e+04	0.13	0.0	350.0	-1.106e+04	-2.637e+04	-154.32	-4.366e+04	-3.105e+04	-4.421e+06
1	38	4.012e+06	2.365e+04	0.30	-4846.13	0.0	-1248.30	2.604e+04	-113.48	-1.447e+05	2.365e+04	-4.253e+06
		-4.253e+06	-1.608e+04	-0.14	0.0	350.0	-1248.30	2.119e+04	-113.48	-1.447e+05	-1.608e+04	4.012e+06
1	43	5.865e+05	279.34	-0.07	-4846.13	0.0	-1.131e+04	-1935.88	-27.35	-1.074e+05	279.34	5.865e+05
		-9.382e+05	-9265.58	-0.03	0.0	350.0	-1.131e+04	-6782.01	-27.35	-1.074e+05	-9265.58	-9.382e+05
1	45	9.468e+05	5.000e+04	-0.09	-4846.13	0.0	-2592.72	-4146.83	-267.19	-5.889e+04	5.000e+04	9.468e+05
		-1.354e+06	-4.356e+04	0.08	0.0	350.0	-2592.72	-8992.96	-267.19	-5.889e+04	-4.356e+04	-1.354e+06
1	46	5.286e+05	4.632e+04	0.06	-4846.13	0.0	-1002.16	6452.30	-240.45	-8.097e+04	4.632e+04	-8.807e+05
		-8.807e+05	-3.787e+04	0.03	0.0	350.0	-1002.16	1606.17	-240.45	-8.097e+04	-3.787e+04	5.286e+05
1	67	3.062e+06	2.315e+04	-0.25	-4846.13	0.0	-1.009e+04	-1.633e+04	-150.57	-5.367e+04	2.315e+04	3.062e+06
		-3.500e+06	-2.953e+04	0.11	0.0	350.0	-1.009e+04	-2.117e+04	-150.57	-5.367e+04	-2.953e+04	-3.500e+06
1	70	3.091e+06	2.344e+04	0.24	-4846.13	0.0	-2216.78	2.084e+04	-117.23	-1.347e+05	2.344e+04	-3.356e+06
		-3.356e+06	-1.760e+04	-0.11	0.0	350.0	-2216.78	1.600e+04	-117.23	-1.347e+05	-1.760e+04	3.091e+06
1	71	3.498e+04	1.929e+04	-3.83e-03	-4295.67	0.0	-5125.25	2047.34	-110.55	-7.729e+04	1.929e+04	-1.354e+05
		-1.705e+05	-1.940e+04	-1.65e-03	0.0	350.0	-5125.25	-2248.34	-110.55	-7.729e+04	-1.940e+04	-1.705e+05
1	72	3.673e+04	2.397e+04	-4.56e-03	-4937.87	0.0	-6326.11	2293.35	-137.79	-9.701e+04	2.397e+04	-1.490e+05
		-2.105e+05	-2.426e+04	-2.23e-03	0.0	350.0	-6326.11	-2644.51	-137.79	-9.701e+04	-2.426e+04	-2.105e+05
1	73	3.498e+04	1.929e+04	-3.83e-03	-4295.67	0.0	-5125.25	2047.34	-110.55	-7.729e+04	1.929e+04	-1.354e+05
		-1.705e+05	-1.940e+04	-1.65e-03	0.0	350.0	-5125.25	-2248.34	-110.55	-7.729e+04	-1.940e+04	-1.705e+05
1	74	3.638e+04	2.330e+04	-4.45e-03	-4846.13	0.0	-6154.56	2258.21	-133.90	-9.419e+04	2.330e+04	-1.471e+05
		-2.048e+05	-2.357e+04	-2.15e-03	0.0	350.0	-6154.56	-2587.92	-133.90	-9.419e+04	-2.357e+04	-2.048e+05
2	1	6.522e+05	2257.67	-0.12	-1.891e+04	0.0	5180.12	1.018e+04	-25.78	-2.312e+04	2257.67	-1.275e+06
		-1.275e+06	-1.592e+04	-7.46e-03	0.0	705.0	5180.12	-8735.19	-25.78	-2.312e+04	-1.592e+04	-7.659e+05
2	2	8.811e+05	1729.24	-0.16	-2.538e+04	0.0	6655.72	1.361e+04	-27.31	-3.364e+04	1729.24	-1.687e+06
		-1.687e+06	-1.752e+04	-9.82e-03	0.0	705.0	6655.72	-1.177e+04	-27.31	-3.364e+04	-1.752e+04	-1.036e+06
2	3	5.017e+05	1736.67	-0.09	-1.455e+04	0.0	3984.71	7830.57	-19.83	-1.778e+04	1736.67	-9.808e+05
		-9.808e+05	-1.224e+04	-5.74e-03	0.0	705.0	3984.71	-6719.38	-19.83	-1.778e+04	-1.224e+04	-5.891e+05
2	5	5.017e+05	1736.67	-0.09	-1.455e+04	0.0	3984.71	7830.57	-19.83	-1.778e+04	1736.67	-9.808e+05
		-9.808e+05	-1.224e+04	-5.74e-03	0.0	705.0	3984.71	-6719.38	-19.83	-1.778e+04	-1.224e+04	-5.891e+05
2	6	6.543e+05	1384.38	-0.12	-1.886e+04	0.0	4968.44	1.012e+04	-20.85	-2.480e+04	1384.38	-1.255e+06
		-1.255e+06	-1.332e+04	-7.31e-03	0.0	705.0	4968.44	-8741.50	-20.85	-2.480e+04	-1.332e+04	-7.693e+05
2	32	1.809e+06	8367.31	0.44	-1.714e+04	0.0	-1447.89	1.638e+04	-64.03	-4.619e+04	8367.31	-3.710e+06
		-3.710e+06	-3.677e+04	-0.26	0.0	705.0	-1447.89	-754.72	-64.03	-4.619e+04	-3.677e+04	1.799e+06
...												
70	74	-3.892e+05	-9931.41	-7.98e-04	0.0	400.0	3730.30	-4520.58	-68.43	-3.193e+04	-9931.41	-2.528e+05
Trave		**M3 mx/mn**	**M2 mx/mn**	**D 2 / D 3**	**Q 2 / Q 3**		**N**	**V 2**	**V 3**	**T**		
		-6.018e+06	-1.823e+05	-1.41	-3.826e+04		-6.131e+04	-3.546e+04	-471.75	-3.528e+05		
		4.012e+06	1.472e+05	1.57	0.0		7.501e+04	2.816e+04	565.76	3.545e+05		

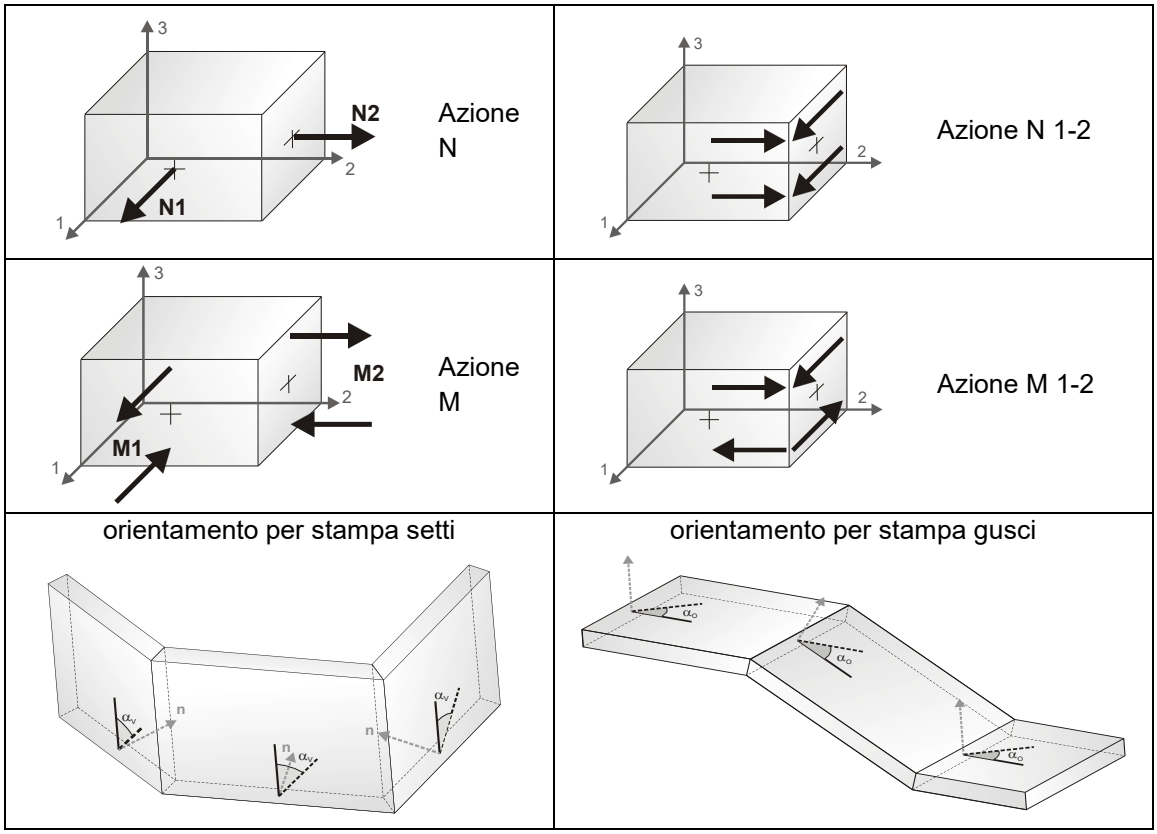
Trave f.	**Cmb**	**M3 mx/mn**	**M2 mx/mn**	**D 2 / D 3**	**Pt**	**Pos.**	**N**	**V 2**	**V 3**	**T**	**M 2**	**M 3**
		daN cm	daN cm	cm	daN/cm2	cm	daN	daN	daN	daN cm	daN cm	daN cm
71	2	6.603e+05	3.526e+05	-4.45e-03	-1.33	0.0	3339.92	-1.895e+04	4046.88	-6782.20	1.955e+05	6.603e+05
		-3.300e+04	1.955e+05	3.83e-04		38.8	3339.92	-1.676e+04	4046.88	-6751.33	3.526e+05	-3.300e+04
71	3	4.831e+05	2.282e+05	-2.98e-03	-0.95	0.0	1805.39	-1.296e+04	2569.97	-5139.16	1.284e+05	4.831e+05
		8982.89	1.284e+05	2.49e-04		38.8	1805.39	-1.146e+04	2569.97	-5115.12	2.282e+05	8982.89
71	4	5.154e+05	2.842e+05	-3.56e-03	-1.05	0.0	2798.30	-1.506e+04	3275.89	-5240.45	1.570e+05	5.154e+05
		-3.570e+04	1.570e+05	3.09e-04		38.8	2798.30	-1.332e+04	3275.89	-5216.79	2.842e+05	-3.570e+04
71	5	4.831e+05	2.282e+05	-2.98e-03	-0.95	0.0	1805.39	-1.296e+04	2569.97	-5139.16	1.284e+05	4.831e+05
		8982.89	1.284e+05	2.49e-04		38.8	1805.39	-1.146e+04	2569.97	-5115.12	2.282e+05	8982.89
71	6	5.046e+05	2.655e+05	-3.37e-03	-1.01	0.0	2467.33	-1.436e+04	3040.58	-5206.69	1.474e+05	5.046e+05
		-2.080e+04	1.474e+05	2.89e-04		38.8	2467.33	-1.270e+04	3040.58	-5182.90	2.655e+05	-2.080e+04
71	7	4.388e+06	4.847e+05	-2.07	-1.63	0.0	-4.275e+04	-2198.62	1.192e+04	-8.662e+04	2.125e+04	4.388e+06
		3.470e+06	2.125e+04	-5.35e-03		38.8	-4.275e+04	141.18	1.192e+04	-8.638e+04	4.847e+05	3.470e+06
71	11	4.761e+06	4.785e+05	-2.04	-1.62	0.0	-3.932e+04	-749.91	1.198e+04	-8.896e+04	1.229e+04	4.761e+06
		3.743e+06	1.229e+04	-2.28e-03		38.8	-3.932e+04	1607.97	1.198e+04	-8.872e+04	4.785e+05	3.743e+06
71	12	3.556e+06	4.029e+05	-1.17	-1.35	0.0	-4.890e+04	-1.320e+04	8161.88	-5.225e+04	8.607e+04	3.556e+06
		3.001e+06	8.607e+04	-5.79e-03		38.8	-4.890e+04	-1.024e+04	8161.88	-5.222e+04	4.029e+05	3.001e+06
71	13	-2.564e+06	1.936e+05	1.17	-0.66	0.0	5.330e+04	-1.440e+04	-2457.20	4.189e+04	1.936e+05	-2.564e+06
		-3.019e+06	9.831e+04	6.34e-03		38.8	5.330e+04	-1.417e+04	-2457.20	4.191e+04	9.831e+04	-3.019e+06
71	14	-3.760e+06	2.674e+05	2.04	-0.40	0.0	4.373e+04	-2.685e+04	-6276.59	7.860e+04	2.674e+05	-3.769e+06
		-3.776e+06	2.273e+04	2.83e-03		38.8	4.373e+04	-2.602e+04	-6276.59	7.841e+04	2.273e+04	-3.760e+06
71	35	3.298e+06	4.274e+05	-1.92	-1.58	0.0	8033.36	8312.76	1.145e+04	-8.806e+04	-1.900e+04	3.298e+06
		1.975e+06	-1.900e+04	8.03e-03		38.8	8033.36	9078.24	1.145e+04	-8.766e+04	4.274e+05	1.975e+06
71	39	3.550e+06	4.340e+05	-1.62	-1.49	0.0	-3.300e+04	-4646.73	9949.73	-6.889e+04	4.680e+04	3.550e+06
		2.728e+06	4.680e+04	-4.16e-03		38.8	-3.300e+04	-2484.59	9949.73	-6.870e+04	4.340e+05	2.728e+06
71	43	3.837e+06	4.293e+05	-1.60	-1.48	0.0	-3.048e+04	-3518.69	1.000e+04	-7.072e+04	3.995e+04	3.837e+06
		2.930e+06	3.995e+04	-1.82e-03		38.8	-3.048e+04	-1342.79	1.000e+04	-7.053e+04	4.293e+05	2.930e+06
71	44	2.892e+06	3.697e+05	-0.92	-1.27	0.0	-3.804e+04	-1.323e+04	7012.36	-4.206e+04	9.753e+04	2.892e+06
		2.346e+06	9.753e+04	-4.56e-03		38.8	-3.804e+04	-1.059e+04	7012.36	-4.203e+04	3.697e+05	2.346e+06
71	45	-1.900e+06	1.821e+05	0.92	-0.73	0.0	4.245e+04	-1.437e+04	-1307.69	3.170e+04	1.821e+05	-1.900e+06
		-2.363e+06	1.315e+05	5.11e-03		38.8	4.245e+04	-1.382e+04	-1307.69	3.172e+04	1.315e+05	-2.363e+06
71	46	-2.845e+06	2.397e+05	1.60	-0.52	0.0	3.488e+04	-2.408e+04	-4295.51	6.036e+04	2.397e+05	-2.845e+06
		-2.948e+06	7.186e+04	2.37e-03		38.8	3.488e+04	-2.307e+04	-4295.51	6.022e+04	7.186e+04	-2.948e+06
71	67	2.703e+06	3.899e+05	-1.50	-1.45	0.0	6758.65	3634.00	9576.48	-6.993e+04	1.580e+04	2.703e+06

		1.559e+06	1.580e+04	6.38e-03		38.8	6758.65	4557.36	9576.48	-6.962e+04	3.899e+05	1.559e+06
71	71	4.831e+05	2.282e+05	-2.98e-03	-0.95	0.0	1805.39	-1.296e+04	2569.97	-5139.16	1.284e+05	4.831e+05
		8982.89	1.284e+05	2.49e-04		38.8	1805.39	-1.146e+04	2569.97	-5115.12	2.282e+05	8982.89
71	72	4.982e+05	2.543e+05	-3.25e-03	-0.99	0.0	2268.75	-1.394e+04	2899.40	-5186.43	1.417e+05	4.982e+05
		-1.187e+04	1.417e+05	2.77e-04		38.8	2268.75	-1.233e+04	2899.40	-5162.57	2.543e+05	-1.187e+04
71	73	4.831e+05	2.282e+05	-2.98e-03	-0.95	0.0	1805.39	-1.296e+04	2569.97	-5139.16	1.284e+05	4.831e+05
		8982.89	1.284e+05	2.49e-04		38.8	1805.39	-1.146e+04	2569.97	-5115.12	2.282e+05	8982.89
71	74	4.960e+05	2.506e+05	-3.21e-03	-0.99	0.0	2202.55	-1.380e+04	2852.34	-5179.68	1.398e+05	4.960e+05
		-8889.08	1.398e+05	2.73e-04		38.8	2202.55	-1.221e+04	2852.34	-5155.79	2.506e+05	-8889.08
72	1	7.920e+05	1.576e+05	-8.06e-04	-1.22	0.0	-4902.68	-2.180e+04	-8305.22	-8.751e+04	1.576e+05	7.920e+05
		-1.747e+04	-1.649e+05	-2.78e-04		38.8	-4902.68	-1.988e+04	-8305.22	-8.736e+04	-1.649e+05	-1.747e+04
72	2	9.894e+05	1.986e+05	-1.03e-03	-1.32	0.0	-6896.36	-2.550e+04	-1.020e+04	-1.080e+05	1.986e+05	9.894e+05
		4.093e+04	-1.976e+05	-3.44e-04		38.8	-6896.36	-2.335e+04	-1.020e+04	-1.079e+05	-1.976e+05	4.093e+04
72	3	6.092e+05	1.213e+05	-6.20e-04	-0.94	0.0	-3771.29	-1.677e+04	-6388.63	-6.732e+04	1.213e+05	6.092e+05
		-1.344e+04	-1.268e+05	-2.14e-04		38.8	-3771.29	-1.530e+04	-6388.63	-6.720e+04	-1.268e+05	-1.344e+04
...												
445	74	-9.408e+05	-1.017e+04	1.24e-04	-0.99	23.5	1.570e+04	9600.98	-187.92	5.587e+04	-1.017e+04	-7.267e+05
Trave f.		**M3 mx/mn**	**M2 mx/mn**	**D 2 / D 3**	**Pt**		**N**	**V 2**	**V 3**	**T**		
		-4.246e+06	-8.284e+05	-2.11	-1.68		-9.632e+04	-4.976e+04	-3.617e+04	-1.158e+06		
		7.847e+06	7.606e+05	2.04	-0.39		9.360e+04	5.441e+04	3.663e+04	1.105e+06		

RISULTATI ELEMENTI TIPO SHELL

LEGENDA RISULTATI ELEMENTI TIPO SHELL

Il controllo dei risultati delle analisi condotte, per quanto concerne gli elementi tipo shell, è possibile in relazione alle tabelle sottoriportate.
Per ogni elemento, e per ogni combinazione(o caso di carico) vengono riportati i risultati più significativi.



In particolare vengono riportati in ogni nodo di un elemento per ogni combinazione:

tensione di Von Mises		(valore riassuntivo del complessivo stato di sollecitazione)
N max		sforzo membranale principale massimo
N min		sforzo membranale principale minimo
M max		sforzo flessionale principale massimo
M min		sforzo flessionale principale minimo
N1	**N2**	sforzi membranali e flessionali in direzione locale 1 e 2 dell'elemento
N1-2	**M1**	(lo sforzo 2-1 è uguale allo sforzo 1-2 per la reciprocità delle tensioni
M2	**M1-2**	tangenziali)

I suddetti risultati possono a scelta del progettista essere preceduti o sostituiti da valori di sollecitazione non più riferiti al sistema locale dell'elemento ma al sistema globale.
In questo caso gli elementi vengono raggruppati in gruppi (M_S: macro gusci o macro setti, raggruppati per materiale, spessore, e posizione fisica) per la valutazione dei valori mediati ai nodi appartenenti agli elementi dei gruppi stessi.
I valori di sollecitazione sono, in questo caso, riferiti ad una terna specifica del gruppo ruotata di α_O attorno all'asse Z per i gusci e ruotata di α_V attorno alla normale (che per definizione è orizzontale) al piano del setto.
Per i setti, in particolare, se α_V è zero, l'asse '1-1 rappresenta la verticale e l'asse '2-2 l'orizzontale contenuta nel setto.
Le azioni sui setti possono essere espresse anche con formato macro, cioè riferite all'intero macroelemento.

In particolare vengono riportati per ogni quota Z dei nodi e per ogni combinazione i seguenti valori:

N memb.	Azione membranale complessiva agente sulla parete in direzione Z
V memb.	Azione complessiva di taglio agente nel piano del macroelemento
V orto	Azione complessiva di taglio agente in direzione perpendicolare al macroelemento
M memb.	Azione flessionale complessiva agente nel piano del macroelemento
M orto	Azione flessionale complessiva agente in direzione perpendicolare al macroelemento
T	Azione torsionale complessiva agente nel piano orizzontale

Macro	Tipo	Angolo 1-X (gradi)
1	**Guscio**	**0.0**

M_G	Cmb	Nodo	N max	N min	N 1	N 2	N 1-2	M max	M min	M 1	M 2	M 1-2
			daN/cm	daN/cm	daN/cm	daN/cm	daN/cm	daN	daN	daN	daN	daN
1	2	1	-0.19	-5.47	-0.30	-5.36	0.77	836.04	-840.72	-20.33	15.66	-838.19
1	2	2	39.06	14.88	14.89	39.04	-0.59	-994.17	-1874.46	-1000.25	-1868.38	72.92
1	2	3	3.96	-11.51	3.85	-11.40	-1.30	811.93	-853.96	-59.87	17.85	832.04
1	2	10	29.73	7.04	15.13	21.64	10.87	-439.01	-1711.51	-1555.04	-595.49	-417.89
1	2	11	-154.35	-170.25	-170.20	-154.40	0.86	2786.84	2656.87	2777.76	2665.96	33.15
1	2	12	49.31	13.26	17.88	44.69	-12.05	-630.65	-1795.05	-1622.88	-802.82	413.32
1	2	19	37.55	5.39	6.16	36.79	-4.89	-86.97	-1706.78	-1158.11	-635.64	766.62
1	2	20	-103.50	-149.39	-103.51	-149.39	0.49	1835.63	1760.36	1830.18	1765.81	-19.51
1	2	21	39.79	5.84	6.95	38.68	6.04	-109.93	-1734.06	-1183.89	-660.09	-768.67
1	2	28	125.47	-45.99	-45.04	124.51	-12.76	189.41	-1428.07	-263.98	-974.67	726.49
1	2	29	414.20	-19.55	-19.55	414.20	7.01e-02	-1903.37	-3791.89	-1903.72	-3791.55	-25.43
1	2	30	125.95	-46.77	-45.68	124.85	13.72	202.14	-1439.14	-252.37	-984.64	-734.44
1	2	37	34.61	-12.85	-11.68	33.44	7.34	-617.05	-759.08	-735.69	-640.43	52.67
1	2	38	110.55	-11.77	110.55	-11.77	-0.74	-525.64	-1320.58	-1316.45	-529.76	-57.10
1	2	39	31.84	-13.39	-12.16	30.61	-7.37	-616.44	-764.63	-734.50	-646.57	-59.64
1	2	46	21.57	-34.70	13.95	-27.07	-19.26	614.38	-909.20	-59.42	-235.40	-756.69
1	2	47	2.37	-51.98	-9.78	-39.83	-22.64	596.67	-1104.90	-295.04	-213.19	-849.80
1	2	48	14.92	-36.89	10.08	-32.05	-15.08	923.06	-648.58	-25.01	299.49	-768.89
1	2	49	-10.64	-35.26	-21.81	-24.09	-12.26	876.98	-1050.67	156.53	-330.22	-932.59
1	2	50	-8.39	-68.14	-24.42	-52.11	-26.47	909.98	-1209.56	43.53	-343.11	-1041.99
1	2	51	-13.53	-50.89	-50.11	-14.31	-5.34	1036.96	-1127.03	352.88	-442.95	-1006.17
1	2	52	-14.61	-82.18	-54.10	-42.69	-33.30	1108.54	-1232.85	284.84	-409.15	-1118.09
1	2	53	-4.94	-71.99	-71.84	-5.10	-3.25	1147.28	-1215.14	485.09	-552.95	-1061.07
1	2	54	-17.65	-86.51	-74.98	-29.18	-25.71	1243.87	-1244.74	463.43	-464.30	-1154.61
1	2	55	2.04	-86.95	-86.95	2.04	-1.98e-02	1198.97	-1288.29	568.05	-657.37	-1082.22
1	2	56	-16.81	-91.02	-88.87	-18.96	-12.45	1314.14	-1249.44	582.42	-517.72	-1157.76
1	2	57	6.81	-96.09	-95.88	6.59	4.69	1199.10	-1349.79	605.01	-755.69	-1077.65
1	2	58	-13.06	-96.85	-96.72	-13.18	3.25	1327.30	-1255.25	647.20	-575.15	-1137.48
1	2	59	9.37	-99.93	-98.91	8.35	10.50	1149.12	-1401.72	596.44	-849.03	-1050.88
1	2	60	-6.85	-103.27	-98.93	-11.19	19.99	1289.60	-1263.13	661.21	-634.74	-1099.65
1	2	61	10.08	-98.88	-96.10	7.31	17.18	1048.18	-1447.13	541.31	-940.25	-1003.94
1	2	62	1.97	-109.51	-95.49	-12.05	36.96	1205.76	-1270.16	627.23	-691.62	-1047.71
1	2	63	9.80	-93.43	-87.15	3.52	24.69	892.17	-1489.58	437.01	-1034.42	-936.43
1	2	64	13.80	-114.69	-86.12	-14.78	53.43	1078.35	-1271.08	547.04	-739.77	-982.84
1	2	65	10.50	-84.72	-71.37	-2.85	33.06	673.11	-1533.88	278.96	-1139.74	-845.29
1	2	66	29.04	-117.58	-70.43	-18.12	68.49	907.69	-1259.18	421.36	-772.85	-904.05
1	2	67	16.39	-75.28	-47.62	-11.26	42.08	379.29	-1587.21	59.69	-1267.61	-725.50
1	2	68	48.07	-116.46	-48.12	-20.27	81.08	691.88	-1225.79	250.40	-784.31	-807.29
1	2	69	33.17	-67.86	-14.66	-20.03	50.44	-3.56	-1654.50	-227.10	-1430.95	-564.88
1	2	70	71.16	-109.75	-19.51	-19.07	90.45	427.48	-1157.48	38.31	-768.31	-682.17
1	2	71	60.48	-56.74	28.82	-25.08	52.04	-409.69	-1775.81	-577.23	-1608.28	-448.11
1	2	72	98.89	-98.18	13.03	-12.31	97.72	87.14	-1008.30	-218.70	-702.46	-491.41
1	2	73	107.72	-53.50	69.36	-15.14	68.66	-1052.62	-1686.30	-1085.63	-1653.29	-140.81
1	2	74	111.98	-40.77	63.59	7.62	71.07	-300.56	-729.67	-464.45	-565.78	-208.49
1	2	75	77.71	-6.50	-6.21	77.42	-4.94	-374.51	-635.07	-397.01	-612.57	73.19
1	2	76	-20.23	-51.73	-30.17	-41.79	-14.64	1019.84	-1212.76	-306.81	113.89	-1096.30
1	2	77	-1.56	-54.25	-2.98	-52.83	-8.53	1143.65	-807.34	-103.52	439.83	-936.90
1	2	78	-26.74	-58.32	-38.01	-47.05	-15.13	1160.64	-1108.74	34.01	17.89	-1134.66

...

1	74	3138	-0.71	-7.52	-0.72	-7.51	0.27	63.27	-242.77	-6.54	-172.95	128.42
M_G			**N max**	**N min**	**N 1**	**N 2**	**N 1-2**	**M max**	**M min**	**M 1**	**M 2**	**M 1-2**
				-417.17	-293.73	-415.84	-152.01		-4526.47	-2663.81	-4521.80	-1870.98
			670.95		256.78	670.94	152.60	3431.94		3003.27	3367.91	1666.73

VERIFICHE ELEMENTI TRAVE E/O PILASTRO IN C.A.

LEGENDA TABELLA VERIFICHE ELEMENTI TRAVE E/O PILASTRO IN C.A.

In tabella vengono riportati per ogni elemento il numero identificativo ed il codice di verifica con le sigle **Ok** o **NV**.

Nel caso in cui si sia proceduto alla progettazione con il metodo degli stati limite (**S.L.**) vengono riportati: il rapporto x/d, le verifiche per sollecitazioni proporzionali e la verifica per compressione media con l'indicazione delle combinazioni in cui si sono attinti i rispettivi valori.

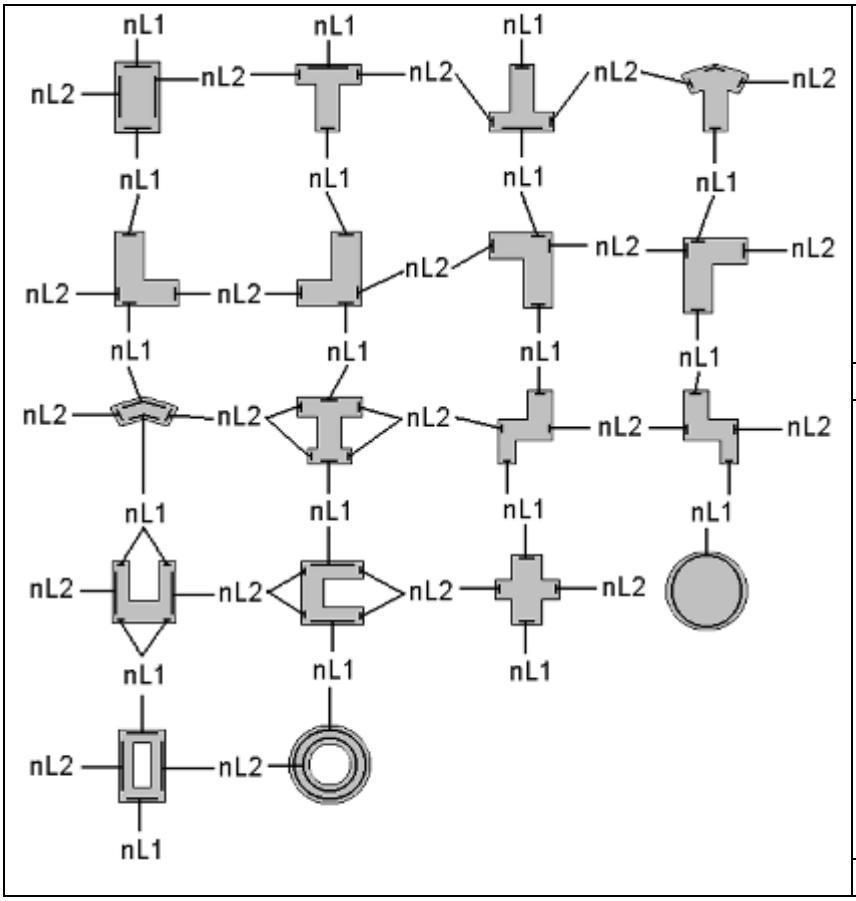
Nel caso in cui si sia proceduto alla progettazione con le tensioni ammissibili (**T.A.**) vengono riportate le massime tensioni nell'elemento (massima compressione nel calcestruzzo, massima compressione media nel calcestruzzo, massima tensione nell'acciaio, massima tensione tangenziale) con l'indicazione delle combinazioni in cui si sono attinti i rispettivi valori.

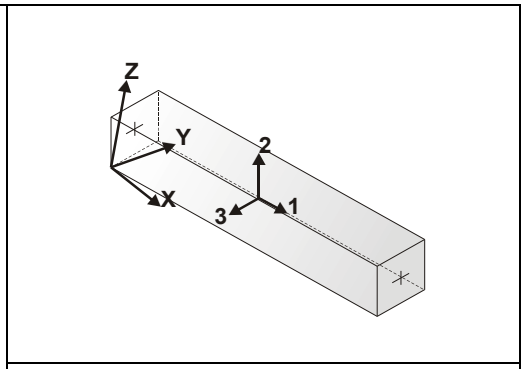
Nel caso in cui la struttura abbia comportamento dissipativo e sia prevista la progettazione con il criterio della gerarchia delle resistenze **(G.R.)** vengono riportate le verifiche di sovraresistenza e del nodo.

Per gli elementi tipo pilastro sono riportati numero e diametro dei ferri di vertice, numero e diametro di ferri disposti lungo i lati L1 (paralleli alla base della sezione) e lungo i lati L2 (paralleli all'altezza della sezione).

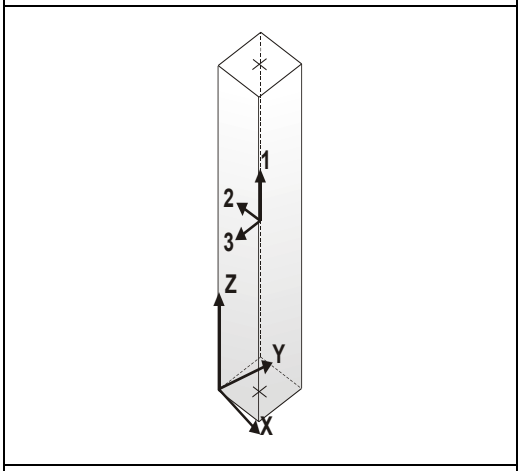
Per gli elementi tipo trave sono riportati infine le quantità di armatura inferiore e superiore.

Schema della distribuzione delle armature longitudinali





Orientamento elementi 2D non verticali



Orientamento elementi 2D verticali

PROGETTAZIONE DELLE FONDAZIONI

Il D.M.17/01/2018 - par: 7.2.5 prevede:

"Sia per CD"A" sia per CD"B" il dimensionamento delle strutture di fondazione e la verifica di sicurezza del complesso fondazione-terreno devono essere eseguiti assumendo come azione in fondazione, trasmessa dagli elementi soprastanti, una tra le seguenti:

- quella derivante dall'analisi strutturale eseguita ipotizzando comportamento strutturale non dissipativo;
- […];
- quella trasferita dagli elementi soprastanti nell'ipotesi di comportamento strutturale dissipativo, amplificata di un coefficiente pari a 1,30 in CD"A" e 1,10 in CD"B";

Nel contesto visualizzazione risultati e nella stampa della relazione sulle fondazioni PRO_SAP mostra le sollecitazioni che derivano dall'analisi non incrementate sia in termini di pressioni sul terreno che in termini di sollecitazioni.

La progettazione degli elementi strutturali con proprietà fondazione è effettuata da PRO_SAP (per travi e platee) o da PRO_CAD Plinti (per plinti e pali di fondazione) incrementando le sollecitazioni delle combinazioni con sisma di un coefficiente pari 1.1 in CDB e 1.3 in CDA per pali, plinti, travi e platee.
Per i bicchieri dei plinti di fondazione prefabbricati l'incremento delle sollecitazioni ha un fattore pari a 1.2 in CDB e 1.35 in CDA.
N.B.: nel caso di comportamento strutturale non dissipativo la progettazione viene effettuata senza nessun incremento.

Le verifiche geotecniche vengono effettuate dal modulo geotecnico incrementando automaticamente le sollecitazioni del fattore 1.1 in CDB e 1.3 in CDA per pali, plinti, travi e platee.
N.B.: nel caso di comportamento strutturale non dissipativo le verifiche geotecniche vengono effettuate senza nessun incremento.

Simbologia adottata nelle tabelle di verifica

Per le verifiche agli S.L. dei pilastri è presente una tabella con i simboli di seguito descritti:

M_P X Y	Numero della pilastrata (P) e posizione in pianta (X,Y)
Pilas.	numero identificativo dell'elemento D2
Note	Codici identificativi delle sezione (s) e materiale (m) pilastro
Stato	Codici relativi all'esito delle verifiche effettuate appresso descritte
Quota	Quota sezione di verifica
%Af	Percentuale di area di armatura rispetto a quella di calcestruzzo
r. snell.	Rapporto di snellezza λ su λ^*: valore superiore a 1 per elementi snelli nel caso in cui viene effettuata la verifica con il metodo diretto dello stato di equilibrio
Armat. long.	Numero e diametro (d) dei ferri di armatura longitudinale distinti in ferri di vertice + ferri di lato nelle posizioni nL1 e nL2, come da schemi in figura precedente
V N/M	Verifica a pressoflessione con rapporto Ed/Rd: valore minore o uguale a 1 per verifica positiva
V N sis	Verifica a compressione solo calcestruzzo con rapporto Nsd/Nrd ed Nrd calcolato come al punto 7.4.4.2.1: valore minore o uguale a 1 per verifica positiva
Staffe	Dati tratto di staffatura oggetto di verifica, nello specifico: numero delle braccia, diametro, passo, lunghezza L tratto
V V/T cls	Verifica a taglio/torsione con rapporto Ved/Vrd: valore minore o uguale a 1 per verifica positiva
Rif. cmb.	Riferimento combinazioni da cui si generano le verifiche più gravose per il pilastro

Per le verifiche alla G.R. dei pilastri è presente una tabella con i simboli di seguito descritti:

Pilas.	numero identificativo dell'elemento D2 pilastro
sovr. Xi (Xf)	Verifica sovraresistenza come da formula 7.4.4 in direzione X, alla base (i) ed alla sommità (f):

	rapporto tra i momenti resistenti dei pilastri e delle travi. La verifica è positiva se maggiore del γ_{Rd} adottato
sovr. Yi (Yf)	Verifica sovraresistenza come da formula 7.4.4 in direzione Y, alla base (i) ed alla sommità (f): rapporto tra i momenti resistenti dei pilastri e delle travi. La verifica è positiva se maggiore del γ_{Rd} adottato
M 2-2 i (f)	Valore del momento resistente 2-2 alla base (i) ed alla sommità (f) con massimo momento in presenza dello sforzo normale di calcolo
M 3-3 i (f)	Valore del momento resistente 3-3 alla base (i) ed alla sommità (f) con massimo momento in presenza dello sforzo normale di calcolo
Luce per V	Luce di calcolo per la definizione del taglio (generato dai momenti resistenti)
V M2-2 (M3-3)	Valore del taglio generato dai momenti resistenti 2-2 (3-3)

Per le verifiche dei dettagli costruttivi per la duttilità è presente una tabella con i simboli di seguito descritti:
(Non presente nel caso di comportamento strutturale non dissipativo)

Pilas	Numero identificativo D2 pilastro
ni	Sforzo assiale adimensionalizzato di progetto relativo alla combinazione sismica SLV
alfaomega	Prodotto tra il coefficiente di efficacia del confinamento e il rapporto meccanico dell'armatura trasversale di confinamento all'interno del nodo
V.7.4.29 2-2 (3-3)	Rapporto tra la domanda di staffe minima nel nodo e il rapporto meccanico dell'armatura trasversale di confinamento inserito all'interno del nodo in direzione 2 (3)
V. 7.4.29 Stato	Codici relativi all'esito della verifica 7.4.29
dmu_fi 2-2 (3-3)	Domanda in duttilità di curvatura in direzione 2 (3)
cmu_fi 2-2 (3-3)	Capacità in duttilità di curvatura in direzione 2 (3)
V. dutt. 2-2 (3-3)	Rapporto tra la domanda in duttilità di curvatura e la capacità in duttilità di curvatura in direzione 2 (3)

Per le verifiche nodi trave-pilastro di elementi nuovi è presente una tabella con i simboli di seguito descritti:

Nodo	Numero identificativo del nodo trave-pilastro
Stato	Esito delle verifiche
Pilastro	Numero identificativo D2 pilastro
Diam st	Diametro staffe nodo
Passo	Passo staffe nodo
n. br. 2 (3)	Numero braccia staffe per il taglio in direzione 2 (3)
Bj2 (3)	Larghezza effettiva del nodo per il taglio in direzione 2 (3)
Hjc2 (3)	Distanza tra le giaciture più esterne delle armature del pilastro per il taglio in direzione 2 (3)
V. 7.4.8	Rapporto tra il taglio Vjbd e il taglio resistente come da formula 7.4.8
V. Ash	Rapporto tra il passo staffe calcolato secondo il capitolo 7.4.4.3.1. e il passo staffe effattivamente inserita nel nodo. Nel caso di valore indica passo staffe utilizzato deriva dalle formule presenti nel paragrafo 7.4.4.3.1. Nel caso di valore minore di 1 il passo staffe utilizzato deriva del pilastro superiore o inferiore al nodo
7.4.10	Check passo staffe valutato in funzione della formula 7.4.10: • SI il passo staffe è calcolato utilizzando la formula 7.4.10; • NO il passo staffe è calcolato utilizzando le formule 7.4.11 e/o 7.4.12; • NR calcolo passo staffe non richiesto;
Rif. comb.	Riferimento combinazioni da cui si generano le verifiche più gravose per il nodo

Per le verifiche nodi trave-pilastro di elementi esistenti è presente una tabella con i simboli di seguito descritti:

Pilastro I	Numero identificativo D2 del pilastro inferiore.

Pilastro S	Numero identificativo D2 del pilastro superiore.
Nodo	Numero identificativo del nodo trave-pilastro.
SL cod	Stato limite di riferimento e relativo esito delle verifiche.
ver. (+)	Fattore di sicurezza nei riguardi della verifica di resistenza a compressione (verificato se < 1.00).
V +	Azione di Taglio presente al di sopra del nodo nella verifica di resistenza a compressione.
V + af s	Sollecitazione di trazione presente nell' armatura longitudinale superiore della trave nella verifica di resistenza a compressione.
N +	Azione Assiale presente al di sopra del nodo nella verifica di resistenza a compressione.
ver. (-)	Fattore di sicurezza nei riguardi della verifica di resistenza a trazione (verificato se < 1.00).
V -	Azione di Taglio presente al di sopra del nodo nella verifica di resistenza a trazione.
V - af s	Sollecitazione di trazione presente nell' armatura longitudinale superiore della trave nella verifica di resistenza a trazione.
N -	Azione Assiale presente al di sopra del nodo nella verifica di resistenza a trazione.
AreaV2	Area resistente del nodo in direzione 2 ($A_{j2}=b_{j2}*h_{jc2}$).
AreaV3	Area resistente del nodo in direzione 3 ($A_{j3}=b_{j3}*h_{jc3}$).
Rif. comb.	Combinazione (direzione) di riferimento nella verifica di trazione.

Per le verifiche agli S.L. delle travi è presente una tabella con i simboli di seguito descritti:

M_T Z P P	Numero della travata (T), quota media (Z), n° pilastrata iniziale (P) e finale (P) (nodo in assenza di pilastrata)
Trave	numero identificativo dell'elemento D2
Note	Codici identificativi sezione (s) e materiale (m) trave; sono inoltre presenti le sigle relative all'esito delle verifiche effettuate appresso descritte
%Af	Percentuale di area di armatura rispetto a quella di calcestruzzo
Af inf.	Area di armatura longitudinale posta all'intradosso
Af sup	Area di armatura longitudinale posta all'estradosso
Af long.	Area complessiva armatura longitudinale
x/d	rapporto tra posizione dell'asse neutro e altezza utile
V N/M	Verifica a pressoflessione rapporto Ed/Rd: valore minore o uguale a 1 per verifica positiva
Staffe	Dati tratto di staffatura oggetto di verifica, nello specifico: numero delle braccia, diametro, passo, lunghezza L tratto
V V/T cls	Verifica a taglio/torsione con rapporto Ved/Vrd: valore minore o uguale a 1 per verifica positiva
Rif. cmb.	Riferimento combinazioni da cui si generano le verifiche più gravose per la trave

Per le verifiche alla G.R. delle travi è presente una tabella con i simboli di seguito descritti:

Trave	numero identificativo dell'elemento D2 trave
M negativo i (f)	Valore del momento resistente negativo all' estremità iniziale i (finale f) della trave
M positivo i (f)	Valore del momento resistente positivo all' estremità iniziale i (finale f) della trave
Luce per V	Luce di calcolo per la definizione del taglio (generato dai momenti resistenti)
V M-i M+f	Taglio generato dai momenti resistenti negativo i e positivo f
V M+i M-f	Taglio generato dai momenti resistenti positivo i e negativo f
VEd, min	Valore di taglio minimo per verifica condizioni p.to 7.4.4.1.1 armatura diagonale (solo per CD "A")
VEd, max	Valore di taglio massimo per verifica condizioni p.to 7.4.4.1.1 armatura diagonale (solo per CD "A")
Vr1	Valore di taglio come da formula 7.4.1 per armatura diagonale (solo per CD "A")
As	Area singolo ordine armature diagonali come da formula 7.4.2 (solo per CD "A")

Per le verifiche a taglio ciclico di travi e pilastri esistenti è presente una tabella con i simboli di seguito descritti:

Trave/Pilastro	Numero identificativo dell'elemento D2 trave/pilastro
V. SLV	Codice relativo all'esito delle verifiche

Nodo	Numero identificativo del nodo di verifica
Ver. VC	Fattore di sicurezza nei confronti della verifica a taglio ciclico (verificato se < 1.00)
Direz.	Direzione di verifica
N fr	Valore di sforzo normale calcolato con fattore di comportamento fragile
V fr	Valore di taglio calcolato con fattore di comportamento fragile
M fr	Valore di momento calcolato con fattore di comportamento fragile
N dutt	Valore di sforzo normale calcolato con fattore di comportamento duttile
LV	Lunghezza di taglio
Mud,pl	Parte plastica della domanda di duttilità
V cic	Resistenza a taglio in condizioni cicliche (C8.7.2.8)
Cmb	Riferimento combinazioni da cui si generano le verifiche più gravose

Per le verifiche alle T.A. di pilastri e travi è presente una tabella con i simboli di seguito descritti:

M_P X Y	Numero della pilastrata (P) e posizione in pianta (X,Y)
M_T Z P P	Numero della travata, quota media pilastrata iniziale e finale (nodo in assenza di pilastrata)
Pilas. o Trave	numero identificativo dell'elemento D2
Note	Viene riportato il codice relativo alla sezione(s) e relativo al materiale(m); nella terza riga viene riportato il valore delle snellezze in direzione 2-2 e 3-3
Stato	Codici di verifica relativi alle tensioni normali e alle tensioni tangenziali
Quota	Ascissa del punto di verifica
%Af	Percentuale di area di armatura rispetto a quella di calcestruzzo
Armat. long.	Numero e diametro dei ferri di armatura longitudinale: ferri di vertice + ferri di lato (come da fig. precedente)
Af inf.	Area di armatura longitudinale posta all'intradosso della trave
Af sup	Area di armatura longitudinale posta all'estradosso della trave
Sc max	Massima tensione di compressione del calcestruzzo
Sc med	Massima tensione media di compressione del calcestruzzo
Sf max	Tensione massima nell'acciaio
staffe	Vengono riportati i dati del tratto di staffatura in cui cade la sezione di verifica; in particolare: numero dei bracci, diametro, passo, lunghezza tratto
Tau max	Tensione massima tangenziale nel cls
Rif. comb	Combinazioni in cui si generano i seguenti valori di tensione: Sc max, Sc med, Sf max, Tau max
AfV	area dell'armatura atta ad assorbire le azioni di taglio
AfT	area dell'armatura atta ad assorbire le azioni di torsione
Scorr. P	Scorrimento dei piegati
Af long.	Area del ferro longitudinale aggiuntivo per assorbire la torsione

					M_P= 1	**X=0.0**	**Y=0.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
			cm						L=cm			
7	s=2,m=3	ok,ok	0.0	1.75	0.44	4d18 8+10 d18	0.99	0.143+4d10/12	L=87	0.77	0.46	12,26,19,19
			214.0	1.11	0.44	4d18 4+6 d18	0.40	0.133+4d10/20	L=253	0.77	0.74	12,26,19,19
	[b=1.0;1.0]		428.0	1.11	0.44	4d18 4+6 d18	0.77	0.133+4d10/12	L=87	0.77	0.46	33,26,19,19
10	s=4,m=3	ok,ok	428.0	1.11	0.28	4d18 4+6 d18	0.60	0.063+4d10/12	L=87	0.56	0.32	32,26,12,22
			631.5	1.11	0.28	4d18 4+6 d18	0.13	0.063+4d10/20	L=232	0.56	0.51	13,26,12,22
	[b=1.0;1.0]		835.0	1.11	0.28	4d18 4+6 d18	0.77	0.053+4d10/12	L=87	0.57	0.32	32,26,12,22
					M_P= 2	**X=582.5**	**Y=0.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
5	s=2,m=3	ok,ok	0.0	1.75	0.61	4d18 8+10 d18	0.93	0.243+4d10/12	L=87	0.77	0.50	7,26,22,17
			214.0	1.11	0.61	4d18 4+6 d18	0.33	0.243+4d10/20	L=253	0.77	0.80	7,26,22,17
	[b=1.0;1.0]		428.0	1.43	0.61	4d18 6+8 d18	0.98	0.233+4d10/12	L=87	0.78	0.50	23,26,22,17
11	s=4,m=3	ok,ok	428.0	1.75	0.40	4d18 8+10 d18	0.88	0.123+4d10/12	L=87	0.86	0.47	26,26,16,16

			631.5	1.11	0.40	4d18 4+6 d18	0.15	0.113+4d10/20	L=232	0.86	0.75	10,26,16,16
	[b=1.0;1.0]		835.0	1.75	0.40	4d18 8+10 d18	0.95	0.113+4d10/12	L=87	0.86	0.47	26,26,16,16
					M_P= 3	**X=1165.0**	**Y=0.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
6	s=2,m=3	ok,ok	0.0	1.75	0.45	4d18 8+10 d18	0.96	0.143+4d10/12	L=87	0.77	0.46	10,32,10,22
			214.0	1.11	0.45	4d18 4+6 d18	0.38	0.143+4d10/20	L=253	0.77	0.74	10,32,10,22
	[b=1.0;1.0]		428.0	1.43	0.45	4d18 6+8 d18	0.83	0.133+4d10/12	L=87	0.77	0.46	33,32,10,22
12	s=4,m=3	ok,ok	428.0	1.11	0.28	4d18 4+6 d18	0.70	0.063+4d10/12	L=87	0.55	0.31	32,32,10,16
			631.5	1.11	0.28	4d18 4+6 d18	0.13	0.063+4d10/20	L=232	0.56	0.50	7,32,10,16
	[b=1.0;1.0]		835.0	1.11	0.28	4d18 4+6 d18	0.76	0.053+4d10/12	L=87	0.56	0.31	26,32,10,16
					M_P= 4	**X=0.0**	**Y=470.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
19	s=2,m=3	ok,ok	0.0	1.75	0.55	4d18 8+10 d18	0.98	0.213+4d10/12	L=87	0.76	0.48	32,18,29,29
			214.0	1.11	0.55	4d18 4+6 d18	0.30	0.203+4d10/20	L=253	0.76	0.77	32,18,29,29
	[b=1.0;1.0]		428.0	1.75	0.55	4d18 8+10 d18	0.97	0.203+4d10/12	L=87	0.77	0.48	12,18,29,29
22	s=4,m=3	ok,ok	428.0	1.43	0.36	4d18 6+8 d18	0.85	0.103+4d10/12	L=87	0.82	0.44	22,18,33,35
			631.5	1.11	0.36	4d18 4+6 d18	0.18	0.093+4d10/20	L=232	0.82	0.71	33,18,33,35
	[b=1.0;1.0]		835.0	1.75	0.36	4d18 8+10 d18	0.92	0.093+4d10/12	L=87	0.82	0.44	13,18,33,35
					M_P= 5	**X=1165.0**	**Y=470.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
18	s=14,m=3	ok,ok	0.0	1.65	0.41	4d18 10+12 d18	0.98	0.183+4d10/12	L=87	0.74	0.58	26,20,35,35
			214.0	1.15	0.41	4d18 6+8 d18	0.33	0.173+4d10/20	L=253	0.75	0.92	10,20,35,35
	[b=1.0;1.0]		428.0	1.15	0.41	4d18 6+8 d18	0.77	0.173+4d10/12	L=87	0.75	0.58	23,20,35,35
24	s=14,m=3	ok,ok	428.0	1.15	0.27	4d18 6+8 d18	0.75	0.083+4d10/12	L=87	0.72	0.46	7,12,32,35
			631.5	1.15	0.27	4d18 6+8 d18	0.18	0.083+4d10/20	L=232	0.72	0.74	23,12,32,35
	[b=1.0;1.0]		835.0	1.40	0.27	4d18 8+10 d18	0.94	0.073+4d10/12	L=87	0.72	0.46	7,12,32,35
					M_P= 6	**X=0.0**	**Y=870.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
31	s=2,m=3	ok,ok	0.0	1.75	0.50	4d18 8+10 d18	0.99	0.173+4d10/12	L=87	0.76	0.47	35,22,35,35
			214.0	1.11	0.50	4d18 4+6 d18	0.28	0.173+4d10/20	L=253	0.76	0.75	32,22,35,35
	[b=1.0;1.0]		428.0	1.43	0.50	4d18 6+8 d18	0.90	0.163+4d10/12	L=87	0.76	0.47	19,22,35,35
34	s=4,m=3	ok,ok	428.0	1.11	0.32	4d18 4+6 d18	0.92	0.083+4d10/12	L=87	0.70	0.37	22,22,38,35
			631.5	1.11	0.32	4d18 4+6 d18	0.14	0.073+4d10/20	L=232	0.70	0.60	33,22,38,35
	[b=1.0;1.0]		835.0	1.43	0.32	4d18 6+8 d18	0.97	0.073+4d10/12	L=87	0.70	0.37	22,22,38,35
					M_P= 7	**X=1165.0**	**Y=870.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
30	s=2,m=3	ok,ok	0.0	1.75	0.50	4d18 8+10 d18	0.97	0.173+4d10/12	L=87	0.75	0.47	29,16,33,38
			214.0	1.11	0.50	4d18 4+6 d18	0.27	0.173+4d10/20	L=253	0.76	0.75	29,16,33,38
	[b=1.0;1.0]		428.0	1.43	0.50	4d18 6+8 d18	0.87	0.163+4d10/12	L=87	0.76	0.47	17,16,33,38
36	s=4,m=3	ok,ok	428.0	1.11	0.32	4d18 4+6 d18	0.91	0.083+4d10/12	L=87	0.69	0.37	16,16,32,35
			631.5	1.11	0.32	4d18 4+6 d18	0.14	0.073+4d10/20	L=232	0.70	0.60	23,16,32,35
	[b=1.0;1.0]		835.0	1.43	0.32	4d18 6+8 d18	0.98	0.073+4d10/12	L=87	0.70	0.37	16,16,32,35
					M_P= 8	**X=0.0**	**Y=1220.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
43	s=2,m=3	ok,ok	0.0	2.07	0.55	4d18 10+12 d18	0.93	0.213+4d10/12	L=87	0.88	0.54	38,33,38,35
			214.0	1.11	0.55	4d18 4+6 d18	0.28	0.213+4d10/20	L=253	0.88	0.86	35,33,38,35
	[b=1.0;1.0]		428.0	1.11	0.55	4d18 4+6 d18	0.97	0.203+4d10/12	L=87	0.89	0.54	38,33,38,35
46	s=4,m=3	ok,ok	428.0	1.11	0.35	4d18 4+6 d18	0.73	0.093+4d10/12	L=87	0.67	0.38	22,13,38,35
			631.5	1.11	0.35	4d18 4+6 d18	0.16	0.093+4d10/20	L=232	0.67	0.61	38,13,38,35
	[b=1.0;1.0]		835.0	1.43	0.35	4d18 6+8 d18	0.85	0.083+4d10/12	L=87	0.67	0.38	38,13,38,35
					M_P= 9	**X=582.5**	**Y=1220.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
41	s=14,m=3	ok,ok	0.0	1.40	0.60	4d18 8+10 d18	0.96	0.303+4d10/12	L=87	0.69	0.56	28,31,38,32
			214.0	1.15	0.60	4d18 6+8 d18	0.30	0.293+4d10/20	L=253	0.69	0.90	26,31,38,32
	[b=1.0;1.0]		428.0	1.15	0.60	4d18 6+8 d18	0.70	0.293+4d10/12	L=87	0.70	0.56	17,31,38,32
47	s=14,m=3	ok,ok	428.0	1.15	0.39	4d18 6+8 d18	0.65	0.153+4d10/12	L=87	0.58	0.44	17,11,38,35
			631.5	1.15	0.39	4d18 6+8 d18	0.14	0.153+4d10/20	L=232	0.59	0.71	25,11,38,35
	[b=1.0;1.0]		835.0	1.15	0.39	4d18 6+8 d18	0.84	0.143+4d10/12	L=87	0.59	0.44	17,11,38,35
					M_P= 10	**X=1165.0**	**Y=1220.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
42	s=2,m=3	ok,ok	0.0	2.07	0.55	4d18 10+12 d18	0.90	0.213+4d10/12	L=87	0.88	0.54	28,23,28,38
			214.0	1.11	0.55	4d18 4+6 d18	0.28	0.213+4d10/20	L=253	0.88	0.86	26,23,28,38
	[b=1.0;1.0]		428.0	1.11	0.55	4d18 4+6 d18	0.92	0.203+4d10/12	L=87	0.88	0.54	28,23,28,38
48	s=4,m=3	ok,ok	428.0	1.11	0.35	4d18 4+6 d18	0.72	0.103+4d10/12	L=87	0.66	0.38	16,7,28,35
			631.5	1.11	0.35	4d18 4+6 d18	0.16	0.093+4d10/20	L=232	0.66	0.61	28,7,28,35
	[b=1.0;1.0]		835.0	1.43	0.35	4d18 6+8 d18	0.83	0.093+4d10/12	L=87	0.66	0.38	28,7,28,35
					M_P= 11	**X=0.0**	**Y=1925.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
27	s=2,m=3	ok,ok	0.0	1.75	0.48	4d18 8+10 d18	0.97	0.163+4d10/12	L=87	0.81	0.47	19,17,19,22
			214.0	1.11	0.48	4d18 4+6 d18	0.38	0.153+4d10/20	L=253	0.81	0.75	19,17,19,22
	[b=1.0;1.0]		428.0	1.11	0.48	4d18 4+6 d18	0.73	0.153+4d10/12	L=87	0.81	0.47	35,17,19,22
23	s=4,m=3	ok,ok	428.0	1.11	0.31	4d18 4+6 d18	0.58	0.073+4d10/12	L=87	0.59	0.32	35,17,19,19
			631.5	1.11	0.31	4d18 4+6 d18	0.13	0.073+4d10/20	L=232	0.60	0.52	19,17,19,19
	[b=1.0;1.0]		835.0	1.11	0.31	4d18 4+6 d18	0.82	0.063+4d10/12	L=87	0.60	0.32	35,17,19,19
					M_P= 12	**X=582.5**	**Y=1925.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
28	s=2,m=3	ok,ok	0.0	1.75	0.55	4d18 8+10 d18	0.95	0.213+4d10/12	L=87	0.75	0.48	16,25,16,16

			214.0	1.11	0.55	4d18 4+6 d18	0.34	0.213+4d10/20 L=253	0.75	0.77	16,25,16,16
	[b=1.0;1.0]		428.0	1.11	0.55	4d18 4+6 d18	0.72	0.203+4d10/12 L=87	0.75	0.48	17,25,16,16
29	s=4,m=3	ok,ok	428.0	1.11	0.36	4d18 4+6 d18	0.65	0.103+4d10/12 L=87	0.58	0.33	17,25,17,17
			631.5	1.11	0.36	4d18 4+6 d18	0.15	0.093+4d10/20 L=232	0.58	0.53	19,25,17,17
	[b=1.0;1.0]		835.0	1.11	0.36	4d18 4+6 d18	0.92	0.093+4d10/12 L=87	0.58	0.33	17,25,17,17
					M_P= 13	**X=1165.0**	**Y=1925.0**				
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
32	s=2,m=3	ok,ok	0.0	1.75	0.49	4d18 8+10 d18	0.94	0.163+4d10/12 L=87	0.81	0.47	17,19,17,16
			214.0	1.11	0.49	4d18 4+6 d18	0.38	0.163+4d10/20 L=253	0.81	0.75	17,19,17,16
	[b=1.0;1.0]		428.0	1.11	0.49	4d18 4+6 d18	0.72	0.153+4d10/12 L=87	0.81	0.47	28,19,17,16
35	s=4,m=3	ok,ok	428.0	1.11	0.31	4d18 4+6 d18	0.51	0.083+4d10/12 L=87	0.58	0.32	29,19,17,17
			631.5	1.11	0.31	4d18 4+6 d18	0.15	0.073+4d10/20 L=232	0.58	0.51	17,19,17,17
	[b=1.0;1.0]		835.0	1.11	0.31	4d18 4+6 d18	0.78	0.073+4d10/12 L=87	0.58	0.32	29,19,17,17

Pilas.	**%Af**	**r. snell.**	**V N/M**	**V N sis**	**V V/T cls**	**V V/T acc**
	2.07	0.61	0.99	0.30	0.89	0.92

Pilas.	**sovr. Xi**	**sovr. Xf**	**sovr. Yi**	**sovr. Yf**	**M 2-2 i**	**M 2-2 f**	**M 3-3 i**	**M 3-3 f**	**Luce per V**	**V M2-2**	**V M3-3**
					daN cm	daN cm	daN cm	daN cm	cm	daN	daN
5	0.0	2.27	0.0	1.40	4.303e+06	3.796e+06	9.105e+06	7.914e+06	348.00	2.721e+04	5.756e+04
6	0.0	3.60	0.0	1.43	3.983e+06	3.405e+06	8.443e+06	7.242e+06	348.00	2.518e+04	5.337e+04
7	0.0	3.19	0.0	1.47	3.966e+06	2.877e+06	8.414e+06	6.022e+06	348.00	2.507e+04	5.319e+04
10	3.19	0.0	1.47	0.0	2.558e+06	2.511e+06	5.490e+06	5.413e+06	344.50	1.634e+04	3.506e+04
11	2.27	0.0	1.40	0.0	3.878e+06	3.838e+06	8.268e+06	8.202e+06	344.50	2.476e+04	5.280e+04
12	3.60	0.0	1.43	0.0	2.570e+06	2.523e+06	5.509e+06	5.433e+06	344.50	1.641e+04	3.518e+04
18	0.0	1.69	0.0	2.10	6.360e+06	4.958e+06	1.046e+07	8.074e+06	348.00	4.020e+04	6.615e+04
19	0.0	1.51	0.0	2.21	4.203e+06	4.175e+06	8.879e+06	8.814e+06	348.00	2.657e+04	5.613e+04
22	1.51	0.0	2.21	0.0	3.269e+06	3.763e+06	6.973e+06	8.077e+06	344.50	2.403e+04	5.158e+04
23	3.28	0.0	1.30	0.0	2.623e+06	2.577e+06	5.598e+06	5.521e+06	344.50	1.675e+04	3.575e+04
24	1.69	0.0	2.10	0.0	4.412e+06	5.039e+06	7.217e+06	8.340e+06	344.50	3.218e+04	5.326e+04
27	0.0	3.28	0.0	1.30	4.053e+06	2.976e+06	8.560e+06	6.189e+06	348.00	2.562e+04	5.411e+04
28	0.0	1.65	0.0	1.66	4.214e+06	3.181e+06	8.903e+06	6.582e+06	348.00	2.664e+04	5.629e+04
29	1.65	0.0	1.66	0.0	2.745e+06	2.700e+06	5.800e+06	5.725e+06	344.50	1.753e+04	3.704e+04
30	0.0	1.38	0.0	1.81	4.103e+06	3.532e+06	8.655e+06	7.488e+06	348.00	2.594e+04	5.472e+04
31	0.0	1.38	0.0	1.81	4.109e+06	3.539e+06	8.667e+06	7.501e+06	348.00	2.598e+04	5.479e+04
32	0.0	2.83	0.0	1.30	4.077e+06	3.005e+06	8.604e+06	6.239e+06	348.00	2.577e+04	5.439e+04
34	1.38	0.0	1.81	0.0	2.653e+06	3.154e+06	5.647e+06	6.743e+06	344.50	2.014e+04	4.306e+04
35	2.83	0.0	1.30	0.0	2.635e+06	2.589e+06	5.617e+06	5.540e+06	344.50	1.683e+04	3.587e+04
36	1.38	0.0	1.81	0.0	2.647e+06	3.149e+06	5.637e+06	6.733e+06	344.50	2.011e+04	4.300e+04
41	0.0	1.66	0.0	2.32	6.301e+06	5.641e+06	1.027e+07	9.076e+06	348.00	3.983e+04	6.490e+04
42	0.0	1.36	0.0	1.47	4.712e+06	3.192e+06	1.002e+07	6.605e+06	348.00	2.979e+04	6.333e+04
43	0.0	1.36	0.0	1.47	4.714e+06	3.195e+06	1.002e+07	6.611e+06	348.00	2.980e+04	6.336e+04
46	1.36	0.0	1.47	0.0	2.725e+06	3.216e+06	5.766e+06	6.868e+06	344.50	2.054e+04	4.386e+04
47	1.66	0.0	2.32	0.0	4.859e+06	4.796e+06	7.915e+06	7.818e+06	344.50	3.103e+04	5.055e+04
48	1.36	0.0	1.47	0.0	2.728e+06	3.219e+06	5.772e+06	6.874e+06	344.50	2.056e+04	4.389e+04

Pilas.	**M 2-2 i**	**M 2-2 f**	**M 3-3 i**	**M 3-3 f**	**V M2-2**	**V M3-3**
	6.360e+06	5.641e+06	1.046e+07	9.076e+06	4.020e+04	6.615e+04

Pilas.	**nid**	**alfaomega**	**V. 7.4.29 2-2**	**V. 7.4.29 3-3**	**V. 7.4.29 Stato**	**dmu_fi 2-2**	**dmu_fi 3-3**	**cmu_fi 2-2**	**cmu_fi 3-3**	**V. dut. 2-2**	**V. dut. 3-3**
5	0.16	0.11	0.32	0.39	ok	7.1	7.1	9.6	8.6	0.74	0.83
	0.15	0.11	0.30	0.36	ok			10.1	9.8	0.70	0.72
6	0.09	0.11	0.06	0.10	ok	7.1	7.1	11.8	11.0	0.60	0.64
	0.09	0.11	0.03	0.07	ok			12.4	12.3	0.57	0.57
7	0.09	0.11	0.05	0.09	ok	7.1	7.1	11.9	11.2	0.59	0.63
	0.08	0.11	0.02	0.06	ok			15.8	12.6	0.45	0.56
10	0.04	0.11	0.0	0.0	ok	7.1	7.1	22.8	15.8	0.31	0.45
	0.03	0.11	0.0	0.0	ok			24.2	16.5	0.29	0.43
11	0.08	0.11	0.0	0.02	ok	7.1	7.1	12.5	12.1	0.57	0.59
	0.07	0.11	0.0	0.0	ok			12.8	12.5	0.55	0.57
12	0.04	0.11	0.0	0.0	ok	7.1	7.1	22.4	15.6	0.32	0.45
	0.03	0.11	0.0	0.0	ok			23.9	16.3	0.30	0.43
18	0.11	0.11	0.16	0.19	ok	7.1	7.1	11.3	10.1	0.63	0.70
	0.11	0.11	0.13	0.16	ok			12.4	12.3	0.57	0.58
19	0.13	0.11	0.23	0.29	ok	7.1	7.1	10.3	9.1	0.69	0.78
	0.13	0.11	0.20	0.26	ok			10.5	9.3	0.67	0.77
22	0.06	0.11	0.0	0.0	ok	7.1	7.1	13.9	13.2	0.51	0.54
	0.06	0.11	0.0	0.0	ok			13.3	13.0	0.53	0.54
23	0.05	0.11	0.0	0.0	ok	7.1	7.1	21.0	14.9	0.34	0.48
	0.04	0.11	0.0	0.0	ok			22.2	15.5	0.32	0.46
24	0.05	0.11	0.0	0.0	ok	7.1	7.1	17.4	14.8	0.41	0.48
	0.05	0.11	0.0	0.0	ok			15.1	14.7	0.47	0.48
27	0.10	0.11	0.10	0.15	ok	7.1	7.1	11.4	10.4	0.62	0.68

	0.10	0.11	0.08	0.12	ok			14.3	12.1	0.50	0.59
28	0.14	0.11	0.24	0.30	ok	7.1	7.1	10.3	9.0	0.69	0.78
	0.13	0.11	0.21	0.27	ok			11.6	10.9	0.61	0.65
29	0.06	0.11	0.0	0.0	ok	7.1	7.1	18.2	13.4	0.39	0.53
	0.06	0.11	0.0	0.0	ok			19.1	13.9	0.37	0.51
30	0.11	0.11	0.14	0.19	ok	7.1	7.1	11.0	9.9	0.64	0.71
	0.11	0.11	0.11	0.16	ok			11.6	11.5	0.61	0.61
31	0.11	0.11	0.15	0.19	ok	7.1	7.1	11.0	9.9	0.64	0.72
	0.11	0.11	0.12	0.16	ok			11.6	11.5	0.61	0.62
32	0.11	0.11	0.12	0.17	ok	7.1	7.1	11.2	10.2	0.63	0.70
	0.10	0.11	0.09	0.14	ok			13.9	11.9	0.51	0.59
34	0.05	0.11	0.0	0.0	ok	7.1	7.1	20.2	14.5	0.35	0.49
	0.05	0.11	0.0	0.0	ok			15.6	14.0	0.45	0.51
35	0.05	0.11	0.0	0.0	ok	7.1	7.1	20.7	14.7	0.34	0.48
	0.04	0.11	0.0	0.0	ok			21.9	15.4	0.32	0.46
36	0.05	0.11	0.0	0.0	ok	7.1	7.1	20.4	14.6	0.35	0.49
	0.04	0.11	0.0	0.0	ok			15.7	14.0	0.45	0.50
41	0.19	0.11	0.50	0.55	ok	7.1	7.1	8.8	8.2	0.80	0.86
	0.19	0.11	0.47	0.52	ok			9.5	9.1	0.74	0.78
42	0.14	0.11	0.25	0.31	ok	7.1	7.1	8.9	8.8	0.80	0.81
	0.13	0.11	0.22	0.28	ok			11.5	10.9	0.62	0.65
43	0.14	0.11	0.25	0.31	ok	7.1	7.1	8.9	8.8	0.80	0.81
	0.13	0.11	0.22	0.28	ok			11.4	10.8	0.62	0.65
46	0.06	0.11	0.0	0.0	ok	7.1	7.1	18.6	13.7	0.38	0.52
	0.06	0.11	0.0	0.0	ok			14.6	13.6	0.48	0.52
47	0.10	0.11	0.09	0.11	ok	7.1	7.1	13.0	12.7	0.55	0.56
	0.09	0.11	0.06	0.08	ok			13.5	13.0	0.53	0.54
48	0.06	0.11	0.0	0.0	ok	7.1	7.1	18.5	13.6	0.38	0.52
	0.06	0.11	0.0	0.0	ok			14.6	13.6	0.49	0.52
			2-2	**3-3**						**2-2**	**3-3**
			0.50	0.55						0.80	0.86

Nodo	**Conf.**	**Stato**	**Pilas.**	**Diam st**	**Passo**	**n. br. 2**	**Bj2**	**Hjc2**	**n. br. 3**	**Bj3**	**Hjc3**	**V. 7.4.8**	**V. Ash**	**7.4.10**	**Rif. cmb**
				mm	cm		cm	cm		cm	cm				
4	NO	ok	7	10	12.5	5	40.0	70.2	6	60.0	30.2	0.5	0.9	NO	26,23
5	NO	ok	5	10	5.0	5	40.0	70.2	6	60.0	30.2	0.9	1.0	NO	31,7
6	NO	ok	6	10	12.5	5	40.0	70.2	6	60.0	30.2	0.6	0.7	NO	32,25
7	NO	ok	10	10	12.5	5	40.0	70.2	6	60.0	30.2	0.3	0.4	NO	23,23
8	NO	ok	11	10	5.0	5	40.0	70.2	6	60.0	30.2	0.7	0.6	NO	23,7
9	NO	ok	12	10	12.5	5	40.0	70.2	6	60.0	30.2	0.3	0.4	NO	23,25
13	NO	ok	19	10	5.0	5	40.0	70.2	6	60.0	30.2	0.8	0.9	NO	12,27
14	NO	ok	32	10	12.5	5	40.0	70.2	6	60.0	30.2	0.6	1.0	SI	32,10
15	NO	ok	18	10	5.0	5	50.0	70.2	6	65.0	40.2	0.6	1.0	NO	13,33
16	NO	ok	22	10	8.0	5	40.0	70.2	6	60.0	30.2	0.6	0.9	NO	7,23
17	NO	ok	23	10	12.5	5	40.0	70.2	6	60.0	30.2	0.4	0.4	NO	23,28
18	NO	ok	24	10	8.0	5	50.0	70.2	6	65.0	40.2	0.5	0.9	SI	7,23
22	NO	ok	31	10	5.0	5	40.0	70.2	6	60.0	30.2	0.7	0.9	NO	12,35
23	NO	ok	35	10	12.5	5	40.0	70.2	6	60.0	30.2	0.4	0.5	SI	23,7
24	NO	ok	30	10	5.0	5	40.0	70.2	6	60.0	30.2	0.7	0.9	NO	10,29
25	NO	ok	34	10	8.0	5	40.0	70.2	6	60.0	30.2	0.5	0.9	NO	7,23
26	NO	ok	29	10	5.0	5	40.0	70.2	6	60.0	30.2	0.4	0.6	NO	23,7
27	NO	ok	36	10	8.0	5	40.0	70.2	6	60.0	30.2	0.6	0.9	NO	7,23
31	NO	ok	43	10	5.0	5	40.0	70.2	6	60.0	30.2	0.6	1.0	NO	29,32
32	NO	ok	41	10	5.0	5	50.0	70.2	6	65.0	40.2	0.6	1.0	NO	32,34
33	NO	ok	42	10	5.0	5	40.0	70.2	6	60.0	30.2	0.6	1.0	NO	35,26
34	NO	ok	46	10	8.0	5	40.0	70.2	6	60.0	30.2	0.4	0.9	NO	23,23
35	NO	ok	47	10	5.0	5	50.0	70.2	6	65.0	40.2	0.4	0.9	NO	23,23
36	NO	ok	48	10	8.0	5	40.0	70.2	6	60.0	30.2	0.4	0.9	NO	23,23
40	NO	ok	27	10	12.5	5	40.0	70.2	6	60.0	30.2	0.6	0.7	NO	26,28
41	NO	ok	28	10	5.0	5	40.0	70.2	6	60.0	30.2	0.6	1.0	NO	7,8

Nodo	**Passo**	**V. 7.4.8**	**V. Ash**
	5.00		
		0.89	0.99

							M_T= 17	**Z=0.0**	**P=1**	**P=3**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
		cm									L=cm	
71	ok,ok	0.0	0.39	17.8	28.0	0.0	0.05	0.97	0.43	0.35	3d10/15 L=0	14,34,34
	s=1,m=3	38.8	0.39	15.3	28.0	0.0	0.07	0.93	0.41	0.33	3d10/15 L=0	14,34,34
94	ok,ok	0.0	0.39	15.3	28.0	0.0	0.05	0.95	0.48	0.33	3d10/15 L=39	14,34,34
	s=1,m=3	38.8	0.35	15.3	25.4	0.0	0.07	0.99	0.48	0.31	3d10/15 L=39	10,14,34
117	ok,ok	0.0	0.39	15.3	28.0	0.0	0.07	0.92	0.49	0.30	3d10/15 L=39	10,14,34

	s=1,m=3	38.8	0.35	15.3	25.4	0.0	0.07	0.99	0.49	0.29	3d10/15 L=39	10,14,34
140	ok,ok	0.0	0.35	15.3	25.4	0.0	0.07	0.98	0.49	0.27	3d10/15 L=39	10,14,34
	s=1,m=3	38.8	0.35	15.3	25.4	0.0	0.07	0.94	0.49	0.26	3d10/15 L=39	10,14,34
163	ok,ok	0.0	0.35	15.3	25.4	0.0	0.07	0.93	0.48	0.25	3d10/15 L=39	10,14,34
	s=1,m=3	38.8	0.32	15.3	22.9	0.0	0.06	0.97	0.48	0.23	3d10/15 L=39	10,14,14
186	ok,ok	0.0	0.32	15.3	22.9	0.0	0.06	0.95	0.47	0.23	3d10/15 L=39	10,14,14
	s=1,m=3	38.8	0.28	15.3	20.4	0.0	0.06	0.97	0.47	0.23	3d10/15 L=39	10,14,14
209	ok,ok	0.0	0.28	15.3	20.4	0.0	0.06	0.95	0.47	0.23	3d10/15 L=39	10,14,14
	s=1,m=3	38.8	0.25	15.3	17.8	0.0	0.05	0.96	0.46	0.23	3d10/15 L=39	10,14,11
232	ok,ok	0.0	0.25	15.3	17.8	0.0	0.05	0.93	0.46	0.23	3d10/15 L=39	26,14,11
	s=1,m=3	38.8	0.25	15.3	17.8	0.0	0.05	0.91	0.45	0.25	3d10/15 L=39	26,14,11
255	ok,ok	0.0	0.25	15.3	17.8	0.0	0.05	0.90	0.46	0.25	3d10/15 L=39	26,14,11
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.99	0.45	0.27	3d10/15 L=39	26,14,11
278	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.98	0.45	0.27	3d10/15 L=39	26,14,11
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.98	0.45	0.29	3d10/15 L=39	34,14,11
301	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.96	0.45	0.29	3d10/15 L=39	32,14,11
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.97	0.44	0.31	3d10/15 L=39	34,14,11
324	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.95	0.44	0.32	3d10/15 L=39	32,14,7
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.93	0.43	0.33	3d10/15 L=39	34,14,7
347	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.90	0.46	0.35	3d10/15 L=39	32,7,7
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.87	0.47	0.36	3d10/15 L=39	34,7,7
370	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.82	0.50	0.38	3d10/15 L=39	11,7,7
	s=1,m=3	38.8	0.28	20.4	15.3	0.0	0.06	0.88	0.52	0.40	3d10/15 L=39	8,7,7
393	ok,ok	0.0	0.25	17.8	15.3	0.0	0.05	0.98	0.50	0.41	3d10/15 L=0	11,7,7
	s=1,m=3	38.8	0.35	25.4	15.3	0.0	0.07	0.92	0.51	0.42	3d10/15 L=0	8,7,7
72	ok,ok	0.0	0.28	15.3	20.4	0.0	0.05	0.92	0.54	0.39	3d10/15 L=19	10,14,14
	s=1,m=3	38.8	0.25	15.3	17.8	0.0	0.05	0.99	0.52	0.38	3d10/15 L=19	26,14,14
95	ok,ok	0.0	0.25	15.3	17.8	0.0	0.05	1.00	0.48	0.36	3d10/15 L=39	26,14,14
	s=1,m=3	38.8	0.28	15.3	20.4	0.0	0.06	0.89	0.47	0.35	3d10/15 L=39	26,14,14
118	ok,ok	0.0	0.28	15.3	20.4	0.0	0.06	0.89	0.43	0.33	3d10/15 L=39	26,10,14
	s=1,m=3	38.8	0.28	15.3	20.4	0.0	0.06	0.88	0.44	0.32	3d10/15 L=39	26,7,14
141	ok,ok	0.0	0.28	15.3	20.4	0.0	0.06	0.88	0.43	0.30	3d10/15 L=39	26,7,14
	s=1,m=3	38.8	0.25	15.3	17.8	0.0	0.05	0.97	0.44	0.29	3d10/15 L=39	26,7,10
164	ok,ok	0.0	0.25	15.3	17.8	0.0	0.05	0.96	0.44	0.28	3d10/15 L=39	26,7,10
	s=1,m=3	38.8	0.25	15.3	17.8	0.0	0.05	0.94	0.45	0.27	3d10/15 L=39	26,7,10
187	ok,ok	0.0	0.25	15.3	17.8	0.0	0.05	0.95	0.44	0.26	3d10/15 L=39	24,7,10
	s=1,m=3	38.8	0.25	15.3	17.8	0.0	0.05	0.92	0.45	0.25	3d10/15 L=39	34,7,10
210	ok,ok	0.0	0.25	15.3	17.8	0.0	0.05	0.95	0.44	0.24	3d10/15 L=39	32,7,10
	s=1,m=3	38.8	0.25	15.3	17.8	0.0	0.05	0.91	0.45	0.23	3d10/15 L=39	34,7,10
233	ok,ok	0.0	0.25	15.3	17.8	0.0	0.05	0.93	0.45	0.22	3d10/15 L=39	32,7,10
	s=1,m=3	38.8	0.25	15.3	17.8	0.0	0.05	0.87	0.45	0.21	3d10/15 L=39	34,7,7
256	ok,ok	0.0	0.25	15.3	17.8	0.0	0.05	0.89	0.45	0.22	3d10/15 L=39	32,7,7
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.93	0.46	0.22	3d10/15 L=39	8,7,7
279	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.96	0.46	0.22	3d10/15 L=39	7,7,7
	s=1,m=3	38.8	0.25	17.8	15.3	0.0	0.05	0.96	0.46	0.23	3d10/15 L=39	8,7,23
302	ok,ok	0.0	0.25	17.8	15.3	0.0	0.05	0.97	0.46	0.24	3d10/15 L=39	7,7,23
	s=1,m=3	38.8	0.28	20.4	15.3	0.0	0.05	0.97	0.47	0.26	3d10/15 L=39	12,7,23
325	ok,ok	0.0	0.28	20.4	15.3	0.0	0.05	0.96	0.48	0.27	3d10/15 L=39	11,7,23
	s=1,m=3	38.8	0.32	22.9	15.3	0.0	0.05	0.97	0.48	0.29	3d10/15 L=39	7,7,23
348	ok,ok	0.0	0.32	22.9	15.3	0.0	0.05	0.98	0.48	0.30	3d10/15 L=39	7,23,23
	s=1,m=3	38.8	0.39	28.0	15.3	0.0	0.05	0.92	0.49	0.31	3d10/15 L=39	7,23,23
371	ok,ok	0.0	0.35	25.4	15.3	0.0	0.05	0.99	0.52	0.32	3d10/15 L=39	7,23,23
	s=1,m=3	38.8	0.42	30.5	15.3	0.0	0.08	0.94	0.54	0.34	3d10/15 L=39	7,23,23
394	ok,ok	0.0	0.42	30.5	15.3	0.0	0.08	0.92	0.41	0.35	3d10/15 L=0	7,23,23
	s=1,m=3	38.8	0.46	33.1	15.3	0.0	0.08	0.95	0.43	0.36	3d10/15 L=0	7,29,23
							M_T= 18	**Z=0.0**	**P=4**	**P=5**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
73	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.77	0.55	0.25	3d10/15 L=19	14,38,38
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.88	0.53	0.24	3d10/15 L=19	14,38,38
96	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.92	0.53	0.24	3d10/15 L=39	14,38,38
	s=1,m=3	38.8	0.25	15.3	17.8	0.0	0.05	0.89	0.51	0.22	3d10/15 L=39	10,38,38
119	ok,ok	0.0	0.25	15.3	17.8	0.0	0.05	0.90	0.47	0.22	3d10/15 L=39	10,38,38
	s=1,m=3	38.8	0.28	15.3	20.4	0.0	0.06	0.88	0.46	0.21	3d10/15 L=39	10,38,38
142	ok,ok	0.0	0.28	15.3	20.4	0.0	0.06	0.89	0.43	0.21	3d10/15 L=39	10,38,34
	s=1,m=3	38.8	0.28	15.3	20.4	0.0	0.06	0.97	0.42	0.19	3d10/15 L=39	10,34,34
165	ok,ok	0.0	0.28	15.3	20.4	0.0	0.06	0.97	0.40	0.19	3d10/15 L=39	10,34,34
	s=1,m=3	38.8	0.32	15.3	22.9	0.0	0.06	0.92	0.38	0.18	3d10/15 L=39	10,34,34
188	ok,ok	0.0	0.32	15.3	22.9	0.0	0.06	0.92	0.36	0.18	3d10/15 L=39	10,34,34
	s=1,m=3	38.8	0.32	15.3	22.9	0.0	0.06	0.96	0.35	0.17	3d10/15 L=39	10,34,34
211	ok,ok	0.0	0.32	15.3	22.9	0.0	0.06	0.96	0.33	0.16	3d10/15 L=39	10,34,34
	s=1,m=3	38.8	0.32	15.3	22.9	0.0	0.06	0.98	0.31	0.15	3d10/15 L=39	10,34,34
234	ok,ok	0.0	0.32	15.3	22.9	0.0	0.06	0.98	0.29	0.15	3d10/15 L=39	10,34,34
	s=1,m=3	38.8	0.35	15.3	25.4	0.0	0.07	0.89	0.28	0.15	3d10/15 L=39	10,34,14
257	ok,ok	0.0	0.35	15.3	25.4	0.0	0.07	0.89	0.28	0.15	3d10/15 L=39	10,14,14
	s=1,m=3	38.8	0.35	15.3	25.4	0.0	0.07	0.91	0.27	0.14	3d10/15 L=39	26,14,14
280	ok,ok	0.0	0.35	15.3	25.4	0.0	0.07	0.92	0.27	0.14	3d10/15 L=39	26,14,14
	s=1,m=3	38.8	0.39	15.3	28.0	0.0	0.07	0.86	0.26	0.14	3d10/15 L=39	26,14,14

303	ok,ok	0.0	0.39	15.3	28.0	0.0	0.07	0.87	0.26	0.14	3d10/15 L=39 26,14,14
	s=1,m=3	38.8	0.42	15.3	30.5	0.0	0.08	0.81	0.25	0.13	3d10/15 L=39 26,14,14
326	ok,ok	0.0	0.42	15.3	30.5	0.0	0.08	0.82	0.25	0.13	3d10/15 L=39 26,10,14
	s=1,m=3	38.8	0.42	15.3	30.5	0.0	0.08	0.83	0.24	0.12	3d10/15 L=39 26,10,14
349	ok,ok	0.0	0.42	15.3	30.5	0.0	0.08	0.83	0.24	0.12	3d10/15 L=39 26,10,14
	s=1,m=3	38.8	0.42	15.3	30.5	0.0	0.08	0.83	0.23	0.11	3d10/15 L=39 26,10,14
372	ok,ok	0.0	0.42	15.3	30.5	0.0	0.08	0.83	0.22	0.11	3d10/15 L=39 26,10,14
	s=1,m=3	38.8	0.42	15.3	30.5	0.0	0.08	0.84	0.21	0.10	3d10/15 L=39 34,10,14
395	ok,ok	0.0	0.42	15.3	30.5	0.0	0.08	0.83	0.20	0.10	3d10/15 L=39 34,10,14
	s=1,m=3	38.8	0.42	15.3	30.5	0.0	0.08	0.84	0.19	0.09	3d10/15 L=39 34,10,11
74	ok,ok	0.0	0.42	15.3	30.5	0.0	0.08	0.85	0.21	0.10	3d10/15 L=39 36,7,10
	s=1,m=3	38.8	0.42	15.3	30.5	0.0	0.08	0.84	0.22	0.11	3d10/15 L=39 36,7,7
97	ok,ok	0.0	0.42	15.3	30.5	0.0	0.08	0.85	0.24	0.11	3d10/15 L=39 32,7,7
	s=1,m=3	38.8	0.42	15.3	30.5	0.0	0.08	0.83	0.24	0.12	3d10/15 L=39 32,7,7
120	ok,ok	0.0	0.42	15.3	30.5	0.0	0.08	0.84	0.25	0.13	3d10/15 L=39 32,7,7
	s=1,m=3	38.8	0.42	15.3	30.5	0.0	0.08	0.81	0.26	0.13	3d10/15 L=39 32,7,7
143	ok,ok	0.0	0.42	15.3	30.5	0.0	0.08	0.82	0.27	0.14	3d10/15 L=39 32,7,7
	s=1,m=3	38.8	0.42	15.3	30.5	0.0	0.08	0.78	0.27	0.15	3d10/15 L=39 32,7,7
166	ok,ok	0.0	0.42	15.3	30.5	0.0	0.08	0.79	0.28	0.15	3d10/15 L=39 32,7,7
	s=1,m=3	38.8	0.39	15.3	28.0	0.0	0.07	0.81	0.28	0.15	3d10/15 L=39 32,7,7
189	ok,ok	0.0	0.39	15.3	28.0	0.0	0.07	0.82	0.29	0.15	3d10/15 L=39 32,7,7
	s=1,m=3	38.8	0.35	15.3	25.4	0.0	0.07	0.90	0.30	0.16	3d10/15 L=39 12,7,7
212	ok,ok	0.0	0.35	15.3	25.4	0.0	0.07	0.85	0.30	0.16	3d10/15 L=39 32,7,7
	s=1,m=3	38.8	0.35	17.8	25.4	0.0	0.06	0.86	0.31	0.17	3d10/15 L=39 12,7,7
235	ok,ok	0.0	0.35	15.3	25.4	0.0	0.07	0.93	0.32	0.17	3d10/15 L=39 12,23,7
	s=1,m=3	38.8	0.32	17.8	22.9	0.0	0.06	0.93	0.33	0.17	3d10/15 L=39 12,23,7
258	ok,ok	0.0	0.32	17.8	22.9	0.0	0.06	0.87	0.36	0.17	3d10/15 L=39 12,23,7
	s=1,m=3	38.8	0.28	20.4	17.8	0.0	0.05	0.88	0.37	0.18	3d10/15 L=39 12,23,23
281	ok,ok	0.0	0.28	17.8	20.4	0.0	0.06	0.92	0.39	0.18	3d10/15 L=39 12,23,23
	s=1,m=3	38.8	0.28	20.4	15.3	0.0	0.05	0.93	0.41	0.19	3d10/15 L=39 12,23,23
304	ok,ok	0.0	0.25	17.8	15.3	0.0	0.05	0.98	0.44	0.20	3d10/15 L=39 12,23,23
	s=1,m=3	38.8	0.28	20.4	15.3	0.0	0.05	0.98	0.45	0.21	3d10/15 L=39 12,23,23
327	ok,ok	0.0	0.28	20.4	15.3	0.0	0.05	0.89	0.48	0.21	3d10/15 L=39 12,23,23
	s=1,m=3	38.8	0.32	22.9	15.3	0.0	0.05	0.91	0.49	0.22	3d10/15 L=39 12,23,23
350	ok,ok	0.0	0.28	20.4	15.3	0.0	0.05	0.93	0.52	0.23	3d10/15 L=39 12,23,23
	s=1,m=3	38.8	0.32	22.9	15.3	0.0	0.06	0.94	0.53	0.24	3d10/15 L=39 12,23,23
373	ok,ok	0.0	0.28	20.4	15.3	0.0	0.05	0.99	0.58	0.24	3d10/15 L=39 7,27,27
	s=1,m=3	38.8	0.32	22.9	15.3	0.0	0.06	0.99	0.59	0.25	3d10/15 L=39 7,27,27
396	ok,ok	0.0	0.32	22.9	15.3	0.0	0.06	0.93	0.63	0.25	3d10/15 L=14 7,23,27
	s=1,m=3	38.8	0.35	25.4	15.3	0.0	0.07	0.95	0.64	0.27	3d10/15 L=14 7,23,27
							M_T= 19	**Z=0.0**	**P=6**	**P=7**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
75	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.77	0.50	0.17	3d10/15 L=19 10,38,2
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.89	0.49	0.16	3d10/15 L=19 10,38,2
98	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.90	0.46	0.16	3d10/15 L=39 10,35,2
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.99	0.45	0.14	3d10/15 L=39 10,35,2
121	ok,ok	0.0	0.25	15.3	17.8	0.0	0.05	0.86	0.42	0.14	3d10/15 L=39 10,35,2
	s=1,m=3	38.8	0.25	15.3	17.8	0.0	0.05	0.92	0.41	0.13	3d10/15 L=39 10,35,2
144	ok,ok	0.0	0.25	15.3	17.8	0.0	0.05	0.93	0.39	0.13	3d10/15 L=39 10,35,2
	s=1,m=3	38.8	0.25	15.3	17.8	0.0	0.05	0.98	0.38	0.11	3d10/15 L=39 10,33,18
167	ok,ok	0.0	0.25	15.3	17.8	0.0	0.05	0.98	0.35	0.12	3d10/15 L=39 10,33,10
	s=1,m=3	38.8	0.28	15.3	20.4	0.0	0.06	0.89	0.35	0.11	3d10/15 L=39 10,33,10
190	ok,ok	0.0	0.28	15.3	20.4	0.0	0.06	0.88	0.32	0.12	3d10/15 L=39 13,33,10
	s=1,m=3	38.8	0.28	15.3	20.4	0.0	0.06	0.89	0.31	0.11	3d10/15 L=39 9,33,10
213	ok,ok	0.0	0.28	15.3	20.4	0.0	0.06	0.89	0.29	0.12	3d10/15 L=39 13,37,10
	s=1,m=3	38.8	0.28	15.3	20.4	0.0	0.06	0.89	0.28	0.11	3d10/15 L=39 14,37,10
236	ok,ok	0.0	0.28	15.3	20.4	0.0	0.06	0.88	0.26	0.11	3d10/15 L=39 13,37,10
	s=1,m=3	38.8	0.28	15.3	20.4	0.0	0.06	0.87	0.25	0.11	3d10/15 L=39 14,37,10
259	ok,ok	0.0	0.28	15.3	20.4	0.0	0.06	0.86	0.23	0.11	3d10/15 L=39 9,37,10
	s=1,m=3	38.8	0.32	15.3	22.9	0.0	0.06	0.75	0.22	0.11	3d10/15 L=39 14,37,10
282	ok,ok	0.0	0.32	15.3	22.9	0.0	0.06	0.74	0.20	0.11	3d10/15 L=39 9,37,10
	s=1,m=3	38.8	0.32	15.3	22.9	0.0	0.06	0.71	0.20	0.10	3d10/15 L=39 14,31,10
305	ok,ok	0.0	0.32	15.3	22.9	0.0	0.06	0.70	0.18	0.10	3d10/15 L=39 9,31,10
	s=1,m=3	38.8	0.32	15.3	22.9	0.0	0.06	0.66	0.19	0.10	3d10/15 L=39 14,31,10
328	ok,ok	0.0	0.32	15.3	22.9	0.0	0.06	0.65	0.17	0.10	3d10/15 L=39 9,31,10
	s=1,m=3	38.8	0.32	15.3	22.9	0.0	0.06	0.62	0.18	0.09	3d10/15 L=39 14,31,7
351	ok,ok	0.0	0.32	15.3	22.9	0.0	0.06	0.60	0.17	0.09	3d10/15 L=39 9,11,7
	s=1,m=3	38.8	0.32	15.3	22.9	0.0	0.06	0.57	0.18	0.10	3d10/15 L=39 14,11,7
374	ok,ok	0.0	0.32	15.3	22.9	0.0	0.06	0.55	0.17	0.10	3d10/15 L=39 9,7,7
	s=1,m=3	38.8	0.32	15.3	22.9	0.0	0.06	0.54	0.18	0.11	3d10/15 L=39 14,7,7
397	ok,ok	0.0	0.32	15.3	22.9	0.0	0.06	0.47	0.17	0.10	3d10/15 L=39 14,7,7
	s=1,m=3	38.8	0.28	15.3	20.4	0.0	0.06	0.55	0.18	0.11	3d10/15 L=39 10,7,7
76	ok,ok	0.0	0.28	15.3	20.4	0.0	0.06	0.51	0.18	0.11	3d10/15 L=39 20,34,14
	s=1,m=3	38.8	0.32	15.3	22.9	0.0	0.06	0.46	0.17	0.10	3d10/15 L=39 14,34,14
99	ok,ok	0.0	0.32	15.3	22.9	0.0	0.06	0.48	0.17	0.10	3d10/15 L=39 20,34,14
	s=1,m=3	38.8	0.32	15.3	22.9	0.0	0.06	0.46	0.17	0.09	3d10/15 L=39 9,34,14
122	ok,ok	0.0	0.32	15.3	22.9	0.0	0.06	0.50	0.17	0.10	3d10/15 L=39 20,34,14

	s=1,m=3	38.8	0.32	15.3	22.9	0.0	0.06	0.46	0.16	0.08	3d10/15 L=39	13,34,11
145	ok,ok	0.0	0.32	15.3	22.9	0.0	0.06	0.50	0.18	0.09	3d10/15 L=39	16,26,14
	s=1,m=3	38.8	0.32	15.3	22.9	0.0	0.06	0.52	0.17	0.09	3d10/15 L=39	7,26,11
168	ok,ok	0.0	0.32	15.3	22.9	0.0	0.06	0.52	0.19	0.09	3d10/15 L=39	7,26,11
	s=1,m=3	38.8	0.32	15.3	22.9	0.0	0.06	0.59	0.18	0.10	3d10/15 L=39	7,26,11
191	ok,ok	0.0	0.32	15.3	22.9	0.0	0.06	0.59	0.20	0.10	3d10/15 L=39	7,26,11
	s=1,m=3	38.8	0.32	15.3	22.9	0.0	0.06	0.66	0.20	0.10	3d10/15 L=39	7,28,11
214	ok,ok	0.0	0.32	15.3	22.9	0.0	0.06	0.65	0.22	0.10	3d10/15 L=39	7,28,11
	s=1,m=3	38.8	0.28	15.3	20.4	0.0	0.06	0.73	0.22	0.11	3d10/15 L=39	7,28,7
237	ok,ok	0.0	0.28	15.3	20.4	0.0	0.06	0.70	0.24	0.10	3d10/15 L=39	7,28,7
	s=1,m=3	38.8	0.28	15.3	20.4	0.0	0.06	0.79	0.25	0.11	3d10/15 L=39	11,28,7
260	ok,ok	0.0	0.28	15.3	20.4	0.0	0.06	0.76	0.27	0.11	3d10/15 L=39	11,28,7
	s=1,m=3	38.8	0.25	15.3	17.8	0.0	0.05	0.85	0.28	0.11	3d10/15 L=39	11,28,7
283	ok,ok	0.0	0.25	15.3	17.8	0.0	0.05	0.79	0.31	0.11	3d10/15 L=39	12,28,7
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.88	0.31	0.11	3d10/15 L=39	12,26,7
306	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.83	0.35	0.10	3d10/15 L=39	12,26,7
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.92	0.36	0.11	3d10/15 L=39	8,26,2
329	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.85	0.39	0.11	3d10/15 L=39	12,26,2
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.94	0.40	0.12	3d10/15 L=39	8,26,2
352	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.87	0.44	0.13	3d10/15 L=39	8,26,2
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.96	0.45	0.14	3d10/15 L=39	12,26,2
375	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.88	0.49	0.14	3d10/15 L=39	11,30,2
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.97	0.50	0.16	3d10/15 L=39	7,30,2
398	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.90	0.46	0.16	3d10/15 L=19	7,28,2
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	1.00	0.47	0.17	3d10/15 L=19	7,28,2
							M_T= 20	**Z=0.0**	**P=8**	**P=10**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
77	ok,ok	0.0	0.25	15.3	17.8	0.0	0.05	0.88	0.55	0.21	3d10/15 L=19	22,38,38
	s=1,m=3	38.8	0.25	15.3	17.8	0.0	0.05	0.90	0.54	0.20	3d10/15 L=19	22,38,38
100	ok,ok	0.0	0.25	15.3	17.8	0.0	0.05	0.90	0.33	0.18	3d10/15 L=39	22,34,38
	s=1,m=3	38.8	0.25	15.3	17.8	0.0	0.05	0.90	0.32	0.17	3d10/15 L=39	22,34,38
123	ok,ok	0.0	0.25	15.3	17.8	0.0	0.05	0.90	0.27	0.16	3d10/15 L=39	17,35,38
	s=1,m=3	38.8	0.25	15.3	17.8	0.0	0.05	0.90	0.28	0.15	3d10/15 L=39	22,35,38
146	ok,ok	0.0	0.25	15.3	17.8	0.0	0.05	0.90	0.26	0.15	3d10/15 L=39	17,35,38
	s=1,m=3	38.8	0.25	15.3	17.8	0.0	0.05	0.87	0.27	0.14	3d10/15 L=39	22,35,38
169	ok,ok	0.0	0.25	15.3	17.8	0.0	0.05	0.88	0.25	0.13	3d10/15 L=39	21,35,38
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.95	0.25	0.12	3d10/15 L=39	17,35,22
192	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.96	0.23	0.12	3d10/15 L=39	21,35,22
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.86	0.24	0.12	3d10/15 L=39	17,19,22
215	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.86	0.24	0.13	3d10/15 L=39	21,15,19
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.75	0.26	0.14	3d10/15 L=39	9,15,19
238	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.74	0.26	0.15	3d10/15 L=39	13,15,19
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.62	0.27	0.17	3d10/15 L=39	9,15,19
261	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.60	0.28	0.18	3d10/15 L=39	13,19,19
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.54	0.29	0.19	3d10/15 L=39	37,19,19
284	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.49	0.31	0.21	3d10/15 L=39	35,19,19
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.59	0.32	0.22	3d10/15 L=39	31,19,19
307	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.56	0.34	0.23	3d10/15 L=39	31,19,19
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.69	0.35	0.24	3d10/15 L=39	31,19,19
330	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.62	0.38	0.26	3d10/15 L=39	31,19,19
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.78	0.39	0.27	3d10/15 L=39	35,19,19
353	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.70	0.41	0.28	3d10/15 L=39	35,19,19
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.88	0.42	0.29	3d10/15 L=39	35,19,19
376	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.79	0.44	0.31	3d10/15 L=39	35,19,19
	s=1,m=3	38.8	0.25	17.8	15.3	0.0	0.05	0.85	0.45	0.32	3d10/15 L=39	19,19,19
399	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.93	0.56	0.32	3d10/15 L=14	19,35,19
	s=1,m=3	38.8	0.28	20.4	15.3	0.0	0.06	0.93	0.57	0.33	3d10/15 L=14	19,35,19
78	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.92	0.55	0.33	3d10/15 L=14	23,29,22
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.72	0.54	0.32	3d10/15 L=14	23,29,18
101	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.83	0.44	0.32	3d10/15 L=39	23,18,18
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.64	0.43	0.30	3d10/15 L=39	23,18,18
124	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.76	0.40	0.29	3d10/15 L=39	23,18,18
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.61	0.39	0.28	3d10/15 L=39	29,18,18
147	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.71	0.38	0.27	3d10/15 L=39	23,18,18
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.58	0.37	0.26	3d10/15 L=39	29,18,18
170	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.66	0.35	0.24	3d10/15 L=39	23,18,18
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.54	0.34	0.23	3d10/15 L=39	23,18,18
193	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.63	0.32	0.22	3d10/15 L=39	23,18,18
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.55	0.31	0.20	3d10/15 L=39	23,18,18
216	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.60	0.29	0.19	3d10/15 L=39	23,18,18
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.54	0.28	0.18	3d10/15 L=39	23,18,18
239	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.57	0.27	0.16	3d10/15 L=39	23,22,18
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.52	0.25	0.15	3d10/15 L=39	7,22,18
262	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.56	0.25	0.14	3d10/15 L=39	7,22,18
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.63	0.24	0.12	3d10/15 L=39	19,22,18
285	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.65	0.23	0.11	3d10/15 L=39	19,22,15
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.72	0.22	0.12	3d10/15 L=39	19,30,15

308	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.72	0.25	0.12	3d10/15 L=39 19,30,27
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.79	0.24	0.13	3d10/15 L=39 19,30,27
331	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.78	0.27	0.14	3d10/15 L=39 19,30,27
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.85	0.26	0.15	3d10/15 L=39 19,30,27
354	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.82	0.30	0.15	3d10/15 L=39 19,30,27
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.90	0.29	0.16	3d10/15 L=39 19,30,27
377	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.86	0.33	0.17	3d10/15 L=39 19,30,27
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.95	0.32	0.18	3d10/15 L=39 19,30,27
400	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.89	0.47	0.20	3d10/15 L=19 16,23,27
	s=1,m=3	38.8	0.25	17.8	15.3	0.0	0.05	0.87	0.48	0.21	3d10/15 L=19 15,23,27
							M_T= 21	**Z=0.0**	**P=11**	**P=13**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
79	ok,ok	0.0	0.39	15.3	28.0	0.0	0.05	0.97	0.34	0.29	3d10/15 L=0 22,22,38
	s=1,m=3	38.8	0.39	15.3	28.0	0.0	0.05	0.93	0.34	0.27	3d10/15 L=0 22,22,38
102	ok,ok	0.0	0.39	15.3	28.0	0.0	0.05	0.94	0.46	0.26	3d10/15 L=39 22,22,38
	s=1,m=3	38.8	0.35	15.3	25.4	0.0	0.07	0.97	0.46	0.25	3d10/15 L=39 22,22,38
125	ok,ok	0.0	0.35	15.3	25.4	0.0	0.07	0.97	0.44	0.24	3d10/15 L=39 22,22,38
	s=1,m=3	38.8	0.35	15.3	25.4	0.0	0.07	0.91	0.44	0.23	3d10/15 L=39 22,22,22
148	ok,ok	0.0	0.32	15.3	22.9	0.0	0.06	0.97	0.43	0.22	3d10/15 L=39 22,22,22
	s=1,m=3	38.8	0.32	15.3	22.9	0.0	0.06	0.91	0.43	0.21	3d10/15 L=39 18,22,22
171	ok,ok	0.0	0.32	15.3	22.9	0.0	0.06	0.89	0.43	0.21	3d10/15 L=39 18,22,22
	s=1,m=3	38.8	0.28	15.3	20.4	0.0	0.06	0.92	0.42	0.21	3d10/15 L=39 22,22,22
194	ok,ok	0.0	0.28	15.3	20.4	0.0	0.06	0.89	0.43	0.21	3d10/15 L=39 18,22,22
	s=1,m=3	38.8	0.25	15.3	17.8	0.0	0.05	0.90	0.42	0.20	3d10/15 L=39 22,22,22
217	ok,ok	0.0	0.25	15.3	17.8	0.0	0.05	0.86	0.42	0.20	3d10/15 L=39 18,22,19
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.85	0.42	0.21	3d10/15 L=39 22,22,19
240	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.80	0.43	0.22	3d10/15 L=39 18,19,19
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.61	0.44	0.23	3d10/15 L=39 22,19,19
263	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.57	0.45	0.24	3d10/15 L=39 18,19,19
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.47	0.46	0.25	3d10/15 L=39 29,19,19
286	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.42	0.48	0.26	3d10/15 L=39 35,19,15
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.46	0.49	0.28	3d10/15 L=39 33,19,15
309	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.44	0.51	0.29	3d10/15 L=39 35,19,15
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.54	0.52	0.31	3d10/15 L=39 35,19,15
332	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.50	0.54	0.32	3d10/15 L=39 35,19,15
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.69	0.56	0.34	3d10/15 L=39 19,19,15
355	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.66	0.58	0.35	3d10/15 L=39 19,19,15
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.96	0.59	0.36	3d10/15 L=39 19,19,15
378	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.93	0.62	0.38	3d10/15 L=39 19,19,15
	s=1,m=3	38.8	0.28	20.4	15.3	0.0	0.06	0.94	0.64	0.39	3d10/15 L=39 19,19,15
401	ok,ok	0.0	0.28	20.4	15.3	0.0	0.06	0.92	0.56	0.40	3d10/15 L=0 19,19,15
	s=1,m=3	38.8	0.35	25.4	15.3	0.0	0.07	0.95	0.57	0.41	3d10/15 L=0 19,19,15
80	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.95	0.53	0.39	3d10/15 L=19 22,22,22
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.83	0.52	0.38	3d10/15 L=19 18,22,22
103	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.81	0.62	0.37	3d10/15 L=39 18,18,22
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.67	0.60	0.35	3d10/15 L=39 18,18,22
126	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.65	0.58	0.34	3d10/15 L=39 18,18,22
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.51	0.57	0.33	3d10/15 L=39 18,18,22
149	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.55	0.55	0.32	3d10/15 L=39 27,18,22
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.48	0.53	0.30	3d10/15 L=39 29,18,22
172	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.55	0.51	0.29	3d10/15 L=39 27,18,22
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.48	0.50	0.27	3d10/15 L=39 23,18,22
195	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.55	0.48	0.26	3d10/15 L=39 27,18,22
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.54	0.47	0.25	3d10/15 L=39 35,18,22
218	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.58	0.46	0.24	3d10/15 L=39 35,18,18
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.62	0.45	0.22	3d10/15 L=39 35,18,18
241	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.65	0.43	0.22	3d10/15 L=39 35,18,18
	s=1,m=3	38.8	0.21	15.3	15.3	0.0	0.05	0.81	0.42	0.20	3d10/15 L=39 19,15,18
264	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.85	0.42	0.20	3d10/15 L=39 19,15,18
	s=1,m=3	38.8	0.25	17.8	15.3	0.0	0.05	0.86	0.42	0.20	3d10/15 L=39 19,15,15
287	ok,ok	0.0	0.25	17.8	15.3	0.0	0.05	0.88	0.42	0.20	3d10/15 L=39 19,15,15
	s=1,m=3	38.8	0.28	20.4	15.3	0.0	0.05	0.89	0.42	0.21	3d10/15 L=39 19,15,15
310	ok,ok	0.0	0.28	20.4	15.3	0.0	0.05	0.89	0.42	0.20	3d10/15 L=39 19,15,15
	s=1,m=3	38.8	0.32	22.9	15.3	0.0	0.05	0.89	0.43	0.21	3d10/15 L=39 19,15,15
333	ok,ok	0.0	0.32	22.9	15.3	0.0	0.05	0.89	0.44	0.22	3d10/15 L=39 19,15,15
	s=1,m=3	38.8	0.32	22.9	15.3	0.0	0.05	0.99	0.44	0.22	3d10/15 L=39 19,15,15
356	ok,ok	0.0	0.32	22.9	15.3	0.0	0.05	0.97	0.45	0.23	3d10/15 L=39 19,19,15
	s=1,m=3	38.8	0.35	25.4	15.3	0.0	0.05	0.97	0.46	0.25	3d10/15 L=39 19,19,27
379	ok,ok	0.0	0.35	25.4	15.3	0.0	0.05	0.95	0.46	0.25	3d10/15 L=39 19,19,27
	s=1,m=3	38.8	0.39	28.0	15.3	0.0	0.07	0.94	0.47	0.27	3d10/15 L=39 19,19,27
402	ok,ok	0.0	0.39	28.0	15.3	0.0	0.07	0.92	0.41	0.28	3d10/15 L=0 19,27,27
	s=1,m=3	38.8	0.42	30.5	15.3	0.0	0.08	0.94	0.43	0.30	3d10/15 L=0 15,27,27
							M_T= 22	**Z=0.0**	**P=3**	**P=13**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
84	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.86	0.69	0.29	3d10/15 L=11 26,10,10
	s=1,m=3	31.3	0.21	15.3	15.3	0.0	0.05	0.81	0.68	0.27	3d10/15 L=11 26,10,10
107	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.80	0.70	0.26	3d10/15 L=31 26,10,10

	s=1,m=3	31.3	0.21	15.3	15.3	0.0	0.05	0.73	0.68	0.24	3d10/15 L=31 26,10,10
130	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.72	0.63	0.24	3d10/15 L=31 26,10,10
	s=1,m=3	31.3	0.21	15.3	15.3	0.0	0.05	0.65	0.61	0.22	3d10/15 L=31 30,10,10
153	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.65	0.57	0.22	3d10/15 L=31 24,10,10
	s=1,m=3	31.3	0.21	15.3	15.3	0.0	0.05	0.58	0.55	0.20	3d10/15 L=31 26,10,10
176	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.57	0.52	0.19	3d10/15 L=31 24,10,10
	s=1,m=3	31.3	0.21	15.3	15.3	0.0	0.05	0.51	0.50	0.18	3d10/15 L=31 34,10,10
199	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.49	0.47	0.17	3d10/15 L=31 32,10,26
	s=1,m=3	31.3	0.21	15.3	15.3	0.0	0.05	0.44	0.45	0.18	3d10/15 L=31 34,10,23
222	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.42	0.42	0.19	3d10/15 L=31 32,10,23
	s=1,m=3	31.3	0.21	15.3	15.3	0.0	0.05	0.48	0.41	0.20	3d10/15 L=31 7,10,23
245	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.50	0.38	0.20	3d10/15 L=31 11,10,23
	s=1,m=3	31.3	0.21	15.3	15.3	0.0	0.05	0.59	0.37	0.22	3d10/15 L=31 7,10,23
268	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.59	0.34	0.23	3d10/15 L=31 7,10,23
	s=1,m=3	31.3	0.21	15.3	15.3	0.0	0.05	0.71	0.33	0.24	3d10/15 L=31 7,10,23
291	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.69	0.33	0.25	3d10/15 L=31 7,26,23
	s=1,m=3	31.3	0.21	15.3	15.3	0.0	0.05	0.81	0.32	0.26	3d10/15 L=31 7,26,23
314	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.79	0.32	0.27	3d10/15 L=31 7,26,23
	s=1,m=3	31.3	0.21	15.3	15.3	0.0	0.05	0.91	0.32	0.28	3d10/15 L=31 7,25,23
337	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.88	0.33	0.29	3d10/15 L=31 7,25,23
	s=1,m=3	31.3	0.25	17.8	15.3	0.0	0.05	0.93	0.34	0.31	3d10/15 L=31 23,25,23
360	ok,ok	0.0	0.25	17.8	15.3	0.0	0.05	0.90	0.35	0.32	3d10/15 L=31 23,25,27
	s=1,m=3	31.3	0.28	20.4	15.3	0.0	0.06	0.97	0.37	0.34	3d10/15 L=31 23,25,27
383	ok,ok	0.0	0.28	20.4	15.3	0.0	0.06	0.94	0.38	0.35	3d10/15 L=31 23,25,27
	s=1,m=3	31.3	0.35	25.4	15.3	0.0	0.07	0.92	0.39	0.37	3d10/15 L=31 23,25,27
406	ok,ok	0.0	0.32	22.9	15.3	0.0	0.06	0.99	0.49	0.38	3d10/15 L=0 23,27,27
	s=1,m=3	31.3	0.39	28.0	15.3	0.0	0.07	0.97	0.51	0.40	3d10/15 L=0 23,27,27
83	ok,ok	0.0	0.32	15.3	22.9	0.0	0.05	0.92	0.54	0.36	3d10/15 L=0 28,10,26
	s=1,m=3	26.7	0.28	15.3	20.4	0.0	0.05	0.96	0.53	0.35	3d10/15 L=0 24,10,26
106	ok,ok	0.0	0.28	15.3	20.4	0.0	0.05	0.95	0.49	0.35	3d10/15 L=27 24,26,26
	s=1,m=3	26.7	0.25	15.3	17.8	0.0	0.05	0.98	0.48	0.35	3d10/15 L=27 30,26,26
129	ok,ok	0.0	0.25	15.3	17.8	0.0	0.05	0.98	0.46	0.34	3d10/15 L=27 24,26,26
	s=1,m=3	26.7	0.25	15.3	17.8	0.0	0.05	0.87	0.46	0.34	3d10/15 L=27 30,26,26
152	ok,ok	0.0	0.25	15.3	17.8	0.0	0.05	0.86	0.45	0.33	3d10/15 L=27 30,26,26
	s=1,m=3	26.7	0.21	15.3	15.3	0.0	0.05	0.88	0.44	0.32	3d10/15 L=27 26,26,26
175	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.86	0.43	0.32	3d10/15 L=27 30,26,26
	s=1,m=3	26.7	0.21	15.3	15.3	0.0	0.05	0.72	0.43	0.31	3d10/15 L=27 26,26,26
198	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.70	0.42	0.30	3d10/15 L=27 30,26,26
	s=1,m=3	26.7	0.21	15.3	15.3	0.0	0.05	0.56	0.42	0.29	3d10/15 L=27 26,23,26
221	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.53	0.42	0.29	3d10/15 L=27 30,23,26
	s=1,m=3	26.7	0.21	15.3	15.3	0.0	0.05	0.50	0.43	0.28	3d10/15 L=27 8,23,26
244	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.50	0.44	0.28	3d10/15 L=27 7,23,26
	s=1,m=3	26.7	0.21	15.3	15.3	0.0	0.05	0.53	0.44	0.28	3d10/15 L=27 8,23,23
267	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.52	0.45	0.28	3d10/15 L=27 11,23,23
	s=1,m=3	26.7	0.21	15.3	15.3	0.0	0.05	0.55	0.45	0.28	3d10/15 L=27 7,23,23
290	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.56	0.46	0.29	3d10/15 L=27 7,23,27
	s=1,m=3	26.7	0.21	15.3	15.3	0.0	0.05	0.64	0.46	0.30	3d10/15 L=27 7,23,27
313	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.63	0.47	0.31	3d10/15 L=27 7,27,27
	s=1,m=3	26.7	0.21	15.3	15.3	0.0	0.05	0.71	0.47	0.32	3d10/15 L=27 7,27,27
336	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.70	0.47	0.33	3d10/15 L=27 7,27,27
	s=1,m=3	26.7	0.21	15.3	15.3	0.0	0.05	0.85	0.48	0.34	3d10/15 L=27 23,27,27
359	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.85	0.48	0.35	3d10/15 L=27 23,27,27
	s=1,m=3	26.7	0.25	17.8	15.3	0.0	0.05	0.91	0.49	0.36	3d10/15 L=27 23,27,27
382	ok,ok	0.0	0.25	17.8	15.3	0.0	0.05	0.90	0.48	0.37	3d10/15 L=27 23,27,27
	s=1,m=3	26.7	0.28	20.4	15.3	0.0	0.06	0.95	0.49	0.38	3d10/15 L=27 23,27,27
405	ok,ok	0.0	0.28	20.4	15.3	0.0	0.06	0.94	0.46	0.38	3d10/15 L=0 23,27,27
	s=1,m=3	26.7	0.35	25.4	15.3	0.0	0.07	0.89	0.47	0.39	3d10/15 L=0 23,27,27
82	ok,ok	0.0	0.25	15.3	17.8	0.0	0.05	0.93	0.40	0.27	3d10/15 L=0 30,28,26
	s=1,m=3	23.3	0.25	15.3	17.8	0.0	0.05	0.87	0.40	0.26	3d10/15 L=0 30,28,26
105	ok,ok	0.0	0.25	15.3	17.8	0.0	0.05	0.86	0.38	0.25	3d10/15 L=23 30,23,26
	s=1,m=3	23.3	0.21	15.3	15.3	0.0	0.05	0.93	0.38	0.24	3d10/15 L=23 30,23,26
128	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.93	0.37	0.24	3d10/15 L=23 30,23,26
	s=1,m=3	23.3	0.21	15.3	15.3	0.0	0.05	0.85	0.37	0.23	3d10/15 L=23 26,23,26
151	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.84	0.37	0.22	3d10/15 L=23 26,23,26
	s=1,m=3	23.3	0.21	15.3	15.3	0.0	0.05	0.77	0.37	0.21	3d10/15 L=23 26,23,26
174	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.75	0.37	0.20	3d10/15 L=23 26,23,26
	s=1,m=3	23.3	0.21	15.3	15.3	0.0	0.05	0.67	0.38	0.20	3d10/15 L=23 26,23,26
197	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.66	0.37	0.19	3d10/15 L=23 26,23,30
	s=1,m=3	23.3	0.21	15.3	15.3	0.0	0.05	0.57	0.38	0.18	3d10/15 L=23 26,23,30
220	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.56	0.37	0.18	3d10/15 L=23 26,27,30
	s=1,m=3	23.3	0.21	15.3	15.3	0.0	0.05	0.53	0.38	0.18	3d10/15 L=23 16,27,30
243	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.51	0.38	0.17	3d10/15 L=23 16,27,30
	s=1,m=3	23.3	0.21	15.3	15.3	0.0	0.05	0.52	0.38	0.18	3d10/15 L=23 16,27,27
266	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.49	0.38	0.18	3d10/15 L=23 16,27,27
	s=1,m=3	23.3	0.21	15.3	15.3	0.0	0.05	0.50	0.38	0.19	3d10/15 L=23 16,27,27
289	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.47	0.38	0.19	3d10/15 L=23 16,27,27
	s=1,m=3	23.3	0.21	15.3	15.3	0.0	0.05	0.47	0.39	0.20	3d10/15 L=23 16,27,27

312	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.45	0.39	0.20	3d10/15 L=23 16,27,27
	s=1,m=3	23.3	0.21	15.3	15.3	0.0	0.05	0.42	0.39	0.20	3d10/15 L=23 16,27,27
335	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.40	0.39	0.21	3d10/15 L=23 16,27,27
	s=1,m=3	23.3	0.21	15.3	15.3	0.0	0.05	0.36	0.39	0.21	3d10/15 L=23 19,27,27
358	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.34	0.39	0.22	3d10/15 L=23 19,27,27
	s=1,m=3	23.3	0.21	15.3	15.3	0.0	0.05	0.34	0.39	0.22	3d10/15 L=23 19,27,27
381	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.32	0.41	0.23	3d10/15 L=23 19,27,27
	s=1,m=3	23.3	0.21	15.3	15.3	0.0	0.05	0.32	0.41	0.23	3d10/15 L=23 19,27,27
404	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.33	0.35	0.24	3d10/15 L=0 28,15,27
	s=1,m=3	23.3	0.21	15.3	15.3	0.0	0.05	0.40	0.36	0.24	3d10/15 L=0 27,15,27
81	ok,ok	0.0	0.49	17.8	35.6	0.0	0.05	0.95	0.48	0.46	3d10/15 L=0 28,28,26
	s=1,m=3	23.5	0.46	15.3	33.1	0.0	0.05	0.99	0.48	0.45	3d10/15 L=0 30,28,26
104	ok,ok	0.0	0.46	17.8	33.1	0.0	0.05	0.98	0.43	0.45	3d10/15 L=23 28,26,26
	s=1,m=3	23.5	0.46	15.3	33.1	0.0	0.05	0.94	0.42	0.44	3d10/15 L=23 26,26,26
127	ok,ok	0.0	0.46	17.8	33.1	0.0	0.05	0.94	0.42	0.43	3d10/15 L=23 28,26,26
	s=1,m=3	23.5	0.42	15.3	30.5	0.0	0.05	0.97	0.41	0.42	3d10/15 L=23 26,26,26
150	ok,ok	0.0	0.42	15.3	30.5	0.0	0.05	0.98	0.40	0.41	3d10/15 L=23 15,26,26
	s=1,m=3	23.5	0.42	15.3	30.5	0.0	0.05	0.96	0.39	0.40	3d10/15 L=23 16,26,26
173	ok,ok	0.0	0.39	15.3	28.0	0.0	0.05	0.99	0.37	0.39	3d10/15 L=23 28,26,26
	s=1,m=3	23.5	0.39	15.3	28.0	0.0	0.07	0.99	0.36	0.38	3d10/15 L=23 16,26,26
196	ok,ok	0.0	0.39	17.8	28.0	0.0	0.07	0.93	0.35	0.37	3d10/15 L=23 28,28,26
	s=1,m=3	23.5	0.35	17.8	25.4	0.0	0.06	0.98	0.34	0.36	3d10/15 L=23 26,28,26
219	ok,ok	0.0	0.35	17.8	25.4	0.0	0.06	0.96	0.34	0.35	3d10/15 L=23 26,28,26
	s=1,m=3	23.5	0.35	17.8	25.4	0.0	0.06	0.91	0.33	0.34	3d10/15 L=23 26,28,26
242	ok,ok	0.0	0.32	17.8	22.9	0.0	0.06	1.00	0.32	0.34	3d10/15 L=23 26,28,26
	s=1,m=3	23.5	0.32	17.8	22.9	0.0	0.06	0.94	0.31	0.32	3d10/15 L=23 26,28,26
265	ok,ok	0.0	0.32	17.8	22.9	0.0	0.06	0.93	0.31	0.31	3d10/15 L=23 26,30,26
	s=1,m=3	23.5	0.28	17.8	20.4	0.0	0.06	0.98	0.30	0.30	3d10/15 L=23 26,30,26
288	ok,ok	0.0	0.28	17.8	20.4	0.0	0.06	0.96	0.31	0.30	3d10/15 L=23 26,30,26
	s=1,m=3	23.5	0.28	17.8	20.4	0.0	0.06	0.91	0.30	0.28	3d10/15 L=23 16,30,26
311	ok,ok	0.0	0.28	17.8	20.4	0.0	0.06	0.91	0.30	0.28	3d10/15 L=23 16,30,26
	s=1,m=3	23.5	0.25	17.8	17.8	0.0	0.05	0.94	0.29	0.27	3d10/15 L=23 26,30,26
334	ok,ok	0.0	0.25	17.8	17.8	0.0	0.05	0.92	0.30	0.26	3d10/15 L=23 26,30,26
	s=1,m=3	23.5	0.25	17.8	15.3	0.0	0.05	0.99	0.29	0.25	3d10/15 L=23 26,30,30
357	ok,ok	0.0	0.25	17.8	15.3	0.0	0.05	0.97	0.30	0.25	3d10/15 L=23 26,30,30
	s=1,m=3	23.5	0.25	17.8	15.3	0.0	0.05	0.89	0.29	0.24	3d10/15 L=23 26,30,30
380	ok,ok	0.0	0.25	17.8	15.3	0.0	0.05	0.87	0.30	0.23	3d10/15 L=23 26,30,30
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.99	0.30	0.22	3d10/15 L=23 16,15,30
403	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.96	0.31	0.22	3d10/15 L=23 16,15,30
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.94	0.32	0.21	3d10/15 L=23 16,15,30
416	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.92	0.34	0.21	3d10/15 L=23 16,15,30
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.89	0.35	0.20	3d10/15 L=23 16,15,30
419	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.87	0.37	0.19	3d10/15 L=23 16,15,30
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.83	0.38	0.18	3d10/15 L=23 19,15,30
422	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.82	0.39	0.18	3d10/15 L=23 19,15,30
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.78	0.40	0.18	3d10/15 L=23 19,15,27
425	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.83	0.42	0.18	3d10/15 L=23 19,15,27
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.79	0.43	0.19	3d10/15 L=23 19,15,27
428	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.77	0.45	0.19	3d10/15 L=23 19,15,27
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.73	0.46	0.19	3d10/15 L=23 19,15,27
431	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.71	0.48	0.19	3d10/15 L=23 19,15,27
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.66	0.49	0.20	3d10/15 L=23 19,15,15
434	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.64	0.51	0.20	3d10/15 L=23 19,15,15
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.60	0.52	0.21	3d10/15 L=23 23,15,15
437	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.59	0.54	0.22	3d10/15 L=23 23,15,15
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.66	0.55	0.23	3d10/15 L=23 23,15,15
440	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.64	0.57	0.24	3d10/15 L=23 23,15,15
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.70	0.58	0.25	3d10/15 L=23 23,15,15
443	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.68	0.61	0.26	3d10/15 L=23 23,15,15
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.74	0.62	0.27	3d10/15 L=23 23,15,15
86	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.71	0.64	0.28	3d10/15 L=23 23,15,15
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.77	0.65	0.29	3d10/15 L=23 23,15,15
155	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.74	0.68	0.30	3d10/15 L=23 23,15,15
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.81	0.69	0.31	3d10/15 L=23 27,15,15
224	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.75	0.72	0.32	3d10/15 L=23 27,15,15
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.87	0.73	0.33	3d10/15 L=23 27,15,15
293	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.81	0.79	0.34	3d10/15 L=23 27,15,15
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.94	0.80	0.36	3d10/15 L=23 27,15,15
362	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.88	0.80	0.37	3d10/15 L=3 27,19,15
	s=1,m=3	23.5	0.25	17.8	15.3	0.0	0.05	0.87	0.81	0.39	3d10/15 L=3 27,19,15
							M_T= 23	**Z=0.0**	**P=1**	**P=11**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
91	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.84	0.65	0.30	3d10/15 L=11 34,10,14
	s=1,m=3	31.3	0.21	15.3	15.3	0.0	0.05	0.80	0.63	0.28	3d10/15 L=11 34,10,14
114	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.82	0.66	0.27	3d10/15 L=31 34,11,14
	s=1,m=3	31.3	0.21	15.3	15.3	0.0	0.05	0.75	0.66	0.25	3d10/15 L=31 34,11,14
137	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.77	0.60	0.25	3d10/15 L=31 34,11,14

	s=1,m=3	31.3	0.21	15.3	15.3	0.0	0.05	0.74	0.60	0.23	3d10/15 L=31 38,11,14
160	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.73	0.56	0.23	3d10/15 L=31 38,11,14
	s=1,m=3	31.3	0.21	15.3	15.3	0.0	0.05	0.70	0.56	0.21	3d10/15 L=31 38,11,14
183	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.69	0.53	0.20	3d10/15 L=31 38,11,14
	s=1,m=3	31.3	0.21	15.3	15.3	0.0	0.05	0.65	0.53	0.19	3d10/15 L=31 26,11,14
206	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.64	0.51	0.18	3d10/15 L=31 26,11,14
	s=1,m=3	31.3	0.21	15.3	15.3	0.0	0.05	0.71	0.51	0.17	3d10/15 L=31 10,11,34
229	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.72	0.48	0.17	3d10/15 L=31 10,11,31
	s=1,m=3	31.3	0.21	15.3	15.3	0.0	0.05	0.78	0.48	0.19	3d10/15 L=31 10,11,31
252	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.79	0.46	0.19	3d10/15 L=31 10,11,31
	s=1,m=3	31.3	0.21	15.3	15.3	0.0	0.05	0.83	0.46	0.20	3d10/15 L=31 10,11,31
275	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.83	0.44	0.21	3d10/15 L=31 13,11,31
	s=1,m=3	31.3	0.21	15.3	15.3	0.0	0.05	0.86	0.44	0.22	3d10/15 L=31 14,11,31
298	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.88	0.42	0.23	3d10/15 L=31 13,11,31
	s=1,m=3	31.3	0.21	15.3	15.3	0.0	0.05	0.89	0.42	0.24	3d10/15 L=31 14,11,31
321	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.90	0.41	0.25	3d10/15 L=31 13,31,31
	s=1,m=3	31.3	0.21	15.3	15.3	0.0	0.05	0.90	0.42	0.27	3d10/15 L=31 14,31,31
344	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.90	0.43	0.28	3d10/15 L=31 9,31,31
	s=1,m=3	31.3	0.21	15.3	15.3	0.0	0.05	0.90	0.44	0.29	3d10/15 L=31 14,31,31
367	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.87	0.45	0.30	3d10/15 L=31 9,31,31
	s=1,m=3	31.3	0.21	15.3	15.3	0.0	0.05	0.96	0.46	0.31	3d10/15 L=31 31,31,35
390	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.92	0.47	0.33	3d10/15 L=31 31,31,35
	s=1,m=3	31.3	0.28	20.4	15.3	0.0	0.06	0.89	0.48	0.35	3d10/15 L=31 31,35,35
413	ok,ok	0.0	0.28	20.4	15.3	0.0	0.06	0.87	0.42	0.36	3d10/15 L=0 31,33,35
	s=1,m=3	31.3	0.32	22.9	15.3	0.0	0.06	0.96	0.43	0.37	3d10/15 L=0 31,35,35
85	ok,ok	0.0	0.28	15.3	20.4	0.0	0.05	0.98	0.49	0.33	3d10/15 L=0 38,14,34
	s=1,m=3	26.7	0.28	15.3	20.4	0.0	0.05	0.92	0.48	0.33	3d10/15 L=0 38,14,34
108	ok,ok	0.0	0.28	15.3	20.4	0.0	0.05	0.91	0.48	0.33	3d10/15 L=27 38,34,34
	s=1,m=3	26.7	0.25	15.3	17.8	0.0	0.05	0.96	0.48	0.32	3d10/15 L=27 38,34,34
131	ok,ok	0.0	0.25	15.3	17.8	0.0	0.05	0.95	0.47	0.32	3d10/15 L=27 38,34,34
	s=1,m=3	26.7	0.25	15.3	17.8	0.0	0.05	0.86	0.46	0.31	3d10/15 L=27 38,34,34
154	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.98	0.45	0.30	3d10/15 L=27 38,34,34
	s=1,m=3	26.7	0.21	15.3	15.3	0.0	0.05	0.86	0.45	0.30	3d10/15 L=27 38,34,34
177	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.84	0.44	0.29	3d10/15 L=27 38,34,34
	s=1,m=3	26.7	0.21	15.3	15.3	0.0	0.05	0.74	0.44	0.29	3d10/15 L=27 22,34,34
200	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.73	0.43	0.28	3d10/15 L=27 22,34,34
	s=1,m=3	26.7	0.21	15.3	15.3	0.0	0.05	0.72	0.42	0.27	3d10/15 L=27 10,34,34
223	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.71	0.42	0.27	3d10/15 L=27 10,34,34
	s=1,m=3	26.7	0.21	15.3	15.3	0.0	0.05	0.71	0.41	0.26	3d10/15 L=27 10,34,34
246	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.70	0.41	0.26	3d10/15 L=27 10,34,34
	s=1,m=3	26.7	0.21	15.3	15.3	0.0	0.05	0.71	0.41	0.27	3d10/15 L=27 14,34,31
269	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.69	0.41	0.27	3d10/15 L=27 13,34,35
	s=1,m=3	26.7	0.21	15.3	15.3	0.0	0.05	0.70	0.40	0.28	3d10/15 L=27 14,38,35
292	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.69	0.40	0.29	3d10/15 L=27 9,38,35
	s=1,m=3	26.7	0.21	15.3	15.3	0.0	0.05	0.70	0.40	0.30	3d10/15 L=27 14,38,35
315	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.67	0.40	0.31	3d10/15 L=27 9,38,35
	s=1,m=3	26.7	0.21	15.3	15.3	0.0	0.05	0.68	0.40	0.32	3d10/15 L=27 14,38,35
338	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.66	0.40	0.33	3d10/15 L=27 31,38,35
	s=1,m=3	26.7	0.21	15.3	15.3	0.0	0.05	0.86	0.40	0.34	3d10/15 L=27 31,35,35
361	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.86	0.41	0.35	3d10/15 L=27 31,35,35
	s=1,m=3	26.7	0.25	17.8	15.3	0.0	0.05	0.91	0.42	0.36	3d10/15 L=27 31,35,35
384	ok,ok	0.0	0.25	17.8	15.3	0.0	0.05	0.90	0.45	0.37	3d10/15 L=27 31,35,35
	s=1,m=3	26.7	0.28	20.4	15.3	0.0	0.06	0.95	0.46	0.38	3d10/15 L=27 31,35,35
407	ok,ok	0.0	0.28	20.4	15.3	0.0	0.06	0.95	0.41	0.38	3d10/15 L=0 31,33,35
	s=1,m=3	26.7	0.35	25.4	15.3	0.0	0.07	0.90	0.42	0.39	3d10/15 L=0 31,33,35
92	ok,ok	0.0	0.25	15.3	17.8	0.0	0.05	0.98	0.43	0.26	3d10/15 L=0 38,34,34
	s=1,m=3	23.3	0.25	15.3	17.8	0.0	0.05	0.93	0.43	0.25	3d10/15 L=0 38,34,34
115	ok,ok	0.0	0.25	15.3	17.8	0.0	0.05	0.92	0.49	0.24	3d10/15 L=23 38,34,34
	s=1,m=3	23.3	0.25	15.3	17.8	0.0	0.05	0.86	0.49	0.23	3d10/15 L=23 38,34,34
138	ok,ok	0.0	0.25	15.3	17.8	0.0	0.05	0.86	0.47	0.23	3d10/15 L=23 38,34,34
	s=1,m=3	23.3	0.21	15.3	15.3	0.0	0.05	0.93	0.46	0.22	3d10/15 L=23 38,34,34
161	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.92	0.44	0.21	3d10/15 L=23 38,34,34
	s=1,m=3	23.3	0.21	15.3	15.3	0.0	0.05	0.84	0.44	0.20	3d10/15 L=23 38,34,34
184	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.83	0.42	0.19	3d10/15 L=23 38,34,34
	s=1,m=3	23.3	0.21	15.3	15.3	0.0	0.05	0.75	0.42	0.19	3d10/15 L=23 38,34,34
207	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.74	0.40	0.18	3d10/15 L=23 38,34,38
	s=1,m=3	23.3	0.21	15.3	15.3	0.0	0.05	0.65	0.40	0.17	3d10/15 L=23 38,38,38
230	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.64	0.39	0.17	3d10/15 L=23 38,38,38
	s=1,m=3	23.3	0.21	15.3	15.3	0.0	0.05	0.56	0.38	0.17	3d10/15 L=23 22,38,35
253	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.55	0.38	0.17	3d10/15 L=23 22,38,35
	s=1,m=3	23.3	0.21	15.3	15.3	0.0	0.05	0.50	0.37	0.18	3d10/15 L=23 22,38,35
276	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.49	0.37	0.17	3d10/15 L=23 22,38,35
	s=1,m=3	23.3	0.21	15.3	15.3	0.0	0.05	0.43	0.37	0.18	3d10/15 L=23 22,38,35
299	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.42	0.36	0.19	3d10/15 L=23 22,38,35
	s=1,m=3	23.3	0.21	15.3	15.3	0.0	0.05	0.37	0.36	0.19	3d10/15 L=23 22,38,35
322	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.35	0.36	0.19	3d10/15 L=23 22,38,35
	s=1,m=3	23.3	0.21	15.3	15.3	0.0	0.05	0.31	0.35	0.20	3d10/15 L=23 22,38,35

345	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.29	0.36	0.20	3d10/15 L=23 22,38,35
	s=1,m=3	23.3	0.21	15.3	15.3	0.0	0.05	0.25	0.35	0.21	3d10/15 L=23 22,38,35
368	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.24	0.35	0.22	3d10/15 L=23 22,38,35
	s=1,m=3	23.3	0.21	15.3	15.3	0.0	0.05	0.25	0.35	0.22	3d10/15 L=23 38,38,35
391	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.26	0.36	0.22	3d10/15 L=23 38,38,35
	s=1,m=3	23.3	0.21	15.3	15.3	0.0	0.05	0.30	0.36	0.23	3d10/15 L=23 38,38,35
414	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.35	0.37	0.23	3d10/15 L=0 38,19,35
	s=1,m=3	23.3	0.21	15.3	15.3	0.0	0.05	0.40	0.38	0.24	3d10/15 L=0 37,19,35
93	ok,ok	0.0	0.53	15.3	38.2	0.0	0.05	0.98	0.55	0.46	3d10/15 L=0 38,34,34
	s=1,m=3	23.5	0.53	15.3	38.2	0.0	0.05	0.95	0.54	0.45	3d10/15 L=0 38,34,34
116	ok,ok	0.0	0.53	15.3	38.2	0.0	0.05	0.95	0.49	0.44	3d10/15 L=23 38,34,34
	s=1,m=3	23.5	0.49	15.3	35.6	0.0	0.05	0.98	0.48	0.43	3d10/15 L=23 38,34,34
139	ok,ok	0.0	0.49	15.3	35.6	0.0	0.05	0.98	0.44	0.42	3d10/15 L=23 38,34,34
	s=1,m=3	23.5	0.49	15.3	35.6	0.0	0.05	0.95	0.43	0.41	3d10/15 L=23 38,34,34
162	ok,ok	0.0	0.49	15.3	35.6	0.0	0.05	0.94	0.43	0.41	3d10/15 L=23 38,34,34
	s=1,m=3	23.5	0.46	15.3	33.1	0.0	0.05	0.98	0.42	0.40	3d10/15 L=23 38,34,34
185	ok,ok	0.0	0.46	15.3	33.1	0.0	0.05	0.97	0.42	0.39	3d10/15 L=23 38,34,34
	s=1,m=3	23.5	0.46	15.3	33.1	0.0	0.08	0.93	0.41	0.38	3d10/15 L=23 38,34,34
208	ok,ok	0.0	0.46	15.3	33.1	0.0	0.08	0.93	0.40	0.37	3d10/15 L=23 38,34,34
	s=1,m=3	23.5	0.42	15.3	30.5	0.0	0.08	0.96	0.39	0.36	3d10/15 L=23 38,34,34
231	ok,ok	0.0	0.42	15.3	30.5	0.0	0.08	0.96	0.39	0.35	3d10/15 L=23 38,38,34
	s=1,m=3	23.5	0.39	15.3	28.0	0.0	0.07	1.00	0.38	0.34	3d10/15 L=23 38,38,34
254	ok,ok	0.0	0.39	15.3	28.0	0.0	0.07	0.99	0.38	0.33	3d10/15 L=23 38,38,34
	s=1,m=3	23.5	0.39	15.3	28.0	0.0	0.07	0.94	0.37	0.32	3d10/15 L=23 38,38,34
277	ok,ok	0.0	0.39	15.3	28.0	0.0	0.07	0.93	0.37	0.31	3d10/15 L=23 38,38,34
	s=1,m=3	23.5	0.35	15.3	25.4	0.0	0.07	0.97	0.36	0.30	3d10/15 L=23 38,38,34
300	ok,ok	0.0	0.35	15.3	25.4	0.0	0.07	0.96	0.36	0.29	3d10/15 L=23 38,38,34
	s=1,m=3	23.5	0.35	15.3	25.4	0.0	0.07	0.94	0.35	0.28	3d10/15 L=23 22,38,34
323	ok,ok	0.0	0.35	15.3	25.4	0.0	0.07	0.94	0.35	0.27	3d10/15 L=23 22,38,34
	s=1,m=3	23.5	0.35	15.3	25.4	0.0	0.07	0.93	0.34	0.26	3d10/15 L=23 22,38,34
346	ok,ok	0.0	0.35	15.3	25.4	0.0	0.07	0.93	0.35	0.26	3d10/15 L=23 22,38,34
	s=1,m=3	23.5	0.35	15.3	25.4	0.0	0.07	0.91	0.34	0.25	3d10/15 L=23 22,38,38
369	ok,ok	0.0	0.35	15.3	25.4	0.0	0.07	0.91	0.34	0.24	3d10/15 L=23 22,38,38
	s=1,m=3	23.5	0.32	15.3	22.9	0.0	0.06	0.99	0.33	0.23	3d10/15 L=23 22,38,38
392	ok,ok	0.0	0.32	15.3	22.9	0.0	0.06	0.99	0.34	0.23	3d10/15 L=23 22,22,38
	s=1,m=3	23.5	0.32	15.3	22.9	0.0	0.06	0.96	0.34	0.22	3d10/15 L=23 22,22,38
415	ok,ok	0.0	0.32	15.3	22.9	0.0	0.06	0.95	0.35	0.22	3d10/15 L=23 22,22,38
	s=1,m=3	23.5	0.32	15.3	22.9	0.0	0.06	0.93	0.35	0.21	3d10/15 L=23 22,22,38
418	ok,ok	0.0	0.32	15.3	22.9	0.0	0.06	0.92	0.36	0.21	3d10/15 L=23 22,22,38
	s=1,m=3	23.5	0.28	15.3	20.4	0.0	0.06	1.00	0.36	0.20	3d10/15 L=23 22,22,38
421	ok,ok	0.0	0.28	15.3	20.4	0.0	0.06	0.98	0.37	0.19	3d10/15 L=23 22,22,38
	s=1,m=3	23.5	0.28	15.3	20.4	0.0	0.06	0.96	0.37	0.18	3d10/15 L=23 18,22,38
424	ok,ok	0.0	0.28	15.3	20.4	0.0	0.06	0.95	0.39	0.18	3d10/15 L=23 18,22,38
	s=1,m=3	23.5	0.28	15.3	20.4	0.0	0.06	0.92	0.39	0.18	3d10/15 L=23 18,22,35
427	ok,ok	0.0	0.25	15.3	17.8	0.0	0.05	0.98	0.40	0.19	3d10/15 L=23 18,22,35
	s=1,m=3	23.5	0.25	15.3	17.8	0.0	0.05	0.93	0.40	0.19	3d10/15 L=23 22,22,35
430	ok,ok	0.0	0.25	15.3	17.8	0.0	0.05	0.91	0.42	0.18	3d10/15 L=23 18,22,35
	s=1,m=3	23.5	0.25	15.3	17.8	0.0	0.05	0.86	0.42	0.19	3d10/15 L=23 22,19,35
433	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.98	0.45	0.19	3d10/15 L=23 18,19,35
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.91	0.46	0.20	3d10/15 L=23 22,19,19
436	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.87	0.48	0.20	3d10/15 L=23 18,19,19
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.81	0.49	0.21	3d10/15 L=23 14,19,19
439	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.78	0.51	0.22	3d10/15 L=23 10,19,19
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.71	0.52	0.23	3d10/15 L=23 14,19,19
442	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.68	0.55	0.24	3d10/15 L=23 10,19,19
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.62	0.56	0.25	3d10/15 L=23 37,19,19
445	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.61	0.58	0.25	3d10/15 L=23 35,19,19
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.69	0.60	0.27	3d10/15 L=23 37,19,19
132	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.66	0.63	0.28	3d10/15 L=23 35,19,19
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.74	0.64	0.29	3d10/15 L=23 33,19,19
201	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.72	0.67	0.29	3d10/15 L=23 35,19,19
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.83	0.68	0.31	3d10/15 L=23 35,19,19
270	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.80	0.73	0.32	3d10/15 L=23 35,19,19
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.92	0.74	0.33	3d10/15 L=23 35,19,19
339	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.88	0.81	0.34	3d10/15 L=23 35,19,19
	s=1,m=3	23.5	0.25	17.8	15.3	0.0	0.05	0.86	0.82	0.35	3d10/15 L=23 35,19,19
408	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.97	0.81	0.37	3d10/15 L=3 35,19,19
	s=1,m=3	23.5	0.25	17.8	15.3	0.0	0.05	0.94	0.82	0.39	3d10/15 L=3 35,19,19
							M_T= 24	**Z=0.0**	**P=2**	**P=12**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
90	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.43	0.54	0.21	3d10/15 L=11 38,10,26
	s=1,m=3	31.3	0.21	15.3	15.3	0.0	0.05	0.58	0.53	0.19	3d10/15 L=11 38,10,26
113	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.59	0.57	0.19	3d10/15 L=31 38,10,26
	s=1,m=3	31.3	0.21	15.3	15.3	0.0	0.05	0.72	0.56	0.18	3d10/15 L=31 38,10,2
136	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.73	0.52	0.18	3d10/15 L=31 38,10,26
	s=1,m=3	31.3	0.21	15.3	15.3	0.0	0.05	0.85	0.51	0.17	3d10/15 L=31 34,10,2
159	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.86	0.47	0.16	3d10/15 L=31 38,10,2

	s=1,m=3	31.3	0.21	15.3	15.3	0.0	0.05	0.98	0.46	0.15	3d10/15 L=31	34,10,2
182	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.99	0.44	0.15	3d10/15 L=31	34,10,2
	s=1,m=3	31.3	0.25	15.3	17.8	0.0	0.05	0.93	0.43	0.14	3d10/15 L=31	34,10,2
205	ok,ok	0.0	0.25	15.3	17.8	0.0	0.05	0.94	0.40	0.14	3d10/15 L=31	34,10,2
	s=1,m=3	31.3	0.28	15.3	20.4	0.0	0.06	0.89	0.39	0.13	3d10/15 L=31	34,10,2
228	ok,ok	0.0	0.28	15.3	20.4	0.0	0.06	0.89	0.36	0.13	3d10/15 L=31	34,14,2
	s=1,m=3	31.3	0.28	15.3	20.4	0.0	0.06	0.95	0.35	0.12	3d10/15 L=31	34,14,2
251	ok,ok	0.0	0.28	15.3	20.4	0.0	0.06	0.95	0.33	0.12	3d10/15 L=31	34,14,2
	s=1,m=3	31.3	0.32	15.3	22.9	0.0	0.06	0.89	0.33	0.11	3d10/15 L=31	34,14,2
274	ok,ok	0.0	0.32	15.3	22.9	0.0	0.06	0.89	0.31	0.10	3d10/15 L=31	34,14,2
	s=1,m=3	31.3	0.32	15.3	22.9	0.0	0.06	0.92	0.30	0.09	3d10/15 L=31	34,14,2
297	ok,ok	0.0	0.32	15.3	22.9	0.0	0.06	0.92	0.28	0.09	3d10/15 L=31	34,14,2
	s=1,m=3	31.3	0.35	15.3	25.4	0.0	0.07	0.85	0.28	0.08	3d10/15 L=31	34,14,2
320	ok,ok	0.0	0.35	15.3	25.4	0.0	0.07	0.85	0.26	0.08	3d10/15 L=31	34,14,2
	s=1,m=3	31.3	0.39	15.3	28.0	0.0	0.07	0.79	0.25	0.08	3d10/15 L=31	34,14,34
343	ok,ok	0.0	0.39	15.3	28.0	0.0	0.07	0.79	0.24	0.08	3d10/15 L=31	34,14,34
	s=1,m=3	31.3	0.39	15.3	28.0	0.0	0.07	0.80	0.23	0.08	3d10/15 L=31	34,14,34
366	ok,ok	0.0	0.39	15.3	28.0	0.0	0.07	0.80	0.22	0.08	3d10/15 L=31	34,14,26
	s=1,m=3	31.3	0.39	15.3	28.0	0.0	0.07	0.80	0.21	0.07	3d10/15 L=31	34,14,26
389	ok,ok	0.0	0.39	15.3	28.0	0.0	0.07	0.80	0.20	0.07	3d10/15 L=31	34,14,34
	s=1,m=3	31.3	0.42	15.3	30.5	0.0	0.08	0.73	0.19	0.07	3d10/15 L=31	34,14,34
412	ok,ok	0.0	0.42	15.3	30.5	0.0	0.08	0.73	0.18	0.07	3d10/15 L=31	34,14,26
	s=1,m=3	31.3	0.42	15.3	30.5	0.0	0.08	0.72	0.17	0.06	3d10/15 L=31	34,14,26
89	ok,ok	0.0	0.42	15.3	30.5	0.0	0.08	0.71	0.12	0.05	3d10/15 L=27	34,14,34
	s=1,m=3	26.7	0.42	15.3	30.5	0.0	0.08	0.70	0.11	0.04	3d10/15 L=27	26,14,34
112	ok,ok	0.0	0.42	15.3	30.5	0.0	0.08	0.70	0.11	0.04	3d10/15 L=27	26,14,34
	s=1,m=3	26.7	0.42	15.3	30.5	0.0	0.08	0.69	0.11	0.04	3d10/15 L=27	26,14,34
135	ok,ok	0.0	0.42	15.3	30.5	0.0	0.08	0.69	0.10	0.04	3d10/15 L=27	26,14,34
	s=1,m=3	26.7	0.42	15.3	30.5	0.0	0.08	0.67	0.11	0.05	3d10/15 L=27	26,11,31
158	ok,ok	0.0	0.42	15.3	30.5	0.0	0.08	0.67	0.10	0.05	3d10/15 L=27	26,11,31
	s=1,m=3	26.7	0.42	15.3	30.5	0.0	0.08	0.65	0.11	0.06	3d10/15 L=27	26,11,31
181	ok,ok	0.0	0.42	15.3	30.5	0.0	0.08	0.65	0.10	0.06	3d10/15 L=27	26,11,31
	s=1,m=3	26.7	0.42	15.3	30.5	0.0	0.08	0.63	0.11	0.07	3d10/15 L=27	26,11,31
204	ok,ok	0.0	0.42	15.3	30.5	0.0	0.08	0.62	0.10	0.07	3d10/15 L=27	26,11,31
	s=1,m=3	26.7	0.39	15.3	28.0	0.0	0.07	0.65	0.10	0.08	3d10/15 L=27	26,11,31
227	ok,ok	0.0	0.39	15.3	28.0	0.0	0.07	0.65	0.09	0.08	3d10/15 L=27	26,7,31
	s=1,m=3	26.7	0.39	15.3	28.0	0.0	0.07	0.62	0.10	0.09	3d10/15 L=27	26,23,31
250	ok,ok	0.0	0.39	15.3	28.0	0.0	0.07	0.61	0.10	0.09	3d10/15 L=27	26,23,31
	s=1,m=3	26.7	0.39	15.3	28.0	0.0	0.07	0.58	0.11	0.10	3d10/15 L=27	26,23,31
273	ok,ok	0.0	0.39	15.3	28.0	0.0	0.07	0.57	0.10	0.10	3d10/15 L=27	26,23,31
	s=1,m=3	26.7	0.39	15.3	28.0	0.0	0.07	0.54	0.11	0.10	3d10/15 L=27	26,23,31
296	ok,ok	0.0	0.39	15.3	28.0	0.0	0.07	0.54	0.11	0.10	3d10/15 L=27	26,23,31
	s=1,m=3	26.7	0.35	15.3	25.4	0.0	0.07	0.56	0.11	0.11	3d10/15 L=27	26,23,31
319	ok,ok	0.0	0.35	15.3	25.4	0.0	0.07	0.51	0.11	0.11	3d10/15 L=27	10,23,31
	s=1,m=3	26.7	0.35	15.3	25.4	0.0	0.07	0.49	0.12	0.12	3d10/15 L=27	13,23,31
342	ok,ok	0.0	0.35	15.3	25.4	0.0	0.07	0.49	0.12	0.11	3d10/15 L=27	10,23,31
	s=1,m=3	26.7	0.32	15.3	22.9	0.0	0.06	0.52	0.12	0.12	3d10/15 L=27	13,23,31
365	ok,ok	0.0	0.32	15.3	22.9	0.0	0.06	0.51	0.12	0.12	3d10/15 L=27	13,23,31
	s=1,m=3	26.7	0.32	15.3	22.9	0.0	0.06	0.50	0.13	0.13	3d10/15 L=27	13,23,31
388	ok,ok	0.0	0.32	15.3	22.9	0.0	0.06	0.49	0.13	0.12	3d10/15 L=27	13,23,31
	s=1,m=3	26.7	0.28	15.3	20.4	0.0	0.06	0.53	0.13	0.13	3d10/15 L=27	13,23,31
411	ok,ok	0.0	0.28	15.3	20.4	0.0	0.06	0.53	0.13	0.13	3d10/15 L=27	13,31,31
	s=1,m=3	26.7	0.25	15.3	17.8	0.0	0.05	0.57	0.14	0.14	3d10/15 L=27	9,31,31
88	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.72	0.24	0.24	3d10/15 L=23	33,31,31
	s=1,m=3	23.3	0.25	15.3	17.8	0.0	0.05	0.55	0.25	0.25	3d10/15 L=23	13,31,31
111	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.68	0.25	0.25	3d10/15 L=23	33,31,31
	s=1,m=3	23.3	0.21	15.3	15.3	0.0	0.05	0.57	0.26	0.26	3d10/15 L=23	9,31,31
134	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.60	0.26	0.26	3d10/15 L=23	25,31,31
	s=1,m=3	23.3	0.21	15.3	15.3	0.0	0.05	0.50	0.27	0.27	3d10/15 L=23	9,31,31
157	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.51	0.27	0.27	3d10/15 L=23	25,23,31
	s=1,m=3	23.3	0.21	15.3	15.3	0.0	0.05	0.49	0.28	0.28	3d10/15 L=23	31,31,31
180	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.42	0.29	0.28	3d10/15 L=23	25,7,31
	s=1,m=3	23.3	0.21	15.3	15.3	0.0	0.05	0.57	0.29	0.29	3d10/15 L=23	31,7,31
203	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.48	0.30	0.29	3d10/15 L=23	31,7,31
	s=1,m=3	23.3	0.21	15.3	15.3	0.0	0.05	0.65	0.31	0.30	3d10/15 L=23	31,7,31
226	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.56	0.32	0.30	3d10/15 L=23	31,7,31
	s=1,m=3	23.3	0.21	15.3	15.3	0.0	0.05	0.73	0.33	0.31	3d10/15 L=23	31,7,31
249	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.63	0.34	0.32	3d10/15 L=23	31,7,31
	s=1,m=3	23.3	0.21	15.3	15.3	0.0	0.05	0.81	0.35	0.32	3d10/15 L=23	31,7,31
272	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.71	0.36	0.33	3d10/15 L=23	31,7,31
	s=1,m=3	23.3	0.21	15.3	15.3	0.0	0.05	0.90	0.36	0.33	3d10/15 L=23	31,7,31
295	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.79	0.38	0.34	3d10/15 L=23	31,7,31
	s=1,m=3	23.3	0.21	15.3	15.3	0.0	0.05	0.99	0.38	0.35	3d10/15 L=23	31,7,31
318	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.89	0.39	0.35	3d10/15 L=23	31,7,31
	s=1,m=3	23.3	0.25	17.8	15.3	0.0	0.05	0.94	0.40	0.35	3d10/15 L=23	31,7,31
341	ok,ok	0.0	0.25	17.8	15.3	0.0	0.05	0.85	0.41	0.36	3d10/15 L=23	31,7,31
	s=1,m=3	23.3	0.28	20.4	15.3	0.0	0.06	0.91	0.42	0.37	3d10/15 L=23	31,7,31

364	ok,ok	0.0	0.25	17.8	15.3	0.0	0.05	0.95	0.44	0.38	3d10/15 L=23 31,7,31
	s=1,m=3	23.3	0.32	22.9	15.3	0.0	0.06	0.89	0.44	0.38	3d10/15 L=23 31,7,31
387	ok,ok	0.0	0.28	20.4	15.3	0.0	0.06	0.93	0.47	0.39	3d10/15 L=23 31,7,31
	s=1,m=3	23.3	0.35	25.4	15.3	0.0	0.07	0.89	0.47	0.39	3d10/15 L=23 31,7,31
410	ok,ok	0.0	0.32	22.9	15.3	0.0	0.06	0.94	0.50	0.40	3d10/15 L=0 31,19,31
	s=1,m=3	23.3	0.39	28.0	15.3	0.0	0.07	0.91	0.51	0.40	3d10/15 L=0 31,19,31
87	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.84	0.44	0.41	3d10/15 L=0 23,14,26
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.77	0.44	0.40	3d10/15 L=0 26,14,26
110	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.77	0.40	0.41	3d10/15 L=23 26,26,26
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.75	0.39	0.40	3d10/15 L=23 26,26,26
133	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.75	0.39	0.40	3d10/15 L=23 26,26,26
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.73	0.38	0.39	3d10/15 L=23 26,26,26
156	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.73	0.37	0.39	3d10/15 L=23 26,26,26
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.71	0.37	0.38	3d10/15 L=23 26,26,26
179	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.71	0.36	0.37	3d10/15 L=23 26,26,26
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.68	0.35	0.36	3d10/15 L=23 26,26,34
202	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.68	0.35	0.35	3d10/15 L=23 26,26,26
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.65	0.34	0.35	3d10/15 L=23 26,26,26
225	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.65	0.33	0.33	3d10/15 L=23 26,30,26
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.62	0.32	0.33	3d10/15 L=23 26,30,26
248	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.62	0.32	0.32	3d10/15 L=23 26,30,26
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.59	0.31	0.31	3d10/15 L=23 26,30,26
271	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.58	0.31	0.30	3d10/15 L=23 26,30,26
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.55	0.30	0.29	3d10/15 L=23 26,30,26
294	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.55	0.30	0.28	3d10/15 L=23 26,30,34
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.52	0.29	0.27	3d10/15 L=23 26,30,34
317	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.51	0.29	0.27	3d10/15 L=23 26,30,26
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.49	0.28	0.26	3d10/15 L=23 26,30,26
340	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.48	0.28	0.25	3d10/15 L=23 26,30,26
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.46	0.27	0.24	3d10/15 L=23 26,30,26
363	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.45	0.27	0.23	3d10/15 L=23 26,30,34
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.44	0.26	0.22	3d10/15 L=23 26,30,34
386	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.43	0.26	0.21	3d10/15 L=23 26,30,26
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.43	0.25	0.20	3d10/15 L=23 26,30,26
409	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.42	0.25	0.19	3d10/15 L=23 26,18,34
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.44	0.25	0.18	3d10/15 L=23 34,18,34
417	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.43	0.26	0.18	3d10/15 L=23 34,18,26
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.47	0.25	0.17	3d10/15 L=23 34,18,26
420	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.47	0.26	0.16	3d10/15 L=23 34,18,34
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.52	0.26	0.15	3d10/15 L=23 34,18,34
423	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.32	0.27	0.14	3d10/15 L=23 9,18,26
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.32	0.26	0.13	3d10/15 L=23 14,18,26
426	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.33	0.27	0.12	3d10/15 L=23 9,18,34
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.33	0.27	0.11	3d10/15 L=23 34,18,34
429	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.34	0.28	0.11	3d10/15 L=23 31,18,34
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.37	0.28	0.10	3d10/15 L=23 31,15,34
432	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.38	0.30	0.09	3d10/15 L=23 31,15,26
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.42	0.30	0.09	3d10/15 L=23 37,15,23
435	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.43	0.32	0.09	3d10/15 L=23 31,15,31
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.46	0.33	0.09	3d10/15 L=23 33,15,31
438	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.46	0.35	0.09	3d10/15 L=23 31,15,31
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.50	0.35	0.09	3d10/15 L=23 33,15,31
441	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.50	0.38	0.09	3d10/15 L=23 37,15,31
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.54	0.38	0.10	3d10/15 L=23 37,15,31
444	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.53	0.40	0.10	3d10/15 L=23 33,15,23
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.57	0.41	0.10	3d10/15 L=23 31,15,23
109	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.55	0.43	0.10	3d10/15 L=23 31,19,23
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.60	0.44	0.11	3d10/15 L=23 31,19,23
178	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.58	0.46	0.11	3d10/15 L=23 31,19,31
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.63	0.47	0.11	3d10/15 L=23 31,19,31
247	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.60	0.49	0.11	3d10/15 L=23 31,15,31
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.65	0.50	0.12	3d10/15 L=23 31,15,31
316	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.62	0.55	0.12	3d10/15 L=23 31,15,31
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.67	0.56	0.13	3d10/15 L=23 31,15,23
385	ok,ok	0.0	0.21	15.3	15.3	0.0	0.05	0.64	0.47	0.13	3d10/15 L=3 31,17,23
	s=1,m=3	23.5	0.21	15.3	15.3	0.0	0.05	0.69	0.47	0.14	3d10/15 L=3 31,17,23
							M_T= 1	**Z=428.0**	**P=1**	**P=11**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
69	ok,ok	0.0	0.64	15.3	15.3	0.0	0.12	0.94	0.61	0.09	3d10/5 L=60 32,10,38
	s=3,m=3	235.0	0.32	7.6	7.6	0.0	0.09	0.21	0.56	0.43	3d10/30 L=290 32,10,38
		470.0	0.64	15.3	15.3	0.0	0.12	0.93	0.61	0.09	3d10/5 L=60 33,10,38
70	ok,ok	0.0	0.74	15.3	17.8	0.0	0.13	0.96	0.57	0.12	3d10/5 L=60 33,29,38
	s=3,m=3	200.0	0.42	10.2	7.6	0.0	0.11	0.13	0.48	0.60	3d10/30 L=200 2,29,38
		400.0	0.74	15.3	17.8	0.0	0.13	0.95	0.57	0.12	3d10/5 L=60 38,29,38
1	ok,ok	0.0	0.74	15.3	17.8	0.0	0.13	0.92	0.72	0.14	3d10/5 L=60 35,38,38
	s=3,m=3	175.0	0.42	10.2	7.6	0.0	0.11	0.05	0.68	0.76	3d10/30 L=150 32,38,38
		350.0	0.74	17.8	17.8	0.0	0.12	0.88	0.68	0.13	3d10/5 L=60 35,38,38

2	ok,ok	0.0	0.74	10.2	17.8	0.0	0.14	0.95	0.48	0.08	3d10/5 L=60 35,22,38
	s=3,m=3	352.5	0.32	7.6	7.6	0.0	0.09	0.62	0.33	0.27	3d10/30 L=525 2,22,38
		705.0	0.74	12.7	17.8	0.0	0.13	0.95	0.46	0.08	3d10/5 L=60 35,22,38
							M_T= 2	**Z=428.0**	**P=1**	**P=3**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
9	ok,ok	0.0	0.64	15.3	15.3	0.0	0.12	0.90	0.52	0.09	3d10/5 L=60 12,21,38
	s=3,m=3	291.3	0.32	7.6	7.6	0.0	0.09	0.30	0.46	0.41	3d10/30 L=342 2,21,38
		582.5	0.74	12.7	17.8	0.0	0.13	0.87	0.56	0.10	3d10/5 L=60 12,21,38
3	ok,ok	0.0	0.85	15.3	20.4	0.0	0.14	0.89	0.50	0.08	3d10/5 L=60 7,16,38
	s=3,m=3	291.3	0.32	7.6	7.6	0.0	0.09	0.20	0.44	0.41	3d10/30 L=382 10,16,38
		582.5	0.64	15.3	15.3	0.0	0.12	0.94	0.47	0.07	3d10/5 L=60 10,16,38
							M_T= 5	**Z=428.0**	**P=11**	**P=13**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
17	ok,ok	0.0	0.64	15.3	15.3	0.0	0.12	0.91	0.36	0.08	3d10/5 L=60 22,33,38
	s=3,m=3	291.3	0.32	7.6	7.6	0.0	0.09	0.33	0.32	0.41	3d10/30 L=342 28,33,38
		582.5	0.74	12.7	17.8	0.0	0.13	0.86	0.40	0.09	3d10/5 L=60 22,33,38
16	ok,ok	0.0	0.85	15.3	20.4	0.0	0.14	0.95	0.48	0.10	3d10/5 L=60 17,38,38
	s=3,m=3	291.3	0.32	7.6	7.6	0.0	0.09	0.46	0.34	0.41	3d10/30 L=382 2,38,38
		582.5	0.74	15.3	17.8	0.0	0.13	0.89	0.46	0.10	3d10/5 L=60 19,38,38
							M_T= 7	**Z=428.0**	**P=4**	**P=5**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
25	ok,ok	0.0	0.95	12.7	22.9	0.0	0.17	0.90	0.76	0.10	3d10/5 L=60 9,38,38
	s=3,m=3	291.3	0.74	17.8	7.6	0.0	0.16	0.45	0.62	0.42	3d10/30 L=442 11,38,38
		582.5	0.74	17.8	10.2	0.0	0.14	0.84	0.64	0.07	3d10/5 L=60 2,38,38
26	ok,ok	0.0	0.74	17.8	10.2	0.0	0.14	0.87	0.65	0.07	3d10/5 L=60 2,28,38
	s=3,m=3	291.3	0.74	17.8	7.6	0.0	0.16	0.46	0.66	0.45	3d10/30 L=437 9,28,38
		582.5	1.06	12.7	25.4	0.0	0.18	0.87	0.79	0.11	3d10/5 L=60 11,28,38
							M_T= 8	**Z=428.0**	**P=6**	**P=7**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
37	ok,ok	0.0	0.85	10.2	20.4	0.0	0.16	0.85	0.74	0.09	3d10/5 L=60 10,33,38
	s=3,m=3	291.3	0.64	15.3	7.6	0.0	0.14	0.48	0.62	0.34	3d10/30 L=442 12,33,38
		582.5	0.53	12.7	7.6	0.0	0.12	0.81	0.63	0.06	3d10/5 L=60 26,33,38
38	ok,ok	0.0	0.53	12.7	7.6	0.0	0.12	0.81	0.64	0.06	3d10/5 L=60 24,29,38
	s=3,m=3	291.3	0.64	15.3	7.6	0.0	0.14	0.49	0.62	0.34	3d10/30 L=442 10,29,38
		582.5	0.85	10.2	20.4	0.0	0.16	0.85	0.74	0.09	3d10/5 L=60 12,29,38
							M_T= 9	**Z=428.0**	**P=8**	**P=10**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
45	ok,ok	0.0	0.74	12.7	17.8	0.0	0.13	0.94	0.45	0.08	3d10/5 L=60 19,26,38
	s=3,m=3	291.3	0.32	7.6	7.6	0.0	0.09	0.43	0.33	0.33	3d10/30 L=417 2,26,38
		582.5	0.74	10.2	17.8	0.0	0.14	0.95	0.47	0.09	3d10/5 L=60 19,26,38
39	ok,ok	0.0	0.85	10.2	20.4	0.0	0.16	0.89	0.52	0.10	3d10/5 L=60 16,38,38
	s=3,m=3	291.3	0.32	7.6	7.6	0.0	0.09	0.58	0.35	0.36	3d10/30 L=417 2,38,38
		582.5	0.74	12.7	17.8	0.0	0.13	0.90	0.48	0.09	3d10/5 L=60 17,38,38
							M_T= 12	**Z=428.0**	**P=3**	**P=13**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
53	ok,ok	0.0	0.74	12.7	17.8	0.0	0.13	0.93	0.57	0.10	3d10/5 L=60 23,12,38
	s=3,m=3	235.0	0.42	10.2	7.6	0.0	0.11	0.25	0.47	0.47	3d10/30 L=290 26,12,38
		470.0	0.64	15.3	15.3	0.0	0.12	0.95	0.53	0.09	3d10/5 L=60 23,12,38
54	ok,ok	0.0	0.74	17.8	17.8	0.0	0.12	0.91	0.57	0.11	3d10/5 L=60 28,12,38
	s=3,m=3	200.0	0.42	10.2	7.6	0.0	0.11	0.08	0.55	0.64	3d10/30 L=200 23,12,38
		400.0	0.74	15.3	17.8	0.0	0.13	0.93	0.60	0.12	3d10/5 L=60 28,12,38
55	ok,ok	0.0	0.74	15.3	17.8	0.0	0.13	0.92	0.74	0.15	3d10/5 L=60 29,26,38
	s=3,m=3	175.0	0.42	10.2	7.6	0.0	0.11	0.09	0.66	0.76	3d10/30 L=150 26,26,38
		350.0	0.74	17.8	17.8	0.0	0.12	0.87	0.70	0.14	3d10/5 L=60 29,26,38
56	ok,ok	0.0	0.74	12.7	17.8	0.0	0.13	0.86	0.41	0.07	3d10/5 L=60 29,19,38
	s=3,m=3	352.5	0.32	7.6	7.6	0.0	0.09	0.32	0.32	0.28	3d10/30 L=525 2,19,38
		705.0	0.74	12.7	17.8	0.0	0.13	0.88	0.41	0.07	3d10/5 L=60 28,19,38
							M_T= 13	**Z=428.0**	**P=2**	**P=12**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
57	ok,ok	0.0	1.06	12.7	25.4	0.0	0.18	0.90	0.95	0.14	3d10/5 L=60 2,12,38
	s=3,m=3	235.0	0.64	15.3	10.2	0.0	0.13	0.46	0.82	0.62	3d10/30 L=330 33,12,38
		470.0	0.95	22.9	12.7	0.0	0.17	0.86	0.76	0.09	3d10/5 L=60 2,12,38
58	ok,ok	0.0	0.93	28.0	15.3	0.0	0.16	0.45	0.42	0.12	3d10/5 L=60 2,13,38
	s=15,m=3	200.0	1.02	30.5	10.2	0.0	0.22	0.43	0.35	0.59	3d10/30 L=280 2,13,38
		400.0	0.76	22.9	12.7	0.0	0.15	0.61	0.44	0.13	3d10/5 L=60 33,13,38
59	ok,ok	0.0	0.74	17.8	10.2	0.0	0.14	0.84	0.84	0.11	3d10/5 L=60 2,16,38
	s=3,m=3	175.0	0.53	12.7	10.2	0.0	0.11	0.31	0.94	0.80	3d10/30 L=190 33,16,38
		350.0	1.06	12.7	25.4	0.0	0.18	0.83	1.00	0.17	3d10/5 L=60 2,14,16
68	ok,ok	0.0	0.85	10.2	20.4	0.0	0.16	0.86	0.48	0.10	3d10/5 L=60 24,19,38
	s=3,m=3	352.5	0.32	7.6	7.6	0.0	0.09	0.67	0.28	0.27	3d10/30 L=525 2,19,38
		705.0	0.64	10.2	15.3	0.0	0.13	0.94	0.45	0.09	3d10/5 L=60 25,19,38
							M_T= 3	**Z=835.0**	**P=1**	**P=3**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
8	ok,ok	0.0	0.42	10.2	10.2	0.0	0.10	0.88	0.49	0.06	3d10/5 L=60 13,22,38
	s=3,m=3	291.3	0.32	7.6	7.6	0.0	0.09	0.27	0.42	0.29	3d10/30 L=342 8,22,38
		582.5	0.53	7.6	12.7	0.0	0.12	0.80	0.53	0.07	3d10/5 L=60 12,22,38
4	ok,ok	0.0	0.64	7.6	15.3	0.0	0.14	0.91	0.53	0.08	3d10/5 L=60 7,28,38

	s=3,m=3	291.3	0.32	7.6	7.6	0.0	0.09	0.31	0.43	0.30	3d10/30 L=382 14,28,38
		582.5	0.42	10.2	10.2	0.0	0.10	0.93	0.48	0.06	3d10/5 L=60 7,28,38
							M_T= 4	**Z=835.0**	**P=1**	**P=11**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
13	ok,ok	0.0	0.42	7.6	10.2	0.0	0.11	0.89	0.58	0.06	3d10/5 L=60 33,10,38
	s=3,m=3	235.0	0.32	7.6	7.6	0.0	0.09	0.19	0.52	0.26	3d10/30 L=290 32,10,38
		470.0	0.42	7.6	10.2	0.0	0.11	0.92	0.58	0.06	3d10/5 L=60 32,10,38
14	ok,ok	0.0	0.42	10.2	10.2	0.0	0.10	0.93	0.42	0.08	3d10/5 L=60 38,23,38
	s=3,m=3	200.0	0.32	7.6	7.6	0.0	0.09	0.25	0.34	0.37	3d10/30 L=200 19,23,38
		400.0	0.42	10.2	10.2	0.0	0.10	0.90	0.42	0.08	3d10/5 L=60 33,23,38
15	ok,ok	0.0	0.32	7.6	7.6	0.0	0.09	0.98	0.43	0.06	3d10/5 L=60 38,38,38
	s=3,m=3	175.0	0.32	7.6	7.6	0.0	0.09	0.10	0.44	0.39	3d10/30 L=150 13,38,38
		350.0	0.42	7.6	10.2	0.0	0.11	0.88	0.47	0.07	3d10/5 L=60 38,38,38
21	ok,ok	0.0	0.53	7.6	12.7	0.0	0.12	0.88	0.43	0.07	3d10/5 L=60 38,22,38
	s=3,m=3	352.5	0.32	7.6	7.6	0.0	0.09	0.54	0.29	0.19	3d10/30 L=525 2,22,38
		705.0	0.53	7.6	12.7	0.0	0.12	0.82	0.43	0.07	3d10/5 L=60 35,22,38
							M_T= 6	**Z=835.0**	**P=11**	**P=13**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
33	ok,ok	0.0	0.42	10.2	10.2	0.0	0.10	0.94	0.30	0.06	3d10/5 L=60 22,13,38
	s=3,m=3	291.3	0.32	7.6	7.6	0.0	0.09	0.29	0.24	0.26	3d10/30 L=342 28,13,38
		582.5	0.42	7.6	10.2	0.0	0.11	0.97	0.32	0.06	3d10/5 L=60 19,13,38
20	ok,ok	0.0	0.53	10.2	12.7	0.0	0.11	0.93	0.32	0.06	3d10/5 L=60 17,7,38
	s=3,m=3	291.3	0.32	7.6	7.6	0.0	0.09	0.24	0.24	0.27	3d10/30 L=382 22,7,38
		582.5	0.53	10.2	12.7	0.0	0.11	0.85	0.32	0.06	3d10/5 L=60 17,7,38
							M_T= 10	**Z=835.0**	**P=8**	**P=10**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
44	ok,ok	0.0	0.42	7.6	10.2	0.0	0.11	0.89	0.39	0.07	3d10/5 L=60 22,26,38
	s=3,m=3	291.3	0.32	7.6	7.6	0.0	0.09	0.47	0.26	0.22	3d10/30 L=417 2,26,38
		582.5	0.53	7.6	12.7	0.0	0.12	0.90	0.41	0.07	3d10/5 L=60 19,26,38
40	ok,ok	0.0	0.53	7.6	12.7	0.0	0.12	0.90	0.41	0.07	3d10/5 L=60 17,32,38
	s=3,m=3	291.3	0.32	7.6	7.6	0.0	0.09	0.46	0.26	0.22	3d10/30 L=417 2,32,38
		582.5	0.42	7.6	10.2	0.0	0.11	0.88	0.39	0.07	3d10/5 L=60 16,32,38
							M_T= 11	**Z=835.0**	**P=3**	**P=13**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
49	ok,ok	0.0	0.42	7.6	10.2	0.0	0.11	0.84	0.48	0.06	3d10/5 L=60 23,12,38
	s=3,m=3	235.0	0.32	7.6	7.6	0.0	0.09	0.22	0.43	0.26	3d10/30 L=290 26,12,38
		470.0	0.42	7.6	10.2	0.0	0.11	0.98	0.48	0.06	3d10/5 L=60 26,12,38
50	ok,ok	0.0	0.42	10.2	10.2	0.0	0.10	0.92	0.40	0.07	3d10/5 L=60 28,12,38
	s=3,m=3	200.0	0.32	7.6	7.6	0.0	0.09	0.19	0.36	0.37	3d10/30 L=200 17,12,38
		400.0	0.42	10.2	10.2	0.0	0.10	0.85	0.40	0.07	3d10/5 L=60 23,12,38
51	ok,ok	0.0	0.32	7.6	7.6	0.0	0.09	0.96	0.45	0.06	3d10/5 L=60 29,35,38
	s=3,m=3	175.0	0.32	7.6	7.6	0.0	0.09	0.10	0.46	0.39	3d10/30 L=150 7,35,38
		350.0	0.42	7.6	10.2	0.0	0.11	0.85	0.49	0.07	3d10/5 L=60 28,35,38
52	ok,ok	0.0	0.53	7.6	12.7	0.0	0.12	0.88	0.43	0.07	3d10/5 L=60 28,16,38
	s=3,m=3	352.5	0.32	7.6	7.6	0.0	0.09	0.56	0.28	0.19	3d10/30 L=525 2,16,38
		705.0	0.53	7.6	12.7	0.0	0.12	0.81	0.43	0.07	3d10/5 L=60 29,16,38
							M_T= 14	**Z=835.0**	**P=4**	**P=5**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
60	ok,ok	0.0	0.74	10.2	17.8	0.0	0.14	0.93	0.62	0.09	3d10/5 L=60 9,38,38
	s=3,m=3	291.3	0.53	12.7	7.6	0.0	0.12	0.55	0.49	0.34	3d10/30 L=442 11,38,38
		582.5	0.64	15.3	7.6	0.0	0.14	0.82	0.52	0.06	3d10/5 L=60 2,38,38
61	ok,ok	0.0	0.64	15.3	7.6	0.0	0.14	0.82	0.58	0.08	3d10/5 L=60 2,28,38
	s=3,m=3	291.3	0.64	15.3	7.6	0.0	0.14	0.59	0.52	0.37	3d10/30 L=437 13,28,38
		582.5	0.85	10.2	20.4	0.0	0.16	0.93	0.70	0.11	3d10/5 L=60 7,28,38
							M_T= 15	**Z=835.0**	**P=6**	**P=7**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
62	ok,ok	0.0	0.64	7.6	15.3	0.0	0.14	0.85	0.63	0.08	3d10/5 L=60 10,33,38
	s=3,m=3	291.3	0.42	10.2	7.6	0.0	0.11	0.64	0.51	0.26	3d10/30 L=442 12,33,38
		582.5	0.42	10.2	7.6	0.0	0.11	0.82	0.57	0.06	3d10/5 L=60 26,33,38
63	ok,ok	0.0	0.53	12.7	7.6	0.0	0.12	0.60	0.63	0.07	3d10/5 L=60 32,23,38
	s=3,m=3	291.3	0.53	12.7	7.6	0.0	0.12	0.62	0.54	0.32	3d10/30 L=442 10,23,38
		582.5	0.74	10.2	17.8	0.0	0.14	0.79	0.71	0.10	3d10/5 L=60 12,23,38
							M_T= 16	**Z=835.0**	**P=2**	**P=12**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
64	ok,ok	0.0	0.85	10.2	20.4	0.0	0.16	0.87	0.69	0.11	3d10/5 L=60 2,13,38
	s=3,m=3	235.0	0.53	12.7	10.2	0.0	0.11	0.35	0.60	0.52	3d10/30 L=330 25,13,38
		470.0	0.85	20.4	10.2	0.0	0.16	0.88	0.52	0.07	3d10/5 L=60 2,13,38
65	ok,ok	0.0	1.06	25.4	12.7	0.0	0.18	0.45	0.42	0.10	3d10/5 L=60 2,13,38
	s=3,m=3	200.0	1.06	25.4	7.6	0.0	0.24	0.44	0.39	0.55	3d10/30 L=280 2,13,38
		400.0	0.74	17.8	12.7	0.0	0.13	0.39	0.49	0.12	3d10/5 L=60 33,13,38
66	ok,ok	0.0	0.64	15.3	7.6	0.0	0.14	0.89	0.64	0.10	3d10/5 L=60 2,22,38
	s=3,m=3	175.0	0.32	7.6	7.6	0.0	0.09	0.31	0.67	0.66	3d10/30 L=190 33,22,38
		350.0	0.85	10.2	20.4	0.0	0.16	0.86	0.71	0.12	3d10/5 L=60 2,22,38
67	ok,ok	0.0	0.85	10.2	20.4	0.0	0.16	0.76	0.52	0.10	3d10/5 L=60 28,19,38
	s=3,m=3	352.5	0.42	10.2	7.6	0.0	0.11	0.62	0.26	0.25	3d10/30 L=525 2,19,38
		705.0	0.53	7.6	12.7	0.0	0.12	0.75	0.49	0.10	3d10/5 L=60 25,19,38

Trave	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc
	1.06	33.08	38.17	0.0	0.24	1.00	1.00	0.80

Trave	M negativo i	M positivo i	M negativo f	M positivo f	Luce per V	V M-i M+f	V M+i M-f	VEd,min	VEd,max	Vr1	As
	daN cm	daN cm	daN cm	daN cm	cm	daN	daN	daN	daN	daN	cm2
1	3.572e+06	3.076e+06	3.574e+06	3.574e+06	269.99	2.911e+04	2.709e+04	0.0	0.0	0.0	0.0
2	3.566e+06	2.075e+06	3.571e+06	2.576e+06	645.00	1.047e+04	9628.35	0.0	0.0	0.0	0.0
3	4.068e+06	3.076e+06	3.075e+06	3.075e+06	502.50	1.564e+04	1.346e+04	0.0	0.0	0.0	0.0
4	3.069e+06	1.575e+06	2.075e+06	2.075e+06	502.50	1.126e+04	7990.08	0.0	0.0	0.0	0.0
8	2.075e+06	2.075e+06	2.574e+06	1.575e+06	462.50	8680.80	1.106e+04	0.0	0.0	0.0	0.0
9	3.075e+06	3.075e+06	3.571e+06	2.576e+06	462.50	1.344e+04	1.581e+04	0.0	0.0	0.0	0.0
13	2.076e+06	1.574e+06	2.076e+06	1.574e+06	410.00	9792.65	9792.65	0.0	0.0	0.0	0.0
14	2.075e+06	2.075e+06	2.075e+06	2.075e+06	320.00	1.427e+04	1.427e+04	0.0	0.0	0.0	0.0
15	1.574e+06	1.574e+06	2.076e+06	1.574e+06	269.99	1.283e+04	1.487e+04	0.0	0.0	0.0	0.0
16	4.068e+06	3.076e+06	3.572e+06	3.076e+06	502.50	1.564e+04	1.455e+04	0.0	0.0	0.0	0.0
17	3.075e+06	3.075e+06	3.571e+06	2.576e+06	462.50	1.344e+04	1.581e+04	0.0	0.0	0.0	0.0
20	2.575e+06	2.075e+06	2.575e+06	2.075e+06	502.50	1.018e+04	1.018e+04	0.0	0.0	0.0	0.0
21	2.574e+06	1.575e+06	2.574e+06	1.575e+06	645.00	7075.06	7075.06	0.0	0.0	0.0	0.0
25	4.552e+06	2.576e+06	2.075e+06	3.566e+06	562.50	1.587e+04	9094.59	0.0	0.0	0.0	0.0
26	2.075e+06	3.566e+06	5.036e+06	2.576e+06	557.50	9176.33	1.697e+04	0.0	0.0	0.0	0.0
33	2.075e+06	2.075e+06	2.076e+06	1.574e+06	462.50	8679.65	9872.93	0.0	0.0	0.0	0.0
37	4.055e+06	2.075e+06	1.575e+06	2.574e+06	562.50	1.296e+04	7137.60	0.0	0.0	0.0	0.0
38	1.575e+06	2.574e+06	4.055e+06	2.075e+06	562.50	7137.60	1.296e+04	0.0	0.0	0.0	0.0
39	4.055e+06	2.075e+06	3.571e+06	2.576e+06	537.50	1.357e+04	1.155e+04	0.0	0.0	0.0	0.0
40	2.574e+06	1.575e+06	2.076e+06	1.574e+06	537.50	8489.08	7470.73	0.0	0.0	0.0	0.0
44	2.076e+06	1.574e+06	2.574e+06	1.575e+06	537.50	7470.73	8489.08	0.0	0.0	0.0	0.0
45	3.571e+06	2.576e+06	3.566e+06	2.075e+06	537.50	1.155e+04	1.257e+04	0.0	0.0	0.0	0.0
49	2.076e+06	1.574e+06	2.076e+06	1.574e+06	410.00	9792.65	9792.65	0.0	0.0	0.0	0.0
50	2.075e+06	2.075e+06	2.075e+06	2.075e+06	320.00	1.427e+04	1.427e+04	0.0	0.0	0.0	0.0
51	1.574e+06	1.574e+06	2.076e+06	1.574e+06	269.99	1.283e+04	1.487e+04	0.0	0.0	0.0	0.0
52	2.574e+06	1.575e+06	2.574e+06	1.575e+06	645.00	7075.06	7075.06	0.0	0.0	0.0	0.0
53	3.571e+06	2.576e+06	3.075e+06	3.075e+06	410.00	1.783e+04	1.516e+04	0.0	0.0	0.0	0.0
54	3.574e+06	3.574e+06	3.572e+06	3.076e+06	320.00	2.286e+04	2.457e+04	0.0	0.0	0.0	0.0
55	3.572e+06	3.076e+06	3.574e+06	3.574e+06	269.99	2.911e+04	2.709e+04	0.0	0.0	0.0	0.0
56	3.571e+06	2.576e+06	3.571e+06	2.576e+06	645.00	1.048e+04	1.048e+04	0.0	0.0	0.0	0.0
57	5.036e+06	2.576e+06	2.576e+06	4.552e+06	450.00	2.344e+04	1.259e+04	0.0	0.0	0.0	0.0
58	3.095e+06	5.566e+06	2.595e+06	4.581e+06	400.00	2.111e+04	2.244e+04	0.0	0.0	0.0	0.0
59	2.075e+06	3.566e+06	5.036e+06	2.576e+06	309.99	1.650e+04	3.052e+04	0.0	0.0	0.0	0.0
60	3.566e+06	2.075e+06	1.575e+06	3.069e+06	562.50	1.297e+04	7137.39	0.0	0.0	0.0	0.0
61	1.575e+06	3.069e+06	4.055e+06	2.075e+06	557.50	7201.87	1.406e+04	0.0	0.0	0.0	0.0
62	3.069e+06	1.575e+06	1.574e+06	2.076e+06	562.50	1.006e+04	6157.81	0.0	0.0	0.0	0.0
63	1.575e+06	2.574e+06	3.566e+06	2.075e+06	562.50	7137.13	1.201e+04	0.0	0.0	0.0	0.0
64	4.055e+06	2.075e+06	2.075e+06	4.055e+06	450.00	1.982e+04	1.015e+04	0.0	0.0	0.0	0.0
65	2.576e+06	5.036e+06	2.576e+06	3.571e+06	400.00	1.690e+04	2.093e+04	0.0	0.0	0.0	0.0
66	1.575e+06	3.069e+06	4.055e+06	2.075e+06	309.99	1.295e+04	2.528e+04	0.0	0.0	0.0	0.0
67	4.055e+06	2.075e+06	2.574e+06	1.575e+06	645.00	9600.15	7928.92	0.0	0.0	0.0	0.0
68	4.055e+06	2.075e+06	3.072e+06	2.075e+06	645.00	1.045e+04	8778.88	0.0	0.0	0.0	0.0
69	3.075e+06	3.075e+06	3.075e+06	3.075e+06	410.00	1.650e+04	1.650e+04	0.0	0.0	0.0	0.0
70	3.572e+06	3.076e+06	3.572e+06	3.076e+06	320.00	2.285e+04	2.285e+04	0.0	0.0	0.0	0.0

Trave	M negativo i	M positivo i	M negativo f	M positivo f	V M-i M+f	V M+i M-f	VEd,min	VEd,max	Vr1	As
							0.0			
	5.036e+06	5.566e+06	5.036e+06	4.581e+06	2.911e+04	3.052e+04		0.0	0.0	0.0

STATI LIMITE D' ESERCIZIO

LEGENDA TABELLA STATI LIMITE D' ESERCIZIO

In tabella vengono riportati i valori di interesse per il controllo degli stati limite d'esercizio.

In particolare vengono riportati, in relazione al tipo di elemento strutturale, i risultati relativi alle tre categorie di combinazione considerate:

- Combinazioni rare
- Combinazioni frequenti
- Combinazioni quasi permanenti.

I valori di interesse sono i seguenti:

rRfck	rapporto tra la massima compressione nel calcestruzzo e la tensione fck in combinazioni rare	[*normalizzato a 1*]
rRfyk	rapporto tra la massima tensione nell'acciaio e la tensione fyk in combinazioni rare	[*normalizzato a 1*]
rPfck	rapporto tra la massima compressione nel calcestruzzo e la tensione fck in combinazioni quasi permanenti	[*normalizzato a 1*]
wR	apertura caratteristica delle fessure in combinazioni rare	[*mm*]
wF	apertura caratteristica delle fessure in combinazioni frequenti	[*mm*]
wP	apertura caratteristica delle fessure in combinazioni quasi permanenti	[*mm*]
dR	massima deformazione in combinazioni rare	
dF	massima deformazione in combinazioni frequenti	
dP	massima deformazione in combinazioni quasi permanenti	

Per ognuno dei nove valori soprariportati viene indicata (Rif.cmb) la combinazione in cui si è verificato.

In relazione al tipo di elemento strutturale i valori sono selezionati nel modo seguente:

pilastri	**rRfck**	**rRfyk**	**rPfck**	per sezioni significative
travi	**rRfck**	**rRfyk**	**rPfck**	per sezioni significative
	wR	**wF**	**wP**	per sezioni significative
	dR	**dF**	**dP**	massimi in campata
setti e gusci	**rRfck**	**rRfyk**	**rPfck**	massimi nei nodi dell'elemento
	wR	**wF**	**wP**	massimi nei nodi dell'elemento

Si precisa che i valori di massima deformazione per travi sono riferiti al piano verticale (piano locale 1-2 con momenti flettenti 3-3).

Pilas.	Pos.	rRfck	rRfyk	rPfck	Rif. cmb	Pos.	rRfck	rRfyk	rPfck	Rif. cmb
	cm					cm				
5	0.0	0.12	0.08	0.16	5,6,73	214.0	0.19	0.12	0.24	6,6,74
	428.0	0.26	0.16	0.31	6,6,74					
6	0.0	0.09	0.06	0.11	6,6,74	214.0	0.07	0.05	0.09	6,6,74
	428.0	0.07	0.04	0.08	6,6,74					
7	0.0	0.10	0.06	0.13	6,6,74	214.0	0.07	0.05	0.09	6,6,74
	428.0	0.05	0.03	0.06	6,6,74					
10	0.0	0.18	0.14	0.23	6,6,74	203.5	0.02	0.02	0.03	5,5,73
	407.0	0.20	0.18	0.26	6,6,74					
11	0.0	0.63	0.61	0.79	6,6,74	203.5	0.08	0.05	0.11	5,5,73
	407.0	0.69	0.68	0.88	6,6,74					
12	0.0	0.17	0.13	0.21	6,6,74	203.5	0.03	0.02	0.04	5,5,73
	407.0	0.21	0.19	0.28	6,6,74					
18	0.0	0.15	0.09	0.19	6,6,74	214.0	0.15	0.10	0.19	6,6,74
	428.0	0.14	0.09	0.17	6,6,74					
19	0.0	0.13	0.08	0.16	6,6,74	214.0	0.16	0.10	0.20	6,6,74
	428.0	0.18	0.11	0.21	6,6,74					
22	0.0	0.55	0.58	0.68	6,6,74	203.5	0.07	0.04	0.09	5,5,73
	407.0	0.55	0.56	0.71	6,6,74					
23	0.0	0.20	0.17	0.25	6,6,74	203.5	0.03	0.02	0.04	5,5,73
	407.0	0.23	0.23	0.30	6,6,74					
24	0.0	0.47	0.56	0.58	6,6,74	203.5	0.07	0.05	0.10	5,5,73
	407.0	0.51	0.61	0.66	6,6,74					
27	0.0	0.07	0.05	0.10	6,6,74	214.0	0.08	0.05	0.10	6,6,74
	428.0	0.08	0.05	0.10	6,6,74					
28	0.0	0.08	0.06	0.11	6,6,74	214.0	0.12	0.08	0.15	6,6,74
	428.0	0.15	0.10	0.18	6,6,74					
29	0.0	0.29	0.21	0.36	6,6,74	203.5	0.06	0.04	0.07	5,6,73
	407.0	0.33	0.29	0.42	6,6,74					
30	0.0	0.10	0.07	0.13	6,6,74	214.0	0.13	0.08	0.16	6,6,74
	428.0	0.15	0.09	0.18	6,6,74					
31	0.0	0.11	0.07	0.14	6,6,74	214.0	0.13	0.09	0.17	6,6,74
	428.0	0.14	0.09	0.17	6,6,74					
32	0.0	0.07	0.05	0.10	6,6,74	214.0	0.08	0.05	0.10	6,6,74
	428.0	0.08	0.05	0.09	6,6,74					
34	0.0	0.47	0.56	0.59	6,6,74	203.5	0.06	0.04	0.08	5,5,73
	407.0	0.47	0.54	0.61	6,6,74					
35	0.0	0.18	0.12	0.23	6,6,74	203.5	0.04	0.03	0.06	6,6,74
	407.0	0.24	0.22	0.31	6,6,74					
36	0.0	0.51	0.58	0.63	6,6,74	203.5	0.06	0.04	0.08	5,5,73
	407.0	0.51	0.58	0.65	6,6,74					
41	0.0	0.19	0.13	0.24	6,6,74	214.0	0.21	0.15	0.26	6,6,74
	428.0	0.22	0.16	0.27	6,6,74					
42	0.0	0.09	0.06	0.12	6,6,74	214.0	0.10	0.07	0.12	6,6,74
	428.0	0.12	0.08	0.15	6,6,74					
43	0.0	0.09	0.06	0.11	6,6,74	214.0	0.10	0.07	0.12	6,6,74
	428.0	0.10	0.07	0.12	6,6,74					
46	0.0	0.27	0.18	0.33	6,6,74	203.5	0.05	0.03	0.06	5,5,73
	407.0	0.28	0.20	0.36	6,6,74					
...										
48	407.0	0.27	0.20	0.35	6,6,74	203.5	0.05	0.03	0.06	5,5,73
Pilas.		**rRfck**	**rRfyk**	**rPfck**			**rRfck**	**rRfyk**	**rPfck**	
		0.69	0.68	0.88						

Trave	Pos.	rRfck	rRfyk	rPfck	Rif. cmb	wR	wF	wP	Rif. cmb	dR	dF	dP	Rif. cmb
	cm					mm	mm	mm		cm	cm	cm	
1	0.0	0.03	0.02	0.03	6,6,74	0.0	0.0	0.0	0,0,0	-7.56e-03	-6.98e-03	-6.79e-03	6,72,74
	175.0	0.02	0.02	0.03	6,6,74	0.0	0.0	0.0	0,0,0				
	350.0	0.04	0.02	0.04	6,6,74	0.0	0.0	0.0	0,0,0				
2	0.0	0.19	0.31	0.23	6,6,74	0.07	0.08	0.08	6,72,74	-0.39	-0.34	-0.33	6,72,74
	352.5	0.20	0.56	0.24	6,6,74	0.20	0.20	0.19	6,72,74				
	705.0	0.12	0.23	0.15	6,6,74	0.0	0.0	0.0	0,0,0				
3	0.0	0.06	0.09	0.07	6,6,74	0.0	0.0	0.0	0,0,0	-0.05	-0.04	-0.04	6,72,74
	291.3	0.06	0.18	0.08	6,6,74	0.0	0.0	0.0	0,0,0				
	582.5	0.02	0.06	0.03	6,6,74	0.0	0.0	0.0	0,0,0				
4	0.0	0.11	0.15	0.15	6,6,74	0.0	0.0	0.0	0,0,0	-0.08	-0.08	-0.08	6,72,74
	291.3	0.12	0.24	0.16	6,6,74	0.0	0.0	0.0	0,0,0				
	582.5	0.05	0.08	0.07	6,6,74	0.0	0.0	0.0	0,0,0				
8	0.0	0.05	0.05	0.06	6,6,74	0.0	0.0	0.0	0,0,0	-0.06	-0.06	-0.06	6,72,74
	291.3	0.10	0.17	0.14	6,6,74	0.0	0.0	0.0	0,0,0				
	582.5	0.10	0.13	0.14	6,6,74	0.0	0.0	0.0	0,0,0				

9	0.0	0.04	0.08	0.04	6,6,74	0.0	0.0	0.0	0,0,0	-0.07	-0.07	-0.06	6,72,74
	291.3	0.11	0.27	0.13	6,6,74	0.0	0.0	0.0	0,0,0				
	582.5	0.08	0.12	0.09	6,6,74	0.0	0.0	0.0	0,0,0				
13	0.0	0.02	0.05	0.02	6,6,74	0.0	0.0	0.0	0,0,0	-0.04	-0.04	-0.04	6,72,74
	235.0	0.06	0.15	0.08	6,6,74	0.0	0.0	0.0	0,0,0				
	470.0	0.04	0.10	0.06	5,5,73	0.0	0.0	0.0	0,0,0				
14	0.0	0.04	0.13	0.06	6,6,74	0.0	0.0	0.0	0,0,0	-0.02	-0.02	-0.02	6,72,74
	200.0	0.05	0.18	0.07	6,6,74	0.0	0.0	0.0	0,0,0				
	400.0	0.01	0.08	0.02	5,6,73	0.0	0.0	0.0	0,0,0				
15	0.0	0.03	0.02	0.04	6,6,74	0.0	0.0	0.0	0,0,0	-0.01	-0.01	-9.82e-03	6,72,74
	175.0	0.02	0.01	0.03	6,6,74	0.0	0.0	0.0	0,0,0				
	350.0	0.04	0.03	0.06	6,6,74	0.0	0.0	0.0	0,0,0				
16	0.0	0.11	0.18	0.13	6,6,74	0.0	0.0	0.0	0,0,0	-0.10	-0.10	-0.09	6,72,74
	291.3	0.15	0.42	0.18	6,6,74	0.0	0.0	0.0	0,0,0				
	582.5	0.08	0.16	0.10	6,6,74	0.0	0.0	0.0	0,0,0				
17	0.0	0.04	0.07	0.05	6,6,74	0.0	0.0	0.0	0,0,0	-0.04	-0.04	-0.04	6,72,74
	291.3	0.07	0.18	0.09	6,6,74	0.0	0.0	0.0	0,0,0				
	582.5	0.06	0.10	0.08	6,6,74	0.0	0.0	0.0	0,0,0				
20	0.0	0.06	0.12	0.08	6,5,74	0.0	0.0	0.0	0,0,0	-0.05	-0.05	-0.05	5,71,73
	291.3	0.08	0.20	0.10	6,6,74	0.0	0.0	0.0	0,0,0				
	582.5	0.06	0.12	0.08	6,6,74	0.0	0.0	0.0	0,0,0				
21	0.0	0.21	0.38	0.28	6,6,74	0.10	0.12	0.12	6,72,74	-0.34	-0.40	-0.40	6,72,74
	352.5	0.20	0.49	0.26	6,6,74	0.18	0.18	0.18	6,72,74				
	705.0	0.11	0.21	0.14	6,6,74	0.0	0.0	0.0	0,0,0				
25	0.0	0.47	0.74	0.57	6,6,74	0.23	0.22	0.22	6,72,74	-3.06	-3.01	-2.92	6,72,74
	291.3	0.09	0.38	0.11	6,6,74	0.10	0.10	0.10	6,72,74				
	582.5	0.36	0.72	0.44	6,6,74	0.23	0.23	0.22	6,72,74				
26	0.0	0.41	0.74	0.49	6,6,74	0.24	0.24	0.23	6,72,74	2.65	2.61	2.61	6,72,74
	291.3	0.07	0.31	0.08	6,6,74	0.07	0.08	0.08	6,72,74				
	582.5	0.51	0.69	0.61	6,6,74	0.21	0.20	0.20	6,72,74				
33	0.0	0.05	0.11	0.06	6,6,74	0.0	0.0	0.0	0,0,0	-0.05	-0.05	-0.05	6,72,74
	291.3	0.07	0.19	0.09	6,6,74	0.0	0.0	0.0	0,0,0				
	582.5	0.06	0.14	0.09	5,5,73	0.0	0.0	0.0	0,0,0				
...													
445	23.5	0.0	0.28	0.0	0,6,0	0.0	0.0	0.0	0,0,0	-8.60e-03	-8.33e-03	-8.24e-03	6,72,74
Trave		**rRfck**	**rRfyk**	**rPfck**		**wR**	**wF**	**wP**		**dR**	**dF**	**dP**	
										-3.35	-3.57	-3.56	
		0.76	0.80	1.00		0.26	0.28	0.28		3.20	3.41	3.40	

Relazione di calcolo strutturale impostata e redatta secondo le modalità previste nel D.M. 17 Gennaio 2018 cap. 10 “Redazione dei progetti strutturali esecutivi e delle relazioni di calcolo”.

Origine e Caratteristiche dei Codici di Calcolo	
Codice di calcolo:	PRO_SAP PROfessional Structural Analysis Program
Versione:	PROFESSIONAL (build 2020-09-190)
Produttore- Distributore:	2S.I. Software e Servizi per l’Ingegneria s.r.l. Via Garibaldi, 90 44121 Ferrara FE (Italy) Tel. +39 0532 200091 www.2si.it
Codice Licenza:	Licenza dsi4693

Descrizione	
Progetto	Lavori di demolizione e ricostruzione dell'Istituto Tecnico Agrario A.Pugliese
Ubicazione	Comune di GIZZERIA (CZ) (Regione CALABRIA)
	Località GIZZERIA (CZ)
	Longitudine 16.152, Latitudine 38.968
Progettista	COICO

In merito al punto 10.2 delle Norme Tecniche per le Costruzioni (*Affidabilità dei codici utilizzati*), si fa riferimento al **Documento di Affidabilità** “Test di validazione del software di calcolo PRO_SAP e dei moduli aggiuntivi PRO_SAP Modulo Geotecnico, PRO_CAD nodi acciaio e PRO_MST” - versione Agosto 2020, disponibile per il download sul sito: https://www.2si.it/it/prodotti/affidabilita/

INTESTAZIONE E CONTENUTI DELLA RELAZIONE

Progetto
Lavori di demolizione e ricostruzione dell'Istituto Tecnico Agrario A.Pugliese

Contenuti della relazione:
RELAZIONE DI CALCOLO STRUTTURALE
- Origine e Caratteristiche dei Codici di Calcolo
- Affidabilità dei codici utilizzati
- Validazione dei codici
- Tipo di analisi svolta
- Modalità di presentazione dei risultati
- Informazioni generali sull'elaborazione
- Giudizio motivato di accettabilità dei risultati
STAMPA DEI DATI DI INGRESSO
- Normative prese a riferimento
- Criteri adottati per le misure di sicurezza
- Criteri seguiti nella schematizzazione della struttura, dei vincoli e delle sconessioni
- Interazione tra terreno e struttura
- Legami costitutivi adottati per la modellazione dei materiali e dei terreni
- Schematizzazione delle azioni, condizioni e combinazioni di carico
- Metodologie numeriche utilizzate per l' analisi strutturale
-Metodologie numeriche utilizzate per la progettazione e la verifica degli elementi strutturali
STAMPA DEI RISULTATI

Il Progettista:

RELAZIONE DI CALCOLO STRUTTURALE

Premessa

La presente relazione di calcolo strutturale, in conformità al §10.1 del DM 17/01/18, è comprensiva di una descrizione generale dell'opera e dei criteri generali di analisi e verifica. Segue inoltre le indicazioni fornite al §10.2 del DM stesso per quanto concerne analisi e verifiche svolte con l'ausilio di codici di calcolo.

Nella presente parte sono riportati i principali elementi di inquadramento del progetto esecutivo riguardante le strutture, in relazione agli strumenti urbanistici, al progetto architettonico, al progetto delle componenti tecnologiche in generale ed alle prestazioni attese dalla struttura.

Descrizione generale dell'opera

Descrizione generale dell'opera	
Fabbricato ad uso	
Ubicazione	Comune di GIZZERIA (CZ) (Regione CALABRIA)
	Località GIZZERIA (CZ)
	Longitudine 16.152, Latitudine 38.968
Numero di piani	Fuori terra 2
	Interrati
	le dimensioni dell'opera in pianta sono racchiuse in un rettangolo di

Parametri della struttura			
Classe d'uso	Vita Vn [anni]	Coeff. Uso	Periodo Vr [anni]
III	50.0	1.5	75.0

Quadro normativo di riferimento adottato

Le norme ed i documenti assunti quale riferimento per la progettazione strutturale vengono indicati di seguito.

Nel capitolo "normativa di riferimento" è comunque presente l'elenco completo delle normative disponibili.

Progetto-verifica degli elementi	
Progetto cemento armato	D.M. 17-01-2018
Progetto acciaio	D.M. 17-01-2018
Progetto legno	D.M. 17-01-2018
Progetto muratura	D.M. 17-01-2018
Azione sismica	
Norma applicata per l' azione sismica	D.M. 17-01-2018

Azioni di progetto sulla costruzione

Nei capitoli “modellazione delle azioni” e “schematizzazione dei casi di carico” sono indicate le azioni sulla costruzioni.

Nel prosieguo si indicano tipo di analisi strutturale condotta (statico,dinamico, lineare o non lineare) e il metodo adottato per la risoluzione del problema strutturale nonché le metodologie seguite per la verifica o per il progetto-verifica delle sezioni. Si riportano le combinazioni di carico adottate e, nel caso di calcoli non lineari, i percorsi di carico seguiti; le configurazioni studiate per la struttura in esame *sono risultate effettivamente esaustive per la progettazione-verifica.*

La verifica della sicurezza degli elementi strutturali avviene con i metodi della scienza delle costruzioni. L’analisi strutturale è condotta con il metodo degli spostamenti per la valutazione dello stato tensodeformativo indotto da carichi statici. L’analisi strutturale è condotta con il metodo dell’analisi modale e dello spettro di risposta in termini di accelerazione per la valutazione dello stato tensodeformativo indotto da carichi dinamici (tra cui quelli di tipo sismico).

L’analisi strutturale viene effettuata con il metodo degli elementi finiti. Il metodo sopraindicato si basa sulla schematizzazione della struttura in elementi connessi solo in corrispondenza di un numero prefissato di punti denominati nodi. I nodi sono definiti dalle tre coordinate cartesiane in un sistema di riferimento globale. Le incognite del problema (nell’ambito del metodo degli spostamenti) sono le componenti di spostamento dei nodi riferite al sistema di riferimento globale (traslazioni secondo X, Y, Z, rotazioni attorno X, Y, Z). La soluzione del problema si ottiene con un sistema di equazioni algebriche lineari i cui termini noti sono costituiti dai carichi agenti sulla struttura opportunamente concentrati ai nodi:

K * u = F dove **K** = matrice di rigidezza

u = vettore spostamenti nodali

F = vettore forze nodali

Dagli spostamenti ottenuti con la risoluzione del sistema vengono quindi dedotte le sollecitazioni e/o le tensioni di ogni elemento, riferite generalmente ad una terna locale all’elemento stesso.

Il sistema di riferimento utilizzato è costituito da una terna cartesiana destrorsa XYZ. Si assume l’asse Z verticale ed orientato verso l'alto.

Gli elementi utilizzati per la modellazione dello schema statico della struttura sono i seguenti:

Elemento tipo ***TRUSS*** (biella-D2)

Elemento tipo ***BEAM*** (trave-D2)

Elemento tipo ***MEMBRANE*** (membrana-D3)

Elemento tipo ***PLATE*** (piastra-guscio-D3)

Elemento tipo ***BOUNDARY*** (molla)

Elemento tipo ***STIFFNESS*** (matrice di rigidezza)

Elemento tipo ***BRICK*** (elemento solido)

Elemento tipo ***SOLAIO*** (macro elemento composto da più membrane)

Modello numerico

In questa parte viene descritto il modello numerico utilizzato (o i modelli numerici utilizzati) per l’analisi della struttura. La presentazione delle informazioni deve essere, coerentemente con le prescrizioni del paragrafo 10.2 e relativi sottoparagrafi delle NTC-18, tale da garantirne la leggibilità, la corretta interpretazione e la riproducibilità

Completare

Tipo di analisi strutturale	
Carichi verticali	SI
Sismica statica lineare	NO
Sismica dinamica lineare	SI
Sismica statica non lineare (prop. masse)	NO
Sismica statica non lineare (prop. modo)	NO
Sismica statica non lineare (triangolare)	NO
Non linearità geometriche (fattore P delta)	SI

Di seguito si indicano l'origine e le caratteristiche dei codici di calcolo utilizzati riportando titolo, produttore e distributore, versione, estremi della licenza d'uso:

Informazioni sul codice di calcolo	
Titolo:	PRO_SAP PROfessional Structural Analysis Program
Versione:	PROFESSIONAL (build 2020-09-190)
Produttore-Distributore:	2S.I. Software e Servizi per l'Ingegneria s.r.l., Ferrara
Dati utente finale:	******* COMPLETARE *******
Codice Utente:	******* COMPLETARE *******
Codice Licenza:	Licenza dsi4693

Un attento esame preliminare della documentazione a corredo del software ***ha consentito di valutarne l'affidabilità e soprattutto l'idoneità al caso specifico***. La documentazione, fornita dal produttore e distributore del software, contiene una esauriente descrizione delle basi teoriche e degli algoritmi impiegati, l'individuazione dei campi d'impiego, nonché casi prova interamente risolti e commentati, corredati dei file di input necessari a riprodurre l'elaborazione:

Affidabilità dei codici utilizzati
2S.I. ha verificato l'affidabilità e la robustezza del codice di calcolo attraverso un numero significativo di casi prova in cui i risultati dell'analisi numerica sono stati confrontati con soluzioni teoriche. E' possibile reperire la documentazione contenente alcuni dei più significativi casi trattati al seguente link: https://www.2si.it/it/prodotti/affidabilita/

Modellazione della geometria e proprietà meccaniche:	
nodi	5241
elementi D2 (per aste, travi, pilastri…)	586
elementi D3 (per pareti, platee, gusci…)	5022
elementi solaio	13
elementi solidi	0

Dimensione del modello strutturale [cm]:	
X min =	-116.50
Xmax =	1281.50
Ymin =	-105.84
Ymax =	2078.34
Zmin =	0.00
Zmax =	1200.00
Strutture verticali:	
Elementi di tipo asta	NO
Pilastri	SI
Pareti	SI
Setti (a comportamento membranale)	NO
Strutture non verticali:	
Elementi di tipo asta	NO
Travi	SI
Gusci	NO
Membrane	NO
Orizzontamenti:	
Solai con la proprietà piano rigido	SI
Solai senza la proprietà piano rigido	NO
Tipo di vincoli:	
Nodi vincolati rigidamente	NO
Nodi vincolati elasticamente	NO
Nodi con isolatori sismici	NO
Fondazioni puntuali (plinti/plinti su palo)	NO
Fondazioni di tipo trave	SI
Fondazioni di tipo platea	SI
Fondazioni con elementi solidi	NO

Modellazione delle azioni

Si veda il capitolo **"Schematizzazione dei casi di carico"** per le informazioni necessarie alla comprensione ed alla ricostruzione delle azioni applicate al modello numerico, coerentemente con quanto indicato nella parte "*2.6. Azioni di progetto sulla costruzione*".

Combinazioni e/o percorsi di carico

Si veda il capitolo **"Definizione delle combinazioni"** in cui sono indicate le combinazioni di carico adottate e, nel caso di calcoli non lineari, i percorsi di carico seguiti.

Combinazioni dei casi di carico	
APPROCCIO PROGETTUALE	Approccio 2
Tensioni ammissibili	NO
SLU	SI
SLV (SLU con sisma)	SI
SLC	NO
SLD	SI
SLO	NO
SLU GEO A2 (per approccio 1)	NO
SLU EQU	NO
Combinazione caratteristica (rara)	SI
Combinazione frequente	SI
Combinazione quasi permanente (SLE)	SI
SLA (accidentale quale incendio)	NO

Principali risultati

I risultati devono costituire una sintesi completa ed efficace, presentata in modo da riassumere il comportamento della struttura, per ogni tipo di analisi svolta.

Nella presente relazione di calcolo sono riportati i seguenti risultati che il progettista ritiene di interesse per la descrizione e la compresione del/i modello/i e del comportamento della struttura:

per l'analisi modale:

- periodi dei modi di vibrare della struttura
- masse eccitate dai singoli modi
- massa eccitata totale

deformate e sollecitazioni:

- spostamenti e rotazioni dei singoli nodi della struttura
- reazioni vincolari (nel caso siano presenti nodi vincolati rigidamente)
- pressioni sul terreno (nel caso siano presenti elementi di fondazione)
- sollecitazioni sugli elementi d2 nelle combinazioni di calcolo più significative
- tensioni sugli elementi d3 nelle combinazioni di calcolo più significative
- sollecitazioni sui macroelementi da elementi d3 nelle combinazioni di calcolo più significative

altri risultati significativi:

- *Completare*

La presente relazione, oltre ad illustrare in modo esaustivo i dati in ingresso ed i risultati delle analisi in forma tabellare, riporta una serie di immagini:

per i dati in ingresso:

- modello solido della struttura
- numerazione di nodi e ed elementi
- configurazioni di carico statiche
- configurazioni di carico sismiche con baricentri delle masse e eccentricità

per le combinazioni più significative (statisticamente più gravose per la struttura):

- configurazioni deformate
- diagrammi e inviluppi delle azioni interne
- mappe delle tensioni
- reazioni vincolari
- mappe delle pressioni sul terreno

per il progetto-verifica degli elementi:

- diagrammi di armatura
- percentuali di sfruttamento
- mappe delle verifiche più significative per i vari stati limite

Informazioni generali sull'elaborazione e giudizio motivato di accettabilità dei risultati.

Il programma prevede una serie di controlli automatici (check) che consentono l'individuazione di errori di modellazione. Al termine dell'analisi un controllo automatico identifica la presenza di spostamenti o rotazioni abnormi. Si può pertanto asserire che l' elaborazione sia corretta e completa. I risultati delle elaborazioni sono stati sottoposti a controlli che ne comprovano l'attendibilità. Tale valutazione ha compreso il confronto con i risultati di semplici calcoli, eseguiti con metodi tradizionali e adottati, anche in fase di primo proporzionamento della struttura. Inoltre, sulla base di considerazioni riguardanti gli stati tensionali e deformativi determinati, si è valutata la validità delle scelte operate in sede di schematizzazione e di modellazione della struttura e delle azioni. Si allega al termine della presente relazione elenco sintetico dei controlli svolti (verifiche di equilibrio tra reazioni vincolari e carichi applicati, comparazioni tra i risultati delle analisi e quelli di valutazioni semplificate, etc.) .

Completare

Verifiche agli stati limite ultimi

Nel capitolo relativo alla progettazione degli elementi strutturali agli SLU vengono indicate, con riferimento alla normativa adottata, le modalità ed i criteri seguiti per valutare la sicurezza della struttura nei confronti delle possibili situazioni di crisi ed i risultati delle valutazioni svolte. In via generale, oltre alle verifiche di resistenza e di spostamento, devono essere prese in considerazione verifiche nei confronti dei fenomeni di instabilità, locale e globale, di fatica, di duttilità, di degrado.

Verifiche agli stati limite di esercizio

Nel capitolo relativo alla progettazione degli elementi strutturali agli SLE vengono indicate, con riferimento alla normativa adottata, le modalità seguite per valutare l'affidabilità della struttura nei confronti delle possibili situazioni di perdita di funzionalità (per eccessive deformazioni, fessurazioni, vibrazioni, etc.) ed i risultati delle valutazioni svolte.

RELAZIONE SUI MATERIALI

Il capitolo Materiali riportata informazioni esaustive relative all'elenco dei materiali impiegati e loro modalità di posa in opera e ai valori di calcolo.

NORMATIVA DI RIFERIMENTO

1. D.Min. Infrastrutture Min. Interni e Prot. Civile 17 Gennaio 2018 e allegate "Norme tecniche per le costruzioni".
2. Circolare 21/01/19, n. 7 C.S.LL.PP "Istruzioni per l'applicazione dell'aggiornamento delle Norme Tecniche delle Costruzioni di cui al decreto ministeriale 17 gennaio 2018"
3. D.Min. Infrastrutture e trasporti 14 Settembre 2005 e allegate "Norme tecniche per le costruzioni".
4. D.M. LL.PP. 9 Gennaio 1996 "Norme tecniche per il calcolo, l'esecuzione ed il collaudo delle strutture in cemento armato, normale e precompresso e per le strutture metalliche".
5. D.M. LL.PP. 16 Gennaio 1996 "Norme tecniche relative ai <<Criteri generali per la verifica di sicurezza delle costruzioni e dei carichi e sovraccarichi>>".
6. D.M. LL.PP. 16 Gennaio 1996 "Norme tecniche per le costruzioni in zone sismiche".
7. Circolare 4/07/96, n.156AA.GG./STC. istruzioni per l'applicazione delle "Norme tecniche relative ai <<Criteri generali per la verifica di sicurezza delle costruzioni e dei carichi e sovraccarichi>>" di cui al D.M. 16/01/96.
8. Circolare 10/04/97, n.65AA.GG. istruzioni per l'applicazione delle "Norme tecniche per le costruzioni in zone sismiche" di cui al D.M. 16/01/96.
9. D.M. LL.PP. 20 Novembre 1987 "Norme tecniche per la progettazione, esecuzione e collaudo degli edifici in muratura e per il loro consolidamento".
10. Circolare 4 Gennaio 1989 n. 30787 "Istruzioni in merito alle norme tecniche per la progettazione, esecuzione e collaudo degli edifici in muratura e per il loro consolidamento".
11. D.M. LL.PP. 11 Marzo 1988 "Norme tecniche riguardanti le indagini sui terreni e sulle rocce, la stabilità dei pendii naturali e delle scarpate, i criteri generali e le prescrizioni per la progettazione, l'esecuzione e il collaudo delle opere di sostegno delle terre e delle opere di fondazione".
12. D.M. LL.PP. 3 Dicembre 1987 "Norme tecniche per la progettazione, esecuzione e collaudo delle costruzioni prefabbricate".
13. UNI 9502 - Procedimento analitico per valutare la resistenza al fuoco degli elementi costruttivi di conglomerato cementizio armato, normale e precompresso - edizione maggio 2001
14. Ordinanza del Presidente del Consiglio dei Ministri n. 3274 del 20 marzo 2003 "Primi elementi in materia di criteri generali per la classificazione sismica del territorio nazionale e di normative tecniche per le costruzioni in zona sismica" e successive modificazioni e integrazioni.
15. UNI EN 1990:2006 13/04/2006 Eurocodice 0 - Criteri generali di progettazione strutturale.
16. UNI EN 1991-1-1:2004 01/08/2004 Eurocodice 1 - Azioni sulle strutture - Parte 1-1: Azioni in generale - Pesi per unità di volume, pesi propri e sovraccarichi per gli edifici.
17. UNI EN 1991-2:2005 01/03/2005 Eurocodice 1 - Azioni sulle strutture - Parte 2: Carichi da traffico sui ponti.
18. UNI EN 1991-1-3:2004 01/10/2004 Eurocodice 1 - Azioni sulle strutture - Parte 1-3: Azioni in generale - Carichi da neve.
19. UNI EN 1991-1-4:2005 01/07/2005 Eurocodice 1 - Azioni sulle strutture - Parte 1-4: Azioni in generale - Azioni del vento.
20. UNI EN 1991-1-5:2004 01/10/2004 Eurocodice 1 - Azioni sulle strutture - Parte 1-5: Azioni in generale - Azioni termiche.
21. UNI EN 1992-1-1:2005 24/11/2005 Eurocodice 2 - Progettazione delle strutture di calcestruzzo - Parte 1-1: Regole generali e regole per gli edifici.
22. UNI EN 1992-1-2:2005 01/04/2005 Eurocodice 2 - Progettazione delle strutture di calcestruzzo - Parte 1-2: Regole generali - Progettazione strutturale contro l'incendio.
23. UNI EN 1993-1-1:2005 01/08/2005 Eurocodice 3 - Progettazione delle strutture di acciaio - Parte 1-1: Regole generali e regole per gli edifici.
24. UNI EN 1993-1-8:2005 01/08/2005 Eurocodice 3 - Progettazione delle strutture di acciaio - Parte 1-8: Progettazione dei collegamenti.
25. UNI EN 1994-1-1:2005 01/03/2005 Eurocodice 4 - Progettazione delle strutture composte acciaio-calcestruzzo - Parte 1-1: Regole generali e regole per gli edifici.
26. UNI EN 1994-2:2006 12/01/2006 Eurocodice 4 - Progettazione delle strutture composte acciaio-calcestruzzo - Parte 2: Regole generali e regole per i ponti.
27. UNI EN 1995-1-1:2005 01/02/2005 Eurocodice 5 - Progettazione delle strutture di legno - Parte 1-1: Regole generali – Regole comuni e regole per gli edifici.
28. UNI EN 1995-2:2005 01/01/2005 Eurocodice 5 - Progettazione delle strutture di legno - Parte 2: Ponti.
29. UNI EN 1996-1-1:2006 26/01/2006 Eurocodice 6 - Progettazione delle strutture di muratura - Parte 1-1: Regole generali per strutture di muratura armata e non armata.
30. UNI EN 1996-3:2006 09/03/2006 Eurocodice 6 - Progettazione delle strutture di muratura - Parte 3: Metodi di calcolo semplificato per strutture di muratura non armata.

31. UNI EN 1997-1:2005 01/02/2005 Eurocodice 7 - Progettazione geotecnica - Parte 1: Regole generali.
32. UNI EN 1998-1:2005 01/03/2005 Eurocodice 8 - Progettazione delle strutture per la resistenza sismica - Parte 1: Regole generali, azioni sismiche e regole per gli edifici.
33. UNI EN 1998-3:2005 01/08/2005 Eurocodice 8 - Progettazione delle strutture per la resistenza sismica - Parte 3: Valutazione e adeguamento degli edifici.
34. UNI EN 1998-5:2005 01/01/2005 Eurocodice 8 - Progettazione delle strutture per la resistenza sismica - Parte 5: Fondazioni, strutture di contenimento ed aspetti geotecnici.

NOTA il capitolo "normativa di riferimento": riporta l' elenco delle normative implementate nel software. Le norme utilizzate per la struttura oggetto della presente relazione sono indicate nel precedente capitolo "RELAZIONE DI CALCOLO STRUTTURALE" "ANALISI E VERIFICHE SVOLTE CON L'AUSILIO DI CODICI DI CALCOLO". Laddove nei capitoli successivi vengano richiamate norme antecedenti al DM 17.01.18 è dovuto o a progettazione simulata di edifico esistente.

CARATTERISTICHE MATERIALI UTILIZZATI

LEGENDA TABELLA DATI MATERIALI

Il programma consente l'uso di materiali diversi. Sono previsti i seguenti tipi di materiale:

1	materiale tipo cemento armato
2	materiale tipo acciaio
3	materiale tipo muratura
4	materiale tipo legno
5	materiale tipo generico

I materiali utilizzati nella modellazione sono individuati da una sigla identificativa ed un codice numerico (gli elementi strutturali richiamano quest'ultimo nella propria descrizione). Per ogni materiale vengono riportati in tabella i seguenti dati:

Young	modulo di elasticità normale E
Poisson	coefficiente di contrazione trasversale ni
G	modulo di elasticità tangenziale
Gamma	peso specifico
Alfa	coefficiente di dilatazione termica
Fattore di confidenza FC m	Fattore di confidenza specifico per materiale; (è riportato solo se diverso da quello globale della struttura)
Fattore di confidenza FC a	Fattore di confidenza specifico per l'armatura (è riportato solo se diverso da quello globale della struttura)
Elasto-plastico	Materiale elastico perfettamente plastico per aste non lineari
Massima compressione	Massima tensione di compressione per aste non lineari
Massima trazione	Massima tensione di trazione per aste non lineari
Fattore attrito	Coefficinete di attrito per aste non lineari
Rapporto HRDb	Rapporto di hardening a flessione
Rapporto HRDv	Rapporto di hardening a taglio

I dati soprariportati vengono utilizzati per la modellazione dello schema statico e per la determinazione dei carichi inerziali e termici. In relazione al tipo di materiale vengono riportati inoltre:

1	c.a.		
		Resistenza Rc	resistenza a cmpressione cubica
		Resistenza fctm	resistenza media a trazione semplice
		Coefficiente ksb	Coefficiente di riduzione della resistenza a compressione da utilizzare nello stress block
2	acciaio		
		Tensione ft	Valore della tensione di rottura
		Tensione fy	Valore della tensione di snervamento
		Resistenza fd	Resistenza di calcolo per SL CNR-UNI 10011
		Resistenza fd (>40)	Resistenza di calcolo per SL CNR-UNI 10011 per spessori > 40mm
		Tensione ammissibile	Tensione ammissibile CNR-UNI 10011
		Tensione ammissibile(>40)	Tensione ammissibile CNR-UNI 10011 per spessori > 40mm
3	muratura		

	Muratura consolidata	Muratura per la quale si prevedono interventi di rinforzo"
	Incremento resistenza	Incremento conseguito in termini di resistenza
	Incremento rigidezza	Incremento conseguito in termini di rigidezza
	Resistenza f	Valore della resistenza a compressione
	Resistenza fv0	Valore della resistenza a taglio in assenza di tensioni normali
	Resistenza fh	Valore della resistenza a compressione orizzontale
	Resistenza fb	Valore della resistenza a compressione dei blocchi
	Resistenza fbh	Valore della resistenza a compressione dei blocchi in direzione orizzontale
	Resistenza fv0h	Valore della resistenza a taglio in assenza di tensioni normali per le travi
	Resistenza ft	Valore della resistenza a trazione per fessurazione diagonale
	Resistenza fvlim	Valore della massima resistenza a taglio
	Resistenza fbt	Valore della resistenza a trazione dei blocchi
	Coefficiente mu	Coefficiente d'attrito utilizzato per la resistenza a taglio (tipicamente 0.4)
	Coefficiente fi	Coefficiente d'ingranamento utilizzato per la resistenza a taglio
	Coefficiente ksb	Coefficiente di riduzione della resistenza a compressione da utilizzare nello stress block
4 legno		
	E0,05	Modulo di elasticità corrispondente ad un frattile del 5%
	Resistenza fc0	Valore della resistenza a compressione parallela
	Resistenza ft0	Valore della resistenza a trazione parallela
	Resistenza fm	Valore della resistenza a flessione
	Resistenza fv	Valore della resistenza a taglio
	Resist. ft0k	Resistenza caratteristica (tensione amm. per REGLES) per trazione
	Resist. fmk	Resistenza caratteristica (tensione amm. per REGLES) per flessione
	Resist. fvk	Resistenza caratteristica (tensione amm. per REGLES) per taglio
	Modulo E0,05	Modulo elastico parallelo caratteristico
	Lamellare	lamellare o massiccio

Nel tabulato si riportano sia i valori caratteristici che medi utilizzando gli uni e/o gli altri in relazione alle richieste di normativa ed alla tipologia di verifica. (Cap.7 NTC18 per materiali nuovi, Cap.8 NTC18 e relativa circolare 21/01/2019 per materiali esistenti, Linee Guida Reluis per incamiciatura CAM, CNR-DT 200 per interventi con FRP)

Vengono inoltre riportate le tabelle contenenti il riassunto delle informazioni assegnate nei criteri di progetto in uso.

Id	Tipo / Note	V. caratt.	V. medio	Young	Poisson	G	Gamma	Alfa	Altri
		daN/cm2	daN/cm2	daN/cm2		daN/cm2	daN/cm3		
3	Calcestruzzo Classe C28/35			3.260e+05	0.20	1.358e+05	2.50e-03	1.00e-05	
	Resistenza Rc	350.0							
	Resistenza fctm		28.4						
	Rapporto Rfessurata								1.00
	Coefficiente ksb								0.85
	Rapporto HRDb								1.00e-05
	Rapporto HRDv								1.00e-05

Pareti c.a.	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Generalità						
Progetto armatura	Parete sismica	Singolo elemento FONDAZIONE	Singolo elemento FONDAZIONE			
Armatura						
Inclinazione Av [gradi]	90.00	90.00	90.00			
Angolo Av-Ao [gradi]	90.00	90.00	90.00			

Pareti c.a.	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Minima tesa	0.25	0.25	0.25			
Massima tesa	4.00	4.00	4.00			
Maglia unica centrale	NO	NO	NO			
Unico strato verticale	NO	NO	NO			
Unico strato orizzontale	NO	NO	NO			
Copriferro [cm]	2.00	3.00	3.00			
Maglia V						
diametro	10	12	16			
passo	25	25	5			
diametro aggiuntivi	12	12	16			
Maglia O						
diametro	8	8	16			
passo	25	25	5			
diametro aggiuntivi	8	8	16			
Stati limite ultimi						
Tensione fy [daN/cm2]	4500.00	4500.00	4500.00			
Tipo acciaio	tipo C	tipo C	tipo C			
Coefficiente gamma s	1.15	1.15	1.15			
Coefficiente gamma c	1.50	1.50	1.50			
Verifiche con N costante	SI	SI	SI			
Tensioni ammissibili						
Tensione amm. cls [daN/cm2]	97.50	97.50	97.50			
Tensione amm. acciaio [daN/cm2]	2600.00	2600.00	2600.00			
Rapporto omogeneizzazione N	15.00	15.00	15.00			
Massimo rapporto area compressa/tesa	1.00	1.00	1.00			
Parete estesa debolmente armata						
Fattore amplificazione taglio V	0.0	1.50	1.50			
Hcrit. par. 7.4.4.5.1 [cm]	0.0	0.0	0.0			
Hcrit. par. 7.4.6.1.4 [cm]	0.0	0.0	0.0			
Diagramma inviluppo taglio	SI	NO	NO			
Vincolo lati	nessun lato	nessun lato	nessun lato			
Verifica come fascia	NO	NO	NO			
Diametro di estremità	0	0	0			
Zona confinata						
Minima tesa	1.00	1.00	1.00			
Massima tesa	4.00	4.00	4.00			
Distanza barre [cm]	2.00	2.00	2.00			
Interferro	2	2	2			
Armatura inclinata						
Area barre [cm2]	0.0	0.0	0.0			
Angolo orizzontale [gradi]	0.0	0.0	0.0			
Distanza di base [cm]	0.0	0.0	0.0			
Resistenza al fuoco						
3- intradosso	NO	NO	NO			
3+ estradosso	NO	NO	NO			
Tempo di esposizione R	15	15	15			

Gusci c.a.	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Armatura						
Inclinazione Ax [gradi]	0.0	0.0	0.0			
Angolo Ax-Ay [gradi]	90.00	90.00	90.00			
Minima tesa	0.31	0.20	0.20			
Massima tesa	0.78	0.78	0.78			
Maglia unica centrale	NO	NO	NO			
Copriferro [cm]	2.00	3.00	3.00			
Maglia x						
diametro	10	12	16			
passo	20	20	5			
diametro aggiuntivi	12	12	16			
Maglia y						
diametro	10	12	16			
passo	20	20	5			
diametro aggiuntivi	12	12	16			
Stati limite ultimi						
Tensione fy [daN/cm2]	4500.00	4500.00	4500.00			
Tipo acciaio	tipo C	tipo C	tipo C			
Coefficiente gamma s	1.15	1.15	1.15			
Coefficiente gamma c	1.50	1.50	1.50			
Verifiche con N costante	SI	SI	SI			

Gusci c.a.	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Applica SLU da DIN	NO	NO	NO			
Tensioni ammissibili						
Tensione amm. cls [daN/cm2]	97.50	97.50	97.50			
Tensione amm. acciaio [daN/cm2]	2600.00	2600.00	2600.00			
Rapporto omogeneizzazione N	15.00	15.00	15.00			
Massimo rapporto area compressa/tesa	1.00	1.00	1.00			
Resistenza al fuoco						
3- intradosso	NO	NO	NO			
3+ estradosso	NO	NO	NO			
Tempo di esposizione R	15	15	15			

Travi c.a.	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Generalità						
Progetta a filo	SI	NO	NO			
Af inf: da q*L*L /	0.0	0.0	0.0			
Armatura						
Minima tesa	0.31	0.31	0.31			
Minima compressa	0.31	0.31	0.31			
Massima tesa	0.78	0.78	0.78			
Da sezione	SI	SI	SI			
Usa armatura teorica	NO	NO	NO			
Stati limite ultimi						
Tensione fy [daN/cm2]	4500.00	4500.00	4500.00			
Tensione fy staffe [daN/cm2]	4500.00	4500.00	4500.00			
Tipo acciaio	tipo C	tipo C	tipo C			
Coefficiente gamma s	1.15	1.15	1.15			
Coefficiente gamma c	1.50	1.50	1.50			
Verifiche con N costante	SI	SI	SI			
Fattore di ridistribuzione	0.0	0.0	0.0			
Modello per il confinamento						
Relazione tensio-deformativa	Mander	Mander	Mander			
Incrudimento acciaio	5.000e-03	5.000e-03	5.000e-03			
Fattore lambda	1.00	1.00	1.00			
epsilon max,s	4.000e-02	4.000e-02	4.000e-02			
epsilon cu2	4.500e-03	4.500e-03	4.500e-03			
epsilon c2	0.0	0.0	0.0			
epsilon cy	0.0	0.0	0.0			
Tensioni ammissibili						
Tensione amm. cls [daN/cm2]	97.50	97.50	97.50			
Tensione amm. acciaio [daN/cm2]	2600.00	2600.00	2600.00			
Rapporto omogeneizzazione N	15.00	15.00	15.00			
Massimo rapporto area compressa/tesa	1.00	1.00	1.00			
Staffe						
Diametro staffe	10.00	0.0	0.0			
Passo minimo [cm]	5.00	4.00	4.00			
Passo massimo [cm]	30.00	30.00	30.00			
Passo raffittito [cm]	15.00	15.00	15.00			
Lunghezza zona raffittita [cm]	0.0	50.00	50.00			
Ctg(Teta) Max	2.50	2.50	2.50			
Percentuale sagomati	0.0	0.0	0.0			
Luce di taglio per GR [cm]	1.00	1.00	1.00			
Adotta scorrimento medio	NO	NO	NO			
Torsione non essenziale inclusa	SI	SI	SI			

Pilastri c.a.	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Generalità						
Progetto armatura	Privilegia spigoli	Privilegia lati	Privilegia lati			
Progetta a filo	NO	NO	NO			
Effetti del 2 ordine	SI	SI	SI			
Beta per 2-2	1.00	1.00	1.00			
Beta per 3-3	1.00	1.00	1.00			
Armatura						
Massima tesa	4.00	4.00	4.00			
Minima tesa	1.00	1.00	1.00			
Stati limite ultimi						
Tensione fy [daN/cm2]	4500.00	4500.00	4500.00			

Pilastri c.a.	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Tensione fy staffe [daN/cm2]	4500.00	4500.00	4500.00			
Tipo acciaio	tipo C	tipo C	tipo C			
Coefficiente gamma s	1.15	1.15	1.15			
Coefficiente gamma c	1.50	1.50	1.50			
Verifiche con N costante	SI	SI	SI			
Modello per il confinamento						
Relazione tensio-deformativa	Mander	Mander	Mander			
Incrudimento acciaio	5.000e-03	5.000e-03	5.000e-03			
Fattore lambda	1.00	1.00	1.00			
epsilon max,s	4.000e-02	4.000e-02	4.000e-02			
epsilon cu2	4.500e-03	4.500e-03	4.500e-03			
epsilon c2	0.0	0.0	0.0			
epsilon cy	0.0	0.0	0.0			
Tensioni ammissibili						
Tensione amm. cls [daN/cm2]	97.50	97.50	97.50			
Tensione amm. acciaio [daN/cm2]	2600.00	2600.00	2600.00			
Rapporto omogeneizzazione N	15.00	15.00	15.00			
Staffe						
Diametro staffe	10.00	0.0	0.0			
Passo minimo [cm]	1.00	5.00	5.00			
Passo massimo [cm]	25.00	25.00	25.00			
Passo raffittito [cm]	15.00	15.00	15.00			
Lunghezza zona raffittita [cm]	0.0	45.00	45.00			
Ctg(Teta) Max	2.50	2.50	2.50			
Luce di taglio per GR [cm]	1.00	1.00	1.00			
Massimizza gerarchia	SI	SI	SI			

Solai e pannelli	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Generalità						
Usa tensioni ammissibili	NO	NO	NO			
Af inf: da traliccio	SI	SI	SI			
Consenti armatura a taglio	NO	NO	NO			
Incrementa armatura longitudinale per taglio	SI	SI	SI			
Af inf: da q*L*L /	20.00	20.00	20.00			
Incremento fascia piena [cm]	5.00	5.00	5.00			
Armatura						
Minima tesa	0.15	0.15	0.15			
Massima tesa	3.00	3.00	3.00			
Minima compressa	0.0	0.0	0.0			
Af/h [cm]	7.000e-02	7.000e-02	7.000e-02			
Stati limite ultimi						
Tensione fy [daN/cm2]	4500.00	4500.00	4500.00			
Tipo acciaio	tipo C	tipo C	tipo C			
Coefficiente gamma s	1.15	1.15	1.15			
Coefficiente gamma c	1.50	1.50	1.50			
Fattore di ridistribuzione	0.0	0.0	0.0			
Tensioni ammissibili						
Tensione amm. cls [daN/cm2]	85.00	85.00	85.00			
Tensione amm. acciaio [daN/cm2]	2600.00	2600.00	2600.00			
Rapporto omogeneizzazione N	15.00	15.00	15.00			
Massimo rapporto area compressa/tesa	1.00	1.00	1.00			
Verifica freccia						
Infinita	250.00	250.00	250.00			
Istantanea	500.00	500.00	500.00			
Fattore viscosità	3.00	3.00	3.00			
Usa J non fessurato	SI	NO	NO			
Elementi non strutturali						
Tamponatura antiespulsione	NO	NO	NO			
Tamponatura con armatura	NO	NO	NO			
Fattore di struttura/comportamento	2.00	2.00	2.00			
Coefficiente gamma m	0.0	0.0	0.0			
Periodo Ta	0.0	0.0	0.0			
Altezza pannello	0.0	0.0	0.0			

MODELLAZIONE DELLE SEZIONI

LEGENDA TABELLA DATI SEZIONI

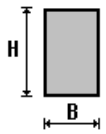
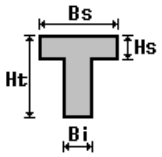
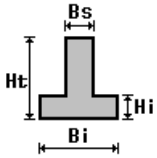
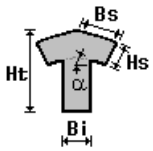
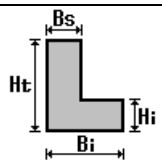
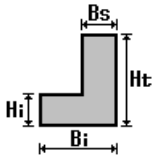
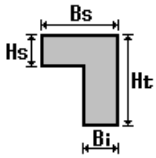
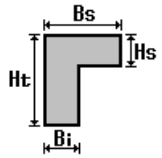
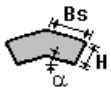
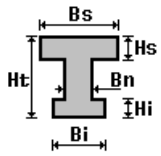
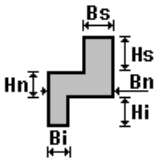
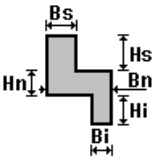
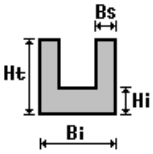
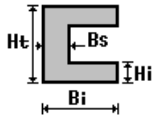
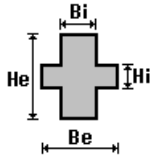
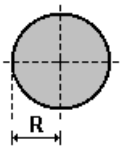
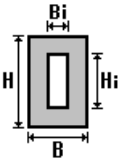
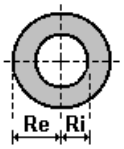
Il programma consente l'uso di sezioni diverse. Sono previsti i seguenti tipi di sezione:

1. sezione di tipo generico
2. profilati semplici
3. profilati accoppiati e speciali

Le sezioni utilizzate nella modellazione sono individuate da una sigla identificativa ed un codice numerico (gli elementi strutturali richiamano quest'ultimo nella propria descrizione). Per ogni sezione vengono riportati in tabella i seguenti dati:

Area	area della sezione
A V2	area della sezione/fattore di taglio (per il taglio in direzione 2)
A V3	area della sezione/fattore di taglio (per il taglio in direzione 3)
Jt	fattore torsionale di rigidezza
J2-2	momento d'inerzia della sezione riferito all'asse 2
J3-3	momento d'inerzia della sezione riferito all'asse 3
W2-2	modulo di resistenza della sezione riferito all'asse 2
W3-3	modulo di resistenza della sezione riferito all'asse 3
Wp2-2	modulo di resistenza plastico della sezione riferito all'asse 2
Wp3-3	modulo di resistenza plastico della sezione riferito all'asse 3

I dati sopra riportati vengono utilizzati per la determinazione dei carichi inerziali e per la definizione delle rigidezze degli elementi strutturali; qualora il valore di Area V2 (e/o Area V3) sia nullo la deformabilità per taglio V2 (e/o V3) è trascurata. La valutazione delle caratteristiche inerziali delle sezioni è condotta nel riferimento 2-3 dell'elemento.

 rettangolare	 a T	 a T rovescia	 a T di colmo	 a L	 a L specchiata
 a L specchiata rovescia	 a L rovescia	 a L di colmo	 a doppio T	 a quattro specchiata	 a quattro
 a U	 a C	 a croce	 circolare	 rettangolare cava	 circolare cava

Per quanto concerne i profilati semplici ed accoppiati l'asse 2 del riferimento coincide con l'asse x riportato nei più diffusi profilatari.

Per quanto concerne le sezioni di tipo generico (tipo 1.):
i valori dimensionali con prefisso B sono riferiti all'asse 2
i valori dimensionali con prefisso H sono riferiti all'asse 3

Id	Tipo	Area	A V2	A V3	Jt	J 2-2	J 3-3	W 2-2	W 3-3	Wp 2-2	Wp 3-3
		cm2	cm2	cm2	cm4	cm4	cm4	cm3	cm3	cm3	cm3
1	TRAVE FONDAZIONE-Rettangolare: b=50 h=80	4000.00	3333.33	3333.33	2.021e+06	8.333e+05	2.133e+06	3.333e+04	5.333e+04	5.000e+04	8.000e+04
2	PILASTRI PT-Rettangolare: b=40 h=80	3200.00	2666.67	2666.67	1.169e+06	4.267e+05	1.707e+06	2.133e+04	4.267e+04	3.200e+04	6.400e+04
3	TRAVI 1° E 2° IMPALCATO-Rettangolare: b=40 h=60	2400.00	2000.00	2000.00	7.424e+05	3.200e+05	7.200e+05	1.600e+04	2.400e+04	2.400e+04	3.600e+04
5	TRAVI 3°IMPALCATO-Rettangolare: b=40 h=60	2400.00	2000.00	2000.00	7.424e+05	3.200e+05	7.200e+05	1.600e+04	2.400e+04	2.400e+04	3.600e+04
7	TRAVETTO SOLAIO-T ribassata: bi=12 ht=25 bs=50 hs=5	490.00	0.0	0.0	1.200e+04	5.496e+04	2.765e+04	2198.53	1688.50	3845.00	3024.51

MODELLAZIONE STRUTTURA: NODI

LEGENDA TABELLA DATI NODI

Il programma utilizza per la modellazione nodi strutturali.
Ogni nodo è individuato dalle coordinate cartesiane nel sistema di riferimento globale (X Y Z).
Ad ogni nodo è eventualmente associato un codice di vincolamento rigido, un codice di fondazione speciale, ed un set di sei molle (tre per le traslazioni, tre per le rotazioni). Le tabelle sottoriportate riflettono le succitate possibilità. In particolare per ogni nodo viene indicato in tabella:

Nodo	numero del nodo.
X	valore della coordinata X
Y	valore della coordinata Y
Z	valore della coordinata Z

Per i nodi ai quali sia associato un codice di vincolamento rigido, un codice di fondazione speciale o un set di molle viene indicato in tabella:

Nodo	numero del nodo.
X	valore della coordinata X
Y	valore della coordinata Y
Z	valore della coordinata Z
Note	eventuale codice di vincolo (es. v=110010 sei valori relativi ai sei gradi di libertà previsti per il nodo TxTyTzRxRyRz, il valore 1 indica che lo spostamento o rotazione relativo è impedito, il valore 0 indica che lo spostamento o rotazione relativo è libero).
Note	(FS = 1, 2,…) eventuale codice del tipo di fondazione speciale (1, 2,… fanno riferimento alle tipologie: plinto, palo, plinto su pali,…) che è collegato al nodo. (ISO = "id SIGLA") indice e sigla identificativa dell' eventuale isolatore sismico assegnato al nodo
Rig. TX	valore della rigidezza dei vincoli elastici eventualmente applicati al nodo, nello specifico TX (idem per TY, TZ, RX, RY, RZ).

Per strutture sismicamente isolate viene inoltre inserita la tabella delle caratteristiche per gli isolatori utilizzati; le caratteristiche sono indicate in conformità al cap. 7.10 del D.M. 17/01/18

TABELLA DATI NODI

Nodo	X	Y	Z	Nodo	X	Y	Z	Nodo	X	Y	Z
	cm	cm	cm		cm	cm	cm		cm	cm	cm
1	582.5	635.0	835.0	2	1165.0	635.0	1200.0	3	0.0	635.0	835.0
4	1165.0	635.0	835.0	5	0.0	1145.9	835.0	6	582.5	1145.9	835.0
7	1165.0	1145.9	1200.0	8	582.5	635.0	1200.0	9	0.0	0.0	0.0
10	1165.0	0.0	0.0	11	582.5	1145.9	1200.0	12	582.5	0.0	835.0
13	0.0	635.0	0.0	14	1165.0	635.0	0.0	15	0.0	1145.9	0.0
16	582.5	1145.9	0.0	17	1165.0	1145.9	0.0	18	0.0	1585.0	0.0
19	582.5	1585.0	0.0	20	1165.0	1585.0	0.0	21	0.0	1985.0	0.0
22	582.5	1985.0	0.0	23	1165.0	1985.0	0.0	24	1165.0	1145.9	835.0
25	0.0	1585.0	835.0	26	582.5	1585.0	835.0	27	582.5	1985.0	835.0
28	0.0	1985.0	835.0	29	582.5	635.0	0.0	30	0.0	0.0	835.0
31	1165.0	0.0	835.0	32	0.0	0.0	428.0	33	1165.0	0.0	428.0
34	582.5	0.0	428.0	35	582.5	0.0	0.0	36	0.0	635.0	428.0
37	1165.0	635.0	428.0	38	0.0	1145.9	428.0	39	582.5	1145.9	428.0
40	1165.0	1145.9	428.0	41	0.0	1585.0	428.0	42	582.5	1585.0	428.0
43	1165.0	1585.0	428.0	44	0.0	1985.0	428.0	45	582.5	1985.0	428.0
46	1165.0	1985.0	428.0	47	582.5	635.0	428.0	48	735.0	1004.5	0.0
49	735.0	1004.5	47.6	50	786.5	1004.5	47.6	51	786.5	1004.5	0.0
52	735.0	1004.5	95.1	53	786.5	1004.5	95.1	54	735.0	1004.5	142.7
55	786.5	1004.5	142.7	56	735.0	1004.5	190.2	57	786.5	1004.5	190.2
58	735.0	1004.5	237.8	59	786.5	1004.5	237.8	60	735.0	1004.5	285.3

61	786.5	1004.5	285.3	62	735.0	1004.5	332.9	63	786.5	1004.5	332.9
64	735.0	1004.5	380.4	65	786.5	1004.5	380.4	66	735.0	1004.5	428.0
67	786.5	1004.5	428.0	68	838.0	1004.5	47.6	69	838.0	1004.5	0.0
70	838.0	1004.5	95.1	71	838.0	1004.5	142.7	72	838.0	1004.5	190.2
73	838.0	1004.5	237.8	74	838.0	1004.5	285.3	75	838.0	1004.5	332.9
76	838.0	1004.5	380.4	77	838.0	1004.5	428.0	78	889.5	1004.5	47.6
79	889.5	1004.5	0.0	80	889.5	1004.5	95.1	81	889.5	1004.5	142.7
82	889.5	1004.5	190.2	83	889.5	1004.5	237.8	84	889.5	1004.5	285.3
85	889.5	1004.5	332.9	86	889.5	1004.5	380.4	87	889.5	1004.5	428.0
88	941.0	1004.5	47.6	89	941.0	1004.5	0.0	90	941.0	1004.5	95.1
91	941.0	1004.5	142.7	92	941.0	1004.5	190.2	93	941.0	1004.5	237.8
94	941.0	1004.5	285.3	95	941.0	1004.5	332.9	96	941.0	1004.5	380.4
97	941.0	1004.5	428.0	98	992.5	1004.5	47.6	99	992.5	1004.5	0.0
100	992.5	1004.5	95.1	101	992.5	1004.5	142.7	102	992.5	1004.5	190.2
103	992.5	1004.5	237.8	104	992.5	1004.5	285.3	105	992.5	1004.5	332.9
106	992.5	1004.5	380.4	107	992.5	1004.5	428.0	108	992.5	967.5	47.6
109	992.5	967.5	0.0	110	992.5	967.5	95.1	111	992.5	967.5	142.7
112	992.5	967.5	190.2	113	992.5	967.5	237.8	114	992.5	967.5	285.3
115	992.5	967.5	332.9	116	992.5	967.5	380.4	117	992.5	967.5	428.0
118	992.5	930.5	47.6	119	992.5	930.5	0.0	120	992.5	930.5	95.1
121	992.5	930.5	142.7	122	992.5	930.5	190.2	123	992.5	930.5	237.8
124	992.5	930.5	285.3	125	992.5	930.5	332.9	126	992.5	930.5	380.4
127	992.5	930.5	428.0	128	992.5	893.5	47.6	129	992.5	893.5	0.0
130	992.5	893.5	95.1	131	992.5	893.5	142.7	132	992.5	893.5	190.2
133	992.5	893.5	237.8	134	992.5	893.5	285.3	135	992.5	893.5	332.9
136	992.5	893.5	380.4	137	992.5	893.5	428.0	138	992.5	856.5	47.6
139	992.5	856.5	0.0	140	992.5	856.5	95.1	141	992.5	856.5	142.7
142	992.5	856.5	190.2	143	992.5	856.5	237.8	144	992.5	856.5	285.3
145	992.5	856.5	332.9	146	992.5	856.5	380.4	147	992.5	856.5	428.0
148	992.5	819.5	47.6	149	992.5	819.5	0.0	150	992.5	819.5	95.1
151	992.5	819.5	142.7	152	992.5	819.5	190.2	153	992.5	819.5	237.8
154	992.5	819.5	285.3	155	992.5	819.5	332.9	156	992.5	819.5	380.4
157	992.5	819.5	428.0	158	953.0	819.5	47.6	159	953.0	819.5	0.0
160	953.0	819.5	95.1	161	953.0	819.5	142.7	162	953.0	819.5	190.2
163	953.0	819.5	237.8	164	953.0	819.5	285.3	165	953.0	819.5	332.9
166	953.0	819.5	380.4	167	953.0	819.5	428.0	168	913.5	819.5	47.6
169	913.5	819.5	0.0	170	913.5	819.5	95.1	171	913.5	819.5	142.7
172	913.5	819.5	190.2	173	913.5	819.5	237.8	174	913.5	819.5	285.3
175	913.5	819.5	332.9	176	913.5	819.5	380.4	177	913.5	819.5	428.0
178	874.0	819.5	47.6	179	874.0	819.5	0.0	180	874.0	819.5	95.1
181	874.0	819.5	142.7	182	874.0	819.5	190.2	183	874.0	819.5	237.8
184	874.0	819.5	285.3	185	874.0	819.5	332.9	186	874.0	819.5	380.4
187	874.0	819.5	428.0	188	834.5	819.5	47.6	189	834.5	819.5	0.0
190	834.5	819.5	95.1	191	834.5	819.5	142.7	192	834.5	819.5	190.2
193	834.5	819.5	237.8	194	834.5	819.5	285.3	195	834.5	819.5	332.9
196	834.5	819.5	380.4	197	834.5	819.5	428.0	198	795.0	819.5	47.6
199	795.0	819.5	0.0	200	795.0	819.5	95.1	201	795.0	819.5	142.7
202	795.0	819.5	190.2	203	795.0	819.5	237.8	204	795.0	819.5	285.3
205	795.0	819.5	332.9	206	795.0	819.5	380.4	207	795.0	819.5	428.0
208	735.0	1004.5	473.2	209	786.5	1004.5	473.2	210	735.0	1004.5	518.4
211	786.5	1004.5	518.4	212	735.0	1004.5	563.7	213	786.5	1004.5	563.7
214	735.0	1004.5	608.9	215	786.5	1004.5	608.9	216	735.0	1004.5	654.1
217	786.5	1004.5	654.1	218	735.0	1004.5	699.3	219	786.5	1004.5	699.3
220	735.0	1004.5	744.6	221	786.5	1004.5	744.6	222	735.0	1004.5	789.8
223	786.5	1004.5	789.8	224	735.0	1004.5	835.0	225	786.5	1004.5	835.0
226	838.0	1004.5	473.2	227	838.0	1004.5	518.4	228	838.0	1004.5	563.7
229	838.0	1004.5	608.9	230	838.0	1004.5	654.1	231	838.0	1004.5	699.3
232	838.0	1004.5	744.6	233	838.0	1004.5	789.8	234	838.0	1004.5	835.0
235	889.5	1004.5	473.2	236	889.5	1004.5	518.4	237	889.5	1004.5	563.7
238	889.5	1004.5	608.9	239	889.5	1004.5	654.1	240	889.5	1004.5	699.3
241	889.5	1004.5	744.6	242	889.5	1004.5	789.8	243	889.5	1004.5	835.0
244	941.0	1004.5	473.2	245	941.0	1004.5	518.4	246	941.0	1004.5	563.7
247	941.0	1004.5	608.9	248	941.0	1004.5	654.1	249	941.0	1004.5	699.3
250	941.0	1004.5	744.6	251	941.0	1004.5	789.8	252	941.0	1004.5	835.0
253	992.5	1004.5	473.2	254	992.5	1004.5	518.4	255	992.5	1004.5	563.7
256	992.5	1004.5	608.9	257	992.5	1004.5	654.1	258	992.5	1004.5	699.3
259	992.5	1004.5	744.6	260	992.5	1004.5	789.8	261	992.5	1004.5	835.0
262	992.5	967.5	473.2	263	992.5	967.5	518.4	264	992.5	967.5	563.7
265	992.5	967.5	608.9	266	992.5	967.5	654.1	267	992.5	967.5	699.3
268	992.5	967.5	744.6	269	992.5	967.5	789.8	270	992.5	967.5	835.0
271	992.5	930.5	473.2	272	992.5	930.5	518.4	273	992.5	930.5	563.7
274	992.5	930.5	608.9	275	992.5	930.5	654.1	276	992.5	930.5	699.3
277	992.5	930.5	744.6	278	992.5	930.5	789.8	279	992.5	930.5	835.0
280	992.5	893.5	473.2	281	992.5	893.5	518.4	282	992.5	893.5	563.7
283	992.5	893.5	608.9	284	992.5	893.5	654.1	285	992.5	893.5	699.3
286	992.5	893.5	744.6	287	992.5	893.5	789.8	288	992.5	893.5	835.0
289	992.5	856.5	473.2	290	992.5	856.5	518.4	291	992.5	856.5	563.7

292	992.5	856.5	608.9	293	992.5	856.5	654.1	294	992.5	856.5	699.3
295	992.5	856.5	744.6	296	992.5	856.5	789.8	297	992.5	856.5	835.0
298	992.5	819.5	473.2	299	992.5	819.5	518.4	300	992.5	819.5	563.7
301	992.5	819.5	608.9	302	992.5	819.5	654.1	303	992.5	819.5	699.3
304	992.5	819.5	744.6	305	992.5	819.5	789.8	306	992.5	819.5	835.0
307	953.0	819.5	473.2	308	953.0	819.5	518.4	309	953.0	819.5	563.7
310	953.0	819.5	608.9	311	953.0	819.5	654.1	312	953.0	819.5	699.3
313	953.0	819.5	744.6	314	953.0	819.5	789.8	315	953.0	819.5	835.0
316	913.5	819.5	473.2	317	913.5	819.5	518.4	318	913.5	819.5	563.7
319	913.5	819.5	608.9	320	913.5	819.5	654.1	321	913.5	819.5	699.3
322	913.5	819.5	744.6	323	913.5	819.5	789.8	324	913.5	819.5	835.0
325	874.0	819.5	473.2	326	874.0	819.5	518.4	327	874.0	819.5	563.7
328	874.0	819.5	608.9	329	874.0	819.5	654.1	330	874.0	819.5	699.3
331	874.0	819.5	744.6	332	874.0	819.5	789.8	333	874.0	819.5	835.0
334	834.5	819.5	473.2	335	834.5	819.5	518.4	336	834.5	819.5	563.7
337	834.5	819.5	608.9	338	834.5	819.5	654.1	339	834.5	819.5	699.3
340	834.5	819.5	744.6	341	834.5	819.5	789.8	342	834.5	819.5	835.0
343	795.0	819.5	473.2	344	795.0	819.5	518.4	345	795.0	819.5	563.7
346	795.0	819.5	608.9	347	795.0	819.5	654.1	348	795.0	819.5	699.3
349	795.0	819.5	744.6	350	795.0	819.5	789.8	351	795.0	819.5	835.0
352	38.8	0.0	0.0	353	38.8	21.2	0.0	354	0.0	21.2	0.0
355	77.7	0.0	0.0	356	77.7	21.2	0.0	357	116.5	0.0	0.0
358	116.5	21.2	0.0	359	155.3	0.0	0.0	360	155.3	21.2	0.0
361	194.2	0.0	0.0	362	194.2	21.2	0.0	363	233.0	0.0	0.0
364	233.0	21.2	0.0	365	271.8	0.0	0.0	366	271.8	21.2	0.0
367	310.7	0.0	0.0	368	310.7	21.2	0.0	369	349.5	0.0	0.0
370	349.5	21.2	0.0	371	388.3	0.0	0.0	372	388.3	21.2	0.0
373	427.2	0.0	0.0	374	427.2	21.2	0.0	375	466.0	0.0	0.0
376	466.0	21.2	0.0	377	504.8	0.0	0.0	378	504.8	21.2	0.0
379	543.7	0.0	0.0	380	543.7	21.2	0.0	381	582.5	21.2	0.0
382	38.8	42.3	0.0	383	0.0	42.3	0.0	384	77.7	42.3	0.0
385	116.5	42.3	0.0	386	155.3	42.3	0.0	387	194.2	42.3	0.0
388	233.0	42.3	0.0	389	271.8	42.3	0.0	390	310.7	42.3	0.0
391	349.5	42.3	0.0	392	388.3	42.3	0.0	393	427.2	42.3	0.0
394	466.0	42.3	0.0	395	504.8	42.3	0.0	396	543.7	42.3	0.0
397	582.5	42.3	0.0	398	38.8	63.5	0.0	399	0.0	63.5	0.0
400	77.7	63.5	0.0	401	116.5	63.5	0.0	402	155.3	63.5	0.0
403	194.2	63.5	0.0	404	233.0	63.5	0.0	405	271.8	63.5	0.0
406	310.7	63.5	0.0	407	349.5	63.5	0.0	408	388.3	63.5	0.0
409	427.2	63.5	0.0	410	466.0	63.5	0.0	411	504.8	63.5	0.0
412	543.7	63.5	0.0	413	582.5	63.5	0.0	414	38.8	84.7	0.0
415	0.0	84.7	0.0	416	77.7	84.7	0.0	417	116.5	84.7	0.0
418	155.3	84.7	0.0	419	194.2	84.7	0.0	420	233.0	84.7	0.0
421	271.8	84.7	0.0	422	310.7	84.7	0.0	423	349.5	84.7	0.0
424	388.3	84.7	0.0	425	427.2	84.7	0.0	426	466.0	84.7	0.0
427	504.8	84.7	0.0	428	543.7	84.7	0.0	429	582.5	84.7	0.0
430	38.8	105.8	0.0	431	0.0	105.8	0.0	432	77.7	105.8	0.0
433	116.5	105.8	0.0	434	155.3	105.8	0.0	435	194.2	105.8	0.0
436	233.0	105.8	0.0	437	271.8	105.8	0.0	438	310.7	105.8	0.0
439	349.5	105.8	0.0	440	388.3	105.8	0.0	441	427.2	105.8	0.0
442	466.0	105.8	0.0	443	504.8	105.8	0.0	444	543.7	105.8	0.0
445	582.5	105.8	0.0	446	38.8	127.0	0.0	447	0.0	127.0	0.0
448	77.7	127.0	0.0	449	116.5	127.0	0.0	450	155.3	127.0	0.0
451	194.2	127.0	0.0	452	233.0	127.0	0.0	453	271.8	127.0	0.0
454	310.7	127.0	0.0	455	349.5	127.0	0.0	456	388.3	127.0	0.0
457	427.2	127.0	0.0	458	466.0	127.0	0.0	459	504.8	127.0	0.0
460	543.7	127.0	0.0	461	582.5	127.0	0.0	462	38.8	148.2	0.0
463	0.0	148.2	0.0	464	77.7	148.2	0.0	465	116.5	148.2	0.0
466	155.3	148.2	0.0	467	194.2	148.2	0.0	468	233.0	148.2	0.0
469	271.8	148.2	0.0	470	310.7	148.2	0.0	471	349.5	148.2	0.0
472	388.3	148.2	0.0	473	427.2	148.2	0.0	474	466.0	148.2	0.0
475	504.8	148.2	0.0	476	543.7	148.2	0.0	477	582.5	148.2	0.0
478	38.8	169.3	0.0	479	0.0	169.3	0.0	480	77.7	169.3	0.0
481	116.5	169.3	0.0	482	155.3	169.3	0.0	483	194.2	169.3	0.0
484	233.0	169.3	0.0	485	271.8	169.3	0.0	486	310.7	169.3	0.0
487	349.5	169.3	0.0	488	388.3	169.3	0.0	489	427.2	169.3	0.0
490	466.0	169.3	0.0	491	504.8	169.3	0.0	492	543.7	169.3	0.0
493	582.5	169.3	0.0	494	38.8	190.5	0.0	495	0.0	190.5	0.0
496	77.7	190.5	0.0	497	116.5	190.5	0.0	498	155.3	190.5	0.0
499	194.2	190.5	0.0	500	233.0	190.5	0.0	501	271.8	190.5	0.0
502	310.7	190.5	0.0	503	349.5	190.5	0.0	504	388.3	190.5	0.0
505	427.2	190.5	0.0	506	466.0	190.5	0.0	507	504.8	190.5	0.0
508	543.7	190.5	0.0	509	582.5	190.5	0.0	510	38.8	211.7	0.0
511	0.0	211.7	0.0	512	77.7	211.7	0.0	513	116.5	211.7	0.0
514	155.3	211.7	0.0	515	194.2	211.7	0.0	516	233.0	211.7	0.0
517	271.8	211.7	0.0	518	310.7	211.7	0.0	519	349.5	211.7	0.0
520	388.3	211.7	0.0	521	427.2	211.7	0.0	522	466.0	211.7	0.0

523	504.8	211.7	0.0	524	543.7	211.7	0.0	525	582.5	211.7	0.0
526	38.8	232.8	0.0	527	0.0	232.8	0.0	528	77.7	232.8	0.0
529	116.5	232.8	0.0	530	155.3	232.8	0.0	531	194.2	232.8	0.0
532	233.0	232.8	0.0	533	271.8	232.8	0.0	534	310.7	232.8	0.0
535	349.5	232.8	0.0	536	388.3	232.8	0.0	537	427.2	232.8	0.0
538	466.0	232.8	0.0	539	504.8	232.8	0.0	540	543.7	232.8	0.0
541	582.5	232.8	0.0	542	38.8	254.0	0.0	543	0.0	254.0	0.0
544	77.7	254.0	0.0	545	116.5	254.0	0.0	546	155.3	254.0	0.0
547	194.2	254.0	0.0	548	233.0	254.0	0.0	549	271.8	254.0	0.0
550	310.7	254.0	0.0	551	349.5	254.0	0.0	552	388.3	254.0	0.0
553	427.2	254.0	0.0	554	466.0	254.0	0.0	555	504.8	254.0	0.0
556	543.7	254.0	0.0	557	582.5	254.0	0.0	558	38.8	275.2	0.0
559	0.0	275.2	0.0	560	77.7	275.2	0.0	561	116.5	275.2	0.0
562	155.3	275.2	0.0	563	194.2	275.2	0.0	564	233.0	275.2	0.0
565	271.8	275.2	0.0	566	310.7	275.2	0.0	567	349.5	275.2	0.0
568	388.3	275.2	0.0	569	427.2	275.2	0.0	570	466.0	275.2	0.0
571	504.8	275.2	0.0	572	543.7	275.2	0.0	573	582.5	275.2	0.0
574	38.8	296.3	0.0	575	0.0	296.3	0.0	576	77.7	296.3	0.0
577	116.5	296.3	0.0	578	155.3	296.3	0.0	579	194.2	296.3	0.0
580	233.0	296.3	0.0	581	271.8	296.3	0.0	582	310.7	296.3	0.0
583	349.5	296.3	0.0	584	388.3	296.3	0.0	585	427.2	296.3	0.0
586	466.0	296.3	0.0	587	504.8	296.3	0.0	588	543.7	296.3	0.0
589	582.5	296.3	0.0	590	38.8	317.5	0.0	591	0.0	317.5	0.0
592	77.7	317.5	0.0	593	116.5	317.5	0.0	594	155.3	317.5	0.0
595	194.2	317.5	0.0	596	233.0	317.5	0.0	597	271.8	317.5	0.0
598	310.7	317.5	0.0	599	349.5	317.5	0.0	600	388.3	317.5	0.0
601	427.2	317.5	0.0	602	466.0	317.5	0.0	603	504.8	317.5	0.0
604	543.7	317.5	0.0	605	582.5	317.5	0.0	606	38.8	338.7	0.0
607	0.0	338.7	0.0	608	77.7	338.7	0.0	609	116.5	338.7	0.0
610	155.3	338.7	0.0	611	194.2	338.7	0.0	612	233.0	338.7	0.0
613	271.8	338.7	0.0	614	310.7	338.7	0.0	615	349.5	338.7	0.0
616	388.3	338.7	0.0	617	427.2	338.7	0.0	618	466.0	338.7	0.0
619	504.8	338.7	0.0	620	543.7	338.7	0.0	621	582.5	338.7	0.0
622	38.8	359.8	0.0	623	0.0	359.8	0.0	624	77.7	359.8	0.0
625	116.5	359.8	0.0	626	155.3	359.8	0.0	627	194.2	359.8	0.0
628	233.0	359.8	0.0	629	271.8	359.8	0.0	630	310.7	359.8	0.0
631	349.5	359.8	0.0	632	388.3	359.8	0.0	633	427.2	359.8	0.0
634	466.0	359.8	0.0	635	504.8	359.8	0.0	636	543.7	359.8	0.0
637	582.5	359.8	0.0	638	38.8	381.0	0.0	639	0.0	381.0	0.0
640	77.7	381.0	0.0	641	116.5	381.0	0.0	642	155.3	381.0	0.0
643	194.2	381.0	0.0	644	233.0	381.0	0.0	645	271.8	381.0	0.0
646	310.7	381.0	0.0	647	349.5	381.0	0.0	648	388.3	381.0	0.0
649	427.2	381.0	0.0	650	466.0	381.0	0.0	651	504.8	381.0	0.0
652	543.7	381.0	0.0	653	582.5	381.0	0.0	654	38.8	402.2	0.0
655	0.0	402.2	0.0	656	77.7	402.2	0.0	657	116.5	402.2	0.0
658	155.3	402.2	0.0	659	194.2	402.2	0.0	660	233.0	402.2	0.0
661	271.8	402.2	0.0	662	310.7	402.2	0.0	663	349.5	402.2	0.0
664	388.3	402.2	0.0	665	427.2	402.2	0.0	666	466.0	402.2	0.0
667	504.8	402.2	0.0	668	543.7	402.2	0.0	669	582.5	402.2	0.0
670	38.8	423.3	0.0	671	0.0	423.3	0.0	672	77.7	423.3	0.0
673	116.5	423.3	0.0	674	155.3	423.3	0.0	675	194.2	423.3	0.0
676	233.0	423.3	0.0	677	271.8	423.3	0.0	678	310.7	423.3	0.0
679	349.5	423.3	0.0	680	388.3	423.3	0.0	681	427.2	423.3	0.0
682	466.0	423.3	0.0	683	504.8	423.3	0.0	684	543.7	423.3	0.0
685	582.5	423.3	0.0	686	38.8	444.5	0.0	687	0.0	444.5	0.0
688	77.7	444.5	0.0	689	116.5	444.5	0.0	690	155.3	444.5	0.0
691	194.2	444.5	0.0	692	233.0	444.5	0.0	693	271.8	444.5	0.0
694	310.7	444.5	0.0	695	349.5	444.5	0.0	696	388.3	444.5	0.0
697	427.2	444.5	0.0	698	466.0	444.5	0.0	699	504.8	444.5	0.0
700	543.7	444.5	0.0	701	582.5	444.5	0.0	702	38.8	465.7	0.0
703	0.0	465.7	0.0	704	77.7	465.7	0.0	705	116.5	465.7	0.0
706	155.3	465.7	0.0	707	194.2	465.7	0.0	708	233.0	465.7	0.0
709	271.8	465.7	0.0	710	310.7	465.7	0.0	711	349.5	465.7	0.0
712	388.3	465.7	0.0	713	427.2	465.7	0.0	714	466.0	465.7	0.0
715	504.8	465.7	0.0	716	543.7	465.7	0.0	717	582.5	465.7	0.0
718	38.8	486.8	0.0	719	0.0	486.8	0.0	720	77.7	486.8	0.0
721	116.5	486.8	0.0	722	155.3	486.8	0.0	723	194.2	486.8	0.0
724	233.0	486.8	0.0	725	271.8	486.8	0.0	726	310.7	486.8	0.0
727	349.5	486.8	0.0	728	388.3	486.8	0.0	729	427.2	486.8	0.0
730	466.0	486.8	0.0	731	504.8	486.8	0.0	732	543.7	486.8	0.0
733	582.5	486.8	0.0	734	38.8	508.0	0.0	735	0.0	508.0	0.0
736	77.7	508.0	0.0	737	116.5	508.0	0.0	738	155.3	508.0	0.0
739	194.2	508.0	0.0	740	233.0	508.0	0.0	741	271.8	508.0	0.0
742	310.7	508.0	0.0	743	349.5	508.0	0.0	744	388.3	508.0	0.0
745	427.2	508.0	0.0	746	466.0	508.0	0.0	747	504.8	508.0	0.0
748	543.7	508.0	0.0	749	582.5	508.0	0.0	750	38.8	529.2	0.0
751	0.0	529.2	0.0	752	77.7	529.2	0.0	753	116.5	529.2	0.0

754	155.3	529.2	0.0	755	194.2	529.2	0.0	756	233.0	529.2	0.0
757	271.8	529.2	0.0	758	310.7	529.2	0.0	759	349.5	529.2	0.0
760	388.3	529.2	0.0	761	427.2	529.2	0.0	762	466.0	529.2	0.0
763	504.8	529.2	0.0	764	543.7	529.2	0.0	765	582.5	529.2	0.0
766	38.8	550.3	0.0	767	0.0	550.3	0.0	768	77.7	550.3	0.0
769	116.5	550.3	0.0	770	155.3	550.3	0.0	771	194.2	550.3	0.0
772	233.0	550.3	0.0	773	271.8	550.3	0.0	774	310.7	550.3	0.0
775	349.5	550.3	0.0	776	388.3	550.3	0.0	777	427.2	550.3	0.0
778	466.0	550.3	0.0	779	504.8	550.3	0.0	780	543.7	550.3	0.0
781	582.5	550.3	0.0	782	38.8	571.5	0.0	783	0.0	571.5	0.0
784	77.7	571.5	0.0	785	116.5	571.5	0.0	786	155.3	571.5	0.0
787	194.2	571.5	0.0	788	233.0	571.5	0.0	789	271.8	571.5	0.0
790	310.7	571.5	0.0	791	349.5	571.5	0.0	792	388.3	571.5	0.0
793	427.2	571.5	0.0	794	466.0	571.5	0.0	795	504.8	571.5	0.0
796	543.7	571.5	0.0	797	582.5	571.5	0.0	798	38.8	592.7	0.0
799	0.0	592.7	0.0	800	77.7	592.7	0.0	801	116.5	592.7	0.0
802	155.3	592.7	0.0	803	194.2	592.7	0.0	804	233.0	592.7	0.0
805	271.8	592.7	0.0	806	310.7	592.7	0.0	807	349.5	592.7	0.0
808	388.3	592.7	0.0	809	427.2	592.7	0.0	810	466.0	592.7	0.0
811	504.8	592.7	0.0	812	543.7	592.7	0.0	813	582.5	592.7	0.0
814	38.8	613.8	0.0	815	0.0	613.8	0.0	816	77.7	613.8	0.0
817	116.5	613.8	0.0	818	155.3	613.8	0.0	819	194.2	613.8	0.0
820	233.0	613.8	0.0	821	271.8	613.8	0.0	822	310.7	613.8	0.0
823	349.5	613.8	0.0	824	388.3	613.8	0.0	825	427.2	613.8	0.0
826	466.0	613.8	0.0	827	504.8	613.8	0.0	828	543.7	613.8	0.0
829	582.5	613.8	0.0	830	38.8	635.0	0.0	831	77.7	635.0	0.0
832	116.5	635.0	0.0	833	155.3	635.0	0.0	834	194.2	635.0	0.0
835	233.0	635.0	0.0	836	271.8	635.0	0.0	837	310.7	635.0	0.0
838	349.5	635.0	0.0	839	388.3	635.0	0.0	840	427.2	635.0	0.0
841	466.0	635.0	0.0	842	504.8	635.0	0.0	843	543.7	635.0	0.0
844	621.3	0.0	0.0	845	621.3	21.2	0.0	846	660.2	0.0	0.0
847	660.2	21.2	0.0	848	699.0	0.0	0.0	849	699.0	21.2	0.0
850	737.8	0.0	0.0	851	737.8	21.2	0.0	852	776.7	0.0	0.0
853	776.7	21.2	0.0	854	815.5	0.0	0.0	855	815.5	21.2	0.0
856	854.3	0.0	0.0	857	854.3	21.2	0.0	858	893.2	0.0	0.0
859	893.2	21.2	0.0	860	932.0	0.0	0.0	861	932.0	21.2	0.0
862	970.8	0.0	0.0	863	970.8	21.2	0.0	864	1009.7	0.0	0.0
865	1009.7	21.2	0.0	866	1048.5	0.0	0.0	867	1048.5	21.2	0.0
868	1087.3	0.0	0.0	869	1087.3	21.2	0.0	870	1126.2	0.0	0.0
871	1126.2	21.2	0.0	872	1165.0	21.2	0.0	873	621.3	42.3	0.0
874	660.2	42.3	0.0	875	699.0	42.3	0.0	876	737.8	42.3	0.0
877	776.7	42.3	0.0	878	815.5	42.3	0.0	879	854.3	42.3	0.0
880	893.2	42.3	0.0	881	932.0	42.3	0.0	882	970.8	42.3	0.0
883	1009.7	42.3	0.0	884	1048.5	42.3	0.0	885	1087.3	42.3	0.0
886	1126.2	42.3	0.0	887	1165.0	42.3	0.0	888	621.3	63.5	0.0
889	660.2	63.5	0.0	890	699.0	63.5	0.0	891	737.8	63.5	0.0
892	776.7	63.5	0.0	893	815.5	63.5	0.0	894	854.3	63.5	0.0
895	893.2	63.5	0.0	896	932.0	63.5	0.0	897	970.8	63.5	0.0
898	1009.7	63.5	0.0	899	1048.5	63.5	0.0	900	1087.3	63.5	0.0
901	1126.2	63.5	0.0	902	1165.0	63.5	0.0	903	621.3	84.7	0.0
904	660.2	84.7	0.0	905	699.0	84.7	0.0	906	737.8	84.7	0.0
907	776.7	84.7	0.0	908	815.5	84.7	0.0	909	854.3	84.7	0.0
910	893.2	84.7	0.0	911	932.0	84.7	0.0	912	970.8	84.7	0.0
913	1009.7	84.7	0.0	914	1048.5	84.7	0.0	915	1087.3	84.7	0.0
916	1126.2	84.7	0.0	917	1165.0	84.7	0.0	918	621.3	105.8	0.0
919	660.2	105.8	0.0	920	699.0	105.8	0.0	921	737.8	105.8	0.0
922	776.7	105.8	0.0	923	815.5	105.8	0.0	924	854.3	105.8	0.0
925	893.2	105.8	0.0	926	932.0	105.8	0.0	927	970.8	105.8	0.0
928	1009.7	105.8	0.0	929	1048.5	105.8	0.0	930	1087.3	105.8	0.0
931	1126.2	105.8	0.0	932	1165.0	105.8	0.0	933	621.3	127.0	0.0
934	660.2	127.0	0.0	935	699.0	127.0	0.0	936	737.8	127.0	0.0
937	776.7	127.0	0.0	938	815.5	127.0	0.0	939	854.3	127.0	0.0
940	893.2	127.0	0.0	941	932.0	127.0	0.0	942	970.8	127.0	0.0
943	1009.7	127.0	0.0	944	1048.5	127.0	0.0	945	1087.3	127.0	0.0
946	1126.2	127.0	0.0	947	1165.0	127.0	0.0	948	621.3	148.2	0.0
949	660.2	148.2	0.0	950	699.0	148.2	0.0	951	737.8	148.2	0.0
952	776.7	148.2	0.0	953	815.5	148.2	0.0	954	854.3	148.2	0.0
955	893.2	148.2	0.0	956	932.0	148.2	0.0	957	970.8	148.2	0.0
958	1009.7	148.2	0.0	959	1048.5	148.2	0.0	960	1087.3	148.2	0.0
961	1126.2	148.2	0.0	962	1165.0	148.2	0.0	963	621.3	169.3	0.0
964	660.2	169.3	0.0	965	699.0	169.3	0.0	966	737.8	169.3	0.0
967	776.7	169.3	0.0	968	815.5	169.3	0.0	969	854.3	169.3	0.0
970	893.2	169.3	0.0	971	932.0	169.3	0.0	972	970.8	169.3	0.0
973	1009.7	169.3	0.0	974	1048.5	169.3	0.0	975	1087.3	169.3	0.0
976	1126.2	169.3	0.0	977	1165.0	169.3	0.0	978	621.3	190.5	0.0
979	660.2	190.5	0.0	980	699.0	190.5	0.0	981	737.8	190.5	0.0
982	776.7	190.5	0.0	983	815.5	190.5	0.0	984	854.3	190.5	0.0

985	893.2	190.5	0.0	986	932.0	190.5	0.0	987	970.8	190.5	0.0
988	1009.7	190.5	0.0	989	1048.5	190.5	0.0	990	1087.3	190.5	0.0
991	1126.2	190.5	0.0	992	1165.0	190.5	0.0	993	621.3	211.7	0.0
994	660.2	211.7	0.0	995	699.0	211.7	0.0	996	737.8	211.7	0.0
997	776.7	211.7	0.0	998	815.5	211.7	0.0	999	854.3	211.7	0.0
1000	893.2	211.7	0.0	1001	932.0	211.7	0.0	1002	970.8	211.7	0.0
1003	1009.7	211.7	0.0	1004	1048.5	211.7	0.0	1005	1087.3	211.7	0.0
1006	1126.2	211.7	0.0	1007	1165.0	211.7	0.0	1008	621.3	232.8	0.0
1009	660.2	232.8	0.0	1010	699.0	232.8	0.0	1011	737.8	232.8	0.0
1012	776.7	232.8	0.0	1013	815.5	232.8	0.0	1014	854.3	232.8	0.0
1015	893.2	232.8	0.0	1016	932.0	232.8	0.0	1017	970.8	232.8	0.0
1018	1009.7	232.8	0.0	1019	1048.5	232.8	0.0	1020	1087.3	232.8	0.0
1021	1126.2	232.8	0.0	1022	1165.0	232.8	0.0	1023	621.3	254.0	0.0
1024	660.2	254.0	0.0	1025	699.0	254.0	0.0	1026	737.8	254.0	0.0
1027	776.7	254.0	0.0	1028	815.5	254.0	0.0	1029	854.3	254.0	0.0
1030	893.2	254.0	0.0	1031	932.0	254.0	0.0	1032	970.8	254.0	0.0
1033	1009.7	254.0	0.0	1034	1048.5	254.0	0.0	1035	1087.3	254.0	0.0
1036	1126.2	254.0	0.0	1037	1165.0	254.0	0.0	1038	621.3	275.2	0.0
1039	660.2	275.2	0.0	1040	699.0	275.2	0.0	1041	737.8	275.2	0.0
1042	776.7	275.2	0.0	1043	815.5	275.2	0.0	1044	854.3	275.2	0.0
1045	893.2	275.2	0.0	1046	932.0	275.2	0.0	1047	970.8	275.2	0.0
1048	1009.7	275.2	0.0	1049	1048.5	275.2	0.0	1050	1087.3	275.2	0.0
1051	1126.2	275.2	0.0	1052	1165.0	275.2	0.0	1053	621.3	296.3	0.0
1054	660.2	296.3	0.0	1055	699.0	296.3	0.0	1056	737.8	296.3	0.0
1057	776.7	296.3	0.0	1058	815.5	296.3	0.0	1059	854.3	296.3	0.0
1060	893.2	296.3	0.0	1061	932.0	296.3	0.0	1062	970.8	296.3	0.0
1063	1009.7	296.3	0.0	1064	1048.5	296.3	0.0	1065	1087.3	296.3	0.0
1066	1126.2	296.3	0.0	1067	1165.0	296.3	0.0	1068	621.3	317.5	0.0
1069	660.2	317.5	0.0	1070	699.0	317.5	0.0	1071	737.8	317.5	0.0
1072	776.7	317.5	0.0	1073	815.5	317.5	0.0	1074	854.3	317.5	0.0
1075	893.2	317.5	0.0	1076	932.0	317.5	0.0	1077	970.8	317.5	0.0
1078	1009.7	317.5	0.0	1079	1048.5	317.5	0.0	1080	1087.3	317.5	0.0
1081	1126.2	317.5	0.0	1082	1165.0	317.5	0.0	1083	621.3	338.7	0.0
1084	660.2	338.7	0.0	1085	699.0	338.7	0.0	1086	737.8	338.7	0.0
1087	776.7	338.7	0.0	1088	815.5	338.7	0.0	1089	854.3	338.7	0.0
1090	893.2	338.7	0.0	1091	932.0	338.7	0.0	1092	970.8	338.7	0.0
1093	1009.7	338.7	0.0	1094	1048.5	338.7	0.0	1095	1087.3	338.7	0.0
1096	1126.2	338.7	0.0	1097	1165.0	338.7	0.0	1098	621.3	359.8	0.0
1099	660.2	359.8	0.0	1100	699.0	359.8	0.0	1101	737.8	359.8	0.0
1102	776.7	359.8	0.0	1103	815.5	359.8	0.0	1104	854.3	359.8	0.0
1105	893.2	359.8	0.0	1106	932.0	359.8	0.0	1107	970.8	359.8	0.0
1108	1009.7	359.8	0.0	1109	1048.5	359.8	0.0	1110	1087.3	359.8	0.0
1111	1126.2	359.8	0.0	1112	1165.0	359.8	0.0	1113	621.3	381.0	0.0
1114	660.2	381.0	0.0	1115	699.0	381.0	0.0	1116	737.8	381.0	0.0
1117	776.7	381.0	0.0	1118	815.5	381.0	0.0	1119	854.3	381.0	0.0
1120	893.2	381.0	0.0	1121	932.0	381.0	0.0	1122	970.8	381.0	0.0
1123	1009.7	381.0	0.0	1124	1048.5	381.0	0.0	1125	1087.3	381.0	0.0
1126	1126.2	381.0	0.0	1127	1165.0	381.0	0.0	1128	621.3	402.2	0.0
1129	660.2	402.2	0.0	1130	699.0	402.2	0.0	1131	737.8	402.2	0.0
1132	776.7	402.2	0.0	1133	815.5	402.2	0.0	1134	854.3	402.2	0.0
1135	893.2	402.2	0.0	1136	932.0	402.2	0.0	1137	970.8	402.2	0.0
1138	1009.7	402.2	0.0	1139	1048.5	402.2	0.0	1140	1087.3	402.2	0.0
1141	1126.2	402.2	0.0	1142	1165.0	402.2	0.0	1143	621.3	423.3	0.0
1144	660.2	423.3	0.0	1145	699.0	423.3	0.0	1146	737.8	423.3	0.0
1147	776.7	423.3	0.0	1148	815.5	423.3	0.0	1149	854.3	423.3	0.0
1150	893.2	423.3	0.0	1151	932.0	423.3	0.0	1152	970.8	423.3	0.0
1153	1009.7	423.3	0.0	1154	1048.5	423.3	0.0	1155	1087.3	423.3	0.0
1156	1126.2	423.3	0.0	1157	1165.0	423.3	0.0	1158	621.3	444.5	0.0
1159	660.2	444.5	0.0	1160	699.0	444.5	0.0	1161	737.8	444.5	0.0
1162	776.7	444.5	0.0	1163	815.5	444.5	0.0	1164	854.3	444.5	0.0
1165	893.2	444.5	0.0	1166	932.0	444.5	0.0	1167	970.8	444.5	0.0
1168	1009.7	444.5	0.0	1169	1048.5	444.5	0.0	1170	1087.3	444.5	0.0
1171	1126.2	444.5	0.0	1172	1165.0	444.5	0.0	1173	621.3	465.7	0.0
1174	660.2	465.7	0.0	1175	699.0	465.7	0.0	1176	737.8	465.7	0.0
1177	776.7	465.7	0.0	1178	815.5	465.7	0.0	1179	854.3	465.7	0.0
1180	893.2	465.7	0.0	1181	932.0	465.7	0.0	1182	970.8	465.7	0.0
1183	1009.7	465.7	0.0	1184	1048.5	465.7	0.0	1185	1087.3	465.7	0.0
1186	1126.2	465.7	0.0	1187	1165.0	465.7	0.0	1188	621.3	486.8	0.0
1189	660.2	486.8	0.0	1190	699.0	486.8	0.0	1191	737.8	486.8	0.0
1192	776.7	486.8	0.0	1193	815.5	486.8	0.0	1194	854.3	486.8	0.0
1195	893.2	486.8	0.0	1196	932.0	486.8	0.0	1197	970.8	486.8	0.0
1198	1009.7	486.8	0.0	1199	1048.5	486.8	0.0	1200	1087.3	486.8	0.0
1201	1126.2	486.8	0.0	1202	1165.0	486.8	0.0	1203	621.3	508.0	0.0
1204	660.2	508.0	0.0	1205	699.0	508.0	0.0	1206	737.8	508.0	0.0
1207	776.7	508.0	0.0	1208	815.5	508.0	0.0	1209	854.3	508.0	0.0
1210	893.2	508.0	0.0	1211	932.0	508.0	0.0	1212	970.8	508.0	0.0
1213	1009.7	508.0	0.0	1214	1048.5	508.0	0.0	1215	1087.3	508.0	0.0

1216	1126.2	508.0	0.0	1217	1165.0	508.0	0.0	1218	621.3	529.2	0.0
1219	660.2	529.2	0.0	1220	699.0	529.2	0.0	1221	737.8	529.2	0.0
1222	776.7	529.2	0.0	1223	815.5	529.2	0.0	1224	854.3	529.2	0.0
1225	893.2	529.2	0.0	1226	932.0	529.2	0.0	1227	970.8	529.2	0.0
1228	1009.7	529.2	0.0	1229	1048.5	529.2	0.0	1230	1087.3	529.2	0.0
1231	1126.2	529.2	0.0	1232	1165.0	529.2	0.0	1233	621.3	550.3	0.0
1234	660.2	550.3	0.0	1235	699.0	550.3	0.0	1236	737.8	550.3	0.0
1237	776.7	550.3	0.0	1238	815.5	550.3	0.0	1239	854.3	550.3	0.0
1240	893.2	550.3	0.0	1241	932.0	550.3	0.0	1242	970.8	550.3	0.0
1243	1009.7	550.3	0.0	1244	1048.5	550.3	0.0	1245	1087.3	550.3	0.0
1246	1126.2	550.3	0.0	1247	1165.0	550.3	0.0	1248	621.3	571.5	0.0
1249	660.2	571.5	0.0	1250	699.0	571.5	0.0	1251	737.8	571.5	0.0
1252	776.7	571.5	0.0	1253	815.5	571.5	0.0	1254	854.3	571.5	0.0
1255	893.2	571.5	0.0	1256	932.0	571.5	0.0	1257	970.8	571.5	0.0
1258	1009.7	571.5	0.0	1259	1048.5	571.5	0.0	1260	1087.3	571.5	0.0
1261	1126.2	571.5	0.0	1262	1165.0	571.5	0.0	1263	621.3	592.7	0.0
1264	660.2	592.7	0.0	1265	699.0	592.7	0.0	1266	737.8	592.7	0.0
1267	776.7	592.7	0.0	1268	815.5	592.7	0.0	1269	854.3	592.7	0.0
1270	893.2	592.7	0.0	1271	932.0	592.7	0.0	1272	970.8	592.7	0.0
1273	1009.7	592.7	0.0	1274	1048.5	592.7	0.0	1275	1087.3	592.7	0.0
1276	1126.2	592.7	0.0	1277	1165.0	592.7	0.0	1278	621.3	613.8	0.0
1279	660.2	613.8	0.0	1280	699.0	613.8	0.0	1281	737.8	613.8	0.0
1282	776.7	613.8	0.0	1283	815.5	613.8	0.0	1284	854.3	613.8	0.0
1285	893.2	613.8	0.0	1286	932.0	613.8	0.0	1287	970.8	613.8	0.0
1288	1009.7	613.8	0.0	1289	1048.5	613.8	0.0	1290	1087.3	613.8	0.0
1291	1126.2	613.8	0.0	1292	1165.0	613.8	0.0	1293	621.3	635.0	0.0
1294	660.2	635.0	0.0	1295	699.0	635.0	0.0	1296	737.8	635.0	0.0
1297	776.7	635.0	0.0	1298	815.5	635.0	0.0	1299	854.3	635.0	0.0
1300	893.2	635.0	0.0	1301	932.0	635.0	0.0	1302	970.8	635.0	0.0
1303	1009.7	635.0	0.0	1304	1048.5	635.0	0.0	1305	1087.3	635.0	0.0
1306	1126.2	635.0	0.0	1307	38.8	652.0	0.0	1308	0.0	652.0	0.0
1309	77.7	652.0	0.0	1310	116.5	652.0	0.0	1311	155.3	652.0	0.0
1312	194.2	652.0	0.0	1313	233.0	652.0	0.0	1314	271.8	652.0	0.0
1315	310.7	652.0	0.0	1316	349.5	652.0	0.0	1317	388.3	652.0	0.0
1318	427.2	652.0	0.0	1319	466.0	652.0	0.0	1320	504.8	652.0	0.0
1321	543.7	652.0	0.0	1322	582.5	652.0	0.0	1323	38.8	669.1	0.0
1324	0.0	669.1	0.0	1325	77.7	669.1	0.0	1326	116.5	669.1	0.0
1327	155.3	669.1	0.0	1328	194.2	669.1	0.0	1329	233.0	669.1	0.0
1330	271.8	669.1	0.0	1331	310.7	669.1	0.0	1332	349.5	669.1	0.0
1333	388.3	669.1	0.0	1334	427.2	669.1	0.0	1335	466.0	669.1	0.0
1336	504.8	669.1	0.0	1337	543.7	669.1	0.0	1338	582.5	669.1	0.0
1339	38.8	686.1	0.0	1340	0.0	686.1	0.0	1341	77.7	686.1	0.0
1342	116.5	686.1	0.0	1343	155.3	686.1	0.0	1344	194.2	686.1	0.0
1345	233.0	686.1	0.0	1346	271.8	686.1	0.0	1347	310.7	686.1	0.0
1348	349.5	686.1	0.0	1349	388.3	686.1	0.0	1350	427.2	686.1	0.0
1351	466.0	686.1	0.0	1352	504.8	686.1	0.0	1353	543.7	686.1	0.0
1354	582.5	686.1	0.0	1355	38.8	703.1	0.0	1356	0.0	703.1	0.0
1357	77.7	703.1	0.0	1358	116.5	703.1	0.0	1359	155.3	703.1	0.0
1360	194.2	703.1	0.0	1361	233.0	703.1	0.0	1362	271.8	703.1	0.0
1363	310.7	703.1	0.0	1364	349.5	703.1	0.0	1365	388.3	703.1	0.0
1366	427.2	703.1	0.0	1367	466.0	703.1	0.0	1368	504.8	703.1	0.0
1369	543.7	703.1	0.0	1370	582.5	703.1	0.0	1371	38.8	720.1	0.0
1372	0.0	720.1	0.0	1373	77.7	720.1	0.0	1374	116.5	720.1	0.0
1375	155.3	720.1	0.0	1376	194.2	720.1	0.0	1377	233.0	720.1	0.0
1378	271.8	720.1	0.0	1379	310.7	720.1	0.0	1380	349.5	720.1	0.0
1381	388.3	720.1	0.0	1382	427.2	720.1	0.0	1383	466.0	720.1	0.0
1384	504.8	720.1	0.0	1385	543.7	720.1	0.0	1386	582.5	720.1	0.0
1387	38.8	737.2	0.0	1388	0.0	737.2	0.0	1389	77.7	737.2	0.0
1390	116.5	737.2	0.0	1391	155.3	737.2	0.0	1392	194.2	737.2	0.0
1393	233.0	737.2	0.0	1394	271.8	737.2	0.0	1395	310.7	737.2	0.0
1396	349.5	737.2	0.0	1397	388.3	737.2	0.0	1398	427.2	737.2	0.0
1399	466.0	737.2	0.0	1400	504.8	737.2	0.0	1401	543.7	737.2	0.0
1402	582.5	737.2	0.0	1403	38.8	754.2	0.0	1404	0.0	754.2	0.0
1405	77.7	754.2	0.0	1406	116.5	754.2	0.0	1407	155.3	754.2	0.0
1408	194.2	754.2	0.0	1409	233.0	754.2	0.0	1410	271.8	754.2	0.0
1411	310.7	754.2	0.0	1412	349.5	754.2	0.0	1413	388.3	754.2	0.0
1414	427.2	754.2	0.0	1415	466.0	754.2	0.0	1416	504.8	754.2	0.0
1417	543.7	754.2	0.0	1418	582.5	754.2	0.0	1419	38.8	771.2	0.0
1420	0.0	771.2	0.0	1421	77.7	771.2	0.0	1422	116.5	771.2	0.0
1423	155.3	771.2	0.0	1424	194.2	771.2	0.0	1425	233.0	771.2	0.0
1426	271.8	771.2	0.0	1427	310.7	771.2	0.0	1428	349.5	771.2	0.0
1429	388.3	771.2	0.0	1430	427.2	771.2	0.0	1431	466.0	771.2	0.0
1432	504.8	771.2	0.0	1433	543.7	771.2	0.0	1434	582.5	771.2	0.0
1435	38.8	788.3	0.0	1436	0.0	788.3	0.0	1437	77.7	788.3	0.0
1438	116.5	788.3	0.0	1439	155.3	788.3	0.0	1440	194.2	788.3	0.0
1441	233.0	788.3	0.0	1442	271.8	788.3	0.0	1443	310.7	788.3	0.0
1444	349.5	788.3	0.0	1445	388.3	788.3	0.0	1446	427.2	788.3	0.0

1447	466.0	788.3	0.0	1448	504.8	788.3	0.0	1449	543.7	788.3	0.0
1450	582.5	788.3	0.0	1451	38.8	805.3	0.0	1452	0.0	805.3	0.0
1453	77.7	805.3	0.0	1454	116.5	805.3	0.0	1455	155.3	805.3	0.0
1456	194.2	805.3	0.0	1457	233.0	805.3	0.0	1458	271.8	805.3	0.0
1459	310.7	805.3	0.0	1460	349.5	805.3	0.0	1461	388.3	805.3	0.0
1462	427.2	805.3	0.0	1463	466.0	805.3	0.0	1464	504.8	805.3	0.0
1465	543.7	805.3	0.0	1466	582.5	805.3	0.0	1467	38.8	822.3	0.0
1468	0.0	822.3	0.0	1469	77.7	822.3	0.0	1470	116.5	822.3	0.0
1471	155.3	822.3	0.0	1472	194.2	822.3	0.0	1473	233.0	822.3	0.0
1474	271.8	822.3	0.0	1475	310.7	822.3	0.0	1476	349.5	822.3	0.0
1477	388.3	822.3	0.0	1478	427.2	822.3	0.0	1479	466.0	822.3	0.0
1480	504.8	822.3	0.0	1481	543.7	822.3	0.0	1482	582.5	822.3	0.0
1483	38.8	839.3	0.0	1484	0.0	839.3	0.0	1485	77.7	839.3	0.0
1486	116.5	839.3	0.0	1487	155.3	839.3	0.0	1488	194.2	839.3	0.0
1489	233.0	839.3	0.0	1490	271.8	839.3	0.0	1491	310.7	839.3	0.0
1492	349.5	839.3	0.0	1493	388.3	839.3	0.0	1494	427.2	839.3	0.0
1495	466.0	839.3	0.0	1496	504.8	839.3	0.0	1497	543.7	839.3	0.0
1498	582.5	839.3	0.0	1499	38.8	856.4	0.0	1500	0.0	856.4	0.0
1501	77.7	856.4	0.0	1502	116.5	856.4	0.0	1503	155.3	856.4	0.0
1504	194.2	856.4	0.0	1505	233.0	856.4	0.0	1506	271.8	856.4	0.0
1507	310.7	856.4	0.0	1508	349.5	856.4	0.0	1509	388.3	856.4	0.0
1510	427.2	856.4	0.0	1511	466.0	856.4	0.0	1512	504.8	856.4	0.0
1513	543.7	856.4	0.0	1514	582.5	856.4	0.0	1515	38.8	873.4	0.0
1516	0.0	873.4	0.0	1517	77.7	873.4	0.0	1518	116.5	873.4	0.0
1519	155.3	873.4	0.0	1520	194.2	873.4	0.0	1521	233.0	873.4	0.0
1522	271.8	873.4	0.0	1523	310.7	873.4	0.0	1524	349.5	873.4	0.0
1525	388.3	873.4	0.0	1526	427.2	873.4	0.0	1527	466.0	873.4	0.0
1528	504.8	873.4	0.0	1529	543.7	873.4	0.0	1530	582.5	873.4	0.0
1531	38.8	890.4	0.0	1532	0.0	890.4	0.0	1533	77.7	890.4	0.0
1534	116.5	890.4	0.0	1535	155.3	890.4	0.0	1536	194.2	890.4	0.0
1537	233.0	890.4	0.0	1538	271.8	890.4	0.0	1539	310.7	890.4	0.0
1540	349.5	890.4	0.0	1541	388.3	890.4	0.0	1542	427.2	890.4	0.0
1543	466.0	890.4	0.0	1544	504.8	890.4	0.0	1545	543.7	890.4	0.0
1546	582.5	890.4	0.0	1547	38.8	907.5	0.0	1548	0.0	907.5	0.0
1549	77.7	907.5	0.0	1550	116.5	907.5	0.0	1551	155.3	907.5	0.0
1552	194.2	907.5	0.0	1553	233.0	907.5	0.0	1554	271.8	907.5	0.0
1555	310.7	907.5	0.0	1556	349.5	907.5	0.0	1557	388.3	907.5	0.0
1558	427.2	907.5	0.0	1559	466.0	907.5	0.0	1560	504.8	907.5	0.0
1561	543.7	907.5	0.0	1562	582.5	907.5	0.0	1563	38.8	924.5	0.0
1564	0.0	924.5	0.0	1565	77.7	924.5	0.0	1566	116.5	924.5	0.0
1567	155.3	924.5	0.0	1568	194.2	924.5	0.0	1569	233.0	924.5	0.0
1570	271.8	924.5	0.0	1571	310.7	924.5	0.0	1572	349.5	924.5	0.0
1573	388.3	924.5	0.0	1574	427.2	924.5	0.0	1575	466.0	924.5	0.0
1576	504.8	924.5	0.0	1577	543.7	924.5	0.0	1578	582.5	924.5	0.0
1579	38.8	941.5	0.0	1580	0.0	941.5	0.0	1581	77.7	941.5	0.0
1582	116.5	941.5	0.0	1583	155.3	941.5	0.0	1584	194.2	941.5	0.0
1585	233.0	941.5	0.0	1586	271.8	941.5	0.0	1587	310.7	941.5	0.0
1588	349.5	941.5	0.0	1589	388.3	941.5	0.0	1590	427.2	941.5	0.0
1591	466.0	941.5	0.0	1592	504.8	941.5	0.0	1593	543.7	941.5	0.0
1594	582.5	941.5	0.0	1595	38.8	958.6	0.0	1596	0.0	958.6	0.0
1597	77.7	958.6	0.0	1598	116.5	958.6	0.0	1599	155.3	958.6	0.0
1600	194.2	958.6	0.0	1601	233.0	958.6	0.0	1602	271.8	958.6	0.0
1603	310.7	958.6	0.0	1604	349.5	958.6	0.0	1605	388.3	958.6	0.0
1606	427.2	958.6	0.0	1607	466.0	958.6	0.0	1608	504.8	958.6	0.0
1609	543.7	958.6	0.0	1610	582.5	958.6	0.0	1611	38.8	975.6	0.0
1612	0.0	975.6	0.0	1613	77.7	975.6	0.0	1614	116.5	975.6	0.0
1615	155.3	975.6	0.0	1616	194.2	975.6	0.0	1617	233.0	975.6	0.0
1618	271.8	975.6	0.0	1619	310.7	975.6	0.0	1620	349.5	975.6	0.0
1621	388.3	975.6	0.0	1622	427.2	975.6	0.0	1623	466.0	975.6	0.0
1624	504.8	975.6	0.0	1625	543.7	975.6	0.0	1626	582.5	975.6	0.0
1627	38.8	992.6	0.0	1628	0.0	992.6	0.0	1629	77.7	992.6	0.0
1630	116.5	992.6	0.0	1631	155.3	992.6	0.0	1632	194.2	992.6	0.0
1633	233.0	992.6	0.0	1634	271.8	992.6	0.0	1635	310.7	992.6	0.0
1636	349.5	992.6	0.0	1637	388.3	992.6	0.0	1638	427.2	992.6	0.0
1639	466.0	992.6	0.0	1640	504.8	992.6	0.0	1641	543.7	992.6	0.0
1642	582.5	992.6	0.0	1643	38.8	1009.6	0.0	1644	0.0	1009.6	0.0
1645	77.7	1009.6	0.0	1646	116.5	1009.6	0.0	1647	155.3	1009.6	0.0
1648	194.2	1009.6	0.0	1649	233.0	1009.6	0.0	1650	271.8	1009.6	0.0
1651	310.7	1009.6	0.0	1652	349.5	1009.6	0.0	1653	388.3	1009.6	0.0
1654	427.2	1009.6	0.0	1655	466.0	1009.6	0.0	1656	504.8	1009.6	0.0
1657	543.7	1009.6	0.0	1658	582.5	1009.6	0.0	1659	38.8	1026.7	0.0
1660	0.0	1026.7	0.0	1661	77.7	1026.7	0.0	1662	116.5	1026.7	0.0
1663	155.3	1026.7	0.0	1664	194.2	1026.7	0.0	1665	233.0	1026.7	0.0
1666	271.8	1026.7	0.0	1667	310.7	1026.7	0.0	1668	349.5	1026.7	0.0
1669	388.3	1026.7	0.0	1670	427.2	1026.7	0.0	1671	466.0	1026.7	0.0
1672	504.8	1026.7	0.0	1673	543.7	1026.7	0.0	1674	582.5	1026.7	0.0
1675	38.8	1043.7	0.0	1676	0.0	1043.7	0.0	1677	77.7	1043.7	0.0

1678	116.5	1043.7	0.0	1679	155.3	1043.7	0.0	1680	194.2	1043.7	0.0
1681	233.0	1043.7	0.0	1682	271.8	1043.7	0.0	1683	310.7	1043.7	0.0
1684	349.5	1043.7	0.0	1685	388.3	1043.7	0.0	1686	427.2	1043.7	0.0
1687	466.0	1043.7	0.0	1688	504.8	1043.7	0.0	1689	543.7	1043.7	0.0
1690	582.5	1043.7	0.0	1691	38.8	1060.7	0.0	1692	0.0	1060.7	0.0
1693	77.7	1060.7	0.0	1694	116.5	1060.7	0.0	1695	155.3	1060.7	0.0
1696	194.2	1060.7	0.0	1697	233.0	1060.7	0.0	1698	271.8	1060.7	0.0
1699	310.7	1060.7	0.0	1700	349.5	1060.7	0.0	1701	388.3	1060.7	0.0
1702	427.2	1060.7	0.0	1703	466.0	1060.7	0.0	1704	504.8	1060.7	0.0
1705	543.7	1060.7	0.0	1706	582.5	1060.7	0.0	1707	38.8	1077.8	0.0
1708	0.0	1077.8	0.0	1709	77.7	1077.8	0.0	1710	116.5	1077.8	0.0
1711	155.3	1077.8	0.0	1712	194.2	1077.8	0.0	1713	233.0	1077.8	0.0
1714	271.8	1077.8	0.0	1715	310.7	1077.8	0.0	1716	349.5	1077.8	0.0
1717	388.3	1077.8	0.0	1718	427.2	1077.8	0.0	1719	466.0	1077.8	0.0
1720	504.8	1077.8	0.0	1721	543.7	1077.8	0.0	1722	582.5	1077.8	0.0
1723	38.8	1094.8	0.0	1724	0.0	1094.8	0.0	1725	77.7	1094.8	0.0
1726	116.5	1094.8	0.0	1727	155.3	1094.8	0.0	1728	194.2	1094.8	0.0
1729	233.0	1094.8	0.0	1730	271.8	1094.8	0.0	1731	310.7	1094.8	0.0
1732	349.5	1094.8	0.0	1733	388.3	1094.8	0.0	1734	427.2	1094.8	0.0
1735	466.0	1094.8	0.0	1736	504.8	1094.8	0.0	1737	543.7	1094.8	0.0
1738	582.5	1094.8	0.0	1739	38.8	1111.8	0.0	1740	0.0	1111.8	0.0
1741	77.7	1111.8	0.0	1742	116.5	1111.8	0.0	1743	155.3	1111.8	0.0
1744	194.2	1111.8	0.0	1745	233.0	1111.8	0.0	1746	271.8	1111.8	0.0
1747	310.7	1111.8	0.0	1748	349.5	1111.8	0.0	1749	388.3	1111.8	0.0
1750	427.2	1111.8	0.0	1751	466.0	1111.8	0.0	1752	504.8	1111.8	0.0
1753	543.7	1111.8	0.0	1754	582.5	1111.8	0.0	1755	38.8	1128.8	0.0
1756	0.0	1128.8	0.0	1757	77.7	1128.8	0.0	1758	116.5	1128.8	0.0
1759	155.3	1128.8	0.0	1760	194.2	1128.8	0.0	1761	233.0	1128.8	0.0
1762	271.8	1128.8	0.0	1763	310.7	1128.8	0.0	1764	349.5	1128.8	0.0
1765	388.3	1128.8	0.0	1766	427.2	1128.8	0.0	1767	466.0	1128.8	0.0
1768	504.8	1128.8	0.0	1769	543.7	1128.8	0.0	1770	582.5	1128.8	0.0
1771	38.8	1145.9	0.0	1772	77.7	1145.9	0.0	1773	116.5	1145.9	0.0
1774	155.3	1145.9	0.0	1775	194.2	1145.9	0.0	1776	233.0	1145.9	0.0
1777	271.8	1145.9	0.0	1778	310.7	1145.9	0.0	1779	349.5	1145.9	0.0
1780	388.3	1145.9	0.0	1781	427.2	1145.9	0.0	1782	466.0	1145.9	0.0
1783	504.8	1145.9	0.0	1784	543.7	1145.9	0.0	1785	621.3	652.0	0.0
1786	660.2	652.0	0.0	1787	699.0	652.0	0.0	1788	737.8	652.0	0.0
1789	776.7	652.0	0.0	1790	815.5	652.0	0.0	1791	854.3	652.0	0.0
1792	893.2	652.0	0.0	1793	932.0	652.0	0.0	1794	970.8	652.0	0.0
1795	1009.7	652.0	0.0	1796	1048.5	652.0	0.0	1797	1087.3	652.0	0.0
1798	1126.2	652.0	0.0	1799	1165.0	652.0	0.0	1800	621.3	669.1	0.0
1801	660.2	669.1	0.0	1802	699.0	669.1	0.0	1803	737.8	669.1	0.0
1804	776.7	669.1	0.0	1805	815.5	669.1	0.0	1806	854.3	669.1	0.0
1807	893.2	669.1	0.0	1808	932.0	669.1	0.0	1809	970.8	669.1	0.0
1810	1009.7	669.1	0.0	1811	1048.5	669.1	0.0	1812	1087.3	669.1	0.0
1813	1126.2	669.1	0.0	1814	1165.0	669.1	0.0	1815	621.3	686.1	0.0
1816	660.2	686.1	0.0	1817	699.0	686.1	0.0	1818	737.8	686.1	0.0
1819	776.7	686.1	0.0	1820	815.5	686.1	0.0	1821	854.3	686.1	0.0
1822	893.2	686.1	0.0	1823	932.0	686.1	0.0	1824	970.8	686.1	0.0
1825	1009.7	686.1	0.0	1826	1048.5	686.1	0.0	1827	1087.3	686.1	0.0
1828	1126.2	686.1	0.0	1829	1165.0	686.1	0.0	1830	621.3	703.1	0.0
1831	660.2	703.1	0.0	1832	699.0	703.1	0.0	1833	737.8	703.1	0.0
1834	776.7	703.1	0.0	1835	815.5	703.1	0.0	1836	854.3	703.1	0.0
1837	893.2	703.1	0.0	1838	932.0	703.1	0.0	1839	970.8	703.1	0.0
1840	1009.7	703.1	0.0	1841	1048.5	703.1	0.0	1842	1087.3	703.1	0.0
1843	1126.2	703.1	0.0	1844	1165.0	703.1	0.0	1845	621.3	720.1	0.0
1846	660.2	720.1	0.0	1847	699.0	720.1	0.0	1848	737.8	720.1	0.0
1849	776.7	720.1	0.0	1850	815.5	720.1	0.0	1851	854.3	720.1	0.0
1852	893.2	720.1	0.0	1853	932.0	720.1	0.0	1854	970.8	720.1	0.0
1855	1009.7	720.1	0.0	1856	1048.5	720.1	0.0	1857	1087.3	720.1	0.0
1858	1126.2	720.1	0.0	1859	1165.0	720.1	0.0	1860	621.3	737.2	0.0
1861	660.2	737.2	0.0	1862	699.0	737.2	0.0	1863	737.8	737.2	0.0
1864	776.7	737.2	0.0	1865	815.5	737.2	0.0	1866	854.3	737.2	0.0
1867	893.2	737.2	0.0	1868	932.0	737.2	0.0	1869	970.8	737.2	0.0
1870	1009.7	737.2	0.0	1871	1048.5	737.2	0.0	1872	1087.3	737.2	0.0
1873	1126.2	737.2	0.0	1874	1165.0	737.2	0.0	1875	621.3	754.2	0.0
1876	660.2	754.2	0.0	1877	699.0	754.2	0.0	1878	737.8	754.2	0.0
1879	776.7	754.2	0.0	1880	815.5	754.2	0.0	1881	854.3	754.2	0.0
1882	893.2	754.2	0.0	1883	932.0	754.2	0.0	1884	970.8	754.2	0.0
1885	1009.7	754.2	0.0	1886	1048.5	754.2	0.0	1887	1087.3	754.2	0.0
1888	1126.2	754.2	0.0	1889	1165.0	754.2	0.0	1890	621.3	771.2	0.0
1891	660.2	771.2	0.0	1892	699.0	771.2	0.0	1893	737.8	771.2	0.0
1894	776.7	771.2	0.0	1895	815.5	771.2	0.0	1896	854.3	771.2	0.0
1897	893.2	771.2	0.0	1898	932.0	771.2	0.0	1899	970.8	771.2	0.0
1900	1009.7	771.2	0.0	1901	1048.5	771.2	0.0	1902	1087.3	771.2	0.0
1903	1126.2	771.2	0.0	1904	1165.0	771.2	0.0	1905	621.3	788.3	0.0
1906	660.2	788.3	0.0	1907	699.0	788.3	0.0	1908	737.8	788.3	0.0

1909	776.7	788.3	0.0	1910	815.5	788.3	0.0	1911	854.3	788.3	0.0
1912	893.2	788.3	0.0	1913	932.0	788.3	0.0	1914	970.8	788.3	0.0
1915	1009.7	788.3	0.0	1916	1048.5	788.3	0.0	1917	1087.3	788.3	0.0
1918	1126.2	788.3	0.0	1919	1165.0	788.3	0.0	1920	621.3	805.3	0.0
1921	660.2	805.3	0.0	1922	699.0	805.3	0.0	1923	737.8	805.3	0.0
1924	776.7	805.3	0.0	1925	815.5	805.3	0.0	1926	854.3	805.3	0.0
1927	893.2	805.3	0.0	1928	932.0	805.3	0.0	1929	970.8	805.3	0.0
1930	1009.7	805.3	0.0	1931	1048.5	805.3	0.0	1932	1087.3	805.3	0.0
1933	1126.2	805.3	0.0	1934	1165.0	805.3	0.0	1935	621.3	822.3	0.0
1936	660.2	822.3	0.0	1937	699.0	822.3	0.0	1938	737.8	822.3	0.0
1939	1126.2	1971.7	0.0	1940	1165.0	1971.7	0.0	1941	854.3	822.3	0.0
1942	621.3	1985.0	0.0	1943	660.2	1985.0	0.0	1944	699.0	1985.0	0.0
1945	737.8	1985.0	0.0	1946	1048.5	822.3	0.0	1947	1087.3	822.3	0.0
1948	1126.2	822.3	0.0	1949	1165.0	822.3	0.0	1950	621.3	839.3	0.0
1951	660.2	839.3	0.0	1952	699.0	839.3	0.0	1953	737.8	839.3	0.0
1954	776.7	839.3	0.0	1955	815.5	839.3	0.0	1956	854.3	839.3	0.0
1957	893.2	839.3	0.0	1958	932.0	839.3	0.0	1959	970.8	839.3	0.0
1960	1009.7	839.3	0.0	1961	1048.5	839.3	0.0	1962	1087.3	839.3	0.0
1963	1126.2	839.3	0.0	1964	1165.0	839.3	0.0	1965	621.3	856.4	0.0
1966	660.2	856.4	0.0	1967	699.0	856.4	0.0	1968	737.8	856.4	0.0
1969	776.7	856.4	0.0	1970	815.5	856.4	0.0	1971	854.3	856.4	0.0
1972	893.2	856.4	0.0	1973	932.0	856.4	0.0	1974	970.8	856.4	0.0
1975	776.7	1985.0	0.0	1976	1048.5	856.4	0.0	1977	1087.3	856.4	0.0
1978	1126.2	856.4	0.0	1979	1165.0	856.4	0.0	1980	621.3	873.4	0.0
1981	660.2	873.4	0.0	1982	699.0	873.4	0.0	1983	737.8	873.4	0.0
1984	776.7	873.4	0.0	1985	815.5	873.4	0.0	1986	854.3	873.4	0.0
1987	893.2	873.4	0.0	1988	932.0	873.4	0.0	1989	970.8	873.4	0.0
1990	1009.7	873.4	0.0	1991	1048.5	873.4	0.0	1992	1087.3	873.4	0.0
1993	1126.2	873.4	0.0	1994	1165.0	873.4	0.0	1995	621.3	890.4	0.0
1996	660.2	890.4	0.0	1997	699.0	890.4	0.0	1998	737.8	890.4	0.0
1999	776.7	890.4	0.0	2000	815.5	890.4	0.0	2001	854.3	890.4	0.0
2002	893.2	890.4	0.0	2003	932.0	890.4	0.0	2004	970.8	890.4	0.0
2005	815.5	1985.0	0.0	2006	1048.5	890.4	0.0	2007	1087.3	890.4	0.0
2008	1126.2	890.4	0.0	2009	1165.0	890.4	0.0	2010	621.3	907.5	0.0
2011	660.2	907.5	0.0	2012	699.0	907.5	0.0	2013	737.8	907.5	0.0
2014	776.7	907.5	0.0	2015	815.5	907.5	0.0	2016	854.3	907.5	0.0
2017	893.2	907.5	0.0	2018	932.0	907.5	0.0	2019	970.8	907.5	0.0
2020	1009.7	907.5	0.0	2021	1048.5	907.5	0.0	2022	1087.3	907.5	0.0
2023	1126.2	907.5	0.0	2024	1165.0	907.5	0.0	2025	621.3	924.5	0.0
2026	660.2	924.5	0.0	2027	699.0	924.5	0.0	2028	737.8	924.5	0.0
2029	776.7	924.5	0.0	2030	815.5	924.5	0.0	2031	854.3	924.5	0.0
2032	893.2	924.5	0.0	2033	932.0	924.5	0.0	2034	970.8	924.5	0.0
2035	854.3	1985.0	0.0	2036	1048.5	924.5	0.0	2037	1087.3	924.5	0.0
2038	1126.2	924.5	0.0	2039	1165.0	924.5	0.0	2040	621.3	941.5	0.0
2041	660.2	941.5	0.0	2042	699.0	941.5	0.0	2043	737.8	941.5	0.0
2044	776.7	941.5	0.0	2045	815.5	941.5	0.0	2046	854.3	941.5	0.0
2047	893.2	941.5	0.0	2048	932.0	941.5	0.0	2049	970.8	941.5	0.0
2050	1009.7	941.5	0.0	2051	1048.5	941.5	0.0	2052	1087.3	941.5	0.0
2053	1126.2	941.5	0.0	2054	1165.0	941.5	0.0	2055	621.3	958.6	0.0
2056	660.2	958.6	0.0	2057	699.0	958.6	0.0	2058	737.8	958.6	0.0
2059	776.7	958.6	0.0	2060	815.5	958.6	0.0	2061	854.3	958.6	0.0
2062	893.2	958.6	0.0	2063	932.0	958.6	0.0	2064	970.8	958.6	0.0
2065	1009.7	958.6	0.0	2066	1048.5	958.6	0.0	2067	1087.3	958.6	0.0
2068	1126.2	958.6	0.0	2069	1165.0	958.6	0.0	2070	621.3	975.6	0.0
2071	660.2	975.6	0.0	2072	699.0	975.6	0.0	2073	737.8	975.6	0.0
2074	776.7	975.6	0.0	2075	815.5	975.6	0.0	2076	854.3	975.6	0.0
2077	893.2	975.6	0.0	2078	932.0	975.6	0.0	2079	970.8	975.6	0.0
2080	893.2	1985.0	0.0	2081	1048.5	975.6	0.0	2082	1087.3	975.6	0.0
2083	1126.2	975.6	0.0	2084	1165.0	975.6	0.0	2085	621.3	992.6	0.0
2086	660.2	992.6	0.0	2087	699.0	992.6	0.0	2088	737.8	992.6	0.0
2089	776.7	992.6	0.0	2090	815.5	992.6	0.0	2091	854.3	992.6	0.0
2092	893.2	992.6	0.0	2093	932.0	992.6	0.0	2094	970.8	992.6	0.0
2095	1009.7	992.6	0.0	2096	1048.5	992.6	0.0	2097	1087.3	992.6	0.0
2098	1126.2	992.6	0.0	2099	1165.0	992.6	0.0	2100	621.3	1009.6	0.0
2101	660.2	1009.6	0.0	2102	699.0	1009.6	0.0	2103	932.0	1985.0	0.0
2104	970.8	1985.0	0.0	2105	1009.7	1985.0	0.0	2106	854.3	1009.6	0.0
2107	1048.5	1985.0	0.0	2108	1087.3	1985.0	0.0	2109	970.8	1009.6	0.0
2110	1126.2	1985.0	0.0	2111	1048.5	1009.6	0.0	2112	1087.3	1009.6	0.0
2113	1126.2	1009.6	0.0	2114	1165.0	1009.6	0.0	2115	621.3	1026.7	0.0
2116	660.2	1026.7	0.0	2117	699.0	1026.7	0.0	2118	737.8	1026.7	0.0
2119	776.7	1026.7	0.0	2120	815.5	1026.7	0.0	2121	854.3	1026.7	0.0
2122	893.2	1026.7	0.0	2123	932.0	1026.7	0.0	2124	970.8	1026.7	0.0
2125	1009.7	1026.7	0.0	2126	1048.5	1026.7	0.0	2127	1087.3	1026.7	0.0
2128	1126.2	1026.7	0.0	2129	1165.0	1026.7	0.0	2130	621.3	1043.7	0.0
2131	660.2	1043.7	0.0	2132	699.0	1043.7	0.0	2133	737.8	1043.7	0.0
2134	776.7	1043.7	0.0	2135	815.5	1043.7	0.0	2136	854.3	1043.7	0.0
2137	893.2	1043.7	0.0	2138	932.0	1043.7	0.0	2139	970.8	1043.7	0.0

2140	1009.7	1043.7	0.0	2141	1048.5	1043.7	0.0	2142	1087.3	1043.7	0.0
2143	1126.2	1043.7	0.0	2144	1165.0	1043.7	0.0	2145	621.3	1060.7	0.0
2146	660.2	1060.7	0.0	2147	699.0	1060.7	0.0	2148	737.8	1060.7	0.0
2149	776.7	1060.7	0.0	2150	815.5	1060.7	0.0	2151	854.3	1060.7	0.0
2152	893.2	1060.7	0.0	2153	932.0	1060.7	0.0	2154	970.8	1060.7	0.0
2155	1009.7	1060.7	0.0	2156	1048.5	1060.7	0.0	2157	1087.3	1060.7	0.0
2158	1126.2	1060.7	0.0	2159	1165.0	1060.7	0.0	2160	621.3	1077.8	0.0
2161	660.2	1077.8	0.0	2162	699.0	1077.8	0.0	2163	737.8	1077.8	0.0
2164	776.7	1077.8	0.0	2165	815.5	1077.8	0.0	2166	854.3	1077.8	0.0
2167	893.2	1077.8	0.0	2168	932.0	1077.8	0.0	2169	970.8	1077.8	0.0
2170	1009.7	1077.8	0.0	2171	1048.5	1077.8	0.0	2172	1087.3	1077.8	0.0
2173	1126.2	1077.8	0.0	2174	1165.0	1077.8	0.0	2175	621.3	1094.8	0.0
2176	660.2	1094.8	0.0	2177	699.0	1094.8	0.0	2178	737.8	1094.8	0.0
2179	776.7	1094.8	0.0	2180	815.5	1094.8	0.0	2181	854.3	1094.8	0.0
2182	893.2	1094.8	0.0	2183	932.0	1094.8	0.0	2184	970.8	1094.8	0.0
2185	1009.7	1094.8	0.0	2186	1048.5	1094.8	0.0	2187	1087.3	1094.8	0.0
2188	1126.2	1094.8	0.0	2189	1165.0	1094.8	0.0	2190	621.3	1111.8	0.0
2191	660.2	1111.8	0.0	2192	699.0	1111.8	0.0	2193	737.8	1111.8	0.0
2194	776.7	1111.8	0.0	2195	815.5	1111.8	0.0	2196	854.3	1111.8	0.0
2197	893.2	1111.8	0.0	2198	932.0	1111.8	0.0	2199	970.8	1111.8	0.0
2200	1009.7	1111.8	0.0	2201	1048.5	1111.8	0.0	2202	1087.3	1111.8	0.0
2203	1126.2	1111.8	0.0	2204	1165.0	1111.8	0.0	2205	621.3	1128.8	0.0
2206	660.2	1128.8	0.0	2207	699.0	1128.8	0.0	2208	737.8	1128.8	0.0
2209	776.7	1128.8	0.0	2210	815.5	1128.8	0.0	2211	854.3	1128.8	0.0
2212	893.2	1128.8	0.0	2213	932.0	1128.8	0.0	2214	970.8	1128.8	0.0
2215	1009.7	1128.8	0.0	2216	1048.5	1128.8	0.0	2217	1087.3	1128.8	0.0
2218	1126.2	1128.8	0.0	2219	1165.0	1128.8	0.0	2220	621.3	1145.9	0.0
2221	660.2	1145.9	0.0	2222	699.0	1145.9	0.0	2223	737.8	1145.9	0.0
2224	776.7	1145.9	0.0	2225	815.5	1145.9	0.0	2226	854.3	1145.9	0.0
2227	893.2	1145.9	0.0	2228	932.0	1145.9	0.0	2229	970.8	1145.9	0.0
2230	1009.7	1145.9	0.0	2231	1048.5	1145.9	0.0	2232	1087.3	1145.9	0.0
2233	1126.2	1145.9	0.0	2234	38.8	1160.5	0.0	2235	0.0	1160.5	0.0
2236	77.7	1160.5	0.0	2237	116.5	1160.5	0.0	2238	155.3	1160.5	0.0
2239	194.2	1160.5	0.0	2240	233.0	1160.5	0.0	2241	271.8	1160.5	0.0
2242	310.7	1160.5	0.0	2243	349.5	1160.5	0.0	2244	388.3	1160.5	0.0
2245	427.2	1160.5	0.0	2246	466.0	1160.5	0.0	2247	504.8	1160.5	0.0
2248	543.7	1160.5	0.0	2249	582.5	1160.5	0.0	2250	38.8	1175.1	0.0
2251	0.0	1175.1	0.0	2252	77.7	1175.1	0.0	2253	116.5	1175.1	0.0
2254	155.3	1175.1	0.0	2255	194.2	1175.1	0.0	2256	233.0	1175.1	0.0
2257	271.8	1175.1	0.0	2258	310.7	1175.1	0.0	2259	349.5	1175.1	0.0
2260	388.3	1175.1	0.0	2261	427.2	1175.1	0.0	2262	466.0	1175.1	0.0
2263	504.8	1175.1	0.0	2264	543.7	1175.1	0.0	2265	582.5	1175.1	0.0
2266	38.8	1189.8	0.0	2267	0.0	1189.8	0.0	2268	77.7	1189.8	0.0
2269	116.5	1189.8	0.0	2270	155.3	1189.8	0.0	2271	194.2	1189.8	0.0
2272	233.0	1189.8	0.0	2273	271.8	1189.8	0.0	2274	310.7	1189.8	0.0
2275	349.5	1189.8	0.0	2276	388.3	1189.8	0.0	2277	427.2	1189.8	0.0
2278	466.0	1189.8	0.0	2279	504.8	1189.8	0.0	2280	543.7	1189.8	0.0
2281	582.5	1189.8	0.0	2282	38.8	1204.4	0.0	2283	0.0	1204.4	0.0
2284	77.7	1204.4	0.0	2285	116.5	1204.4	0.0	2286	155.3	1204.4	0.0
2287	194.2	1204.4	0.0	2288	233.0	1204.4	0.0	2289	271.8	1204.4	0.0
2290	310.7	1204.4	0.0	2291	349.5	1204.4	0.0	2292	388.3	1204.4	0.0
2293	427.2	1204.4	0.0	2294	466.0	1204.4	0.0	2295	504.8	1204.4	0.0
2296	543.7	1204.4	0.0	2297	582.5	1204.4	0.0	2298	38.8	1219.1	0.0
2299	0.0	1219.1	0.0	2300	77.7	1219.1	0.0	2301	116.5	1219.1	0.0
2302	155.3	1219.1	0.0	2303	194.2	1219.1	0.0	2304	233.0	1219.1	0.0
2305	271.8	1219.1	0.0	2306	310.7	1219.1	0.0	2307	349.5	1219.1	0.0
2308	388.3	1219.1	0.0	2309	427.2	1219.1	0.0	2310	466.0	1219.1	0.0
2311	504.8	1219.1	0.0	2312	543.7	1219.1	0.0	2313	582.5	1219.1	0.0
2314	38.8	1233.7	0.0	2315	0.0	1233.7	0.0	2316	77.7	1233.7	0.0
2317	116.5	1233.7	0.0	2318	155.3	1233.7	0.0	2319	194.2	1233.7	0.0
2320	233.0	1233.7	0.0	2321	271.8	1233.7	0.0	2322	310.7	1233.7	0.0
2323	349.5	1233.7	0.0	2324	388.3	1233.7	0.0	2325	427.2	1233.7	0.0
2326	466.0	1233.7	0.0	2327	504.8	1233.7	0.0	2328	543.7	1233.7	0.0
2329	582.5	1233.7	0.0	2330	38.8	1248.3	0.0	2331	0.0	1248.3	0.0
2332	77.7	1248.3	0.0	2333	116.5	1248.3	0.0	2334	155.3	1248.3	0.0
2335	194.2	1248.3	0.0	2336	233.0	1248.3	0.0	2337	271.8	1248.3	0.0
2338	310.7	1248.3	0.0	2339	349.5	1248.3	0.0	2340	388.3	1248.3	0.0
2341	427.2	1248.3	0.0	2342	466.0	1248.3	0.0	2343	504.8	1248.3	0.0
2344	543.7	1248.3	0.0	2345	582.5	1248.3	0.0	2346	38.8	1263.0	0.0
2347	0.0	1263.0	0.0	2348	77.7	1263.0	0.0	2349	116.5	1263.0	0.0
2350	155.3	1263.0	0.0	2351	194.2	1263.0	0.0	2352	233.0	1263.0	0.0
2353	271.8	1263.0	0.0	2354	310.7	1263.0	0.0	2355	349.5	1263.0	0.0
2356	388.3	1263.0	0.0	2357	427.2	1263.0	0.0	2358	466.0	1263.0	0.0
2359	504.8	1263.0	0.0	2360	543.7	1263.0	0.0	2361	582.5	1263.0	0.0
2362	38.8	1277.6	0.0	2363	0.0	1277.6	0.0	2364	77.7	1277.6	0.0
2365	116.5	1277.6	0.0	2366	155.3	1277.6	0.0	2367	194.2	1277.6	0.0
2368	233.0	1277.6	0.0	2369	271.8	1277.6	0.0	2370	310.7	1277.6	0.0

2371	349.5	1277.6	0.0	2372	388.3	1277.6	0.0	2373	427.2	1277.6	0.0
2374	466.0	1277.6	0.0	2375	504.8	1277.6	0.0	2376	543.7	1277.6	0.0
2377	582.5	1277.6	0.0	2378	38.8	1292.2	0.0	2379	0.0	1292.2	0.0
2380	77.7	1292.2	0.0	2381	116.5	1292.2	0.0	2382	155.3	1292.2	0.0
2383	194.2	1292.2	0.0	2384	233.0	1292.2	0.0	2385	271.8	1292.2	0.0
2386	310.7	1292.2	0.0	2387	349.5	1292.2	0.0	2388	388.3	1292.2	0.0
2389	427.2	1292.2	0.0	2390	466.0	1292.2	0.0	2391	504.8	1292.2	0.0
2392	543.7	1292.2	0.0	2393	582.5	1292.2	0.0	2394	38.8	1306.9	0.0
2395	0.0	1306.9	0.0	2396	77.7	1306.9	0.0	2397	116.5	1306.9	0.0
2398	155.3	1306.9	0.0	2399	194.2	1306.9	0.0	2400	233.0	1306.9	0.0
2401	271.8	1306.9	0.0	2402	310.7	1306.9	0.0	2403	349.5	1306.9	0.0
2404	388.3	1306.9	0.0	2405	427.2	1306.9	0.0	2406	466.0	1306.9	0.0
2407	504.8	1306.9	0.0	2408	543.7	1306.9	0.0	2409	582.5	1306.9	0.0
2410	38.8	1321.5	0.0	2411	0.0	1321.5	0.0	2412	77.7	1321.5	0.0
2413	116.5	1321.5	0.0	2414	155.3	1321.5	0.0	2415	194.2	1321.5	0.0
2416	233.0	1321.5	0.0	2417	271.8	1321.5	0.0	2418	310.7	1321.5	0.0
2419	349.5	1321.5	0.0	2420	388.3	1321.5	0.0	2421	427.2	1321.5	0.0
2422	466.0	1321.5	0.0	2423	504.8	1321.5	0.0	2424	543.7	1321.5	0.0
2425	582.5	1321.5	0.0	2426	38.8	1336.2	0.0	2427	0.0	1336.2	0.0
2428	77.7	1336.2	0.0	2429	116.5	1336.2	0.0	2430	155.3	1336.2	0.0
2431	194.2	1336.2	0.0	2432	233.0	1336.2	0.0	2433	271.8	1336.2	0.0
2434	310.7	1336.2	0.0	2435	349.5	1336.2	0.0	2436	388.3	1336.2	0.0
2437	427.2	1336.2	0.0	2438	466.0	1336.2	0.0	2439	504.8	1336.2	0.0
2440	543.7	1336.2	0.0	2441	582.5	1336.2	0.0	2442	38.8	1350.8	0.0
2443	0.0	1350.8	0.0	2444	77.7	1350.8	0.0	2445	116.5	1350.8	0.0
2446	155.3	1350.8	0.0	2447	194.2	1350.8	0.0	2448	233.0	1350.8	0.0
2449	271.8	1350.8	0.0	2450	310.7	1350.8	0.0	2451	349.5	1350.8	0.0
2452	388.3	1350.8	0.0	2453	427.2	1350.8	0.0	2454	466.0	1350.8	0.0
2455	504.8	1350.8	0.0	2456	543.7	1350.8	0.0	2457	582.5	1350.8	0.0
2458	38.8	1365.4	0.0	2459	0.0	1365.4	0.0	2460	77.7	1365.4	0.0
2461	116.5	1365.4	0.0	2462	155.3	1365.4	0.0	2463	194.2	1365.4	0.0
2464	233.0	1365.4	0.0	2465	271.8	1365.4	0.0	2466	310.7	1365.4	0.0
2467	349.5	1365.4	0.0	2468	388.3	1365.4	0.0	2469	427.2	1365.4	0.0
2470	466.0	1365.4	0.0	2471	504.8	1365.4	0.0	2472	543.7	1365.4	0.0
2473	582.5	1365.4	0.0	2474	38.8	1380.1	0.0	2475	0.0	1380.1	0.0
2476	77.7	1380.1	0.0	2477	116.5	1380.1	0.0	2478	155.3	1380.1	0.0
2479	194.2	1380.1	0.0	2480	233.0	1380.1	0.0	2481	271.8	1380.1	0.0
2482	310.7	1380.1	0.0	2483	349.5	1380.1	0.0	2484	388.3	1380.1	0.0
2485	427.2	1380.1	0.0	2486	466.0	1380.1	0.0	2487	504.8	1380.1	0.0
2488	543.7	1380.1	0.0	2489	582.5	1380.1	0.0	2490	38.8	1394.7	0.0
2491	0.0	1394.7	0.0	2492	77.7	1394.7	0.0	2493	116.5	1394.7	0.0
2494	155.3	1394.7	0.0	2495	194.2	1394.7	0.0	2496	233.0	1394.7	0.0
2497	271.8	1394.7	0.0	2498	310.7	1394.7	0.0	2499	349.5	1394.7	0.0
2500	388.3	1394.7	0.0	2501	427.2	1394.7	0.0	2502	466.0	1394.7	0.0
2503	504.8	1394.7	0.0	2504	543.7	1394.7	0.0	2505	582.5	1394.7	0.0
2506	38.8	1409.3	0.0	2507	0.0	1409.3	0.0	2508	77.7	1409.3	0.0
2509	116.5	1409.3	0.0	2510	155.3	1409.3	0.0	2511	194.2	1409.3	0.0
2512	233.0	1409.3	0.0	2513	271.8	1409.3	0.0	2514	310.7	1409.3	0.0
2515	349.5	1409.3	0.0	2516	388.3	1409.3	0.0	2517	427.2	1409.3	0.0
2518	466.0	1409.3	0.0	2519	504.8	1409.3	0.0	2520	543.7	1409.3	0.0
2521	582.5	1409.3	0.0	2522	38.8	1424.0	0.0	2523	0.0	1424.0	0.0
2524	77.7	1424.0	0.0	2525	116.5	1424.0	0.0	2526	155.3	1424.0	0.0
2527	194.2	1424.0	0.0	2528	233.0	1424.0	0.0	2529	271.8	1424.0	0.0
2530	310.7	1424.0	0.0	2531	349.5	1424.0	0.0	2532	388.3	1424.0	0.0
2533	427.2	1424.0	0.0	2534	466.0	1424.0	0.0	2535	504.8	1424.0	0.0
2536	543.7	1424.0	0.0	2537	582.5	1424.0	0.0	2538	38.8	1438.6	0.0
2539	0.0	1438.6	0.0	2540	77.7	1438.6	0.0	2541	116.5	1438.6	0.0
2542	155.3	1438.6	0.0	2543	194.2	1438.6	0.0	2544	233.0	1438.6	0.0
2545	271.8	1438.6	0.0	2546	310.7	1438.6	0.0	2547	349.5	1438.6	0.0
2548	388.3	1438.6	0.0	2549	427.2	1438.6	0.0	2550	466.0	1438.6	0.0
2551	504.8	1438.6	0.0	2552	543.7	1438.6	0.0	2553	582.5	1438.6	0.0
2554	38.8	1453.3	0.0	2555	0.0	1453.3	0.0	2556	77.7	1453.3	0.0
2557	116.5	1453.3	0.0	2558	155.3	1453.3	0.0	2559	194.2	1453.3	0.0
2560	233.0	1453.3	0.0	2561	271.8	1453.3	0.0	2562	310.7	1453.3	0.0
2563	349.5	1453.3	0.0	2564	388.3	1453.3	0.0	2565	427.2	1453.3	0.0
2566	466.0	1453.3	0.0	2567	504.8	1453.3	0.0	2568	543.7	1453.3	0.0
2569	582.5	1453.3	0.0	2570	38.8	1467.9	0.0	2571	0.0	1467.9	0.0
2572	77.7	1467.9	0.0	2573	116.5	1467.9	0.0	2574	155.3	1467.9	0.0
2575	194.2	1467.9	0.0	2576	233.0	1467.9	0.0	2577	271.8	1467.9	0.0
2578	310.7	1467.9	0.0	2579	349.5	1467.9	0.0	2580	388.3	1467.9	0.0
2581	427.2	1467.9	0.0	2582	466.0	1467.9	0.0	2583	504.8	1467.9	0.0
2584	543.7	1467.9	0.0	2585	582.5	1467.9	0.0	2586	38.8	1482.5	0.0
2587	0.0	1482.5	0.0	2588	77.7	1482.5	0.0	2589	116.5	1482.5	0.0
2590	155.3	1482.5	0.0	2591	194.2	1482.5	0.0	2592	233.0	1482.5	0.0
2593	271.8	1482.5	0.0	2594	310.7	1482.5	0.0	2595	349.5	1482.5	0.0
2596	388.3	1482.5	0.0	2597	427.2	1482.5	0.0	2598	466.0	1482.5	0.0
2599	504.8	1482.5	0.0	2600	543.7	1482.5	0.0	2601	582.5	1482.5	0.0

2602	38.8	1497.2	0.0	2603	0.0	1497.2	0.0	2604	77.7	1497.2	0.0
2605	116.5	1497.2	0.0	2606	155.3	1497.2	0.0	2607	194.2	1497.2	0.0
2608	233.0	1497.2	0.0	2609	271.8	1497.2	0.0	2610	310.7	1497.2	0.0
2611	349.5	1497.2	0.0	2612	388.3	1497.2	0.0	2613	427.2	1497.2	0.0
2614	466.0	1497.2	0.0	2615	504.8	1497.2	0.0	2616	543.7	1497.2	0.0
2617	582.5	1497.2	0.0	2618	38.8	1511.8	0.0	2619	0.0	1511.8	0.0
2620	77.7	1511.8	0.0	2621	116.5	1511.8	0.0	2622	155.3	1511.8	0.0
2623	194.2	1511.8	0.0	2624	233.0	1511.8	0.0	2625	271.8	1511.8	0.0
2626	310.7	1511.8	0.0	2627	349.5	1511.8	0.0	2628	388.3	1511.8	0.0
2629	427.2	1511.8	0.0	2630	466.0	1511.8	0.0	2631	504.8	1511.8	0.0
2632	543.7	1511.8	0.0	2633	582.5	1511.8	0.0	2634	38.8	1526.5	0.0
2635	0.0	1526.5	0.0	2636	77.7	1526.5	0.0	2637	116.5	1526.5	0.0
2638	155.3	1526.5	0.0	2639	194.2	1526.5	0.0	2640	233.0	1526.5	0.0
2641	271.8	1526.5	0.0	2642	310.7	1526.5	0.0	2643	349.5	1526.5	0.0
2644	388.3	1526.5	0.0	2645	427.2	1526.5	0.0	2646	466.0	1526.5	0.0
2647	504.8	1526.5	0.0	2648	543.7	1526.5	0.0	2649	582.5	1526.5	0.0
2650	38.8	1541.1	0.0	2651	0.0	1541.1	0.0	2652	77.7	1541.1	0.0
2653	116.5	1541.1	0.0	2654	155.3	1541.1	0.0	2655	194.2	1541.1	0.0
2656	233.0	1541.1	0.0	2657	271.8	1541.1	0.0	2658	310.7	1541.1	0.0
2659	349.5	1541.1	0.0	2660	388.3	1541.1	0.0	2661	427.2	1541.1	0.0
2662	466.0	1541.1	0.0	2663	504.8	1541.1	0.0	2664	543.7	1541.1	0.0
2665	582.5	1541.1	0.0	2666	38.8	1555.7	0.0	2667	0.0	1555.7	0.0
2668	77.7	1555.7	0.0	2669	116.5	1555.7	0.0	2670	155.3	1555.7	0.0
2671	194.2	1555.7	0.0	2672	233.0	1555.7	0.0	2673	271.8	1555.7	0.0
2674	310.7	1555.7	0.0	2675	349.5	1555.7	0.0	2676	388.3	1555.7	0.0
2677	427.2	1555.7	0.0	2678	466.0	1555.7	0.0	2679	504.8	1555.7	0.0
2680	543.7	1555.7	0.0	2681	582.5	1555.7	0.0	2682	38.8	1570.4	0.0
2683	0.0	1570.4	0.0	2684	77.7	1570.4	0.0	2685	116.5	1570.4	0.0
2686	155.3	1570.4	0.0	2687	194.2	1570.4	0.0	2688	233.0	1570.4	0.0
2689	271.8	1570.4	0.0	2690	310.7	1570.4	0.0	2691	349.5	1570.4	0.0
2692	388.3	1570.4	0.0	2693	427.2	1570.4	0.0	2694	466.0	1570.4	0.0
2695	504.8	1570.4	0.0	2696	543.7	1570.4	0.0	2697	582.5	1570.4	0.0
2698	38.8	1585.0	0.0	2699	77.7	1585.0	0.0	2700	116.5	1585.0	0.0
2701	155.3	1585.0	0.0	2702	194.2	1585.0	0.0	2703	233.0	1585.0	0.0
2704	271.8	1585.0	0.0	2705	310.7	1585.0	0.0	2706	349.5	1585.0	0.0
2707	388.3	1585.0	0.0	2708	427.2	1585.0	0.0	2709	466.0	1585.0	0.0
2710	504.8	1585.0	0.0	2711	543.7	1585.0	0.0	2712	621.3	1160.5	0.0
2713	660.2	1160.5	0.0	2714	699.0	1160.5	0.0	2715	737.8	1160.5	0.0
2716	776.7	1160.5	0.0	2717	815.5	1160.5	0.0	2718	854.3	1160.5	0.0
2719	893.2	1160.5	0.0	2720	932.0	1160.5	0.0	2721	970.8	1160.5	0.0
2722	1009.7	1160.5	0.0	2723	1048.5	1160.5	0.0	2724	1087.3	1160.5	0.0
2725	1126.2	1160.5	0.0	2726	1165.0	1160.5	0.0	2727	621.3	1175.1	0.0
2728	660.2	1175.1	0.0	2729	699.0	1175.1	0.0	2730	737.8	1175.1	0.0
2731	776.7	1175.1	0.0	2732	815.5	1175.1	0.0	2733	854.3	1175.1	0.0
2734	893.2	1175.1	0.0	2735	932.0	1175.1	0.0	2736	970.8	1175.1	0.0
2737	1009.7	1175.1	0.0	2738	1048.5	1175.1	0.0	2739	1087.3	1175.1	0.0
2740	1126.2	1175.1	0.0	2741	1165.0	1175.1	0.0	2742	621.3	1189.8	0.0
2743	660.2	1189.8	0.0	2744	699.0	1189.8	0.0	2745	737.8	1189.8	0.0
2746	776.7	1189.8	0.0	2747	815.5	1189.8	0.0	2748	854.3	1189.8	0.0
2749	893.2	1189.8	0.0	2750	932.0	1189.8	0.0	2751	970.8	1189.8	0.0
2752	1009.7	1189.8	0.0	2753	1048.5	1189.8	0.0	2754	1087.3	1189.8	0.0
2755	1126.2	1189.8	0.0	2756	1165.0	1189.8	0.0	2757	621.3	1204.4	0.0
2758	660.2	1204.4	0.0	2759	699.0	1204.4	0.0	2760	737.8	1204.4	0.0
2761	776.7	1204.4	0.0	2762	815.5	1204.4	0.0	2763	854.3	1204.4	0.0
2764	893.2	1204.4	0.0	2765	932.0	1204.4	0.0	2766	970.8	1204.4	0.0
2767	1009.7	1204.4	0.0	2768	1048.5	1204.4	0.0	2769	1087.3	1204.4	0.0
2770	1126.2	1204.4	0.0	2771	1165.0	1204.4	0.0	2772	621.3	1219.1	0.0
2773	660.2	1219.1	0.0	2774	699.0	1219.1	0.0	2775	737.8	1219.1	0.0
2776	776.7	1219.1	0.0	2777	815.5	1219.1	0.0	2778	854.3	1219.1	0.0
2779	893.2	1219.1	0.0	2780	932.0	1219.1	0.0	2781	970.8	1219.1	0.0
2782	1009.7	1219.1	0.0	2783	1048.5	1219.1	0.0	2784	1087.3	1219.1	0.0
2785	1126.2	1219.1	0.0	2786	1165.0	1219.1	0.0	2787	621.3	1233.7	0.0
2788	660.2	1233.7	0.0	2789	699.0	1233.7	0.0	2790	737.8	1233.7	0.0
2791	776.7	1233.7	0.0	2792	815.5	1233.7	0.0	2793	854.3	1233.7	0.0
2794	893.2	1233.7	0.0	2795	932.0	1233.7	0.0	2796	970.8	1233.7	0.0
2797	1009.7	1233.7	0.0	2798	1048.5	1233.7	0.0	2799	1087.3	1233.7	0.0
2800	1126.2	1233.7	0.0	2801	1165.0	1233.7	0.0	2802	621.3	1248.3	0.0
2803	660.2	1248.3	0.0	2804	699.0	1248.3	0.0	2805	737.8	1248.3	0.0
2806	776.7	1248.3	0.0	2807	815.5	1248.3	0.0	2808	854.3	1248.3	0.0
2809	893.2	1248.3	0.0	2810	932.0	1248.3	0.0	2811	970.8	1248.3	0.0
2812	1009.7	1248.3	0.0	2813	1048.5	1248.3	0.0	2814	1087.3	1248.3	0.0
2815	1126.2	1248.3	0.0	2816	1165.0	1248.3	0.0	2817	621.3	1263.0	0.0
2818	660.2	1263.0	0.0	2819	699.0	1263.0	0.0	2820	737.8	1263.0	0.0
2821	776.7	1263.0	0.0	2822	815.5	1263.0	0.0	2823	854.3	1263.0	0.0
2824	893.2	1263.0	0.0	2825	932.0	1263.0	0.0	2826	970.8	1263.0	0.0
2827	1009.7	1263.0	0.0	2828	1048.5	1263.0	0.0	2829	1087.3	1263.0	0.0
2830	1126.2	1263.0	0.0	2831	1165.0	1263.0	0.0	2832	621.3	1277.6	0.0

2833	660.2	1277.6	0.0	2834	699.0	1277.6	0.0	2835	737.8	1277.6	0.0
2836	776.7	1277.6	0.0	2837	815.5	1277.6	0.0	2838	854.3	1277.6	0.0
2839	893.2	1277.6	0.0	2840	932.0	1277.6	0.0	2841	970.8	1277.6	0.0
2842	1009.7	1277.6	0.0	2843	1048.5	1277.6	0.0	2844	1087.3	1277.6	0.0
2845	1126.2	1277.6	0.0	2846	1165.0	1277.6	0.0	2847	621.3	1292.2	0.0
2848	660.2	1292.2	0.0	2849	699.0	1292.2	0.0	2850	737.8	1292.2	0.0
2851	776.7	1292.2	0.0	2852	815.5	1292.2	0.0	2853	854.3	1292.2	0.0
2854	893.2	1292.2	0.0	2855	932.0	1292.2	0.0	2856	970.8	1292.2	0.0
2857	1009.7	1292.2	0.0	2858	1048.5	1292.2	0.0	2859	1087.3	1292.2	0.0
2860	1126.2	1292.2	0.0	2861	1165.0	1292.2	0.0	2862	621.3	1306.9	0.0
2863	660.2	1306.9	0.0	2864	699.0	1306.9	0.0	2865	737.8	1306.9	0.0
2866	776.7	1306.9	0.0	2867	815.5	1306.9	0.0	2868	854.3	1306.9	0.0
2869	893.2	1306.9	0.0	2870	932.0	1306.9	0.0	2871	970.8	1306.9	0.0
2872	1009.7	1306.9	0.0	2873	1048.5	1306.9	0.0	2874	1087.3	1306.9	0.0
2875	1126.2	1306.9	0.0	2876	1165.0	1306.9	0.0	2877	621.3	1321.5	0.0
2878	660.2	1321.5	0.0	2879	699.0	1321.5	0.0	2880	737.8	1321.5	0.0
2881	776.7	1321.5	0.0	2882	815.5	1321.5	0.0	2883	854.3	1321.5	0.0
2884	893.2	1321.5	0.0	2885	932.0	1321.5	0.0	2886	970.8	1321.5	0.0
2887	1009.7	1321.5	0.0	2888	1048.5	1321.5	0.0	2889	1087.3	1321.5	0.0
2890	1126.2	1321.5	0.0	2891	1165.0	1321.5	0.0	2892	621.3	1336.2	0.0
2893	660.2	1336.2	0.0	2894	699.0	1336.2	0.0	2895	737.8	1336.2	0.0
2896	776.7	1336.2	0.0	2897	815.5	1336.2	0.0	2898	854.3	1336.2	0.0
2899	893.2	1336.2	0.0	2900	932.0	1336.2	0.0	2901	970.8	1336.2	0.0
2902	1009.7	1336.2	0.0	2903	1048.5	1336.2	0.0	2904	1087.3	1336.2	0.0
2905	1126.2	1336.2	0.0	2906	1165.0	1336.2	0.0	2907	621.3	1350.8	0.0
2908	660.2	1350.8	0.0	2909	699.0	1350.8	0.0	2910	737.8	1350.8	0.0
2911	776.7	1350.8	0.0	2912	815.5	1350.8	0.0	2913	854.3	1350.8	0.0
2914	893.2	1350.8	0.0	2915	932.0	1350.8	0.0	2916	970.8	1350.8	0.0
2917	1009.7	1350.8	0.0	2918	1048.5	1350.8	0.0	2919	1087.3	1350.8	0.0
2920	1126.2	1350.8	0.0	2921	1165.0	1350.8	0.0	2922	621.3	1365.4	0.0
2923	660.2	1365.4	0.0	2924	699.0	1365.4	0.0	2925	737.8	1365.4	0.0
2926	776.7	1365.4	0.0	2927	815.5	1365.4	0.0	2928	854.3	1365.4	0.0
2929	893.2	1365.4	0.0	2930	932.0	1365.4	0.0	2931	970.8	1365.4	0.0
2932	1009.7	1365.4	0.0	2933	1048.5	1365.4	0.0	2934	1087.3	1365.4	0.0
2935	1126.2	1365.4	0.0	2936	1165.0	1365.4	0.0	2937	621.3	1380.1	0.0
2938	660.2	1380.1	0.0	2939	699.0	1380.1	0.0	2940	737.8	1380.1	0.0
2941	776.7	1380.1	0.0	2942	815.5	1380.1	0.0	2943	854.3	1380.1	0.0
2944	893.2	1380.1	0.0	2945	932.0	1380.1	0.0	2946	970.8	1380.1	0.0
2947	1009.7	1380.1	0.0	2948	1048.5	1380.1	0.0	2949	1087.3	1380.1	0.0
2950	1126.2	1380.1	0.0	2951	1165.0	1380.1	0.0	2952	621.3	1394.7	0.0
2953	660.2	1394.7	0.0	2954	699.0	1394.7	0.0	2955	737.8	1394.7	0.0
2956	776.7	1394.7	0.0	2957	815.5	1394.7	0.0	2958	854.3	1394.7	0.0
2959	893.2	1394.7	0.0	2960	932.0	1394.7	0.0	2961	970.8	1394.7	0.0
2962	1009.7	1394.7	0.0	2963	1048.5	1394.7	0.0	2964	1087.3	1394.7	0.0
2965	1126.2	1394.7	0.0	2966	1165.0	1394.7	0.0	2967	621.3	1409.3	0.0
2968	660.2	1409.3	0.0	2969	699.0	1409.3	0.0	2970	737.8	1409.3	0.0
2971	776.7	1409.3	0.0	2972	815.5	1409.3	0.0	2973	854.3	1409.3	0.0
2974	893.2	1409.3	0.0	2975	932.0	1409.3	0.0	2976	970.8	1409.3	0.0
2977	1009.7	1409.3	0.0	2978	1048.5	1409.3	0.0	2979	1087.3	1409.3	0.0
2980	1126.2	1409.3	0.0	2981	1165.0	1409.3	0.0	2982	621.3	1424.0	0.0
2983	660.2	1424.0	0.0	2984	699.0	1424.0	0.0	2985	737.8	1424.0	0.0
2986	776.7	1424.0	0.0	2987	815.5	1424.0	0.0	2988	854.3	1424.0	0.0
2989	893.2	1424.0	0.0	2990	932.0	1424.0	0.0	2991	970.8	1424.0	0.0
2992	1009.7	1424.0	0.0	2993	1048.5	1424.0	0.0	2994	1087.3	1424.0	0.0
2995	1126.2	1424.0	0.0	2996	1165.0	1424.0	0.0	2997	621.3	1438.6	0.0
2998	660.2	1438.6	0.0	2999	699.0	1438.6	0.0	3000	737.8	1438.6	0.0
3001	776.7	1438.6	0.0	3002	815.5	1438.6	0.0	3003	854.3	1438.6	0.0
3004	893.2	1438.6	0.0	3005	932.0	1438.6	0.0	3006	970.8	1438.6	0.0
3007	1009.7	1438.6	0.0	3008	1048.5	1438.6	0.0	3009	1087.3	1438.6	0.0
3010	1126.2	1438.6	0.0	3011	1165.0	1438.6	0.0	3012	621.3	1453.3	0.0
3013	660.2	1453.3	0.0	3014	699.0	1453.3	0.0	3015	737.8	1453.3	0.0
3016	776.7	1453.3	0.0	3017	815.5	1453.3	0.0	3018	854.3	1453.3	0.0
3019	893.2	1453.3	0.0	3020	932.0	1453.3	0.0	3021	970.8	1453.3	0.0
3022	1009.7	1453.3	0.0	3023	1048.5	1453.3	0.0	3024	1087.3	1453.3	0.0
3025	1126.2	1453.3	0.0	3026	1165.0	1453.3	0.0	3027	621.3	1467.9	0.0
3028	660.2	1467.9	0.0	3029	699.0	1467.9	0.0	3030	737.8	1467.9	0.0
3031	776.7	1467.9	0.0	3032	815.5	1467.9	0.0	3033	854.3	1467.9	0.0
3034	893.2	1467.9	0.0	3035	932.0	1467.9	0.0	3036	970.8	1467.9	0.0
3037	1009.7	1467.9	0.0	3038	1048.5	1467.9	0.0	3039	1087.3	1467.9	0.0
3040	1126.2	1467.9	0.0	3041	1165.0	1467.9	0.0	3042	621.3	1482.5	0.0
3043	660.2	1482.5	0.0	3044	699.0	1482.5	0.0	3045	737.8	1482.5	0.0
3046	776.7	1482.5	0.0	3047	815.5	1482.5	0.0	3048	854.3	1482.5	0.0
3049	893.2	1482.5	0.0	3050	932.0	1482.5	0.0	3051	970.8	1482.5	0.0
3052	1009.7	1482.5	0.0	3053	1048.5	1482.5	0.0	3054	1087.3	1482.5	0.0
3055	1126.2	1482.5	0.0	3056	1165.0	1482.5	0.0	3057	621.3	1497.2	0.0
3058	660.2	1497.2	0.0	3059	699.0	1497.2	0.0	3060	737.8	1497.2	0.0
3061	776.7	1497.2	0.0	3062	815.5	1497.2	0.0	3063	854.3	1497.2	0.0

3064	893.2	1497.2	0.0	3065	932.0	1497.2	0.0	3066	970.8	1497.2	0.0
3067	1009.7	1497.2	0.0	3068	1048.5	1497.2	0.0	3069	1087.3	1497.2	0.0
3070	1126.2	1497.2	0.0	3071	1165.0	1497.2	0.0	3072	621.3	1511.8	0.0
3073	660.2	1511.8	0.0	3074	699.0	1511.8	0.0	3075	737.8	1511.8	0.0
3076	776.7	1511.8	0.0	3077	815.5	1511.8	0.0	3078	854.3	1511.8	0.0
3079	893.2	1511.8	0.0	3080	932.0	1511.8	0.0	3081	970.8	1511.8	0.0
3082	1009.7	1511.8	0.0	3083	1048.5	1511.8	0.0	3084	1087.3	1511.8	0.0
3085	1126.2	1511.8	0.0	3086	1165.0	1511.8	0.0	3087	621.3	1526.5	0.0
3088	660.2	1526.5	0.0	3089	699.0	1526.5	0.0	3090	737.8	1526.5	0.0
3091	776.7	1526.5	0.0	3092	815.5	1526.5	0.0	3093	854.3	1526.5	0.0
3094	893.2	1526.5	0.0	3095	932.0	1526.5	0.0	3096	970.8	1526.5	0.0
3097	1009.7	1526.5	0.0	3098	1048.5	1526.5	0.0	3099	1087.3	1526.5	0.0
3100	1126.2	1526.5	0.0	3101	1165.0	1526.5	0.0	3102	621.3	1541.1	0.0
3103	660.2	1541.1	0.0	3104	699.0	1541.1	0.0	3105	737.8	1541.1	0.0
3106	776.7	1541.1	0.0	3107	815.5	1541.1	0.0	3108	854.3	1541.1	0.0
3109	893.2	1541.1	0.0	3110	932.0	1541.1	0.0	3111	970.8	1541.1	0.0
3112	1009.7	1541.1	0.0	3113	1048.5	1541.1	0.0	3114	1087.3	1541.1	0.0
3115	1126.2	1541.1	0.0	3116	1165.0	1541.1	0.0	3117	621.3	1555.7	0.0
3118	660.2	1555.7	0.0	3119	699.0	1555.7	0.0	3120	737.8	1555.7	0.0
3121	776.7	1555.7	0.0	3122	815.5	1555.7	0.0	3123	854.3	1555.7	0.0
3124	893.2	1555.7	0.0	3125	932.0	1555.7	0.0	3126	970.8	1555.7	0.0
3127	1009.7	1555.7	0.0	3128	1048.5	1555.7	0.0	3129	1087.3	1555.7	0.0
3130	1126.2	1555.7	0.0	3131	1165.0	1555.7	0.0	3132	621.3	1570.4	0.0
3133	660.2	1570.4	0.0	3134	699.0	1570.4	0.0	3135	737.8	1570.4	0.0
3136	776.7	1570.4	0.0	3137	815.5	1570.4	0.0	3138	854.3	1570.4	0.0
3139	893.2	1570.4	0.0	3140	932.0	1570.4	0.0	3141	970.8	1570.4	0.0
3142	1009.7	1570.4	0.0	3143	1048.5	1570.4	0.0	3144	1087.3	1570.4	0.0
3145	1126.2	1570.4	0.0	3146	1165.0	1570.4	0.0	3147	621.3	1585.0	0.0
3148	660.2	1585.0	0.0	3149	699.0	1585.0	0.0	3150	737.8	1585.0	0.0
3151	776.7	1585.0	0.0	3152	815.5	1585.0	0.0	3153	854.3	1585.0	0.0
3154	893.2	1585.0	0.0	3155	932.0	1585.0	0.0	3156	970.8	1585.0	0.0
3157	1009.7	1585.0	0.0	3158	1048.5	1585.0	0.0	3159	1087.3	1585.0	0.0
3160	1126.2	1585.0	0.0	3161	38.8	1598.3	0.0	3162	0.0	1598.3	0.0
3163	77.7	1598.3	0.0	3164	116.5	1598.3	0.0	3165	155.3	1598.3	0.0
3166	194.2	1598.3	0.0	3167	233.0	1598.3	0.0	3168	271.8	1598.3	0.0
3169	310.7	1598.3	0.0	3170	349.5	1598.3	0.0	3171	388.3	1598.3	0.0
3172	427.2	1598.3	0.0	3173	466.0	1598.3	0.0	3174	504.8	1598.3	0.0
3175	543.7	1598.3	0.0	3176	582.5	1598.3	0.0	3177	38.8	1611.7	0.0
3178	0.0	1611.7	0.0	3179	77.7	1611.7	0.0	3180	116.5	1611.7	0.0
3181	155.3	1611.7	0.0	3182	194.2	1611.7	0.0	3183	233.0	1611.7	0.0
3184	271.8	1611.7	0.0	3185	310.7	1611.7	0.0	3186	349.5	1611.7	0.0
3187	388.3	1611.7	0.0	3188	427.2	1611.7	0.0	3189	466.0	1611.7	0.0
3190	504.8	1611.7	0.0	3191	543.7	1611.7	0.0	3192	582.5	1611.7	0.0
3193	38.8	1625.0	0.0	3194	0.0	1625.0	0.0	3195	77.7	1625.0	0.0
3196	116.5	1625.0	0.0	3197	155.3	1625.0	0.0	3198	194.2	1625.0	0.0
3199	233.0	1625.0	0.0	3200	271.8	1625.0	0.0	3201	310.7	1625.0	0.0
3202	349.5	1625.0	0.0	3203	388.3	1625.0	0.0	3204	427.2	1625.0	0.0
3205	466.0	1625.0	0.0	3206	504.8	1625.0	0.0	3207	543.7	1625.0	0.0
3208	582.5	1625.0	0.0	3209	38.8	1638.3	0.0	3210	0.0	1638.3	0.0
3211	77.7	1638.3	0.0	3212	116.5	1638.3	0.0	3213	155.3	1638.3	0.0
3214	194.2	1638.3	0.0	3215	233.0	1638.3	0.0	3216	271.8	1638.3	0.0
3217	310.7	1638.3	0.0	3218	349.5	1638.3	0.0	3219	388.3	1638.3	0.0
3220	427.2	1638.3	0.0	3221	466.0	1638.3	0.0	3222	504.8	1638.3	0.0
3223	543.7	1638.3	0.0	3224	582.5	1638.3	0.0	3225	38.8	1651.7	0.0
3226	0.0	1651.7	0.0	3227	77.7	1651.7	0.0	3228	116.5	1651.7	0.0
3229	155.3	1651.7	0.0	3230	194.2	1651.7	0.0	3231	233.0	1651.7	0.0
3232	271.8	1651.7	0.0	3233	310.7	1651.7	0.0	3234	349.5	1651.7	0.0
3235	388.3	1651.7	0.0	3236	427.2	1651.7	0.0	3237	466.0	1651.7	0.0
3238	504.8	1651.7	0.0	3239	543.7	1651.7	0.0	3240	582.5	1651.7	0.0
3241	38.8	1665.0	0.0	3242	0.0	1665.0	0.0	3243	77.7	1665.0	0.0
3244	116.5	1665.0	0.0	3245	155.3	1665.0	0.0	3246	194.2	1665.0	0.0
3247	233.0	1665.0	0.0	3248	271.8	1665.0	0.0	3249	310.7	1665.0	0.0
3250	349.5	1665.0	0.0	3251	388.3	1665.0	0.0	3252	427.2	1665.0	0.0
3253	466.0	1665.0	0.0	3254	504.8	1665.0	0.0	3255	543.7	1665.0	0.0
3256	582.5	1665.0	0.0	3257	38.8	1678.3	0.0	3258	0.0	1678.3	0.0
3259	77.7	1678.3	0.0	3260	116.5	1678.3	0.0	3261	155.3	1678.3	0.0
3262	194.2	1678.3	0.0	3263	233.0	1678.3	0.0	3264	271.8	1678.3	0.0
3265	310.7	1678.3	0.0	3266	349.5	1678.3	0.0	3267	388.3	1678.3	0.0
3268	427.2	1678.3	0.0	3269	466.0	1678.3	0.0	3270	504.8	1678.3	0.0
3271	543.7	1678.3	0.0	3272	582.5	1678.3	0.0	3273	38.8	1691.7	0.0
3274	0.0	1691.7	0.0	3275	77.7	1691.7	0.0	3276	116.5	1691.7	0.0
3277	155.3	1691.7	0.0	3278	194.2	1691.7	0.0	3279	233.0	1691.7	0.0
3280	271.8	1691.7	0.0	3281	310.7	1691.7	0.0	3282	349.5	1691.7	0.0
3283	388.3	1691.7	0.0	3284	427.2	1691.7	0.0	3285	466.0	1691.7	0.0
3286	504.8	1691.7	0.0	3287	543.7	1691.7	0.0	3288	582.5	1691.7	0.0
3289	38.8	1705.0	0.0	3290	0.0	1705.0	0.0	3291	77.7	1705.0	0.0
3292	116.5	1705.0	0.0	3293	155.3	1705.0	0.0	3294	194.2	1705.0	0.0

3295	233.0	1705.0	0.0	3296	271.8	1705.0	0.0	3297	310.7	1705.0	0.0
3298	349.5	1705.0	0.0	3299	388.3	1705.0	0.0	3300	427.2	1705.0	0.0
3301	466.0	1705.0	0.0	3302	504.8	1705.0	0.0	3303	543.7	1705.0	0.0
3304	582.5	1705.0	0.0	3305	38.8	1718.3	0.0	3306	0.0	1718.3	0.0
3307	77.7	1718.3	0.0	3308	116.5	1718.3	0.0	3309	155.3	1718.3	0.0
3310	194.2	1718.3	0.0	3311	233.0	1718.3	0.0	3312	271.8	1718.3	0.0
3313	310.7	1718.3	0.0	3314	349.5	1718.3	0.0	3315	388.3	1718.3	0.0
3316	427.2	1718.3	0.0	3317	466.0	1718.3	0.0	3318	504.8	1718.3	0.0
3319	543.7	1718.3	0.0	3320	582.5	1718.3	0.0	3321	38.8	1731.7	0.0
3322	0.0	1731.7	0.0	3323	77.7	1731.7	0.0	3324	116.5	1731.7	0.0
3325	155.3	1731.7	0.0	3326	194.2	1731.7	0.0	3327	233.0	1731.7	0.0
3328	271.8	1731.7	0.0	3329	310.7	1731.7	0.0	3330	349.5	1731.7	0.0
3331	388.3	1731.7	0.0	3332	427.2	1731.7	0.0	3333	466.0	1731.7	0.0
3334	504.8	1731.7	0.0	3335	543.7	1731.7	0.0	3336	582.5	1731.7	0.0
3337	38.8	1745.0	0.0	3338	0.0	1745.0	0.0	3339	77.7	1745.0	0.0
3340	116.5	1745.0	0.0	3341	155.3	1745.0	0.0	3342	194.2	1745.0	0.0
3343	233.0	1745.0	0.0	3344	271.8	1745.0	0.0	3345	310.7	1745.0	0.0
3346	349.5	1745.0	0.0	3347	388.3	1745.0	0.0	3348	427.2	1745.0	0.0
3349	466.0	1745.0	0.0	3350	504.8	1745.0	0.0	3351	543.7	1745.0	0.0
3352	582.5	1745.0	0.0	3353	38.8	1758.3	0.0	3354	0.0	1758.3	0.0
3355	77.7	1758.3	0.0	3356	116.5	1758.3	0.0	3357	155.3	1758.3	0.0
3358	194.2	1758.3	0.0	3359	233.0	1758.3	0.0	3360	271.8	1758.3	0.0
3361	310.7	1758.3	0.0	3362	349.5	1758.3	0.0	3363	388.3	1758.3	0.0
3364	427.2	1758.3	0.0	3365	466.0	1758.3	0.0	3366	504.8	1758.3	0.0
3367	543.7	1758.3	0.0	3368	582.5	1758.3	0.0	3369	38.8	1771.7	0.0
3370	0.0	1771.7	0.0	3371	77.7	1771.7	0.0	3372	116.5	1771.7	0.0
3373	155.3	1771.7	0.0	3374	194.2	1771.7	0.0	3375	233.0	1771.7	0.0
3376	271.8	1771.7	0.0	3377	310.7	1771.7	0.0	3378	349.5	1771.7	0.0
3379	388.3	1771.7	0.0	3380	427.2	1771.7	0.0	3381	466.0	1771.7	0.0
3382	504.8	1771.7	0.0	3383	543.7	1771.7	0.0	3384	582.5	1771.7	0.0
3385	38.8	1785.0	0.0	3386	0.0	1785.0	0.0	3387	77.7	1785.0	0.0
3388	116.5	1785.0	0.0	3389	155.3	1785.0	0.0	3390	194.2	1785.0	0.0
3391	233.0	1785.0	0.0	3392	271.8	1785.0	0.0	3393	310.7	1785.0	0.0
3394	349.5	1785.0	0.0	3395	388.3	1785.0	0.0	3396	427.2	1785.0	0.0
3397	466.0	1785.0	0.0	3398	504.8	1785.0	0.0	3399	543.7	1785.0	0.0
3400	582.5	1785.0	0.0	3401	38.8	1798.3	0.0	3402	0.0	1798.3	0.0
3403	77.7	1798.3	0.0	3404	116.5	1798.3	0.0	3405	155.3	1798.3	0.0
3406	194.2	1798.3	0.0	3407	233.0	1798.3	0.0	3408	271.8	1798.3	0.0
3409	310.7	1798.3	0.0	3410	349.5	1798.3	0.0	3411	388.3	1798.3	0.0
3412	427.2	1798.3	0.0	3413	466.0	1798.3	0.0	3414	504.8	1798.3	0.0
3415	543.7	1798.3	0.0	3416	582.5	1798.3	0.0	3417	38.8	1811.7	0.0
3418	0.0	1811.7	0.0	3419	77.7	1811.7	0.0	3420	116.5	1811.7	0.0
3421	155.3	1811.7	0.0	3422	194.2	1811.7	0.0	3423	233.0	1811.7	0.0
3424	271.8	1811.7	0.0	3425	310.7	1811.7	0.0	3426	349.5	1811.7	0.0
3427	388.3	1811.7	0.0	3428	427.2	1811.7	0.0	3429	466.0	1811.7	0.0
3430	504.8	1811.7	0.0	3431	543.7	1811.7	0.0	3432	582.5	1811.7	0.0
3433	38.8	1825.0	0.0	3434	0.0	1825.0	0.0	3435	77.7	1825.0	0.0
3436	116.5	1825.0	0.0	3437	155.3	1825.0	0.0	3438	194.2	1825.0	0.0
3439	233.0	1825.0	0.0	3440	271.8	1825.0	0.0	3441	310.7	1825.0	0.0
3442	349.5	1825.0	0.0	3443	388.3	1825.0	0.0	3444	427.2	1825.0	0.0
3445	466.0	1825.0	0.0	3446	504.8	1825.0	0.0	3447	543.7	1825.0	0.0
3448	582.5	1825.0	0.0	3449	38.8	1838.3	0.0	3450	0.0	1838.3	0.0
3451	77.7	1838.3	0.0	3452	116.5	1838.3	0.0	3453	155.3	1838.3	0.0
3454	194.2	1838.3	0.0	3455	233.0	1838.3	0.0	3456	271.8	1838.3	0.0
3457	310.7	1838.3	0.0	3458	349.5	1838.3	0.0	3459	388.3	1838.3	0.0
3460	427.2	1838.3	0.0	3461	466.0	1838.3	0.0	3462	504.8	1838.3	0.0
3463	543.7	1838.3	0.0	3464	582.5	1838.3	0.0	3465	38.8	1851.7	0.0
3466	0.0	1851.7	0.0	3467	77.7	1851.7	0.0	3468	116.5	1851.7	0.0
3469	155.3	1851.7	0.0	3470	194.2	1851.7	0.0	3471	233.0	1851.7	0.0
3472	271.8	1851.7	0.0	3473	310.7	1851.7	0.0	3474	349.5	1851.7	0.0
3475	388.3	1851.7	0.0	3476	427.2	1851.7	0.0	3477	466.0	1851.7	0.0
3478	504.8	1851.7	0.0	3479	543.7	1851.7	0.0	3480	582.5	1851.7	0.0
3481	38.8	1865.0	0.0	3482	0.0	1865.0	0.0	3483	77.7	1865.0	0.0
3484	116.5	1865.0	0.0	3485	155.3	1865.0	0.0	3486	194.2	1865.0	0.0
3487	233.0	1865.0	0.0	3488	271.8	1865.0	0.0	3489	310.7	1865.0	0.0
3490	349.5	1865.0	0.0	3491	388.3	1865.0	0.0	3492	427.2	1865.0	0.0
3493	466.0	1865.0	0.0	3494	504.8	1865.0	0.0	3495	543.7	1865.0	0.0
3496	582.5	1865.0	0.0	3497	38.8	1878.3	0.0	3498	0.0	1878.3	0.0
3499	77.7	1878.3	0.0	3500	116.5	1878.3	0.0	3501	155.3	1878.3	0.0
3502	194.2	1878.3	0.0	3503	233.0	1878.3	0.0	3504	271.8	1878.3	0.0
3505	310.7	1878.3	0.0	3506	349.5	1878.3	0.0	3507	388.3	1878.3	0.0
3508	427.2	1878.3	0.0	3509	466.0	1878.3	0.0	3510	504.8	1878.3	0.0
3511	543.7	1878.3	0.0	3512	582.5	1878.3	0.0	3513	38.8	1891.7	0.0
3514	0.0	1891.7	0.0	3515	77.7	1891.7	0.0	3516	116.5	1891.7	0.0
3517	155.3	1891.7	0.0	3518	194.2	1891.7	0.0	3519	233.0	1891.7	0.0
3520	271.8	1891.7	0.0	3521	310.7	1891.7	0.0	3522	349.5	1891.7	0.0
3523	388.3	1891.7	0.0	3524	427.2	1891.7	0.0	3525	466.0	1891.7	0.0

3526	504.8	1891.7	0.0	3527	543.7	1891.7	0.0	3528	582.5	1891.7	0.0
3529	38.8	1905.0	0.0	3530	0.0	1905.0	0.0	3531	77.7	1905.0	0.0
3532	116.5	1905.0	0.0	3533	155.3	1905.0	0.0	3534	194.2	1905.0	0.0
3535	233.0	1905.0	0.0	3536	271.8	1905.0	0.0	3537	310.7	1905.0	0.0
3538	349.5	1905.0	0.0	3539	388.3	1905.0	0.0	3540	427.2	1905.0	0.0
3541	466.0	1905.0	0.0	3542	504.8	1905.0	0.0	3543	543.7	1905.0	0.0
3544	582.5	1905.0	0.0	3545	38.8	1918.3	0.0	3546	0.0	1918.3	0.0
3547	77.7	1918.3	0.0	3548	116.5	1918.3	0.0	3549	155.3	1918.3	0.0
3550	194.2	1918.3	0.0	3551	233.0	1918.3	0.0	3552	271.8	1918.3	0.0
3553	310.7	1918.3	0.0	3554	349.5	1918.3	0.0	3555	388.3	1918.3	0.0
3556	427.2	1918.3	0.0	3557	466.0	1918.3	0.0	3558	504.8	1918.3	0.0
3559	543.7	1918.3	0.0	3560	582.5	1918.3	0.0	3561	38.8	1931.7	0.0
3562	0.0	1931.7	0.0	3563	77.7	1931.7	0.0	3564	116.5	1931.7	0.0
3565	155.3	1931.7	0.0	3566	194.2	1931.7	0.0	3567	233.0	1931.7	0.0
3568	271.8	1931.7	0.0	3569	310.7	1931.7	0.0	3570	349.5	1931.7	0.0
3571	388.3	1931.7	0.0	3572	427.2	1931.7	0.0	3573	466.0	1931.7	0.0
3574	504.8	1931.7	0.0	3575	543.7	1931.7	0.0	3576	582.5	1931.7	0.0
3577	38.8	1945.0	0.0	3578	0.0	1945.0	0.0	3579	77.7	1945.0	0.0
3580	116.5	1945.0	0.0	3581	155.3	1945.0	0.0	3582	194.2	1945.0	0.0
3583	233.0	1945.0	0.0	3584	271.8	1945.0	0.0	3585	310.7	1945.0	0.0
3586	349.5	1945.0	0.0	3587	388.3	1945.0	0.0	3588	427.2	1945.0	0.0
3589	466.0	1945.0	0.0	3590	504.8	1945.0	0.0	3591	543.7	1945.0	0.0
3592	582.5	1945.0	0.0	3593	38.8	1958.3	0.0	3594	0.0	1958.3	0.0
3595	77.7	1958.3	0.0	3596	116.5	1958.3	0.0	3597	155.3	1958.3	0.0
3598	194.2	1958.3	0.0	3599	233.0	1958.3	0.0	3600	271.8	1958.3	0.0
3601	310.7	1958.3	0.0	3602	349.5	1958.3	0.0	3603	388.3	1958.3	0.0
3604	427.2	1958.3	0.0	3605	466.0	1958.3	0.0	3606	504.8	1958.3	0.0
3607	543.7	1958.3	0.0	3608	582.5	1958.3	0.0	3609	38.8	1971.7	0.0
3610	0.0	1971.7	0.0	3611	77.7	1971.7	0.0	3612	116.5	1971.7	0.0
3613	155.3	1971.7	0.0	3614	194.2	1971.7	0.0	3615	233.0	1971.7	0.0
3616	271.8	1971.7	0.0	3617	310.7	1971.7	0.0	3618	349.5	1971.7	0.0
3619	388.3	1971.7	0.0	3620	427.2	1971.7	0.0	3621	466.0	1971.7	0.0
3622	504.8	1971.7	0.0	3623	543.7	1971.7	0.0	3624	582.5	1971.7	0.0
3625	38.8	1985.0	0.0	3626	77.7	1985.0	0.0	3627	116.5	1985.0	0.0
3628	155.3	1985.0	0.0	3629	194.2	1985.0	0.0	3630	233.0	1985.0	0.0
3631	271.8	1985.0	0.0	3632	310.7	1985.0	0.0	3633	349.5	1985.0	0.0
3634	388.3	1985.0	0.0	3635	427.2	1985.0	0.0	3636	466.0	1985.0	0.0
3637	504.8	1985.0	0.0	3638	543.7	1985.0	0.0	3639	621.3	1598.3	0.0
3640	660.2	1598.3	0.0	3641	699.0	1598.3	0.0	3642	737.8	1598.3	0.0
3643	776.7	1598.3	0.0	3644	815.5	1598.3	0.0	3645	854.3	1598.3	0.0
3646	893.2	1598.3	0.0	3647	932.0	1598.3	0.0	3648	970.8	1598.3	0.0
3649	1009.7	1598.3	0.0	3650	1048.5	1598.3	0.0	3651	1087.3	1598.3	0.0
3652	1126.2	1598.3	0.0	3653	1165.0	1598.3	0.0	3654	621.3	1611.7	0.0
3655	660.2	1611.7	0.0	3656	699.0	1611.7	0.0	3657	737.8	1611.7	0.0
3658	776.7	1611.7	0.0	3659	815.5	1611.7	0.0	3660	854.3	1611.7	0.0
3661	893.2	1611.7	0.0	3662	932.0	1611.7	0.0	3663	970.8	1611.7	0.0
3664	1009.7	1611.7	0.0	3665	1048.5	1611.7	0.0	3666	1087.3	1611.7	0.0
3667	1126.2	1611.7	0.0	3668	1165.0	1611.7	0.0	3669	621.3	1625.0	0.0
3670	660.2	1625.0	0.0	3671	699.0	1625.0	0.0	3672	737.8	1625.0	0.0
3673	776.7	1625.0	0.0	3674	815.5	1625.0	0.0	3675	854.3	1625.0	0.0
3676	893.2	1625.0	0.0	3677	932.0	1625.0	0.0	3678	970.8	1625.0	0.0
3679	1009.7	1625.0	0.0	3680	1048.5	1625.0	0.0	3681	1087.3	1625.0	0.0
3682	1126.2	1625.0	0.0	3683	1165.0	1625.0	0.0	3684	621.3	1638.3	0.0
3685	660.2	1638.3	0.0	3686	699.0	1638.3	0.0	3687	737.8	1638.3	0.0
3688	776.7	1638.3	0.0	3689	815.5	1638.3	0.0	3690	854.3	1638.3	0.0
3691	893.2	1638.3	0.0	3692	932.0	1638.3	0.0	3693	970.8	1638.3	0.0
3694	1009.7	1638.3	0.0	3695	1048.5	1638.3	0.0	3696	1087.3	1638.3	0.0
3697	1126.2	1638.3	0.0	3698	1165.0	1638.3	0.0	3699	621.3	1651.7	0.0
3700	660.2	1651.7	0.0	3701	699.0	1651.7	0.0	3702	737.8	1651.7	0.0
3703	776.7	1651.7	0.0	3704	815.5	1651.7	0.0	3705	854.3	1651.7	0.0
3706	893.2	1651.7	0.0	3707	932.0	1651.7	0.0	3708	970.8	1651.7	0.0
3709	1009.7	1651.7	0.0	3710	1048.5	1651.7	0.0	3711	1087.3	1651.7	0.0
3712	1126.2	1651.7	0.0	3713	1165.0	1651.7	0.0	3714	621.3	1665.0	0.0
3715	660.2	1665.0	0.0	3716	699.0	1665.0	0.0	3717	737.8	1665.0	0.0
3718	776.7	1665.0	0.0	3719	815.5	1665.0	0.0	3720	854.3	1665.0	0.0
3721	893.2	1665.0	0.0	3722	932.0	1665.0	0.0	3723	970.8	1665.0	0.0
3724	1009.7	1665.0	0.0	3725	1048.5	1665.0	0.0	3726	1087.3	1665.0	0.0
3727	1126.2	1665.0	0.0	3728	1165.0	1665.0	0.0	3729	621.3	1678.3	0.0
3730	660.2	1678.3	0.0	3731	699.0	1678.3	0.0	3732	737.8	1678.3	0.0
3733	776.7	1678.3	0.0	3734	815.5	1678.3	0.0	3735	854.3	1678.3	0.0
3736	893.2	1678.3	0.0	3737	932.0	1678.3	0.0	3738	970.8	1678.3	0.0
3739	1009.7	1678.3	0.0	3740	1048.5	1678.3	0.0	3741	1087.3	1678.3	0.0
3742	1126.2	1678.3	0.0	3743	1165.0	1678.3	0.0	3744	621.3	1691.7	0.0
3745	660.2	1691.7	0.0	3746	699.0	1691.7	0.0	3747	737.8	1691.7	0.0
3748	776.7	1691.7	0.0	3749	815.5	1691.7	0.0	3750	854.3	1691.7	0.0
3751	893.2	1691.7	0.0	3752	932.0	1691.7	0.0	3753	970.8	1691.7	0.0
3754	1009.7	1691.7	0.0	3755	1048.5	1691.7	0.0	3756	1087.3	1691.7	0.0

3757	1126.2	1691.7	0.0	3758	1165.0	1691.7	0.0	3759	621.3	1705.0	0.0
3760	660.2	1705.0	0.0	3761	699.0	1705.0	0.0	3762	737.8	1705.0	0.0
3763	776.7	1705.0	0.0	3764	815.5	1705.0	0.0	3765	854.3	1705.0	0.0
3766	893.2	1705.0	0.0	3767	932.0	1705.0	0.0	3768	970.8	1705.0	0.0
3769	1009.7	1705.0	0.0	3770	1048.5	1705.0	0.0	3771	1087.3	1705.0	0.0
3772	1126.2	1705.0	0.0	3773	1165.0	1705.0	0.0	3774	621.3	1718.3	0.0
3775	660.2	1718.3	0.0	3776	699.0	1718.3	0.0	3777	737.8	1718.3	0.0
3778	776.7	1718.3	0.0	3779	815.5	1718.3	0.0	3780	854.3	1718.3	0.0
3781	893.2	1718.3	0.0	3782	932.0	1718.3	0.0	3783	970.8	1718.3	0.0
3784	1009.7	1718.3	0.0	3785	1048.5	1718.3	0.0	3786	1087.3	1718.3	0.0
3787	1126.2	1718.3	0.0	3788	1165.0	1718.3	0.0	3789	621.3	1731.7	0.0
3790	660.2	1731.7	0.0	3791	699.0	1731.7	0.0	3792	737.8	1731.7	0.0
3793	776.7	1731.7	0.0	3794	815.5	1731.7	0.0	3795	854.3	1731.7	0.0
3796	893.2	1731.7	0.0	3797	932.0	1731.7	0.0	3798	970.8	1731.7	0.0
3799	1009.7	1731.7	0.0	3800	1048.5	1731.7	0.0	3801	1087.3	1731.7	0.0
3802	1126.2	1731.7	0.0	3803	1165.0	1731.7	0.0	3804	621.3	1745.0	0.0
3805	660.2	1745.0	0.0	3806	699.0	1745.0	0.0	3807	737.8	1745.0	0.0
3808	776.7	1745.0	0.0	3809	815.5	1745.0	0.0	3810	854.3	1745.0	0.0
3811	893.2	1745.0	0.0	3812	932.0	1745.0	0.0	3813	970.8	1745.0	0.0
3814	1009.7	1745.0	0.0	3815	1048.5	1745.0	0.0	3816	1087.3	1745.0	0.0
3817	1126.2	1745.0	0.0	3818	1165.0	1745.0	0.0	3819	621.3	1758.3	0.0
3820	660.2	1758.3	0.0	3821	699.0	1758.3	0.0	3822	737.8	1758.3	0.0
3823	776.7	1758.3	0.0	3824	815.5	1758.3	0.0	3825	854.3	1758.3	0.0
3826	893.2	1758.3	0.0	3827	932.0	1758.3	0.0	3828	970.8	1758.3	0.0
3829	1009.7	1758.3	0.0	3830	1048.5	1758.3	0.0	3831	1087.3	1758.3	0.0
3832	1126.2	1758.3	0.0	3833	1165.0	1758.3	0.0	3834	621.3	1771.7	0.0
3835	660.2	1771.7	0.0	3836	699.0	1771.7	0.0	3837	737.8	1771.7	0.0
3838	776.7	1771.7	0.0	3839	815.5	1771.7	0.0	3840	854.3	1771.7	0.0
3841	893.2	1771.7	0.0	3842	932.0	1771.7	0.0	3843	970.8	1771.7	0.0
3844	1009.7	1771.7	0.0	3845	1048.5	1771.7	0.0	3846	1087.3	1771.7	0.0
3847	1126.2	1771.7	0.0	3848	1165.0	1771.7	0.0	3849	621.3	1785.0	0.0
3850	660.2	1785.0	0.0	3851	699.0	1785.0	0.0	3852	737.8	1785.0	0.0
3853	776.7	1785.0	0.0	3854	815.5	1785.0	0.0	3855	854.3	1785.0	0.0
3856	893.2	1785.0	0.0	3857	932.0	1785.0	0.0	3858	970.8	1785.0	0.0
3859	1009.7	1785.0	0.0	3860	1048.5	1785.0	0.0	3861	1087.3	1785.0	0.0
3862	1126.2	1785.0	0.0	3863	1165.0	1785.0	0.0	3864	621.3	1798.3	0.0
3865	660.2	1798.3	0.0	3866	699.0	1798.3	0.0	3867	737.8	1798.3	0.0
3868	776.7	1798.3	0.0	3869	815.5	1798.3	0.0	3870	854.3	1798.3	0.0
3871	893.2	1798.3	0.0	3872	932.0	1798.3	0.0	3873	970.8	1798.3	0.0
3874	1009.7	1798.3	0.0	3875	1048.5	1798.3	0.0	3876	1087.3	1798.3	0.0
3877	1126.2	1798.3	0.0	3878	1165.0	1798.3	0.0	3879	621.3	1811.7	0.0
3880	660.2	1811.7	0.0	3881	699.0	1811.7	0.0	3882	737.8	1811.7	0.0
3883	776.7	1811.7	0.0	3884	815.5	1811.7	0.0	3885	854.3	1811.7	0.0
3886	893.2	1811.7	0.0	3887	932.0	1811.7	0.0	3888	970.8	1811.7	0.0
3889	1009.7	1811.7	0.0	3890	1048.5	1811.7	0.0	3891	1087.3	1811.7	0.0
3892	1126.2	1811.7	0.0	3893	1165.0	1811.7	0.0	3894	621.3	1825.0	0.0
3895	660.2	1825.0	0.0	3896	699.0	1825.0	0.0	3897	737.8	1825.0	0.0
3898	776.7	1825.0	0.0	3899	815.5	1825.0	0.0	3900	854.3	1825.0	0.0
3901	893.2	1825.0	0.0	3902	932.0	1825.0	0.0	3903	970.8	1825.0	0.0
3904	1009.7	1825.0	0.0	3905	1048.5	1825.0	0.0	3906	1087.3	1825.0	0.0
3907	1126.2	1825.0	0.0	3908	1165.0	1825.0	0.0	3909	621.3	1838.3	0.0
3910	660.2	1838.3	0.0	3911	699.0	1838.3	0.0	3912	737.8	1838.3	0.0
3913	776.7	1838.3	0.0	3914	815.5	1838.3	0.0	3915	854.3	1838.3	0.0
3916	893.2	1838.3	0.0	3917	932.0	1838.3	0.0	3918	970.8	1838.3	0.0
3919	1009.7	1838.3	0.0	3920	1048.5	1838.3	0.0	3921	1087.3	1838.3	0.0
3922	1126.2	1838.3	0.0	3923	1165.0	1838.3	0.0	3924	621.3	1851.7	0.0
3925	660.2	1851.7	0.0	3926	699.0	1851.7	0.0	3927	737.8	1851.7	0.0
3928	776.7	1851.7	0.0	3929	815.5	1851.7	0.0	3930	854.3	1851.7	0.0
3931	893.2	1851.7	0.0	3932	932.0	1851.7	0.0	3933	970.8	1851.7	0.0
3934	1009.7	1851.7	0.0	3935	1048.5	1851.7	0.0	3936	1087.3	1851.7	0.0
3937	1126.2	1851.7	0.0	3938	1165.0	1851.7	0.0	3939	621.3	1865.0	0.0
3940	660.2	1865.0	0.0	3941	699.0	1865.0	0.0	3942	737.8	1865.0	0.0
3943	776.7	1865.0	0.0	3944	815.5	1865.0	0.0	3945	854.3	1865.0	0.0
3946	893.2	1865.0	0.0	3947	932.0	1865.0	0.0	3948	970.8	1865.0	0.0
3949	1009.7	1865.0	0.0	3950	1048.5	1865.0	0.0	3951	1087.3	1865.0	0.0
3952	1126.2	1865.0	0.0	3953	1165.0	1865.0	0.0	3954	621.3	1878.3	0.0
3955	660.2	1878.3	0.0	3956	699.0	1878.3	0.0	3957	737.8	1878.3	0.0
3958	776.7	1878.3	0.0	3959	815.5	1878.3	0.0	3960	854.3	1878.3	0.0
3961	893.2	1878.3	0.0	3962	932.0	1878.3	0.0	3963	970.8	1878.3	0.0
3964	1009.7	1878.3	0.0	3965	1048.5	1878.3	0.0	3966	1087.3	1878.3	0.0
3967	1126.2	1878.3	0.0	3968	1165.0	1878.3	0.0	3969	621.3	1891.7	0.0
3970	660.2	1891.7	0.0	3971	699.0	1891.7	0.0	3972	737.8	1891.7	0.0
3973	776.7	1891.7	0.0	3974	815.5	1891.7	0.0	3975	854.3	1891.7	0.0
3976	893.2	1891.7	0.0	3977	932.0	1891.7	0.0	3978	970.8	1891.7	0.0
3979	1009.7	1891.7	0.0	3980	1048.5	1891.7	0.0	3981	1087.3	1891.7	0.0
3982	1126.2	1891.7	0.0	3983	1165.0	1891.7	0.0	3984	621.3	1905.0	0.0
3985	660.2	1905.0	0.0	3986	699.0	1905.0	0.0	3987	737.8	1905.0	0.0

3988	776.7	1905.0	0.0	3989	815.5	1905.0	0.0	3990	854.3	1905.0	0.0
3991	893.2	1905.0	0.0	3992	932.0	1905.0	0.0	3993	970.8	1905.0	0.0
3994	1009.7	1905.0	0.0	3995	1048.5	1905.0	0.0	3996	1087.3	1905.0	0.0
3997	1126.2	1905.0	0.0	3998	1165.0	1905.0	0.0	3999	621.3	1918.3	0.0
4000	660.2	1918.3	0.0	4001	699.0	1918.3	0.0	4002	737.8	1918.3	0.0
4003	776.7	1918.3	0.0	4004	815.5	1918.3	0.0	4005	854.3	1918.3	0.0
4006	893.2	1918.3	0.0	4007	932.0	1918.3	0.0	4008	970.8	1918.3	0.0
4009	1009.7	1918.3	0.0	4010	1048.5	1918.3	0.0	4011	1087.3	1918.3	0.0
4012	1126.2	1918.3	0.0	4013	1165.0	1918.3	0.0	4014	621.3	1931.7	0.0
4015	660.2	1931.7	0.0	4016	699.0	1931.7	0.0	4017	737.8	1931.7	0.0
4018	776.7	1931.7	0.0	4019	815.5	1931.7	0.0	4020	854.3	1931.7	0.0
4021	893.2	1931.7	0.0	4022	932.0	1931.7	0.0	4023	970.8	1931.7	0.0
4024	1009.7	1931.7	0.0	4025	1048.5	1931.7	0.0	4026	1087.3	1931.7	0.0
4027	1126.2	1931.7	0.0	4028	1165.0	1931.7	0.0	4029	621.3	1945.0	0.0
4030	660.2	1945.0	0.0	4031	699.0	1945.0	0.0	4032	737.8	1945.0	0.0
4033	776.7	1945.0	0.0	4034	815.5	1945.0	0.0	4035	854.3	1945.0	0.0
4036	893.2	1945.0	0.0	4037	932.0	1945.0	0.0	4038	970.8	1945.0	0.0
4039	1009.7	1945.0	0.0	4040	1048.5	1945.0	0.0	4041	1087.3	1945.0	0.0
4042	1126.2	1945.0	0.0	4043	1165.0	1945.0	0.0	4044	621.3	1958.3	0.0
4045	660.2	1958.3	0.0	4046	699.0	1958.3	0.0	4047	737.8	1958.3	0.0
4048	776.7	1958.3	0.0	4049	815.5	1958.3	0.0	4050	854.3	1958.3	0.0
4051	893.2	1958.3	0.0	4052	932.0	1958.3	0.0	4053	970.8	1958.3	0.0
4054	1009.7	1958.3	0.0	4055	1048.5	1958.3	0.0	4056	1087.3	1958.3	0.0
4057	1126.2	1958.3	0.0	4058	1165.0	1958.3	0.0	4059	621.3	1971.7	0.0
4060	660.2	1971.7	0.0	4061	699.0	1971.7	0.0	4062	737.8	1971.7	0.0
4063	776.7	1971.7	0.0	4064	815.5	1971.7	0.0	4065	854.3	1971.7	0.0
4066	893.2	1971.7	0.0	4067	932.0	1971.7	0.0	4068	970.8	1971.7	0.0
4069	1009.7	1971.7	0.0	4070	1048.5	1971.7	0.0	4071	1087.3	1971.7	0.0
4072	1203.8	0.0	0.0	4073	1203.8	635.0	0.0	4074	1203.8	1145.9	0.0
4075	1203.8	1585.0	0.0	4076	1203.8	1985.0	0.0	4077	1203.8	21.2	0.0
4078	1203.8	42.3	0.0	4079	1203.8	63.5	0.0	4080	1203.8	84.7	0.0
4081	1203.8	105.8	0.0	4082	1203.8	127.0	0.0	4083	1203.8	148.2	0.0
4084	1203.8	169.3	0.0	4085	1203.8	190.5	0.0	4086	1203.8	211.7	0.0
4087	1203.8	232.8	0.0	4088	1203.8	254.0	0.0	4089	1203.8	275.2	0.0
4090	1203.8	296.3	0.0	4091	1203.8	317.5	0.0	4092	1203.8	338.7	0.0
4093	1203.8	359.8	0.0	4094	1203.8	381.0	0.0	4095	1203.8	402.2	0.0
4096	1203.8	423.3	0.0	4097	1203.8	444.5	0.0	4098	1203.8	465.7	0.0
4099	1203.8	486.8	0.0	4100	1203.8	508.0	0.0	4101	1203.8	529.2	0.0
4102	1203.8	550.3	0.0	4103	1203.8	571.5	0.0	4104	1203.8	592.7	0.0
4105	1203.8	613.8	0.0	4106	1203.8	652.0	0.0	4107	1203.8	669.1	0.0
4108	1203.8	686.1	0.0	4109	1203.8	703.1	0.0	4110	1203.8	720.1	0.0
4111	1203.8	754.2	0.0	4112	1203.8	771.2	0.0	4113	1203.8	788.3	0.0
4114	1203.8	805.3	0.0	4115	1203.8	1971.7	0.0	4116	1203.8	822.3	0.0
4117	1203.8	839.3	0.0	4118	1203.8	856.4	0.0	4119	1203.8	873.4	0.0
4120	1203.8	890.4	0.0	4121	1203.8	907.5	0.0	4122	1203.8	924.5	0.0
4123	1203.8	941.5	0.0	4124	1203.8	958.6	0.0	4125	1203.8	975.6	0.0
4126	1203.8	992.6	0.0	4127	1203.8	1009.6	0.0	4128	1203.8	1026.7	0.0
4129	1203.8	1043.7	0.0	4130	1203.8	1060.7	0.0	4131	1203.8	1077.8	0.0
4132	1203.8	1094.8	0.0	4133	1203.8	1111.8	0.0	4134	1203.8	1128.8	0.0
4135	1203.8	1160.5	0.0	4136	1203.8	1175.1	0.0	4137	1203.8	1189.8	0.0
4138	1203.8	1204.4	0.0	4139	1203.8	1219.1	0.0	4140	1203.8	1233.7	0.0
4141	1203.8	1248.3	0.0	4142	1203.8	1263.0	0.0	4143	1203.8	1277.6	0.0
4144	1203.8	1292.2	0.0	4145	1203.8	1306.9	0.0	4146	1203.8	1321.5	0.0
4147	1203.8	1336.2	0.0	4148	1203.8	1350.8	0.0	4149	1203.8	1365.4	0.0
4150	1203.8	1380.1	0.0	4151	1203.8	1394.7	0.0	4152	1203.8	1409.3	0.0
4153	1203.8	1424.0	0.0	4154	1203.8	1438.6	0.0	4155	1203.8	1453.3	0.0
4156	1203.8	1467.9	0.0	4157	1203.8	1482.5	0.0	4158	1203.8	1497.2	0.0
4159	1203.8	1511.8	0.0	4160	1203.8	1526.5	0.0	4161	1203.8	1541.1	0.0
4162	1203.8	1555.7	0.0	4163	1203.8	1570.4	0.0	4164	1203.8	1598.3	0.0
4165	1203.8	1611.7	0.0	4166	1203.8	1625.0	0.0	4167	1203.8	1638.3	0.0
4168	1203.8	1651.7	0.0	4169	1203.8	1665.0	0.0	4170	1203.8	1678.3	0.0
4171	1203.8	1691.7	0.0	4172	1203.8	1705.0	0.0	4173	1203.8	1718.3	0.0
4174	1203.8	1731.7	0.0	4175	1203.8	1745.0	0.0	4176	1203.8	1758.3	0.0
4177	1203.8	1771.7	0.0	4178	1203.8	1785.0	0.0	4179	1203.8	1798.3	0.0
4180	1203.8	1811.7	0.0	4181	1203.8	1825.0	0.0	4182	1203.8	1838.3	0.0
4183	1203.8	1851.7	0.0	4184	1203.8	1865.0	0.0	4185	1203.8	1878.3	0.0
4186	1203.8	1891.7	0.0	4187	1203.8	1905.0	0.0	4188	1203.8	1918.3	0.0
4189	1203.8	1931.7	0.0	4190	1203.8	1945.0	0.0	4191	1203.8	1958.3	0.0
4192	1242.7	0.0	0.0	4193	1242.7	635.0	0.0	4194	1242.7	1145.9	0.0
4195	1242.7	1585.0	0.0	4196	1242.7	1985.0	0.0	4197	1242.7	21.2	0.0
4198	1242.7	42.3	0.0	4199	1242.7	63.5	0.0	4200	1242.7	84.7	0.0
4201	1242.7	105.8	0.0	4202	1242.7	127.0	0.0	4203	1242.7	148.2	0.0
4204	1242.7	169.3	0.0	4205	1242.7	190.5	0.0	4206	1242.7	211.7	0.0
4207	1242.7	232.8	0.0	4208	1242.7	254.0	0.0	4209	1242.7	275.2	0.0
4210	1242.7	296.3	0.0	4211	1242.7	317.5	0.0	4212	1242.7	338.7	0.0
4213	1242.7	359.8	0.0	4214	1242.7	381.0	0.0	4215	1242.7	402.2	0.0
4216	1242.7	423.3	0.0	4217	1242.7	444.5	0.0	4218	1242.7	465.7	0.0

4219	1242.7	486.8	0.0	4220	1242.7	508.0	0.0	4221	1242.7	529.2	0.0
4222	1242.7	550.3	0.0	4223	1242.7	571.5	0.0	4224	1242.7	592.7	0.0
4225	1242.7	613.8	0.0	4226	1242.7	652.0	0.0	4227	1242.7	669.1	0.0
4228	1242.7	686.1	0.0	4229	1242.7	703.1	0.0	4230	1242.7	720.1	0.0
4231	1242.7	754.2	0.0	4232	1242.7	771.2	0.0	4233	1242.7	788.3	0.0
4234	1242.7	805.3	0.0	4235	1242.7	1971.7	0.0	4236	1242.7	822.3	0.0
4237	1242.7	839.3	0.0	4238	1242.7	856.4	0.0	4239	1242.7	873.4	0.0
4240	1242.7	890.4	0.0	4241	1242.7	907.5	0.0	4242	1242.7	924.5	0.0
4243	1242.7	941.5	0.0	4244	1242.7	958.6	0.0	4245	1242.7	975.6	0.0
4246	1242.7	992.6	0.0	4247	1242.7	1009.6	0.0	4248	1242.7	1026.7	0.0
4249	1242.7	1043.7	0.0	4250	1242.7	1060.7	0.0	4251	1242.7	1077.8	0.0
4252	1242.7	1094.8	0.0	4253	1242.7	1111.8	0.0	4254	1242.7	1128.8	0.0
4255	1242.7	1160.5	0.0	4256	1242.7	1175.1	0.0	4257	1242.7	1189.8	0.0
4258	1242.7	1204.4	0.0	4259	1242.7	1219.1	0.0	4260	1242.7	1233.7	0.0
4261	1242.7	1248.3	0.0	4262	1242.7	1263.0	0.0	4263	1242.7	1277.6	0.0
4264	1242.7	1292.2	0.0	4265	1242.7	1306.9	0.0	4266	1242.7	1321.5	0.0
4267	1242.7	1336.2	0.0	4268	1242.7	1350.8	0.0	4269	1242.7	1365.4	0.0
4270	1242.7	1380.1	0.0	4271	1242.7	1394.7	0.0	4272	1242.7	1409.3	0.0
4273	1242.7	1424.0	0.0	4274	1242.7	1438.6	0.0	4275	1242.7	1453.3	0.0
4276	1242.7	1467.9	0.0	4277	1242.7	1482.5	0.0	4278	1242.7	1497.2	0.0
4279	1242.7	1511.8	0.0	4280	1242.7	1526.5	0.0	4281	1242.7	1541.1	0.0
4282	1242.7	1555.7	0.0	4283	1242.7	1570.4	0.0	4284	1242.7	1598.3	0.0
4285	1242.7	1611.7	0.0	4286	1242.7	1625.0	0.0	4287	1242.7	1638.3	0.0
4288	1242.7	1651.7	0.0	4289	1242.7	1665.0	0.0	4290	1242.7	1678.3	0.0
4291	1242.7	1691.7	0.0	4292	1242.7	1705.0	0.0	4293	1242.7	1718.3	0.0
4294	1242.7	1731.7	0.0	4295	1242.7	1745.0	0.0	4296	1242.7	1758.3	0.0
4297	1242.7	1771.7	0.0	4298	1242.7	1785.0	0.0	4299	1242.7	1798.3	0.0
4300	1242.7	1811.7	0.0	4301	1242.7	1825.0	0.0	4302	1242.7	1838.3	0.0
4303	1242.7	1851.7	0.0	4304	1242.7	1865.0	0.0	4305	1242.7	1878.3	0.0
4306	1242.7	1891.7	0.0	4307	1242.7	1905.0	0.0	4308	1242.7	1918.3	0.0
4309	1242.7	1931.7	0.0	4310	1242.7	1945.0	0.0	4311	1242.7	1958.3	0.0
4312	1281.5	0.0	0.0	4313	1281.5	635.0	0.0	4314	1281.5	1145.9	0.0
4315	1281.5	1585.0	0.0	4316	1281.5	1985.0	0.0	4317	1281.5	21.2	0.0
4318	1281.5	42.3	0.0	4319	1281.5	63.5	0.0	4320	1281.5	84.7	0.0
4321	1281.5	105.8	0.0	4322	1281.5	127.0	0.0	4323	1281.5	148.2	0.0
4324	1281.5	169.3	0.0	4325	1281.5	190.5	0.0	4326	1281.5	211.7	0.0
4327	1281.5	232.8	0.0	4328	1281.5	254.0	0.0	4329	1281.5	275.2	0.0
4330	1281.5	296.3	0.0	4331	1281.5	317.5	0.0	4332	1281.5	338.7	0.0
4333	1281.5	359.8	0.0	4334	1281.5	381.0	0.0	4335	1281.5	402.2	0.0
4336	1281.5	423.3	0.0	4337	1281.5	444.5	0.0	4338	1281.5	465.7	0.0
4339	1281.5	486.8	0.0	4340	1281.5	508.0	0.0	4341	1281.5	529.2	0.0
4342	1281.5	550.3	0.0	4343	1281.5	571.5	0.0	4344	1281.5	592.7	0.0
4345	1281.5	613.8	0.0	4346	1281.5	652.0	0.0	4347	1281.5	669.1	0.0
4348	1281.5	686.1	0.0	4349	1281.5	703.1	0.0	4350	1281.5	720.1	0.0
4351	1281.5	754.2	0.0	4352	1281.5	771.2	0.0	4353	1281.5	788.3	0.0
4354	1281.5	805.3	0.0	4355	1281.5	1971.7	0.0	4356	1281.5	822.3	0.0
4357	1281.5	839.3	0.0	4358	1281.5	856.4	0.0	4359	1281.5	873.4	0.0
4360	1281.5	890.4	0.0	4361	1281.5	907.5	0.0	4362	1281.5	924.5	0.0
4363	1281.5	941.5	0.0	4364	1281.5	958.6	0.0	4365	1281.5	975.6	0.0
4366	1281.5	992.6	0.0	4367	1281.5	1009.6	0.0	4368	1281.5	1026.7	0.0
4369	1281.5	1043.7	0.0	4370	1281.5	1060.7	0.0	4371	1281.5	1077.8	0.0
4372	1281.5	1094.8	0.0	4373	1281.5	1111.8	0.0	4374	1281.5	1128.8	0.0
4375	1281.5	1160.5	0.0	4376	1281.5	1175.1	0.0	4377	1281.5	1189.8	0.0
4378	1281.5	1204.4	0.0	4379	1281.5	1219.1	0.0	4380	1281.5	1233.7	0.0
4381	1281.5	1248.3	0.0	4382	1281.5	1263.0	0.0	4383	1281.5	1277.6	0.0
4384	1281.5	1292.2	0.0	4385	1281.5	1306.9	0.0	4386	1281.5	1321.5	0.0
4387	1281.5	1336.2	0.0	4388	1281.5	1350.8	0.0	4389	1281.5	1365.4	0.0
4390	1281.5	1380.1	0.0	4391	1281.5	1394.7	0.0	4392	1281.5	1409.3	0.0
4393	1281.5	1424.0	0.0	4394	1281.5	1438.6	0.0	4395	1281.5	1453.3	0.0
4396	1281.5	1467.9	0.0	4397	1281.5	1482.5	0.0	4398	1281.5	1497.2	0.0
4399	1281.5	1511.8	0.0	4400	1281.5	1526.5	0.0	4401	1281.5	1541.1	0.0
4402	1281.5	1555.7	0.0	4403	1281.5	1570.4	0.0	4404	1281.5	1598.3	0.0
4405	1281.5	1611.7	0.0	4406	1281.5	1625.0	0.0	4407	1281.5	1638.3	0.0
4408	1281.5	1651.7	0.0	4409	1281.5	1665.0	0.0	4410	1281.5	1678.3	0.0
4411	1281.5	1691.7	0.0	4412	1281.5	1705.0	0.0	4413	1281.5	1718.3	0.0
4414	1281.5	1731.7	0.0	4415	1281.5	1745.0	0.0	4416	1281.5	1758.3	0.0
4417	1281.5	1771.7	0.0	4418	1281.5	1785.0	0.0	4419	1281.5	1798.3	0.0
4420	1281.5	1811.7	0.0	4421	1281.5	1825.0	0.0	4422	1281.5	1838.3	0.0
4423	1281.5	1851.7	0.0	4424	1281.5	1865.0	0.0	4425	1281.5	1878.3	0.0
4426	1281.5	1891.7	0.0	4427	1281.5	1905.0	0.0	4428	1281.5	1918.3	0.0
4429	1281.5	1931.7	0.0	4430	1281.5	1945.0	0.0	4431	1281.5	1958.3	0.0
4432	0.0	-21.2	0.0	4433	1165.0	-21.2	0.0	4434	582.5	-21.2	0.0
4435	38.8	-21.2	0.0	4436	77.7	-21.2	0.0	4437	116.5	-21.2	0.0
4438	155.3	-21.2	0.0	4439	194.2	-21.2	0.0	4440	233.0	-21.2	0.0
4441	271.8	-21.2	0.0	4442	310.7	-21.2	0.0	4443	349.5	-21.2	0.0
4444	388.3	-21.2	0.0	4445	427.2	-21.2	0.0	4446	466.0	-21.2	0.0
4447	504.8	-21.2	0.0	4448	543.7	-21.2	0.0	4449	621.3	-21.2	0.0

4450	660.2	-21.2	0.0	4451	699.0	-21.2	0.0	4452	737.8	-21.2	0.0
4453	776.7	-21.2	0.0	4454	815.5	-21.2	0.0	4455	854.3	-21.2	0.0
4456	893.2	-21.2	0.0	4457	932.0	-21.2	0.0	4458	970.8	-21.2	0.0
4459	1009.7	-21.2	0.0	4460	1048.5	-21.2	0.0	4461	1087.3	-21.2	0.0
4462	1126.2	-21.2	0.0	4463	1203.8	-21.2	0.0	4464	1242.7	-21.2	0.0
4465	1281.5	-21.2	0.0	4466	0.0	-42.3	0.0	4467	1165.0	-42.3	0.0
4468	582.5	-42.3	0.0	4469	38.8	-42.3	0.0	4470	77.7	-42.3	0.0
4471	116.5	-42.3	0.0	4472	155.3	-42.3	0.0	4473	194.2	-42.3	0.0
4474	233.0	-42.3	0.0	4475	271.8	-42.3	0.0	4476	310.7	-42.3	0.0
4477	349.5	-42.3	0.0	4478	388.3	-42.3	0.0	4479	427.2	-42.3	0.0
4480	466.0	-42.3	0.0	4481	504.8	-42.3	0.0	4482	543.7	-42.3	0.0
4483	621.3	-42.3	0.0	4484	660.2	-42.3	0.0	4485	699.0	-42.3	0.0
4486	737.8	-42.3	0.0	4487	776.7	-42.3	0.0	4488	815.5	-42.3	0.0
4489	854.3	-42.3	0.0	4490	893.2	-42.3	0.0	4491	932.0	-42.3	0.0
4492	970.8	-42.3	0.0	4493	1009.7	-42.3	0.0	4494	1048.5	-42.3	0.0
4495	1087.3	-42.3	0.0	4496	1126.2	-42.3	0.0	4497	1203.8	-42.3	0.0
4498	1242.7	-42.3	0.0	4499	1281.5	-42.3	0.0	4500	0.0	-63.5	0.0
4501	1165.0	-63.5	0.0	4502	582.5	-63.5	0.0	4503	38.8	-63.5	0.0
4504	77.7	-63.5	0.0	4505	116.5	-63.5	0.0	4506	155.3	-63.5	0.0
4507	194.2	-63.5	0.0	4508	233.0	-63.5	0.0	4509	271.8	-63.5	0.0
4510	310.7	-63.5	0.0	4511	349.5	-63.5	0.0	4512	388.3	-63.5	0.0
4513	427.2	-63.5	0.0	4514	466.0	-63.5	0.0	4515	504.8	-63.5	0.0
4516	543.7	-63.5	0.0	4517	621.3	-63.5	0.0	4518	660.2	-63.5	0.0
4519	699.0	-63.5	0.0	4520	737.8	-63.5	0.0	4521	776.7	-63.5	0.0
4522	815.5	-63.5	0.0	4523	854.3	-63.5	0.0	4524	893.2	-63.5	0.0
4525	932.0	-63.5	0.0	4526	970.8	-63.5	0.0	4527	1009.7	-63.5	0.0
4528	1048.5	-63.5	0.0	4529	1087.3	-63.5	0.0	4530	1126.2	-63.5	0.0
4531	1203.8	-63.5	0.0	4532	1242.7	-63.5	0.0	4533	1281.5	-63.5	0.0
4534	0.0	-84.7	0.0	4535	1165.0	-84.7	0.0	4536	582.5	-84.7	0.0
4537	38.8	-84.7	0.0	4538	77.7	-84.7	0.0	4539	116.5	-84.7	0.0
4540	155.3	-84.7	0.0	4541	194.2	-84.7	0.0	4542	233.0	-84.7	0.0
4543	271.8	-84.7	0.0	4544	310.7	-84.7	0.0	4545	349.5	-84.7	0.0
4546	388.3	-84.7	0.0	4547	427.2	-84.7	0.0	4548	466.0	-84.7	0.0
4549	504.8	-84.7	0.0	4550	543.7	-84.7	0.0	4551	621.3	-84.7	0.0
4552	660.2	-84.7	0.0	4553	699.0	-84.7	0.0	4554	737.8	-84.7	0.0
4555	776.7	-84.7	0.0	4556	815.5	-84.7	0.0	4557	854.3	-84.7	0.0
4558	893.2	-84.7	0.0	4559	932.0	-84.7	0.0	4560	970.8	-84.7	0.0
4561	1009.7	-84.7	0.0	4562	1048.5	-84.7	0.0	4563	1087.3	-84.7	0.0
4564	1126.2	-84.7	0.0	4565	1203.8	-84.7	0.0	4566	1242.7	-84.7	0.0
4567	1281.5	-84.7	0.0	4568	0.0	-105.8	0.0	4569	1165.0	-105.8	0.0
4570	582.5	-105.8	0.0	4571	38.8	-105.8	0.0	4572	77.7	-105.8	0.0
4573	116.5	-105.8	0.0	4574	155.3	-105.8	0.0	4575	194.2	-105.8	0.0
4576	233.0	-105.8	0.0	4577	271.8	-105.8	0.0	4578	310.7	-105.8	0.0
4579	349.5	-105.8	0.0	4580	388.3	-105.8	0.0	4581	427.2	-105.8	0.0
4582	466.0	-105.8	0.0	4583	504.8	-105.8	0.0	4584	543.7	-105.8	0.0
4585	621.3	-105.8	0.0	4586	660.2	-105.8	0.0	4587	699.0	-105.8	0.0
4588	737.8	-105.8	0.0	4589	776.7	-105.8	0.0	4590	815.5	-105.8	0.0
4591	854.3	-105.8	0.0	4592	893.2	-105.8	0.0	4593	932.0	-105.8	0.0
4594	970.8	-105.8	0.0	4595	1009.7	-105.8	0.0	4596	1048.5	-105.8	0.0
4597	1087.3	-105.8	0.0	4598	1126.2	-105.8	0.0	4599	1203.8	-105.8	0.0
4600	1242.7	-105.8	0.0	4601	1281.5	-105.8	0.0	4602	0.0	1998.3	0.0
4603	582.5	1998.3	0.0	4604	621.3	1998.3	0.0	4605	660.2	1998.3	0.0
4606	699.0	1998.3	0.0	4607	737.8	1998.3	0.0	4608	776.7	1998.3	0.0
4609	854.3	1998.3	0.0	4610	893.2	1998.3	0.0	4611	932.0	1998.3	0.0
4612	970.8	1998.3	0.0	4613	1009.7	1998.3	0.0	4614	1048.5	1998.3	0.0
4615	1087.3	1998.3	0.0	4616	1126.2	1998.3	0.0	4617	38.8	1998.3	0.0
4618	77.7	1998.3	0.0	4619	116.5	1998.3	0.0	4620	155.3	1998.3	0.0
4621	194.2	1998.3	0.0	4622	233.0	1998.3	0.0	4623	271.8	1998.3	0.0
4624	310.7	1998.3	0.0	4625	349.5	1998.3	0.0	4626	388.3	1998.3	0.0
4627	427.2	1998.3	0.0	4628	466.0	1998.3	0.0	4629	504.8	1998.3	0.0
4630	543.7	1998.3	0.0	4631	1203.8	1998.3	0.0	4632	1242.7	1998.3	0.0
4633	1281.5	1998.3	0.0	4634	0.0	2011.7	0.0	4635	582.5	2011.7	0.0
4636	621.3	2011.7	0.0	4637	660.2	2011.7	0.0	4638	699.0	2011.7	0.0
4639	737.8	2011.7	0.0	4640	776.7	2011.7	0.0	4641	854.3	2011.7	0.0
4642	893.2	2011.7	0.0	4643	932.0	2011.7	0.0	4644	970.8	2011.7	0.0
4645	1009.7	2011.7	0.0	4646	1048.5	2011.7	0.0	4647	1087.3	2011.7	0.0
4648	1126.2	2011.7	0.0	4649	38.8	2011.7	0.0	4650	77.7	2011.7	0.0
4651	116.5	2011.7	0.0	4652	155.3	2011.7	0.0	4653	194.2	2011.7	0.0
4654	233.0	2011.7	0.0	4655	271.8	2011.7	0.0	4656	310.7	2011.7	0.0
4657	349.5	2011.7	0.0	4658	388.3	2011.7	0.0	4659	427.2	2011.7	0.0
4660	466.0	2011.7	0.0	4661	504.8	2011.7	0.0	4662	543.7	2011.7	0.0
4663	1203.8	2011.7	0.0	4664	1242.7	2011.7	0.0	4665	1281.5	2011.7	0.0
4666	0.0	2025.0	0.0	4667	582.5	2025.0	0.0	4668	621.3	2025.0	0.0
4669	660.2	2025.0	0.0	4670	699.0	2025.0	0.0	4671	737.8	2025.0	0.0
4672	776.7	2025.0	0.0	4673	854.3	2025.0	0.0	4674	893.2	2025.0	0.0
4675	932.0	2025.0	0.0	4676	970.8	2025.0	0.0	4677	1009.7	2025.0	0.0
4678	1048.5	2025.0	0.0	4679	1087.3	2025.0	0.0	4680	1126.2	2025.0	0.0

4681	38.8	2025.0	0.0	4682	77.7	2025.0	0.0	4683	116.5	2025.0	0.0
4684	155.3	2025.0	0.0	4685	194.2	2025.0	0.0	4686	233.0	2025.0	0.0
4687	271.8	2025.0	0.0	4688	310.7	2025.0	0.0	4689	349.5	2025.0	0.0
4690	388.3	2025.0	0.0	4691	427.2	2025.0	0.0	4692	466.0	2025.0	0.0
4693	504.8	2025.0	0.0	4694	543.7	2025.0	0.0	4695	1203.8	2025.0	0.0
4696	1242.7	2025.0	0.0	4697	1281.5	2025.0	0.0	4698	0.0	2038.3	0.0
4699	582.5	2038.3	0.0	4700	621.3	2038.3	0.0	4701	660.2	2038.3	0.0
4702	699.0	2038.3	0.0	4703	737.8	2038.3	0.0	4704	776.7	2038.3	0.0
4705	854.3	2038.3	0.0	4706	893.2	2038.3	0.0	4707	932.0	2038.3	0.0
4708	970.8	2038.3	0.0	4709	1009.7	2038.3	0.0	4710	1048.5	2038.3	0.0
4711	1087.3	2038.3	0.0	4712	1126.2	2038.3	0.0	4713	38.8	2038.3	0.0
4714	77.7	2038.3	0.0	4715	116.5	2038.3	0.0	4716	155.3	2038.3	0.0
4717	194.2	2038.3	0.0	4718	233.0	2038.3	0.0	4719	271.8	2038.3	0.0
4720	310.7	2038.3	0.0	4721	349.5	2038.3	0.0	4722	388.3	2038.3	0.0
4723	427.2	2038.3	0.0	4724	466.0	2038.3	0.0	4725	504.8	2038.3	0.0
4726	543.7	2038.3	0.0	4727	1203.8	2038.3	0.0	4728	1242.7	2038.3	0.0
4729	1281.5	2038.3	0.0	4730	0.0	2051.7	0.0	4731	582.5	2051.7	0.0
4732	621.3	2051.7	0.0	4733	660.2	2051.7	0.0	4734	699.0	2051.7	0.0
4735	737.8	2051.7	0.0	4736	776.7	2051.7	0.0	4737	854.3	2051.7	0.0
4738	893.2	2051.7	0.0	4739	932.0	2051.7	0.0	4740	970.8	2051.7	0.0
4741	1009.7	2051.7	0.0	4742	1048.5	2051.7	0.0	4743	1087.3	2051.7	0.0
4744	1126.2	2051.7	0.0	4745	38.8	2051.7	0.0	4746	77.7	2051.7	0.0
4747	116.5	2051.7	0.0	4748	155.3	2051.7	0.0	4749	194.2	2051.7	0.0
4750	233.0	2051.7	0.0	4751	271.8	2051.7	0.0	4752	310.7	2051.7	0.0
4753	349.5	2051.7	0.0	4754	388.3	2051.7	0.0	4755	427.2	2051.7	0.0
4756	466.0	2051.7	0.0	4757	504.8	2051.7	0.0	4758	543.7	2051.7	0.0
4759	1203.8	2051.7	0.0	4760	1242.7	2051.7	0.0	4761	1281.5	2051.7	0.0
4762	0.0	2065.0	0.0	4763	582.5	2065.0	0.0	4764	621.3	2065.0	0.0
4765	660.2	2065.0	0.0	4766	699.0	2065.0	0.0	4767	737.8	2065.0	0.0
4768	776.7	2065.0	0.0	4769	854.3	2065.0	0.0	4770	893.2	2065.0	0.0
4771	932.0	2065.0	0.0	4772	970.8	2065.0	0.0	4773	1009.7	2065.0	0.0
4774	1048.5	2065.0	0.0	4775	1087.3	2065.0	0.0	4776	1126.2	2065.0	0.0
4777	38.8	2065.0	0.0	4778	77.7	2065.0	0.0	4779	116.5	2065.0	0.0
4780	155.3	2065.0	0.0	4781	194.2	2065.0	0.0	4782	233.0	2065.0	0.0
4783	271.8	2065.0	0.0	4784	310.7	2065.0	0.0	4785	349.5	2065.0	0.0
4786	388.3	2065.0	0.0	4787	427.2	2065.0	0.0	4788	466.0	2065.0	0.0
4789	504.8	2065.0	0.0	4790	543.7	2065.0	0.0	4791	1203.8	2065.0	0.0
4792	1242.7	2065.0	0.0	4793	1281.5	2065.0	0.0	4794	0.0	2078.3	0.0
4795	582.5	2078.3	0.0	4796	621.3	2078.3	0.0	4797	660.2	2078.3	0.0
4798	699.0	2078.3	0.0	4799	737.8	2078.3	0.0	4800	776.7	2078.3	0.0
4801	854.3	2078.3	0.0	4802	893.2	2078.3	0.0	4803	932.0	2078.3	0.0
4804	970.8	2078.3	0.0	4805	1009.7	2078.3	0.0	4806	1048.5	2078.3	0.0
4807	1087.3	2078.3	0.0	4808	1126.2	2078.3	0.0	4809	38.8	2078.3	0.0
4810	77.7	2078.3	0.0	4811	116.5	2078.3	0.0	4812	155.3	2078.3	0.0
4813	194.2	2078.3	0.0	4814	233.0	2078.3	0.0	4815	271.8	2078.3	0.0
4816	310.7	2078.3	0.0	4817	349.5	2078.3	0.0	4818	388.3	2078.3	0.0
4819	427.2	2078.3	0.0	4820	466.0	2078.3	0.0	4821	504.8	2078.3	0.0
4822	543.7	2078.3	0.0	4823	1203.8	2078.3	0.0	4824	1242.7	2078.3	0.0
4825	1281.5	2078.3	0.0	4826	-38.8	0.0	0.0	4827	-38.8	635.0	0.0
4828	-38.8	1145.9	0.0	4829	-38.8	1585.0	0.0	4830	-38.8	21.2	0.0
4831	-38.8	42.3	0.0	4832	-38.8	63.5	0.0	4833	-38.8	84.7	0.0
4834	-38.8	105.8	0.0	4835	-38.8	127.0	0.0	4836	-38.8	148.2	0.0
4837	-38.8	169.3	0.0	4838	-38.8	190.5	0.0	4839	-38.8	211.7	0.0
4840	-38.8	232.8	0.0	4841	-38.8	254.0	0.0	4842	-38.8	275.2	0.0
4843	-38.8	296.3	0.0	4844	-38.8	317.5	0.0	4845	-38.8	338.7	0.0
4846	-38.8	359.8	0.0	4847	-38.8	381.0	0.0	4848	-38.8	402.2	0.0
4849	-38.8	423.3	0.0	4850	-38.8	444.5	0.0	4851	-38.8	465.7	0.0
4852	-38.8	486.8	0.0	4853	-38.8	508.0	0.0	4854	-38.8	529.2	0.0
4855	-38.8	550.3	0.0	4856	-38.8	571.5	0.0	4857	-38.8	592.7	0.0
4858	-38.8	613.8	0.0	4859	-38.8	652.0	0.0	4860	-38.8	669.1	0.0
4861	-38.8	686.1	0.0	4862	-38.8	703.1	0.0	4863	-38.8	720.1	0.0
4864	-38.8	737.2	0.0	4865	-38.8	754.2	0.0	4866	-38.8	771.2	0.0
4867	-38.8	788.3	0.0	4868	-38.8	805.3	0.0	4869	-38.8	822.3	0.0
4870	-38.8	839.3	0.0	4871	-38.8	856.4	0.0	4872	-38.8	873.4	0.0
4873	-38.8	890.4	0.0	4874	-38.8	907.5	0.0	4875	-38.8	924.5	0.0
4876	-38.8	941.5	0.0	4877	-38.8	958.6	0.0	4878	-38.8	975.6	0.0
4879	-38.8	992.6	0.0	4880	-38.8	1009.6	0.0	4881	-38.8	1026.7	0.0
4882	-38.8	1043.7	0.0	4883	-38.8	1060.7	0.0	4884	-38.8	1077.8	0.0
4885	-38.8	1094.8	0.0	4886	-38.8	1111.8	0.0	4887	-38.8	1128.8	0.0
4888	-38.8	1160.5	0.0	4889	-38.8	1175.1	0.0	4890	-38.8	1189.8	0.0
4891	-38.8	1204.4	0.0	4892	-38.8	1219.1	0.0	4893	-38.8	1233.7	0.0
4894	-38.8	1248.3	0.0	4895	-38.8	1263.0	0.0	4896	-38.8	1277.6	0.0
4897	-38.8	1292.2	0.0	4898	-38.8	1306.9	0.0	4899	-38.8	1321.5	0.0
4900	-38.8	1336.2	0.0	4901	-38.8	1350.8	0.0	4902	-38.8	1365.4	0.0
4903	-38.8	1380.1	0.0	4904	-38.8	1394.7	0.0	4905	-38.8	1409.3	0.0
4906	-38.8	1424.0	0.0	4907	-38.8	1438.6	0.0	4908	-38.8	1453.3	0.0
4909	-38.8	1467.9	0.0	4910	-38.8	1482.5	0.0	4911	-38.8	1497.2	0.0

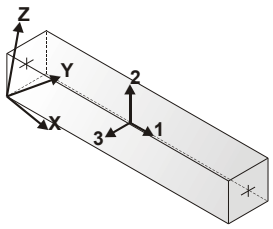
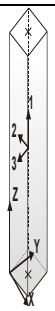
4912	-38.8	1511.8	0.0	4913	-38.8	1526.5	0.0	4914	-38.8	1541.1	0.0
4915	-38.8	1555.7	0.0	4916	-38.8	1570.4	0.0	4917	-38.8	1598.3	0.0
4918	-38.8	1611.7	0.0	4919	-38.8	1625.0	0.0	4920	-38.8	1638.3	0.0
4921	-38.8	1651.7	0.0	4922	-38.8	1665.0	0.0	4923	-38.8	1678.3	0.0
4924	-38.8	1691.7	0.0	4925	-38.8	1705.0	0.0	4926	-38.8	1718.3	0.0
4927	-38.8	1731.7	0.0	4928	-38.8	1745.0	0.0	4929	-38.8	1758.3	0.0
4930	-38.8	1771.7	0.0	4931	-38.8	1785.0	0.0	4932	-38.8	1798.3	0.0
4933	-38.8	1811.7	0.0	4934	-38.8	1825.0	0.0	4935	-38.8	1838.3	0.0
4936	-38.8	1851.7	0.0	4937	-38.8	1865.0	0.0	4938	-38.8	1878.3	0.0
4939	-38.8	1891.7	0.0	4940	-38.8	1905.0	0.0	4941	-38.8	1918.3	0.0
4942	-38.8	1931.7	0.0	4943	-38.8	1945.0	0.0	4944	-38.8	1958.3	0.0
4945	-38.8	1971.7	0.0	4946	-38.8	-21.2	0.0	4947	-38.8	-42.3	0.0
4948	-38.8	-63.5	0.0	4949	-38.8	-84.7	0.0	4950	-38.8	-105.8	0.0
4951	-38.8	1998.3	0.0	4952	-38.8	2011.7	0.0	4953	-38.8	2025.0	0.0
4954	-38.8	2038.3	0.0	4955	-38.8	2051.7	0.0	4956	-38.8	2065.0	0.0
4957	-38.8	2078.3	0.0	4958	-77.7	0.0	0.0	4959	-77.7	635.0	0.0
4960	-77.7	1145.9	0.0	4961	-77.7	1585.0	0.0	4962	-77.7	21.2	0.0
4963	-77.7	42.3	0.0	4964	-77.7	63.5	0.0	4965	-77.7	84.7	0.0
4966	-77.7	105.8	0.0	4967	-77.7	127.0	0.0	4968	-77.7	148.2	0.0
4969	-77.7	169.3	0.0	4970	-77.7	190.5	0.0	4971	-77.7	211.7	0.0
4972	-77.7	232.8	0.0	4973	-77.7	254.0	0.0	4974	-77.7	275.2	0.0
4975	-77.7	296.3	0.0	4976	-77.7	317.5	0.0	4977	-77.7	338.7	0.0
4978	-77.7	359.8	0.0	4979	-77.7	381.0	0.0	4980	-77.7	402.2	0.0
4981	-77.7	423.3	0.0	4982	-77.7	444.5	0.0	4983	-77.7	465.7	0.0
4984	-77.7	486.8	0.0	4985	-77.7	508.0	0.0	4986	-77.7	529.2	0.0
4987	-77.7	550.3	0.0	4988	-77.7	571.5	0.0	4989	-77.7	592.7	0.0
4990	-77.7	613.8	0.0	4991	-77.7	652.0	0.0	4992	-77.7	669.1	0.0
4993	-77.7	686.1	0.0	4994	-77.7	703.1	0.0	4995	-77.7	720.1	0.0
4996	-77.7	737.2	0.0	4997	-77.7	754.2	0.0	4998	-77.7	771.2	0.0
4999	-77.7	788.3	0.0	5000	-77.7	805.3	0.0	5001	-77.7	822.3	0.0
5002	-77.7	839.3	0.0	5003	-77.7	856.4	0.0	5004	-77.7	873.4	0.0
5005	-77.7	890.4	0.0	5006	-77.7	907.5	0.0	5007	-77.7	924.5	0.0
5008	-77.7	941.5	0.0	5009	-77.7	958.6	0.0	5010	-77.7	975.6	0.0
5011	-77.7	992.6	0.0	5012	-77.7	1009.6	0.0	5013	-77.7	1026.7	0.0
5014	-77.7	1043.7	0.0	5015	-77.7	1060.7	0.0	5016	-77.7	1077.8	0.0
5017	-77.7	1094.8	0.0	5018	-77.7	1111.8	0.0	5019	-77.7	1128.8	0.0
5020	-77.7	1160.5	0.0	5021	-77.7	1175.1	0.0	5022	-77.7	1189.8	0.0
5023	-77.7	1204.4	0.0	5024	-77.7	1219.1	0.0	5025	-77.7	1233.7	0.0
5026	-77.7	1248.3	0.0	5027	-77.7	1263.0	0.0	5028	-77.7	1277.6	0.0
5029	-77.7	1292.2	0.0	5030	-77.7	1306.9	0.0	5031	-77.7	1321.5	0.0
5032	-77.7	1336.2	0.0	5033	-77.7	1350.8	0.0	5034	-77.7	1365.4	0.0
5035	-77.7	1380.1	0.0	5036	-77.7	1394.7	0.0	5037	-77.7	1409.3	0.0
5038	-77.7	1424.0	0.0	5039	-77.7	1438.6	0.0	5040	-77.7	1453.3	0.0
5041	-77.7	1467.9	0.0	5042	-77.7	1482.5	0.0	5043	-77.7	1497.2	0.0
5044	-77.7	1511.8	0.0	5045	-77.7	1526.5	0.0	5046	-77.7	1541.1	0.0
5047	-77.7	1555.7	0.0	5048	-77.7	1570.4	0.0	5049	-77.7	1598.3	0.0
5050	-77.7	1611.7	0.0	5051	-77.7	1625.0	0.0	5052	-77.7	1638.3	0.0
5053	-77.7	1651.7	0.0	5054	-77.7	1665.0	0.0	5055	-77.7	1678.3	0.0
5056	-77.7	1691.7	0.0	5057	-77.7	1705.0	0.0	5058	-77.7	1718.3	0.0
5059	-77.7	1731.7	0.0	5060	-77.7	1745.0	0.0	5061	-77.7	1758.3	0.0
5062	-77.7	1771.7	0.0	5063	-77.7	1785.0	0.0	5064	-77.7	1798.3	0.0
5065	-77.7	1811.7	0.0	5066	-77.7	1825.0	0.0	5067	-77.7	1838.3	0.0
5068	-77.7	1851.7	0.0	5069	-77.7	1865.0	0.0	5070	-77.7	1878.3	0.0
5071	-77.7	1891.7	0.0	5072	-77.7	1905.0	0.0	5073	-77.7	1918.3	0.0
5074	-77.7	1931.7	0.0	5075	-77.7	1945.0	0.0	5076	-77.7	1958.3	0.0
5077	-77.7	1971.7	0.0	5078	-77.7	-21.2	0.0	5079	-77.7	-42.3	0.0
5080	-77.7	-63.5	0.0	5081	-77.7	-84.7	0.0	5082	-77.7	-105.8	0.0
5083	-77.7	1998.3	0.0	5084	-77.7	2011.7	0.0	5085	-77.7	2025.0	0.0
5086	-77.7	2038.3	0.0	5087	-77.7	2051.7	0.0	5088	-77.7	2065.0	0.0
5089	-77.7	2078.3	0.0	5090	-116.5	0.0	0.0	5091	-116.5	635.0	0.0
5092	-116.5	1145.9	0.0	5093	-116.5	1585.0	0.0	5094	-116.5	21.2	0.0
5095	-116.5	42.3	0.0	5096	-116.5	63.5	0.0	5097	-116.5	84.7	0.0
5098	-116.5	105.8	0.0	5099	-116.5	127.0	0.0	5100	-116.5	148.2	0.0
5101	-116.5	169.3	0.0	5102	-116.5	190.5	0.0	5103	-116.5	211.7	0.0
5104	-116.5	232.8	0.0	5105	-116.5	254.0	0.0	5106	-116.5	275.2	0.0
5107	-116.5	296.3	0.0	5108	-116.5	317.5	0.0	5109	-116.5	338.7	0.0
5110	-116.5	359.8	0.0	5111	-116.5	381.0	0.0	5112	-116.5	402.2	0.0
5113	-116.5	423.3	0.0	5114	-116.5	444.5	0.0	5115	-116.5	465.7	0.0
5116	-116.5	486.8	0.0	5117	-116.5	508.0	0.0	5118	-116.5	529.2	0.0
5119	-116.5	550.3	0.0	5120	-116.5	571.5	0.0	5121	-116.5	592.7	0.0
5122	-116.5	613.8	0.0	5123	-116.5	652.0	0.0	5124	-116.5	669.1	0.0
5125	-116.5	686.1	0.0	5126	-116.5	703.1	0.0	5127	-116.5	720.1	0.0
5128	-116.5	737.2	0.0	5129	-116.5	754.2	0.0	5130	-116.5	771.2	0.0
5131	-116.5	788.3	0.0	5132	-116.5	805.3	0.0	5133	-116.5	822.3	0.0
5134	-116.5	839.3	0.0	5135	-116.5	856.4	0.0	5136	-116.5	873.4	0.0
5137	-116.5	890.4	0.0	5138	-116.5	907.5	0.0	5139	-116.5	924.5	0.0
5140	-116.5	941.5	0.0	5141	-116.5	958.6	0.0	5142	-116.5	975.6	0.0

5143	-116.5	992.6	0.0	5144	-116.5	1009.6	0.0	5145	-116.5	1026.7	0.0
5146	-116.5	1043.7	0.0	5147	-116.5	1060.7	0.0	5148	-116.5	1077.8	0.0
5149	-116.5	1094.8	0.0	5150	-116.5	1111.8	0.0	5151	-116.5	1128.8	0.0
5152	-116.5	1160.5	0.0	5153	-116.5	1175.1	0.0	5154	-116.5	1189.8	0.0
5155	-116.5	1204.4	0.0	5156	-116.5	1219.1	0.0	5157	-116.5	1233.7	0.0
5158	-116.5	1248.3	0.0	5159	-116.5	1263.0	0.0	5160	-116.5	1277.6	0.0
5161	-116.5	1292.2	0.0	5162	-116.5	1306.9	0.0	5163	-116.5	1321.5	0.0
5164	-116.5	1336.2	0.0	5165	-116.5	1350.8	0.0	5166	-116.5	1365.4	0.0
5167	-116.5	1380.1	0.0	5168	-116.5	1394.7	0.0	5169	-116.5	1409.3	0.0
5170	-116.5	1424.0	0.0	5171	-116.5	1438.6	0.0	5172	-116.5	1453.3	0.0
5173	-116.5	1467.9	0.0	5174	-116.5	1482.5	0.0	5175	-116.5	1497.2	0.0
5176	-116.5	1511.8	0.0	5177	-116.5	1526.5	0.0	5178	-116.5	1541.1	0.0
5179	-116.5	1555.7	0.0	5180	-116.5	1570.4	0.0	5181	-116.5	1598.3	0.0
5182	-116.5	1611.7	0.0	5183	-116.5	1625.0	0.0	5184	-116.5	1638.3	0.0
5185	-116.5	1651.7	0.0	5186	-116.5	1665.0	0.0	5187	-116.5	1678.3	0.0
5188	-116.5	1691.7	0.0	5189	-116.5	1705.0	0.0	5190	-116.5	1718.3	0.0
5191	-116.5	1731.7	0.0	5192	-116.5	1745.0	0.0	5193	-116.5	1758.3	0.0
5194	-116.5	1771.7	0.0	5195	-116.5	1785.0	0.0	5196	-116.5	1798.3	0.0
5197	-116.5	1811.7	0.0	5198	-116.5	1825.0	0.0	5199	-116.5	1838.3	0.0
5200	-116.5	1851.7	0.0	5201	-116.5	1865.0	0.0	5202	-116.5	1878.3	0.0
5203	-116.5	1891.7	0.0	5204	-116.5	1905.0	0.0	5205	-116.5	1918.3	0.0
5206	-116.5	1931.7	0.0	5207	-116.5	1945.0	0.0	5208	-116.5	1958.3	0.0
5209	-116.5	1971.7	0.0	5210	-116.5	-21.2	0.0	5211	-116.5	-42.3	0.0
5212	-116.5	-63.5	0.0	5213	-116.5	-84.7	0.0	5214	-116.5	-105.8	0.0
5215	-116.5	1998.3	0.0	5216	-116.5	2011.7	0.0	5217	-116.5	2025.0	0.0
5218	-116.5	2038.3	0.0	5219	-116.5	2051.7	0.0	5220	-116.5	2065.0	0.0
5221	-116.5	2078.3	0.0	5222	1203.8	737.2	0.0	5223	1242.7	737.2	0.0
5224	1281.5	737.2	0.0	5225	815.5	1998.3	0.0	5226	1165.0	1998.3	0.0
5227	815.5	2011.7	0.0	5228	1165.0	2011.7	0.0	5229	815.5	2025.0	0.0
5230	1165.0	2025.0	0.0	5231	815.5	2038.3	0.0	5232	1165.0	2038.3	0.0
5233	815.5	2051.7	0.0	5234	1165.0	2051.7	0.0	5235	815.5	2065.0	0.0
5236	1165.0	2065.0	0.0	5237	815.5	2078.3	0.0	5238	1165.0	2078.3	0.0
5239	-38.8	1985.0	0.0	5240	-77.7	1985.0	0.0	5241	-116.5	1985.0	0.0

MODELLAZIONE STRUTTURA: ELEMENTI TRAVE

TABELLA DATI TRAVI

Il programma utilizza per la modellazione elementi a due nodi denominati in generale travi.
Ogni elemento trave è individuato dal nodo iniziale e dal nodo finale.
Ogni elemento è caratterizzato da un insieme di proprietà riportate in tabella che ne completano la modellazione.

 orientamento elementi 2D non verticali	 orientamento elementi 2D verticali

In particolare per ogni elemento viene indicato in tabella:

Elem.	numero dell'elemento
Note	codice di comportamento: trave, trave di fondazione, pilastro, asta, asta tesa, asta compressa,
Nodo I (J)	numero del nodo iniziale (finale)
Mat.	codice del materiale assegnato all'elemento
Sez.	codice della sezione assegnata all'elemento
Rotaz.	valore della rotazione dell'elemento, attorno al proprio asse, nel caso in cui l'orientamento di default non sia adottabile; l'orientamento di default prevede per gli elementi non verticali l'asse 2 contenuto nel piano verticale e l'asse 3 orizzontale, per gli elementi verticali l'asse 2 diretto secondo X negativo e l'asse 3 diretto secondo Y negativo
Svincolo I (J)	codici di svincolo per le azioni interne; i primi sei codici si riferiscono al nodo iniziale, i restanti sei al nodo finale (il valore 1 indica che la relativa azione interna non è attiva)
Wink V	costante di sottofondo (coefficiente di Winkler) per la modellazione della trave su suolo elastico
Wink O	costante di sottofondo (coefficiente di Winkler) per la modellazione del suolo elastico orizzontale

Elem.	Note	Nodo I	Nodo J	Mat.	Sez.	Crit.	Rotaz. gradi	Svincolo I	Svincolo J	Wink V daN/cm3	Wink O daN/cm3
1	Trave	40	43	3	3	1					
2	Trave	12	31	3	3	1					
3	Trave	39	40	3	3	1					
4	Pilas.	45	27	3	2	1					
5	Trave	5	6	3	3	1					
6	Pilas.	33	31	3	2	1					
7	Trave	38	39	3	3	1					
8	Pilas.	40	24	3	2	1	90.00				
9	Pilas.	1	8	3	2	1	90.00				
10	Pilas.	4	2	3	2	1	90.00				
11	Trave	25	26	3	3	1					
12	Pilas.	39	6	3	2	1	90.00				
13	Trave	36	47	3	3	1					
14	Trave	8	2	3	5	1					
15	Trave	44	45	3	3	1					
16	Trave	30	12	3	3	1					
17	Trave	8	11	3	5	1					
18	Pilas.	6	11	3	2	1	90.00				
19	Trave	1	4	3	3	1					
20	Trave	6	24	3	3	1					
21	Trave	3	1	3	3	1					
22	Trave	42	43	3	3	1					
23	Trave	34	47	3	3	1					
24	Trave	47	39	3	3	1					
25	Trave	32	34	3	3	1					
26	Trave	45	46	3	3	1					
27	Trave	39	42	3	3	1					
28	Trave	42	45	3	3	1					
29	Pilas.	37	4	3	2	1	90.00				
30	Pilas.	24	7	3	2	1	90.00				
31	Trave	28	27	3	3	1					
32	Trave	41	42	3	3	1					
33	Pilas.	35	34	3	2	1					
34	Pilas.	34	12	3	2	1					
35	Pilas.	29	47	3	2	1	90.00				
36	Pilas.	47	1	3	2	1	90.00				
37	Pilas.	42	26	3	2	1	90.00				
38	Trave	32	36	3	3	1					
39	Pilas.	9	32	3	2	1					
40	Trave	36	38	3	3	1					
41	Pilas.	13	36	3	2	1	90.00				
42	Pilas.	15	38	3	2	1	90.00				
43	Pilas.	18	41	3	2	1	90.00				
44	Pilas.	21	44	3	2	1					
45	Trave	11	7	3	5	1					
46	Trave	38	41	3	3	1					
47	Trave	34	33	3	3	1					
48	Pilas.	32	30	3	2	1					
49	Pilas.	10	33	3	2	1					
50	Trave	47	37	3	3	1					
51	Pilas.	14	37	3	2	1	90.00				
52	Pilas.	17	40	3	2	1	90.00				
53	Pilas.	20	43	3	2	1	90.00				
54	Pilas.	23	46	3	2	1					
55	Pilas.	16	39	3	2	1	90.00				
56	Pilas.	19	42	3	2	1	90.00				
57	Pilas.	22	45	3	2	1					
58	Trave	41	44	3	3	1					
59	Pilas.	36	3	3	2	1	90.00				
60	Pilas.	38	5	3	2	1	90.00				
61	Pilas.	41	25	3	2	1	90.00				
62	Pilas.	44	28	3	2	1					
63	Trave	31	4	3	3	1					
64	Trave	4	24	3	3	1					
65	Trave	12	1	3	3	1					
66	Trave	1	6	3	3	1					
67	Trave	6	26	3	3	1					
68	Trave	26	27	3	3	1					
69	Trave	30	3	3	3	1					
70	Trave	3	5	3	3	1					
71	Trave	5	25	3	3	1					
72	Trave	43	46	3	3	1					
73	Trave	25	28	3	3	1					

74	Trave	2	7	3	5	1		
75	Trave	33	37	3	3	1		
76	Trave	37	40	3	3	1		
77	Trave f.	9	352	3	1	1	0.68	0.41
78	Trave f.	35	844	3	1	1	0.68	0.41
79	Trave f.	13	830	3	1	1	0.68	0.41
80	Trave f.	29	1293	3	1	1	0.68	0.41
81	Trave f.	15	1771	3	1	1	0.68	0.41
82	Trave f.	16	2220	3	1	1	0.68	0.41
83	Trave f.	18	2698	3	1	1	0.68	0.41
84	Trave f.	19	3147	3	1	1	0.68	0.41
85	Trave f.	21	3625	3	1	1	0.68	0.41
86	Trave f.	22	1942	3	1	1	0.68	0.41
87	Trave f.	10	872	3	1	1	0.67	0.41
88	Trave f.	14	1799	3	1	1	0.67	0.41
89	Trave f.	17	2726	3	1	1	0.67	0.41
90	Trave f.	20	3653	3	1	1	0.67	0.41
91	Trave f.	35	381	3	1	1	0.67	0.41
92	Trave f.	29	1322	3	1	1	0.67	0.41
93	Trave f.	16	2249	3	1	1	0.67	0.41
94	Trave f.	19	3176	3	1	1	0.67	0.41
95	Trave f.	9	354	3	1	1	0.67	0.41
96	Trave f.	13	1308	3	1	1	0.67	0.41
97	Trave f.	15	2235	3	1	1	0.67	0.41
98	Trave f.	18	3162	3	1	1	0.67	0.41
99	Trave f.	352	355	3	1	1	0.68	0.41
100	Trave f.	844	846	3	1	1	0.68	0.41
101	Trave f.	830	831	3	1	1	0.68	0.41
102	Trave f.	1293	1294	3	1	1	0.68	0.41
103	Trave f.	1771	1772	3	1	1	0.68	0.41
104	Trave f.	2220	2221	3	1	1	0.68	0.41
105	Trave f.	2698	2699	3	1	1	0.68	0.41
106	Trave f.	3147	3148	3	1	1	0.68	0.41
107	Trave f.	3625	3626	3	1	1	0.68	0.41
108	Trave f.	1942	1943	3	1	1	0.68	0.41
109	Trave f.	872	887	3	1	1	0.67	0.41
110	Trave f.	1799	1814	3	1	1	0.67	0.41
111	Trave f.	2726	2741	3	1	1	0.67	0.41
112	Trave f.	1940	23	3	1	1	0.67	0.41
113	Trave f.	381	397	3	1	1	0.67	0.41
114	Trave f.	1322	1338	3	1	1	0.67	0.41
115	Trave f.	2249	2265	3	1	1	0.67	0.41
116	Trave f.	3176	3192	3	1	1	0.67	0.41
117	Trave f.	354	383	3	1	1	0.67	0.41
118	Trave f.	1308	1324	3	1	1	0.67	0.41
119	Trave f.	2235	2251	3	1	1	0.67	0.41
120	Trave f.	3162	3178	3	1	1	0.67	0.41
121	Trave f.	3653	3668	3	1	1	0.67	0.41
122	Trave f.	355	357	3	1	1	0.68	0.41
123	Trave f.	846	848	3	1	1	0.68	0.41
124	Trave f.	831	832	3	1	1	0.68	0.41
125	Trave f.	1294	1295	3	1	1	0.68	0.41
126	Trave f.	1772	1773	3	1	1	0.68	0.41
127	Trave f.	2221	2222	3	1	1	0.68	0.41
128	Trave f.	2699	2700	3	1	1	0.68	0.41
129	Trave f.	3148	3149	3	1	1	0.68	0.41
130	Trave f.	3626	3627	3	1	1	0.68	0.41
131	Trave f.	1943	1944	3	1	1	0.68	0.41
132	Trave f.	887	902	3	1	1	0.67	0.41
133	Trave f.	1814	1829	3	1	1	0.67	0.41
134	Trave f.	2741	2756	3	1	1	0.67	0.41
135	Trave f.	397	413	3	1	1	0.67	0.41
136	Trave f.	1338	1354	3	1	1	0.67	0.41
137	Trave f.	2265	2281	3	1	1	0.67	0.41
138	Trave f.	3192	3208	3	1	1	0.67	0.41
139	Trave f.	383	399	3	1	1	0.67	0.41
140	Trave f.	1324	1340	3	1	1	0.67	0.41
141	Trave f.	2251	2267	3	1	1	0.67	0.41
142	Trave f.	3178	3194	3	1	1	0.67	0.41
143	Trave f.	3668	3683	3	1	1	0.67	0.41
144	Trave f.	357	359	3	1	1	0.68	0.41
145	Trave f.	848	850	3	1	1	0.68	0.41
146	Trave f.	832	833	3	1	1	0.68	0.41
147	Trave f.	1295	1296	3	1	1	0.68	0.41
148	Trave f.	1773	1774	3	1	1	0.68	0.41
149	Trave f.	2222	2223	3	1	1	0.68	0.41
150	Trave f.	2700	2701	3	1	1	0.68	0.41

151	Trave f.	3149	3150	3	1	1	0.68	0.41
152	Trave f.	3627	3628	3	1	1	0.68	0.41
153	Trave f.	1944	1945	3	1	1	0.68	0.41
154	Trave f.	902	917	3	1	1	0.67	0.41
155	Trave f.	1829	1844	3	1	1	0.67	0.41
156	Trave f.	2756	2771	3	1	1	0.67	0.41
157	Trave f.	413	429	3	1	1	0.67	0.41
158	Trave f.	1354	1370	3	1	1	0.67	0.41
159	Trave f.	2281	2297	3	1	1	0.67	0.41
160	Trave f.	3208	3224	3	1	1	0.67	0.41
161	Trave f.	399	415	3	1	1	0.67	0.41
162	Trave f.	1340	1356	3	1	1	0.67	0.41
163	Trave f.	2267	2283	3	1	1	0.67	0.41
164	Trave f.	3194	3210	3	1	1	0.67	0.41
165	Trave f.	3683	3698	3	1	1	0.67	0.41
166	Trave f.	359	361	3	1	1	0.68	0.41
167	Trave f.	850	852	3	1	1	0.68	0.41
168	Trave f.	833	834	3	1	1	0.68	0.41
169	Trave f.	1296	1297	3	1	1	0.68	0.41
170	Trave f.	1774	1775	3	1	1	0.68	0.41
171	Trave f.	2223	2224	3	1	1	0.68	0.41
172	Trave f.	2701	2702	3	1	1	0.68	0.41
173	Trave f.	3150	3151	3	1	1	0.68	0.41
174	Trave f.	3628	3629	3	1	1	0.68	0.41
175	Trave f.	1945	1975	3	1	1	0.68	0.41
176	Trave f.	917	932	3	1	1	0.67	0.41
177	Trave f.	1844	1859	3	1	1	0.67	0.41
178	Trave f.	2771	2786	3	1	1	0.67	0.41
179	Trave f.	429	445	3	1	1	0.67	0.41
180	Trave f.	1370	1386	3	1	1	0.67	0.41
181	Trave f.	2297	2313	3	1	1	0.67	0.41
182	Trave f.	3224	3240	3	1	1	0.67	0.41
183	Trave f.	415	431	3	1	1	0.67	0.41
184	Trave f.	1356	1372	3	1	1	0.67	0.41
185	Trave f.	2283	2299	3	1	1	0.67	0.41
186	Trave f.	3210	3226	3	1	1	0.67	0.41
187	Trave f.	3698	3713	3	1	1	0.67	0.41
188	Trave f.	361	363	3	1	1	0.68	0.41
189	Trave f.	852	854	3	1	1	0.68	0.41
190	Trave f.	834	835	3	1	1	0.68	0.41
191	Trave f.	1297	1298	3	1	1	0.68	0.41
192	Trave f.	1775	1776	3	1	1	0.68	0.41
193	Trave f.	2224	2225	3	1	1	0.68	0.41
194	Trave f.	2702	2703	3	1	1	0.68	0.41
195	Trave f.	3151	3152	3	1	1	0.68	0.41
196	Trave f.	3629	3630	3	1	1	0.68	0.41
197	Trave f.	1975	2005	3	1	1	0.68	0.41
198	Trave f.	932	947	3	1	1	0.67	0.41
199	Trave f.	1859	1874	3	1	1	0.67	0.41
200	Trave f.	2786	2801	3	1	1	0.67	0.41
201	Trave f.	445	461	3	1	1	0.67	0.41
202	Trave f.	1386	1402	3	1	1	0.67	0.41
203	Trave f.	2313	2329	3	1	1	0.67	0.41
204	Trave f.	3240	3256	3	1	1	0.67	0.41
205	Trave f.	431	447	3	1	1	0.67	0.41
206	Trave f.	1372	1388	3	1	1	0.67	0.41
207	Trave f.	2299	2315	3	1	1	0.67	0.41
208	Trave f.	3226	3242	3	1	1	0.67	0.41
209	Trave f.	3713	3728	3	1	1	0.67	0.41
210	Trave f.	363	365	3	1	1	0.68	0.41
211	Trave f.	854	856	3	1	1	0.68	0.41
212	Trave f.	835	836	3	1	1	0.68	0.41
213	Trave f.	1298	1299	3	1	1	0.68	0.41
214	Trave f.	1776	1777	3	1	1	0.68	0.41
215	Trave f.	2225	2226	3	1	1	0.68	0.41
216	Trave f.	2703	2704	3	1	1	0.68	0.41
217	Trave f.	3152	3153	3	1	1	0.68	0.41
218	Trave f.	3630	3631	3	1	1	0.68	0.41
219	Trave f.	2005	2035	3	1	1	0.68	0.41
220	Trave f.	947	962	3	1	1	0.67	0.41
221	Trave f.	1874	1889	3	1	1	0.67	0.41
222	Trave f.	2801	2816	3	1	1	0.67	0.41
223	Trave f.	461	477	3	1	1	0.67	0.41
224	Trave f.	1402	1418	3	1	1	0.67	0.41
225	Trave f.	2329	2345	3	1	1	0.67	0.41
226	Trave f.	3256	3272	3	1	1	0.67	0.41
227	Trave f.	447	463	3	1	1	0.67	0.41

228	Trave f.	1388	1404	3	1	1	0.67	0.41
229	Trave f.	2315	2331	3	1	1	0.67	0.41
230	Trave f.	3242	3258	3	1	1	0.67	0.41
231	Trave f.	3728	3743	3	1	1	0.67	0.41
232	Trave f.	365	367	3	1	1	0.68	0.41
233	Trave f.	856	858	3	1	1	0.68	0.41
234	Trave f.	836	837	3	1	1	0.68	0.41
235	Trave f.	1299	1300	3	1	1	0.68	0.41
236	Trave f.	1777	1778	3	1	1	0.68	0.41
237	Trave f.	2226	2227	3	1	1	0.68	0.41
238	Trave f.	2704	2705	3	1	1	0.68	0.41
239	Trave f.	3153	3154	3	1	1	0.68	0.41
240	Trave f.	3631	3632	3	1	1	0.68	0.41
241	Trave f.	2035	2080	3	1	1	0.68	0.41
242	Trave f.	962	977	3	1	1	0.67	0.41
243	Trave f.	1889	1904	3	1	1	0.67	0.41
244	Trave f.	2816	2831	3	1	1	0.67	0.41
245	Trave f.	477	493	3	1	1	0.67	0.41
246	Trave f.	1418	1434	3	1	1	0.67	0.41
247	Trave f.	2345	2361	3	1	1	0.67	0.41
248	Trave f.	3272	3288	3	1	1	0.67	0.41
249	Trave f.	463	479	3	1	1	0.67	0.41
250	Trave f.	1404	1420	3	1	1	0.67	0.41
251	Trave f.	2331	2347	3	1	1	0.67	0.41
252	Trave f.	3258	3274	3	1	1	0.67	0.41
253	Trave f.	3743	3758	3	1	1	0.67	0.41
254	Trave f.	367	369	3	1	1	0.68	0.41
255	Trave f.	858	860	3	1	1	0.68	0.41
256	Trave f.	837	838	3	1	1	0.68	0.41
257	Trave f.	1300	1301	3	1	1	0.68	0.41
258	Trave f.	1778	1779	3	1	1	0.68	0.41
259	Trave f.	2227	2228	3	1	1	0.68	0.41
260	Trave f.	2705	2706	3	1	1	0.68	0.41
261	Trave f.	3154	3155	3	1	1	0.68	0.41
262	Trave f.	3632	3633	3	1	1	0.68	0.41
263	Trave f.	2080	2103	3	1	1	0.68	0.41
264	Trave f.	977	992	3	1	1	0.67	0.41
265	Trave f.	1904	1919	3	1	1	0.67	0.41
266	Trave f.	2831	2846	3	1	1	0.67	0.41
267	Trave f.	493	509	3	1	1	0.67	0.41
268	Trave f.	1434	1450	3	1	1	0.67	0.41
269	Trave f.	2361	2377	3	1	1	0.67	0.41
270	Trave f.	3288	3304	3	1	1	0.67	0.41
271	Trave f.	479	495	3	1	1	0.67	0.41
272	Trave f.	1420	1436	3	1	1	0.67	0.41
273	Trave f.	2347	2363	3	1	1	0.67	0.41
274	Trave f.	3274	3290	3	1	1	0.67	0.41
275	Trave f.	3758	3773	3	1	1	0.67	0.41
276	Trave f.	369	371	3	1	1	0.68	0.41
277	Trave f.	860	862	3	1	1	0.68	0.41
278	Trave f.	838	839	3	1	1	0.68	0.41
279	Trave f.	1301	1302	3	1	1	0.68	0.41
280	Trave f.	1779	1780	3	1	1	0.68	0.41
281	Trave f.	2228	2229	3	1	1	0.68	0.41
282	Trave f.	2706	2707	3	1	1	0.68	0.41
283	Trave f.	3155	3156	3	1	1	0.68	0.41
284	Trave f.	3633	3634	3	1	1	0.68	0.41
285	Trave f.	2103	2104	3	1	1	0.68	0.41
286	Trave f.	992	1007	3	1	1	0.67	0.41
287	Trave f.	1919	1934	3	1	1	0.67	0.41
288	Trave f.	2846	2861	3	1	1	0.67	0.41
289	Trave f.	509	525	3	1	1	0.67	0.41
290	Trave f.	1450	1466	3	1	1	0.67	0.41
291	Trave f.	2377	2393	3	1	1	0.67	0.41
292	Trave f.	3304	3320	3	1	1	0.67	0.41
293	Trave f.	495	511	3	1	1	0.67	0.41
294	Trave f.	1436	1452	3	1	1	0.67	0.41
295	Trave f.	2363	2379	3	1	1	0.67	0.41
296	Trave f.	3290	3306	3	1	1	0.67	0.41
297	Trave f.	3773	3788	3	1	1	0.67	0.41
298	Trave f.	371	373	3	1	1	0.68	0.41
299	Trave f.	862	864	3	1	1	0.68	0.41
300	Trave f.	839	840	3	1	1	0.68	0.41
301	Trave f.	1302	1303	3	1	1	0.68	0.41
302	Trave f.	1780	1781	3	1	1	0.68	0.41
303	Trave f.	2229	2230	3	1	1	0.68	0.41
304	Trave f.	2707	2708	3	1	1	0.68	0.41

305	Trave f.	3156	3157	3	1	1	0.68	0.41
306	Trave f.	3634	3635	3	1	1	0.68	0.41
307	Trave f.	2104	2105	3	1	1	0.68	0.41
308	Trave f.	1007	1022	3	1	1	0.67	0.41
309	Trave f.	1934	1949	3	1	1	0.67	0.41
310	Trave f.	2861	2876	3	1	1	0.67	0.41
311	Trave f.	525	541	3	1	1	0.67	0.41
312	Trave f.	1466	1482	3	1	1	0.67	0.41
313	Trave f.	2393	2409	3	1	1	0.67	0.41
314	Trave f.	3320	3336	3	1	1	0.67	0.41
315	Trave f.	511	527	3	1	1	0.67	0.41
316	Trave f.	1452	1468	3	1	1	0.67	0.41
317	Trave f.	2379	2395	3	1	1	0.67	0.41
318	Trave f.	3306	3322	3	1	1	0.67	0.41
319	Trave f.	3788	3803	3	1	1	0.67	0.41
320	Trave f.	373	375	3	1	1	0.68	0.41
321	Trave f.	864	866	3	1	1	0.68	0.41
322	Trave f.	840	841	3	1	1	0.68	0.41
323	Trave f.	1303	1304	3	1	1	0.68	0.41
324	Trave f.	1781	1782	3	1	1	0.68	0.41
325	Trave f.	2230	2231	3	1	1	0.68	0.41
326	Trave f.	2708	2709	3	1	1	0.68	0.41
327	Trave f.	3157	3158	3	1	1	0.68	0.41
328	Trave f.	3635	3636	3	1	1	0.68	0.41
329	Trave f.	2105	2107	3	1	1	0.68	0.41
330	Trave f.	1022	1037	3	1	1	0.67	0.41
331	Trave f.	1949	1964	3	1	1	0.67	0.41
332	Trave f.	2876	2891	3	1	1	0.67	0.41
333	Trave f.	541	557	3	1	1	0.67	0.41
334	Trave f.	1482	1498	3	1	1	0.67	0.41
335	Trave f.	2409	2425	3	1	1	0.67	0.41
336	Trave f.	3336	3352	3	1	1	0.67	0.41
337	Trave f.	527	543	3	1	1	0.67	0.41
338	Trave f.	1468	1484	3	1	1	0.67	0.41
339	Trave f.	2395	2411	3	1	1	0.67	0.41
340	Trave f.	3322	3338	3	1	1	0.67	0.41
341	Trave f.	3803	3818	3	1	1	0.67	0.41
342	Trave f.	375	377	3	1	1	0.68	0.41
343	Trave f.	866	868	3	1	1	0.68	0.41
344	Trave f.	841	842	3	1	1	0.68	0.41
345	Trave f.	1304	1305	3	1	1	0.68	0.41
346	Trave f.	1782	1783	3	1	1	0.68	0.41
347	Trave f.	2231	2232	3	1	1	0.68	0.41
348	Trave f.	2709	2710	3	1	1	0.68	0.41
349	Trave f.	3158	3159	3	1	1	0.68	0.41
350	Trave f.	3636	3637	3	1	1	0.68	0.41
351	Trave f.	2107	2108	3	1	1	0.68	0.41
352	Trave f.	1037	1052	3	1	1	0.67	0.41
353	Trave f.	1964	1979	3	1	1	0.67	0.41
354	Trave f.	2891	2906	3	1	1	0.67	0.41
355	Trave f.	557	573	3	1	1	0.67	0.41
356	Trave f.	1498	1514	3	1	1	0.67	0.41
357	Trave f.	2425	2441	3	1	1	0.67	0.41
358	Trave f.	3352	3368	3	1	1	0.67	0.41
359	Trave f.	543	559	3	1	1	0.67	0.41
360	Trave f.	1484	1500	3	1	1	0.67	0.41
361	Trave f.	2411	2427	3	1	1	0.67	0.41
362	Trave f.	3338	3354	3	1	1	0.67	0.41
363	Trave f.	3818	3833	3	1	1	0.67	0.41
364	Trave f.	377	379	3	1	1	0.68	0.41
365	Trave f.	868	870	3	1	1	0.68	0.41
366	Trave f.	842	843	3	1	1	0.68	0.41
367	Trave f.	1305	1306	3	1	1	0.68	0.41
368	Trave f.	1783	1784	3	1	1	0.68	0.41
369	Trave f.	2232	2233	3	1	1	0.68	0.41
370	Trave f.	2710	2711	3	1	1	0.68	0.41
371	Trave f.	3159	3160	3	1	1	0.68	0.41
372	Trave f.	3637	3638	3	1	1	0.68	0.41
373	Trave f.	2108	2110	3	1	1	0.68	0.41
374	Trave f.	1052	1067	3	1	1	0.67	0.41
375	Trave f.	1979	1994	3	1	1	0.67	0.41
376	Trave f.	2906	2921	3	1	1	0.67	0.41
377	Trave f.	573	589	3	1	1	0.67	0.41
378	Trave f.	1514	1530	3	1	1	0.67	0.41
379	Trave f.	2441	2457	3	1	1	0.67	0.41
380	Trave f.	3368	3384	3	1	1	0.67	0.41
381	Trave f.	559	575	3	1	1	0.67	0.41

382	Trave f.	1500	1516	3	1	1	0.67	0.41
383	Trave f.	2427	2443	3	1	1	0.67	0.41
384	Trave f.	3354	3370	3	1	1	0.67	0.41
385	Trave f.	3833	3848	3	1	1	0.67	0.41
386	Trave f.	379	35	3	1	1	0.68	0.41
387	Trave f.	870	10	3	1	1	0.68	0.41
388	Trave f.	843	29	3	1	1	0.68	0.41
389	Trave f.	1306	14	3	1	1	0.68	0.41
390	Trave f.	1784	16	3	1	1	0.68	0.41
391	Trave f.	2233	17	3	1	1	0.68	0.41
392	Trave f.	2711	19	3	1	1	0.68	0.41
393	Trave f.	3160	20	3	1	1	0.68	0.41
394	Trave f.	3638	22	3	1	1	0.68	0.41
395	Trave f.	2110	23	3	1	1	0.68	0.41
396	Trave f.	1067	1082	3	1	1	0.67	0.41
397	Trave f.	1994	2009	3	1	1	0.67	0.41
398	Trave f.	2921	2936	3	1	1	0.67	0.41
399	Trave f.	589	605	3	1	1	0.67	0.41
400	Trave f.	1530	1546	3	1	1	0.67	0.41
401	Trave f.	2457	2473	3	1	1	0.67	0.41
402	Trave f.	3384	3400	3	1	1	0.67	0.41
403	Trave f.	575	591	3	1	1	0.67	0.41
404	Trave f.	1516	1532	3	1	1	0.67	0.41
405	Trave f.	2443	2459	3	1	1	0.67	0.41
406	Trave f.	3370	3386	3	1	1	0.67	0.41
407	Trave f.	3848	3863	3	1	1	0.67	0.41
408	Trave f.	1082	1097	3	1	1	0.67	0.41
409	Trave f.	2009	2024	3	1	1	0.67	0.41
410	Trave f.	2936	2951	3	1	1	0.67	0.41
411	Trave f.	605	621	3	1	1	0.67	0.41
412	Trave f.	1546	1562	3	1	1	0.67	0.41
413	Trave f.	2473	2489	3	1	1	0.67	0.41
414	Trave f.	3400	3416	3	1	1	0.67	0.41
415	Trave f.	591	607	3	1	1	0.67	0.41
416	Trave f.	1532	1548	3	1	1	0.67	0.41
417	Trave f.	2459	2475	3	1	1	0.67	0.41
418	Trave f.	3386	3402	3	1	1	0.67	0.41
419	Trave f.	3863	3878	3	1	1	0.67	0.41
420	Trave f.	1097	1112	3	1	1	0.67	0.41
421	Trave f.	2024	2039	3	1	1	0.67	0.41
422	Trave f.	2951	2966	3	1	1	0.67	0.41
423	Trave f.	621	637	3	1	1	0.67	0.41
424	Trave f.	1562	1578	3	1	1	0.67	0.41
425	Trave f.	2489	2505	3	1	1	0.67	0.41
426	Trave f.	3416	3432	3	1	1	0.67	0.41
427	Trave f.	607	623	3	1	1	0.67	0.41
428	Trave f.	1548	1564	3	1	1	0.67	0.41
429	Trave f.	2475	2491	3	1	1	0.67	0.41
430	Trave f.	3402	3418	3	1	1	0.67	0.41
431	Trave f.	3878	3893	3	1	1	0.67	0.41
432	Trave f.	1112	1127	3	1	1	0.67	0.41
433	Trave f.	2039	2054	3	1	1	0.67	0.41
434	Trave f.	2966	2981	3	1	1	0.67	0.41
435	Trave f.	637	653	3	1	1	0.67	0.41
436	Trave f.	1578	1594	3	1	1	0.67	0.41
437	Trave f.	2505	2521	3	1	1	0.67	0.41
438	Trave f.	3432	3448	3	1	1	0.67	0.41
439	Trave f.	623	639	3	1	1	0.67	0.41
440	Trave f.	1564	1580	3	1	1	0.67	0.41
441	Trave f.	2491	2507	3	1	1	0.67	0.41
442	Trave f.	3418	3434	3	1	1	0.67	0.41
443	Trave f.	3893	3908	3	1	1	0.67	0.41
444	Trave f.	1127	1142	3	1	1	0.67	0.41
445	Trave f.	2054	2069	3	1	1	0.67	0.41
446	Trave f.	2981	2996	3	1	1	0.67	0.41
447	Trave f.	653	669	3	1	1	0.67	0.41
448	Trave f.	1594	1610	3	1	1	0.67	0.41
449	Trave f.	2521	2537	3	1	1	0.67	0.41
450	Trave f.	3448	3464	3	1	1	0.67	0.41
451	Trave f.	639	655	3	1	1	0.67	0.41
452	Trave f.	1580	1596	3	1	1	0.67	0.41
453	Trave f.	2507	2523	3	1	1	0.67	0.41
454	Trave f.	3434	3450	3	1	1	0.67	0.41
455	Trave f.	3908	3923	3	1	1	0.67	0.41
456	Trave f.	1142	1157	3	1	1	0.67	0.41
457	Trave f.	2069	2084	3	1	1	0.67	0.41
458	Trave f.	2996	3011	3	1	1	0.67	0.41

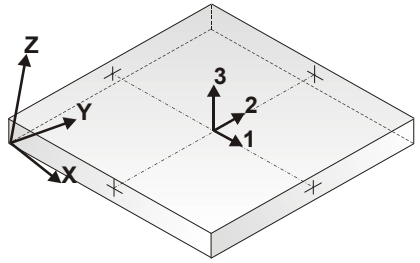
459	Trave f.	669	685	3	1	1	0.67	0.41
460	Trave f.	1610	1626	3	1	1	0.67	0.41
461	Trave f.	2537	2553	3	1	1	0.67	0.41
462	Trave f.	3464	3480	3	1	1	0.67	0.41
463	Trave f.	655	671	3	1	1	0.67	0.41
464	Trave f.	1596	1612	3	1	1	0.67	0.41
465	Trave f.	2523	2539	3	1	1	0.67	0.41
466	Trave f.	3450	3466	3	1	1	0.67	0.41
467	Trave f.	3923	3938	3	1	1	0.67	0.41
468	Trave f.	1157	1172	3	1	1	0.67	0.41
469	Trave f.	2084	2099	3	1	1	0.67	0.41
470	Trave f.	3011	3026	3	1	1	0.67	0.41
471	Trave f.	685	701	3	1	1	0.67	0.41
472	Trave f.	1626	1642	3	1	1	0.67	0.41
473	Trave f.	2553	2569	3	1	1	0.67	0.41
474	Trave f.	3480	3496	3	1	1	0.67	0.41
475	Trave f.	671	687	3	1	1	0.67	0.41
476	Trave f.	1612	1628	3	1	1	0.67	0.41
477	Trave f.	2539	2555	3	1	1	0.67	0.41
478	Trave f.	3466	3482	3	1	1	0.67	0.41
479	Trave f.	3938	3953	3	1	1	0.67	0.41
480	Trave f.	1172	1187	3	1	1	0.67	0.41
481	Trave f.	2099	2114	3	1	1	0.67	0.41
482	Trave f.	3026	3041	3	1	1	0.67	0.41
483	Trave f.	701	717	3	1	1	0.67	0.41
484	Trave f.	1642	1658	3	1	1	0.67	0.41
485	Trave f.	2569	2585	3	1	1	0.67	0.41
486	Trave f.	3496	3512	3	1	1	0.67	0.41
487	Trave f.	687	703	3	1	1	0.67	0.41
488	Trave f.	1628	1644	3	1	1	0.67	0.41
489	Trave f.	2555	2571	3	1	1	0.67	0.41
490	Trave f.	3482	3498	3	1	1	0.67	0.41
491	Trave f.	3953	3968	3	1	1	0.67	0.41
492	Trave f.	1187	1202	3	1	1	0.67	0.41
493	Trave f.	2114	2129	3	1	1	0.67	0.41
494	Trave f.	3041	3056	3	1	1	0.67	0.41
495	Trave f.	717	733	3	1	1	0.67	0.41
496	Trave f.	1658	1674	3	1	1	0.67	0.41
497	Trave f.	2585	2601	3	1	1	0.67	0.41
498	Trave f.	3512	3528	3	1	1	0.67	0.41
499	Trave f.	703	719	3	1	1	0.67	0.41
500	Trave f.	1644	1660	3	1	1	0.67	0.41
501	Trave f.	2571	2587	3	1	1	0.67	0.41
502	Trave f.	3498	3514	3	1	1	0.67	0.41
503	Trave f.	3968	3983	3	1	1	0.67	0.41
504	Trave f.	1202	1217	3	1	1	0.67	0.41
505	Trave f.	2129	2144	3	1	1	0.67	0.41
506	Trave f.	3056	3071	3	1	1	0.67	0.41
507	Trave f.	733	749	3	1	1	0.67	0.41
508	Trave f.	1674	1690	3	1	1	0.67	0.41
509	Trave f.	2601	2617	3	1	1	0.67	0.41
510	Trave f.	3528	3544	3	1	1	0.67	0.41
511	Trave f.	719	735	3	1	1	0.67	0.41
512	Trave f.	1660	1676	3	1	1	0.67	0.41
513	Trave f.	2587	2603	3	1	1	0.67	0.41
514	Trave f.	3514	3530	3	1	1	0.67	0.41
515	Trave f.	3983	3998	3	1	1	0.67	0.41
516	Trave f.	1217	1232	3	1	1	0.67	0.41
517	Trave f.	2144	2159	3	1	1	0.67	0.41
518	Trave f.	3071	3086	3	1	1	0.67	0.41
519	Trave f.	749	765	3	1	1	0.67	0.41
520	Trave f.	1690	1706	3	1	1	0.67	0.41
521	Trave f.	2617	2633	3	1	1	0.67	0.41
522	Trave f.	3544	3560	3	1	1	0.67	0.41
523	Trave f.	735	751	3	1	1	0.67	0.41
524	Trave f.	1676	1692	3	1	1	0.67	0.41
525	Trave f.	2603	2619	3	1	1	0.67	0.41
526	Trave f.	3530	3546	3	1	1	0.67	0.41
527	Trave f.	3998	4013	3	1	1	0.67	0.41
528	Trave f.	1232	1247	3	1	1	0.67	0.41
529	Trave f.	2159	2174	3	1	1	0.67	0.41
530	Trave f.	3086	3101	3	1	1	0.67	0.41
531	Trave f.	765	781	3	1	1	0.67	0.41
532	Trave f.	1706	1722	3	1	1	0.67	0.41
533	Trave f.	2633	2649	3	1	1	0.67	0.41
534	Trave f.	3560	3576	3	1	1	0.67	0.41
535	Trave f.	751	767	3	1	1	0.67	0.41

536	Trave f.	1692	1708	3	1	1	0.67	0.41
537	Trave f.	2619	2635	3	1	1	0.67	0.41
538	Trave f.	3546	3562	3	1	1	0.67	0.41
539	Trave f.	4013	4028	3	1	1	0.67	0.41
540	Trave f.	1247	1262	3	1	1	0.67	0.41
541	Trave f.	2174	2189	3	1	1	0.67	0.41
542	Trave f.	3101	3116	3	1	1	0.67	0.41
543	Trave f.	781	797	3	1	1	0.67	0.41
544	Trave f.	1722	1738	3	1	1	0.67	0.41
545	Trave f.	2649	2665	3	1	1	0.67	0.41
546	Trave f.	3576	3592	3	1	1	0.67	0.41
547	Trave f.	767	783	3	1	1	0.67	0.41
548	Trave f.	1708	1724	3	1	1	0.67	0.41
549	Trave f.	2635	2651	3	1	1	0.67	0.41
550	Trave f.	3562	3578	3	1	1	0.67	0.41
551	Trave f.	4028	4043	3	1	1	0.67	0.41
552	Trave f.	1262	1277	3	1	1	0.67	0.41
553	Trave f.	2189	2204	3	1	1	0.67	0.41
554	Trave f.	3116	3131	3	1	1	0.67	0.41
555	Trave f.	797	813	3	1	1	0.67	0.41
556	Trave f.	1738	1754	3	1	1	0.67	0.41
557	Trave f.	2665	2681	3	1	1	0.67	0.41
558	Trave f.	3592	3608	3	1	1	0.67	0.41
559	Trave f.	783	799	3	1	1	0.67	0.41
560	Trave f.	1724	1740	3	1	1	0.67	0.41
561	Trave f.	2651	2667	3	1	1	0.67	0.41
562	Trave f.	3578	3594	3	1	1	0.67	0.41
563	Trave f.	4043	4058	3	1	1	0.67	0.41
564	Trave f.	1277	1292	3	1	1	0.67	0.41
565	Trave f.	2204	2219	3	1	1	0.67	0.41
566	Trave f.	3131	3146	3	1	1	0.67	0.41
567	Trave f.	813	829	3	1	1	0.67	0.41
568	Trave f.	1754	1770	3	1	1	0.67	0.41
569	Trave f.	2681	2697	3	1	1	0.67	0.41
570	Trave f.	3608	3624	3	1	1	0.67	0.41
571	Trave f.	799	815	3	1	1	0.67	0.41
572	Trave f.	1740	1756	3	1	1	0.67	0.41
573	Trave f.	2667	2683	3	1	1	0.67	0.41
574	Trave f.	3594	3610	3	1	1	0.67	0.41
575	Trave f.	4058	1940	3	1	1	0.67	0.41
576	Trave f.	1292	14	3	1	1	0.67	0.41
577	Trave f.	2219	17	3	1	1	0.67	0.41
578	Trave f.	3146	20	3	1	1	0.67	0.41
579	Trave f.	829	29	3	1	1	0.67	0.41
580	Trave f.	1770	16	3	1	1	0.67	0.41
581	Trave f.	2697	19	3	1	1	0.67	0.41
582	Trave f.	3624	22	3	1	1	0.67	0.41
583	Trave f.	815	13	3	1	1	0.67	0.41
584	Trave f.	1756	15	3	1	1	0.67	0.41
585	Trave f.	2683	18	3	1	1	0.67	0.41
586	Trave f.	3610	21	3	1	1	0.67	0.41

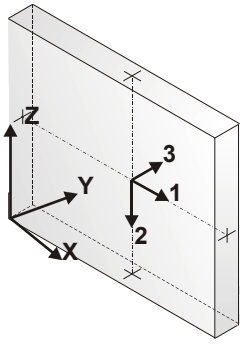
MODELLAZIONE STRUTTURA: ELEMENTI SHELL

LEGENDA TABELLA DATI SHELL

Il programma utilizza per la modellazione elementi a tre o quattro nodi denominati in generale shell.
Ogni elemento shell è individuato dai nodi I, J, K, L (L=I per gli elementi a tre nodi).
Ogni elemento è caratterizzato da un insieme di proprietà riportate in tabella che ne completano la modellazione.



orientamento elementi 3D non verticali



orientamento elementi 3D verticali

In particolare per ogni elemento viene indicato in tabella:

Elem.	numero dell'elemento
Note	codice di comportamento: *Guscio* (elemento guscio in elevazione non verticale) *Guscio fond.* (elemento guscio su suolo elastico) *Setto* (elemento guscio in elevazione verticale) *Membrana* (elemento guscio con comportamento membranale)
Nodo I (J, K, L)	numero del nodo I (J, K, L)
Mat.	codice del materiale assegnato all'elemento
Spessore	spessore dell'elemento (costante)
Wink V	costante di sottofondo (coefficiente di Winkler) per la modellazione del suolo elastico verticale
Wink O	costante di sottofondo (coefficiente di Winkler) per la modellazione del suolo elastico orizzontale

Elem.	Note	Nodo I	Nodo J	Nodo K	Nodo L	Mat.	Crit.	Spessore	Svincolo	Wink V	Wink O
								cm		daN/cm3	daN/cm3
1	Setto	49	50	51	48	3	1	25.0			
2	Setto	52	53	50	49	3	1	25.0			
3	Setto	54	55	53	52	3	1	25.0			
4	Setto	56	57	55	54	3	1	25.0			
5	Setto	58	59	57	56	3	1	25.0			
6	Setto	60	61	59	58	3	1	25.0			
7	Setto	62	63	61	60	3	1	25.0			
8	Setto	64	65	63	62	3	1	25.0			
9	Setto	66	67	65	64	3	1	25.0			
10	Setto	50	68	69	51	3	1	25.0			
11	Setto	53	70	68	50	3	1	25.0			
12	Setto	55	71	70	53	3	1	25.0			
13	Setto	57	72	71	55	3	1	25.0			
14	Setto	59	73	72	57	3	1	25.0			
15	Setto	61	74	73	59	3	1	25.0			
16	Setto	63	75	74	61	3	1	25.0			
17	Setto	65	76	75	63	3	1	25.0			
18	Setto	67	77	76	65	3	1	25.0			
19	Setto	68	78	79	69	3	1	25.0			
20	Setto	70	80	78	68	3	1	25.0			
21	Setto	71	81	80	70	3	1	25.0			
22	Setto	72	82	81	71	3	1	25.0			
23	Setto	73	83	82	72	3	1	25.0			
24	Setto	74	84	83	73	3	1	25.0			
25	Setto	75	85	84	74	3	1	25.0			
26	Setto	76	86	85	75	3	1	25.0			
27	Setto	77	87	86	76	3	1	25.0			
28	Setto	78	88	89	79	3	1	25.0			
29	Setto	80	90	88	78	3	1	25.0			
30	Setto	81	91	90	80	3	1	25.0			
31	Setto	82	92	91	81	3	1	25.0			
32	Setto	83	93	92	82	3	1	25.0			
33	Setto	84	94	93	83	3	1	25.0			
34	Setto	85	95	94	84	3	1	25.0			
35	Setto	86	96	95	85	3	1	25.0			
36	Setto	87	97	96	86	3	1	25.0			
37	Setto	88	98	99	89	3	1	25.0			
38	Setto	90	100	98	88	3	1	25.0			
39	Setto	91	101	100	90	3	1	25.0			
40	Setto	92	102	101	91	3	1	25.0			
41	Setto	93	103	102	92	3	1	25.0			
42	Setto	94	104	103	93	3	1	25.0			
43	Setto	95	105	104	94	3	1	25.0			
44	Setto	96	106	105	95	3	1	25.0			
45	Setto	97	107	106	96	3	1	25.0			
46	Setto	109	99	98	108	3	1	25.0			
47	Setto	108	98	100	110	3	1	25.0			
48	Setto	110	100	101	111	3	1	25.0			
49	Setto	111	101	102	112	3	1	25.0			
50	Setto	112	102	103	113	3	1	25.0			
51	Setto	113	103	104	114	3	1	25.0			
52	Setto	114	104	105	115	3	1	25.0			
53	Setto	115	105	106	116	3	1	25.0			
54	Setto	116	106	107	117	3	1	25.0			
55	Setto	119	109	108	118	3	1	25.0			
56	Setto	118	108	110	120	3	1	25.0			
57	Setto	120	110	111	121	3	1	25.0			
58	Setto	121	111	112	122	3	1	25.0			
59	Setto	122	112	113	123	3	1	25.0			
60	Setto	123	113	114	124	3	1	25.0			
61	Setto	124	114	115	125	3	1	25.0			
62	Setto	125	115	116	126	3	1	25.0			
63	Setto	126	116	117	127	3	1	25.0			
64	Setto	129	119	118	128	3	1	25.0			
65	Setto	128	118	120	130	3	1	25.0			
66	Setto	130	120	121	131	3	1	25.0			
67	Setto	131	121	122	132	3	1	25.0			
68	Setto	132	122	123	133	3	1	25.0			
69	Setto	133	123	124	134	3	1	25.0			
70	Setto	134	124	125	135	3	1	25.0			
71	Setto	135	125	126	136	3	1	25.0			
72	Setto	136	126	127	137	3	1	25.0			
73	Setto	139	129	128	138	3	1	25.0			

74	Setto	138	128	130	140	3	1	25.0
75	Setto	140	130	131	141	3	1	25.0
76	Setto	141	131	132	142	3	1	25.0
77	Setto	142	132	133	143	3	1	25.0
78	Setto	143	133	134	144	3	1	25.0
79	Setto	144	134	135	145	3	1	25.0
80	Setto	145	135	136	146	3	1	25.0
81	Setto	146	136	137	147	3	1	25.0
82	Setto	149	139	138	148	3	1	25.0
83	Setto	148	138	140	150	3	1	25.0
84	Setto	150	140	141	151	3	1	25.0
85	Setto	151	141	142	152	3	1	25.0
86	Setto	152	142	143	153	3	1	25.0
87	Setto	153	143	144	154	3	1	25.0
88	Setto	154	144	145	155	3	1	25.0
89	Setto	155	145	146	156	3	1	25.0
90	Setto	156	146	147	157	3	1	25.0
91	Setto	158	148	149	159	3	1	25.0
92	Setto	160	150	148	158	3	1	25.0
93	Setto	161	151	150	160	3	1	25.0
94	Setto	162	152	151	161	3	1	25.0
95	Setto	163	153	152	162	3	1	25.0
96	Setto	164	154	153	163	3	1	25.0
97	Setto	165	155	154	164	3	1	25.0
98	Setto	166	156	155	165	3	1	25.0
99	Setto	167	157	156	166	3	1	25.0
100	Setto	168	158	159	169	3	1	25.0
101	Setto	170	160	158	168	3	1	25.0
102	Setto	171	161	160	170	3	1	25.0
103	Setto	172	162	161	171	3	1	25.0
104	Setto	173	163	162	172	3	1	25.0
105	Setto	174	164	163	173	3	1	25.0
106	Setto	175	165	164	174	3	1	25.0
107	Setto	176	166	165	175	3	1	25.0
108	Setto	177	167	166	176	3	1	25.0
109	Setto	178	168	169	179	3	1	25.0
110	Setto	180	170	168	178	3	1	25.0
111	Setto	181	171	170	180	3	1	25.0
112	Setto	182	172	171	181	3	1	25.0
113	Setto	183	173	172	182	3	1	25.0
114	Setto	184	174	173	183	3	1	25.0
115	Setto	185	175	174	184	3	1	25.0
116	Setto	186	176	175	185	3	1	25.0
117	Setto	187	177	176	186	3	1	25.0
118	Setto	188	178	179	189	3	1	25.0
119	Setto	190	180	178	188	3	1	25.0
120	Setto	191	181	180	190	3	1	25.0
121	Setto	192	182	181	191	3	1	25.0
122	Setto	193	183	182	192	3	1	25.0
123	Setto	194	184	183	193	3	1	25.0
124	Setto	195	185	184	194	3	1	25.0
125	Setto	196	186	185	195	3	1	25.0
126	Setto	197	187	186	196	3	1	25.0
127	Setto	198	188	189	199	3	1	25.0
128	Setto	200	190	188	198	3	1	25.0
129	Setto	201	191	190	200	3	1	25.0
130	Setto	202	192	191	201	3	1	25.0
131	Setto	203	193	192	202	3	1	25.0
132	Setto	204	194	193	203	3	1	25.0
133	Setto	205	195	194	204	3	1	25.0
134	Setto	206	196	195	205	3	1	25.0
135	Setto	207	197	196	206	3	1	25.0
136	Setto	208	209	67	66	3	1	25.0
137	Setto	210	211	209	208	3	1	25.0
138	Setto	212	213	211	210	3	1	25.0
139	Setto	214	215	213	212	3	1	25.0
140	Setto	216	217	215	214	3	1	25.0
141	Setto	218	219	217	216	3	1	25.0
142	Setto	220	221	219	218	3	1	25.0
143	Setto	222	223	221	220	3	1	25.0
144	Setto	224	225	223	222	3	1	25.0
145	Setto	209	226	77	67	3	1	25.0
146	Setto	211	227	226	209	3	1	25.0
147	Setto	213	228	227	211	3	1	25.0
148	Setto	215	229	228	213	3	1	25.0
149	Setto	217	230	229	215	3	1	25.0
150	Setto	219	231	230	217	3	1	25.0

151	Setto	221	232	231	219	3	1	25.0
152	Setto	223	233	232	221	3	1	25.0
153	Setto	225	234	233	223	3	1	25.0
154	Setto	226	235	87	77	3	1	25.0
155	Setto	227	236	235	226	3	1	25.0
156	Setto	228	237	236	227	3	1	25.0
157	Setto	229	238	237	228	3	1	25.0
158	Setto	230	239	238	229	3	1	25.0
159	Setto	231	240	239	230	3	1	25.0
160	Setto	232	241	240	231	3	1	25.0
161	Setto	233	242	241	232	3	1	25.0
162	Setto	234	243	242	233	3	1	25.0
163	Setto	235	244	97	87	3	1	25.0
164	Setto	236	245	244	235	3	1	25.0
165	Setto	237	246	245	236	3	1	25.0
166	Setto	238	247	246	237	3	1	25.0
167	Setto	239	248	247	238	3	1	25.0
168	Setto	240	249	248	239	3	1	25.0
169	Setto	241	250	249	240	3	1	25.0
170	Setto	242	251	250	241	3	1	25.0
171	Setto	243	252	251	242	3	1	25.0
172	Setto	244	253	107	97	3	1	25.0
173	Setto	245	254	253	244	3	1	25.0
174	Setto	246	255	254	245	3	1	25.0
175	Setto	247	256	255	246	3	1	25.0
176	Setto	248	257	256	247	3	1	25.0
177	Setto	249	258	257	248	3	1	25.0
178	Setto	250	259	258	249	3	1	25.0
179	Setto	251	260	259	250	3	1	25.0
180	Setto	252	261	260	251	3	1	25.0
181	Setto	117	107	253	262	3	1	25.0
182	Setto	262	253	254	263	3	1	25.0
183	Setto	263	254	255	264	3	1	25.0
184	Setto	264	255	256	265	3	1	25.0
185	Setto	265	256	257	266	3	1	25.0
186	Setto	266	257	258	267	3	1	25.0
187	Setto	267	258	259	268	3	1	25.0
188	Setto	268	259	260	269	3	1	25.0
189	Setto	269	260	261	270	3	1	25.0
190	Setto	127	117	262	271	3	1	25.0
191	Setto	271	262	263	272	3	1	25.0
192	Setto	272	263	264	273	3	1	25.0
193	Setto	273	264	265	274	3	1	25.0
194	Setto	274	265	266	275	3	1	25.0
195	Setto	275	266	267	276	3	1	25.0
196	Setto	276	267	268	277	3	1	25.0
197	Setto	277	268	269	278	3	1	25.0
198	Setto	278	269	270	279	3	1	25.0
199	Setto	137	127	271	280	3	1	25.0
200	Setto	280	271	272	281	3	1	25.0
201	Setto	281	272	273	282	3	1	25.0
202	Setto	282	273	274	283	3	1	25.0
203	Setto	283	274	275	284	3	1	25.0
204	Setto	284	275	276	285	3	1	25.0
205	Setto	285	276	277	286	3	1	25.0
206	Setto	286	277	278	287	3	1	25.0
207	Setto	287	278	279	288	3	1	25.0
208	Setto	147	137	280	289	3	1	25.0
209	Setto	289	280	281	290	3	1	25.0
210	Setto	290	281	282	291	3	1	25.0
211	Setto	291	282	283	292	3	1	25.0
212	Setto	292	283	284	293	3	1	25.0
213	Setto	293	284	285	294	3	1	25.0
214	Setto	294	285	286	295	3	1	25.0
215	Setto	295	286	287	296	3	1	25.0
216	Setto	296	287	288	297	3	1	25.0
217	Setto	157	147	289	298	3	1	25.0
218	Setto	298	289	290	299	3	1	25.0
219	Setto	299	290	291	300	3	1	25.0
220	Setto	300	291	292	301	3	1	25.0
221	Setto	301	292	293	302	3	1	25.0
222	Setto	302	293	294	303	3	1	25.0
223	Setto	303	294	295	304	3	1	25.0
224	Setto	304	295	296	305	3	1	25.0
225	Setto	305	296	297	306	3	1	25.0
226	Setto	307	298	157	167	3	1	25.0
227	Setto	308	299	298	307	3	1	25.0

228	Setto	309	300	299	308	3	1	25.0		
229	Setto	310	301	300	309	3	1	25.0		
230	Setto	311	302	301	310	3	1	25.0		
231	Setto	312	303	302	311	3	1	25.0		
232	Setto	313	304	303	312	3	1	25.0		
233	Setto	314	305	304	313	3	1	25.0		
234	Setto	315	306	305	314	3	1	25.0		
235	Setto	316	307	167	177	3	1	25.0		
236	Setto	317	308	307	316	3	1	25.0		
237	Setto	318	309	308	317	3	1	25.0		
238	Setto	319	310	309	318	3	1	25.0		
239	Setto	320	311	310	319	3	1	25.0		
240	Setto	321	312	311	320	3	1	25.0		
241	Setto	322	313	312	321	3	1	25.0		
242	Setto	323	314	313	322	3	1	25.0		
243	Setto	324	315	314	323	3	1	25.0		
244	Setto	325	316	177	187	3	1	25.0		
245	Setto	326	317	316	325	3	1	25.0		
246	Setto	327	318	317	326	3	1	25.0		
247	Setto	328	319	318	327	3	1	25.0		
248	Setto	329	320	319	328	3	1	25.0		
249	Setto	330	321	320	329	3	1	25.0		
250	Setto	331	322	321	330	3	1	25.0		
251	Setto	332	323	322	331	3	1	25.0		
252	Setto	333	324	323	332	3	1	25.0		
253	Setto	334	325	187	197	3	1	25.0		
254	Setto	335	326	325	334	3	1	25.0		
255	Setto	336	327	326	335	3	1	25.0		
256	Setto	337	328	327	336	3	1	25.0		
257	Setto	338	329	328	337	3	1	25.0		
258	Setto	339	330	329	338	3	1	25.0		
259	Setto	340	331	330	339	3	1	25.0		
260	Setto	341	332	331	340	3	1	25.0		
261	Setto	342	333	332	341	3	1	25.0		
262	Setto	343	334	197	207	3	1	25.0		
263	Setto	344	335	334	343	3	1	25.0		
264	Setto	345	336	335	344	3	1	25.0		
265	Setto	346	337	336	345	3	1	25.0		
266	Setto	347	338	337	346	3	1	25.0		
267	Setto	348	339	338	347	3	1	25.0		
268	Setto	349	340	339	348	3	1	25.0		
269	Setto	350	341	340	349	3	1	25.0		
270	Setto	351	342	341	350	3	1	25.0		
271	Guscio fond.	9	352	353	354	3	2	40.0	0.09	0.06
272	Guscio fond.	352	355	356	353	3	2	40.0	0.09	0.06
273	Guscio fond.	355	357	358	356	3	2	40.0	0.09	0.06
274	Guscio fond.	357	359	360	358	3	2	40.0	0.09	0.06
275	Guscio fond.	359	361	362	360	3	2	40.0	0.09	0.06
276	Guscio fond.	361	363	364	362	3	2	40.0	0.09	0.06
277	Guscio fond.	363	365	366	364	3	2	40.0	0.09	0.06
278	Guscio fond.	365	367	368	366	3	2	40.0	0.09	0.06
279	Guscio fond.	367	369	370	368	3	2	40.0	0.09	0.06
280	Guscio fond.	369	371	372	370	3	2	40.0	0.09	0.06
281	Guscio fond.	371	373	374	372	3	2	40.0	0.09	0.06
282	Guscio fond.	373	375	376	374	3	2	40.0	0.09	0.06
283	Guscio fond.	375	377	378	376	3	2	40.0	0.09	0.06
284	Guscio fond.	377	379	380	378	3	2	40.0	0.09	0.06
285	Guscio fond.	379	35	381	380	3	2	40.0	0.09	0.06
286	Guscio fond.	354	353	382	383	3	2	40.0	0.09	0.06
287	Guscio fond.	353	356	384	382	3	2	40.0	0.09	0.06
288	Guscio fond.	356	358	385	384	3	2	40.0	0.09	0.06
289	Guscio fond.	358	360	386	385	3	2	40.0	0.09	0.06
290	Guscio fond.	360	362	387	386	3	2	40.0	0.09	0.06
291	Guscio fond.	362	364	388	387	3	2	40.0	0.09	0.06
292	Guscio fond.	364	366	389	388	3	2	40.0	0.09	0.06
293	Guscio fond.	366	368	390	389	3	2	40.0	0.09	0.06
294	Guscio fond.	368	370	391	390	3	2	40.0	0.09	0.06
295	Guscio fond.	370	372	392	391	3	2	40.0	0.09	0.06
296	Guscio fond.	372	374	393	392	3	2	40.0	0.09	0.06
297	Guscio fond.	374	376	394	393	3	2	40.0	0.09	0.06
298	Guscio fond.	376	378	395	394	3	2	40.0	0.09	0.06
299	Guscio fond.	378	380	396	395	3	2	40.0	0.09	0.06
300	Guscio fond.	380	381	397	396	3	2	40.0	0.09	0.06
301	Guscio fond.	383	382	398	399	3	2	40.0	0.09	0.06
302	Guscio fond.	382	384	400	398	3	2	40.0	0.09	0.06
303	Guscio fond.	384	385	401	400	3	2	40.0	0.09	0.06
304	Guscio fond.	385	386	402	401	3	2	40.0	0.09	0.06

305Guscio fond.	386	387	403	402	3	2	40.0	0.09	0.06
306Guscio fond.	387	388	404	403	3	2	40.0	0.09	0.06
307Guscio fond.	388	389	405	404	3	2	40.0	0.09	0.06
308Guscio fond.	389	390	406	405	3	2	40.0	0.09	0.06
309Guscio fond.	390	391	407	406	3	2	40.0	0.09	0.06
310Guscio fond.	391	392	408	407	3	2	40.0	0.09	0.06
311Guscio fond.	392	393	409	408	3	2	40.0	0.09	0.06
312Guscio fond.	393	394	410	409	3	2	40.0	0.09	0.06
313Guscio fond.	394	395	411	410	3	2	40.0	0.09	0.06
314Guscio fond.	395	396	412	411	3	2	40.0	0.09	0.06
315Guscio fond.	396	397	413	412	3	2	40.0	0.09	0.06
316Guscio fond.	399	398	414	415	3	2	40.0	0.09	0.06
317Guscio fond.	398	400	416	414	3	2	40.0	0.09	0.06
318Guscio fond.	400	401	417	416	3	2	40.0	0.09	0.06
319Guscio fond.	401	402	418	417	3	2	40.0	0.09	0.06
320Guscio fond.	402	403	419	418	3	2	40.0	0.09	0.06
321Guscio fond.	403	404	420	419	3	2	40.0	0.09	0.06
322Guscio fond.	404	405	421	420	3	2	40.0	0.09	0.06
323Guscio fond.	405	406	422	421	3	2	40.0	0.09	0.06
324Guscio fond.	406	407	423	422	3	2	40.0	0.09	0.06
325Guscio fond.	407	408	424	423	3	2	40.0	0.09	0.06
326Guscio fond.	408	409	425	424	3	2	40.0	0.09	0.06
327Guscio fond.	409	410	426	425	3	2	40.0	0.09	0.06
328Guscio fond.	410	411	427	426	3	2	40.0	0.09	0.06
329Guscio fond.	411	412	428	427	3	2	40.0	0.09	0.06
330Guscio fond.	412	413	429	428	3	2	40.0	0.09	0.06
331Guscio fond.	415	414	430	431	3	2	40.0	0.09	0.06
332Guscio fond.	414	416	432	430	3	2	40.0	0.09	0.06
333Guscio fond.	416	417	433	432	3	2	40.0	0.09	0.06
334Guscio fond.	417	418	434	433	3	2	40.0	0.09	0.06
335Guscio fond.	418	419	435	434	3	2	40.0	0.09	0.06
336Guscio fond.	419	420	436	435	3	2	40.0	0.09	0.06
337Guscio fond.	420	421	437	436	3	2	40.0	0.09	0.06
338Guscio fond.	421	422	438	437	3	2	40.0	0.09	0.06
339Guscio fond.	422	423	439	438	3	2	40.0	0.09	0.06
340Guscio fond.	423	424	440	439	3	2	40.0	0.09	0.06
341Guscio fond.	424	425	441	440	3	2	40.0	0.09	0.06
342Guscio fond.	425	426	442	441	3	2	40.0	0.09	0.06
343Guscio fond.	426	427	443	442	3	2	40.0	0.09	0.06
344Guscio fond.	427	428	444	443	3	2	40.0	0.09	0.06
345Guscio fond.	428	429	445	444	3	2	40.0	0.09	0.06
346Guscio fond.	431	430	446	447	3	2	40.0	0.09	0.06
347Guscio fond.	430	432	448	446	3	2	40.0	0.09	0.06
348Guscio fond.	432	433	449	448	3	2	40.0	0.09	0.06
349Guscio fond.	433	434	450	449	3	2	40.0	0.09	0.06
350Guscio fond.	434	435	451	450	3	2	40.0	0.09	0.06
351Guscio fond.	435	436	452	451	3	2	40.0	0.09	0.06
352Guscio fond.	436	437	453	452	3	2	40.0	0.09	0.06
353Guscio fond.	437	438	454	453	3	2	40.0	0.09	0.06
354Guscio fond.	438	439	455	454	3	2	40.0	0.09	0.06
355Guscio fond.	439	440	456	455	3	2	40.0	0.09	0.06
356Guscio fond.	440	441	457	456	3	2	40.0	0.09	0.06
357Guscio fond.	441	442	458	457	3	2	40.0	0.09	0.06
358Guscio fond.	442	443	459	458	3	2	40.0	0.09	0.06
359Guscio fond.	443	444	460	459	3	2	40.0	0.09	0.06
360Guscio fond.	444	445	461	460	3	2	40.0	0.09	0.06
361Guscio fond.	447	446	462	463	3	2	40.0	0.09	0.06
362Guscio fond.	446	448	464	462	3	2	40.0	0.09	0.06
363Guscio fond.	448	449	465	464	3	2	40.0	0.09	0.06
364Guscio fond.	449	450	466	465	3	2	40.0	0.09	0.06
365Guscio fond.	450	451	467	466	3	2	40.0	0.09	0.06
366Guscio fond.	451	452	468	467	3	2	40.0	0.09	0.06
367Guscio fond.	452	453	469	468	3	2	40.0	0.09	0.06
368Guscio fond.	453	454	470	469	3	2	40.0	0.09	0.06
369Guscio fond.	454	455	471	470	3	2	40.0	0.09	0.06
370Guscio fond.	455	456	472	471	3	2	40.0	0.09	0.06
371Guscio fond.	456	457	473	472	3	2	40.0	0.09	0.06
372Guscio fond.	457	458	474	473	3	2	40.0	0.09	0.06
373Guscio fond.	458	459	475	474	3	2	40.0	0.09	0.06
374Guscio fond.	459	460	476	475	3	2	40.0	0.09	0.06
375Guscio fond.	460	461	477	476	3	2	40.0	0.09	0.06
376Guscio fond.	463	462	478	479	3	2	40.0	0.09	0.06
377Guscio fond.	462	464	480	478	3	2	40.0	0.09	0.06
378Guscio fond.	464	465	481	480	3	2	40.0	0.09	0.06
379Guscio fond.	465	466	482	481	3	2	40.0	0.09	0.06
380Guscio fond.	466	467	483	482	3	2	40.0	0.09	0.06
381Guscio fond.	467	468	484	483	3	2	40.0	0.09	0.06

382Guscio fond.	468	469	485	484	3	2	40.0	0.09	0.06
383Guscio fond.	469	470	486	485	3	2	40.0	0.09	0.06
384Guscio fond.	470	471	487	486	3	2	40.0	0.09	0.06
385Guscio fond.	471	472	488	487	3	2	40.0	0.09	0.06
386Guscio fond.	472	473	489	488	3	2	40.0	0.09	0.06
387Guscio fond.	473	474	490	489	3	2	40.0	0.09	0.06
388Guscio fond.	474	475	491	490	3	2	40.0	0.09	0.06
389Guscio fond.	475	476	492	491	3	2	40.0	0.09	0.06
390Guscio fond.	476	477	493	492	3	2	40.0	0.09	0.06
391Guscio fond.	479	478	494	495	3	2	40.0	0.09	0.06
392Guscio fond.	478	480	496	494	3	2	40.0	0.09	0.06
393Guscio fond.	480	481	497	496	3	2	40.0	0.09	0.06
394Guscio fond.	481	482	498	497	3	2	40.0	0.09	0.06
395Guscio fond.	482	483	499	498	3	2	40.0	0.09	0.06
396Guscio fond.	483	484	500	499	3	2	40.0	0.09	0.06
397Guscio fond.	484	485	501	500	3	2	40.0	0.09	0.06
398Guscio fond.	485	486	502	501	3	2	40.0	0.09	0.06
399Guscio fond.	486	487	503	502	3	2	40.0	0.09	0.06
400Guscio fond.	487	488	504	503	3	2	40.0	0.09	0.06
401Guscio fond.	488	489	505	504	3	2	40.0	0.09	0.06
402Guscio fond.	489	490	506	505	3	2	40.0	0.09	0.06
403Guscio fond.	490	491	507	506	3	2	40.0	0.09	0.06
404Guscio fond.	491	492	508	507	3	2	40.0	0.09	0.06
405Guscio fond.	492	493	509	508	3	2	40.0	0.09	0.06
406Guscio fond.	495	494	510	511	3	2	40.0	0.09	0.06
407Guscio fond.	494	496	512	510	3	2	40.0	0.09	0.06
408Guscio fond.	496	497	513	512	3	2	40.0	0.09	0.06
409Guscio fond.	497	498	514	513	3	2	40.0	0.09	0.06
410Guscio fond.	498	499	515	514	3	2	40.0	0.09	0.06
411Guscio fond.	499	500	516	515	3	2	40.0	0.09	0.06
412Guscio fond.	500	501	517	516	3	2	40.0	0.09	0.06
413Guscio fond.	501	502	518	517	3	2	40.0	0.09	0.06
414Guscio fond.	502	503	519	518	3	2	40.0	0.09	0.06
415Guscio fond.	503	504	520	519	3	2	40.0	0.09	0.06
416Guscio fond.	504	505	521	520	3	2	40.0	0.09	0.06
417Guscio fond.	505	506	522	521	3	2	40.0	0.09	0.06
418Guscio fond.	506	507	523	522	3	2	40.0	0.09	0.06
419Guscio fond.	507	508	524	523	3	2	40.0	0.09	0.06
420Guscio fond.	508	509	525	524	3	2	40.0	0.09	0.06
421Guscio fond.	511	510	526	527	3	2	40.0	0.09	0.06
422Guscio fond.	510	512	528	526	3	2	40.0	0.09	0.06
423Guscio fond.	512	513	529	528	3	2	40.0	0.09	0.06
424Guscio fond.	513	514	530	529	3	2	40.0	0.09	0.06
425Guscio fond.	514	515	531	530	3	2	40.0	0.09	0.06
426Guscio fond.	515	516	532	531	3	2	40.0	0.09	0.06
427Guscio fond.	516	517	533	532	3	2	40.0	0.09	0.06
428Guscio fond.	517	518	534	533	3	2	40.0	0.09	0.06
429Guscio fond.	518	519	535	534	3	2	40.0	0.09	0.06
430Guscio fond.	519	520	536	535	3	2	40.0	0.09	0.06
431Guscio fond.	520	521	537	536	3	2	40.0	0.09	0.06
432Guscio fond.	521	522	538	537	3	2	40.0	0.09	0.06
433Guscio fond.	522	523	539	538	3	2	40.0	0.09	0.06
434Guscio fond.	523	524	540	539	3	2	40.0	0.09	0.06
435Guscio fond.	524	525	541	540	3	2	40.0	0.09	0.06
436Guscio fond.	527	526	542	543	3	2	40.0	0.09	0.06
437Guscio fond.	526	528	544	542	3	2	40.0	0.09	0.06
438Guscio fond.	528	529	545	544	3	2	40.0	0.09	0.06
439Guscio fond.	529	530	546	545	3	2	40.0	0.09	0.06
440Guscio fond.	530	531	547	546	3	2	40.0	0.09	0.06
441Guscio fond.	531	532	548	547	3	2	40.0	0.09	0.06
442Guscio fond.	532	533	549	548	3	2	40.0	0.09	0.06
443Guscio fond.	533	534	550	549	3	2	40.0	0.09	0.06
444Guscio fond.	534	535	551	550	3	2	40.0	0.09	0.06
445Guscio fond.	535	536	552	551	3	2	40.0	0.09	0.06
446Guscio fond.	536	537	553	552	3	2	40.0	0.09	0.06
447Guscio fond.	537	538	554	553	3	2	40.0	0.09	0.06
448Guscio fond.	538	539	555	554	3	2	40.0	0.09	0.06
449Guscio fond.	539	540	556	555	3	2	40.0	0.09	0.06
450Guscio fond.	540	541	557	556	3	2	40.0	0.09	0.06
451Guscio fond.	543	542	558	559	3	2	40.0	0.09	0.06
452Guscio fond.	542	544	560	558	3	2	40.0	0.09	0.06
453Guscio fond.	544	545	561	560	3	2	40.0	0.09	0.06
454Guscio fond.	545	546	562	561	3	2	40.0	0.09	0.06
455Guscio fond.	546	547	563	562	3	2	40.0	0.09	0.06
456Guscio fond.	547	548	564	563	3	2	40.0	0.09	0.06
457Guscio fond.	548	549	565	564	3	2	40.0	0.09	0.06
458Guscio fond.	549	550	566	565	3	2	40.0	0.09	0.06

459Guscio fond.	550	551	567	566	3	2	40.0	0.09	0.06
460Guscio fond.	551	552	568	567	3	2	40.0	0.09	0.06
461Guscio fond.	552	553	569	568	3	2	40.0	0.09	0.06
462Guscio fond.	553	554	570	569	3	2	40.0	0.09	0.06
463Guscio fond.	554	555	571	570	3	2	40.0	0.09	0.06
464Guscio fond.	555	556	572	571	3	2	40.0	0.09	0.06
465Guscio fond.	556	557	573	572	3	2	40.0	0.09	0.06
466Guscio fond.	559	558	574	575	3	2	40.0	0.09	0.06
467Guscio fond.	558	560	576	574	3	2	40.0	0.09	0.06
468Guscio fond.	560	561	577	576	3	2	40.0	0.09	0.06
469Guscio fond.	561	562	578	577	3	2	40.0	0.09	0.06
470Guscio fond.	562	563	579	578	3	2	40.0	0.09	0.06
471Guscio fond.	563	564	580	579	3	2	40.0	0.09	0.06
472Guscio fond.	564	565	581	580	3	2	40.0	0.09	0.06
473Guscio fond.	565	566	582	581	3	2	40.0	0.09	0.06
474Guscio fond.	566	567	583	582	3	2	40.0	0.09	0.06
475Guscio fond.	567	568	584	583	3	2	40.0	0.09	0.06
476Guscio fond.	568	569	585	584	3	2	40.0	0.09	0.06
477Guscio fond.	569	570	586	585	3	2	40.0	0.09	0.06
478Guscio fond.	570	571	587	586	3	2	40.0	0.09	0.06
479Guscio fond.	571	572	588	587	3	2	40.0	0.09	0.06
480Guscio fond.	572	573	589	588	3	2	40.0	0.09	0.06
481Guscio fond.	575	574	590	591	3	2	40.0	0.09	0.06
482Guscio fond.	574	576	592	590	3	2	40.0	0.09	0.06
483Guscio fond.	576	577	593	592	3	2	40.0	0.09	0.06
484Guscio fond.	577	578	594	593	3	2	40.0	0.09	0.06
485Guscio fond.	578	579	595	594	3	2	40.0	0.09	0.06
486Guscio fond.	579	580	596	595	3	2	40.0	0.09	0.06
487Guscio fond.	580	581	597	596	3	2	40.0	0.09	0.06
488Guscio fond.	581	582	598	597	3	2	40.0	0.09	0.06
489Guscio fond.	582	583	599	598	3	2	40.0	0.09	0.06
490Guscio fond.	583	584	600	599	3	2	40.0	0.09	0.06
491Guscio fond.	584	585	601	600	3	2	40.0	0.09	0.06
492Guscio fond.	585	586	602	601	3	2	40.0	0.09	0.06
493Guscio fond.	586	587	603	602	3	2	40.0	0.09	0.06
494Guscio fond.	587	588	604	603	3	2	40.0	0.09	0.06
495Guscio fond.	588	589	605	604	3	2	40.0	0.09	0.06
496Guscio fond.	591	590	606	607	3	2	40.0	0.09	0.06
497Guscio fond.	590	592	608	606	3	2	40.0	0.09	0.06
498Guscio fond.	592	593	609	608	3	2	40.0	0.09	0.06
499Guscio fond.	593	594	610	609	3	2	40.0	0.09	0.06
500Guscio fond.	594	595	611	610	3	2	40.0	0.09	0.06
501Guscio fond.	595	596	612	611	3	2	40.0	0.09	0.06
502Guscio fond.	596	597	613	612	3	2	40.0	0.09	0.06
503Guscio fond.	597	598	614	613	3	2	40.0	0.09	0.06
504Guscio fond.	598	599	615	614	3	2	40.0	0.09	0.06
505Guscio fond.	599	600	616	615	3	2	40.0	0.09	0.06
506Guscio fond.	600	601	617	616	3	2	40.0	0.09	0.06
507Guscio fond.	601	602	618	617	3	2	40.0	0.09	0.06
508Guscio fond.	602	603	619	618	3	2	40.0	0.09	0.06
509Guscio fond.	603	604	620	619	3	2	40.0	0.09	0.06
510Guscio fond.	604	605	621	620	3	2	40.0	0.09	0.06
511Guscio fond.	607	606	622	623	3	2	40.0	0.09	0.06
512Guscio fond.	606	608	624	622	3	2	40.0	0.09	0.06
513Guscio fond.	608	609	625	624	3	2	40.0	0.09	0.06
514Guscio fond.	609	610	626	625	3	2	40.0	0.09	0.06
515Guscio fond.	610	611	627	626	3	2	40.0	0.09	0.06
516Guscio fond.	611	612	628	627	3	2	40.0	0.09	0.06
517Guscio fond.	612	613	629	628	3	2	40.0	0.09	0.06
518Guscio fond.	613	614	630	629	3	2	40.0	0.09	0.06
519Guscio fond.	614	615	631	630	3	2	40.0	0.09	0.06
520Guscio fond.	615	616	632	631	3	2	40.0	0.09	0.06
521Guscio fond.	616	617	633	632	3	2	40.0	0.09	0.06
522Guscio fond.	617	618	634	633	3	2	40.0	0.09	0.06
523Guscio fond.	618	619	635	634	3	2	40.0	0.09	0.06
524Guscio fond.	619	620	636	635	3	2	40.0	0.09	0.06
525Guscio fond.	620	621	637	636	3	2	40.0	0.09	0.06
526Guscio fond.	623	622	638	639	3	2	40.0	0.09	0.06
527Guscio fond.	622	624	640	638	3	2	40.0	0.09	0.06
528Guscio fond.	624	625	641	640	3	2	40.0	0.09	0.06
529Guscio fond.	625	626	642	641	3	2	40.0	0.09	0.06
530Guscio fond.	626	627	643	642	3	2	40.0	0.09	0.06
531Guscio fond.	627	628	644	643	3	2	40.0	0.09	0.06
532Guscio fond.	628	629	645	644	3	2	40.0	0.09	0.06
533Guscio fond.	629	630	646	645	3	2	40.0	0.09	0.06
534Guscio fond.	630	631	647	646	3	2	40.0	0.09	0.06
535Guscio fond.	631	632	648	647	3	2	40.0	0.09	0.06

536Guscio fond.	632	633	649	648	3	2	40.0	0.09	0.06
537Guscio fond.	633	634	650	649	3	2	40.0	0.09	0.06
538Guscio fond.	634	635	651	650	3	2	40.0	0.09	0.06
539Guscio fond.	635	636	652	651	3	2	40.0	0.09	0.06
540Guscio fond.	636	637	653	652	3	2	40.0	0.09	0.06
541Guscio fond.	639	638	654	655	3	2	40.0	0.09	0.06
542Guscio fond.	638	640	656	654	3	2	40.0	0.09	0.06
543Guscio fond.	640	641	657	656	3	2	40.0	0.09	0.06
544Guscio fond.	641	642	658	657	3	2	40.0	0.09	0.06
545Guscio fond.	642	643	659	658	3	2	40.0	0.09	0.06
546Guscio fond.	643	644	660	659	3	2	40.0	0.09	0.06
547Guscio fond.	644	645	661	660	3	2	40.0	0.09	0.06
548Guscio fond.	645	646	662	661	3	2	40.0	0.09	0.06
549Guscio fond.	646	647	663	662	3	2	40.0	0.09	0.06
550Guscio fond.	647	648	664	663	3	2	40.0	0.09	0.06
551Guscio fond.	648	649	665	664	3	2	40.0	0.09	0.06
552Guscio fond.	649	650	666	665	3	2	40.0	0.09	0.06
553Guscio fond.	650	651	667	666	3	2	40.0	0.09	0.06
554Guscio fond.	651	652	668	667	3	2	40.0	0.09	0.06
555Guscio fond.	652	653	669	668	3	2	40.0	0.09	0.06
556Guscio fond.	655	654	670	671	3	2	40.0	0.09	0.06
557Guscio fond.	654	656	672	670	3	2	40.0	0.09	0.06
558Guscio fond.	656	657	673	672	3	2	40.0	0.09	0.06
559Guscio fond.	657	658	674	673	3	2	40.0	0.09	0.06
560Guscio fond.	658	659	675	674	3	2	40.0	0.09	0.06
561Guscio fond.	659	660	676	675	3	2	40.0	0.09	0.06
562Guscio fond.	660	661	677	676	3	2	40.0	0.09	0.06
563Guscio fond.	661	662	678	677	3	2	40.0	0.09	0.06
564Guscio fond.	662	663	679	678	3	2	40.0	0.09	0.06
565Guscio fond.	663	664	680	679	3	2	40.0	0.09	0.06
566Guscio fond.	664	665	681	680	3	2	40.0	0.09	0.06
567Guscio fond.	665	666	682	681	3	2	40.0	0.09	0.06
568Guscio fond.	666	667	683	682	3	2	40.0	0.09	0.06
569Guscio fond.	667	668	684	683	3	2	40.0	0.09	0.06
570Guscio fond.	668	669	685	684	3	2	40.0	0.09	0.06
571Guscio fond.	671	670	686	687	3	2	40.0	0.09	0.06
572Guscio fond.	670	672	688	686	3	2	40.0	0.09	0.06
573Guscio fond.	672	673	689	688	3	2	40.0	0.09	0.06
574Guscio fond.	673	674	690	689	3	2	40.0	0.09	0.06
575Guscio fond.	674	675	691	690	3	2	40.0	0.09	0.06
576Guscio fond.	675	676	692	691	3	2	40.0	0.09	0.06
577Guscio fond.	676	677	693	692	3	2	40.0	0.09	0.06
578Guscio fond.	677	678	694	693	3	2	40.0	0.09	0.06
579Guscio fond.	678	679	695	694	3	2	40.0	0.09	0.06
580Guscio fond.	679	680	696	695	3	2	40.0	0.09	0.06
581Guscio fond.	680	681	697	696	3	2	40.0	0.09	0.06
582Guscio fond.	681	682	698	697	3	2	40.0	0.09	0.06
583Guscio fond.	682	683	699	698	3	2	40.0	0.09	0.06
584Guscio fond.	683	684	700	699	3	2	40.0	0.09	0.06
585Guscio fond.	684	685	701	700	3	2	40.0	0.09	0.06
586Guscio fond.	687	686	702	703	3	2	40.0	0.09	0.06
587Guscio fond.	686	688	704	702	3	2	40.0	0.09	0.06
588Guscio fond.	688	689	705	704	3	2	40.0	0.09	0.06
589Guscio fond.	689	690	706	705	3	2	40.0	0.09	0.06
590Guscio fond.	690	691	707	706	3	2	40.0	0.09	0.06
591Guscio fond.	691	692	708	707	3	2	40.0	0.09	0.06
592Guscio fond.	692	693	709	708	3	2	40.0	0.09	0.06
593Guscio fond.	693	694	710	709	3	2	40.0	0.09	0.06
594Guscio fond.	694	695	711	710	3	2	40.0	0.09	0.06
595Guscio fond.	695	696	712	711	3	2	40.0	0.09	0.06
596Guscio fond.	696	697	713	712	3	2	40.0	0.09	0.06
597Guscio fond.	697	698	714	713	3	2	40.0	0.09	0.06
598Guscio fond.	698	699	715	714	3	2	40.0	0.09	0.06
599Guscio fond.	699	700	716	715	3	2	40.0	0.09	0.06
600Guscio fond.	700	701	717	716	3	2	40.0	0.09	0.06
601Guscio fond.	703	702	718	719	3	2	40.0	0.09	0.06
602Guscio fond.	702	704	720	718	3	2	40.0	0.09	0.06
603Guscio fond.	704	705	721	720	3	2	40.0	0.09	0.06
604Guscio fond.	705	706	722	721	3	2	40.0	0.09	0.06
605Guscio fond.	706	707	723	722	3	2	40.0	0.09	0.06
606Guscio fond.	707	708	724	723	3	2	40.0	0.09	0.06
607Guscio fond.	708	709	725	724	3	2	40.0	0.09	0.06
608Guscio fond.	709	710	726	725	3	2	40.0	0.09	0.06
609Guscio fond.	710	711	727	726	3	2	40.0	0.09	0.06
610Guscio fond.	711	712	728	727	3	2	40.0	0.09	0.06
611Guscio fond.	712	713	729	728	3	2	40.0	0.09	0.06
612Guscio fond.	713	714	730	729	3	2	40.0	0.09	0.06

613Guscio fond.	714	715	731	730	3	2	40.0	0.09	0.06
614Guscio fond.	715	716	732	731	3	2	40.0	0.09	0.06
615Guscio fond.	716	717	733	732	3	2	40.0	0.09	0.06
616Guscio fond.	719	718	734	735	3	2	40.0	0.09	0.06
617Guscio fond.	718	720	736	734	3	2	40.0	0.09	0.06
618Guscio fond.	720	721	737	736	3	2	40.0	0.09	0.06
619Guscio fond.	721	722	738	737	3	2	40.0	0.09	0.06
620Guscio fond.	722	723	739	738	3	2	40.0	0.09	0.06
621Guscio fond.	723	724	740	739	3	2	40.0	0.09	0.06
622Guscio fond.	724	725	741	740	3	2	40.0	0.09	0.06
623Guscio fond.	725	726	742	741	3	2	40.0	0.09	0.06
624Guscio fond.	726	727	743	742	3	2	40.0	0.09	0.06
625Guscio fond.	727	728	744	743	3	2	40.0	0.09	0.06
626Guscio fond.	728	729	745	744	3	2	40.0	0.09	0.06
627Guscio fond.	729	730	746	745	3	2	40.0	0.09	0.06
628Guscio fond.	730	731	747	746	3	2	40.0	0.09	0.06
629Guscio fond.	731	732	748	747	3	2	40.0	0.09	0.06
630Guscio fond.	732	733	749	748	3	2	40.0	0.09	0.06
631Guscio fond.	735	734	750	751	3	2	40.0	0.09	0.06
632Guscio fond.	734	736	752	750	3	2	40.0	0.09	0.06
633Guscio fond.	736	737	753	752	3	2	40.0	0.09	0.06
634Guscio fond.	737	738	754	753	3	2	40.0	0.09	0.06
635Guscio fond.	738	739	755	754	3	2	40.0	0.09	0.06
636Guscio fond.	739	740	756	755	3	2	40.0	0.09	0.06
637Guscio fond.	740	741	757	756	3	2	40.0	0.09	0.06
638Guscio fond.	741	742	758	757	3	2	40.0	0.09	0.06
639Guscio fond.	742	743	759	758	3	2	40.0	0.09	0.06
640Guscio fond.	743	744	760	759	3	2	40.0	0.09	0.06
641Guscio fond.	744	745	761	760	3	2	40.0	0.09	0.06
642Guscio fond.	745	746	762	761	3	2	40.0	0.09	0.06
643Guscio fond.	746	747	763	762	3	3	40.0	0.09	0.06
644Guscio fond.	747	748	764	763	3	3	40.0	0.09	0.06
645Guscio fond.	748	749	765	764	3	3	40.0	0.09	0.06
646Guscio fond.	751	750	766	767	3	2	40.0	0.09	0.06
647Guscio fond.	750	752	768	766	3	2	40.0	0.09	0.06
648Guscio fond.	752	753	769	768	3	2	40.0	0.09	0.06
649Guscio fond.	753	754	770	769	3	2	40.0	0.09	0.06
650Guscio fond.	754	755	771	770	3	2	40.0	0.09	0.06
651Guscio fond.	755	756	772	771	3	2	40.0	0.09	0.06
652Guscio fond.	756	757	773	772	3	2	40.0	0.09	0.06
653Guscio fond.	757	758	774	773	3	2	40.0	0.09	0.06
654Guscio fond.	758	759	775	774	3	2	40.0	0.09	0.06
655Guscio fond.	759	760	776	775	3	2	40.0	0.09	0.06
656Guscio fond.	760	761	777	776	3	2	40.0	0.09	0.06
657Guscio fond.	761	762	778	777	3	2	40.0	0.09	0.06
658Guscio fond.	762	763	779	778	3	3	40.0	0.09	0.06
659Guscio fond.	763	764	780	779	3	3	40.0	0.09	0.06
660Guscio fond.	764	765	781	780	3	3	40.0	0.09	0.06
661Guscio fond.	767	766	782	783	3	2	40.0	0.09	0.06
662Guscio fond.	766	768	784	782	3	2	40.0	0.09	0.06
663Guscio fond.	768	769	785	784	3	2	40.0	0.09	0.06
664Guscio fond.	769	770	786	785	3	2	40.0	0.09	0.06
665Guscio fond.	770	771	787	786	3	2	40.0	0.09	0.06
666Guscio fond.	771	772	788	787	3	2	40.0	0.09	0.06
667Guscio fond.	772	773	789	788	3	2	40.0	0.09	0.06
668Guscio fond.	773	774	790	789	3	2	40.0	0.09	0.06
669Guscio fond.	774	775	791	790	3	2	40.0	0.09	0.06
670Guscio fond.	775	776	792	791	3	2	40.0	0.09	0.06
671Guscio fond.	776	777	793	792	3	2	40.0	0.09	0.06
672Guscio fond.	777	778	794	793	3	2	40.0	0.09	0.06
673Guscio fond.	778	779	795	794	3	3	40.0	0.09	0.06
674Guscio fond.	779	780	796	795	3	3	40.0	0.09	0.06
675Guscio fond.	780	781	797	796	3	3	40.0	0.09	0.06
676Guscio fond.	783	782	798	799	3	2	40.0	0.09	0.06
677Guscio fond.	782	784	800	798	3	2	40.0	0.09	0.06
678Guscio fond.	784	785	801	800	3	2	40.0	0.09	0.06
679Guscio fond.	785	786	802	801	3	2	40.0	0.09	0.06
680Guscio fond.	786	787	803	802	3	2	40.0	0.09	0.06
681Guscio fond.	787	788	804	803	3	2	40.0	0.09	0.06
682Guscio fond.	788	789	805	804	3	2	40.0	0.09	0.06
683Guscio fond.	789	790	806	805	3	2	40.0	0.09	0.06
684Guscio fond.	790	791	807	806	3	2	40.0	0.09	0.06
685Guscio fond.	791	792	808	807	3	2	40.0	0.09	0.06
686Guscio fond.	792	793	809	808	3	2	40.0	0.09	0.06
687Guscio fond.	793	794	810	809	3	2	40.0	0.09	0.06
688Guscio fond.	794	795	811	810	3	3	40.0	0.09	0.06
689Guscio fond.	795	796	812	811	3	3	40.0	0.09	0.06

690	Guscio fond.	796	797	813	812	3	3	40.0	0.09	0.06
691	Guscio fond.	799	798	814	815	3	2	40.0	0.09	0.06
692	Guscio fond.	798	800	816	814	3	2	40.0	0.09	0.06
693	Guscio fond.	800	801	817	816	3	2	40.0	0.09	0.06
694	Guscio fond.	801	802	818	817	3	2	40.0	0.09	0.06
695	Guscio fond.	802	803	819	818	3	2	40.0	0.09	0.06
696	Guscio fond.	803	804	820	819	3	2	40.0	0.09	0.06
697	Guscio fond.	804	805	821	820	3	2	40.0	0.09	0.06
698	Guscio fond.	805	806	822	821	3	2	40.0	0.09	0.06
699	Guscio fond.	806	807	823	822	3	2	40.0	0.09	0.06
700	Guscio fond.	807	808	824	823	3	2	40.0	0.09	0.06
701	Guscio fond.	808	809	825	824	3	2	40.0	0.09	0.06
702	Guscio fond.	809	810	826	825	3	2	40.0	0.09	0.06
703	Guscio fond.	810	811	827	826	3	3	40.0	0.09	0.06
704	Guscio fond.	811	812	828	827	3	3	40.0	0.09	0.06
705	Guscio fond.	812	813	829	828	3	3	40.0	0.09	0.06
706	Guscio fond.	815	814	830	13	3	2	40.0	0.09	0.06
707	Guscio fond.	814	816	831	830	3	2	40.0	0.09	0.06
708	Guscio fond.	816	817	832	831	3	2	40.0	0.09	0.06
709	Guscio fond.	817	818	833	832	3	2	40.0	0.09	0.06
710	Guscio fond.	818	819	834	833	3	2	40.0	0.09	0.06
711	Guscio fond.	819	820	835	834	3	2	40.0	0.09	0.06
712	Guscio fond.	820	821	836	835	3	2	40.0	0.09	0.06
713	Guscio fond.	821	822	837	836	3	2	40.0	0.09	0.06
714	Guscio fond.	822	823	838	837	3	2	40.0	0.09	0.06
715	Guscio fond.	823	824	839	838	3	2	40.0	0.09	0.06
716	Guscio fond.	824	825	840	839	3	2	40.0	0.09	0.06
717	Guscio fond.	825	826	841	840	3	2	40.0	0.09	0.06
718	Guscio fond.	826	827	842	841	3	3	40.0	0.09	0.06
719	Guscio fond.	827	828	843	842	3	3	40.0	0.09	0.06
720	Guscio fond.	828	829	29	843	3	3	40.0	0.09	0.06
721	Guscio fond.	35	844	845	381	3	2	40.0	0.09	0.06
722	Guscio fond.	844	846	847	845	3	2	40.0	0.09	0.06
723	Guscio fond.	846	848	849	847	3	2	40.0	0.09	0.06
724	Guscio fond.	848	850	851	849	3	2	40.0	0.09	0.06
725	Guscio fond.	850	852	853	851	3	2	40.0	0.09	0.06
726	Guscio fond.	852	854	855	853	3	2	40.0	0.09	0.06
727	Guscio fond.	854	856	857	855	3	2	40.0	0.09	0.06
728	Guscio fond.	856	858	859	857	3	2	40.0	0.09	0.06
729	Guscio fond.	858	860	861	859	3	2	40.0	0.09	0.06
730	Guscio fond.	860	862	863	861	3	2	40.0	0.09	0.06
731	Guscio fond.	862	864	865	863	3	2	40.0	0.09	0.06
732	Guscio fond.	864	866	867	865	3	2	40.0	0.09	0.06
733	Guscio fond.	866	868	869	867	3	2	40.0	0.09	0.06
734	Guscio fond.	868	870	871	869	3	2	40.0	0.09	0.06
735	Guscio fond.	870	10	872	871	3	2	40.0	0.09	0.06
736	Guscio fond.	381	845	873	397	3	2	40.0	0.09	0.06
737	Guscio fond.	845	847	874	873	3	2	40.0	0.09	0.06
738	Guscio fond.	847	849	875	874	3	2	40.0	0.09	0.06
739	Guscio fond.	849	851	876	875	3	2	40.0	0.09	0.06
740	Guscio fond.	851	853	877	876	3	2	40.0	0.09	0.06
741	Guscio fond.	853	855	878	877	3	2	40.0	0.09	0.06
742	Guscio fond.	855	857	879	878	3	2	40.0	0.09	0.06
743	Guscio fond.	857	859	880	879	3	2	40.0	0.09	0.06
744	Guscio fond.	859	861	881	880	3	2	40.0	0.09	0.06
745	Guscio fond.	861	863	882	881	3	2	40.0	0.09	0.06
746	Guscio fond.	863	865	883	882	3	2	40.0	0.09	0.06
747	Guscio fond.	865	867	884	883	3	2	40.0	0.09	0.06
748	Guscio fond.	867	869	885	884	3	2	40.0	0.09	0.06
749	Guscio fond.	869	871	886	885	3	2	40.0	0.09	0.06
750	Guscio fond.	871	872	887	886	3	2	40.0	0.09	0.06
751	Guscio fond.	397	873	888	413	3	2	40.0	0.09	0.06
752	Guscio fond.	873	874	889	888	3	2	40.0	0.09	0.06
753	Guscio fond.	874	875	890	889	3	2	40.0	0.09	0.06
754	Guscio fond.	875	876	891	890	3	2	40.0	0.09	0.06
755	Guscio fond.	876	877	892	891	3	2	40.0	0.09	0.06
756	Guscio fond.	877	878	893	892	3	2	40.0	0.09	0.06
757	Guscio fond.	878	879	894	893	3	2	40.0	0.09	0.06
758	Guscio fond.	879	880	895	894	3	2	40.0	0.09	0.06
759	Guscio fond.	880	881	896	895	3	2	40.0	0.09	0.06
760	Guscio fond.	881	882	897	896	3	2	40.0	0.09	0.06
761	Guscio fond.	882	883	898	897	3	2	40.0	0.09	0.06
762	Guscio fond.	883	884	899	898	3	2	40.0	0.09	0.06
763	Guscio fond.	884	885	900	899	3	2	40.0	0.09	0.06
764	Guscio fond.	885	886	901	900	3	2	40.0	0.09	0.06
765	Guscio fond.	886	887	902	901	3	2	40.0	0.09	0.06
766	Guscio fond.	413	888	903	429	3	2	40.0	0.09	0.06

767	Guscio fond.	888	889	904	903	3	2	40.0	0.09	0.06
768	Guscio fond.	889	890	905	904	3	2	40.0	0.09	0.06
769	Guscio fond.	890	891	906	905	3	2	40.0	0.09	0.06
770	Guscio fond.	891	892	907	906	3	2	40.0	0.09	0.06
771	Guscio fond.	892	893	908	907	3	2	40.0	0.09	0.06
772	Guscio fond.	893	894	909	908	3	2	40.0	0.09	0.06
773	Guscio fond.	894	895	910	909	3	2	40.0	0.09	0.06
774	Guscio fond.	895	896	911	910	3	2	40.0	0.09	0.06
775	Guscio fond.	896	897	912	911	3	2	40.0	0.09	0.06
776	Guscio fond.	897	898	913	912	3	2	40.0	0.09	0.06
777	Guscio fond.	898	899	914	913	3	2	40.0	0.09	0.06
778	Guscio fond.	899	900	915	914	3	2	40.0	0.09	0.06
779	Guscio fond.	900	901	916	915	3	2	40.0	0.09	0.06
780	Guscio fond.	901	902	917	916	3	2	40.0	0.09	0.06
781	Guscio fond.	429	903	918	445	3	2	40.0	0.09	0.06
782	Guscio fond.	903	904	919	918	3	2	40.0	0.09	0.06
783	Guscio fond.	904	905	920	919	3	2	40.0	0.09	0.06
784	Guscio fond.	905	906	921	920	3	2	40.0	0.09	0.06
785	Guscio fond.	906	907	922	921	3	2	40.0	0.09	0.06
786	Guscio fond.	907	908	923	922	3	2	40.0	0.09	0.06
787	Guscio fond.	908	909	924	923	3	2	40.0	0.09	0.06
788	Guscio fond.	909	910	925	924	3	2	40.0	0.09	0.06
789	Guscio fond.	910	911	926	925	3	2	40.0	0.09	0.06
790	Guscio fond.	911	912	927	926	3	2	40.0	0.09	0.06
791	Guscio fond.	912	913	928	927	3	2	40.0	0.09	0.06
792	Guscio fond.	913	914	929	928	3	2	40.0	0.09	0.06
793	Guscio fond.	914	915	930	929	3	2	40.0	0.09	0.06
794	Guscio fond.	915	916	931	930	3	2	40.0	0.09	0.06
795	Guscio fond.	916	917	932	931	3	2	40.0	0.09	0.06
796	Guscio fond.	445	918	933	461	3	2	40.0	0.09	0.06
797	Guscio fond.	918	919	934	933	3	2	40.0	0.09	0.06
798	Guscio fond.	919	920	935	934	3	2	40.0	0.09	0.06
799	Guscio fond.	920	921	936	935	3	2	40.0	0.09	0.06
800	Guscio fond.	921	922	937	936	3	2	40.0	0.09	0.06
801	Guscio fond.	922	923	938	937	3	2	40.0	0.09	0.06
802	Guscio fond.	923	924	939	938	3	2	40.0	0.09	0.06
803	Guscio fond.	924	925	940	939	3	2	40.0	0.09	0.06
804	Guscio fond.	925	926	941	940	3	2	40.0	0.09	0.06
805	Guscio fond.	926	927	942	941	3	2	40.0	0.09	0.06
806	Guscio fond.	927	928	943	942	3	2	40.0	0.09	0.06
807	Guscio fond.	928	929	944	943	3	2	40.0	0.09	0.06
808	Guscio fond.	929	930	945	944	3	2	40.0	0.09	0.06
809	Guscio fond.	930	931	946	945	3	2	40.0	0.09	0.06
810	Guscio fond.	931	932	947	946	3	2	40.0	0.09	0.06
811	Guscio fond.	461	933	948	477	3	2	40.0	0.09	0.06
812	Guscio fond.	933	934	949	948	3	2	40.0	0.09	0.06
813	Guscio fond.	934	935	950	949	3	2	40.0	0.09	0.06
814	Guscio fond.	935	936	951	950	3	2	40.0	0.09	0.06
815	Guscio fond.	936	937	952	951	3	2	40.0	0.09	0.06
816	Guscio fond.	937	938	953	952	3	2	40.0	0.09	0.06
817	Guscio fond.	938	939	954	953	3	2	40.0	0.09	0.06
818	Guscio fond.	939	940	955	954	3	2	40.0	0.09	0.06
819	Guscio fond.	940	941	956	955	3	2	40.0	0.09	0.06
820	Guscio fond.	941	942	957	956	3	2	40.0	0.09	0.06
821	Guscio fond.	942	943	958	957	3	2	40.0	0.09	0.06
822	Guscio fond.	943	944	959	958	3	2	40.0	0.09	0.06
823	Guscio fond.	944	945	960	959	3	2	40.0	0.09	0.06
824	Guscio fond.	945	946	961	960	3	2	40.0	0.09	0.06
825	Guscio fond.	946	947	962	961	3	2	40.0	0.09	0.06
826	Guscio fond.	477	948	963	493	3	2	40.0	0.09	0.06
827	Guscio fond.	948	949	964	963	3	2	40.0	0.09	0.06
828	Guscio fond.	949	950	965	964	3	2	40.0	0.09	0.06
829	Guscio fond.	950	951	966	965	3	2	40.0	0.09	0.06
830	Guscio fond.	951	952	967	966	3	2	40.0	0.09	0.06
831	Guscio fond.	952	953	968	967	3	2	40.0	0.09	0.06
832	Guscio fond.	953	954	969	968	3	2	40.0	0.09	0.06
833	Guscio fond.	954	955	970	969	3	2	40.0	0.09	0.06
834	Guscio fond.	955	956	971	970	3	2	40.0	0.09	0.06
835	Guscio fond.	956	957	972	971	3	2	40.0	0.09	0.06
836	Guscio fond.	957	958	973	972	3	2	40.0	0.09	0.06
837	Guscio fond.	958	959	974	973	3	2	40.0	0.09	0.06
838	Guscio fond.	959	960	975	974	3	2	40.0	0.09	0.06
839	Guscio fond.	960	961	976	975	3	2	40.0	0.09	0.06
840	Guscio fond.	961	962	977	976	3	2	40.0	0.09	0.06
841	Guscio fond.	493	963	978	509	3	2	40.0	0.09	0.06
842	Guscio fond.	963	964	979	978	3	2	40.0	0.09	0.06
843	Guscio fond.	964	965	980	979	3	2	40.0	0.09	0.06

844	Guscio fond.	965	966	981	980	3	2	40.0	0.09	0.06
845	Guscio fond.	966	967	982	981	3	2	40.0	0.09	0.06
846	Guscio fond.	967	968	983	982	3	2	40.0	0.09	0.06
847	Guscio fond.	968	969	984	983	3	2	40.0	0.09	0.06
848	Guscio fond.	969	970	985	984	3	2	40.0	0.09	0.06
849	Guscio fond.	970	971	986	985	3	2	40.0	0.09	0.06
850	Guscio fond.	971	972	987	986	3	2	40.0	0.09	0.06
851	Guscio fond.	972	973	988	987	3	2	40.0	0.09	0.06
852	Guscio fond.	973	974	989	988	3	2	40.0	0.09	0.06
853	Guscio fond.	974	975	990	989	3	2	40.0	0.09	0.06
854	Guscio fond.	975	976	991	990	3	2	40.0	0.09	0.06
855	Guscio fond.	976	977	992	991	3	2	40.0	0.09	0.06
856	Guscio fond.	509	978	993	525	3	2	40.0	0.09	0.06
857	Guscio fond.	978	979	994	993	3	2	40.0	0.09	0.06
858	Guscio fond.	979	980	995	994	3	2	40.0	0.09	0.06
859	Guscio fond.	980	981	996	995	3	2	40.0	0.09	0.06
860	Guscio fond.	981	982	997	996	3	2	40.0	0.09	0.06
861	Guscio fond.	982	983	998	997	3	2	40.0	0.09	0.06
862	Guscio fond.	983	984	999	998	3	2	40.0	0.09	0.06
863	Guscio fond.	984	985	1000	999	3	2	40.0	0.09	0.06
864	Guscio fond.	985	986	1001	1000	3	2	40.0	0.09	0.06
865	Guscio fond.	986	987	1002	1001	3	2	40.0	0.09	0.06
866	Guscio fond.	987	988	1003	1002	3	2	40.0	0.09	0.06
867	Guscio fond.	988	989	1004	1003	3	2	40.0	0.09	0.06
868	Guscio fond.	989	990	1005	1004	3	2	40.0	0.09	0.06
869	Guscio fond.	990	991	1006	1005	3	2	40.0	0.09	0.06
870	Guscio fond.	991	992	1007	1006	3	2	40.0	0.09	0.06
871	Guscio fond.	525	993	1008	541	3	2	40.0	0.09	0.06
872	Guscio fond.	993	994	1009	1008	3	2	40.0	0.09	0.06
873	Guscio fond.	994	995	1010	1009	3	2	40.0	0.09	0.06
874	Guscio fond.	995	996	1011	1010	3	2	40.0	0.09	0.06
875	Guscio fond.	996	997	1012	1011	3	2	40.0	0.09	0.06
876	Guscio fond.	997	998	1013	1012	3	2	40.0	0.09	0.06
877	Guscio fond.	998	999	1014	1013	3	2	40.0	0.09	0.06
878	Guscio fond.	999	1000	1015	1014	3	2	40.0	0.09	0.06
879	Guscio fond.	1000	1001	1016	1015	3	2	40.0	0.09	0.06
880	Guscio fond.	1001	1002	1017	1016	3	2	40.0	0.09	0.06
881	Guscio fond.	1002	1003	1018	1017	3	2	40.0	0.09	0.06
882	Guscio fond.	1003	1004	1019	1018	3	2	40.0	0.09	0.06
883	Guscio fond.	1004	1005	1020	1019	3	2	40.0	0.09	0.06
884	Guscio fond.	1005	1006	1021	1020	3	2	40.0	0.09	0.06
885	Guscio fond.	1006	1007	1022	1021	3	2	40.0	0.09	0.06
886	Guscio fond.	541	1008	1023	557	3	2	40.0	0.09	0.06
887	Guscio fond.	1008	1009	1024	1023	3	2	40.0	0.09	0.06
888	Guscio fond.	1009	1010	1025	1024	3	2	40.0	0.09	0.06
889	Guscio fond.	1010	1011	1026	1025	3	2	40.0	0.09	0.06
890	Guscio fond.	1011	1012	1027	1026	3	2	40.0	0.09	0.06
891	Guscio fond.	1012	1013	1028	1027	3	2	40.0	0.09	0.06
892	Guscio fond.	1013	1014	1029	1028	3	2	40.0	0.09	0.06
893	Guscio fond.	1014	1015	1030	1029	3	2	40.0	0.09	0.06
894	Guscio fond.	1015	1016	1031	1030	3	2	40.0	0.09	0.06
895	Guscio fond.	1016	1017	1032	1031	3	2	40.0	0.09	0.06
896	Guscio fond.	1017	1018	1033	1032	3	2	40.0	0.09	0.06
897	Guscio fond.	1018	1019	1034	1033	3	2	40.0	0.09	0.06
898	Guscio fond.	1019	1020	1035	1034	3	2	40.0	0.09	0.06
899	Guscio fond.	1020	1021	1036	1035	3	2	40.0	0.09	0.06
900	Guscio fond.	1021	1022	1037	1036	3	2	40.0	0.09	0.06
901	Guscio fond.	557	1023	1038	573	3	2	40.0	0.09	0.06
902	Guscio fond.	1023	1024	1039	1038	3	2	40.0	0.09	0.06
903	Guscio fond.	1024	1025	1040	1039	3	2	40.0	0.09	0.06
904	Guscio fond.	1025	1026	1041	1040	3	2	40.0	0.09	0.06
905	Guscio fond.	1026	1027	1042	1041	3	2	40.0	0.09	0.06
906	Guscio fond.	1027	1028	1043	1042	3	2	40.0	0.09	0.06
907	Guscio fond.	1028	1029	1044	1043	3	2	40.0	0.09	0.06
908	Guscio fond.	1029	1030	1045	1044	3	2	40.0	0.09	0.06
909	Guscio fond.	1030	1031	1046	1045	3	2	40.0	0.09	0.06
910	Guscio fond.	1031	1032	1047	1046	3	2	40.0	0.09	0.06
911	Guscio fond.	1032	1033	1048	1047	3	2	40.0	0.09	0.06
912	Guscio fond.	1033	1034	1049	1048	3	2	40.0	0.09	0.06
913	Guscio fond.	1034	1035	1050	1049	3	2	40.0	0.09	0.06
914	Guscio fond.	1035	1036	1051	1050	3	2	40.0	0.09	0.06
915	Guscio fond.	1036	1037	1052	1051	3	2	40.0	0.09	0.06
916	Guscio fond.	573	1038	1053	589	3	2	40.0	0.09	0.06
917	Guscio fond.	1038	1039	1054	1053	3	2	40.0	0.09	0.06
918	Guscio fond.	1039	1040	1055	1054	3	2	40.0	0.09	0.06
919	Guscio fond.	1040	1041	1056	1055	3	2	40.0	0.09	0.06
920	Guscio fond.	1041	1042	1057	1056	3	2	40.0	0.09	0.06

921Guscio fond.	1042	1043	1058	1057	3	2	40.0	0.09	0.06
922Guscio fond.	1043	1044	1059	1058	3	2	40.0	0.09	0.06
923Guscio fond.	1044	1045	1060	1059	3	2	40.0	0.09	0.06
924Guscio fond.	1045	1046	1061	1060	3	2	40.0	0.09	0.06
925Guscio fond.	1046	1047	1062	1061	3	2	40.0	0.09	0.06
926Guscio fond.	1047	1048	1063	1062	3	2	40.0	0.09	0.06
927Guscio fond.	1048	1049	1064	1063	3	2	40.0	0.09	0.06
928Guscio fond.	1049	1050	1065	1064	3	2	40.0	0.09	0.06
929Guscio fond.	1050	1051	1066	1065	3	2	40.0	0.09	0.06
930Guscio fond.	1051	1052	1067	1066	3	2	40.0	0.09	0.06
931Guscio fond.	589	1053	1068	605	3	2	40.0	0.09	0.06
932Guscio fond.	1053	1054	1069	1068	3	2	40.0	0.09	0.06
933Guscio fond.	1054	1055	1070	1069	3	2	40.0	0.09	0.06
934Guscio fond.	1055	1056	1071	1070	3	2	40.0	0.09	0.06
935Guscio fond.	1056	1057	1072	1071	3	2	40.0	0.09	0.06
936Guscio fond.	1057	1058	1073	1072	3	2	40.0	0.09	0.06
937Guscio fond.	1058	1059	1074	1073	3	2	40.0	0.09	0.06
938Guscio fond.	1059	1060	1075	1074	3	2	40.0	0.09	0.06
939Guscio fond.	1060	1061	1076	1075	3	2	40.0	0.09	0.06
940Guscio fond.	1061	1062	1077	1076	3	2	40.0	0.09	0.06
941Guscio fond.	1062	1063	1078	1077	3	2	40.0	0.09	0.06
942Guscio fond.	1063	1064	1079	1078	3	2	40.0	0.09	0.06
943Guscio fond.	1064	1065	1080	1079	3	2	40.0	0.09	0.06
944Guscio fond.	1065	1066	1081	1080	3	2	40.0	0.09	0.06
945Guscio fond.	1066	1067	1082	1081	3	2	40.0	0.09	0.06
946Guscio fond.	605	1068	1083	621	3	2	40.0	0.09	0.06
947Guscio fond.	1068	1069	1084	1083	3	2	40.0	0.09	0.06
948Guscio fond.	1069	1070	1085	1084	3	2	40.0	0.09	0.06
949Guscio fond.	1070	1071	1086	1085	3	2	40.0	0.09	0.06
950Guscio fond.	1071	1072	1087	1086	3	2	40.0	0.09	0.06
951Guscio fond.	1072	1073	1088	1087	3	2	40.0	0.09	0.06
952Guscio fond.	1073	1074	1089	1088	3	2	40.0	0.09	0.06
953Guscio fond.	1074	1075	1090	1089	3	2	40.0	0.09	0.06
954Guscio fond.	1075	1076	1091	1090	3	2	40.0	0.09	0.06
955Guscio fond.	1076	1077	1092	1091	3	2	40.0	0.09	0.06
956Guscio fond.	1077	1078	1093	1092	3	2	40.0	0.09	0.06
957Guscio fond.	1078	1079	1094	1093	3	2	40.0	0.09	0.06
958Guscio fond.	1079	1080	1095	1094	3	2	40.0	0.09	0.06
959Guscio fond.	1080	1081	1096	1095	3	2	40.0	0.09	0.06
960Guscio fond.	1081	1082	1097	1096	3	2	40.0	0.09	0.06
961Guscio fond.	621	1083	1098	637	3	2	40.0	0.09	0.06
962Guscio fond.	1083	1084	1099	1098	3	2	40.0	0.09	0.06
963Guscio fond.	1084	1085	1100	1099	3	2	40.0	0.09	0.06
964Guscio fond.	1085	1086	1101	1100	3	2	40.0	0.09	0.06
965Guscio fond.	1086	1087	1102	1101	3	2	40.0	0.09	0.06
966Guscio fond.	1087	1088	1103	1102	3	2	40.0	0.09	0.06
967Guscio fond.	1088	1089	1104	1103	3	2	40.0	0.09	0.06
968Guscio fond.	1089	1090	1105	1104	3	2	40.0	0.09	0.06
969Guscio fond.	1090	1091	1106	1105	3	2	40.0	0.09	0.06
970Guscio fond.	1091	1092	1107	1106	3	2	40.0	0.09	0.06
971Guscio fond.	1092	1093	1108	1107	3	2	40.0	0.09	0.06
972Guscio fond.	1093	1094	1109	1108	3	2	40.0	0.09	0.06
973Guscio fond.	1094	1095	1110	1109	3	2	40.0	0.09	0.06
974Guscio fond.	1095	1096	1111	1110	3	2	40.0	0.09	0.06
975Guscio fond.	1096	1097	1112	1111	3	2	40.0	0.09	0.06
976Guscio fond.	637	1098	1113	653	3	2	40.0	0.09	0.06
977Guscio fond.	1098	1099	1114	1113	3	2	40.0	0.09	0.06
978Guscio fond.	1099	1100	1115	1114	3	2	40.0	0.09	0.06
979Guscio fond.	1100	1101	1116	1115	3	2	40.0	0.09	0.06
980Guscio fond.	1101	1102	1117	1116	3	2	40.0	0.09	0.06
981Guscio fond.	1102	1103	1118	1117	3	2	40.0	0.09	0.06
982Guscio fond.	1103	1104	1119	1118	3	2	40.0	0.09	0.06
983Guscio fond.	1104	1105	1120	1119	3	2	40.0	0.09	0.06
984Guscio fond.	1105	1106	1121	1120	3	2	40.0	0.09	0.06
985Guscio fond.	1106	1107	1122	1121	3	2	40.0	0.09	0.06
986Guscio fond.	1107	1108	1123	1122	3	2	40.0	0.09	0.06
987Guscio fond.	1108	1109	1124	1123	3	2	40.0	0.09	0.06
988Guscio fond.	1109	1110	1125	1124	3	2	40.0	0.09	0.06
989Guscio fond.	1110	1111	1126	1125	3	2	40.0	0.09	0.06
990Guscio fond.	1111	1112	1127	1126	3	2	40.0	0.09	0.06
991Guscio fond.	653	1113	1128	669	3	2	40.0	0.09	0.06
992Guscio fond.	1113	1114	1129	1128	3	2	40.0	0.09	0.06
993Guscio fond.	1114	1115	1130	1129	3	2	40.0	0.09	0.06
994Guscio fond.	1115	1116	1131	1130	3	2	40.0	0.09	0.06
995Guscio fond.	1116	1117	1132	1131	3	2	40.0	0.09	0.06
996Guscio fond.	1117	1118	1133	1132	3	2	40.0	0.09	0.06
997Guscio fond.	1118	1119	1134	1133	3	2	40.0	0.09	0.06

998	Guscio fond.	1119	1120	1135	1134	3	2	40.0	0.09	0.06
999	Guscio fond.	1120	1121	1136	1135	3	2	40.0	0.09	0.06
1000	Guscio fond.	1121	1122	1137	1136	3	2	40.0	0.09	0.06
1001	Guscio fond.	1122	1123	1138	1137	3	2	40.0	0.09	0.06
1002	Guscio fond.	1123	1124	1139	1138	3	2	40.0	0.09	0.06
1003	Guscio fond.	1124	1125	1140	1139	3	2	40.0	0.09	0.06
1004	Guscio fond.	1125	1126	1141	1140	3	2	40.0	0.09	0.06
1005	Guscio fond.	1126	1127	1142	1141	3	2	40.0	0.09	0.06
1006	Guscio fond.	669	1128	1143	685	3	2	40.0	0.09	0.06
1007	Guscio fond.	1128	1129	1144	1143	3	2	40.0	0.09	0.06
1008	Guscio fond.	1129	1130	1145	1144	3	2	40.0	0.09	0.06
1009	Guscio fond.	1130	1131	1146	1145	3	2	40.0	0.09	0.06
1010	Guscio fond.	1131	1132	1147	1146	3	2	40.0	0.09	0.06
1011	Guscio fond.	1132	1133	1148	1147	3	2	40.0	0.09	0.06
1012	Guscio fond.	1133	1134	1149	1148	3	2	40.0	0.09	0.06
1013	Guscio fond.	1134	1135	1150	1149	3	2	40.0	0.09	0.06
1014	Guscio fond.	1135	1136	1151	1150	3	2	40.0	0.09	0.06
1015	Guscio fond.	1136	1137	1152	1151	3	2	40.0	0.09	0.06
1016	Guscio fond.	1137	1138	1153	1152	3	2	40.0	0.09	0.06
1017	Guscio fond.	1138	1139	1154	1153	3	2	40.0	0.09	0.06
1018	Guscio fond.	1139	1140	1155	1154	3	2	40.0	0.09	0.06
1019	Guscio fond.	1140	1141	1156	1155	3	2	40.0	0.09	0.06
1020	Guscio fond.	1141	1142	1157	1156	3	2	40.0	0.09	0.06
1021	Guscio fond.	685	1143	1158	701	3	2	40.0	0.09	0.06
1022	Guscio fond.	1143	1144	1159	1158	3	2	40.0	0.09	0.06
1023	Guscio fond.	1144	1145	1160	1159	3	2	40.0	0.09	0.06
1024	Guscio fond.	1145	1146	1161	1160	3	2	40.0	0.09	0.06
1025	Guscio fond.	1146	1147	1162	1161	3	2	40.0	0.09	0.06
1026	Guscio fond.	1147	1148	1163	1162	3	2	40.0	0.09	0.06
1027	Guscio fond.	1148	1149	1164	1163	3	2	40.0	0.09	0.06
1028	Guscio fond.	1149	1150	1165	1164	3	2	40.0	0.09	0.06
1029	Guscio fond.	1150	1151	1166	1165	3	2	40.0	0.09	0.06
1030	Guscio fond.	1151	1152	1167	1166	3	2	40.0	0.09	0.06
1031	Guscio fond.	1152	1153	1168	1167	3	2	40.0	0.09	0.06
1032	Guscio fond.	1153	1154	1169	1168	3	2	40.0	0.09	0.06
1033	Guscio fond.	1154	1155	1170	1169	3	2	40.0	0.09	0.06
1034	Guscio fond.	1155	1156	1171	1170	3	2	40.0	0.09	0.06
1035	Guscio fond.	1156	1157	1172	1171	3	2	40.0	0.09	0.06
1036	Guscio fond.	701	1158	1173	717	3	2	40.0	0.09	0.06
1037	Guscio fond.	1158	1159	1174	1173	3	2	40.0	0.09	0.06
1038	Guscio fond.	1159	1160	1175	1174	3	2	40.0	0.09	0.06
1039	Guscio fond.	1160	1161	1176	1175	3	2	40.0	0.09	0.06
1040	Guscio fond.	1161	1162	1177	1176	3	2	40.0	0.09	0.06
1041	Guscio fond.	1162	1163	1178	1177	3	2	40.0	0.09	0.06
1042	Guscio fond.	1163	1164	1179	1178	3	2	40.0	0.09	0.06
1043	Guscio fond.	1164	1165	1180	1179	3	2	40.0	0.09	0.06
1044	Guscio fond.	1165	1166	1181	1180	3	2	40.0	0.09	0.06
1045	Guscio fond.	1166	1167	1182	1181	3	2	40.0	0.09	0.06
1046	Guscio fond.	1167	1168	1183	1182	3	2	40.0	0.09	0.06
1047	Guscio fond.	1168	1169	1184	1183	3	2	40.0	0.09	0.06
1048	Guscio fond.	1169	1170	1185	1184	3	2	40.0	0.09	0.06
1049	Guscio fond.	1170	1171	1186	1185	3	2	40.0	0.09	0.06
1050	Guscio fond.	1171	1172	1187	1186	3	2	40.0	0.09	0.06
1051	Guscio fond.	717	1173	1188	733	3	2	40.0	0.09	0.06
1052	Guscio fond.	1173	1174	1189	1188	3	2	40.0	0.09	0.06
1053	Guscio fond.	1174	1175	1190	1189	3	2	40.0	0.09	0.06
1054	Guscio fond.	1175	1176	1191	1190	3	2	40.0	0.09	0.06
1055	Guscio fond.	1176	1177	1192	1191	3	2	40.0	0.09	0.06
1056	Guscio fond.	1177	1178	1193	1192	3	2	40.0	0.09	0.06
1057	Guscio fond.	1178	1179	1194	1193	3	2	40.0	0.09	0.06
1058	Guscio fond.	1179	1180	1195	1194	3	2	40.0	0.09	0.06
1059	Guscio fond.	1180	1181	1196	1195	3	2	40.0	0.09	0.06
1060	Guscio fond.	1181	1182	1197	1196	3	2	40.0	0.09	0.06
1061	Guscio fond.	1182	1183	1198	1197	3	2	40.0	0.09	0.06
1062	Guscio fond.	1183	1184	1199	1198	3	2	40.0	0.09	0.06
1063	Guscio fond.	1184	1185	1200	1199	3	2	40.0	0.09	0.06
1064	Guscio fond.	1185	1186	1201	1200	3	2	40.0	0.09	0.06
1065	Guscio fond.	1186	1187	1202	1201	3	2	40.0	0.09	0.06
1066	Guscio fond.	733	1188	1203	749	3	2	40.0	0.09	0.06
1067	Guscio fond.	1188	1189	1204	1203	3	2	40.0	0.09	0.06
1068	Guscio fond.	1189	1190	1205	1204	3	2	40.0	0.09	0.06
1069	Guscio fond.	1190	1191	1206	1205	3	2	40.0	0.09	0.06
1070	Guscio fond.	1191	1192	1207	1206	3	2	40.0	0.09	0.06
1071	Guscio fond.	1192	1193	1208	1207	3	2	40.0	0.09	0.06
1072	Guscio fond.	1193	1194	1209	1208	3	2	40.0	0.09	0.06
1073	Guscio fond.	1194	1195	1210	1209	3	2	40.0	0.09	0.06
1074	Guscio fond.	1195	1196	1211	1210	3	2	40.0	0.09	0.06

1075	Guscio fond.	1196	1197	1212	1211	3	2	40.0	0.09	0.06
1076	Guscio fond.	1197	1198	1213	1212	3	2	40.0	0.09	0.06
1077	Guscio fond.	1198	1199	1214	1213	3	2	40.0	0.09	0.06
1078	Guscio fond.	1199	1200	1215	1214	3	2	40.0	0.09	0.06
1079	Guscio fond.	1200	1201	1216	1215	3	2	40.0	0.09	0.06
1080	Guscio fond.	1201	1202	1217	1216	3	2	40.0	0.09	0.06
1081	Guscio fond.	749	1203	1218	765	3	3	40.0	0.09	0.06
1082	Guscio fond.	1203	1204	1219	1218	3	3	40.0	0.09	0.06
1083	Guscio fond.	1204	1205	1220	1219	3	3	40.0	0.09	0.06
1084	Guscio fond.	1205	1206	1221	1220	3	2	40.0	0.09	0.06
1085	Guscio fond.	1206	1207	1222	1221	3	2	40.0	0.09	0.06
1086	Guscio fond.	1207	1208	1223	1222	3	2	40.0	0.09	0.06
1087	Guscio fond.	1208	1209	1224	1223	3	2	40.0	0.09	0.06
1088	Guscio fond.	1209	1210	1225	1224	3	2	40.0	0.09	0.06
1089	Guscio fond.	1210	1211	1226	1225	3	2	40.0	0.09	0.06
1090	Guscio fond.	1211	1212	1227	1226	3	2	40.0	0.09	0.06
1091	Guscio fond.	1212	1213	1228	1227	3	2	40.0	0.09	0.06
1092	Guscio fond.	1213	1214	1229	1228	3	2	40.0	0.09	0.06
1093	Guscio fond.	1214	1215	1230	1229	3	2	40.0	0.09	0.06
1094	Guscio fond.	1215	1216	1231	1230	3	2	40.0	0.09	0.06
1095	Guscio fond.	1216	1217	1232	1231	3	2	40.0	0.09	0.06
1096	Guscio fond.	765	1218	1233	781	3	3	40.0	0.09	0.06
1097	Guscio fond.	1218	1219	1234	1233	3	3	40.0	0.09	0.06
1098	Guscio fond.	1219	1220	1235	1234	3	3	40.0	0.09	0.06
1099	Guscio fond.	1220	1221	1236	1235	3	2	40.0	0.09	0.06
1100	Guscio fond.	1221	1222	1237	1236	3	2	40.0	0.09	0.06
1101	Guscio fond.	1222	1223	1238	1237	3	2	40.0	0.09	0.06
1102	Guscio fond.	1223	1224	1239	1238	3	2	40.0	0.09	0.06
1103	Guscio fond.	1224	1225	1240	1239	3	2	40.0	0.09	0.06
1104	Guscio fond.	1225	1226	1241	1240	3	2	40.0	0.09	0.06
1105	Guscio fond.	1226	1227	1242	1241	3	2	40.0	0.09	0.06
1106	Guscio fond.	1227	1228	1243	1242	3	2	40.0	0.09	0.06
1107	Guscio fond.	1228	1229	1244	1243	3	2	40.0	0.09	0.06
1108	Guscio fond.	1229	1230	1245	1244	3	2	40.0	0.09	0.06
1109	Guscio fond.	1230	1231	1246	1245	3	2	40.0	0.09	0.06
1110	Guscio fond.	1231	1232	1247	1246	3	2	40.0	0.09	0.06
1111	Guscio fond.	781	1233	1248	797	3	3	40.0	0.09	0.06
1112	Guscio fond.	1233	1234	1249	1248	3	3	40.0	0.09	0.06
1113	Guscio fond.	1234	1235	1250	1249	3	3	40.0	0.09	0.06
1114	Guscio fond.	1235	1236	1251	1250	3	2	40.0	0.09	0.06
1115	Guscio fond.	1236	1237	1252	1251	3	2	40.0	0.09	0.06
1116	Guscio fond.	1237	1238	1253	1252	3	2	40.0	0.09	0.06
1117	Guscio fond.	1238	1239	1254	1253	3	2	40.0	0.09	0.06
1118	Guscio fond.	1239	1240	1255	1254	3	2	40.0	0.09	0.06
1119	Guscio fond.	1240	1241	1256	1255	3	2	40.0	0.09	0.06
1120	Guscio fond.	1241	1242	1257	1256	3	2	40.0	0.09	0.06
1121	Guscio fond.	1242	1243	1258	1257	3	2	40.0	0.09	0.06
1122	Guscio fond.	1243	1244	1259	1258	3	2	40.0	0.09	0.06
1123	Guscio fond.	1244	1245	1260	1259	3	2	40.0	0.09	0.06
1124	Guscio fond.	1245	1246	1261	1260	3	2	40.0	0.09	0.06
1125	Guscio fond.	1246	1247	1262	1261	3	2	40.0	0.09	0.06
1126	Guscio fond.	797	1248	1263	813	3	3	40.0	0.09	0.06
1127	Guscio fond.	1248	1249	1264	1263	3	3	40.0	0.09	0.06
1128	Guscio fond.	1249	1250	1265	1264	3	3	40.0	0.09	0.06
1129	Guscio fond.	1250	1251	1266	1265	3	2	40.0	0.09	0.06
1130	Guscio fond.	1251	1252	1267	1266	3	2	40.0	0.09	0.06
1131	Guscio fond.	1252	1253	1268	1267	3	2	40.0	0.09	0.06
1132	Guscio fond.	1253	1254	1269	1268	3	2	40.0	0.09	0.06
1133	Guscio fond.	1254	1255	1270	1269	3	2	40.0	0.09	0.06
1134	Guscio fond.	1255	1256	1271	1270	3	2	40.0	0.09	0.06
1135	Guscio fond.	1256	1257	1272	1271	3	2	40.0	0.09	0.06
1136	Guscio fond.	1257	1258	1273	1272	3	2	40.0	0.09	0.06
1137	Guscio fond.	1258	1259	1274	1273	3	2	40.0	0.09	0.06
1138	Guscio fond.	1259	1260	1275	1274	3	2	40.0	0.09	0.06
1139	Guscio fond.	1260	1261	1276	1275	3	2	40.0	0.09	0.06
1140	Guscio fond.	1261	1262	1277	1276	3	2	40.0	0.09	0.06
1141	Guscio fond.	813	1263	1278	829	3	3	40.0	0.09	0.06
1142	Guscio fond.	1263	1264	1279	1278	3	3	40.0	0.09	0.06
1143	Guscio fond.	1264	1265	1280	1279	3	3	40.0	0.09	0.06
1144	Guscio fond.	1265	1266	1281	1280	3	2	40.0	0.09	0.06
1145	Guscio fond.	1266	1267	1282	1281	3	2	40.0	0.09	0.06
1146	Guscio fond.	1267	1268	1283	1282	3	2	40.0	0.09	0.06
1147	Guscio fond.	1268	1269	1284	1283	3	2	40.0	0.09	0.06
1148	Guscio fond.	1269	1270	1285	1284	3	2	40.0	0.09	0.06
1149	Guscio fond.	1270	1271	1286	1285	3	2	40.0	0.09	0.06
1150	Guscio fond.	1271	1272	1287	1286	3	2	40.0	0.09	0.06
1151	Guscio fond.	1272	1273	1288	1287	3	2	40.0	0.09	0.06

1152	Guscio fond.	1273	1274	1289	1288	3	2	40.0	0.09	0.06
1153	Guscio fond.	1274	1275	1290	1289	3	2	40.0	0.09	0.06
1154	Guscio fond.	1275	1276	1291	1290	3	2	40.0	0.09	0.06
1155	Guscio fond.	1276	1277	1292	1291	3	2	40.0	0.09	0.06
1156	Guscio fond.	829	1278	1293	29	3	3	40.0	0.09	0.06
1157	Guscio fond.	1278	1279	1294	1293	3	3	40.0	0.09	0.06
1158	Guscio fond.	1279	1280	1295	1294	3	3	40.0	0.09	0.06
1159	Guscio fond.	1280	1281	1296	1295	3	2	40.0	0.09	0.06
1160	Guscio fond.	1281	1282	1297	1296	3	2	40.0	0.09	0.06
1161	Guscio fond.	1282	1283	1298	1297	3	2	40.0	0.09	0.06
1162	Guscio fond.	1283	1284	1299	1298	3	2	40.0	0.09	0.06
1163	Guscio fond.	1284	1285	1300	1299	3	2	40.0	0.09	0.06
1164	Guscio fond.	1285	1286	1301	1300	3	2	40.0	0.09	0.06
1165	Guscio fond.	1286	1287	1302	1301	3	2	40.0	0.09	0.06
1166	Guscio fond.	1287	1288	1303	1302	3	2	40.0	0.09	0.06
1167	Guscio fond.	1288	1289	1304	1303	3	2	40.0	0.09	0.06
1168	Guscio fond.	1289	1290	1305	1304	3	2	40.0	0.09	0.06
1169	Guscio fond.	1290	1291	1306	1305	3	2	40.0	0.09	0.06
1170	Guscio fond.	1291	1292	14	1306	3	2	40.0	0.09	0.06
1171	Guscio fond.	13	830	1307	1308	3	2	40.0	0.09	0.06
1172	Guscio fond.	830	831	1309	1307	3	2	40.0	0.09	0.06
1173	Guscio fond.	831	832	1310	1309	3	2	40.0	0.09	0.06
1174	Guscio fond.	832	833	1311	1310	3	2	40.0	0.09	0.06
1175	Guscio fond.	833	834	1312	1311	3	2	40.0	0.09	0.06
1176	Guscio fond.	834	835	1313	1312	3	2	40.0	0.09	0.06
1177	Guscio fond.	835	836	1314	1313	3	2	40.0	0.09	0.06
1178	Guscio fond.	836	837	1315	1314	3	2	40.0	0.09	0.06
1179	Guscio fond.	837	838	1316	1315	3	2	40.0	0.09	0.06
1180	Guscio fond.	838	839	1317	1316	3	2	40.0	0.09	0.06
1181	Guscio fond.	839	840	1318	1317	3	2	40.0	0.09	0.06
1182	Guscio fond.	840	841	1319	1318	3	2	40.0	0.09	0.06
1183	Guscio fond.	841	842	1320	1319	3	3	40.0	0.09	0.06
1184	Guscio fond.	842	843	1321	1320	3	3	40.0	0.09	0.06
1185	Guscio fond.	843	29	1322	1321	3	3	40.0	0.09	0.06
1186	Guscio fond.	1308	1307	1323	1324	3	2	40.0	0.09	0.06
1187	Guscio fond.	1307	1309	1325	1323	3	2	40.0	0.09	0.06
1188	Guscio fond.	1309	1310	1326	1325	3	2	40.0	0.09	0.06
1189	Guscio fond.	1310	1311	1327	1326	3	2	40.0	0.09	0.06
1190	Guscio fond.	1311	1312	1328	1327	3	2	40.0	0.09	0.06
1191	Guscio fond.	1312	1313	1329	1328	3	2	40.0	0.09	0.06
1192	Guscio fond.	1313	1314	1330	1329	3	2	40.0	0.09	0.06
1193	Guscio fond.	1314	1315	1331	1330	3	2	40.0	0.09	0.06
1194	Guscio fond.	1315	1316	1332	1331	3	2	40.0	0.09	0.06
1195	Guscio fond.	1316	1317	1333	1332	3	2	40.0	0.09	0.06
1196	Guscio fond.	1317	1318	1334	1333	3	2	40.0	0.09	0.06
1197	Guscio fond.	1318	1319	1335	1334	3	2	40.0	0.09	0.06
1198	Guscio fond.	1319	1320	1336	1335	3	3	40.0	0.09	0.06
1199	Guscio fond.	1320	1321	1337	1336	3	3	40.0	0.09	0.06
1200	Guscio fond.	1321	1322	1338	1337	3	3	40.0	0.09	0.06
1201	Guscio fond.	1324	1323	1339	1340	3	2	40.0	0.09	0.06
1202	Guscio fond.	1323	1325	1341	1339	3	2	40.0	0.09	0.06
1203	Guscio fond.	1325	1326	1342	1341	3	2	40.0	0.09	0.06
1204	Guscio fond.	1326	1327	1343	1342	3	2	40.0	0.09	0.06
1205	Guscio fond.	1327	1328	1344	1343	3	2	40.0	0.09	0.06
1206	Guscio fond.	1328	1329	1345	1344	3	2	40.0	0.09	0.06
1207	Guscio fond.	1329	1330	1346	1345	3	2	40.0	0.09	0.06
1208	Guscio fond.	1330	1331	1347	1346	3	2	40.0	0.09	0.06
1209	Guscio fond.	1331	1332	1348	1347	3	2	40.0	0.09	0.06
1210	Guscio fond.	1332	1333	1349	1348	3	2	40.0	0.09	0.06
1211	Guscio fond.	1333	1334	1350	1349	3	2	40.0	0.09	0.06
1212	Guscio fond.	1334	1335	1351	1350	3	2	40.0	0.09	0.06
1213	Guscio fond.	1335	1336	1352	1351	3	3	40.0	0.09	0.06
1214	Guscio fond.	1336	1337	1353	1352	3	3	40.0	0.09	0.06
1215	Guscio fond.	1337	1338	1354	1353	3	3	40.0	0.09	0.06
1216	Guscio fond.	1340	1339	1355	1356	3	2	40.0	0.09	0.06
1217	Guscio fond.	1339	1341	1357	1355	3	2	40.0	0.09	0.06
1218	Guscio fond.	1341	1342	1358	1357	3	2	40.0	0.09	0.06
1219	Guscio fond.	1342	1343	1359	1358	3	2	40.0	0.09	0.06
1220	Guscio fond.	1343	1344	1360	1359	3	2	40.0	0.09	0.06
1221	Guscio fond.	1344	1345	1361	1360	3	2	40.0	0.09	0.06
1222	Guscio fond.	1345	1346	1362	1361	3	2	40.0	0.09	0.06
1223	Guscio fond.	1346	1347	1363	1362	3	2	40.0	0.09	0.06
1224	Guscio fond.	1347	1348	1364	1363	3	2	40.0	0.09	0.06
1225	Guscio fond.	1348	1349	1365	1364	3	2	40.0	0.09	0.06
1226	Guscio fond.	1349	1350	1366	1365	3	2	40.0	0.09	0.06
1227	Guscio fond.	1350	1351	1367	1366	3	2	40.0	0.09	0.06
1228	Guscio fond.	1351	1352	1368	1367	3	3	40.0	0.09	0.06

1229	Guscio fond.	1352	1353	1369	1368	3	3	40.0	0.09	0.06
1230	Guscio fond.	1353	1354	1370	1369	3	3	40.0	0.09	0.06
1231	Guscio fond.	1356	1355	1371	1372	3	2	40.0	0.09	0.06
1232	Guscio fond.	1355	1357	1373	1371	3	2	40.0	0.09	0.06
1233	Guscio fond.	1357	1358	1374	1373	3	2	40.0	0.09	0.06
1234	Guscio fond.	1358	1359	1375	1374	3	2	40.0	0.09	0.06
1235	Guscio fond.	1359	1360	1376	1375	3	2	40.0	0.09	0.06
1236	Guscio fond.	1360	1361	1377	1376	3	2	40.0	0.09	0.06
1237	Guscio fond.	1361	1362	1378	1377	3	2	40.0	0.09	0.06
1238	Guscio fond.	1362	1363	1379	1378	3	2	40.0	0.09	0.06
1239	Guscio fond.	1363	1364	1380	1379	3	2	40.0	0.09	0.06
1240	Guscio fond.	1364	1365	1381	1380	3	2	40.0	0.09	0.06
1241	Guscio fond.	1365	1366	1382	1381	3	2	40.0	0.09	0.06
1242	Guscio fond.	1366	1367	1383	1382	3	2	40.0	0.09	0.06
1243	Guscio fond.	1367	1368	1384	1383	3	3	40.0	0.09	0.06
1244	Guscio fond.	1368	1369	1385	1384	3	3	40.0	0.09	0.06
1245	Guscio fond.	1369	1370	1386	1385	3	3	40.0	0.09	0.06
1246	Guscio fond.	1372	1371	1387	1388	3	2	40.0	0.09	0.06
1247	Guscio fond.	1371	1373	1389	1387	3	2	40.0	0.09	0.06
1248	Guscio fond.	1373	1374	1390	1389	3	2	40.0	0.09	0.06
1249	Guscio fond.	1374	1375	1391	1390	3	2	40.0	0.09	0.06
1250	Guscio fond.	1375	1376	1392	1391	3	2	40.0	0.09	0.06
1251	Guscio fond.	1376	1377	1393	1392	3	2	40.0	0.09	0.06
1252	Guscio fond.	1377	1378	1394	1393	3	2	40.0	0.09	0.06
1253	Guscio fond.	1378	1379	1395	1394	3	2	40.0	0.09	0.06
1254	Guscio fond.	1379	1380	1396	1395	3	2	40.0	0.09	0.06
1255	Guscio fond.	1380	1381	1397	1396	3	2	40.0	0.09	0.06
1256	Guscio fond.	1381	1382	1398	1397	3	2	40.0	0.09	0.06
1257	Guscio fond.	1382	1383	1399	1398	3	2	40.0	0.09	0.06
1258	Guscio fond.	1383	1384	1400	1399	3	3	40.0	0.09	0.06
1259	Guscio fond.	1384	1385	1401	1400	3	3	40.0	0.09	0.06
1260	Guscio fond.	1385	1386	1402	1401	3	3	40.0	0.09	0.06
1261	Guscio fond.	1388	1387	1403	1404	3	2	40.0	0.09	0.06
1262	Guscio fond.	1387	1389	1405	1403	3	2	40.0	0.09	0.06
1263	Guscio fond.	1389	1390	1406	1405	3	2	40.0	0.09	0.06
1264	Guscio fond.	1390	1391	1407	1406	3	2	40.0	0.09	0.06
1265	Guscio fond.	1391	1392	1408	1407	3	2	40.0	0.09	0.06
1266	Guscio fond.	1392	1393	1409	1408	3	2	40.0	0.09	0.06
1267	Guscio fond.	1393	1394	1410	1409	3	2	40.0	0.09	0.06
1268	Guscio fond.	1394	1395	1411	1410	3	2	40.0	0.09	0.06
1269	Guscio fond.	1395	1396	1412	1411	3	2	40.0	0.09	0.06
1270	Guscio fond.	1396	1397	1413	1412	3	2	40.0	0.09	0.06
1271	Guscio fond.	1397	1398	1414	1413	3	2	40.0	0.09	0.06
1272	Guscio fond.	1398	1399	1415	1414	3	2	40.0	0.09	0.06
1273	Guscio fond.	1399	1400	1416	1415	3	3	40.0	0.09	0.06
1274	Guscio fond.	1400	1401	1417	1416	3	3	40.0	0.09	0.06
1275	Guscio fond.	1401	1402	1418	1417	3	3	40.0	0.09	0.06
1276	Guscio fond.	1404	1403	1419	1420	3	2	40.0	0.09	0.06
1277	Guscio fond.	1403	1405	1421	1419	3	2	40.0	0.09	0.06
1278	Guscio fond.	1405	1406	1422	1421	3	2	40.0	0.09	0.06
1279	Guscio fond.	1406	1407	1423	1422	3	2	40.0	0.09	0.06
1280	Guscio fond.	1407	1408	1424	1423	3	2	40.0	0.09	0.06
1281	Guscio fond.	1408	1409	1425	1424	3	2	40.0	0.09	0.06
1282	Guscio fond.	1409	1410	1426	1425	3	2	40.0	0.09	0.06
1283	Guscio fond.	1410	1411	1427	1426	3	2	40.0	0.09	0.06
1284	Guscio fond.	1411	1412	1428	1427	3	2	40.0	0.09	0.06
1285	Guscio fond.	1412	1413	1429	1428	3	2	40.0	0.09	0.06
1286	Guscio fond.	1413	1414	1430	1429	3	2	40.0	0.09	0.06
1287	Guscio fond.	1414	1415	1431	1430	3	2	40.0	0.09	0.06
1288	Guscio fond.	1415	1416	1432	1431	3	2	40.0	0.09	0.06
1289	Guscio fond.	1416	1417	1433	1432	3	2	40.0	0.09	0.06
1290	Guscio fond.	1417	1418	1434	1433	3	2	40.0	0.09	0.06
1291	Guscio fond.	1420	1419	1435	1436	3	2	40.0	0.09	0.06
1292	Guscio fond.	1419	1421	1437	1435	3	2	40.0	0.09	0.06
1293	Guscio fond.	1421	1422	1438	1437	3	2	40.0	0.09	0.06
1294	Guscio fond.	1422	1423	1439	1438	3	2	40.0	0.09	0.06
1295	Guscio fond.	1423	1424	1440	1439	3	2	40.0	0.09	0.06
1296	Guscio fond.	1424	1425	1441	1440	3	2	40.0	0.09	0.06
1297	Guscio fond.	1425	1426	1442	1441	3	2	40.0	0.09	0.06
1298	Guscio fond.	1426	1427	1443	1442	3	2	40.0	0.09	0.06
1299	Guscio fond.	1427	1428	1444	1443	3	2	40.0	0.09	0.06
1300	Guscio fond.	1428	1429	1445	1444	3	2	40.0	0.09	0.06
1301	Guscio fond.	1429	1430	1446	1445	3	2	40.0	0.09	0.06
1302	Guscio fond.	1430	1431	1447	1446	3	2	40.0	0.09	0.06
1303	Guscio fond.	1431	1432	1448	1447	3	2	40.0	0.09	0.06
1304	Guscio fond.	1432	1433	1449	1448	3	2	40.0	0.09	0.06
1305	Guscio fond.	1433	1434	1450	1449	3	2	40.0	0.09	0.06

1306	Guscio fond.	1436	1435	1451	1452	3	2	40.0	0.09	0.06
1307	Guscio fond.	1435	1437	1453	1451	3	2	40.0	0.09	0.06
1308	Guscio fond.	1437	1438	1454	1453	3	2	40.0	0.09	0.06
1309	Guscio fond.	1438	1439	1455	1454	3	2	40.0	0.09	0.06
1310	Guscio fond.	1439	1440	1456	1455	3	2	40.0	0.09	0.06
1311	Guscio fond.	1440	1441	1457	1456	3	2	40.0	0.09	0.06
1312	Guscio fond.	1441	1442	1458	1457	3	2	40.0	0.09	0.06
1313	Guscio fond.	1442	1443	1459	1458	3	2	40.0	0.09	0.06
1314	Guscio fond.	1443	1444	1460	1459	3	2	40.0	0.09	0.06
1315	Guscio fond.	1444	1445	1461	1460	3	2	40.0	0.09	0.06
1316	Guscio fond.	1445	1446	1462	1461	3	2	40.0	0.09	0.06
1317	Guscio fond.	1446	1447	1463	1462	3	2	40.0	0.09	0.06
1318	Guscio fond.	1447	1448	1464	1463	3	2	40.0	0.09	0.06
1319	Guscio fond.	1448	1449	1465	1464	3	2	40.0	0.09	0.06
1320	Guscio fond.	1449	1450	1466	1465	3	2	40.0	0.09	0.06
1321	Guscio fond.	1452	1451	1467	1468	3	2	40.0	0.09	0.06
1322	Guscio fond.	1451	1453	1469	1467	3	2	40.0	0.09	0.06
1323	Guscio fond.	1453	1454	1470	1469	3	2	40.0	0.09	0.06
1324	Guscio fond.	1454	1455	1471	1470	3	2	40.0	0.09	0.06
1325	Guscio fond.	1455	1456	1472	1471	3	2	40.0	0.09	0.06
1326	Guscio fond.	1456	1457	1473	1472	3	2	40.0	0.09	0.06
1327	Guscio fond.	1457	1458	1474	1473	3	2	40.0	0.09	0.06
1328	Guscio fond.	1458	1459	1475	1474	3	2	40.0	0.09	0.06
1329	Guscio fond.	1459	1460	1476	1475	3	2	40.0	0.09	0.06
1330	Guscio fond.	1460	1461	1477	1476	3	2	40.0	0.09	0.06
1331	Guscio fond.	1461	1462	1478	1477	3	2	40.0	0.09	0.06
1332	Guscio fond.	1462	1463	1479	1478	3	2	40.0	0.09	0.06
1333	Guscio fond.	1463	1464	1480	1479	3	2	40.0	0.09	0.06
1334	Guscio fond.	1464	1465	1481	1480	3	2	40.0	0.09	0.06
1335	Guscio fond.	1465	1466	1482	1481	3	2	40.0	0.09	0.06
1336	Guscio fond.	1468	1467	1483	1484	3	2	40.0	0.09	0.06
1337	Guscio fond.	1467	1469	1485	1483	3	2	40.0	0.09	0.06
1338	Guscio fond.	1469	1470	1486	1485	3	2	40.0	0.09	0.06
1339	Guscio fond.	1470	1471	1487	1486	3	2	40.0	0.09	0.06
1340	Guscio fond.	1471	1472	1488	1487	3	2	40.0	0.09	0.06
1341	Guscio fond.	1472	1473	1489	1488	3	2	40.0	0.09	0.06
1342	Guscio fond.	1473	1474	1490	1489	3	2	40.0	0.09	0.06
1343	Guscio fond.	1474	1475	1491	1490	3	2	40.0	0.09	0.06
1344	Guscio fond.	1475	1476	1492	1491	3	2	40.0	0.09	0.06
1345	Guscio fond.	1476	1477	1493	1492	3	2	40.0	0.09	0.06
1346	Guscio fond.	1477	1478	1494	1493	3	2	40.0	0.09	0.06
1347	Guscio fond.	1478	1479	1495	1494	3	2	40.0	0.09	0.06
1348	Guscio fond.	1479	1480	1496	1495	3	2	40.0	0.09	0.06
1349	Guscio fond.	1480	1481	1497	1496	3	2	40.0	0.09	0.06
1350	Guscio fond.	1481	1482	1498	1497	3	2	40.0	0.09	0.06
1351	Guscio fond.	1484	1483	1499	1500	3	2	40.0	0.09	0.06
1352	Guscio fond.	1483	1485	1501	1499	3	2	40.0	0.09	0.06
1353	Guscio fond.	1485	1486	1502	1501	3	2	40.0	0.09	0.06
1354	Guscio fond.	1486	1487	1503	1502	3	2	40.0	0.09	0.06
1355	Guscio fond.	1487	1488	1504	1503	3	2	40.0	0.09	0.06
1356	Guscio fond.	1488	1489	1505	1504	3	2	40.0	0.09	0.06
1357	Guscio fond.	1489	1490	1506	1505	3	2	40.0	0.09	0.06
1358	Guscio fond.	1490	1491	1507	1506	3	2	40.0	0.09	0.06
1359	Guscio fond.	1491	1492	1508	1507	3	2	40.0	0.09	0.06
1360	Guscio fond.	1492	1493	1509	1508	3	2	40.0	0.09	0.06
1361	Guscio fond.	1493	1494	1510	1509	3	2	40.0	0.09	0.06
1362	Guscio fond.	1494	1495	1511	1510	3	2	40.0	0.09	0.06
1363	Guscio fond.	1495	1496	1512	1511	3	2	40.0	0.09	0.06
1364	Guscio fond.	1496	1497	1513	1512	3	2	40.0	0.09	0.06
1365	Guscio fond.	1497	1498	1514	1513	3	2	40.0	0.09	0.06
1366	Guscio fond.	1500	1499	1515	1516	3	2	40.0	0.09	0.06
1367	Guscio fond.	1499	1501	1517	1515	3	2	40.0	0.09	0.06
1368	Guscio fond.	1501	1502	1518	1517	3	2	40.0	0.09	0.06
1369	Guscio fond.	1502	1503	1519	1518	3	2	40.0	0.09	0.06
1370	Guscio fond.	1503	1504	1520	1519	3	2	40.0	0.09	0.06
1371	Guscio fond.	1504	1505	1521	1520	3	2	40.0	0.09	0.06
1372	Guscio fond.	1505	1506	1522	1521	3	2	40.0	0.09	0.06
1373	Guscio fond.	1506	1507	1523	1522	3	2	40.0	0.09	0.06
1374	Guscio fond.	1507	1508	1524	1523	3	2	40.0	0.09	0.06
1375	Guscio fond.	1508	1509	1525	1524	3	2	40.0	0.09	0.06
1376	Guscio fond.	1509	1510	1526	1525	3	2	40.0	0.09	0.06
1377	Guscio fond.	1510	1511	1527	1526	3	2	40.0	0.09	0.06
1378	Guscio fond.	1511	1512	1528	1527	3	2	40.0	0.09	0.06
1379	Guscio fond.	1512	1513	1529	1528	3	2	40.0	0.09	0.06
1380	Guscio fond.	1513	1514	1530	1529	3	2	40.0	0.09	0.06
1381	Guscio fond.	1516	1515	1531	1532	3	2	40.0	0.09	0.06
1382	Guscio fond.	1515	1517	1533	1531	3	2	40.0	0.09	0.06

1383	Guscio fond.	1517	1518	1534	1533	3	2	40.0	0.09	0.06
1384	Guscio fond.	1518	1519	1535	1534	3	2	40.0	0.09	0.06
1385	Guscio fond.	1519	1520	1536	1535	3	2	40.0	0.09	0.06
1386	Guscio fond.	1520	1521	1537	1536	3	2	40.0	0.09	0.06
1387	Guscio fond.	1521	1522	1538	1537	3	2	40.0	0.09	0.06
1388	Guscio fond.	1522	1523	1539	1538	3	2	40.0	0.09	0.06
1389	Guscio fond.	1523	1524	1540	1539	3	2	40.0	0.09	0.06
1390	Guscio fond.	1524	1525	1541	1540	3	2	40.0	0.09	0.06
1391	Guscio fond.	1525	1526	1542	1541	3	2	40.0	0.09	0.06
1392	Guscio fond.	1526	1527	1543	1542	3	2	40.0	0.09	0.06
1393	Guscio fond.	1527	1528	1544	1543	3	2	40.0	0.09	0.06
1394	Guscio fond.	1528	1529	1545	1544	3	2	40.0	0.09	0.06
1395	Guscio fond.	1529	1530	1546	1545	3	2	40.0	0.09	0.06
1396	Guscio fond.	1532	1531	1547	1548	3	2	40.0	0.09	0.06
1397	Guscio fond.	1531	1533	1549	1547	3	2	40.0	0.09	0.06
1398	Guscio fond.	1533	1534	1550	1549	3	2	40.0	0.09	0.06
1399	Guscio fond.	1534	1535	1551	1550	3	2	40.0	0.09	0.06
1400	Guscio fond.	1535	1536	1552	1551	3	2	40.0	0.09	0.06
1401	Guscio fond.	1536	1537	1553	1552	3	2	40.0	0.09	0.06
1402	Guscio fond.	1537	1538	1554	1553	3	2	40.0	0.09	0.06
1403	Guscio fond.	1538	1539	1555	1554	3	2	40.0	0.09	0.06
1404	Guscio fond.	1539	1540	1556	1555	3	2	40.0	0.09	0.06
1405	Guscio fond.	1540	1541	1557	1556	3	2	40.0	0.09	0.06
1406	Guscio fond.	1541	1542	1558	1557	3	2	40.0	0.09	0.06
1407	Guscio fond.	1542	1543	1559	1558	3	2	40.0	0.09	0.06
1408	Guscio fond.	1543	1544	1560	1559	3	2	40.0	0.09	0.06
1409	Guscio fond.	1544	1545	1561	1560	3	2	40.0	0.09	0.06
1410	Guscio fond.	1545	1546	1562	1561	3	2	40.0	0.09	0.06
1411	Guscio fond.	1548	1547	1563	1564	3	2	40.0	0.09	0.06
1412	Guscio fond.	1547	1549	1565	1563	3	2	40.0	0.09	0.06
1413	Guscio fond.	1549	1550	1566	1565	3	2	40.0	0.09	0.06
1414	Guscio fond.	1550	1551	1567	1566	3	2	40.0	0.09	0.06
1415	Guscio fond.	1551	1552	1568	1567	3	2	40.0	0.09	0.06
1416	Guscio fond.	1552	1553	1569	1568	3	2	40.0	0.09	0.06
1417	Guscio fond.	1553	1554	1570	1569	3	2	40.0	0.09	0.06
1418	Guscio fond.	1554	1555	1571	1570	3	2	40.0	0.09	0.06
1419	Guscio fond.	1555	1556	1572	1571	3	2	40.0	0.09	0.06
1420	Guscio fond.	1556	1557	1573	1572	3	2	40.0	0.09	0.06
1421	Guscio fond.	1557	1558	1574	1573	3	2	40.0	0.09	0.06
1422	Guscio fond.	1558	1559	1575	1574	3	2	40.0	0.09	0.06
1423	Guscio fond.	1559	1560	1576	1575	3	2	40.0	0.09	0.06
1424	Guscio fond.	1560	1561	1577	1576	3	2	40.0	0.09	0.06
1425	Guscio fond.	1561	1562	1578	1577	3	2	40.0	0.09	0.06
1426	Guscio fond.	1564	1563	1579	1580	3	2	40.0	0.09	0.06
1427	Guscio fond.	1563	1565	1581	1579	3	2	40.0	0.09	0.06
1428	Guscio fond.	1565	1566	1582	1581	3	2	40.0	0.09	0.06
1429	Guscio fond.	1566	1567	1583	1582	3	2	40.0	0.09	0.06
1430	Guscio fond.	1567	1568	1584	1583	3	2	40.0	0.09	0.06
1431	Guscio fond.	1568	1569	1585	1584	3	2	40.0	0.09	0.06
1432	Guscio fond.	1569	1570	1586	1585	3	2	40.0	0.09	0.06
1433	Guscio fond.	1570	1571	1587	1586	3	2	40.0	0.09	0.06
1434	Guscio fond.	1571	1572	1588	1587	3	2	40.0	0.09	0.06
1435	Guscio fond.	1572	1573	1589	1588	3	2	40.0	0.09	0.06
1436	Guscio fond.	1573	1574	1590	1589	3	2	40.0	0.09	0.06
1437	Guscio fond.	1574	1575	1591	1590	3	2	40.0	0.09	0.06
1438	Guscio fond.	1575	1576	1592	1591	3	2	40.0	0.09	0.06
1439	Guscio fond.	1576	1577	1593	1592	3	2	40.0	0.09	0.06
1440	Guscio fond.	1577	1578	1594	1593	3	2	40.0	0.09	0.06
1441	Guscio fond.	1580	1579	1595	1596	3	2	40.0	0.09	0.06
1442	Guscio fond.	1579	1581	1597	1595	3	2	40.0	0.09	0.06
1443	Guscio fond.	1581	1582	1598	1597	3	2	40.0	0.09	0.06
1444	Guscio fond.	1582	1583	1599	1598	3	2	40.0	0.09	0.06
1445	Guscio fond.	1583	1584	1600	1599	3	2	40.0	0.09	0.06
1446	Guscio fond.	1584	1585	1601	1600	3	2	40.0	0.09	0.06
1447	Guscio fond.	1585	1586	1602	1601	3	2	40.0	0.09	0.06
1448	Guscio fond.	1586	1587	1603	1602	3	2	40.0	0.09	0.06
1449	Guscio fond.	1587	1588	1604	1603	3	2	40.0	0.09	0.06
1450	Guscio fond.	1588	1589	1605	1604	3	2	40.0	0.09	0.06
1451	Guscio fond.	1589	1590	1606	1605	3	2	40.0	0.09	0.06
1452	Guscio fond.	1590	1591	1607	1606	3	2	40.0	0.09	0.06
1453	Guscio fond.	1591	1592	1608	1607	3	2	40.0	0.09	0.06
1454	Guscio fond.	1592	1593	1609	1608	3	2	40.0	0.09	0.06
1455	Guscio fond.	1593	1594	1610	1609	3	2	40.0	0.09	0.06
1456	Guscio fond.	1596	1595	1611	1612	3	2	40.0	0.09	0.06
1457	Guscio fond.	1595	1597	1613	1611	3	2	40.0	0.09	0.06
1458	Guscio fond.	1597	1598	1614	1613	3	2	40.0	0.09	0.06
1459	Guscio fond.	1598	1599	1615	1614	3	2	40.0	0.09	0.06

1460	Guscio fond.	1599	1600	1616	1615	3	2	40.0	0.09	0.06
1461	Guscio fond.	1600	1601	1617	1616	3	2	40.0	0.09	0.06
1462	Guscio fond.	1601	1602	1618	1617	3	2	40.0	0.09	0.06
1463	Guscio fond.	1602	1603	1619	1618	3	2	40.0	0.09	0.06
1464	Guscio fond.	1603	1604	1620	1619	3	2	40.0	0.09	0.06
1465	Guscio fond.	1604	1605	1621	1620	3	2	40.0	0.09	0.06
1466	Guscio fond.	1605	1606	1622	1621	3	2	40.0	0.09	0.06
1467	Guscio fond.	1606	1607	1623	1622	3	2	40.0	0.09	0.06
1468	Guscio fond.	1607	1608	1624	1623	3	2	40.0	0.09	0.06
1469	Guscio fond.	1608	1609	1625	1624	3	2	40.0	0.09	0.06
1470	Guscio fond.	1609	1610	1626	1625	3	2	40.0	0.09	0.06
1471	Guscio fond.	1612	1611	1627	1628	3	2	40.0	0.09	0.06
1472	Guscio fond.	1611	1613	1629	1627	3	2	40.0	0.09	0.06
1473	Guscio fond.	1613	1614	1630	1629	3	2	40.0	0.09	0.06
1474	Guscio fond.	1614	1615	1631	1630	3	2	40.0	0.09	0.06
1475	Guscio fond.	1615	1616	1632	1631	3	2	40.0	0.09	0.06
1476	Guscio fond.	1616	1617	1633	1632	3	2	40.0	0.09	0.06
1477	Guscio fond.	1617	1618	1634	1633	3	2	40.0	0.09	0.06
1478	Guscio fond.	1618	1619	1635	1634	3	2	40.0	0.09	0.06
1479	Guscio fond.	1619	1620	1636	1635	3	2	40.0	0.09	0.06
1480	Guscio fond.	1620	1621	1637	1636	3	2	40.0	0.09	0.06
1481	Guscio fond.	1621	1622	1638	1637	3	2	40.0	0.09	0.06
1482	Guscio fond.	1622	1623	1639	1638	3	2	40.0	0.09	0.06
1483	Guscio fond.	1623	1624	1640	1639	3	2	40.0	0.09	0.06
1484	Guscio fond.	1624	1625	1641	1640	3	2	40.0	0.09	0.06
1485	Guscio fond.	1625	1626	1642	1641	3	2	40.0	0.09	0.06
1486	Guscio fond.	1628	1627	1643	1644	3	2	40.0	0.09	0.06
1487	Guscio fond.	1627	1629	1645	1643	3	2	40.0	0.09	0.06
1488	Guscio fond.	1629	1630	1646	1645	3	2	40.0	0.09	0.06
1489	Guscio fond.	1630	1631	1647	1646	3	2	40.0	0.09	0.06
1490	Guscio fond.	1631	1632	1648	1647	3	2	40.0	0.09	0.06
1491	Guscio fond.	1632	1633	1649	1648	3	2	40.0	0.09	0.06
1492	Guscio fond.	1633	1634	1650	1649	3	2	40.0	0.09	0.06
1493	Guscio fond.	1634	1635	1651	1650	3	2	40.0	0.09	0.06
1494	Guscio fond.	1635	1636	1652	1651	3	2	40.0	0.09	0.06
1495	Guscio fond.	1636	1637	1653	1652	3	2	40.0	0.09	0.06
1496	Guscio fond.	1637	1638	1654	1653	3	2	40.0	0.09	0.06
1497	Guscio fond.	1638	1639	1655	1654	3	2	40.0	0.09	0.06
1498	Guscio fond.	1639	1640	1656	1655	3	2	40.0	0.09	0.06
1499	Guscio fond.	1640	1641	1657	1656	3	2	40.0	0.09	0.06
1500	Guscio fond.	1641	1642	1658	1657	3	2	40.0	0.09	0.06
1501	Guscio fond.	1644	1643	1659	1660	3	2	40.0	0.09	0.06
1502	Guscio fond.	1643	1645	1661	1659	3	2	40.0	0.09	0.06
1503	Guscio fond.	1645	1646	1662	1661	3	2	40.0	0.09	0.06
1504	Guscio fond.	1646	1647	1663	1662	3	2	40.0	0.09	0.06
1505	Guscio fond.	1647	1648	1664	1663	3	2	40.0	0.09	0.06
1506	Guscio fond.	1648	1649	1665	1664	3	2	40.0	0.09	0.06
1507	Guscio fond.	1649	1650	1666	1665	3	2	40.0	0.09	0.06
1508	Guscio fond.	1650	1651	1667	1666	3	2	40.0	0.09	0.06
1509	Guscio fond.	1651	1652	1668	1667	3	2	40.0	0.09	0.06
1510	Guscio fond.	1652	1653	1669	1668	3	2	40.0	0.09	0.06
1511	Guscio fond.	1653	1654	1670	1669	3	2	40.0	0.09	0.06
1512	Guscio fond.	1654	1655	1671	1670	3	2	40.0	0.09	0.06
1513	Guscio fond.	1655	1656	1672	1671	3	2	40.0	0.09	0.06
1514	Guscio fond.	1656	1657	1673	1672	3	2	40.0	0.09	0.06
1515	Guscio fond.	1657	1658	1674	1673	3	2	40.0	0.09	0.06
1516	Guscio fond.	1660	1659	1675	1676	3	2	40.0	0.09	0.06
1517	Guscio fond.	1659	1661	1677	1675	3	2	40.0	0.09	0.06
1518	Guscio fond.	1661	1662	1678	1677	3	2	40.0	0.09	0.06
1519	Guscio fond.	1662	1663	1679	1678	3	2	40.0	0.09	0.06
1520	Guscio fond.	1663	1664	1680	1679	3	2	40.0	0.09	0.06
1521	Guscio fond.	1664	1665	1681	1680	3	2	40.0	0.09	0.06
1522	Guscio fond.	1665	1666	1682	1681	3	2	40.0	0.09	0.06
1523	Guscio fond.	1666	1667	1683	1682	3	2	40.0	0.09	0.06
1524	Guscio fond.	1667	1668	1684	1683	3	2	40.0	0.09	0.06
1525	Guscio fond.	1668	1669	1685	1684	3	2	40.0	0.09	0.06
1526	Guscio fond.	1669	1670	1686	1685	3	2	40.0	0.09	0.06
1527	Guscio fond.	1670	1671	1687	1686	3	2	40.0	0.09	0.06
1528	Guscio fond.	1671	1672	1688	1687	3	2	40.0	0.09	0.06
1529	Guscio fond.	1672	1673	1689	1688	3	2	40.0	0.09	0.06
1530	Guscio fond.	1673	1674	1690	1689	3	2	40.0	0.09	0.06
1531	Guscio fond.	1676	1675	1691	1692	3	2	40.0	0.09	0.06
1532	Guscio fond.	1675	1677	1693	1691	3	2	40.0	0.09	0.06
1533	Guscio fond.	1677	1678	1694	1693	3	2	40.0	0.09	0.06
1534	Guscio fond.	1678	1679	1695	1694	3	2	40.0	0.09	0.06
1535	Guscio fond.	1679	1680	1696	1695	3	2	40.0	0.09	0.06
1536	Guscio fond.	1680	1681	1697	1696	3	2	40.0	0.09	0.06

1537	Guscio fond.	1681	1682	1698	1697	3	2	40.0	0.09	0.06
1538	Guscio fond.	1682	1683	1699	1698	3	2	40.0	0.09	0.06
1539	Guscio fond.	1683	1684	1700	1699	3	2	40.0	0.09	0.06
1540	Guscio fond.	1684	1685	1701	1700	3	2	40.0	0.09	0.06
1541	Guscio fond.	1685	1686	1702	1701	3	2	40.0	0.09	0.06
1542	Guscio fond.	1686	1687	1703	1702	3	2	40.0	0.09	0.06
1543	Guscio fond.	1687	1688	1704	1703	3	2	40.0	0.09	0.06
1544	Guscio fond.	1688	1689	1705	1704	3	2	40.0	0.09	0.06
1545	Guscio fond.	1689	1690	1706	1705	3	2	40.0	0.09	0.06
1546	Guscio fond.	1692	1691	1707	1708	3	2	40.0	0.09	0.06
1547	Guscio fond.	1691	1693	1709	1707	3	2	40.0	0.09	0.06
1548	Guscio fond.	1693	1694	1710	1709	3	2	40.0	0.09	0.06
1549	Guscio fond.	1694	1695	1711	1710	3	2	40.0	0.09	0.06
1550	Guscio fond.	1695	1696	1712	1711	3	2	40.0	0.09	0.06
1551	Guscio fond.	1696	1697	1713	1712	3	2	40.0	0.09	0.06
1552	Guscio fond.	1697	1698	1714	1713	3	2	40.0	0.09	0.06
1553	Guscio fond.	1698	1699	1715	1714	3	2	40.0	0.09	0.06
1554	Guscio fond.	1699	1700	1716	1715	3	2	40.0	0.09	0.06
1555	Guscio fond.	1700	1701	1717	1716	3	2	40.0	0.09	0.06
1556	Guscio fond.	1701	1702	1718	1717	3	2	40.0	0.09	0.06
1557	Guscio fond.	1702	1703	1719	1718	3	2	40.0	0.09	0.06
1558	Guscio fond.	1703	1704	1720	1719	3	2	40.0	0.09	0.06
1559	Guscio fond.	1704	1705	1721	1720	3	2	40.0	0.09	0.06
1560	Guscio fond.	1705	1706	1722	1721	3	2	40.0	0.09	0.06
1561	Guscio fond.	1708	1707	1723	1724	3	2	40.0	0.09	0.06
1562	Guscio fond.	1707	1709	1725	1723	3	2	40.0	0.09	0.06
1563	Guscio fond.	1709	1710	1726	1725	3	2	40.0	0.09	0.06
1564	Guscio fond.	1710	1711	1727	1726	3	2	40.0	0.09	0.06
1565	Guscio fond.	1711	1712	1728	1727	3	2	40.0	0.09	0.06
1566	Guscio fond.	1712	1713	1729	1728	3	2	40.0	0.09	0.06
1567	Guscio fond.	1713	1714	1730	1729	3	2	40.0	0.09	0.06
1568	Guscio fond.	1714	1715	1731	1730	3	2	40.0	0.09	0.06
1569	Guscio fond.	1715	1716	1732	1731	3	2	40.0	0.09	0.06
1570	Guscio fond.	1716	1717	1733	1732	3	2	40.0	0.09	0.06
1571	Guscio fond.	1717	1718	1734	1733	3	2	40.0	0.09	0.06
1572	Guscio fond.	1718	1719	1735	1734	3	2	40.0	0.09	0.06
1573	Guscio fond.	1719	1720	1736	1735	3	2	40.0	0.09	0.06
1574	Guscio fond.	1720	1721	1737	1736	3	2	40.0	0.09	0.06
1575	Guscio fond.	1721	1722	1738	1737	3	2	40.0	0.09	0.06
1576	Guscio fond.	1724	1723	1739	1740	3	2	40.0	0.09	0.06
1577	Guscio fond.	1723	1725	1741	1739	3	2	40.0	0.09	0.06
1578	Guscio fond.	1725	1726	1742	1741	3	2	40.0	0.09	0.06
1579	Guscio fond.	1726	1727	1743	1742	3	2	40.0	0.09	0.06
1580	Guscio fond.	1727	1728	1744	1743	3	2	40.0	0.09	0.06
1581	Guscio fond.	1728	1729	1745	1744	3	2	40.0	0.09	0.06
1582	Guscio fond.	1729	1730	1746	1745	3	2	40.0	0.09	0.06
1583	Guscio fond.	1730	1731	1747	1746	3	2	40.0	0.09	0.06
1584	Guscio fond.	1731	1732	1748	1747	3	2	40.0	0.09	0.06
1585	Guscio fond.	1732	1733	1749	1748	3	2	40.0	0.09	0.06
1586	Guscio fond.	1733	1734	1750	1749	3	2	40.0	0.09	0.06
1587	Guscio fond.	1734	1735	1751	1750	3	2	40.0	0.09	0.06
1588	Guscio fond.	1735	1736	1752	1751	3	2	40.0	0.09	0.06
1589	Guscio fond.	1736	1737	1753	1752	3	2	40.0	0.09	0.06
1590	Guscio fond.	1737	1738	1754	1753	3	2	40.0	0.09	0.06
1591	Guscio fond.	1740	1739	1755	1756	3	2	40.0	0.09	0.06
1592	Guscio fond.	1739	1741	1757	1755	3	2	40.0	0.09	0.06
1593	Guscio fond.	1741	1742	1758	1757	3	2	40.0	0.09	0.06
1594	Guscio fond.	1742	1743	1759	1758	3	2	40.0	0.09	0.06
1595	Guscio fond.	1743	1744	1760	1759	3	2	40.0	0.09	0.06
1596	Guscio fond.	1744	1745	1761	1760	3	2	40.0	0.09	0.06
1597	Guscio fond.	1745	1746	1762	1761	3	2	40.0	0.09	0.06
1598	Guscio fond.	1746	1747	1763	1762	3	2	40.0	0.09	0.06
1599	Guscio fond.	1747	1748	1764	1763	3	2	40.0	0.09	0.06
1600	Guscio fond.	1748	1749	1765	1764	3	2	40.0	0.09	0.06
1601	Guscio fond.	1749	1750	1766	1765	3	2	40.0	0.09	0.06
1602	Guscio fond.	1750	1751	1767	1766	3	2	40.0	0.09	0.06
1603	Guscio fond.	1751	1752	1768	1767	3	2	40.0	0.09	0.06
1604	Guscio fond.	1752	1753	1769	1768	3	2	40.0	0.09	0.06
1605	Guscio fond.	1753	1754	1770	1769	3	2	40.0	0.09	0.06
1606	Guscio fond.	1756	1755	1771	15	3	2	40.0	0.09	0.06
1607	Guscio fond.	1755	1757	1772	1771	3	2	40.0	0.09	0.06
1608	Guscio fond.	1757	1758	1773	1772	3	2	40.0	0.09	0.06
1609	Guscio fond.	1758	1759	1774	1773	3	2	40.0	0.09	0.06
1610	Guscio fond.	1759	1760	1775	1774	3	2	40.0	0.09	0.06
1611	Guscio fond.	1760	1761	1776	1775	3	2	40.0	0.09	0.06
1612	Guscio fond.	1761	1762	1777	1776	3	2	40.0	0.09	0.06
1613	Guscio fond.	1762	1763	1778	1777	3	2	40.0	0.09	0.06

1614	Guscio fond.	1763	1764	1779	1778	3	2	40.0	0.09	0.06
1615	Guscio fond.	1764	1765	1780	1779	3	2	40.0	0.09	0.06
1616	Guscio fond.	1765	1766	1781	1780	3	2	40.0	0.09	0.06
1617	Guscio fond.	1766	1767	1782	1781	3	2	40.0	0.09	0.06
1618	Guscio fond.	1767	1768	1783	1782	3	2	40.0	0.09	0.06
1619	Guscio fond.	1768	1769	1784	1783	3	2	40.0	0.09	0.06
1620	Guscio fond.	1769	1770	16	1784	3	2	40.0	0.09	0.06
1621	Guscio fond.	29	1293	1785	1322	3	3	40.0	0.09	0.06
1622	Guscio fond.	1293	1294	1786	1785	3	3	40.0	0.09	0.06
1623	Guscio fond.	1294	1295	1787	1786	3	3	40.0	0.09	0.06
1624	Guscio fond.	1295	1296	1788	1787	3	2	40.0	0.09	0.06
1625	Guscio fond.	1296	1297	1789	1788	3	2	40.0	0.09	0.06
1626	Guscio fond.	1297	1298	1790	1789	3	2	40.0	0.09	0.06
1627	Guscio fond.	1298	1299	1791	1790	3	2	40.0	0.09	0.06
1628	Guscio fond.	1299	1300	1792	1791	3	2	40.0	0.09	0.06
1629	Guscio fond.	1300	1301	1793	1792	3	2	40.0	0.09	0.06
1630	Guscio fond.	1301	1302	1794	1793	3	2	40.0	0.09	0.06
1631	Guscio fond.	1302	1303	1795	1794	3	2	40.0	0.09	0.06
1632	Guscio fond.	1303	1304	1796	1795	3	2	40.0	0.09	0.06
1633	Guscio fond.	1304	1305	1797	1796	3	2	40.0	0.09	0.06
1634	Guscio fond.	1305	1306	1798	1797	3	2	40.0	0.09	0.06
1635	Guscio fond.	1306	14	1799	1798	3	2	40.0	0.09	0.06
1636	Guscio fond.	1322	1785	1800	1338	3	3	40.0	0.09	0.06
1637	Guscio fond.	1785	1786	1801	1800	3	3	40.0	0.09	0.06
1638	Guscio fond.	1786	1787	1802	1801	3	3	40.0	0.09	0.06
1639	Guscio fond.	1787	1788	1803	1802	3	2	40.0	0.09	0.06
1640	Guscio fond.	1788	1789	1804	1803	3	2	40.0	0.09	0.06
1641	Guscio fond.	1789	1790	1805	1804	3	2	40.0	0.09	0.06
1642	Guscio fond.	1790	1791	1806	1805	3	2	40.0	0.09	0.06
1643	Guscio fond.	1791	1792	1807	1806	3	2	40.0	0.09	0.06
1644	Guscio fond.	1792	1793	1808	1807	3	2	40.0	0.09	0.06
1645	Guscio fond.	1793	1794	1809	1808	3	2	40.0	0.09	0.06
1646	Guscio fond.	1794	1795	1810	1809	3	2	40.0	0.09	0.06
1647	Guscio fond.	1795	1796	1811	1810	3	2	40.0	0.09	0.06
1648	Guscio fond.	1796	1797	1812	1811	3	2	40.0	0.09	0.06
1649	Guscio fond.	1797	1798	1813	1812	3	2	40.0	0.09	0.06
1650	Guscio fond.	1798	1799	1814	1813	3	2	40.0	0.09	0.06
1651	Guscio fond.	1338	1800	1815	1354	3	3	40.0	0.09	0.06
1652	Guscio fond.	1800	1801	1816	1815	3	3	40.0	0.09	0.06
1653	Guscio fond.	1801	1802	1817	1816	3	3	40.0	0.09	0.06
1654	Guscio fond.	1802	1803	1818	1817	3	2	40.0	0.09	0.06
1655	Guscio fond.	1803	1804	1819	1818	3	2	40.0	0.09	0.06
1656	Guscio fond.	1804	1805	1820	1819	3	2	40.0	0.09	0.06
1657	Guscio fond.	1805	1806	1821	1820	3	2	40.0	0.09	0.06
1658	Guscio fond.	1806	1807	1822	1821	3	2	40.0	0.09	0.06
1659	Guscio fond.	1807	1808	1823	1822	3	2	40.0	0.09	0.06
1660	Guscio fond.	1808	1809	1824	1823	3	2	40.0	0.09	0.06
1661	Guscio fond.	1809	1810	1825	1824	3	2	40.0	0.09	0.06
1662	Guscio fond.	1810	1811	1826	1825	3	2	40.0	0.09	0.06
1663	Guscio fond.	1811	1812	1827	1826	3	2	40.0	0.09	0.06
1664	Guscio fond.	1812	1813	1828	1827	3	2	40.0	0.09	0.06
1665	Guscio fond.	1813	1814	1829	1828	3	2	40.0	0.09	0.06
1666	Guscio fond.	1354	1815	1830	1370	3	3	40.0	0.09	0.06
1667	Guscio fond.	1815	1816	1831	1830	3	3	40.0	0.09	0.06
1668	Guscio fond.	1816	1817	1832	1831	3	3	40.0	0.09	0.06
1669	Guscio fond.	1817	1818	1833	1832	3	2	40.0	0.09	0.06
1670	Guscio fond.	1818	1819	1834	1833	3	2	40.0	0.09	0.06
1671	Guscio fond.	1819	1820	1835	1834	3	2	40.0	0.09	0.06
1672	Guscio fond.	1820	1821	1836	1835	3	2	40.0	0.09	0.06
1673	Guscio fond.	1821	1822	1837	1836	3	2	40.0	0.09	0.06
1674	Guscio fond.	1822	1823	1838	1837	3	2	40.0	0.09	0.06
1675	Guscio fond.	1823	1824	1839	1838	3	2	40.0	0.09	0.06
1676	Guscio fond.	1824	1825	1840	1839	3	2	40.0	0.09	0.06
1677	Guscio fond.	1825	1826	1841	1840	3	2	40.0	0.09	0.06
1678	Guscio fond.	1826	1827	1842	1841	3	2	40.0	0.09	0.06
1679	Guscio fond.	1827	1828	1843	1842	3	2	40.0	0.09	0.06
1680	Guscio fond.	1828	1829	1844	1843	3	2	40.0	0.09	0.06
1681	Guscio fond.	1370	1830	1845	1386	3	3	40.0	0.09	0.06
1682	Guscio fond.	1830	1831	1846	1845	3	3	40.0	0.09	0.06
1683	Guscio fond.	1831	1832	1847	1846	3	3	40.0	0.09	0.06
1684	Guscio fond.	1832	1833	1848	1847	3	2	40.0	0.09	0.06
1685	Guscio fond.	1833	1834	1849	1848	3	2	40.0	0.09	0.06
1686	Guscio fond.	1834	1835	1850	1849	3	2	40.0	0.09	0.06
1687	Guscio fond.	1835	1836	1851	1850	3	2	40.0	0.09	0.06
1688	Guscio fond.	1836	1837	1852	1851	3	2	40.0	0.09	0.06
1689	Guscio fond.	1837	1838	1853	1852	3	2	40.0	0.09	0.06
1690	Guscio fond.	1838	1839	1854	1853	3	2	40.0	0.09	0.06

1691	Guscio fond.	1839	1840	1855	1854	3	2	40.0	0.09	0.06
1692	Guscio fond.	1840	1841	1856	1855	3	2	40.0	0.09	0.06
1693	Guscio fond.	1841	1842	1857	1856	3	2	40.0	0.09	0.06
1694	Guscio fond.	1842	1843	1858	1857	3	2	40.0	0.09	0.06
1695	Guscio fond.	1843	1844	1859	1858	3	2	40.0	0.09	0.06
1696	Guscio fond.	1386	1845	1860	1402	3	3	40.0	0.09	0.06
1697	Guscio fond.	1845	1846	1861	1860	3	3	40.0	0.09	0.06
1698	Guscio fond.	1846	1847	1862	1861	3	3	40.0	0.09	0.06
1699	Guscio fond.	1847	1848	1863	1862	3	2	40.0	0.09	0.06
1700	Guscio fond.	1848	1849	1864	1863	3	2	40.0	0.09	0.06
1701	Guscio fond.	1849	1850	1865	1864	3	2	40.0	0.09	0.06
1702	Guscio fond.	1850	1851	1866	1865	3	2	40.0	0.09	0.06
1703	Guscio fond.	1851	1852	1867	1866	3	2	40.0	0.09	0.06
1704	Guscio fond.	1852	1853	1868	1867	3	2	40.0	0.09	0.06
1705	Guscio fond.	1853	1854	1869	1868	3	2	40.0	0.09	0.06
1706	Guscio fond.	1854	1855	1870	1869	3	2	40.0	0.09	0.06
1707	Guscio fond.	1855	1856	1871	1870	3	2	40.0	0.09	0.06
1708	Guscio fond.	1856	1857	1872	1871	3	2	40.0	0.09	0.06
1709	Guscio fond.	1857	1858	1873	1872	3	2	40.0	0.09	0.06
1710	Guscio fond.	1858	1859	1874	1873	3	2	40.0	0.09	0.06
1711	Guscio fond.	1402	1860	1875	1418	3	3	40.0	0.09	0.06
1712	Guscio fond.	1860	1861	1876	1875	3	3	40.0	0.09	0.06
1713	Guscio fond.	1861	1862	1877	1876	3	3	40.0	0.09	0.06
1714	Guscio fond.	1862	1863	1878	1877	3	2	40.0	0.09	0.06
1715	Guscio fond.	1863	1864	1879	1878	3	2	40.0	0.09	0.06
1716	Guscio fond.	1864	1865	1880	1879	3	2	40.0	0.09	0.06
1717	Guscio fond.	1865	1866	1881	1880	3	2	40.0	0.09	0.06
1718	Guscio fond.	1866	1867	1882	1881	3	2	40.0	0.09	0.06
1719	Guscio fond.	1867	1868	1883	1882	3	2	40.0	0.09	0.06
1720	Guscio fond.	1868	1869	1884	1883	3	2	40.0	0.09	0.06
1721	Guscio fond.	1869	1870	1885	1884	3	2	40.0	0.09	0.06
1722	Guscio fond.	1870	1871	1886	1885	3	2	40.0	0.09	0.06
1723	Guscio fond.	1871	1872	1887	1886	3	2	40.0	0.09	0.06
1724	Guscio fond.	1872	1873	1888	1887	3	2	40.0	0.09	0.06
1725	Guscio fond.	1873	1874	1889	1888	3	2	40.0	0.09	0.06
1726	Guscio fond.	1418	1875	1890	1434	3	2	40.0	0.09	0.06
1727	Guscio fond.	1875	1876	1891	1890	3	2	40.0	0.09	0.06
1728	Guscio fond.	1876	1877	1892	1891	3	2	40.0	0.09	0.06
1729	Guscio fond.	1877	1878	1893	1892	3	2	40.0	0.09	0.06
1730	Guscio fond.	1878	1879	1894	1893	3	2	40.0	0.09	0.06
1731	Guscio fond.	1879	1880	1895	1894	3	2	40.0	0.09	0.06
1732	Guscio fond.	1880	1881	1896	1895	3	2	40.0	0.09	0.06
1733	Guscio fond.	1881	1882	1897	1896	3	2	40.0	0.09	0.06
1734	Guscio fond.	1882	1883	1898	1897	3	2	40.0	0.09	0.06
1735	Guscio fond.	1883	1884	1899	1898	3	2	40.0	0.09	0.06
1736	Guscio fond.	1884	1885	1900	1899	3	2	40.0	0.09	0.06
1737	Guscio fond.	1885	1886	1901	1900	3	2	40.0	0.09	0.06
1738	Guscio fond.	1886	1887	1902	1901	3	2	40.0	0.09	0.06
1739	Guscio fond.	1887	1888	1903	1902	3	2	40.0	0.09	0.06
1740	Guscio fond.	1888	1889	1904	1903	3	2	40.0	0.09	0.06
1741	Guscio fond.	1434	1890	1905	1450	3	2	40.0	0.09	0.06
1742	Guscio fond.	1890	1891	1906	1905	3	2	40.0	0.09	0.06
1743	Guscio fond.	1891	1892	1907	1906	3	2	40.0	0.09	0.06
1744	Guscio fond.	1892	1893	1908	1907	3	2	40.0	0.09	0.06
1745	Guscio fond.	1893	1894	1909	1908	3	2	40.0	0.09	0.06
1746	Guscio fond.	1894	1895	1910	1909	3	2	40.0	0.09	0.06
1747	Guscio fond.	1895	1896	1911	1910	3	2	40.0	0.09	0.06
1748	Guscio fond.	1896	1897	1912	1911	3	2	40.0	0.09	0.06
1749	Guscio fond.	1897	1898	1913	1912	3	2	40.0	0.09	0.06
1750	Guscio fond.	1898	1899	1914	1913	3	2	40.0	0.09	0.06
1751	Guscio fond.	1899	1900	1915	1914	3	2	40.0	0.09	0.06
1752	Guscio fond.	1900	1901	1916	1915	3	2	40.0	0.09	0.06
1753	Guscio fond.	1901	1902	1917	1916	3	2	40.0	0.09	0.06
1754	Guscio fond.	1902	1903	1918	1917	3	2	40.0	0.09	0.06
1755	Guscio fond.	1903	1904	1919	1918	3	2	40.0	0.09	0.06
1756	Guscio fond.	1450	1905	1920	1466	3	2	40.0	0.09	0.06
1757	Guscio fond.	1905	1906	1921	1920	3	2	40.0	0.09	0.06
1758	Guscio fond.	1906	1907	1922	1921	3	2	40.0	0.09	0.06
1759	Guscio fond.	1907	1908	1923	1922	3	2	40.0	0.09	0.06
1760	Guscio fond.	1908	1909	1924	1923	3	2	40.0	0.09	0.06
1761	Guscio fond.	1909	1910	1925	1924	3	2	40.0	0.09	0.06
1762	Guscio fond.	1910	1911	1926	1925	3	2	40.0	0.09	0.06
1763	Guscio fond.	1911	1912	1927	1926	3	2	40.0	0.09	0.06
1764	Guscio fond.	1912	1913	1928	1927	3	2	40.0	0.09	0.06
1765	Guscio fond.	1913	1914	1929	1928	3	2	40.0	0.09	0.06
1766	Guscio fond.	1914	1915	1930	1929	3	2	40.0	0.09	0.06
1767	Guscio fond.	1915	1916	1931	1930	3	2	40.0	0.09	0.06

1768	Guscio fond.	1916	1917	1932	1931	3	2	40.0	0.09	0.06
1769	Guscio fond.	1917	1918	1933	1932	3	2	40.0	0.09	0.06
1770	Guscio fond.	1918	1919	1934	1933	3	2	40.0	0.09	0.06
1771	Guscio fond.	1466	1920	1935	1482	3	2	40.0	0.09	0.06
1772	Guscio fond.	1920	1921	1936	1935	3	2	40.0	0.09	0.06
1773	Guscio fond.	1921	1922	1937	1936	3	2	40.0	0.09	0.06
1774	Guscio fond.	1922	1923	1938	1937	3	2	40.0	0.09	0.06
1775	Guscio fond.	1923	1924	199	1938	3	2	40.0	0.09	0.06
1776	Guscio fond.	1924	1925	189	199	3	2	40.0	0.09	0.06
1777	Guscio fond.	1925	1926	1941	189	3	2	40.0	0.09	0.06
1778	Guscio fond.	1926	1927	179	1941	3	2	40.0	0.09	0.06
1779	Guscio fond.	1927	1928	169	179	3	2	40.0	0.09	0.06
1780	Guscio fond.	1928	1929	159	169	3	2	40.0	0.09	0.06
1781	Guscio fond.	1929	1930	149	159	3	2	40.0	0.09	0.06
1782	Guscio fond.	1930	1931	1946	149	3	2	40.0	0.09	0.06
1783	Guscio fond.	1931	1932	1947	1946	3	2	40.0	0.09	0.06
1784	Guscio fond.	1932	1933	1948	1947	3	2	40.0	0.09	0.06
1785	Guscio fond.	1933	1934	1949	1948	3	2	40.0	0.09	0.06
1786	Guscio fond.	1482	1935	1950	1498	3	2	40.0	0.09	0.06
1787	Guscio fond.	1935	1936	1951	1950	3	2	40.0	0.09	0.06
1788	Guscio fond.	1936	1937	1952	1951	3	2	40.0	0.09	0.06
1789	Guscio fond.	1937	1938	1953	1952	3	2	40.0	0.09	0.06
1790	Guscio fond.	1938	199	1954	1953	3	2	40.0	0.09	0.06
1791	Guscio fond.	199	189	1955	1954	3	2	40.0	0.09	0.06
1792	Guscio fond.	189	1941	1956	1955	3	2	40.0	0.09	0.06
1793	Guscio fond.	1941	179	1957	1956	3	2	40.0	0.09	0.06
1794	Guscio fond.	179	169	1958	1957	3	2	40.0	0.09	0.06
1795	Guscio fond.	169	159	1959	1958	3	2	40.0	0.09	0.06
1796	Guscio fond.	159	149	1960	1959	3	2	40.0	0.09	0.06
1797	Guscio fond.	149	1946	1961	1960	3	2	40.0	0.09	0.06
1798	Guscio fond.	1946	1947	1962	1961	3	2	40.0	0.09	0.06
1799	Guscio fond.	1947	1948	1963	1962	3	2	40.0	0.09	0.06
1800	Guscio fond.	1948	1949	1964	1963	3	2	40.0	0.09	0.06
1801	Guscio fond.	1498	1950	1965	1514	3	2	40.0	0.09	0.06
1802	Guscio fond.	1950	1951	1966	1965	3	2	40.0	0.09	0.06
1803	Guscio fond.	1951	1952	1967	1966	3	2	40.0	0.09	0.06
1804	Guscio fond.	1952	1953	1968	1967	3	2	40.0	0.09	0.06
1805	Guscio fond.	1953	1954	1969	1968	3	2	40.0	0.09	0.06
1806	Guscio fond.	1954	1955	1970	1969	3	2	40.0	0.09	0.06
1807	Guscio fond.	1955	1956	1971	1970	3	2	40.0	0.09	0.06
1808	Guscio fond.	1956	1957	1972	1971	3	2	40.0	0.09	0.06
1809	Guscio fond.	1957	1958	1973	1972	3	2	40.0	0.09	0.06
1810	Guscio fond.	1958	1959	1974	1973	3	2	40.0	0.09	0.06
1811	Guscio fond.	1959	1960	139	1974	3	2	40.0	0.09	0.06
1812	Guscio fond.	1960	1961	1976	139	3	2	40.0	0.09	0.06
1813	Guscio fond.	1961	1962	1977	1976	3	2	40.0	0.09	0.06
1814	Guscio fond.	1962	1963	1978	1977	3	2	40.0	0.09	0.06
1815	Guscio fond.	1963	1964	1979	1978	3	2	40.0	0.09	0.06
1816	Guscio fond.	1514	1965	1980	1530	3	2	40.0	0.09	0.06
1817	Guscio fond.	1965	1966	1981	1980	3	2	40.0	0.09	0.06
1818	Guscio fond.	1966	1967	1982	1981	3	2	40.0	0.09	0.06
1819	Guscio fond.	1967	1968	1983	1982	3	2	40.0	0.09	0.06
1820	Guscio fond.	1968	1969	1984	1983	3	2	40.0	0.09	0.06
1821	Guscio fond.	1969	1970	1985	1984	3	2	40.0	0.09	0.06
1822	Guscio fond.	1970	1971	1986	1985	3	2	40.0	0.09	0.06
1823	Guscio fond.	1971	1972	1987	1986	3	2	40.0	0.09	0.06
1824	Guscio fond.	1972	1973	1988	1987	3	2	40.0	0.09	0.06
1825	Guscio fond.	1973	1974	1989	1988	3	2	40.0	0.09	0.06
1826	Guscio fond.	1974	139	1990	1989	3	2	40.0	0.09	0.06
1827	Guscio fond.	139	1976	1991	1990	3	2	40.0	0.09	0.06
1828	Guscio fond.	1976	1977	1992	1991	3	2	40.0	0.09	0.06
1829	Guscio fond.	1977	1978	1993	1992	3	2	40.0	0.09	0.06
1830	Guscio fond.	1978	1979	1994	1993	3	2	40.0	0.09	0.06
1831	Guscio fond.	1530	1980	1995	1546	3	2	40.0	0.09	0.06
1832	Guscio fond.	1980	1981	1996	1995	3	2	40.0	0.09	0.06
1833	Guscio fond.	1981	1982	1997	1996	3	2	40.0	0.09	0.06
1834	Guscio fond.	1982	1983	1998	1997	3	2	40.0	0.09	0.06
1835	Guscio fond.	1983	1984	1999	1998	3	2	40.0	0.09	0.06
1836	Guscio fond.	1984	1985	2000	1999	3	2	40.0	0.09	0.06
1837	Guscio fond.	1985	1986	2001	2000	3	2	40.0	0.09	0.06
1838	Guscio fond.	1986	1987	2002	2001	3	2	40.0	0.09	0.06
1839	Guscio fond.	1987	1988	2003	2002	3	2	40.0	0.09	0.06
1840	Guscio fond.	1988	1989	2004	2003	3	2	40.0	0.09	0.06
1841	Guscio fond.	1989	1990	129	2004	3	2	40.0	0.09	0.06
1842	Guscio fond.	1990	1991	2006	129	3	2	40.0	0.09	0.06
1843	Guscio fond.	1991	1992	2007	2006	3	2	40.0	0.09	0.06
1844	Guscio fond.	1992	1993	2008	2007	3	2	40.0	0.09	0.06

1845	Guscio fond.	1993	1994	2009	2008	3	2	40.0	0.09	0.06
1846	Guscio fond.	1546	1995	2010	1562	3	2	40.0	0.09	0.06
1847	Guscio fond.	1995	1996	2011	2010	3	2	40.0	0.09	0.06
1848	Guscio fond.	1996	1997	2012	2011	3	2	40.0	0.09	0.06
1849	Guscio fond.	1997	1998	2013	2012	3	2	40.0	0.09	0.06
1850	Guscio fond.	1998	1999	2014	2013	3	2	40.0	0.09	0.06
1851	Guscio fond.	1999	2000	2015	2014	3	2	40.0	0.09	0.06
1852	Guscio fond.	2000	2001	2016	2015	3	2	40.0	0.09	0.06
1853	Guscio fond.	2001	2002	2017	2016	3	2	40.0	0.09	0.06
1854	Guscio fond.	2002	2003	2018	2017	3	2	40.0	0.09	0.06
1855	Guscio fond.	2003	2004	2019	2018	3	2	40.0	0.09	0.06
1856	Guscio fond.	2004	129	2020	2019	3	2	40.0	0.09	0.06
1857	Guscio fond.	129	2006	2021	2020	3	2	40.0	0.09	0.06
1858	Guscio fond.	2006	2007	2022	2021	3	2	40.0	0.09	0.06
1859	Guscio fond.	2007	2008	2023	2022	3	2	40.0	0.09	0.06
1860	Guscio fond.	2008	2009	2024	2023	3	2	40.0	0.09	0.06
1861	Guscio fond.	1562	2010	2025	1578	3	2	40.0	0.09	0.06
1862	Guscio fond.	2010	2011	2026	2025	3	2	40.0	0.09	0.06
1863	Guscio fond.	2011	2012	2027	2026	3	2	40.0	0.09	0.06
1864	Guscio fond.	2012	2013	2028	2027	3	2	40.0	0.09	0.06
1865	Guscio fond.	2013	2014	2029	2028	3	2	40.0	0.09	0.06
1866	Guscio fond.	2014	2015	2030	2029	3	2	40.0	0.09	0.06
1867	Guscio fond.	2015	2016	2031	2030	3	2	40.0	0.09	0.06
1868	Guscio fond.	2016	2017	2032	2031	3	2	40.0	0.09	0.06
1869	Guscio fond.	2017	2018	2033	2032	3	2	40.0	0.09	0.06
1870	Guscio fond.	2018	2019	2034	2033	3	2	40.0	0.09	0.06
1871	Guscio fond.	2019	2020	119	2034	3	2	40.0	0.09	0.06
1872	Guscio fond.	2020	2021	2036	119	3	2	40.0	0.09	0.06
1873	Guscio fond.	2021	2022	2037	2036	3	2	40.0	0.09	0.06
1874	Guscio fond.	2022	2023	2038	2037	3	2	40.0	0.09	0.06
1875	Guscio fond.	2023	2024	2039	2038	3	2	40.0	0.09	0.06
1876	Guscio fond.	1578	2025	2040	1594	3	2	40.0	0.09	0.06
1877	Guscio fond.	2025	2026	2041	2040	3	2	40.0	0.09	0.06
1878	Guscio fond.	2026	2027	2042	2041	3	2	40.0	0.09	0.06
1879	Guscio fond.	2027	2028	2043	2042	3	2	40.0	0.09	0.06
1880	Guscio fond.	2028	2029	2044	2043	3	2	40.0	0.09	0.06
1881	Guscio fond.	2029	2030	2045	2044	3	2	40.0	0.09	0.06
1882	Guscio fond.	2030	2031	2046	2045	3	2	40.0	0.09	0.06
1883	Guscio fond.	2031	2032	2047	2046	3	2	40.0	0.09	0.06
1884	Guscio fond.	2032	2033	2048	2047	3	2	40.0	0.09	0.06
1885	Guscio fond.	2033	2034	2049	2048	3	2	40.0	0.09	0.06
1886	Guscio fond.	2034	119	2050	2049	3	2	40.0	0.09	0.06
1887	Guscio fond.	119	2036	2051	2050	3	2	40.0	0.09	0.06
1888	Guscio fond.	2036	2037	2052	2051	3	2	40.0	0.09	0.06
1889	Guscio fond.	2037	2038	2053	2052	3	2	40.0	0.09	0.06
1890	Guscio fond.	2038	2039	2054	2053	3	2	40.0	0.09	0.06
1891	Guscio fond.	1594	2040	2055	1610	3	2	40.0	0.09	0.06
1892	Guscio fond.	2040	2041	2056	2055	3	2	40.0	0.09	0.06
1893	Guscio fond.	2041	2042	2057	2056	3	2	40.0	0.09	0.06
1894	Guscio fond.	2042	2043	2058	2057	3	2	40.0	0.09	0.06
1895	Guscio fond.	2043	2044	2059	2058	3	2	40.0	0.09	0.06
1896	Guscio fond.	2044	2045	2060	2059	3	2	40.0	0.09	0.06
1897	Guscio fond.	2045	2046	2061	2060	3	2	40.0	0.09	0.06
1898	Guscio fond.	2046	2047	2062	2061	3	2	40.0	0.09	0.06
1899	Guscio fond.	2047	2048	2063	2062	3	2	40.0	0.09	0.06
1900	Guscio fond.	2048	2049	2064	2063	3	2	40.0	0.09	0.06
1901	Guscio fond.	2049	2050	2065	2064	3	2	40.0	0.09	0.06
1902	Guscio fond.	2050	2051	2066	2065	3	2	40.0	0.09	0.06
1903	Guscio fond.	2051	2052	2067	2066	3	2	40.0	0.09	0.06
1904	Guscio fond.	2052	2053	2068	2067	3	2	40.0	0.09	0.06
1905	Guscio fond.	2053	2054	2069	2068	3	2	40.0	0.09	0.06
1906	Guscio fond.	1610	2055	2070	1626	3	2	40.0	0.09	0.06
1907	Guscio fond.	2055	2056	2071	2070	3	2	40.0	0.09	0.06
1908	Guscio fond.	2056	2057	2072	2071	3	2	40.0	0.09	0.06
1909	Guscio fond.	2057	2058	2073	2072	3	2	40.0	0.09	0.06
1910	Guscio fond.	2058	2059	2074	2073	3	2	40.0	0.09	0.06
1911	Guscio fond.	2059	2060	2075	2074	3	2	40.0	0.09	0.06
1912	Guscio fond.	2060	2061	2076	2075	3	2	40.0	0.09	0.06
1913	Guscio fond.	2061	2062	2077	2076	3	2	40.0	0.09	0.06
1914	Guscio fond.	2062	2063	2078	2077	3	2	40.0	0.09	0.06
1915	Guscio fond.	2063	2064	2079	2078	3	2	40.0	0.09	0.06
1916	Guscio fond.	2064	2065	109	2079	3	2	40.0	0.09	0.06
1917	Guscio fond.	2065	2066	2081	109	3	2	40.0	0.09	0.06
1918	Guscio fond.	2066	2067	2082	2081	3	2	40.0	0.09	0.06
1919	Guscio fond.	2067	2068	2083	2082	3	2	40.0	0.09	0.06
1920	Guscio fond.	2068	2069	2084	2083	3	2	40.0	0.09	0.06
1921	Guscio fond.	1626	2070	2085	1642	3	2	40.0	0.09	0.06

1922	Guscio fond.	2070	2071	2086	2085	3	2	40.0	0.09	0.06
1923	Guscio fond.	2071	2072	2087	2086	3	2	40.0	0.09	0.06
1924	Guscio fond.	2072	2073	2088	2087	3	2	40.0	0.09	0.06
1925	Guscio fond.	2073	2074	2089	2088	3	2	40.0	0.09	0.06
1926	Guscio fond.	2074	2075	2090	2089	3	2	40.0	0.09	0.06
1927	Guscio fond.	2075	2076	2091	2090	3	2	40.0	0.09	0.06
1928	Guscio fond.	2076	2077	2092	2091	3	2	40.0	0.09	0.06
1929	Guscio fond.	2077	2078	2093	2092	3	2	40.0	0.09	0.06
1930	Guscio fond.	2078	2079	2094	2093	3	2	40.0	0.09	0.06
1931	Guscio fond.	2079	109	2095	2094	3	2	40.0	0.09	0.06
1932	Guscio fond.	109	2081	2096	2095	3	2	40.0	0.09	0.06
1933	Guscio fond.	2081	2082	2097	2096	3	2	40.0	0.09	0.06
1934	Guscio fond.	2082	2083	2098	2097	3	2	40.0	0.09	0.06
1935	Guscio fond.	2083	2084	2099	2098	3	2	40.0	0.09	0.06
1936	Guscio fond.	1642	2085	2100	1658	3	2	40.0	0.09	0.06
1937	Guscio fond.	2085	2086	2101	2100	3	2	40.0	0.09	0.06
1938	Guscio fond.	2086	2087	2102	2101	3	2	40.0	0.09	0.06
1939	Guscio fond.	2087	2088	48	2102	3	2	40.0	0.09	0.06
1940	Guscio fond.	2088	2089	51	48	3	2	40.0	0.09	0.06
1941	Guscio fond.	2089	2090	69	51	3	2	40.0	0.09	0.06
1942	Guscio fond.	2090	2091	2106	69	3	2	40.0	0.09	0.06
1943	Guscio fond.	2091	2092	79	2106	3	2	40.0	0.09	0.06
1944	Guscio fond.	2092	2093	89	79	3	2	40.0	0.09	0.06
1945	Guscio fond.	2093	2094	2109	89	3	2	40.0	0.09	0.06
1946	Guscio fond.	2094	2095	99	2109	3	2	40.0	0.09	0.06
1947	Guscio fond.	2095	2096	2111	99	3	2	40.0	0.09	0.06
1948	Guscio fond.	2096	2097	2112	2111	3	2	40.0	0.09	0.06
1949	Guscio fond.	2097	2098	2113	2112	3	2	40.0	0.09	0.06
1950	Guscio fond.	2098	2099	2114	2113	3	2	40.0	0.09	0.06
1951	Guscio fond.	1658	2100	2115	1674	3	2	40.0	0.09	0.06
1952	Guscio fond.	2100	2101	2116	2115	3	2	40.0	0.09	0.06
1953	Guscio fond.	2101	2102	2117	2116	3	2	40.0	0.09	0.06
1954	Guscio fond.	2102	48	2118	2117	3	2	40.0	0.09	0.06
1955	Guscio fond.	48	51	2119	2118	3	2	40.0	0.09	0.06
1956	Guscio fond.	51	69	2120	2119	3	2	40.0	0.09	0.06
1957	Guscio fond.	69	2106	2121	2120	3	2	40.0	0.09	0.06
1958	Guscio fond.	2106	79	2122	2121	3	2	40.0	0.09	0.06
1959	Guscio fond.	79	89	2123	2122	3	2	40.0	0.09	0.06
1960	Guscio fond.	89	2109	2124	2123	3	2	40.0	0.09	0.06
1961	Guscio fond.	2109	99	2125	2124	3	2	40.0	0.09	0.06
1962	Guscio fond.	99	2111	2126	2125	3	2	40.0	0.09	0.06
1963	Guscio fond.	2111	2112	2127	2126	3	2	40.0	0.09	0.06
1964	Guscio fond.	2112	2113	2128	2127	3	2	40.0	0.09	0.06
1965	Guscio fond.	2113	2114	2129	2128	3	2	40.0	0.09	0.06
1966	Guscio fond.	1674	2115	2130	1690	3	2	40.0	0.09	0.06
1967	Guscio fond.	2115	2116	2131	2130	3	2	40.0	0.09	0.06
1968	Guscio fond.	2116	2117	2132	2131	3	2	40.0	0.09	0.06
1969	Guscio fond.	2117	2118	2133	2132	3	2	40.0	0.09	0.06
1970	Guscio fond.	2118	2119	2134	2133	3	2	40.0	0.09	0.06
1971	Guscio fond.	2119	2120	2135	2134	3	2	40.0	0.09	0.06
1972	Guscio fond.	2120	2121	2136	2135	3	2	40.0	0.09	0.06
1973	Guscio fond.	2121	2122	2137	2136	3	2	40.0	0.09	0.06
1974	Guscio fond.	2122	2123	2138	2137	3	2	40.0	0.09	0.06
1975	Guscio fond.	2123	2124	2139	2138	3	2	40.0	0.09	0.06
1976	Guscio fond.	2124	2125	2140	2139	3	2	40.0	0.09	0.06
1977	Guscio fond.	2125	2126	2141	2140	3	2	40.0	0.09	0.06
1978	Guscio fond.	2126	2127	2142	2141	3	2	40.0	0.09	0.06
1979	Guscio fond.	2127	2128	2143	2142	3	2	40.0	0.09	0.06
1980	Guscio fond.	2128	2129	2144	2143	3	2	40.0	0.09	0.06
1981	Guscio fond.	1690	2130	2145	1706	3	2	40.0	0.09	0.06
1982	Guscio fond.	2130	2131	2146	2145	3	2	40.0	0.09	0.06
1983	Guscio fond.	2131	2132	2147	2146	3	2	40.0	0.09	0.06
1984	Guscio fond.	2132	2133	2148	2147	3	2	40.0	0.09	0.06
1985	Guscio fond.	2133	2134	2149	2148	3	2	40.0	0.09	0.06
1986	Guscio fond.	2134	2135	2150	2149	3	2	40.0	0.09	0.06
1987	Guscio fond.	2135	2136	2151	2150	3	2	40.0	0.09	0.06
1988	Guscio fond.	2136	2137	2152	2151	3	2	40.0	0.09	0.06
1989	Guscio fond.	2137	2138	2153	2152	3	2	40.0	0.09	0.06
1990	Guscio fond.	2138	2139	2154	2153	3	2	40.0	0.09	0.06
1991	Guscio fond.	2139	2140	2155	2154	3	2	40.0	0.09	0.06
1992	Guscio fond.	2140	2141	2156	2155	3	2	40.0	0.09	0.06
1993	Guscio fond.	2141	2142	2157	2156	3	2	40.0	0.09	0.06
1994	Guscio fond.	2142	2143	2158	2157	3	2	40.0	0.09	0.06
1995	Guscio fond.	2143	2144	2159	2158	3	2	40.0	0.09	0.06
1996	Guscio fond.	1706	2145	2160	1722	3	2	40.0	0.09	0.06
1997	Guscio fond.	2145	2146	2161	2160	3	2	40.0	0.09	0.06
1998	Guscio fond.	2146	2147	2162	2161	3	2	40.0	0.09	0.06

1999	Guscio fond.	2147	2148	2163	2162	3	2	40.0	0.09	0.06
2000	Guscio fond.	2148	2149	2164	2163	3	2	40.0	0.09	0.06
2001	Guscio fond.	2149	2150	2165	2164	3	2	40.0	0.09	0.06
2002	Guscio fond.	2150	2151	2166	2165	3	2	40.0	0.09	0.06
2003	Guscio fond.	2151	2152	2167	2166	3	2	40.0	0.09	0.06
2004	Guscio fond.	2152	2153	2168	2167	3	2	40.0	0.09	0.06
2005	Guscio fond.	2153	2154	2169	2168	3	2	40.0	0.09	0.06
2006	Guscio fond.	2154	2155	2170	2169	3	2	40.0	0.09	0.06
2007	Guscio fond.	2155	2156	2171	2170	3	2	40.0	0.09	0.06
2008	Guscio fond.	2156	2157	2172	2171	3	2	40.0	0.09	0.06
2009	Guscio fond.	2157	2158	2173	2172	3	2	40.0	0.09	0.06
2010	Guscio fond.	2158	2159	2174	2173	3	2	40.0	0.09	0.06
2011	Guscio fond.	1722	2160	2175	1738	3	2	40.0	0.09	0.06
2012	Guscio fond.	2160	2161	2176	2175	3	2	40.0	0.09	0.06
2013	Guscio fond.	2161	2162	2177	2176	3	2	40.0	0.09	0.06
2014	Guscio fond.	2162	2163	2178	2177	3	2	40.0	0.09	0.06
2015	Guscio fond.	2163	2164	2179	2178	3	2	40.0	0.09	0.06
2016	Guscio fond.	2164	2165	2180	2179	3	2	40.0	0.09	0.06
2017	Guscio fond.	2165	2166	2181	2180	3	2	40.0	0.09	0.06
2018	Guscio fond.	2166	2167	2182	2181	3	2	40.0	0.09	0.06
2019	Guscio fond.	2167	2168	2183	2182	3	2	40.0	0.09	0.06
2020	Guscio fond.	2168	2169	2184	2183	3	2	40.0	0.09	0.06
2021	Guscio fond.	2169	2170	2185	2184	3	2	40.0	0.09	0.06
2022	Guscio fond.	2170	2171	2186	2185	3	2	40.0	0.09	0.06
2023	Guscio fond.	2171	2172	2187	2186	3	2	40.0	0.09	0.06
2024	Guscio fond.	2172	2173	2188	2187	3	2	40.0	0.09	0.06
2025	Guscio fond.	2173	2174	2189	2188	3	2	40.0	0.09	0.06
2026	Guscio fond.	1738	2175	2190	1754	3	2	40.0	0.09	0.06
2027	Guscio fond.	2175	2176	2191	2190	3	2	40.0	0.09	0.06
2028	Guscio fond.	2176	2177	2192	2191	3	2	40.0	0.09	0.06
2029	Guscio fond.	2177	2178	2193	2192	3	2	40.0	0.09	0.06
2030	Guscio fond.	2178	2179	2194	2193	3	2	40.0	0.09	0.06
2031	Guscio fond.	2179	2180	2195	2194	3	2	40.0	0.09	0.06
2032	Guscio fond.	2180	2181	2196	2195	3	2	40.0	0.09	0.06
2033	Guscio fond.	2181	2182	2197	2196	3	2	40.0	0.09	0.06
2034	Guscio fond.	2182	2183	2198	2197	3	2	40.0	0.09	0.06
2035	Guscio fond.	2183	2184	2199	2198	3	2	40.0	0.09	0.06
2036	Guscio fond.	2184	2185	2200	2199	3	2	40.0	0.09	0.06
2037	Guscio fond.	2185	2186	2201	2200	3	2	40.0	0.09	0.06
2038	Guscio fond.	2186	2187	2202	2201	3	2	40.0	0.09	0.06
2039	Guscio fond.	2187	2188	2203	2202	3	2	40.0	0.09	0.06
2040	Guscio fond.	2188	2189	2204	2203	3	2	40.0	0.09	0.06
2041	Guscio fond.	1754	2190	2205	1770	3	2	40.0	0.09	0.06
2042	Guscio fond.	2190	2191	2206	2205	3	2	40.0	0.09	0.06
2043	Guscio fond.	2191	2192	2207	2206	3	2	40.0	0.09	0.06
2044	Guscio fond.	2192	2193	2208	2207	3	2	40.0	0.09	0.06
2045	Guscio fond.	2193	2194	2209	2208	3	2	40.0	0.09	0.06
2046	Guscio fond.	2194	2195	2210	2209	3	2	40.0	0.09	0.06
2047	Guscio fond.	2195	2196	2211	2210	3	2	40.0	0.09	0.06
2048	Guscio fond.	2196	2197	2212	2211	3	2	40.0	0.09	0.06
2049	Guscio fond.	2197	2198	2213	2212	3	2	40.0	0.09	0.06
2050	Guscio fond.	2198	2199	2214	2213	3	2	40.0	0.09	0.06
2051	Guscio fond.	2199	2200	2215	2214	3	2	40.0	0.09	0.06
2052	Guscio fond.	2200	2201	2216	2215	3	2	40.0	0.09	0.06
2053	Guscio fond.	2201	2202	2217	2216	3	2	40.0	0.09	0.06
2054	Guscio fond.	2202	2203	2218	2217	3	2	40.0	0.09	0.06
2055	Guscio fond.	2203	2204	2219	2218	3	2	40.0	0.09	0.06
2056	Guscio fond.	1770	2205	2220	16	3	2	40.0	0.09	0.06
2057	Guscio fond.	2205	2206	2221	2220	3	2	40.0	0.09	0.06
2058	Guscio fond.	2206	2207	2222	2221	3	2	40.0	0.09	0.06
2059	Guscio fond.	2207	2208	2223	2222	3	2	40.0	0.09	0.06
2060	Guscio fond.	2208	2209	2224	2223	3	2	40.0	0.09	0.06
2061	Guscio fond.	2209	2210	2225	2224	3	2	40.0	0.09	0.06
2062	Guscio fond.	2210	2211	2226	2225	3	2	40.0	0.09	0.06
2063	Guscio fond.	2211	2212	2227	2226	3	2	40.0	0.09	0.06
2064	Guscio fond.	2212	2213	2228	2227	3	2	40.0	0.09	0.06
2065	Guscio fond.	2213	2214	2229	2228	3	2	40.0	0.09	0.06
2066	Guscio fond.	2214	2215	2230	2229	3	2	40.0	0.09	0.06
2067	Guscio fond.	2215	2216	2231	2230	3	2	40.0	0.09	0.06
2068	Guscio fond.	2216	2217	2232	2231	3	2	40.0	0.09	0.06
2069	Guscio fond.	2217	2218	2233	2232	3	2	40.0	0.09	0.06
2070	Guscio fond.	2218	2219	17	2233	3	2	40.0	0.09	0.06
2071	Guscio fond.	15	1771	2234	2235	3	2	40.0	0.09	0.06
2072	Guscio fond.	1771	1772	2236	2234	3	2	40.0	0.09	0.06
2073	Guscio fond.	1772	1773	2237	2236	3	2	40.0	0.09	0.06
2074	Guscio fond.	1773	1774	2238	2237	3	2	40.0	0.09	0.06
2075	Guscio fond.	1774	1775	2239	2238	3	2	40.0	0.09	0.06

2076	Guscio fond.	1775	1776	2240	2239	3	2	40.0	0.09	0.06
2077	Guscio fond.	1776	1777	2241	2240	3	2	40.0	0.09	0.06
2078	Guscio fond.	1777	1778	2242	2241	3	2	40.0	0.09	0.06
2079	Guscio fond.	1778	1779	2243	2242	3	2	40.0	0.09	0.06
2080	Guscio fond.	1779	1780	2244	2243	3	2	40.0	0.09	0.06
2081	Guscio fond.	1780	1781	2245	2244	3	2	40.0	0.09	0.06
2082	Guscio fond.	1781	1782	2246	2245	3	2	40.0	0.09	0.06
2083	Guscio fond.	1782	1783	2247	2246	3	2	40.0	0.09	0.06
2084	Guscio fond.	1783	1784	2248	2247	3	2	40.0	0.09	0.06
2085	Guscio fond.	1784	16	2249	2248	3	2	40.0	0.09	0.06
2086	Guscio fond.	2235	2234	2250	2251	3	2	40.0	0.09	0.06
2087	Guscio fond.	2234	2236	2252	2250	3	2	40.0	0.09	0.06
2088	Guscio fond.	2236	2237	2253	2252	3	2	40.0	0.09	0.06
2089	Guscio fond.	2237	2238	2254	2253	3	2	40.0	0.09	0.06
2090	Guscio fond.	2238	2239	2255	2254	3	2	40.0	0.09	0.06
2091	Guscio fond.	2239	2240	2256	2255	3	2	40.0	0.09	0.06
2092	Guscio fond.	2240	2241	2257	2256	3	2	40.0	0.09	0.06
2093	Guscio fond.	2241	2242	2258	2257	3	2	40.0	0.09	0.06
2094	Guscio fond.	2242	2243	2259	2258	3	2	40.0	0.09	0.06
2095	Guscio fond.	2243	2244	2260	2259	3	2	40.0	0.09	0.06
2096	Guscio fond.	2244	2245	2261	2260	3	2	40.0	0.09	0.06
2097	Guscio fond.	2245	2246	2262	2261	3	2	40.0	0.09	0.06
2098	Guscio fond.	2246	2247	2263	2262	3	2	40.0	0.09	0.06
2099	Guscio fond.	2247	2248	2264	2263	3	2	40.0	0.09	0.06
2100	Guscio fond.	2248	2249	2265	2264	3	2	40.0	0.09	0.06
2101	Guscio fond.	2251	2250	2266	2267	3	2	40.0	0.09	0.06
2102	Guscio fond.	2250	2252	2268	2266	3	2	40.0	0.09	0.06
2103	Guscio fond.	2252	2253	2269	2268	3	2	40.0	0.09	0.06
2104	Guscio fond.	2253	2254	2270	2269	3	2	40.0	0.09	0.06
2105	Guscio fond.	2254	2255	2271	2270	3	2	40.0	0.09	0.06
2106	Guscio fond.	2255	2256	2272	2271	3	2	40.0	0.09	0.06
2107	Guscio fond.	2256	2257	2273	2272	3	2	40.0	0.09	0.06
2108	Guscio fond.	2257	2258	2274	2273	3	2	40.0	0.09	0.06
2109	Guscio fond.	2258	2259	2275	2274	3	2	40.0	0.09	0.06
2110	Guscio fond.	2259	2260	2276	2275	3	2	40.0	0.09	0.06
2111	Guscio fond.	2260	2261	2277	2276	3	2	40.0	0.09	0.06
2112	Guscio fond.	2261	2262	2278	2277	3	2	40.0	0.09	0.06
2113	Guscio fond.	2262	2263	2279	2278	3	2	40.0	0.09	0.06
2114	Guscio fond.	2263	2264	2280	2279	3	2	40.0	0.09	0.06
2115	Guscio fond.	2264	2265	2281	2280	3	2	40.0	0.09	0.06
2116	Guscio fond.	2267	2266	2282	2283	3	2	40.0	0.09	0.06
2117	Guscio fond.	2266	2268	2284	2282	3	2	40.0	0.09	0.06
2118	Guscio fond.	2268	2269	2285	2284	3	2	40.0	0.09	0.06
2119	Guscio fond.	2269	2270	2286	2285	3	2	40.0	0.09	0.06
2120	Guscio fond.	2270	2271	2287	2286	3	2	40.0	0.09	0.06
2121	Guscio fond.	2271	2272	2288	2287	3	2	40.0	0.09	0.06
2122	Guscio fond.	2272	2273	2289	2288	3	2	40.0	0.09	0.06
2123	Guscio fond.	2273	2274	2290	2289	3	2	40.0	0.09	0.06
2124	Guscio fond.	2274	2275	2291	2290	3	2	40.0	0.09	0.06
2125	Guscio fond.	2275	2276	2292	2291	3	2	40.0	0.09	0.06
2126	Guscio fond.	2276	2277	2293	2292	3	2	40.0	0.09	0.06
2127	Guscio fond.	2277	2278	2294	2293	3	2	40.0	0.09	0.06
2128	Guscio fond.	2278	2279	2295	2294	3	2	40.0	0.09	0.06
2129	Guscio fond.	2279	2280	2296	2295	3	2	40.0	0.09	0.06
2130	Guscio fond.	2280	2281	2297	2296	3	2	40.0	0.09	0.06
2131	Guscio fond.	2283	2282	2298	2299	3	2	40.0	0.09	0.06
2132	Guscio fond.	2282	2284	2300	2298	3	2	40.0	0.09	0.06
2133	Guscio fond.	2284	2285	2301	2300	3	2	40.0	0.09	0.06
2134	Guscio fond.	2285	2286	2302	2301	3	2	40.0	0.09	0.06
2135	Guscio fond.	2286	2287	2303	2302	3	2	40.0	0.09	0.06
2136	Guscio fond.	2287	2288	2304	2303	3	2	40.0	0.09	0.06
2137	Guscio fond.	2288	2289	2305	2304	3	2	40.0	0.09	0.06
2138	Guscio fond.	2289	2290	2306	2305	3	2	40.0	0.09	0.06
2139	Guscio fond.	2290	2291	2307	2306	3	2	40.0	0.09	0.06
2140	Guscio fond.	2291	2292	2308	2307	3	2	40.0	0.09	0.06
2141	Guscio fond.	2292	2293	2309	2308	3	2	40.0	0.09	0.06
2142	Guscio fond.	2293	2294	2310	2309	3	2	40.0	0.09	0.06
2143	Guscio fond.	2294	2295	2311	2310	3	2	40.0	0.09	0.06
2144	Guscio fond.	2295	2296	2312	2311	3	2	40.0	0.09	0.06
2145	Guscio fond.	2296	2297	2313	2312	3	2	40.0	0.09	0.06
2146	Guscio fond.	2299	2298	2314	2315	3	2	40.0	0.09	0.06
2147	Guscio fond.	2298	2300	2316	2314	3	2	40.0	0.09	0.06
2148	Guscio fond.	2300	2301	2317	2316	3	2	40.0	0.09	0.06
2149	Guscio fond.	2301	2302	2318	2317	3	2	40.0	0.09	0.06
2150	Guscio fond.	2302	2303	2319	2318	3	2	40.0	0.09	0.06
2151	Guscio fond.	2303	2304	2320	2319	3	2	40.0	0.09	0.06
2152	Guscio fond.	2304	2305	2321	2320	3	2	40.0	0.09	0.06

2153Guscio fond.	2305	2306	2322	2321	3	2	40.0	0.09	0.06
2154Guscio fond.	2306	2307	2323	2322	3	2	40.0	0.09	0.06
2155Guscio fond.	2307	2308	2324	2323	3	2	40.0	0.09	0.06
2156Guscio fond.	2308	2309	2325	2324	3	2	40.0	0.09	0.06
2157Guscio fond.	2309	2310	2326	2325	3	2	40.0	0.09	0.06
2158Guscio fond.	2310	2311	2327	2326	3	2	40.0	0.09	0.06
2159Guscio fond.	2311	2312	2328	2327	3	2	40.0	0.09	0.06
2160Guscio fond.	2312	2313	2329	2328	3	2	40.0	0.09	0.06
2161Guscio fond.	2315	2314	2330	2331	3	2	40.0	0.09	0.06
2162Guscio fond.	2314	2316	2332	2330	3	2	40.0	0.09	0.06
2163Guscio fond.	2316	2317	2333	2332	3	2	40.0	0.09	0.06
2164Guscio fond.	2317	2318	2334	2333	3	2	40.0	0.09	0.06
2165Guscio fond.	2318	2319	2335	2334	3	2	40.0	0.09	0.06
2166Guscio fond.	2319	2320	2336	2335	3	2	40.0	0.09	0.06
2167Guscio fond.	2320	2321	2337	2336	3	2	40.0	0.09	0.06
2168Guscio fond.	2321	2322	2338	2337	3	2	40.0	0.09	0.06
2169Guscio fond.	2322	2323	2339	2338	3	2	40.0	0.09	0.06
2170Guscio fond.	2323	2324	2340	2339	3	2	40.0	0.09	0.06
2171Guscio fond.	2324	2325	2341	2340	3	2	40.0	0.09	0.06
2172Guscio fond.	2325	2326	2342	2341	3	2	40.0	0.09	0.06
2173Guscio fond.	2326	2327	2343	2342	3	2	40.0	0.09	0.06
2174Guscio fond.	2327	2328	2344	2343	3	2	40.0	0.09	0.06
2175Guscio fond.	2328	2329	2345	2344	3	2	40.0	0.09	0.06
2176Guscio fond.	2331	2330	2346	2347	3	2	40.0	0.09	0.06
2177Guscio fond.	2330	2332	2348	2346	3	2	40.0	0.09	0.06
2178Guscio fond.	2332	2333	2349	2348	3	2	40.0	0.09	0.06
2179Guscio fond.	2333	2334	2350	2349	3	2	40.0	0.09	0.06
2180Guscio fond.	2334	2335	2351	2350	3	2	40.0	0.09	0.06
2181Guscio fond.	2335	2336	2352	2351	3	2	40.0	0.09	0.06
2182Guscio fond.	2336	2337	2353	2352	3	2	40.0	0.09	0.06
2183Guscio fond.	2337	2338	2354	2353	3	2	40.0	0.09	0.06
2184Guscio fond.	2338	2339	2355	2354	3	2	40.0	0.09	0.06
2185Guscio fond.	2339	2340	2356	2355	3	2	40.0	0.09	0.06
2186Guscio fond.	2340	2341	2357	2356	3	2	40.0	0.09	0.06
2187Guscio fond.	2341	2342	2358	2357	3	2	40.0	0.09	0.06
2188Guscio fond.	2342	2343	2359	2358	3	2	40.0	0.09	0.06
2189Guscio fond.	2343	2344	2360	2359	3	2	40.0	0.09	0.06
2190Guscio fond.	2344	2345	2361	2360	3	2	40.0	0.09	0.06
2191Guscio fond.	2347	2346	2362	2363	3	2	40.0	0.09	0.06
2192Guscio fond.	2346	2348	2364	2362	3	2	40.0	0.09	0.06
2193Guscio fond.	2348	2349	2365	2364	3	2	40.0	0.09	0.06
2194Guscio fond.	2349	2350	2366	2365	3	2	40.0	0.09	0.06
2195Guscio fond.	2350	2351	2367	2366	3	2	40.0	0.09	0.06
2196Guscio fond.	2351	2352	2368	2367	3	2	40.0	0.09	0.06
2197Guscio fond.	2352	2353	2369	2368	3	2	40.0	0.09	0.06
2198Guscio fond.	2353	2354	2370	2369	3	2	40.0	0.09	0.06
2199Guscio fond.	2354	2355	2371	2370	3	2	40.0	0.09	0.06
2200Guscio fond.	2355	2356	2372	2371	3	2	40.0	0.09	0.06
2201Guscio fond.	2356	2357	2373	2372	3	2	40.0	0.09	0.06
2202Guscio fond.	2357	2358	2374	2373	3	2	40.0	0.09	0.06
2203Guscio fond.	2358	2359	2375	2374	3	2	40.0	0.09	0.06
2204Guscio fond.	2359	2360	2376	2375	3	2	40.0	0.09	0.06
2205Guscio fond.	2360	2361	2377	2376	3	2	40.0	0.09	0.06
2206Guscio fond.	2363	2362	2378	2379	3	2	40.0	0.09	0.06
2207Guscio fond.	2362	2364	2380	2378	3	2	40.0	0.09	0.06
2208Guscio fond.	2364	2365	2381	2380	3	2	40.0	0.09	0.06
2209Guscio fond.	2365	2366	2382	2381	3	2	40.0	0.09	0.06
2210Guscio fond.	2366	2367	2383	2382	3	2	40.0	0.09	0.06
2211Guscio fond.	2367	2368	2384	2383	3	2	40.0	0.09	0.06
2212Guscio fond.	2368	2369	2385	2384	3	2	40.0	0.09	0.06
2213Guscio fond.	2369	2370	2386	2385	3	2	40.0	0.09	0.06
2214Guscio fond.	2370	2371	2387	2386	3	2	40.0	0.09	0.06
2215Guscio fond.	2371	2372	2388	2387	3	2	40.0	0.09	0.06
2216Guscio fond.	2372	2373	2389	2388	3	2	40.0	0.09	0.06
2217Guscio fond.	2373	2374	2390	2389	3	2	40.0	0.09	0.06
2218Guscio fond.	2374	2375	2391	2390	3	2	40.0	0.09	0.06
2219Guscio fond.	2375	2376	2392	2391	3	2	40.0	0.09	0.06
2220Guscio fond.	2376	2377	2393	2392	3	2	40.0	0.09	0.06
2221Guscio fond.	2379	2378	2394	2395	3	2	40.0	0.09	0.06
2222Guscio fond.	2378	2380	2396	2394	3	2	40.0	0.09	0.06
2223Guscio fond.	2380	2381	2397	2396	3	2	40.0	0.09	0.06
2224Guscio fond.	2381	2382	2398	2397	3	2	40.0	0.09	0.06
2225Guscio fond.	2382	2383	2399	2398	3	2	40.0	0.09	0.06
2226Guscio fond.	2383	2384	2400	2399	3	2	40.0	0.09	0.06
2227Guscio fond.	2384	2385	2401	2400	3	2	40.0	0.09	0.06
2228Guscio fond.	2385	2386	2402	2401	3	2	40.0	0.09	0.06
2229Guscio fond.	2386	2387	2403	2402	3	2	40.0	0.09	0.06

2230	Guscio fond.	2387	2388	2404	2403	3	2	40.0	0.09	0.06
2231	Guscio fond.	2388	2389	2405	2404	3	2	40.0	0.09	0.06
2232	Guscio fond.	2389	2390	2406	2405	3	2	40.0	0.09	0.06
2233	Guscio fond.	2390	2391	2407	2406	3	2	40.0	0.09	0.06
2234	Guscio fond.	2391	2392	2408	2407	3	2	40.0	0.09	0.06
2235	Guscio fond.	2392	2393	2409	2408	3	2	40.0	0.09	0.06
2236	Guscio fond.	2395	2394	2410	2411	3	2	40.0	0.09	0.06
2237	Guscio fond.	2394	2396	2412	2410	3	2	40.0	0.09	0.06
2238	Guscio fond.	2396	2397	2413	2412	3	2	40.0	0.09	0.06
2239	Guscio fond.	2397	2398	2414	2413	3	2	40.0	0.09	0.06
2240	Guscio fond.	2398	2399	2415	2414	3	2	40.0	0.09	0.06
2241	Guscio fond.	2399	2400	2416	2415	3	2	40.0	0.09	0.06
2242	Guscio fond.	2400	2401	2417	2416	3	2	40.0	0.09	0.06
2243	Guscio fond.	2401	2402	2418	2417	3	2	40.0	0.09	0.06
2244	Guscio fond.	2402	2403	2419	2418	3	2	40.0	0.09	0.06
2245	Guscio fond.	2403	2404	2420	2419	3	2	40.0	0.09	0.06
2246	Guscio fond.	2404	2405	2421	2420	3	2	40.0	0.09	0.06
2247	Guscio fond.	2405	2406	2422	2421	3	2	40.0	0.09	0.06
2248	Guscio fond.	2406	2407	2423	2422	3	2	40.0	0.09	0.06
2249	Guscio fond.	2407	2408	2424	2423	3	2	40.0	0.09	0.06
2250	Guscio fond.	2408	2409	2425	2424	3	2	40.0	0.09	0.06
2251	Guscio fond.	2411	2410	2426	2427	3	2	40.0	0.09	0.06
2252	Guscio fond.	2410	2412	2428	2426	3	2	40.0	0.09	0.06
2253	Guscio fond.	2412	2413	2429	2428	3	2	40.0	0.09	0.06
2254	Guscio fond.	2413	2414	2430	2429	3	2	40.0	0.09	0.06
2255	Guscio fond.	2414	2415	2431	2430	3	2	40.0	0.09	0.06
2256	Guscio fond.	2415	2416	2432	2431	3	2	40.0	0.09	0.06
2257	Guscio fond.	2416	2417	2433	2432	3	2	40.0	0.09	0.06
2258	Guscio fond.	2417	2418	2434	2433	3	2	40.0	0.09	0.06
2259	Guscio fond.	2418	2419	2435	2434	3	2	40.0	0.09	0.06
2260	Guscio fond.	2419	2420	2436	2435	3	2	40.0	0.09	0.06
2261	Guscio fond.	2420	2421	2437	2436	3	2	40.0	0.09	0.06
2262	Guscio fond.	2421	2422	2438	2437	3	2	40.0	0.09	0.06
2263	Guscio fond.	2422	2423	2439	2438	3	2	40.0	0.09	0.06
2264	Guscio fond.	2423	2424	2440	2439	3	2	40.0	0.09	0.06
2265	Guscio fond.	2424	2425	2441	2440	3	2	40.0	0.09	0.06
2266	Guscio fond.	2427	2426	2442	2443	3	2	40.0	0.09	0.06
2267	Guscio fond.	2426	2428	2444	2442	3	2	40.0	0.09	0.06
2268	Guscio fond.	2428	2429	2445	2444	3	2	40.0	0.09	0.06
2269	Guscio fond.	2429	2430	2446	2445	3	2	40.0	0.09	0.06
2270	Guscio fond.	2430	2431	2447	2446	3	2	40.0	0.09	0.06
2271	Guscio fond.	2431	2432	2448	2447	3	2	40.0	0.09	0.06
2272	Guscio fond.	2432	2433	2449	2448	3	2	40.0	0.09	0.06
2273	Guscio fond.	2433	2434	2450	2449	3	2	40.0	0.09	0.06
2274	Guscio fond.	2434	2435	2451	2450	3	2	40.0	0.09	0.06
2275	Guscio fond.	2435	2436	2452	2451	3	2	40.0	0.09	0.06
2276	Guscio fond.	2436	2437	2453	2452	3	2	40.0	0.09	0.06
2277	Guscio fond.	2437	2438	2454	2453	3	2	40.0	0.09	0.06
2278	Guscio fond.	2438	2439	2455	2454	3	2	40.0	0.09	0.06
2279	Guscio fond.	2439	2440	2456	2455	3	2	40.0	0.09	0.06
2280	Guscio fond.	2440	2441	2457	2456	3	2	40.0	0.09	0.06
2281	Guscio fond.	2443	2442	2458	2459	3	2	40.0	0.09	0.06
2282	Guscio fond.	2442	2444	2460	2458	3	2	40.0	0.09	0.06
2283	Guscio fond.	2444	2445	2461	2460	3	2	40.0	0.09	0.06
2284	Guscio fond.	2445	2446	2462	2461	3	2	40.0	0.09	0.06
2285	Guscio fond.	2446	2447	2463	2462	3	2	40.0	0.09	0.06
2286	Guscio fond.	2447	2448	2464	2463	3	2	40.0	0.09	0.06
2287	Guscio fond.	2448	2449	2465	2464	3	2	40.0	0.09	0.06
2288	Guscio fond.	2449	2450	2466	2465	3	2	40.0	0.09	0.06
2289	Guscio fond.	2450	2451	2467	2466	3	2	40.0	0.09	0.06
2290	Guscio fond.	2451	2452	2468	2467	3	2	40.0	0.09	0.06
2291	Guscio fond.	2452	2453	2469	2468	3	2	40.0	0.09	0.06
2292	Guscio fond.	2453	2454	2470	2469	3	2	40.0	0.09	0.06
2293	Guscio fond.	2454	2455	2471	2470	3	2	40.0	0.09	0.06
2294	Guscio fond.	2455	2456	2472	2471	3	2	40.0	0.09	0.06
2295	Guscio fond.	2456	2457	2473	2472	3	2	40.0	0.09	0.06
2296	Guscio fond.	2459	2458	2474	2475	3	2	40.0	0.09	0.06
2297	Guscio fond.	2458	2460	2476	2474	3	2	40.0	0.09	0.06
2298	Guscio fond.	2460	2461	2477	2476	3	2	40.0	0.09	0.06
2299	Guscio fond.	2461	2462	2478	2477	3	2	40.0	0.09	0.06
2300	Guscio fond.	2462	2463	2479	2478	3	2	40.0	0.09	0.06
2301	Guscio fond.	2463	2464	2480	2479	3	2	40.0	0.09	0.06
2302	Guscio fond.	2464	2465	2481	2480	3	2	40.0	0.09	0.06
2303	Guscio fond.	2465	2466	2482	2481	3	2	40.0	0.09	0.06
2304	Guscio fond.	2466	2467	2483	2482	3	2	40.0	0.09	0.06
2305	Guscio fond.	2467	2468	2484	2483	3	2	40.0	0.09	0.06
2306	Guscio fond.	2468	2469	2485	2484	3	2	40.0	0.09	0.06

2307Guscio fond.	2469	2470	2486	2485	3	2	40.0	0.09	0.06
2308Guscio fond.	2470	2471	2487	2486	3	2	40.0	0.09	0.06
2309Guscio fond.	2471	2472	2488	2487	3	2	40.0	0.09	0.06
2310Guscio fond.	2472	2473	2489	2488	3	2	40.0	0.09	0.06
2311Guscio fond.	2475	2474	2490	2491	3	2	40.0	0.09	0.06
2312Guscio fond.	2474	2476	2492	2490	3	2	40.0	0.09	0.06
2313Guscio fond.	2476	2477	2493	2492	3	2	40.0	0.09	0.06
2314Guscio fond.	2477	2478	2494	2493	3	2	40.0	0.09	0.06
2315Guscio fond.	2478	2479	2495	2494	3	2	40.0	0.09	0.06
2316Guscio fond.	2479	2480	2496	2495	3	2	40.0	0.09	0.06
2317Guscio fond.	2480	2481	2497	2496	3	2	40.0	0.09	0.06
2318Guscio fond.	2481	2482	2498	2497	3	2	40.0	0.09	0.06
2319Guscio fond.	2482	2483	2499	2498	3	2	40.0	0.09	0.06
2320Guscio fond.	2483	2484	2500	2499	3	2	40.0	0.09	0.06
2321Guscio fond.	2484	2485	2501	2500	3	2	40.0	0.09	0.06
2322Guscio fond.	2485	2486	2502	2501	3	2	40.0	0.09	0.06
2323Guscio fond.	2486	2487	2503	2502	3	2	40.0	0.09	0.06
2324Guscio fond.	2487	2488	2504	2503	3	2	40.0	0.09	0.06
2325Guscio fond.	2488	2489	2505	2504	3	2	40.0	0.09	0.06
2326Guscio fond.	2491	2490	2506	2507	3	2	40.0	0.09	0.06
2327Guscio fond.	2490	2492	2508	2506	3	2	40.0	0.09	0.06
2328Guscio fond.	2492	2493	2509	2508	3	2	40.0	0.09	0.06
2329Guscio fond.	2493	2494	2510	2509	3	2	40.0	0.09	0.06
2330Guscio fond.	2494	2495	2511	2510	3	2	40.0	0.09	0.06
2331Guscio fond.	2495	2496	2512	2511	3	2	40.0	0.09	0.06
2332Guscio fond.	2496	2497	2513	2512	3	2	40.0	0.09	0.06
2333Guscio fond.	2497	2498	2514	2513	3	2	40.0	0.09	0.06
2334Guscio fond.	2498	2499	2515	2514	3	2	40.0	0.09	0.06
2335Guscio fond.	2499	2500	2516	2515	3	2	40.0	0.09	0.06
2336Guscio fond.	2500	2501	2517	2516	3	2	40.0	0.09	0.06
2337Guscio fond.	2501	2502	2518	2517	3	2	40.0	0.09	0.06
2338Guscio fond.	2502	2503	2519	2518	3	2	40.0	0.09	0.06
2339Guscio fond.	2503	2504	2520	2519	3	2	40.0	0.09	0.06
2340Guscio fond.	2504	2505	2521	2520	3	2	40.0	0.09	0.06
2341Guscio fond.	2507	2506	2522	2523	3	2	40.0	0.09	0.06
2342Guscio fond.	2506	2508	2524	2522	3	2	40.0	0.09	0.06
2343Guscio fond.	2508	2509	2525	2524	3	2	40.0	0.09	0.06
2344Guscio fond.	2509	2510	2526	2525	3	2	40.0	0.09	0.06
2345Guscio fond.	2510	2511	2527	2526	3	2	40.0	0.09	0.06
2346Guscio fond.	2511	2512	2528	2527	3	2	40.0	0.09	0.06
2347Guscio fond.	2512	2513	2529	2528	3	2	40.0	0.09	0.06
2348Guscio fond.	2513	2514	2530	2529	3	2	40.0	0.09	0.06
2349Guscio fond.	2514	2515	2531	2530	3	2	40.0	0.09	0.06
2350Guscio fond.	2515	2516	2532	2531	3	2	40.0	0.09	0.06
2351Guscio fond.	2516	2517	2533	2532	3	2	40.0	0.09	0.06
2352Guscio fond.	2517	2518	2534	2533	3	2	40.0	0.09	0.06
2353Guscio fond.	2518	2519	2535	2534	3	2	40.0	0.09	0.06
2354Guscio fond.	2519	2520	2536	2535	3	2	40.0	0.09	0.06
2355Guscio fond.	2520	2521	2537	2536	3	2	40.0	0.09	0.06
2356Guscio fond.	2523	2522	2538	2539	3	2	40.0	0.09	0.06
2357Guscio fond.	2522	2524	2540	2538	3	2	40.0	0.09	0.06
2358Guscio fond.	2524	2525	2541	2540	3	2	40.0	0.09	0.06
2359Guscio fond.	2525	2526	2542	2541	3	2	40.0	0.09	0.06
2360Guscio fond.	2526	2527	2543	2542	3	2	40.0	0.09	0.06
2361Guscio fond.	2527	2528	2544	2543	3	2	40.0	0.09	0.06
2362Guscio fond.	2528	2529	2545	2544	3	2	40.0	0.09	0.06
2363Guscio fond.	2529	2530	2546	2545	3	2	40.0	0.09	0.06
2364Guscio fond.	2530	2531	2547	2546	3	2	40.0	0.09	0.06
2365Guscio fond.	2531	2532	2548	2547	3	2	40.0	0.09	0.06
2366Guscio fond.	2532	2533	2549	2548	3	2	40.0	0.09	0.06
2367Guscio fond.	2533	2534	2550	2549	3	2	40.0	0.09	0.06
2368Guscio fond.	2534	2535	2551	2550	3	2	40.0	0.09	0.06
2369Guscio fond.	2535	2536	2552	2551	3	2	40.0	0.09	0.06
2370Guscio fond.	2536	2537	2553	2552	3	2	40.0	0.09	0.06
2371Guscio fond.	2539	2538	2554	2555	3	2	40.0	0.09	0.06
2372Guscio fond.	2538	2540	2556	2554	3	2	40.0	0.09	0.06
2373Guscio fond.	2540	2541	2557	2556	3	2	40.0	0.09	0.06
2374Guscio fond.	2541	2542	2558	2557	3	2	40.0	0.09	0.06
2375Guscio fond.	2542	2543	2559	2558	3	2	40.0	0.09	0.06
2376Guscio fond.	2543	2544	2560	2559	3	2	40.0	0.09	0.06
2377Guscio fond.	2544	2545	2561	2560	3	2	40.0	0.09	0.06
2378Guscio fond.	2545	2546	2562	2561	3	2	40.0	0.09	0.06
2379Guscio fond.	2546	2547	2563	2562	3	2	40.0	0.09	0.06
2380Guscio fond.	2547	2548	2564	2563	3	2	40.0	0.09	0.06
2381Guscio fond.	2548	2549	2565	2564	3	2	40.0	0.09	0.06
2382Guscio fond.	2549	2550	2566	2565	3	2	40.0	0.09	0.06
2383Guscio fond.	2550	2551	2567	2566	3	2	40.0	0.09	0.06

2384	Guscio fond.	2551	2552	2568	2567	3	2	40.0	0.09	0.06
2385	Guscio fond.	2552	2553	2569	2568	3	2	40.0	0.09	0.06
2386	Guscio fond.	2555	2554	2570	2571	3	2	40.0	0.09	0.06
2387	Guscio fond.	2554	2556	2572	2570	3	2	40.0	0.09	0.06
2388	Guscio fond.	2556	2557	2573	2572	3	2	40.0	0.09	0.06
2389	Guscio fond.	2557	2558	2574	2573	3	2	40.0	0.09	0.06
2390	Guscio fond.	2558	2559	2575	2574	3	2	40.0	0.09	0.06
2391	Guscio fond.	2559	2560	2576	2575	3	2	40.0	0.09	0.06
2392	Guscio fond.	2560	2561	2577	2576	3	2	40.0	0.09	0.06
2393	Guscio fond.	2561	2562	2578	2577	3	2	40.0	0.09	0.06
2394	Guscio fond.	2562	2563	2579	2578	3	2	40.0	0.09	0.06
2395	Guscio fond.	2563	2564	2580	2579	3	2	40.0	0.09	0.06
2396	Guscio fond.	2564	2565	2581	2580	3	2	40.0	0.09	0.06
2397	Guscio fond.	2565	2566	2582	2581	3	2	40.0	0.09	0.06
2398	Guscio fond.	2566	2567	2583	2582	3	2	40.0	0.09	0.06
2399	Guscio fond.	2567	2568	2584	2583	3	2	40.0	0.09	0.06
2400	Guscio fond.	2568	2569	2585	2584	3	2	40.0	0.09	0.06
2401	Guscio fond.	2571	2570	2586	2587	3	2	40.0	0.09	0.06
2402	Guscio fond.	2570	2572	2588	2586	3	2	40.0	0.09	0.06
2403	Guscio fond.	2572	2573	2589	2588	3	2	40.0	0.09	0.06
2404	Guscio fond.	2573	2574	2590	2589	3	2	40.0	0.09	0.06
2405	Guscio fond.	2574	2575	2591	2590	3	2	40.0	0.09	0.06
2406	Guscio fond.	2575	2576	2592	2591	3	2	40.0	0.09	0.06
2407	Guscio fond.	2576	2577	2593	2592	3	2	40.0	0.09	0.06
2408	Guscio fond.	2577	2578	2594	2593	3	2	40.0	0.09	0.06
2409	Guscio fond.	2578	2579	2595	2594	3	2	40.0	0.09	0.06
2410	Guscio fond.	2579	2580	2596	2595	3	2	40.0	0.09	0.06
2411	Guscio fond.	2580	2581	2597	2596	3	2	40.0	0.09	0.06
2412	Guscio fond.	2581	2582	2598	2597	3	2	40.0	0.09	0.06
2413	Guscio fond.	2582	2583	2599	2598	3	2	40.0	0.09	0.06
2414	Guscio fond.	2583	2584	2600	2599	3	2	40.0	0.09	0.06
2415	Guscio fond.	2584	2585	2601	2600	3	2	40.0	0.09	0.06
2416	Guscio fond.	2587	2586	2602	2603	3	2	40.0	0.09	0.06
2417	Guscio fond.	2586	2588	2604	2602	3	2	40.0	0.09	0.06
2418	Guscio fond.	2588	2589	2605	2604	3	2	40.0	0.09	0.06
2419	Guscio fond.	2589	2590	2606	2605	3	2	40.0	0.09	0.06
2420	Guscio fond.	2590	2591	2607	2606	3	2	40.0	0.09	0.06
2421	Guscio fond.	2591	2592	2608	2607	3	2	40.0	0.09	0.06
2422	Guscio fond.	2592	2593	2609	2608	3	2	40.0	0.09	0.06
2423	Guscio fond.	2593	2594	2610	2609	3	2	40.0	0.09	0.06
2424	Guscio fond.	2594	2595	2611	2610	3	2	40.0	0.09	0.06
2425	Guscio fond.	2595	2596	2612	2611	3	2	40.0	0.09	0.06
2426	Guscio fond.	2596	2597	2613	2612	3	2	40.0	0.09	0.06
2427	Guscio fond.	2597	2598	2614	2613	3	2	40.0	0.09	0.06
2428	Guscio fond.	2598	2599	2615	2614	3	2	40.0	0.09	0.06
2429	Guscio fond.	2599	2600	2616	2615	3	2	40.0	0.09	0.06
2430	Guscio fond.	2600	2601	2617	2616	3	2	40.0	0.09	0.06
2431	Guscio fond.	2603	2602	2618	2619	3	2	40.0	0.09	0.06
2432	Guscio fond.	2602	2604	2620	2618	3	2	40.0	0.09	0.06
2433	Guscio fond.	2604	2605	2621	2620	3	2	40.0	0.09	0.06
2434	Guscio fond.	2605	2606	2622	2621	3	2	40.0	0.09	0.06
2435	Guscio fond.	2606	2607	2623	2622	3	2	40.0	0.09	0.06
2436	Guscio fond.	2607	2608	2624	2623	3	2	40.0	0.09	0.06
2437	Guscio fond.	2608	2609	2625	2624	3	2	40.0	0.09	0.06
2438	Guscio fond.	2609	2610	2626	2625	3	2	40.0	0.09	0.06
2439	Guscio fond.	2610	2611	2627	2626	3	2	40.0	0.09	0.06
2440	Guscio fond.	2611	2612	2628	2627	3	2	40.0	0.09	0.06
2441	Guscio fond.	2612	2613	2629	2628	3	2	40.0	0.09	0.06
2442	Guscio fond.	2613	2614	2630	2629	3	2	40.0	0.09	0.06
2443	Guscio fond.	2614	2615	2631	2630	3	2	40.0	0.09	0.06
2444	Guscio fond.	2615	2616	2632	2631	3	2	40.0	0.09	0.06
2445	Guscio fond.	2616	2617	2633	2632	3	2	40.0	0.09	0.06
2446	Guscio fond.	2619	2618	2634	2635	3	2	40.0	0.09	0.06
2447	Guscio fond.	2618	2620	2636	2634	3	2	40.0	0.09	0.06
2448	Guscio fond.	2620	2621	2637	2636	3	2	40.0	0.09	0.06
2449	Guscio fond.	2621	2622	2638	2637	3	2	40.0	0.09	0.06
2450	Guscio fond.	2622	2623	2639	2638	3	2	40.0	0.09	0.06
2451	Guscio fond.	2623	2624	2640	2639	3	2	40.0	0.09	0.06
2452	Guscio fond.	2624	2625	2641	2640	3	2	40.0	0.09	0.06
2453	Guscio fond.	2625	2626	2642	2641	3	2	40.0	0.09	0.06
2454	Guscio fond.	2626	2627	2643	2642	3	2	40.0	0.09	0.06
2455	Guscio fond.	2627	2628	2644	2643	3	2	40.0	0.09	0.06
2456	Guscio fond.	2628	2629	2645	2644	3	2	40.0	0.09	0.06
2457	Guscio fond.	2629	2630	2646	2645	3	2	40.0	0.09	0.06
2458	Guscio fond.	2630	2631	2647	2646	3	2	40.0	0.09	0.06
2459	Guscio fond.	2631	2632	2648	2647	3	2	40.0	0.09	0.06
2460	Guscio fond.	2632	2633	2649	2648	3	2	40.0	0.09	0.06

2461	Guscio fond.	2635	2634	2650	2651	3	2	40.0	0.09	0.06
2462	Guscio fond.	2634	2636	2652	2650	3	2	40.0	0.09	0.06
2463	Guscio fond.	2636	2637	2653	2652	3	2	40.0	0.09	0.06
2464	Guscio fond.	2637	2638	2654	2653	3	2	40.0	0.09	0.06
2465	Guscio fond.	2638	2639	2655	2654	3	2	40.0	0.09	0.06
2466	Guscio fond.	2639	2640	2656	2655	3	2	40.0	0.09	0.06
2467	Guscio fond.	2640	2641	2657	2656	3	2	40.0	0.09	0.06
2468	Guscio fond.	2641	2642	2658	2657	3	2	40.0	0.09	0.06
2469	Guscio fond.	2642	2643	2659	2658	3	2	40.0	0.09	0.06
2470	Guscio fond.	2643	2644	2660	2659	3	2	40.0	0.09	0.06
2471	Guscio fond.	2644	2645	2661	2660	3	2	40.0	0.09	0.06
2472	Guscio fond.	2645	2646	2662	2661	3	2	40.0	0.09	0.06
2473	Guscio fond.	2646	2647	2663	2662	3	2	40.0	0.09	0.06
2474	Guscio fond.	2647	2648	2664	2663	3	2	40.0	0.09	0.06
2475	Guscio fond.	2648	2649	2665	2664	3	2	40.0	0.09	0.06
2476	Guscio fond.	2651	2650	2666	2667	3	2	40.0	0.09	0.06
2477	Guscio fond.	2650	2652	2668	2666	3	2	40.0	0.09	0.06
2478	Guscio fond.	2652	2653	2669	2668	3	2	40.0	0.09	0.06
2479	Guscio fond.	2653	2654	2670	2669	3	2	40.0	0.09	0.06
2480	Guscio fond.	2654	2655	2671	2670	3	2	40.0	0.09	0.06
2481	Guscio fond.	2655	2656	2672	2671	3	2	40.0	0.09	0.06
2482	Guscio fond.	2656	2657	2673	2672	3	2	40.0	0.09	0.06
2483	Guscio fond.	2657	2658	2674	2673	3	2	40.0	0.09	0.06
2484	Guscio fond.	2658	2659	2675	2674	3	2	40.0	0.09	0.06
2485	Guscio fond.	2659	2660	2676	2675	3	2	40.0	0.09	0.06
2486	Guscio fond.	2660	2661	2677	2676	3	2	40.0	0.09	0.06
2487	Guscio fond.	2661	2662	2678	2677	3	2	40.0	0.09	0.06
2488	Guscio fond.	2662	2663	2679	2678	3	2	40.0	0.09	0.06
2489	Guscio fond.	2663	2664	2680	2679	3	2	40.0	0.09	0.06
2490	Guscio fond.	2664	2665	2681	2680	3	2	40.0	0.09	0.06
2491	Guscio fond.	2667	2666	2682	2683	3	2	40.0	0.09	0.06
2492	Guscio fond.	2666	2668	2684	2682	3	2	40.0	0.09	0.06
2493	Guscio fond.	2668	2669	2685	2684	3	2	40.0	0.09	0.06
2494	Guscio fond.	2669	2670	2686	2685	3	2	40.0	0.09	0.06
2495	Guscio fond.	2670	2671	2687	2686	3	2	40.0	0.09	0.06
2496	Guscio fond.	2671	2672	2688	2687	3	2	40.0	0.09	0.06
2497	Guscio fond.	2672	2673	2689	2688	3	2	40.0	0.09	0.06
2498	Guscio fond.	2673	2674	2690	2689	3	2	40.0	0.09	0.06
2499	Guscio fond.	2674	2675	2691	2690	3	2	40.0	0.09	0.06
2500	Guscio fond.	2675	2676	2692	2691	3	2	40.0	0.09	0.06
2501	Guscio fond.	2676	2677	2693	2692	3	2	40.0	0.09	0.06
2502	Guscio fond.	2677	2678	2694	2693	3	2	40.0	0.09	0.06
2503	Guscio fond.	2678	2679	2695	2694	3	2	40.0	0.09	0.06
2504	Guscio fond.	2679	2680	2696	2695	3	2	40.0	0.09	0.06
2505	Guscio fond.	2680	2681	2697	2696	3	2	40.0	0.09	0.06
2506	Guscio fond.	2683	2682	2698	18	3	2	40.0	0.09	0.06
2507	Guscio fond.	2682	2684	2699	2698	3	2	40.0	0.09	0.06
2508	Guscio fond.	2684	2685	2700	2699	3	2	40.0	0.09	0.06
2509	Guscio fond.	2685	2686	2701	2700	3	2	40.0	0.09	0.06
2510	Guscio fond.	2686	2687	2702	2701	3	2	40.0	0.09	0.06
2511	Guscio fond.	2687	2688	2703	2702	3	2	40.0	0.09	0.06
2512	Guscio fond.	2688	2689	2704	2703	3	2	40.0	0.09	0.06
2513	Guscio fond.	2689	2690	2705	2704	3	2	40.0	0.09	0.06
2514	Guscio fond.	2690	2691	2706	2705	3	2	40.0	0.09	0.06
2515	Guscio fond.	2691	2692	2707	2706	3	2	40.0	0.09	0.06
2516	Guscio fond.	2692	2693	2708	2707	3	2	40.0	0.09	0.06
2517	Guscio fond.	2693	2694	2709	2708	3	2	40.0	0.09	0.06
2518	Guscio fond.	2694	2695	2710	2709	3	2	40.0	0.09	0.06
2519	Guscio fond.	2695	2696	2711	2710	3	2	40.0	0.09	0.06
2520	Guscio fond.	2696	2697	19	2711	3	2	40.0	0.09	0.06
2521	Guscio fond.	16	2220	2712	2249	3	2	40.0	0.09	0.06
2522	Guscio fond.	2220	2221	2713	2712	3	2	40.0	0.09	0.06
2523	Guscio fond.	2221	2222	2714	2713	3	2	40.0	0.09	0.06
2524	Guscio fond.	2222	2223	2715	2714	3	2	40.0	0.09	0.06
2525	Guscio fond.	2223	2224	2716	2715	3	2	40.0	0.09	0.06
2526	Guscio fond.	2224	2225	2717	2716	3	2	40.0	0.09	0.06
2527	Guscio fond.	2225	2226	2718	2717	3	2	40.0	0.09	0.06
2528	Guscio fond.	2226	2227	2719	2718	3	2	40.0	0.09	0.06
2529	Guscio fond.	2227	2228	2720	2719	3	2	40.0	0.09	0.06
2530	Guscio fond.	2228	2229	2721	2720	3	2	40.0	0.09	0.06
2531	Guscio fond.	2229	2230	2722	2721	3	2	40.0	0.09	0.06
2532	Guscio fond.	2230	2231	2723	2722	3	2	40.0	0.09	0.06
2533	Guscio fond.	2231	2232	2724	2723	3	2	40.0	0.09	0.06
2534	Guscio fond.	2232	2233	2725	2724	3	2	40.0	0.09	0.06
2535	Guscio fond.	2233	17	2726	2725	3	2	40.0	0.09	0.06
2536	Guscio fond.	2249	2712	2727	2265	3	2	40.0	0.09	0.06
2537	Guscio fond.	2712	2713	2728	2727	3	2	40.0	0.09	0.06

2538	Guscio fond.	2713	2714	2729	2728	3	2	40.0	0.09	0.06
2539	Guscio fond.	2714	2715	2730	2729	3	2	40.0	0.09	0.06
2540	Guscio fond.	2715	2716	2731	2730	3	2	40.0	0.09	0.06
2541	Guscio fond.	2716	2717	2732	2731	3	2	40.0	0.09	0.06
2542	Guscio fond.	2717	2718	2733	2732	3	2	40.0	0.09	0.06
2543	Guscio fond.	2718	2719	2734	2733	3	2	40.0	0.09	0.06
2544	Guscio fond.	2719	2720	2735	2734	3	2	40.0	0.09	0.06
2545	Guscio fond.	2720	2721	2736	2735	3	2	40.0	0.09	0.06
2546	Guscio fond.	2721	2722	2737	2736	3	2	40.0	0.09	0.06
2547	Guscio fond.	2722	2723	2738	2737	3	2	40.0	0.09	0.06
2548	Guscio fond.	2723	2724	2739	2738	3	2	40.0	0.09	0.06
2549	Guscio fond.	2724	2725	2740	2739	3	2	40.0	0.09	0.06
2550	Guscio fond.	2725	2726	2741	2740	3	2	40.0	0.09	0.06
2551	Guscio fond.	2265	2727	2742	2281	3	2	40.0	0.09	0.06
2552	Guscio fond.	2727	2728	2743	2742	3	2	40.0	0.09	0.06
2553	Guscio fond.	2728	2729	2744	2743	3	2	40.0	0.09	0.06
2554	Guscio fond.	2729	2730	2745	2744	3	2	40.0	0.09	0.06
2555	Guscio fond.	2730	2731	2746	2745	3	2	40.0	0.09	0.06
2556	Guscio fond.	2731	2732	2747	2746	3	2	40.0	0.09	0.06
2557	Guscio fond.	2732	2733	2748	2747	3	2	40.0	0.09	0.06
2558	Guscio fond.	2733	2734	2749	2748	3	2	40.0	0.09	0.06
2559	Guscio fond.	2734	2735	2750	2749	3	2	40.0	0.09	0.06
2560	Guscio fond.	2735	2736	2751	2750	3	2	40.0	0.09	0.06
2561	Guscio fond.	2736	2737	2752	2751	3	2	40.0	0.09	0.06
2562	Guscio fond.	2737	2738	2753	2752	3	2	40.0	0.09	0.06
2563	Guscio fond.	2738	2739	2754	2753	3	2	40.0	0.09	0.06
2564	Guscio fond.	2739	2740	2755	2754	3	2	40.0	0.09	0.06
2565	Guscio fond.	2740	2741	2756	2755	3	2	40.0	0.09	0.06
2566	Guscio fond.	2281	2742	2757	2297	3	2	40.0	0.09	0.06
2567	Guscio fond.	2742	2743	2758	2757	3	2	40.0	0.09	0.06
2568	Guscio fond.	2743	2744	2759	2758	3	2	40.0	0.09	0.06
2569	Guscio fond.	2744	2745	2760	2759	3	2	40.0	0.09	0.06
2570	Guscio fond.	2745	2746	2761	2760	3	2	40.0	0.09	0.06
2571	Guscio fond.	2746	2747	2762	2761	3	2	40.0	0.09	0.06
2572	Guscio fond.	2747	2748	2763	2762	3	2	40.0	0.09	0.06
2573	Guscio fond.	2748	2749	2764	2763	3	2	40.0	0.09	0.06
2574	Guscio fond.	2749	2750	2765	2764	3	2	40.0	0.09	0.06
2575	Guscio fond.	2750	2751	2766	2765	3	2	40.0	0.09	0.06
2576	Guscio fond.	2751	2752	2767	2766	3	2	40.0	0.09	0.06
2577	Guscio fond.	2752	2753	2768	2767	3	2	40.0	0.09	0.06
2578	Guscio fond.	2753	2754	2769	2768	3	2	40.0	0.09	0.06
2579	Guscio fond.	2754	2755	2770	2769	3	2	40.0	0.09	0.06
2580	Guscio fond.	2755	2756	2771	2770	3	2	40.0	0.09	0.06
2581	Guscio fond.	2297	2757	2772	2313	3	2	40.0	0.09	0.06
2582	Guscio fond.	2757	2758	2773	2772	3	2	40.0	0.09	0.06
2583	Guscio fond.	2758	2759	2774	2773	3	2	40.0	0.09	0.06
2584	Guscio fond.	2759	2760	2775	2774	3	2	40.0	0.09	0.06
2585	Guscio fond.	2760	2761	2776	2775	3	2	40.0	0.09	0.06
2586	Guscio fond.	2761	2762	2777	2776	3	2	40.0	0.09	0.06
2587	Guscio fond.	2762	2763	2778	2777	3	2	40.0	0.09	0.06
2588	Guscio fond.	2763	2764	2779	2778	3	2	40.0	0.09	0.06
2589	Guscio fond.	2764	2765	2780	2779	3	2	40.0	0.09	0.06
2590	Guscio fond.	2765	2766	2781	2780	3	2	40.0	0.09	0.06
2591	Guscio fond.	2766	2767	2782	2781	3	2	40.0	0.09	0.06
2592	Guscio fond.	2767	2768	2783	2782	3	2	40.0	0.09	0.06
2593	Guscio fond.	2768	2769	2784	2783	3	2	40.0	0.09	0.06
2594	Guscio fond.	2769	2770	2785	2784	3	2	40.0	0.09	0.06
2595	Guscio fond.	2770	2771	2786	2785	3	2	40.0	0.09	0.06
2596	Guscio fond.	2313	2772	2787	2329	3	2	40.0	0.09	0.06
2597	Guscio fond.	2772	2773	2788	2787	3	2	40.0	0.09	0.06
2598	Guscio fond.	2773	2774	2789	2788	3	2	40.0	0.09	0.06
2599	Guscio fond.	2774	2775	2790	2789	3	2	40.0	0.09	0.06
2600	Guscio fond.	2775	2776	2791	2790	3	2	40.0	0.09	0.06
2601	Guscio fond.	2776	2777	2792	2791	3	2	40.0	0.09	0.06
2602	Guscio fond.	2777	2778	2793	2792	3	2	40.0	0.09	0.06
2603	Guscio fond.	2778	2779	2794	2793	3	2	40.0	0.09	0.06
2604	Guscio fond.	2779	2780	2795	2794	3	2	40.0	0.09	0.06
2605	Guscio fond.	2780	2781	2796	2795	3	2	40.0	0.09	0.06
2606	Guscio fond.	2781	2782	2797	2796	3	2	40.0	0.09	0.06
2607	Guscio fond.	2782	2783	2798	2797	3	2	40.0	0.09	0.06
2608	Guscio fond.	2783	2784	2799	2798	3	2	40.0	0.09	0.06
2609	Guscio fond.	2784	2785	2800	2799	3	2	40.0	0.09	0.06
2610	Guscio fond.	2785	2786	2801	2800	3	2	40.0	0.09	0.06
2611	Guscio fond.	2329	2787	2802	2345	3	2	40.0	0.09	0.06
2612	Guscio fond.	2787	2788	2803	2802	3	2	40.0	0.09	0.06
2613	Guscio fond.	2788	2789	2804	2803	3	2	40.0	0.09	0.06
2614	Guscio fond.	2789	2790	2805	2804	3	2	40.0	0.09	0.06

2615	Guscio fond.	2790	2791	2806	2805	3	2	40.0	0.09	0.06
2616	Guscio fond.	2791	2792	2807	2806	3	2	40.0	0.09	0.06
2617	Guscio fond.	2792	2793	2808	2807	3	2	40.0	0.09	0.06
2618	Guscio fond.	2793	2794	2809	2808	3	2	40.0	0.09	0.06
2619	Guscio fond.	2794	2795	2810	2809	3	2	40.0	0.09	0.06
2620	Guscio fond.	2795	2796	2811	2810	3	2	40.0	0.09	0.06
2621	Guscio fond.	2796	2797	2812	2811	3	2	40.0	0.09	0.06
2622	Guscio fond.	2797	2798	2813	2812	3	2	40.0	0.09	0.06
2623	Guscio fond.	2798	2799	2814	2813	3	2	40.0	0.09	0.06
2624	Guscio fond.	2799	2800	2815	2814	3	2	40.0	0.09	0.06
2625	Guscio fond.	2800	2801	2816	2815	3	2	40.0	0.09	0.06
2626	Guscio fond.	2345	2802	2817	2361	3	2	40.0	0.09	0.06
2627	Guscio fond.	2802	2803	2818	2817	3	2	40.0	0.09	0.06
2628	Guscio fond.	2803	2804	2819	2818	3	2	40.0	0.09	0.06
2629	Guscio fond.	2804	2805	2820	2819	3	2	40.0	0.09	0.06
2630	Guscio fond.	2805	2806	2821	2820	3	2	40.0	0.09	0.06
2631	Guscio fond.	2806	2807	2822	2821	3	2	40.0	0.09	0.06
2632	Guscio fond.	2807	2808	2823	2822	3	2	40.0	0.09	0.06
2633	Guscio fond.	2808	2809	2824	2823	3	2	40.0	0.09	0.06
2634	Guscio fond.	2809	2810	2825	2824	3	2	40.0	0.09	0.06
2635	Guscio fond.	2810	2811	2826	2825	3	2	40.0	0.09	0.06
2636	Guscio fond.	2811	2812	2827	2826	3	2	40.0	0.09	0.06
2637	Guscio fond.	2812	2813	2828	2827	3	2	40.0	0.09	0.06
2638	Guscio fond.	2813	2814	2829	2828	3	2	40.0	0.09	0.06
2639	Guscio fond.	2814	2815	2830	2829	3	2	40.0	0.09	0.06
2640	Guscio fond.	2815	2816	2831	2830	3	2	40.0	0.09	0.06
2641	Guscio fond.	2361	2817	2832	2377	3	2	40.0	0.09	0.06
2642	Guscio fond.	2817	2818	2833	2832	3	2	40.0	0.09	0.06
2643	Guscio fond.	2818	2819	2834	2833	3	2	40.0	0.09	0.06
2644	Guscio fond.	2819	2820	2835	2834	3	2	40.0	0.09	0.06
2645	Guscio fond.	2820	2821	2836	2835	3	2	40.0	0.09	0.06
2646	Guscio fond.	2821	2822	2837	2836	3	2	40.0	0.09	0.06
2647	Guscio fond.	2822	2823	2838	2837	3	2	40.0	0.09	0.06
2648	Guscio fond.	2823	2824	2839	2838	3	2	40.0	0.09	0.06
2649	Guscio fond.	2824	2825	2840	2839	3	2	40.0	0.09	0.06
2650	Guscio fond.	2825	2826	2841	2840	3	2	40.0	0.09	0.06
2651	Guscio fond.	2826	2827	2842	2841	3	2	40.0	0.09	0.06
2652	Guscio fond.	2827	2828	2843	2842	3	2	40.0	0.09	0.06
2653	Guscio fond.	2828	2829	2844	2843	3	2	40.0	0.09	0.06
2654	Guscio fond.	2829	2830	2845	2844	3	2	40.0	0.09	0.06
2655	Guscio fond.	2830	2831	2846	2845	3	2	40.0	0.09	0.06
2656	Guscio fond.	2377	2832	2847	2393	3	2	40.0	0.09	0.06
2657	Guscio fond.	2832	2833	2848	2847	3	2	40.0	0.09	0.06
2658	Guscio fond.	2833	2834	2849	2848	3	2	40.0	0.09	0.06
2659	Guscio fond.	2834	2835	2850	2849	3	2	40.0	0.09	0.06
2660	Guscio fond.	2835	2836	2851	2850	3	2	40.0	0.09	0.06
2661	Guscio fond.	2836	2837	2852	2851	3	2	40.0	0.09	0.06
2662	Guscio fond.	2837	2838	2853	2852	3	2	40.0	0.09	0.06
2663	Guscio fond.	2838	2839	2854	2853	3	2	40.0	0.09	0.06
2664	Guscio fond.	2839	2840	2855	2854	3	2	40.0	0.09	0.06
2665	Guscio fond.	2840	2841	2856	2855	3	2	40.0	0.09	0.06
2666	Guscio fond.	2841	2842	2857	2856	3	2	40.0	0.09	0.06
2667	Guscio fond.	2842	2843	2858	2857	3	2	40.0	0.09	0.06
2668	Guscio fond.	2843	2844	2859	2858	3	2	40.0	0.09	0.06
2669	Guscio fond.	2844	2845	2860	2859	3	2	40.0	0.09	0.06
2670	Guscio fond.	2845	2846	2861	2860	3	2	40.0	0.09	0.06
2671	Guscio fond.	2393	2847	2862	2409	3	2	40.0	0.09	0.06
2672	Guscio fond.	2847	2848	2863	2862	3	2	40.0	0.09	0.06
2673	Guscio fond.	2848	2849	2864	2863	3	2	40.0	0.09	0.06
2674	Guscio fond.	2849	2850	2865	2864	3	2	40.0	0.09	0.06
2675	Guscio fond.	2850	2851	2866	2865	3	2	40.0	0.09	0.06
2676	Guscio fond.	2851	2852	2867	2866	3	2	40.0	0.09	0.06
2677	Guscio fond.	2852	2853	2868	2867	3	2	40.0	0.09	0.06
2678	Guscio fond.	2853	2854	2869	2868	3	2	40.0	0.09	0.06
2679	Guscio fond.	2854	2855	2870	2869	3	2	40.0	0.09	0.06
2680	Guscio fond.	2855	2856	2871	2870	3	2	40.0	0.09	0.06
2681	Guscio fond.	2856	2857	2872	2871	3	2	40.0	0.09	0.06
2682	Guscio fond.	2857	2858	2873	2872	3	2	40.0	0.09	0.06
2683	Guscio fond.	2858	2859	2874	2873	3	2	40.0	0.09	0.06
2684	Guscio fond.	2859	2860	2875	2874	3	2	40.0	0.09	0.06
2685	Guscio fond.	2860	2861	2876	2875	3	2	40.0	0.09	0.06
2686	Guscio fond.	2409	2862	2877	2425	3	2	40.0	0.09	0.06
2687	Guscio fond.	2862	2863	2878	2877	3	2	40.0	0.09	0.06
2688	Guscio fond.	2863	2864	2879	2878	3	2	40.0	0.09	0.06
2689	Guscio fond.	2864	2865	2880	2879	3	2	40.0	0.09	0.06
2690	Guscio fond.	2865	2866	2881	2880	3	2	40.0	0.09	0.06
2691	Guscio fond.	2866	2867	2882	2881	3	2	40.0	0.09	0.06

2692	Guscio fond.	2867	2868	2883	2882	3	2	40.0	0.09	0.06
2693	Guscio fond.	2868	2869	2884	2883	3	2	40.0	0.09	0.06
2694	Guscio fond.	2869	2870	2885	2884	3	2	40.0	0.09	0.06
2695	Guscio fond.	2870	2871	2886	2885	3	2	40.0	0.09	0.06
2696	Guscio fond.	2871	2872	2887	2886	3	2	40.0	0.09	0.06
2697	Guscio fond.	2872	2873	2888	2887	3	2	40.0	0.09	0.06
2698	Guscio fond.	2873	2874	2889	2888	3	2	40.0	0.09	0.06
2699	Guscio fond.	2874	2875	2890	2889	3	2	40.0	0.09	0.06
2700	Guscio fond.	2875	2876	2891	2890	3	2	40.0	0.09	0.06
2701	Guscio fond.	2425	2877	2892	2441	3	2	40.0	0.09	0.06
2702	Guscio fond.	2877	2878	2893	2892	3	2	40.0	0.09	0.06
2703	Guscio fond.	2878	2879	2894	2893	3	2	40.0	0.09	0.06
2704	Guscio fond.	2879	2880	2895	2894	3	2	40.0	0.09	0.06
2705	Guscio fond.	2880	2881	2896	2895	3	2	40.0	0.09	0.06
2706	Guscio fond.	2881	2882	2897	2896	3	2	40.0	0.09	0.06
2707	Guscio fond.	2882	2883	2898	2897	3	2	40.0	0.09	0.06
2708	Guscio fond.	2883	2884	2899	2898	3	2	40.0	0.09	0.06
2709	Guscio fond.	2884	2885	2900	2899	3	2	40.0	0.09	0.06
2710	Guscio fond.	2885	2886	2901	2900	3	2	40.0	0.09	0.06
2711	Guscio fond.	2886	2887	2902	2901	3	2	40.0	0.09	0.06
2712	Guscio fond.	2887	2888	2903	2902	3	2	40.0	0.09	0.06
2713	Guscio fond.	2888	2889	2904	2903	3	2	40.0	0.09	0.06
2714	Guscio fond.	2889	2890	2905	2904	3	2	40.0	0.09	0.06
2715	Guscio fond.	2890	2891	2906	2905	3	2	40.0	0.09	0.06
2716	Guscio fond.	2441	2892	2907	2457	3	2	40.0	0.09	0.06
2717	Guscio fond.	2892	2893	2908	2907	3	2	40.0	0.09	0.06
2718	Guscio fond.	2893	2894	2909	2908	3	2	40.0	0.09	0.06
2719	Guscio fond.	2894	2895	2910	2909	3	2	40.0	0.09	0.06
2720	Guscio fond.	2895	2896	2911	2910	3	2	40.0	0.09	0.06
2721	Guscio fond.	2896	2897	2912	2911	3	2	40.0	0.09	0.06
2722	Guscio fond.	2897	2898	2913	2912	3	2	40.0	0.09	0.06
2723	Guscio fond.	2898	2899	2914	2913	3	2	40.0	0.09	0.06
2724	Guscio fond.	2899	2900	2915	2914	3	2	40.0	0.09	0.06
2725	Guscio fond.	2900	2901	2916	2915	3	2	40.0	0.09	0.06
2726	Guscio fond.	2901	2902	2917	2916	3	2	40.0	0.09	0.06
2727	Guscio fond.	2902	2903	2918	2917	3	2	40.0	0.09	0.06
2728	Guscio fond.	2903	2904	2919	2918	3	2	40.0	0.09	0.06
2729	Guscio fond.	2904	2905	2920	2919	3	2	40.0	0.09	0.06
2730	Guscio fond.	2905	2906	2921	2920	3	2	40.0	0.09	0.06
2731	Guscio fond.	2457	2907	2922	2473	3	2	40.0	0.09	0.06
2732	Guscio fond.	2907	2908	2923	2922	3	2	40.0	0.09	0.06
2733	Guscio fond.	2908	2909	2924	2923	3	2	40.0	0.09	0.06
2734	Guscio fond.	2909	2910	2925	2924	3	2	40.0	0.09	0.06
2735	Guscio fond.	2910	2911	2926	2925	3	2	40.0	0.09	0.06
2736	Guscio fond.	2911	2912	2927	2926	3	2	40.0	0.09	0.06
2737	Guscio fond.	2912	2913	2928	2927	3	2	40.0	0.09	0.06
2738	Guscio fond.	2913	2914	2929	2928	3	2	40.0	0.09	0.06
2739	Guscio fond.	2914	2915	2930	2929	3	2	40.0	0.09	0.06
2740	Guscio fond.	2915	2916	2931	2930	3	2	40.0	0.09	0.06
2741	Guscio fond.	2916	2917	2932	2931	3	2	40.0	0.09	0.06
2742	Guscio fond.	2917	2918	2933	2932	3	2	40.0	0.09	0.06
2743	Guscio fond.	2918	2919	2934	2933	3	2	40.0	0.09	0.06
2744	Guscio fond.	2919	2920	2935	2934	3	2	40.0	0.09	0.06
2745	Guscio fond.	2920	2921	2936	2935	3	2	40.0	0.09	0.06
2746	Guscio fond.	2473	2922	2937	2489	3	2	40.0	0.09	0.06
2747	Guscio fond.	2922	2923	2938	2937	3	2	40.0	0.09	0.06
2748	Guscio fond.	2923	2924	2939	2938	3	2	40.0	0.09	0.06
2749	Guscio fond.	2924	2925	2940	2939	3	2	40.0	0.09	0.06
2750	Guscio fond.	2925	2926	2941	2940	3	2	40.0	0.09	0.06
2751	Guscio fond.	2926	2927	2942	2941	3	2	40.0	0.09	0.06
2752	Guscio fond.	2927	2928	2943	2942	3	2	40.0	0.09	0.06
2753	Guscio fond.	2928	2929	2944	2943	3	2	40.0	0.09	0.06
2754	Guscio fond.	2929	2930	2945	2944	3	2	40.0	0.09	0.06
2755	Guscio fond.	2930	2931	2946	2945	3	2	40.0	0.09	0.06
2756	Guscio fond.	2931	2932	2947	2946	3	2	40.0	0.09	0.06
2757	Guscio fond.	2932	2933	2948	2947	3	2	40.0	0.09	0.06
2758	Guscio fond.	2933	2934	2949	2948	3	2	40.0	0.09	0.06
2759	Guscio fond.	2934	2935	2950	2949	3	2	40.0	0.09	0.06
2760	Guscio fond.	2935	2936	2951	2950	3	2	40.0	0.09	0.06
2761	Guscio fond.	2489	2937	2952	2505	3	2	40.0	0.09	0.06
2762	Guscio fond.	2937	2938	2953	2952	3	2	40.0	0.09	0.06
2763	Guscio fond.	2938	2939	2954	2953	3	2	40.0	0.09	0.06
2764	Guscio fond.	2939	2940	2955	2954	3	2	40.0	0.09	0.06
2765	Guscio fond.	2940	2941	2956	2955	3	2	40.0	0.09	0.06
2766	Guscio fond.	2941	2942	2957	2956	3	2	40.0	0.09	0.06
2767	Guscio fond.	2942	2943	2958	2957	3	2	40.0	0.09	0.06
2768	Guscio fond.	2943	2944	2959	2958	3	2	40.0	0.09	0.06

2769	Guscio fond.	2944	2945	2960	2959	3	2	40.0	0.09	0.06
2770	Guscio fond.	2945	2946	2961	2960	3	2	40.0	0.09	0.06
2771	Guscio fond.	2946	2947	2962	2961	3	2	40.0	0.09	0.06
2772	Guscio fond.	2947	2948	2963	2962	3	2	40.0	0.09	0.06
2773	Guscio fond.	2948	2949	2964	2963	3	2	40.0	0.09	0.06
2774	Guscio fond.	2949	2950	2965	2964	3	2	40.0	0.09	0.06
2775	Guscio fond.	2950	2951	2966	2965	3	2	40.0	0.09	0.06
2776	Guscio fond.	2505	2952	2967	2521	3	2	40.0	0.09	0.06
2777	Guscio fond.	2952	2953	2968	2967	3	2	40.0	0.09	0.06
2778	Guscio fond.	2953	2954	2969	2968	3	2	40.0	0.09	0.06
2779	Guscio fond.	2954	2955	2970	2969	3	2	40.0	0.09	0.06
2780	Guscio fond.	2955	2956	2971	2970	3	2	40.0	0.09	0.06
2781	Guscio fond.	2956	2957	2972	2971	3	2	40.0	0.09	0.06
2782	Guscio fond.	2957	2958	2973	2972	3	2	40.0	0.09	0.06
2783	Guscio fond.	2958	2959	2974	2973	3	2	40.0	0.09	0.06
2784	Guscio fond.	2959	2960	2975	2974	3	2	40.0	0.09	0.06
2785	Guscio fond.	2960	2961	2976	2975	3	2	40.0	0.09	0.06
2786	Guscio fond.	2961	2962	2977	2976	3	2	40.0	0.09	0.06
2787	Guscio fond.	2962	2963	2978	2977	3	2	40.0	0.09	0.06
2788	Guscio fond.	2963	2964	2979	2978	3	2	40.0	0.09	0.06
2789	Guscio fond.	2964	2965	2980	2979	3	2	40.0	0.09	0.06
2790	Guscio fond.	2965	2966	2981	2980	3	2	40.0	0.09	0.06
2791	Guscio fond.	2521	2967	2982	2537	3	2	40.0	0.09	0.06
2792	Guscio fond.	2967	2968	2983	2982	3	2	40.0	0.09	0.06
2793	Guscio fond.	2968	2969	2984	2983	3	2	40.0	0.09	0.06
2794	Guscio fond.	2969	2970	2985	2984	3	2	40.0	0.09	0.06
2795	Guscio fond.	2970	2971	2986	2985	3	2	40.0	0.09	0.06
2796	Guscio fond.	2971	2972	2987	2986	3	2	40.0	0.09	0.06
2797	Guscio fond.	2972	2973	2988	2987	3	2	40.0	0.09	0.06
2798	Guscio fond.	2973	2974	2989	2988	3	2	40.0	0.09	0.06
2799	Guscio fond.	2974	2975	2990	2989	3	2	40.0	0.09	0.06
2800	Guscio fond.	2975	2976	2991	2990	3	2	40.0	0.09	0.06
2801	Guscio fond.	2976	2977	2992	2991	3	2	40.0	0.09	0.06
2802	Guscio fond.	2977	2978	2993	2992	3	2	40.0	0.09	0.06
2803	Guscio fond.	2978	2979	2994	2993	3	2	40.0	0.09	0.06
2804	Guscio fond.	2979	2980	2995	2994	3	2	40.0	0.09	0.06
2805	Guscio fond.	2980	2981	2996	2995	3	2	40.0	0.09	0.06
2806	Guscio fond.	2537	2982	2997	2553	3	2	40.0	0.09	0.06
2807	Guscio fond.	2982	2983	2998	2997	3	2	40.0	0.09	0.06
2808	Guscio fond.	2983	2984	2999	2998	3	2	40.0	0.09	0.06
2809	Guscio fond.	2984	2985	3000	2999	3	2	40.0	0.09	0.06
2810	Guscio fond.	2985	2986	3001	3000	3	2	40.0	0.09	0.06
2811	Guscio fond.	2986	2987	3002	3001	3	2	40.0	0.09	0.06
2812	Guscio fond.	2987	2988	3003	3002	3	2	40.0	0.09	0.06
2813	Guscio fond.	2988	2989	3004	3003	3	2	40.0	0.09	0.06
2814	Guscio fond.	2989	2990	3005	3004	3	2	40.0	0.09	0.06
2815	Guscio fond.	2990	2991	3006	3005	3	2	40.0	0.09	0.06
2816	Guscio fond.	2991	2992	3007	3006	3	2	40.0	0.09	0.06
2817	Guscio fond.	2992	2993	3008	3007	3	2	40.0	0.09	0.06
2818	Guscio fond.	2993	2994	3009	3008	3	2	40.0	0.09	0.06
2819	Guscio fond.	2994	2995	3010	3009	3	2	40.0	0.09	0.06
2820	Guscio fond.	2995	2996	3011	3010	3	2	40.0	0.09	0.06
2821	Guscio fond.	2553	2997	3012	2569	3	2	40.0	0.09	0.06
2822	Guscio fond.	2997	2998	3013	3012	3	2	40.0	0.09	0.06
2823	Guscio fond.	2998	2999	3014	3013	3	2	40.0	0.09	0.06
2824	Guscio fond.	2999	3000	3015	3014	3	2	40.0	0.09	0.06
2825	Guscio fond.	3000	3001	3016	3015	3	2	40.0	0.09	0.06
2826	Guscio fond.	3001	3002	3017	3016	3	2	40.0	0.09	0.06
2827	Guscio fond.	3002	3003	3018	3017	3	2	40.0	0.09	0.06
2828	Guscio fond.	3003	3004	3019	3018	3	2	40.0	0.09	0.06
2829	Guscio fond.	3004	3005	3020	3019	3	2	40.0	0.09	0.06
2830	Guscio fond.	3005	3006	3021	3020	3	2	40.0	0.09	0.06
2831	Guscio fond.	3006	3007	3022	3021	3	2	40.0	0.09	0.06
2832	Guscio fond.	3007	3008	3023	3022	3	2	40.0	0.09	0.06
2833	Guscio fond.	3008	3009	3024	3023	3	2	40.0	0.09	0.06
2834	Guscio fond.	3009	3010	3025	3024	3	2	40.0	0.09	0.06
2835	Guscio fond.	3010	3011	3026	3025	3	2	40.0	0.09	0.06
2836	Guscio fond.	2569	3012	3027	2585	3	2	40.0	0.09	0.06
2837	Guscio fond.	3012	3013	3028	3027	3	2	40.0	0.09	0.06
2838	Guscio fond.	3013	3014	3029	3028	3	2	40.0	0.09	0.06
2839	Guscio fond.	3014	3015	3030	3029	3	2	40.0	0.09	0.06
2840	Guscio fond.	3015	3016	3031	3030	3	2	40.0	0.09	0.06
2841	Guscio fond.	3016	3017	3032	3031	3	2	40.0	0.09	0.06
2842	Guscio fond.	3017	3018	3033	3032	3	2	40.0	0.09	0.06
2843	Guscio fond.	3018	3019	3034	3033	3	2	40.0	0.09	0.06
2844	Guscio fond.	3019	3020	3035	3034	3	2	40.0	0.09	0.06
2845	Guscio fond.	3020	3021	3036	3035	3	2	40.0	0.09	0.06

2846	Guscio fond.	3021	3022	3037	3036	3	2	40.0	0.09	0.06
2847	Guscio fond.	3022	3023	3038	3037	3	2	40.0	0.09	0.06
2848	Guscio fond.	3023	3024	3039	3038	3	2	40.0	0.09	0.06
2849	Guscio fond.	3024	3025	3040	3039	3	2	40.0	0.09	0.06
2850	Guscio fond.	3025	3026	3041	3040	3	2	40.0	0.09	0.06
2851	Guscio fond.	2585	3027	3042	2601	3	2	40.0	0.09	0.06
2852	Guscio fond.	3027	3028	3043	3042	3	2	40.0	0.09	0.06
2853	Guscio fond.	3028	3029	3044	3043	3	2	40.0	0.09	0.06
2854	Guscio fond.	3029	3030	3045	3044	3	2	40.0	0.09	0.06
2855	Guscio fond.	3030	3031	3046	3045	3	2	40.0	0.09	0.06
2856	Guscio fond.	3031	3032	3047	3046	3	2	40.0	0.09	0.06
2857	Guscio fond.	3032	3033	3048	3047	3	2	40.0	0.09	0.06
2858	Guscio fond.	3033	3034	3049	3048	3	2	40.0	0.09	0.06
2859	Guscio fond.	3034	3035	3050	3049	3	2	40.0	0.09	0.06
2860	Guscio fond.	3035	3036	3051	3050	3	2	40.0	0.09	0.06
2861	Guscio fond.	3036	3037	3052	3051	3	2	40.0	0.09	0.06
2862	Guscio fond.	3037	3038	3053	3052	3	2	40.0	0.09	0.06
2863	Guscio fond.	3038	3039	3054	3053	3	2	40.0	0.09	0.06
2864	Guscio fond.	3039	3040	3055	3054	3	2	40.0	0.09	0.06
2865	Guscio fond.	3040	3041	3056	3055	3	2	40.0	0.09	0.06
2866	Guscio fond.	2601	3042	3057	2617	3	2	40.0	0.09	0.06
2867	Guscio fond.	3042	3043	3058	3057	3	2	40.0	0.09	0.06
2868	Guscio fond.	3043	3044	3059	3058	3	2	40.0	0.09	0.06
2869	Guscio fond.	3044	3045	3060	3059	3	2	40.0	0.09	0.06
2870	Guscio fond.	3045	3046	3061	3060	3	2	40.0	0.09	0.06
2871	Guscio fond.	3046	3047	3062	3061	3	2	40.0	0.09	0.06
2872	Guscio fond.	3047	3048	3063	3062	3	2	40.0	0.09	0.06
2873	Guscio fond.	3048	3049	3064	3063	3	2	40.0	0.09	0.06
2874	Guscio fond.	3049	3050	3065	3064	3	2	40.0	0.09	0.06
2875	Guscio fond.	3050	3051	3066	3065	3	2	40.0	0.09	0.06
2876	Guscio fond.	3051	3052	3067	3066	3	2	40.0	0.09	0.06
2877	Guscio fond.	3052	3053	3068	3067	3	2	40.0	0.09	0.06
2878	Guscio fond.	3053	3054	3069	3068	3	2	40.0	0.09	0.06
2879	Guscio fond.	3054	3055	3070	3069	3	2	40.0	0.09	0.06
2880	Guscio fond.	3055	3056	3071	3070	3	2	40.0	0.09	0.06
2881	Guscio fond.	2617	3057	3072	2633	3	2	40.0	0.09	0.06
2882	Guscio fond.	3057	3058	3073	3072	3	2	40.0	0.09	0.06
2883	Guscio fond.	3058	3059	3074	3073	3	2	40.0	0.09	0.06
2884	Guscio fond.	3059	3060	3075	3074	3	2	40.0	0.09	0.06
2885	Guscio fond.	3060	3061	3076	3075	3	2	40.0	0.09	0.06
2886	Guscio fond.	3061	3062	3077	3076	3	2	40.0	0.09	0.06
2887	Guscio fond.	3062	3063	3078	3077	3	2	40.0	0.09	0.06
2888	Guscio fond.	3063	3064	3079	3078	3	2	40.0	0.09	0.06
2889	Guscio fond.	3064	3065	3080	3079	3	2	40.0	0.09	0.06
2890	Guscio fond.	3065	3066	3081	3080	3	2	40.0	0.09	0.06
2891	Guscio fond.	3066	3067	3082	3081	3	2	40.0	0.09	0.06
2892	Guscio fond.	3067	3068	3083	3082	3	2	40.0	0.09	0.06
2893	Guscio fond.	3068	3069	3084	3083	3	2	40.0	0.09	0.06
2894	Guscio fond.	3069	3070	3085	3084	3	2	40.0	0.09	0.06
2895	Guscio fond.	3070	3071	3086	3085	3	2	40.0	0.09	0.06
2896	Guscio fond.	2633	3072	3087	2649	3	2	40.0	0.09	0.06
2897	Guscio fond.	3072	3073	3088	3087	3	2	40.0	0.09	0.06
2898	Guscio fond.	3073	3074	3089	3088	3	2	40.0	0.09	0.06
2899	Guscio fond.	3074	3075	3090	3089	3	2	40.0	0.09	0.06
2900	Guscio fond.	3075	3076	3091	3090	3	2	40.0	0.09	0.06
2901	Guscio fond.	3076	3077	3092	3091	3	2	40.0	0.09	0.06
2902	Guscio fond.	3077	3078	3093	3092	3	2	40.0	0.09	0.06
2903	Guscio fond.	3078	3079	3094	3093	3	2	40.0	0.09	0.06
2904	Guscio fond.	3079	3080	3095	3094	3	2	40.0	0.09	0.06
2905	Guscio fond.	3080	3081	3096	3095	3	2	40.0	0.09	0.06
2906	Guscio fond.	3081	3082	3097	3096	3	2	40.0	0.09	0.06
2907	Guscio fond.	3082	3083	3098	3097	3	2	40.0	0.09	0.06
2908	Guscio fond.	3083	3084	3099	3098	3	2	40.0	0.09	0.06
2909	Guscio fond.	3084	3085	3100	3099	3	2	40.0	0.09	0.06
2910	Guscio fond.	3085	3086	3101	3100	3	2	40.0	0.09	0.06
2911	Guscio fond.	2649	3087	3102	2665	3	2	40.0	0.09	0.06
2912	Guscio fond.	3087	3088	3103	3102	3	2	40.0	0.09	0.06
2913	Guscio fond.	3088	3089	3104	3103	3	2	40.0	0.09	0.06
2914	Guscio fond.	3089	3090	3105	3104	3	2	40.0	0.09	0.06
2915	Guscio fond.	3090	3091	3106	3105	3	2	40.0	0.09	0.06
2916	Guscio fond.	3091	3092	3107	3106	3	2	40.0	0.09	0.06
2917	Guscio fond.	3092	3093	3108	3107	3	2	40.0	0.09	0.06
2918	Guscio fond.	3093	3094	3109	3108	3	2	40.0	0.09	0.06
2919	Guscio fond.	3094	3095	3110	3109	3	2	40.0	0.09	0.06
2920	Guscio fond.	3095	3096	3111	3110	3	2	40.0	0.09	0.06
2921	Guscio fond.	3096	3097	3112	3111	3	2	40.0	0.09	0.06
2922	Guscio fond.	3097	3098	3113	3112	3	2	40.0	0.09	0.06

2923	Guscio fond.	3098	3099	3114	3113	3	2	40.0	0.09	0.06
2924	Guscio fond.	3099	3100	3115	3114	3	2	40.0	0.09	0.06
2925	Guscio fond.	3100	3101	3116	3115	3	2	40.0	0.09	0.06
2926	Guscio fond.	2665	3102	3117	2681	3	2	40.0	0.09	0.06
2927	Guscio fond.	3102	3103	3118	3117	3	2	40.0	0.09	0.06
2928	Guscio fond.	3103	3104	3119	3118	3	2	40.0	0.09	0.06
2929	Guscio fond.	3104	3105	3120	3119	3	2	40.0	0.09	0.06
2930	Guscio fond.	3105	3106	3121	3120	3	2	40.0	0.09	0.06
2931	Guscio fond.	3106	3107	3122	3121	3	2	40.0	0.09	0.06
2932	Guscio fond.	3107	3108	3123	3122	3	2	40.0	0.09	0.06
2933	Guscio fond.	3108	3109	3124	3123	3	2	40.0	0.09	0.06
2934	Guscio fond.	3109	3110	3125	3124	3	2	40.0	0.09	0.06
2935	Guscio fond.	3110	3111	3126	3125	3	2	40.0	0.09	0.06
2936	Guscio fond.	3111	3112	3127	3126	3	2	40.0	0.09	0.06
2937	Guscio fond.	3112	3113	3128	3127	3	2	40.0	0.09	0.06
2938	Guscio fond.	3113	3114	3129	3128	3	2	40.0	0.09	0.06
2939	Guscio fond.	3114	3115	3130	3129	3	2	40.0	0.09	0.06
2940	Guscio fond.	3115	3116	3131	3130	3	2	40.0	0.09	0.06
2941	Guscio fond.	2681	3117	3132	2697	3	2	40.0	0.09	0.06
2942	Guscio fond.	3117	3118	3133	3132	3	2	40.0	0.09	0.06
2943	Guscio fond.	3118	3119	3134	3133	3	2	40.0	0.09	0.06
2944	Guscio fond.	3119	3120	3135	3134	3	2	40.0	0.09	0.06
2945	Guscio fond.	3120	3121	3136	3135	3	2	40.0	0.09	0.06
2946	Guscio fond.	3121	3122	3137	3136	3	2	40.0	0.09	0.06
2947	Guscio fond.	3122	3123	3138	3137	3	2	40.0	0.09	0.06
2948	Guscio fond.	3123	3124	3139	3138	3	2	40.0	0.09	0.06
2949	Guscio fond.	3124	3125	3140	3139	3	2	40.0	0.09	0.06
2950	Guscio fond.	3125	3126	3141	3140	3	2	40.0	0.09	0.06
2951	Guscio fond.	3126	3127	3142	3141	3	2	40.0	0.09	0.06
2952	Guscio fond.	3127	3128	3143	3142	3	2	40.0	0.09	0.06
2953	Guscio fond.	3128	3129	3144	3143	3	2	40.0	0.09	0.06
2954	Guscio fond.	3129	3130	3145	3144	3	2	40.0	0.09	0.06
2955	Guscio fond.	3130	3131	3146	3145	3	2	40.0	0.09	0.06
2956	Guscio fond.	2697	3132	3147	19	3	2	40.0	0.09	0.06
2957	Guscio fond.	3132	3133	3148	3147	3	2	40.0	0.09	0.06
2958	Guscio fond.	3133	3134	3149	3148	3	2	40.0	0.09	0.06
2959	Guscio fond.	3134	3135	3150	3149	3	2	40.0	0.09	0.06
2960	Guscio fond.	3135	3136	3151	3150	3	2	40.0	0.09	0.06
2961	Guscio fond.	3136	3137	3152	3151	3	2	40.0	0.09	0.06
2962	Guscio fond.	3137	3138	3153	3152	3	2	40.0	0.09	0.06
2963	Guscio fond.	3138	3139	3154	3153	3	2	40.0	0.09	0.06
2964	Guscio fond.	3139	3140	3155	3154	3	2	40.0	0.09	0.06
2965	Guscio fond.	3140	3141	3156	3155	3	2	40.0	0.09	0.06
2966	Guscio fond.	3141	3142	3157	3156	3	2	40.0	0.09	0.06
2967	Guscio fond.	3142	3143	3158	3157	3	2	40.0	0.09	0.06
2968	Guscio fond.	3143	3144	3159	3158	3	2	40.0	0.09	0.06
2969	Guscio fond.	3144	3145	3160	3159	3	2	40.0	0.09	0.06
2970	Guscio fond.	3145	3146	20	3160	3	2	40.0	0.09	0.06
2971	Guscio fond.	18	2698	3161	3162	3	2	40.0	0.09	0.06
2972	Guscio fond.	2698	2699	3163	3161	3	2	40.0	0.09	0.06
2973	Guscio fond.	2699	2700	3164	3163	3	2	40.0	0.09	0.06
2974	Guscio fond.	2700	2701	3165	3164	3	2	40.0	0.09	0.06
2975	Guscio fond.	2701	2702	3166	3165	3	2	40.0	0.09	0.06
2976	Guscio fond.	2702	2703	3167	3166	3	2	40.0	0.09	0.06
2977	Guscio fond.	2703	2704	3168	3167	3	2	40.0	0.09	0.06
2978	Guscio fond.	2704	2705	3169	3168	3	2	40.0	0.09	0.06
2979	Guscio fond.	2705	2706	3170	3169	3	2	40.0	0.09	0.06
2980	Guscio fond.	2706	2707	3171	3170	3	2	40.0	0.09	0.06
2981	Guscio fond.	2707	2708	3172	3171	3	2	40.0	0.09	0.06
2982	Guscio fond.	2708	2709	3173	3172	3	2	40.0	0.09	0.06
2983	Guscio fond.	2709	2710	3174	3173	3	2	40.0	0.09	0.06
2984	Guscio fond.	2710	2711	3175	3174	3	2	40.0	0.09	0.06
2985	Guscio fond.	2711	19	3176	3175	3	2	40.0	0.09	0.06
2986	Guscio fond.	3162	3161	3177	3178	3	2	40.0	0.09	0.06
2987	Guscio fond.	3161	3163	3179	3177	3	2	40.0	0.09	0.06
2988	Guscio fond.	3163	3164	3180	3179	3	2	40.0	0.09	0.06
2989	Guscio fond.	3164	3165	3181	3180	3	2	40.0	0.09	0.06
2990	Guscio fond.	3165	3166	3182	3181	3	2	40.0	0.09	0.06
2991	Guscio fond.	3166	3167	3183	3182	3	2	40.0	0.09	0.06
2992	Guscio fond.	3167	3168	3184	3183	3	2	40.0	0.09	0.06
2993	Guscio fond.	3168	3169	3185	3184	3	2	40.0	0.09	0.06
2994	Guscio fond.	3169	3170	3186	3185	3	2	40.0	0.09	0.06
2995	Guscio fond.	3170	3171	3187	3186	3	2	40.0	0.09	0.06
2996	Guscio fond.	3171	3172	3188	3187	3	2	40.0	0.09	0.06
2997	Guscio fond.	3172	3173	3189	3188	3	2	40.0	0.09	0.06
2998	Guscio fond.	3173	3174	3190	3189	3	2	40.0	0.09	0.06
2999	Guscio fond.	3174	3175	3191	3190	3	2	40.0	0.09	0.06

3000Guscio fond.	3175	3176	3192	3191	3	2	40.0	0.09	0.06
3001Guscio fond.	3178	3177	3193	3194	3	2	40.0	0.09	0.06
3002Guscio fond.	3177	3179	3195	3193	3	2	40.0	0.09	0.06
3003Guscio fond.	3179	3180	3196	3195	3	2	40.0	0.09	0.06
3004Guscio fond.	3180	3181	3197	3196	3	2	40.0	0.09	0.06
3005Guscio fond.	3181	3182	3198	3197	3	2	40.0	0.09	0.06
3006Guscio fond.	3182	3183	3199	3198	3	2	40.0	0.09	0.06
3007Guscio fond.	3183	3184	3200	3199	3	2	40.0	0.09	0.06
3008Guscio fond.	3184	3185	3201	3200	3	2	40.0	0.09	0.06
3009Guscio fond.	3185	3186	3202	3201	3	2	40.0	0.09	0.06
3010Guscio fond.	3186	3187	3203	3202	3	2	40.0	0.09	0.06
3011Guscio fond.	3187	3188	3204	3203	3	2	40.0	0.09	0.06
3012Guscio fond.	3188	3189	3205	3204	3	2	40.0	0.09	0.06
3013Guscio fond.	3189	3190	3206	3205	3	2	40.0	0.09	0.06
3014Guscio fond.	3190	3191	3207	3206	3	2	40.0	0.09	0.06
3015Guscio fond.	3191	3192	3208	3207	3	2	40.0	0.09	0.06
3016Guscio fond.	3194	3193	3209	3210	3	2	40.0	0.09	0.06
3017Guscio fond.	3193	3195	3211	3209	3	2	40.0	0.09	0.06
3018Guscio fond.	3195	3196	3212	3211	3	2	40.0	0.09	0.06
3019Guscio fond.	3196	3197	3213	3212	3	2	40.0	0.09	0.06
3020Guscio fond.	3197	3198	3214	3213	3	2	40.0	0.09	0.06
3021Guscio fond.	3198	3199	3215	3214	3	2	40.0	0.09	0.06
3022Guscio fond.	3199	3200	3216	3215	3	2	40.0	0.09	0.06
3023Guscio fond.	3200	3201	3217	3216	3	2	40.0	0.09	0.06
3024Guscio fond.	3201	3202	3218	3217	3	2	40.0	0.09	0.06
3025Guscio fond.	3202	3203	3219	3218	3	2	40.0	0.09	0.06
3026Guscio fond.	3203	3204	3220	3219	3	2	40.0	0.09	0.06
3027Guscio fond.	3204	3205	3221	3220	3	2	40.0	0.09	0.06
3028Guscio fond.	3205	3206	3222	3221	3	2	40.0	0.09	0.06
3029Guscio fond.	3206	3207	3223	3222	3	2	40.0	0.09	0.06
3030Guscio fond.	3207	3208	3224	3223	3	2	40.0	0.09	0.06
3031Guscio fond.	3210	3209	3225	3226	3	2	40.0	0.09	0.06
3032Guscio fond.	3209	3211	3227	3225	3	2	40.0	0.09	0.06
3033Guscio fond.	3211	3212	3228	3227	3	2	40.0	0.09	0.06
3034Guscio fond.	3212	3213	3229	3228	3	2	40.0	0.09	0.06
3035Guscio fond.	3213	3214	3230	3229	3	2	40.0	0.09	0.06
3036Guscio fond.	3214	3215	3231	3230	3	2	40.0	0.09	0.06
3037Guscio fond.	3215	3216	3232	3231	3	2	40.0	0.09	0.06
3038Guscio fond.	3216	3217	3233	3232	3	2	40.0	0.09	0.06
3039Guscio fond.	3217	3218	3234	3233	3	2	40.0	0.09	0.06
3040Guscio fond.	3218	3219	3235	3234	3	2	40.0	0.09	0.06
3041Guscio fond.	3219	3220	3236	3235	3	2	40.0	0.09	0.06
3042Guscio fond.	3220	3221	3237	3236	3	2	40.0	0.09	0.06
3043Guscio fond.	3221	3222	3238	3237	3	2	40.0	0.09	0.06
3044Guscio fond.	3222	3223	3239	3238	3	2	40.0	0.09	0.06
3045Guscio fond.	3223	3224	3240	3239	3	2	40.0	0.09	0.06
3046Guscio fond.	3226	3225	3241	3242	3	2	40.0	0.09	0.06
3047Guscio fond.	3225	3227	3243	3241	3	2	40.0	0.09	0.06
3048Guscio fond.	3227	3228	3244	3243	3	2	40.0	0.09	0.06
3049Guscio fond.	3228	3229	3245	3244	3	2	40.0	0.09	0.06
3050Guscio fond.	3229	3230	3246	3245	3	2	40.0	0.09	0.06
3051Guscio fond.	3230	3231	3247	3246	3	2	40.0	0.09	0.06
3052Guscio fond.	3231	3232	3248	3247	3	2	40.0	0.09	0.06
3053Guscio fond.	3232	3233	3249	3248	3	2	40.0	0.09	0.06
3054Guscio fond.	3233	3234	3250	3249	3	2	40.0	0.09	0.06
3055Guscio fond.	3234	3235	3251	3250	3	2	40.0	0.09	0.06
3056Guscio fond.	3235	3236	3252	3251	3	2	40.0	0.09	0.06
3057Guscio fond.	3236	3237	3253	3252	3	2	40.0	0.09	0.06
3058Guscio fond.	3237	3238	3254	3253	3	2	40.0	0.09	0.06
3059Guscio fond.	3238	3239	3255	3254	3	2	40.0	0.09	0.06
3060Guscio fond.	3239	3240	3256	3255	3	2	40.0	0.09	0.06
3061Guscio fond.	3242	3241	3257	3258	3	2	40.0	0.09	0.06
3062Guscio fond.	3241	3243	3259	3257	3	2	40.0	0.09	0.06
3063Guscio fond.	3243	3244	3260	3259	3	2	40.0	0.09	0.06
3064Guscio fond.	3244	3245	3261	3260	3	2	40.0	0.09	0.06
3065Guscio fond.	3245	3246	3262	3261	3	2	40.0	0.09	0.06
3066Guscio fond.	3246	3247	3263	3262	3	2	40.0	0.09	0.06
3067Guscio fond.	3247	3248	3264	3263	3	2	40.0	0.09	0.06
3068Guscio fond.	3248	3249	3265	3264	3	2	40.0	0.09	0.06
3069Guscio fond.	3249	3250	3266	3265	3	2	40.0	0.09	0.06
3070Guscio fond.	3250	3251	3267	3266	3	2	40.0	0.09	0.06
3071Guscio fond.	3251	3252	3268	3267	3	2	40.0	0.09	0.06
3072Guscio fond.	3252	3253	3269	3268	3	2	40.0	0.09	0.06
3073Guscio fond.	3253	3254	3270	3269	3	2	40.0	0.09	0.06
3074Guscio fond.	3254	3255	3271	3270	3	2	40.0	0.09	0.06
3075Guscio fond.	3255	3256	3272	3271	3	2	40.0	0.09	0.06
3076Guscio fond.	3258	3257	3273	3274	3	2	40.0	0.09	0.06

3077Guscio fond.	3257	3259	3275	3273	3	2	40.0	0.09	0.06
3078Guscio fond.	3259	3260	3276	3275	3	2	40.0	0.09	0.06
3079Guscio fond.	3260	3261	3277	3276	3	2	40.0	0.09	0.06
3080Guscio fond.	3261	3262	3278	3277	3	2	40.0	0.09	0.06
3081Guscio fond.	3262	3263	3279	3278	3	2	40.0	0.09	0.06
3082Guscio fond.	3263	3264	3280	3279	3	2	40.0	0.09	0.06
3083Guscio fond.	3264	3265	3281	3280	3	2	40.0	0.09	0.06
3084Guscio fond.	3265	3266	3282	3281	3	2	40.0	0.09	0.06
3085Guscio fond.	3266	3267	3283	3282	3	2	40.0	0.09	0.06
3086Guscio fond.	3267	3268	3284	3283	3	2	40.0	0.09	0.06
3087Guscio fond.	3268	3269	3285	3284	3	2	40.0	0.09	0.06
3088Guscio fond.	3269	3270	3286	3285	3	2	40.0	0.09	0.06
3089Guscio fond.	3270	3271	3287	3286	3	2	40.0	0.09	0.06
3090Guscio fond.	3271	3272	3288	3287	3	2	40.0	0.09	0.06
3091Guscio fond.	3274	3273	3289	3290	3	2	40.0	0.09	0.06
3092Guscio fond.	3273	3275	3291	3289	3	2	40.0	0.09	0.06
3093Guscio fond.	3275	3276	3292	3291	3	2	40.0	0.09	0.06
3094Guscio fond.	3276	3277	3293	3292	3	2	40.0	0.09	0.06
3095Guscio fond.	3277	3278	3294	3293	3	2	40.0	0.09	0.06
3096Guscio fond.	3278	3279	3295	3294	3	2	40.0	0.09	0.06
3097Guscio fond.	3279	3280	3296	3295	3	2	40.0	0.09	0.06
3098Guscio fond.	3280	3281	3297	3296	3	2	40.0	0.09	0.06
3099Guscio fond.	3281	3282	3298	3297	3	2	40.0	0.09	0.06
3100Guscio fond.	3282	3283	3299	3298	3	2	40.0	0.09	0.06
3101Guscio fond.	3283	3284	3300	3299	3	2	40.0	0.09	0.06
3102Guscio fond.	3284	3285	3301	3300	3	2	40.0	0.09	0.06
3103Guscio fond.	3285	3286	3302	3301	3	2	40.0	0.09	0.06
3104Guscio fond.	3286	3287	3303	3302	3	2	40.0	0.09	0.06
3105Guscio fond.	3287	3288	3304	3303	3	2	40.0	0.09	0.06
3106Guscio fond.	3290	3289	3305	3306	3	2	40.0	0.09	0.06
3107Guscio fond.	3289	3291	3307	3305	3	2	40.0	0.09	0.06
3108Guscio fond.	3291	3292	3308	3307	3	2	40.0	0.09	0.06
3109Guscio fond.	3292	3293	3309	3308	3	2	40.0	0.09	0.06
3110Guscio fond.	3293	3294	3310	3309	3	2	40.0	0.09	0.06
3111Guscio fond.	3294	3295	3311	3310	3	2	40.0	0.09	0.06
3112Guscio fond.	3295	3296	3312	3311	3	2	40.0	0.09	0.06
3113Guscio fond.	3296	3297	3313	3312	3	2	40.0	0.09	0.06
3114Guscio fond.	3297	3298	3314	3313	3	2	40.0	0.09	0.06
3115Guscio fond.	3298	3299	3315	3314	3	2	40.0	0.09	0.06
3116Guscio fond.	3299	3300	3316	3315	3	2	40.0	0.09	0.06
3117Guscio fond.	3300	3301	3317	3316	3	2	40.0	0.09	0.06
3118Guscio fond.	3301	3302	3318	3317	3	2	40.0	0.09	0.06
3119Guscio fond.	3302	3303	3319	3318	3	2	40.0	0.09	0.06
3120Guscio fond.	3303	3304	3320	3319	3	2	40.0	0.09	0.06
3121Guscio fond.	3306	3305	3321	3322	3	2	40.0	0.09	0.06
3122Guscio fond.	3305	3307	3323	3321	3	2	40.0	0.09	0.06
3123Guscio fond.	3307	3308	3324	3323	3	2	40.0	0.09	0.06
3124Guscio fond.	3308	3309	3325	3324	3	2	40.0	0.09	0.06
3125Guscio fond.	3309	3310	3326	3325	3	2	40.0	0.09	0.06
3126Guscio fond.	3310	3311	3327	3326	3	2	40.0	0.09	0.06
3127Guscio fond.	3311	3312	3328	3327	3	2	40.0	0.09	0.06
3128Guscio fond.	3312	3313	3329	3328	3	2	40.0	0.09	0.06
3129Guscio fond.	3313	3314	3330	3329	3	2	40.0	0.09	0.06
3130Guscio fond.	3314	3315	3331	3330	3	2	40.0	0.09	0.06
3131Guscio fond.	3315	3316	3332	3331	3	2	40.0	0.09	0.06
3132Guscio fond.	3316	3317	3333	3332	3	2	40.0	0.09	0.06
3133Guscio fond.	3317	3318	3334	3333	3	2	40.0	0.09	0.06
3134Guscio fond.	3318	3319	3335	3334	3	2	40.0	0.09	0.06
3135Guscio fond.	3319	3320	3336	3335	3	2	40.0	0.09	0.06
3136Guscio fond.	3322	3321	3337	3338	3	2	40.0	0.09	0.06
3137Guscio fond.	3321	3323	3339	3337	3	2	40.0	0.09	0.06
3138Guscio fond.	3323	3324	3340	3339	3	2	40.0	0.09	0.06
3139Guscio fond.	3324	3325	3341	3340	3	2	40.0	0.09	0.06
3140Guscio fond.	3325	3326	3342	3341	3	2	40.0	0.09	0.06
3141Guscio fond.	3326	3327	3343	3342	3	2	40.0	0.09	0.06
3142Guscio fond.	3327	3328	3344	3343	3	2	40.0	0.09	0.06
3143Guscio fond.	3328	3329	3345	3344	3	2	40.0	0.09	0.06
3144Guscio fond.	3329	3330	3346	3345	3	2	40.0	0.09	0.06
3145Guscio fond.	3330	3331	3347	3346	3	2	40.0	0.09	0.06
3146Guscio fond.	3331	3332	3348	3347	3	2	40.0	0.09	0.06
3147Guscio fond.	3332	3333	3349	3348	3	2	40.0	0.09	0.06
3148Guscio fond.	3333	3334	3350	3349	3	2	40.0	0.09	0.06
3149Guscio fond.	3334	3335	3351	3350	3	2	40.0	0.09	0.06
3150Guscio fond.	3335	3336	3352	3351	3	2	40.0	0.09	0.06
3151Guscio fond.	3338	3337	3353	3354	3	2	40.0	0.09	0.06
3152Guscio fond.	3337	3339	3355	3353	3	2	40.0	0.09	0.06
3153Guscio fond.	3339	3340	3356	3355	3	2	40.0	0.09	0.06

3154	Guscio fond.	3340	3341	3357	3356	3	2	40.0	0.09	0.06
3155	Guscio fond.	3341	3342	3358	3357	3	2	40.0	0.09	0.06
3156	Guscio fond.	3342	3343	3359	3358	3	2	40.0	0.09	0.06
3157	Guscio fond.	3343	3344	3360	3359	3	2	40.0	0.09	0.06
3158	Guscio fond.	3344	3345	3361	3360	3	2	40.0	0.09	0.06
3159	Guscio fond.	3345	3346	3362	3361	3	2	40.0	0.09	0.06
3160	Guscio fond.	3346	3347	3363	3362	3	2	40.0	0.09	0.06
3161	Guscio fond.	3347	3348	3364	3363	3	2	40.0	0.09	0.06
3162	Guscio fond.	3348	3349	3365	3364	3	2	40.0	0.09	0.06
3163	Guscio fond.	3349	3350	3366	3365	3	2	40.0	0.09	0.06
3164	Guscio fond.	3350	3351	3367	3366	3	2	40.0	0.09	0.06
3165	Guscio fond.	3351	3352	3368	3367	3	2	40.0	0.09	0.06
3166	Guscio fond.	3354	3353	3369	3370	3	2	40.0	0.09	0.06
3167	Guscio fond.	3353	3355	3371	3369	3	2	40.0	0.09	0.06
3168	Guscio fond.	3355	3356	3372	3371	3	2	40.0	0.09	0.06
3169	Guscio fond.	3356	3357	3373	3372	3	2	40.0	0.09	0.06
3170	Guscio fond.	3357	3358	3374	3373	3	2	40.0	0.09	0.06
3171	Guscio fond.	3358	3359	3375	3374	3	2	40.0	0.09	0.06
3172	Guscio fond.	3359	3360	3376	3375	3	2	40.0	0.09	0.06
3173	Guscio fond.	3360	3361	3377	3376	3	2	40.0	0.09	0.06
3174	Guscio fond.	3361	3362	3378	3377	3	2	40.0	0.09	0.06
3175	Guscio fond.	3362	3363	3379	3378	3	2	40.0	0.09	0.06
3176	Guscio fond.	3363	3364	3380	3379	3	2	40.0	0.09	0.06
3177	Guscio fond.	3364	3365	3381	3380	3	2	40.0	0.09	0.06
3178	Guscio fond.	3365	3366	3382	3381	3	2	40.0	0.09	0.06
3179	Guscio fond.	3366	3367	3383	3382	3	2	40.0	0.09	0.06
3180	Guscio fond.	3367	3368	3384	3383	3	2	40.0	0.09	0.06
3181	Guscio fond.	3370	3369	3385	3386	3	2	40.0	0.09	0.06
3182	Guscio fond.	3369	3371	3387	3385	3	2	40.0	0.09	0.06
3183	Guscio fond.	3371	3372	3388	3387	3	2	40.0	0.09	0.06
3184	Guscio fond.	3372	3373	3389	3388	3	2	40.0	0.09	0.06
3185	Guscio fond.	3373	3374	3390	3389	3	2	40.0	0.09	0.06
3186	Guscio fond.	3374	3375	3391	3390	3	2	40.0	0.09	0.06
3187	Guscio fond.	3375	3376	3392	3391	3	2	40.0	0.09	0.06
3188	Guscio fond.	3376	3377	3393	3392	3	2	40.0	0.09	0.06
3189	Guscio fond.	3377	3378	3394	3393	3	2	40.0	0.09	0.06
3190	Guscio fond.	3378	3379	3395	3394	3	2	40.0	0.09	0.06
3191	Guscio fond.	3379	3380	3396	3395	3	2	40.0	0.09	0.06
3192	Guscio fond.	3380	3381	3397	3396	3	2	40.0	0.09	0.06
3193	Guscio fond.	3381	3382	3398	3397	3	2	40.0	0.09	0.06
3194	Guscio fond.	3382	3383	3399	3398	3	2	40.0	0.09	0.06
3195	Guscio fond.	3383	3384	3400	3399	3	2	40.0	0.09	0.06
3196	Guscio fond.	3386	3385	3401	3402	3	2	40.0	0.09	0.06
3197	Guscio fond.	3385	3387	3403	3401	3	2	40.0	0.09	0.06
3198	Guscio fond.	3387	3388	3404	3403	3	2	40.0	0.09	0.06
3199	Guscio fond.	3388	3389	3405	3404	3	2	40.0	0.09	0.06
3200	Guscio fond.	3389	3390	3406	3405	3	2	40.0	0.09	0.06
3201	Guscio fond.	3390	3391	3407	3406	3	2	40.0	0.09	0.06
3202	Guscio fond.	3391	3392	3408	3407	3	2	40.0	0.09	0.06
3203	Guscio fond.	3392	3393	3409	3408	3	2	40.0	0.09	0.06
3204	Guscio fond.	3393	3394	3410	3409	3	2	40.0	0.09	0.06
3205	Guscio fond.	3394	3395	3411	3410	3	2	40.0	0.09	0.06
3206	Guscio fond.	3395	3396	3412	3411	3	2	40.0	0.09	0.06
3207	Guscio fond.	3396	3397	3413	3412	3	2	40.0	0.09	0.06
3208	Guscio fond.	3397	3398	3414	3413	3	2	40.0	0.09	0.06
3209	Guscio fond.	3398	3399	3415	3414	3	2	40.0	0.09	0.06
3210	Guscio fond.	3399	3400	3416	3415	3	2	40.0	0.09	0.06
3211	Guscio fond.	3402	3401	3417	3418	3	2	40.0	0.09	0.06
3212	Guscio fond.	3401	3403	3419	3417	3	2	40.0	0.09	0.06
3213	Guscio fond.	3403	3404	3420	3419	3	2	40.0	0.09	0.06
3214	Guscio fond.	3404	3405	3421	3420	3	2	40.0	0.09	0.06
3215	Guscio fond.	3405	3406	3422	3421	3	2	40.0	0.09	0.06
3216	Guscio fond.	3406	3407	3423	3422	3	2	40.0	0.09	0.06
3217	Guscio fond.	3407	3408	3424	3423	3	2	40.0	0.09	0.06
3218	Guscio fond.	3408	3409	3425	3424	3	2	40.0	0.09	0.06
3219	Guscio fond.	3409	3410	3426	3425	3	2	40.0	0.09	0.06
3220	Guscio fond.	3410	3411	3427	3426	3	2	40.0	0.09	0.06
3221	Guscio fond.	3411	3412	3428	3427	3	2	40.0	0.09	0.06
3222	Guscio fond.	3412	3413	3429	3428	3	2	40.0	0.09	0.06
3223	Guscio fond.	3413	3414	3430	3429	3	2	40.0	0.09	0.06
3224	Guscio fond.	3414	3415	3431	3430	3	2	40.0	0.09	0.06
3225	Guscio fond.	3415	3416	3432	3431	3	2	40.0	0.09	0.06
3226	Guscio fond.	3418	3417	3433	3434	3	2	40.0	0.09	0.06
3227	Guscio fond.	3417	3419	3435	3433	3	2	40.0	0.09	0.06
3228	Guscio fond.	3419	3420	3436	3435	3	2	40.0	0.09	0.06
3229	Guscio fond.	3420	3421	3437	3436	3	2	40.0	0.09	0.06
3230	Guscio fond.	3421	3422	3438	3437	3	2	40.0	0.09	0.06

3231	Guscio fond.	3422	3423	3439	3438	3	2	40.0	0.09	0.06
3232	Guscio fond.	3423	3424	3440	3439	3	2	40.0	0.09	0.06
3233	Guscio fond.	3424	3425	3441	3440	3	2	40.0	0.09	0.06
3234	Guscio fond.	3425	3426	3442	3441	3	2	40.0	0.09	0.06
3235	Guscio fond.	3426	3427	3443	3442	3	2	40.0	0.09	0.06
3236	Guscio fond.	3427	3428	3444	3443	3	2	40.0	0.09	0.06
3237	Guscio fond.	3428	3429	3445	3444	3	2	40.0	0.09	0.06
3238	Guscio fond.	3429	3430	3446	3445	3	2	40.0	0.09	0.06
3239	Guscio fond.	3430	3431	3447	3446	3	2	40.0	0.09	0.06
3240	Guscio fond.	3431	3432	3448	3447	3	2	40.0	0.09	0.06
3241	Guscio fond.	3434	3433	3449	3450	3	2	40.0	0.09	0.06
3242	Guscio fond.	3433	3435	3451	3449	3	2	40.0	0.09	0.06
3243	Guscio fond.	3435	3436	3452	3451	3	2	40.0	0.09	0.06
3244	Guscio fond.	3436	3437	3453	3452	3	2	40.0	0.09	0.06
3245	Guscio fond.	3437	3438	3454	3453	3	2	40.0	0.09	0.06
3246	Guscio fond.	3438	3439	3455	3454	3	2	40.0	0.09	0.06
3247	Guscio fond.	3439	3440	3456	3455	3	2	40.0	0.09	0.06
3248	Guscio fond.	3440	3441	3457	3456	3	2	40.0	0.09	0.06
3249	Guscio fond.	3441	3442	3458	3457	3	2	40.0	0.09	0.06
3250	Guscio fond.	3442	3443	3459	3458	3	2	40.0	0.09	0.06
3251	Guscio fond.	3443	3444	3460	3459	3	2	40.0	0.09	0.06
3252	Guscio fond.	3444	3445	3461	3460	3	2	40.0	0.09	0.06
3253	Guscio fond.	3445	3446	3462	3461	3	2	40.0	0.09	0.06
3254	Guscio fond.	3446	3447	3463	3462	3	2	40.0	0.09	0.06
3255	Guscio fond.	3447	3448	3464	3463	3	2	40.0	0.09	0.06
3256	Guscio fond.	3450	3449	3465	3466	3	2	40.0	0.09	0.06
3257	Guscio fond.	3449	3451	3467	3465	3	2	40.0	0.09	0.06
3258	Guscio fond.	3451	3452	3468	3467	3	2	40.0	0.09	0.06
3259	Guscio fond.	3452	3453	3469	3468	3	2	40.0	0.09	0.06
3260	Guscio fond.	3453	3454	3470	3469	3	2	40.0	0.09	0.06
3261	Guscio fond.	3454	3455	3471	3470	3	2	40.0	0.09	0.06
3262	Guscio fond.	3455	3456	3472	3471	3	2	40.0	0.09	0.06
3263	Guscio fond.	3456	3457	3473	3472	3	2	40.0	0.09	0.06
3264	Guscio fond.	3457	3458	3474	3473	3	2	40.0	0.09	0.06
3265	Guscio fond.	3458	3459	3475	3474	3	2	40.0	0.09	0.06
3266	Guscio fond.	3459	3460	3476	3475	3	2	40.0	0.09	0.06
3267	Guscio fond.	3460	3461	3477	3476	3	2	40.0	0.09	0.06
3268	Guscio fond.	3461	3462	3478	3477	3	2	40.0	0.09	0.06
3269	Guscio fond.	3462	3463	3479	3478	3	2	40.0	0.09	0.06
3270	Guscio fond.	3463	3464	3480	3479	3	2	40.0	0.09	0.06
3271	Guscio fond.	3466	3465	3481	3482	3	2	40.0	0.09	0.06
3272	Guscio fond.	3465	3467	3483	3481	3	2	40.0	0.09	0.06
3273	Guscio fond.	3467	3468	3484	3483	3	2	40.0	0.09	0.06
3274	Guscio fond.	3468	3469	3485	3484	3	2	40.0	0.09	0.06
3275	Guscio fond.	3469	3470	3486	3485	3	2	40.0	0.09	0.06
3276	Guscio fond.	3470	3471	3487	3486	3	2	40.0	0.09	0.06
3277	Guscio fond.	3471	3472	3488	3487	3	2	40.0	0.09	0.06
3278	Guscio fond.	3472	3473	3489	3488	3	2	40.0	0.09	0.06
3279	Guscio fond.	3473	3474	3490	3489	3	2	40.0	0.09	0.06
3280	Guscio fond.	3474	3475	3491	3490	3	2	40.0	0.09	0.06
3281	Guscio fond.	3475	3476	3492	3491	3	2	40.0	0.09	0.06
3282	Guscio fond.	3476	3477	3493	3492	3	2	40.0	0.09	0.06
3283	Guscio fond.	3477	3478	3494	3493	3	2	40.0	0.09	0.06
3284	Guscio fond.	3478	3479	3495	3494	3	2	40.0	0.09	0.06
3285	Guscio fond.	3479	3480	3496	3495	3	2	40.0	0.09	0.06
3286	Guscio fond.	3482	3481	3497	3498	3	2	40.0	0.09	0.06
3287	Guscio fond.	3481	3483	3499	3497	3	2	40.0	0.09	0.06
3288	Guscio fond.	3483	3484	3500	3499	3	2	40.0	0.09	0.06
3289	Guscio fond.	3484	3485	3501	3500	3	2	40.0	0.09	0.06
3290	Guscio fond.	3485	3486	3502	3501	3	2	40.0	0.09	0.06
3291	Guscio fond.	3486	3487	3503	3502	3	2	40.0	0.09	0.06
3292	Guscio fond.	3487	3488	3504	3503	3	2	40.0	0.09	0.06
3293	Guscio fond.	3488	3489	3505	3504	3	2	40.0	0.09	0.06
3294	Guscio fond.	3489	3490	3506	3505	3	2	40.0	0.09	0.06
3295	Guscio fond.	3490	3491	3507	3506	3	2	40.0	0.09	0.06
3296	Guscio fond.	3491	3492	3508	3507	3	2	40.0	0.09	0.06
3297	Guscio fond.	3492	3493	3509	3508	3	2	40.0	0.09	0.06
3298	Guscio fond.	3493	3494	3510	3509	3	2	40.0	0.09	0.06
3299	Guscio fond.	3494	3495	3511	3510	3	2	40.0	0.09	0.06
3300	Guscio fond.	3495	3496	3512	3511	3	2	40.0	0.09	0.06
3301	Guscio fond.	3498	3497	3513	3514	3	2	40.0	0.09	0.06
3302	Guscio fond.	3497	3499	3515	3513	3	2	40.0	0.09	0.06
3303	Guscio fond.	3499	3500	3516	3515	3	2	40.0	0.09	0.06
3304	Guscio fond.	3500	3501	3517	3516	3	2	40.0	0.09	0.06
3305	Guscio fond.	3501	3502	3518	3517	3	2	40.0	0.09	0.06
3306	Guscio fond.	3502	3503	3519	3518	3	2	40.0	0.09	0.06
3307	Guscio fond.	3503	3504	3520	3519	3	2	40.0	0.09	0.06

3308	Guscio fond.	3504	3505	3521	3520	3	2	40.0	0.09	0.06
3309	Guscio fond.	3505	3506	3522	3521	3	2	40.0	0.09	0.06
3310	Guscio fond.	3506	3507	3523	3522	3	2	40.0	0.09	0.06
3311	Guscio fond.	3507	3508	3524	3523	3	2	40.0	0.09	0.06
3312	Guscio fond.	3508	3509	3525	3524	3	2	40.0	0.09	0.06
3313	Guscio fond.	3509	3510	3526	3525	3	2	40.0	0.09	0.06
3314	Guscio fond.	3510	3511	3527	3526	3	2	40.0	0.09	0.06
3315	Guscio fond.	3511	3512	3528	3527	3	2	40.0	0.09	0.06
3316	Guscio fond.	3514	3513	3529	3530	3	2	40.0	0.09	0.06
3317	Guscio fond.	3513	3515	3531	3529	3	2	40.0	0.09	0.06
3318	Guscio fond.	3515	3516	3532	3531	3	2	40.0	0.09	0.06
3319	Guscio fond.	3516	3517	3533	3532	3	2	40.0	0.09	0.06
3320	Guscio fond.	3517	3518	3534	3533	3	2	40.0	0.09	0.06
3321	Guscio fond.	3518	3519	3535	3534	3	2	40.0	0.09	0.06
3322	Guscio fond.	3519	3520	3536	3535	3	2	40.0	0.09	0.06
3323	Guscio fond.	3520	3521	3537	3536	3	2	40.0	0.09	0.06
3324	Guscio fond.	3521	3522	3538	3537	3	2	40.0	0.09	0.06
3325	Guscio fond.	3522	3523	3539	3538	3	2	40.0	0.09	0.06
3326	Guscio fond.	3523	3524	3540	3539	3	2	40.0	0.09	0.06
3327	Guscio fond.	3524	3525	3541	3540	3	2	40.0	0.09	0.06
3328	Guscio fond.	3525	3526	3542	3541	3	2	40.0	0.09	0.06
3329	Guscio fond.	3526	3527	3543	3542	3	2	40.0	0.09	0.06
3330	Guscio fond.	3527	3528	3544	3543	3	2	40.0	0.09	0.06
3331	Guscio fond.	3530	3529	3545	3546	3	2	40.0	0.09	0.06
3332	Guscio fond.	3529	3531	3547	3545	3	2	40.0	0.09	0.06
3333	Guscio fond.	3531	3532	3548	3547	3	2	40.0	0.09	0.06
3334	Guscio fond.	3532	3533	3549	3548	3	2	40.0	0.09	0.06
3335	Guscio fond.	3533	3534	3550	3549	3	2	40.0	0.09	0.06
3336	Guscio fond.	3534	3535	3551	3550	3	2	40.0	0.09	0.06
3337	Guscio fond.	3535	3536	3552	3551	3	2	40.0	0.09	0.06
3338	Guscio fond.	3536	3537	3553	3552	3	2	40.0	0.09	0.06
3339	Guscio fond.	3537	3538	3554	3553	3	2	40.0	0.09	0.06
3340	Guscio fond.	3538	3539	3555	3554	3	2	40.0	0.09	0.06
3341	Guscio fond.	3539	3540	3556	3555	3	2	40.0	0.09	0.06
3342	Guscio fond.	3540	3541	3557	3556	3	2	40.0	0.09	0.06
3343	Guscio fond.	3541	3542	3558	3557	3	2	40.0	0.09	0.06
3344	Guscio fond.	3542	3543	3559	3558	3	2	40.0	0.09	0.06
3345	Guscio fond.	3543	3544	3560	3559	3	2	40.0	0.09	0.06
3346	Guscio fond.	3546	3545	3561	3562	3	2	40.0	0.09	0.06
3347	Guscio fond.	3545	3547	3563	3561	3	2	40.0	0.09	0.06
3348	Guscio fond.	3547	3548	3564	3563	3	2	40.0	0.09	0.06
3349	Guscio fond.	3548	3549	3565	3564	3	2	40.0	0.09	0.06
3350	Guscio fond.	3549	3550	3566	3565	3	2	40.0	0.09	0.06
3351	Guscio fond.	3550	3551	3567	3566	3	2	40.0	0.09	0.06
3352	Guscio fond.	3551	3552	3568	3567	3	2	40.0	0.09	0.06
3353	Guscio fond.	3552	3553	3569	3568	3	2	40.0	0.09	0.06
3354	Guscio fond.	3553	3554	3570	3569	3	2	40.0	0.09	0.06
3355	Guscio fond.	3554	3555	3571	3570	3	2	40.0	0.09	0.06
3356	Guscio fond.	3555	3556	3572	3571	3	2	40.0	0.09	0.06
3357	Guscio fond.	3556	3557	3573	3572	3	2	40.0	0.09	0.06
3358	Guscio fond.	3557	3558	3574	3573	3	2	40.0	0.09	0.06
3359	Guscio fond.	3558	3559	3575	3574	3	2	40.0	0.09	0.06
3360	Guscio fond.	3559	3560	3576	3575	3	2	40.0	0.09	0.06
3361	Guscio fond.	3562	3561	3577	3578	3	2	40.0	0.09	0.06
3362	Guscio fond.	3561	3563	3579	3577	3	2	40.0	0.09	0.06
3363	Guscio fond.	3563	3564	3580	3579	3	2	40.0	0.09	0.06
3364	Guscio fond.	3564	3565	3581	3580	3	2	40.0	0.09	0.06
3365	Guscio fond.	3565	3566	3582	3581	3	2	40.0	0.09	0.06
3366	Guscio fond.	3566	3567	3583	3582	3	2	40.0	0.09	0.06
3367	Guscio fond.	3567	3568	3584	3583	3	2	40.0	0.09	0.06
3368	Guscio fond.	3568	3569	3585	3584	3	2	40.0	0.09	0.06
3369	Guscio fond.	3569	3570	3586	3585	3	2	40.0	0.09	0.06
3370	Guscio fond.	3570	3571	3587	3586	3	2	40.0	0.09	0.06
3371	Guscio fond.	3571	3572	3588	3587	3	2	40.0	0.09	0.06
3372	Guscio fond.	3572	3573	3589	3588	3	2	40.0	0.09	0.06
3373	Guscio fond.	3573	3574	3590	3589	3	2	40.0	0.09	0.06
3374	Guscio fond.	3574	3575	3591	3590	3	2	40.0	0.09	0.06
3375	Guscio fond.	3575	3576	3592	3591	3	2	40.0	0.09	0.06
3376	Guscio fond.	3578	3577	3593	3594	3	2	40.0	0.09	0.06
3377	Guscio fond.	3577	3579	3595	3593	3	2	40.0	0.09	0.06
3378	Guscio fond.	3579	3580	3596	3595	3	2	40.0	0.09	0.06
3379	Guscio fond.	3580	3581	3597	3596	3	2	40.0	0.09	0.06
3380	Guscio fond.	3581	3582	3598	3597	3	2	40.0	0.09	0.06
3381	Guscio fond.	3582	3583	3599	3598	3	2	40.0	0.09	0.06
3382	Guscio fond.	3583	3584	3600	3599	3	2	40.0	0.09	0.06
3383	Guscio fond.	3584	3585	3601	3600	3	2	40.0	0.09	0.06
3384	Guscio fond.	3585	3586	3602	3601	3	2	40.0	0.09	0.06

3385	Guscio fond.	3586	3587	3603	3602	3	2	40.0	0.09	0.06
3386	Guscio fond.	3587	3588	3604	3603	3	2	40.0	0.09	0.06
3387	Guscio fond.	3588	3589	3605	3604	3	2	40.0	0.09	0.06
3388	Guscio fond.	3589	3590	3606	3605	3	2	40.0	0.09	0.06
3389	Guscio fond.	3590	3591	3607	3606	3	2	40.0	0.09	0.06
3390	Guscio fond.	3591	3592	3608	3607	3	2	40.0	0.09	0.06
3391	Guscio fond.	3594	3593	3609	3610	3	2	40.0	0.09	0.06
3392	Guscio fond.	3593	3595	3611	3609	3	2	40.0	0.09	0.06
3393	Guscio fond.	3595	3596	3612	3611	3	2	40.0	0.09	0.06
3394	Guscio fond.	3596	3597	3613	3612	3	2	40.0	0.09	0.06
3395	Guscio fond.	3597	3598	3614	3613	3	2	40.0	0.09	0.06
3396	Guscio fond.	3598	3599	3615	3614	3	2	40.0	0.09	0.06
3397	Guscio fond.	3599	3600	3616	3615	3	2	40.0	0.09	0.06
3398	Guscio fond.	3600	3601	3617	3616	3	2	40.0	0.09	0.06
3399	Guscio fond.	3601	3602	3618	3617	3	2	40.0	0.09	0.06
3400	Guscio fond.	3602	3603	3619	3618	3	2	40.0	0.09	0.06
3401	Guscio fond.	3603	3604	3620	3619	3	2	40.0	0.09	0.06
3402	Guscio fond.	3604	3605	3621	3620	3	2	40.0	0.09	0.06
3403	Guscio fond.	3605	3606	3622	3621	3	2	40.0	0.09	0.06
3404	Guscio fond.	3606	3607	3623	3622	3	2	40.0	0.09	0.06
3405	Guscio fond.	3607	3608	3624	3623	3	2	40.0	0.09	0.06
3406	Guscio fond.	3610	3609	3625	21	3	2	40.0	0.09	0.06
3407	Guscio fond.	3609	3611	3626	3625	3	2	40.0	0.09	0.06
3408	Guscio fond.	3611	3612	3627	3626	3	2	40.0	0.09	0.06
3409	Guscio fond.	3612	3613	3628	3627	3	2	40.0	0.09	0.06
3410	Guscio fond.	3613	3614	3629	3628	3	2	40.0	0.09	0.06
3411	Guscio fond.	3614	3615	3630	3629	3	2	40.0	0.09	0.06
3412	Guscio fond.	3615	3616	3631	3630	3	2	40.0	0.09	0.06
3413	Guscio fond.	3616	3617	3632	3631	3	2	40.0	0.09	0.06
3414	Guscio fond.	3617	3618	3633	3632	3	2	40.0	0.09	0.06
3415	Guscio fond.	3618	3619	3634	3633	3	2	40.0	0.09	0.06
3416	Guscio fond.	3619	3620	3635	3634	3	2	40.0	0.09	0.06
3417	Guscio fond.	3620	3621	3636	3635	3	2	40.0	0.09	0.06
3418	Guscio fond.	3621	3622	3637	3636	3	2	40.0	0.09	0.06
3419	Guscio fond.	3622	3623	3638	3637	3	2	40.0	0.09	0.06
3420	Guscio fond.	3623	3624	22	3638	3	2	40.0	0.09	0.06
3421	Guscio fond.	19	3147	3639	3176	3	2	40.0	0.09	0.06
3422	Guscio fond.	3147	3148	3640	3639	3	2	40.0	0.09	0.06
3423	Guscio fond.	3148	3149	3641	3640	3	2	40.0	0.09	0.06
3424	Guscio fond.	3149	3150	3642	3641	3	2	40.0	0.09	0.06
3425	Guscio fond.	3150	3151	3643	3642	3	2	40.0	0.09	0.06
3426	Guscio fond.	3151	3152	3644	3643	3	2	40.0	0.09	0.06
3427	Guscio fond.	3152	3153	3645	3644	3	2	40.0	0.09	0.06
3428	Guscio fond.	3153	3154	3646	3645	3	2	40.0	0.09	0.06
3429	Guscio fond.	3154	3155	3647	3646	3	2	40.0	0.09	0.06
3430	Guscio fond.	3155	3156	3648	3647	3	2	40.0	0.09	0.06
3431	Guscio fond.	3156	3157	3649	3648	3	2	40.0	0.09	0.06
3432	Guscio fond.	3157	3158	3650	3649	3	2	40.0	0.09	0.06
3433	Guscio fond.	3158	3159	3651	3650	3	2	40.0	0.09	0.06
3434	Guscio fond.	3159	3160	3652	3651	3	2	40.0	0.09	0.06
3435	Guscio fond.	3160	20	3653	3652	3	2	40.0	0.09	0.06
3436	Guscio fond.	3176	3639	3654	3192	3	2	40.0	0.09	0.06
3437	Guscio fond.	3639	3640	3655	3654	3	2	40.0	0.09	0.06
3438	Guscio fond.	3640	3641	3656	3655	3	2	40.0	0.09	0.06
3439	Guscio fond.	3641	3642	3657	3656	3	2	40.0	0.09	0.06
3440	Guscio fond.	3642	3643	3658	3657	3	2	40.0	0.09	0.06
3441	Guscio fond.	3643	3644	3659	3658	3	2	40.0	0.09	0.06
3442	Guscio fond.	3644	3645	3660	3659	3	2	40.0	0.09	0.06
3443	Guscio fond.	3645	3646	3661	3660	3	2	40.0	0.09	0.06
3444	Guscio fond.	3646	3647	3662	3661	3	2	40.0	0.09	0.06
3445	Guscio fond.	3647	3648	3663	3662	3	2	40.0	0.09	0.06
3446	Guscio fond.	3648	3649	3664	3663	3	2	40.0	0.09	0.06
3447	Guscio fond.	3649	3650	3665	3664	3	2	40.0	0.09	0.06
3448	Guscio fond.	3650	3651	3666	3665	3	2	40.0	0.09	0.06
3449	Guscio fond.	3651	3652	3667	3666	3	2	40.0	0.09	0.06
3450	Guscio fond.	3652	3653	3668	3667	3	2	40.0	0.09	0.06
3451	Guscio fond.	3192	3654	3669	3208	3	2	40.0	0.09	0.06
3452	Guscio fond.	3654	3655	3670	3669	3	2	40.0	0.09	0.06
3453	Guscio fond.	3655	3656	3671	3670	3	2	40.0	0.09	0.06
3454	Guscio fond.	3656	3657	3672	3671	3	2	40.0	0.09	0.06
3455	Guscio fond.	3657	3658	3673	3672	3	2	40.0	0.09	0.06
3456	Guscio fond.	3658	3659	3674	3673	3	2	40.0	0.09	0.06
3457	Guscio fond.	3659	3660	3675	3674	3	2	40.0	0.09	0.06
3458	Guscio fond.	3660	3661	3676	3675	3	2	40.0	0.09	0.06
3459	Guscio fond.	3661	3662	3677	3676	3	2	40.0	0.09	0.06
3460	Guscio fond.	3662	3663	3678	3677	3	2	40.0	0.09	0.06
3461	Guscio fond.	3663	3664	3679	3678	3	2	40.0	0.09	0.06

3462	Guscio fond.	3664	3665	3680	3679	3	2	40.0	0.09	0.06
3463	Guscio fond.	3665	3666	3681	3680	3	2	40.0	0.09	0.06
3464	Guscio fond.	3666	3667	3682	3681	3	2	40.0	0.09	0.06
3465	Guscio fond.	3667	3668	3683	3682	3	2	40.0	0.09	0.06
3466	Guscio fond.	3208	3669	3684	3224	3	2	40.0	0.09	0.06
3467	Guscio fond.	3669	3670	3685	3684	3	2	40.0	0.09	0.06
3468	Guscio fond.	3670	3671	3686	3685	3	2	40.0	0.09	0.06
3469	Guscio fond.	3671	3672	3687	3686	3	2	40.0	0.09	0.06
3470	Guscio fond.	3672	3673	3688	3687	3	2	40.0	0.09	0.06
3471	Guscio fond.	3673	3674	3689	3688	3	2	40.0	0.09	0.06
3472	Guscio fond.	3674	3675	3690	3689	3	2	40.0	0.09	0.06
3473	Guscio fond.	3675	3676	3691	3690	3	2	40.0	0.09	0.06
3474	Guscio fond.	3676	3677	3692	3691	3	2	40.0	0.09	0.06
3475	Guscio fond.	3677	3678	3693	3692	3	2	40.0	0.09	0.06
3476	Guscio fond.	3678	3679	3694	3693	3	2	40.0	0.09	0.06
3477	Guscio fond.	3679	3680	3695	3694	3	2	40.0	0.09	0.06
3478	Guscio fond.	3680	3681	3696	3695	3	2	40.0	0.09	0.06
3479	Guscio fond.	3681	3682	3697	3696	3	2	40.0	0.09	0.06
3480	Guscio fond.	3682	3683	3698	3697	3	2	40.0	0.09	0.06
3481	Guscio fond.	3224	3684	3699	3240	3	2	40.0	0.09	0.06
3482	Guscio fond.	3684	3685	3700	3699	3	2	40.0	0.09	0.06
3483	Guscio fond.	3685	3686	3701	3700	3	2	40.0	0.09	0.06
3484	Guscio fond.	3686	3687	3702	3701	3	2	40.0	0.09	0.06
3485	Guscio fond.	3687	3688	3703	3702	3	2	40.0	0.09	0.06
3486	Guscio fond.	3688	3689	3704	3703	3	2	40.0	0.09	0.06
3487	Guscio fond.	3689	3690	3705	3704	3	2	40.0	0.09	0.06
3488	Guscio fond.	3690	3691	3706	3705	3	2	40.0	0.09	0.06
3489	Guscio fond.	3691	3692	3707	3706	3	2	40.0	0.09	0.06
3490	Guscio fond.	3692	3693	3708	3707	3	2	40.0	0.09	0.06
3491	Guscio fond.	3693	3694	3709	3708	3	2	40.0	0.09	0.06
3492	Guscio fond.	3694	3695	3710	3709	3	2	40.0	0.09	0.06
3493	Guscio fond.	3695	3696	3711	3710	3	2	40.0	0.09	0.06
3494	Guscio fond.	3696	3697	3712	3711	3	2	40.0	0.09	0.06
3495	Guscio fond.	3697	3698	3713	3712	3	2	40.0	0.09	0.06
3496	Guscio fond.	3240	3699	3714	3256	3	2	40.0	0.09	0.06
3497	Guscio fond.	3699	3700	3715	3714	3	2	40.0	0.09	0.06
3498	Guscio fond.	3700	3701	3716	3715	3	2	40.0	0.09	0.06
3499	Guscio fond.	3701	3702	3717	3716	3	2	40.0	0.09	0.06
3500	Guscio fond.	3702	3703	3718	3717	3	2	40.0	0.09	0.06
3501	Guscio fond.	3703	3704	3719	3718	3	2	40.0	0.09	0.06
3502	Guscio fond.	3704	3705	3720	3719	3	2	40.0	0.09	0.06
3503	Guscio fond.	3705	3706	3721	3720	3	2	40.0	0.09	0.06
3504	Guscio fond.	3706	3707	3722	3721	3	2	40.0	0.09	0.06
3505	Guscio fond.	3707	3708	3723	3722	3	2	40.0	0.09	0.06
3506	Guscio fond.	3708	3709	3724	3723	3	2	40.0	0.09	0.06
3507	Guscio fond.	3709	3710	3725	3724	3	2	40.0	0.09	0.06
3508	Guscio fond.	3710	3711	3726	3725	3	2	40.0	0.09	0.06
3509	Guscio fond.	3711	3712	3727	3726	3	2	40.0	0.09	0.06
3510	Guscio fond.	3712	3713	3728	3727	3	2	40.0	0.09	0.06
3511	Guscio fond.	3256	3714	3729	3272	3	2	40.0	0.09	0.06
3512	Guscio fond.	3714	3715	3730	3729	3	2	40.0	0.09	0.06
3513	Guscio fond.	3715	3716	3731	3730	3	2	40.0	0.09	0.06
3514	Guscio fond.	3716	3717	3732	3731	3	2	40.0	0.09	0.06
3515	Guscio fond.	3717	3718	3733	3732	3	2	40.0	0.09	0.06
3516	Guscio fond.	3718	3719	3734	3733	3	2	40.0	0.09	0.06
3517	Guscio fond.	3719	3720	3735	3734	3	2	40.0	0.09	0.06
3518	Guscio fond.	3720	3721	3736	3735	3	2	40.0	0.09	0.06
3519	Guscio fond.	3721	3722	3737	3736	3	2	40.0	0.09	0.06
3520	Guscio fond.	3722	3723	3738	3737	3	2	40.0	0.09	0.06
3521	Guscio fond.	3723	3724	3739	3738	3	2	40.0	0.09	0.06
3522	Guscio fond.	3724	3725	3740	3739	3	2	40.0	0.09	0.06
3523	Guscio fond.	3725	3726	3741	3740	3	2	40.0	0.09	0.06
3524	Guscio fond.	3726	3727	3742	3741	3	2	40.0	0.09	0.06
3525	Guscio fond.	3727	3728	3743	3742	3	2	40.0	0.09	0.06
3526	Guscio fond.	3272	3729	3744	3288	3	2	40.0	0.09	0.06
3527	Guscio fond.	3729	3730	3745	3744	3	2	40.0	0.09	0.06
3528	Guscio fond.	3730	3731	3746	3745	3	2	40.0	0.09	0.06
3529	Guscio fond.	3731	3732	3747	3746	3	2	40.0	0.09	0.06
3530	Guscio fond.	3732	3733	3748	3747	3	2	40.0	0.09	0.06
3531	Guscio fond.	3733	3734	3749	3748	3	2	40.0	0.09	0.06
3532	Guscio fond.	3734	3735	3750	3749	3	2	40.0	0.09	0.06
3533	Guscio fond.	3735	3736	3751	3750	3	2	40.0	0.09	0.06
3534	Guscio fond.	3736	3737	3752	3751	3	2	40.0	0.09	0.06
3535	Guscio fond.	3737	3738	3753	3752	3	2	40.0	0.09	0.06
3536	Guscio fond.	3738	3739	3754	3753	3	2	40.0	0.09	0.06
3537	Guscio fond.	3739	3740	3755	3754	3	2	40.0	0.09	0.06
3538	Guscio fond.	3740	3741	3756	3755	3	2	40.0	0.09	0.06

3539	Guscio fond.	3741	3742	3757	3756	3	2	40.0	0.09	0.06
3540	Guscio fond.	3742	3743	3758	3757	3	2	40.0	0.09	0.06
3541	Guscio fond.	3288	3744	3759	3304	3	2	40.0	0.09	0.06
3542	Guscio fond.	3744	3745	3760	3759	3	2	40.0	0.09	0.06
3543	Guscio fond.	3745	3746	3761	3760	3	2	40.0	0.09	0.06
3544	Guscio fond.	3746	3747	3762	3761	3	2	40.0	0.09	0.06
3545	Guscio fond.	3747	3748	3763	3762	3	2	40.0	0.09	0.06
3546	Guscio fond.	3748	3749	3764	3763	3	2	40.0	0.09	0.06
3547	Guscio fond.	3749	3750	3765	3764	3	2	40.0	0.09	0.06
3548	Guscio fond.	3750	3751	3766	3765	3	2	40.0	0.09	0.06
3549	Guscio fond.	3751	3752	3767	3766	3	2	40.0	0.09	0.06
3550	Guscio fond.	3752	3753	3768	3767	3	2	40.0	0.09	0.06
3551	Guscio fond.	3753	3754	3769	3768	3	2	40.0	0.09	0.06
3552	Guscio fond.	3754	3755	3770	3769	3	2	40.0	0.09	0.06
3553	Guscio fond.	3755	3756	3771	3770	3	2	40.0	0.09	0.06
3554	Guscio fond.	3756	3757	3772	3771	3	2	40.0	0.09	0.06
3555	Guscio fond.	3757	3758	3773	3772	3	2	40.0	0.09	0.06
3556	Guscio fond.	3304	3759	3774	3320	3	2	40.0	0.09	0.06
3557	Guscio fond.	3759	3760	3775	3774	3	2	40.0	0.09	0.06
3558	Guscio fond.	3760	3761	3776	3775	3	2	40.0	0.09	0.06
3559	Guscio fond.	3761	3762	3777	3776	3	2	40.0	0.09	0.06
3560	Guscio fond.	3762	3763	3778	3777	3	2	40.0	0.09	0.06
3561	Guscio fond.	3763	3764	3779	3778	3	2	40.0	0.09	0.06
3562	Guscio fond.	3764	3765	3780	3779	3	2	40.0	0.09	0.06
3563	Guscio fond.	3765	3766	3781	3780	3	2	40.0	0.09	0.06
3564	Guscio fond.	3766	3767	3782	3781	3	2	40.0	0.09	0.06
3565	Guscio fond.	3767	3768	3783	3782	3	2	40.0	0.09	0.06
3566	Guscio fond.	3768	3769	3784	3783	3	2	40.0	0.09	0.06
3567	Guscio fond.	3769	3770	3785	3784	3	2	40.0	0.09	0.06
3568	Guscio fond.	3770	3771	3786	3785	3	2	40.0	0.09	0.06
3569	Guscio fond.	3771	3772	3787	3786	3	2	40.0	0.09	0.06
3570	Guscio fond.	3772	3773	3788	3787	3	2	40.0	0.09	0.06
3571	Guscio fond.	3320	3774	3789	3336	3	2	40.0	0.09	0.06
3572	Guscio fond.	3774	3775	3790	3789	3	2	40.0	0.09	0.06
3573	Guscio fond.	3775	3776	3791	3790	3	2	40.0	0.09	0.06
3574	Guscio fond.	3776	3777	3792	3791	3	2	40.0	0.09	0.06
3575	Guscio fond.	3777	3778	3793	3792	3	2	40.0	0.09	0.06
3576	Guscio fond.	3778	3779	3794	3793	3	2	40.0	0.09	0.06
3577	Guscio fond.	3779	3780	3795	3794	3	2	40.0	0.09	0.06
3578	Guscio fond.	3780	3781	3796	3795	3	2	40.0	0.09	0.06
3579	Guscio fond.	3781	3782	3797	3796	3	2	40.0	0.09	0.06
3580	Guscio fond.	3782	3783	3798	3797	3	2	40.0	0.09	0.06
3581	Guscio fond.	3783	3784	3799	3798	3	2	40.0	0.09	0.06
3582	Guscio fond.	3784	3785	3800	3799	3	2	40.0	0.09	0.06
3583	Guscio fond.	3785	3786	3801	3800	3	2	40.0	0.09	0.06
3584	Guscio fond.	3786	3787	3802	3801	3	2	40.0	0.09	0.06
3585	Guscio fond.	3787	3788	3803	3802	3	2	40.0	0.09	0.06
3586	Guscio fond.	3336	3789	3804	3352	3	2	40.0	0.09	0.06
3587	Guscio fond.	3789	3790	3805	3804	3	2	40.0	0.09	0.06
3588	Guscio fond.	3790	3791	3806	3805	3	2	40.0	0.09	0.06
3589	Guscio fond.	3791	3792	3807	3806	3	2	40.0	0.09	0.06
3590	Guscio fond.	3792	3793	3808	3807	3	2	40.0	0.09	0.06
3591	Guscio fond.	3793	3794	3809	3808	3	2	40.0	0.09	0.06
3592	Guscio fond.	3794	3795	3810	3809	3	2	40.0	0.09	0.06
3593	Guscio fond.	3795	3796	3811	3810	3	2	40.0	0.09	0.06
3594	Guscio fond.	3796	3797	3812	3811	3	2	40.0	0.09	0.06
3595	Guscio fond.	3797	3798	3813	3812	3	2	40.0	0.09	0.06
3596	Guscio fond.	3798	3799	3814	3813	3	2	40.0	0.09	0.06
3597	Guscio fond.	3799	3800	3815	3814	3	2	40.0	0.09	0.06
3598	Guscio fond.	3800	3801	3816	3815	3	2	40.0	0.09	0.06
3599	Guscio fond.	3801	3802	3817	3816	3	2	40.0	0.09	0.06
3600	Guscio fond.	3802	3803	3818	3817	3	2	40.0	0.09	0.06
3601	Guscio fond.	3352	3804	3819	3368	3	2	40.0	0.09	0.06
3602	Guscio fond.	3804	3805	3820	3819	3	2	40.0	0.09	0.06
3603	Guscio fond.	3805	3806	3821	3820	3	2	40.0	0.09	0.06
3604	Guscio fond.	3806	3807	3822	3821	3	2	40.0	0.09	0.06
3605	Guscio fond.	3807	3808	3823	3822	3	2	40.0	0.09	0.06
3606	Guscio fond.	3808	3809	3824	3823	3	2	40.0	0.09	0.06
3607	Guscio fond.	3809	3810	3825	3824	3	2	40.0	0.09	0.06
3608	Guscio fond.	3810	3811	3826	3825	3	2	40.0	0.09	0.06
3609	Guscio fond.	3811	3812	3827	3826	3	2	40.0	0.09	0.06
3610	Guscio fond.	3812	3813	3828	3827	3	2	40.0	0.09	0.06
3611	Guscio fond.	3813	3814	3829	3828	3	2	40.0	0.09	0.06
3612	Guscio fond.	3814	3815	3830	3829	3	2	40.0	0.09	0.06
3613	Guscio fond.	3815	3816	3831	3830	3	2	40.0	0.09	0.06
3614	Guscio fond.	3816	3817	3832	3831	3	2	40.0	0.09	0.06
3615	Guscio fond.	3817	3818	3833	3832	3	2	40.0	0.09	0.06

3616	Guscio fond.	3368	3819	3834	3384	3	2	40.0	0.09	0.06
3617	Guscio fond.	3819	3820	3835	3834	3	2	40.0	0.09	0.06
3618	Guscio fond.	3820	3821	3836	3835	3	2	40.0	0.09	0.06
3619	Guscio fond.	3821	3822	3837	3836	3	2	40.0	0.09	0.06
3620	Guscio fond.	3822	3823	3838	3837	3	2	40.0	0.09	0.06
3621	Guscio fond.	3823	3824	3839	3838	3	2	40.0	0.09	0.06
3622	Guscio fond.	3824	3825	3840	3839	3	2	40.0	0.09	0.06
3623	Guscio fond.	3825	3826	3841	3840	3	2	40.0	0.09	0.06
3624	Guscio fond.	3826	3827	3842	3841	3	2	40.0	0.09	0.06
3625	Guscio fond.	3827	3828	3843	3842	3	2	40.0	0.09	0.06
3626	Guscio fond.	3828	3829	3844	3843	3	2	40.0	0.09	0.06
3627	Guscio fond.	3829	3830	3845	3844	3	2	40.0	0.09	0.06
3628	Guscio fond.	3830	3831	3846	3845	3	2	40.0	0.09	0.06
3629	Guscio fond.	3831	3832	3847	3846	3	2	40.0	0.09	0.06
3630	Guscio fond.	3832	3833	3848	3847	3	2	40.0	0.09	0.06
3631	Guscio fond.	3384	3834	3849	3400	3	2	40.0	0.09	0.06
3632	Guscio fond.	3834	3835	3850	3849	3	2	40.0	0.09	0.06
3633	Guscio fond.	3835	3836	3851	3850	3	2	40.0	0.09	0.06
3634	Guscio fond.	3836	3837	3852	3851	3	2	40.0	0.09	0.06
3635	Guscio fond.	3837	3838	3853	3852	3	2	40.0	0.09	0.06
3636	Guscio fond.	3838	3839	3854	3853	3	2	40.0	0.09	0.06
3637	Guscio fond.	3839	3840	3855	3854	3	2	40.0	0.09	0.06
3638	Guscio fond.	3840	3841	3856	3855	3	2	40.0	0.09	0.06
3639	Guscio fond.	3841	3842	3857	3856	3	2	40.0	0.09	0.06
3640	Guscio fond.	3842	3843	3858	3857	3	2	40.0	0.09	0.06
3641	Guscio fond.	3843	3844	3859	3858	3	2	40.0	0.09	0.06
3642	Guscio fond.	3844	3845	3860	3859	3	2	40.0	0.09	0.06
3643	Guscio fond.	3845	3846	3861	3860	3	2	40.0	0.09	0.06
3644	Guscio fond.	3846	3847	3862	3861	3	2	40.0	0.09	0.06
3645	Guscio fond.	3847	3848	3863	3862	3	2	40.0	0.09	0.06
3646	Guscio fond.	3400	3849	3864	3416	3	2	40.0	0.09	0.06
3647	Guscio fond.	3849	3850	3865	3864	3	2	40.0	0.09	0.06
3648	Guscio fond.	3850	3851	3866	3865	3	2	40.0	0.09	0.06
3649	Guscio fond.	3851	3852	3867	3866	3	2	40.0	0.09	0.06
3650	Guscio fond.	3852	3853	3868	3867	3	2	40.0	0.09	0.06
3651	Guscio fond.	3853	3854	3869	3868	3	2	40.0	0.09	0.06
3652	Guscio fond.	3854	3855	3870	3869	3	2	40.0	0.09	0.06
3653	Guscio fond.	3855	3856	3871	3870	3	2	40.0	0.09	0.06
3654	Guscio fond.	3856	3857	3872	3871	3	2	40.0	0.09	0.06
3655	Guscio fond.	3857	3858	3873	3872	3	2	40.0	0.09	0.06
3656	Guscio fond.	3858	3859	3874	3873	3	2	40.0	0.09	0.06
3657	Guscio fond.	3859	3860	3875	3874	3	2	40.0	0.09	0.06
3658	Guscio fond.	3860	3861	3876	3875	3	2	40.0	0.09	0.06
3659	Guscio fond.	3861	3862	3877	3876	3	2	40.0	0.09	0.06
3660	Guscio fond.	3862	3863	3878	3877	3	2	40.0	0.09	0.06
3661	Guscio fond.	3416	3864	3879	3432	3	2	40.0	0.09	0.06
3662	Guscio fond.	3864	3865	3880	3879	3	2	40.0	0.09	0.06
3663	Guscio fond.	3865	3866	3881	3880	3	2	40.0	0.09	0.06
3664	Guscio fond.	3866	3867	3882	3881	3	2	40.0	0.09	0.06
3665	Guscio fond.	3867	3868	3883	3882	3	2	40.0	0.09	0.06
3666	Guscio fond.	3868	3869	3884	3883	3	2	40.0	0.09	0.06
3667	Guscio fond.	3869	3870	3885	3884	3	2	40.0	0.09	0.06
3668	Guscio fond.	3870	3871	3886	3885	3	2	40.0	0.09	0.06
3669	Guscio fond.	3871	3872	3887	3886	3	2	40.0	0.09	0.06
3670	Guscio fond.	3872	3873	3888	3887	3	2	40.0	0.09	0.06
3671	Guscio fond.	3873	3874	3889	3888	3	2	40.0	0.09	0.06
3672	Guscio fond.	3874	3875	3890	3889	3	2	40.0	0.09	0.06
3673	Guscio fond.	3875	3876	3891	3890	3	2	40.0	0.09	0.06
3674	Guscio fond.	3876	3877	3892	3891	3	2	40.0	0.09	0.06
3675	Guscio fond.	3877	3878	3893	3892	3	2	40.0	0.09	0.06
3676	Guscio fond.	3432	3879	3894	3448	3	2	40.0	0.09	0.06
3677	Guscio fond.	3879	3880	3895	3894	3	2	40.0	0.09	0.06
3678	Guscio fond.	3880	3881	3896	3895	3	2	40.0	0.09	0.06
3679	Guscio fond.	3881	3882	3897	3896	3	2	40.0	0.09	0.06
3680	Guscio fond.	3882	3883	3898	3897	3	2	40.0	0.09	0.06
3681	Guscio fond.	3883	3884	3899	3898	3	2	40.0	0.09	0.06
3682	Guscio fond.	3884	3885	3900	3899	3	2	40.0	0.09	0.06
3683	Guscio fond.	3885	3886	3901	3900	3	2	40.0	0.09	0.06
3684	Guscio fond.	3886	3887	3902	3901	3	2	40.0	0.09	0.06
3685	Guscio fond.	3887	3888	3903	3902	3	2	40.0	0.09	0.06
3686	Guscio fond.	3888	3889	3904	3903	3	2	40.0	0.09	0.06
3687	Guscio fond.	3889	3890	3905	3904	3	2	40.0	0.09	0.06
3688	Guscio fond.	3890	3891	3906	3905	3	2	40.0	0.09	0.06
3689	Guscio fond.	3891	3892	3907	3906	3	2	40.0	0.09	0.06
3690	Guscio fond.	3892	3893	3908	3907	3	2	40.0	0.09	0.06
3691	Guscio fond.	3448	3894	3909	3464	3	2	40.0	0.09	0.06
3692	Guscio fond.	3894	3895	3910	3909	3	2	40.0	0.09	0.06

3693	Guscio fond.	3895	3896	3911	3910	3	2	40.0	0.09	0.06
3694	Guscio fond.	3896	3897	3912	3911	3	2	40.0	0.09	0.06
3695	Guscio fond.	3897	3898	3913	3912	3	2	40.0	0.09	0.06
3696	Guscio fond.	3898	3899	3914	3913	3	2	40.0	0.09	0.06
3697	Guscio fond.	3899	3900	3915	3914	3	2	40.0	0.09	0.06
3698	Guscio fond.	3900	3901	3916	3915	3	2	40.0	0.09	0.06
3699	Guscio fond.	3901	3902	3917	3916	3	2	40.0	0.09	0.06
3700	Guscio fond.	3902	3903	3918	3917	3	2	40.0	0.09	0.06
3701	Guscio fond.	3903	3904	3919	3918	3	2	40.0	0.09	0.06
3702	Guscio fond.	3904	3905	3920	3919	3	2	40.0	0.09	0.06
3703	Guscio fond.	3905	3906	3921	3920	3	2	40.0	0.09	0.06
3704	Guscio fond.	3906	3907	3922	3921	3	2	40.0	0.09	0.06
3705	Guscio fond.	3907	3908	3923	3922	3	2	40.0	0.09	0.06
3706	Guscio fond.	3464	3909	3924	3480	3	2	40.0	0.09	0.06
3707	Guscio fond.	3909	3910	3925	3924	3	2	40.0	0.09	0.06
3708	Guscio fond.	3910	3911	3926	3925	3	2	40.0	0.09	0.06
3709	Guscio fond.	3911	3912	3927	3926	3	2	40.0	0.09	0.06
3710	Guscio fond.	3912	3913	3928	3927	3	2	40.0	0.09	0.06
3711	Guscio fond.	3913	3914	3929	3928	3	2	40.0	0.09	0.06
3712	Guscio fond.	3914	3915	3930	3929	3	2	40.0	0.09	0.06
3713	Guscio fond.	3915	3916	3931	3930	3	2	40.0	0.09	0.06
3714	Guscio fond.	3916	3917	3932	3931	3	2	40.0	0.09	0.06
3715	Guscio fond.	3917	3918	3933	3932	3	2	40.0	0.09	0.06
3716	Guscio fond.	3918	3919	3934	3933	3	2	40.0	0.09	0.06
3717	Guscio fond.	3919	3920	3935	3934	3	2	40.0	0.09	0.06
3718	Guscio fond.	3920	3921	3936	3935	3	2	40.0	0.09	0.06
3719	Guscio fond.	3921	3922	3937	3936	3	2	40.0	0.09	0.06
3720	Guscio fond.	3922	3923	3938	3937	3	2	40.0	0.09	0.06
3721	Guscio fond.	3480	3924	3939	3496	3	2	40.0	0.09	0.06
3722	Guscio fond.	3924	3925	3940	3939	3	2	40.0	0.09	0.06
3723	Guscio fond.	3925	3926	3941	3940	3	2	40.0	0.09	0.06
3724	Guscio fond.	3926	3927	3942	3941	3	2	40.0	0.09	0.06
3725	Guscio fond.	3927	3928	3943	3942	3	2	40.0	0.09	0.06
3726	Guscio fond.	3928	3929	3944	3943	3	2	40.0	0.09	0.06
3727	Guscio fond.	3929	3930	3945	3944	3	2	40.0	0.09	0.06
3728	Guscio fond.	3930	3931	3946	3945	3	2	40.0	0.09	0.06
3729	Guscio fond.	3931	3932	3947	3946	3	2	40.0	0.09	0.06
3730	Guscio fond.	3932	3933	3948	3947	3	2	40.0	0.09	0.06
3731	Guscio fond.	3933	3934	3949	3948	3	2	40.0	0.09	0.06
3732	Guscio fond.	3934	3935	3950	3949	3	2	40.0	0.09	0.06
3733	Guscio fond.	3935	3936	3951	3950	3	2	40.0	0.09	0.06
3734	Guscio fond.	3936	3937	3952	3951	3	2	40.0	0.09	0.06
3735	Guscio fond.	3937	3938	3953	3952	3	2	40.0	0.09	0.06
3736	Guscio fond.	3496	3939	3954	3512	3	2	40.0	0.09	0.06
3737	Guscio fond.	3939	3940	3955	3954	3	2	40.0	0.09	0.06
3738	Guscio fond.	3940	3941	3956	3955	3	2	40.0	0.09	0.06
3739	Guscio fond.	3941	3942	3957	3956	3	2	40.0	0.09	0.06
3740	Guscio fond.	3942	3943	3958	3957	3	2	40.0	0.09	0.06
3741	Guscio fond.	3943	3944	3959	3958	3	2	40.0	0.09	0.06
3742	Guscio fond.	3944	3945	3960	3959	3	2	40.0	0.09	0.06
3743	Guscio fond.	3945	3946	3961	3960	3	2	40.0	0.09	0.06
3744	Guscio fond.	3946	3947	3962	3961	3	2	40.0	0.09	0.06
3745	Guscio fond.	3947	3948	3963	3962	3	2	40.0	0.09	0.06
3746	Guscio fond.	3948	3949	3964	3963	3	2	40.0	0.09	0.06
3747	Guscio fond.	3949	3950	3965	3964	3	2	40.0	0.09	0.06
3748	Guscio fond.	3950	3951	3966	3965	3	2	40.0	0.09	0.06
3749	Guscio fond.	3951	3952	3967	3966	3	2	40.0	0.09	0.06
3750	Guscio fond.	3952	3953	3968	3967	3	2	40.0	0.09	0.06
3751	Guscio fond.	3512	3954	3969	3528	3	2	40.0	0.09	0.06
3752	Guscio fond.	3954	3955	3970	3969	3	2	40.0	0.09	0.06
3753	Guscio fond.	3955	3956	3971	3970	3	2	40.0	0.09	0.06
3754	Guscio fond.	3956	3957	3972	3971	3	2	40.0	0.09	0.06
3755	Guscio fond.	3957	3958	3973	3972	3	2	40.0	0.09	0.06
3756	Guscio fond.	3958	3959	3974	3973	3	2	40.0	0.09	0.06
3757	Guscio fond.	3959	3960	3975	3974	3	2	40.0	0.09	0.06
3758	Guscio fond.	3960	3961	3976	3975	3	2	40.0	0.09	0.06
3759	Guscio fond.	3961	3962	3977	3976	3	2	40.0	0.09	0.06
3760	Guscio fond.	3962	3963	3978	3977	3	2	40.0	0.09	0.06
3761	Guscio fond.	3963	3964	3979	3978	3	2	40.0	0.09	0.06
3762	Guscio fond.	3964	3965	3980	3979	3	2	40.0	0.09	0.06
3763	Guscio fond.	3965	3966	3981	3980	3	2	40.0	0.09	0.06
3764	Guscio fond.	3966	3967	3982	3981	3	2	40.0	0.09	0.06
3765	Guscio fond.	3967	3968	3983	3982	3	2	40.0	0.09	0.06
3766	Guscio fond.	3528	3969	3984	3544	3	2	40.0	0.09	0.06
3767	Guscio fond.	3969	3970	3985	3984	3	2	40.0	0.09	0.06
3768	Guscio fond.	3970	3971	3986	3985	3	2	40.0	0.09	0.06
3769	Guscio fond.	3971	3972	3987	3986	3	2	40.0	0.09	0.06

3770	Guscio fond.	3972	3973	3988	3987	3	2	40.0	0.09	0.06
3771	Guscio fond.	3973	3974	3989	3988	3	2	40.0	0.09	0.06
3772	Guscio fond.	3974	3975	3990	3989	3	2	40.0	0.09	0.06
3773	Guscio fond.	3975	3976	3991	3990	3	2	40.0	0.09	0.06
3774	Guscio fond.	3976	3977	3992	3991	3	2	40.0	0.09	0.06
3775	Guscio fond.	3977	3978	3993	3992	3	2	40.0	0.09	0.06
3776	Guscio fond.	3978	3979	3994	3993	3	2	40.0	0.09	0.06
3777	Guscio fond.	3979	3980	3995	3994	3	2	40.0	0.09	0.06
3778	Guscio fond.	3980	3981	3996	3995	3	2	40.0	0.09	0.06
3779	Guscio fond.	3981	3982	3997	3996	3	2	40.0	0.09	0.06
3780	Guscio fond.	3982	3983	3998	3997	3	2	40.0	0.09	0.06
3781	Guscio fond.	3544	3984	3999	3560	3	2	40.0	0.09	0.06
3782	Guscio fond.	3984	3985	4000	3999	3	2	40.0	0.09	0.06
3783	Guscio fond.	3985	3986	4001	4000	3	2	40.0	0.09	0.06
3784	Guscio fond.	3986	3987	4002	4001	3	2	40.0	0.09	0.06
3785	Guscio fond.	3987	3988	4003	4002	3	2	40.0	0.09	0.06
3786	Guscio fond.	3988	3989	4004	4003	3	2	40.0	0.09	0.06
3787	Guscio fond.	3989	3990	4005	4004	3	2	40.0	0.09	0.06
3788	Guscio fond.	3990	3991	4006	4005	3	2	40.0	0.09	0.06
3789	Guscio fond.	3991	3992	4007	4006	3	2	40.0	0.09	0.06
3790	Guscio fond.	3992	3993	4008	4007	3	2	40.0	0.09	0.06
3791	Guscio fond.	3993	3994	4009	4008	3	2	40.0	0.09	0.06
3792	Guscio fond.	3994	3995	4010	4009	3	2	40.0	0.09	0.06
3793	Guscio fond.	3995	3996	4011	4010	3	2	40.0	0.09	0.06
3794	Guscio fond.	3996	3997	4012	4011	3	2	40.0	0.09	0.06
3795	Guscio fond.	3997	3998	4013	4012	3	2	40.0	0.09	0.06
3796	Guscio fond.	3560	3999	4014	3576	3	2	40.0	0.09	0.06
3797	Guscio fond.	3999	4000	4015	4014	3	2	40.0	0.09	0.06
3798	Guscio fond.	4000	4001	4016	4015	3	2	40.0	0.09	0.06
3799	Guscio fond.	4001	4002	4017	4016	3	2	40.0	0.09	0.06
3800	Guscio fond.	4002	4003	4018	4017	3	2	40.0	0.09	0.06
3801	Guscio fond.	4003	4004	4019	4018	3	2	40.0	0.09	0.06
3802	Guscio fond.	4004	4005	4020	4019	3	2	40.0	0.09	0.06
3803	Guscio fond.	4005	4006	4021	4020	3	2	40.0	0.09	0.06
3804	Guscio fond.	4006	4007	4022	4021	3	2	40.0	0.09	0.06
3805	Guscio fond.	4007	4008	4023	4022	3	2	40.0	0.09	0.06
3806	Guscio fond.	4008	4009	4024	4023	3	2	40.0	0.09	0.06
3807	Guscio fond.	4009	4010	4025	4024	3	2	40.0	0.09	0.06
3808	Guscio fond.	4010	4011	4026	4025	3	2	40.0	0.09	0.06
3809	Guscio fond.	4011	4012	4027	4026	3	2	40.0	0.09	0.06
3810	Guscio fond.	4012	4013	4028	4027	3	2	40.0	0.09	0.06
3811	Guscio fond.	3576	4014	4029	3592	3	2	40.0	0.09	0.06
3812	Guscio fond.	4014	4015	4030	4029	3	2	40.0	0.09	0.06
3813	Guscio fond.	4015	4016	4031	4030	3	2	40.0	0.09	0.06
3814	Guscio fond.	4016	4017	4032	4031	3	2	40.0	0.09	0.06
3815	Guscio fond.	4017	4018	4033	4032	3	2	40.0	0.09	0.06
3816	Guscio fond.	4018	4019	4034	4033	3	2	40.0	0.09	0.06
3817	Guscio fond.	4019	4020	4035	4034	3	2	40.0	0.09	0.06
3818	Guscio fond.	4020	4021	4036	4035	3	2	40.0	0.09	0.06
3819	Guscio fond.	4021	4022	4037	4036	3	2	40.0	0.09	0.06
3820	Guscio fond.	4022	4023	4038	4037	3	2	40.0	0.09	0.06
3821	Guscio fond.	4023	4024	4039	4038	3	2	40.0	0.09	0.06
3822	Guscio fond.	4024	4025	4040	4039	3	2	40.0	0.09	0.06
3823	Guscio fond.	4025	4026	4041	4040	3	2	40.0	0.09	0.06
3824	Guscio fond.	4026	4027	4042	4041	3	2	40.0	0.09	0.06
3825	Guscio fond.	4027	4028	4043	4042	3	2	40.0	0.09	0.06
3826	Guscio fond.	3592	4029	4044	3608	3	2	40.0	0.09	0.06
3827	Guscio fond.	4029	4030	4045	4044	3	2	40.0	0.09	0.06
3828	Guscio fond.	4030	4031	4046	4045	3	2	40.0	0.09	0.06
3829	Guscio fond.	4031	4032	4047	4046	3	2	40.0	0.09	0.06
3830	Guscio fond.	4032	4033	4048	4047	3	2	40.0	0.09	0.06
3831	Guscio fond.	4033	4034	4049	4048	3	2	40.0	0.09	0.06
3832	Guscio fond.	4034	4035	4050	4049	3	2	40.0	0.09	0.06
3833	Guscio fond.	4035	4036	4051	4050	3	2	40.0	0.09	0.06
3834	Guscio fond.	4036	4037	4052	4051	3	2	40.0	0.09	0.06
3835	Guscio fond.	4037	4038	4053	4052	3	2	40.0	0.09	0.06
3836	Guscio fond.	4038	4039	4054	4053	3	2	40.0	0.09	0.06
3837	Guscio fond.	4039	4040	4055	4054	3	2	40.0	0.09	0.06
3838	Guscio fond.	4040	4041	4056	4055	3	2	40.0	0.09	0.06
3839	Guscio fond.	4041	4042	4057	4056	3	2	40.0	0.09	0.06
3840	Guscio fond.	4042	4043	4058	4057	3	2	40.0	0.09	0.06
3841	Guscio fond.	3608	4044	4059	3624	3	2	40.0	0.09	0.06
3842	Guscio fond.	4044	4045	4060	4059	3	2	40.0	0.09	0.06
3843	Guscio fond.	4045	4046	4061	4060	3	2	40.0	0.09	0.06
3844	Guscio fond.	4046	4047	4062	4061	3	2	40.0	0.09	0.06
3845	Guscio fond.	4047	4048	4063	4062	3	2	40.0	0.09	0.06
3846	Guscio fond.	4048	4049	4064	4063	3	2	40.0	0.09	0.06

3847	Guscio fond.	4049	4050	4065	4064	3	2	40.0	0.09	0.06
3848	Guscio fond.	4050	4051	4066	4065	3	2	40.0	0.09	0.06
3849	Guscio fond.	4051	4052	4067	4066	3	2	40.0	0.09	0.06
3850	Guscio fond.	4052	4053	4068	4067	3	2	40.0	0.09	0.06
3851	Guscio fond.	4053	4054	4069	4068	3	2	40.0	0.09	0.06
3852	Guscio fond.	4054	4055	4070	4069	3	2	40.0	0.09	0.06
3853	Guscio fond.	4055	4056	4071	4070	3	2	40.0	0.09	0.06
3854	Guscio fond.	4056	4057	1939	4071	3	2	40.0	0.09	0.06
3855	Guscio fond.	4057	4058	1940	1939	3	2	40.0	0.09	0.06
3856	Guscio fond.	3624	4059	1942	22	3	2	40.0	0.09	0.06
3857	Guscio fond.	4059	4060	1943	1942	3	2	40.0	0.09	0.06
3858	Guscio fond.	4060	4061	1944	1943	3	2	40.0	0.09	0.06
3859	Guscio fond.	4061	4062	1945	1944	3	2	40.0	0.09	0.06
3860	Guscio fond.	4062	4063	1975	1945	3	2	40.0	0.09	0.06
3861	Guscio fond.	4063	4064	2005	1975	3	2	40.0	0.09	0.06
3862	Guscio fond.	4064	4065	2035	2005	3	2	40.0	0.09	0.06
3863	Guscio fond.	4065	4066	2080	2035	3	2	40.0	0.09	0.06
3864	Guscio fond.	4066	4067	2103	2080	3	2	40.0	0.09	0.06
3865	Guscio fond.	4067	4068	2104	2103	3	2	40.0	0.09	0.06
3866	Guscio fond.	4068	4069	2105	2104	3	2	40.0	0.09	0.06
3867	Guscio fond.	4069	4070	2107	2105	3	2	40.0	0.09	0.06
3868	Guscio fond.	4070	4071	2108	2107	3	2	40.0	0.09	0.06
3869	Guscio fond.	4071	1939	2110	2108	3	2	40.0	0.09	0.06
3870	Guscio fond.	1939	1940	23	2110	3	2	40.0	0.09	0.06
3871	Guscio fond.	10	4072	4077	872	3	2	40.0	0.09	0.06
3872	Guscio fond.	872	4077	4078	887	3	2	40.0	0.09	0.06
3873	Guscio fond.	887	4078	4079	902	3	2	40.0	0.09	0.06
3874	Guscio fond.	902	4079	4080	917	3	2	40.0	0.09	0.06
3875	Guscio fond.	917	4080	4081	932	3	2	40.0	0.09	0.06
3876	Guscio fond.	932	4081	4082	947	3	2	40.0	0.09	0.06
3877	Guscio fond.	947	4082	4083	962	3	2	40.0	0.09	0.06
3878	Guscio fond.	962	4083	4084	977	3	2	40.0	0.09	0.06
3879	Guscio fond.	977	4084	4085	992	3	2	40.0	0.09	0.06
3880	Guscio fond.	992	4085	4086	1007	3	2	40.0	0.09	0.06
3881	Guscio fond.	1007	4086	4087	1022	3	2	40.0	0.09	0.06
3882	Guscio fond.	1022	4087	4088	1037	3	2	40.0	0.09	0.06
3883	Guscio fond.	1037	4088	4089	1052	3	2	40.0	0.09	0.06
3884	Guscio fond.	1052	4089	4090	1067	3	2	40.0	0.09	0.06
3885	Guscio fond.	1067	4090	4091	1082	3	2	40.0	0.09	0.06
3886	Guscio fond.	1082	4091	4092	1097	3	2	40.0	0.09	0.06
3887	Guscio fond.	1097	4092	4093	1112	3	2	40.0	0.09	0.06
3888	Guscio fond.	1112	4093	4094	1127	3	2	40.0	0.09	0.06
3889	Guscio fond.	1127	4094	4095	1142	3	2	40.0	0.09	0.06
3890	Guscio fond.	1142	4095	4096	1157	3	2	40.0	0.09	0.06
3891	Guscio fond.	1157	4096	4097	1172	3	2	40.0	0.09	0.06
3892	Guscio fond.	1172	4097	4098	1187	3	2	40.0	0.09	0.06
3893	Guscio fond.	1187	4098	4099	1202	3	2	40.0	0.09	0.06
3894	Guscio fond.	1202	4099	4100	1217	3	2	40.0	0.09	0.06
3895	Guscio fond.	1217	4100	4101	1232	3	2	40.0	0.09	0.06
3896	Guscio fond.	1232	4101	4102	1247	3	2	40.0	0.09	0.06
3897	Guscio fond.	1247	4102	4103	1262	3	2	40.0	0.09	0.06
3898	Guscio fond.	1262	4103	4104	1277	3	2	40.0	0.09	0.06
3899	Guscio fond.	1277	4104	4105	1292	3	2	40.0	0.09	0.06
3900	Guscio fond.	1292	4105	4073	14	3	2	40.0	0.09	0.06
3901	Guscio fond.	14	4073	4106	1799	3	2	40.0	0.09	0.06
3902	Guscio fond.	1799	4106	4107	1814	3	2	40.0	0.09	0.06
3903	Guscio fond.	1814	4107	4108	1829	3	2	40.0	0.09	0.06
3904	Guscio fond.	1829	4108	4109	1844	3	2	40.0	0.09	0.06
3905	Guscio fond.	1844	4109	4110	1859	3	2	40.0	0.09	0.06
3906	Guscio fond.	1859	4110	5222	1874	3	2	40.0	0.09	0.06
3907	Guscio fond.	1874	5222	4111	1889	3	2	40.0	0.09	0.06
3908	Guscio fond.	1889	4111	4112	1904	3	2	40.0	0.09	0.06
3909	Guscio fond.	1904	4112	4113	1919	3	2	40.0	0.09	0.06
3910	Guscio fond.	1919	4113	4114	1934	3	2	40.0	0.09	0.06
3911	Guscio fond.	1934	4114	4116	1949	3	2	40.0	0.09	0.06
3912	Guscio fond.	1949	4116	4117	1964	3	2	40.0	0.09	0.06
3913	Guscio fond.	1964	4117	4118	1979	3	2	40.0	0.09	0.06
3914	Guscio fond.	1979	4118	4119	1994	3	2	40.0	0.09	0.06
3915	Guscio fond.	1994	4119	4120	2009	3	2	40.0	0.09	0.06
3916	Guscio fond.	2009	4120	4121	2024	3	2	40.0	0.09	0.06
3917	Guscio fond.	2024	4121	4122	2039	3	2	40.0	0.09	0.06
3918	Guscio fond.	2039	4122	4123	2054	3	2	40.0	0.09	0.06
3919	Guscio fond.	2054	4123	4124	2069	3	2	40.0	0.09	0.06
3920	Guscio fond.	2069	4124	4125	2084	3	2	40.0	0.09	0.06
3921	Guscio fond.	2084	4125	4126	2099	3	2	40.0	0.09	0.06
3922	Guscio fond.	2099	4126	4127	2114	3	2	40.0	0.09	0.06
3923	Guscio fond.	2114	4127	4128	2129	3	2	40.0	0.09	0.06

3924	Guscio fond.	2129	4128	4129	2144	3	2	40.0	0.09	0.06
3925	Guscio fond.	2144	4129	4130	2159	3	2	40.0	0.09	0.06
3926	Guscio fond.	2159	4130	4131	2174	3	2	40.0	0.09	0.06
3927	Guscio fond.	2174	4131	4132	2189	3	2	40.0	0.09	0.06
3928	Guscio fond.	2189	4132	4133	2204	3	2	40.0	0.09	0.06
3929	Guscio fond.	2204	4133	4134	2219	3	2	40.0	0.09	0.06
3930	Guscio fond.	2219	4134	4074	17	3	2	40.0	0.09	0.06
3931	Guscio fond.	17	4074	4135	2726	3	2	40.0	0.09	0.06
3932	Guscio fond.	2726	4135	4136	2741	3	2	40.0	0.09	0.06
3933	Guscio fond.	2741	4136	4137	2756	3	2	40.0	0.09	0.06
3934	Guscio fond.	2756	4137	4138	2771	3	2	40.0	0.09	0.06
3935	Guscio fond.	2771	4138	4139	2786	3	2	40.0	0.09	0.06
3936	Guscio fond.	2786	4139	4140	2801	3	2	40.0	0.09	0.06
3937	Guscio fond.	2801	4140	4141	2816	3	2	40.0	0.09	0.06
3938	Guscio fond.	2816	4141	4142	2831	3	2	40.0	0.09	0.06
3939	Guscio fond.	2831	4142	4143	2846	3	2	40.0	0.09	0.06
3940	Guscio fond.	2846	4143	4144	2861	3	2	40.0	0.09	0.06
3941	Guscio fond.	2861	4144	4145	2876	3	2	40.0	0.09	0.06
3942	Guscio fond.	2876	4145	4146	2891	3	2	40.0	0.09	0.06
3943	Guscio fond.	2891	4146	4147	2906	3	2	40.0	0.09	0.06
3944	Guscio fond.	2906	4147	4148	2921	3	2	40.0	0.09	0.06
3945	Guscio fond.	2921	4148	4149	2936	3	2	40.0	0.09	0.06
3946	Guscio fond.	2936	4149	4150	2951	3	2	40.0	0.09	0.06
3947	Guscio fond.	2951	4150	4151	2966	3	2	40.0	0.09	0.06
3948	Guscio fond.	2966	4151	4152	2981	3	2	40.0	0.09	0.06
3949	Guscio fond.	2981	4152	4153	2996	3	2	40.0	0.09	0.06
3950	Guscio fond.	2996	4153	4154	3011	3	2	40.0	0.09	0.06
3951	Guscio fond.	3011	4154	4155	3026	3	2	40.0	0.09	0.06
3952	Guscio fond.	3026	4155	4156	3041	3	2	40.0	0.09	0.06
3953	Guscio fond.	3041	4156	4157	3056	3	2	40.0	0.09	0.06
3954	Guscio fond.	3056	4157	4158	3071	3	2	40.0	0.09	0.06
3955	Guscio fond.	3071	4158	4159	3086	3	2	40.0	0.09	0.06
3956	Guscio fond.	3086	4159	4160	3101	3	2	40.0	0.09	0.06
3957	Guscio fond.	3101	4160	4161	3116	3	2	40.0	0.09	0.06
3958	Guscio fond.	3116	4161	4162	3131	3	2	40.0	0.09	0.06
3959	Guscio fond.	3131	4162	4163	3146	3	2	40.0	0.09	0.06
3960	Guscio fond.	3146	4163	4075	20	3	2	40.0	0.09	0.06
3961	Guscio fond.	20	4075	4164	3653	3	2	40.0	0.09	0.06
3962	Guscio fond.	3653	4164	4165	3668	3	2	40.0	0.09	0.06
3963	Guscio fond.	3668	4165	4166	3683	3	2	40.0	0.09	0.06
3964	Guscio fond.	3683	4166	4167	3698	3	2	40.0	0.09	0.06
3965	Guscio fond.	3698	4167	4168	3713	3	2	40.0	0.09	0.06
3966	Guscio fond.	3713	4168	4169	3728	3	2	40.0	0.09	0.06
3967	Guscio fond.	3728	4169	4170	3743	3	2	40.0	0.09	0.06
3968	Guscio fond.	3743	4170	4171	3758	3	2	40.0	0.09	0.06
3969	Guscio fond.	3758	4171	4172	3773	3	2	40.0	0.09	0.06
3970	Guscio fond.	3773	4172	4173	3788	3	2	40.0	0.09	0.06
3971	Guscio fond.	3788	4173	4174	3803	3	2	40.0	0.09	0.06
3972	Guscio fond.	3803	4174	4175	3818	3	2	40.0	0.09	0.06
3973	Guscio fond.	3818	4175	4176	3833	3	2	40.0	0.09	0.06
3974	Guscio fond.	3833	4176	4177	3848	3	2	40.0	0.09	0.06
3975	Guscio fond.	3848	4177	4178	3863	3	2	40.0	0.09	0.06
3976	Guscio fond.	3863	4178	4179	3878	3	2	40.0	0.09	0.06
3977	Guscio fond.	3878	4179	4180	3893	3	2	40.0	0.09	0.06
3978	Guscio fond.	3893	4180	4181	3908	3	2	40.0	0.09	0.06
3979	Guscio fond.	3908	4181	4182	3923	3	2	40.0	0.09	0.06
3980	Guscio fond.	3923	4182	4183	3938	3	2	40.0	0.09	0.06
3981	Guscio fond.	3938	4183	4184	3953	3	2	40.0	0.09	0.06
3982	Guscio fond.	3953	4184	4185	3968	3	2	40.0	0.09	0.06
3983	Guscio fond.	3968	4185	4186	3983	3	2	40.0	0.09	0.06
3984	Guscio fond.	3983	4186	4187	3998	3	2	40.0	0.09	0.06
3985	Guscio fond.	3998	4187	4188	4013	3	2	40.0	0.09	0.06
3986	Guscio fond.	4013	4188	4189	4028	3	2	40.0	0.09	0.06
3987	Guscio fond.	4028	4189	4190	4043	3	2	40.0	0.09	0.06
3988	Guscio fond.	4043	4190	4191	4058	3	2	40.0	0.09	0.06
3989	Guscio fond.	4058	4191	4115	1940	3	2	40.0	0.09	0.06
3990	Guscio fond.	1940	4115	4076	23	3	2	40.0	0.09	0.06
3991	Guscio fond.	4072	4192	4197	4077	3	2	40.0	0.09	0.06
3992	Guscio fond.	4077	4197	4198	4078	3	2	40.0	0.09	0.06
3993	Guscio fond.	4078	4198	4199	4079	3	2	40.0	0.09	0.06
3994	Guscio fond.	4079	4199	4200	4080	3	2	40.0	0.09	0.06
3995	Guscio fond.	4080	4200	4201	4081	3	2	40.0	0.09	0.06
3996	Guscio fond.	4081	4201	4202	4082	3	2	40.0	0.09	0.06
3997	Guscio fond.	4082	4202	4203	4083	3	2	40.0	0.09	0.06
3998	Guscio fond.	4083	4203	4204	4084	3	2	40.0	0.09	0.06
3999	Guscio fond.	4084	4204	4205	4085	3	2	40.0	0.09	0.06
4000	Guscio fond.	4085	4205	4206	4086	3	2	40.0	0.09	0.06

4001Guscio fond.	4086	4206	4207	4087	3	2	40.0	0.09	0.06
4002Guscio fond.	4087	4207	4208	4088	3	2	40.0	0.09	0.06
4003Guscio fond.	4088	4208	4209	4089	3	2	40.0	0.09	0.06
4004Guscio fond.	4089	4209	4210	4090	3	2	40.0	0.09	0.06
4005Guscio fond.	4090	4210	4211	4091	3	2	40.0	0.09	0.06
4006Guscio fond.	4091	4211	4212	4092	3	2	40.0	0.09	0.06
4007Guscio fond.	4092	4212	4213	4093	3	2	40.0	0.09	0.06
4008Guscio fond.	4093	4213	4214	4094	3	2	40.0	0.09	0.06
4009Guscio fond.	4094	4214	4215	4095	3	2	40.0	0.09	0.06
4010Guscio fond.	4095	4215	4216	4096	3	2	40.0	0.09	0.06
4011Guscio fond.	4096	4216	4217	4097	3	2	40.0	0.09	0.06
4012Guscio fond.	4097	4217	4218	4098	3	2	40.0	0.09	0.06
4013Guscio fond.	4098	4218	4219	4099	3	2	40.0	0.09	0.06
4014Guscio fond.	4099	4219	4220	4100	3	2	40.0	0.09	0.06
4015Guscio fond.	4100	4220	4221	4101	3	2	40.0	0.09	0.06
4016Guscio fond.	4101	4221	4222	4102	3	2	40.0	0.09	0.06
4017Guscio fond.	4102	4222	4223	4103	3	2	40.0	0.09	0.06
4018Guscio fond.	4103	4223	4224	4104	3	2	40.0	0.09	0.06
4019Guscio fond.	4104	4224	4225	4105	3	2	40.0	0.09	0.06
4020Guscio fond.	4105	4225	4193	4073	3	2	40.0	0.09	0.06
4021Guscio fond.	4073	4193	4226	4106	3	2	40.0	0.09	0.06
4022Guscio fond.	4106	4226	4227	4107	3	2	40.0	0.09	0.06
4023Guscio fond.	4107	4227	4228	4108	3	2	40.0	0.09	0.06
4024Guscio fond.	4108	4228	4229	4109	3	2	40.0	0.09	0.06
4025Guscio fond.	4109	4229	4230	4110	3	2	40.0	0.09	0.06
4026Guscio fond.	4110	4230	5223	5222	3	2	40.0	0.09	0.06
4027Guscio fond.	5222	5223	4231	4111	3	2	40.0	0.09	0.06
4028Guscio fond.	4111	4231	4232	4112	3	2	40.0	0.09	0.06
4029Guscio fond.	4112	4232	4233	4113	3	2	40.0	0.09	0.06
4030Guscio fond.	4113	4233	4234	4114	3	2	40.0	0.09	0.06
4031Guscio fond.	4114	4234	4236	4116	3	2	40.0	0.09	0.06
4032Guscio fond.	4116	4236	4237	4117	3	2	40.0	0.09	0.06
4033Guscio fond.	4117	4237	4238	4118	3	2	40.0	0.09	0.06
4034Guscio fond.	4118	4238	4239	4119	3	2	40.0	0.09	0.06
4035Guscio fond.	4119	4239	4240	4120	3	2	40.0	0.09	0.06
4036Guscio fond.	4120	4240	4241	4121	3	2	40.0	0.09	0.06
4037Guscio fond.	4121	4241	4242	4122	3	2	40.0	0.09	0.06
4038Guscio fond.	4122	4242	4243	4123	3	2	40.0	0.09	0.06
4039Guscio fond.	4123	4243	4244	4124	3	2	40.0	0.09	0.06
4040Guscio fond.	4124	4244	4245	4125	3	2	40.0	0.09	0.06
4041Guscio fond.	4125	4245	4246	4126	3	2	40.0	0.09	0.06
4042Guscio fond.	4126	4246	4247	4127	3	2	40.0	0.09	0.06
4043Guscio fond.	4127	4247	4248	4128	3	2	40.0	0.09	0.06
4044Guscio fond.	4128	4248	4249	4129	3	2	40.0	0.09	0.06
4045Guscio fond.	4129	4249	4250	4130	3	2	40.0	0.09	0.06
4046Guscio fond.	4130	4250	4251	4131	3	2	40.0	0.09	0.06
4047Guscio fond.	4131	4251	4252	4132	3	2	40.0	0.09	0.06
4048Guscio fond.	4132	4252	4253	4133	3	2	40.0	0.09	0.06
4049Guscio fond.	4133	4253	4254	4134	3	2	40.0	0.09	0.06
4050Guscio fond.	4134	4254	4194	4074	3	2	40.0	0.09	0.06
4051Guscio fond.	4074	4194	4255	4135	3	2	40.0	0.09	0.06
4052Guscio fond.	4135	4255	4256	4136	3	2	40.0	0.09	0.06
4053Guscio fond.	4136	4256	4257	4137	3	2	40.0	0.09	0.06
4054Guscio fond.	4137	4257	4258	4138	3	2	40.0	0.09	0.06
4055Guscio fond.	4138	4258	4259	4139	3	2	40.0	0.09	0.06
4056Guscio fond.	4139	4259	4260	4140	3	2	40.0	0.09	0.06
4057Guscio fond.	4140	4260	4261	4141	3	2	40.0	0.09	0.06
4058Guscio fond.	4141	4261	4262	4142	3	2	40.0	0.09	0.06
4059Guscio fond.	4142	4262	4263	4143	3	2	40.0	0.09	0.06
4060Guscio fond.	4143	4263	4264	4144	3	2	40.0	0.09	0.06
4061Guscio fond.	4144	4264	4265	4145	3	2	40.0	0.09	0.06
4062Guscio fond.	4145	4265	4266	4146	3	2	40.0	0.09	0.06
4063Guscio fond.	4146	4266	4267	4147	3	2	40.0	0.09	0.06
4064Guscio fond.	4147	4267	4268	4148	3	2	40.0	0.09	0.06
4065Guscio fond.	4148	4268	4269	4149	3	2	40.0	0.09	0.06
4066Guscio fond.	4149	4269	4270	4150	3	2	40.0	0.09	0.06
4067Guscio fond.	4150	4270	4271	4151	3	2	40.0	0.09	0.06
4068Guscio fond.	4151	4271	4272	4152	3	2	40.0	0.09	0.06
4069Guscio fond.	4152	4272	4273	4153	3	2	40.0	0.09	0.06
4070Guscio fond.	4153	4273	4274	4154	3	2	40.0	0.09	0.06
4071Guscio fond.	4154	4274	4275	4155	3	2	40.0	0.09	0.06
4072Guscio fond.	4155	4275	4276	4156	3	2	40.0	0.09	0.06
4073Guscio fond.	4156	4276	4277	4157	3	2	40.0	0.09	0.06
4074Guscio fond.	4157	4277	4278	4158	3	2	40.0	0.09	0.06
4075Guscio fond.	4158	4278	4279	4159	3	2	40.0	0.09	0.06
4076Guscio fond.	4159	4279	4280	4160	3	2	40.0	0.09	0.06
4077Guscio fond.	4160	4280	4281	4161	3	2	40.0	0.09	0.06

4078	Guscio fond.	4161	4281	4282	4162	3	2	40.0	0.09	0.06
4079	Guscio fond.	4162	4282	4283	4163	3	2	40.0	0.09	0.06
4080	Guscio fond.	4163	4283	4195	4075	3	2	40.0	0.09	0.06
4081	Guscio fond.	4075	4195	4284	4164	3	2	40.0	0.09	0.06
4082	Guscio fond.	4164	4284	4285	4165	3	2	40.0	0.09	0.06
4083	Guscio fond.	4165	4285	4286	4166	3	2	40.0	0.09	0.06
4084	Guscio fond.	4166	4286	4287	4167	3	2	40.0	0.09	0.06
4085	Guscio fond.	4167	4287	4288	4168	3	2	40.0	0.09	0.06
4086	Guscio fond.	4168	4288	4289	4169	3	2	40.0	0.09	0.06
4087	Guscio fond.	4169	4289	4290	4170	3	2	40.0	0.09	0.06
4088	Guscio fond.	4170	4290	4291	4171	3	2	40.0	0.09	0.06
4089	Guscio fond.	4171	4291	4292	4172	3	2	40.0	0.09	0.06
4090	Guscio fond.	4172	4292	4293	4173	3	2	40.0	0.09	0.06
4091	Guscio fond.	4173	4293	4294	4174	3	2	40.0	0.09	0.06
4092	Guscio fond.	4174	4294	4295	4175	3	2	40.0	0.09	0.06
4093	Guscio fond.	4175	4295	4296	4176	3	2	40.0	0.09	0.06
4094	Guscio fond.	4176	4296	4297	4177	3	2	40.0	0.09	0.06
4095	Guscio fond.	4177	4297	4298	4178	3	2	40.0	0.09	0.06
4096	Guscio fond.	4178	4298	4299	4179	3	2	40.0	0.09	0.06
4097	Guscio fond.	4179	4299	4300	4180	3	2	40.0	0.09	0.06
4098	Guscio fond.	4180	4300	4301	4181	3	2	40.0	0.09	0.06
4099	Guscio fond.	4181	4301	4302	4182	3	2	40.0	0.09	0.06
4100	Guscio fond.	4182	4302	4303	4183	3	2	40.0	0.09	0.06
4101	Guscio fond.	4183	4303	4304	4184	3	2	40.0	0.09	0.06
4102	Guscio fond.	4184	4304	4305	4185	3	2	40.0	0.09	0.06
4103	Guscio fond.	4185	4305	4306	4186	3	2	40.0	0.09	0.06
4104	Guscio fond.	4186	4306	4307	4187	3	2	40.0	0.09	0.06
4105	Guscio fond.	4187	4307	4308	4188	3	2	40.0	0.09	0.06
4106	Guscio fond.	4188	4308	4309	4189	3	2	40.0	0.09	0.06
4107	Guscio fond.	4189	4309	4310	4190	3	2	40.0	0.09	0.06
4108	Guscio fond.	4190	4310	4311	4191	3	2	40.0	0.09	0.06
4109	Guscio fond.	4191	4311	4235	4115	3	2	40.0	0.09	0.06
4110	Guscio fond.	4115	4235	4196	4076	3	2	40.0	0.09	0.06
4111	Guscio fond.	4192	4312	4317	4197	3	2	40.0	0.09	0.06
4112	Guscio fond.	4197	4317	4318	4198	3	2	40.0	0.09	0.06
4113	Guscio fond.	4198	4318	4319	4199	3	2	40.0	0.09	0.06
4114	Guscio fond.	4199	4319	4320	4200	3	2	40.0	0.09	0.06
4115	Guscio fond.	4200	4320	4321	4201	3	2	40.0	0.09	0.06
4116	Guscio fond.	4201	4321	4322	4202	3	2	40.0	0.09	0.06
4117	Guscio fond.	4202	4322	4323	4203	3	2	40.0	0.09	0.06
4118	Guscio fond.	4203	4323	4324	4204	3	2	40.0	0.09	0.06
4119	Guscio fond.	4204	4324	4325	4205	3	2	40.0	0.09	0.06
4120	Guscio fond.	4205	4325	4326	4206	3	2	40.0	0.09	0.06
4121	Guscio fond.	4206	4326	4327	4207	3	2	40.0	0.09	0.06
4122	Guscio fond.	4207	4327	4328	4208	3	2	40.0	0.09	0.06
4123	Guscio fond.	4208	4328	4329	4209	3	2	40.0	0.09	0.06
4124	Guscio fond.	4209	4329	4330	4210	3	2	40.0	0.09	0.06
4125	Guscio fond.	4210	4330	4331	4211	3	2	40.0	0.09	0.06
4126	Guscio fond.	4211	4331	4332	4212	3	2	40.0	0.09	0.06
4127	Guscio fond.	4212	4332	4333	4213	3	2	40.0	0.09	0.06
4128	Guscio fond.	4213	4333	4334	4214	3	2	40.0	0.09	0.06
4129	Guscio fond.	4214	4334	4335	4215	3	2	40.0	0.09	0.06
4130	Guscio fond.	4215	4335	4336	4216	3	2	40.0	0.09	0.06
4131	Guscio fond.	4216	4336	4337	4217	3	2	40.0	0.09	0.06
4132	Guscio fond.	4217	4337	4338	4218	3	2	40.0	0.09	0.06
4133	Guscio fond.	4218	4338	4339	4219	3	2	40.0	0.09	0.06
4134	Guscio fond.	4219	4339	4340	4220	3	2	40.0	0.09	0.06
4135	Guscio fond.	4220	4340	4341	4221	3	2	40.0	0.09	0.06
4136	Guscio fond.	4221	4341	4342	4222	3	2	40.0	0.09	0.06
4137	Guscio fond.	4222	4342	4343	4223	3	2	40.0	0.09	0.06
4138	Guscio fond.	4223	4343	4344	4224	3	2	40.0	0.09	0.06
4139	Guscio fond.	4224	4344	4345	4225	3	2	40.0	0.09	0.06
4140	Guscio fond.	4225	4345	4313	4193	3	2	40.0	0.09	0.06
4141	Guscio fond.	4193	4313	4346	4226	3	2	40.0	0.09	0.06
4142	Guscio fond.	4226	4346	4347	4227	3	2	40.0	0.09	0.06
4143	Guscio fond.	4227	4347	4348	4228	3	2	40.0	0.09	0.06
4144	Guscio fond.	4228	4348	4349	4229	3	2	40.0	0.09	0.06
4145	Guscio fond.	4229	4349	4350	4230	3	2	40.0	0.09	0.06
4146	Guscio fond.	4230	4350	5224	5223	3	2	40.0	0.09	0.06
4147	Guscio fond.	5223	5224	4351	4231	3	2	40.0	0.09	0.06
4148	Guscio fond.	4231	4351	4352	4232	3	2	40.0	0.09	0.06
4149	Guscio fond.	4232	4352	4353	4233	3	2	40.0	0.09	0.06
4150	Guscio fond.	4233	4353	4354	4234	3	2	40.0	0.09	0.06
4151	Guscio fond.	4234	4354	4356	4236	3	2	40.0	0.09	0.06
4152	Guscio fond.	4236	4356	4357	4237	3	2	40.0	0.09	0.06
4153	Guscio fond.	4237	4357	4358	4238	3	2	40.0	0.09	0.06
4154	Guscio fond.	4238	4358	4359	4239	3	2	40.0	0.09	0.06

4155Guscio fond.	4239	4359	4360	4240	3	2	40.0	0.09	0.06
4156Guscio fond.	4240	4360	4361	4241	3	2	40.0	0.09	0.06
4157Guscio fond.	4241	4361	4362	4242	3	2	40.0	0.09	0.06
4158Guscio fond.	4242	4362	4363	4243	3	2	40.0	0.09	0.06
4159Guscio fond.	4243	4363	4364	4244	3	2	40.0	0.09	0.06
4160Guscio fond.	4244	4364	4365	4245	3	2	40.0	0.09	0.06
4161Guscio fond.	4245	4365	4366	4246	3	2	40.0	0.09	0.06
4162Guscio fond.	4246	4366	4367	4247	3	2	40.0	0.09	0.06
4163Guscio fond.	4247	4367	4368	4248	3	2	40.0	0.09	0.06
4164Guscio fond.	4248	4368	4369	4249	3	2	40.0	0.09	0.06
4165Guscio fond.	4249	4369	4370	4250	3	2	40.0	0.09	0.06
4166Guscio fond.	4250	4370	4371	4251	3	2	40.0	0.09	0.06
4167Guscio fond.	4251	4371	4372	4252	3	2	40.0	0.09	0.06
4168Guscio fond.	4252	4372	4373	4253	3	2	40.0	0.09	0.06
4169Guscio fond.	4253	4373	4374	4254	3	2	40.0	0.09	0.06
4170Guscio fond.	4254	4374	4314	4194	3	2	40.0	0.09	0.06
4171Guscio fond.	4194	4314	4375	4255	3	2	40.0	0.09	0.06
4172Guscio fond.	4255	4375	4376	4256	3	2	40.0	0.09	0.06
4173Guscio fond.	4256	4376	4377	4257	3	2	40.0	0.09	0.06
4174Guscio fond.	4257	4377	4378	4258	3	2	40.0	0.09	0.06
4175Guscio fond.	4258	4378	4379	4259	3	2	40.0	0.09	0.06
4176Guscio fond.	4259	4379	4380	4260	3	2	40.0	0.09	0.06
4177Guscio fond.	4260	4380	4381	4261	3	2	40.0	0.09	0.06
4178Guscio fond.	4261	4381	4382	4262	3	2	40.0	0.09	0.06
4179Guscio fond.	4262	4382	4383	4263	3	2	40.0	0.09	0.06
4180Guscio fond.	4263	4383	4384	4264	3	2	40.0	0.09	0.06
4181Guscio fond.	4264	4384	4385	4265	3	2	40.0	0.09	0.06
4182Guscio fond.	4265	4385	4386	4266	3	2	40.0	0.09	0.06
4183Guscio fond.	4266	4386	4387	4267	3	2	40.0	0.09	0.06
4184Guscio fond.	4267	4387	4388	4268	3	2	40.0	0.09	0.06
4185Guscio fond.	4268	4388	4389	4269	3	2	40.0	0.09	0.06
4186Guscio fond.	4269	4389	4390	4270	3	2	40.0	0.09	0.06
4187Guscio fond.	4270	4390	4391	4271	3	2	40.0	0.09	0.06
4188Guscio fond.	4271	4391	4392	4272	3	2	40.0	0.09	0.06
4189Guscio fond.	4272	4392	4393	4273	3	2	40.0	0.09	0.06
4190Guscio fond.	4273	4393	4394	4274	3	2	40.0	0.09	0.06
4191Guscio fond.	4274	4394	4395	4275	3	2	40.0	0.09	0.06
4192Guscio fond.	4275	4395	4396	4276	3	2	40.0	0.09	0.06
4193Guscio fond.	4276	4396	4397	4277	3	2	40.0	0.09	0.06
4194Guscio fond.	4277	4397	4398	4278	3	2	40.0	0.09	0.06
4195Guscio fond.	4278	4398	4399	4279	3	2	40.0	0.09	0.06
4196Guscio fond.	4279	4399	4400	4280	3	2	40.0	0.09	0.06
4197Guscio fond.	4280	4400	4401	4281	3	2	40.0	0.09	0.06
4198Guscio fond.	4281	4401	4402	4282	3	2	40.0	0.09	0.06
4199Guscio fond.	4282	4402	4403	4283	3	2	40.0	0.09	0.06
4200Guscio fond.	4283	4403	4315	4195	3	2	40.0	0.09	0.06
4201Guscio fond.	4195	4315	4404	4284	3	2	40.0	0.09	0.06
4202Guscio fond.	4284	4404	4405	4285	3	2	40.0	0.09	0.06
4203Guscio fond.	4285	4405	4406	4286	3	2	40.0	0.09	0.06
4204Guscio fond.	4286	4406	4407	4287	3	2	40.0	0.09	0.06
4205Guscio fond.	4287	4407	4408	4288	3	2	40.0	0.09	0.06
4206Guscio fond.	4288	4408	4409	4289	3	2	40.0	0.09	0.06
4207Guscio fond.	4289	4409	4410	4290	3	2	40.0	0.09	0.06
4208Guscio fond.	4290	4410	4411	4291	3	2	40.0	0.09	0.06
4209Guscio fond.	4291	4411	4412	4292	3	2	40.0	0.09	0.06
4210Guscio fond.	4292	4412	4413	4293	3	2	40.0	0.09	0.06
4211Guscio fond.	4293	4413	4414	4294	3	2	40.0	0.09	0.06
4212Guscio fond.	4294	4414	4415	4295	3	2	40.0	0.09	0.06
4213Guscio fond.	4295	4415	4416	4296	3	2	40.0	0.09	0.06
4214Guscio fond.	4296	4416	4417	4297	3	2	40.0	0.09	0.06
4215Guscio fond.	4297	4417	4418	4298	3	2	40.0	0.09	0.06
4216Guscio fond.	4298	4418	4419	4299	3	2	40.0	0.09	0.06
4217Guscio fond.	4299	4419	4420	4300	3	2	40.0	0.09	0.06
4218Guscio fond.	4300	4420	4421	4301	3	2	40.0	0.09	0.06
4219Guscio fond.	4301	4421	4422	4302	3	2	40.0	0.09	0.06
4220Guscio fond.	4302	4422	4423	4303	3	2	40.0	0.09	0.06
4221Guscio fond.	4303	4423	4424	4304	3	2	40.0	0.09	0.06
4222Guscio fond.	4304	4424	4425	4305	3	2	40.0	0.09	0.06
4223Guscio fond.	4305	4425	4426	4306	3	2	40.0	0.09	0.06
4224Guscio fond.	4306	4426	4427	4307	3	2	40.0	0.09	0.06
4225Guscio fond.	4307	4427	4428	4308	3	2	40.0	0.09	0.06
4226Guscio fond.	4308	4428	4429	4309	3	2	40.0	0.09	0.06
4227Guscio fond.	4309	4429	4430	4310	3	2	40.0	0.09	0.06
4228Guscio fond.	4310	4430	4431	4311	3	2	40.0	0.09	0.06
4229Guscio fond.	4311	4431	4355	4235	3	2	40.0	0.09	0.06
4230Guscio fond.	4235	4355	4316	4196	3	2	40.0	0.09	0.06
4231Guscio fond.	4432	4435	352	9	3	2	40.0	0.09	0.06

4232	Guscio fond.	4435	4436	355	352	3	2	40.0	0.09	0.06
4233	Guscio fond.	4436	4437	357	355	3	2	40.0	0.09	0.06
4234	Guscio fond.	4437	4438	359	357	3	2	40.0	0.09	0.06
4235	Guscio fond.	4438	4439	361	359	3	2	40.0	0.09	0.06
4236	Guscio fond.	4439	4440	363	361	3	2	40.0	0.09	0.06
4237	Guscio fond.	4440	4441	365	363	3	2	40.0	0.09	0.06
4238	Guscio fond.	4441	4442	367	365	3	2	40.0	0.09	0.06
4239	Guscio fond.	4442	4443	369	367	3	2	40.0	0.09	0.06
4240	Guscio fond.	4443	4444	371	369	3	2	40.0	0.09	0.06
4241	Guscio fond.	4444	4445	373	371	3	2	40.0	0.09	0.06
4242	Guscio fond.	4445	4446	375	373	3	2	40.0	0.09	0.06
4243	Guscio fond.	4446	4447	377	375	3	2	40.0	0.09	0.06
4244	Guscio fond.	4447	4448	379	377	3	2	40.0	0.09	0.06
4245	Guscio fond.	4448	4434	35	379	3	2	40.0	0.09	0.06
4246	Guscio fond.	4434	4449	844	35	3	2	40.0	0.09	0.06
4247	Guscio fond.	4449	4450	846	844	3	2	40.0	0.09	0.06
4248	Guscio fond.	4450	4451	848	846	3	2	40.0	0.09	0.06
4249	Guscio fond.	4451	4452	850	848	3	2	40.0	0.09	0.06
4250	Guscio fond.	4452	4453	852	850	3	2	40.0	0.09	0.06
4251	Guscio fond.	4453	4454	854	852	3	2	40.0	0.09	0.06
4252	Guscio fond.	4454	4455	856	854	3	2	40.0	0.09	0.06
4253	Guscio fond.	4455	4456	858	856	3	2	40.0	0.09	0.06
4254	Guscio fond.	4456	4457	860	858	3	2	40.0	0.09	0.06
4255	Guscio fond.	4457	4458	862	860	3	2	40.0	0.09	0.06
4256	Guscio fond.	4458	4459	864	862	3	2	40.0	0.09	0.06
4257	Guscio fond.	4459	4460	866	864	3	2	40.0	0.09	0.06
4258	Guscio fond.	4460	4461	868	866	3	2	40.0	0.09	0.06
4259	Guscio fond.	4461	4462	870	868	3	2	40.0	0.09	0.06
4260	Guscio fond.	4462	4433	10	870	3	2	40.0	0.09	0.06
4261	Guscio fond.	4433	4463	4072	10	3	2	40.0	0.09	0.06
4262	Guscio fond.	4463	4464	4192	4072	3	2	40.0	0.09	0.06
4263	Guscio fond.	4464	4465	4312	4192	3	2	40.0	0.09	0.06
4264	Guscio fond.	4466	4469	4435	4432	3	2	40.0	0.09	0.06
4265	Guscio fond.	4469	4470	4436	4435	3	2	40.0	0.09	0.06
4266	Guscio fond.	4470	4471	4437	4436	3	2	40.0	0.09	0.06
4267	Guscio fond.	4471	4472	4438	4437	3	2	40.0	0.09	0.06
4268	Guscio fond.	4472	4473	4439	4438	3	2	40.0	0.09	0.06
4269	Guscio fond.	4473	4474	4440	4439	3	2	40.0	0.09	0.06
4270	Guscio fond.	4474	4475	4441	4440	3	2	40.0	0.09	0.06
4271	Guscio fond.	4475	4476	4442	4441	3	2	40.0	0.09	0.06
4272	Guscio fond.	4476	4477	4443	4442	3	2	40.0	0.09	0.06
4273	Guscio fond.	4477	4478	4444	4443	3	2	40.0	0.09	0.06
4274	Guscio fond.	4478	4479	4445	4444	3	2	40.0	0.09	0.06
4275	Guscio fond.	4479	4480	4446	4445	3	2	40.0	0.09	0.06
4276	Guscio fond.	4480	4481	4447	4446	3	2	40.0	0.09	0.06
4277	Guscio fond.	4481	4482	4448	4447	3	2	40.0	0.09	0.06
4278	Guscio fond.	4482	4468	4434	4448	3	2	40.0	0.09	0.06
4279	Guscio fond.	4468	4483	4449	4434	3	2	40.0	0.09	0.06
4280	Guscio fond.	4483	4484	4450	4449	3	2	40.0	0.09	0.06
4281	Guscio fond.	4484	4485	4451	4450	3	2	40.0	0.09	0.06
4282	Guscio fond.	4485	4486	4452	4451	3	2	40.0	0.09	0.06
4283	Guscio fond.	4486	4487	4453	4452	3	2	40.0	0.09	0.06
4284	Guscio fond.	4487	4488	4454	4453	3	2	40.0	0.09	0.06
4285	Guscio fond.	4488	4489	4455	4454	3	2	40.0	0.09	0.06
4286	Guscio fond.	4489	4490	4456	4455	3	2	40.0	0.09	0.06
4287	Guscio fond.	4490	4491	4457	4456	3	2	40.0	0.09	0.06
4288	Guscio fond.	4491	4492	4458	4457	3	2	40.0	0.09	0.06
4289	Guscio fond.	4492	4493	4459	4458	3	2	40.0	0.09	0.06
4290	Guscio fond.	4493	4494	4460	4459	3	2	40.0	0.09	0.06
4291	Guscio fond.	4494	4495	4461	4460	3	2	40.0	0.09	0.06
4292	Guscio fond.	4495	4496	4462	4461	3	2	40.0	0.09	0.06
4293	Guscio fond.	4496	4467	4433	4462	3	2	40.0	0.09	0.06
4294	Guscio fond.	4467	4497	4463	4433	3	2	40.0	0.09	0.06
4295	Guscio fond.	4497	4498	4464	4463	3	2	40.0	0.09	0.06
4296	Guscio fond.	4498	4499	4465	4464	3	2	40.0	0.09	0.06
4297	Guscio fond.	4500	4503	4469	4466	3	2	40.0	0.09	0.06
4298	Guscio fond.	4503	4504	4470	4469	3	2	40.0	0.09	0.06
4299	Guscio fond.	4504	4505	4471	4470	3	2	40.0	0.09	0.06
4300	Guscio fond.	4505	4506	4472	4471	3	2	40.0	0.09	0.06
4301	Guscio fond.	4506	4507	4473	4472	3	2	40.0	0.09	0.06
4302	Guscio fond.	4507	4508	4474	4473	3	2	40.0	0.09	0.06
4303	Guscio fond.	4508	4509	4475	4474	3	2	40.0	0.09	0.06
4304	Guscio fond.	4509	4510	4476	4475	3	2	40.0	0.09	0.06
4305	Guscio fond.	4510	4511	4477	4476	3	2	40.0	0.09	0.06
4306	Guscio fond.	4511	4512	4478	4477	3	2	40.0	0.09	0.06
4307	Guscio fond.	4512	4513	4479	4478	3	2	40.0	0.09	0.06
4308	Guscio fond.	4513	4514	4480	4479	3	2	40.0	0.09	0.06

4309	Guscio fond.	4514	4515	4481	4480	3	2	40.0	0.09	0.06
4310	Guscio fond.	4515	4516	4482	4481	3	2	40.0	0.09	0.06
4311	Guscio fond.	4516	4502	4468	4482	3	2	40.0	0.09	0.06
4312	Guscio fond.	4502	4517	4483	4468	3	2	40.0	0.09	0.06
4313	Guscio fond.	4517	4518	4484	4483	3	2	40.0	0.09	0.06
4314	Guscio fond.	4518	4519	4485	4484	3	2	40.0	0.09	0.06
4315	Guscio fond.	4519	4520	4486	4485	3	2	40.0	0.09	0.06
4316	Guscio fond.	4520	4521	4487	4486	3	2	40.0	0.09	0.06
4317	Guscio fond.	4521	4522	4488	4487	3	2	40.0	0.09	0.06
4318	Guscio fond.	4522	4523	4489	4488	3	2	40.0	0.09	0.06
4319	Guscio fond.	4523	4524	4490	4489	3	2	40.0	0.09	0.06
4320	Guscio fond.	4524	4525	4491	4490	3	2	40.0	0.09	0.06
4321	Guscio fond.	4525	4526	4492	4491	3	2	40.0	0.09	0.06
4322	Guscio fond.	4526	4527	4493	4492	3	2	40.0	0.09	0.06
4323	Guscio fond.	4527	4528	4494	4493	3	2	40.0	0.09	0.06
4324	Guscio fond.	4528	4529	4495	4494	3	2	40.0	0.09	0.06
4325	Guscio fond.	4529	4530	4496	4495	3	2	40.0	0.09	0.06
4326	Guscio fond.	4530	4501	4467	4496	3	2	40.0	0.09	0.06
4327	Guscio fond.	4501	4531	4497	4467	3	2	40.0	0.09	0.06
4328	Guscio fond.	4531	4532	4498	4497	3	2	40.0	0.09	0.06
4329	Guscio fond.	4532	4533	4499	4498	3	2	40.0	0.09	0.06
4330	Guscio fond.	4534	4537	4503	4500	3	2	40.0	0.09	0.06
4331	Guscio fond.	4537	4538	4504	4503	3	2	40.0	0.09	0.06
4332	Guscio fond.	4538	4539	4505	4504	3	2	40.0	0.09	0.06
4333	Guscio fond.	4539	4540	4506	4505	3	2	40.0	0.09	0.06
4334	Guscio fond.	4540	4541	4507	4506	3	2	40.0	0.09	0.06
4335	Guscio fond.	4541	4542	4508	4507	3	2	40.0	0.09	0.06
4336	Guscio fond.	4542	4543	4509	4508	3	2	40.0	0.09	0.06
4337	Guscio fond.	4543	4544	4510	4509	3	2	40.0	0.09	0.06
4338	Guscio fond.	4544	4545	4511	4510	3	2	40.0	0.09	0.06
4339	Guscio fond.	4545	4546	4512	4511	3	2	40.0	0.09	0.06
4340	Guscio fond.	4546	4547	4513	4512	3	2	40.0	0.09	0.06
4341	Guscio fond.	4547	4548	4514	4513	3	2	40.0	0.09	0.06
4342	Guscio fond.	4548	4549	4515	4514	3	2	40.0	0.09	0.06
4343	Guscio fond.	4549	4550	4516	4515	3	2	40.0	0.09	0.06
4344	Guscio fond.	4550	4536	4502	4516	3	2	40.0	0.09	0.06
4345	Guscio fond.	4536	4551	4517	4502	3	2	40.0	0.09	0.06
4346	Guscio fond.	4551	4552	4518	4517	3	2	40.0	0.09	0.06
4347	Guscio fond.	4552	4553	4519	4518	3	2	40.0	0.09	0.06
4348	Guscio fond.	4553	4554	4520	4519	3	2	40.0	0.09	0.06
4349	Guscio fond.	4554	4555	4521	4520	3	2	40.0	0.09	0.06
4350	Guscio fond.	4555	4556	4522	4521	3	2	40.0	0.09	0.06
4351	Guscio fond.	4556	4557	4523	4522	3	2	40.0	0.09	0.06
4352	Guscio fond.	4557	4558	4524	4523	3	2	40.0	0.09	0.06
4353	Guscio fond.	4558	4559	4525	4524	3	2	40.0	0.09	0.06
4354	Guscio fond.	4559	4560	4526	4525	3	2	40.0	0.09	0.06
4355	Guscio fond.	4560	4561	4527	4526	3	2	40.0	0.09	0.06
4356	Guscio fond.	4561	4562	4528	4527	3	2	40.0	0.09	0.06
4357	Guscio fond.	4562	4563	4529	4528	3	2	40.0	0.09	0.06
4358	Guscio fond.	4563	4564	4530	4529	3	2	40.0	0.09	0.06
4359	Guscio fond.	4564	4535	4501	4530	3	2	40.0	0.09	0.06
4360	Guscio fond.	4535	4565	4531	4501	3	2	40.0	0.09	0.06
4361	Guscio fond.	4565	4566	4532	4531	3	2	40.0	0.09	0.06
4362	Guscio fond.	4566	4567	4533	4532	3	2	40.0	0.09	0.06
4363	Guscio fond.	4568	4571	4537	4534	3	2	40.0	0.09	0.06
4364	Guscio fond.	4571	4572	4538	4537	3	2	40.0	0.09	0.06
4365	Guscio fond.	4572	4573	4539	4538	3	2	40.0	0.09	0.06
4366	Guscio fond.	4573	4574	4540	4539	3	2	40.0	0.09	0.06
4367	Guscio fond.	4574	4575	4541	4540	3	2	40.0	0.09	0.06
4368	Guscio fond.	4575	4576	4542	4541	3	2	40.0	0.09	0.06
4369	Guscio fond.	4576	4577	4543	4542	3	2	40.0	0.09	0.06
4370	Guscio fond.	4577	4578	4544	4543	3	2	40.0	0.09	0.06
4371	Guscio fond.	4578	4579	4545	4544	3	2	40.0	0.09	0.06
4372	Guscio fond.	4579	4580	4546	4545	3	2	40.0	0.09	0.06
4373	Guscio fond.	4580	4581	4547	4546	3	2	40.0	0.09	0.06
4374	Guscio fond.	4581	4582	4548	4547	3	2	40.0	0.09	0.06
4375	Guscio fond.	4582	4583	4549	4548	3	2	40.0	0.09	0.06
4376	Guscio fond.	4583	4584	4550	4549	3	2	40.0	0.09	0.06
4377	Guscio fond.	4584	4570	4536	4550	3	2	40.0	0.09	0.06
4378	Guscio fond.	4570	4585	4551	4536	3	2	40.0	0.09	0.06
4379	Guscio fond.	4585	4586	4552	4551	3	2	40.0	0.09	0.06
4380	Guscio fond.	4586	4587	4553	4552	3	2	40.0	0.09	0.06
4381	Guscio fond.	4587	4588	4554	4553	3	2	40.0	0.09	0.06
4382	Guscio fond.	4588	4589	4555	4554	3	2	40.0	0.09	0.06
4383	Guscio fond.	4589	4590	4556	4555	3	2	40.0	0.09	0.06
4384	Guscio fond.	4590	4591	4557	4556	3	2	40.0	0.09	0.06
4385	Guscio fond.	4591	4592	4558	4557	3	2	40.0	0.09	0.06

4386	Guscio fond.	4592	4593	4559	4558	3	2	40.0	0.09	0.06
4387	Guscio fond.	4593	4594	4560	4559	3	2	40.0	0.09	0.06
4388	Guscio fond.	4594	4595	4561	4560	3	2	40.0	0.09	0.06
4389	Guscio fond.	4595	4596	4562	4561	3	2	40.0	0.09	0.06
4390	Guscio fond.	4596	4597	4563	4562	3	2	40.0	0.09	0.06
4391	Guscio fond.	4597	4598	4564	4563	3	2	40.0	0.09	0.06
4392	Guscio fond.	4598	4569	4535	4564	3	2	40.0	0.09	0.06
4393	Guscio fond.	4569	4599	4565	4535	3	2	40.0	0.09	0.06
4394	Guscio fond.	4599	4600	4566	4565	3	2	40.0	0.09	0.06
4395	Guscio fond.	4600	4601	4567	4566	3	2	40.0	0.09	0.06
4396	Guscio fond.	21	3625	4617	4602	3	2	40.0	0.09	0.06
4397	Guscio fond.	3625	3626	4618	4617	3	2	40.0	0.09	0.06
4398	Guscio fond.	3626	3627	4619	4618	3	2	40.0	0.09	0.06
4399	Guscio fond.	3627	3628	4620	4619	3	2	40.0	0.09	0.06
4400	Guscio fond.	3628	3629	4621	4620	3	2	40.0	0.09	0.06
4401	Guscio fond.	3629	3630	4622	4621	3	2	40.0	0.09	0.06
4402	Guscio fond.	3630	3631	4623	4622	3	2	40.0	0.09	0.06
4403	Guscio fond.	3631	3632	4624	4623	3	2	40.0	0.09	0.06
4404	Guscio fond.	3632	3633	4625	4624	3	2	40.0	0.09	0.06
4405	Guscio fond.	3633	3634	4626	4625	3	2	40.0	0.09	0.06
4406	Guscio fond.	3634	3635	4627	4626	3	2	40.0	0.09	0.06
4407	Guscio fond.	3635	3636	4628	4627	3	2	40.0	0.09	0.06
4408	Guscio fond.	3636	3637	4629	4628	3	2	40.0	0.09	0.06
4409	Guscio fond.	3637	3638	4630	4629	3	2	40.0	0.09	0.06
4410	Guscio fond.	3638	22	4603	4630	3	2	40.0	0.09	0.06
4411	Guscio fond.	22	1942	4604	4603	3	2	40.0	0.09	0.06
4412	Guscio fond.	1942	1943	4605	4604	3	2	40.0	0.09	0.06
4413	Guscio fond.	1943	1944	4606	4605	3	2	40.0	0.09	0.06
4414	Guscio fond.	1944	1945	4607	4606	3	2	40.0	0.09	0.06
4415	Guscio fond.	1945	1975	4608	4607	3	2	40.0	0.09	0.06
4416	Guscio fond.	1975	2005	5225	4608	3	2	40.0	0.09	0.06
4417	Guscio fond.	2005	2035	4609	5225	3	2	40.0	0.09	0.06
4418	Guscio fond.	2035	2080	4610	4609	3	2	40.0	0.09	0.06
4419	Guscio fond.	2080	2103	4611	4610	3	2	40.0	0.09	0.06
4420	Guscio fond.	2103	2104	4612	4611	3	2	40.0	0.09	0.06
4421	Guscio fond.	2104	2105	4613	4612	3	2	40.0	0.09	0.06
4422	Guscio fond.	2105	2107	4614	4613	3	2	40.0	0.09	0.06
4423	Guscio fond.	2107	2108	4615	4614	3	2	40.0	0.09	0.06
4424	Guscio fond.	2108	2110	4616	4615	3	2	40.0	0.09	0.06
4425	Guscio fond.	2110	23	5226	4616	3	2	40.0	0.09	0.06
4426	Guscio fond.	23	4076	4631	5226	3	2	40.0	0.09	0.06
4427	Guscio fond.	4076	4196	4632	4631	3	2	40.0	0.09	0.06
4428	Guscio fond.	4196	4316	4633	4632	3	2	40.0	0.09	0.06
4429	Guscio fond.	4602	4617	4649	4634	3	2	40.0	0.09	0.06
4430	Guscio fond.	4617	4618	4650	4649	3	2	40.0	0.09	0.06
4431	Guscio fond.	4618	4619	4651	4650	3	2	40.0	0.09	0.06
4432	Guscio fond.	4619	4620	4652	4651	3	2	40.0	0.09	0.06
4433	Guscio fond.	4620	4621	4653	4652	3	2	40.0	0.09	0.06
4434	Guscio fond.	4621	4622	4654	4653	3	2	40.0	0.09	0.06
4435	Guscio fond.	4622	4623	4655	4654	3	2	40.0	0.09	0.06
4436	Guscio fond.	4623	4624	4656	4655	3	2	40.0	0.09	0.06
4437	Guscio fond.	4624	4625	4657	4656	3	2	40.0	0.09	0.06
4438	Guscio fond.	4625	4626	4658	4657	3	2	40.0	0.09	0.06
4439	Guscio fond.	4626	4627	4659	4658	3	2	40.0	0.09	0.06
4440	Guscio fond.	4627	4628	4660	4659	3	2	40.0	0.09	0.06
4441	Guscio fond.	4628	4629	4661	4660	3	2	40.0	0.09	0.06
4442	Guscio fond.	4629	4630	4662	4661	3	2	40.0	0.09	0.06
4443	Guscio fond.	4630	4603	4635	4662	3	2	40.0	0.09	0.06
4444	Guscio fond.	4603	4604	4636	4635	3	2	40.0	0.09	0.06
4445	Guscio fond.	4604	4605	4637	4636	3	2	40.0	0.09	0.06
4446	Guscio fond.	4605	4606	4638	4637	3	2	40.0	0.09	0.06
4447	Guscio fond.	4606	4607	4639	4638	3	2	40.0	0.09	0.06
4448	Guscio fond.	4607	4608	4640	4639	3	2	40.0	0.09	0.06
4449	Guscio fond.	4608	5225	5227	4640	3	2	40.0	0.09	0.06
4450	Guscio fond.	5225	4609	4641	5227	3	2	40.0	0.09	0.06
4451	Guscio fond.	4609	4610	4642	4641	3	2	40.0	0.09	0.06
4452	Guscio fond.	4610	4611	4643	4642	3	2	40.0	0.09	0.06
4453	Guscio fond.	4611	4612	4644	4643	3	2	40.0	0.09	0.06
4454	Guscio fond.	4612	4613	4645	4644	3	2	40.0	0.09	0.06
4455	Guscio fond.	4613	4614	4646	4645	3	2	40.0	0.09	0.06
4456	Guscio fond.	4614	4615	4647	4646	3	2	40.0	0.09	0.06
4457	Guscio fond.	4615	4616	4648	4647	3	2	40.0	0.09	0.06
4458	Guscio fond.	4616	5226	5228	4648	3	2	40.0	0.09	0.06
4459	Guscio fond.	5226	4631	4663	5228	3	2	40.0	0.09	0.06
4460	Guscio fond.	4631	4632	4664	4663	3	2	40.0	0.09	0.06
4461	Guscio fond.	4632	4633	4665	4664	3	2	40.0	0.09	0.06
4462	Guscio fond.	4634	4649	4681	4666	3	2	40.0	0.09	0.06

4463	Guscio fond.	4649	4650	4682	4681	3	2	40.0	0.09	0.06
4464	Guscio fond.	4650	4651	4683	4682	3	2	40.0	0.09	0.06
4465	Guscio fond.	4651	4652	4684	4683	3	2	40.0	0.09	0.06
4466	Guscio fond.	4652	4653	4685	4684	3	2	40.0	0.09	0.06
4467	Guscio fond.	4653	4654	4686	4685	3	2	40.0	0.09	0.06
4468	Guscio fond.	4654	4655	4687	4686	3	2	40.0	0.09	0.06
4469	Guscio fond.	4655	4656	4688	4687	3	2	40.0	0.09	0.06
4470	Guscio fond.	4656	4657	4689	4688	3	2	40.0	0.09	0.06
4471	Guscio fond.	4657	4658	4690	4689	3	2	40.0	0.09	0.06
4472	Guscio fond.	4658	4659	4691	4690	3	2	40.0	0.09	0.06
4473	Guscio fond.	4659	4660	4692	4691	3	2	40.0	0.09	0.06
4474	Guscio fond.	4660	4661	4693	4692	3	2	40.0	0.09	0.06
4475	Guscio fond.	4661	4662	4694	4693	3	2	40.0	0.09	0.06
4476	Guscio fond.	4662	4635	4667	4694	3	2	40.0	0.09	0.06
4477	Guscio fond.	4635	4636	4668	4667	3	2	40.0	0.09	0.06
4478	Guscio fond.	4636	4637	4669	4668	3	2	40.0	0.09	0.06
4479	Guscio fond.	4637	4638	4670	4669	3	2	40.0	0.09	0.06
4480	Guscio fond.	4638	4639	4671	4670	3	2	40.0	0.09	0.06
4481	Guscio fond.	4639	4640	4672	4671	3	2	40.0	0.09	0.06
4482	Guscio fond.	4640	5227	5229	4672	3	2	40.0	0.09	0.06
4483	Guscio fond.	5227	4641	4673	5229	3	2	40.0	0.09	0.06
4484	Guscio fond.	4641	4642	4674	4673	3	2	40.0	0.09	0.06
4485	Guscio fond.	4642	4643	4675	4674	3	2	40.0	0.09	0.06
4486	Guscio fond.	4643	4644	4676	4675	3	2	40.0	0.09	0.06
4487	Guscio fond.	4644	4645	4677	4676	3	2	40.0	0.09	0.06
4488	Guscio fond.	4645	4646	4678	4677	3	2	40.0	0.09	0.06
4489	Guscio fond.	4646	4647	4679	4678	3	2	40.0	0.09	0.06
4490	Guscio fond.	4647	4648	4680	4679	3	2	40.0	0.09	0.06
4491	Guscio fond.	4648	5228	5230	4680	3	2	40.0	0.09	0.06
4492	Guscio fond.	5228	4663	4695	5230	3	2	40.0	0.09	0.06
4493	Guscio fond.	4663	4664	4696	4695	3	2	40.0	0.09	0.06
4494	Guscio fond.	4664	4665	4697	4696	3	2	40.0	0.09	0.06
4495	Guscio fond.	4666	4681	4713	4698	3	2	40.0	0.09	0.06
4496	Guscio fond.	4681	4682	4714	4713	3	2	40.0	0.09	0.06
4497	Guscio fond.	4682	4683	4715	4714	3	2	40.0	0.09	0.06
4498	Guscio fond.	4683	4684	4716	4715	3	2	40.0	0.09	0.06
4499	Guscio fond.	4684	4685	4717	4716	3	2	40.0	0.09	0.06
4500	Guscio fond.	4685	4686	4718	4717	3	2	40.0	0.09	0.06
4501	Guscio fond.	4686	4687	4719	4718	3	2	40.0	0.09	0.06
4502	Guscio fond.	4687	4688	4720	4719	3	2	40.0	0.09	0.06
4503	Guscio fond.	4688	4689	4721	4720	3	2	40.0	0.09	0.06
4504	Guscio fond.	4689	4690	4722	4721	3	2	40.0	0.09	0.06
4505	Guscio fond.	4690	4691	4723	4722	3	2	40.0	0.09	0.06
4506	Guscio fond.	4691	4692	4724	4723	3	2	40.0	0.09	0.06
4507	Guscio fond.	4692	4693	4725	4724	3	2	40.0	0.09	0.06
4508	Guscio fond.	4693	4694	4726	4725	3	2	40.0	0.09	0.06
4509	Guscio fond.	4694	4667	4699	4726	3	2	40.0	0.09	0.06
4510	Guscio fond.	4667	4668	4700	4699	3	2	40.0	0.09	0.06
4511	Guscio fond.	4668	4669	4701	4700	3	2	40.0	0.09	0.06
4512	Guscio fond.	4669	4670	4702	4701	3	2	40.0	0.09	0.06
4513	Guscio fond.	4670	4671	4703	4702	3	2	40.0	0.09	0.06
4514	Guscio fond.	4671	4672	4704	4703	3	2	40.0	0.09	0.06
4515	Guscio fond.	4672	5229	5231	4704	3	2	40.0	0.09	0.06
4516	Guscio fond.	5229	4673	4705	5231	3	2	40.0	0.09	0.06
4517	Guscio fond.	4673	4674	4706	4705	3	2	40.0	0.09	0.06
4518	Guscio fond.	4674	4675	4707	4706	3	2	40.0	0.09	0.06
4519	Guscio fond.	4675	4676	4708	4707	3	2	40.0	0.09	0.06
4520	Guscio fond.	4676	4677	4709	4708	3	2	40.0	0.09	0.06
4521	Guscio fond.	4677	4678	4710	4709	3	2	40.0	0.09	0.06
4522	Guscio fond.	4678	4679	4711	4710	3	2	40.0	0.09	0.06
4523	Guscio fond.	4679	4680	4712	4711	3	2	40.0	0.09	0.06
4524	Guscio fond.	4680	5230	5232	4712	3	2	40.0	0.09	0.06
4525	Guscio fond.	5230	4695	4727	5232	3	2	40.0	0.09	0.06
4526	Guscio fond.	4695	4696	4728	4727	3	2	40.0	0.09	0.06
4527	Guscio fond.	4696	4697	4729	4728	3	2	40.0	0.09	0.06
4528	Guscio fond.	4698	4713	4745	4730	3	2	40.0	0.09	0.06
4529	Guscio fond.	4713	4714	4746	4745	3	2	40.0	0.09	0.06
4530	Guscio fond.	4714	4715	4747	4746	3	2	40.0	0.09	0.06
4531	Guscio fond.	4715	4716	4748	4747	3	2	40.0	0.09	0.06
4532	Guscio fond.	4716	4717	4749	4748	3	2	40.0	0.09	0.06
4533	Guscio fond.	4717	4718	4750	4749	3	2	40.0	0.09	0.06
4534	Guscio fond.	4718	4719	4751	4750	3	2	40.0	0.09	0.06
4535	Guscio fond.	4719	4720	4752	4751	3	2	40.0	0.09	0.06
4536	Guscio fond.	4720	4721	4753	4752	3	2	40.0	0.09	0.06
4537	Guscio fond.	4721	4722	4754	4753	3	2	40.0	0.09	0.06
4538	Guscio fond.	4722	4723	4755	4754	3	2	40.0	0.09	0.06
4539	Guscio fond.	4723	4724	4756	4755	3	2	40.0	0.09	0.06

4540	Guscio fond.	4724	4725	4757	4756	3	2	40.0	0.09	0.06
4541	Guscio fond.	4725	4726	4758	4757	3	2	40.0	0.09	0.06
4542	Guscio fond.	4726	4699	4731	4758	3	2	40.0	0.09	0.06
4543	Guscio fond.	4699	4700	4732	4731	3	2	40.0	0.09	0.06
4544	Guscio fond.	4700	4701	4733	4732	3	2	40.0	0.09	0.06
4545	Guscio fond.	4701	4702	4734	4733	3	2	40.0	0.09	0.06
4546	Guscio fond.	4702	4703	4735	4734	3	2	40.0	0.09	0.06
4547	Guscio fond.	4703	4704	4736	4735	3	2	40.0	0.09	0.06
4548	Guscio fond.	4704	5231	5233	4736	3	2	40.0	0.09	0.06
4549	Guscio fond.	5231	4705	4737	5233	3	2	40.0	0.09	0.06
4550	Guscio fond.	4705	4706	4738	4737	3	2	40.0	0.09	0.06
4551	Guscio fond.	4706	4707	4739	4738	3	2	40.0	0.09	0.06
4552	Guscio fond.	4707	4708	4740	4739	3	2	40.0	0.09	0.06
4553	Guscio fond.	4708	4709	4741	4740	3	2	40.0	0.09	0.06
4554	Guscio fond.	4709	4710	4742	4741	3	2	40.0	0.09	0.06
4555	Guscio fond.	4710	4711	4743	4742	3	2	40.0	0.09	0.06
4556	Guscio fond.	4711	4712	4744	4743	3	2	40.0	0.09	0.06
4557	Guscio fond.	4712	5232	5234	4744	3	2	40.0	0.09	0.06
4558	Guscio fond.	5232	4727	4759	5234	3	2	40.0	0.09	0.06
4559	Guscio fond.	4727	4728	4760	4759	3	2	40.0	0.09	0.06
4560	Guscio fond.	4728	4729	4761	4760	3	2	40.0	0.09	0.06
4561	Guscio fond.	4730	4745	4777	4762	3	2	40.0	0.09	0.06
4562	Guscio fond.	4745	4746	4778	4777	3	2	40.0	0.09	0.06
4563	Guscio fond.	4746	4747	4779	4778	3	2	40.0	0.09	0.06
4564	Guscio fond.	4747	4748	4780	4779	3	2	40.0	0.09	0.06
4565	Guscio fond.	4748	4749	4781	4780	3	2	40.0	0.09	0.06
4566	Guscio fond.	4749	4750	4782	4781	3	2	40.0	0.09	0.06
4567	Guscio fond.	4750	4751	4783	4782	3	2	40.0	0.09	0.06
4568	Guscio fond.	4751	4752	4784	4783	3	2	40.0	0.09	0.06
4569	Guscio fond.	4752	4753	4785	4784	3	2	40.0	0.09	0.06
4570	Guscio fond.	4753	4754	4786	4785	3	2	40.0	0.09	0.06
4571	Guscio fond.	4754	4755	4787	4786	3	2	40.0	0.09	0.06
4572	Guscio fond.	4755	4756	4788	4787	3	2	40.0	0.09	0.06
4573	Guscio fond.	4756	4757	4789	4788	3	2	40.0	0.09	0.06
4574	Guscio fond.	4757	4758	4790	4789	3	2	40.0	0.09	0.06
4575	Guscio fond.	4758	4731	4763	4790	3	2	40.0	0.09	0.06
4576	Guscio fond.	4731	4732	4764	4763	3	2	40.0	0.09	0.06
4577	Guscio fond.	4732	4733	4765	4764	3	2	40.0	0.09	0.06
4578	Guscio fond.	4733	4734	4766	4765	3	2	40.0	0.09	0.06
4579	Guscio fond.	4734	4735	4767	4766	3	2	40.0	0.09	0.06
4580	Guscio fond.	4735	4736	4768	4767	3	2	40.0	0.09	0.06
4581	Guscio fond.	4736	5233	5235	4768	3	2	40.0	0.09	0.06
4582	Guscio fond.	5233	4737	4769	5235	3	2	40.0	0.09	0.06
4583	Guscio fond.	4737	4738	4770	4769	3	2	40.0	0.09	0.06
4584	Guscio fond.	4738	4739	4771	4770	3	2	40.0	0.09	0.06
4585	Guscio fond.	4739	4740	4772	4771	3	2	40.0	0.09	0.06
4586	Guscio fond.	4740	4741	4773	4772	3	2	40.0	0.09	0.06
4587	Guscio fond.	4741	4742	4774	4773	3	2	40.0	0.09	0.06
4588	Guscio fond.	4742	4743	4775	4774	3	2	40.0	0.09	0.06
4589	Guscio fond.	4743	4744	4776	4775	3	2	40.0	0.09	0.06
4590	Guscio fond.	4744	5234	5236	4776	3	2	40.0	0.09	0.06
4591	Guscio fond.	5234	4759	4791	5236	3	2	40.0	0.09	0.06
4592	Guscio fond.	4759	4760	4792	4791	3	2	40.0	0.09	0.06
4593	Guscio fond.	4760	4761	4793	4792	3	2	40.0	0.09	0.06
4594	Guscio fond.	4762	4777	4809	4794	3	2	40.0	0.09	0.06
4595	Guscio fond.	4777	4778	4810	4809	3	2	40.0	0.09	0.06
4596	Guscio fond.	4778	4779	4811	4810	3	2	40.0	0.09	0.06
4597	Guscio fond.	4779	4780	4812	4811	3	2	40.0	0.09	0.06
4598	Guscio fond.	4780	4781	4813	4812	3	2	40.0	0.09	0.06
4599	Guscio fond.	4781	4782	4814	4813	3	2	40.0	0.09	0.06
4600	Guscio fond.	4782	4783	4815	4814	3	2	40.0	0.09	0.06
4601	Guscio fond.	4783	4784	4816	4815	3	2	40.0	0.09	0.06
4602	Guscio fond.	4784	4785	4817	4816	3	2	40.0	0.09	0.06
4603	Guscio fond.	4785	4786	4818	4817	3	2	40.0	0.09	0.06
4604	Guscio fond.	4786	4787	4819	4818	3	2	40.0	0.09	0.06
4605	Guscio fond.	4787	4788	4820	4819	3	2	40.0	0.09	0.06
4606	Guscio fond.	4788	4789	4821	4820	3	2	40.0	0.09	0.06
4607	Guscio fond.	4789	4790	4822	4821	3	2	40.0	0.09	0.06
4608	Guscio fond.	4790	4763	4795	4822	3	2	40.0	0.09	0.06
4609	Guscio fond.	4763	4764	4796	4795	3	2	40.0	0.09	0.06
4610	Guscio fond.	4764	4765	4797	4796	3	2	40.0	0.09	0.06
4611	Guscio fond.	4765	4766	4798	4797	3	2	40.0	0.09	0.06
4612	Guscio fond.	4766	4767	4799	4798	3	2	40.0	0.09	0.06
4613	Guscio fond.	4767	4768	4800	4799	3	2	40.0	0.09	0.06
4614	Guscio fond.	4768	5235	5237	4800	3	2	40.0	0.09	0.06
4615	Guscio fond.	5235	4769	4801	5237	3	2	40.0	0.09	0.06
4616	Guscio fond.	4769	4770	4802	4801	3	2	40.0	0.09	0.06

4617	Guscio fond.	4770	4771	4803	4802	3	2	40.0	0.09	0.06
4618	Guscio fond.	4771	4772	4804	4803	3	2	40.0	0.09	0.06
4619	Guscio fond.	4772	4773	4805	4804	3	2	40.0	0.09	0.06
4620	Guscio fond.	4773	4774	4806	4805	3	2	40.0	0.09	0.06
4621	Guscio fond.	4774	4775	4807	4806	3	2	40.0	0.09	0.06
4622	Guscio fond.	4775	4776	4808	4807	3	2	40.0	0.09	0.06
4623	Guscio fond.	4776	5236	5238	4808	3	2	40.0	0.09	0.06
4624	Guscio fond.	5236	4791	4823	5238	3	2	40.0	0.09	0.06
4625	Guscio fond.	4791	4792	4824	4823	3	2	40.0	0.09	0.06
4626	Guscio fond.	4792	4793	4825	4824	3	2	40.0	0.09	0.06
4627	Guscio fond.	4826	9	354	4830	3	2	40.0	0.09	0.06
4628	Guscio fond.	4830	354	383	4831	3	2	40.0	0.09	0.06
4629	Guscio fond.	4831	383	399	4832	3	2	40.0	0.09	0.06
4630	Guscio fond.	4832	399	415	4833	3	2	40.0	0.09	0.06
4631	Guscio fond.	4833	415	431	4834	3	2	40.0	0.09	0.06
4632	Guscio fond.	4834	431	447	4835	3	2	40.0	0.09	0.06
4633	Guscio fond.	4835	447	463	4836	3	2	40.0	0.09	0.06
4634	Guscio fond.	4836	463	479	4837	3	2	40.0	0.09	0.06
4635	Guscio fond.	4837	479	495	4838	3	2	40.0	0.09	0.06
4636	Guscio fond.	4838	495	511	4839	3	2	40.0	0.09	0.06
4637	Guscio fond.	4839	511	527	4840	3	2	40.0	0.09	0.06
4638	Guscio fond.	4840	527	543	4841	3	2	40.0	0.09	0.06
4639	Guscio fond.	4841	543	559	4842	3	2	40.0	0.09	0.06
4640	Guscio fond.	4842	559	575	4843	3	2	40.0	0.09	0.06
4641	Guscio fond.	4843	575	591	4844	3	2	40.0	0.09	0.06
4642	Guscio fond.	4844	591	607	4845	3	2	40.0	0.09	0.06
4643	Guscio fond.	4845	607	623	4846	3	2	40.0	0.09	0.06
4644	Guscio fond.	4846	623	639	4847	3	2	40.0	0.09	0.06
4645	Guscio fond.	4847	639	655	4848	3	2	40.0	0.09	0.06
4646	Guscio fond.	4848	655	671	4849	3	2	40.0	0.09	0.06
4647	Guscio fond.	4849	671	687	4850	3	2	40.0	0.09	0.06
4648	Guscio fond.	4850	687	703	4851	3	2	40.0	0.09	0.06
4649	Guscio fond.	4851	703	719	4852	3	2	40.0	0.09	0.06
4650	Guscio fond.	4852	719	735	4853	3	2	40.0	0.09	0.06
4651	Guscio fond.	4853	735	751	4854	3	2	40.0	0.09	0.06
4652	Guscio fond.	4854	751	767	4855	3	2	40.0	0.09	0.06
4653	Guscio fond.	4855	767	783	4856	3	2	40.0	0.09	0.06
4654	Guscio fond.	4856	783	799	4857	3	2	40.0	0.09	0.06
4655	Guscio fond.	4857	799	815	4858	3	2	40.0	0.09	0.06
4656	Guscio fond.	4858	815	13	4827	3	2	40.0	0.09	0.06
4657	Guscio fond.	4827	13	1308	4859	3	2	40.0	0.09	0.06
4658	Guscio fond.	4859	1308	1324	4860	3	2	40.0	0.09	0.06
4659	Guscio fond.	4860	1324	1340	4861	3	2	40.0	0.09	0.06
4660	Guscio fond.	4861	1340	1356	4862	3	2	40.0	0.09	0.06
4661	Guscio fond.	4862	1356	1372	4863	3	2	40.0	0.09	0.06
4662	Guscio fond.	4863	1372	1388	4864	3	2	40.0	0.09	0.06
4663	Guscio fond.	4864	1388	1404	4865	3	2	40.0	0.09	0.06
4664	Guscio fond.	4865	1404	1420	4866	3	2	40.0	0.09	0.06
4665	Guscio fond.	4866	1420	1436	4867	3	2	40.0	0.09	0.06
4666	Guscio fond.	4867	1436	1452	4868	3	2	40.0	0.09	0.06
4667	Guscio fond.	4868	1452	1468	4869	3	2	40.0	0.09	0.06
4668	Guscio fond.	4869	1468	1484	4870	3	2	40.0	0.09	0.06
4669	Guscio fond.	4870	1484	1500	4871	3	2	40.0	0.09	0.06
4670	Guscio fond.	4871	1500	1516	4872	3	2	40.0	0.09	0.06
4671	Guscio fond.	4872	1516	1532	4873	3	2	40.0	0.09	0.06
4672	Guscio fond.	4873	1532	1548	4874	3	2	40.0	0.09	0.06
4673	Guscio fond.	4874	1548	1564	4875	3	2	40.0	0.09	0.06
4674	Guscio fond.	4875	1564	1580	4876	3	2	40.0	0.09	0.06
4675	Guscio fond.	4876	1580	1596	4877	3	2	40.0	0.09	0.06
4676	Guscio fond.	4877	1596	1612	4878	3	2	40.0	0.09	0.06
4677	Guscio fond.	4878	1612	1628	4879	3	2	40.0	0.09	0.06
4678	Guscio fond.	4879	1628	1644	4880	3	2	40.0	0.09	0.06
4679	Guscio fond.	4880	1644	1660	4881	3	2	40.0	0.09	0.06
4680	Guscio fond.	4881	1660	1676	4882	3	2	40.0	0.09	0.06
4681	Guscio fond.	4882	1676	1692	4883	3	2	40.0	0.09	0.06
4682	Guscio fond.	4883	1692	1708	4884	3	2	40.0	0.09	0.06
4683	Guscio fond.	4884	1708	1724	4885	3	2	40.0	0.09	0.06
4684	Guscio fond.	4885	1724	1740	4886	3	2	40.0	0.09	0.06
4685	Guscio fond.	4886	1740	1756	4887	3	2	40.0	0.09	0.06
4686	Guscio fond.	4887	1756	15	4828	3	2	40.0	0.09	0.06
4687	Guscio fond.	4828	15	2235	4888	3	2	40.0	0.09	0.06
4688	Guscio fond.	4888	2235	2251	4889	3	2	40.0	0.09	0.06
4689	Guscio fond.	4889	2251	2267	4890	3	2	40.0	0.09	0.06
4690	Guscio fond.	4890	2267	2283	4891	3	2	40.0	0.09	0.06
4691	Guscio fond.	4891	2283	2299	4892	3	2	40.0	0.09	0.06
4692	Guscio fond.	4892	2299	2315	4893	3	2	40.0	0.09	0.06
4693	Guscio fond.	4893	2315	2331	4894	3	2	40.0	0.09	0.06

4694	Guscio fond.	4894	2331	2347	4895	3	2	40.0	0.09	0.06
4695	Guscio fond.	4895	2347	2363	4896	3	2	40.0	0.09	0.06
4696	Guscio fond.	4896	2363	2379	4897	3	2	40.0	0.09	0.06
4697	Guscio fond.	4897	2379	2395	4898	3	2	40.0	0.09	0.06
4698	Guscio fond.	4898	2395	2411	4899	3	2	40.0	0.09	0.06
4699	Guscio fond.	4899	2411	2427	4900	3	2	40.0	0.09	0.06
4700	Guscio fond.	4900	2427	2443	4901	3	2	40.0	0.09	0.06
4701	Guscio fond.	4901	2443	2459	4902	3	2	40.0	0.09	0.06
4702	Guscio fond.	4902	2459	2475	4903	3	2	40.0	0.09	0.06
4703	Guscio fond.	4903	2475	2491	4904	3	2	40.0	0.09	0.06
4704	Guscio fond.	4904	2491	2507	4905	3	2	40.0	0.09	0.06
4705	Guscio fond.	4905	2507	2523	4906	3	2	40.0	0.09	0.06
4706	Guscio fond.	4906	2523	2539	4907	3	2	40.0	0.09	0.06
4707	Guscio fond.	4907	2539	2555	4908	3	2	40.0	0.09	0.06
4708	Guscio fond.	4908	2555	2571	4909	3	2	40.0	0.09	0.06
4709	Guscio fond.	4909	2571	2587	4910	3	2	40.0	0.09	0.06
4710	Guscio fond.	4910	2587	2603	4911	3	2	40.0	0.09	0.06
4711	Guscio fond.	4911	2603	2619	4912	3	2	40.0	0.09	0.06
4712	Guscio fond.	4912	2619	2635	4913	3	2	40.0	0.09	0.06
4713	Guscio fond.	4913	2635	2651	4914	3	2	40.0	0.09	0.06
4714	Guscio fond.	4914	2651	2667	4915	3	2	40.0	0.09	0.06
4715	Guscio fond.	4915	2667	2683	4916	3	2	40.0	0.09	0.06
4716	Guscio fond.	4916	2683	18	4829	3	2	40.0	0.09	0.06
4717	Guscio fond.	4829	18	3162	4917	3	2	40.0	0.09	0.06
4718	Guscio fond.	4917	3162	3178	4918	3	2	40.0	0.09	0.06
4719	Guscio fond.	4918	3178	3194	4919	3	2	40.0	0.09	0.06
4720	Guscio fond.	4919	3194	3210	4920	3	2	40.0	0.09	0.06
4721	Guscio fond.	4920	3210	3226	4921	3	2	40.0	0.09	0.06
4722	Guscio fond.	4921	3226	3242	4922	3	2	40.0	0.09	0.06
4723	Guscio fond.	4922	3242	3258	4923	3	2	40.0	0.09	0.06
4724	Guscio fond.	4923	3258	3274	4924	3	2	40.0	0.09	0.06
4725	Guscio fond.	4924	3274	3290	4925	3	2	40.0	0.09	0.06
4726	Guscio fond.	4925	3290	3306	4926	3	2	40.0	0.09	0.06
4727	Guscio fond.	4926	3306	3322	4927	3	2	40.0	0.09	0.06
4728	Guscio fond.	4927	3322	3338	4928	3	2	40.0	0.09	0.06
4729	Guscio fond.	4928	3338	3354	4929	3	2	40.0	0.09	0.06
4730	Guscio fond.	4929	3354	3370	4930	3	2	40.0	0.09	0.06
4731	Guscio fond.	4930	3370	3386	4931	3	2	40.0	0.09	0.06
4732	Guscio fond.	4931	3386	3402	4932	3	2	40.0	0.09	0.06
4733	Guscio fond.	4932	3402	3418	4933	3	2	40.0	0.09	0.06
4734	Guscio fond.	4933	3418	3434	4934	3	2	40.0	0.09	0.06
4735	Guscio fond.	4934	3434	3450	4935	3	2	40.0	0.09	0.06
4736	Guscio fond.	4935	3450	3466	4936	3	2	40.0	0.09	0.06
4737	Guscio fond.	4936	3466	3482	4937	3	2	40.0	0.09	0.06
4738	Guscio fond.	4937	3482	3498	4938	3	2	40.0	0.09	0.06
4739	Guscio fond.	4938	3498	3514	4939	3	2	40.0	0.09	0.06
4740	Guscio fond.	4939	3514	3530	4940	3	2	40.0	0.09	0.06
4741	Guscio fond.	4940	3530	3546	4941	3	2	40.0	0.09	0.06
4742	Guscio fond.	4941	3546	3562	4942	3	2	40.0	0.09	0.06
4743	Guscio fond.	4942	3562	3578	4943	3	2	40.0	0.09	0.06
4744	Guscio fond.	4943	3578	3594	4944	3	2	40.0	0.09	0.06
4745	Guscio fond.	4944	3594	3610	4945	3	2	40.0	0.09	0.06
4746	Guscio fond.	4945	3610	21	5239	3	2	40.0	0.09	0.06
4747	Guscio fond.	4946	4432	9	4826	3	2	40.0	0.09	0.06
4748	Guscio fond.	4947	4466	4432	4946	3	2	40.0	0.09	0.06
4749	Guscio fond.	4948	4500	4466	4947	3	2	40.0	0.09	0.06
4750	Guscio fond.	4949	4534	4500	4948	3	2	40.0	0.09	0.06
4751	Guscio fond.	4950	4568	4534	4949	3	2	40.0	0.09	0.06
4752	Guscio fond.	5239	21	4602	4951	3	2	40.0	0.09	0.06
4753	Guscio fond.	4951	4602	4634	4952	3	2	40.0	0.09	0.06
4754	Guscio fond.	4952	4634	4666	4953	3	2	40.0	0.09	0.06
4755	Guscio fond.	4953	4666	4698	4954	3	2	40.0	0.09	0.06
4756	Guscio fond.	4954	4698	4730	4955	3	2	40.0	0.09	0.06
4757	Guscio fond.	4955	4730	4762	4956	3	2	40.0	0.09	0.06
4758	Guscio fond.	4956	4762	4794	4957	3	2	40.0	0.09	0.06
4759	Guscio fond.	4958	4826	4830	4962	3	2	40.0	0.09	0.06
4760	Guscio fond.	4962	4830	4831	4963	3	2	40.0	0.09	0.06
4761	Guscio fond.	4963	4831	4832	4964	3	2	40.0	0.09	0.06
4762	Guscio fond.	4964	4832	4833	4965	3	2	40.0	0.09	0.06
4763	Guscio fond.	4965	4833	4834	4966	3	2	40.0	0.09	0.06
4764	Guscio fond.	4966	4834	4835	4967	3	2	40.0	0.09	0.06
4765	Guscio fond.	4967	4835	4836	4968	3	2	40.0	0.09	0.06
4766	Guscio fond.	4968	4836	4837	4969	3	2	40.0	0.09	0.06
4767	Guscio fond.	4969	4837	4838	4970	3	2	40.0	0.09	0.06
4768	Guscio fond.	4970	4838	4839	4971	3	2	40.0	0.09	0.06
4769	Guscio fond.	4971	4839	4840	4972	3	2	40.0	0.09	0.06
4770	Guscio fond.	4972	4840	4841	4973	3	2	40.0	0.09	0.06

4771	Guscio fond.	4973	4841	4842	4974	3	2	40.0	0.09	0.06
4772	Guscio fond.	4974	4842	4843	4975	3	2	40.0	0.09	0.06
4773	Guscio fond.	4975	4843	4844	4976	3	2	40.0	0.09	0.06
4774	Guscio fond.	4976	4844	4845	4977	3	2	40.0	0.09	0.06
4775	Guscio fond.	4977	4845	4846	4978	3	2	40.0	0.09	0.06
4776	Guscio fond.	4978	4846	4847	4979	3	2	40.0	0.09	0.06
4777	Guscio fond.	4979	4847	4848	4980	3	2	40.0	0.09	0.06
4778	Guscio fond.	4980	4848	4849	4981	3	2	40.0	0.09	0.06
4779	Guscio fond.	4981	4849	4850	4982	3	2	40.0	0.09	0.06
4780	Guscio fond.	4982	4850	4851	4983	3	2	40.0	0.09	0.06
4781	Guscio fond.	4983	4851	4852	4984	3	2	40.0	0.09	0.06
4782	Guscio fond.	4984	4852	4853	4985	3	2	40.0	0.09	0.06
4783	Guscio fond.	4985	4853	4854	4986	3	2	40.0	0.09	0.06
4784	Guscio fond.	4986	4854	4855	4987	3	2	40.0	0.09	0.06
4785	Guscio fond.	4987	4855	4856	4988	3	2	40.0	0.09	0.06
4786	Guscio fond.	4988	4856	4857	4989	3	2	40.0	0.09	0.06
4787	Guscio fond.	4989	4857	4858	4990	3	2	40.0	0.09	0.06
4788	Guscio fond.	4990	4858	4827	4959	3	2	40.0	0.09	0.06
4789	Guscio fond.	4959	4827	4859	4991	3	2	40.0	0.09	0.06
4790	Guscio fond.	4991	4859	4860	4992	3	2	40.0	0.09	0.06
4791	Guscio fond.	4992	4860	4861	4993	3	2	40.0	0.09	0.06
4792	Guscio fond.	4993	4861	4862	4994	3	2	40.0	0.09	0.06
4793	Guscio fond.	4994	4862	4863	4995	3	2	40.0	0.09	0.06
4794	Guscio fond.	4995	4863	4864	4996	3	2	40.0	0.09	0.06
4795	Guscio fond.	4996	4864	4865	4997	3	2	40.0	0.09	0.06
4796	Guscio fond.	4997	4865	4866	4998	3	2	40.0	0.09	0.06
4797	Guscio fond.	4998	4866	4867	4999	3	2	40.0	0.09	0.06
4798	Guscio fond.	4999	4867	4868	5000	3	2	40.0	0.09	0.06
4799	Guscio fond.	5000	4868	4869	5001	3	2	40.0	0.09	0.06
4800	Guscio fond.	5001	4869	4870	5002	3	2	40.0	0.09	0.06
4801	Guscio fond.	5002	4870	4871	5003	3	2	40.0	0.09	0.06
4802	Guscio fond.	5003	4871	4872	5004	3	2	40.0	0.09	0.06
4803	Guscio fond.	5004	4872	4873	5005	3	2	40.0	0.09	0.06
4804	Guscio fond.	5005	4873	4874	5006	3	2	40.0	0.09	0.06
4805	Guscio fond.	5006	4874	4875	5007	3	2	40.0	0.09	0.06
4806	Guscio fond.	5007	4875	4876	5008	3	2	40.0	0.09	0.06
4807	Guscio fond.	5008	4876	4877	5009	3	2	40.0	0.09	0.06
4808	Guscio fond.	5009	4877	4878	5010	3	2	40.0	0.09	0.06
4809	Guscio fond.	5010	4878	4879	5011	3	2	40.0	0.09	0.06
4810	Guscio fond.	5011	4879	4880	5012	3	2	40.0	0.09	0.06
4811	Guscio fond.	5012	4880	4881	5013	3	2	40.0	0.09	0.06
4812	Guscio fond.	5013	4881	4882	5014	3	2	40.0	0.09	0.06
4813	Guscio fond.	5014	4882	4883	5015	3	2	40.0	0.09	0.06
4814	Guscio fond.	5015	4883	4884	5016	3	2	40.0	0.09	0.06
4815	Guscio fond.	5016	4884	4885	5017	3	2	40.0	0.09	0.06
4816	Guscio fond.	5017	4885	4886	5018	3	2	40.0	0.09	0.06
4817	Guscio fond.	5018	4886	4887	5019	3	2	40.0	0.09	0.06
4818	Guscio fond.	5019	4887	4828	4960	3	2	40.0	0.09	0.06
4819	Guscio fond.	4960	4828	4888	5020	3	2	40.0	0.09	0.06
4820	Guscio fond.	5020	4888	4889	5021	3	2	40.0	0.09	0.06
4821	Guscio fond.	5021	4889	4890	5022	3	2	40.0	0.09	0.06
4822	Guscio fond.	5022	4890	4891	5023	3	2	40.0	0.09	0.06
4823	Guscio fond.	5023	4891	4892	5024	3	2	40.0	0.09	0.06
4824	Guscio fond.	5024	4892	4893	5025	3	2	40.0	0.09	0.06
4825	Guscio fond.	5025	4893	4894	5026	3	2	40.0	0.09	0.06
4826	Guscio fond.	5026	4894	4895	5027	3	2	40.0	0.09	0.06
4827	Guscio fond.	5027	4895	4896	5028	3	2	40.0	0.09	0.06
4828	Guscio fond.	5028	4896	4897	5029	3	2	40.0	0.09	0.06
4829	Guscio fond.	5029	4897	4898	5030	3	2	40.0	0.09	0.06
4830	Guscio fond.	5030	4898	4899	5031	3	2	40.0	0.09	0.06
4831	Guscio fond.	5031	4899	4900	5032	3	2	40.0	0.09	0.06
4832	Guscio fond.	5032	4900	4901	5033	3	2	40.0	0.09	0.06
4833	Guscio fond.	5033	4901	4902	5034	3	2	40.0	0.09	0.06
4834	Guscio fond.	5034	4902	4903	5035	3	2	40.0	0.09	0.06
4835	Guscio fond.	5035	4903	4904	5036	3	2	40.0	0.09	0.06
4836	Guscio fond.	5036	4904	4905	5037	3	2	40.0	0.09	0.06
4837	Guscio fond.	5037	4905	4906	5038	3	2	40.0	0.09	0.06
4838	Guscio fond.	5038	4906	4907	5039	3	2	40.0	0.09	0.06
4839	Guscio fond.	5039	4907	4908	5040	3	2	40.0	0.09	0.06
4840	Guscio fond.	5040	4908	4909	5041	3	2	40.0	0.09	0.06
4841	Guscio fond.	5041	4909	4910	5042	3	2	40.0	0.09	0.06
4842	Guscio fond.	5042	4910	4911	5043	3	2	40.0	0.09	0.06
4843	Guscio fond.	5043	4911	4912	5044	3	2	40.0	0.09	0.06
4844	Guscio fond.	5044	4912	4913	5045	3	2	40.0	0.09	0.06
4845	Guscio fond.	5045	4913	4914	5046	3	2	40.0	0.09	0.06
4846	Guscio fond.	5046	4914	4915	5047	3	2	40.0	0.09	0.06
4847	Guscio fond.	5047	4915	4916	5048	3	2	40.0	0.09	0.06

4848	Guscio fond.	5048	4916	4829	4961	3	2	40.0	0.09	0.06
4849	Guscio fond.	4961	4829	4917	5049	3	2	40.0	0.09	0.06
4850	Guscio fond.	5049	4917	4918	5050	3	2	40.0	0.09	0.06
4851	Guscio fond.	5050	4918	4919	5051	3	2	40.0	0.09	0.06
4852	Guscio fond.	5051	4919	4920	5052	3	2	40.0	0.09	0.06
4853	Guscio fond.	5052	4920	4921	5053	3	2	40.0	0.09	0.06
4854	Guscio fond.	5053	4921	4922	5054	3	2	40.0	0.09	0.06
4855	Guscio fond.	5054	4922	4923	5055	3	2	40.0	0.09	0.06
4856	Guscio fond.	5055	4923	4924	5056	3	2	40.0	0.09	0.06
4857	Guscio fond.	5056	4924	4925	5057	3	2	40.0	0.09	0.06
4858	Guscio fond.	5057	4925	4926	5058	3	2	40.0	0.09	0.06
4859	Guscio fond.	5058	4926	4927	5059	3	2	40.0	0.09	0.06
4860	Guscio fond.	5059	4927	4928	5060	3	2	40.0	0.09	0.06
4861	Guscio fond.	5060	4928	4929	5061	3	2	40.0	0.09	0.06
4862	Guscio fond.	5061	4929	4930	5062	3	2	40.0	0.09	0.06
4863	Guscio fond.	5062	4930	4931	5063	3	2	40.0	0.09	0.06
4864	Guscio fond.	5063	4931	4932	5064	3	2	40.0	0.09	0.06
4865	Guscio fond.	5064	4932	4933	5065	3	2	40.0	0.09	0.06
4866	Guscio fond.	5065	4933	4934	5066	3	2	40.0	0.09	0.06
4867	Guscio fond.	5066	4934	4935	5067	3	2	40.0	0.09	0.06
4868	Guscio fond.	5067	4935	4936	5068	3	2	40.0	0.09	0.06
4869	Guscio fond.	5068	4936	4937	5069	3	2	40.0	0.09	0.06
4870	Guscio fond.	5069	4937	4938	5070	3	2	40.0	0.09	0.06
4871	Guscio fond.	5070	4938	4939	5071	3	2	40.0	0.09	0.06
4872	Guscio fond.	5071	4939	4940	5072	3	2	40.0	0.09	0.06
4873	Guscio fond.	5072	4940	4941	5073	3	2	40.0	0.09	0.06
4874	Guscio fond.	5073	4941	4942	5074	3	2	40.0	0.09	0.06
4875	Guscio fond.	5074	4942	4943	5075	3	2	40.0	0.09	0.06
4876	Guscio fond.	5075	4943	4944	5076	3	2	40.0	0.09	0.06
4877	Guscio fond.	5076	4944	4945	5077	3	2	40.0	0.09	0.06
4878	Guscio fond.	5077	4945	5239	5240	3	2	40.0	0.09	0.06
4879	Guscio fond.	5078	4946	4826	4958	3	2	40.0	0.09	0.06
4880	Guscio fond.	5079	4947	4946	5078	3	2	40.0	0.09	0.06
4881	Guscio fond.	5080	4948	4947	5079	3	2	40.0	0.09	0.06
4882	Guscio fond.	5081	4949	4948	5080	3	2	40.0	0.09	0.06
4883	Guscio fond.	5082	4950	4949	5081	3	2	40.0	0.09	0.06
4884	Guscio fond.	5240	5239	4951	5083	3	2	40.0	0.09	0.06
4885	Guscio fond.	5083	4951	4952	5084	3	2	40.0	0.09	0.06
4886	Guscio fond.	5084	4952	4953	5085	3	2	40.0	0.09	0.06
4887	Guscio fond.	5085	4953	4954	5086	3	2	40.0	0.09	0.06
4888	Guscio fond.	5086	4954	4955	5087	3	2	40.0	0.09	0.06
4889	Guscio fond.	5087	4955	4956	5088	3	2	40.0	0.09	0.06
4890	Guscio fond.	5088	4956	4957	5089	3	2	40.0	0.09	0.06
4891	Guscio fond.	5090	4958	4962	5094	3	2	40.0	0.09	0.06
4892	Guscio fond.	5094	4962	4963	5095	3	2	40.0	0.09	0.06
4893	Guscio fond.	5095	4963	4964	5096	3	2	40.0	0.09	0.06
4894	Guscio fond.	5096	4964	4965	5097	3	2	40.0	0.09	0.06
4895	Guscio fond.	5097	4965	4966	5098	3	2	40.0	0.09	0.06
4896	Guscio fond.	5098	4966	4967	5099	3	2	40.0	0.09	0.06
4897	Guscio fond.	5099	4967	4968	5100	3	2	40.0	0.09	0.06
4898	Guscio fond.	5100	4968	4969	5101	3	2	40.0	0.09	0.06
4899	Guscio fond.	5101	4969	4970	5102	3	2	40.0	0.09	0.06
4900	Guscio fond.	5102	4970	4971	5103	3	2	40.0	0.09	0.06
4901	Guscio fond.	5103	4971	4972	5104	3	2	40.0	0.09	0.06
4902	Guscio fond.	5104	4972	4973	5105	3	2	40.0	0.09	0.06
4903	Guscio fond.	5105	4973	4974	5106	3	2	40.0	0.09	0.06
4904	Guscio fond.	5106	4974	4975	5107	3	2	40.0	0.09	0.06
4905	Guscio fond.	5107	4975	4976	5108	3	2	40.0	0.09	0.06
4906	Guscio fond.	5108	4976	4977	5109	3	2	40.0	0.09	0.06
4907	Guscio fond.	5109	4977	4978	5110	3	2	40.0	0.09	0.06
4908	Guscio fond.	5110	4978	4979	5111	3	2	40.0	0.09	0.06
4909	Guscio fond.	5111	4979	4980	5112	3	2	40.0	0.09	0.06
4910	Guscio fond.	5112	4980	4981	5113	3	2	40.0	0.09	0.06
4911	Guscio fond.	5113	4981	4982	5114	3	2	40.0	0.09	0.06
4912	Guscio fond.	5114	4982	4983	5115	3	2	40.0	0.09	0.06
4913	Guscio fond.	5115	4983	4984	5116	3	2	40.0	0.09	0.06
4914	Guscio fond.	5116	4984	4985	5117	3	2	40.0	0.09	0.06
4915	Guscio fond.	5117	4985	4986	5118	3	2	40.0	0.09	0.06
4916	Guscio fond.	5118	4986	4987	5119	3	2	40.0	0.09	0.06
4917	Guscio fond.	5119	4987	4988	5120	3	2	40.0	0.09	0.06
4918	Guscio fond.	5120	4988	4989	5121	3	2	40.0	0.09	0.06
4919	Guscio fond.	5121	4989	4990	5122	3	2	40.0	0.09	0.06
4920	Guscio fond.	5122	4990	4959	5091	3	2	40.0	0.09	0.06
4921	Guscio fond.	5091	4959	4991	5123	3	2	40.0	0.09	0.06
4922	Guscio fond.	5123	4991	4992	5124	3	2	40.0	0.09	0.06
4923	Guscio fond.	5124	4992	4993	5125	3	2	40.0	0.09	0.06
4924	Guscio fond.	5125	4993	4994	5126	3	2	40.0	0.09	0.06

4925	Guscio fond.	5126	4994	4995	5127	3	2	40.0	0.09	0.06
4926	Guscio fond.	5127	4995	4996	5128	3	2	40.0	0.09	0.06
4927	Guscio fond.	5128	4996	4997	5129	3	2	40.0	0.09	0.06
4928	Guscio fond.	5129	4997	4998	5130	3	2	40.0	0.09	0.06
4929	Guscio fond.	5130	4998	4999	5131	3	2	40.0	0.09	0.06
4930	Guscio fond.	5131	4999	5000	5132	3	2	40.0	0.09	0.06
4931	Guscio fond.	5132	5000	5001	5133	3	2	40.0	0.09	0.06
4932	Guscio fond.	5133	5001	5002	5134	3	2	40.0	0.09	0.06
4933	Guscio fond.	5134	5002	5003	5135	3	2	40.0	0.09	0.06
4934	Guscio fond.	5135	5003	5004	5136	3	2	40.0	0.09	0.06
4935	Guscio fond.	5136	5004	5005	5137	3	2	40.0	0.09	0.06
4936	Guscio fond.	5137	5005	5006	5138	3	2	40.0	0.09	0.06
4937	Guscio fond.	5138	5006	5007	5139	3	2	40.0	0.09	0.06
4938	Guscio fond.	5139	5007	5008	5140	3	2	40.0	0.09	0.06
4939	Guscio fond.	5140	5008	5009	5141	3	2	40.0	0.09	0.06
4940	Guscio fond.	5141	5009	5010	5142	3	2	40.0	0.09	0.06
4941	Guscio fond.	5142	5010	5011	5143	3	2	40.0	0.09	0.06
4942	Guscio fond.	5143	5011	5012	5144	3	2	40.0	0.09	0.06
4943	Guscio fond.	5144	5012	5013	5145	3	2	40.0	0.09	0.06
4944	Guscio fond.	5145	5013	5014	5146	3	2	40.0	0.09	0.06
4945	Guscio fond.	5146	5014	5015	5147	3	2	40.0	0.09	0.06
4946	Guscio fond.	5147	5015	5016	5148	3	2	40.0	0.09	0.06
4947	Guscio fond.	5148	5016	5017	5149	3	2	40.0	0.09	0.06
4948	Guscio fond.	5149	5017	5018	5150	3	2	40.0	0.09	0.06
4949	Guscio fond.	5150	5018	5019	5151	3	2	40.0	0.09	0.06
4950	Guscio fond.	5151	5019	4960	5092	3	2	40.0	0.09	0.06
4951	Guscio fond.	5092	4960	5020	5152	3	2	40.0	0.09	0.06
4952	Guscio fond.	5152	5020	5021	5153	3	2	40.0	0.09	0.06
4953	Guscio fond.	5153	5021	5022	5154	3	2	40.0	0.09	0.06
4954	Guscio fond.	5154	5022	5023	5155	3	2	40.0	0.09	0.06
4955	Guscio fond.	5155	5023	5024	5156	3	2	40.0	0.09	0.06
4956	Guscio fond.	5156	5024	5025	5157	3	2	40.0	0.09	0.06
4957	Guscio fond.	5157	5025	5026	5158	3	2	40.0	0.09	0.06
4958	Guscio fond.	5158	5026	5027	5159	3	2	40.0	0.09	0.06
4959	Guscio fond.	5159	5027	5028	5160	3	2	40.0	0.09	0.06
4960	Guscio fond.	5160	5028	5029	5161	3	2	40.0	0.09	0.06
4961	Guscio fond.	5161	5029	5030	5162	3	2	40.0	0.09	0.06
4962	Guscio fond.	5162	5030	5031	5163	3	2	40.0	0.09	0.06
4963	Guscio fond.	5163	5031	5032	5164	3	2	40.0	0.09	0.06
4964	Guscio fond.	5164	5032	5033	5165	3	2	40.0	0.09	0.06
4965	Guscio fond.	5165	5033	5034	5166	3	2	40.0	0.09	0.06
4966	Guscio fond.	5166	5034	5035	5167	3	2	40.0	0.09	0.06
4967	Guscio fond.	5167	5035	5036	5168	3	2	40.0	0.09	0.06
4968	Guscio fond.	5168	5036	5037	5169	3	2	40.0	0.09	0.06
4969	Guscio fond.	5169	5037	5038	5170	3	2	40.0	0.09	0.06
4970	Guscio fond.	5170	5038	5039	5171	3	2	40.0	0.09	0.06
4971	Guscio fond.	5171	5039	5040	5172	3	2	40.0	0.09	0.06
4972	Guscio fond.	5172	5040	5041	5173	3	2	40.0	0.09	0.06
4973	Guscio fond.	5173	5041	5042	5174	3	2	40.0	0.09	0.06
4974	Guscio fond.	5174	5042	5043	5175	3	2	40.0	0.09	0.06
4975	Guscio fond.	5175	5043	5044	5176	3	2	40.0	0.09	0.06
4976	Guscio fond.	5176	5044	5045	5177	3	2	40.0	0.09	0.06
4977	Guscio fond.	5177	5045	5046	5178	3	2	40.0	0.09	0.06
4978	Guscio fond.	5178	5046	5047	5179	3	2	40.0	0.09	0.06
4979	Guscio fond.	5179	5047	5048	5180	3	2	40.0	0.09	0.06
4980	Guscio fond.	5180	5048	4961	5093	3	2	40.0	0.09	0.06
4981	Guscio fond.	5093	4961	5049	5181	3	2	40.0	0.09	0.06
4982	Guscio fond.	5181	5049	5050	5182	3	2	40.0	0.09	0.06
4983	Guscio fond.	5182	5050	5051	5183	3	2	40.0	0.09	0.06
4984	Guscio fond.	5183	5051	5052	5184	3	2	40.0	0.09	0.06
4985	Guscio fond.	5184	5052	5053	5185	3	2	40.0	0.09	0.06
4986	Guscio fond.	5185	5053	5054	5186	3	2	40.0	0.09	0.06
4987	Guscio fond.	5186	5054	5055	5187	3	2	40.0	0.09	0.06
4988	Guscio fond.	5187	5055	5056	5188	3	2	40.0	0.09	0.06
4989	Guscio fond.	5188	5056	5057	5189	3	2	40.0	0.09	0.06
4990	Guscio fond.	5189	5057	5058	5190	3	2	40.0	0.09	0.06
4991	Guscio fond.	5190	5058	5059	5191	3	2	40.0	0.09	0.06
4992	Guscio fond.	5191	5059	5060	5192	3	2	40.0	0.09	0.06
4993	Guscio fond.	5192	5060	5061	5193	3	2	40.0	0.09	0.06
4994	Guscio fond.	5193	5061	5062	5194	3	2	40.0	0.09	0.06
4995	Guscio fond.	5194	5062	5063	5195	3	2	40.0	0.09	0.06
4996	Guscio fond.	5195	5063	5064	5196	3	2	40.0	0.09	0.06
4997	Guscio fond.	5196	5064	5065	5197	3	2	40.0	0.09	0.06
4998	Guscio fond.	5197	5065	5066	5198	3	2	40.0	0.09	0.06
4999	Guscio fond.	5198	5066	5067	5199	3	2	40.0	0.09	0.06
5000	Guscio fond.	5199	5067	5068	5200	3	2	40.0	0.09	0.06
5001	Guscio fond.	5200	5068	5069	5201	3	2	40.0	0.09	0.06

5002Guscio fond.	5201	5069	5070	5202	3	2	40.0	0.09	0.06
5003Guscio fond.	5202	5070	5071	5203	3	2	40.0	0.09	0.06
5004Guscio fond.	5203	5071	5072	5204	3	2	40.0	0.09	0.06
5005Guscio fond.	5204	5072	5073	5205	3	2	40.0	0.09	0.06
5006Guscio fond.	5205	5073	5074	5206	3	2	40.0	0.09	0.06
5007Guscio fond.	5206	5074	5075	5207	3	2	40.0	0.09	0.06
5008Guscio fond.	5207	5075	5076	5208	3	2	40.0	0.09	0.06
5009Guscio fond.	5208	5076	5077	5209	3	2	40.0	0.09	0.06
5010Guscio fond.	5209	5077	5240	5241	3	2	40.0	0.09	0.06
5011Guscio fond.	5210	5078	4958	5090	3	2	40.0	0.09	0.06
5012Guscio fond.	5211	5079	5078	5210	3	2	40.0	0.09	0.06
5013Guscio fond.	5212	5080	5079	5211	3	2	40.0	0.09	0.06
5014Guscio fond.	5213	5081	5080	5212	3	2	40.0	0.09	0.06
5015Guscio fond.	5214	5082	5081	5213	3	2	40.0	0.09	0.06
5016Guscio fond.	5241	5240	5083	5215	3	2	40.0	0.09	0.06
5017Guscio fond.	5215	5083	5084	5216	3	2	40.0	0.09	0.06
5018Guscio fond.	5216	5084	5085	5217	3	2	40.0	0.09	0.06
5019Guscio fond.	5217	5085	5086	5218	3	2	40.0	0.09	0.06
5020Guscio fond.	5218	5086	5087	5219	3	2	40.0	0.09	0.06
5021Guscio fond.	5219	5087	5088	5220	3	2	40.0	0.09	0.06
5022Guscio fond.	5220	5088	5089	5221	3	2	40.0	0.09	0.06

MODELLAZIONE DELLA STRUTTURA: ELEMENTI SOLAIO-PANNELLO

LEGENDA TABELLA DATI SOLAI-PANNELLI

Il programma utilizza per la modellazione elementi a tre o più nodi denominati in generale solaio o pannello.
Ogni elemento solaio-pannello è individuato da una poligonale di nodi 1,2, ..., N.
L'elemento solaio è utilizzato in primo luogo per la modellazione dei carichi agenti sugli elementi strutturali. In secondo luogo può essere utilizzato per la corretta ripartizione delle forze orizzontali agenti nel proprio piano. L'elemento balcone è derivato dall'elemento solaio.
I carichi agenti sugli elementi solaio, raccolti in un archivio, sono direttamente assegnati agli elementi utilizzando le informazioni raccolte nell' archivio (es. i coefficienti combinatori). La tabella seguente riporta i dati utilizzati per la definizione dei carichi e delle masse.
L'elemento pannello è utilizzato solo per l'applicazione dei carichi, quali pesi delle tamponature o spinte dovute al vento o terre. In questo caso i carichi sono applicati in analogia agli altri elementi strutturali (si veda il cap. SCHEMATIZZAZIONE DEI CASI DI CARICO).

Id.Arch.	Identificativo dell' archivio
Tipo	Tipo di carico ***Variab.*** Carico variabile generico ***Var. rid.*** Carico variabile generico con riduzione in funzione dell' area (c.5.5. …) ***Neve*** Carico di neve
G1k	carico permanente (comprensivo del peso proprio)
G2k	carico permanente non strutturale e non compiutamente definito
Qk	carico variabile
Fatt. A	fattore di riduzione del carico variabile (0.5 o 0.75) per tipo "Var.rid."
S sis.	fattore di riduzione del carico variabile per la definizione delle masse sismiche per D.M. 96 (vedi NOTA sul capitolo "normativa di riferimento")
Psi 0	Coefficiente combinatorio dei valori caratteristici delle azioni variabili: ***per valore raro***
Psi 1	Coefficiente combinatorio dei valori caratteristici delle azioni variabili: ***per valore frequente***
Psi 2	Coefficiente combinatorio dei valori caratteristici delle azioni variabili: ***per valore quasi permanente***
Psi S 2	Coefficiente di combinazione che fornisce il valore quasi-permanente dell'azione variabile: ***per la definizione delle masse sismiche***
Fatt. Fi	Coefficiente di correlazione dei carichi per edifici

Ogni elemento è caratterizzato da un insieme di proprietà riportate in tabella che ne completano la modellazione. In particolare per ogni elemento viene indicato in tabella:

Elem	numero dell'elemento
Tipo	codice di comportamento ***S*** elemento utilizzato solo per scarico ***C*** elemento utilizzato per scarico e per modellazione piano rigido ***P*** elemento utilizzato come pannello ***M*** scarico monodirezionale ***B*** scarico bidirezionale
Id.Arch.	Identificativo dell' archivio
Mat	codice del materiale assegnato all'elemento
Spessore	spessore dell'elemento (costante)
Orditura	angolo (rispetto all'asse X) della direzione dei travetti principali

Gk	carico permanente solaio (comprensivo del peso proprio)
Qk	carico variabile solaio
Nodi	numero dei nodi che definiscono l'elemento (5 per riga)

Nel caso in cui si sia proceduto alla progettazione dei solai con le tensioni ammissibili vengono riportate le massime tensioni nell'elemento (massima compressione nel calcestruzzo, massima tensione nell'acciaio, massima tensione tangenziale); nel caso in cui si sia proceduto alla progettazione con il metodo degli stati limite vengono riportati il rapporto x/d e le verifiche per sollecitazioni proporzionali nonché le verifiche in esercizio.

In particolare i simboli utilizzati in tabella assumono il seguente significato:

Elem.	numero identificativo dell'elemento
Stato	Codici di verifica relativi alle tensioni normali e alle tensioni tangenziali
Note	Viene riportato il codice relativo alla sezione(s) e relativo al materiale(m);
Pos.	Ascissa del punto di verifica
F ist, F infi	Frecce instantanee e a tempo infinito
Momento	Momento flettente
Taglio	Sollecitazione di taglio
Af inf.	Area di armatura longitudinale posta all'intradosso della trave
Af sup.	Area di armatura longitudinale posta all'estradosso della trave
AfV	Area dell'armatura atta ad assorbire le azioni di taglio
Beff	Base della sezione di cls per l'assorbimento del taglio
	simboli utilizzati con il metodo delle tensioni ammissibili:
sc max	Massima tensione di compressione del calcestruzzo
sf max	Massima tensione nell'acciaio
tau max	Massima tensione tangenziale nel cls
	simboli utilizzati con il metodo degli stati limite:
x/d	rapporto tra posizione dell'asse neutro e altezza utile alla rottura della sezione (per sola flessione)
verif.	rapporto Sd/Su con sollecitazioni ultime proporzionali: valore minore o uguale a 1 per verifica positiva
Verif.V	rapporto Sd/Su con sollecitazioni taglianti proporzionali valore minore o uguale a 1 per verifica positiva
rRfck	rapporto tra la massima compressione nel calcestruzzo e la tensione fck in combinazioni rare [normalizzato a 1]
rFfck	rapporto tra la massima compressione nel calcestruzzo e la tensione fck in combinazioni frequenti [normalizzato a 1]
rPfck	rapporto tra la massima compressione nel calcestruzzo e la tensione fck in combinazioni quasi permanenti [normalizzato a 1]
rRfyk	rapporto tra la massima tensione nell'acciaio e la tensione fyk in combinazioni frequenti [normalizzato a 1]
rFyk	rapporto tra la massima tensione nell'acciaio e la tensione fyk in combinazioni rare [normalizzato a 1]
rPfyk	rapporto tra la massima tensione nell'acciaio e la tensione fyk in combinazioni quasi permanenti [normalizzato a 1]
wR	apertura caratteristica delle fessure in combinazioni rare [mm]
wF	apertura caratteristica delle fessure in combinazioni frequenti [mm]
wP	apertura caratteristica delle fessure in combinazioni quasi permanenti [mm]

Nel caso in cui si sia proceduto alla verifica delle tamponature secondo il D.M. 17.01.2018 - §7.2.3 viene riportata una tabella riassuntiva delle verifiche degli elementi pannello. La verifica confronta i momenti sollecitanti indotti dal sisma con i momenti resistenti, secondo tre ipotesi, due basate sulla resistenza a pressoflessione della tamponatura ed una basata sul cinematismo a seguito della formazione di tre cerniere plastiche sulla tamponatura (rif. Ufficio di

Vigilanza sulle Costruzioni, Provincia di Terni).
Qualora la tamponatura sia di tipo antiespulsione (nelle due possibili varianti ordinaria o armata) viene condotta una verifica con meccanismo ad arco con degrado di resistenza. La verifica confronta le pressioni sollecitanti indotte dal sisma con le pressioni resistenti che la tamponatura sviluppa attraverso il meccanismo ad arco. La verifica considera anche il degrado di resistenza dovuto al danneggiamento nel piano della tamponatura.
Per quest'ultima tamponatura sono disponibili, in funzione del materiale impiegato (materiale [52] o materiale [53]):

- **Tamponatura Antiespulsione ordinaria Poroton® Cis Edil** sp.30 cm; con metodo di verifica per meccanismo ad arco con degrado di resistenza, sviluppato attraverso i risultati di un progetto di ricerca sperimentale condotto dall'Università degli Studi di Padova.
  Utilizzabile per il materiale [52].
- **Tamponatura Antiespulsione armata Poroton® Cis Edil** sp.30 cm; con metodo di verifica per meccanismo ad arco con degrado di resistenza, sviluppato attraverso i risultati di un progetto di ricerca sperimentale condotto dall'Università degli Studi di Padova.
  Utilizzabile per il materiale [53].

La verifica è stata calibrata sulla base di prove sperimentali sul sistema di Tamponatura Antiespulsione anche in presenza di aperture.
(rif. Rapporti di Prova redatti dal Dipartimento ICEA - Università degli Studi di Padova di test sperimentali condotti sul sistema Tamponatura Antiespulsione di Cis Edil)

In particolare i simboli utilizzati in tabella assumono il seguente significato:

Elem.	Numero identificativo dell'elemento
Stato	Codice di verifica
Ver. c.c.	Verifica nell'ipotesi di trave appoggiata con carico concentrato in mezzeria
Ver. c.d.	Verifica nell'ipotesi di trave appoggiata con carico distribuito
Ver. c.cin.	Verifica nell'ipotesi di cinematismo con formazione di cerniere plastiche in appoggio e mezzeria
Ver. CIS	Rapporto pa/pr (valore minore o uguale a 1 per verifica positiva)
Z	Quota del baricentro dell'elemento
T1	Periodo proprio dell'edificio nella direzione di interesse (ortogonale al pannello)
Ta	Periodo proprio della parete
Sa	Accelerazione massima, adimensionalizzata allo SLV
pa	Pressione sulla parete causata dall'azione sismica
pr	Pressione resistente del meccanismo ad arco
Drift	Spostamento relativo interpiano allo SLV valutato secondo il D.M. 14.01.2018 - § 7.3.3.3
Beta a	Coef. riduttivo per tener conto del danneggiamento del piano dipendente dallo spostamento, ottenuto sperimentalmente

ID Arch.	Tipo	G1k	G2k	Qk	Fatt. A	s sis.	Psi 0	Psi 1	Psi 2	Psi S 2	Fatt. Fi
		daN/cm2	daN/cm2	daN/cm2							
1	Variab.	3.42e-02	3.76e-02	3.00e-02		1.00	0.70	0.70	0.60	0.60	1.00
2	Variab.	3.42e-02	9.96e-02	2.00e-02		1.00	0.70	0.50	0.30	0.30	1.00
4	Variab.	3.18e-02	1.46e-02	2.00e-02		1.00	0.70	0.50	0.30	0.30	1.00

Elem.	Tipo	ID Arch.	Mat.	Spessore	Orditura	G1k	G2k	Qk	Nodo 1/6..	Nodo 2/7..	Nodo 3/8..	Nodo..	Nodo..
						daN/cm2	daN/cm2	daN/cm2					
1	CM	1	m=3	5.0	0.0	3.42e-02	3.76e-02	3.00e-02	34	47	36	32	
2	CB	1	m=3	5.0	90.0	3.42e-02	3.76e-02	3.00e-02	47	39	38	36	
3	CM	1	m=3	5.0	0.0	3.42e-02	3.76e-02	3.00e-02	39	42	41	38	
4	CM	1	m=3	5.0	90.0	3.42e-02	3.76e-02	3.00e-02	42	45	44	41	
5	CB	1	m=3	5.0	90.0	3.42e-02	3.76e-02	3.00e-02	33	37	47	34	
6	CM	4	m=3	5.0	0.0	3.18e-02	1.46e-02	2.00e-02	2	7	11	8	
7	CB	1	m=3	5.0	90.0	3.42e-02	3.76e-02	3.00e-02	40	43	42	39	
8	CB	1	m=3	5.0	0.0	3.42e-02	3.76e-02	3.00e-02	43	46	45	42	
9	CB	2	m=3	5.0	0.0	3.42e-02	9.96e-02	2.00e-02	12	1	3	30	
10	CB	2	m=3	5.0	90.0	3.42e-02	9.96e-02	2.00e-02	1	6	5	3	
11	CB	2	m=3	5.0	0.0	3.42e-02	9.96e-02	2.00e-02	6	26	25	5	

12	CM	2	m=3	5.0	90.0	3.42e-02	9.96e-02	2.00e-02	26	27	28	25
13	CB	2	m=3	5.0	90.0	3.42e-02	9.96e-02	2.00e-02	31	4	1	12

Elem.	Stato	Note	f ist	f infi	Pos.	Momento	Af inf.	Af. sup	V N/M	x/d	Taglio	Af V	verif. V	B eff
			cm	cm	cm	daN cm	cm2	cm2			daN	cm2		cm
1	ok L	s=7,m=3	-0.84	-2.23	0.0	0.0	1.37	0.0	0.0	0.04	-2014.58	0.0	0.35	50.0
					20.0	3.891e+04	2.45	0.0	0.18	0.06	-1876.24	0.0	1.00	12.0
					291.3	2.934e+05	3.58	0.0	0.96	0.09	0.0	0.0	0.0	12.0
					562.5	3.891e+04	2.45	0.0	0.18	0.06	1876.24	0.0	1.00	12.0
					582.5	0.0	1.37	0.0	0.0	0.04	2014.58	0.0	0.35	50.0
2	ok L	s=7,m=3	-0.31	-0.83	0.0	0.0	0.88	0.0	0.0	0.02	-1110.08	0.0	0.19	50.0
					20.0	2.133e+04	0.88	0.0	0.28	0.02	-1023.16	0.0	0.74	12.0
					255.4	1.418e+05	1.67	0.0	0.98	0.04	0.0	0.0	0.0	12.0
					490.9	2.133e+04	0.88	0.0	0.28	0.02	1023.16	0.0	0.74	12.0
					510.9	0.0	0.88	0.0	0.0	0.02	1110.08	0.0	0.19	50.0
3	ok L	s=7,m=3	-0.84	-2.23	0.0	0.0	1.37	0.0	0.0	0.04	-2014.58	0.0	0.35	50.0
					20.0	3.891e+04	2.45	0.0	0.18	0.06	-1876.24	0.0	1.00	12.0
					291.3	2.934e+05	3.58	0.0	0.96	0.09	0.0	0.0	0.0	12.0
					562.5	3.891e+04	2.45	0.0	0.18	0.06	1876.24	0.0	1.00	12.0
					582.5	0.0	1.37	0.0	0.0	0.04	2014.58	0.0	0.35	50.0
4	ok L	s=7,m=3	-0.19	-0.50	0.0	0.0	0.88	0.0	0.0	0.02	-1383.41	0.0	0.24	50.0
					20.0	2.628e+04	0.88	0.0	0.34	0.02	-1245.07	0.0	0.90	12.0
					200.0	1.383e+05	1.63	0.0	0.98	0.04	0.0	0.0	0.0	12.0
					380.0	2.628e+04	0.88	0.0	0.34	0.02	1245.07	0.0	0.90	12.0
					400.0	0.0	0.88	0.0	0.0	0.02	1383.41	0.0	0.24	50.0
5	ok L	s=7,m=3	-0.49	-1.30	0.0	0.0	0.88	0.0	0.0	0.02	-910.42	0.0	0.16	50.0
					20.0	1.763e+04	0.88	0.0	0.23	0.02	-853.07	0.0	0.62	12.0
					317.5	1.445e+05	1.70	0.0	0.98	0.04	0.0	0.0	0.0	12.0
					615.0	1.763e+04	0.88	0.0	0.23	0.02	853.07	0.0	0.62	12.0
					635.0	0.0	0.88	0.0	0.0	0.02	910.42	0.0	0.16	50.0
6	ok L	s=7,m=3	-0.55	-1.30	0.0	0.0	0.89	0.0	0.0	0.02	-1315.29	0.0	0.23	50.0
					20.0	2.540e+04	0.90	0.0	0.32	0.02	-1224.97	0.0	0.89	12.0
					291.3	1.915e+05	2.28	0.0	0.97	0.06	0.0	0.0	0.0	12.0
					562.5	2.540e+04	0.90	0.0	0.32	0.02	1224.97	0.0	0.89	12.0
					582.5	0.0	0.89	0.0	0.0	0.02	1315.29	0.0	0.23	50.0
7	ok L	s=7,m=3	-0.21	-0.54	0.0	0.0	0.88	0.0	0.0	0.02	-1147.95	0.0	0.20	50.0
					20.0	2.191e+04	0.88	0.0	0.29	0.02	-1043.39	0.0	0.76	12.0
					219.6	1.260e+05	1.48	0.0	0.98	0.04	0.0	0.0	0.0	12.0
					419.1	2.191e+04	0.88	0.0	0.29	0.02	1043.39	0.0	0.76	12.0
					439.1	0.0	0.88	0.0	0.0	0.02	1147.95	0.0	0.20	50.0
8	ok L	s=7,m=3	-0.15	-0.41	0.0	0.0	0.88	0.0	0.0	0.02	-366.48	0.0	0.06	50.0
					20.0	7077.96	0.88	0.0	0.09	0.02	-341.31	0.0	0.25	12.0
					291.3	5.337e+04	0.88	0.0	0.70	0.02	0.0	0.0	0.0	12.0
					562.5	7077.96	0.88	0.0	0.09	0.02	341.31	0.0	0.25	12.0
					582.5	0.0	0.88	0.0	0.0	0.02	366.48	0.0	0.06	50.0
9	ok L	s=7,m=3	-0.76	-2.08	0.0	0.0	1.21	0.0	0.0	0.03	-1781.93	0.0	0.31	50.0
					20.0	3.441e+04	1.70	0.0	0.23	0.04	-1659.56	0.0	1.00	12.0
					291.3	2.595e+05	3.15	0.0	0.97	0.08	0.0	0.0	0.0	12.0
					562.5	3.441e+04	1.70	0.0	0.23	0.04	1659.56	0.0	1.00	12.0
					582.5	0.0	1.21	0.0	0.0	0.03	1781.93	0.0	0.31	50.0
10	ok L	s=7,m=3	-0.53	-1.44	0.0	0.0	1.08	0.0	0.0	0.03	-1823.27	0.0	0.32	50.0
					20.0	3.504e+04	1.76	0.0	0.23	0.05	-1680.51	0.0	1.00	12.0
					255.4	2.329e+05	2.80	0.0	0.97	0.07	0.0	0.0	0.0	12.0
...														
13	ok L	s=7,m=3	-0.74	-2.03	635.0	0.0	0.99	0.0	0.0	0.03	1342.13	0.0	0.23	50.0
Elem.			**f ist**	**f infi**		**Momento**	**Af inf.**	**Af. sup**	**V N/M**	**x/d**	**Taglio**	**Af V**	**verif. V**	
						0.0					-2039.42			
			-0.15	-0.41		2.934e+05	3.58	0.0	0.98	0.09	2039.42	0.0	1.00	

Elem.	Pos.	rRfck	rFfck	rPfck	rRfyk	rFfyk	rPfyk	wR	wF	wP
	cm							mm	mm	mm
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	20.0	0.06	0.06	0.07	0.16	0.14	0.14	0.0	0.0	0.0
	291.3	0.41	0.37	0.48	0.81	0.74	0.72	0.12	0.12	0.11
	562.5	0.06	0.06	0.07	0.16	0.14	0.14	0.0	0.0	0.0
	582.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	20.0	0.05	0.05	0.06	0.23	0.21	0.20	0.0	0.0	0.0
	255.4	0.26	0.24	0.31	0.82	0.75	0.72	0.14	0.14	0.14
	490.9	0.05	0.05	0.06	0.23	0.21	0.20	0.0	0.0	0.0
	510.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	20.0	0.06	0.06	0.07	0.16	0.14	0.14	0.0	0.0	0.0

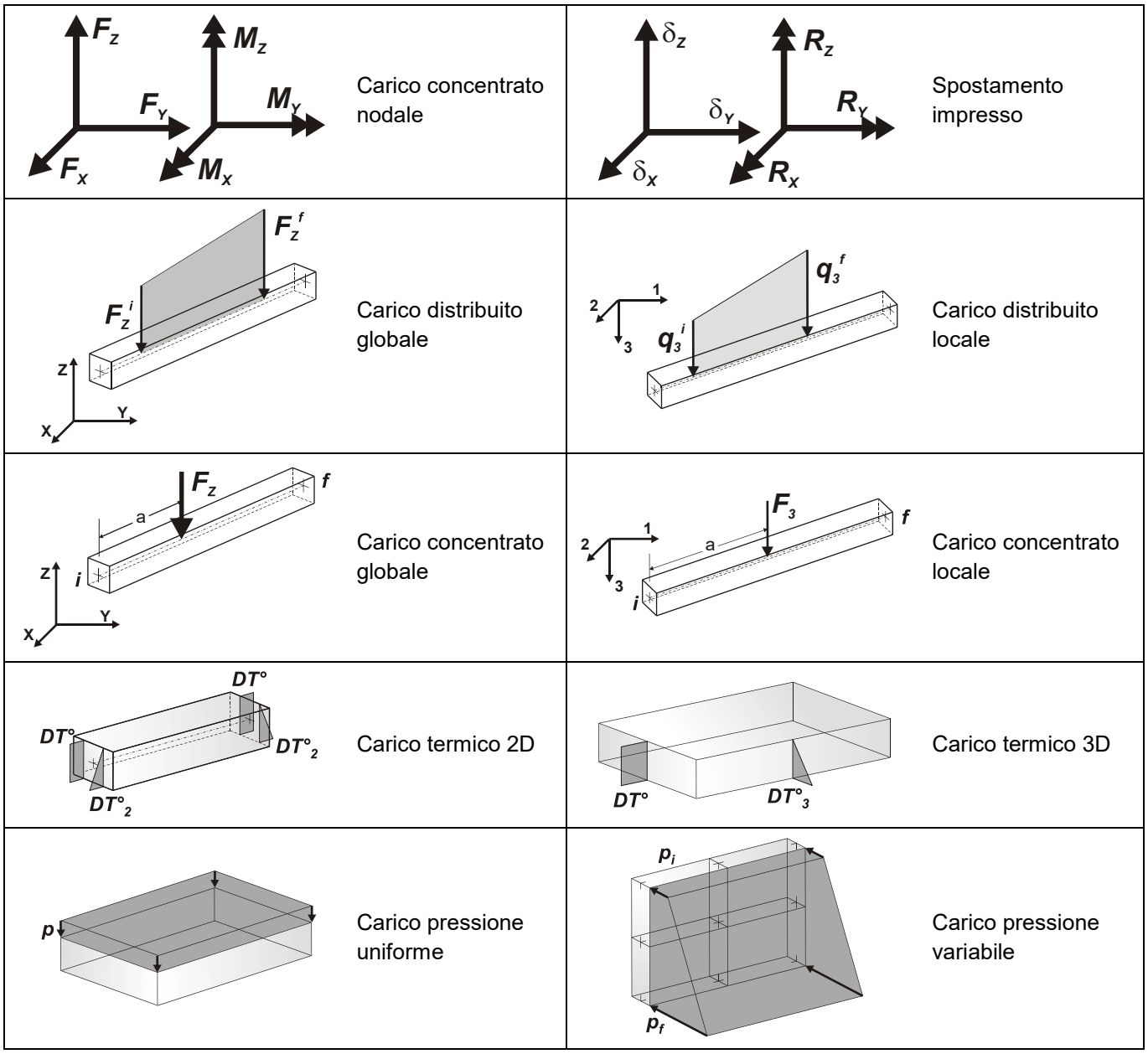
	291.3	0.41	0.37	0.48	0.81	0.74	0.72	0.12	0.12	0.11
	562.5	0.06	0.06	0.07	0.16	0.14	0.14	0.0	0.0	0.0
	582.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	20.0	0.06	0.06	0.08	0.29	0.26	0.25	0.0	0.0	0.0
	200.0	0.26	0.24	0.31	0.82	0.75	0.72	0.14	0.14	0.14
	380.0	0.06	0.06	0.08	0.29	0.26	0.25	0.0	0.0	0.0
	400.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	20.0	0.04	0.04	0.05	0.19	0.17	0.17	0.0	0.0	0.0
	317.5	0.27	0.24	0.31	0.82	0.75	0.72	0.14	0.14	0.14
	615.0	0.04	0.04	0.05	0.19	0.17	0.17	0.0	0.0	0.0
	635.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	20.0	0.06	0.05	0.07	0.27	0.23	0.21	0.0	0.0	0.0
	291.3	0.31	0.27	0.33	0.82	0.70	0.65	0.13	0.12	0.11
	562.5	0.06	0.05	0.07	0.27	0.23	0.21	0.0	0.0	0.0
	582.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	20.0	0.05	0.05	0.06	0.24	0.22	0.21	0.0	0.0	0.0
	219.6	0.25	0.23	0.29	0.82	0.75	0.72	0.14	0.14	0.14
	419.1	0.05	0.05	0.06	0.24	0.22	0.21	0.0	0.0	0.0
	439.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	20.0	0.02	0.02	0.02	0.08	0.07	0.07	0.0	0.0	0.0
	291.3	0.13	0.12	0.15	0.58	0.53	0.51	0.0	0.0	0.0
	562.5	0.02	0.02	0.02	0.08	0.07	0.07	0.0	0.0	0.0
	582.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	20.0	0.07	0.06	0.08	0.20	0.19	0.18	0.0	0.0	0.0
	291.3	0.39	0.36	0.47	0.84	0.78	0.76	0.13	0.13	0.12
	562.5	0.07	0.06	0.08	0.20	0.19	0.18	0.0	0.0	0.0
	582.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	20.0	0.07	0.06	0.08	0.20	0.18	0.18	0.0	0.0	0.0
	255.4	0.36	0.34	0.44	0.84	0.78	0.76	0.13	0.13	0.13
...										
13	635.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Elem.		**rRfck**	**rFfck**	**rPfck**	**rRfyk**	**rFfyk**	**rPfyk**	**wR**	**wF**	**wP**
		0.41	0.37	0.48	0.84	0.79	0.76	0.14	0.14	0.14

MODELLAZIONE DELLE AZIONI

LEGENDA TABELLA DATI AZIONI

Il programma consente l'uso di diverse tipologie di carico (azioni). Le azioni utilizzate nella modellazione sono individuate da una sigla identificativa ed un codice numerico (gli elementi strutturali richiamano quest'ultimo nella propria descrizione). Per ogni azione applicata alla struttura viene di riportato il codice, il tipo e la sigla identificativa. Le tabelle successive dettagliano i valori caratteristici di ogni azione in relazione al tipo. Le tabelle riportano infatti i seguenti dati in relazione al tipo:

1	**carico concentrato nodale** 6 dati (forza Fx, Fy, Fz, momento Mx, My, Mz)
2	**spostamento nodale impresso** 6 dati (spostamento Tx,Ty,Tz, rotazione Rx,Ry,Rz)
3	**carico distribuito globale su elemento tipo trave** 7 dati (fx,fy,fz,mx,my,mz,ascissa di inizio carico) 7 dati (fx,fy,fz,mx,my,mz,ascissa di fine carico)
4	**carico distribuito locale su elemento tipo trave** 7 dati (f1,f2,f3,m1,m2,m3,ascissa di inizio carico) 7 dati (f1,f2,f3,m1,m2,m3,ascissa di fine carico)
5	**carico concentrato globale su elemento tipo trave** 7 dati (Fx,Fy,Fz,Mx,My,Mz,ascissa di carico)
6	**carico concentrato locale su elemento tipo trave** 7 dati (F1, F2, F3, M1, M2, M3, ascissa di carico)
7	**variazione termica applicata ad elemento tipo trave** 7 dati (variazioni termiche: uniforme, media e differenza in altezza e larghezza al nodo iniziale e finale)
8	**carico di pressione uniforme su elemento tipo piastra** 1 dato (pressione)
9	**carico di pressione variabile su elemento tipo piastra** 4 dati (pressione, quota, pressione, quota)
10	**variazione termica applicata ad elemento tipo piastra** 2 dati (variazioni termiche: media e differenza nello spessore)
11	**carico variabile generale su elementi tipo trave e piastra** 1 dato descrizione della tipologia 4 dati per segmento (posizione, valore, posizione, valore) la tipologia precisa l'ascissa di definizione, la direzione del carico, la modalità di carico e la larghezza d'influenza per gli elementi tipo trave
12	**gruppo di carichi con impronta su piastra** 9 dati (numero di ripetizioni in direzione X e Y, valore di ciascun carico, posizione centrale del primo, dimensioni dell' impronta, interasse tra i carichi



Tipo	carico distribuito globale su trave

Id	Tipo	Pos.	fx	fy	fz	mx	my	mz
		cm	daN/cm	daN/cm	daN/cm	daN	daN	daN
2	TAMP.P1-DG:Fzi=-9.48 Fzf=-9.48	0.0	0.0	0.0	-9.48	0.0	0.0	0.0
		0.0	0.0	0.0	-9.48	0.0	0.0	0.0
3	TAMP.P2-DG:Fzi=-7.69 Fzf=-7.69	0.0	0.0	0.0	-7.69	0.0	0.0	0.0
		0.0	0.0	0.0	-7.69	0.0	0.0	0.0

SCHEMATIZZAZIONE DEI CASI DI CARICO

LEGENDA TABELLA CASI DI CARICO

Il programma consente l'applicazione di diverse tipologie di casi di carico.
Sono previsti i seguenti 11 tipi di casi di carico:

	Sigla	***Tipo***	***Descrizione***
1	**Ggk**	A	caso di carico comprensivo del peso proprio struttura
2	**Gk**	NA	caso di carico con azioni permanenti
3	**Qk**	NA	caso di carico con azioni variabili
4	**Gsk**	A	caso di carico comprensivo dei carichi permanenti sui solai e sulle coperture
5	**Qsk**	A	caso di carico comprensivo dei carichi variabili sui solai
6	**Qnk**	A	caso di carico comprensivo dei carichi di neve sulle coperture
7	**Qtk**	SA	caso di carico comprensivo di una variazione termica agente sulla struttura
8	**Qvk**	NA	caso di carico comprensivo di azioni da vento sulla struttura
9	**Esk**	SA	caso di carico sismico con analisi statica equivalente
10	**Edk**	SA	caso di carico sismico con analisi dinamica
11	**Etk**	NA	caso di carico comprensivo di azioni derivanti dall' incremento di spinta delle terre in condizione sismica
12	**Pk**	NA	caso di carico comprensivo di azioni derivanti da coazioni, cedimenti e precompressioni

Sono di tipo automatico A (ossia non prevedono introduzione dati da parte dell'utente) i seguenti casi di carico: 1-Ggk; 4-Gsk; 5-Qsk; 6-Qnk.

Sono di tipo semi-automatico SA (ossia prevedono una minima introduzione dati da parte dell'utente) i seguenti casi di carico:
7-Qtk, in quanto richiede solo il valore della variazione termica;
9-Esk e 10-Edk, in quanto richiedono il valore dell'angolo di ingresso del sisma e l'individuazione dei casi di carico partecipanti alla definizione delle masse.

Sono di tipo non automatico NA ossia prevedono la diretta applicazione di carichi generici agli elementi strutturali (si veda il precedente punto Modellazione delle Azioni) i restanti casi di carico.

Nella tabella successiva vengono riportati i casi di carico agenti sulla struttura, con l'indicazione dei dati relativi al caso di carico stesso:
Numero Tipo e *Sigla identificativa*, *Valore di riferimento* del caso di carico (se previsto).

In successione, per i casi di carico non automatici, viene riportato l'elenco di nodi ed elementi direttamente caricati con la sigla identificativa del carico.

Per i casi di carico di tipo sismico (9-Esk e 10-Edk), viene riportata la tabella di definizione delle masse: per ogni caso di carico partecipante alla definizione delle masse viene indicata la relativa aliquota (partecipazione) considerata. Si precisa che per i caso di carico 5-Qsk e 6-Qnk la partecipazione è prevista localmente per ogni elemento solaio o copertura presente nel modello (si confronti il valore Sksol nel capitolo relativo agli elementi solaio) e pertanto la loro partecipazione è di norma pari a uno.

CDC	Tipo	Sigla Id	Note
1	Ggk	CDC=Ggk (peso proprio della struttura)	
2	Gsk	CDC=G1sk (permanente solai-coperture)	
3	Gsk	CDC=G2sk (permanente solai-coperture n.c.d.)	
4	Qsk	CDC=Qsk (variabile solai)	
5	Edk	CDC=Ed (dinamico SLU) alfa=0.0 (ecc. +)	partecipazione:1.00 per 1 CDC=Ggk (peso proprio della struttura)
			partecipazione:1.00 per 2 CDC=G1sk (permanente solai-coperture)
			partecipazione:1.00 per 3 CDC=G2sk (permanente solai-coperture n.c.d.)

CDC	Tipo	Sigla Id	Note
			partecipazione:1.00 per 4 CDC=Qsk (variabile solai)
			partecipazione:1.00 per 13 CDC=G2k (TAMPONATURE)
6	Edk	CDC=Ed (dinamico SLU) alfa=0.0 (ecc. -)	come precedente CDC sismico
7	Edk	CDC=Ed (dinamico SLU) alfa=90.00 (ecc. +)	come precedente CDC sismico
8	Edk	CDC=Ed (dinamico SLU) alfa=90.00 (ecc. -)	come precedente CDC sismico
9	Edk	CDC=Ed (dinamico SLD) alfa=0.0 (ecc. +)	come precedente CDC sismico
10	Edk	CDC=Ed (dinamico SLD) alfa=0.0 (ecc. -)	come precedente CDC sismico
11	Edk	CDC=Ed (dinamico SLD) alfa=90.00 (ecc. +)	come precedente CDC sismico
12	Edk	CDC=Ed (dinamico SLD) alfa=90.00 (ecc. -)	come precedente CDC sismico
13	Gk	CDC=G2k (TAMPONATURE)	Azioni applicate:
			D2 : 3 Azione : TAMP.P1-DG:Fzi=-9.48 Fzf=-9.48
			D2 : 15 Azione : TAMP.P1-DG:Fzi=-9.48 Fzf=-9.48
			D2 :da 19 a 20 Azione : TAMP.P2-DG:Fzi=-7.69 Fzf=-7.69
			D2 : 25 Azione : TAMP.P1-DG:Fzi=-9.48 Fzf=-9.48
			D2 :da 27 a 28 Azione : TAMP.P1-DG:Fzi=-9.48 Fzf=-9.48
			D2 : 38 Azione : TAMP.P1-DG:Fzi=-9.48 Fzf=-9.48
			D2 : 40 Azione : TAMP.P1-DG:Fzi=-9.48 Fzf=-9.48
			D2 :da 46 a 47 Azione : TAMP.P1-DG:Fzi=-9.48 Fzf=-9.48
			D2 : 58 Azione : TAMP.P1-DG:Fzi=-9.48 Fzf=-9.48
			D2 : 64 Azione : TAMP.P2-DG:Fzi=-7.69 Fzf=-7.69
			D2 : 66 Azione : TAMP.P2-DG:Fzi=-7.69 Fzf=-7.69
			D2 :da 75 a 76 Azione : TAMP.P1-DG:Fzi=-9.48 Fzf=-9.48

DEFINIZIONE DELLE COMBINAZIONI

LEGENDA TABELLA COMBINAZIONI DI CARICO

Il programma combina i diversi tipi di casi di carico (CDC) secondo le regole previste dalla normativa vigente.
Le combinazioni previste sono destinate al controllo di sicurezza della struttura ed alla verifica degli spostamenti e delle sollecitazioni.

La prima tabella delle combinazioni riportata di seguito comprende le seguenti informazioni: Numero, Tipo, Sigla identificativa. Una seconda tabella riporta il peso nella combinazione assunto per ogni caso di carico.

Ai fini delle verifiche degli stati limite si definiscono le seguenti combinazioni delle azioni:
***Combinazione fondamentale** SLU*

$\gamma G1 \cdot G1 + \gamma G2 \cdot G2 + \gamma P \cdot P + \gamma Q1 \cdot Qk1 + \gamma Q2 \cdot \psi 02 \cdot Qk2 + \gamma Q3 \cdot \psi 03 \cdot Qk3 + \ldots$

***Combinazione caratteristica** (rara) SLE*

$G1 + G2 + P + Qk1 + \psi 02 \cdot Qk2 + \psi 03 \cdot Qk3 + \ldots$

***Combinazione frequente** SLE*

$G1 + G2 + P + \psi 11 \cdot Qk1 + \psi 22 \cdot Qk2 + \psi 23 \cdot Qk3 + \ldots$

***Combinazione quasi permanente** SLE*

$G1 + G2 + P + \psi 21 \cdot Qk1 + \psi 22 \cdot Qk2 + \psi 23 \cdot Qk3 + \ldots$

***Combinazione sismica**, impiegata per gli stati limite ultimi e di esercizio connessi all'azione sismica E*

$E + G1 + G2 + P + \psi 21 \cdot Qk1 + \psi 22 \cdot Qk2 + \ldots$

***Combinazione eccezionale**, impiegata per gli stati limite connessi alle azioni eccezionali*

$G1 + G2 + Ad + P + \psi 21 \cdot Qk1 + \psi 22 \cdot Qk2 + \ldots$

Dove:

NTC 2018 Tabella 2.5.I

Destinazione d'uso/azione	**ψ0**	**ψ1**	**ψ2**
Categoria A residenziali	0,70	0,50	0,30
Categoria B uffici	0,70	0,50	0,30
Categoria C ambienti suscettibili di affollamento	0,70	0,70	0,60
Categoria D ambienti ad uso commerciale	0,70	0,70	0,60
Categoria E biblioteche, archivi, magazzini,…	1,00	0,90	0,80
Categoria F Rimesse e parcheggi (autoveicoli <= 30kN)	0,70	0,70	0,60
Categoria G Rimesse e parcheggi (autoveicoli > 30kN)	0,70	0,50	0,30
Categoria H Coperture	0,00	0,00	0,00
Vento	0,60	0,20	0,00
Neve a quota <= 1000 m	0,50	0,20	0,00
Neve a quota > 1000 m	0,70	0,50	0,20
Variazioni Termiche	0,60	0,50	0,00

Nelle verifiche possono essere adottati in alternativa due diversi approcci progettuali:
- per l'approccio 1 si considerano due diverse combinazioni di gruppi di coefficienti di sicurezza parziali per le azioni, per i materiali e per la resistenza globale (combinazione 1 con coefficienti A1 e combinazione 2 con coefficienti A2),
- per l'approccio 2 si definisce un'unica combinazione per le azioni, per la resistenza dei materiali e per la resistenza globale (con coefficienti A1).

NTC 2018 Tabella 2.6.I

	Coefficiente γf	**EQU**	**A1**	**A2**

Carichi permanenti	*Favorevoli*	*$\gamma G1$*	*0,9*	*1,0*	*1,0*
	Sfavorevoli		*1,1*	*1,3*	*1,0*
Carichi permanenti non strutturali *(Non compiutamente definiti)*	*Favorevoli*	*$\gamma G2$*	*0,8*	*0,8*	*0,8*
	Sfavorevoli		*1,5*	*1,5*	*1,3*
Carichi variabili	*Favorevoli*	*γQi*	*0,0*	*0,0*	*0,0*
	Sfavorevoli		*1,5*	*1,5*	*1,3*

Cmb	Tipo	Sigla Id	effetto P-delta
1	SLU	Comb. SLU A1 1	
2	SLU	Comb. SLU A1 2	
3	SLU	Comb. SLU A1 3	
4	SLU	Comb. SLU A1 4	
5	SLU	Comb. SLU A1 (SLV sism.) 5	SI
6	SLU	Comb. SLU A1 (SLV sism.) 6	SI
7	SLU	Comb. SLU A1 (SLV sism.) 7	SI
8	SLU	Comb. SLU A1 (SLV sism.) 8	SI
9	SLU	Comb. SLU A1 (SLV sism.) 9	SI
10	SLU	Comb. SLU A1 (SLV sism.) 10	SI
11	SLU	Comb. SLU A1 (SLV sism.) 11	SI
12	SLU	Comb. SLU A1 (SLV sism.) 12	SI
13	SLU	Comb. SLU A1 (SLV sism.) 13	SI
14	SLU	Comb. SLU A1 (SLV sism.) 14	SI
15	SLU	Comb. SLU A1 (SLV sism.) 15	SI
16	SLU	Comb. SLU A1 (SLV sism.) 16	SI
17	SLU	Comb. SLU A1 (SLV sism.) 17	SI
18	SLU	Comb. SLU A1 (SLV sism.) 18	SI
19	SLU	Comb. SLU A1 (SLV sism.) 19	SI
20	SLU	Comb. SLU A1 (SLV sism.) 20	SI
21	SLU	Comb. SLU A1 (SLV sism.) 21	SI
22	SLU	Comb. SLU A1 (SLV sism.) 22	SI
23	SLU	Comb. SLU A1 (SLV sism.) 23	SI
24	SLU	Comb. SLU A1 (SLV sism.) 24	SI
25	SLU	Comb. SLU A1 (SLV sism.) 25	SI
26	SLU	Comb. SLU A1 (SLV sism.) 26	SI
27	SLU	Comb. SLU A1 (SLV sism.) 27	SI
28	SLU	Comb. SLU A1 (SLV sism.) 28	SI
29	SLU	Comb. SLU A1 (SLV sism.) 29	SI
30	SLU	Comb. SLU A1 (SLV sism.) 30	SI
31	SLU	Comb. SLU A1 (SLV sism.) 31	SI
32	SLU	Comb. SLU A1 (SLV sism.) 32	SI
33	SLU	Comb. SLU A1 (SLV sism.) 33	SI
34	SLU	Comb. SLU A1 (SLV sism.) 34	SI
35	SLU	Comb. SLU A1 (SLV sism.) 35	SI
36	SLU	Comb. SLU A1 (SLV sism.) 36	SI
37	SLD(sis)	Comb. SLE (SLD Danno sism.) 37	SI
38	SLD(sis)	Comb. SLE (SLD Danno sism.) 38	SI
39	SLD(sis)	Comb. SLE (SLD Danno sism.) 39	SI
40	SLD(sis)	Comb. SLE (SLD Danno sism.) 40	SI
41	SLD(sis)	Comb. SLE (SLD Danno sism.) 41	SI
42	SLD(sis)	Comb. SLE (SLD Danno sism.) 42	SI
43	SLD(sis)	Comb. SLE (SLD Danno sism.) 43	SI
44	SLD(sis)	Comb. SLE (SLD Danno sism.) 44	SI
45	SLD(sis)	Comb. SLE (SLD Danno sism.) 45	SI
46	SLD(sis)	Comb. SLE (SLD Danno sism.) 46	SI
47	SLD(sis)	Comb. SLE (SLD Danno sism.) 47	SI
48	SLD(sis)	Comb. SLE (SLD Danno sism.) 48	SI
49	SLD(sis)	Comb. SLE (SLD Danno sism.) 49	SI
50	SLD(sis)	Comb. SLE (SLD Danno sism.) 50	SI
51	SLD(sis)	Comb. SLE (SLD Danno sism.) 51	SI
52	SLD(sis)	Comb. SLE (SLD Danno sism.) 52	SI
53	SLD(sis)	Comb. SLE (SLD Danno sism.) 53	SI
54	SLD(sis)	Comb. SLE (SLD Danno sism.) 54	SI
55	SLD(sis)	Comb. SLE (SLD Danno sism.) 55	SI
56	SLD(sis)	Comb. SLE (SLD Danno sism.) 56	SI
57	SLD(sis)	Comb. SLE (SLD Danno sism.) 57	SI
58	SLD(sis)	Comb. SLE (SLD Danno sism.) 58	SI

Cmb	Tipo	Sigla Id	effetto P-delta
59	SLD(sis)	Comb. SLE (SLD Danno sism.) 59	SI
60	SLD(sis)	Comb. SLE (SLD Danno sism.) 60	SI
61	SLD(sis)	Comb. SLE (SLD Danno sism.) 61	SI
62	SLD(sis)	Comb. SLE (SLD Danno sism.) 62	SI
63	SLD(sis)	Comb. SLE (SLD Danno sism.) 63	SI
64	SLD(sis)	Comb. SLE (SLD Danno sism.) 64	SI
65	SLD(sis)	Comb. SLE (SLD Danno sism.) 65	SI
66	SLD(sis)	Comb. SLE (SLD Danno sism.) 66	SI
67	SLD(sis)	Comb. SLE (SLD Danno sism.) 67	SI
68	SLD(sis)	Comb. SLE (SLD Danno sism.) 68	SI
69	SLE(r)	Comb. SLE(rara) 69	
70	SLE(r)	Comb. SLE(rara) 70	
71	SLE(f)	Comb. SLE(freq.) 71	
72	SLE(f)	Comb. SLE(freq.) 72	
73	SLE(p)	Comb. SLE(perm.) 73	
74	SLE(p)	Comb. SLE(perm.) 74	

Cmb	CDC 1/15...	CDC 2/16...	CDC 3/17...	CDC 4/18...	CDC 5/19...	CDC 6/20...	CDC 7/21...	CDC 8/22...	CDC 9/23...	CDC 10/24...	CDC 11/25...	CDC 12/26...	CDC 13/27...	CDC 14/28...
1	1.30	1.30	1.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.30	
2	1.30	1.30	1.30	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.30	
3	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	
4	1.00	1.00	1.00	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	
5	1.00	1.00	1.00	0.60	-1.00	0.0	-0.30	0.0	0.0	0.0	0.0	0.0	1.00	
6	1.00	1.00	1.00	0.60	-1.00	0.0	0.30	0.0	0.0	0.0	0.0	0.0	1.00	
7	1.00	1.00	1.00	0.60	1.00	0.0	-0.30	0.0	0.0	0.0	0.0	0.0	1.00	
8	1.00	1.00	1.00	0.60	1.00	0.0	0.30	0.0	0.0	0.0	0.0	0.0	1.00	
9	1.00	1.00	1.00	0.60	-1.00	0.0	0.0	-0.30	0.0	0.0	0.0	0.0	1.00	
10	1.00	1.00	1.00	0.60	-1.00	0.0	0.0	0.30	0.0	0.0	0.0	0.0	1.00	
11	1.00	1.00	1.00	0.60	1.00	0.0	0.0	-0.30	0.0	0.0	0.0	0.0	1.00	
12	1.00	1.00	1.00	0.60	1.00	0.0	0.0	0.30	0.0	0.0	0.0	0.0	1.00	
13	1.00	1.00	1.00	0.60	0.0	-1.00	-0.30	0.0	0.0	0.0	0.0	0.0	1.00	
14	1.00	1.00	1.00	0.60	0.0	-1.00	0.30	0.0	0.0	0.0	0.0	0.0	1.00	
15	1.00	1.00	1.00	0.60	0.0	1.00	-0.30	0.0	0.0	0.0	0.0	0.0	1.00	
16	1.00	1.00	1.00	0.60	0.0	1.00	0.30	0.0	0.0	0.0	0.0	0.0	1.00	
17	1.00	1.00	1.00	0.60	0.0	-1.00	0.0	-0.30	0.0	0.0	0.0	0.0	1.00	
18	1.00	1.00	1.00	0.60	0.0	-1.00	0.0	0.30	0.0	0.0	0.0	0.0	1.00	
19	1.00	1.00	1.00	0.60	0.0	1.00	0.0	-0.30	0.0	0.0	0.0	0.0	1.00	
20	1.00	1.00	1.00	0.60	0.0	1.00	0.0	0.30	0.0	0.0	0.0	0.0	1.00	
21	1.00	1.00	1.00	0.60	-0.30	0.0	-1.00	0.0	0.0	0.0	0.0	0.0	1.00	
22	1.00	1.00	1.00	0.60	-0.30	0.0	1.00	0.0	0.0	0.0	0.0	0.0	1.00	
23	1.00	1.00	1.00	0.60	0.30	0.0	-1.00	0.0	0.0	0.0	0.0	0.0	1.00	
24	1.00	1.00	1.00	0.60	0.30	0.0	1.00	0.0	0.0	0.0	0.0	0.0	1.00	
25	1.00	1.00	1.00	0.60	0.0	-0.30	-1.00	0.0	0.0	0.0	0.0	0.0	1.00	
26	1.00	1.00	1.00	0.60	0.0	-0.30	1.00	0.0	0.0	0.0	0.0	0.0	1.00	
27	1.00	1.00	1.00	0.60	0.0	0.30	-1.00	0.0	0.0	0.0	0.0	0.0	1.00	
28	1.00	1.00	1.00	0.60	0.0	0.30	1.00	0.0	0.0	0.0	0.0	0.0	1.00	
29	1.00	1.00	1.00	0.60	-0.30	0.0	0.0	-1.00	0.0	0.0	0.0	0.0	1.00	
30	1.00	1.00	1.00	0.60	-0.30	0.0	0.0	1.00	0.0	0.0	0.0	0.0	1.00	
31	1.00	1.00	1.00	0.60	0.30	0.0	0.0	-1.00	0.0	0.0	0.0	0.0	1.00	
32	1.00	1.00	1.00	0.60	0.30	0.0	0.0	1.00	0.0	0.0	0.0	0.0	1.00	
33	1.00	1.00	1.00	0.60	0.0	-0.30	0.0	-1.00	0.0	0.0	0.0	0.0	1.00	
34	1.00	1.00	1.00	0.60	0.0	-0.30	0.0	1.00	0.0	0.0	0.0	0.0	1.00	
35	1.00	1.00	1.00	0.60	0.0	0.30	0.0	-1.00	0.0	0.0	0.0	0.0	1.00	
36	1.00	1.00	1.00	0.60	0.0	0.30	0.0	1.00	0.0	0.0	0.0	0.0	1.00	
37	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	-1.00	0.0	-0.30	0.0	1.00	
38	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	-1.00	0.0	0.30	0.0	1.00	
39	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	1.00	0.0	-0.30	0.0	1.00	
40	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	1.00	0.0	0.30	0.0	1.00	
41	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	-1.00	0.0	0.0	-0.30	1.00	
42	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	-1.00	0.0	0.0	0.30	1.00	
43	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	1.00	0.0	0.0	-0.30	1.00	
44	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.30	1.00	
45	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	-1.00	-0.30	0.0	1.00	
46	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	-1.00	0.30	0.0	1.00	
47	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	1.00	-0.30	0.0	1.00	
48	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	1.00	0.30	0.0	1.00	
49	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	-0.30	1.00	
50	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.30	1.00	
51	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	1.00	0.0	-0.30	1.00	

Cmb	CDC 1/15...	CDC 2/16...	CDC 3/17...	CDC 4/18...	CDC 5/19...	CDC 6/20...	CDC 7/21...	CDC 8/22...	CDC 9/23...	CDC 10/24...	CDC 11/25...	CDC 12/26...	CDC 13/27...	CDC 14/28...
52	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.30	1.00	
53	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	-0.30	0.0	-1.00	0.0	1.00	
54	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	-0.30	0.0	1.00	0.0	1.00	
55	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.30	0.0	-1.00	0.0	1.00	
56	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.30	0.0	1.00	0.0	1.00	
57	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	-0.30	-1.00	0.0	1.00	
58	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	-0.30	1.00	0.0	1.00	
59	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	0.30	-1.00	0.0	1.00	
60	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	0.30	1.00	0.0	1.00	
61	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	-1.00	1.00	
62	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	1.00	1.00	
63	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.30	0.0	0.0	-1.00	1.00	
64	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.30	0.0	0.0	1.00	1.00	
65	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	-1.00	1.00	
66	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	1.00	1.00	
67	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	0.30	0.0	-1.00	1.00	
68	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	0.30	0.0	1.00	1.00	
69	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	
70	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	
71	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	
72	1.00	1.00	1.00	0.70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	
73	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	
74	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	

AZIONE SISMICA

VALUTAZIONE DELL' AZIONE SISMICA

L'azione sismica sulle costruzioni è valutata a partire dalla "pericolosità sismica di base", in condizioni ideali di sito di riferimento rigido con superficie topografica orizzontale.
Allo stato attuale, la pericolosità sismica su reticolo di riferimento nell'intervallo di riferimento è fornita dai dati pubblicati sul sito http://esse1.mi.ingv.it/. Per punti non coincidenti con il reticolo di riferimento e periodi di ritorno non contemplati direttamente si opera come indicato nell' allegato alle NTC (rispettivamente media pesata e interpolazione).

L' azione sismica viene definita in relazione ad un periodo di riferimento Vr che si ricava, per ciascun tipo di costruzione, moltiplicandone la vita nominale per il coefficiente d'uso (vedi tabella Parametri della struttura). Fissato il periodo di riferimento Vr e la probabilità di superamento Pver associata a ciascuno degli stati limite considerati, si ottiene il periodo di ritorno Tr e i relativi parametri di pericolosità sismica (vedi tabella successiva):
ag: accelerazione orizzontale massima del terreno;
Fo: valore massimo del fattore di amplificazione dello spettro in accelerazione orizzontale;
T*c: periodo di inizio del tratto a velocità costante dello spettro in accelerazione orizzontale;

Parametri della struttura					
Classe d'uso	Vita Vn [anni]	Coeff. Uso	Periodo Vr [anni]	Tipo di suolo	Categoria topografica
III	50.0	1.5	75.0	B	T1

Individuati su reticolo di riferimento i parametri di pericolosità sismica si valutano i parametri spettrali riportati in tabella:
S è il coefficiente che tiene conto della categoria di sottosuolo e delle condizioni topografiche mediante la relazione seguente S = Ss*St (3.2.3)
Fo è il fattore che quantifica l'amplificazione spettrale massima, su sito di riferimento rigido orizzontale
Fv è il fattore che quantifica l'amplificazione spettrale massima verticale, in termini di accelerazione orizzontale massima del terreno ag su sito di riferimento rigido orizzontale
Tb è il periodo corrispondente all'inizio del tratto dello spettro ad accelerazione costante.
Tc è il periodo corrispondente all'inizio del tratto dello spettro a velocità costante.
Td è il periodo corrispondente all'inizio del tratto dello spettro a spostamento costante.

Lo spettro di risposta elastico in accelerazione della componente orizzontale del moto sismico, Se, è definito dalle seguenti espressioni:

$$0 \le T < T_B \qquad S_e(T) = a_g \cdot S \cdot \eta \cdot F_o \cdot \left[\frac{T}{T_B} + \frac{1}{\eta \cdot F_o}\left(1 - \frac{T}{T_B}\right)\right]$$

$$T_B \le T < T_C \qquad S_e(T) = a_g \cdot S \cdot \eta \cdot F_o$$

$$T_C \le T < T_D \qquad S_e(T) = a_g \cdot S \cdot \eta \cdot F_o \cdot \left(\frac{T_C}{T}\right)$$

$$T_D \le T \qquad S_e(T) = a_g \cdot S \cdot \eta \cdot F_o \cdot \left(\frac{T_C \cdot T_D}{T^2}\right)$$

Dove per sottosuolo di categoria **A** i coefficienti S_S e C_C valgono 1; mentre per le categorie di sottosuolo B, C, D, E i coefficienti S_S e C_C vengono calcolati mediante le espressioni riportane nella seguente Tabella

Categoria sottosuolo	S_S	C_C
A	1,00	1,00
B	$1{,}00 \le 1{,}40 - 0{,}40 \cdot F_o \cdot \frac{a_g}{g} \le 1{,}20$	$1{,}10 \cdot (T_C^*)^{-0{,}20}$
C	$1{,}00 \le 1{,}70 - 0{,}60 \cdot F_o \cdot \frac{a_g}{g} \le 1{,}50$	$1{,}05 \cdot (T_C^*)^{-0{,}33}$
D	$0{,}90 \le 2{,}40 - 1{,}50 \cdot F_o \cdot \frac{a_g}{g} \le 1{,}80$	$1{,}25 \cdot (T_C^*)^{-0{,}50}$
E	$1{,}00 \le 2{,}00 - 1{,}10 \cdot F_o \cdot \frac{a_g}{g} \le 1{,}60$	$1{,}15 \cdot (T_C^*)^{-0{,}40}$

Per tenere conto delle condizioni topografiche e in assenza di specifiche analisi di risposta sismica locale, si utilizzano i valori del coefficiente topografico S_T riportati nella seguente Tabella

Categoria topografica	Ubicazione dell'opera o dell'intervento	S_T
T1	-	1,0
T2	In corrispondenza della sommità del pendio	1,2
T3	In corrispondenza della cresta di un rilievo con pendenza media minore o uguale a 30°	1,2
T4	In corrispondenza della cresta di un rilievo con pendenza media maggiore di 30°	1,4

Lo spettro di risposta elastico in accelerazione della componente verticale del moto sismico, Sve, è definito dalle espressioni:

$$0 \le T < T_B \qquad S_{ve}(T) = a_g \cdot S \cdot \eta \cdot F_v \cdot \left[\frac{T}{T_B} + \frac{1}{\eta \cdot F_o}\left(1 - \frac{T}{T_B}\right)\right]$$

$$T_B \le T < T_C \qquad S_{ve}(T) = a_g \cdot S \cdot \eta \cdot F_v$$

$$T_C \le T < T_D \qquad S_{ve}(T) = a_g \cdot S \cdot \eta \cdot F_v \cdot \left(\frac{T_C}{T}\right)$$

$$T_D \le T \qquad S_{ve}(T) = a_g \cdot S \cdot \eta \cdot F_v \cdot \left(\frac{T_C \cdot T_D}{T^2}\right)$$

I valori di S_S, T_B, T_C e T_D, sono riportati nella seguenteTabella

Categoria di sottosuolo	S_S	T_B	T_C	T_D
A, B, C, D, E	1,0	0,05 s	0,15 s	1,0 s

Id nodo	Longitudine	Latitudine	Distanza
			Km
Loc.	16.152	38.968	
41445	16.187	38.952	3.607
41446	16.251	38.950	5.181
41224	16.253	39.000	4.564
41223	16.189	39.002	2.750

SL	Pver	Tr	ag	Fo	T*c
		Anni	g		sec
SLO	81.0	45.0	0.084	2.290	0.300
SLD	63.0	75.0	0.109	2.310	0.320
SLV	10.0	712.0	0.303	2.440	0.390
SLC	5.0	1462.0	0.402	2.480	0.420

SL	ag	S	Fo	Fv	Tb	Tc	Td
	g				sec	sec	sec
SLO	0.084	1.200	2.290	0.894	0.140	0.420	1.934
SLD	0.109	1.200	2.310	1.030	0.147	0.442	2.036
SLV	0.303	1.104	2.440	1.814	0.173	0.518	2.814
SLC	0.402	1.002	2.480	2.122	0.183	0.550	3.206

RISULTATI ANALISI SISMICHE

LEGENDA TABELLA ANALISI SISMICHE

Il programma consente l'analisi di diverse configurazioni sismiche.

Sono previsti, infatti, i seguenti casi di carico:

9. Esk caso di carico sismico con analisi statica equivalente
10. Edk caso di carico sismico con analisi dinamica

Ciascun caso di carico è caratterizzato da un angolo di ingresso e da una configurazione di masse determinante la forza sismica complessiva (si rimanda al capitolo relativo ai casi di carico per chiarimenti inerenti questo aspetto).

Nella colonna Note, in funzione della norma in uso sono riportati i parametri fondamentali che caratterizzano l' azione sismica: in particolare possono essere presenti i seguenti valori:

Angolo di ingresso	Angolo di ingresso dell'azione sismica orizzontale
Fattore di importanza	Fattore di importanza dell'edificio, in base alla categoria di appartenenza
Zona sismica	Zona sismica
Accelerazione ag	Accelerazione orizzontale massima sul suolo
Categoria suolo	Categoria di profilo stratigrafico del suolo di fondazione
Fattore q	Fattore di struttura/di comportamento. Dipendente dalla tipologia strutturale
Fattore di sito S	Fattore dipendente dalla stratigrafia e dal profilo topografico
Classe di duttilità CD	Classe di duttilità della struttura – "A" duttilità alta, "B" duttilità bassa
Fattore riduz. SLD	Fattore di riduzione dello spettro elastico per lo stato limite di danno
Periodo proprio T1	Periodo proprio di vibrazione della struttura
Coefficiente Lambda	Coefficiente dipendente dal periodo proprio T1 e dal numero di piani della struttura
Ordinata spettro Sd(T1)	Valore delle ordinate dello spettro di progetto per lo stato limite ultimo, componente orizzontale (verticale Svd)
Ordinata spettro Se(T1)	Valore delle ordinate dello spettro elastico ridotta del fattore SLD per lo stato limite di danno, componente orizzontale (verticale Sve)
Ordinata spettro S (Tb-Tc)	Valore dell' ordinata dello spettro in uso nel tratto costante
numero di modi considerati	Numero di modi di vibrare della struttura considerati nell'analisi dinamica

Per ciascun caso di carico sismico viene riportato l'insieme di dati sotto riportati (le masse sono espresse in unità di forza):

a) **analisi sismica statica equivalente**:
   - quota, posizione del centro di applicazione e azione orizzontale risultante, posizione del baricentro delle rigidezze, rapporto r/Ls (per strutture a nucleo), indici di regolarità e/r secondo EC8 4.2.3.2
   - azione sismica complessiva

b) **analisi sismica dinamica con spettro di risposta**:
   - quota, posizione del centro di massa e massa risultante, posizione del baricentro delle rigidezze, rapporto r/Ls (per strutture a nucleo) **,** indici di regolarità e/r secondo EC8 4.2.3.2
   - frequenza, periodo, accelerazione spettrale, massa eccitata nelle tre direzioni globali per tutti i modi

- massa complessiva ed aliquota di massa complessiva eccitata.

Per ciascuna combinazione sismica definita SLD o SLO viene riportato il livello di deformazione etaT (dr) degli elementi strutturali verticali. Per semplicità di consultazione il livello è espresso anche in unità 1000*etaT/h da confrontare direttamente con i valori forniti nella norma (es. 5 per edifici con tamponamenti collegati rigidamente alla struttura, 10.0 per edifici con tamponamenti collegati elasticamente, 3 per edifici in muratura ordinaria, 4 per edifici in muratura armata).

Qualora si applichi il D.M. 96 (vedi NOTA sul capitolo "normativa di riferimento") l'analisi sismica dinamica può essere comprensiva di sollecitazione verticale contemporanea a quella orizzontale, nel qual caso è effettuata una sovrapposizione degli effetti in ragione della radice dei quadrati degli effetti stessi. Per ciascuna combinazione sismica - analisi effettuate con il D.M. 96 (vedi NOTA sul capitolo "normativa di riferimento") - viene riportato il livello di deformazione etaT, etaP e etaD degli elementi strutturali verticali. Per semplicità di consultazione il livello è espresso in unità 1000*etaT/h da confrontare direttamente con il valore 2 o 4 per la verifica.

Per gli edifici sismicamente isolati si riportano di seguito le verifiche condotte sui dispositivi di isolamento. Le verifiche sono effettuate secondo la circolare n.7/2019 del C.S.LL.PP nelle combinazioni in SLC come previsto dal DM 17-01-2018. Per ogni combinazione è riportato il codice di verifica ed i valori utilizzati per la verifica: spostamento dE, area ridotta e dimensione A2, azione verticale, deformazioni di taglio dell'elastomero e tensioni nell'acciaio.
Qualora si applichi l'Ordinanza 3274 e s.m.i. le verifiche sono eseguite in accordo con l'allegato 10.A.
In particolare la tabella, per ogni combinazione di calcolo, riporta:

Nodo	Nodo di appoggio dell' isolatore
Cmb	Combinazione oggetto della verifica
Verif.	Codice di verifica ok – verifica positiva , NV – verifica negativa, ND – verifica non completata
dE	Spostamento relativo tra le due facce (amplificato del 20% per Ordinanza 3274 e smi) combinato con la regola del 30%
Ang fi	Angolo utilizzato per il calcolo dell' area ridotta Ar (per dispositivi circolari)
V	Azione verticale agente
Ar	Area ridotta efficace
Dim A2	Dimensione utile per il calcolo della deformazione per rotazione
Sig s	Tensione nell' inserto in acciaio
Gam c(a,s,t)	Deformazioni di taglio dell' elestomero
Vcr	Carico critico per instabilità

Affinché la verifica sia positiva deve essere:

1) V > 0
2) Sig s < fyk
3) Gam t < 5
4) Gam s < Gam * (caratteristica dell' elastomero)
5) Gam s < 2
6) V < 0.5 Vcr

Calcolo dei fattori di comportamento secondo il D.M. 17/01/2018

La costruzione, nuova, è caratterizzata da non regolarità sia in pianta sia in altezza ed è progettata in classe di duttilità media (CD"B").

Parametri fattore in direzione x e y

Sistema costruttivo: calcestruzzo

Tipologia strutturale: altre tipologie

Valore base fattore q_0 = 3.450

Fattore di regolarità K_R = 0.8

Fattore dissipativo $q_D = q_0 \cdot K_R$ = 2.760

Fattori di comportamento utilizzati

	Dissipativi
q SLU x	2.760
q SLU y	2.760
q SLU z	1.500

CDC	Tipo	Sigla Id	Note
5	Edk	CDC=Ed (dinamico SLU) alfa=0.0 (ecc. +)	
			categoria suolo: B
			fattore di sito S = 1.104
			ordinata spettro (tratto Tb-Tc) = 0.296 g
			angolo di ingresso:0.0
			eccentricità aggiuntiva: positiva
			periodo proprio T1: 0.631 sec.
			fattore q: 2.760
			fattore per spost. mu d: 2.760
			classe di duttilità CD: B
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
1200.00	3.455e+04	873.75	890.43	0.0	-25.54	873.75	890.43	2.022	0.0	0.0
835.00	3.167e+05	481.50	854.61	0.0	-99.25	728.98	932.62	0.500	0.358	0.166
789.78	1808.89	910.22	920.63	0.0	-9.25	987.53	946.78	0.890	0.462	0.303
744.56	1808.89	910.22	920.63	0.0	-9.25	987.53	946.78	0.890	0.462	0.303
699.33	1808.89	910.22	920.63	0.0	-9.25	987.53	946.78	0.890	0.462	0.303
654.11	1808.89	910.22	920.63	0.0	-9.25	987.53	946.78	0.890	0.462	0.303
608.89	1808.89	910.22	920.63	0.0	-9.25	987.53	946.78	0.890	0.462	0.303
563.67	1808.89	910.22	920.63	0.0	-9.25	987.53	946.78	0.890	0.462	0.303
518.44	1808.89	910.22	920.63	0.0	-9.25	987.53	946.78	0.890	0.462	0.303
473.22	1808.89	910.22	920.63	0.0	-9.25	987.53	946.78	0.890	0.462	0.303
428.00	3.600e+05	544.43	998.02	0.0	-99.25	758.05	964.08	0.566	0.296	0.068
380.44	1902.22	910.22	920.63	0.0	-9.25	987.53	946.78	0.890	0.462	0.303
332.89	1902.22	910.22	920.63	0.0	-9.25	987.53	946.78	0.890	0.462	0.303
285.33	1902.22	910.22	920.63	0.0	-9.25	987.53	946.78	0.890	0.462	0.303
237.78	1902.22	910.22	920.63	0.0	-9.25	987.53	946.78	0.890	0.462	0.303
190.22	1902.22	910.22	920.63	0.0	-9.25	987.53	946.78	0.890	0.462	0.303
142.67	1902.22	910.22	920.63	0.0	-9.25	987.53	946.78	0.890	0.462	0.303
95.11	1902.22	910.22	920.63	0.0	-9.25	987.53	946.78	0.890	0.462	0.303
47.56	1902.22	910.22	920.63	0.0	-9.25	987.53	946.78	0.890	0.462	0.303
0.0	2.663e+04	594.20	1064.83	0.0	-99.25	0.0	0.0	0.0	0.0	0.0
Risulta	7.677e+05									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	1.585	0.631	0.243	6.237e+05	81.2	738.60	9.62e-02	249.48	3.25e-02	0.0	0.0
2	2.046	0.489	0.296	1402.49	0.2	6.607e+05	86.1	1357.44	0.2	0.0	0.0
3	2.599	0.385	0.296	1.780e+04	2.3	686.34	8.94e-02	239.28	3.12e-02	0.0	0.0
4	4.511	0.222	0.296	1046.40	0.1	8334.44	1.1	7.157e+05	93.2	0.0	0.0
5	5.244	0.191	0.296	3.869e+04	5.0	4.330e+04	5.6	1.271e+04	1.7	0.0	0.0
6	5.431	0.184	0.296	4.170e+04	5.4	1.947e+04	2.5	2.987e+04	3.9	0.0	0.0
7	6.344	0.158	0.300	2.210e+04	2.9	2347.94	0.3	3061.87	0.4	0.0	0.0
8	7.866	0.127	0.306	5109.67	0.7	2.232e+04	2.9	85.37	1.11e-02	0.0	0.0
9	8.402	0.119	0.308	9688.91	1.3	5534.97	0.7	3982.48	0.5	0.0	0.0
Risulta				7.612e+05		7.634e+05		7.672e+05			
In percentuale				99.16		99.45		99.94			

CDC	Tipo	Sigla Id	Note
6	Edk	CDC=Ed (dinamico SLU) alfa=0.0 (ecc. -)	
			categoria suolo: B
			fattore di sito S = 1.104
			ordinata spettro (tratto Tb-Tc) = 0.296 g
			angolo di ingresso:0.0
			eccentricità aggiuntiva: negativa
			periodo proprio T1: 0.615 sec.
			fattore q: 2.760
			fattore per spost. mu d: 2.760
			classe di duttilità CD: B
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
1200.00	3.455e+04	873.75	890.43	0.0	25.54	873.75	890.43	2.022	0.0	0.0
835.00	3.167e+05	481.50	854.61	0.0	99.25	728.98	932.62	0.500	0.358	0.166
789.78	1808.89	910.22	920.63	0.0	9.25	987.53	946.78	0.890	0.462	0.303
744.56	1808.89	910.22	920.63	0.0	9.25	987.53	946.78	0.890	0.462	0.303
699.33	1808.89	910.22	920.63	0.0	9.25	987.53	946.78	0.890	0.462	0.303
654.11	1808.89	910.22	920.63	0.0	9.25	987.53	946.78	0.890	0.462	0.303
608.89	1808.89	910.22	920.63	0.0	9.25	987.53	946.78	0.890	0.462	0.303
563.67	1808.89	910.22	920.63	0.0	9.25	987.53	946.78	0.890	0.462	0.303
518.44	1808.89	910.22	920.63	0.0	9.25	987.53	946.78	0.890	0.462	0.303
473.22	1808.89	910.22	920.63	0.0	9.25	987.53	946.78	0.890	0.462	0.303
428.00	3.600e+05	544.43	998.02	0.0	99.25	758.05	964.08	0.566	0.296	0.068
380.44	1902.22	910.22	920.63	0.0	9.25	987.53	946.78	0.890	0.462	0.303
332.89	1902.22	910.22	920.63	0.0	9.25	987.53	946.78	0.890	0.462	0.303
285.33	1902.22	910.22	920.63	0.0	9.25	987.53	946.78	0.890	0.462	0.303
237.78	1902.22	910.22	920.63	0.0	9.25	987.53	946.78	0.890	0.462	0.303
190.22	1902.22	910.22	920.63	0.0	9.25	987.53	946.78	0.890	0.462	0.303
142.67	1902.22	910.22	920.63	0.0	9.25	987.53	946.78	0.890	0.462	0.303
95.11	1902.22	910.22	920.63	0.0	9.25	987.53	946.78	0.890	0.462	0.303
47.56	1902.22	910.22	920.63	0.0	9.25	987.53	946.78	0.890	0.462	0.303
0.0	2.663e+04	594.20	1064.83	0.0	99.25	0.0	0.0	0.0	0.0	0.0
Risulta	7.677e+05									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	1.626	0.615	0.249	6.412e+05	83.5	368.34	4.80e-02	330.44	4.30e-02	0.0	0.0
2	2.045	0.489	0.296	804.10	0.1	6.600e+05	86.0	1327.96	0.2	0.0	0.0
3	2.546	0.393	0.296	2083.77	0.3	1802.15	0.2	20.95	2.73e-03	0.0	0.0
4	4.512	0.222	0.296	1165.35	0.2	7952.08	1.0	7.188e+05	93.6	0.0	0.0
5	5.253	0.190	0.296	4.779e+04	6.2	3.792e+04	4.9	6080.03	0.8	0.0	0.0
6	5.445	0.184	0.296	3.197e+04	4.2	2.856e+04	3.7	3.229e+04	4.2	0.0	0.0
7	6.297	0.159	0.299	1.852e+04	2.4	301.15	3.92e-02	4696.81	0.6	0.0	0.0
8	8.071	0.124	0.307	1.471e+04	1.9	3192.57	0.4	2497.23	0.3	0.0	0.0
9	8.129	0.123	0.307	2961.82	0.4	2.339e+04	3.0	973.00	0.1	0.0	0.0
Risulta				7.612e+05		7.635e+05		7.671e+05			
In percentuale				99.15		99.45		99.92			

CDC	Tipo	Sigla Id	Note
7	Edk	CDC=Ed (dinamico SLU) alfa=90.00 (ecc. +)	
			categoria suolo: B
			fattore di sito S = 1.104
			ordinata spettro (tratto Tb-Tc) = 0.296 g
			angolo di ingresso:90.00

CDC	Tipo	Sigla Id	Note
			eccentricità aggiuntiva: positiva
			periodo proprio T1: 0.489 sec.
			fattore q: 2.760
			fattore per spost. mu d: 2.863
			classe di duttilità CD: B
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
1200.00	3.455e+04	873.75	890.43	29.13	0.0	873.75	890.43	2.022	0.0	0.0
835.00	3.167e+05	481.50	854.61	58.25	0.0	728.98	932.62	0.500	0.358	0.166
789.78	1808.89	910.22	920.63	12.87	0.0	987.53	946.78	0.890	0.462	0.303
744.56	1808.89	910.22	920.63	12.87	0.0	987.53	946.78	0.890	0.462	0.303
699.33	1808.89	910.22	920.63	12.87	0.0	987.53	946.78	0.890	0.462	0.303
654.11	1808.89	910.22	920.63	12.87	0.0	987.53	946.78	0.890	0.462	0.303
608.89	1808.89	910.22	920.63	12.87	0.0	987.53	946.78	0.890	0.462	0.303
563.67	1808.89	910.22	920.63	12.87	0.0	987.53	946.78	0.890	0.462	0.303
518.44	1808.89	910.22	920.63	12.87	0.0	987.53	946.78	0.890	0.462	0.303
473.22	1808.89	910.22	920.63	12.87	0.0	987.53	946.78	0.890	0.462	0.303
428.00	3.600e+05	544.43	998.02	58.25	0.0	758.05	964.08	0.566	0.296	0.068
380.44	1902.22	910.22	920.63	12.87	0.0	987.53	946.78	0.890	0.462	0.303
332.89	1902.22	910.22	920.63	12.87	0.0	987.53	946.78	0.890	0.462	0.303
285.33	1902.22	910.22	920.63	12.87	0.0	987.53	946.78	0.890	0.462	0.303
237.78	1902.22	910.22	920.63	12.87	0.0	987.53	946.78	0.890	0.462	0.303
190.22	1902.22	910.22	920.63	12.87	0.0	987.53	946.78	0.890	0.462	0.303
142.67	1902.22	910.22	920.63	12.87	0.0	987.53	946.78	0.890	0.462	0.303
95.11	1902.22	910.22	920.63	12.87	0.0	987.53	946.78	0.890	0.462	0.303
47.56	1902.22	910.22	920.63	12.87	0.0	987.53	946.78	0.890	0.462	0.303
0.0	2.663e+04	594.20	1064.83	58.25	0.0	0.0	0.0	0.0	0.0	0.0
Risulta	7.677e+05									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	1.613	0.620	0.247	6.341e+05	82.6	62.14	8.10e-03	306.61	3.99e-02	0.0	0.0
2	2.044	0.489	0.296	49.60	6.46e-03	6.574e+05	85.6	1207.60	0.2	0.0	0.0
3	2.540	0.394	0.296	9407.03	1.2	4176.87	0.5	358.59	4.67e-02	0.0	0.0
4	4.511	0.222	0.296	1009.47	0.1	8521.65	1.1	7.144e+05	93.1	0.0	0.0
5	5.180	0.193	0.296	4.162e+04	5.4	3.720e+04	4.8	1.326e+04	1.7	0.0	0.0
6	5.431	0.184	0.296	3.767e+04	4.9	2.265e+04	3.0	3.120e+04	4.1	0.0	0.0
7	6.597	0.152	0.301	1.541e+04	2.0	7667.34	1.0	2364.15	0.3	0.0	0.0
8	7.372	0.136	0.304	1.705e+04	2.2	1.594e+04	2.1	147.05	1.92e-02	0.0	0.0
9	8.456	0.118	0.308	5279.48	0.7	9231.88	1.2	3975.29	0.5	0.0	0.0
Risulta				7.616e+05		7.629e+05		7.673e+05			
In percentuale				99.21		99.38		99.95			

CDC	Tipo	Sigla Id	Note
8	Edk	CDC=Ed (dinamico SLU) alfa=90.00 (ecc. -)	
			categoria suolo: B
			fattore di sito S = 1.104
			ordinata spettro (tratto Tb-Tc) = 0.296 g
			angolo di ingresso:90.00
			eccentricità aggiuntiva: negativa
			periodo proprio T1: 0.493 sec.
			fattore q: 2.760
			fattore per spost. mu d: 2.849
			classe di duttilità CD: B
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
1200.00	3.455e+04	873.75	890.43	-29.13	0.0	873.75	890.43	2.022	0.0	0.0
835.00	3.167e+05	481.50	854.61	-58.25	0.0	728.98	932.62	0.500	0.358	0.166
789.78	1808.89	910.22	920.63	-12.87	0.0	987.53	946.78	0.890	0.462	0.303
744.56	1808.89	910.22	920.63	-12.87	0.0	987.53	946.78	0.890	0.462	0.303
699.33	1808.89	910.22	920.63	-12.87	0.0	987.53	946.78	0.890	0.462	0.303
654.11	1808.89	910.22	920.63	-12.87	0.0	987.53	946.78	0.890	0.462	0.303
608.89	1808.89	910.22	920.63	-12.87	0.0	987.53	946.78	0.890	0.462	0.303
563.67	1808.89	910.22	920.63	-12.87	0.0	987.53	946.78	0.890	0.462	0.303
518.44	1808.89	910.22	920.63	-12.87	0.0	987.53	946.78	0.890	0.462	0.303
473.22	1808.89	910.22	920.63	-12.87	0.0	987.53	946.78	0.890	0.462	0.303
428.00	3.600e+05	544.43	998.02	-58.25	0.0	758.05	964.08	0.566	0.296	0.068
380.44	1902.22	910.22	920.63	-12.87	0.0	987.53	946.78	0.890	0.462	0.303
332.89	1902.22	910.22	920.63	-12.87	0.0	987.53	946.78	0.890	0.462	0.303
285.33	1902.22	910.22	920.63	-12.87	0.0	987.53	946.78	0.890	0.462	0.303
237.78	1902.22	910.22	920.63	-12.87	0.0	987.53	946.78	0.890	0.462	0.303
190.22	1902.22	910.22	920.63	-12.87	0.0	987.53	946.78	0.890	0.462	0.303
142.67	1902.22	910.22	920.63	-12.87	0.0	987.53	946.78	0.890	0.462	0.303
95.11	1902.22	910.22	920.63	-12.87	0.0	987.53	946.78	0.890	0.462	0.303
47.56	1902.22	910.22	920.63	-12.87	0.0	987.53	946.78	0.890	0.462	0.303
0.0	2.663e+04	594.20	1064.83	-58.25	0.0	0.0	0.0	0.0	0.0	0.0
Risulta	7.677e+05									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	1.612	0.620	0.247	6.318e+05	82.3	1721.69	0.2	278.72	3.63e-02	0.0	0.0
2	2.029	0.493	0.296	3829.58	0.5	6.449e+05	84.0	1381.94	0.2	0.0	0.0
3	2.577	0.388	0.296	8098.99	1.1	1.603e+04	2.1	1.47	1.91e-04	0.0	0.0
4	4.510	0.222	0.296	1179.62	0.2	7668.14	1.0	7.172e+05	93.4	0.0	0.0
5	5.436	0.184	0.296	1.229e+04	1.6	4.321e+04	5.6	3.979e+04	5.2	0.0	0.0
6	5.499	0.182	0.296	7.889e+04	10.3	2.709e+04	3.5	879.22	0.1	0.0	0.0
7	5.604	0.178	0.296	8662.47	1.1	2081.64	0.3	3709.87	0.5	0.0	0.0
8	7.868	0.127	0.306	1.269e+04	1.7	1.696e+04	2.2	625.35	8.15e-02	0.0	0.0
9	9.074	0.110	0.310	2405.30	0.3	1539.13	0.2	3516.34	0.5	0.0	0.0
Risulta				7.599e+05		7.612e+05		7.674e+05			
In percentuale				98.98		99.16		99.96			

CDC	Tipo	Sigla Id	Note
9	Edk	CDC=Ed (dinamico SLD) alfa=0.0 (ecc. +)	
			categoria suolo: B
			fattore di sito S = 1.200
			ordinata spettro (tratto Tb-Tc) = 0.302 g
			angolo di ingresso:0.0
			eccentricità aggiuntiva: positiva
			periodo proprio T1: 0.631 sec.
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
1200.00	3.455e+04	873.75	890.43	0.0	-25.54	873.75	890.43	2.022	0.0	0.0
835.00	3.167e+05	481.50	854.61	0.0	-99.25	728.98	932.62	0.500	0.358	0.166
789.78	1808.89	910.22	920.63	0.0	-9.25	987.53	946.78	0.890	0.462	0.303
744.56	1808.89	910.22	920.63	0.0	-9.25	987.53	946.78	0.890	0.462	0.303
699.33	1808.89	910.22	920.63	0.0	-9.25	987.53	946.78	0.890	0.462	0.303
654.11	1808.89	910.22	920.63	0.0	-9.25	987.53	946.78	0.890	0.462	0.303
608.89	1808.89	910.22	920.63	0.0	-9.25	987.53	946.78	0.890	0.462	0.303
563.67	1808.89	910.22	920.63	0.0	-9.25	987.53	946.78	0.890	0.462	0.303
518.44	1808.89	910.22	920.63	0.0	-9.25	987.53	946.78	0.890	0.462	0.303

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
473.22	1808.89	910.22	920.63	0.0	-9.25	987.53	946.78	0.890	0.462	0.303
428.00	3.600e+05	544.43	998.02	0.0	-99.25	758.05	964.08	0.566	0.296	0.068
380.44	1902.22	910.22	920.63	0.0	-9.25	987.53	946.78	0.890	0.462	0.303
332.89	1902.22	910.22	920.63	0.0	-9.25	987.53	946.78	0.890	0.462	0.303
285.33	1902.22	910.22	920.63	0.0	-9.25	987.53	946.78	0.890	0.462	0.303
237.78	1902.22	910.22	920.63	0.0	-9.25	987.53	946.78	0.890	0.462	0.303
190.22	1902.22	910.22	920.63	0.0	-9.25	987.53	946.78	0.890	0.462	0.303
142.67	1902.22	910.22	920.63	0.0	-9.25	987.53	946.78	0.890	0.462	0.303
95.11	1902.22	910.22	920.63	0.0	-9.25	987.53	946.78	0.890	0.462	0.303
47.56	1902.22	910.22	920.63	0.0	-9.25	987.53	946.78	0.890	0.462	0.303
0.0	2.663e+04	594.20	1064.83	0.0	-99.25	0.0	0.0	0.0	0.0	0.0
Risulta	7.677e+05									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	1.585	0.631	0.212	6.237e+05	81.2	738.60	9.62e-02	249.48	3.25e-02	0.0	0.0
2	2.046	0.489	0.273	1402.49	0.2	6.607e+05	86.1	1357.44	0.2	0.0	0.0
3	2.599	0.385	0.302	1.780e+04	2.3	686.34	8.94e-02	239.28	3.12e-02	0.0	0.0
4	4.511	0.222	0.302	1046.40	0.1	8334.44	1.1	7.157e+05	93.2	0.0	0.0
5	5.244	0.191	0.302	3.869e+04	5.0	4.330e+04	5.6	1.271e+04	1.7	0.0	0.0
6	5.431	0.184	0.302	4.170e+04	5.4	1.947e+04	2.5	2.987e+04	3.9	0.0	0.0
7	6.344	0.158	0.302	2.210e+04	2.9	2347.94	0.3	3061.87	0.4	0.0	0.0
8	7.866	0.127	0.279	5109.67	0.7	2.232e+04	2.9	85.37	1.11e-02	0.0	0.0
9	8.402	0.119	0.270	9688.91	1.3	5534.97	0.7	3982.48	0.5	0.0	0.0
Risulta				7.612e+05		7.634e+05		7.672e+05			
In percentuale				99.16		99.45		99.94			

CDC	Tipo	Sigla Id	Note
10	Edk	CDC=Ed (dinamico SLD) alfa=0.0 (ecc. -)	
			categoria suolo: B
			fattore di sito S = 1.200
			ordinata spettro (tratto Tb-Tc) = 0.302 g
			angolo di ingresso:0.0
			eccentricità aggiuntiva: negativa
			periodo proprio T1: 0.615 sec.
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
1200.00	3.455e+04	873.75	890.43	0.0	25.54	873.75	890.43	2.022	0.0	0.0
835.00	3.167e+05	481.50	854.61	0.0	99.25	728.98	932.62	0.500	0.358	0.166
789.78	1808.89	910.22	920.63	0.0	9.25	987.53	946.78	0.890	0.462	0.303
744.56	1808.89	910.22	920.63	0.0	9.25	987.53	946.78	0.890	0.462	0.303
699.33	1808.89	910.22	920.63	0.0	9.25	987.53	946.78	0.890	0.462	0.303
654.11	1808.89	910.22	920.63	0.0	9.25	987.53	946.78	0.890	0.462	0.303
608.89	1808.89	910.22	920.63	0.0	9.25	987.53	946.78	0.890	0.462	0.303
563.67	1808.89	910.22	920.63	0.0	9.25	987.53	946.78	0.890	0.462	0.303
518.44	1808.89	910.22	920.63	0.0	9.25	987.53	946.78	0.890	0.462	0.303
473.22	1808.89	910.22	920.63	0.0	9.25	987.53	946.78	0.890	0.462	0.303
428.00	3.600e+05	544.43	998.02	0.0	99.25	758.05	964.08	0.566	0.296	0.068
380.44	1902.22	910.22	920.63	0.0	9.25	987.53	946.78	0.890	0.462	0.303
332.89	1902.22	910.22	920.63	0.0	9.25	987.53	946.78	0.890	0.462	0.303
285.33	1902.22	910.22	920.63	0.0	9.25	987.53	946.78	0.890	0.462	0.303
237.78	1902.22	910.22	920.63	0.0	9.25	987.53	946.78	0.890	0.462	0.303
190.22	1902.22	910.22	920.63	0.0	9.25	987.53	946.78	0.890	0.462	0.303
142.67	1902.22	910.22	920.63	0.0	9.25	987.53	946.78	0.890	0.462	0.303
95.11	1902.22	910.22	920.63	0.0	9.25	987.53	946.78	0.890	0.462	0.303
47.56	1902.22	910.22	920.63	0.0	9.25	987.53	946.78	0.890	0.462	0.303
0.0	2.663e+04	594.20	1064.83	0.0	99.25	0.0	0.0	0.0	0.0	0.0
Risulta	7.677e+05									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	1.626	0.615	0.217	6.412e+05	83.5	368.34	4.80e-02	330.44	4.30e-02	0.0	0.0
2	2.045	0.489	0.273	804.10	0.1	6.600e+05	86.0	1327.96	0.2	0.0	0.0
3	2.546	0.393	0.302	2083.77	0.3	1802.15	0.2	20.95	2.73e-03	0.0	0.0
4	4.512	0.222	0.302	1165.35	0.2	7952.08	1.0	7.188e+05	93.6	0.0	0.0
5	5.253	0.190	0.302	4.779e+04	6.2	3.792e+04	4.9	6080.03	0.8	0.0	0.0
6	5.445	0.184	0.302	3.197e+04	4.2	2.856e+04	3.7	3.229e+04	4.2	0.0	0.0
7	6.297	0.159	0.302	1.852e+04	2.4	301.15	3.92e-02	4696.81	0.6	0.0	0.0
8	8.071	0.124	0.275	1.471e+04	1.9	3192.57	0.4	2497.23	0.3	0.0	0.0
9	8.129	0.123	0.274	2961.82	0.4	2.339e+04	3.0	973.00	0.1	0.0	0.0
Risulta				7.612e+05		7.635e+05		7.671e+05			
In percentuale				99.15		99.45		99.92			

CDC	Tipo	Sigla Id	Note
11	Edk	CDC=Ed (dinamico SLD) alfa=90.00 (ecc. +)	
			categoria suolo: B
			fattore di sito S = 1.200
			ordinata spettro (tratto Tb-Tc) = 0.302 g
			angolo di ingresso:90.00
			eccentricità aggiuntiva: positiva
			periodo proprio T1: 0.489 sec.
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
1200.00	3.455e+04	873.75	890.43	29.13	0.0	873.75	890.43	2.022	0.0	0.0
835.00	3.167e+05	481.50	854.61	58.25	0.0	728.98	932.62	0.500	0.358	0.166
789.78	1808.89	910.22	920.63	12.87	0.0	987.53	946.78	0.890	0.462	0.303
744.56	1808.89	910.22	920.63	12.87	0.0	987.53	946.78	0.890	0.462	0.303
699.33	1808.89	910.22	920.63	12.87	0.0	987.53	946.78	0.890	0.462	0.303
654.11	1808.89	910.22	920.63	12.87	0.0	987.53	946.78	0.890	0.462	0.303
608.89	1808.89	910.22	920.63	12.87	0.0	987.53	946.78	0.890	0.462	0.303
563.67	1808.89	910.22	920.63	12.87	0.0	987.53	946.78	0.890	0.462	0.303
518.44	1808.89	910.22	920.63	12.87	0.0	987.53	946.78	0.890	0.462	0.303
473.22	1808.89	910.22	920.63	12.87	0.0	987.53	946.78	0.890	0.462	0.303
428.00	3.600e+05	544.43	998.02	58.25	0.0	758.05	964.08	0.566	0.296	0.068
380.44	1902.22	910.22	920.63	12.87	0.0	987.53	946.78	0.890	0.462	0.303
332.89	1902.22	910.22	920.63	12.87	0.0	987.53	946.78	0.890	0.462	0.303
285.33	1902.22	910.22	920.63	12.87	0.0	987.53	946.78	0.890	0.462	0.303
237.78	1902.22	910.22	920.63	12.87	0.0	987.53	946.78	0.890	0.462	0.303
190.22	1902.22	910.22	920.63	12.87	0.0	987.53	946.78	0.890	0.462	0.303
142.67	1902.22	910.22	920.63	12.87	0.0	987.53	946.78	0.890	0.462	0.303
95.11	1902.22	910.22	920.63	12.87	0.0	987.53	946.78	0.890	0.462	0.303
47.56	1902.22	910.22	920.63	12.87	0.0	987.53	946.78	0.890	0.462	0.303
0.0	2.663e+04	594.20	1064.83	58.25	0.0	0.0	0.0	0.0	0.0	0.0
Risulta	7.677e+05									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	1.613	0.620	0.216	6.341e+05	82.6	62.14	8.10e-03	306.61	3.99e-02	0.0	0.0
2	2.044	0.489	0.273	49.60	6.46e-03	6.574e+05	85.6	1207.60	0.2	0.0	0.0
3	2.540	0.394	0.302	9407.03	1.2	4176.87	0.5	358.59	4.67e-02	0.0	0.0
4	4.511	0.222	0.302	1009.47	0.1	8521.65	1.1	7.144e+05	93.1	0.0	0.0
5	5.180	0.193	0.302	4.162e+04	5.4	3.720e+04	4.8	1.326e+04	1.7	0.0	0.0
6	5.431	0.184	0.302	3.767e+04	4.9	2.265e+04	3.0	3.120e+04	4.1	0.0	0.0

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
7	6.597	0.152	0.302	1.541e+04	2.0	7667.34	1.0	2364.15	0.3	0.0	0.0
8	7.372	0.136	0.289	1.705e+04	2.2	1.594e+04	2.1	147.05	1.92e-02	0.0	0.0
9	8.456	0.118	0.269	5279.48	0.7	9231.88	1.2	3975.29	0.5	0.0	0.0
Risulta				7.616e+05		7.629e+05		7.673e+05			
In percentuale				99.21		99.38		99.95			

CDC	Tipo	Sigla Id	Note
12	Edk	CDC=Ed (dinamico SLD) alfa=90.00 (ecc. -)	
			categoria suolo: B
			fattore di sito S = 1.200
			ordinata spettro (tratto Tb-Tc) = 0.302 g
			angolo di ingresso:90.00
			eccentricità aggiuntiva: negativa
			periodo proprio T1: 0.493 sec.
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
1200.00	3.455e+04	873.75	890.43	-29.13	0.0	873.75	890.43	2.022	0.0	0.0
835.00	3.167e+05	481.50	854.61	-58.25	0.0	728.98	932.62	0.500	0.358	0.166
789.78	1808.89	910.22	920.63	-12.87	0.0	987.53	946.78	0.890	0.462	0.303
744.56	1808.89	910.22	920.63	-12.87	0.0	987.53	946.78	0.890	0.462	0.303
699.33	1808.89	910.22	920.63	-12.87	0.0	987.53	946.78	0.890	0.462	0.303
654.11	1808.89	910.22	920.63	-12.87	0.0	987.53	946.78	0.890	0.462	0.303
608.89	1808.89	910.22	920.63	-12.87	0.0	987.53	946.78	0.890	0.462	0.303
563.67	1808.89	910.22	920.63	-12.87	0.0	987.53	946.78	0.890	0.462	0.303
518.44	1808.89	910.22	920.63	-12.87	0.0	987.53	946.78	0.890	0.462	0.303
473.22	1808.89	910.22	920.63	-12.87	0.0	987.53	946.78	0.890	0.462	0.303
428.00	3.600e+05	544.43	998.02	-58.25	0.0	758.05	964.08	0.566	0.296	0.068
380.44	1902.22	910.22	920.63	-12.87	0.0	987.53	946.78	0.890	0.462	0.303
332.89	1902.22	910.22	920.63	-12.87	0.0	987.53	946.78	0.890	0.462	0.303
285.33	1902.22	910.22	920.63	-12.87	0.0	987.53	946.78	0.890	0.462	0.303
237.78	1902.22	910.22	920.63	-12.87	0.0	987.53	946.78	0.890	0.462	0.303
190.22	1902.22	910.22	920.63	-12.87	0.0	987.53	946.78	0.890	0.462	0.303
142.67	1902.22	910.22	920.63	-12.87	0.0	987.53	946.78	0.890	0.462	0.303
95.11	1902.22	910.22	920.63	-12.87	0.0	987.53	946.78	0.890	0.462	0.303
47.56	1902.22	910.22	920.63	-12.87	0.0	987.53	946.78	0.890	0.462	0.303
0.0	2.663e+04	594.20	1064.83	-58.25	0.0	0.0	0.0	0.0	0.0	0.0
Risulta	7.677e+05									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	1.612	0.620	0.215	6.318e+05	82.3	1721.69	0.2	278.72	3.63e-02	0.0	0.0
2	2.029	0.493	0.271	3829.58	0.5	6.449e+05	84.0	1381.94	0.2	0.0	0.0
3	2.577	0.388	0.302	8098.99	1.1	1.603e+04	2.1	1.47	1.91e-04	0.0	0.0
4	4.510	0.222	0.302	1179.62	0.2	7668.14	1.0	7.172e+05	93.4	0.0	0.0
5	5.436	0.184	0.302	1.229e+04	1.6	4.321e+04	5.6	3.979e+04	5.2	0.0	0.0
6	5.499	0.182	0.302	7.889e+04	10.3	2.709e+04	3.5	879.22	0.1	0.0	0.0
7	5.604	0.178	0.302	8662.47	1.1	2081.64	0.3	3709.87	0.5	0.0	0.0
8	7.868	0.127	0.279	1.269e+04	1.7	1.696e+04	2.2	625.35	8.15e-02	0.0	0.0
9	9.074	0.110	0.259	2405.30	0.3	1539.13	0.2	3516.34	0.5	0.0	0.0
Risulta				7.599e+05		7.612e+05		7.674e+05			
In percentuale				98.98		99.16		99.96			

Cmb	Pilas.	1000 etaT/h	etaT	inter. h	Pilas.	1000 etaT/h	etaT	inter. h	Pilas.	1000 etaT/h	etaT	inter. h

			cm	cm			cm	cm			cm	cm
37	4	1.45	0.59	407.0	6	2.47	1.01	407.0	8	1.99	0.81	407.0
	9	1.37	0.50	365.0	10	1.27	0.46	365.0	12	1.92	0.78	407.0
	18	1.35	0.49	365.0	29	2.20	0.89	407.0	30	1.23	0.45	365.0
	33	2.33	1.00	428.0	34	2.43	0.99	407.0	35	2.06	0.88	428.0
	36	2.22	0.90	407.0	37	1.66	0.68	407.0	39	2.30	0.98	428.0
	41	2.07	0.89	428.0	42	1.80	0.77	428.0	43	1.55	0.66	428.0
	44	1.29	0.55	428.0	48	2.44	0.99	407.0	49	2.33	1.00	428.0
	51	2.09	0.89	428.0	52	1.81	0.78	428.0	53	1.56	0.67	428.0
	54	1.32	0.56	428.0	55	1.76	0.75	428.0	56	1.57	0.67	428.0
	57	1.32	0.56	428.0	59	2.15	0.88	407.0	60	1.91	0.78	407.0
	61	1.67	0.68	407.0	62	1.44	0.59	407.0				
38	4	1.71	0.69	407.0	6	2.37	0.96	407.0	8	2.02	0.82	407.0
	9	1.69	0.62	365.0	10	1.33	0.49	365.0	12	2.04	0.83	407.0
	18	1.75	0.64	365.0	29	2.18	0.89	407.0	30	1.39	0.51	365.0
	33	2.38	1.02	428.0	34	2.45	1.00	407.0	35	2.20	0.94	428.0
	36	2.15	0.88	407.0	37	1.86	0.76	407.0	39	2.46	1.05	428.0
	41	2.32	0.99	428.0	42	2.11	0.90	428.0	43	1.92	0.82	428.0
	44	1.72	0.74	428.0	48	2.52	1.03	407.0	49	2.24	0.96	428.0
	51	2.08	0.89	428.0	52	1.83	0.78	428.0	53	1.62	0.69	428.0
	54	1.41	0.60	428.0	55	1.94	0.83	428.0	56	1.73	0.74	428.0
	57	1.53	0.65	428.0	59	2.34	0.95	407.0	60	2.18	0.89	407.0
	61	2.03	0.82	407.0	62	1.87	0.76	407.0				
39	4	2.09	0.85	407.0	6	2.65	1.08	407.0	8	2.34	0.95	407.0
	9	1.91	0.70	365.0	10	1.81	0.66	365.0	12	2.36	0.96	407.0
	18	1.97	0.72	365.0	29	2.52	1.02	407.0	30	1.88	0.69	365.0
	33	2.69	1.15	428.0	34	2.66	1.08	407.0	35	2.57	1.10	428.0
	36	2.52	1.02	407.0	37	2.22	0.90	407.0	39	2.69	1.15	428.0
	41	2.55	1.09	428.0	42	2.38	1.02	428.0	43	2.19	0.94	428.0
	44	2.00	0.86	428.0	48	2.68	1.09	407.0	49	2.65	1.14	428.0
	51	2.54	1.09	428.0	52	2.37	1.01	428.0	53	2.18	0.93	428.0
	54	1.96	0.84	428.0	55	2.42	1.03	428.0	56	2.19	0.94	428.0
	57	1.97	0.84	428.0	59	2.52	1.02	407.0	60	2.36	0.96	407.0
	61	2.21	0.90	407.0	62	2.10	0.85	407.0				
40	4	2.10	0.85	407.0	6	2.92	1.19	407.0	8	2.51	1.02	407.0
	9	1.88	0.69	365.0	10	2.02	0.74	365.0	12	2.46	1.00	407.0
	18	1.85	0.68	365.0	29	2.72	1.11	407.0	30	2.00	0.73	365.0
	33	2.82	1.21	428.0	34	2.83	1.15	407.0	35	2.67	1.14	428.0
	36	2.77	1.13	407.0	37	2.28	0.93	407.0	39	2.74	1.17	428.0
	41	2.57	1.10	428.0	42	2.35	1.01	428.0	43	2.13	0.91	428.0
	44	1.91	0.82	428.0	48	2.80	1.14	407.0	49	2.90	1.24	428.0
	51	2.75	1.18	428.0	52	2.53	1.08	428.0	53	2.32	0.99	428.0
	54	2.11	0.90	428.0	55	2.46	1.05	428.0	56	2.27	0.97	428.0
	57	2.05	0.88	428.0	59	2.55	1.04	407.0	60	2.34	0.95	407.0
	61	2.13	0.87	407.0	62	1.97	0.80	407.0				
41	4	1.65	0.67	407.0	6	2.34	0.95	407.0	8	2.05	0.83	407.0
	9	1.32	0.48	365.0	10	1.20	0.44	365.0	12	2.00	0.82	407.0
	18	1.42	0.52	365.0	29	2.13	0.87	407.0	30	1.30	0.47	365.0
	33	2.22	0.95	428.0	34	2.32	0.94	407.0	35	2.02	0.87	428.0
...												
68	61	2.26	0.92	407.0	62	2.32	0.94	407.0	60	2.20	0.90	407.0
Cmb		**1000 etaT/h**										
		2.92										

RISULTATI NODALI

LEGENDA RISULTATI NODALI

Il controllo dei risultati delle analisi condotte, per quanto concerne i nodi strutturali, è possibile in relazione alle tabelle sottoriportate.

Una prima tabella riporta infatti per ogni nodo e per ogni combinazione (o caso di carico) gli spostamenti nodali.

Una seconda tabella riporta per ogni nodo a cui sia associato un vincolo rigido e/o elastico o una fondazione speciale e per ogni combinazione (o caso di carico) i valori delle azioni esercitate dalla struttura sui vincoli (reazioni vincolari cambiate di segno).

Una terza tabella, infine riassume per ogni nodo le sei combinazioni in cui si attingono i valori minimi e massimi della reazione Fz, della reazione Mx e della reazione My.

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
		cm	cm	cm			
1	2	-0.27	-0.32	-2.69	4.67e-04	-4.11e-04	1.08e-04
1	11	-2.92	0.23	-1.92	-1.02e-04	-1.94e-03	-7.28e-04
1	24	-1.07	-2.18	-2.26	1.55e-03	-8.37e-04	-3.51e-04
1	28	-1.05	-2.13	-2.26	1.55e-03	-8.49e-04	-1.93e-04
1	43	-2.57	0.20	-1.93	-6.75e-05	-1.74e-03	-6.49e-04
1	56	-0.96	-2.03	-2.24	1.46e-03	-7.75e-04	-3.18e-04
1	60	-0.94	-1.98	-2.24	1.46e-03	-7.84e-04	-1.79e-04
1	70	-0.21	-0.24	-2.04	3.53e-04	-3.06e-04	8.17e-05
1	72	-0.19	-0.23	-1.99	3.41e-04	-2.86e-04	7.87e-05
1	74	-0.19	-0.23	-1.98	3.36e-04	-2.80e-04	7.77e-05
2	2	-0.44	-0.44	-2.51	3.30e-04	-4.21e-04	3.29e-05
2	11	-3.70	-0.07	-1.13	2.62e-05	-1.69e-03	-7.77e-04
2	14	2.95	-1.19	-2.64	6.76e-04	1.12e-03	-1.82e-04
2	24	-1.41	-2.95	-1.95	1.40e-03	-7.72e-04	-4.75e-04
2	43	-3.26	-0.09	-1.21	4.87e-05	-1.51e-03	-7.05e-04
2	46	2.53	-1.12	-2.54	6.44e-04	9.39e-04	-1.79e-04
2	56	-1.28	-2.75	-1.95	1.32e-03	-7.21e-04	-4.38e-04
2	70	-0.33	-0.33	-1.91	2.52e-04	-3.13e-04	2.50e-05
2	72	-0.31	-0.32	-1.87	2.48e-04	-2.94e-04	2.44e-05
2	74	-0.30	-0.32	-1.86	2.47e-04	-2.87e-04	2.43e-05
3	2	-0.26	-0.35	-2.75	3.74e-04	3.78e-04	-6.57e-05
3	11	-2.91	0.80	-2.56	-1.89e-04	-1.50e-03	-7.35e-04
3	20	-2.76	-0.76	-2.78	7.04e-04	-1.46e-03	1.81e-04
3	30	0.77	-2.47	-2.14	1.52e-03	9.26e-04	5.69e-04
3	43	-2.56	0.70	-2.48	-1.53e-04	-1.28e-03	-6.72e-04
3	52	-2.43	-0.71	-2.69	6.71e-04	-1.24e-03	1.74e-04
3	62	0.65	-2.28	-2.14	1.42e-03	8.47e-04	5.26e-04
3	70	-0.20	-0.26	-2.09	2.84e-04	2.88e-04	-4.90e-05
3	72	-0.19	-0.25	-2.04	2.76e-04	2.83e-04	-4.61e-05
3	74	-0.18	-0.25	-2.02	2.74e-04	2.82e-04	-4.52e-05
4	2	-0.28	-0.29	-2.51	4.46e-04	-5.60e-04	7.80e-05
4	11	-2.93	-0.05	-1.12	8.11e-05	-2.32e-03	-6.72e-04
4	14	2.41	-0.90	-2.63	8.46e-04	1.49e-03	-1.06e-04
4	24	-1.08	-2.34	-1.94	1.72e-03	-1.04e-03	-3.48e-04
4	43	-2.58	-0.06	-1.21	1.07e-04	-2.08e-03	-6.05e-04
4	46	2.07	-0.85	-2.54	8.03e-04	1.25e-03	-1.04e-04
4	56	-0.97	-2.17	-1.95	1.61e-03	-9.68e-04	-3.18e-04
4	70	-0.21	-0.22	-1.91	3.37e-04	-4.20e-04	5.95e-05
4	72	-0.20	-0.21	-1.87	3.24e-04	-4.00e-04	5.84e-05
4	74	-0.19	-0.21	-1.86	3.20e-04	-3.93e-04	5.81e-05
5	2	-0.29	-0.34	-2.66	3.02e-04	2.51e-04	-5.12e-05
5	19	-2.70	0.51	-2.65	-2.43e-04	-1.52e-03	-2.96e-04
5	20	-2.86	-0.75	-2.60	4.78e-04	-1.63e-03	-2.77e-05
5	30	0.24	-2.47	-1.69	1.48e-03	4.92e-04	6.08e-04
5	51	-2.37	0.44	-2.56	-2.03e-04	-1.30e-03	-2.82e-04
5	52	-2.52	-0.71	-2.52	4.60e-04	-1.40e-03	-2.95e-05
5	62	0.17	-2.28	-1.72	1.37e-03	4.46e-04	5.61e-04
5	70	-0.22	-0.26	-2.02	2.28e-04	1.92e-04	-3.82e-05

...

5241	74	-0.02	-2.62e-04	-1.79	1.90e-04	-4.44e-04	0.0
Nodo		**Traslazione X**	**Traslazione Y**	**Traslazione Z**	**Rotazione X**	**Rotazione Y**	**Rotazione Z**
		-3.71	-2.95	-3.44	-1.27e-03	-3.18e-03	-7.86e-04
		3.06	2.04	-5.59e-04	2.09e-03	2.58e-03	7.90e-04

Nodo	**Cmb**	**Azione X**	**Azione Y**	**Azione Z**	**Azione RX**	**Azione RY**	**Azione RZ**
		daN	daN	daN	daN cm	daN cm	daN cm

Nodo	**Azione X**	**Azione Y**	**Azione Z**	**Azione RX**	**Azione RY**	**Azione RZ**

Nodo	**Cmb**	**Azione X**	**Azione Y**	**Azione Z**	**Azione RX**	**Azione RY**	**Azione RZ**
		daN	daN	daN	daN cm	daN cm	daN cm

RISULTATI OPERE DI FONDAZIONE

LEGENDA RISULTATI OPERE DI FONDAZIONE

Il controllo dei risultati delle analisi condotte, per quanto concerne le opere di fondazione, è possibile in relazione alle tabelle sotto riportate.

La prima tabella è riferita alle fondazioni tipo palo e plinto su pali.
Per questo tipo di fondazione vengono riportate le sei componenti di sollecitazione (espresse nel riferimento globale della struttura) per ogni palo componente l'opera.
In particolare viene riportato:

Nodo	numero del nodo a cui è applicato il plinto
Tipo	codice corrispondente al nome assegnato al tipo di plinto di fondazione: 3) palo singolo (*PALO*) 4) plinto su palo 5) plinto su due pali (*PL.2P*) 6) plinto su tre pali (*PL.3P*) 7) plinto su quattro pali (*PL.4P*) 8) plinto rettangolare su cinque pali (*PL.5P.R*) 9) plinto pentagonale su cinque pali (*PL.5P*) 10) plinto su sei pali (*PL.6P*)
Palo	numero del palo
Comb.	combinazione di carico in cui si verificano le sei componenti di sollecitazione.
Quota	quota assoluta della sezione del palo per cui si riportano le sei componenti di sollecitazione.

L'azione Fz (corrispondente allo sforzo normale nel palo) è costante poiché il peso del palo stesso non è considerato nella modellazione.

La seconda tabella è riferita alle fondazioni tipo plinto su suolo elastico.
Per questo tipo di fondazione vengono riportate le pressioni nei quattro vertici dell'impronta sul terreno.
In particolare viene riportato:

Nodo		numero del nodo a cui è applicato il plinto
Tipo		Codice identificativo del nome assegnato al plinto
area		area dell'impronta del plinto
Wink O	**Wink V**	coefficienti di Winkler (orizzontale e verticale) adottati
Comb		Combinazione di carico in cui si verificano i valori riportati
Pt (P1 P2 P3 P4)		valori di pressione nei vertici

La terza tabella è riferita alle fondazioni tipo platea su suolo elastico.
Per questo tipo di fondazione vengono riportate le pressioni in ogni vertice (nodo) degli elementi costituenti la platea.

La quarta tabella è riferita alle fondazioni tipo trave su suolo elastico.
Per questo tipo di fondazione vengono riportate le pressioni alle estremità dell'elemento e la massima (in valore assoluto) pressione lungo lo sviluppo dell'elemento.
Vengono inoltre riportati, con funzione statistica, i valori massimo e minimo delle pressioni che compaiono nella tabella.

Nodo (G) **Pt 1/12** **Pt 2/13** **Pt 3...** **Pt 4...**

	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2
9	-0.26	-0.29	-0.28	-0.20	-0.19	-0.19					
10	-0.24	-0.27	-0.26	-0.18	-0.18	-0.18					
13	-0.25	-0.25	-0.24	-0.19	-0.19	-0.18					
14	-0.23	-0.24	-0.23	-0.17	-0.17	-0.17					
15	-0.24	-0.24	-0.23	-0.18	-0.18	-0.18					
16	-0.23	-0.17	-0.17	-0.17	-0.17	-0.17					
17	-0.21	-0.22	-0.21	-0.16	-0.15	-0.15					
18	-0.23	-0.25	-0.24	-0.18	-0.17	-0.17					
19	-0.21	-0.18	-0.18	-0.16	-0.15	-0.15					
20	-0.18	-0.20	-0.19	-0.13	-0.13	-0.13					
21	-0.22	-0.26	-0.25	-0.17	-0.16	-0.16					
22	-0.19	-0.20	-0.20	-0.14	-0.14	-0.14					
23	-0.16	-0.20	-0.19	-0.12	-0.12	-0.12					
29	-0.24	-0.20	-0.20	-0.18	-0.18	-0.18					
35	-0.25	-0.24	-0.24	-0.19	-0.19	-0.18					
48	-0.23	-0.18	-0.18	-0.17	-0.17	-0.17					
51	-0.23	-0.19	-0.19	-0.17	-0.17	-0.17					
69	-0.23	-0.19	-0.19	-0.17	-0.17	-0.17					
79	-0.22	-0.20	-0.19	-0.17	-0.17	-0.17					
89	-0.22	-0.20	-0.20	-0.17	-0.17	-0.16					
99	-0.22	-0.21	-0.20	-0.17	-0.16	-0.16					
109	-0.22	-0.21	-0.20	-0.17	-0.17	-0.16					
119	-0.22	-0.21	-0.20	-0.17	-0.17	-0.17					
129	-0.22	-0.21	-0.21	-0.17	-0.17	-0.17					
139	-0.23	-0.21	-0.21	-0.17	-0.17	-0.17					
149	-0.23	-0.21	-0.21	-0.17	-0.17	-0.17					
159	-0.23	-0.21	-0.21	-0.17	-0.17	-0.17					
169	-0.23	-0.21	-0.20	-0.17	-0.17	-0.17					
179	-0.23	-0.20	-0.20	-0.18	-0.17	-0.17					
189	-0.23	-0.20	-0.20	-0.18	-0.17	-0.17					
199	-0.23	-0.20	-0.19	-0.18	-0.17	-0.17					
352	-0.26	-0.28	-0.27	-0.20	-0.19	-0.19					
353	-0.26	-0.28	-0.27	-0.20	-0.19	-0.19					
354	-0.26	-0.28	-0.27	-0.20	-0.19	-0.19					
355	-0.26	-0.27	-0.26	-0.20	-0.19	-0.19					
356	-0.26	-0.27	-0.26	-0.20	-0.19	-0.19					
357	-0.26	-0.27	-0.26	-0.20	-0.19	-0.19					
358	-0.26	-0.26	-0.26	-0.20	-0.19	-0.19					
359	-0.26	-0.26	-0.26	-0.20	-0.19	-0.19					
360	-0.26	-0.26	-0.25	-0.19	-0.19	-0.19					
361	-0.26	-0.26	-0.25	-0.19	-0.19	-0.19					
362	-0.25	-0.26	-0.25	-0.19	-0.19	-0.19					
363	-0.25	-0.26	-0.25	-0.19	-0.19	-0.19					
364	-0.25	-0.25	-0.25	-0.19	-0.19	-0.19					
365	-0.25	-0.25	-0.25	-0.19	-0.19	-0.19					
366	-0.25	-0.25	-0.25	-0.19	-0.19	-0.19					
367	-0.25	-0.25	-0.25	-0.19	-0.19	-0.19					
368	-0.25	-0.25	-0.25	-0.19	-0.19	-0.19					
...											
5241	-0.23	-0.28	-0.27	-0.17	-0.17	-0.17					
Nodo (G)	**Pt 1/12**	**Pt 2/13**	**Pt 3...**	**Pt 4...**							
	-0.32										
	-0.11										

Elem.	**Cmb**	**Pt ini**	**Pt fin**	**Pt max**	**Cmb**	**Pt ini**	**Pt fin**	**Pt max**	**Cmb**	**Pt ini**	**Pt fin**	**Pt max**
		daN/cm2	daN/cm2	daN/cm2		daN/cm2	daN/cm2	daN/cm2		daN/cm2	daN/cm2	daN/cm2
77	2	-1.92	-1.91	-1.92	5	-2.10	-2.05	-2.10	37	-2.02	-1.97	-2.02
	70	-1.46	-1.45	-1.46	72	-1.42	-1.41	-1.42	74	-1.41	-1.40	-1.41
78	2	-1.83	-1.82	-1.83	21	-1.77	-1.77	-1.77	53	-1.74	-1.73	-1.74
	70	-1.39	-1.39	-1.39	72	-1.36	-1.35	-1.36	74	-1.35	-1.34	-1.35
79	2	-1.82	-1.81	-1.82	17	-1.85	-1.81	-1.85	49	-1.79	-1.75	-1.79
	70	-1.39	-1.38	-1.39	72	-1.35	-1.34	-1.35	74	-1.34	-1.33	-1.34
80	2	-1.76	-1.75	-1.76	21	-1.49	-1.49	-1.49	53	-1.47	-1.47	-1.47
	70	-1.33	-1.33	-1.33	72	-1.30	-1.30	-1.30	74	-1.29	-1.29	-1.29
81	2	-1.77	-1.76	-1.77	13	-1.78	-1.73	-1.78	45	-1.72	-1.68	-1.72
	70	-1.35	-1.33	-1.35	72	-1.31	-1.30	-1.31	74	-1.30	-1.29	-1.30
82	2	-1.66	-1.65	-1.66	33	-1.27	-1.27	-1.27	65	-1.27	-1.27	-1.27
	70	-1.26	-1.25	-1.26	72	-1.23	-1.22	-1.23	74	-1.22	-1.21	-1.22
83	2	-1.69	-1.67	-1.69	13	-1.81	-1.76	-1.81	45	-1.74	-1.69	-1.74
	70	-1.28	-1.27	-1.28	72	-1.25	-1.24	-1.25	74	-1.24	-1.23	-1.24
84	2	-1.50	-1.49	-1.50	21	-1.34	-1.33	-1.34	53	-1.33	-1.32	-1.33
	70	-1.14	-1.13	-1.14	72	-1.12	-1.11	-1.12	74	-1.11	-1.10	-1.11
85	2	-1.60	-1.58	-1.60	13	-1.88	-1.83	-1.88	45	-1.80	-1.75	-1.80
	70	-1.22	-1.20	-1.22	72	-1.19	-1.17	-1.19	74	-1.18	-1.16	-1.18

86	2	-1.37	-1.36	-1.37	21	-1.48	-1.46	-1.48	53	-1.44	-1.43	-1.44
	70	-1.05	-1.03	-1.05	72	-1.02	-1.01	-1.02	74	-1.01	-1.00	-1.01
87	2	-1.74	-1.74	-1.74	5	-2.02	-2.00	-2.02	37	-1.93	-1.92	-1.93
	70	-1.33	-1.32	-1.33	72	-1.30	-1.29	-1.30	74	-1.29	-1.28	-1.29
88	2	-1.65	-1.65	-1.65	13	-1.76	-1.76	-1.76	45	-1.70	-1.69	-1.70
	70	-1.26	-1.26	-1.26	72	-1.23	-1.23	-1.23	74	-1.22	-1.22	-1.22
89	2	-1.50	-1.49	-1.50	17	-1.61	-1.60	-1.61	49	-1.55	-1.54	-1.55
	70	-1.14	-1.14	-1.14	72	-1.12	-1.11	-1.12	74	-1.11	-1.11	-1.11
90	2	-1.28	-1.28	-1.28	17	-1.50	-1.50	-1.50	49	-1.43	-1.43	-1.43
	70	-0.98	-0.97	-0.98	72	-0.96	-0.95	-0.96	74	-0.95	-0.95	-0.95
91	2	-1.82	-1.81	-1.82	21	-1.75	-1.74	-1.75	53	-1.72	-1.70	-1.72
	70	-1.38	-1.37	-1.38	72	-1.35	-1.34	-1.35	74	-1.33	-1.33	-1.33
92	2	-1.75	-1.75	-1.75	25	-1.47	-1.46	-1.47	57	-1.46	-1.45	-1.46
	70	-1.33	-1.33	-1.33	72	-1.29	-1.29	-1.29	74	-1.28	-1.28	-1.28
93	2	-1.64	-1.64	-1.64	33	-1.26	-1.26	-1.26	65	-1.26	-1.26	-1.26
	70	-1.25	-1.25	-1.25	72	-1.22	-1.22	-1.22	74	-1.21	-1.21	-1.21
94	2	-1.50	-1.49	-1.50	25	-1.33	-1.33	-1.33	57	-1.31	-1.31	-1.31
	70	-1.14	-1.13	-1.14	72	-1.11	-1.11	-1.11	74	-1.10	-1.10	-1.10
95	2	-1.90	-1.89	-1.90	5	-2.11	-2.09	-2.11	37	-2.03	-2.01	-2.03
	70	-1.44	-1.44	-1.44	72	-1.41	-1.40	-1.41	74	-1.40	-1.39	-1.40
96	2	-1.82	-1.82	-1.82	17	-1.87	-1.86	-1.87	49	-1.80	-1.80	-1.80
	70	-1.38	-1.38	-1.38	72	-1.35	-1.34	-1.35	74	-1.33	-1.33	-1.33
97	2	-1.77	-1.77	-1.77	13	-1.79	-1.79	-1.79	45	-1.73	-1.73	-1.73
	70	-1.34	-1.34	-1.34	72	-1.31	-1.30	-1.31	74	-1.30	-1.29	-1.30
98	2	-1.69	-1.68	-1.69	13	-1.82	-1.82	-1.82	45	-1.75	-1.75	-1.75
	70	-1.28	-1.28	-1.28	72	-1.25	-1.24	-1.25	74	-1.24	-1.23	-1.24
99	2	-1.91	-1.90	-1.91	5	-2.05	-1.99	-2.05	37	-1.97	-1.93	-1.97
	70	-1.45	-1.44	-1.45	72	-1.41	-1.40	-1.41	74	-1.40	-1.39	-1.40
100	2	-1.82	-1.81	-1.82	21	-1.77	-1.77	-1.77	53	-1.73	-1.74	-1.74
	70	-1.39	-1.38	-1.39	72	-1.35	-1.34	-1.35	74	-1.34	-1.33	-1.34
...												
586	70	-1.21	-1.21	-1.21	72	-1.19	-1.18	-1.19	74	-1.18	-1.17	-1.18
Elem.		**Pt ini**	**Pt fin**	**Pt max**		**Pt ini**	**Pt fin**	**Pt max**		**Pt ini**	**Pt fin**	**Pt max**
		-2.11										
		-0.84										

RISULTATI ELEMENTI TIPO TRAVE

LEGENDA RISULTATI ELEMENTI TIPO TRAVE

Il controllo dei risultati delle analisi condotte, per quanto concerne gli elementi tipo trave, è possibile in relazione alle tabelle sotto riportate.

Gli elementi vengono suddivisi in relazione alle proprietà in elementi:

- tipo **pilastro**
- tipo **trave in elevazione**
- tipo **trave in fondazione**

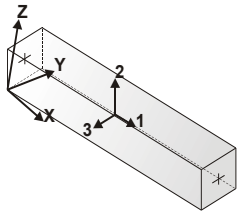
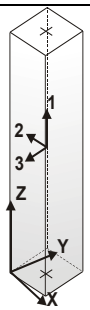
Per ogni elemento e per ogni combinazione (o caso di carico) vengono riportati i risultati più significativi.

Per gli elementi tipo *pilastro* sono riportati in tabella i seguenti valori:

Pilas.	numero dell'elemento pilastro
Cmb	combinazione in cui si verificano i valori riportati
M3 mx/mn	momento flettente in campata M3 max (prima riga) / min (seconda riga)
M2 mx/mn	momento flettente in campata M2 max (prima riga) / min (seconda riga)
D2/D3	freccia massima in direzione 2 (prima riga) / direzione 3 (seconda riga)
Q2/Q3	carico totale in direzione 2 (prima riga) / direzione 3 (seconda riga)
Pos.	ascissa del punto iniziale e finale dell'elemento
N, V2, ecc..	sei componenti di sollecitazione al piede ed in sommità dell'elemento

Per gli elementi tipo *trave in elevazione* sono riportati, oltre al numero dell'elemento, i medesimi risultati visti per i pilastri.

Per gli elementi tipo *trave in fondazione* (trave f.) sono riportati, oltre al numero dell'elemento, i medesimi risultati visti per i pilastri e la massima pressione sul terreno.

 orientamento elementi 2D non verticali	 orientamento elementi 2D verticali

Pilas.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
		daN cm	daN cm	cm	daN	cm	daN	daN	daN	daN cm	daN cm	daN cm
4	2	1.212e+06	2.221e+05	0.15	0.0	0.0	-2.167e+04	4456.24	1125.15	2.320e+04	-2.358e+05	-6.018e+05
		-6.018e+05	-2.358e+05	0.15	0.0	407.0	-1.743e+04	4456.24	1125.15	2.320e+04	2.221e+05	1.212e+06
4	3	8.313e+05	1.510e+05	0.10	0.0	0.0	-1.516e+04	3060.66	772.15	1.655e+04	-1.633e+05	-4.144e+05
		-4.144e+05	-1.633e+05	0.10	0.0	407.0	-1.191e+04	3060.66	772.15	1.655e+04	1.510e+05	8.313e+05
4	14	2.956e+06	1.848e+05	-0.97	0.0	0.0	-2.035e+04	1.365e+04	-1076.06	2.203e+04	1.848e+05	-2.613e+06
		-2.613e+06	-2.537e+05	0.19	0.0	407.0	-1.709e+04	1.365e+04	-1076.06	2.203e+04	-2.537e+05	2.956e+06
4	17	3.014e+06	3.276e+05	-0.99	0.0	0.0	-2.487e+04	1.220e+04	1570.46	4.684e+04	-3.112e+05	-2.303e+06
		-2.303e+06	-3.112e+05	-0.22	0.0	407.0	-2.161e+04	1.220e+04	1570.46	4.684e+04	3.276e+05	3.014e+06
4	23	5.444e+05	1.206e+06	0.45	0.0	0.0	-2.108e+04	-1018.60	5588.64	4.610e+04	-1.069e+06	5.444e+05
		1.211e+05	-1.069e+06	-0.58	0.0	407.0	-1.783e+04	-1018.60	5588.64	4.610e+04	1.206e+06	1.211e+05
4	27	7.629e+05	1.209e+06	0.52	0.0	0.0	-2.052e+04	-2057.14	5597.11	6.390e+04	-1.069e+06	7.629e+05
		-8.325e+04	-1.069e+06	-0.56	0.0	407.0	-1.726e+04	-2057.14	5597.11	6.390e+04	1.209e+06	-8.325e+04
4	33	2.044e+06	1.051e+06	-0.40	0.0	0.0	-2.644e+04	3740.05	4866.01	5.326e+04	-9.296e+05	-6.083e+05
		-6.083e+05	-9.296e+05	-0.61	0.0	407.0	-2.319e+04	3740.05	4866.01	5.326e+04	1.051e+06	2.044e+06
4	36	-2.710e+05	5.842e+05	0.61	0.0	0.0	-5444.49	2763.18	-3224.64	-1.881e+04	5.842e+05	-2.710e+05
		-2.765e+05	-7.284e+05	0.82	0.0	407.0	-2188.49	2763.18	-3224.64	-1.881e+04	-7.284e+05	-2.765e+05
4	46	2.700e+06	1.573e+05	-0.83	0.0	0.0	-1.969e+04	1.240e+04	-925.68	2.148e+04	1.573e+05	-2.363e+06
		-2.363e+06	-2.201e+05	0.19	0.0	407.0	-1.643e+04	1.240e+04	-925.68	2.148e+04	-2.201e+05	2.700e+06
4	49	2.756e+06	3.158e+05	-0.85	0.0	0.0	-2.388e+04	1.103e+04	1514.28	4.519e+04	-3.001e+05	-2.067e+06
		-2.067e+06	-3.001e+05	-0.19	0.0	407.0	-2.062e+04	1.103e+04	1514.28	4.519e+04	3.158e+05	2.756e+06
4	55	4.624e+05	1.128e+06	0.42	0.0	0.0	-2.080e+04	-650.46	5234.51	4.491e+04	-1.003e+06	4.624e+05
		1.880e+05	-1.003e+06	-0.53	0.0	407.0	-1.754e+04	-650.46	5234.51	4.491e+04	1.128e+06	1.880e+05
4	59	6.494e+05	1.129e+06	0.47	0.0	0.0	-2.032e+04	-1534.51	5233.50	6.060e+04	-1.001e+06	6.494e+05
		1.496e+04	-1.001e+06	-0.51	0.0	407.0	-1.706e+04	-1534.51	5233.50	6.060e+04	1.129e+06	1.496e+04
4	65	1.940e+06	9.795e+05	-0.35	0.0	0.0	-2.554e+04	3466.44	4541.07	5.290e+04	-8.688e+05	-5.440e+05
		-5.440e+05	-8.688e+05	-0.55	0.0	407.0	-2.228e+04	3466.44	4541.07	5.290e+04	9.795e+05	1.940e+06
4	68	-1.727e+05	5.234e+05	0.56	0.0	0.0	-6350.77	3036.79	-2899.69	-1.845e+04	5.234e+05	-3.353e+05
		-3.353e+05	-6.569e+05	0.76	0.0	407.0	-3094.77	3036.79	-2899.69	-1.845e+04	-6.569e+05	-1.727e+05
4	69	8.313e+05	1.510e+05	0.10	0.0	0.0	-1.516e+04	3060.66	772.15	1.655e+04	-1.633e+05	-4.144e+05
		-4.144e+05	-1.633e+05	0.10	0.0	407.0	-1.191e+04	3060.66	772.15	1.655e+04	1.510e+05	8.313e+05
4	70	9.188e+05	1.682e+05	0.11	0.0	0.0	-1.646e+04	3378.92	853.05	1.767e+04	-1.790e+05	-4.565e+05
		-4.565e+05	-1.790e+05	0.11	0.0	407.0	-1.321e+04	3378.92	853.05	1.767e+04	1.682e+05	9.188e+05
4	71	8.313e+05	1.510e+05	0.10	0.0	0.0	-1.516e+04	3060.66	772.15	1.655e+04	-1.633e+05	-4.144e+05
		-4.144e+05	-1.633e+05	0.10	0.0	407.0	-1.191e+04	3060.66	772.15	1.655e+04	1.510e+05	8.313e+05
4	72	8.925e+05	1.630e+05	0.11	0.0	0.0	-1.607e+04	3283.44	828.78	1.734e+04	-1.743e+05	-4.439e+05
		-4.439e+05	-1.743e+05	0.11	0.0	407.0	-1.282e+04	3283.44	828.78	1.734e+04	1.630e+05	8.925e+05
4	73	8.313e+05	1.510e+05	0.10	0.0	0.0	-1.516e+04	3060.66	772.15	1.655e+04	-1.633e+05	-4.144e+05
		-4.144e+05	-1.633e+05	0.10	0.0	407.0	-1.191e+04	3060.66	772.15	1.655e+04	1.510e+05	8.313e+05
4	74	8.838e+05	1.613e+05	0.10	0.0	0.0	-1.594e+04	3251.62	820.69	1.722e+04	-1.727e+05	-4.396e+05
		-4.396e+05	-1.727e+05	0.11	0.0	407.0	-1.269e+04	3251.62	820.69	1.722e+04	1.613e+05	8.838e+05
6	2	4.711e+05	7.916e+05	0.10	0.0	0.0	-2.750e+04	2694.25	-4161.29	-1.179e+04	7.916e+05	-6.254e+05
		-6.254e+05	-9.020e+05	0.13	0.0	407.0	-2.327e+04	2694.25	-4161.29	-1.179e+04	-9.020e+05	4.711e+05
6	3	3.038e+05	5.209e+05	0.06	0.0	0.0	-1.902e+04	1765.34	-2788.75	-7442.39	5.209e+05	-4.146e+05
		-4.146e+05	-6.142e+05	0.08	0.0	407.0	-1.576e+04	1765.34	-2788.75	-7442.39	-6.142e+05	3.038e+05
6	5	2.841e+06	2.289e+05	-1.14	0.0	0.0	-2.550e+04	1.153e+04	793.92	6.422e+04	-9.491e+04	-1.883e+06
		-1.883e+06	-9.491e+04	-0.23	0.0	407.0	-2.225e+04	1.153e+04	793.92	6.422e+04	2.289e+05	2.841e+06
6	6	2.539e+06	4.976e+05	-1.09	0.0	0.0	-2.902e+04	1.021e+04	-2517.36	3.650e+04	4.976e+05	-1.644e+06
		-1.644e+06	-5.266e+05	0.22	0.0	407.0	-2.576e+04	1.021e+04	-2517.36	3.650e+04	-5.266e+05	2.539e+06
...												
62	74	-4.469e+05	-4.843e+04	0.12	0.0	407.0	-1.024e+04	-1785.26	172.35	1485.79	2.171e+04	-4.469e+05
Pilas.		**M3 mx/mn**	**M2 mx/mn**	**D 2 / D 3**	**Q 2 / Q 3**		**N**	**V 2**	**V 3**	**T**		
		-6.763e+06	-2.859e+06	-1.26	0.0		-1.408e+05	-2.846e+04	-9907.15	-1.085e+05		
		7.787e+06	2.311e+06	1.35	9.04e-04		656.09	2.776e+04	1.197e+04	1.259e+05		

Trave	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
		daN cm	daN cm	cm	daN	cm	daN	daN	daN	daN cm	daN cm	daN cm
1	1	8.127e+05	2.787e+04	0.31	-6339.75	0.0	7.54	-1357.48	-94.04	-5.052e+04	2.787e+04	8.127e+05
		-1.175e+06	-1.343e+04	-0.01	0.0	439.1	7.54	-7697.23	-94.04	-5.052e+04	-1.343e+04	-1.175e+06
1	2	7.762e+05	3.400e+04	0.33	-7744.86	0.0	211.51	-704.63	-117.48	-6.944e+04	3.400e+04	7.762e+05
		-1.234e+06	-1.760e+04	-0.01	0.0	439.1	211.51	-8449.49	-117.48	-6.944e+04	-1.760e+04	-1.234e+06
1	3	6.252e+05	2.144e+04	0.24	-4876.73	0.0	5.80	-1044.22	-72.34	-3.886e+04	2.144e+04	6.252e+05
		-9.042e+05	-1.033e+04	-8.68e-03	0.0	439.1	5.80	-5920.95	-72.34	-3.886e+04	-1.033e+04	-9.042e+05
1	8	4.346e+05	6.129e+04	0.31	-5438.78	0.0	-3242.45	5721.76	-229.60	4.943e+04	6.129e+04	-8.850e+05
		-8.850e+05	-4.094e+04	0.19	0.0	439.1	-3242.45	282.98	-229.60	4.943e+04	-4.094e+04	4.346e+05
1	12	2.764e+05	6.151e+04	0.32	-5438.78	0.0	-3887.05	4856.06	-227.02	4.747e+04	6.151e+04	-6.763e+05
		-6.763e+05	-3.967e+04	0.14	0.0	439.1	-3887.05	-582.71	-227.02	4.747e+04	-3.967e+04	2.631e+05
1	14	-1.713e+05	-2916.63	0.32	-5438.78	0.0	6712.86	1433.28	-35.64	-1.348e+05	-2916.63	-4.471e+05
		-4.926e+05	-2.200e+04	-0.04	0.0	439.1	6712.86	-4005.49	-35.64	-1.348e+05	-2.200e+04	-4.926e+05
1	15	1.668e+06	5.069e+04	0.18	-5438.78	0.0	-6538.09	-2999.43	-127.79	4.189e+04	5.069e+04	1.668e+06
		-1.362e+06	-1992.83	0.02	0.0	439.1	-6538.09	-8438.21	-127.79	4.189e+04	-1992.83	-1.362e+06

1	21	3.466e+06	1.230e+04	-0.06	-5438.78	0.0	-1888.32	-1.301e+04	4.55	-6.881e+04	9483.05	3.466e+06
		-3.443e+06	9483.05	-0.12	0.0	439.1	-1888.32	-1.845e+04	4.55	-6.881e+04	1.230e+04	-3.443e+06
1	40	3.198e+05	5.677e+04	0.31	-5438.78	0.0	-2885.49	5178.22	-212.80	3.707e+04	5.677e+04	-7.635e+05
		-7.635e+05	-3.830e+04	0.17	0.0	439.1	-2885.49	-260.55	-212.80	3.707e+04	-3.830e+04	3.174e+05
1	44	2.040e+05	5.701e+04	0.31	-5438.78	0.0	-3459.78	4378.39	-211.09	3.538e+04	5.701e+04	-5.709e+05
		-5.709e+05	-3.735e+04	0.11	0.0	439.1	-3459.78	-1060.38	-211.09	3.538e+04	-3.735e+04	1.589e+05
1	46	-1.523e+05	570.92	0.32	-5438.78	0.0	5948.77	1215.81	-41.81	-1.237e+05	570.92	-3.780e+05
		-5.339e+05	-2.159e+04	-0.03	0.0	439.1	5948.77	-4222.96	-41.81	-1.237e+05	-2.159e+04	-5.339e+05
1	47	1.599e+06	4.720e+04	0.18	-5438.78	0.0	-5773.99	-2781.96	-121.63	3.088e+04	4.720e+04	1.599e+06
		-1.321e+06	-2401.45	0.02	0.0	439.1	-5773.99	-8220.74	-121.63	3.088e+04	-2401.45	-1.321e+06
1	53	3.245e+06	1.096e+04	-0.06	-5438.78	0.0	-1771.27	-1.206e+04	-3.31	-6.520e+04	1.096e+04	3.245e+06
		-3.247e+06	1.041e+04	-0.11	0.0	439.1	-1771.27	-1.750e+04	-3.31	-6.520e+04	1.041e+04	-3.247e+06
1	69	6.252e+05	2.144e+04	0.24	-4876.73	0.0	5.80	-1044.22	-72.34	-3.886e+04	2.144e+04	6.252e+05
		-9.042e+05	-1.033e+04	-8.68e-03	0.0	439.1	5.80	-5920.95	-72.34	-3.886e+04	-1.033e+04	-9.042e+05
1	70	6.008e+05	2.552e+04	0.25	-5813.47	0.0	141.78	-608.98	-87.97	-5.148e+04	2.552e+04	6.008e+05
		-9.431e+05	-1.311e+04	-0.01	0.0	439.1	141.78	-6422.45	-87.97	-5.148e+04	-1.311e+04	-9.431e+05
1	71	6.252e+05	2.144e+04	0.24	-4876.73	0.0	5.80	-1044.22	-72.34	-3.886e+04	2.144e+04	6.252e+05
		-9.042e+05	-1.033e+04	-8.68e-03	0.0	439.1	5.80	-5920.95	-72.34	-3.886e+04	-1.033e+04	-9.042e+05
1	72	6.081e+05	2.430e+04	0.25	-5532.45	0.0	100.99	-739.55	-83.28	-4.769e+04	2.430e+04	6.081e+05
		-9.314e+05	-1.227e+04	-0.01	0.0	439.1	100.99	-6272.00	-83.28	-4.769e+04	-1.227e+04	-9.314e+05
1	73	6.252e+05	2.144e+04	0.24	-4876.73	0.0	5.80	-1044.22	-72.34	-3.886e+04	2.144e+04	6.252e+05
		-9.042e+05	-1.033e+04	-8.68e-03	0.0	439.1	5.80	-5920.95	-72.34	-3.886e+04	-1.033e+04	-9.042e+05
1	74	6.106e+05	2.389e+04	0.25	-5438.78	0.0	87.39	-783.07	-81.72	-4.643e+04	2.389e+04	6.106e+05
		-9.275e+05	-1.200e+04	-9.82e-03	0.0	439.1	87.39	-6221.85	-81.72	-4.643e+04	-1.200e+04	-9.275e+05
2	2	5.556e+05	6.504e+04	0.13	-2.018e+04	0.0	1797.96	9971.30	244.63	4.676e+04	-7.745e+04	-8.792e+05
		-9.482e+05	-7.745e+04	-0.03	0.0	582.5	1797.96	-1.021e+04	244.63	4.676e+04	6.504e+04	-9.482e+05
2	3	3.782e+05	4.335e+04	0.07	-1.375e+04	0.0	1220.16	6860.97	159.98	3.003e+04	-4.984e+04	-6.186e+05
		-6.277e+05	-4.984e+04	-0.02	0.0	582.5	1220.16	-6892.29	159.98	3.003e+04	4.335e+04	-6.277e+05
2	5	1.455e+06	5.920e+04	-0.74	-1.467e+04	0.0	-5976.66	-267.21	225.05	4.502e+04	-7.195e+04	1.455e+06
		-2.975e+06	-7.195e+04	-0.48	0.0	582.5	-5976.66	-1.494e+04	225.05	4.502e+04	5.920e+04	-2.975e+06
2	8	1.613e+06	3.444e+04	0.91	-1.467e+04	0.0	8586.38	1.483e+04	124.24	2.121e+04	-3.787e+04	-2.752e+06
		-2.752e+06	-3.787e+04	0.44	0.0	582.5	8586.38	157.49	124.24	2.121e+04	3.444e+04	1.613e+06
2	9	1.419e+06	5.184e+04	-0.74	-1.467e+04	0.0	-6042.83	312.97	197.86	4.526e+04	-6.348e+04	1.419e+06
		-2.801e+06	-6.348e+04	-0.38	0.0	582.5	-6042.83	-1.436e+04	197.86	4.526e+04	5.184e+04	-2.801e+06
...												
76	74	-4.975e+05	-8490.55	-0.02	0.0	510.9	-4225.23	-4538.47	-43.71	-2.994e+04	-8490.55	-4.975e+05
Trave		**M3 mx/mn**	**M2 mx/mn**	**D 2 / D 3**	**Q 2 / Q 3**		**N**	**V 2**	**V 3**	**T**		
		-4.289e+06	-1.964e+05	-0.81	-4.967e+04		-1.771e+04	-2.557e+04	-435.14	-1.804e+05		
		3.466e+06	1.492e+05	1.14	0.0		1.886e+04	2.409e+04	676.05	1.800e+05		

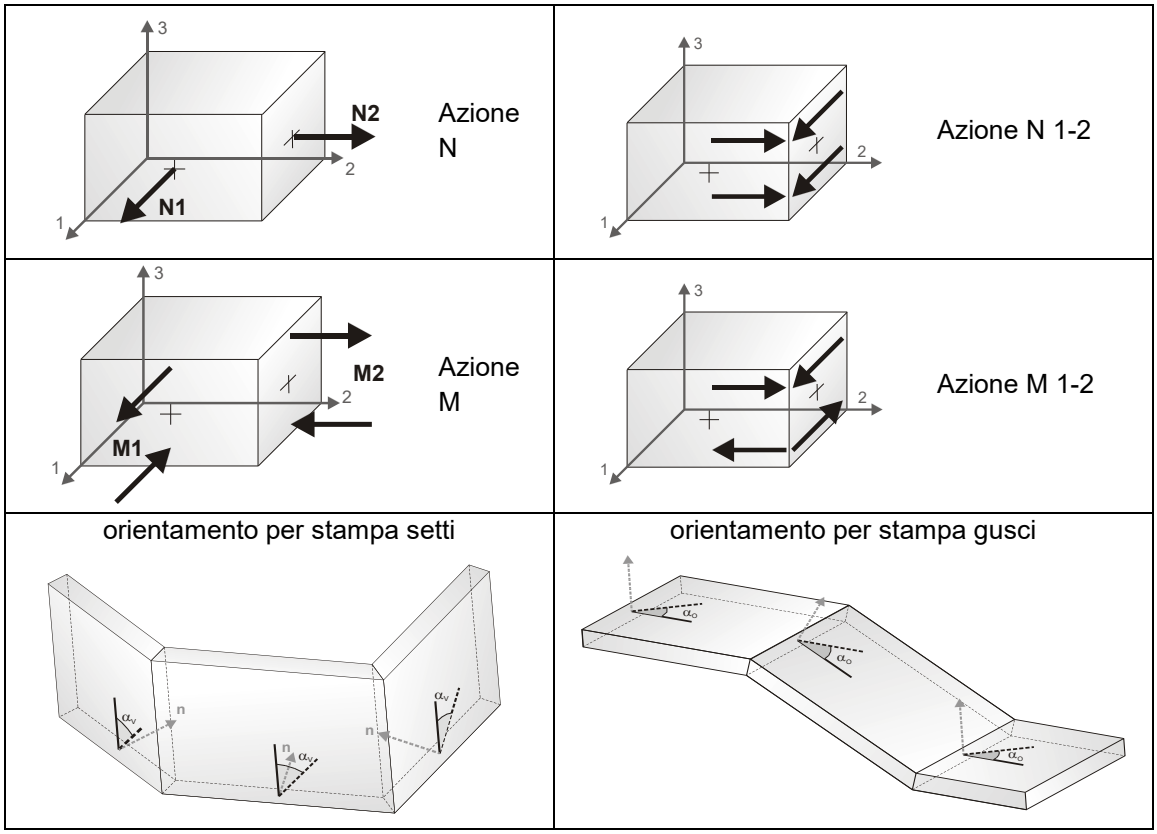
Trave f.	**Cmb**	**M3 mx/mn**	**M2 mx/mn**	**D 2 / D 3**	**Pt**	**Pos.**	**N**	**V 2**	**V 3**	**T**	**M 2**	**M 3**
		daN cm	daN cm	cm	daN/cm2	cm	daN	daN	daN	daN cm	daN cm	daN cm
77	2	1.259e+06	1.324e+05	-0.01	-1.92	0.0	-5158.38	-2.616e+04	-5024.76	-5.211e+04	1.324e+05	1.259e+06
		3.052e+05	-6.276e+04	1.59e-04		38.8	-5158.38	-2.297e+04	-5024.76	-5.195e+04	-6.276e+04	3.052e+05
77	3	8.743e+05	8.900e+04	-9.49e-03	-1.33	0.0	-3848.21	-1.776e+04	-3422.17	-3.534e+04	8.900e+04	8.743e+05
		2.271e+05	-4.389e+04	9.89e-05		38.8	-3848.21	-1.558e+04	-3422.17	-3.522e+04	-4.389e+04	2.271e+05
77	9	3.644e+06	6.990e+04	-1.97	-2.10	0.0	-3.817e+04	-9552.54	2301.03	-9.192e+04	-2.115e+04	3.644e+06
		2.586e+06	-2.115e+04	-6.35e-03		38.8	-3.817e+04	-6591.98	2301.03	-9.165e+04	6.990e+04	2.586e+06
77	10	2.981e+06	9.953e+04	-1.21	-1.84	0.0	-4.512e+04	-1.646e+04	-2961.43	-4.455e+04	9.953e+04	2.981e+06
		2.176e+06	-1.394e+04	-0.01		38.8	-4.512e+04	-1.301e+04	-2961.43	-4.439e+04	-1.394e+04	2.176e+06
77	11	-1.135e+06	9.181e+04	1.21	-1.02	0.0	3.730e+04	-2.151e+04	-4343.66	-3.106e+04	9.181e+04	-1.135e+06
		-1.714e+06	-7.840e+04	0.01		38.8	3.730e+04	-2.032e+04	-4343.66	-3.098e+04	-7.840e+04	-1.714e+06
77	12	-1.798e+06	2.125e+05	1.96	-0.76	0.0	3.035e+04	-2.842e+04	-9606.13	1.631e+04	2.125e+05	-1.798e+06
		-2.124e+06	-1.622e+05	6.57e-03		38.8	3.035e+04	-2.673e+04	-9606.13	1.627e+04	-1.622e+05	-2.124e+06
77	36	-7.578e+05	3.227e+05	1.74	-0.82	0.0	-6206.80	-3.168e+04	-1.368e+04	5.335e+04	3.227e+05	-7.578e+05
		-9.826e+05	-2.087e+05	-6.94e-03		38.8	-6206.80	-2.876e+04	-1.368e+04	5.326e+04	-2.087e+05	-9.826e+05
77	41	3.328e+06	5.716e+04	-1.73	-2.02	0.0	-3.380e+04	-1.037e+04	1683.05	-8.635e+04	-1.014e+04	3.328e+06
		2.305e+06	-1.014e+04	-5.65e-03		38.8	-3.380e+04	-7537.32	1683.05	-8.609e+04	5.716e+04	2.305e+06
77	42	2.707e+06	1.006e+05	-1.04	-1.78	0.0	-4.018e+04	-1.677e+04	-3148.38	-4.285e+04	1.006e+05	2.707e+06
		1.918e+06	-1.991e+04	-9.36e-03		38.8	-4.018e+04	-1.348e+04	-3148.38	-4.269e+04	-1.991e+04	1.918e+06
77	43	-8.602e+05	9.074e+04	1.04	-1.07	0.0	3.236e+04	-2.120e+04	-4156.71	-3.277e+04	9.074e+04	-8.602e+05
		-1.456e+06	-7.243e+04	9.58e-03		38.8	3.236e+04	-1.984e+04	-4156.71	-3.268e+04	-7.243e+04	-1.456e+06
77	44	-1.481e+06	2.015e+05	1.73	-0.83	0.0	2.598e+04	-2.760e+04	-8988.15	1.073e+04	2.015e+05	-1.481e+06
		-1.843e+06	-1.495e+05	5.88e-03		38.8	2.598e+04	-2.579e+04	-8988.15	1.072e+04	-1.495e+05	-1.843e+06
77	60	-1.756e+05	2.726e+05	1.61	-0.87	0.0	-361.87	-2.847e+04	-1.202e+04	3.385e+04	2.726e+05	-1.756e+05
		-5.584e+05	-1.945e+05	1.31e-03		38.8	-361.87	-2.557e+04	-1.202e+04	3.376e+04	-1.945e+05	-5.584e+05
77	68	-6.165e+05	3.028e+05	1.58	-0.87	0.0	-6422.88	-3.075e+04	-1.280e+04	4.534e+04	3.028e+05	-6.165e+05
		-8.776e+05	-1.945e+05	-6.38e-03		38.8	-6422.88	-2.786e+04	-1.280e+04	4.527e+04	-1.945e+05	-8.776e+05
77	69	8.743e+05	8.900e+04	-9.49e-03	-1.33	0.0	-3848.21	-1.776e+04	-3422.17	-3.534e+04	8.900e+04	8.743e+05
		2.271e+05	-4.389e+04	9.89e-05		38.8	-3848.21	-1.558e+04	-3422.17	-3.522e+04	-4.389e+04	2.271e+05
77	70	9.559e+05	1.001e+05	-0.01	-1.46	0.0	-3952.02	-1.981e+04	-3806.13	-3.945e+04	1.001e+05	9.559e+05
		2.337e+05	-4.769e+04	1.19e-04		38.8	-3952.02	-1.739e+04	-3806.13	-3.933e+04	-4.769e+04	2.337e+05
77	71	8.743e+05	8.900e+04	-9.49e-03	-1.33	0.0	-3848.21	-1.776e+04	-3422.17	-3.534e+04	8.900e+04	8.743e+05
		2.271e+05	-4.389e+04	9.89e-05		38.8	-3848.21	-1.558e+04	-3422.17	-3.522e+04	-4.389e+04	2.271e+05
77	72	9.314e+05	9.678e+04	-0.01	-1.42	0.0	-3920.88	-1.919e+04	-3690.94	-3.822e+04	9.678e+04	9.314e+05

		2.317e+05	-4.655e+04	1.13e-04		38.8	-3920.88	-1.684e+04	-3690.94	-3.810e+04	-4.655e+04	2.317e+05
77	73	8.743e+05	8.900e+04	-9.49e-03	-1.33	0.0	-3848.21	-1.776e+04	-3422.17	-3.534e+04	8.900e+04	8.743e+05
		2.271e+05	-4.389e+04	9.89e-05		38.8	-3848.21	-1.558e+04	-3422.17	-3.522e+04	-4.389e+04	2.271e+05
77	74	9.232e+05	9.567e+04	-0.01	-1.41	0.0	-3910.49	-1.899e+04	-3652.55	-3.781e+04	9.567e+04	9.232e+05
		2.311e+05	-4.617e+04	1.11e-04		38.8	-3910.49	-1.666e+04	-3652.55	-3.769e+04	-4.617e+04	2.311e+05
78	2	1.342e+06	1.713e+05	-0.01	-1.83	0.0	-1.705e+04	-2.454e+04	-5563.82	-6.793e+04	1.713e+05	1.342e+06
		4.477e+05	-4.476e+04	-1.55e-04		38.8	-1.705e+04	-2.152e+04	-5563.82	-6.778e+04	-4.476e+04	4.477e+05
78	3	8.451e+05	1.141e+05	-7.53e-03	-1.28	0.0	-1.026e+04	-1.623e+04	-3753.20	-4.539e+04	1.141e+05	8.451e+05
		2.551e+05	-3.165e+04	-9.84e-05		38.8	-1.026e+04	-1.416e+04	-3753.20	-4.529e+04	-3.165e+04	2.551e+05
78	8	-1.477e+06	3.477e+05	0.49	-1.19	0.0	1.517e+04	-3.865e+04	-1.387e+04	4.278e+04	3.477e+05	-1.597e+06
		-1.597e+06	-1.911e+05	0.05		38.8	1.517e+04	-3.616e+04	-1.387e+04	4.284e+04	-1.911e+05	-1.477e+06
78	9	3.600e+06	1.178e+05	-0.46	-1.51	0.0	-3.620e+04	4314.50	5497.45	-1.382e+05	-9.591e+04	3.600e+06
		2.121e+06	-9.591e+04	-0.05		38.8	-3.620e+04	6251.61	5497.45	-1.380e+05	1.178e+05	2.121e+06
78	10	3.203e+06	7.150e+04	0.38	-1.27	0.0	-3.949e+04	-1134.28	1409.75	-9.534e+04	1.678e+04	3.203e+06
		1.911e+06	1.678e+04	-0.06		38.8	-3.949e+04	1238.76	1409.75	-9.529e+04	7.150e+04	1.911e+06
...												
586	74	1.342e+05	-3564.21	4.50e-05	-1.18	13.3	-1623.33	1.113e+04	5514.96	1.230e+04	6.997e+04	2.783e+05
Trave f.		**M3 mx/mn**	**M2 mx/mn**	**D 2 / D 3**	**Pt**		**N**	**V 2**	**V 3**	**T**		
		-3.060e+06	-5.696e+05	-2.02	-2.11		-6.421e+04	-4.272e+04	-4.218e+04	-7.644e+05		
		4.841e+06	6.740e+05	1.96	-0.26		4.859e+04	4.773e+04	5.210e+04	9.707e+05		

RISULTATI ELEMENTI TIPO SHELL

LEGENDA RISULTATI ELEMENTI TIPO SHELL

Il controllo dei risultati delle analisi condotte, per quanto concerne gli elementi tipo shell, è possibile in relazione alle tabelle sottoriportate.
Per ogni elemento, e per ogni combinazione(o caso di carico) vengono riportati i risultati più significativi.



In particolare vengono riportati in ogni nodo di un elemento per ogni combinazione:

tensione di Von Mises		(valore riassuntivo del complessivo stato di sollecitazione)
N max		sforzo membranale principale massimo
N min		sforzo membranale principale minimo
M max		sforzo flessionale principale massimo
M min		sforzo flessionale principale minimo
N1	**N2**	sforzi membranali e flessionali in direzione locale 1 e 2 dell'elemento
N1-2	**M1**	(lo sforzo 2-1 è uguale allo sforzo 1-2 per la reciprocità delle tensioni
M2	**M1-2**	tangenziali)

I suddetti risultati possono a scelta del progettista essere preceduti o sostituiti da valori di sollecitazione non più riferiti al sistema locale dell'elemento ma al sistema globale.
In questo caso gli elementi vengono raggruppati in gruppi (M_S: macro gusci o macro setti, raggruppati per materiale, spessore, e posizione fisica) per la valutazione dei valori mediati ai nodi appartenenti agli elementi dei gruppi stessi.
I valori di sollecitazione sono, in questo caso, riferiti ad una terna specifica del gruppo ruotata di α_O attorno all'asse Z per i gusci e ruotata di α_V attorno alla normale (che per definizione è orizzontale) al piano del setto.
Per i setti, in particolare, se α_V è zero, l'asse '1-1 rappresenta la verticale e l'asse '2-2 l'orizzontale contenuta nel setto.
Le azioni sui setti possono essere espresse anche con formato macro, cioè riferite all'intero macroelemento.

In particolare vengono riportati per ogni quota Z dei nodi e per ogni combinazione i seguenti valori:

N memb.	Azione membranale complessiva agente sulla parete in direzione Z
V memb.	Azione complessiva di taglio agente nel piano del macroelemento
V orto	Azione complessiva di taglio agente in direzione perpendicolare al macroelemento
M memb.	Azione flessionale complessiva agente nel piano del macroelemento
M orto	Azione flessionale complessiva agente in direzione perpendicolare al macroelemento
T	Azione torsionale complessiva agente nel piano orizzontale

Macro	Tipo	Angolo 1-Z (gradi)
1	**Setto**	**0.0**

M_S	Cmb	Z	N memb.	V memb.	V orto	M memb.	M orto	T
		cm	daN	daN	daN	daN cm	daN cm	daN cm
1	1	0.0	-1.856e+04	-715.40	2775.44	-4.115e+05	-1.348e+05	2.121e+04
1	1	47.56	-1.724e+04	168.05	1010.76	-2.561e+05	-4.474e+04	6.818e+04
1	1	95.11	-1.603e+04	684.61	291.04	-2.014e+05	-1.625e+04	4.090e+04
1	1	142.67	-1.485e+04	617.29	104.56	-1.457e+05	-7724.66	2.630e+04
1	1	190.22	-1.380e+04	497.72	49.59	-1.121e+05	-4344.37	1.761e+04
1	1	237.78	-1.280e+04	401.69	29.05	-9.022e+04	-2557.22	1.275e+04
1	1	285.33	-1.181e+04	334.24	17.69	-7.429e+04	-1471.37	1.013e+04
1	1	332.89	-1.084e+04	287.26	9.75	-6.187e+04	-830.67	8733.88
1	1	380.44	-9861.92	253.21	4.03	-5.166e+04	-510.41	7985.63
1	1	428.00	-8887.35	227.33	-0.10	-4.289e+04	-417.54	7556.35
1	1	473.22	-7935.59	207.11	-2.54	-3.551e+04	-472.45	7272.89
1	1	518.44	-7006.03	189.60	-4.03	-2.869e+04	-621.05	7005.69
1	1	563.67	-6074.54	173.77	-4.89	-2.236e+04	-824.71	6696.13
1	1	608.89	-5141.06	158.44	-5.02	-1.648e+04	-1051.38	6313.47
1	1	654.11	-4205.82	142.70	-4.20	-1.107e+04	-1263.51	5853.14
1	1	699.33	-3269.20	125.72	-1.91	-6219.88	-1407.84	5339.19
1	1	744.56	-2331.74	106.31	3.13	-2077.41	-1393.44	4823.40
1	1	789.78	-1394.60	79.71	14.05	1019.08	-1033.21	4289.17
1	1	835.00	-465.72	12.40	25.89	1226.29	-30.18	2208.72
1	2	0.0	-1.882e+04	-484.14	2726.63	-4.723e+05	-1.313e+05	2.003e+04
1	2	47.56	-1.743e+04	251.46	980.37	-3.017e+05	-4.319e+04	6.812e+04
1	2	95.11	-1.612e+04	745.57	277.31	-2.312e+05	-1.559e+04	4.271e+04
1	2	142.67	-1.488e+04	665.21	96.45	-1.655e+05	-7559.90	2.873e+04
1	2	190.22	-1.380e+04	538.57	44.54	-1.258e+05	-4485.62	2.022e+04
1	2	237.78	-1.279e+04	437.56	26.07	-1.002e+05	-2886.26	1.533e+04
1	2	285.33	-1.180e+04	365.94	16.19	-8.202e+04	-1904.65	1.258e+04
1	2	332.89	-1.082e+04	315.38	9.24	-6.806e+04	-1309.91	1.101e+04
1	2	380.44	-9848.54	278.27	4.13	-5.671e+04	-998.08	1.007e+04
1	2	428.00	-8875.60	249.80	0.31	-4.702e+04	-892.25	9443.92
1	2	473.22	-7925.48	227.48	-2.01	-3.889e+04	-925.26	8974.52
1	2	518.44	-6997.47	208.12	-3.47	-3.139e+04	-1048.93	8526.82
1	2	563.67	-6067.38	190.59	-4.34	-2.444e+04	-1227.28	8043.94
1	2	608.89	-5135.15	173.64	-4.43	-1.800e+04	-1428.23	7496.51
1	2	654.11	-4201.01	156.23	-3.48	-1.208e+04	-1611.27	6881.95
1	2	699.33	-3265.35	137.45	-0.87	-6782.27	-1716.72	6227.78
1	2	744.56	-2328.73	115.98	4.83	-2263.43	-1641.98	5590.39
1	2	789.78	-1392.44	86.68	16.93	1104.94	-1180.02	4944.82
1	2	835.00	-465.15	13.95	28.62	1321.85	-27.00	2534.65
1	4	0.0	-1.453e+04	-319.05	2086.14	-3.773e+05	-1.002e+05	1.513e+04
1	4	47.56	-1.345e+04	212.67	747.12	-2.426e+05	-3.287e+04	5.239e+04
1	4	95.11	-1.242e+04	587.58	210.15	-1.847e+05	-1.184e+04	3.328e+04
1	4	142.67	-1.146e+04	522.76	72.32	-1.318e+05	-5777.29	2.266e+04
1	4	190.22	-1.062e+04	423.72	33.09	-9.993e+04	-3483.07	1.616e+04
1	4	237.78	-9835.88	344.86	19.37	-7.940e+04	-2296.14	1.239e+04
1	4	285.33	-9074.13	288.81	12.11	-6.487e+04	-1565.10	1.024e+04
1	4	332.89	-8321.56	249.09	6.99	-5.378e+04	-1118.21	8996.63
1	4	380.44	-7572.72	219.84	3.20	-4.479e+04	-880.29	8228.19
1	4	428.00	-6824.67	197.34	0.33	-3.712e+04	-795.89	7700.15

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1	74	835.00	-358.02	10.16	21.01	981.52	-21.94	1829.39
M_S			**N memb.**	**V memb.**	**V orto**	**M memb.**	**M orto**	**T**
			-2.471e+04	-1632.46	-1836.99	-2.397e+06	-2.452e+05	-8.395e+04
			-0.46	4897.73	4492.48	3.548e+05	2.488e+05	2.563e+05

Macro	Tipo	Angolo 1-Z (gradi)
2	**Setto**	**0.0**

M_S	**Cmb**	**Z**	**N memb.**	**V memb.**	**V orto**	**M memb.**	**M orto**	**T**
		cm	daN	daN	daN	daN cm	daN cm	daN cm
2	1	0.0	-7221.46	-2388.83	3062.64	-2.683e+05	-7.047e+04	1.460e+04
2	1	47.56	-1.034e+04	-692.35	864.67	-1.528e+05	2.292e+04	1.264e+04
2	1	95.11	-1.056e+04	-373.47	-179.21	-8.328e+04	3.034e+04	1.278e+04
2	1	142.67	-1.033e+04	-178.19	-225.16	-6.089e+04	1.933e+04	1.277e+04
2	1	190.22	-9786.54	-68.61	-139.27	-4.922e+04	1.053e+04	1.240e+04
2	1	237.78	-9141.54	-10.70	-69.90	-4.199e+04	5664.98	1.195e+04
2	1	285.33	-8464.11	16.64	-32.58	-3.664e+04	3333.03	1.150e+04
2	1	332.89	-7775.63	26.69	-15.98	-3.200e+04	2237.66	1.107e+04
2	1	380.44	-7081.93	27.59	-9.28	-2.763e+04	1664.76	1.069e+04
2	1	428.00	-6385.12	24.07	-6.85	-2.344e+04	1301.67	1.037e+04
2	1	473.22	-5702.53	19.15	-5.32	-1.959e+04	1049.83	1.012e+04
2	1	518.44	-5036.91	14.05	-4.07	-1.596e+04	843.54	9911.52
2	1	563.67	-4370.36	9.65	-3.23	-1.257e+04	680.11	9753.24
2	1	608.89	-3703.04	6.78	-2.57	-9440.32	550.38	9638.27
2	1	654.11	-3034.73	6.50	-2.23	-6656.10	443.91	9561.00
2	1	699.33	-2364.95	10.51	-2.54	-4338.08	339.65	9508.21
2	1	744.56	-1693.09	21.99	-3.83	-2703.19	199.77	9438.50
2	1	789.78	-1018.81	46.02	-5.08	-2022.05	-9.90	9105.92
2	1	835.00	-342.03	52.28	8.79	-1183.22	-64.21	5261.63
2	2	0.0	-6667.34	-2503.58	2751.38	-2.818e+05	-6.147e+04	1.556e+04
2	2	47.56	-9938.93	-757.44	819.65	-1.589e+05	2.344e+04	1.401e+04
2	2	95.11	-1.034e+04	-414.19	-185.06	-8.824e+04	2.973e+04	1.412e+04
2	2	142.67	-1.020e+04	-201.55	-220.52	-6.570e+04	1.875e+04	1.405e+04
2	2	190.22	-9720.37	-80.94	-134.64	-5.386e+04	1.018e+04	1.360e+04
2	2	237.78	-9103.41	-16.29	-67.21	-4.626e+04	5495.24	1.308e+04
2	2	285.33	-8440.06	14.94	-31.35	-4.042e+04	3254.50	1.257e+04
2	2	332.89	-7758.81	27.06	-15.49	-3.525e+04	2198.03	1.209e+04
2	2	380.44	-7069.16	28.89	-9.12	-3.037e+04	1639.41	1.167e+04
2	2	428.00	-6374.97	25.65	-6.81	-2.570e+04	1280.73	1.132e+04
2	2	473.22	-5694.27	20.68	-5.32	-2.144e+04	1029.71	1.104e+04
2	2	518.44	-5030.24	15.38	-4.09	-1.745e+04	823.05	1.081e+04
2	2	563.67	-4365.12	10.76	-3.25	-1.371e+04	658.71	1.064e+04
2	2	608.89	-3699.08	7.76	-2.60	-1.028e+04	527.95	1.052e+04
2	2	654.11	-3031.94	7.55	-2.24	-7232.59	420.84	1.043e+04
2	2	699.33	-2363.22	12.02	-2.50	-4696.29	317.28	1.038e+04
2	2	744.56	-1692.26	24.61	-3.71	-2911.63	181.09	1.030e+04
2	2	789.78	-1018.66	50.88	-4.83	-2176.82	-19.91	9939.91
2	2	835.00	-342.15	57.31	8.90	-1281.81	-63.56	5747.83
2	3	0.0	-5554.97	-1837.56	2355.87	-2.064e+05	-5.420e+04	1.123e+04
2	3	47.56	-7952.17	-532.58	665.13	-1.175e+05	1.763e+04	9722.05
2	3	95.11	-8123.49	-287.29	-137.86	-6.406e+04	2.334e+04	9834.12
2	3	142.67	-7942.65	-137.07	-173.20	-4.684e+04	1.487e+04	9824.06
2	3	190.22	-7528.11	-52.78	-107.13	-3.786e+04	8099.39	9535.06
2	3	237.78	-7031.95	-8.23	-53.77	-3.230e+04	4357.68	9192.05
2	3	285.33	-6510.85	12.80	-25.06	-2.819e+04	2563.87	8844.64
2	3	332.89	-5981.26	20.53	-12.29	-2.462e+04	1721.28	8517.35
2	3	380.44	-5447.64	21.22	-7.14	-2.126e+04	1280.59	8225.94
2	3	428.00	-4911.63	18.51	-5.27	-1.803e+04	1001.28	7977.65

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2	74	835.00	-263.15	42.23	6.81	-949.61	-49.13	4241.89
M_S			**N memb.**	**V memb.**	**V orto**	**M memb.**	**M orto**	**T**
			-2.208e+04	-5354.70	-542.22	-1.342e+06	-7.047e+04	-9.835e+04
			8777.82	4599.83	3062.64	8.361e+05	3.493e+04	1.409e+05

Macro	Tipo	Angolo 1-Z (gradi)
3	**Setto**	**0.0**

M_S	Cmb	Z	N memb.	V memb.	V orto	M memb.	M orto	T
		cm	daN	daN	daN	daN cm	daN cm	daN cm
3	1	0.0	-1.640e+04	-2347.25	-5164.30	-5.592e+04	2.385e+05	-5.563e+04
3	1	47.56	-1.460e+04	-1032.73	-1703.12	4.086e+04	7.517e+04	-5.414e+04
3	1	95.11	-1.312e+04	-505.40	-664.52	7.879e+04	2.401e+04	9051.19
3	1	142.67	-1.206e+04	-392.13	-282.75	8.714e+04	3043.15	3.438e+04
3	1	190.22	-1.118e+04	-358.44	-118.20	8.138e+04	-5905.39	4.301e+04
3	1	237.78	-1.035e+04	-331.79	-39.75	7.136e+04	-9408.02	4.339e+04
3	1	285.33	-9541.10	-301.65	-1.05	6.111e+04	-1.025e+04	4.014e+04
3	1	332.89	-8733.89	-271.29	16.94	5.185e+04	-9810.45	3.562e+04
3	1	380.44	-7929.47	-243.93	23.56	4.369e+04	-8811.79	3.092e+04
3	1	428.00	-7127.96	-220.48	24.17	3.645e+04	-7662.64	2.652e+04
3	1	473.22	-6350.08	-201.79	21.69	3.022e+04	-6626.32	2.277e+04
3	1	518.44	-5593.72	-185.53	18.08	2.450e+04	-5726.58	1.944e+04
3	1	563.67	-4840.21	-170.54	14.54	1.920e+04	-4989.80	1.650e+04
3	1	608.89	-4089.45	-155.87	11.80	1.429e+04	-4397.72	1.390e+04
3	1	654.11	-3341.45	-140.47	10.70	9794.49	-3896.12	1.159e+04
3	1	699.33	-2596.29	-123.18	12.42	5747.98	-3385.95	9547.34
3	1	744.56	-1854.05	-102.48	18.85	2264.79	-2699.99	7803.06
3	1	789.78	-1113.92	-74.62	31.97	-352.68	-1571.25	6274.43
3	1	835.00	-368.03	-21.19	26.39	-730.13	54.60	2891.83
3	2	0.0	-1.670e+04	-2267.24	-5230.23	-6.636e+04	2.438e+05	-5.715e+04
3	2	47.56	-1.481e+04	-1071.10	-1737.83	4.082e+04	7.811e+04	-5.418e+04
3	2	95.11	-1.325e+04	-560.50	-691.50	8.435e+04	2.531e+04	1.031e+04
3	2	142.67	-1.215e+04	-444.70	-298.00	9.442e+04	3336.73	3.632e+04
3	2	190.22	-1.124e+04	-403.94	-125.48	8.866e+04	-6132.91	4.522e+04
3	2	237.78	-1.040e+04	-370.35	-42.36	7.801e+04	-9859.43	4.563e+04
3	2	285.33	-9578.63	-334.59	-1.25	6.694e+04	-1.077e+04	4.226e+04
3	2	332.89	-8765.07	-299.89	17.81	5.685e+04	-1.030e+04	3.755e+04
3	2	380.44	-7955.62	-269.15	24.76	4.791e+04	-9250.69	3.264e+04
3	2	428.00	-7149.86	-242.99	25.34	3.996e+04	-8043.66	2.803e+04
3	2	473.22	-6368.46	-222.16	22.69	3.311e+04	-6957.70	2.410e+04
3	2	518.44	-5608.95	-204.03	18.85	2.682e+04	-6017.80	2.061e+04
3	2	563.67	-4852.60	-187.34	15.10	2.100e+04	-5251.10	1.753e+04
3	2	608.89	-4099.31	-171.04	12.19	1.562e+04	-4637.86	1.479e+04
3	2	654.11	-3349.04	-153.99	11.03	1.070e+04	-4120.30	1.235e+04
3	2	699.33	-2601.88	-134.95	12.88	6276.77	-3592.89	1.019e+04
3	2	744.56	-1857.89	-112.28	19.78	2477.49	-2877.01	8343.66
3	2	789.78	-1116.24	-81.85	33.94	-378.45	-1684.92	6718.49
3	2	835.00	-368.48	-22.85	28.69	-797.67	55.54	3102.50
3	3	0.0	-1.261e+04	-1805.57	-3972.54	-4.302e+04	1.834e+05	-4.279e+04
3	3	47.56	-1.123e+04	-794.40	-1310.10	3.143e+04	5.782e+04	-4.164e+04
3	3	95.11	-1.009e+04	-388.77	-511.17	6.061e+04	1.847e+04	6962.46
3	3	142.67	-9280.76	-301.64	-217.50	6.703e+04	2340.89	2.645e+04
3	3	190.22	-8600.72	-275.73	-90.92	6.260e+04	-4542.61	3.308e+04
3	3	237.78	-7963.92	-255.23	-30.57	5.489e+04	-7236.94	3.337e+04
3	3	285.33	-7339.31	-232.04	-0.81	4.701e+04	-7887.99	3.088e+04
3	3	332.89	-6718.38	-208.68	13.03	3.989e+04	-7546.50	2.740e+04
3	3	380.44	-6099.59	-187.64	18.12	3.361e+04	-6778.30	2.379e+04
3	3	428.00	-5483.04	-169.60	18.59	2.804e+04	-5894.34	2.040e+04
...								
3	74	835.00	-283.28	-16.96	21.22	-588.66	42.37	2308.76
M_S			**N memb.**	**V memb.**	**V orto**	**M memb.**	**M orto**	**T**
			-2.346e+04	-3615.74	-7413.61	-1.410e+06	-1.687e+05	-1.347e+05
			60.68	1978.73	2090.73	1.316e+06	4.129e+05	2.018e+05

Macro	Tipo	Angolo 1-X (gradi)
4	**Guscio**	**0.0**

M_G	Cmb	Nodo	N max	N min	N 1	N 2	N 1-2	M max	M min	M 1	M 2	M 1-2
			daN/cm	daN/cm	daN/cm	daN/cm	daN/cm	daN	daN	daN	daN	daN
4	2	9	59.46	-7.98	-5.53	57.01	-12.62	-2045.47	-2663.84	-2518.79	-2190.53	262.02
4	2	10	54.33	8.75	16.25	46.83	16.90	-1862.44	-2795.42	-2652.05	-2005.82	-336.46
4	2	13	288.04	-81.33	-81.11	287.82	8.91	-2951.78	-5059.41	-2988.12	-5023.06	-274.36
4	2	14	302.40	-65.22	-65.22	302.39	-0.41	-2924.81	-5787.38	-3071.87	-5640.33	-631.93
4	2	15	203.55	-58.77	-58.67	203.46	5.01	-2044.24	-3638.62	-2134.39	-3548.47	-368.24
4	2	16	210.42	60.19	61.31	209.30	12.92	-3718.51	-5574.24	-5102.97	-4189.78	-807.74
4	2	17	207.23	-45.43	-45.42	207.22	-1.67	-1710.76	-3760.19	-1717.20	-3753.74	114.76

4	2	18	176.87	-51.01	-50.93	176.79	4.22	-2106.48	-2836.31	-2146.69	-2796.09	-166.53
4	2	19	139.20	55.02	56.24	137.98	10.06	-2022.45	-4757.04	-4673.23	-2106.25	-471.33
4	2	20	27.39	-22.71	-22.53	27.21	2.97	239.18	-496.07	-454.05	197.16	-170.68
4	2	21	38.22	-10.06	2.45	25.71	21.16	-1207.46	-1689.89	-1603.59	-1293.77	-184.90
4	2	22	66.49	0.33	66.18	0.64	4.52	-1223.69	-3514.59	-3478.15	-1260.14	-286.64
4	2	23	17.34	-21.10	-20.74	16.97	3.71	-332.95	-515.27	-350.47	-497.75	-53.73
4	2	29	315.05	77.25	77.36	314.93	5.17	-6381.41	-6786.36	-6544.32	-6623.46	198.57
4	2	35	117.71	15.74	116.64	16.81	10.41	-2741.24	-4694.64	-4676.92	-2758.96	185.20
4	2	48	31.44	-8.72	-8.71	31.43	0.59	-1459.71	-4040.21	-2677.25	-2822.67	-1288.20
4	2	51	39.49	20.37	33.92	25.95	8.69	-459.02	-3005.83	-697.91	-2766.93	-742.52
4	2	69	42.87	23.25	32.34	33.78	9.78	-660.07	-3199.52	-784.91	-3074.67	-549.05
4	2	79	50.61	12.25	21.71	41.16	16.53	-955.17	-3701.83	-955.42	-3701.59	26.02
4	2	89	60.41	16.91	18.04	59.28	6.90	-1548.94	-4422.47	-1613.75	-4357.67	-426.63
4	2	99	190.01	98.95	103.10	185.86	19.01	-3320.02	-5315.13	-3431.30	-5203.85	-457.87
4	2	109	134.77	25.97	32.79	127.95	26.37	-1143.26	-2617.47	-1859.03	-1901.70	-736.80
4	2	119	76.12	21.66	21.67	76.11	-0.77	-408.82	-1363.01	-827.42	-944.41	-473.50
4	2	129	95.18	24.31	24.74	94.75	5.53	-239.53	-1109.02	-586.46	-762.10	-425.78
4	2	139	98.99	23.09	25.48	96.61	13.23	-720.09	-1272.70	-829.11	-1163.68	-219.91
4	2	149	56.73	-4.52	2.77	49.45	19.83	-1896.91	-4649.19	-1897.48	-4648.62	39.62
4	2	159	45.32	17.92	19.51	43.73	-6.41	-750.69	-4351.03	-977.29	-4124.43	-874.36
4	2	169	39.80	21.14	21.27	39.67	-1.53	-739.22	-4197.51	-911.72	-4025.01	-752.85
4	2	179	25.61	9.42	10.22	24.81	-3.52	-895.20	-4042.50	-1076.66	-3861.04	-733.61
4	2	189	47.33	28.48	45.51	30.30	5.57	-760.09	-4113.17	-762.73	-4110.54	-94.00
4	2	199	49.27	-0.30	0.92	48.05	7.68	-2540.04	-3682.14	-2564.21	-3657.97	-164.39
4	2	352	73.24	-64.97	46.99	-38.72	-54.21	-1256.45	-1670.58	-1360.87	-1566.16	179.83
4	2	353	124.02	-78.82	78.90	-33.70	-84.36	105.22	-973.06	-780.65	-87.19	412.86
4	2	354	58.60	-0.11	24.52	33.97	-28.97	-750.66	-2062.78	-2052.73	-760.71	114.40
4	2	355	25.04	-44.51	3.79	-23.27	-32.04	261.84	-927.79	57.79	-723.73	448.46
4	2	356	85.66	-107.09	-1.29	-20.14	-95.92	919.51	-267.43	314.06	338.02	593.35
4	2	357	11.10	-53.87	-37.19	-5.59	-28.38	1282.13	-177.80	1141.84	-37.51	430.28
4	2	358	45.84	-109.36	-45.84	-17.68	-76.31	1686.48	249.28	1242.37	693.39	664.11
4	2	359	13.66	-71.98	-67.51	9.19	-19.04	2002.35	311.59	1884.51	429.43	430.53
4	2	360	20.51	-108.35	-78.17	-9.67	-54.57	2186.89	731.20	1909.19	1008.90	571.95
4	2	361	20.57	-87.32	-86.31	19.57	-10.35	2424.91	634.08	2347.21	711.78	364.83
4	2	362	7.49	-107.83	-98.68	-1.65	-31.16	2486.53	1069.47	2333.23	1222.77	440.16
4	2	363	25.85	-95.11	-95.01	25.76	-3.41	2601.27	817.87	2562.59	856.55	259.77
4	2	364	4.55	-109.03	-108.60	4.13	-6.96	2597.54	1270.23	2529.64	1338.13	292.44
4	2	365	28.20	-94.71	-94.67	28.15	2.29	2559.61	881.96	2548.65	892.92	135.16
4	2	366	9.30	-111.44	-108.92	6.78	17.27	2524.69	1341.63	2508.34	1357.98	138.14
4	2	367	27.40	-86.19	-85.69	26.90	7.51	2311.92	830.09	2311.87	830.14	9.23
4	2	368	19.99	-114.10	-100.05	5.94	41.07	2273.16	1281.20	2272.90	1281.46	-16.04
...												
4	74	5241	1.39	-0.78	1.24	-0.63	0.55	8.68	-11.58	2.31	-5.21	-9.41
M_G			**N max**	**N min**	**N 1**	**N 2**	**N 1-2**	**M max**	**M min**	**M 1**	**M 2**	**M 1-2**
				-562.72	-314.98	-561.56	-130.46		-9864.84	-8141.39	-9838.82	-2837.63
			773.61		488.06	768.55	150.90	7660.35		4932.99	7646.71	2912.80

VERIFICHE ELEMENTI TRAVE E/O PILASTRO IN C.A.

LEGENDA TABELLA VERIFICHE ELEMENTI TRAVE E/O PILASTRO IN C.A.

In tabella vengono riportati per ogni elemento il numero identificativo ed il codice di verifica con le sigle **Ok** o **NV**.

Nel caso in cui si sia proceduto alla progettazione con il metodo degli stati limite (**S.L.**) vengono riportati: il rapporto x/d, le verifiche per sollecitazioni proporzionali e la verifica per compressione media con l'indicazione delle combinazioni in cui si sono attinti i rispettivi valori.

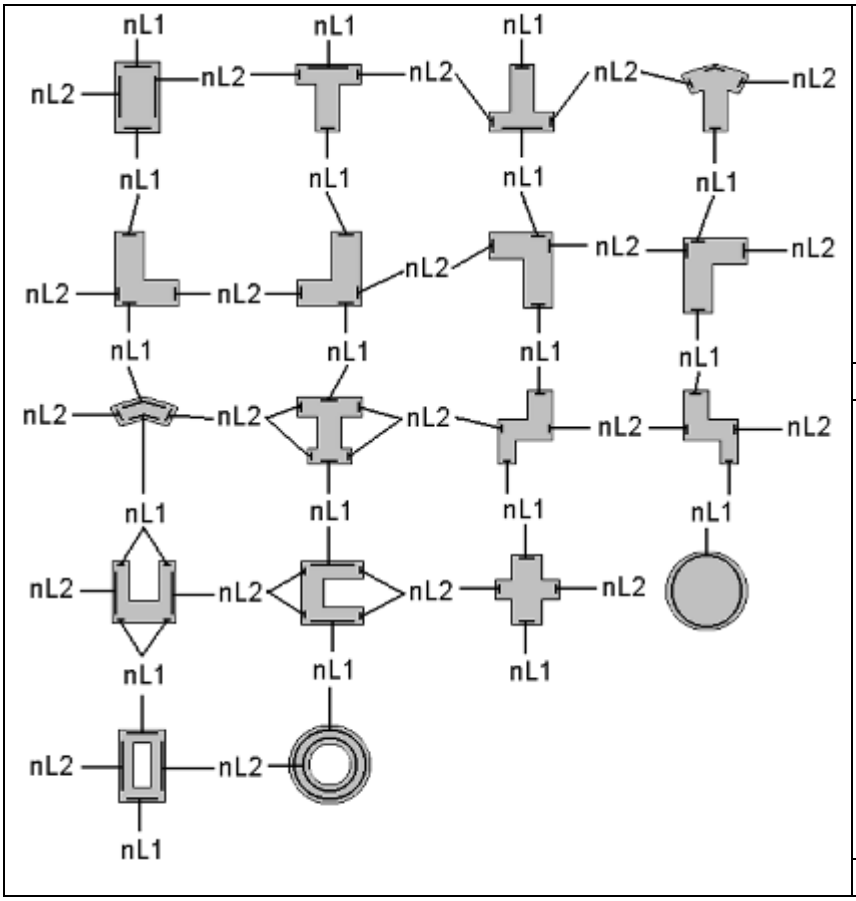
Nel caso in cui si sia proceduto alla progettazione con le tensioni ammissibili (**T.A.**) vengono riportate le massime tensioni nell'elemento (massima compressione nel calcestruzzo, massima compressione media nel calcestruzzo, massima tensione nell'acciaio, massima tensione tangenziale) con l'indicazione delle combinazioni in cui si sono attinti i rispettivi valori.

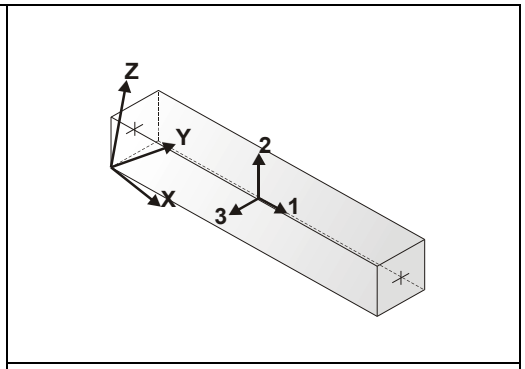
Nel caso in cui la struttura abbia comportamento dissipativo e sia prevista la progettazione con il criterio della gerarchia delle resistenze **(G.R.)** vengono riportate le verifiche di sovraresistenza e del nodo.

Per gli elementi tipo pilastro sono riportati numero e diametro dei ferri di vertice, numero e diametro di ferri disposti lungo i lati L1 (paralleli alla base della sezione) e lungo i lati L2 (paralleli all'altezza della sezione).

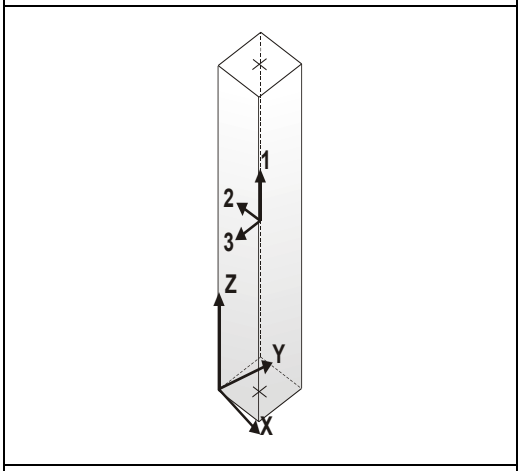
Per gli elementi tipo trave sono riportati infine le quantità di armatura inferiore e superiore.

Schema della distribuzione delle armature longitudinali





Orientamento elementi 2D non verticali



Orientamento elementi 2D verticali

PROGETTAZIONE DELLE FONDAZIONI

Il D.M.17/01/2018 - par: 7.2.5 prevede:

"Sia per CD"A" sia per CD"B" il dimensionamento delle strutture di fondazione e la verifica di sicurezza del complesso fondazione-terreno devono essere eseguiti assumendo come azione in fondazione, trasmessa dagli elementi soprastanti, una tra le seguenti:

- quella derivante dall'analisi strutturale eseguita ipotizzando comportamento strutturale non dissipativo;
- […];
- quella trasferita dagli elementi soprastanti nell'ipotesi di comportamento strutturale dissipativo, amplificata di un coefficiente pari a 1,30 in CD"A" e 1,10 in CD"B";

Nel contesto visualizzazione risultati e nella stampa della relazione sulle fondazioni PRO_SAP mostra le sollecitazioni che derivano dall'analisi non incrementate sia in termini di pressioni sul terreno che in termini di sollecitazioni.

La progettazione degli elementi strutturali con proprietà fondazione è effettuata da PRO_SAP (per travi e platee) o da PRO_CAD Plinti (per plinti e pali di fondazione) incrementando le sollecitazioni delle combinazioni con sisma di un coefficiente pari 1.1 in CDB e 1.3 in CDA per pali, plinti, travi e platee.
Per i bicchieri dei plinti di fondazione prefabbricati l'incremento delle sollecitazioni ha un fattore pari a 1.2 in CDB e 1.35 in CDA.
N.B.: nel caso di comportamento strutturale non dissipativo la progettazione viene effettuata senza nessun incremento.

Le verifiche geotecniche vengono effettuate dal modulo geotecnico incrementando automaticamente le sollecitazioni del fattore 1.1 in CDB e 1.3 in CDA per pali, plinti, travi e platee.
N.B.: nel caso di comportamento strutturale non dissipativo le verifiche geotecniche vengono effettuate senza nessun incremento.

Simbologia adottata nelle tabelle di verifica

Per le verifiche agli S.L. dei pilastri è presente una tabella con i simboli di seguito descritti:

M_P X Y	Numero della pilastrata (P) e posizione in pianta (X,Y)
Pilas.	numero identificativo dell'elemento D2
Note	Codici identificativi delle sezione (s) e materiale (m) pilastro
Stato	Codici relativi all'esito delle verifiche effettuate appresso descritte
Quota	Quota sezione di verifica
%Af	Percentuale di area di armatura rispetto a quella di calcestruzzo
r. snell.	Rapporto di snellezza λ su λ^*: valore superiore a 1 per elementi snelli nel caso in cui viene effettuata la verifica con il metodo diretto dello stato di equilibrio
Armat. long.	Numero e diametro (d) dei ferri di armatura longitudinale distinti in ferri di vertice + ferri di lato nelle posizioni nL1 e nL2, come da schemi in figura precedente
V N/M	Verifica a pressoflessione con rapporto Ed/Rd: valore minore o uguale a 1 per verifica positiva
V N sis	Verifica a compressione solo calcestruzzo con rapporto Nsd/Nrd ed Nrd calcolato come al punto 7.4.4.2.1: valore minore o uguale a 1 per verifica positiva
Staffe	Dati tratto di staffatura oggetto di verifica, nello specifico: numero delle braccia, diametro, passo, lunghezza L tratto
V V/T cls	Verifica a taglio/torsione con rapporto Ved/Vrd: valore minore o uguale a 1 per verifica positiva
Rif. cmb.	Riferimento combinazioni da cui si generano le verifiche più gravose per il pilastro

Per le verifiche alla G.R. dei pilastri è presente una tabella con i simboli di seguito descritti:

Pilas.	numero identificativo dell'elemento D2 pilastro
sovr. Xi (Xf)	Verifica sovraresistenza come da formula 7.4.4 in direzione X, alla base (i) ed alla sommità (f):

	rapporto tra i momenti resistenti dei pilastri e delle travi. La verifica è positiva se maggiore del γ_{Rd} adottato
sovr. Yi (Yf)	Verifica sovraresistenza come da formula 7.4.4 in direzione Y, alla base (i) ed alla sommità (f): rapporto tra i momenti resistenti dei pilastri e delle travi. La verifica è positiva se maggiore del γ_{Rd} adottato
M 2-2 i (f)	Valore del momento resistente 2-2 alla base (i) ed alla sommità (f) con massimo momento in presenza dello sforzo normale di calcolo
M 3-3 i (f)	Valore del momento resistente 3-3 alla base (i) ed alla sommità (f) con massimo momento in presenza dello sforzo normale di calcolo
Luce per V	Luce di calcolo per la definizione del taglio (generato dai momenti resistenti)
V M2-2 (M3-3)	Valore del taglio generato dai momenti resistenti 2-2 (3-3)

Per le verifiche dei dettagli costruttivi per la duttilità è presente una tabella con i simboli di seguito descritti:
(Non presente nel caso di comportamento strutturale non dissipativo)

Pilas	Numero identificativo D2 pilastro
ni	Sforzo assiale adimensionalizzato di progetto relativo alla combinazione sismica SLV
alfaomega	Prodotto tra il coefficiente di efficacia del confinamento e il rapporto meccanico dell'armatura trasversale di confinamento all'interno del nodo
V.7.4.29 2-2 (3-3)	Rapporto tra la domanda di staffe minima nel nodo e il rapporto meccanico dell'armatura trasversale di confinamento inserito all'interno del nodo in direzione 2 (3)
V. 7.4.29 Stato	Codici relativi all'esito della verifica 7.4.29
dmu_fi 2-2 (3-3)	Domanda in duttilità di curvatura in direzione 2 (3)
cmu_fi 2-2 (3-3)	Capacità in duttilità di curvatura in direzione 2 (3)
V. dutt. 2-2 (3-3)	Rapporto tra la domanda in duttilità di curvatura e la capacità in duttilità di curvatura in direzione 2 (3)

Per le verifiche nodi trave-pilastro di elementi nuovi è presente una tabella con i simboli di seguito descritti:

Nodo	Numero identificativo del nodo trave-pilastro
Stato	Esito delle verifiche
Pilastro	Numero identificativo D2 pilastro
Diam st	Diametro staffe nodo
Passo	Passo staffe nodo
n. br. 2 (3)	Numero braccia staffe per il taglio in direzione 2 (3)
Bj2 (3)	Larghezza effettiva del nodo per il taglio in direzione 2 (3)
Hjc2 (3)	Distanza tra le giaciture più esterne delle armature del pilastro per il taglio in direzione 2 (3)
V. 7.4.8	Rapporto tra il taglio Vjbd e il taglio resistente come da formula 7.4.8
V. Ash	Rapporto tra il passo staffe calcolato secondo il capitolo 7.4.4.3.1. e il passo staffe effattivamente inserita nel nodo. Nel caso di valore indica passo staffe utilizzato deriva dalle formule presenti nel paragrafo 7.4.4.3.1. Nel caso di valore minore di 1 il passo staffe utilizzato deriva del pilastro superiore o inferiore al nodo
7.4.10	Check passo staffe valutato in funzione della formula 7.4.10: • SI il passo staffe è calcolato utilizzando la formula 7.4.10; • NO il passo staffe è calcolato utilizzando le formule 7.4.11 e/o 7.4.12; • NR calcolo passo staffe non richiesto;
Rif. comb.	Riferimento combinazioni da cui si generano le verifiche più gravose per il nodo

Per le verifiche nodi trave-pilastro di elementi esistenti è presente una tabella con i simboli di seguito descritti:

Pilastro I	Numero identificativo D2 del pilastro inferiore.

Pilastro S	Numero identificativo D2 del pilastro superiore.
Nodo	Numero identificativo del nodo trave-pilastro.
SL cod	Stato limite di riferimento e relativo esito delle verifiche.
ver. (+)	Fattore di sicurezza nei riguardi della verifica di resistenza a compressione (verificato se < 1.00).
V +	Azione di Taglio presente al di sopra del nodo nella verifica di resistenza a compressione.
V + af s	Sollecitazione di trazione presente nell' armatura longitudinale superiore della trave nella verifica di resistenza a compressione.
N +	Azione Assiale presente al di sopra del nodo nella verifica di resistenza a compressione.
ver. (-)	Fattore di sicurezza nei riguardi della verifica di resistenza a trazione (verificato se < 1.00).
V -	Azione di Taglio presente al di sopra del nodo nella verifica di resistenza a trazione.
V - af s	Sollecitazione di trazione presente nell' armatura longitudinale superiore della trave nella verifica di resistenza a trazione.
N -	Azione Assiale presente al di sopra del nodo nella verifica di resistenza a trazione.
AreaV2	Area resistente del nodo in direzione 2 ($A_{j2}=b_{j2}*h_{jc2}$).
AreaV3	Area resistente del nodo in direzione 3 ($A_{j3}=b_{j3}*h_{jc3}$).
Rif. comb.	Combinazione (direzione) di riferimento nella verifica di trazione.

Per le verifiche agli S.L. delle travi è presente una tabella con i simboli di seguito descritti:

M_T Z P P	Numero della travata (T), quota media (Z), n° pilastrata iniziale (P) e finale (P) (nodo in assenza di pilastrata)
Trave	numero identificativo dell'elemento D2
Note	Codici identificativi sezione (s) e materiale (m) trave; sono inoltre presenti le sigle relative all'esito delle verifiche effettuate appresso descritte
%Af	Percentuale di area di armatura rispetto a quella di calcestruzzo
Af inf.	Area di armatura longitudinale posta all'intradosso
Af sup	Area di armatura longitudinale posta all'estradosso
Af long.	Area complessiva armatura longitudinale
x/d	rapporto tra posizione dell'asse neutro e altezza utile
V N/M	Verifica a pressoflessione rapporto Ed/Rd: valore minore o uguale a 1 per verifica positiva
Staffe	Dati tratto di staffatura oggetto di verifica, nello specifico: numero delle braccia, diametro, passo, lunghezza L tratto
V V/T cls	Verifica a taglio/torsione con rapporto Ved/Vrd: valore minore o uguale a 1 per verifica positiva
Rif. cmb.	Riferimento combinazioni da cui si generano le verifiche più gravose per la trave

Per le verifiche alla G.R. delle travi è presente una tabella con i simboli di seguito descritti:

Trave	numero identificativo dell'elemento D2 trave
M negativo i (f)	Valore del momento resistente negativo all' estremità iniziale i (finale f) della trave
M positivo i (f)	Valore del momento resistente positivo all' estremità iniziale i (finale f) della trave
Luce per V	Luce di calcolo per la definizione del taglio (generato dai momenti resistenti)
V M-i M+f	Taglio generato dai momenti resistenti negativo i e positivo f
V M+i M-f	Taglio generato dai momenti resistenti positivo i e negativo f
VEd, min	Valore di taglio minimo per verifica condizioni p.to 7.4.4.1.1 armatura diagonale (solo per CD "A")
VEd, max	Valore di taglio massimo per verifica condizioni p.to 7.4.4.1.1 armatura diagonale (solo per CD "A")
Vr1	Valore di taglio come da formula 7.4.1 per armatura diagonale (solo per CD "A")
As	Area singolo ordine armature diagonali come da formula 7.4.2 (solo per CD "A")

Per le verifiche a taglio ciclico di travi e pilastri esistenti è presente una tabella con i simboli di seguito descritti:

Trave/Pilastro	Numero identificativo dell'elemento D2 trave/pilastro
V. SLV	Codice relativo all'esito delle verifiche

Nodo	Numero identificativo del nodo di verifica
Ver. VC	Fattore di sicurezza nei confronti della verifica a taglio ciclico (verificato se < 1.00)
Direz.	Direzione di verifica
N fr	Valore di sforzo normale calcolato con fattore di comportamento fragile
V fr	Valore di taglio calcolato con fattore di comportamento fragile
M fr	Valore di momento calcolato con fattore di comportamento fragile
N dutt	Valore di sforzo normale calcolato con fattore di comportamento duttile
LV	Lunghezza di taglio
Mud,pl	Parte plastica della domanda di duttilità
V cic	Resistenza a taglio in condizioni cicliche (C8.7.2.8)
Cmb	Riferimento combinazioni da cui si generano le verifiche più gravose

Per le verifiche alle T.A. di pilastri e travi è presente una tabella con i simboli di seguito descritti:

M_P X Y	Numero della pilastrata (P) e posizione in pianta (X,Y)
M_T Z P P	Numero della travata, quota media pilastrata iniziale e finale (nodo in assenza di pilastrata)
Pilas. o Trave	numero identificativo dell'elemento D2
Note	Viene riportato il codice relativo alla sezione(s) e relativo al materiale(m); nella terza riga viene riportato il valore delle snellezze in direzione 2-2 e 3-3
Stato	Codici di verifica relativi alle tensioni normali e alle tensioni tangenziali
Quota	Ascissa del punto di verifica
%Af	Percentuale di area di armatura rispetto a quella di calcestruzzo
Armat. long.	Numero e diametro dei ferri di armatura longitudinale: ferri di vertice + ferri di lato (come da fig. precedente)
Af inf.	Area di armatura longitudinale posta all'intradosso della trave
Af sup	Area di armatura longitudinale posta all'estradosso della trave
Sc max	Massima tensione di compressione del calcestruzzo
Sc med	Massima tensione media di compressione del calcestruzzo
Sf max	Tensione massima nell'acciaio
staffe	Vengono riportati i dati del tratto di staffatura in cui cade la sezione di verifica; in particolare: numero dei bracci, diametro, passo, lunghezza tratto
Tau max	Tensione massima tangenziale nel cls
Rif. comb	Combinazioni in cui si generano i seguenti valori di tensione: Sc max, Sc med, Sf max, Tau max
AfV	area dell'armatura atta ad assorbire le azioni di taglio
AfT	area dell'armatura atta ad assorbire le azioni di torsione
Scorr. P	Scorrimento dei piegati
Af long.	Area del ferro longitudinale aggiuntivo per assorbire la torsione

					M_P= 1	**X=0.0**	**Y=0.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
			cm						L=cm			
39	s=2,m=3	ok,ok	0.0	1.43	0.51	4d18 6+8 d18	0.97	0.183+4d10/12	L=87	0.77	0.43	10,8,10,10
			214.0	1.11	0.51	4d18 4+6 d18	0.27	0.173+4d10/20	L=253	0.77	0.70	10,8,10,10
	[b=1.0;1.0]		428.0	1.43	0.51	4d18 6+8 d18	0.96	0.173+4d10/12	L=87	0.77	0.43	29,8,10,10
48	s=2,m=3	ok,ok	428.0	1.11	0.33	4d18 4+6 d18	0.72	0.083+4d10/12	L=87	0.66	0.35	24,8,10,10
			631.5	1.11	0.33	4d18 4+6 d18	0.14	0.083+4d10/20	L=232	0.66	0.55	11,8,10,10
	[b=1.0;1.0]		835.0	1.11	0.33	4d18 4+6 d18	0.86	0.073+4d10/12	L=87	0.66	0.35	30,8,10,10
					M_P= 2	**X=582.5**	**Y=0.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
33	s=2,m=3	ok,ok	0.0	1.43	0.62	4d18 6+8 d18	1.00	0.253+4d10/12	L=87	0.68	0.45	11,24,10,10
			214.0	1.11	0.62	4d18 4+6 d18	0.30	0.253+4d10/20	L=253	0.68	0.72	5,24,10,10
	[b=1.0;1.0]		428.0	1.11	0.62	4d18 4+6 d18	0.70	0.243+4d10/12	L=87	0.69	0.45	11,24,10,10
34	s=2,m=3	ok,ok	428.0	1.11	0.43	4d18 4+6 d18	0.70	0.133+4d10/12	L=87	0.62	0.35	8,24,8,8

			631.5	1.11	0.43	4d18 4+6 d18	0.15	0.133+4d10/20	L=232	0.63	0.57	11,24,8,8
	[b=1.0;1.0]		835.0	1.11	0.43	4d18 4+6 d18	0.99	0.123+4d10/12	L=87	0.63	0.35	8,24,8,8
					M_P= 3	**X=1165.0**	**Y=0.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
49	s=2,m=3	ok,ok	0.0	1.43	0.51	4d18 6+8 d18	0.99	0.183+4d10/12	L=87	0.73	0.44	8,6,8,10
			214.0	1.11	0.51	4d18 4+6 d18	0.29	0.183+4d10/20	L=253	0.73	0.70	8,6,8,10
	[b=1.0;1.0]		428.0	1.11	0.51	4d18 4+6 d18	0.66	0.173+4d10/12	L=87	0.73	0.44	8,6,8,10
6	s=2,m=3	ok,ok	428.0	1.11	0.33	4d18 4+6 d18	0.65	0.083+4d10/12	L=87	0.61	0.33	24,6,8,8
			631.5	1.11	0.33	4d18 4+6 d18	0.13	0.083+4d10/20	L=232	0.61	0.53	8,6,8,8
	[b=1.0;1.0]		835.0	1.11	0.33	4d18 4+6 d18	0.84	0.083+4d10/12	L=87	0.62	0.33	24,6,8,8
					M_P= 4	**X=0.0**	**Y=635.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
41	s=2,m=3	ok,ok	0.0	1.75	0.62	4d18 8+10 d18	0.95	0.263+4d10/12	L=87	0.77	0.50	30,20,31,31
			214.0	1.11	0.62	4d18 4+6 d18	0.28	0.253+4d10/20	L=253	0.77	0.80	30,20,31,31
	[b=1.0;1.0]		428.0	1.11	0.62	4d18 4+6 d18	0.72	0.253+4d10/12	L=87	0.78	0.50	30,20,31,31
59	s=2,m=3	ok,ok	428.0	1.11	0.42	4d18 4+6 d18	0.66	0.133+4d10/12	L=87	0.59	0.35	11,20,31,31
			631.5	1.11	0.42	4d18 4+6 d18	0.15	0.123+4d10/20	L=232	0.59	0.55	31,20,31,31
	[b=1.0;1.0]		835.0	1.11	0.42	4d18 4+6 d18	0.94	0.123+4d10/12	L=87	0.59	0.35	11,20,31,31
					M_P= 5	**X=582.5**	**Y=635.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
35	s=2,m=3	ok,ok	0.0	1.11	0.77	4d18 4+6 d18	0.99	0.343+4d10/12	L=87	0.64	0.42	8,28,31,30
			214.0	1.11	0.77	4d18 4+6 d18	0.23	0.343+4d10/20	L=253	0.65	0.67	24,28,31,30
	[b=1.0;1.0]		428.0	1.11	0.77	4d18 4+6 d18	0.72	0.333+4d10/12	L=87	0.65	0.42	8,28,31,30
36	s=2,m=3	ok,ok	428.0	1.11	0.59	4d18 4+6 d18	0.68	0.233+4d10/12	L=87	0.78	0.50	5,28,21,30
			631.5	1.11	0.59	4d18 4+6 d18	0.09	0.223+4d10/20	L=232	0.78	0.80	24,28,21,30
	[b=1.0;1.0]		835.0	1.75	0.59	4d18 8+10 d18	0.89	0.223+4d10/12	L=87	0.78	0.50	5,28,21,30
9	s=2,m=3	ok,ok	835.0	1.11	0.22	4d18 4+6 d18	0.48	0.053+4d10/12	L=87	0.56	0.34	20,28,24,26
			1017.5	1.11	0.22	4d18 4+6 d18	0.11	0.043+4d10/20	L=190	0.56	0.54	26,28,24,26
	[b=1.0;1.0]		1200.0	1.11	0.22	4d18 4+6 d18	0.39	0.043+4d10/12	L=87	0.56	0.34	16,28,24,26
					M_P= 6	**X=1165.0**	**Y=635.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
51	s=2,m=3	ok,ok	0.0	1.43	0.58	4d18 6+8 d18	0.91	0.243+4d10/12	L=87	0.69	0.44	8,14,31,30
			214.0	1.11	0.58	4d18 4+6 d18	0.25	0.233+4d10/20	L=253	0.69	0.71	24,14,31,30
	[b=1.0;1.0]		428.0	1.11	0.58	4d18 4+6 d18	0.66	0.233+4d10/12	L=87	0.69	0.44	8,14,31,30
29	s=2,m=3	ok,ok	428.0	1.11	0.43	4d18 4+6 d18	0.61	0.143+4d10/12	L=87	0.58	0.35	5,14,30,30
			631.5	1.11	0.43	4d18 4+6 d18	0.09	0.143+4d10/20	L=232	0.58	0.56	21,14,30,30
	[b=1.0;1.0]		835.0	1.11	0.43	4d18 4+6 d18	0.77	0.133+4d10/12	L=87	0.58	0.35	21,14,30,30
10	s=2,m=3	ok,ok	835.0	1.11	0.22	4d18 4+6 d18	0.18	0.043+4d10/12	L=87	0.55	0.34	5,26,33,24
			1017.5	1.11	0.22	4d18 4+6 d18	0.10	0.043+4d10/20	L=190	0.55	0.54	8,26,33,24
	[b=1.0;1.0]		1200.0	1.11	0.22	4d18 4+6 d18	0.33	0.043+4d10/12	L=87	0.56	0.34	24,26,33,24
					M_P= 7	**X=0.0**	**Y=1145.9**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
42	s=2,m=3	ok,ok	0.0	1.43	0.54	4d18 6+8 d18	0.99	0.203+4d10/12	L=87	0.67	0.43	30,20,30,30
			214.0	1.11	0.54	4d18 4+6 d18	0.23	0.203+4d10/20	L=253	0.67	0.68	30,20,30,30
	[b=1.0;1.0]		428.0	1.11	0.54	4d18 4+6 d18	0.74	0.193+4d10/12	L=87	0.68	0.43	30,20,30,30
60	s=2,m=3	ok,ok	428.0	1.11	0.37	4d18 4+6 d18	0.60	0.103+4d10/12	L=87	0.59	0.34	20,15,31,31
			631.5	1.11	0.37	4d18 4+6 d18	0.13	0.103+4d10/20	L=232	0.59	0.54	36,15,31,31
	[b=1.0;1.0]		835.0	1.11	0.37	4d18 4+6 d18	0.82	0.093+4d10/12	L=87	0.59	0.34	20,15,31,31
					M_P= 8	**X=582.5**	**Y=1145.9**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
55	s=2,m=3	ok,ok	0.0	1.11	0.66	4d18 4+6 d18	0.93	0.233+4d10/12	L=87	0.60	0.39	15,27,31,30
			214.0	1.11	0.66	4d18 4+6 d18	0.19	0.233+4d10/20	L=253	0.60	0.62	27,27,31,30
	[b=1.0;1.0]		428.0	1.11	0.66	4d18 4+6 d18	0.72	0.223+4d10/12	L=87	0.60	0.39	15,27,31,30
12	s=2,m=3	ok,ok	428.0	1.11	0.47	4d18 4+6 d18	0.71	0.143+4d10/12	L=87	0.69	0.42	18,27,30,30
			631.5	1.11	0.47	4d18 4+6 d18	0.09	0.143+4d10/20	L=232	0.69	0.67	21,27,30,30
	[b=1.0;1.0]		835.0	1.43	0.47	4d18 6+8 d18	0.87	0.133+4d10/12	L=87	0.69	0.42	5,27,30,30
18	s=2,m=3	ok,ok	835.0	1.11	0.22	4d18 4+6 d18	0.50	0.053+4d10/12	L=87	0.59	0.35	6,27,26,26
			1017.5	1.11	0.22	4d18 4+6 d18	0.10	0.043+4d10/20	L=190	0.59	0.56	21,27,26,26
	[b=1.0;1.0]		1200.0	1.11	0.22	4d18 4+6 d18	0.42	0.043+4d10/12	L=87	0.60	0.35	15,27,26,26
					M_P= 9	**X=1165.0**	**Y=1145.9**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
52	s=2,m=3	ok,ok	0.0	1.43	0.50	4d18 6+8 d18	0.93	0.173+4d10/12	L=87	0.69	0.43	21,5,30,30
			214.0	1.11	0.50	4d18 4+6 d18	0.23	0.173+4d10/20	L=253	0.69	0.68	27,5,30,30
	[b=1.0;1.0]		428.0	1.11	0.50	4d18 4+6 d18	0.68	0.163+4d10/12	L=87	0.70	0.43	21,5,30,30
8	s=2,m=3	ok,ok	428.0	1.11	0.37	4d18 4+6 d18	0.64	0.113+4d10/12	L=87	0.58	0.33	14,21,30,31
			631.5	1.11	0.37	4d18 4+6 d18	0.12	0.103+4d10/20	L=232	0.58	0.53	8,21,30,31
	[b=1.0;1.0]		835.0	1.11	0.37	4d18 4+6 d18	0.74	0.103+4d10/12	L=87	0.58	0.33	26,21,30,31
30	s=2,m=3	ok,ok	835.0	1.11	0.22	4d18 4+6 d18	0.20	0.053+4d10/12	L=87	0.56	0.34	14,21,27,21
			1017.5	1.11	0.22	4d18 4+6 d18	0.18	0.043+4d10/20	L=190	0.56	0.55	21,21,27,21
	[b=1.0;1.0]		1200.0	1.11	0.22	4d18 4+6 d18	0.35	0.043+4d10/12	L=87	0.56	0.34	14,21,27,21
					M_P= 10	**X=0.0**	**Y=1585.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
43	s=2,m=3	ok,ok	0.0	1.11	0.53	4d18 4+6 d18	0.91	0.193+4d10/12	L=87	0.57	0.37	30,15,30,30
			214.0	1.11	0.53	4d18 4+6 d18	0.17	0.193+4d10/20	L=253	0.57	0.59	30,15,30,30
	[b=1.0;1.0]		428.0	1.11	0.53	4d18 4+6 d18	0.59	0.183+4d10/12	L=87	0.58	0.37	36,15,30,30
61	s=2,m=3	ok,ok	428.0	1.11	0.36	4d18 4+6 d18	0.56	0.103+4d10/12	L=87	0.56	0.33	20,15,36,30
			631.5	1.11	0.36	4d18 4+6 d18	0.11	0.093+4d10/20	L=232	0.56	0.53	32,15,36,30

[b=1.0;1.0]		835.0	1.11	0.36	4d18 4+6 d18	0.75	0.093+4d10/12 L=87	0.56	0.33	20,15,36,30
				M_P= 11	**X=582.5**	**Y=1585.0**				
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
56	s=2,m=3	ok,ok	0.0	1.43	0.61	4d18 6+8 d18	0.72	0.223+4d10/12 L=87	0.69	0.44	15,33,36,30
			214.0	1.11	0.61	4d18 4+6 d18	0.15	0.223+4d10/20 L=253	0.69	0.70	27,33,36,30
[b=1.0;1.0]			428.0	1.43	0.61	4d18 6+8 d18	0.91	0.213+4d10/12 L=87	0.69	0.44	11,33,36,30
37	s=2,m=3	ok,ok	428.0	1.11	0.37	4d18 4+6 d18	0.99	0.103+4d10/12 L=87	0.55	0.33	5,33,33,30
			631.5	1.11	0.37	4d18 4+6 d18	0.12	0.093+4d10/20 L=232	0.55	0.53	23,33,33,30
[b=1.0;1.0]			835.0	1.11	0.37	4d18 4+6 d18	0.85	0.093+4d10/12 L=87	0.55	0.33	17,33,33,30
				M_P= 12	**X=1165.0**	**Y=1585.0**				
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
53	s=2,m=3	ok,ok	0.0	1.75	0.36	4d18 8+10 d18	0.87	0.093+4d10/12 L=87	0.77	0.45	27,17,30,30
			214.0	1.11	0.36	4d18 4+6 d18	0.15	0.093+4d10/20 L=253	0.77	0.72	27,17,30,30
[b=1.0;1.0]			428.0	1.43	0.36	4d18 6+8 d18	0.83	0.083+4d10/12 L=87	0.77	0.45	21,17,30,30
				M_P= 13	**X=0.0**	**Y=1985.0**				
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
44	s=2,m=3	ok,ok	0.0	1.11	0.44	4d18 4+6 d18	0.80	0.143+4d10/12 L=87	0.59	0.36	17,27,10,10
			214.0	1.11	0.44	4d18 4+6 d18	0.25	0.133+4d10/20 L=253	0.59	0.58	17,27,10,10
[b=1.0;1.0]			428.0	1.11	0.44	4d18 4+6 d18	0.52	0.133+4d10/12 L=87	0.59	0.36	36,27,10,10
62	s=2,m=3	ok,ok	428.0	1.11	0.29	4d18 4+6 d18	0.38	0.063+4d10/12 L=87	0.54	0.33	33,15,5,10
			631.5	1.11	0.29	4d18 4+6 d18	0.15	0.063+4d10/20 L=232	0.54	0.53	36,15,5,10
[b=1.0;1.0]			835.0	1.11	0.29	4d18 4+6 d18	0.57	0.053+4d10/12 L=87	0.55	0.33	36,15,5,10
				M_P= 14	**X=582.5**	**Y=1985.0**				
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
57	s=2,m=3	ok,ok	0.0	1.43	0.51	4d18 6+8 d18	0.87	0.183+4d10/12 L=87	0.68	0.43	17,33,10,10
			214.0	1.11	0.51	4d18 4+6 d18	0.26	0.183+4d10/20 L=253	0.68	0.70	17,33,10,10
[b=1.0;1.0]			428.0	1.11	0.51	4d18 4+6 d18	0.55	0.173+4d10/12 L=87	0.69	0.43	17,33,10,10
4	s=2,m=3	ok,ok	428.0	1.11	0.32	4d18 4+6 d18	0.50	0.083+4d10/12 L=87	0.56	0.34	14,33,5,5
			631.5	1.11	0.32	4d18 4+6 d18	0.14	0.073+4d10/20 L=232	0.56	0.54	35,33,5,5
[b=1.0;1.0]			835.0	1.11	0.32	4d18 4+6 d18	0.59	0.073+4d10/12 L=87	0.56	0.34	17,33,5,5
				M_P= 15	**X=1165.0**	**Y=1985.0**				
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
54	s=2,m=3	ok,ok	0.0	1.11	0.32	4d18 4+6 d18	0.86	0.073+4d10/12 L=87	0.56	0.33	15,33,11,10
			214.0	1.11	0.32	4d18 4+6 d18	0.19	0.073+4d10/20 L=253	0.56	0.53	20,33,11,10
[b=1.0;1.0]			428.0	1.11	0.32	4d18 4+6 d18	0.66	0.063+4d10/12 L=87	0.56	0.33	27,33,11,10

Pilas.	**%Af**	**r. snell.**	**V N/M**	**V N sis**	**V V/T cls**	**V V/T acc**
	1.75	0.77	1.00	0.34	0.78	0.80

Pilas.	**sovr. Xi**	**sovr. Xf**	**sovr. Yi**	**sovr. Yf**	**M 2-2 i**	**M 2-2 f**	**M 3-3 i**	**M 3-3 f**	**Luce per V**	**V M2-2**	**V M3-3**
					daN cm	daN cm	daN cm	daN cm	cm	daN	daN
4	1.94	0.0	2.20	0.0	2.642e+06	2.596e+06	5.629e+06	5.552e+06	344.50	1.687e+04	3.594e+04
6	3.45	0.0	1.38	0.0	2.679e+06	2.633e+06	5.689e+06	5.613e+06	344.50	1.711e+04	3.633e+04
8	1.72	2.47	1.87	4.62	2.790e+06	2.745e+06	5.875e+06	5.799e+06	344.50	1.782e+04	3.752e+04
9	1.37	0.0	3.12	0.0	2.502e+06	2.460e+06	5.397e+06	5.314e+06	302.50	1.820e+04	3.925e+04
10	2.33	0.0	2.58	0.0	2.484e+06	2.441e+06	5.361e+06	5.278e+06	302.50	1.806e+04	3.899e+04
12	1.37	1.35	2.45	3.49	2.951e+06	3.415e+06	6.147e+06	7.261e+06	344.50	2.181e+04	4.637e+04
18	1.35	0.0	3.49	0.0	2.486e+06	2.444e+06	5.366e+06	5.283e+06	302.50	1.808e+04	3.903e+04
29	2.02	2.33	2.08	2.58	2.952e+06	2.909e+06	6.149e+06	6.075e+06	344.50	1.885e+04	3.927e+04
30	2.47	0.0	4.62	0.0	2.499e+06	2.457e+06	5.391e+06	5.309e+06	305.00	1.803e+04	3.889e+04
33	0.0	1.63	0.0	1.49	3.867e+06	3.337e+06	8.040e+06	6.892e+06	348.00	2.445e+04	5.083e+04
34	1.63	0.0	1.49	0.0	2.891e+06	2.847e+06	6.046e+06	5.971e+06	344.50	1.846e+04	3.861e+04
35	0.0	1.30	0.0	2.54	3.626e+06	3.598e+06	7.440e+06	7.395e+06	348.00	2.292e+04	4.704e+04
36	1.30	1.37	2.54	3.12	3.269e+06	4.228e+06	6.758e+06	8.935e+06	344.50	2.700e+04	5.706e+04
37	1.38	0.0	2.49	0.0	2.729e+06	2.683e+06	5.773e+06	5.697e+06	344.50	1.743e+04	3.686e+04
39	0.0	3.84	0.0	1.35	3.598e+06	3.559e+06	7.595e+06	7.534e+06	348.00	2.275e+04	4.802e+04
41	0.0	1.76	0.0	1.87	4.337e+06	3.340e+06	9.175e+06	6.897e+06	348.00	2.742e+04	5.800e+04
42	0.0	2.10	0.0	1.81	3.684e+06	3.148e+06	7.729e+06	6.515e+06	348.00	2.329e+04	4.886e+04
43	0.0	2.32	0.0	2.24	3.155e+06	3.119e+06	6.530e+06	6.456e+06	348.00	1.995e+04	4.128e+04
44	0.0	4.06	0.0	2.24	2.932e+06	2.886e+06	6.114e+06	6.036e+06	348.00	1.853e+04	3.865e+04
48	3.84	0.0	1.35	0.0	2.675e+06	2.629e+06	5.683e+06	5.607e+06	344.50	1.708e+04	3.629e+04
49	0.0	3.45	0.0	1.38	3.604e+06	3.072e+06	7.604e+06	6.362e+06	348.00	2.278e+04	4.807e+04
51	0.0	2.02	0.0	2.08	3.812e+06	3.277e+06	7.941e+06	6.774e+06	348.00	2.410e+04	5.020e+04
52	0.0	1.72	0.0	1.87	3.569e+06	3.038e+06	7.550e+06	6.295e+06	348.00	2.257e+04	4.773e+04
53	0.0	0.0	0.0	0.0	3.779e+06	3.204e+06	8.104e+06	6.844e+06	348.00	2.389e+04	5.124e+04
54	0.0	0.0	0.0	0.0	2.609e+06	2.560e+06	5.574e+06	5.493e+06	348.00	1.649e+04	3.524e+04
55	0.0	1.37	0.0	2.45	3.300e+06	3.265e+06	6.820e+06	6.749e+06	348.00	2.086e+04	4.311e+04
56	0.0	1.38	0.0	2.49	3.765e+06	3.729e+06	7.858e+06	7.799e+06	348.00	2.380e+04	4.968e+04
57	0.0	1.94	0.0	2.20	3.608e+06	3.076e+06	7.611e+06	6.370e+06	348.00	2.281e+04	4.812e+04
59	1.76	0.0	1.87	0.0	2.876e+06	2.831e+06	6.019e+06	5.945e+06	344.50	1.836e+04	3.844e+04
60	2.10	0.0	1.81	0.0	2.757e+06	2.712e+06	5.820e+06	5.745e+06	344.50	1.761e+04	3.717e+04
61	2.32	0.0	2.24	0.0	2.746e+06	2.700e+06	5.801e+06	5.725e+06	344.50	1.753e+04	3.704e+04
62	4.06	0.0	2.24	0.0	2.579e+06	2.533e+06	5.525e+06	5.448e+06	344.50	1.647e+04	3.528e+04

Pilas.	**M 2-2 i**	**M 2-2 f**	**M 3-3 i**	**M 3-3 f**	**V M2-2**	**V M3-3**
	4.337e+06	4.228e+06	9.175e+06	8.935e+06	2.742e+04	5.800e+04

Pilas.	nid	alfaomega	V. 7.4.29	V. 7.4.29	V. 7.4.29	dmu_fi	dmu_fi	cmu_fi	cmu_fi	V. dut.	V. dut.
			2-2	**3-3**	**Stato**	**2-2**	**3-3**	**2-2**	**3-3**	**2-2**	**3-3**
4	0.05	0.11	0.0	0.0	ok	7.4	7.1	20.5	14.7	0.36	0.48
	0.04	0.11	0.0	0.0	ok			21.7	15.3	0.34	0.46
6	0.06	0.11	0.0	0.0	ok	7.4	7.1	19.6	14.2	0.38	0.50
	0.05	0.11	0.0	0.0	ok			20.7	14.8	0.36	0.48
8	0.07	0.11	0.0	0.02	ok	7.1	7.4	17.3	13.0	0.41	0.57
	0.06	0.11	0.0	0.0	ok			18.2	13.4	0.39	0.55
9	0.03	0.11	0.0	0.0	ok	7.1	7.4	24.5	16.6	0.29	0.44
	0.03	0.11	0.0	0.0	ok			26.0	17.4	0.27	0.43
10	0.03	0.11	0.0	0.0	ok	7.1	7.4	25.2	16.9	0.28	0.44
	0.02	0.11	0.0	0.0	ok			26.7	17.7	0.26	0.42
12	0.09	0.11	0.06	0.12	ok	7.1	7.4	14.6	12.2	0.48	0.61
	0.09	0.11	0.04	0.09	ok			12.4	12.3	0.57	0.60
18	0.03	0.11	0.0	0.0	ok	7.1	7.4	25.1	16.9	0.28	0.44
	0.02	0.11	0.0	0.0	ok			26.6	17.7	0.27	0.42
29	0.09	0.11	0.06	0.12	ok	7.1	7.4	14.6	12.2	0.48	0.61
	0.09	0.11	0.04	0.09	ok			15.3	12.4	0.46	0.60
30	0.03	0.11	0.0	0.0	ok	7.1	7.4	24.6	16.7	0.29	0.44
	0.03	0.11	0.0	0.0	ok			26.1	17.4	0.27	0.43
33	0.17	0.11	0.38	0.42	ok	7.4	7.1	9.7	9.2	0.76	0.77
	0.16	0.11	0.35	0.39	ok			10.0	10.0	0.74	0.71
34	0.08	0.11	0.05	0.07	ok	7.4	7.1	15.5	12.5	0.48	0.57
	0.08	0.11	0.02	0.04	ok			16.3	12.7	0.45	0.56
35	0.22	0.11	0.57	0.71	ok	7.1	7.4	8.3	8.4	0.86	0.88
	0.21	0.11	0.55	0.68	ok			8.4	8.6	0.84	0.86
36	0.15	0.11	0.28	0.37	ok	7.1	7.4	10.6	10.4	0.67	0.71
	0.14	0.11	0.25	0.34	ok			10.2	9.0	0.70	0.83
37	0.06	0.11	0.0	0.0	ok	7.1	7.4	18.5	13.6	0.38	0.54
	0.06	0.11	0.0	0.0	ok			19.5	14.1	0.36	0.52
39	0.12	0.11	0.18	0.21	ok	7.4	7.1	11.2	11.2	0.66	0.63
	0.11	0.11	0.15	0.18	ok			11.5	11.4	0.64	0.62
41	0.17	0.11	0.35	0.46	ok	7.1	7.4	9.2	8.4	0.77	0.88
	0.16	0.11	0.33	0.43	ok			10.0	10.0	0.71	0.74
42	0.13	0.11	0.22	0.30	ok	7.1	7.4	10.8	10.7	0.66	0.69
	0.12	0.11	0.19	0.27	ok			12.0	11.1	0.59	0.67
43	0.13	0.11	0.19	0.27	ok	7.1	7.4	11.9	11.1	0.59	0.67
	0.12	0.11	0.17	0.24	ok			12.4	11.3	0.57	0.66
44	0.09	0.11	0.07	0.09	ok	7.4	7.1	14.9	12.3	0.50	0.58
	0.08	0.11	0.04	0.06	ok			15.6	12.5	0.47	0.57
48	0.05	0.11	0.0	0.0	ok	7.4	7.1	19.7	14.2	0.38	0.50
	0.05	0.11	0.0	0.0	ok			20.8	14.8	0.36	0.48
49	0.12	0.11	0.18	0.21	ok	7.4	7.1	11.2	11.1	0.66	0.64
	0.11	0.11	0.16	0.18	ok			13.0	11.6	0.57	0.61
51	0.15	0.11	0.31	0.40	ok	7.1	7.4	10.0	9.7	0.71	0.76
	0.15	0.11	0.28	0.37	ok			10.6	10.4	0.67	0.71
52	0.11	0.11	0.14	0.21	ok	7.1	7.4	11.4	11.3	0.62	0.65
	0.11	0.11	0.11	0.18	ok			13.4	11.8	0.53	0.63
53	0.06	0.11	0.0	0.0	ok	7.1	7.4	13.2	12.9	0.54	0.57
	0.05	0.11	0.0	0.0	ok			14.8	13.7	0.48	0.54
54	0.05	0.11	0.0	0.0	ok	7.4	7.1	21.3	15.1	0.35	0.47
	0.04	0.11	0.0	0.0	ok			22.7	15.8	0.33	0.45
55	0.15	0.11	0.30	0.39	ok	7.1	7.4	10.3	10.2	0.69	0.72
	0.15	0.11	0.27	0.36	ok			10.7	10.4	0.66	0.71
56	0.15	0.11	0.27	0.36	ok	7.1	7.4	10.3	10.1	0.69	0.73
	0.14	0.11	0.25	0.33	ok			10.5	10.5	0.67	0.71
57	0.12	0.11	0.19	0.21	ok	7.4	7.1	11.2	11.1	0.66	0.64
	0.11	0.11	0.16	0.19	ok			12.9	11.5	0.57	0.61
59	0.08	0.11	0.02	0.07	ok	7.1	7.4	15.8	12.6	0.45	0.59
	0.08	0.11	0.0	0.04	ok			16.5	12.8	0.43	0.58
60	0.07	0.11	0.0	0.0	ok	7.1	7.4	17.9	13.3	0.39	0.56
	0.06	0.11	0.0	0.0	ok			18.9	13.8	0.38	0.54
61	0.06	0.11	0.0	0.0	ok	7.1	7.4	18.2	13.4	0.39	0.55
	0.06	0.11	0.0	0.0	ok			19.1	13.9	0.37	0.53
62	0.04	0.11	0.0	0.0	ok	7.4	7.1	22.2	15.5	0.33	0.46
	0.04	0.11	0.0	0.0	ok			23.6	16.2	0.31	0.44
			2-2	**3-3**						**2-2**	**3-3**
			0.57	0.71						0.86	0.88

Nodo	Conf.	Stato	Pilas.	Diam st	Passo	n. br. 2	Bj2	Hjc2	n. br. 3	Bj3	Hjc3	V. 7.4.8	V. Ash	7.4.10	Rif. cmb
				mm	cm		cm	cm		cm	cm				
1	NO	ok	36	10	5.0	3	40.0	70.2	4	60.0	30.2	0.6	1.0	NO	6,25

2	NO	ok	10	10	12.5	3	40.0	70.2	4	60.0	30.2	0.3	0.9	NO	5,15
3	NO	ok	59	10	5.0	3	40.0	70.2	4	60.0	30.2	0.4	0.9	NO	5,21
4	NO	ok	29	10	5.0	3	40.0	70.2	4	60.0	30.2	0.3	0.9	NO	31,27
5	NO	ok	60	10	5.0	3	40.0	70.2	4	60.0	30.2	0.4	0.8	NO	5,21
6	NO	ok	12	10	5.0	3	40.0	70.2	4	60.0	30.2	0.5	0.7	NO	8,14
7	NO	ok	30	10	12.5	3	40.0	70.2	4	60.0	30.2	0.3	0.9	NO	5,8
8	NO	ok	9	10	12.5	3	40.0	70.2	4	60.0	30.2	0.3	0.9	NO	5,13
11	NO	ok	18	10	12.5	3	40.0	70.2	4	60.0	30.2	0.3	0.9	NO	5,14
12	NO	ok	34	10	5.0	3	40.0	70.2	4	60.0	30.2	0.5	1.0	NO	21,5
24	NO	ok	8	10	12.5	3	40.0	70.2	4	60.0	30.2	0.3	0.7	NO	5,8
25	NO	ok	61	10	8.0	3	40.0	70.2	4	60.0	30.2	0.4	1.0	SI	5,21
26	NO	ok	37	10	5.0	3	40.0	70.2	4	60.0	30.2	0.5	0.8	NO	5,21
27	NO	ok	4	10	12.5	3	40.0	70.2	4	60.0	30.2	0.3	0.7	SI	5,5
28	NO	ok	62	10	12.5	3	40.0	70.2	4	60.0	30.2	0.3	0.7	NO	21,26
30	NO	ok	48	10	12.5	3	40.0	70.2	4	60.0	30.2	0.4	0.7	NO	21,21
31	NO	ok	6	10	12.5	3	40.0	70.2	4	60.0	30.2	0.4	0.6	NO	21,23
32	NO	ok	39	10	12.5	3	40.0	70.2	4	60.0	30.2	0.7	0.9	NO	27,21
33	NO	ok	49	10	12.5	3	40.0	70.2	4	60.0	30.2	0.6	0.9	NO	31,23
34	NO	ok	33	10	3.0	3	40.0	70.2	4	60.0	30.2	0.7	0.9	NO	31,5
36	NO	ok	41	10	3.0	3	40.0	70.2	4	60.0	30.2	0.5	0.8	NO	24,33
37	NO	ok	51	10	3.0	3	40.0	70.2	4	60.0	30.2	0.5	0.7	NO	30,35
38	NO	ok	42	10	3.0	3	40.0	70.2	4	60.0	30.2	0.5	0.8	NO	27,26
39	NO	ok	55	10	5.0	3	40.0	70.2	4	60.0	30.2	0.6	0.7	SI	12,30
40	NO	ok	52	10	3.0	3	40.0	70.2	4	60.0	30.2	0.5	0.7	NO	7,24
41	NO	ok	43	10	3.0	3	40.0	70.2	4	60.0	30.2	0.5	0.7	NO	27,26
42	NO	ok	56	10	3.0	3	40.0	70.2	4	60.0	30.2	0.6	0.7	NO	11,36
43	NO	ok	53	10	5.0	3	40.0	70.2	4	60.0	30.2	0.4	1.0	NO	5,21
44	NO	ok	44	10	12.5	3	40.0	70.2	4	60.0	30.2	0.3	0.9	NO	27,26
45	NO	ok	57	10	3.0	3	40.0	70.2	4	60.0	30.2	0.5	0.8	NO	8,20
46	NO	ok	54	10	12.5	3	40.0	70.2	4	60.0	30.2	0.3	0.7	SI	21,5
47	NO	ok	35	10	5.0	3	40.0	70.2	4	60.0	30.2	0.7	0.8	NO	20,13

Nodo	**Passo**	**V. 7.4.8**	**V. Ash**
	3.00		
		0.71	0.99

Trave	Note	Pos. cm	%Af	Af inf.	Af. sup	Af long.	**M_T= 21** x/d	**Z=0.0** V N/M	**P=1** V V/T cls	**P=3** V V/T acc	Staffe L=cm	Rif. cmb
77	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.93	0.54	0.65	3d10/30 L=0	12,32,32
	s=1,m=3	38.8	0.34	12.7	13.8	0.0	0.07	0.93	0.51	0.59	3d10/30 L=0	12,32,32
99	ok,ok	0.0	0.34	12.7	13.8	6.2	0.07	0.96	0.42	0.97	3d10/30 L=39	12,32,5
	s=1,m=3	38.8	0.34	12.7	13.8	6.2	0.08	0.97	0.40	0.90	3d10/30 L=39	8,12,9
122	ok,ok	0.0	0.34	12.7	13.8	0.0	0.08	1.00	0.34	0.43	3d10/30 L=39	12,12,32
	s=1,m=3	38.8	0.34	12.7	13.8	0.0	0.08	0.99	0.32	0.39	3d10/30 L=39	8,12,12
144	ok,ok	0.0	0.38	12.7	15.3	0.0	0.08	0.91	0.29	0.35	3d10/30 L=39	8,12,12
	s=1,m=3	38.8	0.34	12.7	13.8	0.0	0.08	1.00	0.27	0.32	3d10/30 L=39	8,12,12
166	ok,ok	0.0	0.34	12.7	13.8	0.0	0.08	0.99	0.26	0.30	3d10/30 L=39	8,12,12
	s=1,m=3	38.8	0.34	12.7	13.8	0.0	0.08	0.95	0.24	0.26	3d10/30 L=39	8,12,12
188	ok,ok	0.0	0.34	12.7	13.8	0.0	0.08	0.93	0.23	0.26	3d10/30 L=39	8,12,12
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.94	0.24	0.22	3d10/30 L=39	8,9,12
210	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.91	0.23	0.22	3d10/30 L=39	8,9,12
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.80	0.25	0.24	3d10/30 L=39	8,9,9
232	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.77	0.24	0.24	3d10/30 L=39	8,9,9
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.63	0.27	0.29	3d10/30 L=39	8,5,9
254	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.59	0.27	0.29	3d10/30 L=39	8,9,9
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.47	0.30	0.35	3d10/30 L=39	36,5,5
276	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.45	0.30	0.35	3d10/30 L=39	36,9,5
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.36	0.33	0.41	3d10/30 L=39	36,5,5
298	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.34	0.35	0.42	3d10/30 L=39	30,5,5
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.28	0.37	0.48	3d10/30 L=39	9,5,5
320	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.22	0.40	0.51	3d10/30 L=39	5,5,5
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.50	0.43	0.56	3d10/30 L=39	9,5,5
342	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.42	0.48	0.62	3d10/30 L=39	9,5,5
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.78	0.51	0.67	3d10/30 L=39	5,5,5
364	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.67	0.59	0.76	3d10/30 L=39	9,5,5
	s=1,m=3	38.8	0.38	15.3	12.7	0.0	0.08	0.94	0.61	0.81	3d10/30 L=39	5,5,5
386	ok,ok	0.0	0.38	15.3	12.7	0.0	0.08	0.88	0.63	0.91	3d10/30 L=0	5,5,5
	s=1,m=3	38.8	0.57	22.9	12.7	0.0	0.11	0.91	0.66	0.96	3d10/30 L=0	5,5,5
78	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.79	0.62	0.80	3d10/30 L=19	9,12,12
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.65	0.60	0.75	3d10/30 L=19	8,12,12
100	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.66	0.53	0.86	3d10/20 L=39	8,12,9
	s=1,m=3	38.8	0.32	12.7	12.7	6.2	0.08	0.60	0.50	0.92	3d10/20 L=39	8,12,9
123	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.60	0.43	0.77	3d10/20 L=39	8,12,5
	s=1,m=3	38.8	0.32	12.7	12.7	6.2	0.08	0.54	0.40	0.82	3d10/20 L=39	8,12,5
145	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.53	0.36	0.47	3d10/30 L=39	8,12,12

	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.47	0.33	0.42	3d10/30 L=39	8,12,12
167	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.46	0.31	0.40	3d10/30 L=39	8,12,12
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.49	0.28	0.35	3d10/30 L=39	24,12,12
189	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.48	0.28	0.34	3d10/30 L=39	24,12,12
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.54	0.25	0.29	3d10/30 L=39	24,12,12
211	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.54	0.25	0.28	3d10/30 L=39	22,12,12
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.57	0.22	0.23	3d10/30 L=39	32,9,12
233	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.57	0.23	0.22	3d10/30 L=39	30,12,12
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.57	0.23	0.23	3d10/30 L=39	32,9,5
255	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.57	0.22	0.22	3d10/30 L=39	30,9,5
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.55	0.24	0.26	3d10/30 L=39	32,5,5
277	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.53	0.23	0.26	3d10/30 L=39	30,5,5
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.64	0.25	0.29	3d10/30 L=39	9,5,5
299	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.62	0.25	0.29	3d10/30 L=39	5,5,5
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.77	0.27	0.32	3d10/30 L=39	9,5,5
321	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.73	0.29	0.34	3d10/30 L=39	9,5,5
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.91	0.30	0.37	3d10/30 L=39	5,5,5
343	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.86	0.33	0.42	3d10/30 L=39	5,5,5
	s=1,m=3	38.8	0.38	15.3	12.7	0.0	0.08	0.91	0.35	0.44	3d10/30 L=39	5,5,5
365	ok,ok	0.0	0.38	15.3	12.7	0.0	0.08	0.83	0.39	0.50	3d10/30 L=39	5,5,5
	s=1,m=3	38.8	0.45	17.8	12.7	0.0	0.09	0.93	0.41	0.55	3d10/30 L=39	5,5,21
387	ok,ok	0.0	0.45	17.8	12.7	0.0	0.09	0.87	0.41	0.61	3d10/30 L=0	5,21,21
	s=1,m=3	38.8	0.51	20.4	12.7	0.0	0.10	0.97	0.44	0.66	3d10/30 L=0	5,21,21
							M_T= 22	**Z=0.0**	**P=4**	**P=6**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
79	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.49	0.64	0.45	3d10/30 L=19	8,36,2
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.64	0.61	0.39	3d10/30 L=19	8,36,2
101	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.66	0.46	0.94	3d10/20 L=39	12,32,35
	s=1,m=3	38.8	0.32	12.7	12.7	6.2	0.08	0.76	0.44	0.88	3d10/20 L=39	8,32,35
124	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.78	0.32	0.26	3d10/30 L=39	8,32,2
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.85	0.29	0.22	3d10/30 L=39	8,32,12
146	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.86	0.22	0.20	3d10/30 L=39	8,36,12
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.90	0.19	0.17	3d10/30 L=39	8,36,12
168	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.90	0.15	0.16	3d10/30 L=39	8,32,12
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.90	0.13	0.12	3d10/30 L=39	8,32,12
190	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.89	0.10	0.12	3d10/30 L=39	12,32,12
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.87	0.08	0.09	3d10/30 L=39	12,9,12
212	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.85	0.08	0.09	3d10/30 L=39	12,5,12
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.80	0.10	0.13	3d10/30 L=39	20,5,9
234	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.78	0.10	0.14	3d10/30 L=39	20,5,9
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.69	0.13	0.19	3d10/30 L=39	20,5,9
256	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.67	0.14	0.19	3d10/30 L=39	20,9,9
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.55	0.17	0.24	3d10/30 L=39	20,9,9
278	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.52	0.18	0.25	3d10/30 L=39	20,9,5
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.38	0.20	0.30	3d10/30 L=39	36,9,5
300	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.35	0.22	0.31	3d10/30 L=39	36,9,5
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.21	0.25	0.36	3d10/30 L=39	32,9,5
322	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.19	0.27	0.39	3d10/30 L=39	30,29,5
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.20	0.30	0.43	3d10/30 L=39	10,29,5
344	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.08	0.36	0.48	3d10/30 L=39	5,29,5
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.36	0.39	0.52	3d10/30 L=39	5,29,5
366	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.23	0.49	0.58	3d10/30 L=39	9,29,5
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.58	0.51	0.63	3d10/30 L=39	5,29,5
388	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.46	0.59	0.68	3d10/30 L=19	5,25,5
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.87	0.61	0.72	3d10/30 L=19	5,25,5
80	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.51	0.60	0.61	3d10/30 L=19	2,24,8
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.27	0.58	0.57	3d10/30 L=19	2,24,12
102	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.35	0.43	0.83	3d10/15 L=39	2,24,27
	s=1,m=3	38.8	0.32	12.7	12.7	6.2	0.08	0.15	0.40	0.79	3d10/15 L=39	2,24,27
125	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.22	0.31	0.41	3d10/30 L=39	2,27,12
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.06	0.29	0.36	3d10/30 L=39	2,27,12
147	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.12	0.23	0.33	3d10/30 L=39	5,27,12
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.04	0.21	0.28	3d10/30 L=39	24,27,12
169	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.12	0.17	0.26	3d10/30 L=39	13,27,12
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.14	0.15	0.22	3d10/30 L=39	24,27,12
191	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.17	0.13	0.21	3d10/30 L=39	13,8,12
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.20	0.10	0.16	3d10/30 L=39	24,8,8
213	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.21	0.11	0.17	3d10/30 L=39	13,8,8
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.24	0.09	0.12	3d10/30 L=39	24,8,8
235	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.27	0.11	0.14	3d10/30 L=39	13,8,8
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.28	0.09	0.09	3d10/30 L=39	5,8,8
257	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.31	0.12	0.11	3d10/30 L=39	9,8,8
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.34	0.10	0.07	3d10/30 L=39	9,24,5
279	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.35	0.15	0.08	3d10/30 L=39	9,24,8
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.39	0.12	0.10	3d10/30 L=39	9,24,5
301	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.39	0.18	0.09	3d10/30 L=39	9,24,5
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.43	0.17	0.12	3d10/30 L=39	9,22,5

323	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.41	0.21	0.88	3d10/30 L=39 9,22,28
	s=1,m=3	38.8	0.32	12.7	12.7	6.2	0.08	0.47	0.23	0.97	3d10/30 L=39 9,22,28
345	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.43	0.21	0.78	3d10/20 L=39 9,22,22
	s=1,m=3	38.8	0.32	12.7	12.7	6.2	0.08	0.52	0.23	0.83	3d10/20 L=39 9,21,22
367	ok,ok	0.0	0.32	12.7	12.7	9.2	0.08	0.46	0.32	0.74	3d10/15 L=39 9,21,22
	s=1,m=3	38.8	0.32	12.7	12.7	9.2	0.08	0.58	0.34	0.78	3d10/15 L=39 9,21,22
389	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.51	0.50	0.31	3d10/30 L=19 5,21,21
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.66	0.53	0.35	3d10/30 L=19 5,21,25
							M_T= 23	**Z=0.0**	**P=7**	**P=9**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
81	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.45	0.55	0.39	3d10/30 L=19 16,30,2
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.59	0.52	0.33	3d10/30 L=19 20,30,2
103	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.61	0.40	0.82	3d10/15 L=39 20,30,32
	s=1,m=3	38.8	0.32	12.7	12.7	6.2	0.08	0.70	0.38	0.77	3d10/15 L=39 20,30,32
126	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.72	0.32	0.23	3d10/30 L=39 20,32,2
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.78	0.30	0.18	3d10/30 L=39 20,32,8
148	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.78	0.23	0.17	3d10/30 L=39 20,32,8
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.81	0.21	0.14	3d10/30 L=39 20,32,8
170	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.81	0.18	0.13	3d10/30 L=39 20,24,8
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.82	0.16	0.10	3d10/30 L=39 20,32,8
192	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.81	0.14	0.10	3d10/30 L=39 20,16,8
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.79	0.12	0.07	3d10/30 L=39 20,16,16
214	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.77	0.12	0.07	3d10/30 L=39 20,16,20
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.72	0.10	0.12	3d10/30 L=39 15,16,17
236	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.71	0.10	0.12	3d10/30 L=39 20,16,17
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.63	0.11	0.17	3d10/30 L=39 19,2,17
258	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.60	0.11	0.17	3d10/30 L=39 15,2,17
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.50	0.14	0.21	3d10/30 L=39 19,2,17
280	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.47	0.15	0.22	3d10/30 L=39 19,10,17
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.34	0.17	0.26	3d10/30 L=39 19,2,17
302	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.31	0.19	0.27	3d10/30 L=39 19,30,17
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.17	0.21	0.32	3d10/30 L=39 16,30,17
324	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.12	0.25	0.33	3d10/30 L=39 9,30,17
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.17	0.27	0.38	3d10/30 L=39 5,30,17
346	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.07	0.33	0.41	3d10/30 L=39 5,30,17
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.31	0.35	0.45	3d10/30 L=39 5,30,17
368	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.21	0.45	0.85	3d10/15 L=39 5,26,22
	s=1,m=3	38.8	0.32	12.7	12.7	6.2	0.08	0.50	0.47	0.89	3d10/15 L=39 9,26,22
390	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.40	0.52	0.58	3d10/30 L=19 9,26,17
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.75	0.54	0.62	3d10/30 L=19 17,26,17
82	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.43	0.49	0.49	3d10/30 L=19 13,27,16
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.24	0.47	0.45	3d10/30 L=19 2,27,16
104	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.29	0.39	0.95	3d10/15 L=39 2,16,28
	s=1,m=3	38.8	0.32	12.7	12.7	6.2	0.08	0.14	0.37	0.90	3d10/15 L=39 2,16,28
127	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.22	0.33	0.78	3d10/15 L=39 5,16,28
	s=1,m=3	38.8	0.32	12.7	12.7	6.2	0.08	0.08	0.30	0.73	3d10/15 L=39 21,16,28
149	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.15	0.30	0.27	3d10/30 L=39 25,28,16
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.07	0.28	0.23	3d10/30 L=39 5,28,16
171	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.14	0.25	0.22	3d10/30 L=39 5,16,16
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.10	0.23	0.18	3d10/30 L=39 5,28,16
193	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.14	0.23	0.18	3d10/30 L=39 5,16,16
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.13	0.21	0.14	3d10/30 L=39 10,16,16
215	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.17	0.21	0.16	3d10/30 L=39 10,16,16
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.18	0.19	0.12	3d10/30 L=39 18,16,16
237	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.21	0.18	0.14	3d10/30 L=39 18,16,16
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.23	0.16	0.10	3d10/30 L=39 13,16,16
259	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.25	0.15	0.12	3d10/30 L=39 13,16,16
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.29	0.13	0.08	3d10/30 L=39 13,16,13
281	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.30	0.11	0.10	3d10/30 L=39 13,28,16
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.34	0.10	0.08	3d10/30 L=39 13,28,13
303	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.35	0.10	0.08	3d10/30 L=39 13,24,16
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.39	0.12	0.08	3d10/30 L=39 13,21,13
325	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.39	0.16	0.07	3d10/30 L=39 13,21,17
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.43	0.18	0.09	3d10/30 L=39 13,21,13
347	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.41	0.26	0.10	3d10/30 L=39 13,21,17
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.47	0.28	0.12	3d10/30 L=39 13,21,13
369	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.43	0.30	0.89	3d10/20 L=39 17,35,21
	s=1,m=3	38.8	0.32	12.7	12.7	6.2	0.08	0.50	0.32	0.95	3d10/20 L=39 13,35,21
391	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.46	0.51	0.17	3d10/30 L=19 17,21,13
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.56	0.53	0.21	3d10/30 L=19 13,21,2
							M_T= 24	**Z=0.0**	**P=10**	**P=12**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
83	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.36	0.48	0.35	3d10/30 L=19 20,36,2
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.50	0.46	0.30	3d10/30 L=19 20,30,2
105	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.52	0.38	0.78	3d10/15 L=39 20,24,32
	s=1,m=3	38.8	0.32	12.7	12.7	6.2	0.08	0.61	0.36	0.73	3d10/15 L=39 20,24,32
128	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.60	0.31	0.21	3d10/30 L=39 20,32,28

	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.66	0.28	0.17	3d10/30 L=39 16,32,28
150	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.67	0.23	0.16	3d10/30 L=39 20,32,28
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.71	0.21	0.12	3d10/30 L=39 16,32,36
172	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.71	0.19	0.12	3d10/30 L=39 20,32,36
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.72	0.16	0.08	3d10/30 L=39 16,32,20
194	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.72	0.15	0.09	3d10/30 L=39 19,36,20
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.71	0.13	0.06	3d10/30 L=39 16,20,20
216	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.69	0.13	0.06	3d10/30 L=39 16,20,20
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.66	0.12	0.10	3d10/30 L=39 16,20,17
238	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.64	0.12	0.10	3d10/30 L=39 16,20,17
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.58	0.10	0.14	3d10/30 L=39 16,17,17
260	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.56	0.10	0.14	3d10/30 L=39 16,20,17
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.47	0.12	0.18	3d10/30 L=39 16,2,13
282	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.45	0.12	0.18	3d10/30 L=39 16,2,17
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.34	0.15	0.22	3d10/30 L=39 20,2,13
304	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.32	0.15	0.22	3d10/30 L=39 16,2,13
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.19	0.17	0.26	3d10/30 L=39 20,2,13
326	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.17	0.17	0.27	3d10/30 L=39 16,2,13
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.12	0.20	0.31	3d10/30 L=39 27,2,13
348	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.04	0.23	0.32	3d10/30 L=39 25,30,13
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.19	0.24	0.36	3d10/30 L=39 17,34,13
370	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.12	0.31	0.39	3d10/30 L=39 2,30,13
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.31	0.33	0.43	3d10/30 L=39 17,33,13
392	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.24	0.42	0.46	3d10/30 L=19 2,25,13
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.50	0.44	0.49	3d10/30 L=19 17,25,13
84	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.49	0.46	0.53	3d10/30 L=19 17,27,20
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.25	0.44	0.49	3d10/30 L=19 2,27,20
106	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.31	0.42	0.97	3d10/15 L=39 17,20,36
	s=1,m=3	38.8	0.32	12.7	12.7	6.2	0.08	0.14	0.40	0.91	3d10/15 L=39 2,20,36
129	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.20	0.37	0.40	3d10/30 L=39 2,36,20
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.07	0.35	0.36	3d10/30 L=39 13,36,20
151	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.13	0.30	0.34	3d10/30 L=39 25,20,20
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.05	0.28	0.30	3d10/30 L=39 20,20,20
173	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.12	0.26	0.30	3d10/30 L=39 21,20,20
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.10	0.24	0.26	3d10/30 L=39 20,20,20
195	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.12	0.22	0.26	3d10/30 L=39 21,20,20
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.17	0.20	0.22	3d10/30 L=39 20,20,20
217	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.16	0.19	0.22	3d10/30 L=39 14,20,20
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.23	0.17	0.18	3d10/30 L=39 20,20,20
239	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.24	0.16	0.18	3d10/30 L=39 17,20,20
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.27	0.14	0.14	3d10/30 L=39 17,20,20
261	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.31	0.13	0.15	3d10/30 L=39 17,20,20
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.35	0.11	0.11	3d10/30 L=39 17,16,16
283	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.38	0.11	0.11	3d10/30 L=39 17,16,16
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.42	0.09	0.09	3d10/30 L=39 17,16,13
305	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.43	0.10	0.08	3d10/30 L=39 17,28,13
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.48	0.10	0.10	3d10/30 L=39 17,25,13
327	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.48	0.13	0.10	3d10/30 L=39 17,21,13
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.53	0.15	0.12	3d10/30 L=39 17,21,13
349	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.52	0.22	0.12	3d10/30 L=39 17,21,13
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.58	0.24	0.14	3d10/30 L=39 17,21,25
371	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.55	0.34	0.15	3d10/30 L=39 17,21,13
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.63	0.36	0.17	3d10/30 L=39 17,21,25
393	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.59	0.48	0.17	3d10/30 L=19 17,21,13
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.68	0.49	0.20	3d10/30 L=19 17,21,25
						M_T= 25	**Z=0.0**	**P=13**	**P=15**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
85	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.63	0.42	0.62	3d10/30 L=0 33,36,36
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.69	0.40	0.57	3d10/30 L=0 20,36,36
107	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.71	0.43	0.51	3d10/30 L=39 20,36,36
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.74	0.41	0.46	3d10/30 L=39 20,36,36
130	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.75	0.34	0.40	3d10/30 L=39 20,36,36
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.76	0.32	0.35	3d10/30 L=39 20,36,36
152	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.76	0.28	0.32	3d10/30 L=39 20,36,36
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.76	0.26	0.27	3d10/30 L=39 20,36,36
174	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.75	0.24	0.26	3d10/30 L=39 20,36,36
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.73	0.22	0.21	3d10/30 L=39 20,20,36
196	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.70	0.21	0.21	3d10/30 L=39 20,20,36
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.67	0.19	0.16	3d10/30 L=39 16,20,20
218	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.65	0.19	0.16	3d10/30 L=39 16,20,20
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.60	0.17	0.15	3d10/30 L=39 16,20,17
240	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.58	0.17	0.15	3d10/30 L=39 16,20,17
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.50	0.15	0.18	3d10/30 L=39 20,20,17
262	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.48	0.15	0.18	3d10/30 L=39 16,20,17
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.38	0.16	0.22	3d10/30 L=39 20,17,17
284	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.36	0.17	0.22	3d10/30 L=39 16,13,17
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.24	0.19	0.26	3d10/30 L=39 12,13,13

306	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.17	0.20	0.27	3d10/30 L=39 28,13,13
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.22	0.22	0.31	3d10/30 L=39 33,13,13
328	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.16	0.24	0.32	3d10/30 L=39 33,13,13
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.26	0.26	0.36	3d10/30 L=39 33,13,13
350	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.21	0.29	0.39	3d10/30 L=39 17,13,13
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.42	0.31	0.43	3d10/30 L=39 17,13,13
372	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.36	0.37	0.50	3d10/30 L=39 17,13,13
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.64	0.39	0.53	3d10/30 L=39 17,13,13
394	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.58	0.43	0.61	3d10/30 L=0 17,13,13
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.92	0.45	0.65	3d10/30 L=0 17,13,13
86	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.77	0.53	0.74	3d10/30 L=19 20,20,20
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.64	0.51	0.70	3d10/30 L=19 20,20,20
108	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.64	0.51	0.63	3d10/30 L=39 20,20,20
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.52	0.49	0.59	3d10/30 L=39 20,20,20
131	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.51	0.42	0.52	3d10/30 L=39 20,20,20
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.41	0.40	0.48	3d10/30 L=39 20,20,20
153	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.37	0.36	0.45	3d10/30 L=39 20,20,20
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.31	0.34	0.41	3d10/30 L=39 16,20,20
175	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.28	0.32	0.40	3d10/30 L=39 16,20,20
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.22	0.30	0.36	3d10/30 L=39 20,20,20
197	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.20	0.28	0.36	3d10/30 L=39 16,20,20
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.23	0.26	0.32	3d10/30 L=39 36,20,20
219	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.23	0.25	0.32	3d10/30 L=39 14,20,20
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.28	0.23	0.28	3d10/30 L=39 36,20,20
241	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.29	0.22	0.28	3d10/30 L=39 33,20,20
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.37	0.20	0.24	3d10/30 L=39 17,20,20
263	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.41	0.19	0.24	3d10/30 L=39 17,20,20
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.51	0.17	0.20	3d10/30 L=39 17,20,20
285	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.55	0.17	0.20	3d10/30 L=39 17,20,20
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.65	0.15	0.19	3d10/30 L=39 17,16,13
307	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.67	0.16	0.19	3d10/30 L=39 17,13,13
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.77	0.17	0.21	3d10/30 L=39 17,13,13
329	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.78	0.19	0.22	3d10/30 L=39 17,13,13
	s=1,m=3	38.8	0.32	12.7	12.7	0.0	0.08	0.89	0.20	0.23	3d10/30 L=39 17,13,13
351	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.88	0.24	0.26	3d10/30 L=39 17,13,13
	s=1,m=3	38.8	0.38	15.3	12.7	0.0	0.07	0.84	0.25	0.27	3d10/30 L=39 17,13,13
373	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.98	0.30	0.32	3d10/30 L=39 17,13,13
	s=1,m=3	38.8	0.38	15.3	12.7	0.0	0.07	0.95	0.31	0.33	3d10/30 L=39 17,13,13
395	ok,ok	0.0	0.38	15.3	12.7	0.0	0.07	0.91	0.34	0.35	3d10/30 L=0 17,25,13
	s=1,m=3	38.8	0.45	17.8	12.7	0.0	0.09	0.90	0.36	0.37	3d10/30 L=0 17,25,25
							M_T= 26	**Z=0.0**	**P=3**	**P=15**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
87	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.54	1.00	0.71	3d10/30 L=1 8,8,12
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.54	0.99	0.67	3d10/30 L=1 24,8,12
109	ok,ok	0.0	0.32	12.7	12.7	12.3	0.08	0.54	0.63	0.95	3d10/8 L=21 24,12,12
	s=1,m=3	21.2	0.32	12.7	12.7	12.3	0.08	0.60	0.61	0.92	3d10/8 L=21 24,12,12
132	ok,ok	0.0	0.32	12.7	12.7	9.2	0.08	0.62	0.51	0.97	3d10/10 L=21 24,12,12
	s=1,m=3	21.2	0.32	12.7	12.7	9.2	0.08	0.66	0.50	0.94	3d10/10 L=21 24,12,12
154	ok,ok	0.0	0.32	12.7	12.7	9.2	0.08	0.67	0.43	0.85	3d10/10 L=21 24,12,12
	s=1,m=3	21.2	0.32	12.7	12.7	9.2	0.08	0.70	0.42	0.82	3d10/10 L=21 24,12,12
176	ok,ok	0.0	0.32	12.7	12.7	9.2	0.08	0.71	0.37	0.95	3d10/12 L=21 24,12,12
	s=1,m=3	21.2	0.32	12.7	12.7	9.2	0.08	0.74	0.36	0.91	3d10/12 L=21 24,12,12
198	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.74	0.36	0.85	3d10/12 L=21 24,19,12
	s=1,m=3	21.2	0.32	12.7	12.7	6.2	0.08	0.77	0.34	0.82	3d10/12 L=21 24,19,12
220	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.75	0.32	0.92	3d10/15 L=21 26,15,12
	s=1,m=3	21.2	0.32	12.7	12.7	6.2	0.08	0.78	0.30	0.88	3d10/15 L=21 28,15,12
242	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.78	0.32	0.83	3d10/15 L=21 28,20,12
	s=1,m=3	21.2	0.32	12.7	12.7	6.2	0.08	0.80	0.30	0.79	3d10/15 L=21 28,20,12
264	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.79	0.31	0.75	3d10/15 L=21 28,7,12
	s=1,m=3	21.2	0.32	12.7	12.7	6.2	0.08	0.80	0.29	0.71	3d10/15 L=21 24,7,12
286	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.79	0.31	0.91	3d10/20 L=21 28,8,12
	s=1,m=3	21.2	0.32	12.7	12.7	6.2	0.08	0.79	0.29	0.86	3d10/20 L=21 24,8,12
308	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.78	0.28	0.94	3d10/25 L=21 28,12,9
	s=1,m=3	21.2	0.32	12.7	12.7	6.2	0.08	0.77	0.26	0.97	3d10/25 L=21 24,12,9
330	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.76	0.25	0.92	3d10/25 L=21 28,5,9
	s=1,m=3	21.2	0.32	12.7	12.7	6.2	0.08	0.74	0.26	0.94	3d10/25 L=21 24,5,9
352	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.73	0.25	0.12	3d10/30 L=21 28,9,21
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.70	0.25	0.15	3d10/30 L=21 24,9,21
374	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.69	0.24	0.15	3d10/30 L=21 28,9,21
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.66	0.25	0.18	3d10/30 L=21 32,9,21
396	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.65	0.23	0.17	3d10/30 L=21 36,9,21
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.61	0.24	0.20	3d10/30 L=21 32,9,21
408	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.60	0.22	0.20	3d10/30 L=21 36,9,21
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.56	0.23	0.23	3d10/30 L=21 32,9,21
420	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.49	0.22	0.23	3d10/30 L=21 20,9,21
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.47	0.23	0.25	3d10/30 L=21 7,9,21
432	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.46	0.21	0.25	3d10/30 L=21 15,9,21

	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.44	0.22	0.28	3d10/30 L=21	5,9,21
444	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.42	0.21	0.28	3d10/30 L=21	15,9,21
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.47	0.22	0.31	3d10/30 L=21	5,9,25
456	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.43	0.22	0.31	3d10/30 L=21	5,21,25
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.49	0.23	0.34	3d10/30 L=21	5,21,25
468	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.45	0.23	0.35	3d10/30 L=21	5,21,25
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.52	0.25	0.38	3d10/30 L=21	5,21,25
480	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.46	0.25	0.38	3d10/30 L=21	5,21,25
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.54	0.27	0.41	3d10/30 L=21	5,21,25
492	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.48	0.27	0.42	3d10/30 L=21	5,21,25
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.56	0.29	0.45	3d10/30 L=21	5,21,25
504	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.50	0.30	0.47	3d10/30 L=21	5,25,25
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.63	0.31	0.49	3d10/30 L=21	21,25,25
516	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.57	0.33	0.51	3d10/30 L=21	21,25,25
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.73	0.34	0.54	3d10/30 L=21	21,25,25
528	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.66	0.36	0.57	3d10/30 L=21	21,25,25
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.83	0.38	0.60	3d10/30 L=21	21,25,25
540	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.76	0.40	0.63	3d10/30 L=21	21,25,25
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.95	0.42	0.66	3d10/30 L=21	21,25,25
552	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.87	0.44	0.69	3d10/30 L=21	21,25,25
	s=1,m=3	21.2	0.38	15.3	12.7	0.0	0.08	0.90	0.46	0.72	3d10/30 L=21	21,25,25
564	ok,ok	0.0	0.38	15.3	12.7	0.0	0.08	0.83	0.49	0.76	3d10/30 L=21	21,25,25
	s=1,m=3	21.2	0.45	17.8	12.7	0.0	0.09	0.88	0.51	0.79	3d10/30 L=21	21,25,25
576	ok,ok	0.0	0.45	17.8	12.7	0.0	0.09	0.85	0.58	0.84	3d10/30 L=0	21,13,25
	s=1,m=3	21.2	0.51	20.4	12.7	0.0	0.10	0.91	0.60	0.87	3d10/30 L=0	21,13,25
88	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.60	0.49	0.60	3d10/30 L=0	21,8,8
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.46	0.47	0.58	3d10/30 L=0	21,8,8
110	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.46	0.39	0.91	3d10/20 L=17	21,8,14
	s=1,m=3	17.0	0.32	12.7	12.7	6.2	0.08	0.35	0.38	0.89	3d10/20 L=17	21,8,14
133	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.37	0.32	0.96	3d10/25 L=17	21,8,14
	s=1,m=3	17.0	0.32	12.7	12.7	6.2	0.08	0.27	0.31	0.97	3d10/25 L=17	21,8,5
155	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.29	0.28	0.88	3d10/25 L=17	21,8,5
	s=1,m=3	17.0	0.32	12.7	12.7	6.2	0.08	0.23	0.27	0.90	3d10/25 L=17	21,14,5
177	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.25	0.25	0.83	3d10/25 L=17	2,2,5
	s=1,m=3	17.0	0.32	12.7	12.7	6.2	0.08	0.21	0.24	0.85	3d10/25 L=17	2,2,5
199	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.22	0.23	0.95	3d10/30 L=17	2,2,5
	s=1,m=3	17.0	0.32	12.7	12.7	6.2	0.08	0.19	0.21	0.97	3d10/30 L=17	2,2,5
221	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.20	0.21	0.30	3d10/30 L=17	2,2,24
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.17	0.21	0.29	3d10/30 L=17	2,5,24
243	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.18	0.19	0.28	3d10/30 L=17	2,5,24
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.15	0.20	0.26	3d10/30 L=17	2,5,24
265	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.16	0.18	0.25	3d10/30 L=17	2,5,24
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.13	0.19	0.24	3d10/30 L=17	2,5,24
287	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.15	0.17	0.23	3d10/30 L=17	2,5,24
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.12	0.18	0.21	3d10/30 L=17	1,5,24
309	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.14	0.16	0.21	3d10/30 L=17	13,9,24
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.12	0.16	0.20	3d10/30 L=17	13,9,24
331	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.14	0.15	0.20	3d10/30 L=17	13,9,24
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.13	0.16	0.18	3d10/30 L=17	13,9,24
353	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.14	0.15	0.18	3d10/30 L=17	13,9,24
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.13	0.15	0.16	3d10/30 L=17	13,9,24
375	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.16	0.14	0.17	3d10/30 L=17	13,9,24
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.15	0.15	0.15	3d10/30 L=17	17,9,24
397	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.16	0.14	0.16	3d10/30 L=17	13,9,24
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.16	0.15	0.14	3d10/30 L=17	9,9,24
409	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.17	0.13	0.15	3d10/30 L=17	5,9,24
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.17	0.14	0.13	3d10/30 L=17	5,9,24
421	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.18	0.13	0.14	3d10/30 L=17	5,29,24
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.19	0.14	0.12	3d10/30 L=17	5,29,24
433	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.20	0.13	0.13	3d10/30 L=17	5,29,24
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.21	0.13	0.12	3d10/30 L=17	5,29,24
445	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.22	0.12	0.13	3d10/30 L=17	5,29,24
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.23	0.13	0.13	3d10/30 L=17	5,29,21
457	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.23	0.12	0.13	3d10/30 L=17	5,33,21
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.25	0.13	0.14	3d10/30 L=17	5,33,25
469	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.25	0.12	0.14	3d10/30 L=17	5,33,25
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.27	0.13	0.16	3d10/30 L=17	21,33,25
481	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.27	0.12	0.16	3d10/30 L=17	21,33,25
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.31	0.13	0.17	3d10/30 L=17	21,33,25
493	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.30	0.13	0.18	3d10/30 L=17	21,25,25
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.35	0.14	0.20	3d10/30 L=17	21,25,25
505	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.34	0.14	0.20	3d10/30 L=17	21,25,25
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.39	0.15	0.22	3d10/30 L=17	21,25,25
517	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.38	0.16	0.22	3d10/30 L=17	21,25,25
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.43	0.17	0.24	3d10/30 L=17	21,25,25
529	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.42	0.18	0.26	3d10/30 L=17	21,25,25
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.48	0.19	0.28	3d10/30 L=17	21,25,25

541	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.47	0.21	0.28	3d10/30 L=17 21,13,25
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.54	0.22	0.30	3d10/30 L=17 21,13,25
553	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.52	0.26	0.32	3d10/30 L=17 21,13,25
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.59	0.27	0.34	3d10/30 L=17 21,13,25
565	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.56	0.31	0.35	3d10/30 L=17 21,13,25
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.64	0.32	0.37	3d10/30 L=17 21,13,25
577	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.59	0.39	0.38	3d10/30 L=0 21,13,25
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.67	0.41	0.39	3d10/30 L=0 21,13,25
89	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.84	0.58	0.86	3d10/30 L=0 21,8,24
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.65	0.57	0.85	3d10/30 L=0 21,8,24
111	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.66	0.50	0.83	3d10/30 L=15 21,8,24
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.49	0.49	0.82	3d10/30 L=15 21,8,24
134	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.53	0.45	0.77	3d10/30 L=15 21,8,24
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.39	0.44	0.75	3d10/30 L=15 24,8,24
156	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.43	0.41	0.72	3d10/30 L=15 21,24,24
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.36	0.40	0.70	3d10/30 L=15 24,24,24
178	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.36	0.38	0.67	3d10/30 L=15 24,24,24
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.33	0.37	0.66	3d10/30 L=15 24,24,24
200	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.34	0.36	0.64	3d10/30 L=15 24,24,24
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.30	0.35	0.62	3d10/30 L=15 24,24,24
222	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.30	0.33	0.59	3d10/30 L=15 24,24,24
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.28	0.32	0.58	3d10/30 L=15 24,24,24
244	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.27	0.31	0.56	3d10/30 L=15 24,24,24
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.25	0.30	0.54	3d10/30 L=15 24,24,24
266	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.24	0.29	0.53	3d10/30 L=15 24,24,24
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.22	0.29	0.52	3d10/30 L=15 24,24,24
288	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.20	0.28	0.50	3d10/30 L=15 28,24,24
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.17	0.27	0.49	3d10/30 L=15 28,24,24
310	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.17	0.26	0.48	3d10/30 L=15 28,24,24
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.15	0.25	0.46	3d10/30 L=15 28,24,24
332	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.14	0.25	0.46	3d10/30 L=15 13,24,24
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.12	0.24	0.44	3d10/30 L=15 28,24,24
354	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.15	0.24	0.43	3d10/30 L=15 13,24,24
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.13	0.23	0.42	3d10/30 L=15 20,24,24
376	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.15	0.23	0.42	3d10/30 L=15 17,24,24
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.15	0.22	0.40	3d10/30 L=15 20,24,24
398	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.17	0.22	0.40	3d10/30 L=15 17,24,24
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.19	0.21	0.39	3d10/30 L=15 20,24,24
410	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.19	0.21	0.39	3d10/30 L=15 17,24,24
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.21	0.20	0.38	3d10/30 L=15 20,24,24
422	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.23	0.20	0.37	3d10/30 L=15 21,24,24
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.28	0.19	0.35	3d10/30 L=15 21,24,24
434	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.30	0.20	0.36	3d10/30 L=15 21,24,24
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.34	0.19	0.35	3d10/30 L=15 21,24,24
446	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.37	0.19	0.35	3d10/30 L=15 21,24,24
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.40	0.19	0.34	3d10/30 L=15 21,24,24
458	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.43	0.19	0.34	3d10/30 L=15 21,28,24
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.47	0.18	0.32	3d10/30 L=15 21,28,24
470	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.49	0.19	0.33	3d10/30 L=15 21,28,24
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.54	0.18	0.31	3d10/30 L=15 21,25,24
482	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.56	0.19	0.32	3d10/30 L=15 21,28,24
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.60	0.18	0.30	3d10/30 L=15 21,28,24
494	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.62	0.19	0.31	3d10/30 L=15 21,28,24
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.67	0.18	0.29	3d10/30 L=15 21,28,24
506	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.69	0.19	0.31	3d10/30 L=15 21,28,28
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.74	0.19	0.30	3d10/30 L=15 21,28,28
518	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.74	0.22	0.32	3d10/30 L=15 21,25,28
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.81	0.23	0.31	3d10/30 L=15 21,25,25
530	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.81	0.21	0.31	3d10/30 L=15 21,28,28
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.87	0.21	0.30	3d10/30 L=15 21,25,28
542	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.87	0.22	0.31	3d10/30 L=15 21,16,28
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.93	0.22	0.30	3d10/30 L=15 21,25,28
554	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.92	0.26	0.31	3d10/30 L=15 21,16,28
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.98	0.26	0.31	3d10/30 L=15 21,16,25
566	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.96	0.30	0.37	3d10/30 L=15 21,16,25
	s=1,m=3	14.6	0.38	15.3	12.7	0.0	0.07	0.86	0.30	0.38	3d10/30 L=15 21,16,25
578	ok,ok	0.0	0.38	15.3	12.7	0.0	0.07	0.86	0.36	0.32	3d10/30 L=0 21,13,25
	s=1,m=3	14.6	0.38	15.3	12.7	0.0	0.07	0.91	0.37	0.33	3d10/30 L=0 21,13,25
90	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.61	0.43	0.62	3d10/30 L=0 25,26,24
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.50	0.42	0.61	3d10/30 L=0 25,26,24
121	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.48	0.33	0.55	3d10/30 L=13 25,26,24
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.43	0.33	0.54	3d10/30 L=13 28,26,24
143	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.43	0.32	0.54	3d10/30 L=13 24,24,24
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.40	0.31	0.52	3d10/30 L=13 28,24,24
165	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.40	0.27	0.46	3d10/30 L=13 28,24,24
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.38	0.27	0.45	3d10/30 L=13 28,24,24
187	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.38	0.27	0.45	3d10/30 L=13 28,24,24

	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.35	0.26	0.44	3d10/30 L=13 28,24,24
209	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.35	0.23	0.39	3d10/30 L=13 28,24,24
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.33	0.22	0.38	3d10/30 L=13 28,24,24
231	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.33	0.22	0.38	3d10/30 L=13 28,24,24
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.30	0.21	0.36	3d10/30 L=13 28,26,24
253	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.30	0.20	0.35	3d10/30 L=13 28,26,24
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.27	0.19	0.33	3d10/30 L=13 28,26,24
275	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.27	0.17	0.29	3d10/30 L=13 28,26,24
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.25	0.17	0.28	3d10/30 L=13 28,26,24
297	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.25	0.17	0.29	3d10/30 L=13 28,26,24
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.22	0.17	0.28	3d10/30 L=13 28,26,24
319	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.22	0.15	0.24	3d10/30 L=13 28,26,24
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.20	0.14	0.23	3d10/30 L=13 36,26,24
341	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.21	0.15	0.25	3d10/30 L=13 17,28,24
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.21	0.15	0.23	3d10/30 L=13 17,25,24
363	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.22	0.14	0.21	3d10/30 L=13 17,16,28
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.20	0.14	0.20	3d10/30 L=13 17,16,28
385	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.21	0.15	0.21	3d10/30 L=13 17,25,28
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.20	0.16	0.20	3d10/30 L=13 20,25,28
407	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.21	0.16	0.18	3d10/30 L=13 20,16,28
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.21	0.16	0.17	3d10/30 L=13 20,16,28
419	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.21	0.17	0.18	3d10/30 L=13 20,13,28
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.22	0.18	0.17	3d10/30 L=13 36,13,28
431	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.22	0.19	0.17	3d10/30 L=13 20,13,28
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.22	0.19	0.17	3d10/30 L=13 36,13,25
443	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.22	0.19	0.14	3d10/30 L=13 20,13,28
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.22	0.19	0.13	3d10/30 L=13 24,13,28
455	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.22	0.21	0.17	3d10/30 L=13 20,13,25
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.23	0.22	0.17	3d10/30 L=13 21,13,25
467	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.24	0.22	0.12	3d10/30 L=13 21,13,16
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.25	0.22	0.12	3d10/30 L=13 21,13,16
479	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.25	0.25	0.18	3d10/30 L=13 21,13,25
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.28	0.26	0.18	3d10/30 L=13 21,13,25
491	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.28	0.26	0.13	3d10/30 L=13 21,17,13
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.29	0.27	0.14	3d10/30 L=13 21,17,13
503	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.29	0.30	0.83	3d10/20 L=13 21,13,17
	s=1,m=3	13.3	0.32	12.7	12.7	6.2	0.08	0.32	0.30	0.85	3d10/20 L=13 21,13,17
515	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.31	0.27	0.90	3d10/20 L=13 21,18,13
	s=1,m=3	13.3	0.32	12.7	12.7	6.2	0.08	0.34	0.28	0.93	3d10/20 L=13 21,18,13
527	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.34	0.30	0.96	3d10/20 L=13 21,18,17
	s=1,m=3	13.3	0.32	12.7	12.7	6.2	0.08	0.35	0.31	0.98	3d10/20 L=13 21,18,17
539	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.35	0.29	0.80	3d10/15 L=13 21,9,13
	s=1,m=3	13.3	0.32	12.7	12.7	6.2	0.08	0.38	0.30	0.81	3d10/15 L=13 21,9,17
551	ok,ok	0.0	0.32	12.7	12.7	9.2	0.08	0.35	0.31	0.88	3d10/15 L=13 25,17,17
	s=1,m=3	13.3	0.32	12.7	12.7	9.2	0.08	0.38	0.32	0.91	3d10/15 L=13 25,17,17
563	ok,ok	0.0	0.32	12.7	12.7	9.2	0.08	0.36	0.36	0.85	3d10/12 L=13 25,17,17
	s=1,m=3	13.3	0.32	12.7	12.7	9.2	0.08	0.41	0.36	0.86	3d10/12 L=13 25,17,17
575	ok,ok	0.0	0.32	12.7	12.7	9.2	0.08	0.38	0.42	0.83	3d10/10 L=13 25,17,17
	s=1,m=3	13.3	0.32	12.7	12.7	9.2	0.08	0.41	0.43	0.84	3d10/10 L=13 25,17,17
112	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.40	0.74	0.37	3d10/30 L=0 25,17,13
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.45	0.75	0.39	3d10/30 L=0 25,17,13
							M_T= 27	**Z=0.0**	**P=2**	**P=14**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
91	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.27	0.94	0.52	3d10/30 L=1 32,8,2
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.40	0.93	0.49	3d10/30 L=1 24,8,2
113	ok,ok	0.0	0.32	12.7	12.7	12.3	0.08	0.40	0.59	0.85	3d10/8 L=21 24,12,12
	s=1,m=3	21.2	0.32	12.7	12.7	12.3	0.08	0.50	0.58	0.83	3d10/8 L=21 24,12,12
135	ok,ok	0.0	0.32	12.7	12.7	12.3	0.08	0.52	0.48	0.86	3d10/10 L=21 24,8,12
	s=1,m=3	21.2	0.32	12.7	12.7	12.3	0.08	0.61	0.48	0.84	3d10/10 L=21 24,8,12
157	ok,ok	0.0	0.32	12.7	12.7	9.2	0.08	0.62	0.40	0.94	3d10/12 L=21 24,8,12
	s=1,m=3	21.2	0.32	12.7	12.7	9.2	0.08	0.69	0.39	0.92	3d10/12 L=21 24,8,12
179	ok,ok	0.0	0.32	12.7	12.7	9.2	0.08	0.70	0.34	0.84	3d10/12 L=21 24,8,12
	s=1,m=3	21.2	0.32	12.7	12.7	9.2	0.08	0.75	0.33	0.82	3d10/12 L=21 24,8,12
201	ok,ok	0.0	0.32	12.7	12.7	9.2	0.08	0.76	0.30	0.91	3d10/15 L=21 24,8,12
	s=1,m=3	21.2	0.32	12.7	12.7	9.2	0.08	0.80	0.29	0.88	3d10/15 L=21 24,8,12
223	ok,ok	0.0	0.32	12.7	12.7	9.2	0.08	0.81	0.27	0.81	3d10/15 L=21 24,10,12
	s=1,m=3	21.2	0.32	12.7	12.7	9.2	0.08	0.84	0.26	0.79	3d10/15 L=21 24,10,8
245	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.84	0.25	0.97	3d10/20 L=21 24,5,8
	s=1,m=3	21.2	0.32	12.7	12.7	6.2	0.08	0.86	0.23	0.94	3d10/20 L=21 24,5,8
267	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.87	0.24	0.86	3d10/20 L=21 24,19,8
	s=1,m=3	21.2	0.32	12.7	12.7	6.2	0.08	0.88	0.22	0.83	3d10/20 L=21 24,19,8
289	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.88	0.24	0.97	3d10/25 L=21 24,16,8
	s=1,m=3	21.2	0.32	12.7	12.7	6.2	0.08	0.88	0.23	0.93	3d10/25 L=21 24,16,8
311	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.87	0.21	0.86	3d10/25 L=21 24,16,8
	s=1,m=3	21.2	0.32	12.7	12.7	6.2	0.08	0.87	0.20	0.82	3d10/25 L=21 24,16,8
333	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.86	0.21	0.09	3d10/30 L=21 24,8,24
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.84	0.20	0.08	3d10/30 L=21 24,8,21

355	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.84	0.19	0.08	3d10/30 L=21 24,8,21
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.81	0.18	0.11	3d10/30 L=21 24,11,21
377	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.80	0.17	0.11	3d10/30 L=21 24,11,21
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.76	0.18	0.14	3d10/30 L=21 24,11,21
399	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.76	0.17	0.14	3d10/30 L=21 24,11,21
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.71	0.18	0.17	3d10/30 L=21 24,11,21
411	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.70	0.17	0.17	3d10/30 L=21 24,11,21
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.65	0.18	0.20	3d10/30 L=21 32,11,21
423	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.58	0.17	0.21	3d10/30 L=21 2,11,21
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.52	0.18	0.23	3d10/30 L=21 7,11,21
435	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.52	0.17	0.24	3d10/30 L=21 2,11,21
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.48	0.19	0.27	3d10/30 L=21 7,11,21
447	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.47	0.18	0.28	3d10/30 L=21 7,7,21
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.43	0.19	0.30	3d10/30 L=21 7,7,21
459	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.44	0.19	0.31	3d10/30 L=21 23,23,21
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.36	0.20	0.34	3d10/30 L=21 7,23,21
471	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.37	0.21	0.35	3d10/30 L=21 23,23,21
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.29	0.22	0.38	3d10/30 L=21 7,23,21
483	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.30	0.23	0.39	3d10/30 L=21 23,23,21
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.26	0.24	0.42	3d10/30 L=21 27,23,21
495	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.21	0.25	0.44	3d10/30 L=21 23,23,21
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.34	0.26	0.47	3d10/30 L=21 27,23,21
507	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.27	0.27	0.49	3d10/30 L=21 27,23,21
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.42	0.29	0.52	3d10/30 L=21 27,23,21
519	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.36	0.30	0.55	3d10/30 L=21 25,23,21
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.53	0.31	0.57	3d10/30 L=21 25,23,21
531	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.45	0.34	0.61	3d10/30 L=21 21,27,21
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.65	0.35	0.64	3d10/30 L=21 21,27,21
543	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.56	0.38	0.68	3d10/30 L=21 21,27,21
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.78	0.39	0.70	3d10/30 L=21 21,27,21
555	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.68	0.42	0.75	3d10/30 L=21 21,33,21
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.93	0.44	0.78	3d10/30 L=21 21,33,21
567	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.83	0.48	0.82	3d10/30 L=21 21,33,21
	s=1,m=3	21.2	0.38	15.3	12.7	0.0	0.08	0.92	0.49	0.85	3d10/30 L=21 21,33,21
579	ok,ok	0.0	0.38	15.3	12.7	0.0	0.08	0.87	0.53	0.89	3d10/30 L=0 21,25,21
	s=1,m=3	21.2	0.45	17.8	12.7	0.0	0.09	0.96	0.54	0.91	3d10/30 L=0 21,25,21
92	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.51	0.44	0.55	3d10/30 L=0 21,8,32
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.38	0.43	0.54	3d10/30 L=0 21,8,32
114	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.42	0.44	0.52	3d10/30 L=17 21,12,32
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.31	0.43	0.51	3d10/30 L=17 29,12,32
136	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.34	0.38	0.49	3d10/30 L=17 21,12,32
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.26	0.37	0.47	3d10/30 L=17 29,12,32
158	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.28	0.33	0.44	3d10/30 L=17 21,12,32
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.22	0.33	0.43	3d10/30 L=17 29,12,32
180	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.23	0.30	0.41	3d10/30 L=17 29,32,32
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.19	0.29	0.39	3d10/30 L=17 29,32,32
202	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.20	0.27	0.37	3d10/30 L=17 29,32,32
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.16	0.26	0.36	3d10/30 L=17 21,32,32
224	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.17	0.25	0.34	3d10/30 L=17 29,32,32
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.13	0.24	0.32	3d10/30 L=17 21,32,32
246	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.14	0.22	0.31	3d10/30 L=17 21,32,32
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.11	0.22	0.29	3d10/30 L=17 21,32,32
268	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.12	0.20	0.28	3d10/30 L=17 21,32,32
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.09	0.20	0.27	3d10/30 L=17 21,32,32
290	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.10	0.19	0.26	3d10/30 L=17 21,32,32
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.07	0.18	0.24	3d10/30 L=17 24,32,32
312	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.08	0.17	0.23	3d10/30 L=17 21,32,36
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.06	0.16	0.22	3d10/30 L=17 28,32,36
334	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.06	0.15	0.22	3d10/30 L=17 13,32,36
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.04	0.15	0.20	3d10/30 L=17 28,32,36
356	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.06	0.14	0.20	3d10/30 L=17 13,32,36
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.04	0.13	0.18	3d10/30 L=17 13,32,36
378	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.05	0.12	0.18	3d10/30 L=17 17,32,36
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.04	0.12	0.17	3d10/30 L=17 13,29,36
400	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.06	0.12	0.17	3d10/30 L=17 13,29,32
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.05	0.13	0.15	3d10/30 L=17 13,29,32
412	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.06	0.13	0.16	3d10/30 L=17 13,29,32
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.07	0.14	0.14	3d10/30 L=17 25,29,32
424	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.08	0.14	0.15	3d10/30 L=17 25,29,32
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.11	0.15	0.16	3d10/30 L=17 33,29,29
436	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.12	0.16	0.16	3d10/30 L=17 33,29,29
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.16	0.17	0.18	3d10/30 L=17 33,29,29
448	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.16	0.17	0.18	3d10/30 L=17 33,33,29
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.20	0.18	0.20	3d10/30 L=17 33,33,29
460	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.20	0.19	0.20	3d10/30 L=17 33,33,29
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.25	0.20	0.22	3d10/30 L=17 33,33,29
472	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.25	0.21	0.23	3d10/30 L=17 33,33,29

	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.30	0.22	0.25	3d10/30 L=17 33,33,29
484	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.29	0.23	0.25	3d10/30 L=17 33,33,29
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.35	0.24	0.27	3d10/30 L=17 33,33,29
496	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.34	0.25	0.28	3d10/30 L=17 33,33,29
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.41	0.26	0.30	3d10/30 L=17 33,33,29
508	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.39	0.28	0.32	3d10/30 L=17 33,33,29
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.47	0.29	0.34	3d10/30 L=17 33,33,29
520	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.45	0.30	0.35	3d10/30 L=17 33,33,21
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.54	0.31	0.37	3d10/30 L=17 33,33,21
532	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.51	0.33	0.39	3d10/30 L=17 33,33,21
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.61	0.34	0.41	3d10/30 L=17 29,33,21
544	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.58	0.36	0.43	3d10/30 L=17 29,33,21
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.69	0.37	0.45	3d10/30 L=17 29,33,21
556	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.65	0.39	0.48	3d10/30 L=17 29,33,21
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.77	0.40	0.49	3d10/30 L=17 29,33,21
568	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.73	0.43	0.92	3d10/15 L=17 29,33,17
	s=1,m=3	17.0	0.32	12.7	12.7	6.2	0.08	0.86	0.44	0.94	3d10/15 L=17 29,33,17
580	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.85	0.38	0.54	3d10/30 L=0 29,15,21
	s=1,m=3	17.0	0.38	15.3	12.7	0.0	0.08	0.83	0.39	0.56	3d10/30 L=0 29,15,21
93	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.60	0.44	0.69	3d10/30 L=0 25,26,24
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.45	0.44	0.68	3d10/30 L=0 25,26,24
115	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.48	0.45	0.68	3d10/30 L=15 25,26,24
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.34	0.44	0.66	3d10/30 L=15 25,26,24
137	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.39	0.42	0.62	3d10/30 L=15 25,26,28
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.26	0.41	0.61	3d10/30 L=15 25,26,28
159	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.31	0.39	0.59	3d10/30 L=15 25,22,28
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.21	0.38	0.57	3d10/30 L=15 25,22,28
181	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.25	0.36	0.54	3d10/30 L=15 25,22,28
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.20	0.35	0.53	3d10/30 L=15 24,22,28
203	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.21	0.34	0.52	3d10/30 L=15 24,22,28
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.19	0.33	0.50	3d10/30 L=15 24,22,28
225	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.19	0.31	0.47	3d10/30 L=15 24,22,28
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.19	0.30	0.46	3d10/30 L=15 24,22,28
247	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.18	0.28	0.44	3d10/30 L=15 24,22,28
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.17	0.28	0.42	3d10/30 L=15 26,22,28
269	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.17	0.26	0.41	3d10/30 L=15 24,22,28
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.16	0.26	0.39	3d10/30 L=15 26,22,28
291	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.16	0.25	0.39	3d10/30 L=15 24,22,28
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.13	0.24	0.37	3d10/30 L=15 26,22,28
313	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.13	0.23	0.35	3d10/30 L=15 24,22,28
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.12	0.22	0.33	3d10/30 L=15 26,22,28
335	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.12	0.21	0.33	3d10/30 L=15 24,22,28
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.13	0.20	0.31	3d10/30 L=15 34,22,28
357	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.11	0.20	0.31	3d10/30 L=15 31,22,28
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.13	0.19	0.29	3d10/30 L=15 32,22,28
379	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.15	0.19	0.29	3d10/30 L=15 23,26,28
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.16	0.19	0.28	3d10/30 L=15 32,25,28
401	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.17	0.17	0.26	3d10/30 L=15 7,26,28
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.19	0.17	0.24	3d10/30 L=15 8,25,28
413	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.19	0.17	0.25	3d10/30 L=15 7,25,28
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.20	0.18	0.23	3d10/30 L=15 8,25,28
425	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.20	0.21	0.23	3d10/30 L=15 7,25,28
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.24	0.22	0.23	3d10/30 L=15 29,25,25
437	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.25	0.19	0.21	3d10/30 L=15 29,25,28
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.28	0.20	0.20	3d10/30 L=15 29,25,28
449	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.29	0.20	0.19	3d10/30 L=15 29,25,28
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.33	0.21	0.20	3d10/30 L=15 21,25,25
461	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.34	0.21	0.20	3d10/30 L=15 21,25,25
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.38	0.22	0.21	3d10/30 L=15 25,25,25
473	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.38	0.26	0.28	3d10/30 L=15 21,25,25
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.44	0.26	0.29	3d10/30 L=15 25,25,25
485	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.44	0.24	0.24	3d10/30 L=15 21,25,25
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.49	0.24	0.25	3d10/30 L=15 25,25,25
497	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.48	0.25	0.27	3d10/30 L=15 21,25,25
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.54	0.26	0.28	3d10/30 L=15 25,25,25
509	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.53	0.27	0.29	3d10/30 L=15 21,25,25
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.60	0.27	0.30	3d10/30 L=15 25,25,25
521	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.58	0.31	0.37	3d10/30 L=15 21,25,25
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.66	0.32	0.38	3d10/30 L=15 25,25,25
533	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.64	0.30	0.34	3d10/30 L=15 21,25,25
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.71	0.30	0.35	3d10/30 L=15 25,25,25
545	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.69	0.32	0.36	3d10/30 L=15 21,25,25
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.77	0.32	0.37	3d10/30 L=15 25,25,25
557	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.74	0.34	0.39	3d10/30 L=15 25,25,25
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.83	0.34	0.40	3d10/30 L=15 25,25,25
569	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.79	0.40	0.47	3d10/30 L=15 25,25,25
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.89	0.41	0.48	3d10/30 L=15 25,25,25

581	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.88	0.34	0.42	3d10/30 L=0 25,17,25
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.97	0.34	0.43	3d10/30 L=0 25,17,25
94	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.44	0.39	0.62	3d10/30 L=0 21,36,28
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.32	0.39	0.60	3d10/30 L=0 21,36,28
116	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.34	0.33	0.54	3d10/30 L=13 21,26,28
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.23	0.32	0.53	3d10/30 L=13 21,26,28
138	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.27	0.31	0.53	3d10/30 L=13 21,26,28
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.17	0.30	0.52	3d10/30 L=13 21,26,28
160	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.21	0.27	0.47	3d10/30 L=13 21,26,28
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.14	0.26	0.45	3d10/30 L=13 24,26,28
182	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.16	0.26	0.45	3d10/30 L=13 21,26,24
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.13	0.25	0.43	3d10/30 L=13 24,26,24
204	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.13	0.22	0.38	3d10/30 L=13 24,26,28
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.14	0.21	0.37	3d10/30 L=13 24,26,28
226	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.14	0.22	0.38	3d10/30 L=13 24,34,24
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.13	0.21	0.36	3d10/30 L=13 24,34,24
248	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.14	0.20	0.34	3d10/30 L=13 24,34,24
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.13	0.20	0.33	3d10/30 L=13 24,34,24
270	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.13	0.18	0.28	3d10/30 L=13 24,18,24
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.13	0.17	0.27	3d10/30 L=13 24,18,24
292	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.14	0.18	0.28	3d10/30 L=13 24,34,24
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.15	0.17	0.26	3d10/30 L=13 32,34,24
314	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.15	0.17	0.22	3d10/30 L=13 24,18,24
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.18	0.16	0.20	3d10/30 L=13 24,18,24
336	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.16	0.16	0.23	3d10/30 L=13 23,18,24
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.17	0.15	0.22	3d10/30 L=13 8,18,24
358	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.17	0.16	0.17	3d10/30 L=13 7,18,24
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.19	0.16	0.15	3d10/30 L=13 8,18,24
380	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.19	0.16	0.18	3d10/30 L=13 7,18,24
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.21	0.15	0.17	3d10/30 L=13 24,18,24
402	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.20	0.16	0.12	3d10/30 L=13 12,18,24
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.22	0.15	0.11	3d10/30 L=13 24,18,24
414	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.21	0.15	0.14	3d10/30 L=13 12,13,24
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.23	0.16	0.12	3d10/30 L=13 24,13,24
426	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.22	0.17	0.12	3d10/30 L=13 12,13,24
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.24	0.17	0.10	3d10/30 L=13 24,13,21
438	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.22	0.16	0.06	3d10/30 L=13 32,13,28
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.23	0.17	0.05	3d10/30 L=13 24,13,28
450	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.22	0.20	0.11	3d10/30 L=13 32,13,25
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.24	0.20	0.11	3d10/30 L=13 24,13,25
462	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.23	0.19	0.03	3d10/30 L=13 32,13,25
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.23	0.20	0.04	3d10/30 L=13 24,13,25
474	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.22	0.23	0.12	3d10/30 L=13 32,13,25
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.23	0.24	0.12	3d10/30 L=13 24,13,25
486	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.22	0.21	0.82	3d10/25 L=13 32,18,13
	s=1,m=3	13.3	0.32	12.7	12.7	6.2	0.08	0.23	0.21	0.84	3d10/25 L=13 27,18,13
498	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.22	0.23	0.96	3d10/25 L=13 27,5,13
	s=1,m=3	13.3	0.32	12.7	12.7	6.2	0.08	0.25	0.24	0.98	3d10/25 L=13 27,5,13
510	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.23	0.25	0.82	3d10/20 L=13 27,5,13
	s=1,m=3	13.3	0.32	12.7	12.7	6.2	0.08	0.26	0.26	0.84	3d10/20 L=13 27,5,13
522	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.24	0.26	0.84	3d10/20 L=13 27,9,17
	s=1,m=3	13.3	0.32	12.7	12.7	6.2	0.08	0.26	0.27	0.86	3d10/20 L=13 27,9,17
534	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.24	0.28	0.97	3d10/20 L=13 27,20,17
	s=1,m=3	13.3	0.32	12.7	12.7	6.2	0.08	0.27	0.29	0.98	3d10/20 L=13 21,20,17
546	ok,ok	0.0	0.32	12.7	12.7	9.2	0.08	0.25	0.31	0.78	3d10/15 L=13 27,15,17
	s=1,m=3	13.3	0.32	12.7	12.7	9.2	0.08	0.27	0.31	0.79	3d10/15 L=13 21,15,17
558	ok,ok	0.0	0.32	12.7	12.7	9.2	0.08	0.25	0.32	0.90	3d10/15 L=13 27,17,17
	s=1,m=3	13.3	0.32	12.7	12.7	9.2	0.08	0.28	0.33	0.91	3d10/15 L=13 21,17,17
570	ok,ok	0.0	0.32	12.7	12.7	9.2	0.08	0.26	0.37	0.91	3d10/12 L=13 27,17,17
	s=1,m=3	13.3	0.32	12.7	12.7	9.2	0.08	0.28	0.38	0.93	3d10/12 L=13 21,17,17
582	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.27	0.59	0.26	3d10/30 L=0 21,17,2
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.30	0.59	0.28	3d10/30 L=0 25,17,2
							M_T= 28	**Z=0.0**	**P=1**	**P=13**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
95	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.69	0.92	0.74	3d10/30 L=1 9,8,8
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.56	0.90	0.70	3d10/30 L=1 32,8,8
117	ok,ok	0.0	0.32	12.7	12.7	12.3	0.08	0.57	0.65	0.97	3d10/8 L=21 32,12,12
	s=1,m=3	21.2	0.32	12.7	12.7	12.3	0.08	0.63	0.63	0.95	3d10/8 L=21 32,12,12
139	ok,ok	0.0	0.32	12.7	12.7	9.2	0.08	0.66	0.53	0.81	3d10/8 L=21 32,12,12
	s=1,m=3	21.2	0.32	12.7	12.7	9.2	0.08	0.71	0.52	0.79	3d10/8 L=21 32,12,12
161	ok,ok	0.0	0.32	12.7	12.7	9.2	0.08	0.73	0.45	0.90	3d10/10 L=21 32,12,12
	s=1,m=3	21.2	0.32	12.7	12.7	9.2	0.08	0.77	0.44	0.87	3d10/10 L=21 34,12,12
183	ok,ok	0.0	0.32	12.7	12.7	9.2	0.08	0.79	0.39	0.81	3d10/10 L=21 32,12,12
	s=1,m=3	21.2	0.32	12.7	12.7	9.2	0.08	0.82	0.38	0.79	3d10/10 L=21 30,12,12
205	ok,ok	0.0	0.32	12.7	12.7	9.2	0.08	0.84	0.35	0.93	3d10/12 L=21 36,12,12
	s=1,m=3	21.2	0.32	12.7	12.7	9.2	0.08	0.88	0.34	0.89	3d10/12 L=21 36,12,12
227	ok,ok	0.0	0.32	12.7	12.7	9.2	0.08	0.88	0.32	0.84	3d10/12 L=21 36,12,12

	s=1,m=3	21.2	0.32	12.7	12.7	9.2	0.08	0.92	0.31	0.81	3d10/12 L=21 36,12,12
249	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.92	0.32	0.92	3d10/15 L=21 36,15,12
	s=1,m=3	21.2	0.32	12.7	12.7	6.2	0.08	0.95	0.30	0.88	3d10/15 L=21 36,15,12
271	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.95	0.32	0.84	3d10/15 L=21 36,20,12
	s=1,m=3	21.2	0.32	12.7	12.7	6.2	0.08	0.97	0.31	0.80	3d10/15 L=21 36,20,12
293	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.97	0.29	0.76	3d10/15 L=21 36,20,12
	s=1,m=3	21.2	0.32	12.7	12.7	6.2	0.08	0.97	0.27	0.72	3d10/15 L=21 36,20,12
315	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.97	0.27	0.90	3d10/20 L=21 36,7,12
	s=1,m=3	21.2	0.32	12.7	12.7	6.2	0.08	0.96	0.25	0.85	3d10/20 L=21 36,7,12
337	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.95	0.28	0.16	3d10/30 L=21 36,12,12
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.95	0.26	0.13	3d10/30 L=21 20,9,32
359	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.96	0.25	0.13	3d10/30 L=21 20,9,32
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.96	0.26	0.15	3d10/30 L=21 12,9,29
381	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.97	0.25	0.15	3d10/30 L=21 8,9,29
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.97	0.26	0.18	3d10/30 L=21 8,9,29
403	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.97	0.25	0.18	3d10/30 L=21 8,9,29
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.97	0.26	0.21	3d10/30 L=21 8,9,29
415	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.97	0.25	0.21	3d10/30 L=21 8,9,29
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.95	0.26	0.23	3d10/30 L=21 8,9,29
427	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.93	0.25	0.24	3d10/30 L=21 12,9,29
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.90	0.26	0.27	3d10/30 L=21 7,9,29
439	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.90	0.25	0.27	3d10/30 L=21 8,9,29
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.87	0.26	0.29	3d10/30 L=21 7,9,29
451	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.87	0.25	0.30	3d10/30 L=21 11,9,29
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.83	0.26	0.32	3d10/30 L=21 7,29,29
463	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.83	0.26	0.33	3d10/30 L=21 11,29,29
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.78	0.28	0.36	3d10/30 L=21 7,29,33
475	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.78	0.27	0.36	3d10/30 L=21 7,29,33
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.71	0.29	0.39	3d10/30 L=21 12,29,33
487	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.71	0.29	0.40	3d10/30 L=21 7,29,33
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.64	0.30	0.43	3d10/30 L=21 12,29,33
499	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.63	0.31	0.44	3d10/30 L=21 7,29,33
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.55	0.32	0.47	3d10/30 L=21 12,29,33
511	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.54	0.33	0.49	3d10/30 L=21 7,29,33
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.51	0.34	0.52	3d10/30 L=21 29,29,33
523	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.44	0.36	0.54	3d10/30 L=21 29,33,33
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.61	0.37	0.58	3d10/30 L=21 29,33,33
535	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.54	0.39	0.60	3d10/30 L=21 29,33,33
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.73	0.41	0.63	3d10/30 L=21 29,33,33
547	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.66	0.44	0.67	3d10/30 L=21 29,33,33
	s=1,m=3	21.2	0.32	12.7	12.7	0.0	0.08	0.87	0.46	0.70	3d10/30 L=21 29,33,33
559	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.80	0.50	0.75	3d10/30 L=21 29,33,33
	s=1,m=3	21.2	0.38	15.3	12.7	0.0	0.08	0.86	0.52	0.78	3d10/30 L=21 29,33,33
571	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.95	0.58	0.84	3d10/30 L=21 29,33,33
	s=1,m=3	21.2	0.45	17.8	12.7	0.0	0.09	0.87	0.59	0.87	3d10/30 L=21 29,33,33
583	ok,ok	0.0	0.45	17.8	12.7	0.0	0.09	0.86	0.59	0.93	3d10/30 L=0 29,31,33
	s=1,m=3	21.2	0.51	20.4	12.7	0.0	0.10	0.93	0.61	0.96	3d10/30 L=0 29,31,33
96	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.73	0.62	0.67	3d10/30 L=0 29,12,12
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.56	0.61	0.65	3d10/30 L=0 29,12,12
118	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.57	0.51	0.81	3d10/10 L=17 29,20,12
	s=1,m=3	17.0	0.32	12.7	12.7	6.2	0.08	0.48	0.50	0.79	3d10/10 L=17 32,20,12
140	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.50	0.48	0.57	3d10/30 L=17 32,12,32
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.48	0.47	0.56	3d10/30 L=17 32,12,32
162	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.49	0.42	0.53	3d10/30 L=17 36,12,32
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.48	0.40	0.51	3d10/30 L=17 36,12,32
184	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.48	0.37	0.49	3d10/30 L=17 36,12,32
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.47	0.35	0.47	3d10/30 L=17 36,12,32
206	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.47	0.32	0.44	3d10/30 L=17 36,12,32
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.45	0.31	0.43	3d10/30 L=17 36,12,32
228	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.46	0.29	0.41	3d10/30 L=17 32,12,32
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.44	0.27	0.40	3d10/30 L=17 36,12,32
250	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.44	0.25	0.38	3d10/30 L=17 36,12,32
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.42	0.24	0.36	3d10/30 L=17 36,12,32
272	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.42	0.23	0.35	3d10/30 L=17 36,12,32
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.40	0.21	0.34	3d10/30 L=17 36,12,32
294	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.40	0.20	0.33	3d10/30 L=17 36,32,32
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.37	0.19	0.31	3d10/30 L=17 36,32,32
316	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.37	0.18	0.30	3d10/30 L=17 36,32,32
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.34	0.17	0.29	3d10/30 L=17 36,32,32
338	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.33	0.17	0.29	3d10/30 L=17 36,32,32
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.30	0.16	0.27	3d10/30 L=17 20,32,32
360	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.30	0.16	0.27	3d10/30 L=17 20,32,32
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.30	0.15	0.25	3d10/30 L=17 20,29,32
382	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.30	0.15	0.25	3d10/30 L=17 20,29,32
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.30	0.16	0.23	3d10/30 L=17 20,29,32
404	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.30	0.16	0.24	3d10/30 L=17 20,29,32
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.30	0.17	0.23	3d10/30 L=17 8,29,29

416	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.32	0.17	0.24	3d10/30 L=17 11,29,29
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.31	0.18	0.25	3d10/30 L=17 8,29,29
428	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.32	0.18	0.25	3d10/30 L=17 11,29,29
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.32	0.19	0.27	3d10/30 L=17 12,29,29
440	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.33	0.20	0.27	3d10/30 L=17 11,29,29
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.31	0.21	0.29	3d10/30 L=17 12,29,29
452	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.32	0.21	0.29	3d10/30 L=17 11,33,29
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.30	0.22	0.31	3d10/30 L=17 12,33,29
464	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.30	0.23	0.32	3d10/30 L=17 11,33,29
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.36	0.24	0.34	3d10/30 L=17 29,33,33
476	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.35	0.25	0.34	3d10/30 L=17 33,33,33
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.44	0.26	0.37	3d10/30 L=17 29,33,33
488	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.42	0.27	0.37	3d10/30 L=17 33,33,33
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.51	0.28	0.40	3d10/30 L=17 29,33,33
500	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.50	0.29	0.41	3d10/30 L=17 33,33,33
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.60	0.31	0.43	3d10/30 L=17 29,33,33
512	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.57	0.32	0.45	3d10/30 L=17 33,33,33
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.68	0.33	0.47	3d10/30 L=17 29,33,33
524	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.66	0.35	0.49	3d10/30 L=17 29,33,33
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.78	0.36	0.51	3d10/30 L=17 29,33,33
536	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.74	0.38	0.54	3d10/30 L=17 29,33,33
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.88	0.40	0.56	3d10/30 L=17 29,33,33
548	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.85	0.42	0.59	3d10/30 L=17 33,33,33
	s=1,m=3	17.0	0.32	12.7	12.7	0.0	0.08	0.99	0.43	0.61	3d10/30 L=17 33,33,33
560	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.95	0.47	0.65	3d10/30 L=17 33,33,33
	s=1,m=3	17.0	0.38	15.3	12.7	0.0	0.08	0.93	0.48	0.67	3d10/30 L=17 33,17,33
572	ok,ok	0.0	0.38	15.3	12.7	6.2	0.08	0.89	0.52	0.79	3d10/10 L=17 29,33,17
	s=1,m=3	17.0	0.45	17.8	12.7	6.2	0.09	0.89	0.53	0.81	3d10/10 L=17 33,33,17
584	ok,ok	0.0	0.45	17.8	12.7	0.0	0.09	0.89	0.50	0.76	3d10/30 L=0 29,17,33
	s=1,m=3	17.0	0.51	20.4	12.7	0.0	0.10	0.91	0.51	0.78	3d10/30 L=0 33,17,33
97	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.63	0.54	0.65	3d10/30 L=0 29,12,32
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.49	0.53	0.64	3d10/30 L=0 29,12,32
119	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.50	0.43	0.65	3d10/30 L=15 29,12,32
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.37	0.42	0.63	3d10/30 L=15 29,12,32
141	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.40	0.36	0.58	3d10/30 L=15 29,32,32
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.35	0.35	0.56	3d10/30 L=15 36,32,32
163	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.35	0.32	0.53	3d10/30 L=15 32,32,32
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.33	0.31	0.51	3d10/30 L=15 36,32,32
185	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.33	0.29	0.49	3d10/30 L=15 36,32,32
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.31	0.28	0.48	3d10/30 L=15 36,32,32
207	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.32	0.28	0.48	3d10/30 L=15 32,32,32
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.28	0.27	0.46	3d10/30 L=15 36,32,32
229	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.28	0.24	0.42	3d10/30 L=15 36,32,32
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.26	0.23	0.40	3d10/30 L=15 36,32,32
251	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.26	0.22	0.39	3d10/30 L=15 36,32,32
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.23	0.21	0.37	3d10/30 L=15 36,32,32
273	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.23	0.20	0.36	3d10/30 L=15 36,32,32
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.20	0.19	0.34	3d10/30 L=15 36,32,32
295	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.20	0.20	0.36	3d10/30 L=15 36,32,32
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.21	0.19	0.34	3d10/30 L=15 20,32,32
317	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.21	0.17	0.31	3d10/30 L=15 20,32,32
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.22	0.16	0.29	3d10/30 L=15 20,32,32
339	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.22	0.16	0.29	3d10/30 L=15 15,32,32
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.23	0.15	0.27	3d10/30 L=15 16,29,32
361	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.24	0.15	0.26	3d10/30 L=15 19,29,32
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.24	0.16	0.25	3d10/30 L=15 16,29,32
383	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.25	0.18	0.27	3d10/30 L=15 19,29,32
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.25	0.19	0.25	3d10/30 L=15 16,29,32
405	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.26	0.17	0.23	3d10/30 L=15 19,29,32
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.26	0.17	0.22	3d10/30 L=15 8,29,29
417	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.27	0.17	0.22	3d10/30 L=15 11,33,29
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.27	0.18	0.23	3d10/30 L=15 8,33,29
429	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.27	0.21	0.28	3d10/30 L=15 11,33,29
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.31	0.22	0.29	3d10/30 L=15 33,33,29
441	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.31	0.20	0.24	3d10/30 L=15 33,33,29
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.36	0.21	0.26	3d10/30 L=15 29,33,29
453	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.36	0.21	0.26	3d10/30 L=15 33,33,33
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.41	0.22	0.28	3d10/30 L=15 29,33,33
465	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.41	0.22	0.28	3d10/30 L=15 33,33,33
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.47	0.23	0.29	3d10/30 L=15 29,33,33
477	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.46	0.26	0.35	3d10/30 L=15 33,33,33
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.53	0.27	0.36	3d10/30 L=15 29,33,33
489	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.52	0.26	0.32	3d10/30 L=15 33,33,33
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.58	0.26	0.34	3d10/30 L=15 29,33,33
501	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.57	0.27	0.35	3d10/30 L=15 33,33,33
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.64	0.29	0.37	3d10/30 L=15 29,17,33
513	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.63	0.30	0.38	3d10/30 L=15 29,17,33

	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.71	0.31	0.39	3d10/30 L=15 29,17,33
525	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.68	0.34	0.46	3d10/30 L=15 29,33,33
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.78	0.35	0.47	3d10/30 L=15 29,17,33
537	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.76	0.37	0.44	3d10/30 L=15 33,17,33
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.85	0.38	0.46	3d10/30 L=15 33,17,33
549	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.83	0.41	0.48	3d10/30 L=15 33,17,33
	s=1,m=3	14.6	0.32	12.7	12.7	0.0	0.08	0.93	0.42	0.50	3d10/30 L=15 33,17,33
561	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.90	0.46	0.53	3d10/30 L=15 33,17,33
	s=1,m=3	14.6	0.38	15.3	12.7	0.0	0.08	0.85	0.47	0.54	3d10/30 L=15 33,17,33
573	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.98	0.47	0.95	3d10/12 L=15 33,33,17
	s=1,m=3	14.6	0.38	15.3	12.7	6.2	0.08	0.93	0.48	0.97	3d10/12 L=15 33,33,17
585	ok,ok	0.0	0.38	15.3	12.7	0.0	0.08	0.93	0.46	0.60	3d10/30 L=0 33,17,33
	s=1,m=3	14.6	0.45	17.8	12.7	0.0	0.09	0.90	0.47	0.62	3d10/30 L=0 33,17,33
98	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.51	0.47	0.64	3d10/30 L=0 29,12,32
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.38	0.46	0.62	3d10/30 L=0 29,12,32
120	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.39	0.38	0.55	3d10/30 L=13 29,12,32
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.29	0.36	0.53	3d10/30 L=13 29,12,32
142	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.31	0.35	0.56	3d10/30 L=13 29,32,32
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.25	0.34	0.54	3d10/30 L=13 36,32,32
164	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.25	0.29	0.46	3d10/30 L=13 36,32,32
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.25	0.28	0.44	3d10/30 L=13 36,32,32
186	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.25	0.30	0.47	3d10/30 L=13 36,32,32
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.24	0.29	0.46	3d10/30 L=13 36,32,32
208	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.24	0.25	0.38	3d10/30 L=13 36,32,32
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.24	0.24	0.37	3d10/30 L=13 36,32,32
230	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.24	0.25	0.40	3d10/30 L=13 36,32,32
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.23	0.24	0.38	3d10/30 L=13 36,32,32
252	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.24	0.23	0.37	3d10/30 L=13 36,32,32
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.24	0.22	0.35	3d10/30 L=13 20,32,32
274	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.25	0.19	0.28	3d10/30 L=13 20,32,32
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.27	0.18	0.26	3d10/30 L=13 20,32,32
296	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.27	0.20	0.30	3d10/30 L=13 20,36,32
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.28	0.19	0.28	3d10/30 L=13 20,36,32
318	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.28	0.16	0.23	3d10/30 L=13 20,36,32
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.30	0.16	0.21	3d10/30 L=13 20,20,32
340	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.29	0.18	0.25	3d10/30 L=13 15,36,32
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.30	0.17	0.23	3d10/30 L=13 16,36,32
362	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.30	0.16	0.18	3d10/30 L=13 19,20,32
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.31	0.15	0.16	3d10/30 L=13 16,20,32
384	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.31	0.17	0.21	3d10/30 L=13 19,36,32
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.32	0.16	0.19	3d10/30 L=13 16,36,32
406	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.32	0.17	0.14	3d10/30 L=13 16,20,36
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.32	0.16	0.12	3d10/30 L=13 16,20,36
418	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.32	0.16	0.16	3d10/30 L=13 19,20,36
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.32	0.16	0.15	3d10/30 L=13 16,20,36
430	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.32	0.16	0.15	3d10/30 L=13 16,20,36
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.31	0.16	0.15	3d10/30 L=13 16,17,33
442	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.31	0.18	0.09	3d10/30 L=13 16,20,36
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.30	0.18	0.09	3d10/30 L=13 8,20,17
454	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.30	0.19	0.16	3d10/30 L=13 8,17,33
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.29	0.20	0.17	3d10/30 L=13 12,17,33
466	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.29	0.20	0.11	3d10/30 L=13 8,17,17
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.28	0.21	0.13	3d10/30 L=13 12,17,17
478	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.28	0.23	0.18	3d10/30 L=13 8,17,33
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.27	0.24	0.19	3d10/30 L=13 12,17,33
490	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.26	0.25	0.16	3d10/30 L=13 8,17,17
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.24	0.26	0.18	3d10/30 L=13 12,17,17
502	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.24	0.28	0.20	3d10/30 L=13 12,17,33
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.27	0.29	0.21	3d10/30 L=13 29,17,33
514	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.25	0.31	0.22	3d10/30 L=13 29,17,17
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.29	0.32	0.24	3d10/30 L=13 29,17,17
526	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.28	0.35	0.86	3d10/25 L=13 33,17,20
	s=1,m=3	13.3	0.32	12.7	12.7	6.2	0.08	0.31	0.36	0.85	3d10/25 L=13 33,17,20
538	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.29	0.37	0.78	3d10/15 L=13 33,13,17
	s=1,m=3	13.3	0.32	12.7	12.7	6.2	0.08	0.34	0.38	0.80	3d10/15 L=13 33,13,17
550	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.32	0.38	0.86	3d10/15 L=13 29,14,17
	s=1,m=3	13.3	0.32	12.7	12.7	6.2	0.08	0.36	0.39	0.88	3d10/15 L=13 33,14,17
562	ok,ok	0.0	0.32	12.7	12.7	6.2	0.08	0.34	0.41	0.83	3d10/12 L=13 33,18,17
	s=1,m=3	13.3	0.32	12.7	12.7	6.2	0.08	0.40	0.42	0.85	3d10/12 L=13 33,18,17
574	ok,ok	0.0	0.32	12.7	12.7	9.2	0.08	0.38	0.41	0.97	3d10/12 L=13 33,5,17
	s=1,m=3	13.3	0.32	12.7	12.7	9.2	0.08	0.42	0.43	0.99	3d10/12 L=13 33,5,17
586	ok,ok	0.0	0.32	12.7	12.7	0.0	0.08	0.42	0.72	0.47	3d10/30 L=0 33,17,17
	s=1,m=3	13.3	0.32	12.7	12.7	0.0	0.08	0.49	0.73	0.49	3d10/30 L=0 33,17,17
							M_T= 1	**Z=428.0**	**P=3**	**P=15**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
75	ok,ok	0.0	0.74	10.2	17.8	0.0	0.14	0.94	0.52	0.19	3d10/10 L=60 24,10,36
	s=3,m=3	317.5	0.42	10.2	7.6	0.0	0.11	0.48	0.34	0.31	3d10/30 L=455 2,10,36

		635.0	0.64	12.7	15.3	0.0	0.12	0.92	0.48	0.17	3d10/10 L=60 21,10,36
76	ok,ok	0.0	0.57	10.2	13.8	0.0	0.12	0.96	0.41	0.15	3d10/10 L=60 21,10,36
	s=3,m=3	255.4	0.32	7.6	7.6	0.0	0.09	0.19	0.34	0.36	3d10/30 L=311 16,10,36
		510.9	0.53	12.7	12.2	0.0	0.11	0.93	0.38	0.14	3d10/10 L=60 21,10,36
1	ok,ok	0.0	0.64	15.3	9.2	0.0	0.13	0.98	0.43	0.13	3d10/10 L=60 24,10,36
	s=3,m=3	219.6	0.32	7.6	7.6	0.0	0.09	0.26	0.48	0.47	3d10/30 L=239 15,10,36
		439.1	0.57	7.6	13.8	0.0	0.13	0.96	0.53	0.18	3d10/10 L=60 21,10,36
72	ok,ok	0.0	0.32	7.6	7.6	0.0	0.09	0.96	0.40	0.11	3d10/10 L=60 27,17,36
	s=3,m=3	200.0	0.32	7.6	7.6	0.0	0.09	0.13	0.38	0.29	3d10/30 L=220 27,17,36
		400.0	0.38	7.6	9.2	0.0	0.10	0.84	0.42	0.12	3d10/10 L=60 27,17,36
							M_T= 3	**Z=428.0**	**P=7**	**P=9**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
7	ok,ok	0.0	0.51	10.2	12.2	0.0	0.11	0.97	0.32	0.12	3d10/10 L=60 19,10,36
	s=3,m=3	291.3	0.32	7.6	7.6	0.0	0.09	0.32	0.24	0.26	3d10/30 L=422 18,10,36
		582.5	0.57	7.6	13.8	0.0	0.13	0.91	0.35	0.14	3d10/10 L=60 18,10,36
3	ok,ok	0.0	0.57	7.6	13.8	0.0	0.13	0.95	0.39	0.16	3d10/10 L=60 15,11,36
	s=3,m=3	291.3	0.32	7.6	7.6	0.0	0.09	0.53	0.23	0.26	3d10/30 L=423 2,11,36
		582.5	0.57	10.2	13.8	0.0	0.12	0.92	0.37	0.15	3d10/10 L=60 18,11,36
							M_T= 6	**Z=428.0**	**P=4**	**P=6**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
13	ok,ok	0.0	0.64	10.2	15.3	0.0	0.13	0.98	0.35	0.14	3d10/10 L=60 10,10,36
	s=3,m=3	291.3	0.32	7.6	7.6	0.0	0.09	0.36	0.24	0.27	3d10/30 L=422 5,10,36
		582.5	0.57	10.2	13.8	0.0	0.12	0.92	0.34	0.14	3d10/10 L=60 10,10,36
50	ok,ok	0.0	0.57	7.6	13.8	0.0	0.13	0.94	0.34	0.14	3d10/10 L=60 11,10,36
	s=3,m=3	291.3	0.32	7.6	7.6	0.0	0.09	0.33	0.25	0.29	3d10/30 L=423 11,10,36
		582.5	0.53	12.7	12.7	0.0	0.11	0.96	0.30	0.12	3d10/10 L=60 5,10,36
							M_T= 8	**Z=428.0**	**P=13**	**P=15**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
15	ok,ok	0.0	0.51	10.2	12.2	0.0	0.11	0.92	0.41	0.17	3d10/10 L=60 17,11,36
	s=3,m=3	291.3	0.32	7.6	7.6	0.0	0.09	0.47	0.27	0.30	3d10/30 L=342 2,11,36
		582.5	0.57	7.6	13.8	0.0	0.13	0.93	0.44	0.19	3d10/10 L=60 17,11,36
26	ok,ok	0.0	0.64	12.7	15.3	0.0	0.12	0.90	0.38	0.15	3d10/10 L=60 20,31,36
	s=3,m=3	291.3	0.32	7.6	7.6	0.0	0.09	0.35	0.28	0.30	3d10/30 L=382 2,31,36
		582.5	0.51	10.2	12.2	0.0	0.11	0.94	0.38	0.15	3d10/10 L=60 17,31,36
							M_T= 11	**Z=428.0**	**P=10**	**P=12**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
32	ok,ok	0.0	0.45	10.2	10.7	0.0	0.10	0.98	0.32	0.13	3d10/10 L=60 20,11,36
	s=3,m=3	291.3	0.32	7.6	7.6	0.0	0.09	0.36	0.24	0.26	3d10/30 L=422 2,11,36
		582.5	0.57	7.6	13.8	0.0	0.13	0.96	0.36	0.15	3d10/10 L=60 17,11,36
22	ok,ok	0.0	0.57	7.6	13.8	0.0	0.13	0.93	0.43	0.17	3d10/10 L=60 19,31,36
	s=3,m=3	291.3	0.32	7.6	7.6	0.0	0.09	0.79	0.24	0.23	3d10/30 L=423 2,31,36
		582.5	0.51	7.6	12.2	0.0	0.12	0.92	0.42	0.16	3d10/10 L=60 18,31,36
							M_T= 12	**Z=428.0**	**P=2**	**P=14**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
23	ok,ok	0.0	0.77	10.2	18.4	0.0	0.15	0.96	0.64	0.23	3d10/10 L=60 24,10,36
	s=3,m=3	317.5	0.42	10.2	7.6	0.0	0.11	0.87	0.37	0.29	3d10/30 L=455 2,10,36
		635.0	0.64	10.2	15.3	0.0	0.13	0.94	0.62	0.22	3d10/10 L=60 21,10,36
24	ok,ok	0.0	0.57	10.2	13.8	0.0	0.12	0.91	0.34	0.14	3d10/10 L=60 26,11,36
	s=3,m=3	255.4	0.32	7.6	7.6	0.0	0.09	0.10	0.27	0.33	3d10/30 L=311 2,11,36
		510.9	0.51	10.2	12.2	0.0	0.11	0.96	0.32	0.14	3d10/10 L=60 26,11,36
27	ok,ok	0.0	0.53	12.7	12.2	0.0	0.11	0.92	0.48	0.21	3d10/10 L=60 26,5,36
	s=3,m=3	219.6	0.32	7.6	7.6	0.0	0.09	0.42	0.35	0.45	3d10/30 L=239 2,5,36
		439.1	0.64	10.2	15.3	0.0	0.13	0.94	0.54	0.24	3d10/10 L=60 23,5,36
28	ok,ok	0.0	0.42	10.2	9.2	0.0	0.10	0.88	0.42	0.13	3d10/10 L=60 26,20,36
	s=3,m=3	200.0	0.32	7.6	7.6	0.0	0.09	0.18	0.40	0.36	3d10/30 L=220 27,20,36
		400.0	0.45	7.6	10.7	0.0	0.11	0.97	0.47	0.16	3d10/10 L=60 27,20,36
							M_T= 13	**Z=428.0**	**P=1**	**P=3**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
25	ok,ok	0.0	0.64	12.7	15.3	0.0	0.12	0.96	0.35	0.16	3d10/10 L=60 10,30,36
	s=3,m=3	291.3	0.32	7.6	7.6	0.0	0.09	0.18	0.27	0.35	3d10/30 L=342 6,30,36
		582.5	0.64	12.7	15.3	0.0	0.12	0.90	0.35	0.16	3d10/10 L=60 10,30,36
47	ok,ok	0.0	0.95	12.7	22.9	0.0	0.16	0.92	0.49	0.22	3d10/10 L=60 10,11,36
	s=3,m=3	291.3	0.32	7.6	7.6	0.0	0.09	0.43	0.35	0.44	3d10/30 L=382 2,11,36
		582.5	0.64	15.3	15.3	0.0	0.12	0.95	0.41	0.18	3d10/10 L=60 10,11,36
							M_T= 15	**Z=428.0**	**P=1**	**P=13**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
38	ok,ok	0.0	0.85	10.2	20.4	0.0	0.16	0.91	0.60	0.23	3d10/10 L=60 30,11,36
	s=3,m=3	317.5	0.42	10.2	7.6	0.0	0.11	0.69	0.37	0.33	3d10/30 L=455 2,11,36
		635.0	0.74	12.7	17.8	0.0	0.13	0.90	0.57	0.21	3d10/10 L=60 31,11,36
40	ok,ok	0.0	0.74	10.2	17.8	0.0	0.14	0.96	0.48	0.20	3d10/10 L=60 31,10,36
	s=3,m=3	255.4	0.32	7.6	7.6	0.0	0.09	0.20	0.37	0.45	3d10/30 L=311 2,10,36
		510.9	0.64	15.3	13.8	0.0	0.12	0.95	0.40	0.16	3d10/10 L=60 31,10,36
46	ok,ok	0.0	0.64	10.2	15.3	0.0	0.13	0.97	0.53	0.23	3d10/10 L=60 31,10,36
	s=3,m=3	219.6	0.32	7.6	7.6	0.0	0.09	0.34	0.37	0.45	3d10/30 L=239 2,10,36
		439.1	0.57	12.7	13.8	0.0	0.11	0.94	0.49	0.21	3d10/10 L=60 31,10,36
58	ok,ok	0.0	0.42	10.2	10.2	0.0	0.10	0.95	0.40	0.14	3d10/10 L=60 36,20,36
	s=3,m=3	200.0	0.32	7.6	7.6	0.0	0.09	0.16	0.35	0.35	3d10/30 L=220 33,20,36

		400.0	0.42	10.2	10.2	0.0	0.10	0.95	0.40	0.14	3d10/10 L=60 33,20,36
							M_T= 2	**Z=835.0**	**P=1**	**P=3**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
16	ok,ok	0.0	0.45	10.2	10.7	0.0	0.10	0.96	0.38	0.14	3d10/10 L=60 8,20,36
	s=3,m=3	291.3	0.32	7.6	7.6	0.0	0.09	0.37	0.28	0.27	3d10/30 L=342 21,20,36
		582.5	0.45	7.6	10.7	0.0	0.11	0.94	0.40	0.15	3d10/10 L=60 10,20,36
2	ok,ok	0.0	0.57	7.6	13.8	0.0	0.13	0.96	0.39	0.16	3d10/10 L=60 8,18,36
	s=3,m=3	291.3	0.32	7.6	7.6	0.0	0.09	0.43	0.26	0.28	3d10/30 L=382 31,18,36
		582.5	0.42	10.2	10.2	0.0	0.10	0.96	0.34	0.13	3d10/10 L=60 10,18,36
							M_T= 4	**Z=835.0**	**P=7**	**P=9**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
5	ok,ok	0.0	0.45	7.6	10.7	0.0	0.11	0.97	0.42	0.18	3d10/10 L=60 19,8,36
	s=3,m=3	291.3	0.42	10.2	7.6	0.0	0.11	0.70	0.20	0.22	3d10/30 L=422 2,8,36
		582.5	0.53	7.6	12.7	0.0	0.12	0.97	0.43	0.19	3d10/10 L=60 18,8,36
20	ok,ok	0.0	0.38	7.6	9.2	0.0	0.10	0.97	0.26	0.10	3d10/10 L=60 15,21,36
	s=3,m=3	291.3	0.32	7.6	7.6	0.0	0.09	0.17	0.19	0.18	3d10/30 L=423 19,21,36
		582.5	0.38	7.6	9.2	0.0	0.10	0.92	0.26	0.10	3d10/10 L=60 14,21,36
							M_T= 5	**Z=835.0**	**P=10**	**P=11**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
11	ok,ok	0.0	0.51	7.6	12.2	0.0	0.12	0.97	0.46	0.19	3d10/10 L=60 20,11,36
	s=3,m=3	291.3	0.42	10.2	7.6	0.0	0.11	0.87	0.23	0.23	3d10/30 L=422 2,11,36
		582.5	0.57	7.6	13.8	0.0	0.13	0.93	0.47	0.20	3d10/10 L=60 17,11,36
							M_T= 10	**Z=835.0**	**P=4**	**P=6**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
21	ok,ok	0.0	0.51	7.6	12.2	0.0	0.12	0.92	0.45	0.20	3d10/10 L=60 11,26,36
	s=3,m=3	291.3	0.42	10.2	7.6	0.0	0.11	0.76	0.20	0.25	3d10/30 L=422 2,26,36
		582.5	0.64	7.6	15.3	0.0	0.14	0.88	0.47	0.21	3d10/10 L=60 5,26,36
19	ok,ok	0.0	0.51	7.6	12.2	0.0	0.12	0.95	0.35	0.16	3d10/10 L=60 8,21,36
	s=3,m=3	291.3	0.32	7.6	7.6	0.0	0.09	0.47	0.18	0.22	3d10/30 L=423 2,21,36
		582.5	0.42	7.6	10.2	0.0	0.11	0.95	0.34	0.15	3d10/10 L=60 5,21,36
							M_T= 14	**Z=835.0**	**P=13**	**P=14**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
31	ok,ok	0.0	0.42	7.6	10.2	0.0	0.11	0.96	0.40	0.17	3d10/10 L=60 17,11,36
	s=3,m=3	291.3	0.32	7.6	7.6	0.0	0.09	0.56	0.23	0.25	3d10/30 L=342 2,11,36
		582.5	0.51	7.6	12.2	0.0	0.12	0.90	0.42	0.17	3d10/10 L=60 17,11,36
							M_T= 17	**Z=835.0**	**P=3**	**P=9**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
63	ok,ok	0.0	0.51	7.6	12.2	0.0	0.12	0.93	0.46	0.15	3d10/10 L=60 24,10,36
	s=3,m=3	317.5	0.32	7.6	7.6	0.0	0.09	0.68	0.29	0.20	3d10/30 L=455 2,10,36
		635.0	0.51	7.6	12.2	0.0	0.12	0.87	0.46	0.15	3d10/10 L=60 21,10,36
64	ok,ok	0.0	0.42	7.6	10.2	0.0	0.11	0.98	0.30	0.12	3d10/10 L=60 21,11,36
	s=3,m=3	255.4	0.32	7.6	7.6	0.0	0.09	0.15	0.24	0.28	3d10/30 L=311 24,11,36
		510.9	0.45	10.2	10.7	0.0	0.10	0.96	0.28	0.11	3d10/10 L=60 21,11,36
							M_T= 18	**Z=835.0**	**P=2**	**P=14**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
65	ok,ok	0.0	0.64	7.6	15.3	0.0	0.14	0.90	0.63	0.23	3d10/10 L=60 22,10,36
	s=3,m=3	317.5	0.53	12.7	7.6	0.0	0.12	0.77	0.31	0.23	3d10/30 L=455 2,10,36
		635.0	0.57	7.6	13.8	0.0	0.13	0.93	0.62	0.23	3d10/10 L=60 21,10,36
66	ok,ok	0.0	0.51	7.6	12.2	0.0	0.12	0.86	0.36	0.15	3d10/10 L=60 22,10,36
	s=3,m=3	255.4	0.32	7.6	7.6	0.0	0.09	0.23	0.24	0.27	3d10/30 L=311 8,10,36
		510.9	0.38	7.6	9.2	0.0	0.10	0.91	0.33	0.14	3d10/10 L=60 26,10,36
67	ok,ok	0.0	0.38	7.6	9.2	0.0	0.10	0.91	0.45	0.15	3d10/10 L=60 26,15,36
	s=3,m=3	219.6	0.32	7.6	7.6	0.0	0.09	0.27	0.33	0.28	3d10/30 L=239 2,15,36
		439.1	0.38	7.6	9.2	0.0	0.10	0.92	0.45	0.15	3d10/10 L=60 33,15,36
68	ok,ok	0.0	0.32	7.6	7.6	0.0	0.09	0.63	0.40	0.10	3d10/10 L=60 21,17,36
	s=3,m=3	200.0	0.32	7.6	7.6	0.0	0.09	0.10	0.38	0.27	3d10/30 L=220 5,17,36
		400.0	0.32	7.6	7.6	0.0	0.09	0.71	0.40	0.10	3d10/10 L=60 23,17,36
							M_T= 19	**Z=835.0**	**P=1**	**P=13**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
69	ok,ok	0.0	0.51	7.6	12.2	3.1	0.12	0.90	0.51	0.62	3d10/10 L=60 30,12,8
	s=3,m=3	317.5	0.32	7.6	7.6	3.1	0.09	0.64	0.33	0.60	3d10/15 L=455 2,12,8
		635.0	0.45	7.6	10.7	3.1	0.11	0.95	0.50	0.61	3d10/10 L=60 31,12,8
70	ok,ok	0.0	0.51	7.6	12.2	0.0	0.12	0.88	0.35	0.14	3d10/10 L=60 36,10,36
	s=3,m=3	255.4	0.32	7.6	7.6	0.0	0.09	0.16	0.27	0.31	3d10/30 L=311 18,10,36
		510.9	0.42	10.2	7.6	0.0	0.11	0.98	0.29	0.11	3d10/10 L=60 31,10,36
71	ok,ok	0.0	0.38	7.6	9.2	0.0	0.10	0.97	0.36	0.15	3d10/10 L=60 36,27,36
	s=3,m=3	219.6	0.32	7.6	7.6	0.0	0.09	0.27	0.24	0.28	3d10/30 L=239 2,27,36
		439.1	0.32	7.6	7.6	0.0	0.09	0.96	0.34	0.14	3d10/10 L=60 31,27,36
73	ok,ok	0.0	0.32	7.6	7.6	0.0	0.09	0.68	0.40	0.10	3d10/10 L=60 36,15,36
	s=3,m=3	200.0	0.32	7.6	7.6	0.0	0.09	0.06	0.38	0.27	3d10/30 L=220 33,15,36
		400.0	0.32	7.6	7.6	0.0	0.09	0.64	0.40	0.10	3d10/10 L=60 33,15,36
							M_T= 7	**Z=1200.0**	**P=5**	**P=6**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
14	ok,ok	0.0	0.42	10.2	10.2	0.0	0.10	0.39	0.22	0.07	4d10/10 L=60 16,26,36
	s=5,m=3	291.3	0.42	10.2	10.2	0.0	0.10	0.08	0.19	0.17	4d10/30 L=423 1,26,36
		582.5	0.42	10.2	10.2	0.0	0.10	0.30	0.22	0.07	4d10/10 L=60 13,26,36
							M_T= 9	**Z=1200.0**	**P=5**	**P=8**	

Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
17	ok,ok	0.0	0.42	10.2	10.2	0.0	0.10	0.59	0.32	0.11	4d10/10 L=60	22,36,36
	s=5,m=3	255.4	0.42	10.2	10.2	0.0	0.10	0.24	0.21	0.21	4d10/30 L=311	2,36,36
		510.9	0.42	10.2	10.2	0.0	0.10	0.53	0.32	0.11	4d10/10 L=60	23,36,36
							M_T= 16	**Z=1200.0**	**P=8**	**P=9**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
45	ok,ok	0.0	0.42	10.2	10.2	0.0	0.10	0.42	0.21	0.07	4d10/10 L=60	15,8,36
	s=5,m=3	291.3	0.42	10.2	10.2	0.0	0.10	0.09	0.18	0.17	4d10/30 L=423	2,8,36
		582.5	0.42	10.2	10.2	0.0	0.10	0.42	0.21	0.07	4d10/10 L=60	14,8,36
							M_T= 20	**Z=1200.0**	**P=6**	**P=9**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
74	ok,ok	0.0	0.42	10.2	10.2	0.0	0.10	0.58	0.32	0.11	4d10/10 L=60	24,32,36
	s=5,m=3	255.4	0.42	10.2	10.2	0.0	0.10	0.24	0.22	0.21	4d10/30 L=311	2,32,36
		510.9	0.42	10.2	10.2	0.0	0.10	0.65	0.32	0.11	4d10/10 L=60	21,32,36

Trave	**%Af**	**Af inf.**	**Af. sup**	**Af long.**	**x/d**	**V N/M**	**V V/T cls**	**V V/T acc**
	0.95	22.90	22.90	12.32	0.16	1.00	1.00	0.99

Trave	**M negativo i**	**M positivo i**	**M negativo f**	**M positivo f**	**Luce per V**	**V M-i M+f**	**V M+i M-f**	**VEd,min**	**VEd,max**	**Vr1**	**As**
	daN cm	daN cm	daN cm	daN cm	cm	daN	daN	daN	daN	daN	cm2
1	1.879e+06	3.075e+06	2.786e+06	1.575e+06	359.13	1.058e+04	1.795e+04	0.0	0.0	0.0	0.0
2	2.786e+06	1.575e+06	2.078e+06	2.078e+06	502.50	1.065e+04	7997.39	0.0	0.0	0.0	0.0
3	2.786e+06	1.575e+06	2.788e+06	2.078e+06	542.50	9862.44	8846.97	0.0	0.0	0.0	0.0
5	2.183e+06	1.576e+06	2.578e+06	1.576e+06	542.50	7621.90	8422.28	0.0	0.0	0.0	0.0
7	2.486e+06	2.078e+06	2.786e+06	1.575e+06	542.50	8235.57	9862.21	0.0	0.0	0.0	0.0
11	2.485e+06	1.576e+06	2.786e+06	1.575e+06	542.50	8233.52	8843.71	0.0	0.0	0.0	0.0
13	3.076e+06	2.078e+06	2.788e+06	2.078e+06	542.50	1.045e+04	9864.97	0.0	0.0	0.0	0.0
14	2.078e+06	2.078e+06	2.078e+06	2.078e+06	542.50	8425.79	8425.79	0.0	0.0	0.0	0.0
15	2.486e+06	2.078e+06	2.786e+06	1.575e+06	462.50	9660.10	1.157e+04	0.0	0.0	0.0	0.0
16	2.183e+06	2.078e+06	2.183e+06	1.576e+06	462.50	8940.31	1.013e+04	0.0	0.0	0.0	0.0
17	2.078e+06	2.078e+06	2.078e+06	2.078e+06	430.87	1.061e+04	1.061e+04	0.0	0.0	0.0	0.0
19	2.485e+06	1.576e+06	2.078e+06	1.576e+06	542.50	8234.52	7408.27	0.0	0.0	0.0	0.0
20	1.880e+06	1.576e+06	1.880e+06	1.576e+06	542.50	7007.37	7007.37	0.0	0.0	0.0	0.0
21	2.485e+06	1.576e+06	3.073e+06	1.575e+06	542.50	8233.52	9426.29	0.0	0.0	0.0	0.0
22	2.786e+06	1.575e+06	2.485e+06	1.576e+06	542.50	8843.71	8233.52	0.0	0.0	0.0	0.0
23	3.686e+06	2.077e+06	3.076e+06	2.078e+06	575.00	1.103e+04	9858.41	0.0	0.0	0.0	0.0
24	2.788e+06	2.078e+06	2.486e+06	2.078e+06	430.87	1.242e+04	1.165e+04	0.0	0.0	0.0	0.0
25	3.078e+06	2.579e+06	3.078e+06	2.579e+06	462.50	1.345e+04	1.345e+04	0.0	0.0	0.0	0.0
26	3.078e+06	2.579e+06	2.486e+06	2.078e+06	502.50	1.129e+04	1.109e+04	0.0	0.0	0.0	0.0
27	2.486e+06	2.579e+06	3.076e+06	2.078e+06	359.13	1.398e+04	1.732e+04	0.0	0.0	0.0	0.0
28	1.880e+06	2.078e+06	2.183e+06	1.576e+06	340.00	1.118e+04	1.379e+04	0.0	0.0	0.0	0.0
31	2.078e+06	1.576e+06	2.485e+06	1.576e+06	462.50	8689.70	9658.86	0.0	0.0	0.0	0.0
32	2.183e+06	2.078e+06	2.786e+06	1.575e+06	542.50	7620.51	9861.20	0.0	0.0	0.0	0.0
38	4.061e+06	2.077e+06	3.575e+06	2.579e+06	575.00	1.270e+04	1.081e+04	0.0	0.0	0.0	0.0
40	3.571e+06	2.077e+06	2.789e+06	3.079e+06	430.87	1.698e+04	1.242e+04	0.0	0.0	0.0	0.0
45	2.078e+06	2.078e+06	2.078e+06	2.078e+06	542.50	8425.79	8425.79	0.0	0.0	0.0	0.0
46	3.076e+06	2.078e+06	2.789e+06	2.579e+06	359.13	1.732e+04	1.490e+04	0.0	0.0	0.0	0.0
47	4.559e+06	2.579e+06	3.079e+06	3.079e+06	502.50	1.672e+04	1.239e+04	0.0	0.0	0.0	0.0
50	2.786e+06	1.575e+06	2.579e+06	2.579e+06	542.50	1.088e+04	8423.05	0.0	0.0	0.0	0.0
58	2.078e+06	2.078e+06	2.078e+06	2.078e+06	340.00	1.344e+04	1.344e+04	0.0	0.0	0.0	0.0
63	2.485e+06	1.576e+06	2.485e+06	1.576e+06	575.00	7768.76	7768.76	0.0	0.0	0.0	0.0
64	2.078e+06	1.576e+06	2.183e+06	2.078e+06	430.87	1.061e+04	9596.08	0.0	0.0	0.0	0.0
65	3.073e+06	1.575e+06	2.786e+06	1.575e+06	575.00	8892.89	8343.23	0.0	0.0	0.0	0.0
66	2.485e+06	1.576e+06	1.880e+06	1.576e+06	430.87	1.037e+04	8822.23	0.0	0.0	0.0	0.0
67	1.880e+06	1.576e+06	1.880e+06	1.576e+06	359.13	1.059e+04	1.059e+04	0.0	0.0	0.0	0.0
68	1.576e+06	1.576e+06	1.576e+06	1.576e+06	340.00	1.020e+04	1.020e+04	0.0	0.0	0.0	0.0
69	2.485e+06	1.576e+06	2.183e+06	1.576e+06	575.00	7769.49	7191.42	0.0	0.0	0.0	0.0
70	2.485e+06	1.576e+06	1.576e+06	2.078e+06	430.87	1.165e+04	8046.34	0.0	0.0	0.0	0.0
71	1.880e+06	1.576e+06	1.576e+06	1.576e+06	359.13	1.059e+04	9655.17	0.0	0.0	0.0	0.0
72	1.576e+06	1.576e+06	1.880e+06	1.576e+06	340.00	1.020e+04	1.118e+04	0.0	0.0	0.0	0.0
73	1.576e+06	1.576e+06	1.576e+06	1.576e+06	340.00	1.020e+04	1.020e+04	0.0	0.0	0.0	0.0
74	2.078e+06	2.078e+06	2.078e+06	2.078e+06	430.87	1.061e+04	1.061e+04	0.0	0.0	0.0	0.0
75	3.571e+06	2.077e+06	3.078e+06	2.579e+06	575.00	1.177e+04	9863.27	0.0	0.0	0.0	0.0
76	2.788e+06	2.078e+06	2.486e+06	2.579e+06	430.87	1.370e+04	1.165e+04	0.0	0.0	0.0	0.0

Trave	**M negativo i**	**M positivo i**	**M negativo f**	**M positivo f**	**V M-i M+f**	**V M+i M-f**	**VEd,min**	**VEd,max**	**Vr1**	**As**
							0.0			
	4.559e+06	3.075e+06	3.575e+06	3.079e+06	1.732e+04	1.795e+04		0.0	0.0	0.0

STATI LIMITE D' ESERCIZIO

LEGENDA TABELLA STATI LIMITE D' ESERCIZIO

In tabella vengono riportati i valori di interesse per il controllo degli stati limite d'esercizio.

In particolare vengono riportati, in relazione al tipo di elemento strutturale, i risultati relativi alle tre categorie di combinazione considerate:

- Combinazioni rare
- Combinazioni frequenti
- Combinazioni quasi permanenti.

I valori di interesse sono i seguenti:

rRfck	rapporto tra la massima compressione nel calcestruzzo e la tensione fck in combinazioni rare	[*normalizzato a 1*]
rRfyk	rapporto tra la massima tensione nell'acciaio e la tensione fyk in combinazioni rare	[*normalizzato a 1*]
rPfck	rapporto tra la massima compressione nel calcestruzzo e la tensione fck in combinazioni quasi permanenti	[*normalizzato a 1*]
wR	apertura caratteristica delle fessure in combinazioni rare	[*mm*]
wF	apertura caratteristica delle fessure in combinazioni frequenti	[*mm*]
wP	apertura caratteristica delle fessure in combinazioni quasi permanenti	[*mm*]
dR	massima deformazione in combinazioni rare	
dF	massima deformazione in combinazioni frequenti	
dP	massima deformazione in combinazioni quasi permanenti	

Per ognuno dei nove valori soprariportati viene indicata (Rif.cmb) la combinazione in cui si è verificato.

In relazione al tipo di elemento strutturale i valori sono selezionati nel modo seguente:

pilastri	**rRfck**	**rRfyk**	**rPfck**	per sezioni significative
travi	**rRfck**	**rRfyk**	**rPfck**	per sezioni significative
	wR	**wF**	**wP**	per sezioni significative
	dR	**dF**	**dP**	massimi in campata
setti e gusci	**rRfck**	**rRfyk**	**rPfck**	massimi nei nodi dell'elemento
	wR	**wF**	**wP**	massimi nei nodi dell'elemento

Si precisa che i valori di massima deformazione per travi sono riferiti al piano verticale (piano locale 1-2 con momenti flettenti 3-3).

Pilas.	Pos.	rRfck	rRfyk	rPfck	Rif. cmb	Pos.	rRfck	rRfyk	rPfck	Rif. cmb
	cm					cm				
4	0.0	0.15	0.09	0.19	70,70,74	203.5	0.05	0.03	0.06	70,70,74
	407.0	0.24	0.22	0.31	70,70,74					
6	0.0	0.32	0.26	0.41	70,70,74	203.5	0.05	0.03	0.06	70,70,74
	407.0	0.34	0.32	0.43	70,70,74					
8	0.0	0.24	0.15	0.31	70,70,74	203.5	0.04	0.03	0.06	70,70,74
	407.0	0.20	0.12	0.25	70,70,74					
9	0.0	0.05	0.03	0.06	70,70,74	182.5	0.05	0.03	0.06	70,70,74
	365.0	0.15	0.12	0.20	70,70,74					
10	0.0	0.05	0.03	0.07	70,70,74	182.5	0.04	0.02	0.05	70,70,74
	365.0	0.07	0.04	0.08	70,70,74					
12	0.0	0.10	0.07	0.13	70,70,74	203.5	0.09	0.06	0.12	70,70,74
	407.0	0.12	0.08	0.16	70,70,74					
18	0.0	0.04	0.03	0.05	70,70,74	182.5	0.05	0.03	0.06	70,70,74
	365.0	0.07	0.04	0.08	70,70,74					
29	0.0	0.20	0.13	0.25	70,70,74	203.5	0.06	0.04	0.08	70,70,74
	407.0	0.24	0.14	0.29	70,70,74					
30	0.0	0.03	0.02	0.04	69,69,73	182.5	0.04	0.03	0.05	70,70,74
	365.0	0.10	0.08	0.13	70,70,74					
33	0.0	0.13	0.09	0.17	70,70,74	214.0	0.16	0.11	0.19	70,70,74
	428.0	0.24	0.15	0.29	70,70,74					
34	0.0	0.43	0.32	0.53	70,70,74	203.5	0.08	0.05	0.10	70,70,74
	407.0	0.52	0.45	0.65	70,70,74					
35	0.0	0.33	0.22	0.43	70,70,74	214.0	0.21	0.15	0.26	70,70,74
	428.0	0.23	0.16	0.30	70,70,74					
36	0.0	0.19	0.13	0.23	70,70,74	203.5	0.11	0.08	0.14	70,70,74
	407.0	0.18	0.12	0.22	70,70,74					
37	0.0	0.19	0.11	0.24	70,70,74	203.5	0.08	0.05	0.11	70,70,74
	407.0	0.36	0.28	0.46	70,70,74					
39	0.0	0.08	0.06	0.10	70,70,74	214.0	0.11	0.07	0.14	70,70,74
	428.0	0.14	0.09	0.17	70,70,74					
41	0.0	0.23	0.15	0.29	70,70,74	214.0	0.16	0.11	0.20	70,70,74
	428.0	0.18	0.12	0.23	70,70,74					
42	0.0	0.17	0.11	0.22	70,70,74	214.0	0.11	0.08	0.14	70,70,74
	428.0	0.15	0.10	0.19	70,70,74					
43	0.0	0.15	0.10	0.19	70,70,74	214.0	0.10	0.07	0.13	70,70,74
	428.0	0.08	0.06	0.11	70,70,73					
44	0.0	0.15	0.10	0.20	69,70,73	214.0	0.08	0.06	0.11	70,70,74
	428.0	0.05	0.04	0.07	70,70,74					
48	0.0	0.31	0.30	0.39	70,70,74	203.5	0.05	0.03	0.06	70,70,74
	407.0	0.38	0.38	0.47	70,70,74					
49	0.0	0.17	0.11	0.21	70,70,74	214.0	0.12	0.08	0.15	70,70,74
	428.0	0.14	0.09	0.18	70,70,74					
51	0.0	0.19	0.13	0.25	70,70,74	214.0	0.13	0.09	0.17	70,70,74
	428.0	0.11	0.08	0.15	69,69,73					
52	0.0	0.21	0.14	0.28	69,70,73	214.0	0.10	0.07	0.13	70,70,74
	428.0	0.19	0.12	0.25	70,70,74					
53	0.0	0.25	0.18	0.32	70,69,74	214.0	0.08	0.05	0.10	70,70,74
	428.0	0.34	0.27	0.43	70,70,74					
...										
62	407.0	0.10	0.07	0.12	70,70,74	203.5	0.03	0.02	0.04	70,70,74
Pilas.		**rRfck**	**rRfyk**	**rPfck**			**rRfck**	**rRfyk**	**rPfck**	
		0.52	0.45	0.65						

Trave	Pos.	rRfck	rRfyk	rPfck	Rif. cmb	wR	wF	wP	Rif. cmb	dR	dF	dP	Rif. cmb
	cm					mm	mm	mm		cm	cm	cm	
1	0.0	0.14	0.21	0.19	69,69,73	0.0	0.0	0.0	0,0,0	0.47	0.45	0.45	70,72,74
	219.6	0.05	0.11	0.06	70,70,74	0.0	0.0	0.0	0,0,0				
	439.1	0.18	0.29	0.24	70,70,74	0.07	0.07	0.07	70,72,74				
2	0.0	0.14	0.23	0.18	70,70,74	0.0	0.0	0.0	0,0,0	0.20	0.18	0.18	70,72,74
	291.3	0.13	0.33	0.17	70,70,74	0.0	0.0	0.0	0,0,0				
	582.5	0.08	0.18	0.10	70,70,74	0.0	0.0	0.0	0,0,0				
3	0.0	0.18	0.32	0.22	70,70,74	0.08	0.08	0.08	70,72,74	0.36	0.34	0.33	70,72,74
	291.3	0.18	0.48	0.22	70,70,74	0.0	0.0	0.0	0,0,0				
	582.5	0.13	0.25	0.15	70,70,74	0.0	0.0	0.0	0,0,0				
5	0.0	0.16	0.46	0.20	70,70,74	0.13	0.15	0.14	70,72,74	0.54	-0.58	-0.57	70,72,74
	291.3	0.24	0.63	0.31	70,70,74	0.21	0.24	0.23	70,72,74				
	582.5	0.24	0.53	0.31	70,70,74	0.16	0.18	0.18	70,72,74				
7	0.0	0.10	0.19	0.12	70,70,74	0.0	0.0	0.0	0,0,0	0.25	0.23	0.23	70,72,74
	291.3	0.11	0.27	0.13	70,70,74	0.0	0.0	0.0	0,0,0				
	582.5	0.15	0.24	0.18	70,70,74	0.0	0.0	0.0	0,0,0				

11	0.0	0.15	0.48	0.19	70,70,74	0.13	0.15	0.15	70,72,74	1.04	1.11	1.09	70,72,74
	291.3	0.27	0.76	0.34	70,70,74	0.28	0.30	0.29	70,72,74				
	582.5	0.19	0.50	0.25	70,70,74	0.14	0.16	0.15	70,72,74				
13	0.0	0.13	0.24	0.16	70,70,74	0.0	0.0	0.0	0,0,0	0.12	0.11	0.11	70,72,74
	291.3	0.11	0.32	0.13	70,70,74	0.0	0.0	0.0	0,0,0				
	582.5	0.08	0.18	0.09	70,70,74	0.0	0.0	0.0	0,0,0				
14	0.0	0.05	0.11	0.06	70,70,74	0.0	0.0	0.0	0,0,0	0.26	0.24	0.23	70,72,74
	291.3	0.03	0.08	0.04	69,69,73	0.0	0.0	0.0	0,0,0				
	582.5	2.60e-03	0.03	3.46e-03	69,70,73	0.0	0.0	0.0	0,0,0				
15	0.0	0.03	0.09	0.03	70,70,74	0.0	0.0	0.0	0,0,0	0.47	0.45	0.44	70,72,74
	291.3	0.17	0.42	0.21	70,70,74	0.0	0.0	0.0	0,0,0				
	582.5	0.19	0.32	0.24	70,70,74	0.08	0.08	0.08	70,72,74				
16	0.0	0.07	0.17	0.09	70,70,74	0.0	0.0	0.0	0,0,0	0.15	0.14	0.14	70,72,74
	291.3	0.11	0.29	0.14	70,70,74	0.0	0.0	0.0	0,0,0				
	582.5	0.10	0.21	0.14	70,70,74	0.0	0.0	0.0	0,0,0				
17	0.0	0.08	0.20	0.10	70,70,74	0.0	0.0	0.0	0,0,0	0.27	0.26	0.25	70,72,74
	255.4	0.09	0.23	0.11	70,70,74	0.0	0.0	0.0	0,0,0				
	510.9	0.04	0.12	0.04	70,70,74	0.0	0.0	0.0	0,0,0				
19	0.0	0.27	0.49	0.35	70,70,74	0.14	0.16	0.16	70,72,74	0.27	0.24	0.23	70,72,74
	291.3	0.16	0.43	0.21	70,70,74	0.0	0.0	0.0	0,0,0				
	582.5	0.12	0.28	0.15	70,70,74	0.0	0.0	0.0	0,0,0				
20	0.0	0.15	0.28	0.20	70,69,74	0.0	0.0	0.0	0,0,0	0.38	0.36	0.35	70,72,74
	291.3	0.05	0.09	0.07	69,69,73	0.0	0.0	0.0	0,0,0				
	582.5	0.07	0.11	0.09	70,70,74	0.0	0.0	0.0	0,0,0				
21	0.0	0.19	0.48	0.24	70,70,74	0.13	0.15	0.15	70,72,74	-0.56	-0.60	-0.59	70,72,74
	291.3	0.26	0.67	0.33	70,70,74	0.23	0.26	0.25	70,72,74				
	582.5	0.26	0.50	0.33	70,70,74	0.15	0.16	0.16	70,72,74				
22	0.0	0.18	0.40	0.22	70,70,74	0.10	0.11	0.11	70,72,74	1.35	1.37	1.35	70,72,74
	291.3	0.22	0.70	0.27	70,70,74	0.25	0.27	0.26	70,72,74				
	582.5	0.14	0.37	0.17	70,70,74	0.10	0.10	0.10	70,72,74				
23	0.0	0.28	0.49	0.34	70,70,74	0.14	0.14	0.14	70,72,74	-0.73	-0.73	-0.71	70,72,74
	317.5	0.28	0.74	0.33	70,70,74	0.27	0.27	0.27	70,72,74				
	635.0	0.19	0.44	0.22	70,70,74	0.12	0.13	0.12	70,72,74				
...													
586	13.3	0.03	0.07	0.05	70,70,74	0.0	0.0	0.0	0,0,0	-6.95e-03	-6.63e-03	-6.52e-03	70,72,74
Trave		**rRfck**	**rRfyk**	**rPfck**		**wR**	**wF**	**wP**		**dR**	**dF**	**dP**	
										-0.78	-0.82	-0.81	
		0.31	0.76	0.39		0.30	0.30	0.29		1.35	1.37	1.35	

PRO_SAP

PROfessional Structural Analysis Program

Relazione di calcolo strutturale impostata e redatta secondo le modalità previste nel D.M. 17 Gennaio 2018 cap. 10 "Redazione dei progetti strutturali esecutivi e delle relazioni di calcolo".

Origine e Caratteristiche dei Codici di Calcolo	
Codice di calcolo:	PRO_SAP PROfessional Structural Analysis Program
Versione:	PROFESSIONAL (build 2020-09-190)
Produttore-Distributore:	2S.I. Software e Servizi per l'Ingegneria s.r.l. Via Garibaldi, 90 44121 Ferrara FE (Italy) Tel. +39 0532 200091 www.2si.it
Codice Licenza:	Licenza dsi4693

Descrizione	
Progetto	
Ubicazione	Comune di GIZZERIA (CZ) (Regione CALABRIA)
	Località GIZZERIA (CZ)
	Longitudine 16.152, Latitudine 38.968
Progettista	CO.MA.TE.C. SRL

In merito al punto 10.2 delle Norme Tecniche per le Costruzioni (*Affidabilità dei codici utilizzati*), si fa riferimento al **Documento di Affidabilità** "Test di validazione del software di calcolo PRO_SAP e dei moduli aggiuntivi PRO_SAP Modulo Geotecnico, PRO_CAD nodi acciaio e PRO_MST" - versione Agosto 2020, disponibile per il download sul sito: https://www.2si.it/it/prodotti/affidabilita/

INTESTAZIONE E CONTENUTI DELLA RELAZIONE

Progetto
LAVORI DI DEMOLIZIONE E RICOSTRUZIONE DELL'ISTITUTO TECNICO AGRARIO A.PUGLIESE

Contenuti della relazione:
RELAZIONE DI CALCOLO STRUTTURALE
- Origine e Caratteristiche dei Codici di Calcolo
- Affidabilità dei codici utilizzati
- Validazione dei codici
- Tipo di analisi svolta
- Modalità di presentazione dei risultati
- Informazioni generali sull'elaborazione
- Giudizio motivato di accettabilità dei risultati
STAMPA DEI DATI DI INGRESSO
- Normative prese a riferimento
- Criteri adottati per le misure di sicurezza
- Criteri seguiti nella schematizzazione della struttura, dei vincoli e delle sconessioni
- Interazione tra terreno e struttura
- Legami costitutivi adottati per la modellazione dei materiali e dei terreni
- Schematizzazione delle azioni, condizioni e combinazioni di carico
- Metodologie numeriche utilizzate per l' analisi strutturale
-Metodologie numeriche utilizzate per la progettazione e la verifica degli elementi strutturali
STAMPA DEI RISULTATI

Il Progettista:

RELAZIONE DI CALCOLO STRUTTURALE

Premessa

La presente relazione di calcolo strutturale, in conformità al §10.1 del DM 17/01/18, è comprensiva di una descrizione generale dell'opera e dei criteri generali di analisi e verifica. Segue inoltre le indicazioni fornite al §10.2 del DM stesso per quanto concerne analisi e verifiche svolte con l'ausilio di codici di calcolo.

Nella presente parte sono riportati i principali elementi di inquadramento del progetto esecutivo riguardante le strutture, in relazione agli strumenti urbanistici, al progetto architettonico, al progetto delle componenti tecnologiche in generale ed alle prestazioni attese dalla struttura.

Descrizione generale dell'opera

Descrizione generale dell'opera	
Fabbricato ad uso	
Ubicazione	Comune di GIZZERIA (CZ) (Regione CALABRIA)
	Località GIZZERIA (CZ)
	Longitudine 16.152, Latitudine 38.968
Numero di piani	Fuori terra 3
	Interrati 0
	le dimensioni dell'opera in pianta sono racchiuse in un rettangolo di

Parametri della struttura			
Classe d'uso	Vita Vn [anni]	Coeff. Uso	Periodo Vr [anni]
III	50.0	1.5	75.0

Quadro normativo di riferimento adottato

Le norme ed i documenti assunti quale riferimento per la progettazione strutturale vengono indicati di seguito.

Nel capitolo "normativa di riferimento" è comunque presente l'elenco completo delle normative disponibili.

Progetto-verifica degli elementi	
Progetto cemento armato	D.M. 17-01-2018
Progetto acciaio	D.M. 17-01-2018
Progetto legno	D.M. 17-01-2018
Progetto muratura	D.M. 17-01-2018
Azione sismica	
Norma applicata per l' azione sismica	D.M. 17-01-2018

Azioni di progetto sulla costruzione

Nei capitoli “modellazione delle azioni” e “schematizzazione dei casi di carico” sono indicate le azioni sulla costruzioni.

Nel prosieguo si indicano tipo di analisi strutturale condotta (statico,dinamico, lineare o non lineare) e il metodo adottato per la risoluzione del problema strutturale nonché le metodologie seguite per la verifica o per il progetto-verifica delle sezioni. Si riportano le combinazioni di carico adottate e, nel caso di calcoli non lineari, i percorsi di carico seguiti; le configurazioni studiate per la struttura in esame *sono risultate effettivamente esaustive per la progettazione-verifica.*

La verifica della sicurezza degli elementi strutturali avviene con i metodi della scienza delle costruzioni. L’analisi strutturale è condotta con il metodo degli spostamenti per la valutazione dello stato tensodeformativo indotto da carichi statici. L’analisi strutturale è condotta con il metodo dell’analisi modale e dello spettro di risposta in termini di accelerazione per la valutazione dello stato tensodeformativo indotto da carichi dinamici (tra cui quelli di tipo sismico).

L’analisi strutturale viene effettuata con il metodo degli elementi finiti. Il metodo sopraindicato si basa sulla schematizzazione della struttura in elementi connessi solo in corrispondenza di un numero prefissato di punti denominati nodi. I nodi sono definiti dalle tre coordinate cartesiane in un sistema di riferimento globale. Le incognite del problema (nell’ambito del metodo degli spostamenti) sono le componenti di spostamento dei nodi riferite al sistema di riferimento globale (traslazioni secondo X, Y, Z, rotazioni attorno X, Y, Z). La soluzione del problema si ottiene con un sistema di equazioni algebriche lineari i cui termini noti sono costituiti dai carichi agenti sulla struttura opportunamente concentrati ai nodi:

K * u = F dove **K** = matrice di rigidezza

u = vettore spostamenti nodali

F = vettore forze nodali

Dagli spostamenti ottenuti con la risoluzione del sistema vengono quindi dedotte le sollecitazioni e/o le tensioni di ogni elemento, riferite generalmente ad una terna locale all’elemento stesso.

Il sistema di riferimento utilizzato è costituito da una terna cartesiana destrorsa XYZ. Si assume l’asse Z verticale ed orientato verso l'alto.

Gli elementi utilizzati per la modellazione dello schema statico della struttura sono i seguenti:

Elemento tipo ***TRUSS*** (biella-D2)

Elemento tipo ***BEAM*** (trave-D2)

Elemento tipo ***MEMBRANE*** (membrana-D3)

Elemento tipo ***PLATE*** (piastra-guscio-D3)

Elemento tipo ***BOUNDARY*** (molla)

Elemento tipo ***STIFFNESS*** (matrice di rigidezza)

Elemento tipo ***BRICK*** (elemento solido)

Elemento tipo ***SOLAIO*** (macro elemento composto da più membrane)

Modello numerico

In questa parte viene descritto il modello numerico utilizzato (o i modelli numerici utilizzati) per l'analisi della struttura. La presentazione delle informazioni deve essere, coerentemente con le prescrizioni del paragrafo 10.2 e relativi sottoparagrafi delle NTC-18, tale da garantirne la leggibilità, la corretta interpretazione e la riproducibilità

Tipo di analisi strutturale	
Carichi verticali	SI
Sismica statica lineare	NO
Sismica dinamica lineare	SI
Sismica statica non lineare (prop. masse)	NO
Sismica statica non lineare (prop. modo)	NO
Sismica statica non lineare (triangolare)	NO
Non linearità geometriche (fattore P delta)	SI

Di seguito si indicano l'origine e le caratteristiche dei codici di calcolo utilizzati riportando titolo, produttore e distributore, versione, estremi della licenza d'uso:

Informazioni sul codice di calcolo	
Titolo:	PRO_SAP PROfessional Structural Analysis Program
Versione:	PROFESSIONAL (build 2020-09-190)
Produttore-Distributore:	2S.I. Software e Servizi per l'Ingegneria s.r.l., Ferrara
Codice Licenza:	Licenza dsi4693

Un attento esame preliminare della documentazione a corredo del software ***ha consentito di valutarne l'affidabilità e soprattutto l'idoneità al caso specifico***. La documentazione, fornita dal produttore e distributore del software, contiene una esauriente descrizione delle basi teoriche e degli algoritmi impiegati, l'individuazione dei campi d'impiego, nonché casi prova interamente risolti e commentati, corredati dei file di input necessari a riprodurre l'elaborazione:

Affidabilità dei codici utilizzati
2S.I. ha verificato l'affidabilità e la robustezza del codice di calcolo attraverso un numero significativo di casi prova in cui i risultati dell'analisi numerica sono stati confrontati con soluzioni teoriche. E' possibile reperire la documentazione contenente alcuni dei più significativi casi trattati al seguente link: https://www.2si.it/it/prodotti/affidabilita/

Modellazione della geometria e proprietà meccaniche:	
nodi	2734
elementi D2 (per aste, travi, pilastri…)	436
elementi D3 (per pareti, platee, gusci…)	2572
elementi solaio	22

elementi solidi	0
Dimensione del modello strutturale [cm]:	
X min =	-128.33
Xmax =	1852.73
Ymin =	-118.00
Ymax =	1980.00
Zmin =	0.00
Zmax =	1169.50
Strutture verticali:	
Elementi di tipo asta	NO
Pilastri	SI
Pareti	SI
Setti (a comportamento membranale)	NO
Strutture non verticali:	
Elementi di tipo asta	NO
Travi	SI
Gusci	NO
Membrane	NO
Orizzontamenti:	
Solai con la proprietà piano rigido	SI
Solai senza la proprietà piano rigido	NO
Tipo di vincoli:	
Nodi vincolati rigidamente	NO
Nodi vincolati elasticamente	NO
Nodi con isolatori sismici	NO
Fondazioni puntuali (plinti/plinti su palo)	NO
Fondazioni di tipo trave	SI
Fondazioni di tipo platea	SI
Fondazioni con elementi solidi	NO

Modellazione delle azioni

Si veda il capitolo **"Schematizzazione dei casi di carico"** per le informazioni necessarie alla comprensione ed alla ricostruzione delle azioni applicate al modello numerico, coerentemente con quanto indicato nella parte "*2.6. Azioni di progetto sulla costruzione*".

Combinazioni e/o percorsi di carico

Si veda il capitolo **"Definizione delle combinazioni"** in cui sono indicate le combinazioni di carico adottate e, nel caso di calcoli non lineari, i percorsi di carico seguiti.

Combinazioni dei casi di carico	
APPROCCIO PROGETTUALE	Approccio 2
Tensioni ammissibili	NO
SLU	SI
SLV (SLU con sisma)	SI
SLC	NO
SLD	SI
SLO	NO
SLU GEO A2 (per approccio 1)	NO
SLU EQU	NO
Combinazione caratteristica (rara)	SI
Combinazione frequente	SI
Combinazione quasi permanente (SLE)	SI
SLA (accidentale quale incendio)	NO

Principali risultati

I risultati devono costituire una sintesi completa ed efficace, presentata in modo da riassumere il comportamento della struttura, per ogni tipo di analisi svolta.

Nella presente relazione di calcolo sono riportati i seguenti risultati che il progettista ritiene di interesse per la descrizione e la compresione del/i modello/i e del comportamento della struttura:

per l'analisi modale:

- periodi dei modi di vibrare della struttura
- masse eccitate dai singoli modi
- massa eccitata totale

deformate e sollecitazioni:

- spostamenti e rotazioni dei singoli nodi della struttura
- reazioni vincolari (nel caso siano presenti nodi vincolati rigidamente)
- pressioni sul terreno (nel caso siano presenti elementi di fondazione)
- sollecitazioni sugli elementi d2 nelle combinazioni di calcolo più significative
- tensioni sugli elementi d3 nelle combinazioni di calcolo più significative
- sollecitazioni sui macroelementi da elementi d3 nelle combinazioni di calcolo più significative

altri risultati significativi:

La presente relazione, oltre ad illustrare in modo esaustivo i dati in ingresso ed i risultati delle analisi in forma tabellare, riporta una serie di immagini:

per i dati in ingresso:

- modello solido della struttura
- numerazione di nodi e ed elementi
- configurazioni di carico statiche
- configurazioni di carico sismiche con baricentri delle masse e eccentricità

per le combinazioni più significative (statisticamente più gravose per la struttura):

- configurazioni deformate
- diagrammi e inviluppi delle azioni interne
- mappe delle tensioni
- reazioni vincolari
- mappe delle pressioni sul terreno

per il progetto-verifica degli elementi:

- diagrammi di armatura
- percentuali di sfruttamento
- mappe delle verifiche più significative per i vari stati limite

Informazioni generali sull'elaborazione e giudizio motivato di accettabilità dei risultati.
Il programma prevede una serie di controlli automatici (check) che consentono l'individuazione di errori di modellazione. Al termine dell'analisi un controllo automatico identifica la presenza di spostamenti o rotazioni abnormi. Si può pertanto asserire che l' elaborazione sia corretta e completa. I risultati delle elaborazioni sono stati sottoposti a controlli che ne comprovano l'attendibilità. Tale valutazione ha compreso il confronto con i risultati di semplici calcoli, eseguiti con metodi tradizionali e adottati, anche in fase di primo proporzionamento della struttura. Inoltre, sulla base di considerazioni riguardanti gli stati tensionali e deformativi determinati, si è valutata la validità delle scelte operate in sede di schematizzazione e di modellazione della struttura e delle azioni. Si allega al termine della presente relazione elenco sintetico dei controlli svolti (verifiche di equilibrio tra reazioni vincolari e carichi applicati, comparazioni tra i risultati delle analisi e quelli di valutazioni semplificate, etc.) .

Verifiche agli stati limite ultimi

Nel capitolo relativo alla progettazione degli elementi strutturali agli SLU vengono indicate, con riferimento alla normativa adottata, le modalità ed i criteri seguiti per valutare la sicurezza della struttura nei confronti delle possibili situazioni di crisi ed i risultati delle valutazioni svolte. In via generale, oltre alle verifiche di resistenza e di spostamento, devono essere prese in considerazione verifiche nei confronti dei fenomeni di instabilità, locale e globale, di fatica, di duttilità, di degrado.

Verifiche agli stati limite di esercizio

Nel capitolo relativo alla progettazione degli elementi strutturali agli SLE vengono indicate, con riferimento alla normativa adottata, le modalità seguite per valutare l'affidabilità della struttura nei confronti delle possibili situazioni di perdita di funzionalità (per eccessive deformazioni, fessurazioni, vibrazioni, etc.) ed i risultati delle valutazioni svolte.

RELAZIONE SUI MATERIALI

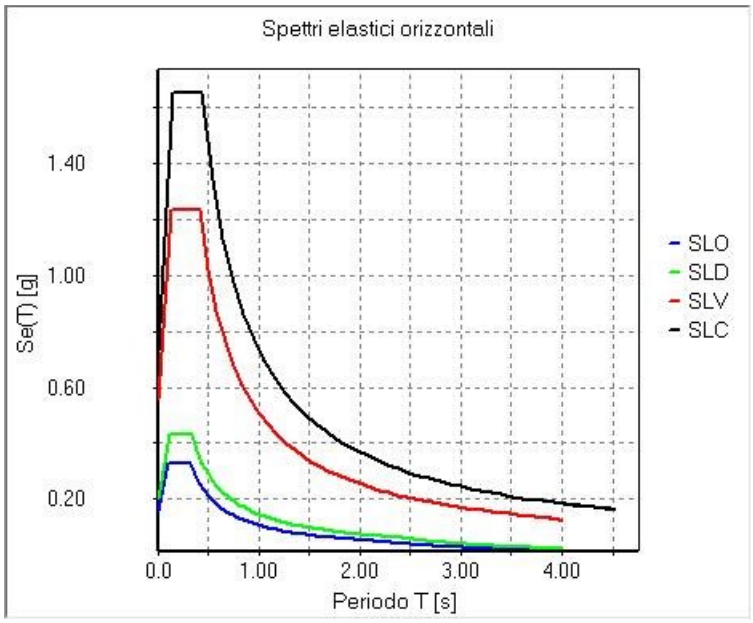
Il capitolo Materiali riportata informazioni esaustive relative all'elenco dei materiali impiegati e loro modalità di posa in opera e ai valori di calcolo.

NORMATIVA DI RIFERIMENTO

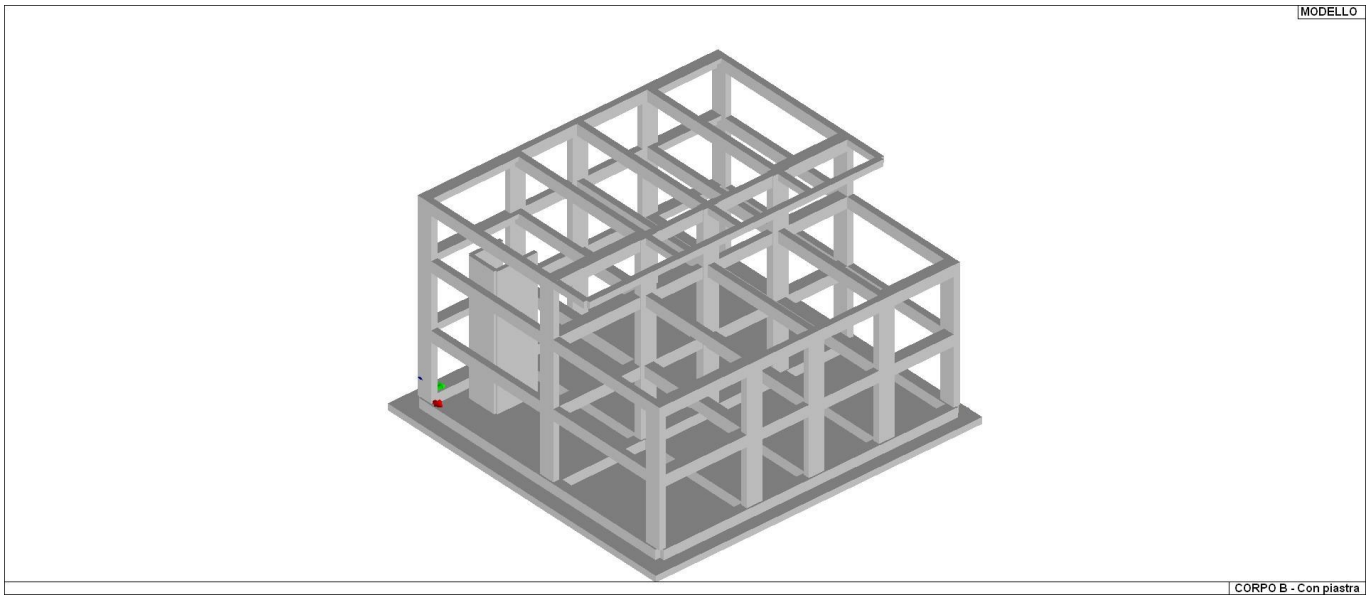
1. D.Min. Infrastrutture Min. Interni e Prot. Civile 17 Gennaio 2018 e allegate "Norme tecniche per le costruzioni".
2. Circolare 21/01/19, n. 7 C.S.LL.PP "Istruzioni per l'applicazione dell'aggiornamento delle Norme Tecniche delle Costruzioni di cui al decreto ministeriale 17 gennaio 2018"
3. D.Min. Infrastrutture e trasporti 14 Settembre 2005 e allegate "Norme tecniche per le costruzioni".
4. D.M. LL.PP. 9 Gennaio 1996 "Norme tecniche per il calcolo, l'esecuzione ed il collaudo delle strutture in cemento armato, normale e precompresso e per le strutture metalliche".
5. D.M. LL.PP. 16 Gennaio 1996 "Norme tecniche relative ai <<Criteri generali per la verifica di sicurezza delle costruzioni e dei carichi e sovraccarichi>>".
6. D.M. LL.PP. 16 Gennaio 1996 "Norme tecniche per le costruzioni in zone sismiche".
7. Circolare 4/07/96, n.156AA.GG./STC. istruzioni per l'applicazione delle "Norme tecniche relative ai <<Criteri generali per la verifica di sicurezza delle costruzioni e dei carichi e sovraccarichi>>" di cui al D.M. 16/01/96.
8. Circolare 10/04/97, n.65AA.GG. istruzioni per l'applicazione delle "Norme tecniche per le costruzioni in zone sismiche" di cui al D.M. 16/01/96.
9. D.M. LL.PP. 20 Novembre 1987 "Norme tecniche per la progettazione, esecuzione e collaudo degli edifici in muratura e per il loro consolidamento".
10. Circolare 4 Gennaio 1989 n. 30787 "Istruzioni in merito alle norme tecniche per la progettazione, esecuzione e collaudo degli edifici in muratura e per il loro consolidamento".
11. D.M. LL.PP. 11 Marzo 1988 "Norme tecniche riguardanti le indagini sui terreni e sulle rocce, la stabilità dei pendii naturali e delle scarpate, i criteri generali e le prescrizioni per la progettazione, l'esecuzione e il collaudo delle opere di sostegno delle terre e delle opere di fondazione".
12. D.M. LL.PP. 3 Dicembre 1987 "Norme tecniche per la progettazione, esecuzione e collaudo delle costruzioni prefabbricate".
13. UNI 9502 - Procedimento analitico per valutare la resistenza al fuoco degli elementi costruttivi di conglomerato cementizio armato, normale e precompresso - edizione maggio 2001
14. Ordinanza del Presidente del Consiglio dei Ministri n. 3274 del 20 marzo 2003 "Primi elementi in materia di criteri generali per la classificazione sismica del territorio nazionale e di normative tecniche per le costruzioni in zona sismica" e successive modificazioni e integrazioni.
15. UNI EN 1990:2006 13/04/2006 Eurocodice 0 - Criteri generali di progettazione strutturale.
16. UNI EN 1991-1-1:2004 01/08/2004 Eurocodice 1 - Azioni sulle strutture - Parte 1-1: Azioni in generale - Pesi per unità di volume, pesi propri e sovraccarichi per gli edifici.
17. UNI EN 1991-2:2005 01/03/2005 Eurocodice 1 - Azioni sulle strutture - Parte 2: Carichi da traffico sui ponti.
18. UNI EN 1991-1-3:2004 01/10/2004 Eurocodice 1 - Azioni sulle strutture - Parte 1-3: Azioni in generale - Carichi da neve.
19. UNI EN 1991-1-4:2005 01/07/2005 Eurocodice 1 - Azioni sulle strutture - Parte 1-4: Azioni in generale - Azioni del vento.
20. UNI EN 1991-1-5:2004 01/10/2004 Eurocodice 1 - Azioni sulle strutture - Parte 1-5: Azioni in generale - Azioni termiche.
21. UNI EN 1992-1-1:2005 24/11/2005 Eurocodice 2 - Progettazione delle strutture di calcestruzzo - Parte 1-1: Regole generali e regole per gli edifici.
22. UNI EN 1992-1-2:2005 01/04/2005 Eurocodice 2 - Progettazione delle strutture di calcestruzzo - Parte 1-2: Regole generali - Progettazione strutturale contro l'incendio.
23. UNI EN 1993-1-1:2005 01/08/2005 Eurocodice 3 - Progettazione delle strutture di acciaio - Parte 1-1: Regole generali e regole per gli edifici.
24. UNI EN 1993-1-8:2005 01/08/2005 Eurocodice 3 - Progettazione delle strutture di acciaio - Parte 1-8: Progettazione dei collegamenti.
25. UNI EN 1994-1-1:2005 01/03/2005 Eurocodice 4 - Progettazione delle strutture composte acciaio-calcestruzzo - Parte 1-1: Regole generali e regole per gli edifici.
26. UNI EN 1994-2:2006 12/01/2006 Eurocodice 4 - Progettazione delle strutture composte acciaio-calcestruzzo - Parte 2: Regole generali e regole per i ponti.
27. UNI EN 1995-1-1:2005 01/02/2005 Eurocodice 5 - Progettazione delle strutture di legno - Parte 1-1: Regole generali – Regole comuni e regole per gli edifici.
28. UNI EN 1995-2:2005 01/01/2005 Eurocodice 5 - Progettazione delle strutture di legno - Parte 2: Ponti.
29. UNI EN 1996-1-1:2006 26/01/2006 Eurocodice 6 - Progettazione delle strutture di muratura - Parte 1-1: Regole generali per strutture di muratura armata e non armata.
30. UNI EN 1996-3:2006 09/03/2006 Eurocodice 6 - Progettazione delle strutture di muratura - Parte 3: Metodi di calcolo semplificato per strutture di muratura non armata.

31. UNI EN 1997-1:2005 01/02/2005 Eurocodice 7 - Progettazione geotecnica - Parte 1: Regole generali.
32. UNI EN 1998-1:2005 01/03/2005 Eurocodice 8 - Progettazione delle strutture per la resistenza sismica - Parte 1: Regole generali, azioni sismiche e regole per gli edifici.
33. UNI EN 1998-3:2005 01/08/2005 Eurocodice 8 - Progettazione delle strutture per la resistenza sismica - Parte 3: Valutazione e adeguamento degli edifici.
34. UNI EN 1998-5:2005 01/01/2005 Eurocodice 8 - Progettazione delle strutture per la resistenza sismica - Parte 5: Fondazioni, strutture di contenimento ed aspetti geotecnici.

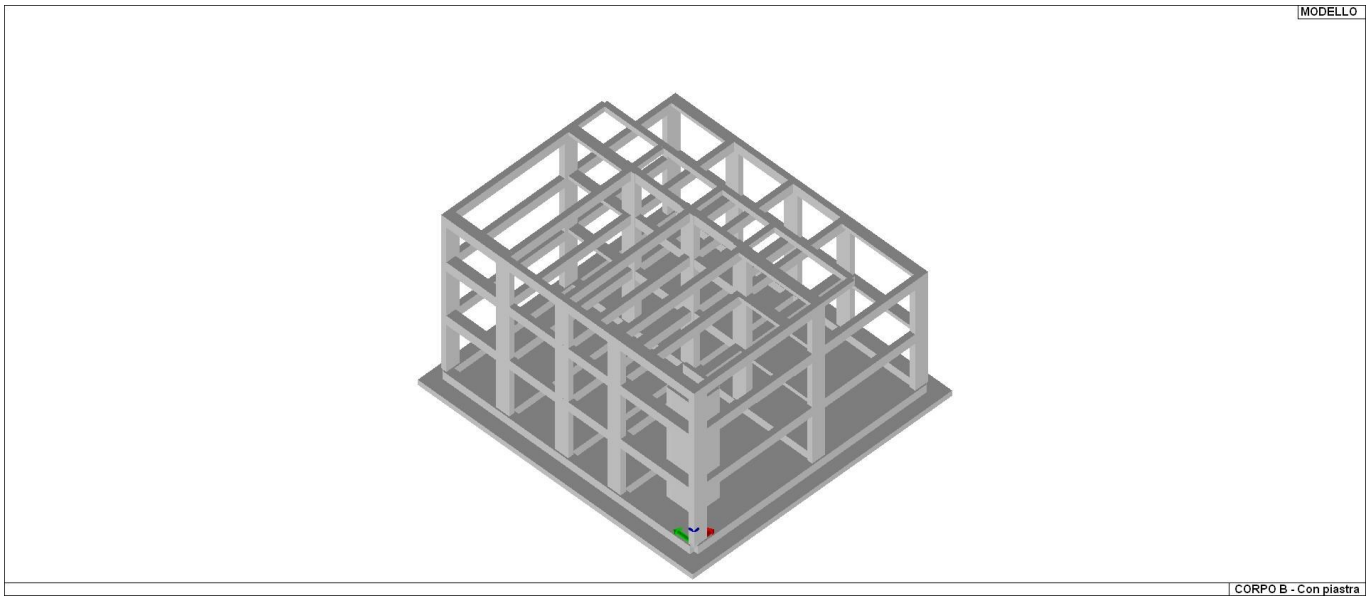
NOTA il capitolo "normativa di riferimento": riporta l' elenco delle normative implementate nel software. Le norme utilizzate per la struttura oggetto della presente relazione sono indicate nel precedente capitolo "RELAZIONE DI CALCOLO STRUTTURALE" "ANALISI E VERIFICHE SVOLTE CON L'AUSILIO DI CODICI DI CALCOLO". Laddove nei capitoli successivi vengano richiamate norme antecedenti al DM 17.01.18 è dovuto o a progettazione simulata di edifico esistente.



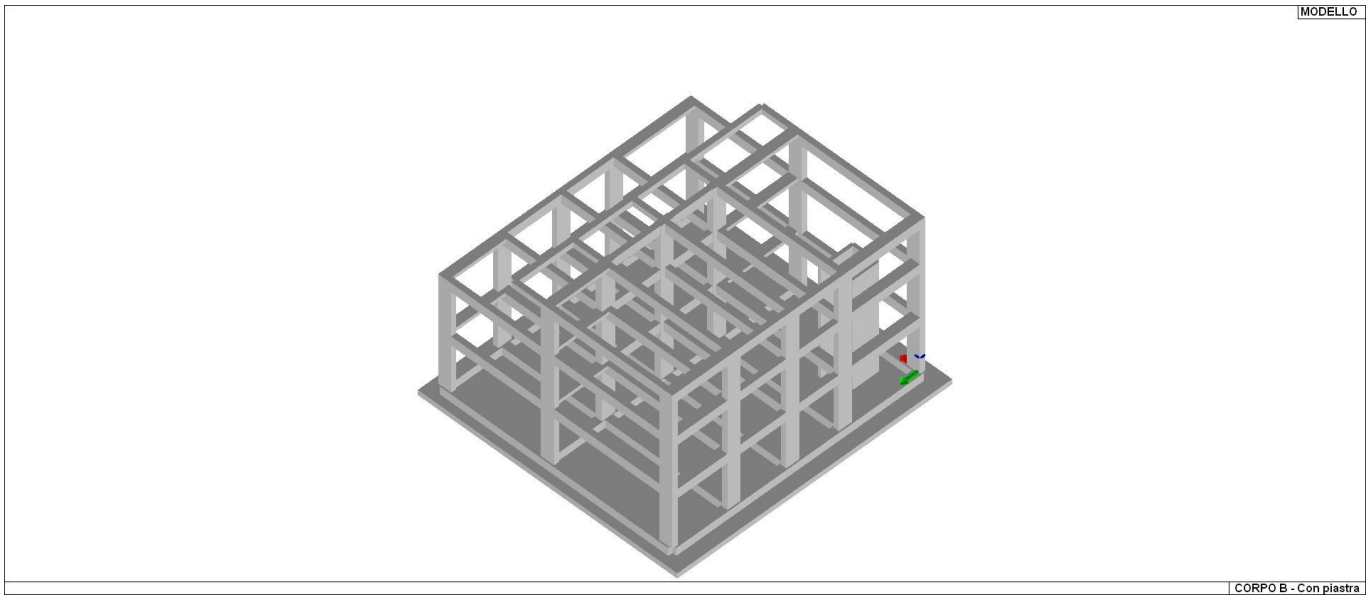
01_INT_SPETTRI_ELASTICI_O



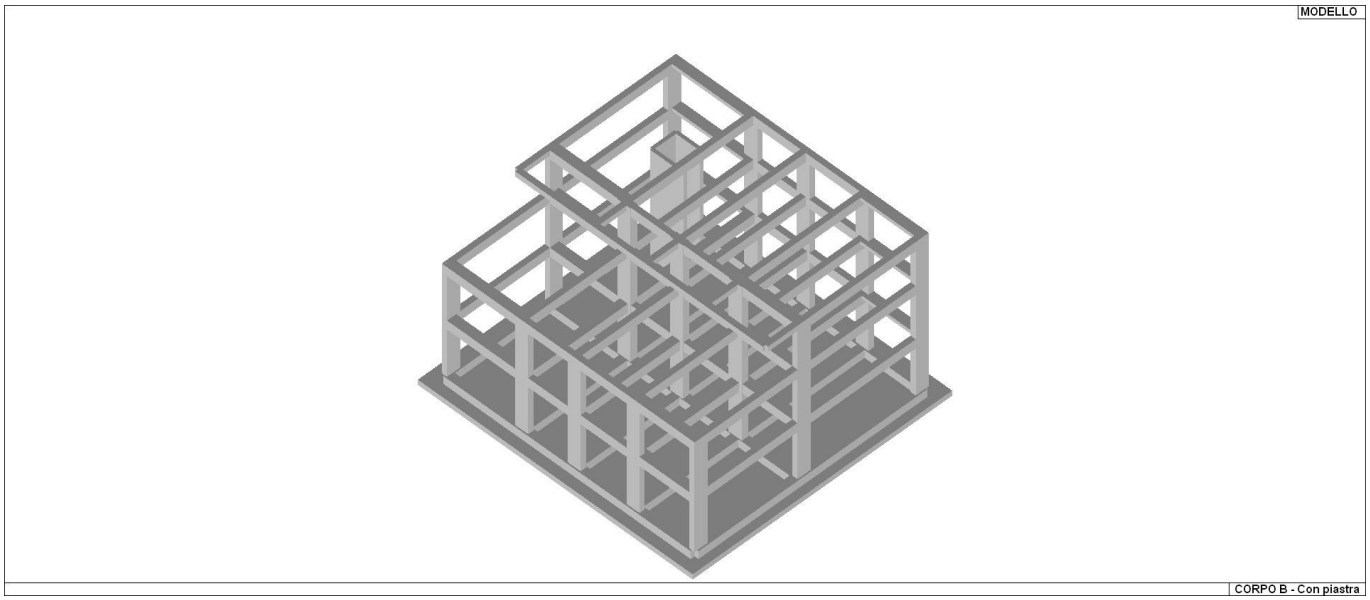
01_INT_VISTA_SOLIDA_001



01_INT_VISTA_SOLIDA_002



01_INT_VISTA_SOLIDA_003



01_INT_VISTA_SOLIDA_004

CARATTERISTICHE MATERIALI UTILIZZATI

LEGENDA TABELLA DATI MATERIALI

Il programma consente l'uso di materiali diversi. Sono previsti i seguenti tipi di materiale:

1	materiale tipo cemento armato
2	materiale tipo acciaio
3	materiale tipo muratura
4	materiale tipo legno
5	materiale tipo generico

I materiali utilizzati nella modellazione sono individuati da una sigla identificativa ed un codice numerico (gli elementi strutturali richiamano quest'ultimo nella propria descrizione). Per ogni materiale vengono riportati in tabella i seguenti dati:

Young	modulo di elasticità normale E
Poisson	coefficiente di contrazione trasversale ni
G	modulo di elasticità tangenziale
Gamma	peso specifico
Alfa	coefficiente di dilatazione termica
Fattore di confidenza FC m	Fattore di confidenza specifico per materiale; (è riportato solo se diverso da quello globale della struttura)
Fattore di confidenza FC a	Fattore di confidenza specifico per l'armatura (è riportato solo se diverso da quello globale della struttura)
Elasto-plastico	Materiale elastico perfettamente plastico per aste non lineari
Massima compressione	Massima tensione di compressione per aste non lineari
Massima trazione	Massima tensione di trazione per aste non lineari
Fattore attrito	Coefficinete di attrito per aste non lineari
Rapporto HRDb	Rapporto di hardening a flessione
Rapporto HRDv	Rapporto di hardening a taglio

I dati soprariportati vengono utilizzati per la modellazione dello schema statico e per la determinazione dei carichi inerziali e termici. In relazione al tipo di materiale vengono riportati inoltre:

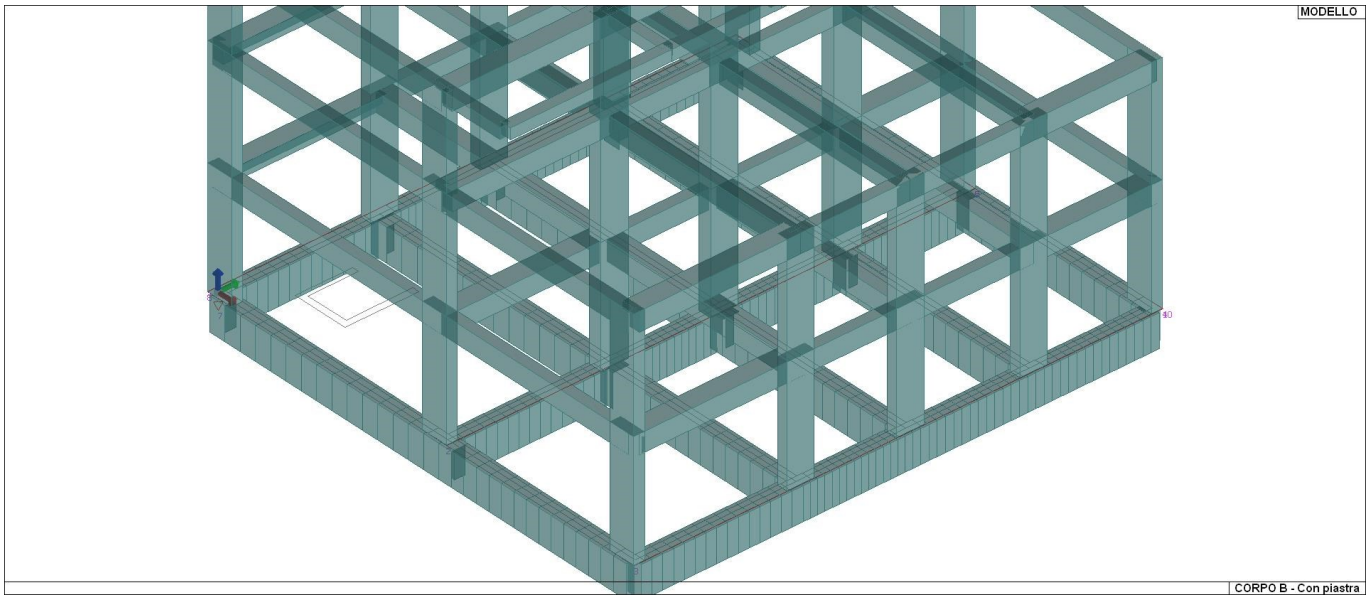
1	c.a.		
		Resistenza Rc	resistenza a cmpressione cubica
		Resistenza fctm	resistenza media a trazione semplice
		Coefficiente ksb	Coefficiente di riduzione della resistenza a compressione da utilizzare nello stress block
2	acciaio		
		Tensione ft	Valore della tensione di rottura
		Tensione fy	Valore della tensione di snervamento
		Resistenza fd	Resistenza di calcolo per SL CNR-UNI 10011
		Resistenza fd (>40)	Resistenza di calcolo per SL CNR-UNI 10011 per spessori > 40mm
		Tensione ammissibile	Tensione ammissibile CNR-UNI 10011
		Tensione ammissibile(>40)	Tensione ammissibile CNR-UNI 10011 per spessori > 40mm
3	muratura		

	Muratura consolidata	Muratura per la quale si prevedono interventi di rinforzo"
	Incremento resistenza	Incremento conseguito in termini di resistenza
	Incremento rigidezza	Incremento conseguito in termini di rigidezza
	Resistenza f	Valore della resistenza a compressione
	Resistenza fv0	Valore della resistenza a taglio in assenza di tensioni normali
	Resistenza fh	Valore della resistenza a compressione orizzontale
	Resistenza fb	Valore della resistenza a compressione dei blocchi
	Resistenza fbh	Valore della resistenza a compressione dei blocchi in direzione orizzontale
	Resistenza fv0h	Valore della resistenza a taglio in assenza di tensioni normali per le travi
	Resistenza ft	Valore della resistenza a trazione per fessurazione diagonale
	Resistenza fvlim	Valore della massima resistenza a taglio
	Resistenza fbt	Valore della resistenza a trazione dei blocchi
	Coefficiente mu	Coefficiente d'attrito utilizzato per la resistenza a taglio (tipicamente 0.4)
	Coefficiente fi	Coefficiente d'ingranamento utilizzato per la resistenza a taglio
	Coefficiente ksb	Coefficiente di riduzione della resistenza a compressione da utilizzare nello stress block
4 legno		
	E0,05	Modulo di elasticità corrispondente ad un frattile del 5%
	Resistenza fc0	Valore della resistenza a compressione parallela
	Resistenza ft0	Valore della resistenza a trazione parallela
	Resistenza fm	Valore della resistenza a flessione
	Resistenza fv	Valore della resistenza a taglio
	Resist. ft0k	Resistenza caratteristica (tensione amm. per REGLES) per trazione
	Resist. fmk	Resistenza caratteristica (tensione amm. per REGLES) per flessione
	Resist. fvk	Resistenza caratteristica (tensione amm. per REGLES) per taglio
	Modulo E0,05	Modulo elastico parallelo caratteristico
	Lamellare	lamellare o massiccio

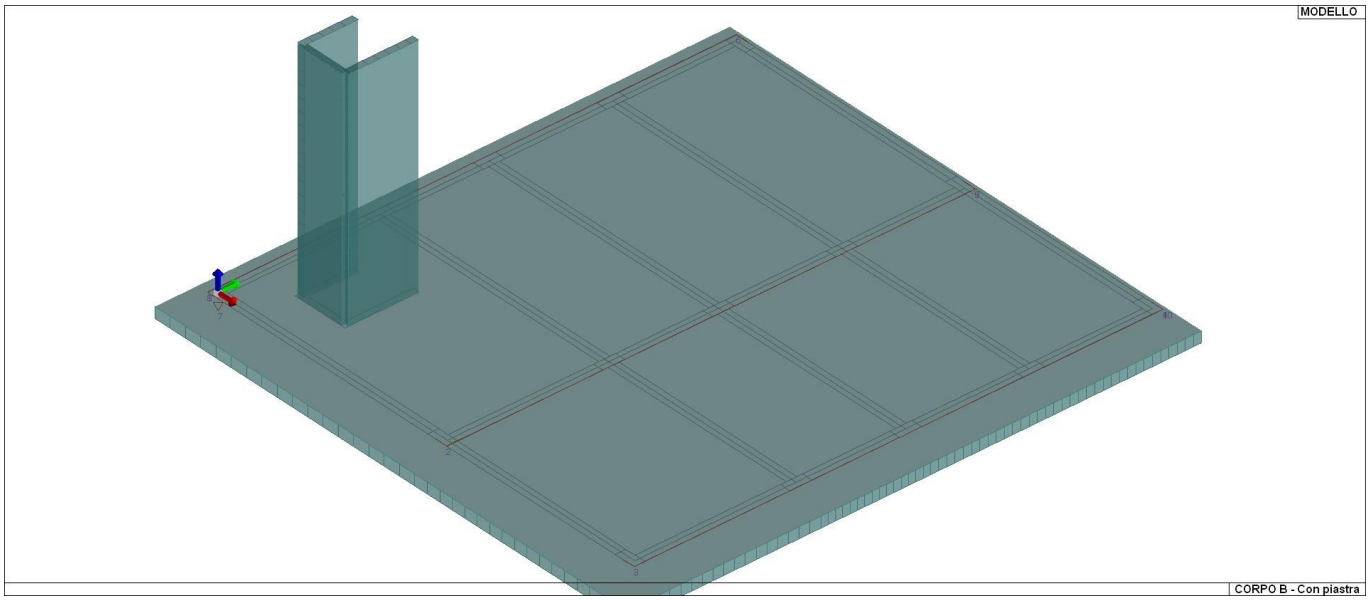
Nel tabulato si riportano sia i valori caratteristici che medi utilizzando gli uni e/o gli altri in relazione alle richieste di normativa ed alla tipologia di verifica. (Cap.7 NTC18 per materiali nuovi, Cap.8 NTC18 e relativa circolare 21/01/2019 per materiali esistenti, Linee Guida Reluis per incamiciatura CAM, CNR-DT 200 per interventi con FRP)

Vengono inoltre riportate le tabelle contenenti il riassunto delle informazioni assegnate nei criteri di progetto in uso.

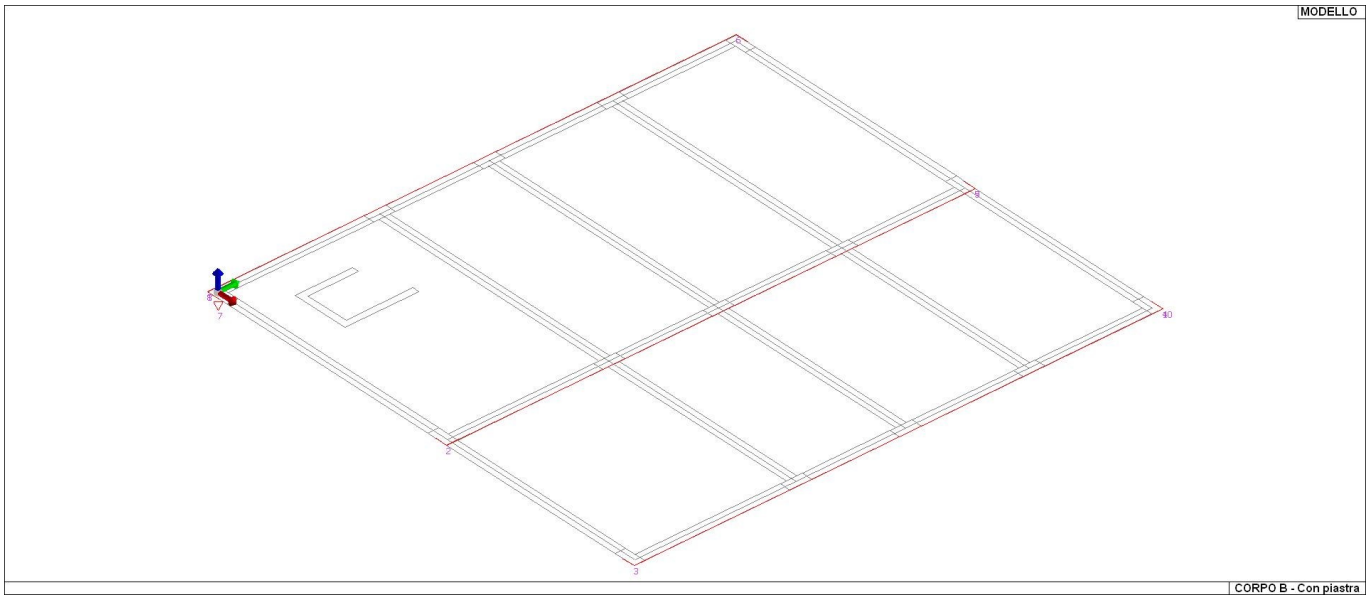
Id	Tipo / Note	V. caratt.	V. medio	Young	Poisson	G	Gamma	Alfa	Altri
		daN/cm2	daN/cm2	daN/cm2		daN/cm2	daN/cm3		
3	Calcestruzzo Classe C28/35			3.260e+05	0.20	1.358e+05	2.50e-03	1.00e-05	
	Resistenza Rc	350.0							
	Resistenza fctm		28.4						
	Rapporto Rfessurata								1.00
	Coefficiente ksb								0.85
	Rapporto HRDb								1.00e-05
	Rapporto HRDv								1.00e-05



11_MOD_MATERIALI_D2



11_MOD_MATERIALI_D3



11_MOD_MATERIALI_SOLAI

Pareti c.a.	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Generalità						
Progetto armatura	Parete sismica	Singolo elemento FONDAZIONE	Singolo elemento FONDAZIONE	Singolo elemento	Singolo elemento FONDAZIONE	
Armatura						
Inclinazione Av [gradi]	90.00	90.00	90.00	90.00	90.00	
Angolo Av-Ao [gradi]	90.00	90.00	90.00	90.00	90.00	
Minima tesa	0.25	0.25	0.25	0.25	0.25	
Massima tesa	4.00	4.00	4.00	4.00	4.00	
Maglia unica centrale	NO	NO	NO	NO	NO	
Unico strato verticale	NO	NO	NO	NO	NO	
Unico strato orizzontale	NO	NO	NO	NO	NO	
Copriferro [cm]	2.00	3.00	3.00	2.00	3.00	
Maglia V						
diametro	10	12	12	10	12	
passo	25	25	25	20	25	
diametro aggiuntivi	12	12	12	12	12	
Maglia O						
diametro	8	8	8	10	8	
passo	25	25	25	20	25	
diametro aggiuntivi	8	8	8	12	8	
Stati limite ultimi						
Tensione fy [daN/cm2]	4500.00	4500.00	4500.00	4500.00	4500.00	
Tipo acciaio	tipo C	tipo C	tipo C	tipo C	tipo C	
Coefficiente gamma s	1.15	1.15	1.15	1.15	1.15	
Coefficiente gamma c	1.50	1.50	1.50	1.50	1.50	
Verifiche con N costante	SI	SI	SI	SI	SI	
Tensioni ammissibili						
Tensione amm. cls [daN/cm2]	97.50	97.50	97.50	97.50	97.50	
Tensione amm. acciaio [daN/cm2]	2600.00	2600.00	2600.00	2600.00	2600.00	
Rapporto omogeneizzazione N	15.00	15.00	15.00	15.00	15.00	
Massimo rapporto area compressa/tesa	1.00	1.00	1.00	1.00	1.00	
Parete estesa debolmente armata						
Fattore amplificazione taglio V	0.0	1.50	1.50	0.0	1.50	
Hcrit. par. 7.4.4.5.1 [cm]	0.0	0.0	0.0	0.0	0.0	
Hcrit. par. 7.4.6.1.4 [cm]	0.0	0.0	0.0	0.0	0.0	
Diagramma inviluppo taglio	SI	NO	NO	NO	NO	
Vincolo lati	nessun lato	nessun lato	nessun lato	nessun lato	nessun lato	

Pareti c.a.	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Verifica come fascia	NO	NO	NO	NO	NO	
Diametro di estremità	0	0	0	0	0	
Zona confinata						
Minima tesa	1.00	1.00	1.00	1.00	1.00	
Massima tesa	4.00	4.00	4.00	4.00	4.00	
Distanza barre [cm]	2.00	2.00	2.00	2.00	2.00	
Interferro	2	2	2	2	2	
Armatura inclinata						
Area barre [cm2]	0.0	0.0	0.0	0.0	0.0	
Angolo orizzontale [gradi]	0.0	0.0	0.0	0.0	0.0	
Distanza di base [cm]	0.0	0.0	0.0	0.0	0.0	
Resistenza al fuoco						
3- intradosso	NO	NO	NO	NO	NO	
3+ estradosso	NO	NO	NO	NO	NO	
Tempo di esposizione R	15	15	15	15	15	

Gusci c.a.	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Armatura						
Inclinazione Ax [gradi]	0.0	0.0	0.0	0.0	0.0	
Angolo Ax-Ay [gradi]	90.00	90.00	90.00	90.00	90.00	
Minima tesa	0.31	0.20	0.20	0.31	0.31	
Massima tesa	0.78	0.78	0.78	0.78	0.78	
Maglia unica centrale	NO	NO	NO	NO	NO	
Copriferro [cm]	2.00	3.00	3.00	2.00	3.00	
Maglia x						
diametro	10	12	20	10	25	
passo	20	20	3	20	35	
diametro aggiuntivi	12	12	20	12	12	
Maglia y						
diametro	10	12	20	10	25	
passo	20	20	3	20	35	
diametro aggiuntivi	12	12	20	12	12	
Stati limite ultimi						
Tensione fy [daN/cm2]	4500.00	4500.00	4500.00	4500.00	4500.00	
Tipo acciaio	tipo C	tipo C	tipo C	tipo C	tipo C	
Coefficiente gamma s	1.15	1.15	1.15	1.15	1.15	
Coefficiente gamma c	1.50	1.50	1.50	1.50	1.50	
Verifiche con N costante	SI	SI	SI	SI	SI	
Applica SLU da DIN	NO	NO	NO	NO	NO	
Tensioni ammissibili						
Tensione amm. cls [daN/cm2]	97.50	97.50	97.50	97.50	97.50	
Tensione amm. acciaio [daN/cm2]	2600.00	2600.00	2600.00	2600.00	2600.00	
Rapporto omogeneizzazione N	15.00	15.00	15.00	15.00	15.00	
Massimo rapporto area compressa/tesa	1.00	1.00	1.00	1.00	1.00	
Resistenza al fuoco						
3- intradosso	NO	NO	NO	NO	NO	
3+ estradosso	NO	NO	NO	NO	NO	
Tempo di esposizione R	15	15	15	15	15	

Travi c.a.	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Generalità						
Progetta a filo	SI	NO	NO	NO	NO	
Af inf: da q*L*L /	0.0	0.0	0.0	0.0	0.0	
Armatura						
Minima tesa	0.31	0.20	0.20	0.31	0.31	
Minima compressa	0.31	0.20	0.20	0.31	0.31	
Massima tesa	0.78	0.78	0.78	0.78	0.78	
Da sezione	SI	SI	SI	SI	SI	
Usa armatura teorica	NO	NO	NO	NO	NO	
Stati limite ultimi						
Tensione fy [daN/cm2]	4500.00	4500.00	4500.00	4500.00	4500.00	
Tensione fy staffe [daN/cm2]	4500.00	4500.00	4500.00	4500.00	4500.00	
Tipo acciaio	tipo C	tipo C	tipo C	tipo C	tipo C	
Coefficiente gamma s	1.15	1.15	1.15	1.15	1.15	
Coefficiente gamma c	1.50	1.50	1.50	1.50	1.50	
Verifiche con N costante	SI	SI	SI	SI	SI	

Travi c.a.	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Fattore di ridistribuzione	0.0	0.0	0.0	0.0	0.0	
Modello per il confinamento						
Relazione tensio-deformativa	Mander	Mander	Mander	Mander	Mander	
Incrudimento acciaio	5.000e-03	5.000e-03	5.000e-03	5.000e-03	5.000e-03	
Fattore lambda	1.00	1.00	1.00	1.00	1.00	
epsilon max,s	4.000e-02	4.000e-02	4.000e-02	4.000e-02	4.000e-02	
epsilon cu2	4.500e-03	4.500e-03	4.500e-03	4.500e-03	4.500e-03	
epsilon c2	0.0	0.0	0.0	0.0	0.0	
epsilon cy	0.0	0.0	0.0	0.0	0.0	
Tensioni ammissibili						
Tensione amm. cls [daN/cm2]	97.50	97.50	97.50	97.50	97.50	
Tensione amm. acciaio [daN/cm2]	2600.00	2600.00	2600.00	2600.00	2600.00	
Rapporto omogeneizzazione N	15.00	15.00	15.00	15.00	15.00	
Massimo rapporto area compressa/tesa	1.00	1.00	1.00	1.00	1.00	
Staffe						
Diametro staffe	10.00	0.0	0.0	0.0	0.0	
Passo minimo [cm]	1.00	5.00	5.00	4.00	5.00	
Passo massimo [cm]	30.00	10.00	10.00	30.00	10.00	
Passo raffittito [cm]	15.00	10.00	10.00	15.00	10.00	
Lunghezza zona raffittita [cm]	0.0	50.00	50.00	50.00	50.00	
Ctg(Teta) Max	2.50	2.50	2.50	2.50	2.50	
Percentuale sagomati	0.0	0.0	0.0	0.0	0.0	
Luce di taglio per GR [cm]	1.00	1.00	1.00	1.00	1.00	
Adotta scorrimento medio	NO	NO	NO	NO	NO	
Torsione non essenziale inclusa	SI	NO	NO	SI	NO	

Pilastri c.a.	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Generalità						
Progetto armatura	Privilegia spigoli	Privilegia lati	Privilegia lati	Privilegia lati	Privilegia lati	
Progetta a filo	SI	NO	NO	NO	NO	
Effetti del 2 ordine	SI	SI	SI	SI	SI	
Beta per 2-2	1.00	1.00	1.00	1.00	1.00	
Beta per 3-3	1.00	1.00	1.00	1.00	1.00	
Armatura						
Massima tesa	4.00	4.00	4.00	4.00	4.00	
Minima tesa	1.00	1.00	1.00	1.00	1.00	
Stati limite ultimi						
Tensione fy [daN/cm2]	4500.00	4500.00	4500.00	4500.00	4500.00	
Tensione fy staffe [daN/cm2]	4500.00	4500.00	4500.00	4500.00	4500.00	
Tipo acciaio	tipo C	tipo C	tipo C	tipo C	tipo C	
Coefficiente gamma s	1.15	1.15	1.15	1.15	1.15	
Coefficiente gamma c	1.50	1.50	1.50	1.50	1.50	
Verifiche con N costante	SI	SI	SI	SI	SI	
Modello per il confinamento						
Relazione tensio-deformativa	Mander	Mander	Mander	Mander	Mander	
Incrudimento acciaio	5.000e-03	5.000e-03	5.000e-03	5.000e-03	5.000e-03	
Fattore lambda	1.00	1.00	1.00	1.00	1.00	
epsilon max,s	4.000e-02	4.000e-02	4.000e-02	4.000e-02	4.000e-02	
epsilon cu2	4.500e-03	4.500e-03	4.500e-03	4.500e-03	4.500e-03	
epsilon c2	0.0	0.0	0.0	0.0	0.0	
epsilon cy	0.0	0.0	0.0	0.0	0.0	
Tensioni ammissibili						
Tensione amm. cls [daN/cm2]	97.50	97.50	97.50	97.50	97.50	
Tensione amm. acciaio [daN/cm2]	2600.00	2600.00	2600.00	2600.00	2600.00	
Rapporto omogeneizzazione N	15.00	15.00	15.00	15.00	15.00	
Staffe						
Diametro staffe	10.00	0.0	0.0	0.0	0.0	
Passo minimo [cm]	1.00	5.00	5.00	5.00	5.00	
Passo massimo [cm]	25.00	25.00	25.00	25.00	25.00	
Passo raffittito [cm]	15.00	15.00	15.00	15.00	15.00	
Lunghezza zona raffittita [cm]	0.0	45.00	45.00	45.00	45.00	
Ctg(Teta) Max	2.50	2.50	2.50	2.50	2.50	
Luce di taglio per GR [cm]	1.00	1.00	1.00	1.00	1.00	
Massimizza gerarchia	SI	SI	SI	SI	SI	

Solai e pannelli	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Generalità						
Usa tensioni ammissibili	NO	NO	NO	NO	NO	
Af inf: da traliccio	SI	SI	SI	SI	SI	
Consenti armatura a taglio	NO	NO	NO	NO	NO	
Incrementa armatura longitudinale per taglio	SI	SI	SI	SI	SI	
Af inf: da q*L*L /	20.00	20.00	20.00	20.00	20.00	
Incremento fascia piena [cm]	5.00	5.00	5.00	5.00	5.00	
Armatura						
Minima tesa	0.15	0.15	0.15	0.15	0.15	
Massima tesa	3.00	3.00	3.00	3.00	3.00	
Minima compressa	0.0	0.0	0.0	0.0	0.0	
Af/h [cm]	7.000e-02	7.000e-02	7.000e-02	7.000e-02	7.000e-02	
Stati limite ultimi						
Tensione fy [daN/cm2]	4500.00	4500.00	4500.00	4500.00	4500.00	
Tipo acciaio	tipo C	tipo C	tipo C	tipo C	tipo C	
Coefficiente gamma s	1.15	1.15	1.15	1.15	1.15	
Coefficiente gamma c	1.50	1.50	1.50	1.50	1.50	
Fattore di ridistribuzione	0.0	0.0	0.0	0.0	0.0	
Tensioni ammissibili						
Tensione amm. cls [daN/cm2]	85.00	85.00	85.00	85.00	85.00	
Tensione amm. acciaio [daN/cm2]	2600.00	2600.00	2600.00	2600.00	2600.00	
Rapporto omogeneizzazione N	15.00	15.00	15.00	15.00	15.00	
Massimo rapporto area compressa/tesa	1.00	1.00	1.00	1.00	1.00	
Verifica freccia						
Infinita	250.00	250.00	250.00	250.00	250.00	
Istantanea	500.00	500.00	500.00	500.00	500.00	
Fattore viscosità	3.00	3.00	3.00	3.00	3.00	
Usa J non fessurato	SI	NO	NO	NO	NO	
Elementi non strutturali						
Tamponatura antiespulsione	NO	NO	NO	NO	NO	
Tamponatura con armatura	NO	NO	NO	NO	NO	
Fattore di struttura/comportamento	2.00	2.00	2.00	2.00	2.00	
Coefficiente gamma m	0.0	0.0	0.0	0.0	0.0	
Periodo Ta	0.0	0.0	0.0	0.0	0.0	
Altezza pannello	0.0	0.0	0.0	0.0	0.0	

MODELLAZIONE DELLE SEZIONI

LEGENDA TABELLA DATI SEZIONI

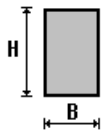
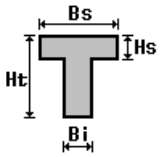
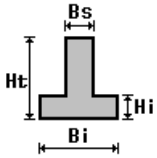
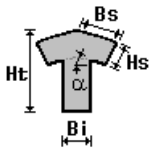
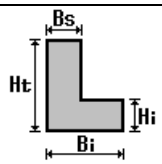
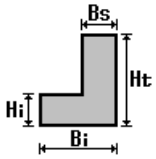
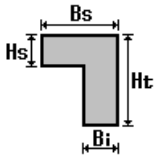
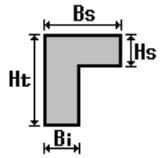
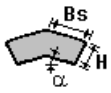
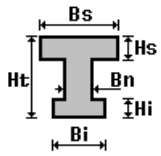
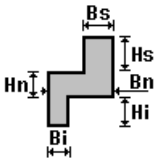
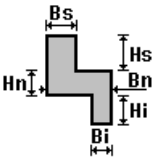
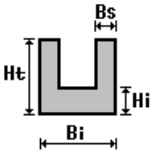
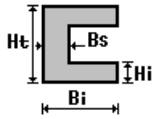
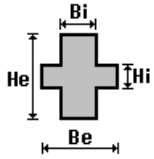
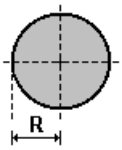
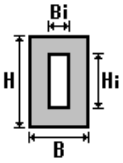
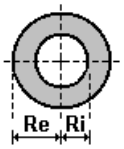
Il programma consente l'uso di sezioni diverse. Sono previsti i seguenti tipi di sezione:

1. sezione di tipo generico
2. profilati semplici
3. profilati accoppiati e speciali

Le sezioni utilizzate nella modellazione sono individuate da una sigla identificativa ed un codice numerico (gli elementi strutturali richiamano quest'ultimo nella propria descrizione). Per ogni sezione vengono riportati in tabella i seguenti dati:

Area	area della sezione
A V2	area della sezione/fattore di taglio (per il taglio in direzione 2)
A V3	area della sezione/fattore di taglio (per il taglio in direzione 3)
Jt	fattore torsionale di rigidezza
J2-2	momento d'inerzia della sezione riferito all'asse 2
J3-3	momento d'inerzia della sezione riferito all'asse 3
W2-2	modulo di resistenza della sezione riferito all'asse 2
W3-3	modulo di resistenza della sezione riferito all'asse 3
Wp2-2	modulo di resistenza plastico della sezione riferito all'asse 2
Wp3-3	modulo di resistenza plastico della sezione riferito all'asse 3

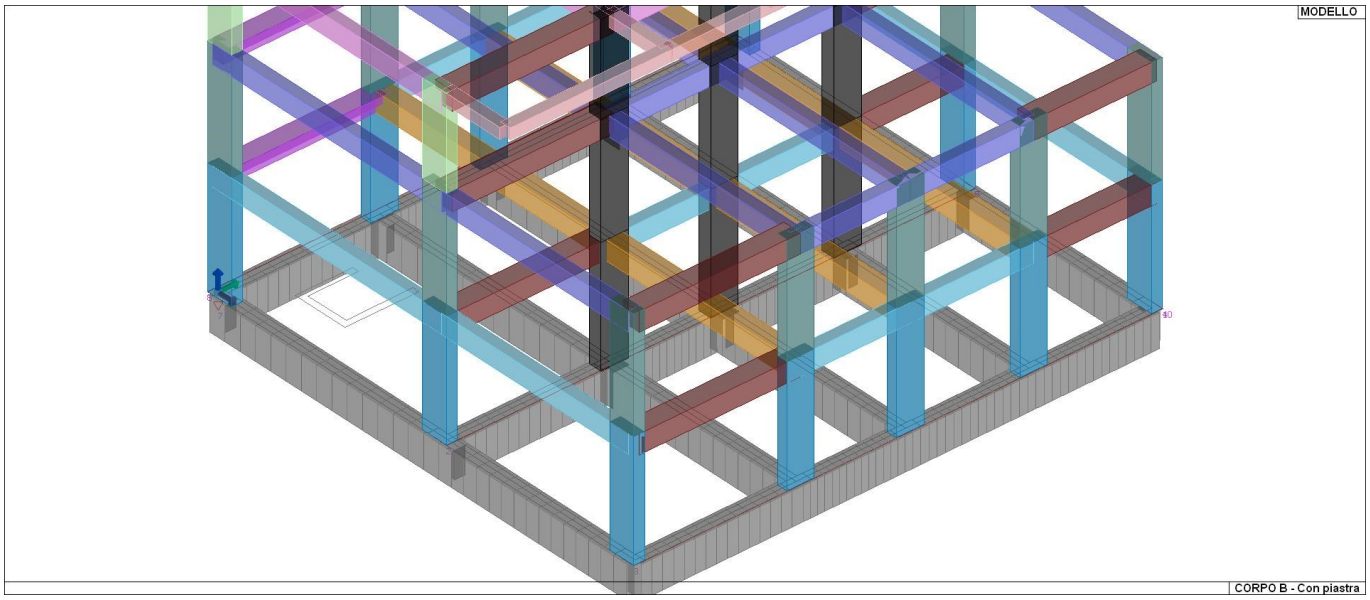
I dati sopra riportati vengono utilizzati per la determinazione dei carichi inerziali e per la definizione delle rigidezze degli elementi strutturali; qualora il valore di Area V2 (e/o Area V3) sia nullo la deformabilità per taglio V2 (e/o V3) è trascurata. La valutazione delle caratteristiche inerziali delle sezioni è condotta nel riferimento 2-3 dell'elemento.

 rettangolare	 a T	 a T rovescia	 a T di colmo	 a L	 a L specchiata
 a L specchiata rovescia	 a L rovescia	 a L di colmo	 a doppio T	 a quattro specchiata	 a quattro
 a U	 a C	 a croce	 circolare	 rettangolare cava	 circolare cava

Per quanto concerne i profilati semplici ed accoppiati l'asse 2 del riferimento coincide con l'asse x riportato nei più diffusi profilatari.

Per quanto concerne le sezioni di tipo generico (tipo 1.):
i valori dimensionali con prefisso B sono riferiti all'asse 2
i valori dimensionali con prefisso H sono riferiti all'asse 3

Id	Tipo	Area	A V2	A V3	Jt	J 2-2	J 3-3	W 2-2	W 3-3	Wp 2-2	Wp 3-3
		cm2	cm2	cm2	cm4	cm4	cm4	cm3	cm3	cm3	cm3
1	FONDAZIONE-Rettangolare: b=60 h=120	7200.00	6000.00	6000.00	5.918e+06	2.160e+06	8.640e+06	7.200e+04	1.440e+05	1.080e+05	2.160e+05
2	PILASTRI PT-Rettangolare: b=40 h=100	4000.00	3333.33	3333.33	1.596e+06	5.333e+05	3.333e+06	2.667e+04	6.667e+04	4.000e+04	1.000e+05
3	PILASTRI PP-Rettangolare: b=40 h=100	4000.00	3333.33	3333.33	1.596e+06	5.333e+05	3.333e+06	2.667e+04	6.667e+04	4.000e+04	1.000e+05
4	PILASTRI PS-Rettangolare: b=40 h=100	4000.00	3333.33	3333.33	1.596e+06	5.333e+05	3.333e+06	2.667e+04	6.667e+04	4.000e+04	1.000e+05
5	TRAVI PRIMO IMPALCATO-Rettangolare: b=40 h=70	2800.00	2333.33	2333.33	9.557e+05	3.733e+05	1.143e+06	1.867e+04	3.267e+04	2.800e+04	4.900e+04
6	TRAVI SECONDO IMPALCATO-Rettangolare: b=40 h=70	2800.00	2333.33	2333.33	9.557e+05	3.733e+05	1.143e+06	1.867e+04	3.267e+04	2.800e+04	4.900e+04
7	TRAVI TERZO IMPALCATO-Rettangolare: b=40 h=70	2800.00	2333.33	2333.33	9.557e+05	3.733e+05	1.143e+06	1.867e+04	3.267e+04	2.800e+04	4.900e+04
8	TRAVI SBALZO-Rettangolare: b=40 h=40	1600.00	1333.33	1333.33	3.599e+05	2.133e+05	2.133e+05	1.067e+04	1.067e+04	1.600e+04	1.600e+04
9	TRAVETTO SOLAIO-T ribassata: bi=12 ht=25 bs=50 hs=5	490.00	0.0	0.0	1.200e+04	5.496e+04	2.765e+04	2198.53	1688.50	3845.00	3024.51
10	TRAVI MODIFICATE I IMP-Rettangolare: b=60 h=70	4200.00	3500.00	3500.00	2.448e+06	1.260e+06	1.715e+06	4.200e+04	4.900e+04	6.300e+04	7.350e+04
14	PILASTRI PT modificati-Rettangolare: b=50 h=100	5000.00	4166.67	4166.67	2.854e+06	1.042e+06	4.167e+06	4.167e+04	8.333e+04	6.250e+04	1.250e+05
15	L rovescia: bi=40 ht=70 bs=70 hs=25	3550.00	0.0	0.0	1.238e+06	1.154e+06	1.482e+06	2.709e+04	3.728e+04	5.224e+04	6.236e+04
16	L inv.ribas.: bi=40 ht=70 bs=70 hs=25	3550.00	0.0	0.0	1.238e+06	1.154e+06	1.482e+06	2.709e+04	3.728e+04	5.224e+04	6.236e+04
18	PILASTRI 40x80-Rettangolare: b=40 h=80	3200.00	2666.67	2666.67	1.169e+06	4.267e+05	1.707e+06	2.133e+04	4.267e+04	3.200e+04	6.400e+04



13_MOD_SEZIONI

MODELLAZIONE STRUTTURA: NODI

LEGENDA TABELLA DATI NODI

Il programma utilizza per la modellazione nodi strutturali.
Ogni nodo è individuato dalle coordinate cartesiane nel sistema di riferimento globale (X Y Z).
Ad ogni nodo è eventualmente associato un codice di vincolamento rigido, un codice di fondazione speciale, ed un set di sei molle (tre per le traslazioni, tre per le rotazioni). Le tabelle sottoriportate riflettono le succitate possibilità. In particolare per ogni nodo viene indicato in tabella:

Nodo	numero del nodo.
X	valore della coordinata X
Y	valore della coordinata Y
Z	valore della coordinata Z

Per i nodi ai quali sia associato un codice di vincolamento rigido, un codice di fondazione speciale o un set di molle viene indicato in tabella:

Nodo	numero del nodo.
X	valore della coordinata X
Y	valore della coordinata Y
Z	valore della coordinata Z
Note	eventuale codice di vincolo (es. v=110010 sei valori relativi ai sei gradi di libertà previsti per il nodo TxTyTzRxRyRz, il valore 1 indica che lo spostamento o rotazione relativo è impedito, il valore 0 indica che lo spostamento o rotazione relativo è libero).
Note	(FS = 1, 2,…) eventuale codice del tipo di fondazione speciale (1, 2,… fanno riferimento alle tipologie: plinto, palo, plinto su pali,…) che è collegato al nodo. (ISO = "id SIGLA") indice e sigla identificativa dell' eventuale isolatore sismico assegnato al nodo
Rig. TX	valore della rigidezza dei vincoli elastici eventualmente applicati al nodo, nello specifico TX (idem per TY, TZ, RX, RY, RZ).

Per strutture sismicamente isolate viene inoltre inserita la tabella delle caratteristiche per gli isolatori utilizzati; le caratteristiche sono indicate in conformità al cap. 7.10 del D.M. 17/01/18

TABELLA DATI NODI

Nodo	X	Y	Z	Nodo	X	Y	Z	Nodo	X	Y	Z
	cm	cm	cm		cm	cm	cm		cm	cm	cm
1	0.0	0.0	0.0	2	962.5	0.0	0.0	3	1748.0	0.0	0.0
4	0.0	590.0	0.0	5	962.5	590.0	0.0	6	1748.0	590.0	0.0
7	0.0	990.0	0.0	8	962.5	990.0	0.0	9	1748.0	990.0	0.0
10	0.0	1440.0	0.0	11	962.5	1440.0	0.0	12	1748.0	1440.0	0.0
13	0.0	1890.0	0.0	14	962.5	1890.0	0.0	15	1748.0	1890.0	0.0
16	962.5	1890.0	835.0	17	0.0	1890.0	835.0	18	1748.0	0.0	835.0
19	1748.0	1890.0	835.0	20	0.0	590.0	835.0	21	962.5	1440.0	835.0
22	962.5	590.0	835.0	23	962.5	1440.0	1169.5	24	0.0	1890.0	1169.5
25	962.5	1890.0	1169.5	26	1748.0	590.0	835.0	27	0.0	990.0	835.0
28	1207.5	1890.0	1169.5	29	1748.0	1440.0	835.0	30	0.0	0.0	428.0
31	962.5	0.0	428.0	32	1748.0	0.0	428.0	33	0.0	590.0	428.0
34	962.5	590.0	428.0	35	1748.0	590.0	428.0	36	0.0	990.0	428.0
37	962.5	990.0	428.0	38	1748.0	990.0	428.0	39	0.0	1440.0	428.0
40	962.5	1440.0	428.0	41	1748.0	1440.0	428.0	42	0.0	1890.0	428.0
43	962.5	1890.0	428.0	44	1748.0	1890.0	428.0	45	962.5	990.0	835.0
46	1748.0	990.0	835.0	47	0.0	1440.0	835.0	48	1207.5	0.0	1169.5
49	1207.5	590.0	1169.5	50	1207.5	990.0	1169.5	51	1207.5	1440.0	1169.5
52	0.0	0.0	1169.5	53	962.5	0.0	1169.5	54	0.0	590.0	1169.5
55	962.5	590.0	1169.5	56	0.0	990.0	1169.5	57	962.5	990.0	1169.5
58	0.0	1440.0	1169.5	59	0.0	0.0	835.0	60	962.5	0.0	835.0

61	0.0	550.7	0.0	62	-128.3	1890.0	0.0	63	64.2	590.0	0.0
64	0.0	511.3	0.0	65	-128.3	1830.0	0.0	66	0.0	472.0	0.0
67	-128.3	1800.0	0.0	68	0.0	432.7	0.0	69	-128.3	1770.0	0.0
70	0.0	393.3	0.0	71	-128.3	1230.0	0.0	72	0.0	354.0	0.0
73	-128.3	1740.0	0.0	74	0.0	314.7	0.0	75	-128.3	1710.0	0.0
76	0.0	275.3	0.0	77	-128.3	1680.0	0.0	78	0.0	236.0	0.0
79	-128.3	1650.0	0.0	80	0.0	196.7	0.0	81	1276.7	1950.0	0.0
82	0.0	157.3	0.0	83	1329.1	1950.0	0.0	84	0.0	118.0	0.0
85	1852.7	723.3	0.0	86	0.0	78.7	0.0	87	1852.7	696.7	0.0
88	0.0	39.3	0.0	89	1852.7	670.0	0.0	90	64.2	0.0	0.0
91	-128.3	1200.0	0.0	92	128.3	590.0	0.0	93	-128.3	1620.0	0.0
94	-128.3	1590.0	0.0	95	-128.3	1560.0	0.0	96	-128.3	1530.0	0.0
97	-128.3	1500.0	0.0	98	-128.3	1470.0	0.0	99	1381.4	1950.0	0.0
100	1433.8	1950.0	0.0	101	1486.2	1950.0	0.0	102	1538.5	1950.0	0.0
103	1590.9	1950.0	0.0	104	1643.3	1950.0	0.0	105	1852.7	643.3	0.0
106	128.3	0.0	0.0	107	-128.3	1920.0	0.0	108	192.5	590.0	0.0
109	-128.3	-39.3	0.0	110	-128.3	-78.7	0.0	111	64.2	1950.0	0.0
112	0.0	1950.0	0.0	113	128.3	1950.0	0.0	114	192.5	1950.0	0.0
115	1695.6	1950.0	0.0	116	1748.0	1950.0	0.0	117	-64.2	1950.0	0.0
118	1800.4	1950.0	0.0	119	1852.7	1950.0	0.0	120	-128.3	1950.0	0.0
121	1852.7	616.7	0.0	122	192.5	0.0	0.0	123	256.7	1950.0	0.0
124	256.7	590.0	0.0	125	320.8	1950.0	0.0	126	385.0	1950.0	0.0
127	449.2	1950.0	0.0	128	513.3	1950.0	0.0	129	64.2	1980.0	0.0
130	0.0	1980.0	0.0	131	128.3	1980.0	0.0	132	192.5	1980.0	0.0
133	256.7	1980.0	0.0	134	320.8	1980.0	0.0	135	385.0	1980.0	0.0
136	449.2	1980.0	0.0	137	1852.7	590.0	0.0	138	256.7	0.0	0.0
139	-128.3	1170.0	0.0	140	320.8	590.0	0.0	141	577.5	1950.0	0.0
142	641.7	1950.0	0.0	143	513.3	1980.0	0.0	144	577.5	1980.0	0.0
145	641.7	1980.0	0.0	146	705.8	1980.0	0.0	147	770.0	1980.0	0.0
148	834.2	1980.0	0.0	149	898.3	1980.0	0.0	150	962.5	1980.0	0.0
151	1014.9	1980.0	0.0	152	1067.2	1980.0	0.0	153	1852.7	550.7	0.0
154	320.8	0.0	0.0	155	705.8	1950.0	0.0	156	385.0	590.0	0.0
157	770.0	1950.0	0.0	158	834.2	1950.0	0.0	159	898.3	1950.0	0.0
160	1119.6	1980.0	0.0	161	1172.0	1980.0	0.0	162	1224.3	1980.0	0.0
163	1276.7	1980.0	0.0	164	1329.1	1980.0	0.0	165	1381.4	1980.0	0.0
166	1433.8	1980.0	0.0	167	1486.2	1980.0	0.0	168	1852.7	432.7	0.0
169	1852.7	511.3	0.0	170	385.0	0.0	0.0	171	-128.3	1140.0	0.0
172	449.2	590.0	0.0	173	962.5	1950.0	0.0	174	1014.9	1950.0	0.0
175	1067.2	1950.0	0.0	176	1119.6	1950.0	0.0	177	1538.5	1980.0	0.0
178	1590.9	1980.0	0.0	179	1643.3	1980.0	0.0	180	1695.6	1980.0	0.0
181	1748.0	1980.0	0.0	182	-64.2	1980.0	0.0	183	1852.7	393.3	0.0
184	1852.7	354.0	0.0	185	1852.7	472.0	0.0	186	449.2	0.0	0.0
187	1172.0	1950.0	0.0	188	513.3	590.0	0.0	189	1224.3	1950.0	0.0
190	-128.3	1110.0	0.0	191	1800.4	1980.0	0.0	192	1852.7	1980.0	0.0
193	192.5	-78.7	0.0	194	320.8	-78.7	0.0	195	449.2	-78.7	0.0
196	1433.8	-78.7	0.0	197	1852.7	-78.7	0.0	198	0.0	-118.0	0.0
199	1852.7	314.7	0.0	200	1852.7	275.3	0.0	201	1852.7	236.0	0.0
202	513.3	0.0	0.0	203	1852.7	1920.0	0.0	204	577.5	590.0	0.0
205	64.2	-118.0	0.0	206	128.3	-118.0	0.0	207	256.7	-118.0	0.0
208	385.0	-118.0	0.0	209	513.3	-118.0	0.0	210	577.5	-118.0	0.0
211	641.7	-118.0	0.0	212	705.8	-118.0	0.0	213	770.0	-118.0	0.0
214	834.2	-118.0	0.0	215	898.3	-118.0	0.0	216	962.5	-118.0	0.0
217	1852.7	-39.3	0.0	218	577.5	0.0	0.0	219	-128.3	550.7	0.0
220	641.7	590.0	0.0	221	-128.3	590.0	0.0	222	1014.9	-118.0	0.0
223	1067.2	-118.0	0.0	224	1119.6	-118.0	0.0	225	1172.0	-118.0	0.0
226	1224.3	-118.0	0.0	227	1276.7	-118.0	0.0	228	1329.1	-118.0	0.0
229	1381.4	-118.0	0.0	230	1486.2	-118.0	0.0	231	1538.5	-118.0	0.0
232	-128.3	511.3	0.0	233	-128.3	472.0	0.0	234	641.7	0.0	0.0
235	1852.7	196.7	0.0	236	705.8	590.0	0.0	237	-128.3	1080.0	0.0
238	-128.3	1050.0	0.0	239	-128.3	1020.0	0.0	240	1590.9	-118.0	0.0
241	1643.3	-118.0	0.0	242	1695.6	-118.0	0.0	243	1748.0	-118.0	0.0
244	-64.2	-118.0	0.0	245	1800.4	-118.0	0.0	246	-128.3	-118.0	0.0
247	1852.7	157.3	0.0	248	-128.3	432.7	0.0	249	-128.3	393.3	0.0
250	705.8	0.0	0.0	251	-128.3	354.0	0.0	252	770.0	590.0	0.0
253	-128.3	314.7	0.0	254	-128.3	1860.0	0.0	255	-128.3	275.3	0.0
256	1852.7	118.0	0.0	257	192.5	-118.0	0.0	258	320.8	-118.0	0.0
259	449.2	-118.0	0.0	260	1433.8	-118.0	0.0	261	-128.3	236.0	0.0
262	-128.3	196.7	0.0	263	1852.7	78.7	0.0	264	-128.3	157.3	0.0
265	-128.3	118.0	0.0	266	770.0	0.0	0.0	267	1852.7	39.3	0.0
268	834.2	590.0	0.0	269	-128.3	78.7	0.0	270	-128.3	39.3	0.0
271	-128.3	0.0	0.0	272	-128.3	963.3	0.0	273	-128.3	990.0	0.0
274	-128.3	936.7	0.0	275	1852.7	-118.0	0.0	276	-128.3	910.0	0.0
277	-128.3	883.3	0.0	278	-128.3	856.7	0.0	279	-128.3	830.0	0.0
280	-128.3	803.3	0.0	281	1852.7	0.0	0.0	282	834.2	0.0	0.0
283	-128.3	776.7	0.0	284	898.3	590.0	0.0	285	-128.3	750.0	0.0
286	-128.3	723.3	0.0	287	-128.3	696.7	0.0	288	-128.3	670.0	0.0
289	-128.3	643.3	0.0	290	-128.3	616.7	0.0	291	-128.3	1410.0	0.0

292	-128.3	1440.0	0.0	293	-128.3	1380.0	0.0	294	-128.3	1350.0	0.0
295	-128.3	1320.0	0.0	296	-128.3	1290.0	0.0	297	-128.3	1260.0	0.0
298	898.3	0.0	0.0	299	962.5	550.7	0.0	300	962.5	511.3	0.0
301	962.5	472.0	0.0	302	962.5	432.7	0.0	303	962.5	393.3	0.0
304	962.5	354.0	0.0	305	962.5	314.7	0.0	306	962.5	275.3	0.0
307	962.5	236.0	0.0	308	962.5	196.7	0.0	309	962.5	157.3	0.0
310	962.5	118.0	0.0	311	962.5	78.7	0.0	312	962.5	39.3	0.0
313	0.0	963.3	0.0	314	64.2	963.3	0.0	315	64.2	990.0	0.0
316	0.0	936.7	0.0	317	64.2	936.7	0.0	318	0.0	910.0	0.0
319	64.2	910.0	0.0	320	0.0	883.3	0.0	321	64.2	883.3	0.0
322	0.0	856.7	0.0	323	64.2	856.7	0.0	324	0.0	830.0	0.0
325	64.2	830.0	0.0	326	0.0	803.3	0.0	327	64.2	803.3	0.0
328	0.0	776.7	0.0	329	64.2	776.7	0.0	330	0.0	750.0	0.0
331	64.2	750.0	0.0	332	0.0	723.3	0.0	333	64.2	723.3	0.0
334	0.0	696.7	0.0	335	64.2	696.7	0.0	336	0.0	670.0	0.0
337	64.2	670.0	0.0	338	0.0	643.3	0.0	339	64.2	643.3	0.0
340	0.0	616.7	0.0	341	64.2	616.7	0.0	342	128.3	963.3	0.0
343	128.3	990.0	0.0	344	128.3	936.7	0.0	345	128.3	910.0	0.0
346	128.3	883.3	0.0	347	128.3	856.7	0.0	348	128.3	830.0	0.0
349	128.3	803.3	0.0	350	128.3	776.7	0.0	351	128.3	750.0	0.0
352	128.3	723.3	0.0	353	128.3	696.7	0.0	354	128.3	670.0	0.0
355	128.3	643.3	0.0	356	128.3	616.7	0.0	357	192.5	963.3	0.0
358	192.5	990.0	0.0	359	192.5	936.7	0.0	360	192.5	910.0	0.0
361	192.5	883.3	0.0	362	192.5	856.7	0.0	363	192.5	830.0	0.0
364	192.5	803.3	0.0	365	192.5	776.7	0.0	366	192.5	750.0	0.0
367	192.5	723.3	0.0	368	192.5	696.7	0.0	369	192.5	670.0	0.0
370	192.5	643.3	0.0	371	192.5	616.7	0.0	372	256.7	963.3	0.0
373	256.7	990.0	0.0	374	256.7	936.7	0.0	375	256.7	910.0	0.0
376	256.7	883.3	0.0	377	256.7	856.7	0.0	378	256.7	830.0	0.0
379	256.7	803.3	0.0	380	256.7	776.7	0.0	381	256.7	750.0	0.0
382	256.7	723.3	0.0	383	256.7	696.7	0.0	384	256.7	670.0	0.0
385	256.7	643.3	0.0	386	256.7	616.7	0.0	387	320.8	963.3	0.0
388	320.8	990.0	0.0	389	320.8	936.7	0.0	390	320.8	910.0	0.0
391	320.8	883.3	0.0	392	320.8	856.7	0.0	393	320.8	830.0	0.0
394	320.8	803.3	0.0	395	320.8	776.7	0.0	396	320.8	750.0	0.0
397	320.8	723.3	0.0	398	320.8	696.7	0.0	399	320.8	670.0	0.0
400	320.8	643.3	0.0	401	320.8	616.7	0.0	402	385.0	963.3	0.0
403	385.0	990.0	0.0	404	385.0	936.7	0.0	405	385.0	910.0	0.0
406	385.0	883.3	0.0	407	385.0	856.7	0.0	408	385.0	830.0	0.0
409	385.0	803.3	0.0	410	385.0	776.7	0.0	411	385.0	750.0	0.0
412	385.0	723.3	0.0	413	385.0	696.7	0.0	414	385.0	670.0	0.0
415	385.0	643.3	0.0	416	385.0	616.7	0.0	417	449.2	963.3	0.0
418	449.2	990.0	0.0	419	449.2	936.7	0.0	420	449.2	910.0	0.0
421	449.2	883.3	0.0	422	449.2	856.7	0.0	423	449.2	830.0	0.0
424	449.2	803.3	0.0	425	449.2	776.7	0.0	426	449.2	750.0	0.0
427	449.2	723.3	0.0	428	449.2	696.7	0.0	429	449.2	670.0	0.0
430	449.2	643.3	0.0	431	449.2	616.7	0.0	432	513.3	963.3	0.0
433	513.3	990.0	0.0	434	513.3	936.7	0.0	435	513.3	910.0	0.0
436	513.3	883.3	0.0	437	513.3	856.7	0.0	438	513.3	830.0	0.0
439	513.3	803.3	0.0	440	513.3	776.7	0.0	441	513.3	750.0	0.0
442	513.3	723.3	0.0	443	513.3	696.7	0.0	444	513.3	670.0	0.0
445	513.3	643.3	0.0	446	513.3	616.7	0.0	447	577.5	963.3	0.0
448	577.5	990.0	0.0	449	577.5	936.7	0.0	450	577.5	910.0	0.0
451	577.5	883.3	0.0	452	577.5	856.7	0.0	453	577.5	830.0	0.0
454	577.5	803.3	0.0	455	577.5	776.7	0.0	456	577.5	750.0	0.0
457	577.5	723.3	0.0	458	577.5	696.7	0.0	459	577.5	670.0	0.0
460	577.5	643.3	0.0	461	577.5	616.7	0.0	462	641.7	963.3	0.0
463	641.7	990.0	0.0	464	641.7	936.7	0.0	465	641.7	910.0	0.0
466	641.7	883.3	0.0	467	641.7	856.7	0.0	468	641.7	830.0	0.0
469	641.7	803.3	0.0	470	641.7	776.7	0.0	471	641.7	750.0	0.0
472	641.7	723.3	0.0	473	641.7	696.7	0.0	474	641.7	670.0	0.0
475	641.7	643.3	0.0	476	641.7	616.7	0.0	477	705.8	963.3	0.0
478	705.8	990.0	0.0	479	705.8	936.7	0.0	480	705.8	910.0	0.0
481	705.8	883.3	0.0	482	705.8	856.7	0.0	483	705.8	830.0	0.0
484	705.8	803.3	0.0	485	705.8	776.7	0.0	486	705.8	750.0	0.0
487	705.8	723.3	0.0	488	705.8	696.7	0.0	489	705.8	670.0	0.0
490	705.8	643.3	0.0	491	705.8	616.7	0.0	492	770.0	963.3	0.0
493	770.0	990.0	0.0	494	770.0	936.7	0.0	495	770.0	910.0	0.0
496	770.0	883.3	0.0	497	770.0	856.7	0.0	498	770.0	830.0	0.0
499	770.0	803.3	0.0	500	770.0	776.7	0.0	501	770.0	750.0	0.0
502	770.0	723.3	0.0	503	770.0	696.7	0.0	504	770.0	670.0	0.0
505	770.0	643.3	0.0	506	770.0	616.7	0.0	507	834.2	963.3	0.0
508	834.2	990.0	0.0	509	834.2	936.7	0.0	510	834.2	910.0	0.0
511	834.2	883.3	0.0	512	834.2	856.7	0.0	513	834.2	830.0	0.0
514	834.2	803.3	0.0	515	834.2	776.7	0.0	516	834.2	750.0	0.0
517	834.2	723.3	0.0	518	834.2	696.7	0.0	519	834.2	670.0	0.0
520	834.2	643.3	0.0	521	834.2	616.7	0.0	522	898.3	963.3	0.0

523	898.3	990.0	0.0	524	898.3	936.7	0.0	525	898.3	910.0	0.0
526	898.3	883.3	0.0	527	898.3	856.7	0.0	528	898.3	830.0	0.0
529	898.3	803.3	0.0	530	898.3	776.7	0.0	531	898.3	750.0	0.0
532	898.3	723.3	0.0	533	898.3	696.7	0.0	534	898.3	670.0	0.0
535	898.3	643.3	0.0	536	898.3	616.7	0.0	537	962.5	963.3	0.0
538	962.5	936.7	0.0	539	962.5	910.0	0.0	540	962.5	883.3	0.0
541	962.5	856.7	0.0	542	962.5	830.0	0.0	543	962.5	803.3	0.0
544	962.5	776.7	0.0	545	962.5	750.0	0.0	546	962.5	723.3	0.0
547	962.5	696.7	0.0	548	962.5	670.0	0.0	549	962.5	643.3	0.0
550	962.5	616.7	0.0	551	0.0	1410.0	0.0	552	64.2	1410.0	0.0
553	64.2	1440.0	0.0	554	0.0	1380.0	0.0	555	64.2	1380.0	0.0
556	0.0	1350.0	0.0	557	64.2	1350.0	0.0	558	0.0	1320.0	0.0
559	64.2	1320.0	0.0	560	0.0	1290.0	0.0	561	64.2	1290.0	0.0
562	0.0	1260.0	0.0	563	64.2	1260.0	0.0	564	0.0	1230.0	0.0
565	64.2	1230.0	0.0	566	0.0	1200.0	0.0	567	64.2	1200.0	0.0
568	0.0	1170.0	0.0	569	64.2	1170.0	0.0	570	0.0	1140.0	0.0
571	64.2	1140.0	0.0	572	0.0	1110.0	0.0	573	64.2	1110.0	0.0
574	0.0	1080.0	0.0	575	64.2	1080.0	0.0	576	0.0	1050.0	0.0
577	64.2	1050.0	0.0	578	0.0	1020.0	0.0	579	64.2	1020.0	0.0
580	128.3	1410.0	0.0	581	128.3	1440.0	0.0	582	128.3	1380.0	0.0
583	128.3	1350.0	0.0	584	128.3	1320.0	0.0	585	128.3	1290.0	0.0
586	128.3	1260.0	0.0	587	128.3	1230.0	0.0	588	128.3	1200.0	0.0
589	128.3	1170.0	0.0	590	128.3	1140.0	0.0	591	128.3	1110.0	0.0
592	128.3	1080.0	0.0	593	128.3	1050.0	0.0	594	128.3	1020.0	0.0
595	192.5	1410.0	0.0	596	192.5	1440.0	0.0	597	192.5	1380.0	0.0
598	192.5	1350.0	0.0	599	192.5	1320.0	0.0	600	192.5	1290.0	0.0
601	192.5	1260.0	0.0	602	192.5	1230.0	0.0	603	192.5	1200.0	0.0
604	192.5	1170.0	0.0	605	192.5	1140.0	0.0	606	192.5	1110.0	0.0
607	192.5	1080.0	0.0	608	192.5	1050.0	0.0	609	192.5	1020.0	0.0
610	256.7	1410.0	0.0	611	256.7	1440.0	0.0	612	256.7	1380.0	0.0
613	256.7	1350.0	0.0	614	256.7	1320.0	0.0	615	256.7	1290.0	0.0
616	256.7	1260.0	0.0	617	256.7	1230.0	0.0	618	256.7	1200.0	0.0
619	256.7	1170.0	0.0	620	256.7	1140.0	0.0	621	256.7	1110.0	0.0
622	256.7	1080.0	0.0	623	256.7	1050.0	0.0	624	256.7	1020.0	0.0
625	320.8	1410.0	0.0	626	320.8	1440.0	0.0	627	320.8	1380.0	0.0
628	320.8	1350.0	0.0	629	320.8	1320.0	0.0	630	320.8	1290.0	0.0
631	320.8	1260.0	0.0	632	320.8	1230.0	0.0	633	320.8	1200.0	0.0
634	320.8	1170.0	0.0	635	320.8	1140.0	0.0	636	320.8	1110.0	0.0
637	320.8	1080.0	0.0	638	320.8	1050.0	0.0	639	320.8	1020.0	0.0
640	385.0	1410.0	0.0	641	385.0	1440.0	0.0	642	385.0	1380.0	0.0
643	385.0	1350.0	0.0	644	385.0	1320.0	0.0	645	385.0	1290.0	0.0
646	385.0	1260.0	0.0	647	385.0	1230.0	0.0	648	385.0	1200.0	0.0
649	385.0	1170.0	0.0	650	385.0	1140.0	0.0	651	385.0	1110.0	0.0
652	385.0	1080.0	0.0	653	385.0	1050.0	0.0	654	385.0	1020.0	0.0
655	449.2	1410.0	0.0	656	449.2	1440.0	0.0	657	449.2	1380.0	0.0
658	449.2	1350.0	0.0	659	449.2	1320.0	0.0	660	449.2	1290.0	0.0
661	449.2	1260.0	0.0	662	449.2	1230.0	0.0	663	449.2	1200.0	0.0
664	449.2	1170.0	0.0	665	449.2	1140.0	0.0	666	449.2	1110.0	0.0
667	449.2	1080.0	0.0	668	449.2	1050.0	0.0	669	449.2	1020.0	0.0
670	513.3	1410.0	0.0	671	513.3	1440.0	0.0	672	513.3	1380.0	0.0
673	513.3	1350.0	0.0	674	513.3	1320.0	0.0	675	513.3	1290.0	0.0
676	513.3	1260.0	0.0	677	513.3	1230.0	0.0	678	513.3	1200.0	0.0
679	513.3	1170.0	0.0	680	513.3	1140.0	0.0	681	513.3	1110.0	0.0
682	513.3	1080.0	0.0	683	513.3	1050.0	0.0	684	513.3	1020.0	0.0
685	577.5	1410.0	0.0	686	577.5	1440.0	0.0	687	577.5	1380.0	0.0
688	577.5	1350.0	0.0	689	577.5	1320.0	0.0	690	577.5	1290.0	0.0
691	577.5	1260.0	0.0	692	577.5	1230.0	0.0	693	577.5	1200.0	0.0
694	577.5	1170.0	0.0	695	577.5	1140.0	0.0	696	577.5	1110.0	0.0
697	577.5	1080.0	0.0	698	577.5	1050.0	0.0	699	577.5	1020.0	0.0
700	641.7	1410.0	0.0	701	641.7	1440.0	0.0	702	641.7	1380.0	0.0
703	641.7	1350.0	0.0	704	641.7	1320.0	0.0	705	641.7	1290.0	0.0
706	641.7	1260.0	0.0	707	641.7	1230.0	0.0	708	641.7	1200.0	0.0
709	641.7	1170.0	0.0	710	641.7	1140.0	0.0	711	641.7	1110.0	0.0
712	641.7	1080.0	0.0	713	641.7	1050.0	0.0	714	641.7	1020.0	0.0
715	705.8	1410.0	0.0	716	705.8	1440.0	0.0	717	705.8	1380.0	0.0
718	705.8	1350.0	0.0	719	705.8	1320.0	0.0	720	705.8	1290.0	0.0
721	705.8	1260.0	0.0	722	705.8	1230.0	0.0	723	705.8	1200.0	0.0
724	705.8	1170.0	0.0	725	705.8	1140.0	0.0	726	705.8	1110.0	0.0
727	705.8	1080.0	0.0	728	705.8	1050.0	0.0	729	705.8	1020.0	0.0
730	770.0	1410.0	0.0	731	770.0	1440.0	0.0	732	770.0	1380.0	0.0
733	770.0	1350.0	0.0	734	770.0	1320.0	0.0	735	770.0	1290.0	0.0
736	770.0	1260.0	0.0	737	770.0	1230.0	0.0	738	770.0	1200.0	0.0
739	770.0	1170.0	0.0	740	770.0	1140.0	0.0	741	770.0	1110.0	0.0
742	770.0	1080.0	0.0	743	770.0	1050.0	0.0	744	770.0	1020.0	0.0
745	834.2	1410.0	0.0	746	834.2	1440.0	0.0	747	834.2	1380.0	0.0
748	834.2	1350.0	0.0	749	834.2	1320.0	0.0	750	834.2	1290.0	0.0
751	834.2	1260.0	0.0	752	834.2	1230.0	0.0	753	834.2	1200.0	0.0

754	834.2	1170.0	0.0	755	834.2	1140.0	0.0	756	834.2	1110.0	0.0
757	834.2	1080.0	0.0	758	834.2	1050.0	0.0	759	834.2	1020.0	0.0
760	898.3	1410.0	0.0	761	898.3	1440.0	0.0	762	898.3	1380.0	0.0
763	898.3	1350.0	0.0	764	898.3	1320.0	0.0	765	898.3	1290.0	0.0
766	898.3	1260.0	0.0	767	898.3	1230.0	0.0	768	898.3	1200.0	0.0
769	898.3	1170.0	0.0	770	898.3	1140.0	0.0	771	898.3	1110.0	0.0
772	898.3	1080.0	0.0	773	898.3	1050.0	0.0	774	898.3	1020.0	0.0
775	962.5	1410.0	0.0	776	962.5	1380.0	0.0	777	962.5	1350.0	0.0
778	962.5	1320.0	0.0	779	962.5	1290.0	0.0	780	962.5	1260.0	0.0
781	962.5	1230.0	0.0	782	962.5	1200.0	0.0	783	962.5	1170.0	0.0
784	962.5	1140.0	0.0	785	962.5	1110.0	0.0	786	962.5	1080.0	0.0
787	962.5	1050.0	0.0	788	962.5	1020.0	0.0	789	0.0	1860.0	0.0
790	64.2	1860.0	0.0	791	64.2	1890.0	0.0	792	0.0	1830.0	0.0
793	64.2	1830.0	0.0	794	0.0	1800.0	0.0	795	64.2	1800.0	0.0
796	0.0	1770.0	0.0	797	64.2	1770.0	0.0	798	0.0	1740.0	0.0
799	64.2	1740.0	0.0	800	0.0	1710.0	0.0	801	64.2	1710.0	0.0
802	0.0	1680.0	0.0	803	64.2	1680.0	0.0	804	0.0	1650.0	0.0
805	64.2	1650.0	0.0	806	0.0	1620.0	0.0	807	64.2	1620.0	0.0
808	0.0	1590.0	0.0	809	64.2	1590.0	0.0	810	0.0	1560.0	0.0
811	64.2	1560.0	0.0	812	0.0	1530.0	0.0	813	64.2	1530.0	0.0
814	0.0	1500.0	0.0	815	64.2	1500.0	0.0	816	0.0	1470.0	0.0
817	64.2	1470.0	0.0	818	128.3	1860.0	0.0	819	128.3	1890.0	0.0
820	128.3	1830.0	0.0	821	128.3	1800.0	0.0	822	128.3	1770.0	0.0
823	128.3	1740.0	0.0	824	128.3	1710.0	0.0	825	128.3	1680.0	0.0
826	128.3	1650.0	0.0	827	128.3	1620.0	0.0	828	128.3	1590.0	0.0
829	128.3	1560.0	0.0	830	128.3	1530.0	0.0	831	128.3	1500.0	0.0
832	128.3	1470.0	0.0	833	192.5	1860.0	0.0	834	192.5	1890.0	0.0
835	192.5	1830.0	0.0	836	192.5	1800.0	0.0	837	192.5	1770.0	0.0
838	192.5	1740.0	0.0	839	192.5	1710.0	0.0	840	192.5	1680.0	0.0
841	192.5	1650.0	0.0	842	192.5	1620.0	0.0	843	192.5	1590.0	0.0
844	192.5	1560.0	0.0	845	192.5	1530.0	0.0	846	192.5	1500.0	0.0
847	192.5	1470.0	0.0	848	256.7	1860.0	0.0	849	256.7	1890.0	0.0
850	256.7	1830.0	0.0	851	256.7	1800.0	0.0	852	256.7	1770.0	0.0
853	256.7	1740.0	0.0	854	256.7	1710.0	0.0	855	256.7	1680.0	0.0
856	256.7	1650.0	0.0	857	256.7	1620.0	0.0	858	256.7	1590.0	0.0
859	256.7	1560.0	0.0	860	256.7	1530.0	0.0	861	256.7	1500.0	0.0
862	256.7	1470.0	0.0	863	320.8	1860.0	0.0	864	320.8	1890.0	0.0
865	320.8	1830.0	0.0	866	320.8	1800.0	0.0	867	320.8	1770.0	0.0
868	320.8	1740.0	0.0	869	320.8	1710.0	0.0	870	320.8	1680.0	0.0
871	320.8	1650.0	0.0	872	320.8	1620.0	0.0	873	320.8	1590.0	0.0
874	320.8	1560.0	0.0	875	320.8	1530.0	0.0	876	320.8	1500.0	0.0
877	320.8	1470.0	0.0	878	385.0	1860.0	0.0	879	385.0	1890.0	0.0
880	385.0	1830.0	0.0	881	385.0	1800.0	0.0	882	385.0	1770.0	0.0
883	385.0	1740.0	0.0	884	385.0	1710.0	0.0	885	385.0	1680.0	0.0
886	385.0	1650.0	0.0	887	385.0	1620.0	0.0	888	385.0	1590.0	0.0
889	385.0	1560.0	0.0	890	385.0	1530.0	0.0	891	385.0	1500.0	0.0
892	385.0	1470.0	0.0	893	449.2	1860.0	0.0	894	449.2	1890.0	0.0
895	449.2	1830.0	0.0	896	449.2	1800.0	0.0	897	449.2	1770.0	0.0
898	449.2	1740.0	0.0	899	449.2	1710.0	0.0	900	449.2	1680.0	0.0
901	449.2	1650.0	0.0	902	449.2	1620.0	0.0	903	449.2	1590.0	0.0
904	449.2	1560.0	0.0	905	449.2	1530.0	0.0	906	449.2	1500.0	0.0
907	449.2	1470.0	0.0	908	513.3	1860.0	0.0	909	513.3	1890.0	0.0
910	513.3	1830.0	0.0	911	513.3	1800.0	0.0	912	513.3	1770.0	0.0
913	513.3	1740.0	0.0	914	513.3	1710.0	0.0	915	513.3	1680.0	0.0
916	513.3	1650.0	0.0	917	513.3	1620.0	0.0	918	513.3	1590.0	0.0
919	513.3	1560.0	0.0	920	513.3	1530.0	0.0	921	513.3	1500.0	0.0
922	513.3	1470.0	0.0	923	577.5	1860.0	0.0	924	577.5	1890.0	0.0
925	577.5	1830.0	0.0	926	577.5	1800.0	0.0	927	577.5	1770.0	0.0
928	577.5	1740.0	0.0	929	577.5	1710.0	0.0	930	577.5	1680.0	0.0
931	577.5	1650.0	0.0	932	577.5	1620.0	0.0	933	577.5	1590.0	0.0
934	577.5	1560.0	0.0	935	577.5	1530.0	0.0	936	577.5	1500.0	0.0
937	577.5	1470.0	0.0	938	641.7	1860.0	0.0	939	641.7	1890.0	0.0
940	641.7	1830.0	0.0	941	641.7	1800.0	0.0	942	641.7	1770.0	0.0
943	641.7	1740.0	0.0	944	641.7	1710.0	0.0	945	641.7	1680.0	0.0
946	641.7	1650.0	0.0	947	641.7	1620.0	0.0	948	641.7	1590.0	0.0
949	641.7	1560.0	0.0	950	641.7	1530.0	0.0	951	641.7	1500.0	0.0
952	641.7	1470.0	0.0	953	705.8	1860.0	0.0	954	705.8	1890.0	0.0
955	705.8	1830.0	0.0	956	705.8	1800.0	0.0	957	705.8	1770.0	0.0
958	705.8	1740.0	0.0	959	705.8	1710.0	0.0	960	705.8	1680.0	0.0
961	705.8	1650.0	0.0	962	705.8	1620.0	0.0	963	705.8	1590.0	0.0
964	705.8	1560.0	0.0	965	705.8	1530.0	0.0	966	705.8	1500.0	0.0
967	705.8	1470.0	0.0	968	770.0	1860.0	0.0	969	770.0	1890.0	0.0
970	770.0	1830.0	0.0	971	770.0	1800.0	0.0	972	770.0	1770.0	0.0
973	770.0	1740.0	0.0	974	770.0	1710.0	0.0	975	770.0	1680.0	0.0
976	770.0	1650.0	0.0	977	770.0	1620.0	0.0	978	770.0	1590.0	0.0
979	770.0	1560.0	0.0	980	770.0	1530.0	0.0	981	770.0	1500.0	0.0
982	770.0	1470.0	0.0	983	834.2	1860.0	0.0	984	834.2	1890.0	0.0

985	834.2	1830.0	0.0	986	834.2	1800.0	0.0	987	834.2	1770.0	0.0
988	834.2	1740.0	0.0	989	834.2	1710.0	0.0	990	834.2	1680.0	0.0
991	834.2	1650.0	0.0	992	834.2	1620.0	0.0	993	834.2	1590.0	0.0
994	834.2	1560.0	0.0	995	834.2	1530.0	0.0	996	834.2	1500.0	0.0
997	834.2	1470.0	0.0	998	898.3	1860.0	0.0	999	898.3	1890.0	0.0
1000	898.3	1830.0	0.0	1001	898.3	1800.0	0.0	1002	898.3	1770.0	0.0
1003	898.3	1740.0	0.0	1004	898.3	1710.0	0.0	1005	898.3	1680.0	0.0
1006	898.3	1650.0	0.0	1007	898.3	1620.0	0.0	1008	898.3	1590.0	0.0
1009	898.3	1560.0	0.0	1010	898.3	1530.0	0.0	1011	898.3	1500.0	0.0
1012	898.3	1470.0	0.0	1013	962.5	1860.0	0.0	1014	962.5	1830.0	0.0
1015	962.5	1800.0	0.0	1016	962.5	1770.0	0.0	1017	962.5	1740.0	0.0
1018	962.5	1710.0	0.0	1019	962.5	1680.0	0.0	1020	962.5	1650.0	0.0
1021	962.5	1620.0	0.0	1022	962.5	1590.0	0.0	1023	962.5	1560.0	0.0
1024	962.5	1530.0	0.0	1025	962.5	1500.0	0.0	1026	962.5	1470.0	0.0
1027	1014.9	1860.0	0.0	1028	1014.9	1890.0	0.0	1029	1014.9	1830.0	0.0
1030	1014.9	1800.0	0.0	1031	1014.9	1770.0	0.0	1032	1014.9	1740.0	0.0
1033	1014.9	1710.0	0.0	1034	1014.9	1680.0	0.0	1035	1014.9	1650.0	0.0
1036	1014.9	1620.0	0.0	1037	1014.9	1590.0	0.0	1038	1014.9	1560.0	0.0
1039	1014.9	1530.0	0.0	1040	1014.9	1500.0	0.0	1041	1014.9	1470.0	0.0
1042	1014.9	1440.0	0.0	1043	1067.2	1860.0	0.0	1044	1067.2	1890.0	0.0
1045	1067.2	1830.0	0.0	1046	1067.2	1800.0	0.0	1047	1067.2	1770.0	0.0
1048	1067.2	1740.0	0.0	1049	1067.2	1710.0	0.0	1050	1067.2	1680.0	0.0
1051	1067.2	1650.0	0.0	1052	1067.2	1620.0	0.0	1053	1067.2	1590.0	0.0
1054	1067.2	1560.0	0.0	1055	1067.2	1530.0	0.0	1056	1067.2	1500.0	0.0
1057	1067.2	1470.0	0.0	1058	1067.2	1440.0	0.0	1059	1119.6	1860.0	0.0
1060	1119.6	1890.0	0.0	1061	1119.6	1830.0	0.0	1062	1119.6	1800.0	0.0
1063	1119.6	1770.0	0.0	1064	1119.6	1740.0	0.0	1065	1119.6	1710.0	0.0
1066	1119.6	1680.0	0.0	1067	1119.6	1650.0	0.0	1068	1119.6	1620.0	0.0
1069	1119.6	1590.0	0.0	1070	1119.6	1560.0	0.0	1071	1119.6	1530.0	0.0
1072	1119.6	1500.0	0.0	1073	1119.6	1470.0	0.0	1074	1119.6	1440.0	0.0
1075	1172.0	1860.0	0.0	1076	1172.0	1890.0	0.0	1077	1172.0	1830.0	0.0
1078	1172.0	1800.0	0.0	1079	1172.0	1770.0	0.0	1080	1172.0	1740.0	0.0
1081	1172.0	1710.0	0.0	1082	1172.0	1680.0	0.0	1083	1172.0	1650.0	0.0
1084	1172.0	1620.0	0.0	1085	1172.0	1590.0	0.0	1086	1172.0	1560.0	0.0
1087	1172.0	1530.0	0.0	1088	1172.0	1500.0	0.0	1089	1172.0	1470.0	0.0
1090	1172.0	1440.0	0.0	1091	1224.3	1860.0	0.0	1092	1224.3	1890.0	0.0
1093	1224.3	1830.0	0.0	1094	1224.3	1800.0	0.0	1095	1224.3	1770.0	0.0
1096	1224.3	1740.0	0.0	1097	1224.3	1710.0	0.0	1098	1224.3	1680.0	0.0
1099	1224.3	1650.0	0.0	1100	1224.3	1620.0	0.0	1101	1224.3	1590.0	0.0
1102	1224.3	1560.0	0.0	1103	1224.3	1530.0	0.0	1104	1224.3	1500.0	0.0
1105	1224.3	1470.0	0.0	1106	1224.3	1440.0	0.0	1107	1276.7	1860.0	0.0
1108	1276.7	1890.0	0.0	1109	1276.7	1830.0	0.0	1110	1276.7	1800.0	0.0
1111	1276.7	1770.0	0.0	1112	1276.7	1740.0	0.0	1113	1276.7	1710.0	0.0
1114	1276.7	1680.0	0.0	1115	1276.7	1650.0	0.0	1116	1276.7	1620.0	0.0
1117	1276.7	1590.0	0.0	1118	1276.7	1560.0	0.0	1119	1276.7	1530.0	0.0
1120	1276.7	1500.0	0.0	1121	1276.7	1470.0	0.0	1122	1276.7	1440.0	0.0
1123	1329.1	1860.0	0.0	1124	1329.1	1890.0	0.0	1125	1329.1	1830.0	0.0
1126	1329.1	1800.0	0.0	1127	1329.1	1770.0	0.0	1128	1329.1	1740.0	0.0
1129	1329.1	1710.0	0.0	1130	1329.1	1680.0	0.0	1131	1329.1	1650.0	0.0
1132	1329.1	1620.0	0.0	1133	1329.1	1590.0	0.0	1134	1329.1	1560.0	0.0
1135	1329.1	1530.0	0.0	1136	1329.1	1500.0	0.0	1137	1329.1	1470.0	0.0
1138	1329.1	1440.0	0.0	1139	1381.4	1860.0	0.0	1140	1381.4	1890.0	0.0
1141	1381.4	1830.0	0.0	1142	1381.4	1800.0	0.0	1143	1381.4	1770.0	0.0
1144	1381.4	1740.0	0.0	1145	1381.4	1710.0	0.0	1146	1381.4	1680.0	0.0
1147	1381.4	1650.0	0.0	1148	1381.4	1620.0	0.0	1149	1381.4	1590.0	0.0
1150	1381.4	1560.0	0.0	1151	1381.4	1530.0	0.0	1152	1381.4	1500.0	0.0
1153	1381.4	1470.0	0.0	1154	1381.4	1440.0	0.0	1155	1433.8	1860.0	0.0
1156	1433.8	1890.0	0.0	1157	1433.8	1830.0	0.0	1158	1433.8	1800.0	0.0
1159	1433.8	1770.0	0.0	1160	1433.8	1740.0	0.0	1161	1433.8	1710.0	0.0
1162	1433.8	1680.0	0.0	1163	1433.8	1650.0	0.0	1164	1433.8	1620.0	0.0
1165	1433.8	1590.0	0.0	1166	1433.8	1560.0	0.0	1167	1433.8	1530.0	0.0
1168	1433.8	1500.0	0.0	1169	1433.8	1470.0	0.0	1170	1433.8	1440.0	0.0
1171	1486.2	1860.0	0.0	1172	1486.2	1890.0	0.0	1173	1486.2	1830.0	0.0
1174	1486.2	1800.0	0.0	1175	1486.2	1770.0	0.0	1176	1486.2	1740.0	0.0
1177	1486.2	1710.0	0.0	1178	1486.2	1680.0	0.0	1179	1486.2	1650.0	0.0
1180	1486.2	1620.0	0.0	1181	1486.2	1590.0	0.0	1182	1486.2	1560.0	0.0
1183	1486.2	1530.0	0.0	1184	1486.2	1500.0	0.0	1185	1486.2	1470.0	0.0
1186	1486.2	1440.0	0.0	1187	1538.5	1860.0	0.0	1188	1538.5	1890.0	0.0
1189	1538.5	1830.0	0.0	1190	1538.5	1800.0	0.0	1191	1538.5	1770.0	0.0
1192	1538.5	1740.0	0.0	1193	1538.5	1710.0	0.0	1194	1538.5	1680.0	0.0
1195	1538.5	1650.0	0.0	1196	1538.5	1620.0	0.0	1197	1538.5	1590.0	0.0
1198	1538.5	1560.0	0.0	1199	1538.5	1530.0	0.0	1200	1538.5	1500.0	0.0
1201	1538.5	1470.0	0.0	1202	1538.5	1440.0	0.0	1203	1590.9	1860.0	0.0
1204	1590.9	1890.0	0.0	1205	1590.9	1830.0	0.0	1206	1590.9	1800.0	0.0
1207	1590.9	1770.0	0.0	1208	1590.9	1740.0	0.0	1209	1590.9	1710.0	0.0
1210	1590.9	1680.0	0.0	1211	1590.9	1650.0	0.0	1212	1590.9	1620.0	0.0
1213	1590.9	1590.0	0.0	1214	1590.9	1560.0	0.0	1215	1590.9	1530.0	0.0

1216	1590.9	1500.0	0.0	1217	1590.9	1470.0	0.0	1218	1590.9	1440.0	0.0
1219	1643.3	1860.0	0.0	1220	1643.3	1890.0	0.0	1221	1643.3	1830.0	0.0
1222	1643.3	1800.0	0.0	1223	1643.3	1770.0	0.0	1224	1643.3	1740.0	0.0
1225	1643.3	1710.0	0.0	1226	1643.3	1680.0	0.0	1227	1643.3	1650.0	0.0
1228	1643.3	1620.0	0.0	1229	1643.3	1590.0	0.0	1230	1643.3	1560.0	0.0
1231	1643.3	1530.0	0.0	1232	1643.3	1500.0	0.0	1233	1643.3	1470.0	0.0
1234	1643.3	1440.0	0.0	1235	1695.6	1860.0	0.0	1236	1695.6	1890.0	0.0
1237	1695.6	1830.0	0.0	1238	1695.6	1800.0	0.0	1239	1695.6	1770.0	0.0
1240	1695.6	1740.0	0.0	1241	1695.6	1710.0	0.0	1242	1695.6	1680.0	0.0
1243	1695.6	1650.0	0.0	1244	1695.6	1620.0	0.0	1245	1695.6	1590.0	0.0
1246	1695.6	1560.0	0.0	1247	1695.6	1530.0	0.0	1248	1695.6	1500.0	0.0
1249	1695.6	1470.0	0.0	1250	1695.6	1440.0	0.0	1251	1748.0	1860.0	0.0
1252	1748.0	1830.0	0.0	1253	1748.0	1800.0	0.0	1254	1748.0	1770.0	0.0
1255	1748.0	1740.0	0.0	1256	1748.0	1710.0	0.0	1257	1748.0	1680.0	0.0
1258	1748.0	1650.0	0.0	1259	1748.0	1620.0	0.0	1260	1748.0	1590.0	0.0
1261	1748.0	1560.0	0.0	1262	1748.0	1530.0	0.0	1263	1748.0	1500.0	0.0
1264	1748.0	1470.0	0.0	1265	1014.9	1410.0	0.0	1266	1014.9	1380.0	0.0
1267	1014.9	1350.0	0.0	1268	1014.9	1320.0	0.0	1269	1014.9	1290.0	0.0
1270	1014.9	1260.0	0.0	1271	1014.9	1230.0	0.0	1272	1014.9	1200.0	0.0
1273	1014.9	1170.0	0.0	1274	1014.9	1140.0	0.0	1275	1014.9	1110.0	0.0
1276	1014.9	1080.0	0.0	1277	1014.9	1050.0	0.0	1278	1014.9	1020.0	0.0
1279	1014.9	990.0	0.0	1280	1067.2	1410.0	0.0	1281	1067.2	1380.0	0.0
1282	1067.2	1350.0	0.0	1283	1067.2	1320.0	0.0	1284	1067.2	1290.0	0.0
1285	1067.2	1260.0	0.0	1286	1067.2	1230.0	0.0	1287	1067.2	1200.0	0.0
1288	1067.2	1170.0	0.0	1289	1067.2	1140.0	0.0	1290	1067.2	1110.0	0.0
1291	1067.2	1080.0	0.0	1292	1067.2	1050.0	0.0	1293	1067.2	1020.0	0.0
1294	1067.2	990.0	0.0	1295	1119.6	1410.0	0.0	1296	1119.6	1380.0	0.0
1297	1119.6	1350.0	0.0	1298	1119.6	1320.0	0.0	1299	1119.6	1290.0	0.0
1300	1119.6	1260.0	0.0	1301	1119.6	1230.0	0.0	1302	1119.6	1200.0	0.0
1303	1119.6	1170.0	0.0	1304	1119.6	1140.0	0.0	1305	1119.6	1110.0	0.0
1306	1119.6	1080.0	0.0	1307	1119.6	1050.0	0.0	1308	1119.6	1020.0	0.0
1309	1119.6	990.0	0.0	1310	1172.0	1410.0	0.0	1311	1172.0	1380.0	0.0
1312	1172.0	1350.0	0.0	1313	1172.0	1320.0	0.0	1314	1172.0	1290.0	0.0
1315	1172.0	1260.0	0.0	1316	1172.0	1230.0	0.0	1317	1172.0	1200.0	0.0
1318	1172.0	1170.0	0.0	1319	1172.0	1140.0	0.0	1320	1172.0	1110.0	0.0
1321	1172.0	1080.0	0.0	1322	1172.0	1050.0	0.0	1323	1172.0	1020.0	0.0
1324	1172.0	990.0	0.0	1325	1224.3	1410.0	0.0	1326	1224.3	1380.0	0.0
1327	1224.3	1350.0	0.0	1328	1224.3	1320.0	0.0	1329	1224.3	1290.0	0.0
1330	1224.3	1260.0	0.0	1331	1224.3	1230.0	0.0	1332	1224.3	1200.0	0.0
1333	1224.3	1170.0	0.0	1334	1224.3	1140.0	0.0	1335	1224.3	1110.0	0.0
1336	1224.3	1080.0	0.0	1337	1224.3	1050.0	0.0	1338	1224.3	1020.0	0.0
1339	1224.3	990.0	0.0	1340	1276.7	1410.0	0.0	1341	1276.7	1380.0	0.0
1342	1276.7	1350.0	0.0	1343	1276.7	1320.0	0.0	1344	1276.7	1290.0	0.0
1345	1276.7	1260.0	0.0	1346	1276.7	1230.0	0.0	1347	1276.7	1200.0	0.0
1348	1276.7	1170.0	0.0	1349	1276.7	1140.0	0.0	1350	1276.7	1110.0	0.0
1351	1276.7	1080.0	0.0	1352	1276.7	1050.0	0.0	1353	1276.7	1020.0	0.0
1354	1276.7	990.0	0.0	1355	1329.1	1410.0	0.0	1356	1329.1	1380.0	0.0
1357	1329.1	1350.0	0.0	1358	1329.1	1320.0	0.0	1359	1329.1	1290.0	0.0
1360	1329.1	1260.0	0.0	1361	1329.1	1230.0	0.0	1362	1329.1	1200.0	0.0
1363	1329.1	1170.0	0.0	1364	1329.1	1140.0	0.0	1365	1329.1	1110.0	0.0
1366	1329.1	1080.0	0.0	1367	1329.1	1050.0	0.0	1368	1329.1	1020.0	0.0
1369	1329.1	990.0	0.0	1370	1381.4	1410.0	0.0	1371	1381.4	1380.0	0.0
1372	1381.4	1350.0	0.0	1373	1381.4	1320.0	0.0	1374	1381.4	1290.0	0.0
1375	1381.4	1260.0	0.0	1376	1381.4	1230.0	0.0	1377	1381.4	1200.0	0.0
1378	1381.4	1170.0	0.0	1379	1381.4	1140.0	0.0	1380	1381.4	1110.0	0.0
1381	1381.4	1080.0	0.0	1382	1381.4	1050.0	0.0	1383	1381.4	1020.0	0.0
1384	1381.4	990.0	0.0	1385	1433.8	1410.0	0.0	1386	1433.8	1380.0	0.0
1387	1433.8	1350.0	0.0	1388	1433.8	1320.0	0.0	1389	1433.8	1290.0	0.0
1390	1433.8	1260.0	0.0	1391	1433.8	1230.0	0.0	1392	1433.8	1200.0	0.0
1393	1433.8	1170.0	0.0	1394	1433.8	1140.0	0.0	1395	1433.8	1110.0	0.0
1396	1433.8	1080.0	0.0	1397	1433.8	1050.0	0.0	1398	1433.8	1020.0	0.0
1399	1433.8	990.0	0.0	1400	1486.2	1410.0	0.0	1401	1486.2	1380.0	0.0
1402	1486.2	1350.0	0.0	1403	1486.2	1320.0	0.0	1404	1486.2	1290.0	0.0
1405	1486.2	1260.0	0.0	1406	1486.2	1230.0	0.0	1407	1486.2	1200.0	0.0
1408	1486.2	1170.0	0.0	1409	1486.2	1140.0	0.0	1410	1486.2	1110.0	0.0
1411	1486.2	1080.0	0.0	1412	1486.2	1050.0	0.0	1413	1486.2	1020.0	0.0
1414	1486.2	990.0	0.0	1415	1538.5	1410.0	0.0	1416	1538.5	1380.0	0.0
1417	1538.5	1350.0	0.0	1418	1538.5	1320.0	0.0	1419	1538.5	1290.0	0.0
1420	1538.5	1260.0	0.0	1421	1538.5	1230.0	0.0	1422	1538.5	1200.0	0.0
1423	1538.5	1170.0	0.0	1424	1538.5	1140.0	0.0	1425	1538.5	1110.0	0.0
1426	1538.5	1080.0	0.0	1427	1538.5	1050.0	0.0	1428	1538.5	1020.0	0.0
1429	1538.5	990.0	0.0	1430	1590.9	1410.0	0.0	1431	1590.9	1380.0	0.0
1432	1590.9	1350.0	0.0	1433	1590.9	1320.0	0.0	1434	1590.9	1290.0	0.0
1435	1590.9	1260.0	0.0	1436	1590.9	1230.0	0.0	1437	1590.9	1200.0	0.0
1438	1590.9	1170.0	0.0	1439	1590.9	1140.0	0.0	1440	1590.9	1110.0	0.0
1441	1590.9	1080.0	0.0	1442	1590.9	1050.0	0.0	1443	1590.9	1020.0	0.0
1444	1590.9	990.0	0.0	1445	1643.3	1410.0	0.0	1446	1643.3	1380.0	0.0

1447	1643.3	1350.0	0.0	1448	1643.3	1320.0	0.0	1449	1643.3	1290.0	0.0
1450	1643.3	1260.0	0.0	1451	1643.3	1230.0	0.0	1452	1643.3	1200.0	0.0
1453	1643.3	1170.0	0.0	1454	1643.3	1140.0	0.0	1455	1643.3	1110.0	0.0
1456	1643.3	1080.0	0.0	1457	1643.3	1050.0	0.0	1458	1643.3	1020.0	0.0
1459	1643.3	990.0	0.0	1460	1695.6	1410.0	0.0	1461	1695.6	1380.0	0.0
1462	1695.6	1350.0	0.0	1463	1695.6	1320.0	0.0	1464	1695.6	1290.0	0.0
1465	1695.6	1260.0	0.0	1466	1695.6	1230.0	0.0	1467	1695.6	1200.0	0.0
1468	1695.6	1170.0	0.0	1469	1695.6	1140.0	0.0	1470	1695.6	1110.0	0.0
1471	1695.6	1080.0	0.0	1472	1695.6	1050.0	0.0	1473	1695.6	1020.0	0.0
1474	1695.6	990.0	0.0	1475	1748.0	1410.0	0.0	1476	1748.0	1380.0	0.0
1477	1748.0	1350.0	0.0	1478	1748.0	1320.0	0.0	1479	1748.0	1290.0	0.0
1480	1748.0	1260.0	0.0	1481	1748.0	1230.0	0.0	1482	1748.0	1200.0	0.0
1483	1748.0	1170.0	0.0	1484	1748.0	1140.0	0.0	1485	1748.0	1110.0	0.0
1486	1748.0	1080.0	0.0	1487	1748.0	1050.0	0.0	1488	1748.0	1020.0	0.0
1489	1014.9	963.3	0.0	1490	1014.9	936.7	0.0	1491	1014.9	910.0	0.0
1492	1014.9	883.3	0.0	1493	1014.9	856.7	0.0	1494	1014.9	830.0	0.0
1495	1014.9	803.3	0.0	1496	1014.9	776.7	0.0	1497	1014.9	750.0	0.0
1498	1014.9	723.3	0.0	1499	1014.9	696.7	0.0	1500	1014.9	670.0	0.0
1501	1014.9	643.3	0.0	1502	1014.9	616.7	0.0	1503	1014.9	590.0	0.0
1504	1067.2	963.3	0.0	1505	1067.2	936.7	0.0	1506	1067.2	910.0	0.0
1507	1067.2	883.3	0.0	1508	1067.2	856.7	0.0	1509	1067.2	830.0	0.0
1510	1067.2	803.3	0.0	1511	1067.2	776.7	0.0	1512	1067.2	750.0	0.0
1513	1067.2	723.3	0.0	1514	1067.2	696.7	0.0	1515	1067.2	670.0	0.0
1516	1067.2	643.3	0.0	1517	1067.2	616.7	0.0	1518	1067.2	590.0	0.0
1519	1119.6	963.3	0.0	1520	1119.6	936.7	0.0	1521	1119.6	910.0	0.0
1522	1119.6	883.3	0.0	1523	1119.6	856.7	0.0	1524	1119.6	830.0	0.0
1525	1119.6	803.3	0.0	1526	1119.6	776.7	0.0	1527	1119.6	750.0	0.0
1528	1119.6	723.3	0.0	1529	1119.6	696.7	0.0	1530	1119.6	670.0	0.0
1531	1119.6	643.3	0.0	1532	1119.6	616.7	0.0	1533	1119.6	590.0	0.0
1534	1172.0	963.3	0.0	1535	1172.0	936.7	0.0	1536	1172.0	910.0	0.0
1537	1172.0	883.3	0.0	1538	1172.0	856.7	0.0	1539	1172.0	830.0	0.0
1540	1172.0	803.3	0.0	1541	1172.0	776.7	0.0	1542	1172.0	750.0	0.0
1543	1172.0	723.3	0.0	1544	1172.0	696.7	0.0	1545	1172.0	670.0	0.0
1546	1172.0	643.3	0.0	1547	1172.0	616.7	0.0	1548	1172.0	590.0	0.0
1549	1224.3	963.3	0.0	1550	1224.3	936.7	0.0	1551	1224.3	910.0	0.0
1552	1224.3	883.3	0.0	1553	1224.3	856.7	0.0	1554	1224.3	830.0	0.0
1555	1224.3	803.3	0.0	1556	1224.3	776.7	0.0	1557	1224.3	750.0	0.0
1558	1224.3	723.3	0.0	1559	1224.3	696.7	0.0	1560	1224.3	670.0	0.0
1561	1224.3	643.3	0.0	1562	1224.3	616.7	0.0	1563	1224.3	590.0	0.0
1564	1276.7	963.3	0.0	1565	1276.7	936.7	0.0	1566	1276.7	910.0	0.0
1567	1276.7	883.3	0.0	1568	1276.7	856.7	0.0	1569	1276.7	830.0	0.0
1570	1276.7	803.3	0.0	1571	1276.7	776.7	0.0	1572	1276.7	750.0	0.0
1573	1276.7	723.3	0.0	1574	1276.7	696.7	0.0	1575	1276.7	670.0	0.0
1576	1276.7	643.3	0.0	1577	1276.7	616.7	0.0	1578	1276.7	590.0	0.0
1579	1329.1	963.3	0.0	1580	1329.1	936.7	0.0	1581	1329.1	910.0	0.0
1582	1329.1	883.3	0.0	1583	1329.1	856.7	0.0	1584	1329.1	830.0	0.0
1585	1329.1	803.3	0.0	1586	1329.1	776.7	0.0	1587	1329.1	750.0	0.0
1588	1329.1	723.3	0.0	1589	1329.1	696.7	0.0	1590	1329.1	670.0	0.0
1591	1329.1	643.3	0.0	1592	1329.1	616.7	0.0	1593	1329.1	590.0	0.0
1594	1381.4	963.3	0.0	1595	1381.4	936.7	0.0	1596	1381.4	910.0	0.0
1597	1381.4	883.3	0.0	1598	1381.4	856.7	0.0	1599	1381.4	830.0	0.0
1600	1381.4	803.3	0.0	1601	1381.4	776.7	0.0	1602	1381.4	750.0	0.0
1603	1381.4	723.3	0.0	1604	1381.4	696.7	0.0	1605	1381.4	670.0	0.0
1606	1381.4	643.3	0.0	1607	1381.4	616.7	0.0	1608	1381.4	590.0	0.0
1609	1433.8	963.3	0.0	1610	1433.8	936.7	0.0	1611	1433.8	910.0	0.0
1612	1433.8	883.3	0.0	1613	1433.8	856.7	0.0	1614	1433.8	830.0	0.0
1615	1433.8	803.3	0.0	1616	1433.8	776.7	0.0	1617	1433.8	750.0	0.0
1618	1433.8	723.3	0.0	1619	1433.8	696.7	0.0	1620	1433.8	670.0	0.0
1621	1433.8	643.3	0.0	1622	1433.8	616.7	0.0	1623	1433.8	590.0	0.0
1624	1486.2	963.3	0.0	1625	1486.2	936.7	0.0	1626	1486.2	910.0	0.0
1627	1486.2	883.3	0.0	1628	1486.2	856.7	0.0	1629	1486.2	830.0	0.0
1630	1486.2	803.3	0.0	1631	1486.2	776.7	0.0	1632	1486.2	750.0	0.0
1633	1486.2	723.3	0.0	1634	1486.2	696.7	0.0	1635	1486.2	670.0	0.0
1636	1486.2	643.3	0.0	1637	1486.2	616.7	0.0	1638	1486.2	590.0	0.0
1639	1538.5	963.3	0.0	1640	1538.5	936.7	0.0	1641	1538.5	910.0	0.0
1642	1538.5	883.3	0.0	1643	1538.5	856.7	0.0	1644	1538.5	830.0	0.0
1645	1538.5	803.3	0.0	1646	1538.5	776.7	0.0	1647	1538.5	750.0	0.0
1648	1538.5	723.3	0.0	1649	1538.5	696.7	0.0	1650	1538.5	670.0	0.0
1651	1538.5	643.3	0.0	1652	1538.5	616.7	0.0	1653	1538.5	590.0	0.0
1654	1590.9	963.3	0.0	1655	1590.9	936.7	0.0	1656	1590.9	910.0	0.0
1657	1590.9	883.3	0.0	1658	1590.9	856.7	0.0	1659	1590.9	830.0	0.0
1660	1590.9	803.3	0.0	1661	1590.9	776.7	0.0	1662	1590.9	750.0	0.0
1663	1590.9	723.3	0.0	1664	1590.9	696.7	0.0	1665	1590.9	670.0	0.0
1666	1590.9	643.3	0.0	1667	1590.9	616.7	0.0	1668	1590.9	590.0	0.0
1669	1643.3	963.3	0.0	1670	1643.3	936.7	0.0	1671	1643.3	910.0	0.0
1672	1643.3	883.3	0.0	1673	1643.3	856.7	0.0	1674	1643.3	830.0	0.0
1675	1643.3	803.3	0.0	1676	1643.3	776.7	0.0	1677	1643.3	750.0	0.0

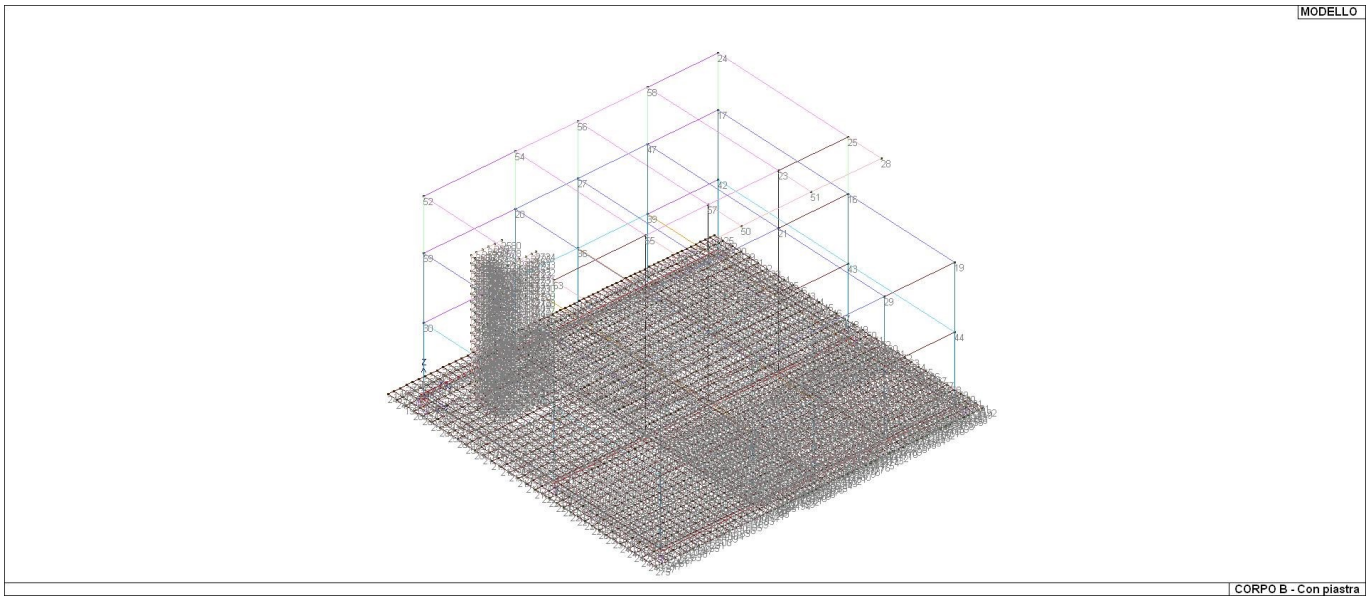
1678	1643.3	723.3	0.0	1679	1643.3	696.7	0.0	1680	1643.3	670.0	0.0
1681	1643.3	643.3	0.0	1682	1643.3	616.7	0.0	1683	1643.3	590.0	0.0
1684	1695.6	963.3	0.0	1685	1695.6	936.7	0.0	1686	1695.6	910.0	0.0
1687	1695.6	883.3	0.0	1688	1695.6	856.7	0.0	1689	1695.6	830.0	0.0
1690	1695.6	803.3	0.0	1691	1695.6	776.7	0.0	1692	1695.6	750.0	0.0
1693	1695.6	723.3	0.0	1694	1695.6	696.7	0.0	1695	1695.6	670.0	0.0
1696	1695.6	643.3	0.0	1697	1695.6	616.7	0.0	1698	1695.6	590.0	0.0
1699	1748.0	963.3	0.0	1700	1748.0	936.7	0.0	1701	1748.0	910.0	0.0
1702	1748.0	883.3	0.0	1703	1748.0	856.7	0.0	1704	1748.0	830.0	0.0
1705	1748.0	803.3	0.0	1706	1748.0	776.7	0.0	1707	1748.0	750.0	0.0
1708	1748.0	723.3	0.0	1709	1748.0	696.7	0.0	1710	1748.0	670.0	0.0
1711	1748.0	643.3	0.0	1712	1748.0	616.7	0.0	1713	1014.9	550.7	0.0
1714	1014.9	511.3	0.0	1715	1014.9	472.0	0.0	1716	1014.9	432.7	0.0
1717	1014.9	393.3	0.0	1718	1014.9	354.0	0.0	1719	1014.9	314.7	0.0
1720	1014.9	275.3	0.0	1721	1014.9	236.0	0.0	1722	1014.9	196.7	0.0
1723	1014.9	157.3	0.0	1724	1014.9	118.0	0.0	1725	1014.9	78.7	0.0
1726	1014.9	39.3	0.0	1727	1014.9	0.0	0.0	1728	1067.2	550.7	0.0
1729	1067.2	511.3	0.0	1730	1067.2	472.0	0.0	1731	1067.2	432.7	0.0
1732	1067.2	393.3	0.0	1733	1067.2	354.0	0.0	1734	1067.2	314.7	0.0
1735	1067.2	275.3	0.0	1736	1067.2	236.0	0.0	1737	1067.2	196.7	0.0
1738	1067.2	157.3	0.0	1739	1067.2	118.0	0.0	1740	1067.2	78.7	0.0
1741	1067.2	39.3	0.0	1742	1067.2	0.0	0.0	1743	1119.6	550.7	0.0
1744	1119.6	511.3	0.0	1745	1119.6	472.0	0.0	1746	1119.6	432.7	0.0
1747	1119.6	393.3	0.0	1748	1119.6	354.0	0.0	1749	1119.6	314.7	0.0
1750	1119.6	275.3	0.0	1751	1119.6	236.0	0.0	1752	1119.6	196.7	0.0
1753	1119.6	157.3	0.0	1754	1119.6	118.0	0.0	1755	1119.6	78.7	0.0
1756	1119.6	39.3	0.0	1757	1119.6	0.0	0.0	1758	1172.0	550.7	0.0
1759	1172.0	511.3	0.0	1760	1172.0	472.0	0.0	1761	1172.0	432.7	0.0
1762	1172.0	393.3	0.0	1763	1172.0	354.0	0.0	1764	1172.0	314.7	0.0
1765	1172.0	275.3	0.0	1766	1172.0	236.0	0.0	1767	1172.0	196.7	0.0
1768	1172.0	157.3	0.0	1769	1172.0	118.0	0.0	1770	1172.0	78.7	0.0
1771	1172.0	39.3	0.0	1772	1172.0	0.0	0.0	1773	1224.3	550.7	0.0
1774	1224.3	511.3	0.0	1775	1224.3	472.0	0.0	1776	1224.3	432.7	0.0
1777	1224.3	393.3	0.0	1778	1224.3	354.0	0.0	1779	1224.3	314.7	0.0
1780	1224.3	275.3	0.0	1781	1224.3	236.0	0.0	1782	1224.3	196.7	0.0
1783	1224.3	157.3	0.0	1784	1224.3	118.0	0.0	1785	1224.3	78.7	0.0
1786	1224.3	39.3	0.0	1787	1224.3	0.0	0.0	1788	1276.7	550.7	0.0
1789	1276.7	511.3	0.0	1790	1276.7	472.0	0.0	1791	1276.7	432.7	0.0
1792	1276.7	393.3	0.0	1793	1276.7	354.0	0.0	1794	1276.7	314.7	0.0
1795	1276.7	275.3	0.0	1796	1276.7	236.0	0.0	1797	1276.7	196.7	0.0
1798	1276.7	157.3	0.0	1799	1276.7	118.0	0.0	1800	1276.7	78.7	0.0
1801	1276.7	39.3	0.0	1802	1276.7	0.0	0.0	1803	1329.1	550.7	0.0
1804	1329.1	511.3	0.0	1805	1329.1	472.0	0.0	1806	1329.1	432.7	0.0
1807	1329.1	393.3	0.0	1808	1329.1	354.0	0.0	1809	1329.1	314.7	0.0
1810	1329.1	275.3	0.0	1811	1329.1	236.0	0.0	1812	1329.1	196.7	0.0
1813	1329.1	157.3	0.0	1814	1329.1	118.0	0.0	1815	1329.1	78.7	0.0
1816	1329.1	39.3	0.0	1817	1329.1	0.0	0.0	1818	1381.4	550.7	0.0
1819	1381.4	511.3	0.0	1820	1381.4	472.0	0.0	1821	1381.4	432.7	0.0
1822	1381.4	393.3	0.0	1823	1381.4	354.0	0.0	1824	1381.4	314.7	0.0
1825	1381.4	275.3	0.0	1826	1381.4	236.0	0.0	1827	1381.4	196.7	0.0
1828	1381.4	157.3	0.0	1829	1381.4	118.0	0.0	1830	1381.4	78.7	0.0
1831	1381.4	39.3	0.0	1832	1381.4	0.0	0.0	1833	1433.8	550.7	0.0
1834	1433.8	511.3	0.0	1835	1433.8	472.0	0.0	1836	1433.8	432.7	0.0
1837	1433.8	393.3	0.0	1838	1433.8	354.0	0.0	1839	1433.8	314.7	0.0
1840	1433.8	275.3	0.0	1841	1433.8	236.0	0.0	1842	1433.8	196.7	0.0
1843	1433.8	157.3	0.0	1844	1433.8	118.0	0.0	1845	1433.8	78.7	0.0
1846	1433.8	39.3	0.0	1847	1433.8	0.0	0.0	1848	1486.2	550.7	0.0
1849	1486.2	511.3	0.0	1850	1486.2	472.0	0.0	1851	1486.2	432.7	0.0
1852	1486.2	393.3	0.0	1853	1486.2	354.0	0.0	1854	1486.2	314.7	0.0
1855	1486.2	275.3	0.0	1856	1486.2	236.0	0.0	1857	1486.2	196.7	0.0
1858	1486.2	157.3	0.0	1859	1486.2	118.0	0.0	1860	1486.2	78.7	0.0
1861	1486.2	39.3	0.0	1862	1486.2	0.0	0.0	1863	1538.5	550.7	0.0
1864	1538.5	511.3	0.0	1865	1538.5	472.0	0.0	1866	1538.5	432.7	0.0
1867	1538.5	393.3	0.0	1868	1538.5	354.0	0.0	1869	1538.5	314.7	0.0
1870	1538.5	275.3	0.0	1871	1538.5	236.0	0.0	1872	1538.5	196.7	0.0
1873	1538.5	157.3	0.0	1874	1538.5	118.0	0.0	1875	1538.5	78.7	0.0
1876	1538.5	39.3	0.0	1877	1538.5	0.0	0.0	1878	1590.9	550.7	0.0
1879	1590.9	511.3	0.0	1880	1590.9	472.0	0.0	1881	1590.9	432.7	0.0
1882	1590.9	393.3	0.0	1883	1590.9	354.0	0.0	1884	1590.9	314.7	0.0
1885	1590.9	275.3	0.0	1886	1590.9	236.0	0.0	1887	1590.9	196.7	0.0
1888	1590.9	157.3	0.0	1889	1590.9	118.0	0.0	1890	1590.9	78.7	0.0
1891	1590.9	39.3	0.0	1892	1590.9	0.0	0.0	1893	1643.3	550.7	0.0
1894	1643.3	511.3	0.0	1895	1643.3	472.0	0.0	1896	1643.3	432.7	0.0
1897	1643.3	393.3	0.0	1898	1643.3	354.0	0.0	1899	1643.3	314.7	0.0
1900	1643.3	275.3	0.0	1901	1643.3	236.0	0.0	1902	1643.3	196.7	0.0
1903	1643.3	157.3	0.0	1904	1643.3	118.0	0.0	1905	1643.3	78.7	0.0
1906	1643.3	39.3	0.0	1907	1643.3	0.0	0.0	1908	1695.6	550.7	0.0

1909	1695.6	511.3	0.0	1910	1695.6	472.0	0.0	1911	1695.6	432.7	0.0
1912	1695.6	393.3	0.0	1913	1695.6	354.0	0.0	1914	1695.6	314.7	0.0
1915	1695.6	275.3	0.0	1916	1695.6	236.0	0.0	1917	1695.6	196.7	0.0
1918	1695.6	157.3	0.0	1919	1695.6	118.0	0.0	1920	1695.6	78.7	0.0
1921	1695.6	39.3	0.0	1922	1695.6	0.0	0.0	1923	1748.0	550.7	0.0
1924	1748.0	511.3	0.0	1925	1748.0	472.0	0.0	1926	1748.0	432.7	0.0
1927	1748.0	393.3	0.0	1928	1748.0	354.0	0.0	1929	1748.0	314.7	0.0
1930	1748.0	275.3	0.0	1931	1748.0	236.0	0.0	1932	1748.0	196.7	0.0
1933	1748.0	157.3	0.0	1934	1748.0	118.0	0.0	1935	1748.0	78.7	0.0
1936	1748.0	39.3	0.0	1937	64.2	1920.0	0.0	1938	0.0	1920.0	0.0
1939	128.3	1920.0	0.0	1940	192.5	1920.0	0.0	1941	256.7	1920.0	0.0
1942	320.8	1920.0	0.0	1943	385.0	1920.0	0.0	1944	449.2	1920.0	0.0
1945	513.3	1920.0	0.0	1946	577.5	1920.0	0.0	1947	641.7	1920.0	0.0
1948	705.8	1920.0	0.0	1949	770.0	1920.0	0.0	1950	834.2	1920.0	0.0
1951	898.3	1920.0	0.0	1952	962.5	1920.0	0.0	1953	1014.9	1920.0	0.0
1954	1067.2	1920.0	0.0	1955	1119.6	1920.0	0.0	1956	1172.0	1920.0	0.0
1957	1224.3	1920.0	0.0	1958	1276.7	1920.0	0.0	1959	1329.1	1920.0	0.0
1960	1381.4	1920.0	0.0	1961	1433.8	1920.0	0.0	1962	1486.2	1920.0	0.0
1963	1538.5	1920.0	0.0	1964	1590.9	1920.0	0.0	1965	1643.3	1920.0	0.0
1966	1695.6	1920.0	0.0	1967	1748.0	1920.0	0.0	1968	0.0	-39.3	0.0
1969	64.2	-39.3	0.0	1970	128.3	-39.3	0.0	1971	192.5	-39.3	0.0
1972	256.7	-39.3	0.0	1973	320.8	-39.3	0.0	1974	385.0	-39.3	0.0
1975	449.2	-39.3	0.0	1976	513.3	-39.3	0.0	1977	577.5	-39.3	0.0
1978	641.7	-39.3	0.0	1979	705.8	-39.3	0.0	1980	770.0	-39.3	0.0
1981	834.2	-39.3	0.0	1982	898.3	-39.3	0.0	1983	962.5	-39.3	0.0
1984	1014.9	-39.3	0.0	1985	1067.2	-39.3	0.0	1986	1119.6	-39.3	0.0
1987	1172.0	-39.3	0.0	1988	1224.3	-39.3	0.0	1989	1276.7	-39.3	0.0
1990	1329.1	-39.3	0.0	1991	1381.4	-39.3	0.0	1992	1433.8	-39.3	0.0
1993	1486.2	-39.3	0.0	1994	1538.5	-39.3	0.0	1995	1590.9	-39.3	0.0
1996	1643.3	-39.3	0.0	1997	1695.6	-39.3	0.0	1998	1748.0	-39.3	0.0
1999	-64.2	550.7	0.0	2000	-64.2	590.0	0.0	2001	-64.2	511.3	0.0
2002	-64.2	472.0	0.0	2003	-64.2	432.7	0.0	2004	-64.2	393.3	0.0
2005	-64.2	354.0	0.0	2006	-64.2	314.7	0.0	2007	-64.2	275.3	0.0
2008	-64.2	236.0	0.0	2009	-64.2	196.7	0.0	2010	-64.2	157.3	0.0
2011	-64.2	118.0	0.0	2012	-64.2	78.7	0.0	2013	-64.2	39.3	0.0
2014	-64.2	0.0	0.0	2015	-64.2	963.3	0.0	2016	-64.2	990.0	0.0
2017	-64.2	936.7	0.0	2018	-64.2	910.0	0.0	2019	-64.2	883.3	0.0
2020	-64.2	856.7	0.0	2021	-64.2	830.0	0.0	2022	-64.2	803.3	0.0
2023	-64.2	776.7	0.0	2024	-64.2	750.0	0.0	2025	-64.2	723.3	0.0
2026	-64.2	696.7	0.0	2027	-64.2	670.0	0.0	2028	-64.2	643.3	0.0
2029	-64.2	616.7	0.0	2030	-64.2	1410.0	0.0	2031	-64.2	1440.0	0.0
2032	-64.2	1380.0	0.0	2033	-64.2	1350.0	0.0	2034	-64.2	1320.0	0.0
2035	-64.2	1290.0	0.0	2036	-64.2	1260.0	0.0	2037	-64.2	1230.0	0.0
2038	-64.2	1200.0	0.0	2039	-64.2	1170.0	0.0	2040	-64.2	1140.0	0.0
2041	-64.2	1110.0	0.0	2042	-64.2	1080.0	0.0	2043	-64.2	1050.0	0.0
2044	-64.2	1020.0	0.0	2045	-64.2	1860.0	0.0	2046	-64.2	1890.0	0.0
2047	-64.2	1830.0	0.0	2048	-64.2	1800.0	0.0	2049	-64.2	1770.0	0.0
2050	-64.2	1740.0	0.0	2051	-64.2	1710.0	0.0	2052	-64.2	1680.0	0.0
2053	-64.2	1650.0	0.0	2054	-64.2	1620.0	0.0	2055	-64.2	1590.0	0.0
2056	-64.2	1560.0	0.0	2057	-64.2	1530.0	0.0	2058	-64.2	1500.0	0.0
2059	-64.2	1470.0	0.0	2060	-64.2	1920.0	0.0	2061	-64.2	-39.3	0.0
2062	1800.4	1860.0	0.0	2063	1800.4	1890.0	0.0	2064	1800.4	1830.0	0.0
2065	1800.4	1800.0	0.0	2066	1800.4	1770.0	0.0	2067	1800.4	1740.0	0.0
2068	1800.4	1710.0	0.0	2069	1800.4	1680.0	0.0	2070	1800.4	1650.0	0.0
2071	1800.4	1620.0	0.0	2072	1800.4	1590.0	0.0	2073	1800.4	1560.0	0.0
2074	1800.4	1530.0	0.0	2075	1800.4	1500.0	0.0	2076	1800.4	1470.0	0.0
2077	1800.4	1440.0	0.0	2078	1800.4	1410.0	0.0	2079	1800.4	1380.0	0.0
2080	1800.4	1350.0	0.0	2081	1800.4	1320.0	0.0	2082	1800.4	1290.0	0.0
2083	1800.4	1260.0	0.0	2084	1800.4	1230.0	0.0	2085	1800.4	1200.0	0.0
2086	1800.4	1170.0	0.0	2087	1800.4	1140.0	0.0	2088	1800.4	1110.0	0.0
2089	1800.4	1080.0	0.0	2090	1800.4	1050.0	0.0	2091	1800.4	1020.0	0.0
2092	1800.4	990.0	0.0	2093	1800.4	963.3	0.0	2094	1800.4	936.7	0.0
2095	1800.4	910.0	0.0	2096	1800.4	883.3	0.0	2097	1800.4	856.7	0.0
2098	1800.4	830.0	0.0	2099	1800.4	803.3	0.0	2100	1800.4	776.7	0.0
2101	1800.4	750.0	0.0	2102	1800.4	723.3	0.0	2103	1800.4	696.7	0.0
2104	1800.4	670.0	0.0	2105	1800.4	643.3	0.0	2106	1800.4	616.7	0.0
2107	1800.4	590.0	0.0	2108	1800.4	550.7	0.0	2109	1800.4	511.3	0.0
2110	1800.4	472.0	0.0	2111	1800.4	432.7	0.0	2112	1800.4	393.3	0.0
2113	1800.4	354.0	0.0	2114	1800.4	314.7	0.0	2115	1800.4	275.3	0.0
2116	1800.4	236.0	0.0	2117	1800.4	196.7	0.0	2118	1800.4	157.3	0.0
2119	1800.4	118.0	0.0	2120	1800.4	78.7	0.0	2121	1800.4	39.3	0.0
2122	1800.4	0.0	0.0	2123	1800.4	1920.0	0.0	2124	1800.4	-39.3	0.0
2125	-128.3	1980.0	0.0	2126	0.0	-78.7	0.0	2127	64.2	-78.7	0.0
2128	128.3	-78.7	0.0	2129	256.7	-78.7	0.0	2130	385.0	-78.7	0.0
2131	513.3	-78.7	0.0	2132	577.5	-78.7	0.0	2133	641.7	-78.7	0.0
2134	705.8	-78.7	0.0	2135	770.0	-78.7	0.0	2136	834.2	-78.7	0.0
2137	898.3	-78.7	0.0	2138	962.5	-78.7	0.0	2139	1014.9	-78.7	0.0

2140	1067.2	-78.7	0.0	2141	1119.6	-78.7	0.0	2142	1172.0	-78.7	0.0
2143	1224.3	-78.7	0.0	2144	1276.7	-78.7	0.0	2145	1329.1	-78.7	0.0
2146	1381.4	-78.7	0.0	2147	1486.2	-78.7	0.0	2148	1538.5	-78.7	0.0
2149	1590.9	-78.7	0.0	2150	1643.3	-78.7	0.0	2151	1695.6	-78.7	0.0
2152	1748.0	-78.7	0.0	2153	-64.2	-78.7	0.0	2154	1800.4	-78.7	0.0
2155	1852.7	1860.0	0.0	2156	1852.7	1890.0	0.0	2157	1852.7	1830.0	0.0
2158	1852.7	1800.0	0.0	2159	1852.7	1770.0	0.0	2160	1852.7	1740.0	0.0
2161	1852.7	1710.0	0.0	2162	1852.7	1680.0	0.0	2163	1852.7	1650.0	0.0
2164	1852.7	1620.0	0.0	2165	1852.7	1590.0	0.0	2166	1852.7	1560.0	0.0
2167	1852.7	1530.0	0.0	2168	1852.7	1500.0	0.0	2169	1852.7	1470.0	0.0
2170	1852.7	1440.0	0.0	2171	1852.7	1410.0	0.0	2172	1852.7	1380.0	0.0
2173	1852.7	1350.0	0.0	2174	1852.7	1320.0	0.0	2175	1852.7	1290.0	0.0
2176	1852.7	1260.0	0.0	2177	1852.7	1230.0	0.0	2178	1852.7	1200.0	0.0
2179	1852.7	1170.0	0.0	2180	1852.7	1140.0	0.0	2181	1852.7	1110.0	0.0
2182	1852.7	1080.0	0.0	2183	1852.7	1050.0	0.0	2184	1852.7	1020.0	0.0
2185	1852.7	990.0	0.0	2186	1852.7	963.3	0.0	2187	1852.7	936.7	0.0
2188	1852.7	910.0	0.0	2189	1852.7	883.3	0.0	2190	1852.7	856.7	0.0
2191	1852.7	830.0	0.0	2192	1852.7	803.3	0.0	2193	1852.7	776.7	0.0
2194	1852.7	750.0	0.0	2195	256.7	432.7	0.0	2196	64.2	39.3	0.0
2197	128.3	39.3	0.0	2198	192.5	39.3	0.0	2199	256.7	39.3	0.0
2200	320.8	39.3	0.0	2201	385.0	39.3	0.0	2202	449.2	39.3	0.0
2203	513.3	39.3	0.0	2204	577.5	39.3	0.0	2205	641.7	39.3	0.0
2206	705.8	39.3	0.0	2207	770.0	39.3	0.0	2208	834.2	39.3	0.0
2209	898.3	39.3	0.0	2210	347.5	420.0	0.0	2211	385.0	432.7	0.0
2212	449.2	432.7	0.0	2213	513.3	432.7	0.0	2214	577.5	432.7	0.0
2215	641.7	432.7	0.0	2216	705.8	432.7	0.0	2217	64.2	314.7	0.0
2218	162.5	314.7	0.0	2219	192.5	314.7	0.0	2220	256.7	314.7	0.0
2221	320.8	314.7	0.0	2222	347.6	314.6	0.0	2223	449.2	314.7	0.0
2224	513.3	314.7	0.0	2225	64.2	78.7	0.0	2226	128.3	78.7	0.0
2227	192.5	78.7	0.0	2228	256.7	78.7	0.0	2229	320.8	78.7	0.0
2230	385.0	78.7	0.0	2231	449.2	78.7	0.0	2232	513.3	78.7	0.0
2233	577.5	78.7	0.0	2234	641.7	78.7	0.0	2235	705.8	78.7	0.0
2236	770.0	78.7	0.0	2237	834.2	78.7	0.0	2238	898.3	78.7	0.0
2239	577.5	314.7	0.0	2240	641.7	314.7	0.0	2241	705.8	314.7	0.0
2242	770.0	314.7	0.0	2243	834.2	314.7	0.0	2244	898.3	314.7	0.0
2245	770.0	432.7	0.0	2246	834.2	432.7	0.0	2247	898.3	432.7	0.0
2248	770.0	550.7	0.0	2249	834.2	550.7	0.0	2250	64.2	511.3	0.0
2251	128.3	511.3	0.0	2252	192.5	511.3	0.0	2253	256.7	511.3	0.0
2254	64.2	118.0	0.0	2255	128.3	118.0	0.0	2256	192.5	118.0	0.0
2257	256.7	118.0	0.0	2258	320.8	118.0	0.0	2259	385.0	118.0	0.0
2260	449.2	118.0	0.0	2261	513.3	118.0	0.0	2262	577.5	118.0	0.0
2263	641.7	118.0	0.0	2264	705.8	118.0	0.0	2265	770.0	118.0	0.0
2266	834.2	118.0	0.0	2267	898.3	118.0	0.0	2268	320.8	511.3	0.0
2269	385.0	511.3	0.0	2270	449.2	511.3	0.0	2271	513.3	511.3	0.0
2272	577.5	511.3	0.0	2273	641.7	511.3	0.0	2274	64.2	354.0	0.0
2275	162.5	360.0	0.0	2276	192.5	354.0	0.0	2277	256.7	354.0	0.0
2278	320.8	354.0	0.0	2279	347.6	354.0	0.0	2280	449.2	354.0	0.0
2281	513.3	354.0	0.0	2282	577.5	354.0	0.0	2283	64.2	157.3	0.0
2284	162.5	162.5	0.0	2285	192.5	162.5	0.0	2286	256.7	162.5	0.0
2287	320.8	162.5	0.0	2288	347.5	162.5	0.0	2289	449.2	157.3	0.0
2290	513.3	157.3	0.0	2291	577.5	157.3	0.0	2292	641.7	157.3	0.0
2293	705.8	157.3	0.0	2294	770.0	157.3	0.0	2295	834.2	157.3	0.0
2296	898.3	157.3	0.0	2297	641.7	354.0	0.0	2298	705.8	354.0	0.0
2299	770.0	354.0	0.0	2300	834.2	354.0	0.0	2301	898.3	354.0	0.0
2302	705.8	511.3	0.0	2303	770.0	511.3	0.0	2304	834.2	511.3	0.0
2305	64.2	472.0	0.0	2306	128.3	472.0	0.0	2307	192.5	472.0	0.0
2308	256.7	472.0	0.0	2309	320.8	472.0	0.0	2310	385.0	472.0	0.0
2311	449.2	472.0	0.0	2312	64.2	196.7	0.0	2313	162.5	196.7	0.0
2314	192.5	196.7	0.0	2315	256.7	196.7	0.0	2316	320.8	196.7	0.0
2317	347.6	196.6	0.0	2318	449.2	196.7	0.0	2319	513.3	196.7	0.0
2320	577.5	196.7	0.0	2321	641.7	196.7	0.0	2322	705.8	196.7	0.0
2323	770.0	196.7	0.0	2324	834.2	196.7	0.0	2325	898.3	196.7	0.0
2326	513.3	472.0	0.0	2327	577.5	472.0	0.0	2328	641.7	472.0	0.0
2329	705.8	472.0	0.0	2330	770.0	472.0	0.0	2331	64.2	393.3	0.0
2332	128.3	393.3	0.0	2333	192.5	393.3	0.0	2334	256.7	393.3	0.0
2335	320.8	393.3	0.0	2336	347.8	393.3	0.0	2337	449.2	393.3	0.0
2338	513.3	393.3	0.0	2339	577.5	393.3	0.0	2340	641.7	393.3	0.0
2341	64.2	236.0	0.0	2342	162.5	236.0	0.0	2343	192.5	236.0	0.0
2344	256.7	236.0	0.0	2345	320.8	236.0	0.0	2346	347.6	236.0	0.0
2347	449.2	236.0	0.0	2348	513.3	236.0	0.0	2349	577.5	236.0	0.0
2350	641.7	236.0	0.0	2351	705.8	236.0	0.0	2352	770.0	236.0	0.0
2353	834.2	236.0	0.0	2354	898.3	236.0	0.0	2355	705.8	393.3	0.0
2356	770.0	393.3	0.0	2357	834.2	393.3	0.0	2358	898.3	393.3	0.0
2359	834.2	472.0	0.0	2360	898.3	472.0	0.0	2361	898.3	511.3	0.0
2362	898.3	550.7	0.0	2363	64.2	550.7	0.0	2364	128.3	550.7	0.0
2365	192.5	550.7	0.0	2366	256.7	550.7	0.0	2367	320.8	550.7	0.0
2368	385.0	550.7	0.0	2369	449.2	550.7	0.0	2370	64.2	275.3	0.0

2371	162.5	275.4	0.0	2372	192.5	275.3	0.0	2373	256.7	275.3	0.0
2374	320.8	275.3	0.0	2375	347.6	275.3	0.0	2376	449.2	275.3	0.0
2377	513.3	275.3	0.0	2378	577.5	275.3	0.0	2379	641.7	275.3	0.0
2380	705.8	275.3	0.0	2381	770.0	275.3	0.0	2382	834.2	275.3	0.0
2383	898.3	275.3	0.0	2384	513.3	550.7	0.0	2385	577.5	550.7	0.0
2386	641.7	550.7	0.0	2387	705.8	550.7	0.0	2388	64.2	432.7	0.0
2389	128.3	432.7	0.0	2390	192.5	432.7	0.0	2391	162.5	360.0	47.6
2392	162.5	314.7	47.6	2393	162.5	360.0	95.1	2394	162.5	314.7	95.1
2395	162.5	360.0	142.7	2396	162.5	314.7	142.7	2397	162.5	360.0	190.2
2398	162.5	314.7	190.2	2399	162.5	360.0	237.8	2400	162.5	314.7	237.8
2401	162.5	360.0	285.3	2402	162.5	314.7	285.3	2403	162.5	360.0	332.9
2404	162.5	314.7	332.9	2405	162.5	360.0	380.4	2406	162.5	314.7	380.4
2407	162.5	360.0	428.0	2408	162.5	314.7	428.0	2409	162.5	275.4	47.6
2410	162.5	275.4	95.1	2411	162.5	275.4	142.7	2412	162.5	275.4	190.2
2413	162.5	275.4	237.8	2414	162.5	275.4	285.3	2415	162.5	275.4	332.9
2416	162.5	275.4	380.4	2417	162.5	275.4	428.0	2418	162.5	236.0	47.6
2419	162.5	236.0	95.1	2420	162.5	236.0	142.7	2421	162.5	236.0	190.2
2422	162.5	236.0	237.8	2423	162.5	236.0	285.3	2424	162.5	236.0	332.9
2425	162.5	236.0	380.4	2426	162.5	236.0	428.0	2427	162.5	196.7	47.6
2428	162.5	196.7	95.1	2429	162.5	196.7	142.7	2430	162.5	196.7	190.2
2431	162.5	196.7	237.8	2432	162.5	196.7	285.3	2433	162.5	196.7	332.9
2434	162.5	196.7	380.4	2435	162.5	196.7	428.0	2436	162.5	162.5	47.6
2437	162.5	162.5	95.1	2438	162.5	162.5	142.7	2439	162.5	162.5	190.2
2440	162.5	162.5	237.8	2441	162.5	162.5	285.3	2442	162.5	162.5	332.9
2443	162.5	162.5	380.4	2444	162.5	162.5	428.0	2445	192.5	162.5	47.6
2446	192.5	162.5	95.1	2447	192.5	162.5	142.7	2448	192.5	162.5	190.2
2449	192.5	162.5	237.8	2450	192.5	162.5	285.3	2451	192.5	162.5	332.9
2452	192.5	162.5	380.4	2453	192.5	162.5	428.0	2454	224.6	162.5	47.6
2455	224.6	162.5	0.0	2456	224.6	162.5	95.1	2457	224.6	162.5	142.7
2458	224.6	162.5	190.2	2459	224.6	162.5	237.8	2460	224.6	162.5	285.3
2461	224.6	162.5	332.9	2462	224.6	162.5	380.4	2463	224.6	162.5	428.0
2464	256.7	162.5	47.6	2465	256.7	162.5	95.1	2466	256.7	162.5	142.7
2467	256.7	162.5	190.2	2468	256.7	162.5	237.8	2469	256.7	162.5	285.3
2470	256.7	162.5	332.9	2471	256.7	162.5	380.4	2472	256.7	162.5	428.0
2473	288.8	162.5	47.6	2474	288.8	162.5	0.0	2475	288.8	162.5	95.1
2476	288.8	162.5	142.7	2477	288.8	162.5	190.2	2478	288.8	162.5	237.8
2479	288.8	162.5	285.3	2480	288.8	162.5	332.9	2481	288.8	162.5	380.4
2482	288.8	162.5	428.0	2483	320.8	162.5	47.6	2484	320.8	162.5	95.1
2485	320.8	162.5	142.7	2486	320.8	162.5	190.2	2487	320.8	162.5	237.8
2488	320.8	162.5	285.3	2489	320.8	162.5	332.9	2490	320.8	162.5	380.4
2491	320.8	162.5	428.0	2492	347.5	162.5	47.6	2493	347.5	162.5	95.1
2494	347.5	162.5	142.7	2495	347.5	162.5	190.2	2496	347.5	162.5	237.8
2497	347.5	162.5	285.3	2498	347.5	162.5	332.9	2499	347.5	162.5	380.4
2500	347.5	162.5	428.0	2501	347.6	196.6	47.6	2502	347.6	196.6	95.1
2503	347.6	196.6	142.7	2504	347.6	196.6	190.2	2505	347.6	196.6	237.8
2506	347.6	196.6	285.3	2507	347.6	196.6	332.9	2508	347.6	196.6	380.4
2509	347.6	196.6	428.0	2510	347.6	236.0	47.6	2511	347.6	236.0	95.1
2512	347.6	236.0	142.7	2513	347.6	236.0	190.2	2514	347.6	236.0	237.8
2515	347.6	236.0	285.3	2516	347.6	236.0	332.9	2517	347.6	236.0	380.4
2518	347.6	236.0	428.0	2519	347.6	275.3	47.6	2520	347.6	275.3	95.1
2521	347.6	275.3	142.7	2522	347.6	275.3	190.2	2523	347.6	275.3	237.8
2524	347.6	275.3	285.3	2525	347.6	275.3	332.9	2526	347.6	275.3	380.4
2527	347.6	275.3	428.0	2528	347.6	314.6	47.6	2529	347.6	314.6	95.1
2530	347.6	314.6	142.7	2531	347.6	314.6	190.2	2532	347.6	314.6	237.8
2533	347.6	314.6	285.3	2534	347.6	314.6	332.9	2535	347.6	314.6	380.4
2536	347.6	314.6	428.0	2537	347.6	354.0	47.6	2538	347.6	354.0	95.1
2539	347.6	354.0	142.7	2540	347.6	354.0	190.2	2541	347.6	354.0	237.8
2542	347.6	354.0	285.3	2543	347.6	354.0	332.9	2544	347.6	354.0	380.4
2545	347.6	354.0	428.0	2546	347.8	393.3	47.6	2547	347.8	393.3	95.1
2548	347.8	393.3	142.7	2549	347.8	393.3	190.2	2550	347.8	393.3	237.8
2551	347.8	393.3	285.3	2552	347.8	393.3	332.9	2553	347.8	393.3	380.4
2554	347.8	393.3	428.0	2555	347.5	420.0	47.6	2556	347.5	420.0	95.1
2557	347.5	420.0	142.7	2558	347.5	420.0	190.2	2559	347.5	420.0	237.8
2560	347.5	420.0	285.3	2561	347.5	420.0	332.9	2562	347.5	420.0	380.4
2563	347.5	420.0	428.0	2564	162.5	360.0	473.2	2565	162.5	314.7	473.2
2566	162.5	360.0	518.4	2567	162.5	314.7	518.4	2568	162.5	360.0	563.7
2569	162.5	314.7	563.7	2570	162.5	360.0	608.9	2571	162.5	314.7	608.9
2572	162.5	360.0	654.1	2573	162.5	314.7	654.1	2574	162.5	360.0	699.3
2575	162.5	314.7	699.3	2576	162.5	360.0	744.6	2577	162.5	314.7	744.6
2578	162.5	360.0	789.8	2579	162.5	314.7	789.8	2580	162.5	360.0	835.0
2581	162.5	314.7	835.0	2582	162.5	275.4	473.2	2583	162.5	275.4	518.4
2584	162.5	275.4	563.7	2585	162.5	275.4	608.9	2586	162.5	275.4	654.1
2587	162.5	275.4	699.3	2588	162.5	275.4	744.6	2589	162.5	275.4	789.8
2590	162.5	275.4	835.0	2591	162.5	236.0	473.2	2592	162.5	236.0	518.4
2593	162.5	236.0	563.7	2594	162.5	236.0	608.9	2595	162.5	236.0	654.1
2596	162.5	236.0	699.3	2597	162.5	236.0	744.6	2598	162.5	236.0	789.8
2599	162.5	236.0	835.0	2600	162.5	196.7	473.2	2601	162.5	196.7	518.4

2602	162.5	196.7	563.7	2603	162.5	196.7	608.9	2604	162.5	196.7	654.1
2605	162.5	196.7	699.3	2606	162.5	196.7	744.6	2607	162.5	196.7	789.8
2608	162.5	196.7	835.0	2609	162.5	162.5	473.2	2610	162.5	162.5	518.4
2611	162.5	162.5	563.7	2612	162.5	162.5	608.9	2613	162.5	162.5	654.1
2614	162.5	162.5	699.3	2615	162.5	162.5	744.6	2616	162.5	162.5	789.8
2617	162.5	162.5	835.0	2618	192.5	162.5	473.2	2619	192.5	162.5	518.4
2620	192.5	162.5	563.7	2621	192.5	162.5	608.9	2622	192.5	162.5	654.1
2623	192.5	162.5	699.3	2624	192.5	162.5	744.6	2625	192.5	162.5	789.8
2626	192.5	162.5	835.0	2627	224.6	162.5	473.2	2628	224.6	162.5	518.4
2629	224.6	162.5	563.7	2630	224.6	162.5	608.9	2631	224.6	162.5	654.1
2632	224.6	162.5	699.3	2633	224.6	162.5	744.6	2634	224.6	162.5	789.8
2635	224.6	162.5	835.0	2636	256.7	162.5	473.2	2637	256.7	162.5	518.4
2638	256.7	162.5	563.7	2639	256.7	162.5	608.9	2640	256.7	162.5	654.1
2641	256.7	162.5	699.3	2642	256.7	162.5	744.6	2643	256.7	162.5	789.8
2644	256.7	162.5	835.0	2645	288.8	162.5	473.2	2646	288.8	162.5	518.4
2647	288.8	162.5	563.7	2648	288.8	162.5	608.9	2649	288.8	162.5	654.1
2650	288.8	162.5	699.3	2651	288.8	162.5	744.6	2652	288.8	162.5	789.8
2653	288.8	162.5	835.0	2654	320.8	162.5	473.2	2655	320.8	162.5	518.4
2656	320.8	162.5	563.7	2657	320.8	162.5	608.9	2658	320.8	162.5	654.1
2659	320.8	162.5	699.3	2660	320.8	162.5	744.6	2661	320.8	162.5	789.8
2662	320.8	162.5	835.0	2663	347.5	162.5	473.2	2664	347.5	162.5	518.4
2665	347.5	162.5	563.7	2666	347.5	162.5	608.9	2667	347.5	162.5	654.1
2668	347.5	162.5	699.3	2669	347.5	162.5	744.6	2670	347.5	162.5	789.8
2671	347.5	162.5	835.0	2672	347.6	196.6	473.2	2673	347.6	196.6	518.4
2674	347.6	196.6	563.7	2675	347.6	196.6	608.9	2676	347.6	196.6	654.1
2677	347.6	196.6	699.3	2678	347.6	196.6	744.6	2679	347.6	196.6	789.8
2680	347.6	196.6	835.0	2681	347.6	236.0	473.2	2682	347.6	236.0	518.4
2683	347.6	236.0	563.7	2684	347.6	236.0	608.9	2685	347.6	236.0	654.1
2686	347.6	236.0	699.3	2687	347.6	236.0	744.6	2688	347.6	236.0	789.8
2689	347.6	236.0	835.0	2690	347.6	275.3	473.2	2691	347.6	275.3	518.4
2692	347.6	275.3	563.7	2693	347.6	275.3	608.9	2694	347.6	275.3	654.1
2695	347.6	275.3	699.3	2696	347.6	275.3	744.6	2697	347.6	275.3	789.8
2698	347.6	275.3	835.0	2699	347.6	314.6	473.2	2700	347.6	314.6	518.4
2701	347.6	314.6	563.7	2702	347.6	314.6	608.9	2703	347.6	314.6	654.1
2704	347.6	314.6	699.3	2705	347.6	314.6	744.6	2706	347.6	314.6	789.8
2707	347.6	314.6	835.0	2708	347.6	354.0	473.2	2709	347.6	354.0	518.4
2710	347.6	354.0	563.7	2711	347.6	354.0	608.9	2712	347.6	354.0	654.1
2713	347.6	354.0	699.3	2714	347.6	354.0	744.6	2715	347.6	354.0	789.8
2716	347.6	354.0	835.0	2717	347.8	393.3	473.2	2718	347.8	393.3	518.4
2719	347.8	393.3	563.7	2720	347.8	393.3	608.9	2721	347.8	393.3	654.1
2722	347.8	393.3	699.3	2723	347.8	393.3	744.6	2724	347.8	393.3	789.8
2725	347.8	393.3	835.0	2726	347.5	420.0	473.2	2727	347.5	420.0	518.4
2728	347.5	420.0	563.7	2729	347.5	420.0	608.9	2730	347.5	420.0	654.1
2731	347.5	420.0	699.3	2732	347.5	420.0	744.6	2733	347.5	420.0	789.8
2734	347.5	420.0	835.0								

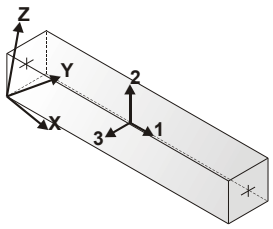
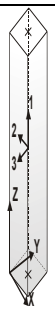


14_MOD_NUMERAZIONE_NODI

MODELLAZIONE STRUTTURA: ELEMENTI TRAVE

TABELLA DATI TRAVI

Il programma utilizza per la modellazione elementi a due nodi denominati in generale travi.
Ogni elemento trave è individuato dal nodo iniziale e dal nodo finale.
Ogni elemento è caratterizzato da un insieme di proprietà riportate in tabella che ne completano la modellazione.

 orientamento elementi 2D non verticali	 orientamento elementi 2D verticali

In particolare per ogni elemento viene indicato in tabella:

Elem.	numero dell'elemento
Note	codice di comportamento: trave, trave di fondazione, pilastro, asta, asta tesa, asta compressa,
Nodo I (J)	numero del nodo iniziale (finale)
Mat.	codice del materiale assegnato all'elemento
Sez.	codice della sezione assegnata all'elemento
Rotaz.	valore della rotazione dell'elemento, attorno al proprio asse, nel caso in cui l'orientamento di default non sia adottabile; l'orientamento di default prevede per gli elementi non verticali l'asse 2 contenuto nel piano verticale e l'asse 3 orizzontale, per gli elementi verticali l'asse 2 diretto secondo X negativo e l'asse 3 diretto secondo Y negativo
Svincolo I (J)	codici di svincolo per le azioni interne; i primi sei codici si riferiscono al nodo iniziale, i restanti sei al nodo finale (il valore 1 indica che la relativa azione interna non è attiva)
Wink V	costante di sottofondo (coefficiente di Winkler) per la modellazione della trave su suolo elastico
Wink O	costante di sottofondo (coefficiente di Winkler) per la modellazione del suolo elastico orizzontale

Elem.	Note	Nodo I	Nodo J	Mat.	Sez.	Crit.	Rotaz. gradi	Svincolo I	Svincolo J	Wink V daN/cm3	Wink O daN/cm3
1	Pilas.	1	30	3	18	1					
2	Pilas.	2	31	3	2	1					
3	Pilas.	3	32	3	2	1					
4	Pilas.	4	33	3	2	1	90.00				
5	Pilas.	5	34	3	14	1	90.00				
6	Pilas.	6	35	3	2	1	90.00				
7	Pilas.	7	36	3	2	1	90.00				
8	Pilas.	8	37	3	14	1	90.00				
9	Pilas.	9	38	3	2	1	90.00				
10	Pilas.	10	39	3	2	1	90.00				
11	Pilas.	11	40	3	14	1	90.00				
12	Pilas.	12	41	3	2	1	90.00				
13	Pilas.	13	42	3	2	1					
14	Pilas.	14	43	3	2	1					
15	Pilas.	15	44	3	2	1					
16	Trave	27	47	3	6	1					
17	Trave	47	17	3	15	1					
18	Pilas.	17	24	3	4	1					
19	Trave	52	54	3	7	1					
20	Trave	54	56	3	7	1					
21	Trave	56	58	3	7	1					
22	Trave	58	24	3	15	1					
23	Trave	60	22	3	16	1					
24	Trave	22	45	3	6	1					
25	Trave	45	21	3	6	1					
26	Trave	21	16	3	16	1					
27	Trave	59	20	3	6	1					
28	Pilas.	21	23	3	14	1	90.00				
29	Trave	57	50	3	8	1					
30	Trave f.	1	90	3	1	2				0.68	0.42
31	Trave f.	2	1727	3	1	2				0.68	0.42
32	Trave f.	4	63	3	1	2				0.68	0.42
33	Trave f.	5	1503	3	1	2				0.68	0.42
34	Trave f.	7	315	3	1	2				0.68	0.42
35	Trave f.	8	1279	3	1	2				0.68	0.42
36	Trave f.	10	553	3	1	2				0.68	0.42
37	Trave f.	11	1042	3	1	2				0.68	0.42
38	Trave f.	13	791	3	1	2				0.68	0.42
39	Trave f.	14	1028	3	1	2				0.68	0.42
40	Trave	23	51	3	8	1					
41	Trave	25	28	3	8	1					
42	Trave	18	26	3	16	1					
43	Trave	26	46	3	6	1					
44	Trave	46	29	3	6	1					
45	Trave	29	19	3	16	1					
46	Trave	56	57	3	7	1					
47	Trave	48	49	3	8	1					
48	Trave	53	55	3	16	1					
49	Trave f.	1	88	3	1	2				0.68	0.42
50	Trave f.	4	340	3	1	2				0.68	0.42
51	Trave f.	7	578	3	1	2				0.68	0.42
52	Trave f.	10	816	3	1	2				0.68	0.42
53	Trave	24	25	3	7	1					
54	Trave	55	57	3	7	1					
55	Pilas.	30	59	3	18	1					
56	Pilas.	31	60	3	3	1					
57	Pilas.	32	18	3	3	1					
58	Trave f.	2	312	3	1	2				0.68	0.42
59	Trave f.	5	550	3	1	2				0.68	0.42
60	Trave f.	8	788	3	1	2				0.68	0.42
61	Trave f.	11	1026	3	1	2				0.68	0.42
62	Trave	55	49	3	8	1					
63	Pilas.	33	20	3	3	1	90.00				
64	Pilas.	34	22	3	14	1	90.00				
65	Pilas.	35	26	3	3	1	90.00				
66	Pilas.	36	27	3	3	1	90.00				
67	Trave f.	3	1936	3	1	2				0.68	0.42
68	Trave f.	6	1712	3	1	2				0.68	0.42
69	Trave f.	9	1488	3	1	2				0.68	0.42
70	Trave f.	12	1264	3	1	2				0.68	0.42
71	Trave	54	55	3	7	1					
72	Pilas.	37	45	3	14	1	90.00				
73	Pilas.	38	46	3	3	1	90.00				

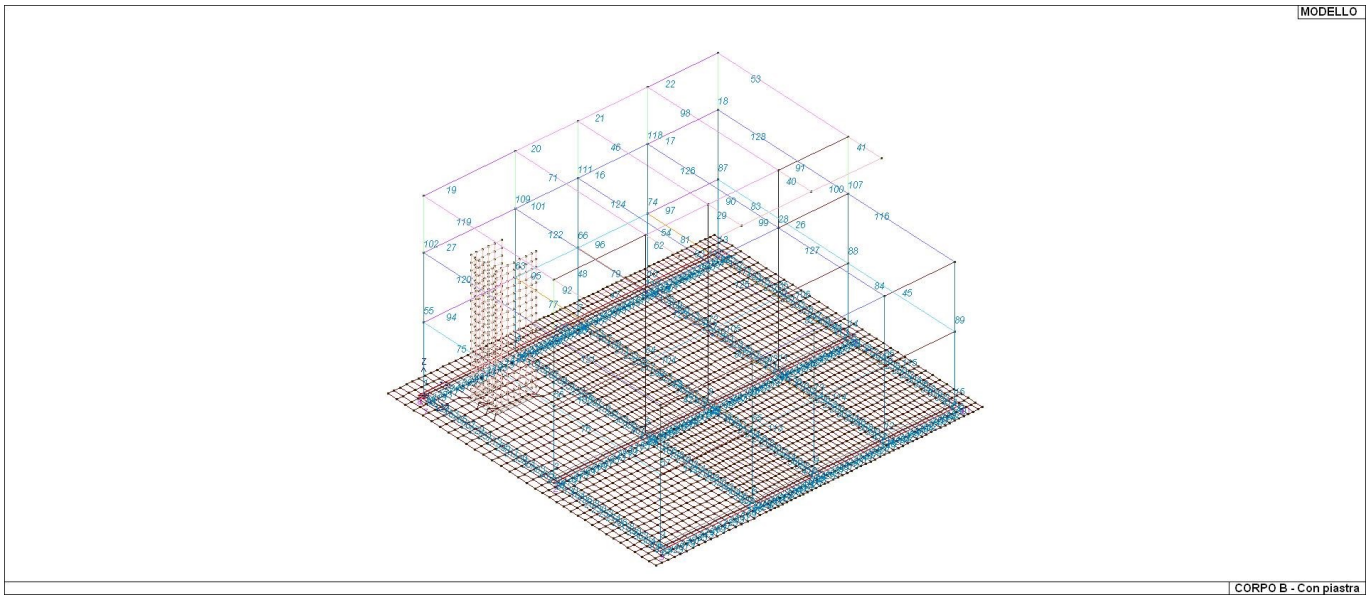
74	Pilas.	39	47	3	3	1	90.00		
75	Trave	30	31	3	5	1			
76	Trave	31	32	3	5	1			
77	Trave	33	34	3	10	1			
78	Trave	34	35	3	10	1			
79	Trave	36	37	3	10	1			
80	Trave	37	38	3	10	1			
81	Trave	39	40	3	10	1			
82	Trave	40	41	3	10	1			
83	Trave	42	43	3	5	1			
84	Trave	43	44	3	5	1			
85	Pilas.	40	21	3	14	1	90.00		
86	Pilas.	41	29	3	3	1	90.00		
87	Pilas.	42	17	3	3	1			
88	Pilas.	43	16	3	3	1			
89	Pilas.	44	19	3	3	1			
90	Trave	57	23	3	7	1			
91	Trave	23	25	3	16	1			
92	Trave	53	48	3	8	1			
93	Trave	49	50	3	8	1			
94	Trave	30	33	3	5	1			
95	Trave	33	36	3	5	1			
96	Trave	36	39	3	5	1			
97	Trave	39	42	3	15	1			
98	Trave	58	23	3	7	1			
99	Trave	50	51	3	8	1			
100	Trave	51	28	3	8	1			
101	Trave	20	27	3	6	1			
102	Pilas.	59	52	3	18	1			
103	Trave	31	34	3	16	1			
104	Trave	34	37	3	5	1			
105	Trave	37	40	3	5	1			
106	Trave	40	43	3	16	1			
107	Pilas.	16	25	3	4	1			
108	Pilas.	60	53	3	4	1			
109	Pilas.	20	54	3	4	1	90.00		
110	Pilas.	22	55	3	14	1	90.00		
111	Pilas.	27	56	3	4	1	90.00		
112	Trave	32	35	3	16	1			
113	Trave	35	38	3	5	1			
114	Trave	38	41	3	5	1			
115	Trave	41	44	3	16	1			
116	Trave	16	19	3	6	1			
117	Pilas.	45	57	3	14	1	90.00		
118	Pilas.	47	58	3	4	1	90.00		
119	Trave	52	53	3	7	1			
120	Trave	59	60	3	6	1			
121	Trave	60	18	3	6	1			
122	Trave	20	22	3	6	1			
123	Trave	22	26	3	6	1			
124	Trave	27	45	3	6	1			
125	Trave	45	46	3	6	1			
126	Trave	47	21	3	6	1			
127	Trave	21	29	3	6	1			
128	Trave	17	16	3	6	1			
129	Trave f.	90	106	3	1	2		0.68	0.42
130	Trave f.	1727	1742	3	1	2		0.68	0.42
131	Trave f.	63	92	3	1	2		0.68	0.42
132	Trave f.	1503	1518	3	1	2		0.68	0.42
133	Trave f.	315	343	3	1	2		0.68	0.42
134	Trave f.	1279	1294	3	1	2		0.68	0.42
135	Trave f.	553	581	3	1	2		0.68	0.42
136	Trave f.	1042	1058	3	1	2		0.68	0.42
137	Trave f.	791	819	3	1	2		0.68	0.42
138	Trave f.	1028	1044	3	1	2		0.68	0.42
139	Trave f.	61	4	3	1	2		0.68	0.42
140	Trave f.	313	7	3	1	2		0.68	0.42
141	Trave f.	551	10	3	1	2		0.68	0.42
142	Trave f.	789	13	3	1	2		0.68	0.42
143	Trave f.	299	5	3	1	2		0.68	0.42
144	Trave f.	537	8	3	1	2		0.68	0.42
145	Trave f.	775	11	3	1	2		0.68	0.42
146	Trave f.	1013	14	3	1	2		0.68	0.42
147	Trave f.	1923	6	3	1	2		0.68	0.42
148	Trave f.	1699	9	3	1	2		0.68	0.42
149	Trave f.	1475	12	3	1	2		0.68	0.42
150	Trave f.	1251	15	3	1	2		0.68	0.42

151	Trave f.	64	61	3	1	2	0.68	0.42
152	Trave f.	316	313	3	1	2	0.68	0.42
153	Trave f.	554	551	3	1	2	0.68	0.42
154	Trave f.	792	789	3	1	2	0.68	0.42
155	Trave f.	300	299	3	1	2	0.68	0.42
156	Trave f.	538	537	3	1	2	0.68	0.42
157	Trave f.	776	775	3	1	2	0.68	0.42
158	Trave f.	1014	1013	3	1	2	0.68	0.42
159	Trave f.	1924	1923	3	1	2	0.68	0.42
160	Trave f.	1700	1699	3	1	2	0.68	0.42
161	Trave f.	1476	1475	3	1	2	0.68	0.42
162	Trave f.	1252	1251	3	1	2	0.68	0.42
163	Trave f.	106	122	3	1	2	0.68	0.42
164	Trave f.	1742	1757	3	1	2	0.68	0.42
165	Trave f.	92	108	3	1	2	0.68	0.42
166	Trave f.	1518	1533	3	1	2	0.68	0.42
167	Trave f.	343	358	3	1	2	0.68	0.42
168	Trave f.	1294	1309	3	1	2	0.68	0.42
169	Trave f.	581	596	3	1	2	0.68	0.42
170	Trave f.	1058	1074	3	1	2	0.68	0.42
171	Trave f.	819	834	3	1	2	0.68	0.42
172	Trave f.	1044	1060	3	1	2	0.68	0.42
173	Trave f.	66	64	3	1	2	0.68	0.42
174	Trave f.	318	316	3	1	2	0.68	0.42
175	Trave f.	556	554	3	1	2	0.68	0.42
176	Trave f.	794	792	3	1	2	0.68	0.42
177	Trave f.	301	300	3	1	2	0.68	0.42
178	Trave f.	539	538	3	1	2	0.68	0.42
179	Trave f.	777	776	3	1	2	0.68	0.42
180	Trave f.	1015	1014	3	1	2	0.68	0.42
181	Trave f.	1925	1924	3	1	2	0.68	0.42
182	Trave f.	1701	1700	3	1	2	0.68	0.42
183	Trave f.	1477	1476	3	1	2	0.68	0.42
184	Trave f.	1253	1252	3	1	2	0.68	0.42
185	Trave f.	122	138	3	1	2	0.68	0.42
186	Trave f.	1757	1772	3	1	2	0.68	0.42
187	Trave f.	108	124	3	1	2	0.68	0.42
188	Trave f.	1533	1548	3	1	2	0.68	0.42
189	Trave f.	358	373	3	1	2	0.68	0.42
190	Trave f.	1309	1324	3	1	2	0.68	0.42
191	Trave f.	596	611	3	1	2	0.68	0.42
192	Trave f.	1074	1090	3	1	2	0.68	0.42
193	Trave f.	834	849	3	1	2	0.68	0.42
194	Trave f.	1060	1076	3	1	2	0.68	0.42
195	Trave f.	68	66	3	1	2	0.68	0.42
196	Trave f.	320	318	3	1	2	0.68	0.42
197	Trave f.	558	556	3	1	2	0.68	0.42
198	Trave f.	796	794	3	1	2	0.68	0.42
199	Trave f.	302	301	3	1	2	0.68	0.42
200	Trave f.	540	539	3	1	2	0.68	0.42
201	Trave f.	778	777	3	1	2	0.68	0.42
202	Trave f.	1016	1015	3	1	2	0.68	0.42
203	Trave f.	1926	1925	3	1	2	0.68	0.42
204	Trave f.	1702	1701	3	1	2	0.68	0.42
205	Trave f.	1478	1477	3	1	2	0.68	0.42
206	Trave f.	1254	1253	3	1	2	0.68	0.42
207	Trave f.	138	154	3	1	2	0.68	0.42
208	Trave f.	1772	1787	3	1	2	0.68	0.42
209	Trave f.	124	140	3	1	2	0.68	0.42
210	Trave f.	1548	1563	3	1	2	0.68	0.42
211	Trave f.	373	388	3	1	2	0.68	0.42
212	Trave f.	1324	1339	3	1	2	0.68	0.42
213	Trave f.	611	626	3	1	2	0.68	0.42
214	Trave f.	1090	1106	3	1	2	0.68	0.42
215	Trave f.	849	864	3	1	2	0.68	0.42
216	Trave f.	1076	1092	3	1	2	0.68	0.42
217	Trave f.	70	68	3	1	2	0.68	0.42
218	Trave f.	322	320	3	1	2	0.68	0.42
219	Trave f.	560	558	3	1	2	0.68	0.42
220	Trave f.	798	796	3	1	2	0.68	0.42
221	Trave f.	303	302	3	1	2	0.68	0.42
222	Trave f.	541	540	3	1	2	0.68	0.42
223	Trave f.	779	778	3	1	2	0.68	0.42
224	Trave f.	1017	1016	3	1	2	0.68	0.42
225	Trave f.	1927	1926	3	1	2	0.68	0.42
226	Trave f.	1703	1702	3	1	2	0.68	0.42
227	Trave f.	1479	1478	3	1	2	0.68	0.42

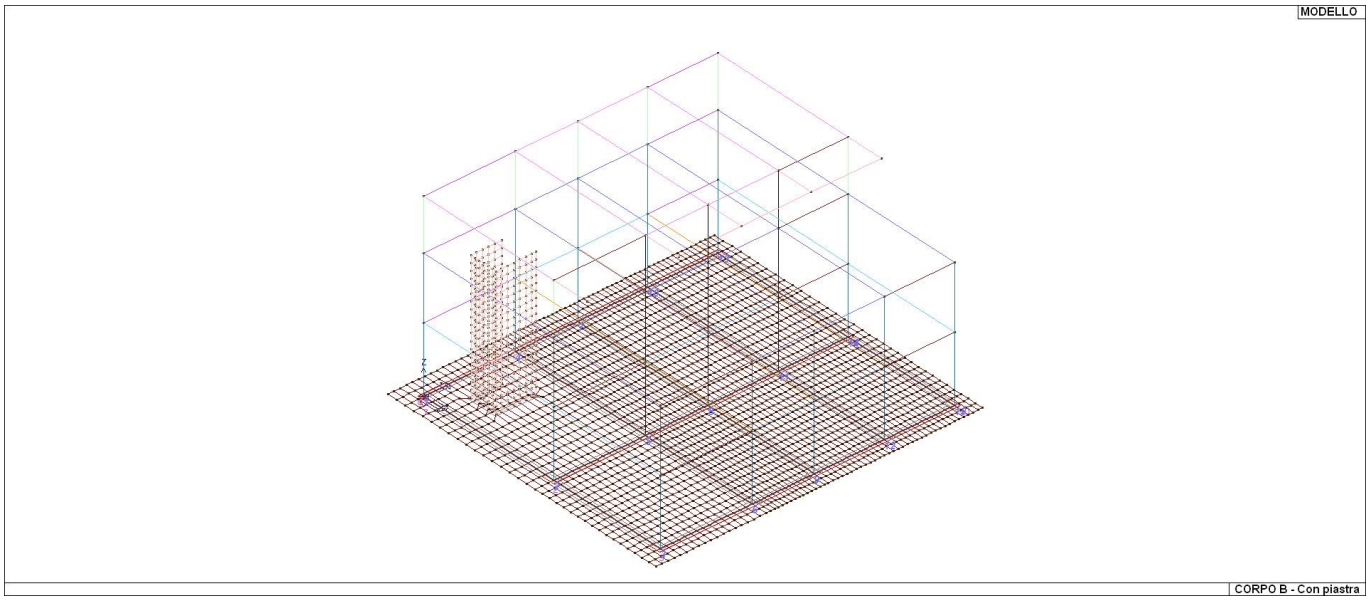
228	Trave f.	1255	1254	3	1	2	0.68	0.42
229	Trave f.	154	170	3	1	2	0.68	0.42
230	Trave f.	1787	1802	3	1	2	0.68	0.42
231	Trave f.	140	156	3	1	2	0.68	0.42
232	Trave f.	1563	1578	3	1	2	0.68	0.42
233	Trave f.	388	403	3	1	2	0.68	0.42
234	Trave f.	1339	1354	3	1	2	0.68	0.42
235	Trave f.	626	641	3	1	2	0.68	0.42
236	Trave f.	1106	1122	3	1	2	0.68	0.42
237	Trave f.	864	879	3	1	2	0.68	0.42
238	Trave f.	1092	1108	3	1	2	0.68	0.42
239	Trave f.	72	70	3	1	2	0.68	0.42
240	Trave f.	324	322	3	1	2	0.68	0.42
241	Trave f.	562	560	3	1	2	0.68	0.42
242	Trave f.	800	798	3	1	2	0.68	0.42
243	Trave f.	304	303	3	1	2	0.68	0.42
244	Trave f.	542	541	3	1	2	0.68	0.42
245	Trave f.	780	779	3	1	2	0.68	0.42
246	Trave f.	1018	1017	3	1	2	0.68	0.42
247	Trave f.	1928	1927	3	1	2	0.68	0.42
248	Trave f.	1704	1703	3	1	2	0.68	0.42
249	Trave f.	1480	1479	3	1	2	0.68	0.42
250	Trave f.	1256	1255	3	1	2	0.68	0.42
251	Trave f.	170	186	3	1	2	0.68	0.42
252	Trave f.	1802	1817	3	1	2	0.68	0.42
253	Trave f.	156	172	3	1	2	0.68	0.42
254	Trave f.	1578	1593	3	1	2	0.68	0.42
255	Trave f.	403	418	3	1	2	0.68	0.42
256	Trave f.	1354	1369	3	1	2	0.68	0.42
257	Trave f.	641	656	3	1	2	0.68	0.42
258	Trave f.	1122	1138	3	1	2	0.68	0.42
259	Trave f.	879	894	3	1	2	0.68	0.42
260	Trave f.	1108	1124	3	1	2	0.68	0.42
261	Trave f.	74	72	3	1	2	0.68	0.42
262	Trave f.	326	324	3	1	2	0.68	0.42
263	Trave f.	564	562	3	1	2	0.68	0.42
264	Trave f.	802	800	3	1	2	0.68	0.42
265	Trave f.	305	304	3	1	2	0.68	0.42
266	Trave f.	543	542	3	1	2	0.68	0.42
267	Trave f.	781	780	3	1	2	0.68	0.42
268	Trave f.	1019	1018	3	1	2	0.68	0.42
269	Trave f.	1929	1928	3	1	2	0.68	0.42
270	Trave f.	1705	1704	3	1	2	0.68	0.42
271	Trave f.	1481	1480	3	1	2	0.68	0.42
272	Trave f.	1257	1256	3	1	2	0.68	0.42
273	Trave f.	186	202	3	1	2	0.68	0.42
274	Trave f.	1817	1832	3	1	2	0.68	0.42
275	Trave f.	172	188	3	1	2	0.68	0.42
276	Trave f.	1593	1608	3	1	2	0.68	0.42
277	Trave f.	418	433	3	1	2	0.68	0.42
278	Trave f.	1369	1384	3	1	2	0.68	0.42
279	Trave f.	656	671	3	1	2	0.68	0.42
280	Trave f.	1138	1154	3	1	2	0.68	0.42
281	Trave f.	894	909	3	1	2	0.68	0.42
282	Trave f.	1124	1140	3	1	2	0.68	0.42
283	Trave f.	76	74	3	1	2	0.68	0.42
284	Trave f.	328	326	3	1	2	0.68	0.42
285	Trave f.	566	564	3	1	2	0.68	0.42
286	Trave f.	804	802	3	1	2	0.68	0.42
287	Trave f.	306	305	3	1	2	0.68	0.42
288	Trave f.	544	543	3	1	2	0.68	0.42
289	Trave f.	782	781	3	1	2	0.68	0.42
290	Trave f.	1020	1019	3	1	2	0.68	0.42
291	Trave f.	1930	1929	3	1	2	0.68	0.42
292	Trave f.	1706	1705	3	1	2	0.68	0.42
293	Trave f.	1482	1481	3	1	2	0.68	0.42
294	Trave f.	1258	1257	3	1	2	0.68	0.42
295	Trave f.	202	218	3	1	2	0.68	0.42
296	Trave f.	1832	1847	3	1	2	0.68	0.42
297	Trave f.	188	204	3	1	2	0.68	0.42
298	Trave f.	1608	1623	3	1	2	0.68	0.42
299	Trave f.	433	448	3	1	2	0.68	0.42
300	Trave f.	1384	1399	3	1	2	0.68	0.42
301	Trave f.	671	686	3	1	2	0.68	0.42
302	Trave f.	1154	1170	3	1	2	0.68	0.42
303	Trave f.	909	924	3	1	2	0.68	0.42
304	Trave f.	1140	1156	3	1	2	0.68	0.42

305	Trave f.	78	76	3	1	2	0.68	0.42
306	Trave f.	330	328	3	1	2	0.68	0.42
307	Trave f.	568	566	3	1	2	0.68	0.42
308	Trave f.	806	804	3	1	2	0.68	0.42
309	Trave f.	307	306	3	1	2	0.68	0.42
310	Trave f.	545	544	3	1	2	0.68	0.42
311	Trave f.	783	782	3	1	2	0.68	0.42
312	Trave f.	1021	1020	3	1	2	0.68	0.42
313	Trave f.	1931	1930	3	1	2	0.68	0.42
314	Trave f.	1707	1706	3	1	2	0.68	0.42
315	Trave f.	1483	1482	3	1	2	0.68	0.42
316	Trave f.	1259	1258	3	1	2	0.68	0.42
317	Trave f.	218	234	3	1	2	0.68	0.42
318	Trave f.	1847	1862	3	1	2	0.68	0.42
319	Trave f.	204	220	3	1	2	0.68	0.42
320	Trave f.	1623	1638	3	1	2	0.68	0.42
321	Trave f.	448	463	3	1	2	0.68	0.42
322	Trave f.	1399	1414	3	1	2	0.68	0.42
323	Trave f.	686	701	3	1	2	0.68	0.42
324	Trave f.	1170	1186	3	1	2	0.68	0.42
325	Trave f.	924	939	3	1	2	0.68	0.42
326	Trave f.	1156	1172	3	1	2	0.68	0.42
327	Trave f.	80	78	3	1	2	0.68	0.42
328	Trave f.	332	330	3	1	2	0.68	0.42
329	Trave f.	570	568	3	1	2	0.68	0.42
330	Trave f.	808	806	3	1	2	0.68	0.42
331	Trave f.	308	307	3	1	2	0.68	0.42
332	Trave f.	546	545	3	1	2	0.68	0.42
333	Trave f.	784	783	3	1	2	0.68	0.42
334	Trave f.	1022	1021	3	1	2	0.68	0.42
335	Trave f.	1932	1931	3	1	2	0.68	0.42
336	Trave f.	1708	1707	3	1	2	0.68	0.42
337	Trave f.	1484	1483	3	1	2	0.68	0.42
338	Trave f.	1260	1259	3	1	2	0.68	0.42
339	Trave f.	234	250	3	1	2	0.68	0.42
340	Trave f.	1862	1877	3	1	2	0.68	0.42
341	Trave f.	220	236	3	1	2	0.68	0.42
342	Trave f.	1638	1653	3	1	2	0.68	0.42
343	Trave f.	463	478	3	1	2	0.68	0.42
344	Trave f.	1414	1429	3	1	2	0.68	0.42
345	Trave f.	701	716	3	1	2	0.68	0.42
346	Trave f.	1186	1202	3	1	2	0.68	0.42
347	Trave f.	939	954	3	1	2	0.68	0.42
348	Trave f.	1172	1188	3	1	2	0.68	0.42
349	Trave f.	82	80	3	1	2	0.68	0.42
350	Trave f.	334	332	3	1	2	0.68	0.42
351	Trave f.	572	570	3	1	2	0.68	0.42
352	Trave f.	810	808	3	1	2	0.68	0.42
353	Trave f.	309	308	3	1	2	0.68	0.42
354	Trave f.	547	546	3	1	2	0.68	0.42
355	Trave f.	785	784	3	1	2	0.68	0.42
356	Trave f.	1023	1022	3	1	2	0.68	0.42
357	Trave f.	1933	1932	3	1	2	0.68	0.42
358	Trave f.	1709	1708	3	1	2	0.68	0.42
359	Trave f.	1485	1484	3	1	2	0.68	0.42
360	Trave f.	1261	1260	3	1	2	0.68	0.42
361	Trave f.	250	266	3	1	2	0.68	0.42
362	Trave f.	1877	1892	3	1	2	0.68	0.42
363	Trave f.	236	252	3	1	2	0.68	0.42
364	Trave f.	1653	1668	3	1	2	0.68	0.42
365	Trave f.	478	493	3	1	2	0.68	0.42
366	Trave f.	1429	1444	3	1	2	0.68	0.42
367	Trave f.	716	731	3	1	2	0.68	0.42
368	Trave f.	1202	1218	3	1	2	0.68	0.42
369	Trave f.	954	969	3	1	2	0.68	0.42
370	Trave f.	1188	1204	3	1	2	0.68	0.42
371	Trave f.	84	82	3	1	2	0.68	0.42
372	Trave f.	336	334	3	1	2	0.68	0.42
373	Trave f.	574	572	3	1	2	0.68	0.42
374	Trave f.	812	810	3	1	2	0.68	0.42
375	Trave f.	310	309	3	1	2	0.68	0.42
376	Trave f.	548	547	3	1	2	0.68	0.42
377	Trave f.	786	785	3	1	2	0.68	0.42
378	Trave f.	1024	1023	3	1	2	0.68	0.42
379	Trave f.	1934	1933	3	1	2	0.68	0.42
380	Trave f.	1710	1709	3	1	2	0.68	0.42
381	Trave f.	1486	1485	3	1	2	0.68	0.42

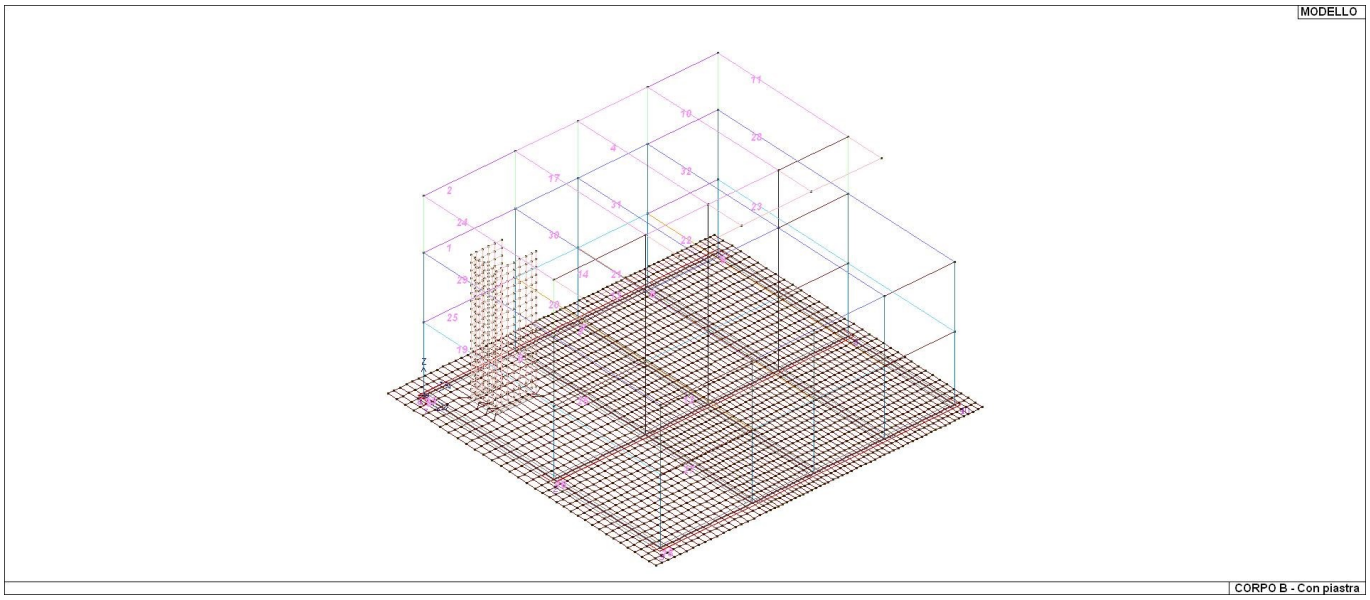
382	Trave f.	1262	1261	3	1	2	0.68	0.42
383	Trave f.	266	282	3	1	2	0.68	0.42
384	Trave f.	1892	1907	3	1	2	0.68	0.42
385	Trave f.	252	268	3	1	2	0.68	0.42
386	Trave f.	1668	1683	3	1	2	0.68	0.42
387	Trave f.	493	508	3	1	2	0.68	0.42
388	Trave f.	1444	1459	3	1	2	0.68	0.42
389	Trave f.	731	746	3	1	2	0.68	0.42
390	Trave f.	1218	1234	3	1	2	0.68	0.42
391	Trave f.	969	984	3	1	2	0.68	0.42
392	Trave f.	1204	1220	3	1	2	0.68	0.42
393	Trave f.	86	84	3	1	2	0.68	0.42
394	Trave f.	338	336	3	1	2	0.68	0.42
395	Trave f.	576	574	3	1	2	0.68	0.42
396	Trave f.	814	812	3	1	2	0.68	0.42
397	Trave f.	311	310	3	1	2	0.68	0.42
398	Trave f.	549	548	3	1	2	0.68	0.42
399	Trave f.	787	786	3	1	2	0.68	0.42
400	Trave f.	1025	1024	3	1	2	0.68	0.42
401	Trave f.	1935	1934	3	1	2	0.68	0.42
402	Trave f.	1711	1710	3	1	2	0.68	0.42
403	Trave f.	1487	1486	3	1	2	0.68	0.42
404	Trave f.	1263	1262	3	1	2	0.68	0.42
405	Trave f.	282	298	3	1	2	0.68	0.42
406	Trave f.	1907	1922	3	1	2	0.68	0.42
407	Trave f.	268	284	3	1	2	0.68	0.42
408	Trave f.	1683	1698	3	1	2	0.68	0.42
409	Trave f.	508	523	3	1	2	0.68	0.42
410	Trave f.	1459	1474	3	1	2	0.68	0.42
411	Trave f.	746	761	3	1	2	0.68	0.42
412	Trave f.	1234	1250	3	1	2	0.68	0.42
413	Trave f.	984	999	3	1	2	0.68	0.42
414	Trave f.	1220	1236	3	1	2	0.68	0.42
415	Trave f.	88	86	3	1	2	0.68	0.42
416	Trave f.	340	338	3	1	2	0.68	0.42
417	Trave f.	578	576	3	1	2	0.68	0.42
418	Trave f.	816	814	3	1	2	0.68	0.42
419	Trave f.	312	311	3	1	2	0.68	0.42
420	Trave f.	550	549	3	1	2	0.68	0.42
421	Trave f.	788	787	3	1	2	0.68	0.42
422	Trave f.	1026	1025	3	1	2	0.68	0.42
423	Trave f.	1936	1935	3	1	2	0.68	0.42
424	Trave f.	1712	1711	3	1	2	0.68	0.42
425	Trave f.	1488	1487	3	1	2	0.68	0.42
426	Trave f.	1264	1263	3	1	2	0.68	0.42
427	Trave f.	298	2	3	1	2	0.68	0.42
428	Trave f.	1922	3	3	1	2	0.68	0.42
429	Trave f.	284	5	3	1	2	0.68	0.42
430	Trave f.	1698	6	3	1	2	0.68	0.42
431	Trave f.	523	8	3	1	2	0.68	0.42
432	Trave f.	1474	9	3	1	2	0.68	0.42
433	Trave f.	761	11	3	1	2	0.68	0.42
434	Trave f.	1250	12	3	1	2	0.68	0.42
435	Trave f.	999	14	3	1	2	0.68	0.42
436	Trave f.	1236	15	3	1	2	0.68	0.42



15_MOD_NUMERAZIONE_D2



15_MOD_NUMERAZIONE_D2_PILASTRATE

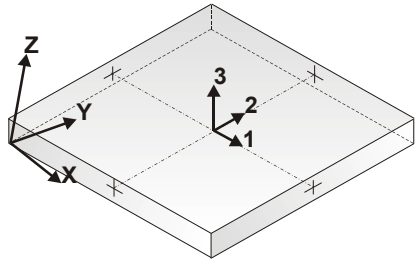


15_MOD_NUMERAZIONE_D2_TRAVATE

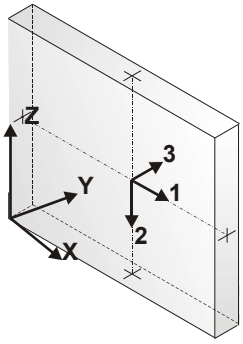
MODELLAZIONE STRUTTURA: ELEMENTI SHELL

LEGENDA TABELLA DATI SHELL

Il programma utilizza per la modellazione elementi a tre o quattro nodi denominati in generale shell.
Ogni elemento shell è individuato dai nodi I, J, K, L (L=I per gli elementi a tre nodi).
Ogni elemento è caratterizzato da un insieme di proprietà riportate in tabella che ne completano la modellazione.



orientamento elementi 3D non verticali



orientamento elementi 3D verticali

In particolare per ogni elemento viene indicato in tabella:

Elem.	numero dell'elemento
Note	codice di comportamento: *Guscio* (elemento guscio in elevazione non verticale) *Guscio fond.* (elemento guscio su suolo elastico) *Setto* (elemento guscio in elevazione verticale) *Membrana* (elemento guscio con comportamento membranale)
Nodo I (J, K, L)	numero del nodo I (J, K, L)
Mat.	codice del materiale assegnato all'elemento
Spessore	spessore dell'elemento (costante)
Wink V	costante di sottofondo (coefficiente di Winkler) per la modellazione del suolo elastico verticale
Wink O	costante di sottofondo (coefficiente di Winkler) per la modellazione del suolo elastico orizzontale

Elem.	Note	Nodo I	Nodo J	Nodo K	Nodo L	Mat.	Crit.	Spessore	Svincolo	Wink V	Wink O
								cm		daN/cm3	daN/cm3
1	Guscio fond.	249	2004	2003	248	3	5	40.0		0.08	0.05
2	Guscio fond.	251	2005	2004	249	3	2	40.0		0.08	0.05
3	Guscio fond.	253	2006	2005	251	3	2	40.0		0.08	0.05
4	Guscio fond.	255	2007	2006	253	3	2	40.0		0.08	0.05
5	Guscio fond.	261	2008	2007	255	3	2	40.0		0.08	0.05
6	Guscio fond.	262	2009	2008	261	3	5	40.0		0.08	0.05
7	Guscio fond.	264	2010	2009	262	3	5	40.0		0.08	0.05
8	Guscio fond.	265	2011	2010	264	3	5	40.0		0.08	0.05
9	Guscio fond.	269	2012	2011	265	3	5	40.0		0.08	0.05
10	Guscio fond.	65	2047	2045	254	3	3	40.0		0.08	0.05
11	Guscio fond.	67	2048	2047	65	3	3	40.0		0.08	0.05
12	Guscio fond.	69	2049	2048	67	3	5	40.0		0.08	0.05
13	Guscio fond.	2065	2158	2157	2064	3	2	40.0		0.08	0.05
14	Guscio fond.	2066	2159	2158	2065	3	2	40.0		0.08	0.05
15	Guscio fond.	2067	2160	2159	2066	3	2	40.0		0.08	0.05
16	Guscio fond.	270	2013	2012	269	3	5	40.0		0.08	0.05
17	Guscio fond.	271	2014	2013	270	3	5	40.0		0.08	0.05
18	Guscio fond.	272	2015	2016	273	3	3	40.0		0.08	0.05
19	Guscio fond.	274	2017	2015	272	3	3	40.0		0.08	0.05
20	Guscio fond.	276	2018	2017	274	3	3	40.0		0.08	0.05
21	Guscio fond.	277	2019	2018	276	3	3	40.0		0.08	0.05
22	Guscio fond.	278	2020	2019	277	3	5	40.0		0.08	0.05
23	Guscio fond.	73	2050	2049	69	3	2	40.0		0.08	0.05
24	Guscio fond.	75	2051	2050	73	3	2	40.0		0.08	0.05
25	Guscio fond.	77	2052	2051	75	3	2	40.0		0.08	0.05
26	Guscio fond.	79	2053	2052	77	3	2	40.0		0.08	0.05
27	Guscio fond.	93	2054	2053	79	3	2	40.0		0.08	0.05
28	Guscio fond.	94	2055	2054	93	3	2	40.0		0.08	0.05
29	Guscio fond.	95	2056	2055	94	3	5	40.0		0.08	0.05
30	Guscio fond.	2068	2161	2160	2067	3	2	40.0		0.08	0.05
31	Guscio fond.	279	2021	2020	278	3	2	40.0		0.08	0.05
32	Guscio fond.	280	2022	2021	279	3	2	40.0		0.08	0.05
33	Guscio fond.	283	2023	2022	280	3	5	40.0		0.08	0.05
34	Guscio fond.	285	2024	2023	283	3	5	40.0		0.08	0.05
35	Guscio fond.	286	2025	2024	285	3	5	40.0		0.08	0.05
36	Guscio fond.	287	2026	2025	286	3	5	40.0		0.08	0.05
37	Guscio fond.	288	2027	2026	287	3	3	40.0		0.08	0.05
38	Guscio fond.	96	2057	2056	95	3	3	40.0		0.08	0.05
39	Guscio fond.	97	2058	2057	96	3	3	40.0		0.08	0.05
40	Guscio fond.	98	2059	2058	97	3	3	40.0		0.08	0.05
41	Guscio fond.	292	2031	2059	98	3	3	40.0		0.08	0.05
42	Guscio fond.	62	2046	2060	107	3	3	40.0		0.08	0.05
43	Guscio fond.	109	2061	2014	271	3	5	40.0		0.08	0.05
44	Guscio fond.	1938	1937	111	112	3	3	40.0		0.08	0.05
45	Guscio fond.	2069	2162	2161	2068	3	2	40.0		0.08	0.05
46	Guscio fond.	289	2028	2027	288	3	3	40.0		0.08	0.05
47	Guscio fond.	290	2029	2028	289	3	3	40.0		0.08	0.05
48	Guscio fond.	221	2000	2029	290	3	3	40.0		0.08	0.05
49	Guscio fond.	291	2030	2031	292	3	3	40.0		0.08	0.05
50	Guscio fond.	293	2032	2030	291	3	3	40.0		0.08	0.05
51	Guscio fond.	1937	1939	113	111	3	3	40.0		0.08	0.05
52	Guscio fond.	1939	1940	114	113	3	3	40.0		0.08	0.05
53	Guscio fond.	1940	1941	123	114	3	2	40.0		0.08	0.05
54	Guscio fond.	1941	1942	125	123	3	2	40.0		0.08	0.05
55	Guscio fond.	1942	1943	126	125	3	2	40.0		0.08	0.05
56	Guscio fond.	1943	1944	127	126	3	2	40.0		0.08	0.05
57	Guscio fond.	1944	1945	128	127	3	2	40.0		0.08	0.05
58	Guscio fond.	1945	1946	141	128	3	2	40.0		0.08	0.05
59	Guscio fond.	1946	1947	142	141	3	2	40.0		0.08	0.05
60	Guscio fond.	2070	2163	2162	2069	3	2	40.0		0.08	0.05
61	Guscio fond.	294	2033	2032	293	3	3	40.0		0.08	0.05
62	Guscio fond.	295	2034	2033	294	3	3	40.0		0.08	0.05
63	Guscio fond.	296	2035	2034	295	3	5	40.0		0.08	0.05
64	Guscio fond.	1947	1948	155	142	3	2	40.0		0.08	0.05
65	Guscio fond.	1948	1949	157	155	3	5	40.0		0.08	0.05
66	Guscio fond.	1949	1950	158	157	3	3	40.0		0.08	0.05
67	Guscio fond.	1950	1951	159	158	3	3	40.0		0.08	0.05
68	Guscio fond.	1951	1952	173	159	3	3	40.0		0.08	0.05
69	Guscio fond.	1952	1953	174	173	3	3	40.0		0.08	0.05
70	Guscio fond.	1953	1954	175	174	3	3	40.0		0.08	0.05
71	Guscio fond.	1954	1955	176	175	3	5	40.0		0.08	0.05
72	Guscio fond.	1955	1956	187	176	3	5	40.0		0.08	0.05
73	Guscio fond.	1956	1957	189	187	3	2	40.0		0.08	0.05

74	Guscio fond.	1957	1958	81	189	3	2	40.0	0.08	0.05
75	Guscio fond.	2071	2164	2163	2070	3	2	40.0	0.08	0.05
76	Guscio fond.	297	2036	2035	296	3	2	40.0	0.08	0.05
77	Guscio fond.	71	2037	2036	297	3	2	40.0	0.08	0.05
78	Guscio fond.	91	2038	2037	71	3	2	40.0	0.08	0.05
79	Guscio fond.	1958	1959	83	81	3	2	40.0	0.08	0.05
80	Guscio fond.	1959	1960	99	83	3	2	40.0	0.08	0.05
81	Guscio fond.	1960	1961	100	99	3	2	40.0	0.08	0.05
82	Guscio fond.	1961	1962	101	100	3	2	40.0	0.08	0.05
83	Guscio fond.	1962	1963	102	101	3	2	40.0	0.08	0.05
84	Guscio fond.	1963	1964	103	102	3	2	40.0	0.08	0.05
85	Guscio fond.	1964	1965	104	103	3	2	40.0	0.08	0.05
86	Guscio fond.	1965	1966	115	104	3	2	40.0	0.08	0.05
87	Guscio fond.	1966	1967	116	115	3	2	40.0	0.08	0.05
88	Guscio fond.	2060	1938	112	117	3	3	40.0	0.08	0.05
89	Guscio fond.	1967	2123	118	116	3	2	40.0	0.08	0.05
90	Guscio fond.	2072	2165	2164	2071	3	2	40.0	0.08	0.05
91	Guscio fond.	139	2039	2038	91	3	2	40.0	0.08	0.05
92	Guscio fond.	171	2040	2039	139	3	2	40.0	0.08	0.05
93	Guscio fond.	190	2041	2040	171	3	5	40.0	0.08	0.05
94	Guscio fond.	237	2042	2041	190	3	3	40.0	0.08	0.05
95	Guscio fond.	2123	203	119	118	3	2	40.0	0.08	0.05
96	Guscio fond.	107	2060	117	120	3	3	40.0	0.08	0.05
97	Guscio fond.	112	111	129	130	3	3	40.0	0.08	0.05
98	Guscio fond.	111	113	131	129	3	3	40.0	0.08	0.05
99	Guscio fond.	113	114	132	131	3	3	40.0	0.08	0.05
100	Guscio fond.	114	123	133	132	3	2	40.0	0.08	0.05
101	Guscio fond.	123	125	134	133	3	2	40.0	0.08	0.05
102	Guscio fond.	125	126	135	134	3	2	40.0	0.08	0.05
103	Guscio fond.	126	127	136	135	3	2	40.0	0.08	0.05
104	Guscio fond.	2074	2167	2166	2073	3	2	40.0	0.08	0.05
105	Guscio fond.	2073	2166	2165	2072	3	2	40.0	0.08	0.05
106	Guscio fond.	238	2043	2042	237	3	3	40.0	0.08	0.05
107	Guscio fond.	239	2044	2043	238	3	3	40.0	0.08	0.05
108	Guscio fond.	273	2016	2044	239	3	3	40.0	0.08	0.05
109	Guscio fond.	127	128	143	136	3	2	40.0	0.08	0.05
110	Guscio fond.	128	141	144	143	3	2	40.0	0.08	0.05
111	Guscio fond.	141	142	145	144	3	2	40.0	0.08	0.05
112	Guscio fond.	142	155	146	145	3	2	40.0	0.08	0.05
113	Guscio fond.	155	157	147	146	3	5	40.0	0.08	0.05
114	Guscio fond.	157	158	148	147	3	3	40.0	0.08	0.05
115	Guscio fond.	158	159	149	148	3	3	40.0	0.08	0.05
116	Guscio fond.	159	173	150	149	3	3	40.0	0.08	0.05
117	Guscio fond.	173	174	151	150	3	3	40.0	0.08	0.05
118	Guscio fond.	2075	2168	2167	2074	3	2	40.0	0.08	0.05
119	Guscio fond.	2076	2169	2168	2075	3	2	40.0	0.08	0.05
120	Guscio fond.	2077	2170	2169	2076	3	2	40.0	0.08	0.05
121	Guscio fond.	254	2045	2046	62	3	3	40.0	0.08	0.05
122	Guscio fond.	174	175	152	151	3	3	40.0	0.08	0.05
123	Guscio fond.	175	176	160	152	3	5	40.0	0.08	0.05
124	Guscio fond.	176	187	161	160	3	5	40.0	0.08	0.05
125	Guscio fond.	187	189	162	161	3	2	40.0	0.08	0.05
126	Guscio fond.	189	81	163	162	3	2	40.0	0.08	0.05
127	Guscio fond.	81	83	164	163	3	2	40.0	0.08	0.05
128	Guscio fond.	83	99	165	164	3	2	40.0	0.08	0.05
129	Guscio fond.	99	100	166	165	3	2	40.0	0.08	0.05
130	Guscio fond.	100	101	167	166	3	2	40.0	0.08	0.05
131	Guscio fond.	101	102	177	167	3	2	40.0	0.08	0.05
132	Guscio fond.	102	103	178	177	3	2	40.0	0.08	0.05
133	Guscio fond.	103	104	179	178	3	2	40.0	0.08	0.05
134	Guscio fond.	104	115	180	179	3	2	40.0	0.08	0.05
135	Guscio fond.	2078	2171	2170	2077	3	2	40.0	0.08	0.05
136	Guscio fond.	2079	2172	2171	2078	3	2	40.0	0.08	0.05
137	Guscio fond.	115	116	181	180	3	2	40.0	0.08	0.05
138	Guscio fond.	117	112	130	182	3	3	40.0	0.08	0.05
139	Guscio fond.	116	118	191	181	3	2	40.0	0.08	0.05
140	Guscio fond.	118	119	192	191	3	2	40.0	0.08	0.05
141	Guscio fond.	120	117	182	2125	3	3	40.0	0.08	0.05
142	Guscio fond.	244	198	2126	2153	3	5	40.0	0.08	0.05
143	Guscio fond.	243	245	2154	2152	3	2	40.0	0.08	0.05
144	Guscio fond.	198	205	2127	2126	3	5	40.0	0.08	0.05
145	Guscio fond.	205	206	2128	2127	3	5	40.0	0.08	0.05
146	Guscio fond.	206	257	193	2128	3	2	40.0	0.08	0.05
147	Guscio fond.	257	207	2129	193	3	2	40.0	0.08	0.05
148	Guscio fond.	207	258	194	2129	3	2	40.0	0.08	0.05
149	Guscio fond.	258	208	2130	194	3	2	40.0	0.08	0.05
150	Guscio fond.	2080	2173	2172	2079	3	2	40.0	0.08	0.05

151	Guscio fond.	2081	2174	2173	2080	3	2	40.0	0.08	0.05
152	Guscio fond.	2124	217	281	2122	3	2	40.0	0.08	0.05
153	Guscio fond.	208	259	195	2130	3	2	40.0	0.08	0.05
154	Guscio fond.	259	209	2131	195	3	2	40.0	0.08	0.05
155	Guscio fond.	209	210	2132	2131	3	2	40.0	0.08	0.05
156	Guscio fond.	210	211	2133	2132	3	2	40.0	0.08	0.05
157	Guscio fond.	211	212	2134	2133	3	2	40.0	0.08	0.05
158	Guscio fond.	212	213	2135	2134	3	2	40.0	0.08	0.05
159	Guscio fond.	213	214	2136	2135	3	2	40.0	0.08	0.05
160	Guscio fond.	214	215	2137	2136	3	3	40.0	0.08	0.05
161	Guscio fond.	215	216	2138	2137	3	3	40.0	0.08	0.05
162	Guscio fond.	216	222	2139	2138	3	3	40.0	0.08	0.05
163	Guscio fond.	222	223	2140	2139	3	3	40.0	0.08	0.05
164	Guscio fond.	2082	2175	2174	2081	3	2	40.0	0.08	0.05
165	Guscio fond.	2083	2176	2175	2082	3	2	40.0	0.08	0.05
166	Guscio fond.	2084	2177	2176	2083	3	2	40.0	0.08	0.05
167	Guscio fond.	110	2153	2061	109	3	5	40.0	0.08	0.05
168	Guscio fond.	219	1999	2000	221	3	3	40.0	0.08	0.05
169	Guscio fond.	232	2001	1999	219	3	3	40.0	0.08	0.05
170	Guscio fond.	223	224	2141	2140	3	5	40.0	0.08	0.05
171	Guscio fond.	224	225	2142	2141	3	2	40.0	0.08	0.05
172	Guscio fond.	225	226	2143	2142	3	2	40.0	0.08	0.05
173	Guscio fond.	226	227	2144	2143	3	2	40.0	0.08	0.05
174	Guscio fond.	227	228	2145	2144	3	2	40.0	0.08	0.05
175	Guscio fond.	228	229	2146	2145	3	2	40.0	0.08	0.05
176	Guscio fond.	229	260	196	2146	3	2	40.0	0.08	0.05
177	Guscio fond.	260	230	2147	196	3	2	40.0	0.08	0.05
178	Guscio fond.	2085	2178	2177	2084	3	2	40.0	0.08	0.05
179	Guscio fond.	2086	2179	2178	2085	3	2	40.0	0.08	0.05
180	Guscio fond.	2087	2180	2179	2086	3	2	40.0	0.08	0.05
181	Guscio fond.	2088	2181	2180	2087	3	2	40.0	0.08	0.05
182	Guscio fond.	2089	2182	2181	2088	3	2	40.0	0.08	0.05
183	Guscio fond.	233	2002	2001	232	3	3	40.0	0.08	0.05
184	Guscio fond.	248	2003	2002	233	3	5	40.0	0.08	0.05
185	Guscio fond.	2090	2183	2182	2089	3	2	40.0	0.08	0.05
186	Guscio fond.	230	231	2148	2147	3	2	40.0	0.08	0.05
187	Guscio fond.	231	240	2149	2148	3	2	40.0	0.08	0.05
188	Guscio fond.	240	241	2150	2149	3	2	40.0	0.08	0.05
189	Guscio fond.	241	242	2151	2150	3	2	40.0	0.08	0.05
190	Guscio fond.	242	243	2152	2151	3	2	40.0	0.08	0.05
191	Guscio fond.	2091	2184	2183	2090	3	2	40.0	0.08	0.05
192	Guscio fond.	2092	2185	2184	2091	3	2	40.0	0.08	0.05
193	Guscio fond.	2093	2186	2185	2092	3	2	40.0	0.08	0.05
194	Guscio fond.	2094	2187	2186	2093	3	2	40.0	0.08	0.05
195	Guscio fond.	2095	2188	2187	2094	3	2	40.0	0.08	0.05
196	Guscio fond.	2096	2189	2188	2095	3	2	40.0	0.08	0.05
197	Guscio fond.	2097	2190	2189	2096	3	2	40.0	0.08	0.05
198	Guscio fond.	2098	2191	2190	2097	3	2	40.0	0.08	0.05
199	Guscio fond.	2099	2192	2191	2098	3	2	40.0	0.08	0.05
200	Guscio fond.	2100	2193	2192	2099	3	2	40.0	0.08	0.05
201	Guscio fond.	2101	2194	2193	2100	3	2	40.0	0.08	0.05
202	Guscio fond.	2102	85	2194	2101	3	2	40.0	0.08	0.05
203	Guscio fond.	245	275	197	2154	3	2	40.0	0.08	0.05
204	Guscio fond.	246	244	2153	110	3	5	40.0	0.08	0.05
205	Guscio fond.	2103	87	85	2102	3	2	40.0	0.08	0.05
206	Guscio fond.	2104	89	87	2103	3	2	40.0	0.08	0.05
207	Guscio fond.	2105	105	89	2104	3	2	40.0	0.08	0.05
208	Guscio fond.	2106	121	105	2105	3	2	40.0	0.08	0.05
209	Guscio fond.	2107	137	121	2106	3	2	40.0	0.08	0.05
210	Guscio fond.	2108	153	137	2107	3	2	40.0	0.08	0.05
211	Guscio fond.	2109	169	153	2108	3	2	40.0	0.08	0.05
212	Guscio fond.	2110	185	169	2109	3	2	40.0	0.08	0.05
213	Guscio fond.	2111	168	185	2110	3	2	40.0	0.08	0.05
214	Guscio fond.	2112	183	168	2111	3	2	40.0	0.08	0.05
215	Guscio fond.	2113	184	183	2112	3	2	40.0	0.08	0.05
216	Guscio fond.	2114	199	184	2113	3	2	40.0	0.08	0.05
217	Guscio fond.	2115	200	199	2114	3	2	40.0	0.08	0.05
218	Guscio fond.	2116	201	200	2115	3	2	40.0	0.08	0.05
219	Guscio fond.	2117	235	201	2116	3	2	40.0	0.08	0.05
220	Guscio fond.	2118	247	235	2117	3	2	40.0	0.08	0.05
221	Guscio fond.	2119	256	247	2118	3	2	40.0	0.08	0.05
222	Guscio fond.	2120	263	256	2119	3	2	40.0	0.08	0.05
223	Guscio fond.	2121	267	263	2120	3	2	40.0	0.08	0.05
224	Guscio fond.	2122	281	267	2121	3	2	40.0	0.08	0.05
225	Guscio fond.	2063	2156	203	2123	3	2	40.0	0.08	0.05
226	Guscio fond.	313	314	315	7	3	3	40.0	0.08	0.05
227	Guscio fond.	316	317	314	313	3	3	40.0	0.08	0.05

228Guscio fond.	318	319	317	316	3	3	40.0	0.08	0.05
229Guscio fond.	320	321	319	318	3	3	40.0	0.08	0.05
230Guscio fond.	322	323	321	320	3	3	40.0	0.08	0.05
231Guscio fond.	324	325	323	322	3	2	40.0	0.08	0.05
232Guscio fond.	326	327	325	324	3	2	40.0	0.08	0.05
233Guscio fond.	328	329	327	326	3	5	40.0	0.08	0.05
234Guscio fond.	330	331	329	328	3	5	40.0	0.08	0.05
235Guscio fond.	332	333	331	330	3	5	40.0	0.08	0.05
236Guscio fond.	334	335	333	332	3	3	40.0	0.08	0.05
237Guscio fond.	336	337	335	334	3	3	40.0	0.08	0.05
238Guscio fond.	338	339	337	336	3	3	40.0	0.08	0.05
239Guscio fond.	340	341	339	338	3	3	40.0	0.08	0.05
240Guscio fond.	4	63	341	340	3	3	40.0	0.08	0.05
241Guscio fond.	314	342	343	315	3	3	40.0	0.08	0.05
242Guscio fond.	317	344	342	314	3	3	40.0	0.08	0.05
243Guscio fond.	319	345	344	317	3	3	40.0	0.08	0.05
244Guscio fond.	321	346	345	319	3	3	40.0	0.08	0.05
245Guscio fond.	323	347	346	321	3	5	40.0	0.08	0.05
246Guscio fond.	325	348	347	323	3	2	40.0	0.08	0.05
247Guscio fond.	327	349	348	325	3	2	40.0	0.08	0.05
248Guscio fond.	329	350	349	327	3	5	40.0	0.08	0.05
249Guscio fond.	331	351	350	329	3	5	40.0	0.08	0.05
250Guscio fond.	333	352	351	331	3	5	40.0	0.08	0.05
251Guscio fond.	335	353	352	333	3	5	40.0	0.08	0.05
252Guscio fond.	337	354	353	335	3	3	40.0	0.08	0.05
253Guscio fond.	339	355	354	337	3	3	40.0	0.08	0.05
254Guscio fond.	341	356	355	339	3	3	40.0	0.08	0.05
255Guscio fond.	63	92	356	341	3	3	40.0	0.08	0.05
256Guscio fond.	342	357	358	343	3	2	40.0	0.08	0.05
257Guscio fond.	344	359	357	342	3	2	40.0	0.08	0.05
258Guscio fond.	345	360	359	344	3	2	40.0	0.08	0.05
259Guscio fond.	346	361	360	345	3	2	40.0	0.08	0.05
260Guscio fond.	347	362	361	346	3	2	40.0	0.08	0.05
261Guscio fond.	348	363	362	347	3	2	40.0	0.08	0.05
262Guscio fond.	349	364	363	348	3	2	40.0	0.08	0.05
263Guscio fond.	350	365	364	349	3	2	40.0	0.08	0.05
264Guscio fond.	351	366	365	350	3	2	40.0	0.08	0.05
265Guscio fond.	352	367	366	351	3	2	40.0	0.08	0.05
266Guscio fond.	353	368	367	352	3	2	40.0	0.08	0.05
267Guscio fond.	354	369	368	353	3	2	40.0	0.08	0.05
268Guscio fond.	355	370	369	354	3	2	40.0	0.08	0.05
269Guscio fond.	356	371	370	355	3	2	40.0	0.08	0.05
270Guscio fond.	92	108	371	356	3	2	40.0	0.08	0.05
271Guscio fond.	357	372	373	358	3	2	40.0	0.08	0.05
272Guscio fond.	359	374	372	357	3	2	40.0	0.08	0.05
273Guscio fond.	360	375	374	359	3	2	40.0	0.08	0.05
274Guscio fond.	361	376	375	360	3	2	40.0	0.08	0.05
275Guscio fond.	362	377	376	361	3	2	40.0	0.08	0.05
276Guscio fond.	363	378	377	362	3	2	40.0	0.08	0.05
277Guscio fond.	364	379	378	363	3	2	40.0	0.08	0.05
278Guscio fond.	365	380	379	364	3	2	40.0	0.08	0.05
279Guscio fond.	366	381	380	365	3	2	40.0	0.08	0.05
280Guscio fond.	367	382	381	366	3	2	40.0	0.08	0.05
281Guscio fond.	368	383	382	367	3	2	40.0	0.08	0.05
282Guscio fond.	369	384	383	368	3	2	40.0	0.08	0.05
283Guscio fond.	370	385	384	369	3	2	40.0	0.08	0.05
284Guscio fond.	371	386	385	370	3	2	40.0	0.08	0.05
285Guscio fond.	108	124	386	371	3	2	40.0	0.08	0.05
286Guscio fond.	372	387	388	373	3	2	40.0	0.08	0.05
287Guscio fond.	374	389	387	372	3	2	40.0	0.08	0.05
288Guscio fond.	375	390	389	374	3	2	40.0	0.08	0.05
289Guscio fond.	376	391	390	375	3	2	40.0	0.08	0.05
290Guscio fond.	377	392	391	376	3	2	40.0	0.08	0.05
291Guscio fond.	378	393	392	377	3	2	40.0	0.08	0.05
292Guscio fond.	379	394	393	378	3	2	40.0	0.08	0.05
293Guscio fond.	380	395	394	379	3	2	40.0	0.08	0.05
294Guscio fond.	381	396	395	380	3	2	40.0	0.08	0.05
295Guscio fond.	382	397	396	381	3	2	40.0	0.08	0.05
296Guscio fond.	383	398	397	382	3	2	40.0	0.08	0.05
297Guscio fond.	384	399	398	383	3	2	40.0	0.08	0.05
298Guscio fond.	385	400	399	384	3	2	40.0	0.08	0.05
299Guscio fond.	386	401	400	385	3	2	40.0	0.08	0.05
300Guscio fond.	124	140	401	386	3	2	40.0	0.08	0.05
301Guscio fond.	387	402	403	388	3	2	40.0	0.08	0.05
302Guscio fond.	389	404	402	387	3	2	40.0	0.08	0.05
303Guscio fond.	390	405	404	389	3	2	40.0	0.08	0.05
304Guscio fond.	391	406	405	390	3	2	40.0	0.08	0.05

305Guscio fond.	392	407	406	391	3	2	40.0	0.08	0.05
306Guscio fond.	393	408	407	392	3	2	40.0	0.08	0.05
307Guscio fond.	394	409	408	393	3	2	40.0	0.08	0.05
308Guscio fond.	395	410	409	394	3	2	40.0	0.08	0.05
309Guscio fond.	396	411	410	395	3	2	40.0	0.08	0.05
310Guscio fond.	397	412	411	396	3	2	40.0	0.08	0.05
311Guscio fond.	398	413	412	397	3	2	40.0	0.08	0.05
312Guscio fond.	399	414	413	398	3	2	40.0	0.08	0.05
313Guscio fond.	400	415	414	399	3	2	40.0	0.08	0.05
314Guscio fond.	401	416	415	400	3	2	40.0	0.08	0.05
315Guscio fond.	140	156	416	401	3	2	40.0	0.08	0.05
316Guscio fond.	402	417	418	403	3	2	40.0	0.08	0.05
317Guscio fond.	404	419	417	402	3	2	40.0	0.08	0.05
318Guscio fond.	405	420	419	404	3	2	40.0	0.08	0.05
319Guscio fond.	406	421	420	405	3	2	40.0	0.08	0.05
320Guscio fond.	407	422	421	406	3	2	40.0	0.08	0.05
321Guscio fond.	408	423	422	407	3	2	40.0	0.08	0.05
322Guscio fond.	409	424	423	408	3	2	40.0	0.08	0.05
323Guscio fond.	410	425	424	409	3	2	40.0	0.08	0.05
324Guscio fond.	411	426	425	410	3	2	40.0	0.08	0.05
325Guscio fond.	412	427	426	411	3	2	40.0	0.08	0.05
326Guscio fond.	413	428	427	412	3	2	40.0	0.08	0.05
327Guscio fond.	414	429	428	413	3	2	40.0	0.08	0.05
328Guscio fond.	415	430	429	414	3	2	40.0	0.08	0.05
329Guscio fond.	416	431	430	415	3	2	40.0	0.08	0.05
330Guscio fond.	156	172	431	416	3	2	40.0	0.08	0.05
331Guscio fond.	417	432	433	418	3	2	40.0	0.08	0.05
332Guscio fond.	419	434	432	417	3	2	40.0	0.08	0.05
333Guscio fond.	420	435	434	419	3	2	40.0	0.08	0.05
334Guscio fond.	421	436	435	420	3	2	40.0	0.08	0.05
335Guscio fond.	422	437	436	421	3	2	40.0	0.08	0.05
336Guscio fond.	423	438	437	422	3	2	40.0	0.08	0.05
337Guscio fond.	424	439	438	423	3	2	40.0	0.08	0.05
338Guscio fond.	425	440	439	424	3	2	40.0	0.08	0.05
339Guscio fond.	426	441	440	425	3	2	40.0	0.08	0.05
340Guscio fond.	427	442	441	426	3	2	40.0	0.08	0.05
341Guscio fond.	428	443	442	427	3	2	40.0	0.08	0.05
342Guscio fond.	429	444	443	428	3	2	40.0	0.08	0.05
343Guscio fond.	430	445	444	429	3	2	40.0	0.08	0.05
344Guscio fond.	431	446	445	430	3	2	40.0	0.08	0.05
345Guscio fond.	172	188	446	431	3	2	40.0	0.08	0.05
346Guscio fond.	432	447	448	433	3	2	40.0	0.08	0.05
347Guscio fond.	434	449	447	432	3	2	40.0	0.08	0.05
348Guscio fond.	435	450	449	434	3	2	40.0	0.08	0.05
349Guscio fond.	436	451	450	435	3	2	40.0	0.08	0.05
350Guscio fond.	437	452	451	436	3	2	40.0	0.08	0.05
351Guscio fond.	438	453	452	437	3	2	40.0	0.08	0.05
352Guscio fond.	439	454	453	438	3	2	40.0	0.08	0.05
353Guscio fond.	440	455	454	439	3	2	40.0	0.08	0.05
354Guscio fond.	441	456	455	440	3	2	40.0	0.08	0.05
355Guscio fond.	442	457	456	441	3	2	40.0	0.08	0.05
356Guscio fond.	443	458	457	442	3	2	40.0	0.08	0.05
357Guscio fond.	444	459	458	443	3	2	40.0	0.08	0.05
358Guscio fond.	445	460	459	444	3	2	40.0	0.08	0.05
359Guscio fond.	446	461	460	445	3	2	40.0	0.08	0.05
360Guscio fond.	188	204	461	446	3	2	40.0	0.08	0.05
361Guscio fond.	447	462	463	448	3	2	40.0	0.08	0.05
362Guscio fond.	449	464	462	447	3	2	40.0	0.08	0.05
363Guscio fond.	450	465	464	449	3	2	40.0	0.08	0.05
364Guscio fond.	451	466	465	450	3	2	40.0	0.08	0.05
365Guscio fond.	452	467	466	451	3	2	40.0	0.08	0.05
366Guscio fond.	453	468	467	452	3	2	40.0	0.08	0.05
367Guscio fond.	454	469	468	453	3	2	40.0	0.08	0.05
368Guscio fond.	455	470	469	454	3	2	40.0	0.08	0.05
369Guscio fond.	456	471	470	455	3	2	40.0	0.08	0.05
370Guscio fond.	457	472	471	456	3	2	40.0	0.08	0.05
371Guscio fond.	458	473	472	457	3	2	40.0	0.08	0.05
372Guscio fond.	459	474	473	458	3	2	40.0	0.08	0.05
373Guscio fond.	460	475	474	459	3	2	40.0	0.08	0.05
374Guscio fond.	461	476	475	460	3	2	40.0	0.08	0.05
375Guscio fond.	204	220	476	461	3	2	40.0	0.08	0.05
376Guscio fond.	462	477	478	463	3	2	40.0	0.08	0.05
377Guscio fond.	464	479	477	462	3	2	40.0	0.08	0.05
378Guscio fond.	465	480	479	464	3	2	40.0	0.08	0.05
379Guscio fond.	466	481	480	465	3	2	40.0	0.08	0.05
380Guscio fond.	467	482	481	466	3	2	40.0	0.08	0.05
381Guscio fond.	468	483	482	467	3	2	40.0	0.08	0.05

382	Guscio fond.	469	484	483	468	3	2	40.0	0.08	0.05
383	Guscio fond.	470	485	484	469	3	2	40.0	0.08	0.05
384	Guscio fond.	471	486	485	470	3	2	40.0	0.08	0.05
385	Guscio fond.	472	487	486	471	3	2	40.0	0.08	0.05
386	Guscio fond.	473	488	487	472	3	2	40.0	0.08	0.05
387	Guscio fond.	474	489	488	473	3	2	40.0	0.08	0.05
388	Guscio fond.	475	490	489	474	3	2	40.0	0.08	0.05
389	Guscio fond.	476	491	490	475	3	2	40.0	0.08	0.05
390	Guscio fond.	220	236	491	476	3	2	40.0	0.08	0.05
391	Guscio fond.	477	492	493	478	3	2	40.0	0.08	0.05
392	Guscio fond.	479	494	492	477	3	2	40.0	0.08	0.05
393	Guscio fond.	480	495	494	479	3	2	40.0	0.08	0.05
394	Guscio fond.	481	496	495	480	3	2	40.0	0.08	0.05
395	Guscio fond.	482	497	496	481	3	2	40.0	0.08	0.05
396	Guscio fond.	483	498	497	482	3	2	40.0	0.08	0.05
397	Guscio fond.	484	499	498	483	3	2	40.0	0.08	0.05
398	Guscio fond.	485	500	499	484	3	2	40.0	0.08	0.05
399	Guscio fond.	486	501	500	485	3	2	40.0	0.08	0.05
400	Guscio fond.	487	502	501	486	3	2	40.0	0.08	0.05
401	Guscio fond.	488	503	502	487	3	2	40.0	0.08	0.05
402	Guscio fond.	489	504	503	488	3	2	40.0	0.08	0.05
403	Guscio fond.	490	505	504	489	3	2	40.0	0.08	0.05
404	Guscio fond.	491	506	505	490	3	2	40.0	0.08	0.05
405	Guscio fond.	236	252	506	491	3	2	40.0	0.08	0.05
406	Guscio fond.	492	507	508	493	3	5	40.0	0.08	0.05
407	Guscio fond.	494	509	507	492	3	5	40.0	0.08	0.05
408	Guscio fond.	495	510	509	494	3	5	40.0	0.08	0.05
409	Guscio fond.	496	511	510	495	3	5	40.0	0.08	0.05
410	Guscio fond.	497	512	511	496	3	5	40.0	0.08	0.05
411	Guscio fond.	498	513	512	497	3	2	40.0	0.08	0.05
412	Guscio fond.	499	514	513	498	3	2	40.0	0.08	0.05
413	Guscio fond.	500	515	514	499	3	2	40.0	0.08	0.05
414	Guscio fond.	501	516	515	500	3	2	40.0	0.08	0.05
415	Guscio fond.	502	517	516	501	3	2	40.0	0.08	0.05
416	Guscio fond.	503	518	517	502	3	2	40.0	0.08	0.05
417	Guscio fond.	504	519	518	503	3	2	40.0	0.08	0.05
418	Guscio fond.	505	520	519	504	3	2	40.0	0.08	0.05
419	Guscio fond.	506	521	520	505	3	2	40.0	0.08	0.05
420	Guscio fond.	252	268	521	506	3	2	40.0	0.08	0.05
421	Guscio fond.	507	522	523	508	3	3	40.0	0.08	0.05
422	Guscio fond.	509	524	522	507	3	3	40.0	0.08	0.05
423	Guscio fond.	510	525	524	509	3	3	40.0	0.08	0.05
424	Guscio fond.	511	526	525	510	3	3	40.0	0.08	0.05
425	Guscio fond.	512	527	526	511	3	3	40.0	0.08	0.05
426	Guscio fond.	513	528	527	512	3	2	40.0	0.08	0.05
427	Guscio fond.	514	529	528	513	3	2	40.0	0.08	0.05
428	Guscio fond.	515	530	529	514	3	2	40.0	0.08	0.05
429	Guscio fond.	516	531	530	515	3	2	40.0	0.08	0.05
430	Guscio fond.	517	532	531	516	3	2	40.0	0.08	0.05
431	Guscio fond.	518	533	532	517	3	3	40.0	0.08	0.05
432	Guscio fond.	519	534	533	518	3	3	40.0	0.08	0.05
433	Guscio fond.	520	535	534	519	3	3	40.0	0.08	0.05
434	Guscio fond.	521	536	535	520	3	3	40.0	0.08	0.05
435	Guscio fond.	268	284	536	521	3	3	40.0	0.08	0.05
436	Guscio fond.	522	537	8	523	3	3	40.0	0.08	0.05
437	Guscio fond.	524	538	537	522	3	3	40.0	0.08	0.05
438	Guscio fond.	525	539	538	524	3	3	40.0	0.08	0.05
439	Guscio fond.	526	540	539	525	3	3	40.0	0.08	0.05
440	Guscio fond.	527	541	540	526	3	3	40.0	0.08	0.05
441	Guscio fond.	528	542	541	527	3	2	40.0	0.08	0.05
442	Guscio fond.	529	543	542	528	3	2	40.0	0.08	0.05
443	Guscio fond.	530	544	543	529	3	2	40.0	0.08	0.05
444	Guscio fond.	531	545	544	530	3	2	40.0	0.08	0.05
445	Guscio fond.	532	546	545	531	3	2	40.0	0.08	0.05
446	Guscio fond.	533	547	546	532	3	3	40.0	0.08	0.05
447	Guscio fond.	534	548	547	533	3	3	40.0	0.08	0.05
448	Guscio fond.	535	549	548	534	3	3	40.0	0.08	0.05
449	Guscio fond.	536	550	549	535	3	3	40.0	0.08	0.05
450	Guscio fond.	284	5	550	536	3	3	40.0	0.08	0.05
451	Guscio fond.	551	552	553	10	3	3	40.0	0.08	0.05
452	Guscio fond.	554	555	552	551	3	3	40.0	0.08	0.05
453	Guscio fond.	556	557	555	554	3	3	40.0	0.08	0.05
454	Guscio fond.	558	559	557	556	3	3	40.0	0.08	0.05
455	Guscio fond.	560	561	559	558	3	3	40.0	0.08	0.05
456	Guscio fond.	562	563	561	560	3	2	40.0	0.08	0.05
457	Guscio fond.	564	565	563	562	3	2	40.0	0.08	0.05
458	Guscio fond.	566	567	565	564	3	2	40.0	0.08	0.05

459	Guscio fond.	568	569	567	566	3	2	40.0	0.08	0.05
460	Guscio fond.	570	571	569	568	3	2	40.0	0.08	0.05
461	Guscio fond.	572	573	571	570	3	3	40.0	0.08	0.05
462	Guscio fond.	574	575	573	572	3	3	40.0	0.08	0.05
463	Guscio fond.	576	577	575	574	3	3	40.0	0.08	0.05
464	Guscio fond.	578	579	577	576	3	3	40.0	0.08	0.05
465	Guscio fond.	7	315	579	578	3	3	40.0	0.08	0.05
466	Guscio fond.	552	580	581	553	3	3	40.0	0.08	0.05
467	Guscio fond.	555	582	580	552	3	3	40.0	0.08	0.05
468	Guscio fond.	557	583	582	555	3	3	40.0	0.08	0.05
469	Guscio fond.	559	584	583	557	3	3	40.0	0.08	0.05
470	Guscio fond.	561	585	584	559	3	5	40.0	0.08	0.05
471	Guscio fond.	563	586	585	561	3	2	40.0	0.08	0.05
472	Guscio fond.	565	587	586	563	3	2	40.0	0.08	0.05
473	Guscio fond.	567	588	587	565	3	2	40.0	0.08	0.05
474	Guscio fond.	569	589	588	567	3	2	40.0	0.08	0.05
475	Guscio fond.	571	590	589	569	3	2	40.0	0.08	0.05
476	Guscio fond.	573	591	590	571	3	5	40.0	0.08	0.05
477	Guscio fond.	575	592	591	573	3	3	40.0	0.08	0.05
478	Guscio fond.	577	593	592	575	3	3	40.0	0.08	0.05
479	Guscio fond.	579	594	593	577	3	3	40.0	0.08	0.05
480	Guscio fond.	315	343	594	579	3	3	40.0	0.08	0.05
481	Guscio fond.	580	595	596	581	3	2	40.0	0.08	0.05
482	Guscio fond.	582	597	595	580	3	2	40.0	0.08	0.05
483	Guscio fond.	583	598	597	582	3	2	40.0	0.08	0.05
484	Guscio fond.	584	599	598	583	3	2	40.0	0.08	0.05
485	Guscio fond.	585	600	599	584	3	2	40.0	0.08	0.05
486	Guscio fond.	586	601	600	585	3	2	40.0	0.08	0.05
487	Guscio fond.	587	602	601	586	3	2	40.0	0.08	0.05
488	Guscio fond.	588	603	602	587	3	2	40.0	0.08	0.05
489	Guscio fond.	589	604	603	588	3	2	40.0	0.08	0.05
490	Guscio fond.	590	605	604	589	3	2	40.0	0.08	0.05
491	Guscio fond.	591	606	605	590	3	2	40.0	0.08	0.05
492	Guscio fond.	592	607	606	591	3	2	40.0	0.08	0.05
493	Guscio fond.	593	608	607	592	3	2	40.0	0.08	0.05
494	Guscio fond.	594	609	608	593	3	2	40.0	0.08	0.05
495	Guscio fond.	343	358	609	594	3	2	40.0	0.08	0.05
496	Guscio fond.	595	610	611	596	3	2	40.0	0.08	0.05
497	Guscio fond.	597	612	610	595	3	2	40.0	0.08	0.05
498	Guscio fond.	598	613	612	597	3	2	40.0	0.08	0.05
499	Guscio fond.	599	614	613	598	3	2	40.0	0.08	0.05
500	Guscio fond.	600	615	614	599	3	2	40.0	0.08	0.05
501	Guscio fond.	601	616	615	600	3	2	40.0	0.08	0.05
502	Guscio fond.	602	617	616	601	3	2	40.0	0.08	0.05
503	Guscio fond.	603	618	617	602	3	2	40.0	0.08	0.05
504	Guscio fond.	604	619	618	603	3	2	40.0	0.08	0.05
505	Guscio fond.	605	620	619	604	3	2	40.0	0.08	0.05
506	Guscio fond.	606	621	620	605	3	2	40.0	0.08	0.05
507	Guscio fond.	607	622	621	606	3	2	40.0	0.08	0.05
508	Guscio fond.	608	623	622	607	3	2	40.0	0.08	0.05
509	Guscio fond.	609	624	623	608	3	2	40.0	0.08	0.05
510	Guscio fond.	358	373	624	609	3	2	40.0	0.08	0.05
511	Guscio fond.	610	625	626	611	3	2	40.0	0.08	0.05
512	Guscio fond.	612	627	625	610	3	2	40.0	0.08	0.05
513	Guscio fond.	613	628	627	612	3	2	40.0	0.08	0.05
514	Guscio fond.	614	629	628	613	3	2	40.0	0.08	0.05
515	Guscio fond.	615	630	629	614	3	2	40.0	0.08	0.05
516	Guscio fond.	616	631	630	615	3	2	40.0	0.08	0.05
517	Guscio fond.	617	632	631	616	3	2	40.0	0.08	0.05
518	Guscio fond.	618	633	632	617	3	2	40.0	0.08	0.05
519	Guscio fond.	619	634	633	618	3	2	40.0	0.08	0.05
520	Guscio fond.	620	635	634	619	3	2	40.0	0.08	0.05
521	Guscio fond.	621	636	635	620	3	2	40.0	0.08	0.05
522	Guscio fond.	622	637	636	621	3	2	40.0	0.08	0.05
523	Guscio fond.	623	638	637	622	3	2	40.0	0.08	0.05
524	Guscio fond.	624	639	638	623	3	2	40.0	0.08	0.05
525	Guscio fond.	373	388	639	624	3	2	40.0	0.08	0.05
526	Guscio fond.	625	640	641	626	3	2	40.0	0.08	0.05
527	Guscio fond.	627	642	640	625	3	2	40.0	0.08	0.05
528	Guscio fond.	628	643	642	627	3	2	40.0	0.08	0.05
529	Guscio fond.	629	644	643	628	3	2	40.0	0.08	0.05
530	Guscio fond.	630	645	644	629	3	2	40.0	0.08	0.05
531	Guscio fond.	631	646	645	630	3	2	40.0	0.08	0.05
532	Guscio fond.	632	647	646	631	3	2	40.0	0.08	0.05
533	Guscio fond.	633	648	647	632	3	2	40.0	0.08	0.05
534	Guscio fond.	634	649	648	633	3	2	40.0	0.08	0.05
535	Guscio fond.	635	650	649	634	3	2	40.0	0.08	0.05

536	Guscio fond.	636	651	650	635	3	2	40.0	0.08	0.05
537	Guscio fond.	637	652	651	636	3	2	40.0	0.08	0.05
538	Guscio fond.	638	653	652	637	3	2	40.0	0.08	0.05
539	Guscio fond.	639	654	653	638	3	2	40.0	0.08	0.05
540	Guscio fond.	388	403	654	639	3	2	40.0	0.08	0.05
541	Guscio fond.	640	655	656	641	3	2	40.0	0.08	0.05
542	Guscio fond.	642	657	655	640	3	2	40.0	0.08	0.05
543	Guscio fond.	643	658	657	642	3	2	40.0	0.08	0.05
544	Guscio fond.	644	659	658	643	3	2	40.0	0.08	0.05
545	Guscio fond.	645	660	659	644	3	2	40.0	0.08	0.05
546	Guscio fond.	646	661	660	645	3	2	40.0	0.08	0.05
547	Guscio fond.	647	662	661	646	3	2	40.0	0.08	0.05
548	Guscio fond.	648	663	662	647	3	2	40.0	0.08	0.05
549	Guscio fond.	649	664	663	648	3	2	40.0	0.08	0.05
550	Guscio fond.	650	665	664	649	3	2	40.0	0.08	0.05
551	Guscio fond.	651	666	665	650	3	2	40.0	0.08	0.05
552	Guscio fond.	652	667	666	651	3	2	40.0	0.08	0.05
553	Guscio fond.	653	668	667	652	3	2	40.0	0.08	0.05
554	Guscio fond.	654	669	668	653	3	2	40.0	0.08	0.05
555	Guscio fond.	403	418	669	654	3	2	40.0	0.08	0.05
556	Guscio fond.	655	670	671	656	3	2	40.0	0.08	0.05
557	Guscio fond.	657	672	670	655	3	2	40.0	0.08	0.05
558	Guscio fond.	658	673	672	657	3	2	40.0	0.08	0.05
559	Guscio fond.	659	674	673	658	3	2	40.0	0.08	0.05
560	Guscio fond.	660	675	674	659	3	2	40.0	0.08	0.05
561	Guscio fond.	661	676	675	660	3	2	40.0	0.08	0.05
562	Guscio fond.	662	677	676	661	3	2	40.0	0.08	0.05
563	Guscio fond.	663	678	677	662	3	2	40.0	0.08	0.05
564	Guscio fond.	664	679	678	663	3	2	40.0	0.08	0.05
565	Guscio fond.	665	680	679	664	3	2	40.0	0.08	0.05
566	Guscio fond.	666	681	680	665	3	2	40.0	0.08	0.05
567	Guscio fond.	667	682	681	666	3	2	40.0	0.08	0.05
568	Guscio fond.	668	683	682	667	3	2	40.0	0.08	0.05
569	Guscio fond.	669	684	683	668	3	2	40.0	0.08	0.05
570	Guscio fond.	418	433	684	669	3	2	40.0	0.08	0.05
571	Guscio fond.	670	685	686	671	3	2	40.0	0.08	0.05
572	Guscio fond.	672	687	685	670	3	2	40.0	0.08	0.05
573	Guscio fond.	673	688	687	672	3	2	40.0	0.08	0.05
574	Guscio fond.	674	689	688	673	3	2	40.0	0.08	0.05
575	Guscio fond.	675	690	689	674	3	2	40.0	0.08	0.05
576	Guscio fond.	676	691	690	675	3	2	40.0	0.08	0.05
577	Guscio fond.	677	692	691	676	3	2	40.0	0.08	0.05
578	Guscio fond.	678	693	692	677	3	2	40.0	0.08	0.05
579	Guscio fond.	679	694	693	678	3	2	40.0	0.08	0.05
580	Guscio fond.	680	695	694	679	3	2	40.0	0.08	0.05
581	Guscio fond.	681	696	695	680	3	2	40.0	0.08	0.05
582	Guscio fond.	682	697	696	681	3	2	40.0	0.08	0.05
583	Guscio fond.	683	698	697	682	3	2	40.0	0.08	0.05
584	Guscio fond.	684	699	698	683	3	2	40.0	0.08	0.05
585	Guscio fond.	433	448	699	684	3	2	40.0	0.08	0.05
586	Guscio fond.	685	700	701	686	3	2	40.0	0.08	0.05
587	Guscio fond.	687	702	700	685	3	2	40.0	0.08	0.05
588	Guscio fond.	688	703	702	687	3	2	40.0	0.08	0.05
589	Guscio fond.	689	704	703	688	3	2	40.0	0.08	0.05
590	Guscio fond.	690	705	704	689	3	2	40.0	0.08	0.05
591	Guscio fond.	691	706	705	690	3	2	40.0	0.08	0.05
592	Guscio fond.	692	707	706	691	3	2	40.0	0.08	0.05
593	Guscio fond.	693	708	707	692	3	2	40.0	0.08	0.05
594	Guscio fond.	694	709	708	693	3	2	40.0	0.08	0.05
595	Guscio fond.	695	710	709	694	3	2	40.0	0.08	0.05
596	Guscio fond.	696	711	710	695	3	2	40.0	0.08	0.05
597	Guscio fond.	697	712	711	696	3	2	40.0	0.08	0.05
598	Guscio fond.	698	713	712	697	3	2	40.0	0.08	0.05
599	Guscio fond.	699	714	713	698	3	2	40.0	0.08	0.05
600	Guscio fond.	448	463	714	699	3	2	40.0	0.08	0.05
601	Guscio fond.	700	715	716	701	3	2	40.0	0.08	0.05
602	Guscio fond.	702	717	715	700	3	2	40.0	0.08	0.05
603	Guscio fond.	703	718	717	702	3	2	40.0	0.08	0.05
604	Guscio fond.	704	719	718	703	3	2	40.0	0.08	0.05
605	Guscio fond.	705	720	719	704	3	2	40.0	0.08	0.05
606	Guscio fond.	706	721	720	705	3	2	40.0	0.08	0.05
607	Guscio fond.	707	722	721	706	3	2	40.0	0.08	0.05
608	Guscio fond.	708	723	722	707	3	2	40.0	0.08	0.05
609	Guscio fond.	709	724	723	708	3	2	40.0	0.08	0.05
610	Guscio fond.	710	725	724	709	3	2	40.0	0.08	0.05
611	Guscio fond.	711	726	725	710	3	2	40.0	0.08	0.05
612	Guscio fond.	712	727	726	711	3	2	40.0	0.08	0.05

613	Guscio fond.	713	728	727	712	3	2	40.0	0.08	0.05
614	Guscio fond.	714	729	728	713	3	2	40.0	0.08	0.05
615	Guscio fond.	463	478	729	714	3	2	40.0	0.08	0.05
616	Guscio fond.	715	730	731	716	3	2	40.0	0.08	0.05
617	Guscio fond.	717	732	730	715	3	2	40.0	0.08	0.05
618	Guscio fond.	718	733	732	717	3	2	40.0	0.08	0.05
619	Guscio fond.	719	734	733	718	3	2	40.0	0.08	0.05
620	Guscio fond.	720	735	734	719	3	2	40.0	0.08	0.05
621	Guscio fond.	721	736	735	720	3	2	40.0	0.08	0.05
622	Guscio fond.	722	737	736	721	3	2	40.0	0.08	0.05
623	Guscio fond.	723	738	737	722	3	2	40.0	0.08	0.05
624	Guscio fond.	724	739	738	723	3	2	40.0	0.08	0.05
625	Guscio fond.	725	740	739	724	3	2	40.0	0.08	0.05
626	Guscio fond.	726	741	740	725	3	2	40.0	0.08	0.05
627	Guscio fond.	727	742	741	726	3	2	40.0	0.08	0.05
628	Guscio fond.	728	743	742	727	3	2	40.0	0.08	0.05
629	Guscio fond.	729	744	743	728	3	2	40.0	0.08	0.05
630	Guscio fond.	478	493	744	729	3	2	40.0	0.08	0.05
631	Guscio fond.	730	745	746	731	3	5	40.0	0.08	0.05
632	Guscio fond.	732	747	745	730	3	5	40.0	0.08	0.05
633	Guscio fond.	733	748	747	732	3	5	40.0	0.08	0.05
634	Guscio fond.	734	749	748	733	3	5	40.0	0.08	0.05
635	Guscio fond.	735	750	749	734	3	5	40.0	0.08	0.05
636	Guscio fond.	736	751	750	735	3	5	40.0	0.08	0.05
637	Guscio fond.	737	752	751	736	3	2	40.0	0.08	0.05
638	Guscio fond.	738	753	752	737	3	2	40.0	0.08	0.05
639	Guscio fond.	739	754	753	738	3	2	40.0	0.08	0.05
640	Guscio fond.	740	755	754	739	3	2	40.0	0.08	0.05
641	Guscio fond.	741	756	755	740	3	2	40.0	0.08	0.05
642	Guscio fond.	742	757	756	741	3	5	40.0	0.08	0.05
643	Guscio fond.	743	758	757	742	3	5	40.0	0.08	0.05
644	Guscio fond.	744	759	758	743	3	5	40.0	0.08	0.05
645	Guscio fond.	493	508	759	744	3	5	40.0	0.08	0.05
646	Guscio fond.	745	760	761	746	3	3	40.0	0.08	0.05
647	Guscio fond.	747	762	760	745	3	3	40.0	0.08	0.05
648	Guscio fond.	748	763	762	747	3	3	40.0	0.08	0.05
649	Guscio fond.	749	764	763	748	3	3	40.0	0.08	0.05
650	Guscio fond.	750	765	764	749	3	5	40.0	0.08	0.05
651	Guscio fond.	751	766	765	750	3	5	40.0	0.08	0.05
652	Guscio fond.	752	767	766	751	3	2	40.0	0.08	0.05
653	Guscio fond.	753	768	767	752	3	2	40.0	0.08	0.05
654	Guscio fond.	754	769	768	753	3	2	40.0	0.08	0.05
655	Guscio fond.	755	770	769	754	3	2	40.0	0.08	0.05
656	Guscio fond.	756	771	770	755	3	2	40.0	0.08	0.05
657	Guscio fond.	757	772	771	756	3	3	40.0	0.08	0.05
658	Guscio fond.	758	773	772	757	3	3	40.0	0.08	0.05
659	Guscio fond.	759	774	773	758	3	3	40.0	0.08	0.05
660	Guscio fond.	508	523	774	759	3	3	40.0	0.08	0.05
661	Guscio fond.	760	775	11	761	3	3	40.0	0.08	0.05
662	Guscio fond.	762	776	775	760	3	3	40.0	0.08	0.05
663	Guscio fond.	763	777	776	762	3	3	40.0	0.08	0.05
664	Guscio fond.	764	778	777	763	3	3	40.0	0.08	0.05
665	Guscio fond.	765	779	778	764	3	3	40.0	0.08	0.05
666	Guscio fond.	766	780	779	765	3	5	40.0	0.08	0.05
667	Guscio fond.	767	781	780	766	3	2	40.0	0.08	0.05
668	Guscio fond.	768	782	781	767	3	2	40.0	0.08	0.05
669	Guscio fond.	769	783	782	768	3	2	40.0	0.08	0.05
670	Guscio fond.	770	784	783	769	3	2	40.0	0.08	0.05
671	Guscio fond.	771	785	784	770	3	3	40.0	0.08	0.05
672	Guscio fond.	772	786	785	771	3	3	40.0	0.08	0.05
673	Guscio fond.	773	787	786	772	3	3	40.0	0.08	0.05
674	Guscio fond.	774	788	787	773	3	3	40.0	0.08	0.05
675	Guscio fond.	523	8	788	774	3	3	40.0	0.08	0.05
676	Guscio fond.	789	790	791	13	3	3	40.0	0.08	0.05
677	Guscio fond.	792	793	790	789	3	3	40.0	0.08	0.05
678	Guscio fond.	794	795	793	792	3	3	40.0	0.08	0.05
679	Guscio fond.	796	797	795	794	3	3	40.0	0.08	0.05
680	Guscio fond.	798	799	797	796	3	2	40.0	0.08	0.05
681	Guscio fond.	800	801	799	798	3	2	40.0	0.08	0.05
682	Guscio fond.	802	803	801	800	3	2	40.0	0.08	0.05
683	Guscio fond.	804	805	803	802	3	2	40.0	0.08	0.05
684	Guscio fond.	806	807	805	804	3	2	40.0	0.08	0.05
685	Guscio fond.	808	809	807	806	3	2	40.0	0.08	0.05
686	Guscio fond.	810	811	809	808	3	3	40.0	0.08	0.05
687	Guscio fond.	812	813	811	810	3	3	40.0	0.08	0.05
688	Guscio fond.	814	815	813	812	3	3	40.0	0.08	0.05
689	Guscio fond.	816	817	815	814	3	3	40.0	0.08	0.05

690	Guscio fond.	10	553	817	816	3	3	40.0	0.08	0.05
691	Guscio fond.	790	818	819	791	3	3	40.0	0.08	0.05
692	Guscio fond.	793	820	818	790	3	3	40.0	0.08	0.05
693	Guscio fond.	795	821	820	793	3	3	40.0	0.08	0.05
694	Guscio fond.	797	822	821	795	3	3	40.0	0.08	0.05
695	Guscio fond.	799	823	822	797	3	2	40.0	0.08	0.05
696	Guscio fond.	801	824	823	799	3	2	40.0	0.08	0.05
697	Guscio fond.	803	825	824	801	3	2	40.0	0.08	0.05
698	Guscio fond.	805	826	825	803	3	2	40.0	0.08	0.05
699	Guscio fond.	807	827	826	805	3	2	40.0	0.08	0.05
700	Guscio fond.	809	828	827	807	3	2	40.0	0.08	0.05
701	Guscio fond.	811	829	828	809	3	5	40.0	0.08	0.05
702	Guscio fond.	813	830	829	811	3	3	40.0	0.08	0.05
703	Guscio fond.	815	831	830	813	3	3	40.0	0.08	0.05
704	Guscio fond.	817	832	831	815	3	3	40.0	0.08	0.05
705	Guscio fond.	553	581	832	817	3	3	40.0	0.08	0.05
706	Guscio fond.	818	833	834	819	3	3	40.0	0.08	0.05
707	Guscio fond.	820	835	833	818	3	3	40.0	0.08	0.05
708	Guscio fond.	821	836	835	820	3	3	40.0	0.08	0.05
709	Guscio fond.	822	837	836	821	3	2	40.0	0.08	0.05
710	Guscio fond.	823	838	837	822	3	2	40.0	0.08	0.05
711	Guscio fond.	824	839	838	823	3	2	40.0	0.08	0.05
712	Guscio fond.	825	840	839	824	3	2	40.0	0.08	0.05
713	Guscio fond.	826	841	840	825	3	2	40.0	0.08	0.05
714	Guscio fond.	827	842	841	826	3	2	40.0	0.08	0.05
715	Guscio fond.	828	843	842	827	3	2	40.0	0.08	0.05
716	Guscio fond.	829	844	843	828	3	2	40.0	0.08	0.05
717	Guscio fond.	830	845	844	829	3	2	40.0	0.08	0.05
718	Guscio fond.	831	846	845	830	3	2	40.0	0.08	0.05
719	Guscio fond.	832	847	846	831	3	2	40.0	0.08	0.05
720	Guscio fond.	581	596	847	832	3	2	40.0	0.08	0.05
721	Guscio fond.	833	848	849	834	3	2	40.0	0.08	0.05
722	Guscio fond.	835	850	848	833	3	2	40.0	0.08	0.05
723	Guscio fond.	836	851	850	835	3	2	40.0	0.08	0.05
724	Guscio fond.	837	852	851	836	3	2	40.0	0.08	0.05
725	Guscio fond.	838	853	852	837	3	2	40.0	0.08	0.05
726	Guscio fond.	839	854	853	838	3	2	40.0	0.08	0.05
727	Guscio fond.	840	855	854	839	3	2	40.0	0.08	0.05
728	Guscio fond.	841	856	855	840	3	2	40.0	0.08	0.05
729	Guscio fond.	842	857	856	841	3	2	40.0	0.08	0.05
730	Guscio fond.	843	858	857	842	3	2	40.0	0.08	0.05
731	Guscio fond.	844	859	858	843	3	2	40.0	0.08	0.05
732	Guscio fond.	845	860	859	844	3	2	40.0	0.08	0.05
733	Guscio fond.	846	861	860	845	3	2	40.0	0.08	0.05
734	Guscio fond.	847	862	861	846	3	2	40.0	0.08	0.05
735	Guscio fond.	596	611	862	847	3	2	40.0	0.08	0.05
736	Guscio fond.	848	863	864	849	3	2	40.0	0.08	0.05
737	Guscio fond.	850	865	863	848	3	2	40.0	0.08	0.05
738	Guscio fond.	851	866	865	850	3	2	40.0	0.08	0.05
739	Guscio fond.	852	867	866	851	3	2	40.0	0.08	0.05
740	Guscio fond.	853	868	867	852	3	2	40.0	0.08	0.05
741	Guscio fond.	854	869	868	853	3	2	40.0	0.08	0.05
742	Guscio fond.	855	870	869	854	3	2	40.0	0.08	0.05
743	Guscio fond.	856	871	870	855	3	2	40.0	0.08	0.05
744	Guscio fond.	857	872	871	856	3	2	40.0	0.08	0.05
745	Guscio fond.	858	873	872	857	3	2	40.0	0.08	0.05
746	Guscio fond.	859	874	873	858	3	2	40.0	0.08	0.05
747	Guscio fond.	860	875	874	859	3	2	40.0	0.08	0.05
748	Guscio fond.	861	876	875	860	3	2	40.0	0.08	0.05
749	Guscio fond.	862	877	876	861	3	2	40.0	0.08	0.05
750	Guscio fond.	611	626	877	862	3	2	40.0	0.08	0.05
751	Guscio fond.	863	878	879	864	3	2	40.0	0.08	0.05
752	Guscio fond.	865	880	878	863	3	2	40.0	0.08	0.05
753	Guscio fond.	866	881	880	865	3	2	40.0	0.08	0.05
754	Guscio fond.	867	882	881	866	3	2	40.0	0.08	0.05
755	Guscio fond.	868	883	882	867	3	2	40.0	0.08	0.05
756	Guscio fond.	869	884	883	868	3	2	40.0	0.08	0.05
757	Guscio fond.	870	885	884	869	3	2	40.0	0.08	0.05
758	Guscio fond.	871	886	885	870	3	2	40.0	0.08	0.05
759	Guscio fond.	872	887	886	871	3	2	40.0	0.08	0.05
760	Guscio fond.	873	888	887	872	3	2	40.0	0.08	0.05
761	Guscio fond.	874	889	888	873	3	2	40.0	0.08	0.05
762	Guscio fond.	875	890	889	874	3	2	40.0	0.08	0.05
763	Guscio fond.	876	891	890	875	3	2	40.0	0.08	0.05
764	Guscio fond.	877	892	891	876	3	2	40.0	0.08	0.05
765	Guscio fond.	626	641	892	877	3	2	40.0	0.08	0.05
766	Guscio fond.	878	893	894	879	3	2	40.0	0.08	0.05

767	Guscio fond.	880	895	893	878	3	2	40.0	0.08	0.05
768	Guscio fond.	881	896	895	880	3	2	40.0	0.08	0.05
769	Guscio fond.	882	897	896	881	3	2	40.0	0.08	0.05
770	Guscio fond.	883	898	897	882	3	2	40.0	0.08	0.05
771	Guscio fond.	884	899	898	883	3	2	40.0	0.08	0.05
772	Guscio fond.	885	900	899	884	3	2	40.0	0.08	0.05
773	Guscio fond.	886	901	900	885	3	2	40.0	0.08	0.05
774	Guscio fond.	887	902	901	886	3	2	40.0	0.08	0.05
775	Guscio fond.	888	903	902	887	3	2	40.0	0.08	0.05
776	Guscio fond.	889	904	903	888	3	2	40.0	0.08	0.05
777	Guscio fond.	890	905	904	889	3	2	40.0	0.08	0.05
778	Guscio fond.	891	906	905	890	3	2	40.0	0.08	0.05
779	Guscio fond.	892	907	906	891	3	2	40.0	0.08	0.05
780	Guscio fond.	641	656	907	892	3	2	40.0	0.08	0.05
781	Guscio fond.	893	908	909	894	3	2	40.0	0.08	0.05
782	Guscio fond.	895	910	908	893	3	2	40.0	0.08	0.05
783	Guscio fond.	896	911	910	895	3	2	40.0	0.08	0.05
784	Guscio fond.	897	912	911	896	3	2	40.0	0.08	0.05
785	Guscio fond.	898	913	912	897	3	2	40.0	0.08	0.05
786	Guscio fond.	899	914	913	898	3	2	40.0	0.08	0.05
787	Guscio fond.	900	915	914	899	3	2	40.0	0.08	0.05
788	Guscio fond.	901	916	915	900	3	2	40.0	0.08	0.05
789	Guscio fond.	902	917	916	901	3	2	40.0	0.08	0.05
790	Guscio fond.	903	918	917	902	3	2	40.0	0.08	0.05
791	Guscio fond.	904	919	918	903	3	2	40.0	0.08	0.05
792	Guscio fond.	905	920	919	904	3	2	40.0	0.08	0.05
793	Guscio fond.	906	921	920	905	3	2	40.0	0.08	0.05
794	Guscio fond.	907	922	921	906	3	2	40.0	0.08	0.05
795	Guscio fond.	656	671	922	907	3	2	40.0	0.08	0.05
796	Guscio fond.	908	923	924	909	3	2	40.0	0.08	0.05
797	Guscio fond.	910	925	923	908	3	2	40.0	0.08	0.05
798	Guscio fond.	911	926	925	910	3	2	40.0	0.08	0.05
799	Guscio fond.	912	927	926	911	3	2	40.0	0.08	0.05
800	Guscio fond.	913	928	927	912	3	2	40.0	0.08	0.05
801	Guscio fond.	914	929	928	913	3	2	40.0	0.08	0.05
802	Guscio fond.	915	930	929	914	3	2	40.0	0.08	0.05
803	Guscio fond.	916	931	930	915	3	2	40.0	0.08	0.05
804	Guscio fond.	917	932	931	916	3	2	40.0	0.08	0.05
805	Guscio fond.	918	933	932	917	3	2	40.0	0.08	0.05
806	Guscio fond.	919	934	933	918	3	2	40.0	0.08	0.05
807	Guscio fond.	920	935	934	919	3	2	40.0	0.08	0.05
808	Guscio fond.	921	936	935	920	3	2	40.0	0.08	0.05
809	Guscio fond.	922	937	936	921	3	2	40.0	0.08	0.05
810	Guscio fond.	671	686	937	922	3	2	40.0	0.08	0.05
811	Guscio fond.	923	938	939	924	3	2	40.0	0.08	0.05
812	Guscio fond.	925	940	938	923	3	2	40.0	0.08	0.05
813	Guscio fond.	926	941	940	925	3	2	40.0	0.08	0.05
814	Guscio fond.	927	942	941	926	3	2	40.0	0.08	0.05
815	Guscio fond.	928	943	942	927	3	2	40.0	0.08	0.05
816	Guscio fond.	929	944	943	928	3	2	40.0	0.08	0.05
817	Guscio fond.	930	945	944	929	3	2	40.0	0.08	0.05
818	Guscio fond.	931	946	945	930	3	2	40.0	0.08	0.05
819	Guscio fond.	932	947	946	931	3	2	40.0	0.08	0.05
820	Guscio fond.	933	948	947	932	3	2	40.0	0.08	0.05
821	Guscio fond.	934	949	948	933	3	2	40.0	0.08	0.05
822	Guscio fond.	935	950	949	934	3	2	40.0	0.08	0.05
823	Guscio fond.	936	951	950	935	3	2	40.0	0.08	0.05
824	Guscio fond.	937	952	951	936	3	2	40.0	0.08	0.05
825	Guscio fond.	686	701	952	937	3	2	40.0	0.08	0.05
826	Guscio fond.	938	953	954	939	3	2	40.0	0.08	0.05
827	Guscio fond.	940	955	953	938	3	2	40.0	0.08	0.05
828	Guscio fond.	941	956	955	940	3	2	40.0	0.08	0.05
829	Guscio fond.	942	957	956	941	3	2	40.0	0.08	0.05
830	Guscio fond.	943	958	957	942	3	2	40.0	0.08	0.05
831	Guscio fond.	944	959	958	943	3	2	40.0	0.08	0.05
832	Guscio fond.	945	960	959	944	3	2	40.0	0.08	0.05
833	Guscio fond.	946	961	960	945	3	2	40.0	0.08	0.05
834	Guscio fond.	947	962	961	946	3	2	40.0	0.08	0.05
835	Guscio fond.	948	963	962	947	3	2	40.0	0.08	0.05
836	Guscio fond.	949	964	963	948	3	2	40.0	0.08	0.05
837	Guscio fond.	950	965	964	949	3	2	40.0	0.08	0.05
838	Guscio fond.	951	966	965	950	3	2	40.0	0.08	0.05
839	Guscio fond.	952	967	966	951	3	2	40.0	0.08	0.05
840	Guscio fond.	701	716	967	952	3	2	40.0	0.08	0.05
841	Guscio fond.	953	968	969	954	3	5	40.0	0.08	0.05
842	Guscio fond.	955	970	968	953	3	5	40.0	0.08	0.05
843	Guscio fond.	956	971	970	955	3	5	40.0	0.08	0.05

844	Guscio fond.	957	972	971	956	3	5	40.0	0.08	0.05
845	Guscio fond.	958	973	972	957	3	5	40.0	0.08	0.05
846	Guscio fond.	959	974	973	958	3	2	40.0	0.08	0.05
847	Guscio fond.	960	975	974	959	3	2	40.0	0.08	0.05
848	Guscio fond.	961	976	975	960	3	2	40.0	0.08	0.05
849	Guscio fond.	962	977	976	961	3	2	40.0	0.08	0.05
850	Guscio fond.	963	978	977	962	3	2	40.0	0.08	0.05
851	Guscio fond.	964	979	978	963	3	2	40.0	0.08	0.05
852	Guscio fond.	965	980	979	964	3	2	40.0	0.08	0.05
853	Guscio fond.	966	981	980	965	3	2	40.0	0.08	0.05
854	Guscio fond.	967	982	981	966	3	2	40.0	0.08	0.05
855	Guscio fond.	716	731	982	967	3	2	40.0	0.08	0.05
856	Guscio fond.	968	983	984	969	3	3	40.0	0.08	0.05
857	Guscio fond.	970	985	983	968	3	3	40.0	0.08	0.05
858	Guscio fond.	971	986	985	970	3	3	40.0	0.08	0.05
859	Guscio fond.	972	987	986	971	3	5	40.0	0.08	0.05
860	Guscio fond.	973	988	987	972	3	5	40.0	0.08	0.05
861	Guscio fond.	974	989	988	973	3	2	40.0	0.08	0.05
862	Guscio fond.	975	990	989	974	3	2	40.0	0.08	0.05
863	Guscio fond.	976	991	990	975	3	2	40.0	0.08	0.05
864	Guscio fond.	977	992	991	976	3	2	40.0	0.08	0.05
865	Guscio fond.	978	993	992	977	3	2	40.0	0.08	0.05
866	Guscio fond.	979	994	993	978	3	5	40.0	0.08	0.05
867	Guscio fond.	980	995	994	979	3	5	40.0	0.08	0.05
868	Guscio fond.	981	996	995	980	3	5	40.0	0.08	0.05
869	Guscio fond.	982	997	996	981	3	5	40.0	0.08	0.05
870	Guscio fond.	731	746	997	982	3	5	40.0	0.08	0.05
871	Guscio fond.	983	998	999	984	3	3	40.0	0.08	0.05
872	Guscio fond.	985	1000	998	983	3	3	40.0	0.08	0.05
873	Guscio fond.	986	1001	1000	985	3	3	40.0	0.08	0.05
874	Guscio fond.	987	1002	1001	986	3	3	40.0	0.08	0.05
875	Guscio fond.	988	1003	1002	987	3	5	40.0	0.08	0.05
876	Guscio fond.	989	1004	1003	988	3	2	40.0	0.08	0.05
877	Guscio fond.	990	1005	1004	989	3	2	40.0	0.08	0.05
878	Guscio fond.	991	1006	1005	990	3	2	40.0	0.08	0.05
879	Guscio fond.	992	1007	1006	991	3	2	40.0	0.08	0.05
880	Guscio fond.	993	1008	1007	992	3	2	40.0	0.08	0.05
881	Guscio fond.	994	1009	1008	993	3	5	40.0	0.08	0.05
882	Guscio fond.	995	1010	1009	994	3	3	40.0	0.08	0.05
883	Guscio fond.	996	1011	1010	995	3	3	40.0	0.08	0.05
884	Guscio fond.	997	1012	1011	996	3	3	40.0	0.08	0.05
885	Guscio fond.	746	761	1012	997	3	3	40.0	0.08	0.05
886	Guscio fond.	998	1013	14	999	3	3	40.0	0.08	0.05
887	Guscio fond.	1000	1014	1013	998	3	3	40.0	0.08	0.05
888	Guscio fond.	1001	1015	1014	1000	3	3	40.0	0.08	0.05
889	Guscio fond.	1002	1016	1015	1001	3	3	40.0	0.08	0.05
890	Guscio fond.	1003	1017	1016	1002	3	5	40.0	0.08	0.05
891	Guscio fond.	1004	1018	1017	1003	3	2	40.0	0.08	0.05
892	Guscio fond.	1005	1019	1018	1004	3	2	40.0	0.08	0.05
893	Guscio fond.	1006	1020	1019	1005	3	2	40.0	0.08	0.05
894	Guscio fond.	1007	1021	1020	1006	3	2	40.0	0.08	0.05
895	Guscio fond.	1008	1022	1021	1007	3	2	40.0	0.08	0.05
896	Guscio fond.	1009	1023	1022	1008	3	3	40.0	0.08	0.05
897	Guscio fond.	1010	1024	1023	1009	3	3	40.0	0.08	0.05
898	Guscio fond.	1011	1025	1024	1010	3	3	40.0	0.08	0.05
899	Guscio fond.	1012	1026	1025	1011	3	3	40.0	0.08	0.05
900	Guscio fond.	761	11	1026	1012	3	3	40.0	0.08	0.05
901	Guscio fond.	1013	1027	1028	14	3	3	40.0	0.08	0.05
902	Guscio fond.	1014	1029	1027	1013	3	3	40.0	0.08	0.05
903	Guscio fond.	1015	1030	1029	1014	3	3	40.0	0.08	0.05
904	Guscio fond.	1016	1031	1030	1015	3	3	40.0	0.08	0.05
905	Guscio fond.	1017	1032	1031	1016	3	5	40.0	0.08	0.05
906	Guscio fond.	1018	1033	1032	1017	3	2	40.0	0.08	0.05
907	Guscio fond.	1019	1034	1033	1018	3	2	40.0	0.08	0.05
908	Guscio fond.	1020	1035	1034	1019	3	2	40.0	0.08	0.05
909	Guscio fond.	1021	1036	1035	1020	3	2	40.0	0.08	0.05
910	Guscio fond.	1022	1037	1036	1021	3	2	40.0	0.08	0.05
911	Guscio fond.	1023	1038	1037	1022	3	3	40.0	0.08	0.05
912	Guscio fond.	1024	1039	1038	1023	3	3	40.0	0.08	0.05
913	Guscio fond.	1025	1040	1039	1024	3	3	40.0	0.08	0.05
914	Guscio fond.	1026	1041	1040	1025	3	3	40.0	0.08	0.05
915	Guscio fond.	11	1042	1041	1026	3	3	40.0	0.08	0.05
916	Guscio fond.	1027	1043	1044	1028	3	3	40.0	0.08	0.05
917	Guscio fond.	1029	1045	1043	1027	3	3	40.0	0.08	0.05
918	Guscio fond.	1030	1046	1045	1029	3	3	40.0	0.08	0.05
919	Guscio fond.	1031	1047	1046	1030	3	5	40.0	0.08	0.05
920	Guscio fond.	1032	1048	1047	1031	3	5	40.0	0.08	0.05

921	Guscio fond.	1033	1049	1048	1032	3	2	40.0	0.08	0.05
922	Guscio fond.	1034	1050	1049	1033	3	2	40.0	0.08	0.05
923	Guscio fond.	1035	1051	1050	1034	3	2	40.0	0.08	0.05
924	Guscio fond.	1036	1052	1051	1035	3	2	40.0	0.08	0.05
925	Guscio fond.	1037	1053	1052	1036	3	2	40.0	0.08	0.05
926	Guscio fond.	1038	1054	1053	1037	3	5	40.0	0.08	0.05
927	Guscio fond.	1039	1055	1054	1038	3	3	40.0	0.08	0.05
928	Guscio fond.	1040	1056	1055	1039	3	3	40.0	0.08	0.05
929	Guscio fond.	1041	1057	1056	1040	3	3	40.0	0.08	0.05
930	Guscio fond.	1042	1058	1057	1041	3	3	40.0	0.08	0.05
931	Guscio fond.	1043	1059	1060	1044	3	5	40.0	0.08	0.05
932	Guscio fond.	1045	1061	1059	1043	3	5	40.0	0.08	0.05
933	Guscio fond.	1046	1062	1061	1045	3	5	40.0	0.08	0.05
934	Guscio fond.	1047	1063	1062	1046	3	5	40.0	0.08	0.05
935	Guscio fond.	1048	1064	1063	1047	3	5	40.0	0.08	0.05
936	Guscio fond.	1049	1065	1064	1048	3	2	40.0	0.08	0.05
937	Guscio fond.	1050	1066	1065	1049	3	2	40.0	0.08	0.05
938	Guscio fond.	1051	1067	1066	1050	3	2	40.0	0.08	0.05
939	Guscio fond.	1052	1068	1067	1051	3	2	40.0	0.08	0.05
940	Guscio fond.	1053	1069	1068	1052	3	2	40.0	0.08	0.05
941	Guscio fond.	1054	1070	1069	1053	3	5	40.0	0.08	0.05
942	Guscio fond.	1055	1071	1070	1054	3	5	40.0	0.08	0.05
943	Guscio fond.	1056	1072	1071	1055	3	5	40.0	0.08	0.05
944	Guscio fond.	1057	1073	1072	1056	3	5	40.0	0.08	0.05
945	Guscio fond.	1058	1074	1073	1057	3	5	40.0	0.08	0.05
946	Guscio fond.	1059	1075	1076	1060	3	5	40.0	0.08	0.05
947	Guscio fond.	1061	1077	1075	1059	3	5	40.0	0.08	0.05
948	Guscio fond.	1062	1078	1077	1061	3	5	40.0	0.08	0.05
949	Guscio fond.	1063	1079	1078	1062	3	5	40.0	0.08	0.05
950	Guscio fond.	1064	1080	1079	1063	3	5	40.0	0.08	0.05
951	Guscio fond.	1065	1081	1080	1064	3	2	40.0	0.08	0.05
952	Guscio fond.	1066	1082	1081	1065	3	2	40.0	0.08	0.05
953	Guscio fond.	1067	1083	1082	1066	3	2	40.0	0.08	0.05
954	Guscio fond.	1068	1084	1083	1067	3	2	40.0	0.08	0.05
955	Guscio fond.	1069	1085	1084	1068	3	2	40.0	0.08	0.05
956	Guscio fond.	1070	1086	1085	1069	3	2	40.0	0.08	0.05
957	Guscio fond.	1071	1087	1086	1070	3	2	40.0	0.08	0.05
958	Guscio fond.	1072	1088	1087	1071	3	2	40.0	0.08	0.05
959	Guscio fond.	1073	1089	1088	1072	3	2	40.0	0.08	0.05
960	Guscio fond.	1074	1090	1089	1073	3	2	40.0	0.08	0.05
961	Guscio fond.	1075	1091	1092	1076	3	2	40.0	0.08	0.05
962	Guscio fond.	1077	1093	1091	1075	3	2	40.0	0.08	0.05
963	Guscio fond.	1078	1094	1093	1077	3	2	40.0	0.08	0.05
964	Guscio fond.	1079	1095	1094	1078	3	2	40.0	0.08	0.05
965	Guscio fond.	1080	1096	1095	1079	3	2	40.0	0.08	0.05
966	Guscio fond.	1081	1097	1096	1080	3	2	40.0	0.08	0.05
967	Guscio fond.	1082	1098	1097	1081	3	2	40.0	0.08	0.05
968	Guscio fond.	1083	1099	1098	1082	3	2	40.0	0.08	0.05
969	Guscio fond.	1084	1100	1099	1083	3	2	40.0	0.08	0.05
970	Guscio fond.	1085	1101	1100	1084	3	2	40.0	0.08	0.05
971	Guscio fond.	1086	1102	1101	1085	3	2	40.0	0.08	0.05
972	Guscio fond.	1087	1103	1102	1086	3	2	40.0	0.08	0.05
973	Guscio fond.	1088	1104	1103	1087	3	2	40.0	0.08	0.05
974	Guscio fond.	1089	1105	1104	1088	3	2	40.0	0.08	0.05
975	Guscio fond.	1090	1106	1105	1089	3	2	40.0	0.08	0.05
976	Guscio fond.	1091	1107	1108	1092	3	2	40.0	0.08	0.05
977	Guscio fond.	1093	1109	1107	1091	3	2	40.0	0.08	0.05
978	Guscio fond.	1094	1110	1109	1093	3	2	40.0	0.08	0.05
979	Guscio fond.	1095	1111	1110	1094	3	2	40.0	0.08	0.05
980	Guscio fond.	1096	1112	1111	1095	3	2	40.0	0.08	0.05
981	Guscio fond.	1097	1113	1112	1096	3	2	40.0	0.08	0.05
982	Guscio fond.	1098	1114	1113	1097	3	2	40.0	0.08	0.05
983	Guscio fond.	1099	1115	1114	1098	3	2	40.0	0.08	0.05
984	Guscio fond.	1100	1116	1115	1099	3	2	40.0	0.08	0.05
985	Guscio fond.	1101	1117	1116	1100	3	2	40.0	0.08	0.05
986	Guscio fond.	1102	1118	1117	1101	3	2	40.0	0.08	0.05
987	Guscio fond.	1103	1119	1118	1102	3	2	40.0	0.08	0.05
988	Guscio fond.	1104	1120	1119	1103	3	2	40.0	0.08	0.05
989	Guscio fond.	1105	1121	1120	1104	3	2	40.0	0.08	0.05
990	Guscio fond.	1106	1122	1121	1105	3	2	40.0	0.08	0.05
991	Guscio fond.	1107	1123	1124	1108	3	2	40.0	0.08	0.05
992	Guscio fond.	1109	1125	1123	1107	3	2	40.0	0.08	0.05
993	Guscio fond.	1110	1126	1125	1109	3	2	40.0	0.08	0.05
994	Guscio fond.	1111	1127	1126	1110	3	2	40.0	0.08	0.05
995	Guscio fond.	1112	1128	1127	1111	3	2	40.0	0.08	0.05
996	Guscio fond.	1113	1129	1128	1112	3	2	40.0	0.08	0.05
997	Guscio fond.	1114	1130	1129	1113	3	2	40.0	0.08	0.05

998	Guscio fond.	1115	1131	1130	1114	3	2	40.0	0.08	0.05
999	Guscio fond.	1116	1132	1131	1115	3	2	40.0	0.08	0.05
1000	Guscio fond.	1117	1133	1132	1116	3	2	40.0	0.08	0.05
1001	Guscio fond.	1118	1134	1133	1117	3	2	40.0	0.08	0.05
1002	Guscio fond.	1119	1135	1134	1118	3	2	40.0	0.08	0.05
1003	Guscio fond.	1120	1136	1135	1119	3	2	40.0	0.08	0.05
1004	Guscio fond.	1121	1137	1136	1120	3	2	40.0	0.08	0.05
1005	Guscio fond.	1122	1138	1137	1121	3	2	40.0	0.08	0.05
1006	Guscio fond.	1123	1139	1140	1124	3	2	40.0	0.08	0.05
1007	Guscio fond.	1125	1141	1139	1123	3	2	40.0	0.08	0.05
1008	Guscio fond.	1126	1142	1141	1125	3	2	40.0	0.08	0.05
1009	Guscio fond.	1127	1143	1142	1126	3	2	40.0	0.08	0.05
1010	Guscio fond.	1128	1144	1143	1127	3	2	40.0	0.08	0.05
1011	Guscio fond.	1129	1145	1144	1128	3	2	40.0	0.08	0.05
1012	Guscio fond.	1130	1146	1145	1129	3	2	40.0	0.08	0.05
1013	Guscio fond.	1131	1147	1146	1130	3	2	40.0	0.08	0.05
1014	Guscio fond.	1132	1148	1147	1131	3	2	40.0	0.08	0.05
1015	Guscio fond.	1133	1149	1148	1132	3	2	40.0	0.08	0.05
1016	Guscio fond.	1134	1150	1149	1133	3	2	40.0	0.08	0.05
1017	Guscio fond.	1135	1151	1150	1134	3	2	40.0	0.08	0.05
1018	Guscio fond.	1136	1152	1151	1135	3	2	40.0	0.08	0.05
1019	Guscio fond.	1137	1153	1152	1136	3	2	40.0	0.08	0.05
1020	Guscio fond.	1138	1154	1153	1137	3	2	40.0	0.08	0.05
1021	Guscio fond.	1139	1155	1156	1140	3	2	40.0	0.08	0.05
1022	Guscio fond.	1141	1157	1155	1139	3	2	40.0	0.08	0.05
1023	Guscio fond.	1142	1158	1157	1141	3	2	40.0	0.08	0.05
1024	Guscio fond.	1143	1159	1158	1142	3	2	40.0	0.08	0.05
1025	Guscio fond.	1144	1160	1159	1143	3	2	40.0	0.08	0.05
1026	Guscio fond.	1145	1161	1160	1144	3	2	40.0	0.08	0.05
1027	Guscio fond.	1146	1162	1161	1145	3	2	40.0	0.08	0.05
1028	Guscio fond.	1147	1163	1162	1146	3	2	40.0	0.08	0.05
1029	Guscio fond.	1148	1164	1163	1147	3	2	40.0	0.08	0.05
1030	Guscio fond.	1149	1165	1164	1148	3	2	40.0	0.08	0.05
1031	Guscio fond.	1150	1166	1165	1149	3	2	40.0	0.08	0.05
1032	Guscio fond.	1151	1167	1166	1150	3	2	40.0	0.08	0.05
1033	Guscio fond.	1152	1168	1167	1151	3	2	40.0	0.08	0.05
1034	Guscio fond.	1153	1169	1168	1152	3	2	40.0	0.08	0.05
1035	Guscio fond.	1154	1170	1169	1153	3	2	40.0	0.08	0.05
1036	Guscio fond.	1155	1171	1172	1156	3	2	40.0	0.08	0.05
1037	Guscio fond.	1157	1173	1171	1155	3	2	40.0	0.08	0.05
1038	Guscio fond.	1158	1174	1173	1157	3	2	40.0	0.08	0.05
1039	Guscio fond.	1159	1175	1174	1158	3	2	40.0	0.08	0.05
1040	Guscio fond.	1160	1176	1175	1159	3	2	40.0	0.08	0.05
1041	Guscio fond.	1161	1177	1176	1160	3	2	40.0	0.08	0.05
1042	Guscio fond.	1162	1178	1177	1161	3	2	40.0	0.08	0.05
1043	Guscio fond.	1163	1179	1178	1162	3	2	40.0	0.08	0.05
1044	Guscio fond.	1164	1180	1179	1163	3	2	40.0	0.08	0.05
1045	Guscio fond.	1165	1181	1180	1164	3	2	40.0	0.08	0.05
1046	Guscio fond.	1166	1182	1181	1165	3	2	40.0	0.08	0.05
1047	Guscio fond.	1167	1183	1182	1166	3	2	40.0	0.08	0.05
1048	Guscio fond.	1168	1184	1183	1167	3	2	40.0	0.08	0.05
1049	Guscio fond.	1169	1185	1184	1168	3	2	40.0	0.08	0.05
1050	Guscio fond.	1170	1186	1185	1169	3	2	40.0	0.08	0.05
1051	Guscio fond.	1171	1187	1188	1172	3	2	40.0	0.08	0.05
1052	Guscio fond.	1173	1189	1187	1171	3	2	40.0	0.08	0.05
1053	Guscio fond.	1174	1190	1189	1173	3	2	40.0	0.08	0.05
1054	Guscio fond.	1175	1191	1190	1174	3	2	40.0	0.08	0.05
1055	Guscio fond.	1176	1192	1191	1175	3	2	40.0	0.08	0.05
1056	Guscio fond.	1177	1193	1192	1176	3	2	40.0	0.08	0.05
1057	Guscio fond.	1178	1194	1193	1177	3	2	40.0	0.08	0.05
1058	Guscio fond.	1179	1195	1194	1178	3	2	40.0	0.08	0.05
1059	Guscio fond.	1180	1196	1195	1179	3	2	40.0	0.08	0.05
1060	Guscio fond.	1181	1197	1196	1180	3	2	40.0	0.08	0.05
1061	Guscio fond.	1182	1198	1197	1181	3	2	40.0	0.08	0.05
1062	Guscio fond.	1183	1199	1198	1182	3	2	40.0	0.08	0.05
1063	Guscio fond.	1184	1200	1199	1183	3	2	40.0	0.08	0.05
1064	Guscio fond.	1185	1201	1200	1184	3	2	40.0	0.08	0.05
1065	Guscio fond.	1186	1202	1201	1185	3	2	40.0	0.08	0.05
1066	Guscio fond.	1187	1203	1204	1188	3	2	40.0	0.08	0.05
1067	Guscio fond.	1189	1205	1203	1187	3	2	40.0	0.08	0.05
1068	Guscio fond.	1190	1206	1205	1189	3	2	40.0	0.08	0.05
1069	Guscio fond.	1191	1207	1206	1190	3	2	40.0	0.08	0.05
1070	Guscio fond.	1192	1208	1207	1191	3	2	40.0	0.08	0.05
1071	Guscio fond.	1193	1209	1208	1192	3	2	40.0	0.08	0.05
1072	Guscio fond.	1194	1210	1209	1193	3	2	40.0	0.08	0.05
1073	Guscio fond.	1195	1211	1210	1194	3	2	40.0	0.08	0.05
1074	Guscio fond.	1196	1212	1211	1195	3	2	40.0	0.08	0.05

1075	Guscio fond.	1197	1213	1212	1196	3	2	40.0	0.08	0.05
1076	Guscio fond.	1198	1214	1213	1197	3	2	40.0	0.08	0.05
1077	Guscio fond.	1199	1215	1214	1198	3	2	40.0	0.08	0.05
1078	Guscio fond.	1200	1216	1215	1199	3	2	40.0	0.08	0.05
1079	Guscio fond.	1201	1217	1216	1200	3	2	40.0	0.08	0.05
1080	Guscio fond.	1202	1218	1217	1201	3	2	40.0	0.08	0.05
1081	Guscio fond.	1203	1219	1220	1204	3	2	40.0	0.08	0.05
1082	Guscio fond.	1205	1221	1219	1203	3	2	40.0	0.08	0.05
1083	Guscio fond.	1206	1222	1221	1205	3	2	40.0	0.08	0.05
1084	Guscio fond.	1207	1223	1222	1206	3	2	40.0	0.08	0.05
1085	Guscio fond.	1208	1224	1223	1207	3	2	40.0	0.08	0.05
1086	Guscio fond.	1209	1225	1224	1208	3	2	40.0	0.08	0.05
1087	Guscio fond.	1210	1226	1225	1209	3	2	40.0	0.08	0.05
1088	Guscio fond.	1211	1227	1226	1210	3	2	40.0	0.08	0.05
1089	Guscio fond.	1212	1228	1227	1211	3	2	40.0	0.08	0.05
1090	Guscio fond.	1213	1229	1228	1212	3	2	40.0	0.08	0.05
1091	Guscio fond.	1214	1230	1229	1213	3	2	40.0	0.08	0.05
1092	Guscio fond.	1215	1231	1230	1214	3	2	40.0	0.08	0.05
1093	Guscio fond.	1216	1232	1231	1215	3	2	40.0	0.08	0.05
1094	Guscio fond.	1217	1233	1232	1216	3	2	40.0	0.08	0.05
1095	Guscio fond.	1218	1234	1233	1217	3	2	40.0	0.08	0.05
1096	Guscio fond.	1219	1235	1236	1220	3	2	40.0	0.08	0.05
1097	Guscio fond.	1221	1237	1235	1219	3	2	40.0	0.08	0.05
1098	Guscio fond.	1222	1238	1237	1221	3	2	40.0	0.08	0.05
1099	Guscio fond.	1223	1239	1238	1222	3	2	40.0	0.08	0.05
1100	Guscio fond.	1224	1240	1239	1223	3	2	40.0	0.08	0.05
1101	Guscio fond.	1225	1241	1240	1224	3	2	40.0	0.08	0.05
1102	Guscio fond.	1226	1242	1241	1225	3	2	40.0	0.08	0.05
1103	Guscio fond.	1227	1243	1242	1226	3	2	40.0	0.08	0.05
1104	Guscio fond.	1228	1244	1243	1227	3	2	40.0	0.08	0.05
1105	Guscio fond.	1229	1245	1244	1228	3	2	40.0	0.08	0.05
1106	Guscio fond.	1230	1246	1245	1229	3	2	40.0	0.08	0.05
1107	Guscio fond.	1231	1247	1246	1230	3	2	40.0	0.08	0.05
1108	Guscio fond.	1232	1248	1247	1231	3	2	40.0	0.08	0.05
1109	Guscio fond.	1233	1249	1248	1232	3	2	40.0	0.08	0.05
1110	Guscio fond.	1234	1250	1249	1233	3	2	40.0	0.08	0.05
1111	Guscio fond.	1235	1251	15	1236	3	2	40.0	0.08	0.05
1112	Guscio fond.	1237	1252	1251	1235	3	2	40.0	0.08	0.05
1113	Guscio fond.	1238	1253	1252	1237	3	2	40.0	0.08	0.05
1114	Guscio fond.	1239	1254	1253	1238	3	2	40.0	0.08	0.05
1115	Guscio fond.	1240	1255	1254	1239	3	2	40.0	0.08	0.05
1116	Guscio fond.	1241	1256	1255	1240	3	2	40.0	0.08	0.05
1117	Guscio fond.	1242	1257	1256	1241	3	2	40.0	0.08	0.05
1118	Guscio fond.	1243	1258	1257	1242	3	2	40.0	0.08	0.05
1119	Guscio fond.	1244	1259	1258	1243	3	2	40.0	0.08	0.05
1120	Guscio fond.	1245	1260	1259	1244	3	2	40.0	0.08	0.05
1121	Guscio fond.	1246	1261	1260	1245	3	2	40.0	0.08	0.05
1122	Guscio fond.	1247	1262	1261	1246	3	2	40.0	0.08	0.05
1123	Guscio fond.	1248	1263	1262	1247	3	2	40.0	0.08	0.05
1124	Guscio fond.	1249	1264	1263	1248	3	2	40.0	0.08	0.05
1125	Guscio fond.	1250	12	1264	1249	3	2	40.0	0.08	0.05
1126	Guscio fond.	775	1265	1042	11	3	3	40.0	0.08	0.05
1127	Guscio fond.	776	1266	1265	775	3	3	40.0	0.08	0.05
1128	Guscio fond.	777	1267	1266	776	3	3	40.0	0.08	0.05
1129	Guscio fond.	778	1268	1267	777	3	3	40.0	0.08	0.05
1130	Guscio fond.	779	1269	1268	778	3	3	40.0	0.08	0.05
1131	Guscio fond.	780	1270	1269	779	3	5	40.0	0.08	0.05
1132	Guscio fond.	781	1271	1270	780	3	2	40.0	0.08	0.05
1133	Guscio fond.	782	1272	1271	781	3	2	40.0	0.08	0.05
1134	Guscio fond.	783	1273	1272	782	3	2	40.0	0.08	0.05
1135	Guscio fond.	784	1274	1273	783	3	2	40.0	0.08	0.05
1136	Guscio fond.	785	1275	1274	784	3	3	40.0	0.08	0.05
1137	Guscio fond.	786	1276	1275	785	3	3	40.0	0.08	0.05
1138	Guscio fond.	787	1277	1276	786	3	3	40.0	0.08	0.05
1139	Guscio fond.	788	1278	1277	787	3	3	40.0	0.08	0.05
1140	Guscio fond.	8	1279	1278	788	3	3	40.0	0.08	0.05
1141	Guscio fond.	1265	1280	1058	1042	3	3	40.0	0.08	0.05
1142	Guscio fond.	1266	1281	1280	1265	3	3	40.0	0.08	0.05
1143	Guscio fond.	1267	1282	1281	1266	3	3	40.0	0.08	0.05
1144	Guscio fond.	1268	1283	1282	1267	3	3	40.0	0.08	0.05
1145	Guscio fond.	1269	1284	1283	1268	3	5	40.0	0.08	0.05
1146	Guscio fond.	1270	1285	1284	1269	3	5	40.0	0.08	0.05
1147	Guscio fond.	1271	1286	1285	1270	3	2	40.0	0.08	0.05
1148	Guscio fond.	1272	1287	1286	1271	3	2	40.0	0.08	0.05
1149	Guscio fond.	1273	1288	1287	1272	3	2	40.0	0.08	0.05
1150	Guscio fond.	1274	1289	1288	1273	3	2	40.0	0.08	0.05
1151	Guscio fond.	1275	1290	1289	1274	3	2	40.0	0.08	0.05

1152	Guscio fond.	1276	1291	1290	1275	3	3	40.0	0.08	0.05
1153	Guscio fond.	1277	1292	1291	1276	3	3	40.0	0.08	0.05
1154	Guscio fond.	1278	1293	1292	1277	3	3	40.0	0.08	0.05
1155	Guscio fond.	1279	1294	1293	1278	3	3	40.0	0.08	0.05
1156	Guscio fond.	1280	1295	1074	1058	3	5	40.0	0.08	0.05
1157	Guscio fond.	1281	1296	1295	1280	3	5	40.0	0.08	0.05
1158	Guscio fond.	1282	1297	1296	1281	3	5	40.0	0.08	0.05
1159	Guscio fond.	1283	1298	1297	1282	3	5	40.0	0.08	0.05
1160	Guscio fond.	1284	1299	1298	1283	3	5	40.0	0.08	0.05
1161	Guscio fond.	1285	1300	1299	1284	3	5	40.0	0.08	0.05
1162	Guscio fond.	1286	1301	1300	1285	3	2	40.0	0.08	0.05
1163	Guscio fond.	1287	1302	1301	1286	3	2	40.0	0.08	0.05
1164	Guscio fond.	1288	1303	1302	1287	3	2	40.0	0.08	0.05
1165	Guscio fond.	1289	1304	1303	1288	3	2	40.0	0.08	0.05
1166	Guscio fond.	1290	1305	1304	1289	3	2	40.0	0.08	0.05
1167	Guscio fond.	1291	1306	1305	1290	3	5	40.0	0.08	0.05
1168	Guscio fond.	1292	1307	1306	1291	3	5	40.0	0.08	0.05
1169	Guscio fond.	1293	1308	1307	1292	3	5	40.0	0.08	0.05
1170	Guscio fond.	1294	1309	1308	1293	3	5	40.0	0.08	0.05
1171	Guscio fond.	1295	1310	1090	1074	3	2	40.0	0.08	0.05
1172	Guscio fond.	1296	1311	1310	1295	3	2	40.0	0.08	0.05
1173	Guscio fond.	1297	1312	1311	1296	3	2	40.0	0.08	0.05
1174	Guscio fond.	1298	1313	1312	1297	3	2	40.0	0.08	0.05
1175	Guscio fond.	1299	1314	1313	1298	3	2	40.0	0.08	0.05
1176	Guscio fond.	1300	1315	1314	1299	3	2	40.0	0.08	0.05
1177	Guscio fond.	1301	1316	1315	1300	3	2	40.0	0.08	0.05
1178	Guscio fond.	1302	1317	1316	1301	3	2	40.0	0.08	0.05
1179	Guscio fond.	1303	1318	1317	1302	3	2	40.0	0.08	0.05
1180	Guscio fond.	1304	1319	1318	1303	3	2	40.0	0.08	0.05
1181	Guscio fond.	1305	1320	1319	1304	3	2	40.0	0.08	0.05
1182	Guscio fond.	1306	1321	1320	1305	3	2	40.0	0.08	0.05
1183	Guscio fond.	1307	1322	1321	1306	3	2	40.0	0.08	0.05
1184	Guscio fond.	1308	1323	1322	1307	3	2	40.0	0.08	0.05
1185	Guscio fond.	1309	1324	1323	1308	3	2	40.0	0.08	0.05
1186	Guscio fond.	1310	1325	1106	1090	3	2	40.0	0.08	0.05
1187	Guscio fond.	1311	1326	1325	1310	3	2	40.0	0.08	0.05
1188	Guscio fond.	1312	1327	1326	1311	3	2	40.0	0.08	0.05
1189	Guscio fond.	1313	1328	1327	1312	3	2	40.0	0.08	0.05
1190	Guscio fond.	1314	1329	1328	1313	3	2	40.0	0.08	0.05
1191	Guscio fond.	1315	1330	1329	1314	3	2	40.0	0.08	0.05
1192	Guscio fond.	1316	1331	1330	1315	3	2	40.0	0.08	0.05
1193	Guscio fond.	1317	1332	1331	1316	3	2	40.0	0.08	0.05
1194	Guscio fond.	1318	1333	1332	1317	3	2	40.0	0.08	0.05
1195	Guscio fond.	1319	1334	1333	1318	3	2	40.0	0.08	0.05
1196	Guscio fond.	1320	1335	1334	1319	3	2	40.0	0.08	0.05
1197	Guscio fond.	1321	1336	1335	1320	3	2	40.0	0.08	0.05
1198	Guscio fond.	1322	1337	1336	1321	3	2	40.0	0.08	0.05
1199	Guscio fond.	1323	1338	1337	1322	3	2	40.0	0.08	0.05
1200	Guscio fond.	1324	1339	1338	1323	3	2	40.0	0.08	0.05
1201	Guscio fond.	1325	1340	1122	1106	3	2	40.0	0.08	0.05
1202	Guscio fond.	1326	1341	1340	1325	3	2	40.0	0.08	0.05
1203	Guscio fond.	1327	1342	1341	1326	3	2	40.0	0.08	0.05
1204	Guscio fond.	1328	1343	1342	1327	3	2	40.0	0.08	0.05
1205	Guscio fond.	1329	1344	1343	1328	3	2	40.0	0.08	0.05
1206	Guscio fond.	1330	1345	1344	1329	3	2	40.0	0.08	0.05
1207	Guscio fond.	1331	1346	1345	1330	3	2	40.0	0.08	0.05
1208	Guscio fond.	1332	1347	1346	1331	3	2	40.0	0.08	0.05
1209	Guscio fond.	1333	1348	1347	1332	3	2	40.0	0.08	0.05
1210	Guscio fond.	1334	1349	1348	1333	3	2	40.0	0.08	0.05
1211	Guscio fond.	1335	1350	1349	1334	3	2	40.0	0.08	0.05
1212	Guscio fond.	1336	1351	1350	1335	3	2	40.0	0.08	0.05
1213	Guscio fond.	1337	1352	1351	1336	3	2	40.0	0.08	0.05
1214	Guscio fond.	1338	1353	1352	1337	3	2	40.0	0.08	0.05
1215	Guscio fond.	1339	1354	1353	1338	3	2	40.0	0.08	0.05
1216	Guscio fond.	1340	1355	1138	1122	3	2	40.0	0.08	0.05
1217	Guscio fond.	1341	1356	1355	1340	3	2	40.0	0.08	0.05
1218	Guscio fond.	1342	1357	1356	1341	3	2	40.0	0.08	0.05
1219	Guscio fond.	1343	1358	1357	1342	3	2	40.0	0.08	0.05
1220	Guscio fond.	1344	1359	1358	1343	3	2	40.0	0.08	0.05
1221	Guscio fond.	1345	1360	1359	1344	3	2	40.0	0.08	0.05
1222	Guscio fond.	1346	1361	1360	1345	3	2	40.0	0.08	0.05
1223	Guscio fond.	1347	1362	1361	1346	3	2	40.0	0.08	0.05
1224	Guscio fond.	1348	1363	1362	1347	3	2	40.0	0.08	0.05
1225	Guscio fond.	1349	1364	1363	1348	3	2	40.0	0.08	0.05
1226	Guscio fond.	1350	1365	1364	1349	3	2	40.0	0.08	0.05
1227	Guscio fond.	1351	1366	1365	1350	3	2	40.0	0.08	0.05
1228	Guscio fond.	1352	1367	1366	1351	3	2	40.0	0.08	0.05

1229	Guscio fond.	1353	1368	1367	1352	3	2	40.0	0.08	0.05
1230	Guscio fond.	1354	1369	1368	1353	3	2	40.0	0.08	0.05
1231	Guscio fond.	1355	1370	1154	1138	3	2	40.0	0.08	0.05
1232	Guscio fond.	1356	1371	1370	1355	3	2	40.0	0.08	0.05
1233	Guscio fond.	1357	1372	1371	1356	3	2	40.0	0.08	0.05
1234	Guscio fond.	1358	1373	1372	1357	3	2	40.0	0.08	0.05
1235	Guscio fond.	1359	1374	1373	1358	3	2	40.0	0.08	0.05
1236	Guscio fond.	1360	1375	1374	1359	3	2	40.0	0.08	0.05
1237	Guscio fond.	1361	1376	1375	1360	3	2	40.0	0.08	0.05
1238	Guscio fond.	1362	1377	1376	1361	3	2	40.0	0.08	0.05
1239	Guscio fond.	1363	1378	1377	1362	3	2	40.0	0.08	0.05
1240	Guscio fond.	1364	1379	1378	1363	3	2	40.0	0.08	0.05
1241	Guscio fond.	1365	1380	1379	1364	3	2	40.0	0.08	0.05
1242	Guscio fond.	1366	1381	1380	1365	3	2	40.0	0.08	0.05
1243	Guscio fond.	1367	1382	1381	1366	3	2	40.0	0.08	0.05
1244	Guscio fond.	1368	1383	1382	1367	3	2	40.0	0.08	0.05
1245	Guscio fond.	1369	1384	1383	1368	3	2	40.0	0.08	0.05
1246	Guscio fond.	1370	1385	1170	1154	3	2	40.0	0.08	0.05
1247	Guscio fond.	1371	1386	1385	1370	3	2	40.0	0.08	0.05
1248	Guscio fond.	1372	1387	1386	1371	3	2	40.0	0.08	0.05
1249	Guscio fond.	1373	1388	1387	1372	3	2	40.0	0.08	0.05
1250	Guscio fond.	1374	1389	1388	1373	3	2	40.0	0.08	0.05
1251	Guscio fond.	1375	1390	1389	1374	3	2	40.0	0.08	0.05
1252	Guscio fond.	1376	1391	1390	1375	3	2	40.0	0.08	0.05
1253	Guscio fond.	1377	1392	1391	1376	3	2	40.0	0.08	0.05
1254	Guscio fond.	1378	1393	1392	1377	3	2	40.0	0.08	0.05
1255	Guscio fond.	1379	1394	1393	1378	3	2	40.0	0.08	0.05
1256	Guscio fond.	1380	1395	1394	1379	3	2	40.0	0.08	0.05
1257	Guscio fond.	1381	1396	1395	1380	3	2	40.0	0.08	0.05
1258	Guscio fond.	1382	1397	1396	1381	3	2	40.0	0.08	0.05
1259	Guscio fond.	1383	1398	1397	1382	3	2	40.0	0.08	0.05
1260	Guscio fond.	1384	1399	1398	1383	3	2	40.0	0.08	0.05
1261	Guscio fond.	1385	1400	1186	1170	3	2	40.0	0.08	0.05
1262	Guscio fond.	1386	1401	1400	1385	3	2	40.0	0.08	0.05
1263	Guscio fond.	1387	1402	1401	1386	3	2	40.0	0.08	0.05
1264	Guscio fond.	1388	1403	1402	1387	3	2	40.0	0.08	0.05
1265	Guscio fond.	1389	1404	1403	1388	3	2	40.0	0.08	0.05
1266	Guscio fond.	1390	1405	1404	1389	3	2	40.0	0.08	0.05
1267	Guscio fond.	1391	1406	1405	1390	3	2	40.0	0.08	0.05
1268	Guscio fond.	1392	1407	1406	1391	3	2	40.0	0.08	0.05
1269	Guscio fond.	1393	1408	1407	1392	3	2	40.0	0.08	0.05
1270	Guscio fond.	1394	1409	1408	1393	3	2	40.0	0.08	0.05
1271	Guscio fond.	1395	1410	1409	1394	3	2	40.0	0.08	0.05
1272	Guscio fond.	1396	1411	1410	1395	3	2	40.0	0.08	0.05
1273	Guscio fond.	1397	1412	1411	1396	3	2	40.0	0.08	0.05
1274	Guscio fond.	1398	1413	1412	1397	3	2	40.0	0.08	0.05
1275	Guscio fond.	1399	1414	1413	1398	3	2	40.0	0.08	0.05
1276	Guscio fond.	1400	1415	1202	1186	3	2	40.0	0.08	0.05
1277	Guscio fond.	1401	1416	1415	1400	3	2	40.0	0.08	0.05
1278	Guscio fond.	1402	1417	1416	1401	3	2	40.0	0.08	0.05
1279	Guscio fond.	1403	1418	1417	1402	3	2	40.0	0.08	0.05
1280	Guscio fond.	1404	1419	1418	1403	3	2	40.0	0.08	0.05
1281	Guscio fond.	1405	1420	1419	1404	3	2	40.0	0.08	0.05
1282	Guscio fond.	1406	1421	1420	1405	3	2	40.0	0.08	0.05
1283	Guscio fond.	1407	1422	1421	1406	3	2	40.0	0.08	0.05
1284	Guscio fond.	1408	1423	1422	1407	3	2	40.0	0.08	0.05
1285	Guscio fond.	1409	1424	1423	1408	3	2	40.0	0.08	0.05
1286	Guscio fond.	1410	1425	1424	1409	3	2	40.0	0.08	0.05
1287	Guscio fond.	1411	1426	1425	1410	3	2	40.0	0.08	0.05
1288	Guscio fond.	1412	1427	1426	1411	3	2	40.0	0.08	0.05
1289	Guscio fond.	1413	1428	1427	1412	3	2	40.0	0.08	0.05
1290	Guscio fond.	1414	1429	1428	1413	3	2	40.0	0.08	0.05
1291	Guscio fond.	1415	1430	1218	1202	3	2	40.0	0.08	0.05
1292	Guscio fond.	1416	1431	1430	1415	3	2	40.0	0.08	0.05
1293	Guscio fond.	1417	1432	1431	1416	3	2	40.0	0.08	0.05
1294	Guscio fond.	1418	1433	1432	1417	3	2	40.0	0.08	0.05
1295	Guscio fond.	1419	1434	1433	1418	3	2	40.0	0.08	0.05
1296	Guscio fond.	1420	1435	1434	1419	3	2	40.0	0.08	0.05
1297	Guscio fond.	1421	1436	1435	1420	3	2	40.0	0.08	0.05
1298	Guscio fond.	1422	1437	1436	1421	3	2	40.0	0.08	0.05
1299	Guscio fond.	1423	1438	1437	1422	3	2	40.0	0.08	0.05
1300	Guscio fond.	1424	1439	1438	1423	3	2	40.0	0.08	0.05
1301	Guscio fond.	1425	1440	1439	1424	3	2	40.0	0.08	0.05
1302	Guscio fond.	1426	1441	1440	1425	3	2	40.0	0.08	0.05
1303	Guscio fond.	1427	1442	1441	1426	3	2	40.0	0.08	0.05
1304	Guscio fond.	1428	1443	1442	1427	3	2	40.0	0.08	0.05
1305	Guscio fond.	1429	1444	1443	1428	3	2	40.0	0.08	0.05

1306	Guscio fond.	1430	1445	1234	1218	3	2	40.0	0.08	0.05
1307	Guscio fond.	1431	1446	1445	1430	3	2	40.0	0.08	0.05
1308	Guscio fond.	1432	1447	1446	1431	3	2	40.0	0.08	0.05
1309	Guscio fond.	1433	1448	1447	1432	3	2	40.0	0.08	0.05
1310	Guscio fond.	1434	1449	1448	1433	3	2	40.0	0.08	0.05
1311	Guscio fond.	1435	1450	1449	1434	3	2	40.0	0.08	0.05
1312	Guscio fond.	1436	1451	1450	1435	3	2	40.0	0.08	0.05
1313	Guscio fond.	1437	1452	1451	1436	3	2	40.0	0.08	0.05
1314	Guscio fond.	1438	1453	1452	1437	3	2	40.0	0.08	0.05
1315	Guscio fond.	1439	1454	1453	1438	3	2	40.0	0.08	0.05
1316	Guscio fond.	1440	1455	1454	1439	3	2	40.0	0.08	0.05
1317	Guscio fond.	1441	1456	1455	1440	3	2	40.0	0.08	0.05
1318	Guscio fond.	1442	1457	1456	1441	3	2	40.0	0.08	0.05
1319	Guscio fond.	1443	1458	1457	1442	3	2	40.0	0.08	0.05
1320	Guscio fond.	1444	1459	1458	1443	3	2	40.0	0.08	0.05
1321	Guscio fond.	1445	1460	1250	1234	3	2	40.0	0.08	0.05
1322	Guscio fond.	1446	1461	1460	1445	3	2	40.0	0.08	0.05
1323	Guscio fond.	1447	1462	1461	1446	3	2	40.0	0.08	0.05
1324	Guscio fond.	1448	1463	1462	1447	3	2	40.0	0.08	0.05
1325	Guscio fond.	1449	1464	1463	1448	3	2	40.0	0.08	0.05
1326	Guscio fond.	1450	1465	1464	1449	3	2	40.0	0.08	0.05
1327	Guscio fond.	1451	1466	1465	1450	3	2	40.0	0.08	0.05
1328	Guscio fond.	1452	1467	1466	1451	3	2	40.0	0.08	0.05
1329	Guscio fond.	1453	1468	1467	1452	3	2	40.0	0.08	0.05
1330	Guscio fond.	1454	1469	1468	1453	3	2	40.0	0.08	0.05
1331	Guscio fond.	1455	1470	1469	1454	3	2	40.0	0.08	0.05
1332	Guscio fond.	1456	1471	1470	1455	3	2	40.0	0.08	0.05
1333	Guscio fond.	1457	1472	1471	1456	3	2	40.0	0.08	0.05
1334	Guscio fond.	1458	1473	1472	1457	3	2	40.0	0.08	0.05
1335	Guscio fond.	1459	1474	1473	1458	3	2	40.0	0.08	0.05
1336	Guscio fond.	1460	1475	12	1250	3	2	40.0	0.08	0.05
1337	Guscio fond.	1461	1476	1475	1460	3	2	40.0	0.08	0.05
1338	Guscio fond.	1462	1477	1476	1461	3	2	40.0	0.08	0.05
1339	Guscio fond.	1463	1478	1477	1462	3	2	40.0	0.08	0.05
1340	Guscio fond.	1464	1479	1478	1463	3	2	40.0	0.08	0.05
1341	Guscio fond.	1465	1480	1479	1464	3	2	40.0	0.08	0.05
1342	Guscio fond.	1466	1481	1480	1465	3	2	40.0	0.08	0.05
1343	Guscio fond.	1467	1482	1481	1466	3	2	40.0	0.08	0.05
1344	Guscio fond.	1468	1483	1482	1467	3	2	40.0	0.08	0.05
1345	Guscio fond.	1469	1484	1483	1468	3	2	40.0	0.08	0.05
1346	Guscio fond.	1470	1485	1484	1469	3	2	40.0	0.08	0.05
1347	Guscio fond.	1471	1486	1485	1470	3	2	40.0	0.08	0.05
1348	Guscio fond.	1472	1487	1486	1471	3	2	40.0	0.08	0.05
1349	Guscio fond.	1473	1488	1487	1472	3	2	40.0	0.08	0.05
1350	Guscio fond.	1474	9	1488	1473	3	2	40.0	0.08	0.05
1351	Guscio fond.	537	1489	1279	8	3	3	40.0	0.08	0.05
1352	Guscio fond.	538	1490	1489	537	3	3	40.0	0.08	0.05
1353	Guscio fond.	539	1491	1490	538	3	3	40.0	0.08	0.05
1354	Guscio fond.	540	1492	1491	539	3	3	40.0	0.08	0.05
1355	Guscio fond.	541	1493	1492	540	3	3	40.0	0.08	0.05
1356	Guscio fond.	542	1494	1493	541	3	2	40.0	0.08	0.05
1357	Guscio fond.	543	1495	1494	542	3	2	40.0	0.08	0.05
1358	Guscio fond.	544	1496	1495	543	3	2	40.0	0.08	0.05
1359	Guscio fond.	545	1497	1496	544	3	2	40.0	0.08	0.05
1360	Guscio fond.	546	1498	1497	545	3	2	40.0	0.08	0.05
1361	Guscio fond.	547	1499	1498	546	3	3	40.0	0.08	0.05
1362	Guscio fond.	548	1500	1499	547	3	3	40.0	0.08	0.05
1363	Guscio fond.	549	1501	1500	548	3	3	40.0	0.08	0.05
1364	Guscio fond.	550	1502	1501	549	3	3	40.0	0.08	0.05
1365	Guscio fond.	5	1503	1502	550	3	3	40.0	0.08	0.05
1366	Guscio fond.	1489	1504	1294	1279	3	3	40.0	0.08	0.05
1367	Guscio fond.	1490	1505	1504	1489	3	3	40.0	0.08	0.05
1368	Guscio fond.	1491	1506	1505	1490	3	3	40.0	0.08	0.05
1369	Guscio fond.	1492	1507	1506	1491	3	3	40.0	0.08	0.05
1370	Guscio fond.	1493	1508	1507	1492	3	3	40.0	0.08	0.05
1371	Guscio fond.	1494	1509	1508	1493	3	2	40.0	0.08	0.05
1372	Guscio fond.	1495	1510	1509	1494	3	2	40.0	0.08	0.05
1373	Guscio fond.	1496	1511	1510	1495	3	2	40.0	0.08	0.05
1374	Guscio fond.	1497	1512	1511	1496	3	2	40.0	0.08	0.05
1375	Guscio fond.	1498	1513	1512	1497	3	2	40.0	0.08	0.05
1376	Guscio fond.	1499	1514	1513	1498	3	3	40.0	0.08	0.05
1377	Guscio fond.	1500	1515	1514	1499	3	3	40.0	0.08	0.05
1378	Guscio fond.	1501	1516	1515	1500	3	3	40.0	0.08	0.05
1379	Guscio fond.	1502	1517	1516	1501	3	3	40.0	0.08	0.05
1380	Guscio fond.	1503	1518	1517	1502	3	3	40.0	0.08	0.05
1381	Guscio fond.	1504	1519	1309	1294	3	5	40.0	0.08	0.05
1382	Guscio fond.	1505	1520	1519	1504	3	5	40.0	0.08	0.05

1383	Guscio fond.	1506	1521	1520	1505	3	5	40.0	0.08	0.05
1384	Guscio fond.	1507	1522	1521	1506	3	5	40.0	0.08	0.05
1385	Guscio fond.	1508	1523	1522	1507	3	5	40.0	0.08	0.05
1386	Guscio fond.	1509	1524	1523	1508	3	2	40.0	0.08	0.05
1387	Guscio fond.	1510	1525	1524	1509	3	2	40.0	0.08	0.05
1388	Guscio fond.	1511	1526	1525	1510	3	2	40.0	0.08	0.05
1389	Guscio fond.	1512	1527	1526	1511	3	2	40.0	0.08	0.05
1390	Guscio fond.	1513	1528	1527	1512	3	2	40.0	0.08	0.05
1391	Guscio fond.	1514	1529	1528	1513	3	2	40.0	0.08	0.05
1392	Guscio fond.	1515	1530	1529	1514	3	2	40.0	0.08	0.05
1393	Guscio fond.	1516	1531	1530	1515	3	2	40.0	0.08	0.05
1394	Guscio fond.	1517	1532	1531	1516	3	2	40.0	0.08	0.05
1395	Guscio fond.	1518	1533	1532	1517	3	2	40.0	0.08	0.05
1396	Guscio fond.	1519	1534	1324	1309	3	2	40.0	0.08	0.05
1397	Guscio fond.	1520	1535	1534	1519	3	2	40.0	0.08	0.05
1398	Guscio fond.	1521	1536	1535	1520	3	2	40.0	0.08	0.05
1399	Guscio fond.	1522	1537	1536	1521	3	2	40.0	0.08	0.05
1400	Guscio fond.	1523	1538	1537	1522	3	2	40.0	0.08	0.05
1401	Guscio fond.	1524	1539	1538	1523	3	2	40.0	0.08	0.05
1402	Guscio fond.	1525	1540	1539	1524	3	2	40.0	0.08	0.05
1403	Guscio fond.	1526	1541	1540	1525	3	2	40.0	0.08	0.05
1404	Guscio fond.	1527	1542	1541	1526	3	2	40.0	0.08	0.05
1405	Guscio fond.	1528	1543	1542	1527	3	2	40.0	0.08	0.05
1406	Guscio fond.	1529	1544	1543	1528	3	2	40.0	0.08	0.05
1407	Guscio fond.	1530	1545	1544	1529	3	2	40.0	0.08	0.05
1408	Guscio fond.	1531	1546	1545	1530	3	2	40.0	0.08	0.05
1409	Guscio fond.	1532	1547	1546	1531	3	2	40.0	0.08	0.05
1410	Guscio fond.	1533	1548	1547	1532	3	2	40.0	0.08	0.05
1411	Guscio fond.	1534	1549	1339	1324	3	2	40.0	0.08	0.05
1412	Guscio fond.	1535	1550	1549	1534	3	2	40.0	0.08	0.05
1413	Guscio fond.	1536	1551	1550	1535	3	2	40.0	0.08	0.05
1414	Guscio fond.	1537	1552	1551	1536	3	2	40.0	0.08	0.05
1415	Guscio fond.	1538	1553	1552	1537	3	2	40.0	0.08	0.05
1416	Guscio fond.	1539	1554	1553	1538	3	2	40.0	0.08	0.05
1417	Guscio fond.	1540	1555	1554	1539	3	2	40.0	0.08	0.05
1418	Guscio fond.	1541	1556	1555	1540	3	2	40.0	0.08	0.05
1419	Guscio fond.	1542	1557	1556	1541	3	2	40.0	0.08	0.05
1420	Guscio fond.	1543	1558	1557	1542	3	2	40.0	0.08	0.05
1421	Guscio fond.	1544	1559	1558	1543	3	2	40.0	0.08	0.05
1422	Guscio fond.	1545	1560	1559	1544	3	2	40.0	0.08	0.05
1423	Guscio fond.	1546	1561	1560	1545	3	2	40.0	0.08	0.05
1424	Guscio fond.	1547	1562	1561	1546	3	2	40.0	0.08	0.05
1425	Guscio fond.	1548	1563	1562	1547	3	2	40.0	0.08	0.05
1426	Guscio fond.	1549	1564	1354	1339	3	2	40.0	0.08	0.05
1427	Guscio fond.	1550	1565	1564	1549	3	2	40.0	0.08	0.05
1428	Guscio fond.	1551	1566	1565	1550	3	2	40.0	0.08	0.05
1429	Guscio fond.	1552	1567	1566	1551	3	2	40.0	0.08	0.05
1430	Guscio fond.	1553	1568	1567	1552	3	2	40.0	0.08	0.05
1431	Guscio fond.	1554	1569	1568	1553	3	2	40.0	0.08	0.05
1432	Guscio fond.	1555	1570	1569	1554	3	2	40.0	0.08	0.05
1433	Guscio fond.	1556	1571	1570	1555	3	2	40.0	0.08	0.05
1434	Guscio fond.	1557	1572	1571	1556	3	2	40.0	0.08	0.05
1435	Guscio fond.	1558	1573	1572	1557	3	2	40.0	0.08	0.05
1436	Guscio fond.	1559	1574	1573	1558	3	2	40.0	0.08	0.05
1437	Guscio fond.	1560	1575	1574	1559	3	2	40.0	0.08	0.05
1438	Guscio fond.	1561	1576	1575	1560	3	2	40.0	0.08	0.05
1439	Guscio fond.	1562	1577	1576	1561	3	2	40.0	0.08	0.05
1440	Guscio fond.	1563	1578	1577	1562	3	2	40.0	0.08	0.05
1441	Guscio fond.	1564	1579	1369	1354	3	2	40.0	0.08	0.05
1442	Guscio fond.	1565	1580	1579	1564	3	2	40.0	0.08	0.05
1443	Guscio fond.	1566	1581	1580	1565	3	2	40.0	0.08	0.05
1444	Guscio fond.	1567	1582	1581	1566	3	2	40.0	0.08	0.05
1445	Guscio fond.	1568	1583	1582	1567	3	2	40.0	0.08	0.05
1446	Guscio fond.	1569	1584	1583	1568	3	2	40.0	0.08	0.05
1447	Guscio fond.	1570	1585	1584	1569	3	2	40.0	0.08	0.05
1448	Guscio fond.	1571	1586	1585	1570	3	2	40.0	0.08	0.05
1449	Guscio fond.	1572	1587	1586	1571	3	2	40.0	0.08	0.05
1450	Guscio fond.	1573	1588	1587	1572	3	2	40.0	0.08	0.05
1451	Guscio fond.	1574	1589	1588	1573	3	2	40.0	0.08	0.05
1452	Guscio fond.	1575	1590	1589	1574	3	2	40.0	0.08	0.05
1453	Guscio fond.	1576	1591	1590	1575	3	2	40.0	0.08	0.05
1454	Guscio fond.	1577	1592	1591	1576	3	2	40.0	0.08	0.05
1455	Guscio fond.	1578	1593	1592	1577	3	2	40.0	0.08	0.05
1456	Guscio fond.	1579	1594	1384	1369	3	2	40.0	0.08	0.05
1457	Guscio fond.	1580	1595	1594	1579	3	2	40.0	0.08	0.05
1458	Guscio fond.	1581	1596	1595	1580	3	2	40.0	0.08	0.05
1459	Guscio fond.	1582	1597	1596	1581	3	2	40.0	0.08	0.05

1460	Guscio fond.	1583	1598	1597	1582	3	2	40.0	0.08	0.05
1461	Guscio fond.	1584	1599	1598	1583	3	2	40.0	0.08	0.05
1462	Guscio fond.	1585	1600	1599	1584	3	2	40.0	0.08	0.05
1463	Guscio fond.	1586	1601	1600	1585	3	2	40.0	0.08	0.05
1464	Guscio fond.	1587	1602	1601	1586	3	2	40.0	0.08	0.05
1465	Guscio fond.	1588	1603	1602	1587	3	2	40.0	0.08	0.05
1466	Guscio fond.	1589	1604	1603	1588	3	2	40.0	0.08	0.05
1467	Guscio fond.	1590	1605	1604	1589	3	2	40.0	0.08	0.05
1468	Guscio fond.	1591	1606	1605	1590	3	2	40.0	0.08	0.05
1469	Guscio fond.	1592	1607	1606	1591	3	2	40.0	0.08	0.05
1470	Guscio fond.	1593	1608	1607	1592	3	2	40.0	0.08	0.05
1471	Guscio fond.	1594	1609	1399	1384	3	2	40.0	0.08	0.05
1472	Guscio fond.	1595	1610	1609	1594	3	2	40.0	0.08	0.05
1473	Guscio fond.	1596	1611	1610	1595	3	2	40.0	0.08	0.05
1474	Guscio fond.	1597	1612	1611	1596	3	2	40.0	0.08	0.05
1475	Guscio fond.	1598	1613	1612	1597	3	2	40.0	0.08	0.05
1476	Guscio fond.	1599	1614	1613	1598	3	2	40.0	0.08	0.05
1477	Guscio fond.	1600	1615	1614	1599	3	2	40.0	0.08	0.05
1478	Guscio fond.	1601	1616	1615	1600	3	2	40.0	0.08	0.05
1479	Guscio fond.	1602	1617	1616	1601	3	2	40.0	0.08	0.05
1480	Guscio fond.	1603	1618	1617	1602	3	2	40.0	0.08	0.05
1481	Guscio fond.	1604	1619	1618	1603	3	2	40.0	0.08	0.05
1482	Guscio fond.	1605	1620	1619	1604	3	2	40.0	0.08	0.05
1483	Guscio fond.	1606	1621	1620	1605	3	2	40.0	0.08	0.05
1484	Guscio fond.	1607	1622	1621	1606	3	2	40.0	0.08	0.05
1485	Guscio fond.	1608	1623	1622	1607	3	2	40.0	0.08	0.05
1486	Guscio fond.	1609	1624	1414	1399	3	2	40.0	0.08	0.05
1487	Guscio fond.	1610	1625	1624	1609	3	2	40.0	0.08	0.05
1488	Guscio fond.	1611	1626	1625	1610	3	2	40.0	0.08	0.05
1489	Guscio fond.	1612	1627	1626	1611	3	2	40.0	0.08	0.05
1490	Guscio fond.	1613	1628	1627	1612	3	2	40.0	0.08	0.05
1491	Guscio fond.	1614	1629	1628	1613	3	2	40.0	0.08	0.05
1492	Guscio fond.	1615	1630	1629	1614	3	2	40.0	0.08	0.05
1493	Guscio fond.	1616	1631	1630	1615	3	2	40.0	0.08	0.05
1494	Guscio fond.	1617	1632	1631	1616	3	2	40.0	0.08	0.05
1495	Guscio fond.	1618	1633	1632	1617	3	2	40.0	0.08	0.05
1496	Guscio fond.	1619	1634	1633	1618	3	2	40.0	0.08	0.05
1497	Guscio fond.	1620	1635	1634	1619	3	2	40.0	0.08	0.05
1498	Guscio fond.	1621	1636	1635	1620	3	2	40.0	0.08	0.05
1499	Guscio fond.	1622	1637	1636	1621	3	2	40.0	0.08	0.05
1500	Guscio fond.	1623	1638	1637	1622	3	2	40.0	0.08	0.05
1501	Guscio fond.	1624	1639	1429	1414	3	2	40.0	0.08	0.05
1502	Guscio fond.	1625	1640	1639	1624	3	2	40.0	0.08	0.05
1503	Guscio fond.	1626	1641	1640	1625	3	2	40.0	0.08	0.05
1504	Guscio fond.	1627	1642	1641	1626	3	2	40.0	0.08	0.05
1505	Guscio fond.	1628	1643	1642	1627	3	2	40.0	0.08	0.05
1506	Guscio fond.	1629	1644	1643	1628	3	2	40.0	0.08	0.05
1507	Guscio fond.	1630	1645	1644	1629	3	2	40.0	0.08	0.05
1508	Guscio fond.	1631	1646	1645	1630	3	2	40.0	0.08	0.05
1509	Guscio fond.	1632	1647	1646	1631	3	2	40.0	0.08	0.05
1510	Guscio fond.	1633	1648	1647	1632	3	2	40.0	0.08	0.05
1511	Guscio fond.	1634	1649	1648	1633	3	2	40.0	0.08	0.05
1512	Guscio fond.	1635	1650	1649	1634	3	2	40.0	0.08	0.05
1513	Guscio fond.	1636	1651	1650	1635	3	2	40.0	0.08	0.05
1514	Guscio fond.	1637	1652	1651	1636	3	2	40.0	0.08	0.05
1515	Guscio fond.	1638	1653	1652	1637	3	2	40.0	0.08	0.05
1516	Guscio fond.	1639	1654	1444	1429	3	2	40.0	0.08	0.05
1517	Guscio fond.	1640	1655	1654	1639	3	2	40.0	0.08	0.05
1518	Guscio fond.	1641	1656	1655	1640	3	2	40.0	0.08	0.05
1519	Guscio fond.	1642	1657	1656	1641	3	2	40.0	0.08	0.05
1520	Guscio fond.	1643	1658	1657	1642	3	2	40.0	0.08	0.05
1521	Guscio fond.	1644	1659	1658	1643	3	2	40.0	0.08	0.05
1522	Guscio fond.	1645	1660	1659	1644	3	2	40.0	0.08	0.05
1523	Guscio fond.	1646	1661	1660	1645	3	2	40.0	0.08	0.05
1524	Guscio fond.	1647	1662	1661	1646	3	2	40.0	0.08	0.05
1525	Guscio fond.	1648	1663	1662	1647	3	2	40.0	0.08	0.05
1526	Guscio fond.	1649	1664	1663	1648	3	2	40.0	0.08	0.05
1527	Guscio fond.	1650	1665	1664	1649	3	2	40.0	0.08	0.05
1528	Guscio fond.	1651	1666	1665	1650	3	2	40.0	0.08	0.05
1529	Guscio fond.	1652	1667	1666	1651	3	2	40.0	0.08	0.05
1530	Guscio fond.	1653	1668	1667	1652	3	2	40.0	0.08	0.05
1531	Guscio fond.	1654	1669	1459	1444	3	2	40.0	0.08	0.05
1532	Guscio fond.	1655	1670	1669	1654	3	2	40.0	0.08	0.05
1533	Guscio fond.	1656	1671	1670	1655	3	2	40.0	0.08	0.05
1534	Guscio fond.	1657	1672	1671	1656	3	2	40.0	0.08	0.05
1535	Guscio fond.	1658	1673	1672	1657	3	2	40.0	0.08	0.05
1536	Guscio fond.	1659	1674	1673	1658	3	2	40.0	0.08	0.05

1537	Guscio fond.	1660	1675	1674	1659	3	2	40.0	0.08	0.05
1538	Guscio fond.	1661	1676	1675	1660	3	2	40.0	0.08	0.05
1539	Guscio fond.	1662	1677	1676	1661	3	2	40.0	0.08	0.05
1540	Guscio fond.	1663	1678	1677	1662	3	2	40.0	0.08	0.05
1541	Guscio fond.	1664	1679	1678	1663	3	2	40.0	0.08	0.05
1542	Guscio fond.	1665	1680	1679	1664	3	2	40.0	0.08	0.05
1543	Guscio fond.	1666	1681	1680	1665	3	2	40.0	0.08	0.05
1544	Guscio fond.	1667	1682	1681	1666	3	2	40.0	0.08	0.05
1545	Guscio fond.	1668	1683	1682	1667	3	2	40.0	0.08	0.05
1546	Guscio fond.	1669	1684	1474	1459	3	2	40.0	0.08	0.05
1547	Guscio fond.	1670	1685	1684	1669	3	2	40.0	0.08	0.05
1548	Guscio fond.	1671	1686	1685	1670	3	2	40.0	0.08	0.05
1549	Guscio fond.	1672	1687	1686	1671	3	2	40.0	0.08	0.05
1550	Guscio fond.	1673	1688	1687	1672	3	2	40.0	0.08	0.05
1551	Guscio fond.	1674	1689	1688	1673	3	2	40.0	0.08	0.05
1552	Guscio fond.	1675	1690	1689	1674	3	2	40.0	0.08	0.05
1553	Guscio fond.	1676	1691	1690	1675	3	2	40.0	0.08	0.05
1554	Guscio fond.	1677	1692	1691	1676	3	2	40.0	0.08	0.05
1555	Guscio fond.	1678	1693	1692	1677	3	2	40.0	0.08	0.05
1556	Guscio fond.	1679	1694	1693	1678	3	2	40.0	0.08	0.05
1557	Guscio fond.	1680	1695	1694	1679	3	2	40.0	0.08	0.05
1558	Guscio fond.	1681	1696	1695	1680	3	2	40.0	0.08	0.05
1559	Guscio fond.	1682	1697	1696	1681	3	2	40.0	0.08	0.05
1560	Guscio fond.	1683	1698	1697	1682	3	2	40.0	0.08	0.05
1561	Guscio fond.	1684	1699	9	1474	3	2	40.0	0.08	0.05
1562	Guscio fond.	1685	1700	1699	1684	3	2	40.0	0.08	0.05
1563	Guscio fond.	1686	1701	1700	1685	3	2	40.0	0.08	0.05
1564	Guscio fond.	1687	1702	1701	1686	3	2	40.0	0.08	0.05
1565	Guscio fond.	1688	1703	1702	1687	3	2	40.0	0.08	0.05
1566	Guscio fond.	1689	1704	1703	1688	3	2	40.0	0.08	0.05
1567	Guscio fond.	1690	1705	1704	1689	3	2	40.0	0.08	0.05
1568	Guscio fond.	1691	1706	1705	1690	3	2	40.0	0.08	0.05
1569	Guscio fond.	1692	1707	1706	1691	3	2	40.0	0.08	0.05
1570	Guscio fond.	1693	1708	1707	1692	3	2	40.0	0.08	0.05
1571	Guscio fond.	1694	1709	1708	1693	3	2	40.0	0.08	0.05
1572	Guscio fond.	1695	1710	1709	1694	3	2	40.0	0.08	0.05
1573	Guscio fond.	1696	1711	1710	1695	3	2	40.0	0.08	0.05
1574	Guscio fond.	1697	1712	1711	1696	3	2	40.0	0.08	0.05
1575	Guscio fond.	1698	6	1712	1697	3	2	40.0	0.08	0.05
1576	Guscio fond.	299	1713	1503	5	3	3	40.0	0.08	0.05
1577	Guscio fond.	300	1714	1713	299	3	3	40.0	0.08	0.05
1578	Guscio fond.	301	1715	1714	300	3	3	40.0	0.08	0.05
1579	Guscio fond.	302	1716	1715	301	3	3	40.0	0.08	0.05
1580	Guscio fond.	303	1717	1716	302	3	2	40.0	0.08	0.05
1581	Guscio fond.	304	1718	1717	303	3	2	40.0	0.08	0.05
1582	Guscio fond.	305	1719	1718	304	3	2	40.0	0.08	0.05
1583	Guscio fond.	306	1720	1719	305	3	2	40.0	0.08	0.05
1584	Guscio fond.	307	1721	1720	306	3	2	40.0	0.08	0.05
1585	Guscio fond.	308	1722	1721	307	3	2	40.0	0.08	0.05
1586	Guscio fond.	309	1723	1722	308	3	2	40.0	0.08	0.05
1587	Guscio fond.	310	1724	1723	309	3	2	40.0	0.08	0.05
1588	Guscio fond.	311	1725	1724	310	3	3	40.0	0.08	0.05
1589	Guscio fond.	312	1726	1725	311	3	3	40.0	0.08	0.05
1590	Guscio fond.	2	1727	1726	312	3	3	40.0	0.08	0.05
1591	Guscio fond.	1713	1728	1518	1503	3	3	40.0	0.08	0.05
1592	Guscio fond.	1714	1729	1728	1713	3	3	40.0	0.08	0.05
1593	Guscio fond.	1715	1730	1729	1714	3	3	40.0	0.08	0.05
1594	Guscio fond.	1716	1731	1730	1715	3	5	40.0	0.08	0.05
1595	Guscio fond.	1717	1732	1731	1716	3	2	40.0	0.08	0.05
1596	Guscio fond.	1718	1733	1732	1717	3	2	40.0	0.08	0.05
1597	Guscio fond.	1719	1734	1733	1718	3	2	40.0	0.08	0.05
1598	Guscio fond.	1720	1735	1734	1719	3	2	40.0	0.08	0.05
1599	Guscio fond.	1721	1736	1735	1720	3	2	40.0	0.08	0.05
1600	Guscio fond.	1722	1737	1736	1721	3	2	40.0	0.08	0.05
1601	Guscio fond.	1723	1738	1737	1722	3	2	40.0	0.08	0.05
1602	Guscio fond.	1724	1739	1738	1723	3	2	40.0	0.08	0.05
1603	Guscio fond.	1725	1740	1739	1724	3	3	40.0	0.08	0.05
1604	Guscio fond.	1726	1741	1740	1725	3	3	40.0	0.08	0.05
1605	Guscio fond.	1727	1742	1741	1726	3	3	40.0	0.08	0.05
1606	Guscio fond.	1728	1743	1533	1518	3	2	40.0	0.08	0.05
1607	Guscio fond.	1729	1744	1743	1728	3	2	40.0	0.08	0.05
1608	Guscio fond.	1730	1745	1744	1729	3	2	40.0	0.08	0.05
1609	Guscio fond.	1731	1746	1745	1730	3	2	40.0	0.08	0.05
1610	Guscio fond.	1732	1747	1746	1731	3	2	40.0	0.08	0.05
1611	Guscio fond.	1733	1748	1747	1732	3	2	40.0	0.08	0.05
1612	Guscio fond.	1734	1749	1748	1733	3	2	40.0	0.08	0.05
1613	Guscio fond.	1735	1750	1749	1734	3	2	40.0	0.08	0.05

1614	Guscio fond.	1736	1751	1750	1735	3	2	40.0	0.08	0.05
1615	Guscio fond.	1737	1752	1751	1736	3	2	40.0	0.08	0.05
1616	Guscio fond.	1738	1753	1752	1737	3	2	40.0	0.08	0.05
1617	Guscio fond.	1739	1754	1753	1738	3	2	40.0	0.08	0.05
1618	Guscio fond.	1740	1755	1754	1739	3	5	40.0	0.08	0.05
1619	Guscio fond.	1741	1756	1755	1740	3	5	40.0	0.08	0.05
1620	Guscio fond.	1742	1757	1756	1741	3	5	40.0	0.08	0.05
1621	Guscio fond.	1743	1758	1548	1533	3	2	40.0	0.08	0.05
1622	Guscio fond.	1744	1759	1758	1743	3	2	40.0	0.08	0.05
1623	Guscio fond.	1745	1760	1759	1744	3	2	40.0	0.08	0.05
1624	Guscio fond.	1746	1761	1760	1745	3	2	40.0	0.08	0.05
1625	Guscio fond.	1747	1762	1761	1746	3	2	40.0	0.08	0.05
1626	Guscio fond.	1748	1763	1762	1747	3	2	40.0	0.08	0.05
1627	Guscio fond.	1749	1764	1763	1748	3	2	40.0	0.08	0.05
1628	Guscio fond.	1750	1765	1764	1749	3	2	40.0	0.08	0.05
1629	Guscio fond.	1751	1766	1765	1750	3	2	40.0	0.08	0.05
1630	Guscio fond.	1752	1767	1766	1751	3	2	40.0	0.08	0.05
1631	Guscio fond.	1753	1768	1767	1752	3	2	40.0	0.08	0.05
1632	Guscio fond.	1754	1769	1768	1753	3	2	40.0	0.08	0.05
1633	Guscio fond.	1755	1770	1769	1754	3	2	40.0	0.08	0.05
1634	Guscio fond.	1756	1771	1770	1755	3	2	40.0	0.08	0.05
1635	Guscio fond.	1757	1772	1771	1756	3	2	40.0	0.08	0.05
1636	Guscio fond.	1758	1773	1563	1548	3	2	40.0	0.08	0.05
1637	Guscio fond.	1759	1774	1773	1758	3	2	40.0	0.08	0.05
1638	Guscio fond.	1760	1775	1774	1759	3	2	40.0	0.08	0.05
1639	Guscio fond.	1761	1776	1775	1760	3	2	40.0	0.08	0.05
1640	Guscio fond.	1762	1777	1776	1761	3	2	40.0	0.08	0.05
1641	Guscio fond.	1763	1778	1777	1762	3	2	40.0	0.08	0.05
1642	Guscio fond.	1764	1779	1778	1763	3	2	40.0	0.08	0.05
1643	Guscio fond.	1765	1780	1779	1764	3	2	40.0	0.08	0.05
1644	Guscio fond.	1766	1781	1780	1765	3	2	40.0	0.08	0.05
1645	Guscio fond.	1767	1782	1781	1766	3	2	40.0	0.08	0.05
1646	Guscio fond.	1768	1783	1782	1767	3	2	40.0	0.08	0.05
1647	Guscio fond.	1769	1784	1783	1768	3	2	40.0	0.08	0.05
1648	Guscio fond.	1770	1785	1784	1769	3	2	40.0	0.08	0.05
1649	Guscio fond.	1771	1786	1785	1770	3	2	40.0	0.08	0.05
1650	Guscio fond.	1772	1787	1786	1771	3	2	40.0	0.08	0.05
1651	Guscio fond.	1773	1788	1578	1563	3	2	40.0	0.08	0.05
1652	Guscio fond.	1774	1789	1788	1773	3	2	40.0	0.08	0.05
1653	Guscio fond.	1775	1790	1789	1774	3	2	40.0	0.08	0.05
1654	Guscio fond.	1776	1791	1790	1775	3	2	40.0	0.08	0.05
1655	Guscio fond.	1777	1792	1791	1776	3	2	40.0	0.08	0.05
1656	Guscio fond.	1778	1793	1792	1777	3	2	40.0	0.08	0.05
1657	Guscio fond.	1779	1794	1793	1778	3	2	40.0	0.08	0.05
1658	Guscio fond.	1780	1795	1794	1779	3	2	40.0	0.08	0.05
1659	Guscio fond.	1781	1796	1795	1780	3	2	40.0	0.08	0.05
1660	Guscio fond.	1782	1797	1796	1781	3	2	40.0	0.08	0.05
1661	Guscio fond.	1783	1798	1797	1782	3	2	40.0	0.08	0.05
1662	Guscio fond.	1784	1799	1798	1783	3	2	40.0	0.08	0.05
1663	Guscio fond.	1785	1800	1799	1784	3	2	40.0	0.08	0.05
1664	Guscio fond.	1786	1801	1800	1785	3	2	40.0	0.08	0.05
1665	Guscio fond.	1787	1802	1801	1786	3	2	40.0	0.08	0.05
1666	Guscio fond.	1788	1803	1593	1578	3	2	40.0	0.08	0.05
1667	Guscio fond.	1789	1804	1803	1788	3	2	40.0	0.08	0.05
1668	Guscio fond.	1790	1805	1804	1789	3	2	40.0	0.08	0.05
1669	Guscio fond.	1791	1806	1805	1790	3	2	40.0	0.08	0.05
1670	Guscio fond.	1792	1807	1806	1791	3	2	40.0	0.08	0.05
1671	Guscio fond.	1793	1808	1807	1792	3	2	40.0	0.08	0.05
1672	Guscio fond.	1794	1809	1808	1793	3	2	40.0	0.08	0.05
1673	Guscio fond.	1795	1810	1809	1794	3	2	40.0	0.08	0.05
1674	Guscio fond.	1796	1811	1810	1795	3	2	40.0	0.08	0.05
1675	Guscio fond.	1797	1812	1811	1796	3	2	40.0	0.08	0.05
1676	Guscio fond.	1798	1813	1812	1797	3	2	40.0	0.08	0.05
1677	Guscio fond.	1799	1814	1813	1798	3	2	40.0	0.08	0.05
1678	Guscio fond.	1800	1815	1814	1799	3	2	40.0	0.08	0.05
1679	Guscio fond.	1801	1816	1815	1800	3	2	40.0	0.08	0.05
1680	Guscio fond.	1802	1817	1816	1801	3	2	40.0	0.08	0.05
1681	Guscio fond.	1803	1818	1608	1593	3	2	40.0	0.08	0.05
1682	Guscio fond.	1804	1819	1818	1803	3	2	40.0	0.08	0.05
1683	Guscio fond.	1805	1820	1819	1804	3	2	40.0	0.08	0.05
1684	Guscio fond.	1806	1821	1820	1805	3	2	40.0	0.08	0.05
1685	Guscio fond.	1807	1822	1821	1806	3	2	40.0	0.08	0.05
1686	Guscio fond.	1808	1823	1822	1807	3	2	40.0	0.08	0.05
1687	Guscio fond.	1809	1824	1823	1808	3	2	40.0	0.08	0.05
1688	Guscio fond.	1810	1825	1824	1809	3	2	40.0	0.08	0.05
1689	Guscio fond.	1811	1826	1825	1810	3	2	40.0	0.08	0.05
1690	Guscio fond.	1812	1827	1826	1811	3	2	40.0	0.08	0.05

1691	Guscio fond.	1813	1828	1827	1812	3	2	40.0	0.08	0.05
1692	Guscio fond.	1814	1829	1828	1813	3	2	40.0	0.08	0.05
1693	Guscio fond.	1815	1830	1829	1814	3	2	40.0	0.08	0.05
1694	Guscio fond.	1816	1831	1830	1815	3	2	40.0	0.08	0.05
1695	Guscio fond.	1817	1832	1831	1816	3	2	40.0	0.08	0.05
1696	Guscio fond.	1818	1833	1623	1608	3	2	40.0	0.08	0.05
1697	Guscio fond.	1819	1834	1833	1818	3	2	40.0	0.08	0.05
1698	Guscio fond.	1820	1835	1834	1819	3	2	40.0	0.08	0.05
1699	Guscio fond.	1821	1836	1835	1820	3	2	40.0	0.08	0.05
1700	Guscio fond.	1822	1837	1836	1821	3	2	40.0	0.08	0.05
1701	Guscio fond.	1823	1838	1837	1822	3	2	40.0	0.08	0.05
1702	Guscio fond.	1824	1839	1838	1823	3	2	40.0	0.08	0.05
1703	Guscio fond.	1825	1840	1839	1824	3	2	40.0	0.08	0.05
1704	Guscio fond.	1826	1841	1840	1825	3	2	40.0	0.08	0.05
1705	Guscio fond.	1827	1842	1841	1826	3	2	40.0	0.08	0.05
1706	Guscio fond.	1828	1843	1842	1827	3	2	40.0	0.08	0.05
1707	Guscio fond.	1829	1844	1843	1828	3	2	40.0	0.08	0.05
1708	Guscio fond.	1830	1845	1844	1829	3	2	40.0	0.08	0.05
1709	Guscio fond.	1831	1846	1845	1830	3	2	40.0	0.08	0.05
1710	Guscio fond.	1832	1847	1846	1831	3	2	40.0	0.08	0.05
1711	Guscio fond.	1833	1848	1638	1623	3	2	40.0	0.08	0.05
1712	Guscio fond.	1834	1849	1848	1833	3	2	40.0	0.08	0.05
1713	Guscio fond.	1835	1850	1849	1834	3	2	40.0	0.08	0.05
1714	Guscio fond.	1836	1851	1850	1835	3	2	40.0	0.08	0.05
1715	Guscio fond.	1837	1852	1851	1836	3	2	40.0	0.08	0.05
1716	Guscio fond.	1838	1853	1852	1837	3	2	40.0	0.08	0.05
1717	Guscio fond.	1839	1854	1853	1838	3	2	40.0	0.08	0.05
1718	Guscio fond.	1840	1855	1854	1839	3	2	40.0	0.08	0.05
1719	Guscio fond.	1841	1856	1855	1840	3	2	40.0	0.08	0.05
1720	Guscio fond.	1842	1857	1856	1841	3	2	40.0	0.08	0.05
1721	Guscio fond.	1843	1858	1857	1842	3	2	40.0	0.08	0.05
1722	Guscio fond.	1844	1859	1858	1843	3	2	40.0	0.08	0.05
1723	Guscio fond.	1845	1860	1859	1844	3	2	40.0	0.08	0.05
1724	Guscio fond.	1846	1861	1860	1845	3	2	40.0	0.08	0.05
1725	Guscio fond.	1847	1862	1861	1846	3	2	40.0	0.08	0.05
1726	Guscio fond.	1848	1863	1653	1638	3	2	40.0	0.08	0.05
1727	Guscio fond.	1849	1864	1863	1848	3	2	40.0	0.08	0.05
1728	Guscio fond.	1850	1865	1864	1849	3	2	40.0	0.08	0.05
1729	Guscio fond.	1851	1866	1865	1850	3	2	40.0	0.08	0.05
1730	Guscio fond.	1852	1867	1866	1851	3	2	40.0	0.08	0.05
1731	Guscio fond.	1853	1868	1867	1852	3	2	40.0	0.08	0.05
1732	Guscio fond.	1854	1869	1868	1853	3	2	40.0	0.08	0.05
1733	Guscio fond.	1855	1870	1869	1854	3	2	40.0	0.08	0.05
1734	Guscio fond.	1856	1871	1870	1855	3	2	40.0	0.08	0.05
1735	Guscio fond.	1857	1872	1871	1856	3	2	40.0	0.08	0.05
1736	Guscio fond.	1858	1873	1872	1857	3	2	40.0	0.08	0.05
1737	Guscio fond.	1859	1874	1873	1858	3	2	40.0	0.08	0.05
1738	Guscio fond.	1860	1875	1874	1859	3	2	40.0	0.08	0.05
1739	Guscio fond.	1861	1876	1875	1860	3	2	40.0	0.08	0.05
1740	Guscio fond.	1862	1877	1876	1861	3	2	40.0	0.08	0.05
1741	Guscio fond.	1863	1878	1668	1653	3	2	40.0	0.08	0.05
1742	Guscio fond.	1864	1879	1878	1863	3	2	40.0	0.08	0.05
1743	Guscio fond.	1865	1880	1879	1864	3	2	40.0	0.08	0.05
1744	Guscio fond.	1866	1881	1880	1865	3	2	40.0	0.08	0.05
1745	Guscio fond.	1867	1882	1881	1866	3	2	40.0	0.08	0.05
1746	Guscio fond.	1868	1883	1882	1867	3	2	40.0	0.08	0.05
1747	Guscio fond.	1869	1884	1883	1868	3	2	40.0	0.08	0.05
1748	Guscio fond.	1870	1885	1884	1869	3	2	40.0	0.08	0.05
1749	Guscio fond.	1871	1886	1885	1870	3	2	40.0	0.08	0.05
1750	Guscio fond.	1872	1887	1886	1871	3	2	40.0	0.08	0.05
1751	Guscio fond.	1873	1888	1887	1872	3	2	40.0	0.08	0.05
1752	Guscio fond.	1874	1889	1888	1873	3	2	40.0	0.08	0.05
1753	Guscio fond.	1875	1890	1889	1874	3	2	40.0	0.08	0.05
1754	Guscio fond.	1876	1891	1890	1875	3	2	40.0	0.08	0.05
1755	Guscio fond.	1877	1892	1891	1876	3	2	40.0	0.08	0.05
1756	Guscio fond.	1878	1893	1683	1668	3	2	40.0	0.08	0.05
1757	Guscio fond.	1879	1894	1893	1878	3	2	40.0	0.08	0.05
1758	Guscio fond.	1880	1895	1894	1879	3	2	40.0	0.08	0.05
1759	Guscio fond.	1881	1896	1895	1880	3	2	40.0	0.08	0.05
1760	Guscio fond.	1882	1897	1896	1881	3	2	40.0	0.08	0.05
1761	Guscio fond.	1883	1898	1897	1882	3	2	40.0	0.08	0.05
1762	Guscio fond.	1884	1899	1898	1883	3	2	40.0	0.08	0.05
1763	Guscio fond.	1885	1900	1899	1884	3	2	40.0	0.08	0.05
1764	Guscio fond.	1886	1901	1900	1885	3	2	40.0	0.08	0.05
1765	Guscio fond.	1887	1902	1901	1886	3	2	40.0	0.08	0.05
1766	Guscio fond.	1888	1903	1902	1887	3	2	40.0	0.08	0.05
1767	Guscio fond.	1889	1904	1903	1888	3	2	40.0	0.08	0.05

1768	Guscio fond.	1890	1905	1904	1889	3	2	40.0	0.08	0.05
1769	Guscio fond.	1891	1906	1905	1890	3	2	40.0	0.08	0.05
1770	Guscio fond.	1892	1907	1906	1891	3	2	40.0	0.08	0.05
1771	Guscio fond.	1893	1908	1698	1683	3	2	40.0	0.08	0.05
1772	Guscio fond.	1894	1909	1908	1893	3	2	40.0	0.08	0.05
1773	Guscio fond.	1895	1910	1909	1894	3	2	40.0	0.08	0.05
1774	Guscio fond.	1896	1911	1910	1895	3	2	40.0	0.08	0.05
1775	Guscio fond.	1897	1912	1911	1896	3	2	40.0	0.08	0.05
1776	Guscio fond.	1898	1913	1912	1897	3	2	40.0	0.08	0.05
1777	Guscio fond.	1899	1914	1913	1898	3	2	40.0	0.08	0.05
1778	Guscio fond.	1900	1915	1914	1899	3	2	40.0	0.08	0.05
1779	Guscio fond.	1901	1916	1915	1900	3	2	40.0	0.08	0.05
1780	Guscio fond.	1902	1917	1916	1901	3	2	40.0	0.08	0.05
1781	Guscio fond.	1903	1918	1917	1902	3	2	40.0	0.08	0.05
1782	Guscio fond.	1904	1919	1918	1903	3	2	40.0	0.08	0.05
1783	Guscio fond.	1905	1920	1919	1904	3	2	40.0	0.08	0.05
1784	Guscio fond.	1906	1921	1920	1905	3	2	40.0	0.08	0.05
1785	Guscio fond.	1907	1922	1921	1906	3	2	40.0	0.08	0.05
1786	Guscio fond.	1908	1923	6	1698	3	2	40.0	0.08	0.05
1787	Guscio fond.	1909	1924	1923	1908	3	2	40.0	0.08	0.05
1788	Guscio fond.	1910	1925	1924	1909	3	2	40.0	0.08	0.05
1789	Guscio fond.	1911	1926	1925	1910	3	2	40.0	0.08	0.05
1790	Guscio fond.	1912	1927	1926	1911	3	2	40.0	0.08	0.05
1791	Guscio fond.	1913	1928	1927	1912	3	2	40.0	0.08	0.05
1792	Guscio fond.	1914	1929	1928	1913	3	2	40.0	0.08	0.05
1793	Guscio fond.	1915	1930	1929	1914	3	2	40.0	0.08	0.05
1794	Guscio fond.	1916	1931	1930	1915	3	2	40.0	0.08	0.05
1795	Guscio fond.	1917	1932	1931	1916	3	2	40.0	0.08	0.05
1796	Guscio fond.	1918	1933	1932	1917	3	2	40.0	0.08	0.05
1797	Guscio fond.	1919	1934	1933	1918	3	2	40.0	0.08	0.05
1798	Guscio fond.	1920	1935	1934	1919	3	2	40.0	0.08	0.05
1799	Guscio fond.	1921	1936	1935	1920	3	2	40.0	0.08	0.05
1800	Guscio fond.	1922	3	1936	1921	3	2	40.0	0.08	0.05
1801	Guscio fond.	13	791	1937	1938	3	3	40.0	0.08	0.05
1802	Guscio fond.	791	819	1939	1937	3	3	40.0	0.08	0.05
1803	Guscio fond.	819	834	1940	1939	3	3	40.0	0.08	0.05
1804	Guscio fond.	834	849	1941	1940	3	2	40.0	0.08	0.05
1805	Guscio fond.	849	864	1942	1941	3	2	40.0	0.08	0.05
1806	Guscio fond.	864	879	1943	1942	3	2	40.0	0.08	0.05
1807	Guscio fond.	879	894	1944	1943	3	2	40.0	0.08	0.05
1808	Guscio fond.	894	909	1945	1944	3	2	40.0	0.08	0.05
1809	Guscio fond.	909	924	1946	1945	3	2	40.0	0.08	0.05
1810	Guscio fond.	924	939	1947	1946	3	2	40.0	0.08	0.05
1811	Guscio fond.	939	954	1948	1947	3	2	40.0	0.08	0.05
1812	Guscio fond.	954	969	1949	1948	3	5	40.0	0.08	0.05
1813	Guscio fond.	969	984	1950	1949	3	3	40.0	0.08	0.05
1814	Guscio fond.	984	999	1951	1950	3	3	40.0	0.08	0.05
1815	Guscio fond.	999	14	1952	1951	3	3	40.0	0.08	0.05
1816	Guscio fond.	14	1028	1953	1952	3	3	40.0	0.08	0.05
1817	Guscio fond.	1028	1044	1954	1953	3	3	40.0	0.08	0.05
1818	Guscio fond.	1044	1060	1955	1954	3	5	40.0	0.08	0.05
1819	Guscio fond.	1060	1076	1956	1955	3	5	40.0	0.08	0.05
1820	Guscio fond.	1076	1092	1957	1956	3	2	40.0	0.08	0.05
1821	Guscio fond.	1092	1108	1958	1957	3	2	40.0	0.08	0.05
1822	Guscio fond.	1108	1124	1959	1958	3	2	40.0	0.08	0.05
1823	Guscio fond.	1124	1140	1960	1959	3	2	40.0	0.08	0.05
1824	Guscio fond.	1140	1156	1961	1960	3	2	40.0	0.08	0.05
1825	Guscio fond.	1156	1172	1962	1961	3	2	40.0	0.08	0.05
1826	Guscio fond.	1172	1188	1963	1962	3	2	40.0	0.08	0.05
1827	Guscio fond.	1188	1204	1964	1963	3	2	40.0	0.08	0.05
1828	Guscio fond.	1204	1220	1965	1964	3	2	40.0	0.08	0.05
1829	Guscio fond.	1220	1236	1966	1965	3	2	40.0	0.08	0.05
1830	Guscio fond.	1236	15	1967	1966	3	2	40.0	0.08	0.05
1831	Guscio fond.	1968	1969	90	1	3	5	40.0	0.08	0.05
1832	Guscio fond.	1969	1970	106	90	3	5	40.0	0.08	0.05
1833	Guscio fond.	1970	1971	122	106	3	2	40.0	0.08	0.05
1834	Guscio fond.	1971	1972	138	122	3	2	40.0	0.08	0.05
1835	Guscio fond.	1972	1973	154	138	3	2	40.0	0.08	0.05
1836	Guscio fond.	1973	1974	170	154	3	2	40.0	0.08	0.05
1837	Guscio fond.	1974	1975	186	170	3	2	40.0	0.08	0.05
1838	Guscio fond.	1975	1976	202	186	3	2	40.0	0.08	0.05
1839	Guscio fond.	1976	1977	218	202	3	2	40.0	0.08	0.05
1840	Guscio fond.	1977	1978	234	218	3	2	40.0	0.08	0.05
1841	Guscio fond.	1978	1979	250	234	3	2	40.0	0.08	0.05
1842	Guscio fond.	1979	1980	266	250	3	2	40.0	0.08	0.05
1843	Guscio fond.	1980	1981	282	266	3	3	40.0	0.08	0.05
1844	Guscio fond.	1981	1982	298	282	3	3	40.0	0.08	0.05

1845	Guscio fond.	1982	1983	2	298	3	3	40.0	0.08	0.05
1846	Guscio fond.	1983	1984	1727	2	3	3	40.0	0.08	0.05
1847	Guscio fond.	1984	1985	1742	1727	3	3	40.0	0.08	0.05
1848	Guscio fond.	1985	1986	1757	1742	3	5	40.0	0.08	0.05
1849	Guscio fond.	1986	1987	1772	1757	3	2	40.0	0.08	0.05
1850	Guscio fond.	1987	1988	1787	1772	3	2	40.0	0.08	0.05
1851	Guscio fond.	1988	1989	1802	1787	3	2	40.0	0.08	0.05
1852	Guscio fond.	2153	2126	1968	2061	3	5	40.0	0.08	0.05
1853	Guscio fond.	2152	2154	2124	1998	3	2	40.0	0.08	0.05
1854	Guscio fond.	1991	1992	1847	1832	3	2	40.0	0.08	0.05
1855	Guscio fond.	1992	1993	1862	1847	3	2	40.0	0.08	0.05
1856	Guscio fond.	1993	1994	1877	1862	3	2	40.0	0.08	0.05
1857	Guscio fond.	1994	1995	1892	1877	3	2	40.0	0.08	0.05
1858	Guscio fond.	1995	1996	1907	1892	3	2	40.0	0.08	0.05
1859	Guscio fond.	1996	1997	1922	1907	3	2	40.0	0.08	0.05
1860	Guscio fond.	1997	1998	3	1922	3	2	40.0	0.08	0.05
1861	Guscio fond.	1999	61	4	2000	3	3	40.0	0.08	0.05
1862	Guscio fond.	2001	64	61	1999	3	3	40.0	0.08	0.05
1863	Guscio fond.	2002	66	64	2001	3	3	40.0	0.08	0.05
1864	Guscio fond.	2003	68	66	2002	3	3	40.0	0.08	0.05
1865	Guscio fond.	2004	70	68	2003	3	5	40.0	0.08	0.05
1866	Guscio fond.	2005	72	70	2004	3	2	40.0	0.08	0.05
1867	Guscio fond.	2006	74	72	2005	3	2	40.0	0.08	0.05
1868	Guscio fond.	2007	76	74	2006	3	2	40.0	0.08	0.05
1869	Guscio fond.	2008	78	76	2007	3	2	40.0	0.08	0.05
1870	Guscio fond.	2009	80	78	2008	3	5	40.0	0.08	0.05
1871	Guscio fond.	2010	82	80	2009	3	5	40.0	0.08	0.05
1872	Guscio fond.	2011	84	82	2010	3	5	40.0	0.08	0.05
1873	Guscio fond.	2012	86	84	2011	3	5	40.0	0.08	0.05
1874	Guscio fond.	2013	88	86	2012	3	5	40.0	0.08	0.05
1875	Guscio fond.	2014	1	88	2013	3	5	40.0	0.08	0.05
1876	Guscio fond.	2015	313	7	2016	3	3	40.0	0.08	0.05
1877	Guscio fond.	2017	316	313	2015	3	3	40.0	0.08	0.05
1878	Guscio fond.	2018	318	316	2017	3	3	40.0	0.08	0.05
1879	Guscio fond.	2019	320	318	2018	3	3	40.0	0.08	0.05
1880	Guscio fond.	2020	322	320	2019	3	3	40.0	0.08	0.05
1881	Guscio fond.	2021	324	322	2020	3	2	40.0	0.08	0.05
1882	Guscio fond.	2022	326	324	2021	3	2	40.0	0.08	0.05
1883	Guscio fond.	2023	328	326	2022	3	5	40.0	0.08	0.05
1884	Guscio fond.	2024	330	328	2023	3	5	40.0	0.08	0.05
1885	Guscio fond.	2025	332	330	2024	3	5	40.0	0.08	0.05
1886	Guscio fond.	2026	334	332	2025	3	3	40.0	0.08	0.05
1887	Guscio fond.	2027	336	334	2026	3	3	40.0	0.08	0.05
1888	Guscio fond.	2028	338	336	2027	3	3	40.0	0.08	0.05
1889	Guscio fond.	2029	340	338	2028	3	3	40.0	0.08	0.05
1890	Guscio fond.	2000	4	340	2029	3	3	40.0	0.08	0.05
1891	Guscio fond.	2030	551	10	2031	3	3	40.0	0.08	0.05
1892	Guscio fond.	2032	554	551	2030	3	3	40.0	0.08	0.05
1893	Guscio fond.	2033	556	554	2032	3	3	40.0	0.08	0.05
1894	Guscio fond.	2034	558	556	2033	3	3	40.0	0.08	0.05
1895	Guscio fond.	2035	560	558	2034	3	3	40.0	0.08	0.05
1896	Guscio fond.	2036	562	560	2035	3	2	40.0	0.08	0.05
1897	Guscio fond.	2037	564	562	2036	3	2	40.0	0.08	0.05
1898	Guscio fond.	2038	566	564	2037	3	2	40.0	0.08	0.05
1899	Guscio fond.	2039	568	566	2038	3	2	40.0	0.08	0.05
1900	Guscio fond.	2040	570	568	2039	3	2	40.0	0.08	0.05
1901	Guscio fond.	2041	572	570	2040	3	3	40.0	0.08	0.05
1902	Guscio fond.	2042	574	572	2041	3	3	40.0	0.08	0.05
1903	Guscio fond.	2043	576	574	2042	3	3	40.0	0.08	0.05
1904	Guscio fond.	2044	578	576	2043	3	3	40.0	0.08	0.05
1905	Guscio fond.	2016	7	578	2044	3	3	40.0	0.08	0.05
1906	Guscio fond.	2045	789	13	2046	3	3	40.0	0.08	0.05
1907	Guscio fond.	2047	792	789	2045	3	3	40.0	0.08	0.05
1908	Guscio fond.	2048	794	792	2047	3	3	40.0	0.08	0.05
1909	Guscio fond.	2049	796	794	2048	3	3	40.0	0.08	0.05
1910	Guscio fond.	2050	798	796	2049	3	2	40.0	0.08	0.05
1911	Guscio fond.	2051	800	798	2050	3	2	40.0	0.08	0.05
1912	Guscio fond.	2052	802	800	2051	3	2	40.0	0.08	0.05
1913	Guscio fond.	2053	804	802	2052	3	2	40.0	0.08	0.05
1914	Guscio fond.	2054	806	804	2053	3	2	40.0	0.08	0.05
1915	Guscio fond.	2055	808	806	2054	3	2	40.0	0.08	0.05
1916	Guscio fond.	2056	810	808	2055	3	3	40.0	0.08	0.05
1917	Guscio fond.	2057	812	810	2056	3	3	40.0	0.08	0.05
1918	Guscio fond.	2058	814	812	2057	3	3	40.0	0.08	0.05
1919	Guscio fond.	2059	816	814	2058	3	3	40.0	0.08	0.05
1920	Guscio fond.	2031	10	816	2059	3	3	40.0	0.08	0.05
1921	Guscio fond.	2046	13	1938	2060	3	3	40.0	0.08	0.05

1922	Guscio fond.	2061	1968	1	2014	3	5	40.0	0.08	0.05
1923	Guscio fond.	1251	2062	2063	15	3	2	40.0	0.08	0.05
1924	Guscio fond.	1252	2064	2062	1251	3	2	40.0	0.08	0.05
1925	Guscio fond.	1253	2065	2064	1252	3	2	40.0	0.08	0.05
1926	Guscio fond.	1254	2066	2065	1253	3	2	40.0	0.08	0.05
1927	Guscio fond.	1255	2067	2066	1254	3	2	40.0	0.08	0.05
1928	Guscio fond.	1256	2068	2067	1255	3	2	40.0	0.08	0.05
1929	Guscio fond.	1257	2069	2068	1256	3	2	40.0	0.08	0.05
1930	Guscio fond.	1258	2070	2069	1257	3	2	40.0	0.08	0.05
1931	Guscio fond.	1259	2071	2070	1258	3	2	40.0	0.08	0.05
1932	Guscio fond.	1260	2072	2071	1259	3	2	40.0	0.08	0.05
1933	Guscio fond.	1261	2073	2072	1260	3	2	40.0	0.08	0.05
1934	Guscio fond.	1262	2074	2073	1261	3	2	40.0	0.08	0.05
1935	Guscio fond.	1263	2075	2074	1262	3	2	40.0	0.08	0.05
1936	Guscio fond.	1264	2076	2075	1263	3	2	40.0	0.08	0.05
1937	Guscio fond.	12	2077	2076	1264	3	2	40.0	0.08	0.05
1938	Guscio fond.	1475	2078	2077	12	3	2	40.0	0.08	0.05
1939	Guscio fond.	1476	2079	2078	1475	3	2	40.0	0.08	0.05
1940	Guscio fond.	1477	2080	2079	1476	3	2	40.0	0.08	0.05
1941	Guscio fond.	1478	2081	2080	1477	3	2	40.0	0.08	0.05
1942	Guscio fond.	1479	2082	2081	1478	3	2	40.0	0.08	0.05
1943	Guscio fond.	1480	2083	2082	1479	3	2	40.0	0.08	0.05
1944	Guscio fond.	1481	2084	2083	1480	3	2	40.0	0.08	0.05
1945	Guscio fond.	1482	2085	2084	1481	3	2	40.0	0.08	0.05
1946	Guscio fond.	1483	2086	2085	1482	3	2	40.0	0.08	0.05
1947	Guscio fond.	1484	2087	2086	1483	3	2	40.0	0.08	0.05
1948	Guscio fond.	1485	2088	2087	1484	3	2	40.0	0.08	0.05
1949	Guscio fond.	1486	2089	2088	1485	3	2	40.0	0.08	0.05
1950	Guscio fond.	1487	2090	2089	1486	3	2	40.0	0.08	0.05
1951	Guscio fond.	1488	2091	2090	1487	3	2	40.0	0.08	0.05
1952	Guscio fond.	9	2092	2091	1488	3	2	40.0	0.08	0.05
1953	Guscio fond.	1699	2093	2092	9	3	2	40.0	0.08	0.05
1954	Guscio fond.	1700	2094	2093	1699	3	2	40.0	0.08	0.05
1955	Guscio fond.	1701	2095	2094	1700	3	2	40.0	0.08	0.05
1956	Guscio fond.	1702	2096	2095	1701	3	2	40.0	0.08	0.05
1957	Guscio fond.	1703	2097	2096	1702	3	2	40.0	0.08	0.05
1958	Guscio fond.	1704	2098	2097	1703	3	2	40.0	0.08	0.05
1959	Guscio fond.	1705	2099	2098	1704	3	2	40.0	0.08	0.05
1960	Guscio fond.	1706	2100	2099	1705	3	2	40.0	0.08	0.05
1961	Guscio fond.	1707	2101	2100	1706	3	2	40.0	0.08	0.05
1962	Guscio fond.	1708	2102	2101	1707	3	2	40.0	0.08	0.05
1963	Guscio fond.	1709	2103	2102	1708	3	2	40.0	0.08	0.05
1964	Guscio fond.	1710	2104	2103	1709	3	2	40.0	0.08	0.05
1965	Guscio fond.	1711	2105	2104	1710	3	2	40.0	0.08	0.05
1966	Guscio fond.	1712	2106	2105	1711	3	2	40.0	0.08	0.05
1967	Guscio fond.	6	2107	2106	1712	3	2	40.0	0.08	0.05
1968	Guscio fond.	1923	2108	2107	6	3	2	40.0	0.08	0.05
1969	Guscio fond.	1924	2109	2108	1923	3	2	40.0	0.08	0.05
1970	Guscio fond.	1925	2110	2109	1924	3	2	40.0	0.08	0.05
1971	Guscio fond.	1926	2111	2110	1925	3	2	40.0	0.08	0.05
1972	Guscio fond.	1927	2112	2111	1926	3	2	40.0	0.08	0.05
1973	Guscio fond.	1928	2113	2112	1927	3	2	40.0	0.08	0.05
1974	Guscio fond.	1929	2114	2113	1928	3	2	40.0	0.08	0.05
1975	Guscio fond.	1930	2115	2114	1929	3	2	40.0	0.08	0.05
1976	Guscio fond.	1931	2116	2115	1930	3	2	40.0	0.08	0.05
1977	Guscio fond.	1932	2117	2116	1931	3	2	40.0	0.08	0.05
1978	Guscio fond.	1933	2118	2117	1932	3	2	40.0	0.08	0.05
1979	Guscio fond.	1934	2119	2118	1933	3	2	40.0	0.08	0.05
1980	Guscio fond.	1935	2120	2119	1934	3	2	40.0	0.08	0.05
1981	Guscio fond.	1936	2121	2120	1935	3	2	40.0	0.08	0.05
1982	Guscio fond.	3	2122	2121	1936	3	2	40.0	0.08	0.05
1983	Guscio fond.	15	2063	2123	1967	3	2	40.0	0.08	0.05
1984	Guscio fond.	1998	2124	2122	3	3	2	40.0	0.08	0.05
1985	Guscio fond.	1989	1990	1817	1802	3	2	40.0	0.08	0.05
1986	Guscio fond.	1990	1991	1832	1817	3	2	40.0	0.08	0.05
1987	Guscio fond.	2126	2127	1969	1968	3	2	40.0	0.08	0.05
1988	Guscio fond.	2127	2128	1970	1969	3	5	40.0	0.08	0.05
1989	Guscio fond.	2128	193	1971	1970	3	2	40.0	0.08	0.05
1990	Guscio fond.	193	2129	1972	1971	3	2	40.0	0.08	0.05
1991	Guscio fond.	2129	194	1973	1972	3	2	40.0	0.08	0.05
1992	Guscio fond.	194	2130	1974	1973	3	2	40.0	0.08	0.05
1993	Guscio fond.	2130	195	1975	1974	3	2	40.0	0.08	0.05
1994	Guscio fond.	195	2131	1976	1975	3	2	40.0	0.08	0.05
1995	Guscio fond.	2131	2132	1977	1976	3	2	40.0	0.08	0.05
1996	Guscio fond.	2132	2133	1978	1977	3	2	40.0	0.08	0.05
1997	Guscio fond.	2133	2134	1979	1978	3	2	40.0	0.08	0.05
1998	Guscio fond.	2134	2135	1980	1979	3	2	40.0	0.08	0.05

1999	Guscio fond.	2135	2136	1981	1980	3	3	40.0	0.08	0.05
2000	Guscio fond.	2136	2137	1982	1981	3	3	40.0	0.08	0.05
2001	Guscio fond.	2137	2138	1983	1982	3	3	40.0	0.08	0.05
2002	Guscio fond.	2138	2139	1984	1983	3	3	40.0	0.08	0.05
2003	Guscio fond.	2139	2140	1985	1984	3	3	40.0	0.08	0.05
2004	Guscio fond.	2140	2141	1986	1985	3	5	40.0	0.08	0.05
2005	Guscio fond.	2141	2142	1987	1986	3	2	40.0	0.08	0.05
2006	Guscio fond.	2142	2143	1988	1987	3	2	40.0	0.08	0.05
2007	Guscio fond.	2143	2144	1989	1988	3	2	40.0	0.08	0.05
2008	Guscio fond.	2144	2145	1990	1989	3	2	40.0	0.08	0.05
2009	Guscio fond.	2145	2146	1991	1990	3	2	40.0	0.08	0.05
2010	Guscio fond.	2146	196	1992	1991	3	2	40.0	0.08	0.05
2011	Guscio fond.	196	2147	1993	1992	3	2	40.0	0.08	0.05
2012	Guscio fond.	2147	2148	1994	1993	3	2	40.0	0.08	0.05
2013	Guscio fond.	2148	2149	1995	1994	3	2	40.0	0.08	0.05
2014	Guscio fond.	2149	2150	1996	1995	3	2	40.0	0.08	0.05
2015	Guscio fond.	2150	2151	1997	1996	3	2	40.0	0.08	0.05
2016	Guscio fond.	2151	2152	1998	1997	3	2	40.0	0.08	0.05
2017	Guscio fond.	2154	197	217	2124	3	2	40.0	0.08	0.05
2018	Guscio fond.	2062	2155	2156	2063	3	2	40.0	0.08	0.05
2019	Guscio fond.	2064	2157	2155	2062	3	2	40.0	0.08	0.05
2020	Guscio fond.	1	90	2196	88	3	5	40.0	0.08	0.05
2021	Guscio fond.	90	106	2197	2196	3	5	40.0	0.08	0.05
2022	Guscio fond.	106	122	2198	2197	3	2	40.0	0.08	0.05
2023	Guscio fond.	122	138	2199	2198	3	2	40.0	0.08	0.05
2024	Guscio fond.	138	154	2200	2199	3	2	40.0	0.08	0.05
2025	Guscio fond.	154	170	2201	2200	3	2	40.0	0.08	0.05
2026	Guscio fond.	170	186	2202	2201	3	2	40.0	0.08	0.05
2027	Guscio fond.	186	202	2203	2202	3	2	40.0	0.08	0.05
2028	Guscio fond.	202	218	2204	2203	3	2	40.0	0.08	0.05
2029	Guscio fond.	218	234	2205	2204	3	2	40.0	0.08	0.05
2030	Guscio fond.	234	250	2206	2205	3	2	40.0	0.08	0.05
2031	Guscio fond.	250	266	2207	2206	3	2	40.0	0.08	0.05
2032	Guscio fond.	266	282	2208	2207	3	3	40.0	0.08	0.05
2033	Guscio fond.	282	298	2209	2208	3	3	40.0	0.08	0.05
2034	Guscio fond.	298	2	312	2209	3	3	40.0	0.08	0.05
2035	Guscio fond.	88	2196	2225	86	3	5	40.0	0.08	0.05
2036	Guscio fond.	2196	2197	2226	2225	3	5	40.0	0.08	0.05
2037	Guscio fond.	2197	2198	2227	2226	3	2	40.0	0.08	0.05
2038	Guscio fond.	2198	2199	2228	2227	3	2	40.0	0.08	0.05
2039	Guscio fond.	2199	2200	2229	2228	3	2	40.0	0.08	0.05
2040	Guscio fond.	2200	2201	2230	2229	3	2	40.0	0.08	0.05
2041	Guscio fond.	2201	2202	2231	2230	3	2	40.0	0.08	0.05
2042	Guscio fond.	2202	2203	2232	2231	3	2	40.0	0.08	0.05
2043	Guscio fond.	2203	2204	2233	2232	3	2	40.0	0.08	0.05
2044	Guscio fond.	2204	2205	2234	2233	3	2	40.0	0.08	0.05
2045	Guscio fond.	2205	2206	2235	2234	3	2	40.0	0.08	0.05
2046	Guscio fond.	2206	2207	2236	2235	3	2	40.0	0.08	0.05
2047	Guscio fond.	2207	2208	2237	2236	3	3	40.0	0.08	0.05
2048	Guscio fond.	2208	2209	2238	2237	3	3	40.0	0.08	0.05
2049	Guscio fond.	2209	312	311	2238	3	3	40.0	0.08	0.05
2050	Guscio fond.	86	2225	2254	84	3	5	40.0	0.08	0.05
2051	Guscio fond.	2225	2226	2255	2254	3	5	40.0	0.08	0.05
2052	Guscio fond.	2226	2227	2256	2255	3	2	40.0	0.08	0.05
2053	Guscio fond.	2227	2228	2257	2256	3	2	40.0	0.08	0.05
2054	Guscio fond.	2228	2229	2258	2257	3	2	40.0	0.08	0.05
2055	Guscio fond.	2229	2230	2259	2258	3	2	40.0	0.08	0.05
2056	Guscio fond.	2230	2231	2260	2259	3	2	40.0	0.08	0.05
2057	Guscio fond.	2231	2232	2261	2260	3	2	40.0	0.08	0.05
2058	Guscio fond.	2232	2233	2262	2261	3	2	40.0	0.08	0.05
2059	Guscio fond.	2233	2234	2263	2262	3	2	40.0	0.08	0.05
2060	Guscio fond.	2234	2235	2264	2263	3	2	40.0	0.08	0.05
2061	Guscio fond.	2235	2236	2265	2264	3	2	40.0	0.08	0.05
2062	Guscio fond.	2236	2237	2266	2265	3	2	40.0	0.08	0.05
2063	Guscio fond.	2237	2238	2267	2266	3	3	40.0	0.08	0.05
2064	Guscio fond.	2238	311	310	2267	3	3	40.0	0.08	0.05
2065	Guscio fond.	84	2254	2283	82	3	5	40.0	0.08	0.05
2066	Guscio fond.	2254	2255	2284	2283	3	5	40.0	0.08	0.05
2067	Guscio fond.	2255	2256	2285	2284	3	2	40.0	0.08	0.05
2068	Guscio fond.	2256	2257	2455	2285	3	2	40.0	0.08	0.05
2069	Guscio fond.	2257	2258	2474	2286	3	2	40.0	0.08	0.05
2070	Guscio fond.	2258	2259	2288	2287	3	2	40.0	0.08	0.05
2071	Guscio fond.	2259	2260	2289	2288	3	2	40.0	0.08	0.05
2072	Guscio fond.	2260	2261	2290	2289	3	2	40.0	0.08	0.05
2073	Guscio fond.	2261	2262	2291	2290	3	2	40.0	0.08	0.05
2074	Guscio fond.	2262	2263	2292	2291	3	2	40.0	0.08	0.05
2075	Guscio fond.	2263	2264	2293	2292	3	2	40.0	0.08	0.05

2076	Guscio fond.	2264	2265	2294	2293	3	2	40.0	0.08	0.05
2077	Guscio fond.	2265	2266	2295	2294	3	2	40.0	0.08	0.05
2078	Guscio fond.	2266	2267	2296	2295	3	2	40.0	0.08	0.05
2079	Guscio fond.	2267	310	309	2296	3	2	40.0	0.08	0.05
2080	Guscio fond.	82	2283	2312	80	3	2	40.0	0.08	0.05
2081	Guscio fond.	2283	2284	2313	2312	3	2	40.0	0.08	0.05
2082	Guscio fond.	2284	2285	2314	2313	3	2	40.0	0.08	0.05
2083	Guscio fond.	2285	2455	2315	2314	3	2	40.0	0.08	0.05
2084	Guscio fond.	2286	2474	2316	2315	3	2	40.0	0.08	0.05
2085	Guscio fond.	2287	2288	2317	2316	3	2	40.0	0.08	0.05
2086	Guscio fond.	2288	2289	2318	2317	3	2	40.0	0.08	0.05
2087	Guscio fond.	2289	2290	2319	2318	3	2	40.0	0.08	0.05
2088	Guscio fond.	2290	2291	2320	2319	3	2	40.0	0.08	0.05
2089	Guscio fond.	2291	2292	2321	2320	3	2	40.0	0.08	0.05
2090	Guscio fond.	2292	2293	2322	2321	3	2	40.0	0.08	0.05
2091	Guscio fond.	2293	2294	2323	2322	3	2	40.0	0.08	0.05
2092	Guscio fond.	2294	2295	2324	2323	3	2	40.0	0.08	0.05
2093	Guscio fond.	2295	2296	2325	2324	3	2	40.0	0.08	0.05
2094	Guscio fond.	2296	309	308	2325	3	2	40.0	0.08	0.05
2095	Guscio fond.	80	2312	2341	78	3	2	40.0	0.08	0.05
2096	Guscio fond.	2312	2313	2342	2341	3	2	40.0	0.08	0.05
2097	Guscio fond.	2313	2314	2343	2342	3	2	40.0	0.08	0.05
2098	Guscio fond.	2314	2315	2344	2343	3	2	40.0	0.08	0.05
2099	Guscio fond.	2315	2316	2345	2344	3	2	40.0	0.08	0.05
2100	Guscio fond.	2316	2317	2346	2345	3	2	40.0	0.08	0.05
2101	Guscio fond.	2317	2318	2347	2346	3	2	40.0	0.08	0.05
2102	Guscio fond.	2318	2319	2348	2347	3	2	40.0	0.08	0.05
2103	Guscio fond.	2319	2320	2349	2348	3	2	40.0	0.08	0.05
2104	Guscio fond.	2320	2321	2350	2349	3	2	40.0	0.08	0.05
2105	Guscio fond.	2321	2322	2351	2350	3	2	40.0	0.08	0.05
2106	Guscio fond.	2322	2323	2352	2351	3	2	40.0	0.08	0.05
2107	Guscio fond.	2323	2324	2353	2352	3	2	40.0	0.08	0.05
2108	Guscio fond.	2324	2325	2354	2353	3	2	40.0	0.08	0.05
2109	Guscio fond.	2325	308	307	2354	3	2	40.0	0.08	0.05
2110	Guscio fond.	78	2341	2370	76	3	2	40.0	0.08	0.05
2111	Guscio fond.	2341	2342	2371	2370	3	2	40.0	0.08	0.05
2112	Guscio fond.	2342	2343	2372	2371	3	2	40.0	0.08	0.05
2113	Guscio fond.	2343	2344	2373	2372	3	2	40.0	0.08	0.05
2114	Guscio fond.	2344	2345	2374	2373	3	2	40.0	0.08	0.05
2115	Guscio fond.	2345	2346	2375	2374	3	2	40.0	0.08	0.05
2116	Guscio fond.	2346	2347	2376	2375	3	2	40.0	0.08	0.05
2117	Guscio fond.	2347	2348	2377	2376	3	2	40.0	0.08	0.05
2118	Guscio fond.	2348	2349	2378	2377	3	2	40.0	0.08	0.05
2119	Guscio fond.	2349	2350	2379	2378	3	2	40.0	0.08	0.05
2120	Guscio fond.	2350	2351	2380	2379	3	2	40.0	0.08	0.05
2121	Guscio fond.	2351	2352	2381	2380	3	2	40.0	0.08	0.05
2122	Guscio fond.	2352	2353	2382	2381	3	2	40.0	0.08	0.05
2123	Guscio fond.	2353	2354	2383	2382	3	2	40.0	0.08	0.05
2124	Guscio fond.	2354	307	306	2383	3	2	40.0	0.08	0.05
2125	Guscio fond.	76	2370	2217	74	3	2	40.0	0.08	0.05
2126	Guscio fond.	2370	2371	2218	2217	3	2	40.0	0.08	0.05
2127	Guscio fond.	2371	2372	2219	2218	3	2	40.0	0.08	0.05
2128	Guscio fond.	2372	2373	2220	2219	3	2	40.0	0.08	0.05
2129	Guscio fond.	2373	2374	2221	2220	3	2	40.0	0.08	0.05
2130	Guscio fond.	2374	2375	2222	2221	3	2	40.0	0.08	0.05
2131	Guscio fond.	2375	2376	2223	2222	3	2	40.0	0.08	0.05
2132	Guscio fond.	2376	2377	2224	2223	3	2	40.0	0.08	0.05
2133	Guscio fond.	2377	2378	2239	2224	3	2	40.0	0.08	0.05
2134	Guscio fond.	2378	2379	2240	2239	3	2	40.0	0.08	0.05
2135	Guscio fond.	2379	2380	2241	2240	3	2	40.0	0.08	0.05
2136	Guscio fond.	2380	2381	2242	2241	3	2	40.0	0.08	0.05
2137	Guscio fond.	2381	2382	2243	2242	3	2	40.0	0.08	0.05
2138	Guscio fond.	2382	2383	2244	2243	3	2	40.0	0.08	0.05
2139	Guscio fond.	2383	306	305	2244	3	2	40.0	0.08	0.05
2140	Guscio fond.	74	2217	2274	72	3	2	40.0	0.08	0.05
2141	Guscio fond.	2217	2218	2275	2274	3	2	40.0	0.08	0.05
2142	Guscio fond.	2218	2219	2276	2275	3	2	40.0	0.08	0.05
2143	Guscio fond.	2219	2220	2277	2276	3	2	40.0	0.08	0.05
2144	Guscio fond.	2220	2221	2278	2277	3	2	40.0	0.08	0.05
2145	Guscio fond.	2221	2222	2279	2278	3	2	40.0	0.08	0.05
2146	Guscio fond.	2222	2223	2280	2279	3	2	40.0	0.08	0.05
2147	Guscio fond.	2223	2224	2281	2280	3	2	40.0	0.08	0.05
2148	Guscio fond.	2224	2239	2282	2281	3	2	40.0	0.08	0.05
2149	Guscio fond.	2239	2240	2297	2282	3	2	40.0	0.08	0.05
2150	Guscio fond.	2240	2241	2298	2297	3	2	40.0	0.08	0.05
2151	Guscio fond.	2241	2242	2299	2298	3	2	40.0	0.08	0.05
2152	Guscio fond.	2242	2243	2300	2299	3	2	40.0	0.08	0.05

2153	Guscio fond.	2243	2244	2301	2300	3	2	40.0	0.08	0.05
2154	Guscio fond.	2244	305	304	2301	3	2	40.0	0.08	0.05
2155	Guscio fond.	72	2274	2331	70	3	2	40.0	0.08	0.05
2156	Guscio fond.	2274	2275	2332	2331	3	2	40.0	0.08	0.05
2157	Guscio fond.	2275	2276	2333	2332	3	2	40.0	0.08	0.05
2158	Guscio fond.	2276	2277	2334	2333	3	2	40.0	0.08	0.05
2159	Guscio fond.	2277	2278	2335	2334	3	2	40.0	0.08	0.05
2160	Guscio fond.	2278	2279	2336	2335	3	2	40.0	0.08	0.05
2161	Guscio fond.	2279	2280	2337	2336	3	2	40.0	0.08	0.05
2162	Guscio fond.	2280	2281	2338	2337	3	2	40.0	0.08	0.05
2163	Guscio fond.	2281	2282	2339	2338	3	2	40.0	0.08	0.05
2164	Guscio fond.	2282	2297	2340	2339	3	2	40.0	0.08	0.05
2165	Guscio fond.	2297	2298	2355	2340	3	2	40.0	0.08	0.05
2166	Guscio fond.	2298	2299	2356	2355	3	2	40.0	0.08	0.05
2167	Guscio fond.	2299	2300	2357	2356	3	2	40.0	0.08	0.05
2168	Guscio fond.	2300	2301	2358	2357	3	2	40.0	0.08	0.05
2169	Guscio fond.	2301	304	303	2358	3	2	40.0	0.08	0.05
2170	Guscio fond.	70	2331	2388	68	3	5	40.0	0.08	0.05
2171	Guscio fond.	2331	2332	2389	2388	3	5	40.0	0.08	0.05
2172	Guscio fond.	2332	2333	2390	2389	3	2	40.0	0.08	0.05
2173	Guscio fond.	2333	2334	2195	2390	3	2	40.0	0.08	0.05
2174	Guscio fond.	2334	2335	2210	2195	3	2	40.0	0.08	0.05
2175	Guscio fond.	2335	2336	2211	2210	3	2	40.0	0.08	0.05
2176	Guscio fond.	2336	2337	2212	2211	3	2	40.0	0.08	0.05
2177	Guscio fond.	2337	2338	2213	2212	3	2	40.0	0.08	0.05
2178	Guscio fond.	2338	2339	2214	2213	3	2	40.0	0.08	0.05
2179	Guscio fond.	2339	2340	2215	2214	3	2	40.0	0.08	0.05
2180	Guscio fond.	2340	2355	2216	2215	3	2	40.0	0.08	0.05
2181	Guscio fond.	2355	2356	2245	2216	3	2	40.0	0.08	0.05
2182	Guscio fond.	2356	2357	2246	2245	3	2	40.0	0.08	0.05
2183	Guscio fond.	2357	2358	2247	2246	3	2	40.0	0.08	0.05
2184	Guscio fond.	2358	303	302	2247	3	2	40.0	0.08	0.05
2185	Guscio fond.	68	2388	2305	66	3	3	40.0	0.08	0.05
2186	Guscio fond.	2388	2389	2306	2305	3	5	40.0	0.08	0.05
2187	Guscio fond.	2389	2390	2307	2306	3	2	40.0	0.08	0.05
2188	Guscio fond.	2390	2195	2308	2307	3	2	40.0	0.08	0.05
2189	Guscio fond.	2195	2210	2309	2308	3	2	40.0	0.08	0.05
2190	Guscio fond.	2210	2211	2310	2309	3	2	40.0	0.08	0.05
2191	Guscio fond.	2211	2212	2311	2310	3	2	40.0	0.08	0.05
2192	Guscio fond.	2212	2213	2326	2311	3	2	40.0	0.08	0.05
2193	Guscio fond.	2213	2214	2327	2326	3	2	40.0	0.08	0.05
2194	Guscio fond.	2214	2215	2328	2327	3	2	40.0	0.08	0.05
2195	Guscio fond.	2215	2216	2329	2328	3	2	40.0	0.08	0.05
2196	Guscio fond.	2216	2245	2330	2329	3	2	40.0	0.08	0.05
2197	Guscio fond.	2245	2246	2359	2330	3	2	40.0	0.08	0.05
2198	Guscio fond.	2246	2247	2360	2359	3	5	40.0	0.08	0.05
2199	Guscio fond.	2247	302	301	2360	3	3	40.0	0.08	0.05
2200	Guscio fond.	66	2305	2250	64	3	3	40.0	0.08	0.05
2201	Guscio fond.	2305	2306	2251	2250	3	3	40.0	0.08	0.05
2202	Guscio fond.	2306	2307	2252	2251	3	2	40.0	0.08	0.05
2203	Guscio fond.	2307	2308	2253	2252	3	2	40.0	0.08	0.05
2204	Guscio fond.	2308	2309	2268	2253	3	2	40.0	0.08	0.05
2205	Guscio fond.	2309	2310	2269	2268	3	2	40.0	0.08	0.05
2206	Guscio fond.	2310	2311	2270	2269	3	2	40.0	0.08	0.05
2207	Guscio fond.	2311	2326	2271	2270	3	2	40.0	0.08	0.05
2208	Guscio fond.	2326	2327	2272	2271	3	2	40.0	0.08	0.05
2209	Guscio fond.	2327	2328	2273	2272	3	2	40.0	0.08	0.05
2210	Guscio fond.	2328	2329	2302	2273	3	2	40.0	0.08	0.05
2211	Guscio fond.	2329	2330	2303	2302	3	2	40.0	0.08	0.05
2212	Guscio fond.	2330	2359	2304	2303	3	2	40.0	0.08	0.05
2213	Guscio fond.	2359	2360	2361	2304	3	3	40.0	0.08	0.05
2214	Guscio fond.	2360	301	300	2361	3	3	40.0	0.08	0.05
2215	Guscio fond.	64	2250	2363	61	3	3	40.0	0.08	0.05
2216	Guscio fond.	2250	2251	2364	2363	3	3	40.0	0.08	0.05
2217	Guscio fond.	2251	2252	2365	2364	3	2	40.0	0.08	0.05
2218	Guscio fond.	2252	2253	2366	2365	3	2	40.0	0.08	0.05
2219	Guscio fond.	2253	2268	2367	2366	3	2	40.0	0.08	0.05
2220	Guscio fond.	2268	2269	2368	2367	3	2	40.0	0.08	0.05
2221	Guscio fond.	2269	2270	2369	2368	3	2	40.0	0.08	0.05
2222	Guscio fond.	2270	2271	2384	2369	3	2	40.0	0.08	0.05
2223	Guscio fond.	2271	2272	2385	2384	3	2	40.0	0.08	0.05
2224	Guscio fond.	2272	2273	2386	2385	3	2	40.0	0.08	0.05
2225	Guscio fond.	2273	2302	2387	2386	3	2	40.0	0.08	0.05
2226	Guscio fond.	2302	2303	2248	2387	3	2	40.0	0.08	0.05
2227	Guscio fond.	2303	2304	2249	2248	3	2	40.0	0.08	0.05
2228	Guscio fond.	2304	2361	2362	2249	3	3	40.0	0.08	0.05
2229	Guscio fond.	2361	300	299	2362	3	3	40.0	0.08	0.05

2230	Guscio fond.	61	2363	63	4	3	3	40.0	0.08	0.05
2231	Guscio fond.	2363	2364	92	63	3	3	40.0	0.08	0.05
2232	Guscio fond.	2364	2365	108	92	3	2	40.0	0.08	0.05
2233	Guscio fond.	2365	2366	124	108	3	2	40.0	0.08	0.05
2234	Guscio fond.	2366	2367	140	124	3	2	40.0	0.08	0.05
2235	Guscio fond.	2367	2368	156	140	3	2	40.0	0.08	0.05
2236	Guscio fond.	2368	2369	172	156	3	2	40.0	0.08	0.05
2237	Guscio fond.	2369	2384	188	172	3	2	40.0	0.08	0.05
2238	Guscio fond.	2384	2385	204	188	3	2	40.0	0.08	0.05
2239	Guscio fond.	2385	2386	220	204	3	2	40.0	0.08	0.05
2240	Guscio fond.	2386	2387	236	220	3	2	40.0	0.08	0.05
2241	Guscio fond.	2387	2248	252	236	3	2	40.0	0.08	0.05
2242	Guscio fond.	2248	2249	268	252	3	2	40.0	0.08	0.05
2243	Guscio fond.	2249	2362	284	268	3	3	40.0	0.08	0.05
2244	Guscio fond.	2362	299	5	284	3	3	40.0	0.08	0.05
2245	Setto	2218	2275	2391	2392	3	1	25.0		
2246	Setto	2392	2391	2393	2394	3	1	25.0		
2247	Setto	2394	2393	2395	2396	3	1	25.0		
2248	Setto	2396	2395	2397	2398	3	1	25.0		
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2250	Setto	2400	2399	2401	2402	3	1	25.0		
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2259	Setto	2413	2400	2402	2414	3	1	25.0		
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2263	Setto	2342	2371	2409	2418	3	1	25.0		
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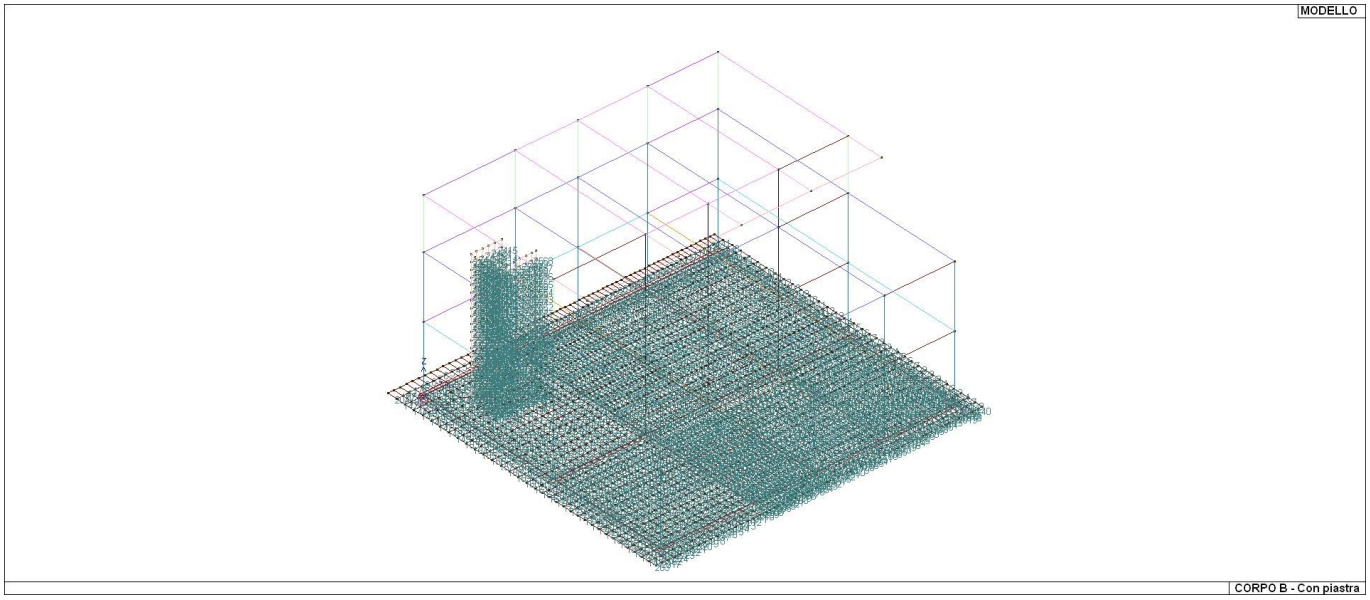
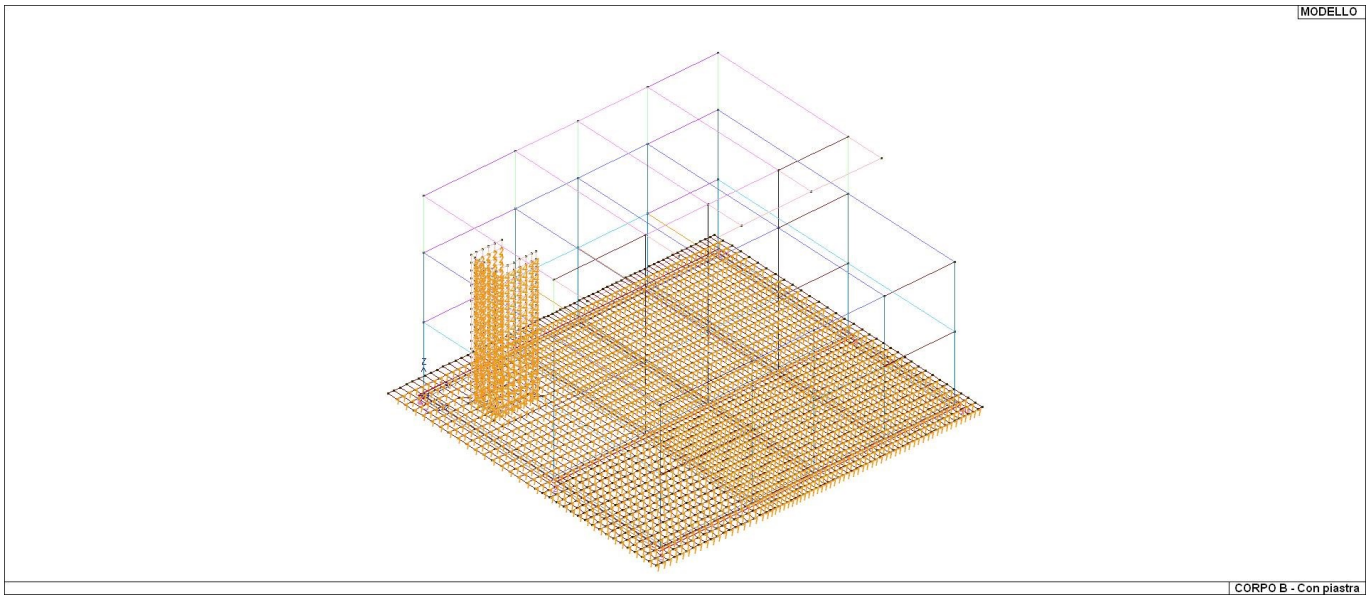
2500	Setto	2657	2666	2665	2656	3	1	25.0
2501	Setto	2658	2667	2666	2657	3	1	25.0
2502	Setto	2659	2668	2667	2658	3	1	25.0
2503	Setto	2660	2669	2668	2659	3	1	25.0
2504	Setto	2661	2670	2669	2660	3	1	25.0
2505	Setto	2662	2671	2670	2661	3	1	25.0
2506	Setto	2663	2672	2509	2500	3	1	25.0
2507	Setto	2664	2673	2672	2663	3	1	25.0
2508	Setto	2665	2674	2673	2664	3	1	25.0
2509	Setto	2666	2675	2674	2665	3	1	25.0
2510	Setto	2667	2676	2675	2666	3	1	25.0
2511	Setto	2668	2677	2676	2667	3	1	25.0
2512	Setto	2669	2678	2677	2668	3	1	25.0
2513	Setto	2670	2679	2678	2669	3	1	25.0
2514	Setto	2671	2680	2679	2670	3	1	25.0
2515	Setto	2509	2518	2681	2672	3	1	25.0
2516	Setto	2672	2681	2682	2673	3	1	25.0
2517	Setto	2673	2682	2683	2674	3	1	25.0
2518	Setto	2674	2683	2684	2675	3	1	25.0
2519	Setto	2675	2684	2685	2676	3	1	25.0
2520	Setto	2676	2685	2686	2677	3	1	25.0
2521	Setto	2677	2686	2687	2678	3	1	25.0
2522	Setto	2678	2687	2688	2679	3	1	25.0
2523	Setto	2679	2688	2689	2680	3	1	25.0
2524	Setto	2518	2527	2690	2681	3	1	25.0
2525	Setto	2681	2690	2691	2682	3	1	25.0
2526	Setto	2682	2691	2692	2683	3	1	25.0
2527	Setto	2683	2692	2693	2684	3	1	25.0
2528	Setto	2684	2693	2694	2685	3	1	25.0
2529	Setto	2685	2694	2695	2686	3	1	25.0
2530	Setto	2686	2695	2696	2687	3	1	25.0
2531	Setto	2687	2696	2697	2688	3	1	25.0
2532	Setto	2688	2697	2698	2689	3	1	25.0
2533	Setto	2527	2536	2699	2690	3	1	25.0
2534	Setto	2690	2699	2700	2691	3	1	25.0
2535	Setto	2691	2700	2701	2692	3	1	25.0
2536	Setto	2692	2701	2702	2693	3	1	25.0
2537	Setto	2693	2702	2703	2694	3	1	25.0

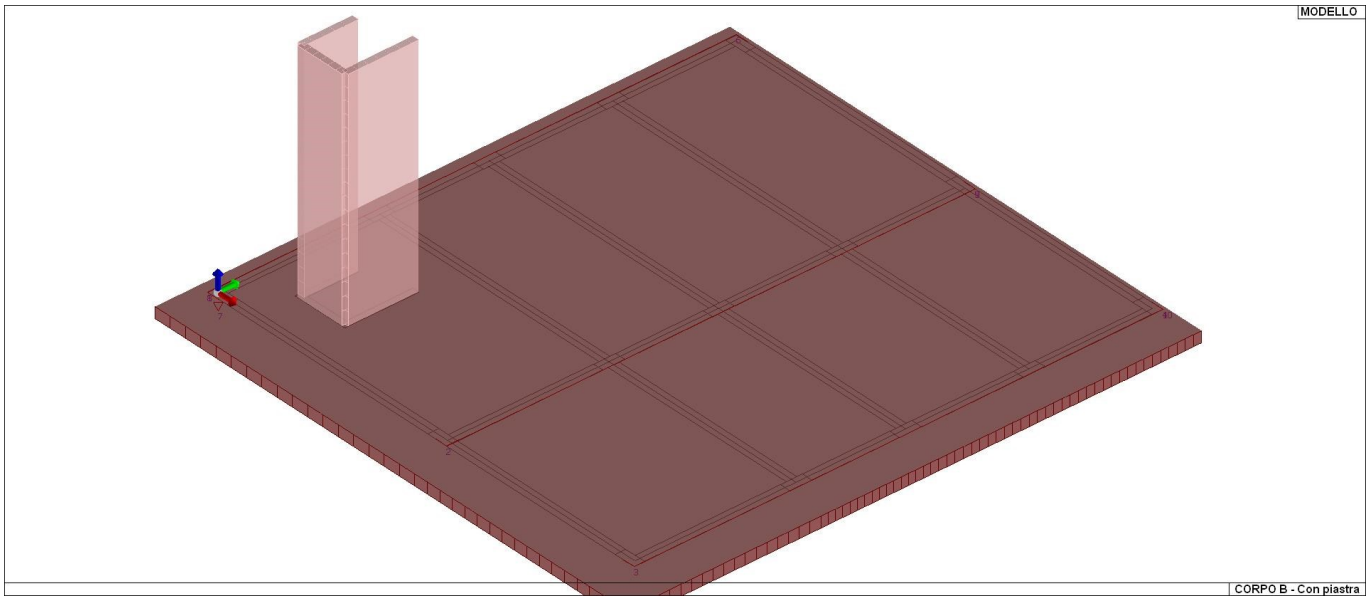
2538	Setto	2694	2703	2704	2695	3	1	25.0		
2539	Setto	2695	2704	2705	2696	3	1	25.0		
2540	Setto	2696	2705	2706	2697	3	1	25.0		
2541	Setto	2697	2706	2707	2698	3	1	25.0		
2542	Setto	2536	2545	2708	2699	3	1	25.0		
2543	Setto	2699	2708	2709	2700	3	1	25.0		
2544	Setto	2700	2709	2710	2701	3	1	25.0		
2545	Setto	2701	2710	2711	2702	3	1	25.0		
2546	Setto	2702	2711	2712	2703	3	1	25.0		
2547	Setto	2703	2712	2713	2704	3	1	25.0		
2548	Setto	2704	2713	2714	2705	3	1	25.0		
2549	Setto	2705	2714	2715	2706	3	1	25.0		
2550	Setto	2706	2715	2716	2707	3	1	25.0		
2551	Setto	2708	2717	2554	2545	3	1	25.0		
2552	Setto	2709	2718	2717	2708	3	1	25.0		
2553	Setto	2710	2719	2718	2709	3	1	25.0		
2554	Setto	2711	2720	2719	2710	3	1	25.0		
2555	Setto	2712	2721	2720	2711	3	1	25.0		
2556	Setto	2713	2722	2721	2712	3	1	25.0		
2557	Setto	2714	2723	2722	2713	3	1	25.0		
2558	Setto	2715	2724	2723	2714	3	1	25.0		
2559	Setto	2716	2725	2724	2715	3	1	25.0		
2560	Setto	2726	2717	2554	2563	3	1	25.0		
2561	Setto	2727	2718	2717	2726	3	1	25.0		
2562	Setto	2728	2719	2718	2727	3	1	25.0		
2563	Setto	2729	2720	2719	2728	3	1	25.0		
2564	Setto	2730	2721	2720	2729	3	1	25.0		
2565	Setto	2731	2722	2721	2730	3	1	25.0		
2566	Setto	2732	2723	2722	2731	3	1	25.0		
2567	Setto	2733	2724	2723	2732	3	1	25.0		
2568	Setto	2734	2725	2724	2733	3	1	25.0		
2569	Guscio fond.	2455	2257	2286		3	2	40.0	0.08	0.05
2570	Guscio fond.	2474	2258	2287		3	2	40.0	0.08	0.05
2571	Guscio fond.	2455	2286	2315		3	2	40.0	0.08	0.05
2572	Guscio fond.	2474	2287	2316		3	2	40.0	0.08	0.05



16_MOD_NUMERAZIONE_D3



16_MOD_NUMERAZIONE_D3_PARETI



16_MOD_SPESSORI_D3

MODELLAZIONE DELLA STRUTTURA: ELEMENTI SOLAIO-PANNELLO

LEGENDA TABELLA DATI SOLAI-PANNELLI

Il programma utilizza per la modellazione elementi a tre o più nodi denominati in generale solaio o pannello.
Ogni elemento solaio-pannello è individuato da una poligonale di nodi 1,2, ..., N.
L'elemento solaio è utilizzato in primo luogo per la modellazione dei carichi agenti sugli elementi strutturali. In secondo luogo può essere utilizzato per la corretta ripartizione delle forze orizzontali agenti nel proprio piano. L'elemento balcone è derivato dall'elemento solaio.
I carichi agenti sugli elementi solaio, raccolti in un archivio, sono direttamente assegnati agli elementi utilizzando le informazioni raccolte nell' archivio (es. i coefficienti combinatori). La tabella seguente riporta i dati utilizzati per la definizione dei carichi e delle masse.
L'elemento pannello è utilizzato solo per l'applicazione dei carichi, quali pesi delle tamponature o spinte dovute al vento o terre. In questo caso i carichi sono applicati in analogia agli altri elementi strutturali (si veda il cap. SCHEMATIZZAZIONE DEI CASI DI CARICO).

Id.Arch.	Identificativo dell' archivio
Tipo	Tipo di carico ***Variab.*** Carico variabile generico ***Var. rid.*** Carico variabile generico con riduzione in funzione dell' area (c.5.5. …) ***Neve*** Carico di neve
G1k	carico permanente (comprensivo del peso proprio)
G2k	carico permanente non strutturale e non compiutamente definito
Qk	carico variabile
Fatt. A	fattore di riduzione del carico variabile (0.5 o 0.75) per tipo "Var.rid."
S sis.	fattore di riduzione del carico variabile per la definizione delle masse sismiche per D.M. 96 (vedi NOTA sul capitolo "normativa di riferimento")
Psi 0	Coefficiente combinatorio dei valori caratteristici delle azioni variabili: ***per valore raro***
Psi 1	Coefficiente combinatorio dei valori caratteristici delle azioni variabili: ***per valore frequente***
Psi 2	Coefficiente combinatorio dei valori caratteristici delle azioni variabili: ***per valore quasi permanente***
Psi S 2	Coefficiente di combinazione che fornisce il valore quasi-permanente dell'azione variabile: ***per la definizione delle masse sismiche***
Fatt. Fi	Coefficiente di correlazione dei carichi per edifici

Ogni elemento è caratterizzato da un insieme di proprietà riportate in tabella che ne completano la modellazione. In particolare per ogni elemento viene indicato in tabella:

Elem	numero dell'elemento
Tipo	codice di comportamento ***S*** elemento utilizzato solo per scarico ***C*** elemento utilizzato per scarico e per modellazione piano rigido ***P*** elemento utilizzato come pannello ***M*** scarico monodirezionale ***B*** scarico bidirezionale
Id.Arch.	Identificativo dell' archivio
Mat	codice del materiale assegnato all'elemento
Spessore	spessore dell'elemento (costante)
Orditura	angolo (rispetto all'asse X) della direzione dei travetti principali

Gk	carico permanente solaio (comprensivo del peso proprio)
Qk	carico variabile solaio
Nodi	numero dei nodi che definiscono l'elemento (5 per riga)

Nel caso in cui si sia proceduto alla progettazione dei solai con le tensioni ammissibili vengono riportate le massime tensioni nell'elemento (massima compressione nel calcestruzzo, massima tensione nell'acciaio, massima tensione tangenziale); nel caso in cui si sia proceduto alla progettazione con il metodo degli stati limite vengono riportati il rapporto x/d e le verifiche per sollecitazioni proporzionali nonché le verifiche in esercizio.

In particolare i simboli utilizzati in tabella assumono il seguente significato:

Elem.	numero identificativo dell'elemento
Stato	Codici di verifica relativi alle tensioni normali e alle tensioni tangenziali
Note	Viene riportato il codice relativo alla sezione(s) e relativo al materiale(m);
Pos.	Ascissa del punto di verifica
F ist, F infi	Frecce instantanee e a tempo infinito
Momento	Momento flettente
Taglio	Sollecitazione di taglio
Af inf.	Area di armatura longitudinale posta all'intradosso della trave
Af sup.	Area di armatura longitudinale posta all'estradosso della trave
AfV	Area dell'armatura atta ad assorbire le azioni di taglio
Beff	Base della sezione di cls per l'assorbimento del taglio
	simboli utilizzati con il metodo delle tensioni ammissibili:
sc max	Massima tensione di compressione del calcestruzzo
sf max	Massima tensione nell'acciaio
tau max	Massima tensione tangenziale nel cls
	simboli utilizzati con il metodo degli stati limite:
x/d	rapporto tra posizione dell'asse neutro e altezza utile alla rottura della sezione (per sola flessione)
verif.	rapporto Sd/Su con sollecitazioni ultime proporzionali: valore minore o uguale a 1 per verifica positiva
Verif.V	rapporto Sd/Su con sollecitazioni taglianti proporzionali valore minore o uguale a 1 per verifica positiva
rRfck	rapporto tra la massima compressione nel calcestruzzo e la tensione fck in combinazioni rare [normalizzato a 1]
rFfck	rapporto tra la massima compressione nel calcestruzzo e la tensione fck in combinazioni frequenti [normalizzato a 1]
rPfck	rapporto tra la massima compressione nel calcestruzzo e la tensione fck in combinazioni quasi permanenti [normalizzato a 1]
rRfyk	rapporto tra la massima tensione nell'acciaio e la tensione fyk in combinazioni frequenti [normalizzato a 1]
rFyk	rapporto tra la massima tensione nell'acciaio e la tensione fyk in combinazioni rare [normalizzato a 1]
rPfyk	rapporto tra la massima tensione nell'acciaio e la tensione fyk in combinazioni quasi permanenti [normalizzato a 1]
wR	apertura caratteristica delle fessure in combinazioni rare [mm]
wF	apertura caratteristica delle fessure in combinazioni frequenti [mm]
wP	apertura caratteristica delle fessure in combinazioni quasi permanenti [mm]

Nel caso in cui si sia proceduto alla verifica delle tamponature secondo il D.M. 17.01.2018 - §7.2.3 viene riportata una tabella riassuntiva delle verifiche degli elementi pannello. La verifica confronta i momenti sollecitanti indotti dal sisma con i momenti resistenti, secondo tre ipotesi, due basate sulla resistenza a pressoflessione della tamponatura ed una basata sul cinematismo a seguito della formazione di tre cerniere plastiche sulla tamponatura (rif. Ufficio di

Vigilanza sulle Costruzioni, Provincia di Terni).
Qualora la tamponatura sia di tipo antiespulsione (nelle due possibili varianti ordinaria o armata) viene condotta una verifica con meccanismo ad arco con degrado di resistenza. La verifica confronta le pressioni sollecitanti indotte dal sisma con le pressioni resistenti che la tamponatura sviluppa attraverso il meccanismo ad arco. La verifica considera anche il degrado di resistenza dovuto al danneggiamento nel piano della tamponatura.
Per quest'ultima tamponatura sono disponibili, in funzione del materiale impiegato (materiale [52] o materiale [53]):

- **Tamponatura Antiespulsione ordinaria Poroton® Cis Edil** sp.30 cm; con metodo di verifica per meccanismo ad arco con degrado di resistenza, sviluppato attraverso i risultati di un progetto di ricerca sperimentale condotto dall'Università degli Studi di Padova.
  Utilizzabile per il materiale [52].
- **Tamponatura Antiespulsione armata Poroton® Cis Edil** sp.30 cm; con metodo di verifica per meccanismo ad arco con degrado di resistenza, sviluppato attraverso i risultati di un progetto di ricerca sperimentale condotto dall'Università degli Studi di Padova.
  Utilizzabile per il materiale [53].

La verifica è stata calibrata sulla base di prove sperimentali sul sistema di Tamponatura Antiespulsione anche in presenza di aperture.
(rif. Rapporti di Prova redatti dal Dipartimento ICEA - Università degli Studi di Padova di test sperimentali condotti sul sistema Tamponatura Antiespulsione di Cis Edil)

In particolare i simboli utilizzati in tabella assumono il seguente significato:

Elem.	Numero identificativo dell'elemento
Stato	Codice di verifica
Ver. c.c.	Verifica nell'ipotesi di trave appoggiata con carico concentrato in mezzeria
Ver. c.d.	Verifica nell'ipotesi di trave appoggiata con carico distribuito
Ver. c.cin.	Verifica nell'ipotesi di cinematismo con formazione di cerniere plastiche in appoggio e mezzeria
Ver. CIS	Rapporto pa/pr (valore minore o uguale a 1 per verifica positiva)
Z	Quota del baricentro dell'elemento
T1	Periodo proprio dell'edificio nella direzione di interesse (ortogonale al pannello)
Ta	Periodo proprio della parete
Sa	Accelerazione massima, adimensionalizzata allo SLV
pa	Pressione sulla parete causata dall'azione sismica
pr	Pressione resistente del meccanismo ad arco
Drift	Spostamento relativo interpiano allo SLV valutato secondo il D.M. 14.01.2018 - § 7.3.3.3
Beta a	Coef. riduttivo per tener conto del danneggiamento del piano dipendente dallo spostamento, ottenuto sperimentalmente

ID Arch.	Tipo	G1k	G2k	Qk	Fatt. A	s sis.	Psi 0	Psi 1	Psi 2	Psi S 2	Fatt. Fi
		daN/cm2	daN/cm2	daN/cm2							
1	Variab.	3.42e-02	3.76e-02	3.00e-02		1.00	0.70	0.70	0.60	0.60	1.00
2	Variab.	3.42e-02	1.61e-02	2.00e-02		1.00	0.70	0.50	0.30	0.30	1.00
3	Variab.	3.67e-02	1.66e-02	3.00e-02		1.00	0.70	0.70	0.60	0.60	1.00

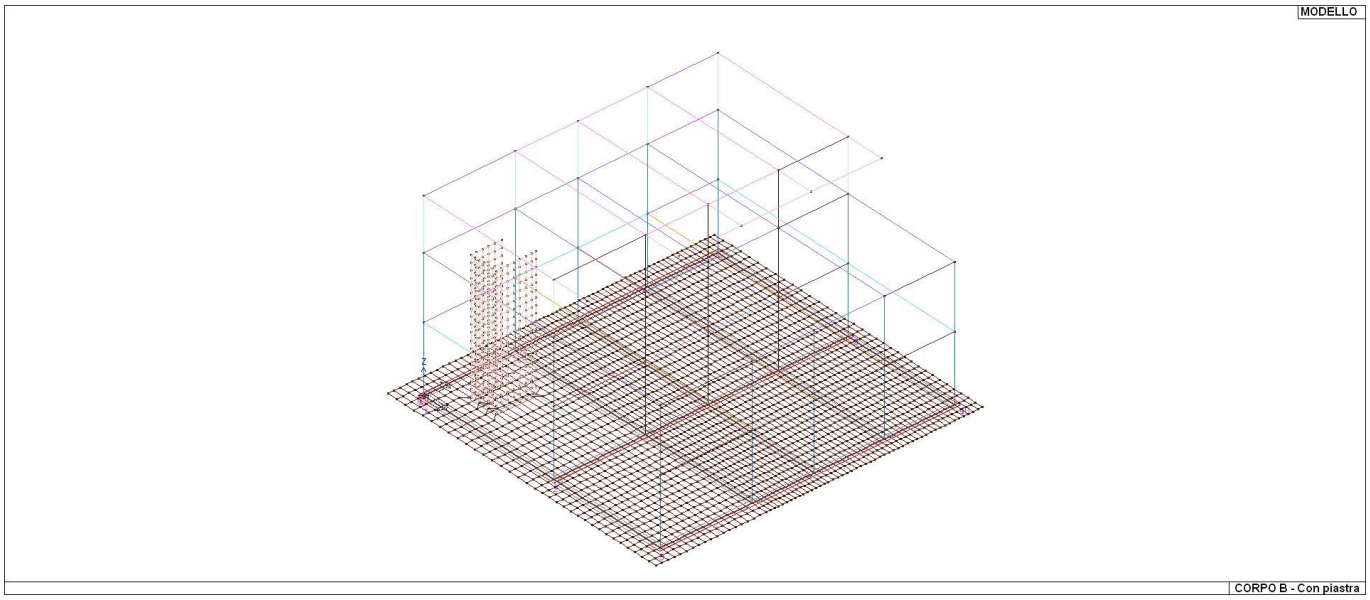
Elem.	Tipo	ID Arch.	Mat.	Spessore	Orditura	G1k	G2k	Qk	Nodo 1/6..	Nodo 2/7..	Nodo 3/8..	Nodo..	Nodo..
						daN/cm2	daN/cm2	daN/cm2					
1	CB	2	m=3	5.0	0.0	3.42e-02	1.61e-02	2.00e-02	23	25	24	58	
2	CB	1	m=3	5.0	0.0	3.42e-02	3.76e-02	3.00e-02	34	37	36	33	
3	CB	1	m=3	5.0	90.0	3.42e-02	3.76e-02	3.00e-02	37	40	39	36	
4	CB	1	m=3	5.0	0.0	3.42e-02	3.76e-02	3.00e-02	40	43	42	39	
5	CB	3	m=3	5.0	0.0	3.67e-02	1.66e-02	3.00e-02	18	26	22	60	
6	CB	3	m=3	5.0	90.0	3.67e-02	1.66e-02	3.00e-02	29	19	16	21	
7	CB	2	m=3	5.0	0.0	3.42e-02	1.61e-02	2.00e-02	51	28	25	23	
8	CB	3	m=3	5.0	90.0	3.67e-02	1.66e-02	3.00e-02	26	46	45	22	
9	CB	2	m=3	5.0	0.0	3.42e-02	1.61e-02	2.00e-02	48	49	55	53	
10	CB	3	m=3	5.0	0.0	3.67e-02	1.66e-02	3.00e-02	32	35	34	31	
11	CB	3	m=3	5.0	90.0	3.67e-02	1.66e-02	3.00e-02	35	38	37	34	

12	CB	3	m=3	5.0	0.0	3.67e-02	1.66e-02	3.00e-02	38	41	40	37
13	CB	3	m=3	5.0	90.0	3.67e-02	1.66e-02	3.00e-02	41	44	43	40
14	CB	3	m=3	5.0	0.0	3.67e-02	1.66e-02	3.00e-02	46	29	21	45
15	CB	2	m=3	5.0	90.0	3.42e-02	1.61e-02	2.00e-02	53	55	54	52
16	CB	2	m=3	5.0	0.0	3.42e-02	1.61e-02	2.00e-02	55	57	56	54
17	CB	2	m=3	5.0	90.0	3.42e-02	1.61e-02	2.00e-02	57	23	58	56
18	CB	2	m=3	5.0	0.0	3.42e-02	1.61e-02	2.00e-02	49	50	57	55
19	CB	1	m=3	5.0	0.0	3.42e-02	3.76e-02	3.00e-02	22	45	27	20
20	CB	1	m=3	5.0	90.0	3.42e-02	3.76e-02	3.00e-02	45	21	47	27
21	CB	1	m=3	5.0	0.0	3.42e-02	3.76e-02	3.00e-02	21	16	17	47
22	CB	2	m=3	5.0	0.0	3.42e-02	1.61e-02	2.00e-02	50	51	23	57

Elem.	Stato	Note	f ist	f infi	Pos.	Momento	Af inf.	Af. sup	V N/M	x/d	Taglio	Af V	verif. V	B eff
			cm	cm	cm	daN cm	cm2	cm2			daN	cm2		cm
1	ok L	s=8,m=3	-0.03	-0.06	0.0	0.0	2.40	0.0	0.0	0.04	-108.20	0.0	0.01	50.0
					20.0	2119.09	2.40	0.0	6.30e-03	0.05	-103.71	0.0	0.02	40.0
					481.3	2.604e+04	2.40	0.0	0.08	0.05	0.0	0.0	0.0	40.0
					942.5	2119.09	2.40	0.0	6.30e-03	0.05	103.71	0.0	0.02	40.0
					962.5	0.0	2.40	0.0	0.0	0.04	108.20	0.0	0.01	50.0
5	ok L	s=8,m=3	-0.07	-0.18	0.0	0.0	2.40	0.0	0.0	0.04	-557.63	0.0	0.07	50.0
					20.0	1.087e+04	2.40	0.0	0.03	0.05	-529.23	0.0	0.08	40.0
					392.8	1.095e+05	2.40	0.0	0.33	0.05	0.0	0.0	0.0	40.0
					765.5	1.087e+04	2.40	0.0	0.03	0.05	529.23	0.0	0.08	40.0
					785.5	0.0	2.40	0.0	0.0	0.04	557.63	0.0	0.07	50.0
6	ok L	s=8,m=3	-0.03	-0.07	0.0	0.0	2.40	0.0	0.0	0.04	-1194.46	0.0	0.15	50.0
					20.0	2.283e+04	2.40	0.0	0.07	0.05	-1088.28	0.0	0.17	40.0
					225.0	1.344e+05	2.40	0.0	0.40	0.05	0.0	0.0	0.0	40.0
					430.0	2.283e+04	2.40	0.0	0.07	0.05	1088.28	0.0	0.17	40.0
					450.0	0.0	2.40	0.0	0.0	0.04	1194.46	0.0	0.15	50.0
7	ok L	s=8,m=3	-2.17e-03	-5.21e-03	0.0	0.0	2.40	0.0	0.0	0.04	-555.20	0.0	0.07	50.0
					20.0	1.020e+04	2.40	0.0	0.03	0.05	-464.56	0.0	0.07	40.0
					122.5	3.401e+04	2.40	0.0	0.10	0.05	0.0	0.0	0.0	40.0
					225.0	1.020e+04	2.40	0.0	0.03	0.05	464.56	0.0	0.07	40.0
					245.0	0.0	2.40	0.0	0.0	0.04	555.20	0.0	0.07	50.0
8	ok L	s=8,m=3	-0.02	-0.05	0.0	0.0	2.40	0.0	0.0	0.04	-1102.00	0.0	0.14	50.0
					20.0	2.094e+04	2.40	0.0	0.06	0.05	-991.80	0.0	0.16	40.0
					200.0	1.102e+05	2.40	0.0	0.33	0.05	0.0	0.0	0.0	40.0
					380.0	2.094e+04	2.40	0.0	0.06	0.05	991.80	0.0	0.16	40.0
					400.0	0.0	2.40	0.0	0.0	0.04	1102.00	0.0	0.14	50.0
9	ok L	s=8,m=3	-2.29e-03	-5.50e-03	0.0	0.0	2.40	0.0	0.0	0.04	-586.55	0.0	0.07	50.0
					20.0	1.077e+04	2.40	0.0	0.03	0.05	-490.78	0.0	0.08	40.0
					122.5	3.593e+04	2.40	0.0	0.11	0.05	0.0	0.0	0.0	40.0
					225.0	1.077e+04	2.40	0.0	0.03	0.05	490.78	0.0	0.08	40.0
					245.0	0.0	2.40	0.0	0.0	0.04	586.55	0.0	0.07	50.0
14	ok L	s=8,m=3	-0.03	-0.07	0.0	0.0	2.40	0.0	0.0	0.04	-224.58	0.0	0.03	50.0
					20.0	4377.21	2.40	0.0	0.01	0.05	-213.14	0.0	0.03	40.0
					392.8	4.410e+04	2.40	0.0	0.13	0.05	0.0	0.0	0.0	40.0
					765.5	4377.21	2.40	0.0	0.01	0.05	213.14	0.0	0.03	40.0
					785.5	0.0	2.40	0.0	0.0	0.04	224.58	0.0	0.03	50.0
15	ok L	s=8,m=3	-0.07	-0.17	0.0	0.0	2.40	0.0	0.0	0.04	-1274.54	0.0	0.16	50.0
					20.0	2.463e+04	2.40	0.0	0.07	0.05	-1188.13	0.0	0.19	40.0
					295.0	1.880e+05	2.40	0.0	0.56	0.05	0.0	0.0	0.0	40.0
					570.0	2.463e+04	2.40	0.0	0.07	0.05	1188.13	0.0	0.19	40.0
					590.0	0.0	2.40	0.0	0.0	0.04	1274.54	0.0	0.16	50.0
16	ok L	s=8,m=3	-0.02	-0.04	0.0	0.0	2.40	0.0	0.0	0.04	-68.73	0.0	8.69e-03	50.0
					20.0	1346.00	2.40	0.0	4.00e-03	0.05	-65.87	0.0	0.01	40.0
					481.3	1.654e+04	2.40	0.0	0.05	0.05	0.0	0.0	0.0	40.0
					942.5	1346.00	2.40	0.0	4.00e-03	0.05	65.87	0.0	0.01	40.0
					962.5	0.0	2.40	0.0	0.0	0.04	68.73	0.0	8.69e-03	50.0
17	ok L	s=8,m=3	-0.03	-0.06	0.0	0.0	2.40	0.0	0.0	0.04	-1058.77	0.0	0.13	50.0
					20.0	2.023e+04	2.40	0.0	0.06	0.05	-964.66	0.0	0.15	40.0
					225.0	1.191e+05	2.40	0.0	0.35	0.05	0.0	0.0	0.0	40.0
...														
22	ok L	s=8,m=3	-2.17e-03	-5.21e-03	245.0	0.0	2.40	0.0	0.0	0.04	555.20	0.0	0.07	50.0
Elem.			**f ist**	**f infi**		**Momento**	**Af inf.**	**Af. sup**	**V N/M**	**x/d**	**Taglio**	**Af V**	**verif. V**	
						0.0					-1566.10			
			-2.07e-03	-4.97e-03		1.880e+05	2.40	0.0	0.56	0.05	1566.10	0.0	0.23	

Elem.	Pos.	rRfck	rFfck	rPfck	rRfyk	rFfyk	rPfyk	wR	wF	wP
	cm							mm	mm	mm
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	20.0	1.75e-03	1.50e-03	1.87e-03	5.12e-03	4.39e-03	4.10e-03	0.0	0.0	0.0
	481.3	0.02	0.02	0.02	0.06	0.05	0.05	0.0	0.0	0.0

	942.5	1.75e-03	1.50e-03	1.87e-03	5.12e-03	4.39e-03	4.10e-03	0.0	0.0	0.0
	962.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	20.0	8.91e-03	7.95e-03	0.01	0.03	0.02	0.02	0.0	0.0	0.0
	392.8	0.09	0.08	0.10	0.26	0.23	0.23	0.0	0.0	0.0
	765.5	8.91e-03	7.95e-03	0.01	0.03	0.02	0.02	0.0	0.0	0.0
	785.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	20.0	0.02	0.02	0.02	0.05	0.05	0.05	0.0	0.0	0.0
	225.0	0.11	0.10	0.13	0.32	0.29	0.28	0.0	0.0	0.0
	430.0	0.02	0.02	0.02	0.05	0.05	0.05	0.0	0.0	0.0
	450.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	20.0	8.42e-03	7.22e-03	8.99e-03	0.02	0.02	0.02	0.0	0.0	0.0
	122.5	0.03	0.02	0.03	0.08	0.07	0.07	0.0	0.0	0.0
	225.0	8.42e-03	7.22e-03	8.99e-03	0.02	0.02	0.02	0.0	0.0	0.0
	245.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	20.0	0.02	0.02	0.02	0.05	0.04	0.04	0.0	0.0	0.0
	200.0	0.09	0.08	0.10	0.26	0.24	0.23	0.0	0.0	0.0
	380.0	0.02	0.02	0.02	0.05	0.04	0.04	0.0	0.0	0.0
	400.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	20.0	8.89e-03	7.63e-03	9.49e-03	0.03	0.02	0.02	0.0	0.0	0.0
	122.5	0.03	0.03	0.03	0.09	0.07	0.07	0.0	0.0	0.0
	225.0	8.89e-03	7.63e-03	9.49e-03	0.03	0.02	0.02	0.0	0.0	0.0
	245.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	20.0	3.59e-03	3.20e-03	4.10e-03	0.01	9.38e-03	9.00e-03	0.0	0.0	0.0
	392.8	0.04	0.03	0.04	0.11	0.09	0.09	0.0	0.0	0.0
	765.5	3.59e-03	3.20e-03	4.10e-03	0.01	9.38e-03	9.00e-03	0.0	0.0	0.0
	785.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	20.0	0.02	0.02	0.02	0.06	0.05	0.05	0.0	0.0	0.0
	295.0	0.16	0.13	0.17	0.45	0.39	0.36	0.0	0.0	0.0
	570.0	0.02	0.02	0.02	0.06	0.05	0.05	0.0	0.0	0.0
	590.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	20.0	1.11e-03	9.53e-04	1.19e-03	3.25e-03	2.79e-03	2.61e-03	0.0	0.0	0.0
	481.3	0.01	0.01	0.01	0.04	0.03	0.03	0.0	0.0	0.0
	942.5	1.11e-03	9.53e-04	1.19e-03	3.25e-03	2.79e-03	2.61e-03	0.0	0.0	0.0
	962.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	20.0	0.02	0.01	0.02	0.05	0.04	0.04	0.0	0.0	0.0
	225.0	0.10	0.08	0.10	0.29	0.25	0.23	0.0	0.0	0.0
...										
22	245.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Elem.		**rRfck**	**rFfck**	**rPfck**	**rRfyk**	**rFfyk**	**rPfyk**	**wR**	**wF**	**wP**
		0.16	0.13	0.17	0.45	0.39	0.37	0.0	0.0	0.0



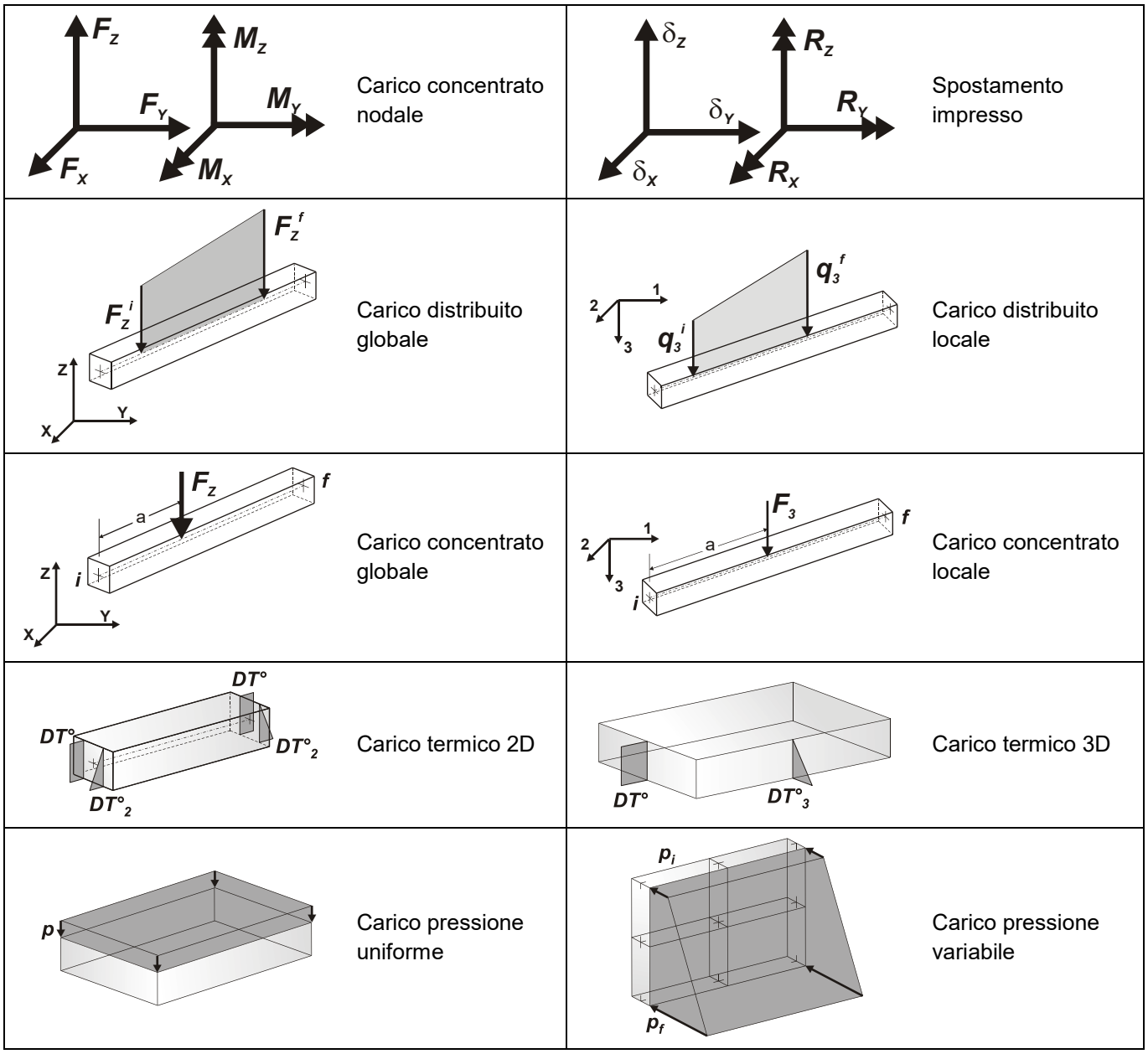
17_MOD_NUMERAZIONE_SOLAI

MODELLAZIONE DELLE AZIONI

LEGENDA TABELLA DATI AZIONI

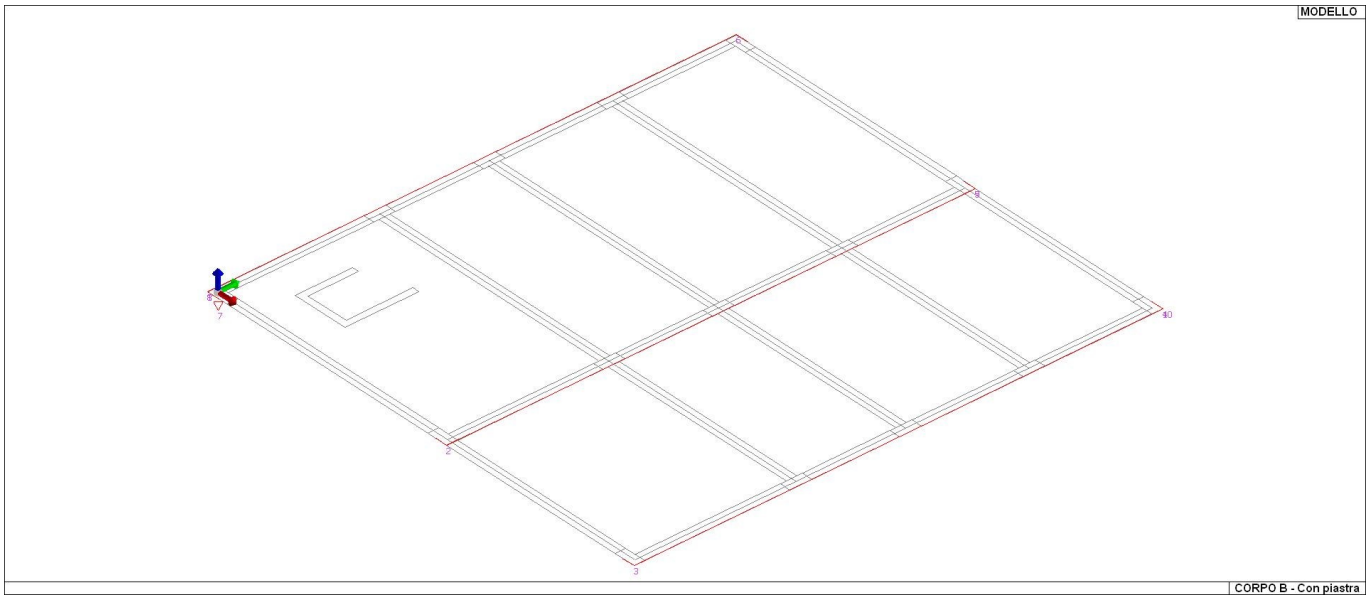
Il programma consente l'uso di diverse tipologie di carico (azioni). Le azioni utilizzate nella modellazione sono individuate da una sigla identificativa ed un codice numerico (gli elementi strutturali richiamano quest'ultimo nella propria descrizione). Per ogni azione applicata alla struttura viene di riportato il codice, il tipo e la sigla identificativa. Le tabelle successive dettagliano i valori caratteristici di ogni azione in relazione al tipo. Le tabelle riportano infatti i seguenti dati in relazione al tipo:

1	**carico concentrato nodale** 6 dati (forza Fx, Fy, Fz, momento Mx, My, Mz)
2	**spostamento nodale impresso** 6 dati (spostamento Tx,Ty,Tz, rotazione Rx,Ry,Rz)
3	**carico distribuito globale su elemento tipo trave** 7 dati (fx,fy,fz,mx,my,mz,ascissa di inizio carico) 7 dati (fx,fy,fz,mx,my,mz,ascissa di fine carico)
4	**carico distribuito locale su elemento tipo trave** 7 dati (f1,f2,f3,m1,m2,m3,ascissa di inizio carico) 7 dati (f1,f2,f3,m1,m2,m3,ascissa di fine carico)
5	**carico concentrato globale su elemento tipo trave** 7 dati (Fx,Fy,Fz,Mx,My,Mz,ascissa di carico)
6	**carico concentrato locale su elemento tipo trave** 7 dati (F1, F2, F3, M1, M2, M3, ascissa di carico)
7	**variazione termica applicata ad elemento tipo trave** 7 dati (variazioni termiche: uniforme, media e differenza in altezza e larghezza al nodo iniziale e finale)
8	**carico di pressione uniforme su elemento tipo piastra** 1 dato (pressione)
9	**carico di pressione variabile su elemento tipo piastra** 4 dati (pressione, quota, pressione, quota)
10	**variazione termica applicata ad elemento tipo piastra** 2 dati (variazioni termiche: media e differenza nello spessore)
11	**carico variabile generale su elementi tipo trave e piastra** 1 dato descrizione della tipologia 4 dati per segmento (posizione, valore, posizione, valore) la tipologia precisa l'ascissa di definizione, la direzione del carico, la modalità di carico e la larghezza d'influenza per gli elementi tipo trave
12	**gruppo di carichi con impronta su piastra** 9 dati (numero di ripetizioni in direzione X e Y, valore di ciascun carico, posizione centrale del primo, dimensioni dell' impronta, interasse tra i carichi



Tipo	carico distribuito globale su trave

Id	Tipo	Pos.	fx	fy	fz	mx	my	mz
		cm	daN/cm	daN/cm	daN/cm	daN	daN	daN
1	TAMP.PT-DG:Fzi=-10.67 Fzf=-10.67	0.0	0.0	0.0	-10.67	0.0	0.0	0.0
		0.0	0.0	0.0	-10.67	0.0	0.0	0.0
2	TAMP.P1-DG:Fzi=-9.48 Fzf=-9.48	0.0	0.0	0.0	-9.48	0.0	0.0	0.0
		0.0	0.0	0.0	-9.48	0.0	0.0	0.0
3	TAMP.P2-DG:Fzi=-7.69 Fzf=-7.69	0.0	0.0	0.0	-7.69	0.0	0.0	0.0
		0.0	0.0	0.0	-7.69	0.0	0.0	0.0



21_CAR_CARICHI_SOLAI

SCHEMATIZZAZIONE DEI CASI DI CARICO

LEGENDA TABELLA CASI DI CARICO

Il programma consente l'applicazione di diverse tipologie di casi di carico.
Sono previsti i seguenti 11 tipi di casi di carico:

	Sigla	***Tipo***	***Descrizione***
1	**Ggk**	A	caso di carico comprensivo del peso proprio struttura
2	**Gk**	NA	caso di carico con azioni permanenti
3	**Qk**	NA	caso di carico con azioni variabili
4	**Gsk**	A	caso di carico comprensivo dei carichi permanenti sui solai e sulle coperture
5	**Qsk**	A	caso di carico comprensivo dei carichi variabili sui solai
6	**Qnk**	A	caso di carico comprensivo dei carichi di neve sulle coperture
7	**Qtk**	SA	caso di carico comprensivo di una variazione termica agente sulla struttura
8	**Qvk**	NA	caso di carico comprensivo di azioni da vento sulla struttura
9	**Esk**	SA	caso di carico sismico con analisi statica equivalente
10	**Edk**	SA	caso di carico sismico con analisi dinamica
11	**Etk**	NA	caso di carico comprensivo di azioni derivanti dall' incremento di spinta delle terre in condizione sismica
12	**Pk**	NA	caso di carico comprensivo di azioni derivanti da coazioni, cedimenti e precompressioni

Sono di tipo automatico A (ossia non prevedono introduzione dati da parte dell'utente) i seguenti casi di carico: 1-Ggk; 4-Gsk; 5-Qsk; 6-Qnk.

Sono di tipo semi-automatico SA (ossia prevedono una minima introduzione dati da parte dell'utente) i seguenti casi di carico:
7-Qtk, in quanto richiede solo il valore della variazione termica;
9-Esk e 10-Edk, in quanto richiedono il valore dell'angolo di ingresso del sisma e l'individuazione dei casi di carico partecipanti alla definizione delle masse.

Sono di tipo non automatico NA ossia prevedono la diretta applicazione di carichi generici agli elementi strutturali (si veda il precedente punto Modellazione delle Azioni) i restanti casi di carico.

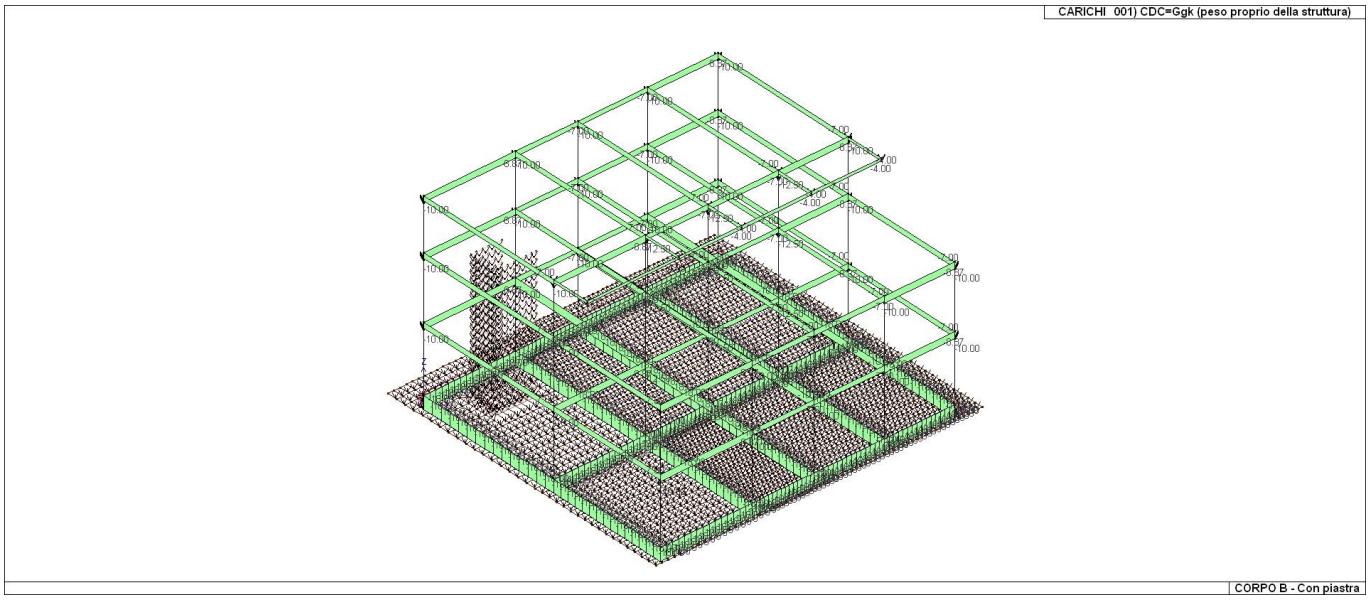
Nella tabella successiva vengono riportati i casi di carico agenti sulla struttura, con l'indicazione dei dati relativi al caso di carico stesso:
Numero Tipo e *Sigla identificativa*, *Valore di riferimento* del caso di carico (se previsto).

In successione, per i casi di carico non automatici, viene riportato l'elenco di nodi ed elementi direttamente caricati con la sigla identificativa del carico.

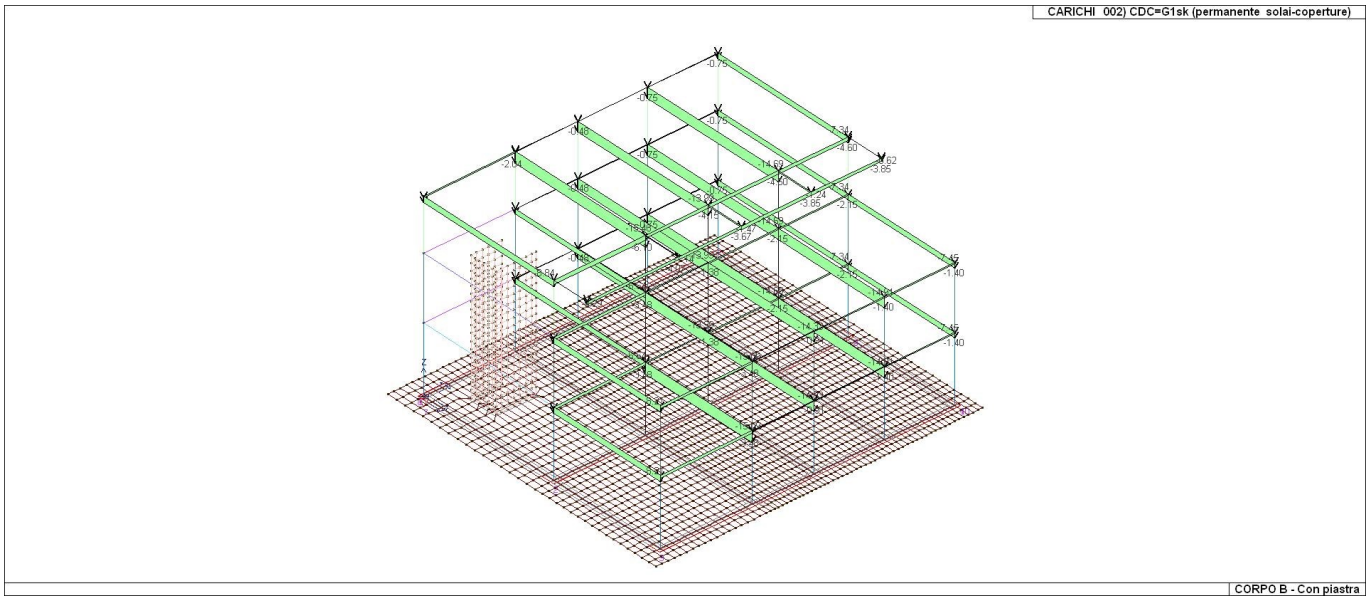
Per i casi di carico di tipo sismico (9-Esk e 10-Edk), viene riportata la tabella di definizione delle masse: per ogni caso di carico partecipante alla definizione delle masse viene indicata la relativa aliquota (partecipazione) considerata. Si precisa che per i caso di carico 5-Qsk e 6-Qnk la partecipazione è prevista localmente per ogni elemento solaio o copertura presente nel modello (si confronti il valore Sksol nel capitolo relativo agli elementi solaio) e pertanto la loro partecipazione è di norma pari a uno.

CDC	Tipo	Sigla Id	Note
1	Ggk	CDC=Ggk (peso proprio della struttura)	
2	Gsk	CDC=G1sk (permanente solai-coperture)	
3	Gsk	CDC=G2sk (permanente solai-coperture n.c.d.)	
4	Qsk	CDC=Qsk (variabile solai)	
5	Edk	CDC=Ed (dinamico SLU) alfa=0.0 (ecc. +)	partecipazione:1.00 per 1 CDC=Ggk (peso proprio della struttura)
			partecipazione:1.00 per 2 CDC=G1sk (permanente solai-coperture)
			partecipazione:1.00 per 3 CDC=G2sk (permanente solai-coperture n.c.d.)

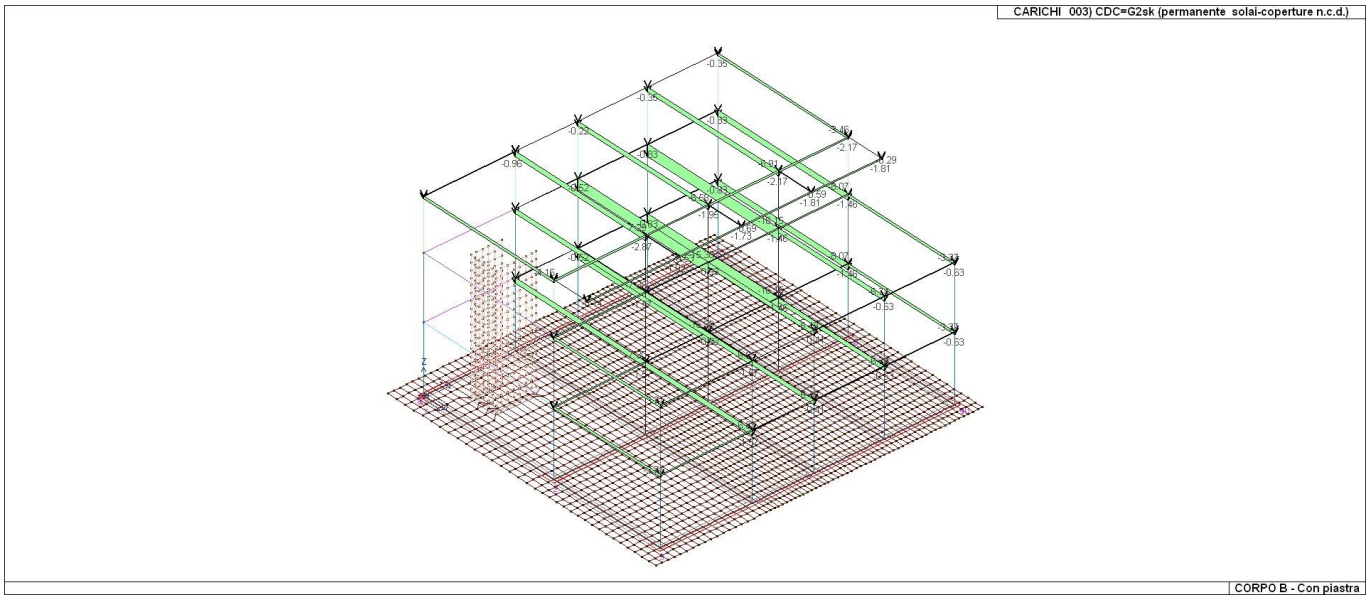
CDC	Tipo	Sigla Id	Note
			partecipazione:1.00 per 4 CDC=Qsk (variabile solai)
			partecipazione:1.00 per 13 CDC=G2k (TAMPONATURE)
6	Edk	CDC=Ed (dinamico SLU) alfa=0.0 (ecc. -)	come precedente CDC sismico
7	Edk	CDC=Ed (dinamico SLU) alfa=90.00 (ecc. +)	come precedente CDC sismico
8	Edk	CDC=Ed (dinamico SLU) alfa=90.00 (ecc. -)	come precedente CDC sismico
9	Edk	CDC=Ed (dinamico SLD) alfa=0.0 (ecc. +)	come precedente CDC sismico
10	Edk	CDC=Ed (dinamico SLD) alfa=0.0 (ecc. -)	come precedente CDC sismico
11	Edk	CDC=Ed (dinamico SLD) alfa=90.00 (ecc. +)	come precedente CDC sismico
12	Edk	CDC=Ed (dinamico SLD) alfa=90.00 (ecc. -)	come precedente CDC sismico
13	Gk	CDC=G2k (TAMPONATURE)	Azioni applicate:
			D2 :da 16 a 17 Azione : TAMP.P2-DG:Fzi=-7.69 Fzf=-7.69
			D2 :da 23 a 27 Azione : TAMP.P2-DG:Fzi=-7.69 Fzf=-7.69
			D2 :da 30 a 31 Azione : TAMP.PT-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 38 a 39 Azione : TAMP.PT-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 49 a 52 Azione : TAMP.PT-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 67 a 70 Azione : TAMP.PT-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 75 a 76 Azione : TAMP.P1-DG:Fzi=-9.48 Fzf=-9.48
			D2 :da 83 a 84 Azione : TAMP.P1-DG:Fzi=-9.48 Fzf=-9.48
			D2 :da 94 a 97 Azione : TAMP.P1-DG:Fzi=-9.48 Fzf=-9.48
			D2 : 101 Azione : TAMP.P2-DG:Fzi=-7.69 Fzf=-7.69
			D2 :da 112 a 115 Azione : TAMP.P1-DG:Fzi=-9.48 Fzf=-9.48
			D2 : 120 Azione : TAMP.P2-DG:Fzi=-7.69 Fzf=-7.69
			D2 : 128 Azione : TAMP.P2-DG:Fzi=-7.69 Fzf=-7.69
			D2 :da 129 a 130 Azione : TAMP.PT-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 137 a 142 Azione : TAMP.PT-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 147 a 154 Azione : TAMP.PT-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 159 a 164 Azione : TAMP.PT-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 171 a 176 Azione : TAMP.PT-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 181 a 186 Azione : TAMP.PT-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 193 a 198 Azione : TAMP.PT-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 203 a 208 Azione : TAMP.PT-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 215 a 220 Azione : TAMP.PT-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 225 a 230 Azione : TAMP.PT-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 237 a 242 Azione : TAMP.PT-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 247 a 252 Azione : TAMP.PT-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 259 a 264 Azione : TAMP.PT-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 269 a 274 Azione : TAMP.PT-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 281 a 286 Azione : TAMP.PT-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 291 a 296 Azione : TAMP.PT-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 303 a 308 Azione : TAMP.PT-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 313 a 318 Azione : TAMP.PT-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 325 a 330 Azione : TAMP.PT-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 335 a 340 Azione : TAMP.PT-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 347 a 352 Azione : TAMP.PT-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 357 a 362 Azione : TAMP.PT-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 369 a 374 Azione : TAMP.PT-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 379 a 384 Azione : TAMP.PT-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 391 a 396 Azione : TAMP.PT-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 401 a 406 Azione : TAMP.PT-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 413 a 418 Azione : TAMP.PT-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 423 a 428 Azione : TAMP.PT-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 435 a 436 Azione : TAMP.PT-DG:Fzi=-10.67 Fzf=-10.67



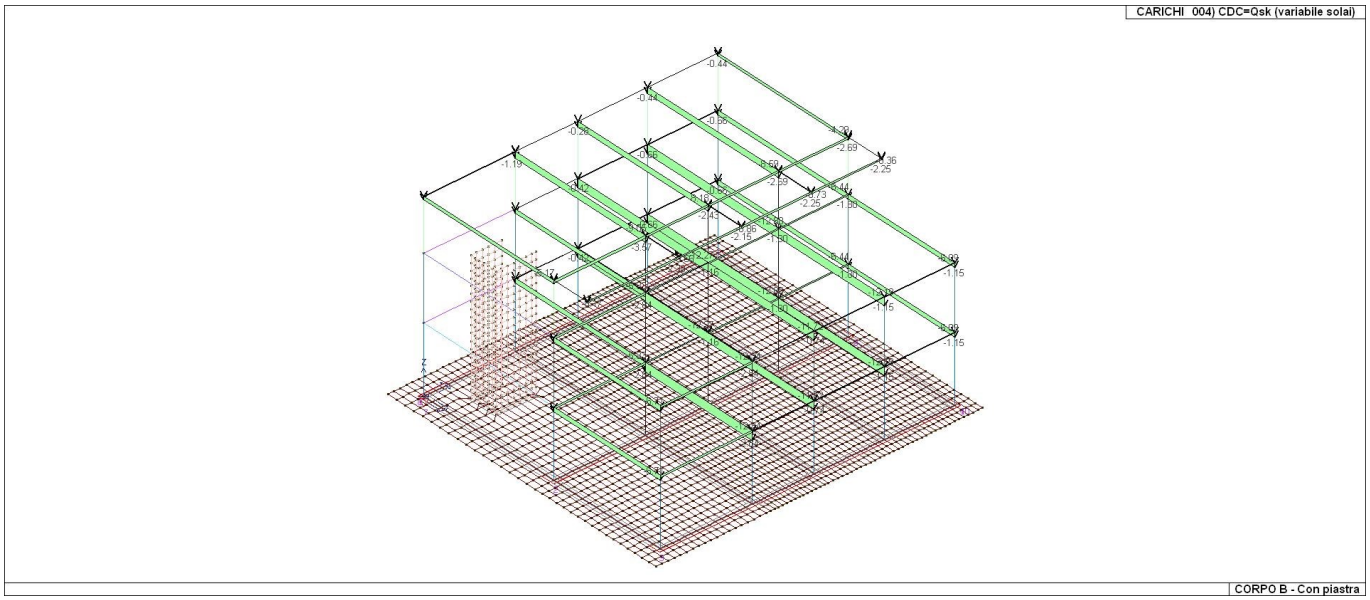
22_CDC_001_CDC=Ggk (peso proprio della struttura)



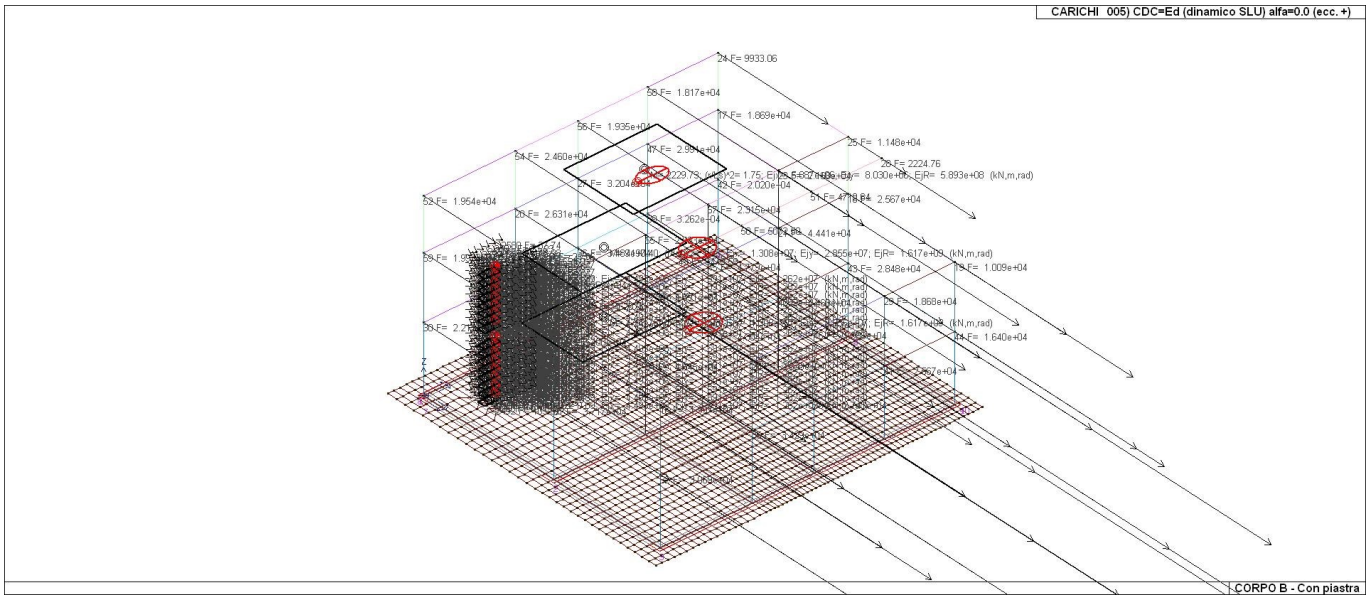
22_CDC_002_CDC=G1sk (permanente solai-coperture)



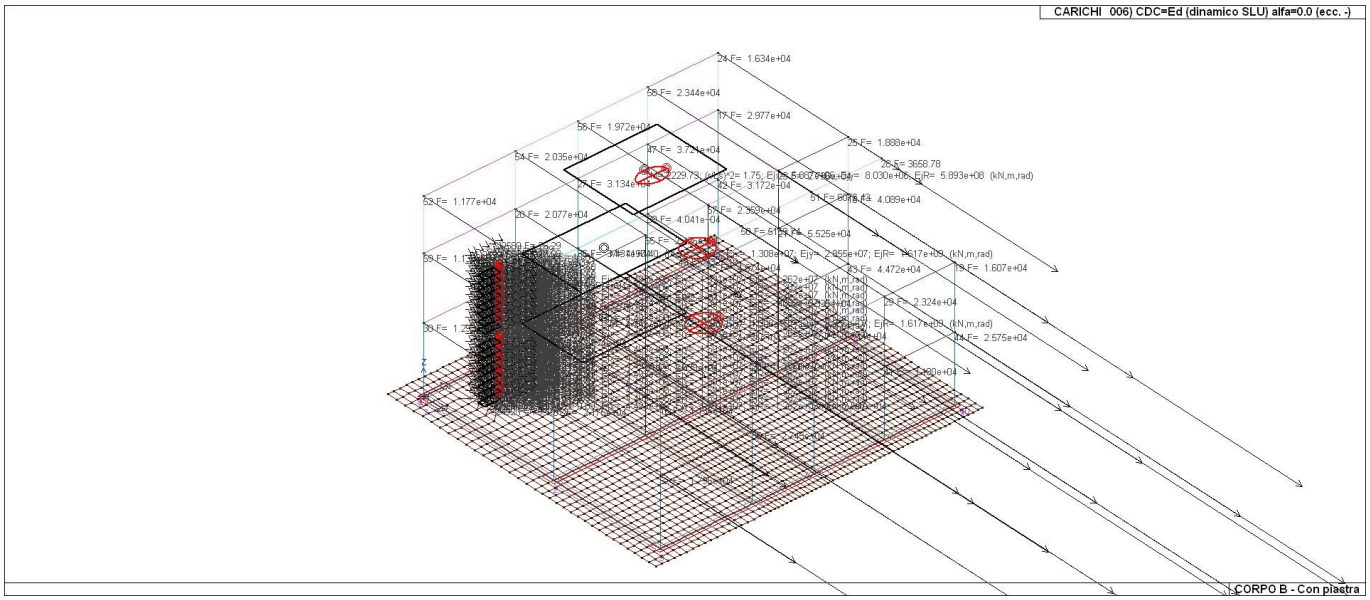
22_CDC_003_CDC=G2sk (permanente solai-coperture n.c.d.)



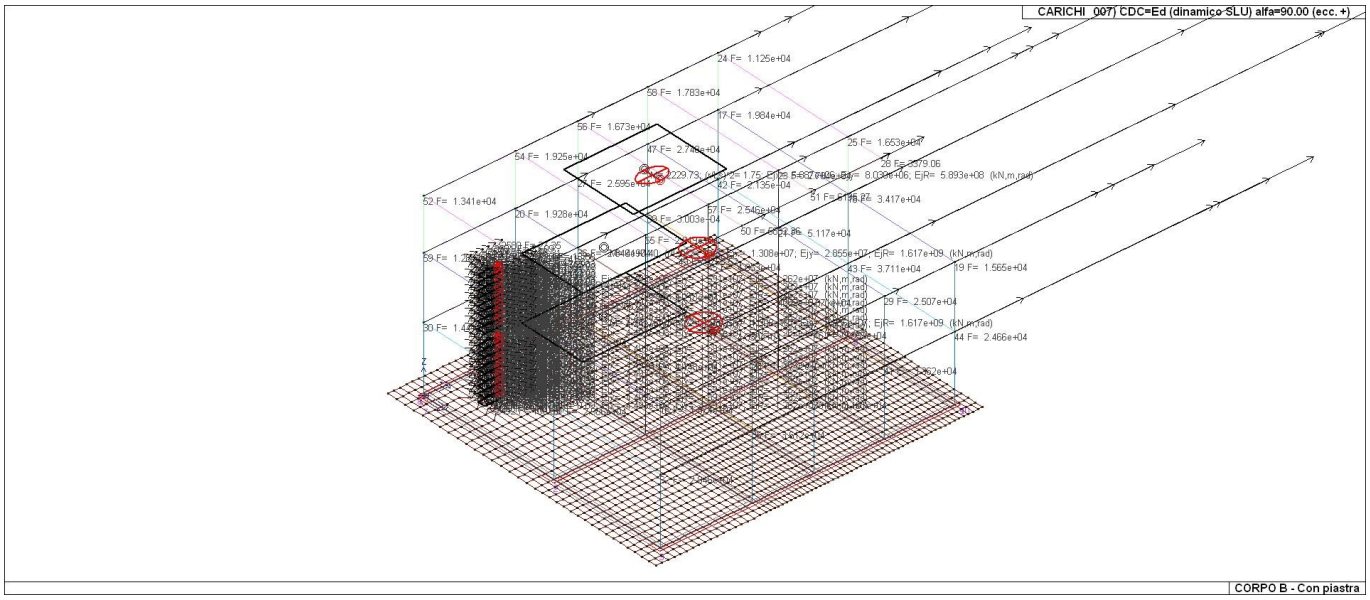
22_CDC_004_CDC=Qsk (variabile solai)



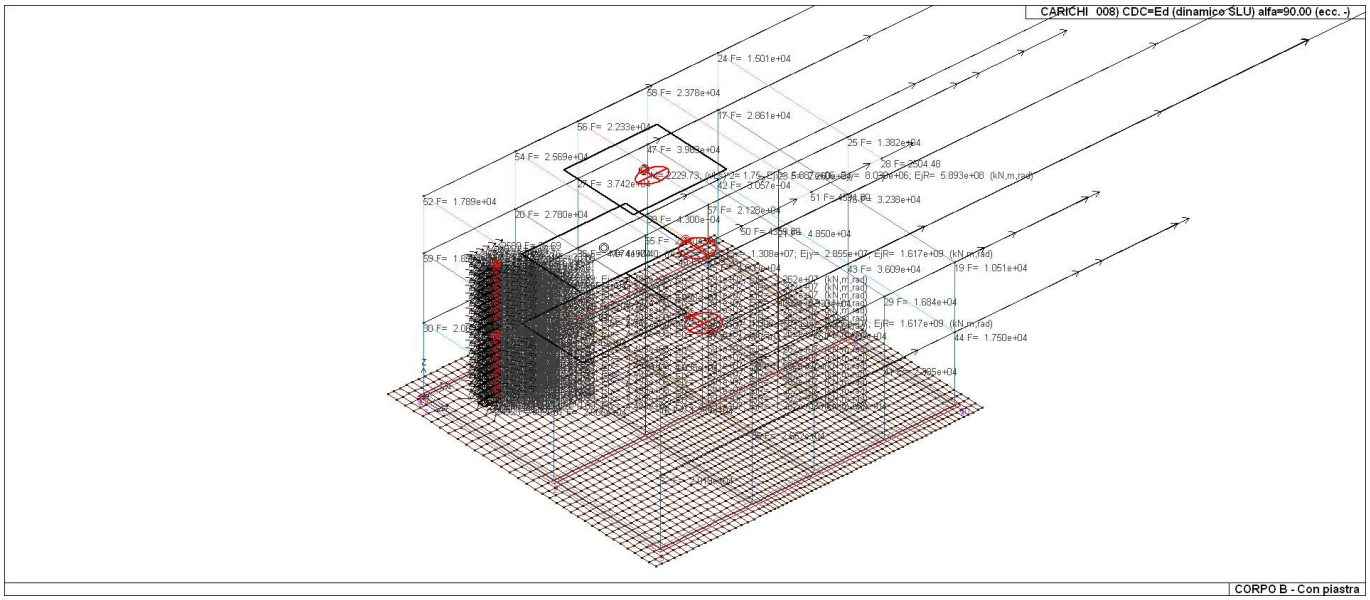
22_CDC_005_CDC=Ed (dinamico SLU) alfa=0.0 (ecc. +)



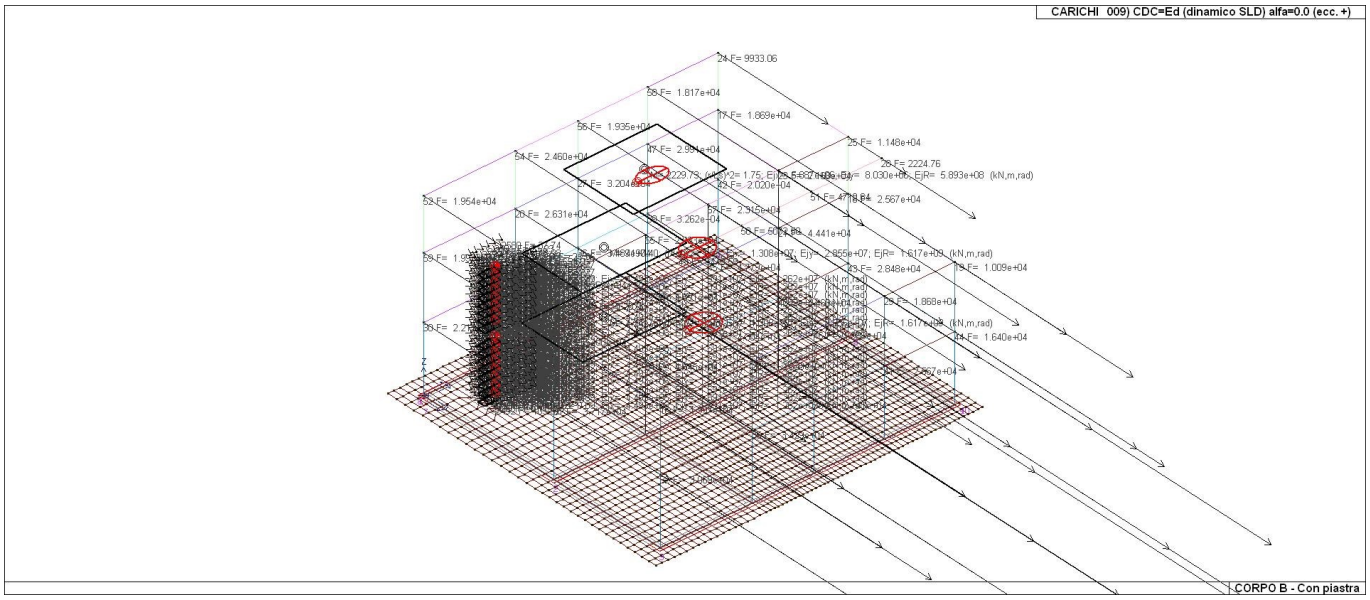
22_CDC_006_CDC=Ed (dinamico SLU) alfa=0.0 (ecc. -)



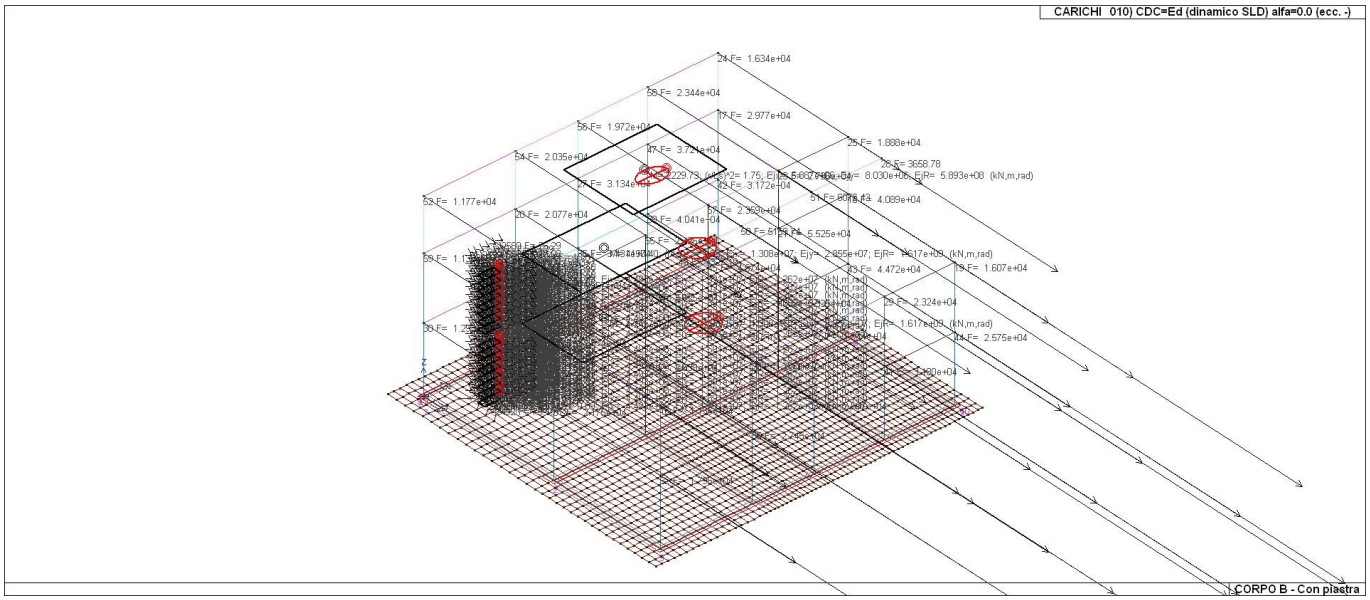
22_CDC_007_CDC=Ed (dinamico SLU) alfa=90.00 (ecc. +)



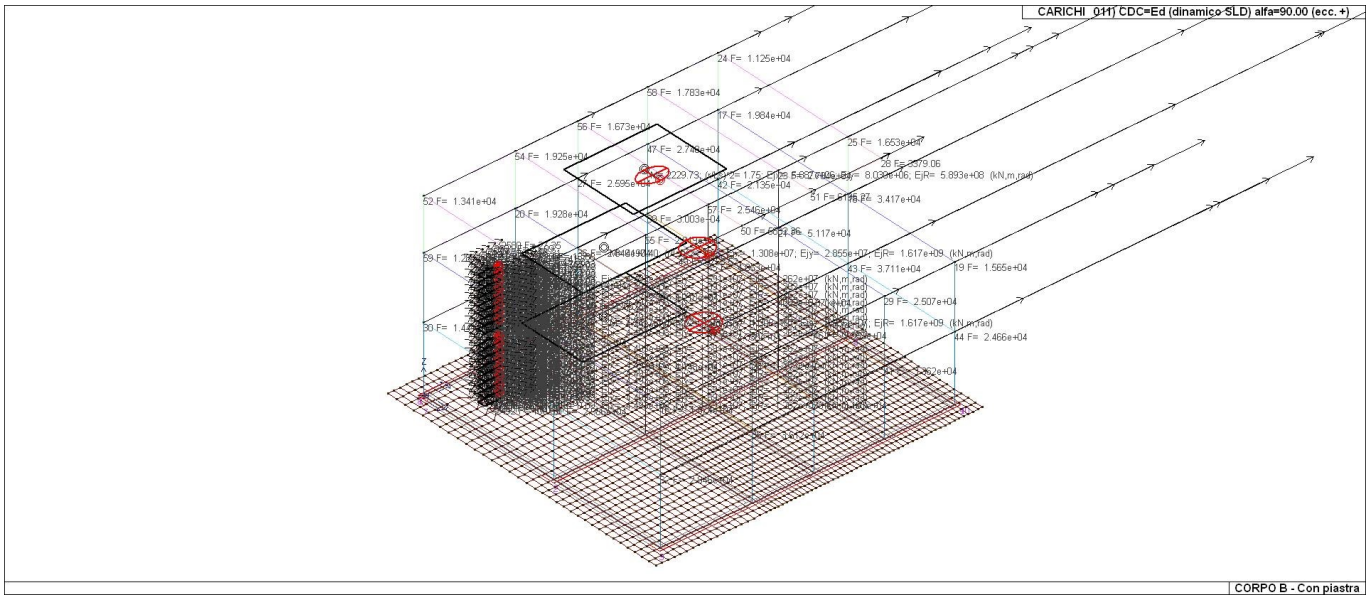
22_CDC_008_CDC=Ed (dinamico SLU) alfa=90.00 (ecc. -)



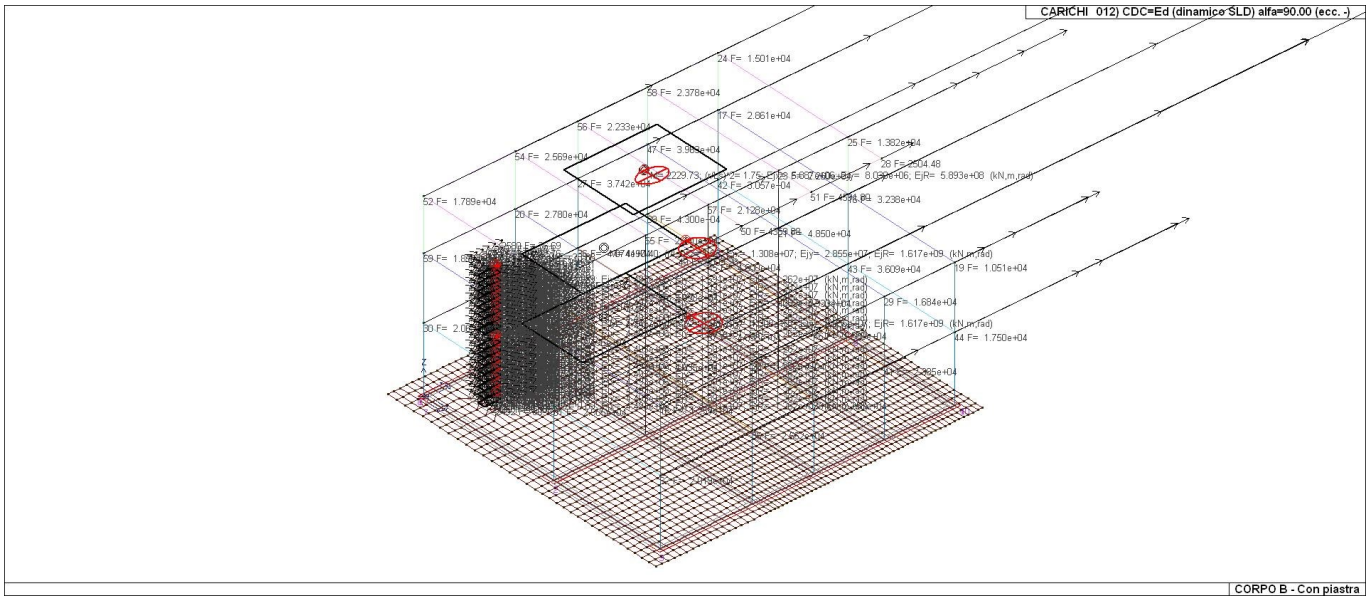
22_CDC_009_CDC=Ed (dinamico SLD) alfa=0.0 (ecc. +)



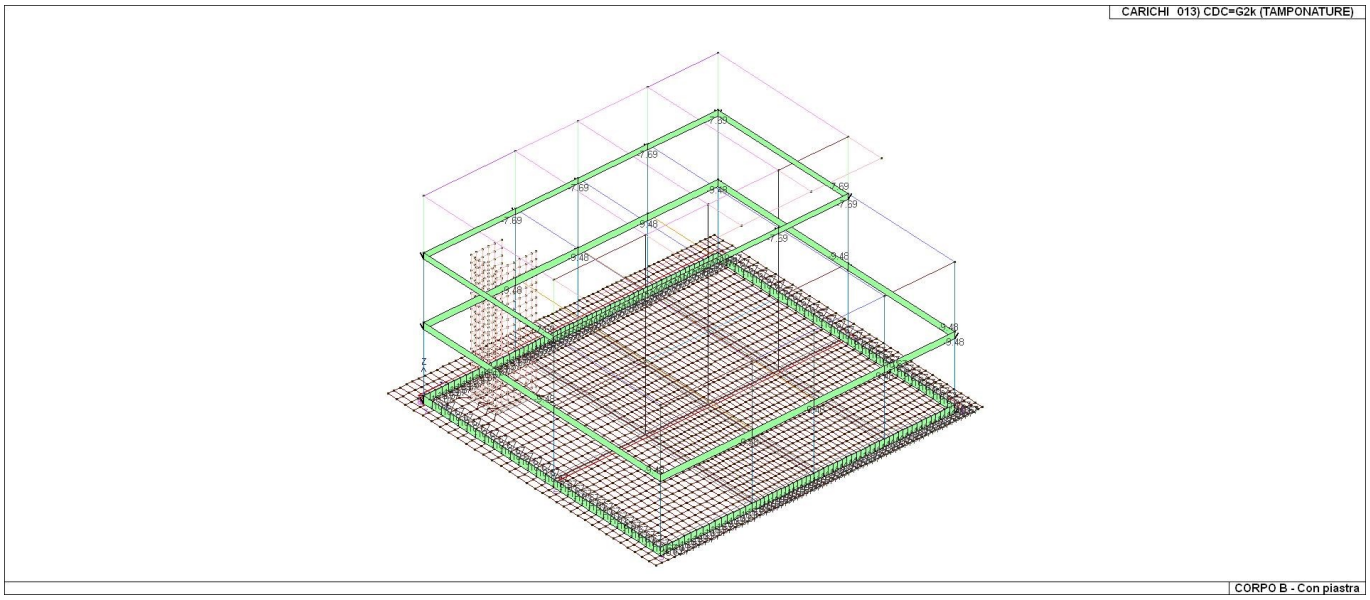
22_CDC_010_CDC=Ed (dinamico SLD) alfa=0.0 (ecc. -)



22_CDC_011_CDC=Ed (dinamico SLD) alfa=90.00 (ecc. +)



22_CDC_012_CDC=Ed (dinamico SLD) alfa=90.00 (ecc. -)



22_CDC_013_CDC=G2k (TAMPONATURE)

DEFINIZIONE DELLE COMBINAZIONI

LEGENDA TABELLA COMBINAZIONI DI CARICO

Il programma combina i diversi tipi di casi di carico (CDC) secondo le regole previste dalla normativa vigente.
Le combinazioni previste sono destinate al controllo di sicurezza della struttura ed alla verifica degli spostamenti e delle sollecitazioni.

La prima tabella delle combinazioni riportata di seguito comprende le seguenti informazioni: Numero, Tipo, Sigla identificativa. Una seconda tabella riporta il peso nella combinazione assunto per ogni caso di carico.

Ai fini delle verifiche degli stati limite si definiscono le seguenti combinazioni delle azioni:
***Combinazione fondamentale** SLU*

$\gamma G1 \cdot G1 + \gamma G2 \cdot G2 + \gamma P \cdot P + \gamma Q1 \cdot Qk1 + \gamma Q2 \cdot \psi 02 \cdot Qk2 + \gamma Q3 \cdot \psi 03 \cdot Qk3 + \ldots$

***Combinazione caratteristica** (rara) SLE*

$G1 + G2 + P + Qk1 + \psi 02 \cdot Qk2 + \psi 03 \cdot Qk3 + \ldots$

***Combinazione frequente** SLE*

$G1 + G2 + P + \psi 11 \cdot Qk1 + \psi 22 \cdot Qk2 + \psi 23 \cdot Qk3 + \ldots$

***Combinazione quasi permanente** SLE*

$G1 + G2 + P + \psi 21 \cdot Qk1 + \psi 22 \cdot Qk2 + \psi 23 \cdot Qk3 + \ldots$

***Combinazione sismica**, impiegata per gli stati limite ultimi e di esercizio connessi all'azione sismica E*

$E + G1 + G2 + P + \psi 21 \cdot Qk1 + \psi 22 \cdot Qk2 + \ldots$

***Combinazione eccezionale**, impiegata per gli stati limite connessi alle azioni eccezionali*

$G1 + G2 + Ad + P + \psi 21 \cdot Qk1 + \psi 22 \cdot Qk2 + \ldots$

Dove:

NTC 2018 Tabella 2.5.I

Destinazione d'uso/azione	**ψ0**	**ψ1**	**ψ2**
Categoria A residenziali	0,70	0,50	0,30
Categoria B uffici	0,70	0,50	0,30
Categoria C ambienti suscettibili di affollamento	0,70	0,70	0,60
Categoria D ambienti ad uso commerciale	0,70	0,70	0,60
Categoria E biblioteche, archivi, magazzini,…	1,00	0,90	0,80
Categoria F Rimesse e parcheggi (autoveicoli <= 30kN)	0,70	0,70	0,60
Categoria G Rimesse e parcheggi (autoveicoli > 30kN)	0,70	0,50	0,30
Categoria H Coperture	0,00	0,00	0,00
Vento	0,60	0,20	0,00
Neve a quota <= 1000 m	0,50	0,20	0,00
Neve a quota > 1000 m	0,70	0,50	0,20
Variazioni Termiche	0,60	0,50	0,00

Nelle verifiche possono essere adottati in alternativa due diversi approcci progettuali:
- per l'approccio 1 si considerano due diverse combinazioni di gruppi di coefficienti di sicurezza parziali per le azioni, per i materiali e per la resistenza globale (combinazione 1 con coefficienti A1 e combinazione 2 con coefficienti A2),
- per l'approccio 2 si definisce un'unica combinazione per le azioni, per la resistenza dei materiali e per la resistenza globale (con coefficienti A1).

NTC 2018 Tabella 2.6.I

	Coefficiente γf	**EQU**	**A1**	**A2**

Carichi permanenti	*Favorevoli*	*$\gamma G1$*	*0,9*	*1,0*	*1,0*
	Sfavorevoli		*1,1*	*1,3*	*1,0*
Carichi permanenti non strutturali *(Non compiutamente definiti)*	*Favorevoli*	*$\gamma G2$*	*0,8*	*0,8*	*0,8*
	Sfavorevoli		*1,5*	*1,5*	*1,3*
Carichi variabili	*Favorevoli*	*γQi*	*0,0*	*0,0*	*0,0*
	Sfavorevoli		*1,5*	*1,5*	*1,3*

Cmb	Tipo	Sigla Id	effetto P-delta
1	SLU	Comb. SLU A1 1	
2	SLU	Comb. SLU A1 2	
3	SLU	Comb. SLU A1 3	
4	SLU	Comb. SLU A1 4	
5	SLU	Comb. SLU A1 (SLV sism.) 5	SI
6	SLU	Comb. SLU A1 (SLV sism.) 6	SI
7	SLU	Comb. SLU A1 (SLV sism.) 7	SI
8	SLU	Comb. SLU A1 (SLV sism.) 8	SI
9	SLU	Comb. SLU A1 (SLV sism.) 9	SI
10	SLU	Comb. SLU A1 (SLV sism.) 10	SI
11	SLU	Comb. SLU A1 (SLV sism.) 11	SI
12	SLU	Comb. SLU A1 (SLV sism.) 12	SI
13	SLU	Comb. SLU A1 (SLV sism.) 13	SI
14	SLU	Comb. SLU A1 (SLV sism.) 14	SI
15	SLU	Comb. SLU A1 (SLV sism.) 15	SI
16	SLU	Comb. SLU A1 (SLV sism.) 16	SI
17	SLU	Comb. SLU A1 (SLV sism.) 17	SI
18	SLU	Comb. SLU A1 (SLV sism.) 18	SI
19	SLU	Comb. SLU A1 (SLV sism.) 19	SI
20	SLU	Comb. SLU A1 (SLV sism.) 20	SI
21	SLU	Comb. SLU A1 (SLV sism.) 21	SI
22	SLU	Comb. SLU A1 (SLV sism.) 22	SI
23	SLU	Comb. SLU A1 (SLV sism.) 23	SI
24	SLU	Comb. SLU A1 (SLV sism.) 24	SI
25	SLU	Comb. SLU A1 (SLV sism.) 25	SI
26	SLU	Comb. SLU A1 (SLV sism.) 26	SI
27	SLU	Comb. SLU A1 (SLV sism.) 27	SI
28	SLU	Comb. SLU A1 (SLV sism.) 28	SI
29	SLU	Comb. SLU A1 (SLV sism.) 29	SI
30	SLU	Comb. SLU A1 (SLV sism.) 30	SI
31	SLU	Comb. SLU A1 (SLV sism.) 31	SI
32	SLU	Comb. SLU A1 (SLV sism.) 32	SI
33	SLU	Comb. SLU A1 (SLV sism.) 33	SI
34	SLU	Comb. SLU A1 (SLV sism.) 34	SI
35	SLU	Comb. SLU A1 (SLV sism.) 35	SI
36	SLU	Comb. SLU A1 (SLV sism.) 36	SI
37	SLD(sis)	Comb. SLE (SLD Danno sism.) 37	SI
38	SLD(sis)	Comb. SLE (SLD Danno sism.) 38	SI
39	SLD(sis)	Comb. SLE (SLD Danno sism.) 39	SI
40	SLD(sis)	Comb. SLE (SLD Danno sism.) 40	SI
41	SLD(sis)	Comb. SLE (SLD Danno sism.) 41	SI
42	SLD(sis)	Comb. SLE (SLD Danno sism.) 42	SI
43	SLD(sis)	Comb. SLE (SLD Danno sism.) 43	SI
44	SLD(sis)	Comb. SLE (SLD Danno sism.) 44	SI
45	SLD(sis)	Comb. SLE (SLD Danno sism.) 45	SI
46	SLD(sis)	Comb. SLE (SLD Danno sism.) 46	SI
47	SLD(sis)	Comb. SLE (SLD Danno sism.) 47	SI
48	SLD(sis)	Comb. SLE (SLD Danno sism.) 48	SI
49	SLD(sis)	Comb. SLE (SLD Danno sism.) 49	SI
50	SLD(sis)	Comb. SLE (SLD Danno sism.) 50	SI
51	SLD(sis)	Comb. SLE (SLD Danno sism.) 51	SI
52	SLD(sis)	Comb. SLE (SLD Danno sism.) 52	SI
53	SLD(sis)	Comb. SLE (SLD Danno sism.) 53	SI
54	SLD(sis)	Comb. SLE (SLD Danno sism.) 54	SI
55	SLD(sis)	Comb. SLE (SLD Danno sism.) 55	SI
56	SLD(sis)	Comb. SLE (SLD Danno sism.) 56	SI
57	SLD(sis)	Comb. SLE (SLD Danno sism.) 57	SI
58	SLD(sis)	Comb. SLE (SLD Danno sism.) 58	SI

Cmb	Tipo	Sigla Id	effetto P-delta
59	SLD(sis)	Comb. SLE (SLD Danno sism.) 59	SI
60	SLD(sis)	Comb. SLE (SLD Danno sism.) 60	SI
61	SLD(sis)	Comb. SLE (SLD Danno sism.) 61	SI
62	SLD(sis)	Comb. SLE (SLD Danno sism.) 62	SI
63	SLD(sis)	Comb. SLE (SLD Danno sism.) 63	SI
64	SLD(sis)	Comb. SLE (SLD Danno sism.) 64	SI
65	SLD(sis)	Comb. SLE (SLD Danno sism.) 65	SI
66	SLD(sis)	Comb. SLE (SLD Danno sism.) 66	SI
67	SLD(sis)	Comb. SLE (SLD Danno sism.) 67	SI
68	SLD(sis)	Comb. SLE (SLD Danno sism.) 68	SI
69	SLE(r)	Comb. SLE(rara) 69	
70	SLE(r)	Comb. SLE(rara) 70	
71	SLE(f)	Comb. SLE(freq.) 71	
72	SLE(f)	Comb. SLE(freq.) 72	
73	SLE(p)	Comb. SLE(perm.) 73	
74	SLE(p)	Comb. SLE(perm.) 74	

Cmb	CDC 1/15...	CDC 2/16...	CDC 3/17...	CDC 4/18...	CDC 5/19...	CDC 6/20...	CDC 7/21...	CDC 8/22...	CDC 9/23...	CDC 10/24...	CDC 11/25...	CDC 12/26...	CDC 13/27...	CDC 14/28...
1	1.30	1.30	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.50	
2	1.30	1.30	1.50	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.50	
3	1.00	1.00	0.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.80	
4	1.00	1.00	0.80	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.80	
5	1.00	1.00	1.00	0.60	-1.00	0.0	-0.30	0.0	0.0	0.0	0.0	0.0	1.00	
6	1.00	1.00	1.00	0.60	-1.00	0.0	0.30	0.0	0.0	0.0	0.0	0.0	1.00	
7	1.00	1.00	1.00	0.60	1.00	0.0	-0.30	0.0	0.0	0.0	0.0	0.0	1.00	
8	1.00	1.00	1.00	0.60	1.00	0.0	0.30	0.0	0.0	0.0	0.0	0.0	1.00	
9	1.00	1.00	1.00	0.60	-1.00	0.0	0.0	-0.30	0.0	0.0	0.0	0.0	1.00	
10	1.00	1.00	1.00	0.60	-1.00	0.0	0.0	0.30	0.0	0.0	0.0	0.0	1.00	
11	1.00	1.00	1.00	0.60	1.00	0.0	0.0	-0.30	0.0	0.0	0.0	0.0	1.00	
12	1.00	1.00	1.00	0.60	1.00	0.0	0.0	0.30	0.0	0.0	0.0	0.0	1.00	
13	1.00	1.00	1.00	0.60	0.0	-1.00	-0.30	0.0	0.0	0.0	0.0	0.0	1.00	
14	1.00	1.00	1.00	0.60	0.0	-1.00	0.30	0.0	0.0	0.0	0.0	0.0	1.00	
15	1.00	1.00	1.00	0.60	0.0	1.00	-0.30	0.0	0.0	0.0	0.0	0.0	1.00	
16	1.00	1.00	1.00	0.60	0.0	1.00	0.30	0.0	0.0	0.0	0.0	0.0	1.00	
17	1.00	1.00	1.00	0.60	0.0	-1.00	0.0	-0.30	0.0	0.0	0.0	0.0	1.00	
18	1.00	1.00	1.00	0.60	0.0	-1.00	0.0	0.30	0.0	0.0	0.0	0.0	1.00	
19	1.00	1.00	1.00	0.60	0.0	1.00	0.0	-0.30	0.0	0.0	0.0	0.0	1.00	
20	1.00	1.00	1.00	0.60	0.0	1.00	0.0	0.30	0.0	0.0	0.0	0.0	1.00	
21	1.00	1.00	1.00	0.60	-0.30	0.0	-1.00	0.0	0.0	0.0	0.0	0.0	1.00	
22	1.00	1.00	1.00	0.60	-0.30	0.0	1.00	0.0	0.0	0.0	0.0	0.0	1.00	
23	1.00	1.00	1.00	0.60	0.30	0.0	-1.00	0.0	0.0	0.0	0.0	0.0	1.00	
24	1.00	1.00	1.00	0.60	0.30	0.0	1.00	0.0	0.0	0.0	0.0	0.0	1.00	
25	1.00	1.00	1.00	0.60	0.0	-0.30	-1.00	0.0	0.0	0.0	0.0	0.0	1.00	
26	1.00	1.00	1.00	0.60	0.0	-0.30	1.00	0.0	0.0	0.0	0.0	0.0	1.00	
27	1.00	1.00	1.00	0.60	0.0	0.30	-1.00	0.0	0.0	0.0	0.0	0.0	1.00	
28	1.00	1.00	1.00	0.60	0.0	0.30	1.00	0.0	0.0	0.0	0.0	0.0	1.00	
29	1.00	1.00	1.00	0.60	-0.30	0.0	0.0	-1.00	0.0	0.0	0.0	0.0	1.00	
30	1.00	1.00	1.00	0.60	-0.30	0.0	0.0	1.00	0.0	0.0	0.0	0.0	1.00	
31	1.00	1.00	1.00	0.60	0.30	0.0	0.0	-1.00	0.0	0.0	0.0	0.0	1.00	
32	1.00	1.00	1.00	0.60	0.30	0.0	0.0	1.00	0.0	0.0	0.0	0.0	1.00	
33	1.00	1.00	1.00	0.60	0.0	-0.30	0.0	-1.00	0.0	0.0	0.0	0.0	1.00	
34	1.00	1.00	1.00	0.60	0.0	-0.30	0.0	1.00	0.0	0.0	0.0	0.0	1.00	
35	1.00	1.00	1.00	0.60	0.0	0.30	0.0	-1.00	0.0	0.0	0.0	0.0	1.00	
36	1.00	1.00	1.00	0.60	0.0	0.30	0.0	1.00	0.0	0.0	0.0	0.0	1.00	
37	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	-1.00	0.0	-0.30	0.0	1.00	
38	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	-1.00	0.0	0.30	0.0	1.00	
39	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	1.00	0.0	-0.30	0.0	1.00	
40	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	1.00	0.0	0.30	0.0	1.00	
41	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	-1.00	0.0	0.0	-0.30	1.00	
42	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	-1.00	0.0	0.0	0.30	1.00	
43	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	1.00	0.0	0.0	-0.30	1.00	
44	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.30	1.00	
45	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	-1.00	-0.30	0.0	1.00	
46	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	-1.00	0.30	0.0	1.00	
47	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	1.00	-0.30	0.0	1.00	
48	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	1.00	0.30	0.0	1.00	
49	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	-0.30	1.00	
50	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.30	1.00	
51	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	1.00	0.0	-0.30	1.00	

Cmb	CDC 1/15...	CDC 2/16...	CDC 3/17...	CDC 4/18...	CDC 5/19...	CDC 6/20...	CDC 7/21...	CDC 8/22...	CDC 9/23...	CDC 10/24...	CDC 11/25...	CDC 12/26...	CDC 13/27...	CDC 14/28...
52	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.30	1.00	
53	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	-0.30	0.0	-1.00	0.0	1.00	
54	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	-0.30	0.0	1.00	0.0	1.00	
55	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.30	0.0	-1.00	0.0	1.00	
56	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.30	0.0	1.00	0.0	1.00	
57	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	-0.30	-1.00	0.0	1.00	
58	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	-0.30	1.00	0.0	1.00	
59	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	0.30	-1.00	0.0	1.00	
60	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	0.30	1.00	0.0	1.00	
61	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	-1.00	1.00	
62	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	1.00	1.00	
63	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.30	0.0	0.0	-1.00	1.00	
64	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.30	0.0	0.0	1.00	1.00	
65	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	-1.00	1.00	
66	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	1.00	1.00	
67	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	0.30	0.0	-1.00	1.00	
68	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	0.30	0.0	1.00	1.00	
69	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	
70	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	
71	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	
72	1.00	1.00	1.00	0.70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	
73	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	
74	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	

AZIONE SISMICA

VALUTAZIONE DELL' AZIONE SISMICA

L'azione sismica sulle costruzioni è valutata a partire dalla "pericolosità sismica di base", in condizioni ideali di sito di riferimento rigido con superficie topografica orizzontale.
Allo stato attuale, la pericolosità sismica su reticolo di riferimento nell'intervallo di riferimento è fornita dai dati pubblicati sul sito http://esse1.mi.ingv.it/. Per punti non coincidenti con il reticolo di riferimento e periodi di ritorno non contemplati direttamente si opera come indicato nell' allegato alle NTC (rispettivamente media pesata e interpolazione).

L' azione sismica viene definita in relazione ad un periodo di riferimento Vr che si ricava, per ciascun tipo di costruzione, moltiplicandone la vita nominale per il coefficiente d'uso (vedi tabella Parametri della struttura). Fissato il periodo di riferimento Vr e la probabilità di superamento Pver associata a ciascuno degli stati limite considerati, si ottiene il periodo di ritorno Tr e i relativi parametri di pericolosità sismica (vedi tabella successiva):
ag: accelerazione orizzontale massima del terreno;
Fo: valore massimo del fattore di amplificazione dello spettro in accelerazione orizzontale;
T*c: periodo di inizio del tratto a velocità costante dello spettro in accelerazione orizzontale;

Parametri della struttura					
Classe d'uso	Vita Vn [anni]	Coeff. Uso	Periodo Vr [anni]	Tipo di suolo	Categoria topografica
III	50.0	1.5	75.0	B	T1

Per la struttura in esame si sono adottati i parametri di pericolosità sismica da analisi di Risposta Sismica locale; si sono adottati i parametri spettrali riportati nelle seguenti tabelle; i parametri consentono la definizione degli spettri elastici come previsto al cap. 3.2 delle norme tecniche:
lo spettro di risposta elastico in accelerazione della componente orizzontale del moto sismico, Se, è definito dalle seguenti espressioni:

$$0 \le T < T_B \qquad S_e(T) = a_g \cdot S \cdot \eta \cdot F_o \cdot \left[\frac{T}{T_B} + \frac{1}{\eta \cdot F_o}\left(1 - \frac{T}{T_B}\right)\right]$$

$$T_B \le T < T_C \qquad S_e(T) = a_g \cdot S \cdot \eta \cdot F_o$$

$$T_C \le T < T_D \qquad S_e(T) = a_g \cdot S \cdot \eta \cdot F_o \cdot \left(\frac{T_C}{T}\right)$$

$$T_D \le T \qquad S_e(T) = a_g \cdot S \cdot \eta \cdot F_o \cdot \left(\frac{T_C \cdot T_D}{T^2}\right)$$

Lo spettro di risposta elastico in accelerazione della componente verticale del moto sismico, Sve, è definito dalle espressioni:

$$0 \le T < T_B \qquad S_{ve}(T) = a_g \cdot S \cdot \eta \cdot F_v \cdot \left[\frac{T}{T_B} + \frac{1}{\eta \cdot F_o}\left(1 - \frac{T}{T_B}\right)\right]$$

$$T_B \le T < T_C \qquad S_{ve}(T) = a_g \cdot S \cdot \eta \cdot F_v$$

$$T_C \le T < T_D \qquad S_{ve}(T) = a_g \cdot S \cdot \eta \cdot F_v \cdot \left(\frac{T_C}{T}\right)$$

$$T_D \le T \qquad S_{ve}(T) = a_g \cdot S \cdot \eta \cdot F_v \cdot \left(\frac{T_C \cdot T_D}{T^2}\right)$$

I valori di S_S, T_B, T_C e T_D, sono riportati nella seguenteTabella

Categoria di sottosuolo	S_S	T_B	T_C	T_D
A, B, C, D, E	1,0	0,05 s	0,15 s	1,0 s

S è il coefficiente che tiene conto della categoria di sottosuolo e delle condizioni topografiche mediante la relazione seguente S = Ss*St (3.2.3); nel caso di RSL i valori sono unitari
Fo è il fattore che quantifica l'amplificazione spettrale massima, su sito in esame
Fv è il fattore che quantifica l'amplificazione spettrale massima verticale, in termini di accelerazione orizzontale massima del terreno ag su sito in esame
Tb è il periodo corrispondente all'inizio del tratto dello spettro ad accelerazione costante.
Tc è il periodo corrispondente all'inizio del tratto dello spettro a velocità costante.
Td è il periodo corrispondente all'inizio del tratto dello spettro a spostamento costante.

Simbologia adottata nelle tabelle

Se(t)	Accelerazioni dello spettro di input
Tr	Periodo di ritorno
Tmin	Valore minore tra i tre periodi di vibrazione dell'edificio con massa partecipante più elevata
2Tmax	Valore maggiore tra i tre periodi di vibrazione dell'edificio con massa partecipante più elevata moltiplicato per due
Integrale RSL	Integrale dello spettro di risposta sismica locale valutato nell'intervallo compreso tra Tmin e 2Tmax
Integrale NTC*1.2	Integrale dello spettro da normativa amplificato del 20% valutato nell'intervallo compreso tra Tmin e 2Tmax
Rapporto	Rapporto tra Integrale RSL e Integrale NTC*1.2;
Esito confronto RSL vs NTC	- Possibile l'uso dello spettro NTC se Rapporto minore di 1 e RSL < NTC*1.3 - Non ammesso l'uso dello spettro NTC se RSL ≥ NTC*1.3 e Rapporto maggiore di 1 - Non ammesso l'uso dello spettro NTC (30% superato) se RSL ≥ NTC*1.3 - Non ammasso l'uso dello spettro NTC (rapporto integrali) se Rapporto maggiore di 1
Se(t) RSL	Accelerazioni dello spettro di risposta sismica locale
Se(t) NTC*1.3	Accelerazioni dello spettro da normativa amplificate del 30%
Confronto ord.55	Confronto tra lo spettro di risposta sismica locale e lo spettro da normativa amplificato del 30% nell'intervallo compreso tra Tmin e 2Tmax secondo l'Ordinanza n. 55 – 24/04/2018: - Non richiesto (ad di fuori dell'intervallo compreso tra Tmin e 2Tmax); - RSL <= NTC*1.3; - RSL > NTC*1.3
Esito confronto RSL vs NTC (0.7 A)	Se lo spettro di risposta sismica locale è minore del 70% dello spettro da normativa non è consentito l'uso dello spettro di risposta sismica locale (7.2.6 NTC 2018): - Possibile l'uso dello spettro RSL; - Non ammesso l'uso di RSL (0.7 non superato).
Se(t) NTC*0.7 suolo tipo A	70% delle Accelerazioni dello spettro da normativa valutato per categoria A di sottosuolo
Confronto NTC	Confronto tra lo spettro di risposta sismica locale e il 70% dello spettro da normativa: - RSL >= NTC_A*0.7; - RSL < NTC_A*0.7

A seguire sono riportati i confronti tra pericolosità sismica RSL e NTC come previsto da Ordinanza n.55 – 24/04/2018 e NTC (7.2.6)

Id nodo	Longitudine	Latitudine	Distanza
			Km
Loc.	16.152	38.968	
41444	16.123	38.953	3.008
41445	16.187	38.952	3.505
41223	16.189	39.002	4.927
41222	16.125	39.003	4.513

SL	Pver	Tr	ag	Fo	T*c
		Anni	g		sec
SLO	81.0	45.0	0.156	2.105	0.320
SLD	63.0	75.0	0.203	2.115	0.337
SLV	10.0	712.0	0.555	2.224	0.412
SLC	5.0	1462.0	0.732	2.262	0.443

SL	ag	S	Fo	Fv	Tb	Tc	Td
	g				sec	sec	sec
SLO	0.156	1.000	2.105	1.123	0.107	0.320	2.224
SLD	0.203	1.000	2.115	1.287	0.112	0.337	2.413
SLV	0.555	1.000	2.224	2.237	0.137	0.412	3.820
SLC	0.732	1.000	2.262	2.612	0.148	0.443	4.527

Periodo di ritorno <Tr>	Accelerazione max <ag>	Amplificazione <Fo>	Inizio v=costante <T*c>
	[g]		[s]
30	0.125	2.119	0.297
50	0.165	2.101	0.326
72	0.199	2.113	0.336
101	0.235	2.127	0.347
140	0.275	2.150	0.357
201	0.326	2.166	0.367
475	0.472	2.213	0.388
975	0.630	2.232	0.431
2475	0.889	2.302	0.460

Confronto spettri RSL vs NTC	
Tmin	0.100
2Tmax	0.700
Integrale RSL	0.540
Integrale NTC*1.2	0.449
Rapporto	1.202
Esito confronto	Non ammesso l'uso dello spettro NTC

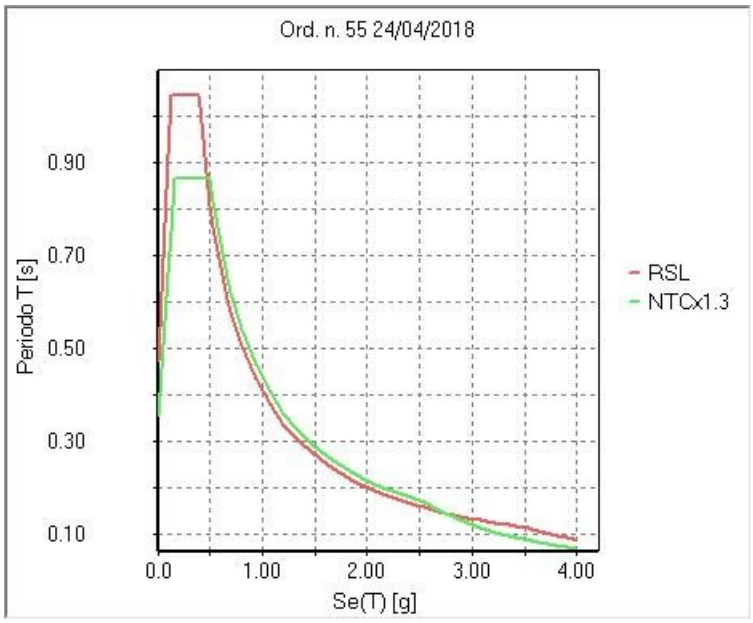


Fig. 1

Periodo	Se(t) RSL	Se(t) NTC*1.3	Confronto ord.55
[s]	[g]	[g]	
0.000	0.472	0.355	Non richiesto
0.100	0.915	0.660	RSL > NTC*1.3
0.129	1.045	0.750	RSL > NTC*1.3
0.167	1.045	0.866	RSL > NTC*1.3
0.264	1.045	0.866	RSL > NTC*1.3
0.388	1.045	0.866	RSL > NTC*1.3
0.398	1.018	0.866	RSL > NTC*1.3
0.502	0.807	0.866	RSL <= NTC*1.3
0.532	0.761	0.816	RSL <= NTC*1.3
0.667	0.608	0.652	RSL <= NTC*1.3
0.700	0.579	0.621	RSL <= NTC*1.3
0.801	0.506	0.542	Non richiesto
0.935	0.433	0.465	Non richiesto
1.070	0.379	0.406	Non richiesto
1.204	0.337	0.361	Non richiesto
1.338	0.303	0.325	Non richiesto
1.473	0.275	0.295	Non richiesto
1.607	0.252	0.270	Non richiesto
1.741	0.233	0.250	Non richiesto
1.876	0.216	0.232	Non richiesto
2.010	0.202	0.216	Non richiesto
2.145	0.189	0.203	Non richiesto
2.279	0.178	0.191	Non richiesto
2.413	0.168	0.180	Non richiesto
2.530	0.160	0.172	Non richiesto
2.548	0.159	0.169	Non richiesto
2.682	0.151	0.153	Non richiesto
2.816	0.144	0.139	Non richiesto

Periodo	Se(t) RSL	Se(t) NTC*1.3	Confronto ord.55
2.951	0.137	0.126	Non richiesto
3.085	0.131	0.116	Non richiesto
3.219	0.126	0.106	Non richiesto
3.354	0.121	0.098	Non richiesto
3.488	0.116	0.090	Non richiesto
3.508	0.115	0.089	Non richiesto
3.529	0.114	0.088	Non richiesto
3.549	0.112	0.087	Non richiesto
3.570	0.111	0.086	Non richiesto
3.590	0.110	0.085	Non richiesto
3.611	0.108	0.084	Non richiesto
3.631	0.107	0.083	Non richiesto
3.652	0.106	0.082	Non richiesto
3.672	0.105	0.082	Non richiesto
3.693	0.104	0.081	Non richiesto
3.713	0.103	0.080	Non richiesto
3.734	0.101	0.079	Non richiesto
3.754	0.100	0.078	Non richiesto
3.775	0.099	0.077	Non richiesto
3.795	0.098	0.076	Non richiesto
3.816	0.097	0.076	Non richiesto
3.836	0.096	0.075	Non richiesto
3.857	0.095	0.074	Non richiesto
3.877	0.094	0.073	Non richiesto
3.898	0.093	0.072	Non richiesto
3.918	0.092	0.072	Non richiesto
3.939	0.091	0.071	Non richiesto
3.959	0.090	0.070	Non richiesto
3.980	0.089	0.069	Non richiesto
4.000	0.088	0.069	Non richiesto

Confronto spettro RSL vs NTC (0.7 A)	
Esito confronto	Possibile l'uso dello spettro RSL

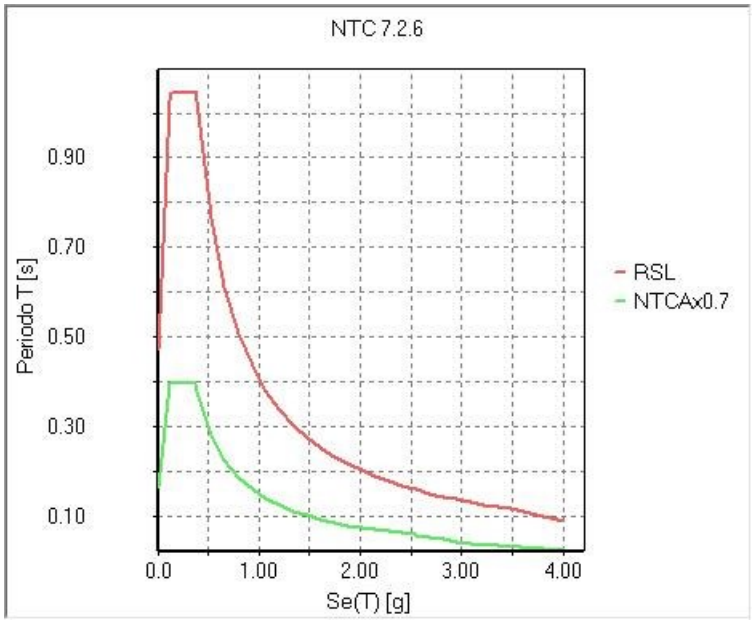


Fig. 2

Periodo	Se(t) RSL	Se(t) NTC*0.7 suolo tipo A	Confronto NTC
[s]	[g]	[g]	
0.000	0.472	0.163	RSL >= NTC_A*0.7
0.125	1.025	0.397	RSL >= NTC_A*0.7
0.129	1.045	0.397	RSL >= NTC_A*0.7
0.260	1.045	0.397	RSL >= NTC_A*0.7
0.375	1.045	0.397	RSL >= NTC_A*0.7
0.388	1.045	0.384	RSL >= NTC_A*0.7
0.394	1.029	0.378	RSL >= NTC_A*0.7
0.529	0.767	0.282	RSL >= NTC_A*0.7
0.663	0.611	0.225	RSL >= NTC_A*0.7
0.798	0.508	0.187	RSL >= NTC_A*0.7
0.932	0.435	0.160	RSL >= NTC_A*0.7
1.067	0.380	0.140	RSL >= NTC_A*0.7
1.201	0.337	0.124	RSL >= NTC_A*0.7
1.336	0.303	0.112	RSL >= NTC_A*0.7
1.470	0.276	0.101	RSL >= NTC_A*0.7
1.605	0.253	0.093	RSL >= NTC_A*0.7
1.739	0.233	0.086	RSL >= NTC_A*0.7
1.874	0.216	0.080	RSL >= NTC_A*0.7
2.008	0.202	0.074	RSL >= NTC_A*0.7
2.143	0.189	0.070	RSL >= NTC_A*0.7
2.277	0.178	0.065	RSL >= NTC_A*0.7
2.412	0.168	0.062	RSL >= NTC_A*0.7
2.530	0.160	0.059	RSL >= NTC_A*0.7
2.546	0.159	0.058	RSL >= NTC_A*0.7
2.681	0.151	0.052	RSL >= NTC_A*0.7
2.815	0.144	0.048	RSL >= NTC_A*0.7
2.950	0.137	0.043	RSL >= NTC_A*0.7
3.084	0.131	0.040	RSL >= NTC_A*0.7
3.219	0.126	0.036	RSL >= NTC_A*0.7
3.353	0.121	0.034	RSL >= NTC_A*0.7
3.488	0.116	0.031	RSL >= NTC_A*0.7
3.508	0.115	0.031	RSL >= NTC_A*0.7

Periodo	Se(t) RSL	Se(t) NTC*0.7 suolo tipo A	Confronto NTC
3.529	0.114	0.030	RSL >= NTC_A*0.7
3.549	0.112	0.030	RSL >= NTC_A*0.7
3.570	0.111	0.030	RSL >= NTC_A*0.7
3.590	0.110	0.029	RSL >= NTC_A*0.7
3.611	0.108	0.029	RSL >= NTC_A*0.7
3.631	0.107	0.029	RSL >= NTC_A*0.7
3.652	0.106	0.028	RSL >= NTC_A*0.7
3.672	0.105	0.028	RSL >= NTC_A*0.7
3.693	0.104	0.028	RSL >= NTC_A*0.7
3.713	0.103	0.027	RSL >= NTC_A*0.7
3.734	0.101	0.027	RSL >= NTC_A*0.7
3.754	0.100	0.027	RSL >= NTC_A*0.7
3.775	0.099	0.026	RSL >= NTC_A*0.7
3.795	0.098	0.026	RSL >= NTC_A*0.7
3.816	0.097	0.026	RSL >= NTC_A*0.7
3.836	0.096	0.026	RSL >= NTC_A*0.7
3.857	0.095	0.025	RSL >= NTC_A*0.7
3.877	0.094	0.025	RSL >= NTC_A*0.7
3.898	0.093	0.025	RSL >= NTC_A*0.7
3.918	0.092	0.025	RSL >= NTC_A*0.7
3.939	0.091	0.024	RSL >= NTC_A*0.7
3.959	0.090	0.024	RSL >= NTC_A*0.7
3.980	0.089	0.024	RSL >= NTC_A*0.7
4.000	0.088	0.024	RSL >= NTC_A*0.7

Periodo di ritorno <Tr>	Esito confronto
30	Possibile l'uso dello spettro RSL
50	Possibile l'uso dello spettro RSL
72	Possibile l'uso dello spettro RSL
101	Possibile l'uso dello spettro RSL
140	Possibile l'uso dello spettro RSL
201	Possibile l'uso dello spettro RSL
475	Possibile l'uso dello spettro RSL
975	Possibile l'uso dello spettro RSL
2475	Possibile l'uso dello spettro RSL

RISULTATI ANALISI SISMICHE

LEGENDA TABELLA ANALISI SISMICHE

Il programma consente l'analisi di diverse configurazioni sismiche.

Sono previsti, infatti, i seguenti casi di carico:

9. Esk caso di carico sismico con analisi statica equivalente
10. Edk caso di carico sismico con analisi dinamica

Ciascun caso di carico è caratterizzato da un angolo di ingresso e da una configurazione di masse determinante la forza sismica complessiva (si rimanda al capitolo relativo ai casi di carico per chiarimenti inerenti questo aspetto).

Nella colonna Note, in funzione della norma in uso sono riportati i parametri fondamentali che caratterizzano l' azione sismica: in particolare possono essere presenti i seguenti valori:

Angolo di ingresso	Angolo di ingresso dell'azione sismica orizzontale
Fattore di importanza	Fattore di importanza dell'edificio, in base alla categoria di appartenenza
Zona sismica	Zona sismica
Accelerazione ag	Accelerazione orizzontale massima sul suolo
Categoria suolo	Categoria di profilo stratigrafico del suolo di fondazione
Fattore q	Fattore di struttura/di comportamento. Dipendente dalla tipologia strutturale
Fattore di sito S	Fattore dipendente dalla stratigrafia e dal profilo topografico
Classe di duttilità CD	Classe di duttilità della struttura – "A" duttilità alta, "B" duttilità bassa
Fattore riduz. SLD	Fattore di riduzione dello spettro elastico per lo stato limite di danno
Periodo proprio T1	Periodo proprio di vibrazione della struttura
Coefficiente Lambda	Coefficiente dipendente dal periodo proprio T1 e dal numero di piani della struttura
Ordinata spettro Sd(T1)	Valore delle ordinate dello spettro di progetto per lo stato limite ultimo, componente orizzontale (verticale Svd)
Ordinata spettro Se(T1)	Valore delle ordinate dello spettro elastico ridotta del fattore SLD per lo stato limite di danno, componente orizzontale (verticale Sve)
Ordinata spettro S (Tb-Tc)	Valore dell' ordinata dello spettro in uso nel tratto costante
numero di modi considerati	Numero di modi di vibrare della struttura considerati nell'analisi dinamica

Per ciascun caso di carico sismico viene riportato l'insieme di dati sotto riportati (le masse sono espresse in unità di forza):

a) **analisi sismica statica equivalente**:
   - quota, posizione del centro di applicazione e azione orizzontale risultante, posizione del baricentro delle rigidezze, rapporto r/Ls (per strutture a nucleo), indici di regolarità e/r secondo EC8 4.2.3.2
   - azione sismica complessiva

b) **analisi sismica dinamica con spettro di risposta**:
   - quota, posizione del centro di massa e massa risultante, posizione del baricentro delle rigidezze, rapporto r/Ls (per strutture a nucleo) **,** indici di regolarità e/r secondo EC8 4.2.3.2
   - frequenza, periodo, accelerazione spettrale, massa eccitata nelle tre direzioni globali per tutti i modi

- massa complessiva ed aliquota di massa complessiva eccitata.

Per ciascuna combinazione sismica definita SLD o SLO viene riportato il livello di deformazione etaT (dr) degli elementi strutturali verticali. Per semplicità di consultazione il livello è espresso anche in unità 1000*etaT/h da confrontare direttamente con i valori forniti nella norma (es. 5 per edifici con tamponamenti collegati rigidamente alla struttura, 10.0 per edifici con tamponamenti collegati elasticamente, 3 per edifici in muratura ordinaria, 4 per edifici in muratura armata).

Qualora si applichi il D.M. 96 (vedi NOTA sul capitolo "normativa di riferimento") l'analisi sismica dinamica può essere comprensiva di sollecitazione verticale contemporanea a quella orizzontale, nel qual caso è effettuata una sovrapposizione degli effetti in ragione della radice dei quadrati degli effetti stessi. Per ciascuna combinazione sismica - analisi effettuate con il D.M. 96 (vedi NOTA sul capitolo "normativa di riferimento") - viene riportato il livello di deformazione etaT, etaP e etaD degli elementi strutturali verticali. Per semplicità di consultazione il livello è espresso in unità 1000*etaT/h da confrontare direttamente con il valore 2 o 4 per la verifica.

Per gli edifici sismicamente isolati si riportano di seguito le verifiche condotte sui dispositivi di isolamento. Le verifiche sono effettuate secondo la circolare n.7/2019 del C.S.LL.PP nelle combinazioni in SLC come previsto dal DM 17-01-2018. Per ogni combinazione è riportato il codice di verifica ed i valori utilizzati per la verifica: spostamento dE, area ridotta e dimensione A2, azione verticale, deformazioni di taglio dell'elastomero e tensioni nell'acciaio.
Qualora si applichi l'Ordinanza 3274 e s.m.i. le verifiche sono eseguite in accordo con l'allegato 10.A.
In particolare la tabella, per ogni combinazione di calcolo, riporta:

Nodo	Nodo di appoggio dell' isolatore
Cmb	Combinazione oggetto della verifica
Verif.	Codice di verifica ok – verifica positiva , NV – verifica negativa, ND – verifica non completata
dE	Spostamento relativo tra le due facce (amplificato del 20% per Ordinanza 3274 e smi) combinato con la regola del 30%
Ang fi	Angolo utilizzato per il calcolo dell' area ridotta Ar (per dispositivi circolari)
V	Azione verticale agente
Ar	Area ridotta efficace
Dim A2	Dimensione utile per il calcolo della deformazione per rotazione
Sig s	Tensione nell' inserto in acciaio
Gam c(a,s,t)	Deformazioni di taglio dell' elestomero
Vcr	Carico critico per instabilità

Affinché la verifica sia positiva deve essere:

1) V > 0
2) Sig s < fyk
3) Gam t < 5
4) Gam s < Gam * (caratteristica dell' elastomero)
5) Gam s < 2
6) V < 0.5 Vcr

Calcolo dei fattori di comportamento secondo il D.M. 17/01/2018

La costruzione, nuova, è caratterizzata da non regolarità sia in pianta sia in altezza ed è progettata in classe di duttilità media (CD"B").

Parametri fattore in direzione x e y

Sistema costruttivo: calcestruzzo

Tipologia strutturale: altre tipologie

Valore base fattore q_0 = 3.450

Fattore di regolarità K_R = 0.8

Fattore dissipativo $q_D = q_0 \cdot K_R$ = 2.760

Fattori di comportamento utilizzati

	Dissipativi
q SLU x	2.760
q SLU y	2.760
q SLU z	1.500

CDC	Tipo	Sigla Id	Note
5	Edk	CDC=Ed (dinamico SLU) alfa=0.0 (ecc. +)	
			categoria suolo: B
			fattore di sito S = 1.000
			ordinata spettro (tratto Tb-Tc) = 0.447 g
			angolo di ingresso:0.0
			eccentricità aggiuntiva: positiva
			periodo proprio T1: 0.616 sec.
			fattore q: 2.760
			fattore per spost. mu d: 2.760
			classe di duttilità CD: B
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
1169.50	2.215e+05	596.29	958.25	0.0	-94.50	532.09	1056.28	1.595	0.079	0.098
835.00	4.179e+05	841.85	1035.41	0.0	-94.50	541.98	716.59	1.010	0.401	0.283
789.78	1808.89	263.71	244.78	0.0	-12.87	289.93	167.47	0.890	0.303	0.461
744.56	1808.89	263.71	244.78	0.0	-12.87	289.93	167.47	0.890	0.303	0.461
699.33	1808.89	263.71	244.78	0.0	-12.87	289.93	167.47	0.890	0.303	0.461
654.11	1808.89	263.71	244.78	0.0	-12.87	289.93	167.47	0.890	0.303	0.461
608.89	1808.89	263.71	244.78	0.0	-12.87	289.93	167.47	0.890	0.303	0.461
563.67	1808.89	263.71	244.78	0.0	-12.87	289.93	167.47	0.890	0.303	0.461
518.44	1808.89	263.71	244.78	0.0	-12.87	289.93	167.47	0.890	0.303	0.461
473.22	1808.89	263.71	244.78	0.0	-12.87	289.93	167.47	0.890	0.303	0.461
428.00	4.779e+05	896.69	1026.45	0.0	-94.50	541.98	716.59	1.010	0.475	0.275
380.44	1902.23	263.71	244.78	0.0	-12.87	289.93	167.47	0.890	0.303	0.461
332.89	1902.23	263.71	244.78	0.0	-12.87	289.93	167.47	0.890	0.303	0.461
285.33	1902.23	263.71	244.78	0.0	-12.87	289.93	167.47	0.890	0.303	0.461
237.78	1902.23	263.71	244.78	0.0	-12.87	289.93	167.47	0.890	0.303	0.461
190.22	1902.23	263.71	244.78	0.0	-12.87	289.93	167.47	0.890	0.303	0.461
142.67	1902.23	263.71	244.78	0.0	-12.87	289.93	167.47	0.890	0.303	0.461
95.11	1902.23	263.71	244.78	0.0	-12.87	289.93	167.47	0.890	0.303	0.461
47.56	1902.23	263.71	244.78	0.0	-12.87	289.93	167.47	0.890	0.303	0.461
Risulta	1.147e+06									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	1.623	0.616	0.299	9.716e+05	84.7	2757.86	0.2	1059.46	9.24e-02	0.0	0.0
2	1.860	0.538	0.343	5213.60	0.5	9.350e+05	81.5	454.85	3.97e-02	0.0	0.0
3	2.439	0.410	0.447	3497.23	0.3	4.260e+04	3.7	272.55	2.38e-02	0.0	0.0
4	4.221	0.237	0.447	2.117e+04	1.8	4158.11	0.4	9.059e+05	79.0	0.0	0.0
5	4.799	0.208	0.447	7.235e+04	6.3	17.91	1.56e-03	2.156e+05	18.8	0.0	0.0
6	5.406	0.185	0.447	2271.00	0.2	1.318e+05	11.5	1.379e+04	1.2	0.0	0.0
7	5.880	0.170	0.447	5.773e+04	5.0	9092.13	0.8	4374.61	0.4	0.0	0.0
8	7.468	0.134	0.450	947.89	8.26e-02	2539.47	0.2	4940.63	0.4	0.0	0.0
9	8.069	0.124	0.458	8165.13	0.7	1.506e+04	1.3	286.65	2.50e-02	0.0	0.0
Risulta				1.143e+06		1.143e+06		1.147e+06			
In percentuale				99.64		99.65		99.97			

CDC	Tipo	Sigla Id	Note
6	Edk	CDC=Ed (dinamico SLU) alfa=0.0 (ecc. -)	
			categoria suolo: B
			fattore di sito S = 1.000
			ordinata spettro (tratto Tb-Tc) = 0.447 g
			angolo di ingresso:0.0
			eccentricità aggiuntiva: negativa
			periodo proprio T1: 0.618 sec.
			fattore q: 2.760
			fattore per spost. mu d: 2.760
			classe di duttilità CD: B
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
1169.50	2.215e+05	596.29	958.25	0.0	94.50	532.09	1056.28	1.595	0.079	0.098
835.00	4.179e+05	841.85	1035.41	0.0	94.50	541.98	716.59	1.010	0.401	0.283
789.78	1808.89	263.71	244.78	0.0	12.87	289.93	167.47	0.890	0.303	0.461
744.56	1808.89	263.71	244.78	0.0	12.87	289.93	167.47	0.890	0.303	0.461
699.33	1808.89	263.71	244.78	0.0	12.87	289.93	167.47	0.890	0.303	0.461
654.11	1808.89	263.71	244.78	0.0	12.87	289.93	167.47	0.890	0.303	0.461
608.89	1808.89	263.71	244.78	0.0	12.87	289.93	167.47	0.890	0.303	0.461
563.67	1808.89	263.71	244.78	0.0	12.87	289.93	167.47	0.890	0.303	0.461
518.44	1808.89	263.71	244.78	0.0	12.87	289.93	167.47	0.890	0.303	0.461
473.22	1808.89	263.71	244.78	0.0	12.87	289.93	167.47	0.890	0.303	0.461
428.00	4.779e+05	896.69	1026.45	0.0	94.50	541.98	716.59	1.010	0.475	0.275
380.44	1902.23	263.71	244.78	0.0	12.87	289.93	167.47	0.890	0.303	0.461
332.89	1902.23	263.71	244.78	0.0	12.87	289.93	167.47	0.890	0.303	0.461
285.33	1902.23	263.71	244.78	0.0	12.87	289.93	167.47	0.890	0.303	0.461
237.78	1902.23	263.71	244.78	0.0	12.87	289.93	167.47	0.890	0.303	0.461
190.22	1902.23	263.71	244.78	0.0	12.87	289.93	167.47	0.890	0.303	0.461
142.67	1902.23	263.71	244.78	0.0	12.87	289.93	167.47	0.890	0.303	0.461
95.11	1902.23	263.71	244.78	0.0	12.87	289.93	167.47	0.890	0.303	0.461
47.56	1902.23	263.71	244.78	0.0	12.87	289.93	167.47	0.890	0.303	0.461
Risulta	1.147e+06									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	1.617	0.618	0.298	9.730e+05	84.8	1413.20	0.1	931.55	8.12e-02	0.0	0.0
2	1.860	0.538	0.343	2382.22	0.2	9.391e+05	81.9	740.34	6.45e-02	0.0	0.0
3	2.475	0.404	0.447	5841.30	0.5	4.004e+04	3.5	5.14	4.48e-04	0.0	0.0
4	4.222	0.237	0.447	2.118e+04	1.8	3371.51	0.3	9.033e+05	78.7	0.0	0.0
5	4.782	0.209	0.447	6.260e+04	5.5	915.36	7.98e-02	2.159e+05	18.8	0.0	0.0
6	5.353	0.187	0.447	1.279e+04	1.1	1.053e+05	9.2	1.049e+04	0.9	0.0	0.0
7	5.707	0.175	0.447	5.200e+04	4.5	3.211e+04	2.8	9796.28	0.9	0.0	0.0
8	7.147	0.140	0.447	1176.16	0.1	1.698e+04	1.5	4326.19	0.4	0.0	0.0
9	8.113	0.123	0.458	1.242e+04	1.1	2718.07	0.2	1228.26	0.1	0.0	0.0
Risulta				1.143e+06		1.142e+06		1.147e+06			
In percentuale				99.68		99.56		99.97			

CDC	Tipo	Sigla Id	Note
7	Edk	CDC=Ed (dinamico SLU) alfa=90.00 (ecc. +)	
			categoria suolo: B
			fattore di sito S = 1.000
			ordinata spettro (tratto Tb-Tc) = 0.447 g
			angolo di ingresso:90.00
			eccentricità aggiuntiva: positiva

CDC	Tipo	Sigla Id	Note
			periodo proprio T1: 0.532 sec.
			fattore q: 2.760
			fattore per spost. mu d: 2.760
			classe di duttilità CD: B
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
1169.50	2.215e+05	596.29	958.25	60.38	0.0	532.09	1056.28	1.595	0.079	0.098
835.00	4.179e+05	841.85	1035.41	87.40	0.0	541.98	716.59	1.010	0.401	0.283
789.78	1808.89	263.71	244.78	9.26	0.0	289.93	167.47	0.890	0.303	0.461
744.56	1808.89	263.71	244.78	9.26	0.0	289.93	167.47	0.890	0.303	0.461
699.33	1808.89	263.71	244.78	9.26	0.0	289.93	167.47	0.890	0.303	0.461
654.11	1808.89	263.71	244.78	9.26	0.0	289.93	167.47	0.890	0.303	0.461
608.89	1808.89	263.71	244.78	9.26	0.0	289.93	167.47	0.890	0.303	0.461
563.67	1808.89	263.71	244.78	9.26	0.0	289.93	167.47	0.890	0.303	0.461
518.44	1808.89	263.71	244.78	9.26	0.0	289.93	167.47	0.890	0.303	0.461
473.22	1808.89	263.71	244.78	9.26	0.0	289.93	167.47	0.890	0.303	0.461
428.00	4.779e+05	896.69	1026.45	87.40	0.0	541.98	716.59	1.010	0.475	0.275
380.44	1902.23	263.71	244.78	9.26	0.0	289.93	167.47	0.890	0.303	0.461
332.89	1902.23	263.71	244.78	9.26	0.0	289.93	167.47	0.890	0.303	0.461
285.33	1902.23	263.71	244.78	9.26	0.0	289.93	167.47	0.890	0.303	0.461
237.78	1902.23	263.71	244.78	9.26	0.0	289.93	167.47	0.890	0.303	0.461
190.22	1902.23	263.71	244.78	9.26	0.0	289.93	167.47	0.890	0.303	0.461
142.67	1902.23	263.71	244.78	9.26	0.0	289.93	167.47	0.890	0.303	0.461
95.11	1902.23	263.71	244.78	9.26	0.0	289.93	167.47	0.890	0.303	0.461
47.56	1902.23	263.71	244.78	9.26	0.0	289.93	167.47	0.890	0.303	0.461
Risulta	1.147e+06									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	1.628	0.614	0.300	9.806e+05	85.5	139.25	1.21e-02	1035.33	9.03e-02	0.0	0.0
2	1.881	0.532	0.347	268.13	2.34e-02	9.704e+05	84.6	629.99	5.49e-02	0.0	0.0
3	2.437	0.410	0.447	97.14	8.47e-03	1.087e+04	0.9	0.01	1.10e-06	0.0	0.0
4	4.221	0.237	0.447	2.107e+04	1.8	3468.30	0.3	9.011e+05	78.6	0.0	0.0
5	4.782	0.209	0.447	6.248e+04	5.4	647.19	5.64e-02	2.194e+05	19.1	0.0	0.0
6	5.427	0.184	0.447	1.671e+04	1.5	1.022e+05	8.9	7928.07	0.7	0.0	0.0
7	5.650	0.177	0.447	4.533e+04	4.0	4.082e+04	3.6	1.100e+04	1.0	0.0	0.0
8	7.155	0.140	0.447	2429.50	0.2	1.205e+04	1.1	4711.20	0.4	0.0	0.0
9	8.234	0.121	0.460	1.535e+04	1.3	12.44	1.08e-03	833.52	7.27e-02	0.0	0.0
Risulta				1.144e+06		1.141e+06		1.147e+06			
In percentuale				99.76		99.44		99.97			

CDC	Tipo	Sigla Id	Note
8	Edk	CDC=Ed (dinamico SLU) alfa=90.00 (ecc. -)	
			categoria suolo: B
			fattore di sito S = 1.000
			ordinata spettro (tratto Tb-Tc) = 0.447 g
			angolo di ingresso:90.00
			eccentricità aggiuntiva: negativa
			periodo proprio T1: 0.549 sec.
			fattore q: 2.760
			fattore per spost. mu d: 2.760
			classe di duttilità CD: B
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
1169.50	2.215e+05	596.29	958.25	-60.38	0.0	532.09	1056.28	1.595	0.079	0.098
835.00	4.179e+05	841.85	1035.41	-87.40	0.0	541.98	716.59	1.010	0.401	0.283
789.78	1808.89	263.71	244.78	-9.26	0.0	289.93	167.47	0.890	0.303	0.461
744.56	1808.89	263.71	244.78	-9.26	0.0	289.93	167.47	0.890	0.303	0.461
699.33	1808.89	263.71	244.78	-9.26	0.0	289.93	167.47	0.890	0.303	0.461
654.11	1808.89	263.71	244.78	-9.26	0.0	289.93	167.47	0.890	0.303	0.461
608.89	1808.89	263.71	244.78	-9.26	0.0	289.93	167.47	0.890	0.303	0.461
563.67	1808.89	263.71	244.78	-9.26	0.0	289.93	167.47	0.890	0.303	0.461
518.44	1808.89	263.71	244.78	-9.26	0.0	289.93	167.47	0.890	0.303	0.461
473.22	1808.89	263.71	244.78	-9.26	0.0	289.93	167.47	0.890	0.303	0.461
428.00	4.779e+05	896.69	1026.45	-87.40	0.0	541.98	716.59	1.010	0.475	0.275
380.44	1902.23	263.71	244.78	-9.26	0.0	289.93	167.47	0.890	0.303	0.461
332.89	1902.23	263.71	244.78	-9.26	0.0	289.93	167.47	0.890	0.303	0.461
285.33	1902.23	263.71	244.78	-9.26	0.0	289.93	167.47	0.890	0.303	0.461
237.78	1902.23	263.71	244.78	-9.26	0.0	289.93	167.47	0.890	0.303	0.461
190.22	1902.23	263.71	244.78	-9.26	0.0	289.93	167.47	0.890	0.303	0.461
142.67	1902.23	263.71	244.78	-9.26	0.0	289.93	167.47	0.890	0.303	0.461
95.11	1902.23	263.71	244.78	-9.26	0.0	289.93	167.47	0.890	0.303	0.461
47.56	1902.23	263.71	244.78	-9.26	0.0	289.93	167.47	0.890	0.303	0.461
Risulta	1.147e+06									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	1.628	0.614	0.300	9.808e+05	85.5	0.29	2.57e-05	1023.53	8.92e-02	0.0	0.0
2	1.821	0.549	0.336	8.72	7.60e-04	8.981e+05	78.3	521.06	4.54e-02	0.0	0.0
3	2.487	0.402	0.447	128.28	1.12e-02	8.156e+04	7.1	186.60	1.63e-02	0.0	0.0
4	4.221	0.237	0.447	2.096e+04	1.8	4106.15	0.4	9.055e+05	78.9	0.0	0.0
5	4.805	0.208	0.447	7.005e+04	6.1	14.16	1.23e-03	2.196e+05	19.1	0.0	0.0
6	5.487	0.182	0.447	8355.69	0.7	1.315e+05	11.5	1.189e+04	1.0	0.0	0.0
7	5.755	0.174	0.447	4.807e+04	4.2	2.282e+04	2.0	1358.79	0.1	0.0	0.0
8	7.215	0.139	0.447	982.51	8.57e-02	78.46	6.84e-03	6094.44	0.5	0.0	0.0
9	8.278	0.121	0.460	1.501e+04	1.3	1654.41	0.1	526.98	4.59e-02	0.0	0.0
Risulta				1.144e+06		1.140e+06		1.147e+06			
In percentuale				99.77		99.37		99.97			

CDC	Tipo	Sigla Id	Note
9	Edk	CDC=Ed (dinamico SLD) alfa=0.0 (ecc. +)	
			categoria suolo: B
			fattore di sito S = 1.000
			ordinata spettro (tratto Tb-Tc) = 0.430 g
			angolo di ingresso:0.0
			eccentricità aggiuntiva: positiva
			periodo proprio T1: 0.616 sec.
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
1169.50	2.215e+05	596.29	958.25	0.0	-94.50	532.09	1056.28	1.595	0.079	0.098
835.00	4.179e+05	841.85	1035.41	0.0	-94.50	541.98	716.59	1.010	0.401	0.283
789.78	1808.89	263.71	244.78	0.0	-12.87	289.93	167.47	0.890	0.303	0.461
744.56	1808.89	263.71	244.78	0.0	-12.87	289.93	167.47	0.890	0.303	0.461
699.33	1808.89	263.71	244.78	0.0	-12.87	289.93	167.47	0.890	0.303	0.461
654.11	1808.89	263.71	244.78	0.0	-12.87	289.93	167.47	0.890	0.303	0.461
608.89	1808.89	263.71	244.78	0.0	-12.87	289.93	167.47	0.890	0.303	0.461
563.67	1808.89	263.71	244.78	0.0	-12.87	289.93	167.47	0.890	0.303	0.461
518.44	1808.89	263.71	244.78	0.0	-12.87	289.93	167.47	0.890	0.303	0.461
473.22	1808.89	263.71	244.78	0.0	-12.87	289.93	167.47	0.890	0.303	0.461
428.00	4.779e+05	896.69	1026.45	0.0	-94.50	541.98	716.59	1.010	0.475	0.275
380.44	1902.23	263.71	244.78	0.0	-12.87	289.93	167.47	0.890	0.303	0.461

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
332.89	1902.23	263.71	244.78	0.0	-12.87	289.93	167.47	0.890	0.303	0.461
285.33	1902.23	263.71	244.78	0.0	-12.87	289.93	167.47	0.890	0.303	0.461
237.78	1902.23	263.71	244.78	0.0	-12.87	289.93	167.47	0.890	0.303	0.461
190.22	1902.23	263.71	244.78	0.0	-12.87	289.93	167.47	0.890	0.303	0.461
142.67	1902.23	263.71	244.78	0.0	-12.87	289.93	167.47	0.890	0.303	0.461
95.11	1902.23	263.71	244.78	0.0	-12.87	289.93	167.47	0.890	0.303	0.461
47.56	1902.23	263.71	244.78	0.0	-12.87	289.93	167.47	0.890	0.303	0.461
Risulta	1.147e+06									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	1.623	0.616	0.235	9.716e+05	84.7	2757.86	0.2	1059.46	9.24e-02	0.0	0.0
2	1.860	0.538	0.269	5213.60	0.5	9.350e+05	81.5	454.85	3.97e-02	0.0	0.0
3	2.439	0.410	0.353	3497.23	0.3	4.260e+04	3.7	272.55	2.38e-02	0.0	0.0
4	4.221	0.237	0.430	2.117e+04	1.8	4158.11	0.4	9.059e+05	79.0	0.0	0.0
5	4.799	0.208	0.430	7.235e+04	6.3	17.91	1.56e-03	2.156e+05	18.8	0.0	0.0
6	5.406	0.185	0.430	2271.00	0.2	1.318e+05	11.5	1.379e+04	1.2	0.0	0.0
7	5.880	0.170	0.430	5.773e+04	5.0	9092.13	0.8	4374.61	0.4	0.0	0.0
8	7.468	0.134	0.430	947.89	8.26e-02	2539.47	0.2	4940.63	0.4	0.0	0.0
9	8.069	0.124	0.430	8165.13	0.7	1.506e+04	1.3	286.65	2.50e-02	0.0	0.0
Risulta				1.143e+06		1.143e+06		1.147e+06			
In percentuale				99.64		99.65		99.97			

CDC	Tipo	Sigla Id	Note
10	Edk	CDC=Ed (dinamico SLD) alfa=0.0 (ecc. -)	
			categoria suolo: B
			fattore di sito S = 1.000
			ordinata spettro (tratto Tb-Tc) = 0.430 g
			angolo di ingresso:0.0
			eccentricità aggiuntiva: negativa
			periodo proprio T1: 0.618 sec.
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
1169.50	2.215e+05	596.29	958.25	0.0	94.50	532.09	1056.28	1.595	0.079	0.098
835.00	4.179e+05	841.85	1035.41	0.0	94.50	541.98	716.59	1.010	0.401	0.283
789.78	1808.89	263.71	244.78	0.0	12.87	289.93	167.47	0.890	0.303	0.461
744.56	1808.89	263.71	244.78	0.0	12.87	289.93	167.47	0.890	0.303	0.461
699.33	1808.89	263.71	244.78	0.0	12.87	289.93	167.47	0.890	0.303	0.461
654.11	1808.89	263.71	244.78	0.0	12.87	289.93	167.47	0.890	0.303	0.461
608.89	1808.89	263.71	244.78	0.0	12.87	289.93	167.47	0.890	0.303	0.461
563.67	1808.89	263.71	244.78	0.0	12.87	289.93	167.47	0.890	0.303	0.461
518.44	1808.89	263.71	244.78	0.0	12.87	289.93	167.47	0.890	0.303	0.461
473.22	1808.89	263.71	244.78	0.0	12.87	289.93	167.47	0.890	0.303	0.461
428.00	4.779e+05	896.69	1026.45	0.0	94.50	541.98	716.59	1.010	0.475	0.275
380.44	1902.23	263.71	244.78	0.0	12.87	289.93	167.47	0.890	0.303	0.461
332.89	1902.23	263.71	244.78	0.0	12.87	289.93	167.47	0.890	0.303	0.461
285.33	1902.23	263.71	244.78	0.0	12.87	289.93	167.47	0.890	0.303	0.461
237.78	1902.23	263.71	244.78	0.0	12.87	289.93	167.47	0.890	0.303	0.461
190.22	1902.23	263.71	244.78	0.0	12.87	289.93	167.47	0.890	0.303	0.461
142.67	1902.23	263.71	244.78	0.0	12.87	289.93	167.47	0.890	0.303	0.461
95.11	1902.23	263.71	244.78	0.0	12.87	289.93	167.47	0.890	0.303	0.461
47.56	1902.23	263.71	244.78	0.0	12.87	289.93	167.47	0.890	0.303	0.461
Risulta	1.147e+06									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	1.617	0.618	0.234	9.730e+05	84.8	1413.20	0.1	931.55	8.12e-02	0.0	0.0
2	1.860	0.538	0.269	2382.22	0.2	9.391e+05	81.9	740.34	6.45e-02	0.0	0.0
3	2.475	0.404	0.358	5841.30	0.5	4.004e+04	3.5	5.14	4.48e-04	0.0	0.0
4	4.222	0.237	0.430	2.118e+04	1.8	3371.51	0.3	9.033e+05	78.7	0.0	0.0
5	4.782	0.209	0.430	6.260e+04	5.5	915.36	7.98e-02	2.159e+05	18.8	0.0	0.0
6	5.353	0.187	0.430	1.279e+04	1.1	1.053e+05	9.2	1.049e+04	0.9	0.0	0.0
7	5.707	0.175	0.430	5.200e+04	4.5	3.211e+04	2.8	9796.28	0.9	0.0	0.0
8	7.147	0.140	0.430	1176.16	0.1	1.698e+04	1.5	4326.19	0.4	0.0	0.0
9	8.113	0.123	0.430	1.242e+04	1.1	2718.07	0.2	1228.26	0.1	0.0	0.0
Risulta				1.143e+06		1.142e+06		1.147e+06			
In percentuale				99.68		99.56		99.97			

CDC	Tipo	Sigla Id	Note
11	Edk	CDC=Ed (dinamico SLD) alfa=90.00 (ecc. +)	
			categoria suolo: B
			fattore di sito S = 1.000
			ordinata spettro (tratto Tb-Tc) = 0.430 g
			angolo di ingresso:90.00
			eccentricità aggiuntiva: positiva
			periodo proprio T1: 0.532 sec.
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
1169.50	2.215e+05	596.29	958.25	60.38	0.0	532.09	1056.28	1.595	0.079	0.098
835.00	4.179e+05	841.85	1035.41	87.40	0.0	541.98	716.59	1.010	0.401	0.283
789.78	1808.89	263.71	244.78	9.26	0.0	289.93	167.47	0.890	0.303	0.461
744.56	1808.89	263.71	244.78	9.26	0.0	289.93	167.47	0.890	0.303	0.461
699.33	1808.89	263.71	244.78	9.26	0.0	289.93	167.47	0.890	0.303	0.461
654.11	1808.89	263.71	244.78	9.26	0.0	289.93	167.47	0.890	0.303	0.461
608.89	1808.89	263.71	244.78	9.26	0.0	289.93	167.47	0.890	0.303	0.461
563.67	1808.89	263.71	244.78	9.26	0.0	289.93	167.47	0.890	0.303	0.461
518.44	1808.89	263.71	244.78	9.26	0.0	289.93	167.47	0.890	0.303	0.461
473.22	1808.89	263.71	244.78	9.26	0.0	289.93	167.47	0.890	0.303	0.461
428.00	4.779e+05	896.69	1026.45	87.40	0.0	541.98	716.59	1.010	0.475	0.275
380.44	1902.23	263.71	244.78	9.26	0.0	289.93	167.47	0.890	0.303	0.461
332.89	1902.23	263.71	244.78	9.26	0.0	289.93	167.47	0.890	0.303	0.461
285.33	1902.23	263.71	244.78	9.26	0.0	289.93	167.47	0.890	0.303	0.461
237.78	1902.23	263.71	244.78	9.26	0.0	289.93	167.47	0.890	0.303	0.461
190.22	1902.23	263.71	244.78	9.26	0.0	289.93	167.47	0.890	0.303	0.461
142.67	1902.23	263.71	244.78	9.26	0.0	289.93	167.47	0.890	0.303	0.461
95.11	1902.23	263.71	244.78	9.26	0.0	289.93	167.47	0.890	0.303	0.461
47.56	1902.23	263.71	244.78	9.26	0.0	289.93	167.47	0.890	0.303	0.461
Risulta	1.147e+06									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	1.628	0.614	0.236	9.806e+05	85.5	139.25	1.21e-02	1035.33	9.03e-02	0.0	0.0
2	1.881	0.532	0.272	268.13	2.34e-02	9.704e+05	84.6	629.99	5.49e-02	0.0	0.0
3	2.437	0.410	0.353	97.14	8.47e-03	1.087e+04	0.9	0.01	1.10e-06	0.0	0.0
4	4.221	0.237	0.430	2.107e+04	1.8	3468.30	0.3	9.011e+05	78.6	0.0	0.0
5	4.782	0.209	0.430	6.248e+04	5.4	647.19	5.64e-02	2.194e+05	19.1	0.0	0.0
6	5.427	0.184	0.430	1.671e+04	1.5	1.022e+05	8.9	7928.07	0.7	0.0	0.0
7	5.650	0.177	0.430	4.533e+04	4.0	4.082e+04	3.6	1.100e+04	1.0	0.0	0.0
8	7.155	0.140	0.430	2429.50	0.2	1.205e+04	1.1	4711.20	0.4	0.0	0.0
9	8.234	0.121	0.430	1.535e+04	1.3	12.44	1.08e-03	833.52	7.27e-02	0.0	0.0
Risulta				1.144e+06		1.141e+06		1.147e+06			
In percentuale				99.76		99.44		99.97			

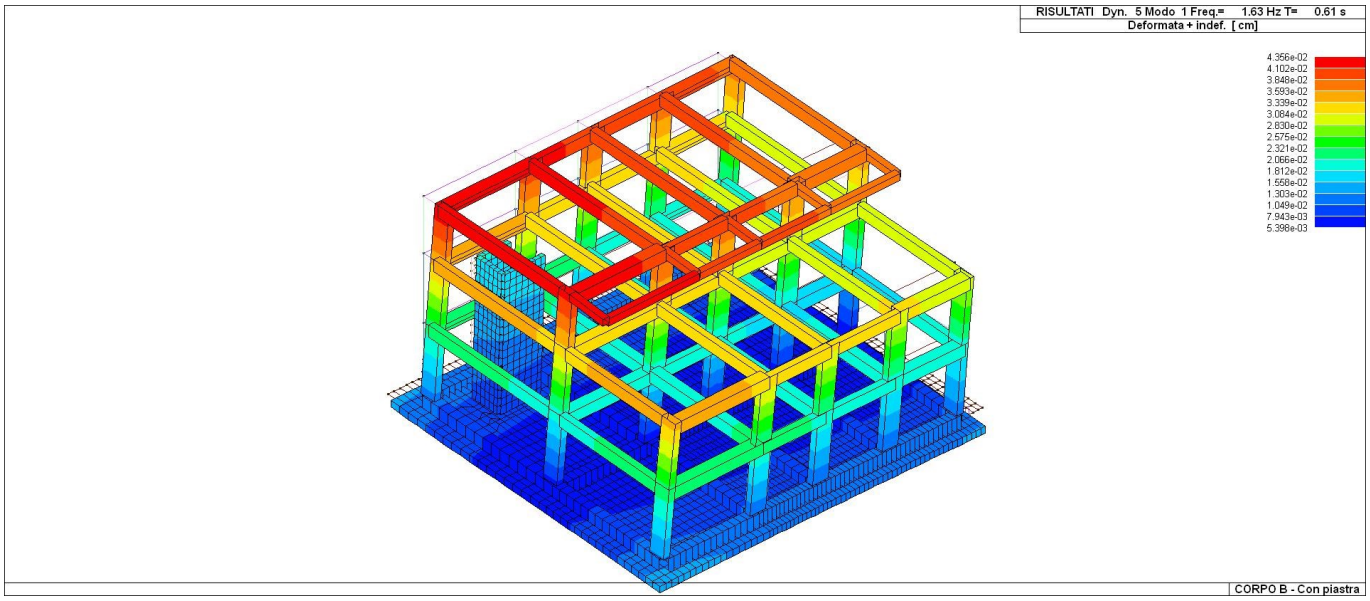
CDC	Tipo	Sigla Id	Note
12	Edk	CDC=Ed (dinamico SLD) alfa=90.00 (ecc. -)	
			categoria suolo: B
			fattore di sito S = 1.000
			ordinata spettro (tratto Tb-Tc) = 0.430 g
			angolo di ingresso:90.00
			eccentricità aggiuntiva: negativa
			periodo proprio T1: 0.549 sec.
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
1169.50	2.215e+05	596.29	958.25	-60.38	0.0	532.09	1056.28	1.595	0.079	0.098
835.00	4.179e+05	841.85	1035.41	-87.40	0.0	541.98	716.59	1.010	0.401	0.283
789.78	1808.89	263.71	244.78	-9.26	0.0	289.93	167.47	0.890	0.303	0.461
744.56	1808.89	263.71	244.78	-9.26	0.0	289.93	167.47	0.890	0.303	0.461
699.33	1808.89	263.71	244.78	-9.26	0.0	289.93	167.47	0.890	0.303	0.461
654.11	1808.89	263.71	244.78	-9.26	0.0	289.93	167.47	0.890	0.303	0.461
608.89	1808.89	263.71	244.78	-9.26	0.0	289.93	167.47	0.890	0.303	0.461
563.67	1808.89	263.71	244.78	-9.26	0.0	289.93	167.47	0.890	0.303	0.461
518.44	1808.89	263.71	244.78	-9.26	0.0	289.93	167.47	0.890	0.303	0.461
473.22	1808.89	263.71	244.78	-9.26	0.0	289.93	167.47	0.890	0.303	0.461
428.00	4.779e+05	896.69	1026.45	-87.40	0.0	541.98	716.59	1.010	0.475	0.275
380.44	1902.23	263.71	244.78	-9.26	0.0	289.93	167.47	0.890	0.303	0.461
332.89	1902.23	263.71	244.78	-9.26	0.0	289.93	167.47	0.890	0.303	0.461
285.33	1902.23	263.71	244.78	-9.26	0.0	289.93	167.47	0.890	0.303	0.461
237.78	1902.23	263.71	244.78	-9.26	0.0	289.93	167.47	0.890	0.303	0.461
190.22	1902.23	263.71	244.78	-9.26	0.0	289.93	167.47	0.890	0.303	0.461
142.67	1902.23	263.71	244.78	-9.26	0.0	289.93	167.47	0.890	0.303	0.461
95.11	1902.23	263.71	244.78	-9.26	0.0	289.93	167.47	0.890	0.303	0.461
47.56	1902.23	263.71	244.78	-9.26	0.0	289.93	167.47	0.890	0.303	0.461
Risulta	1.147e+06									

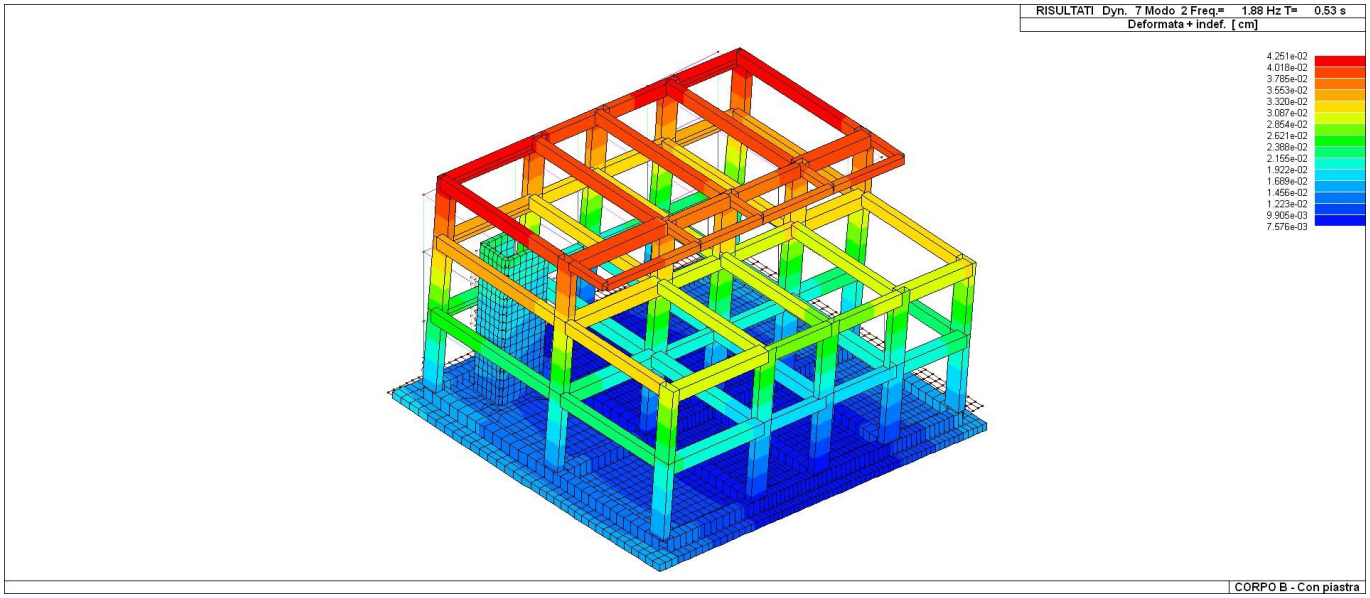
Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	1.628	0.614	0.236	9.808e+05	85.5	0.29	2.57e-05	1023.53	8.92e-02	0.0	0.0
2	1.821	0.549	0.264	8.72	7.60e-04	8.981e+05	78.3	521.06	4.54e-02	0.0	0.0
3	2.487	0.402	0.360	128.28	1.12e-02	8.156e+04	7.1	186.60	1.63e-02	0.0	0.0
4	4.221	0.237	0.430	2.096e+04	1.8	4106.15	0.4	9.055e+05	78.9	0.0	0.0
5	4.805	0.208	0.430	7.005e+04	6.1	14.16	1.23e-03	2.196e+05	19.1	0.0	0.0
6	5.487	0.182	0.430	8355.69	0.7	1.315e+05	11.5	1.189e+04	1.0	0.0	0.0
7	5.755	0.174	0.430	4.807e+04	4.2	2.282e+04	2.0	1358.79	0.1	0.0	0.0
8	7.215	0.139	0.430	982.51	8.57e-02	78.46	6.84e-03	6094.44	0.5	0.0	0.0
9	8.278	0.121	0.430	1.501e+04	1.3	1654.41	0.1	526.98	4.59e-02	0.0	0.0
Risulta				1.144e+06		1.140e+06		1.147e+06			
In percentuale				99.77		99.37		99.97			

Cmb	Pilas.	1000 etaT/h	etaT	inter. h	Pilas.	1000 etaT/h	etaT	inter. h	Pilas.	1000 etaT/h	etaT	inter. h
			cm	cm			cm	cm			cm	cm
37	1	1.65	0.71	428.0	2	1.74	0.75	428.0	3	1.80	0.77	428.0
	4	1.81	0.78	428.0	5	1.87	0.80	428.0	6	1.80	0.77	428.0
	7	1.81	0.78	428.0	8	1.82	0.78	428.0	9	1.77	0.76	428.0
	10	1.85	0.79	428.0	11	1.84	0.79	428.0	12	1.72	0.74	428.0
	13	1.74	0.74	428.0	14	1.82	0.78	428.0	15	1.64	0.70	428.0
	18	1.53	0.51	334.5	28	1.63	0.55	334.5	55	2.04	0.83	407.0
	56	2.10	0.85	407.0	57	2.06	0.84	407.0	63	1.95	0.79	407.0

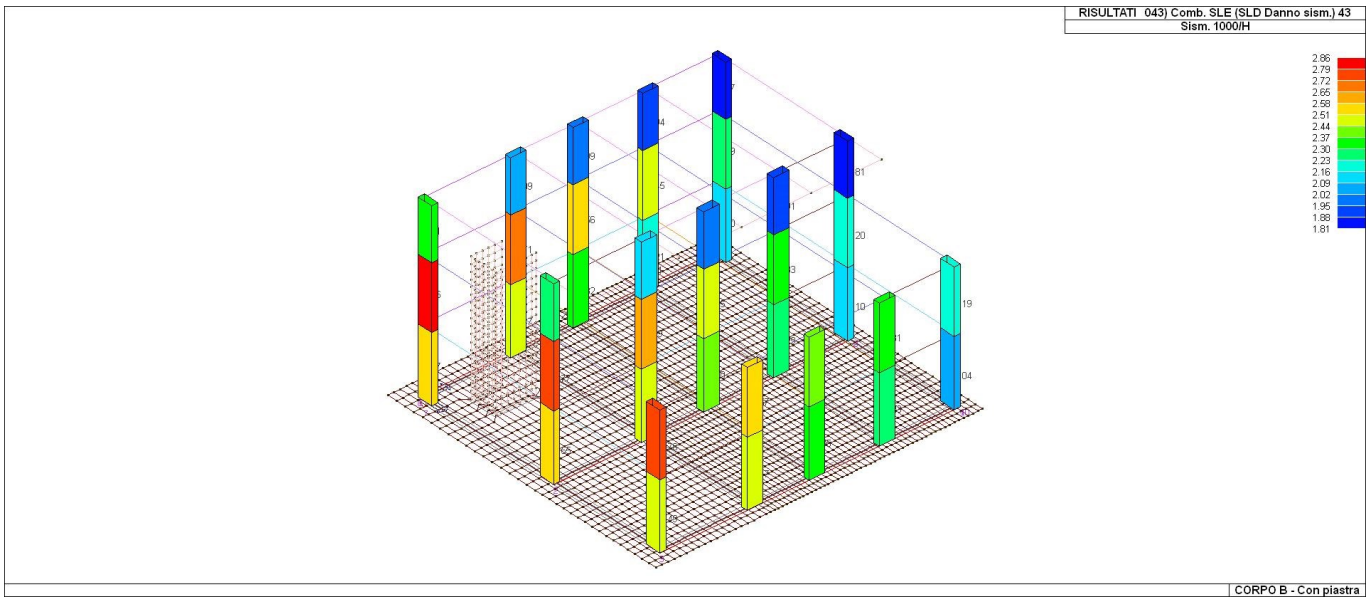
	64	2.04	0.83	407.0	65	2.00	0.81	407.0	66	1.91	0.78	407.0
	72	2.01	0.82	407.0	73	1.96	0.80	407.0	74	1.87	0.76	407.0
	85	1.97	0.80	407.0	86	1.93	0.78	407.0	87	1.86	0.76	407.0
	88	1.93	0.78	407.0	89	1.90	0.77	407.0	102	1.76	0.59	334.5
	107	1.61	0.54	334.5	108	1.84	0.61	334.5	109	1.64	0.55	334.5
	110	1.70	0.57	334.5	111	1.59	0.53	334.5	117	1.65	0.55	334.5
	118	1.56	0.52	334.5								
38	1	2.01	0.86	428.0	2	1.93	0.83	428.0	3	1.74	0.74	428.0
	4	2.00	0.86	428.0	5	1.79	0.77	428.0	6	1.71	0.73	428.0
	7	1.93	0.82	428.0	8	1.71	0.73	428.0	9	1.66	0.71	428.0
	10	1.72	0.74	428.0	11	1.53	0.66	428.0	12	1.55	0.66	428.0
	13	1.48	0.63	428.0	14	1.37	0.59	428.0	15	1.44	0.62	428.0
	18	1.51	0.50	334.5	28	1.50	0.50	334.5	55	2.20	0.90	407.0
	56	2.10	0.85	407.0	57	2.06	0.84	407.0	63	2.04	0.83	407.0
	64	1.97	0.80	407.0	65	1.93	0.78	407.0	66	1.97	0.80	407.0
	72	1.89	0.77	407.0	73	1.84	0.75	407.0	74	1.88	0.77	407.0
	85	1.80	0.73	407.0	86	1.76	0.71	407.0	87	1.82	0.74	407.0
	88	1.71	0.69	407.0	89	1.67	0.68	407.0	102	1.83	0.61	334.5
	107	1.46	0.49	334.5	108	1.79	0.60	334.5	109	1.69	0.57	334.5
	110	1.63	0.55	334.5	111	1.64	0.55	334.5	117	1.58	0.53	334.5
	118	1.56	0.52	334.5								
39	1	2.63	1.13	428.0	2	2.60	1.11	428.0	3	2.43	1.04	428.0
	4	2.49	1.06	428.0	5	2.47	1.06	428.0	6	2.44	1.05	428.0
	7	2.37	1.01	428.0	8	2.42	1.04	428.0	9	2.38	1.02	428.0
	10	2.18	0.93	428.0	11	2.24	0.96	428.0	12	2.27	0.97	428.0
	13	2.05	0.88	428.0	14	2.03	0.87	428.0	15	2.11	0.90	428.0
	18	1.91	0.64	334.5	28	1.91	0.64	334.5	55	2.80	1.14	407.0
	56	2.69	1.09	407.0	57	2.69	1.09	407.0	63	2.67	1.09	407.0
	64	2.54	1.04	407.0	65	2.53	1.03	407.0	66	2.58	1.05	407.0
	72	2.46	1.00	407.0	73	2.45	1.00	407.0	74	2.48	1.01	407.0
	85	2.35	0.96	407.0	86	2.35	0.96	407.0	87	2.36	0.96	407.0
	88	2.26	0.92	407.0	89	2.26	0.92	407.0	102	2.19	0.73	334.5
	107	1.84	0.62	334.5	108	2.17	0.73	334.5	109	2.04	0.68	334.5
	110	2.05	0.69	334.5	111	2.01	0.67	334.5	117	1.99	0.67	334.5
	118	1.94	0.65	334.5								
40	1	2.16	0.92	428.0	2	2.25	0.96	428.0	3	2.34	1.00	428.0
	4	2.21	0.95	428.0	5	2.43	1.04	428.0	6	2.40	1.03	428.0
	7	2.16	0.92	428.0	8	2.39	1.02	428.0	9	2.36	1.01	428.0
	10	2.20	0.94	428.0	11	2.41	1.03	428.0	12	2.31	0.99	428.0
	13	2.23	0.95	428.0	14	2.36	1.01	428.0	15	2.19	0.94	428.0
	18	1.82	0.61	334.5	28	1.91	0.64	334.5	55	2.55	1.04	407.0
...												
68	118	1.50	0.50	334.5	111	1.40	0.47	334.5	117	1.18	0.39	334.5
Cmb		**1000 etaT/h**										
		2.93										



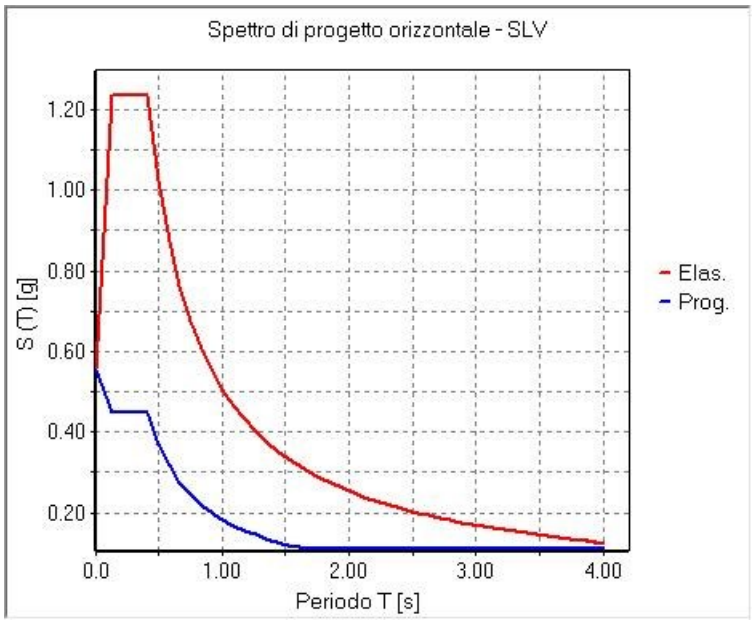
31_RIS_MODOX_001_CDC=Ed (dinamico SLU) alfa=0.0 (ecc. +)



31_RIS_MODOY_002_CDC=Ed (dinamico SLU) alfa=90.00 (ecc. +)



31_RIS_SLE_043_Comb. SLE (SLD Danno sism.) 43



31_RIS_SPETTRI_PROGETTO_SLV_O

RISULTATI NODALI

LEGENDA RISULTATI NODALI

Il controllo dei risultati delle analisi condotte, per quanto concerne i nodi strutturali, è possibile in relazione alle tabelle sottoriportate.

Una prima tabella riporta infatti per ogni nodo e per ogni combinazione (o caso di carico) gli spostamenti nodali.

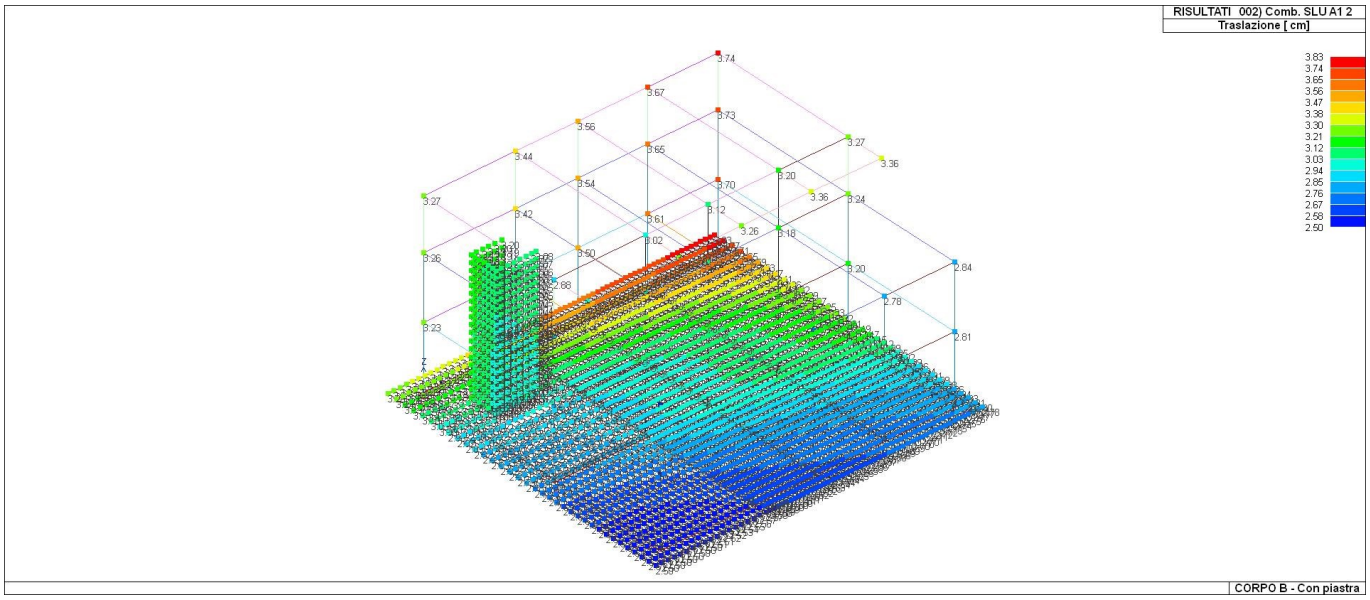
Una seconda tabella riporta per ogni nodo a cui sia associato un vincolo rigido e/o elastico o una fondazione speciale e per ogni combinazione (o caso di carico) i valori delle azioni esercitate dalla struttura sui vincoli (reazioni vincolari cambiate di segno).

Una terza tabella, infine riassume per ogni nodo le sei combinazioni in cui si attingono i valori minimi e massimi della reazione Fz, della reazione Mx e della reazione My.

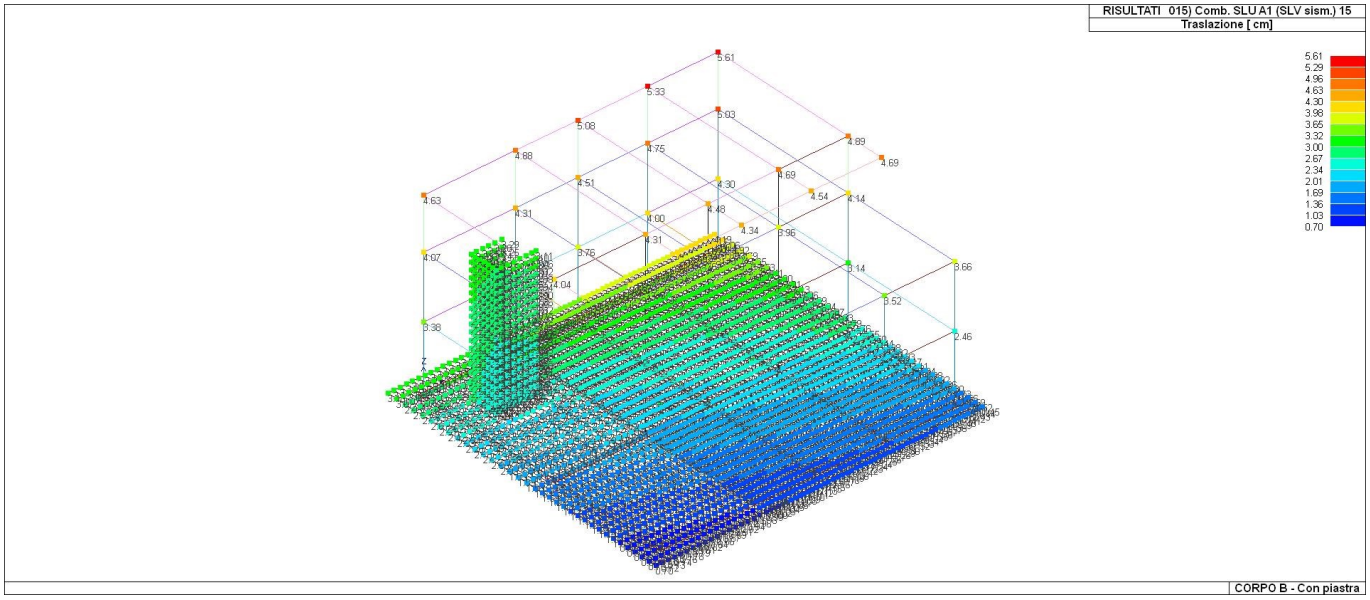
Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
		cm	cm	cm			
1	1	-0.04	-5.67e-03	-2.95	1.19e-05	-7.00e-04	4.46e-06
1	2	-0.03	2.69e-03	-3.16	-1.44e-04	-7.07e-04	4.82e-06
1	11	-0.79	0.36	-2.82	-1.50e-04	-1.75e-03	-2.20e-04
1	28	-0.26	-0.75	-3.57	1.00e-03	-1.17e-03	1.79e-04
1	36	0.22	-0.92	-3.51	9.15e-04	-1.12e-03	4.66e-04
1	43	-0.63	0.29	-2.70	-1.23e-04	-1.48e-03	-1.73e-04
1	60	-0.21	-0.59	-3.30	7.81e-04	-1.03e-03	1.42e-04
1	68	0.17	-0.73	-3.25	7.09e-04	-9.98e-04	3.69e-04
1	69	-0.03	-3.99e-03	-2.20	9.11e-06	-5.05e-04	3.57e-06
1	70	-0.03	1.59e-03	-2.33	-9.46e-05	-5.09e-04	3.81e-06
1	71	-0.03	-3.99e-03	-2.20	9.11e-06	-5.05e-04	3.57e-06
1	72	-0.03	-8.33e-05	-2.29	-6.35e-05	-5.08e-04	3.73e-06
1	73	-0.03	-3.99e-03	-2.20	9.11e-06	-5.05e-04	3.57e-06
1	74	-0.03	-6.41e-04	-2.28	-5.31e-05	-5.07e-04	3.71e-06
2	1	-0.01	-0.01	-2.50	8.82e-05	-3.88e-04	-1.49e-06
2	2	-0.01	-4.72e-03	-2.75	-3.30e-05	-3.67e-04	-1.80e-06
2	11	-0.77	0.12	-1.62	-1.63e-04	-1.45e-03	-2.20e-04
2	22	0.08	-0.62	-2.88	9.07e-04	9.43e-05	-8.77e-05
2	24	-0.31	-0.65	-2.81	9.50e-04	-5.96e-04	-1.47e-04
2	43	-0.61	0.09	-1.68	-1.24e-04	-1.20e-03	-1.75e-04
2	54	0.06	-0.49	-2.69	7.17e-04	1.62e-05	-6.99e-05
2	56	-0.25	-0.51	-2.63	7.53e-04	-5.26e-04	-1.17e-04
2	69	-9.01e-03	-7.20e-03	-1.87	5.84e-05	-2.84e-04	-1.10e-06
2	70	-7.69e-03	-3.16e-03	-2.04	-2.24e-05	-2.70e-04	-1.31e-06
2	71	-9.01e-03	-7.20e-03	-1.87	5.84e-05	-2.84e-04	-1.10e-06
2	72	-8.09e-03	-4.37e-03	-1.99	1.83e-06	-2.74e-04	-1.24e-06
2	73	-9.01e-03	-7.20e-03	-1.87	5.84e-05	-2.84e-04	-1.10e-06
2	74	-8.22e-03	-4.78e-03	-1.97	9.91e-06	-2.75e-04	-1.22e-06
3	1	-1.22e-03	-9.58e-03	-2.26	7.29e-05	-2.34e-04	0.0
3	2	9.12e-04	-7.77e-03	-2.52	4.40e-06	-2.10e-04	-1.53e-06
3	11	-0.80	0.05	-0.61	-5.23e-04	-1.85e-03	-2.21e-04
3	22	0.32	-0.59	-3.03	1.10e-03	5.10e-04	-8.46e-05
3	26	0.25	-0.66	-3.02	1.09e-03	4.74e-04	-1.69e-04
3	43	-0.63	0.04	-0.86	-4.07e-04	-1.49e-03	-1.75e-04
3	54	0.25	-0.47	-2.77	8.76e-04	3.66e-04	-6.74e-05
3	58	0.20	-0.52	-2.76	8.65e-04	3.38e-04	-1.34e-04
3	69	-9.46e-04	-6.72e-03	-1.69	5.21e-05	-1.70e-04	0.0
3	70	4.75e-04	-5.52e-03	-1.87	6.48e-06	-1.53e-04	-1.19e-06
3	71	-9.46e-04	-6.72e-03	-1.69	5.21e-05	-1.70e-04	0.0
3	72	4.91e-05	-5.88e-03	-1.82	2.02e-05	-1.58e-04	-1.06e-06
3	73	-9.46e-04	-6.72e-03	-1.69	5.21e-05	-1.70e-04	0.0
3	74	-9.30e-05	-6.00e-03	-1.80	2.47e-05	-1.60e-04	-1.02e-06
4	2	-0.06	0.02	-3.31	-3.19e-04	-1.02e-03	-1.61e-06
4	11	-0.68	0.39	-3.01	-4.13e-04	-1.83e-03	-2.24e-04
4	16	-0.56	-0.38	-3.32	2.90e-04	-1.98e-03	2.17e-04
4	33	-0.02	0.95	-1.68	-1.37e-03	-1.39e-04	-4.63e-04
4	43	-0.54	0.31	-2.88	-3.60e-04	-1.59e-03	-1.78e-04
4	48	-0.45	-0.30	-3.12	1.96e-04	-1.72e-03	1.70e-04

...

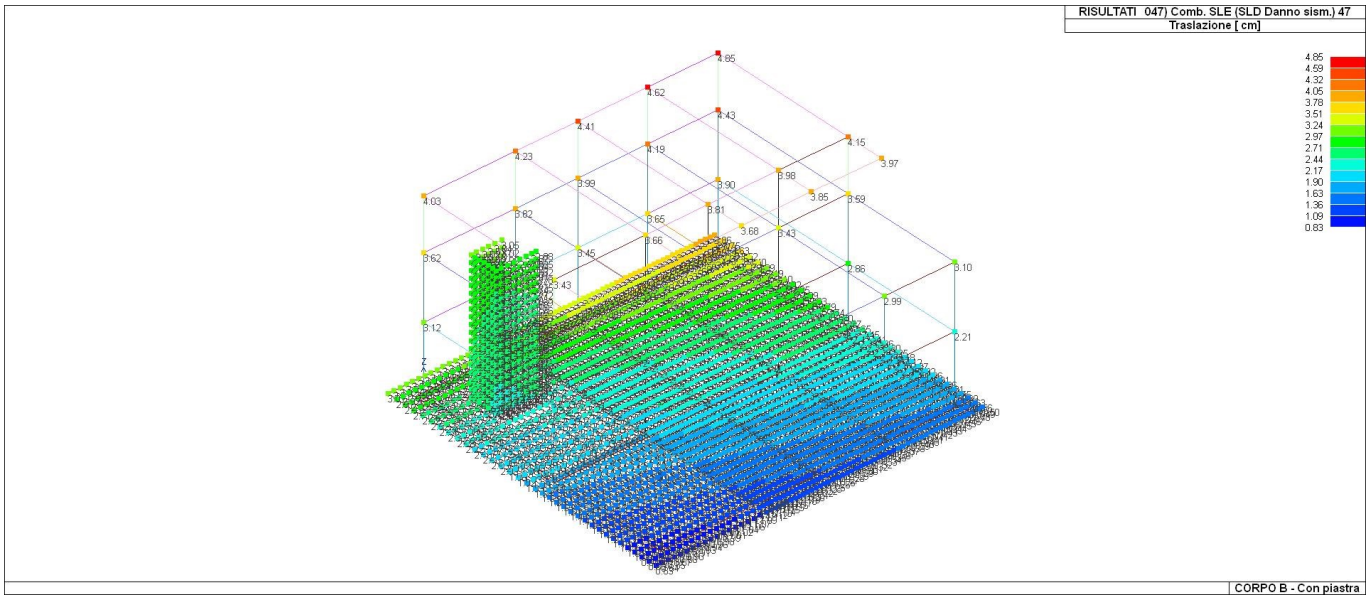
2734	74	-0.40	0.04	-2.14	4.85e-06	-4.63e-04	-6.50e-05
Nodo		**Traslazione X**	**Traslazione Y**	**Traslazione Z**	**Rotazione X**	**Rotazione Y**	**Rotazione Z**
		-4.45	-3.05	-4.30	-9.65e-03	-3.41e-03	-1.26e-03
		3.41	3.70	-0.40	0.01	3.27e-03	1.44e-03



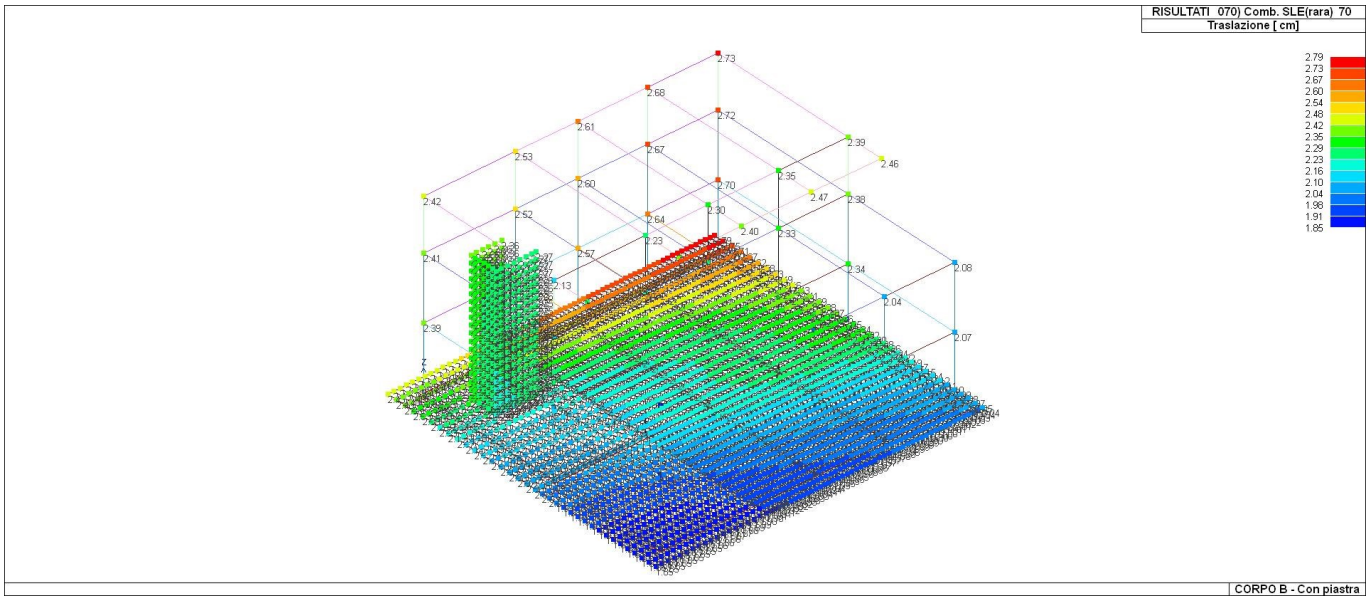
41_RIS_SPOSTAMENTI_002_Comb. SLU A1 2



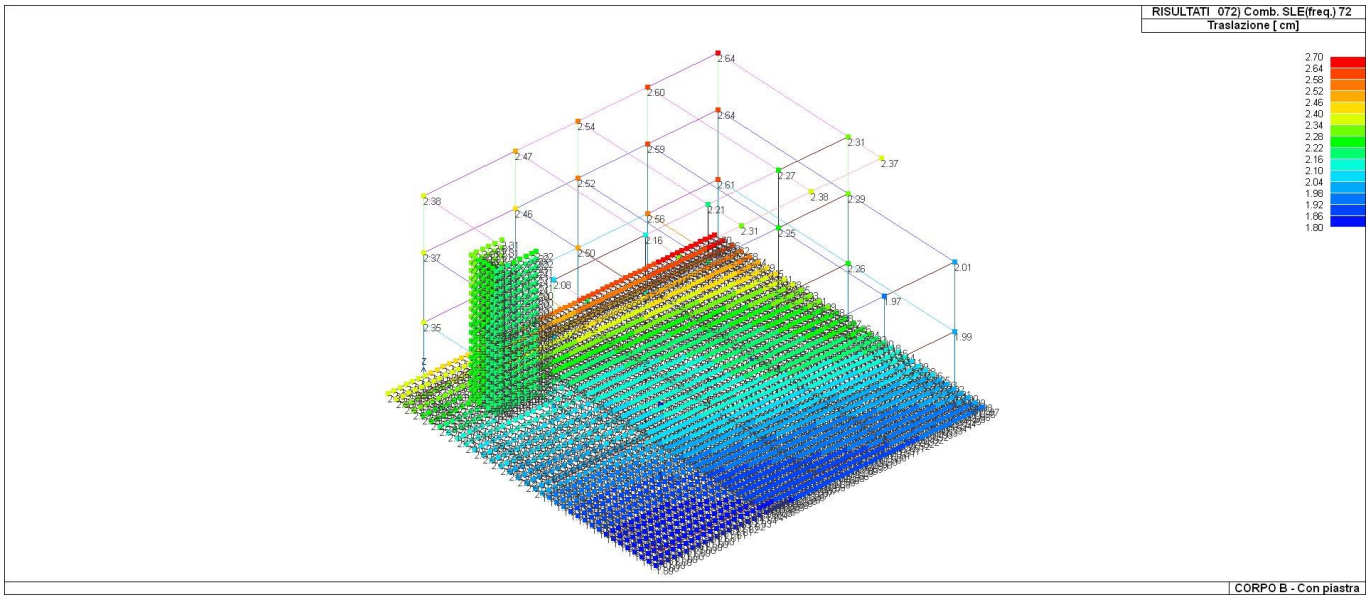
41_RIS_SPOSTAMENTI_015_Comb. SLU A1 (SLV sism.) 15



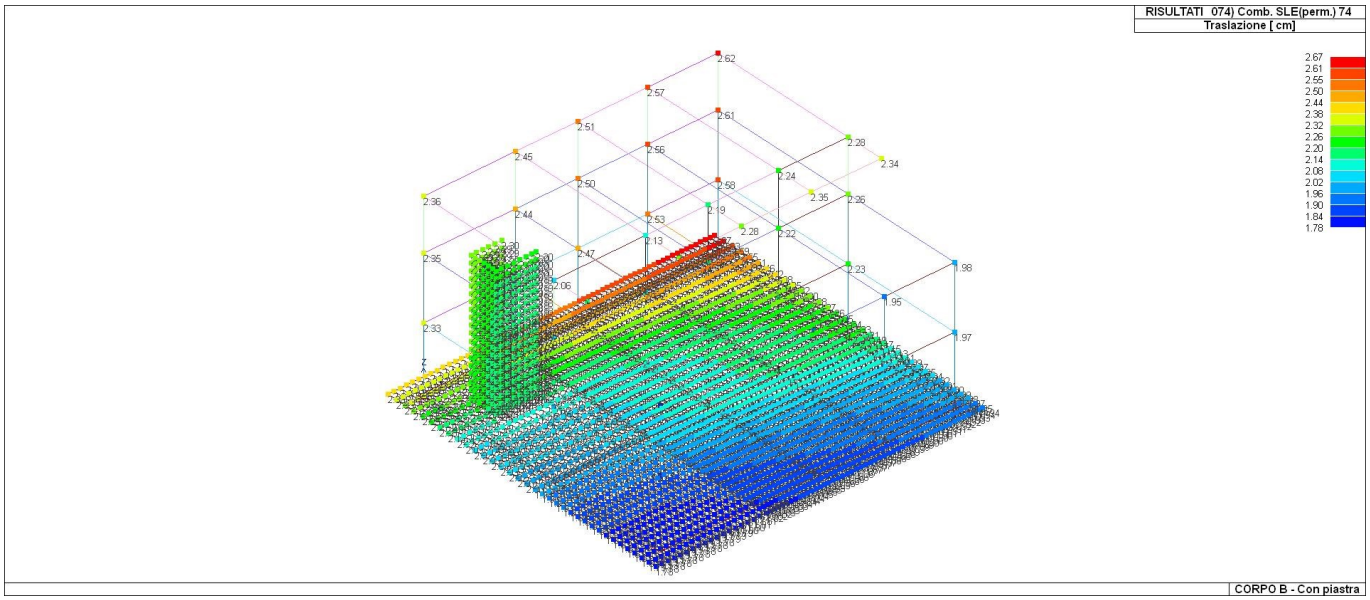
41_RIS_SPOSTAMENTI_047_Comb. SLE (SLD Danno sism.) 47



41_RIS_SPOSTAMENTI_070_Comb. SLE(rara) 70



41_RIS_SPOSTAMENTI_072_Comb. SLE(freq.) 72



41_RIS_SPOSTAMENTI_074_Comb. SLE(perm.) 74

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
		daN	daN	daN	daN cm	daN cm	daN cm
Nodo		**Azione X**	**Azione Y**	**Azione Z**	**Azione RX**	**Azione RY**	**Azione RZ**
Nodo	**Cmb**	**Azione X**	**Azione Y**	**Azione Z**	**Azione RX**	**Azione RY**	**Azione RZ**
		daN	daN	daN	daN cm	daN cm	daN cm

RISULTATI OPERE DI FONDAZIONE

LEGENDA RISULTATI OPERE DI FONDAZIONE

Il controllo dei risultati delle analisi condotte, per quanto concerne le opere di fondazione, è possibile in relazione alle tabelle sotto riportate.

La prima tabella è riferita alle fondazioni tipo palo e plinto su pali.
Per questo tipo di fondazione vengono riportate le sei componenti di sollecitazione (espresse nel riferimento globale della struttura) per ogni palo componente l'opera.
In particolare viene riportato:

Nodo	numero del nodo a cui è applicato il plinto
Tipo	codice corrispondente al nome assegnato al tipo di plinto di fondazione: 3) palo singolo (*PALO*) 4) plinto su palo 5) plinto su due pali (*PL.2P*) 6) plinto su tre pali (*PL.3P*) 7) plinto su quattro pali (*PL.4P*) 8) plinto rettangolare su cinque pali (*PL.5P.R*) 9) plinto pentagonale su cinque pali (*PL.5P*) 10) plinto su sei pali (*PL.6P*)
Palo	numero del palo
Comb.	combinazione di carico in cui si verificano le sei componenti di sollecitazione.
Quota	quota assoluta della sezione del palo per cui si riportano le sei componenti di sollecitazione.

L'azione Fz (corrispondente allo sforzo normale nel palo) è costante poiché il peso del palo stesso non è considerato nella modellazione.

La seconda tabella è riferita alle fondazioni tipo plinto su suolo elastico.
Per questo tipo di fondazione vengono riportate le pressioni nei quattro vertici dell'impronta sul terreno.
In particolare viene riportato:

Nodo		numero del nodo a cui è applicato il plinto
Tipo		Codice identificativo del nome assegnato al plinto
area		area dell'impronta del plinto
Wink O	**Wink V**	coefficienti di Winkler (orizzontale e verticale) adottati
Comb		Combinazione di carico in cui si verificano i valori riportati
Pt (P1 P2 P3 P4)		valori di pressione nei vertici

La terza tabella è riferita alle fondazioni tipo platea su suolo elastico.
Per questo tipo di fondazione vengono riportate le pressioni in ogni vertice (nodo) degli elementi costituenti la platea.

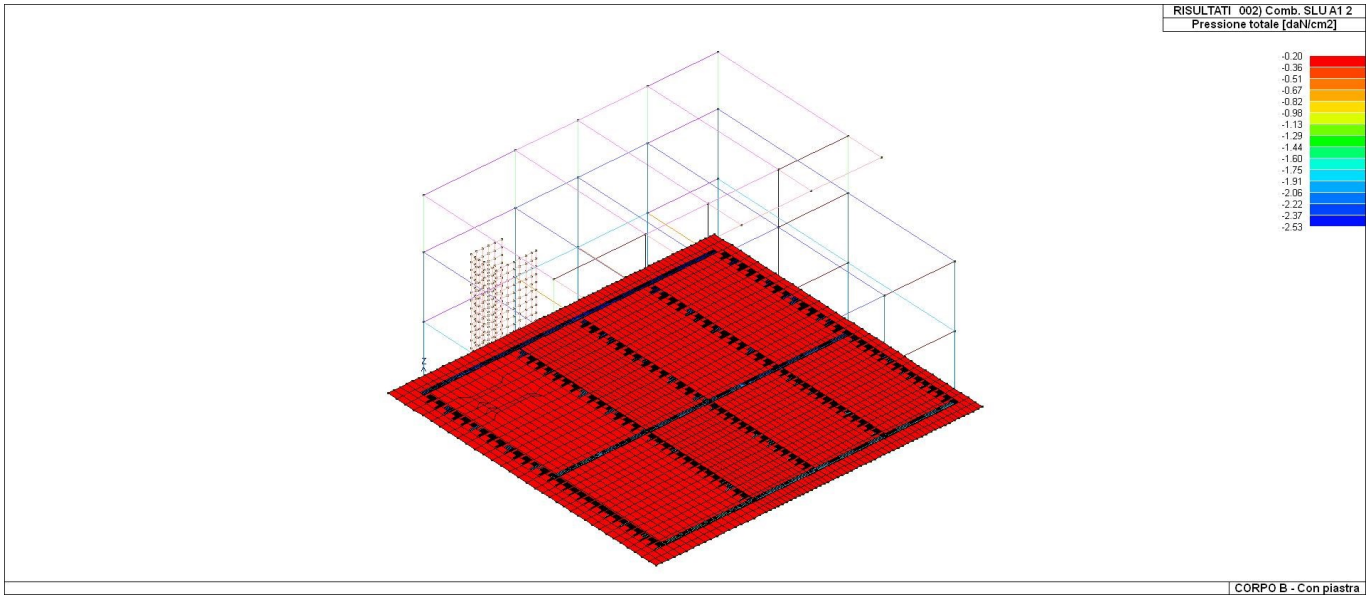
La quarta tabella è riferita alle fondazioni tipo trave su suolo elastico.
Per questo tipo di fondazione vengono riportate le pressioni alle estremità dell'elemento e la massima (in valore assoluto) pressione lungo lo sviluppo dell'elemento.
Vengono inoltre riportati, con funzione statistica, i valori massimo e minimo delle pressioni che compaiono nella tabella.

Nodo (G) **Pt 1/12** **Pt 2/13** **Pt 3...** **Pt 4...**

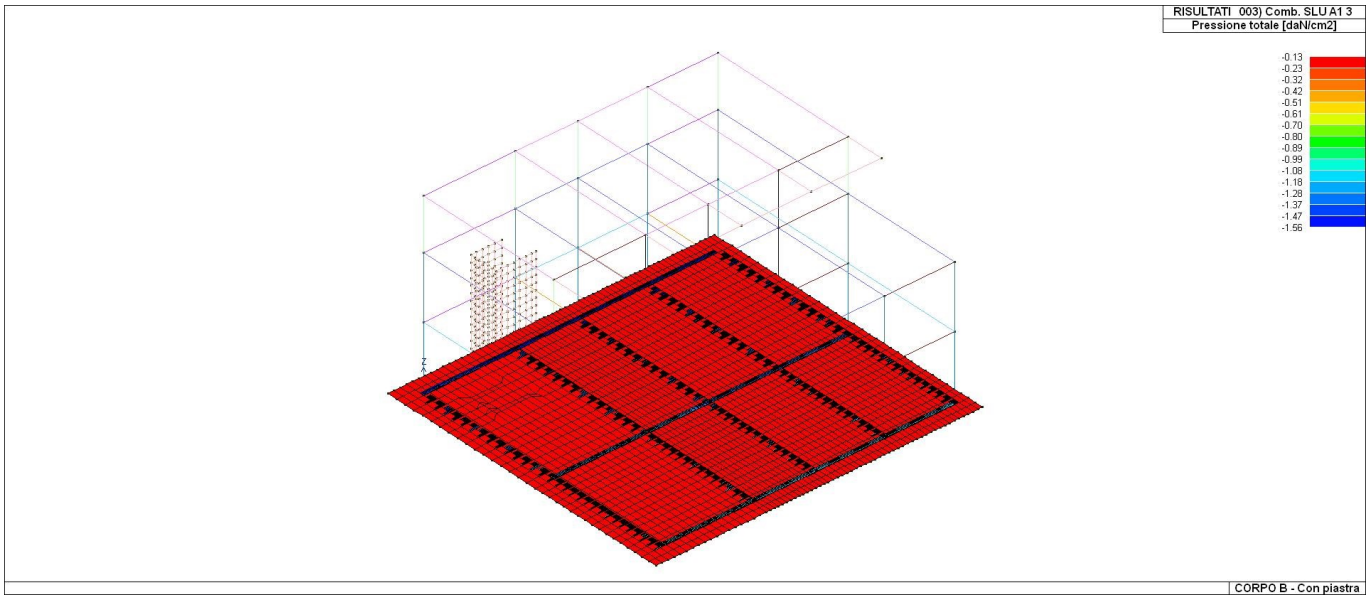
	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2
1	-0.26	-0.29	-0.27	-0.19	-0.19	-0.19					
2	-0.22	-0.23	-0.22	-0.17	-0.16	-0.16					
3	-0.20	-0.25	-0.23	-0.15	-0.15	-0.15					
4	-0.27	-0.27	-0.25	-0.20	-0.19	-0.19					
5	-0.23	-0.20	-0.19	-0.17	-0.17	-0.17					
6	-0.21	-0.23	-0.21	-0.16	-0.15	-0.15					
7	-0.28	-0.27	-0.25	-0.21	-0.20	-0.20					
8	-0.24	-0.18	-0.18	-0.18	-0.17	-0.17					
9	-0.22	-0.22	-0.21	-0.16	-0.15	-0.15					
10	-0.29	-0.29	-0.27	-0.21	-0.20	-0.20					
11	-0.25	-0.21	-0.21	-0.18	-0.18	-0.17					
12	-0.22	-0.24	-0.22	-0.16	-0.16	-0.16					
13	-0.30	-0.32	-0.30	-0.22	-0.21	-0.21					
14	-0.26	-0.26	-0.24	-0.19	-0.18	-0.18					
15	-0.23	-0.27	-0.24	-0.17	-0.16	-0.16					
61	-0.27	-0.27	-0.25	-0.20	-0.19	-0.19					
62	-0.31	-0.34	-0.31	-0.23	-0.22	-0.22					
63	-0.26	-0.26	-0.24	-0.19	-0.19	-0.19					
64	-0.27	-0.27	-0.25	-0.20	-0.19	-0.19					
65	-0.31	-0.33	-0.31	-0.22	-0.22	-0.21					
66	-0.27	-0.27	-0.25	-0.20	-0.19	-0.19					
67	-0.31	-0.33	-0.31	-0.22	-0.22	-0.21					
68	-0.26	-0.27	-0.25	-0.20	-0.19	-0.19					
69	-0.31	-0.33	-0.31	-0.22	-0.22	-0.21					
70	-0.26	-0.27	-0.26	-0.19	-0.19	-0.19					
71	-0.30	-0.30	-0.28	-0.22	-0.21	-0.21					
72	-0.26	-0.27	-0.26	-0.19	-0.19	-0.19					
73	-0.31	-0.33	-0.30	-0.22	-0.22	-0.21					
74	-0.26	-0.27	-0.26	-0.19	-0.19	-0.19					
75	-0.30	-0.33	-0.30	-0.22	-0.22	-0.21					
76	-0.26	-0.27	-0.26	-0.19	-0.19	-0.19					
77	-0.30	-0.32	-0.30	-0.22	-0.22	-0.21					
78	-0.26	-0.28	-0.26	-0.19	-0.19	-0.19					
79	-0.30	-0.32	-0.30	-0.22	-0.21	-0.21					
80	-0.26	-0.28	-0.26	-0.19	-0.19	-0.19					
81	-0.24	-0.26	-0.24	-0.18	-0.17	-0.17					
82	-0.26	-0.28	-0.26	-0.19	-0.19	-0.19					
83	-0.24	-0.26	-0.24	-0.18	-0.17	-0.17					
84	-0.26	-0.28	-0.26	-0.19	-0.19	-0.19					
85	-0.21	-0.23	-0.21	-0.16	-0.15	-0.15					
86	-0.26	-0.28	-0.26	-0.19	-0.19	-0.19					
87	-0.21	-0.23	-0.22	-0.16	-0.15	-0.15					
88	-0.26	-0.29	-0.27	-0.19	-0.19	-0.19					
89	-0.21	-0.23	-0.22	-0.16	-0.15	-0.15					
90	-0.25	-0.28	-0.26	-0.19	-0.18	-0.18					
91	-0.30	-0.30	-0.28	-0.22	-0.21	-0.21					
92	-0.26	-0.25	-0.24	-0.19	-0.19	-0.18					
93	-0.30	-0.32	-0.30	-0.22	-0.21	-0.21					
...											
2474	-0.24	-0.25	-0.24	-0.18	-0.18	-0.18					
Nodo (G)	**Pt 1/12**	**Pt 2/13**	**Pt 3...**	**Pt 4...**							
	-0.35										
	-0.14										

Elem.	**Cmb**	**Pt ini**	**Pt fin**	**Pt max**	**Cmb**	**Pt ini**	**Pt fin**	**Pt max**	**Cmb**	**Pt ini**	**Pt fin**	**Pt max**
		daN/cm2	daN/cm2	daN/cm2		daN/cm2	daN/cm2	daN/cm2		daN/cm2	daN/cm2	daN/cm2
30	2	-2.16	-2.13	-2.16	25	-2.47	-2.42	-2.47	57	-2.28	-2.23	-2.28
	70	-1.60	-1.57	-1.60	72	-1.57	-1.55	-1.57	74	-1.56	-1.54	-1.56
31	2	-1.88	-1.86	-1.88	21	-1.98	-1.98	-1.98	53	-1.85	-1.84	-1.85
	70	-1.39	-1.38	-1.39	72	-1.36	-1.35	-1.36	74	-1.34	-1.33	-1.34
32	2	-2.27	-2.23	-2.27	13	-2.30	-2.21	-2.30	45	-2.16	-2.08	-2.16
	70	-1.67	-1.64	-1.67	72	-1.63	-1.60	-1.63	74	-1.61	-1.58	-1.61
33	2	-1.97	-1.96	-1.97	21	-1.69	-1.69	-1.69	53	-1.63	-1.63	-1.63
	70	-1.46	-1.45	-1.46	72	-1.41	-1.40	-1.41	74	-1.39	-1.38	-1.39
34	2	-2.35	-2.30	-2.35	13	-2.24	-2.15	-2.24	45	-2.12	-2.04	-2.12
	70	-1.73	-1.69	-1.73	72	-1.68	-1.64	-1.68	74	-1.66	-1.63	-1.66
35	2	-2.04	-2.03	-2.04	9	-1.54	-1.55	-1.55	41	-1.53	-1.54	-1.54
	70	-1.50	-1.49	-1.50	72	-1.45	-1.44	-1.45	74	-1.43	-1.42	-1.43
36	2	-2.43	-2.38	-2.43	5	-2.43	-2.33	-2.43	37	-2.27	-2.19	-2.27
	70	-1.78	-1.74	-1.78	72	-1.73	-1.69	-1.73	74	-1.71	-1.67	-1.71
37	2	-2.10	-2.08	-2.10	21	-1.84	-1.83	-1.84	53	-1.76	-1.76	-1.76
	70	-1.54	-1.53	-1.54	72	-1.49	-1.48	-1.49	74	-1.47	-1.46	-1.47
38	2	-2.52	-2.48	-2.52	21	-2.74	-2.68	-2.74	53	-2.53	-2.48	-2.53
	70	-1.84	-1.81	-1.84	72	-1.78	-1.75	-1.78	74	-1.76	-1.74	-1.76

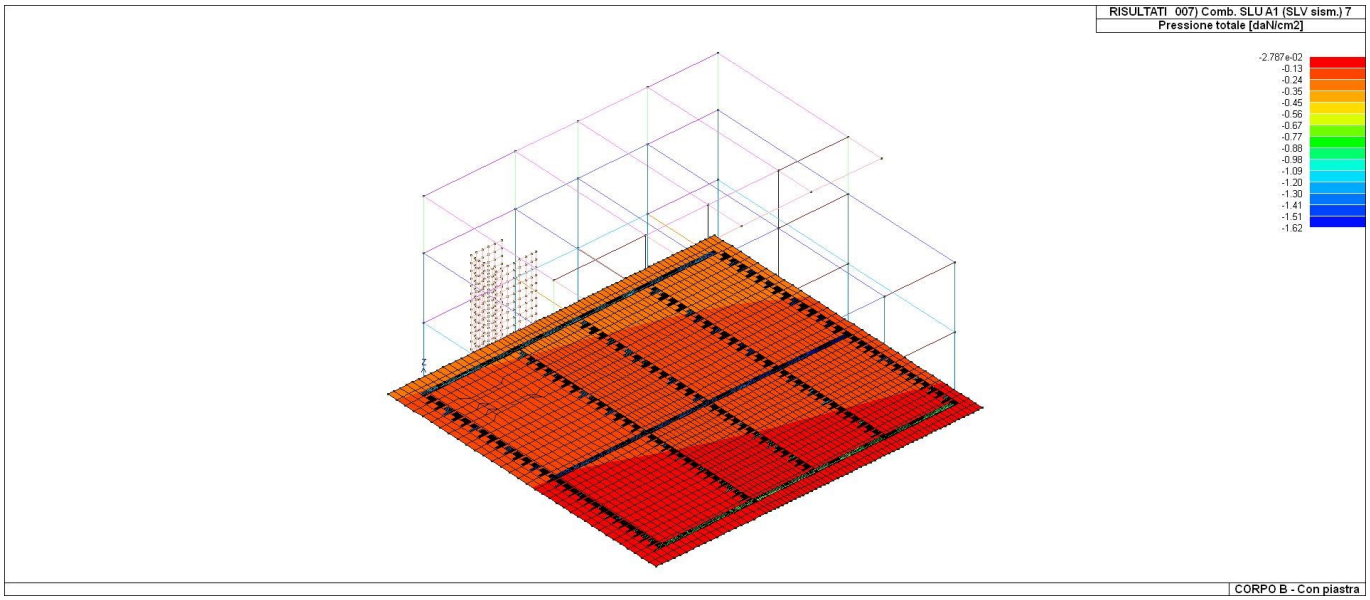
39	2	-2.16	-2.14	-2.16	21	-2.22	-2.21	-2.22	53	-2.07	-2.06	-2.07
	70	-1.58	-1.57	-1.58	72	-1.53	-1.52	-1.53	74	-1.51	-1.50	-1.51
49	2	-2.17	-2.17	-2.17	25	-2.47	-2.44	-2.47	57	-2.28	-2.26	-2.28
	70	-1.60	-1.60	-1.60	72	-1.57	-1.57	-1.57	74	-1.56	-1.57	-1.57
50	2	-2.28	-2.28	-2.28	13	-2.31	-2.31	-2.31	45	-2.17	-2.17	-2.17
	70	-1.68	-1.68	-1.68	72	-1.64	-1.64	-1.64	74	-1.62	-1.62	-1.62
51	2	-2.37	-2.37	-2.37	17	-2.26	-2.26	-2.26	49	-2.14	-2.14	-2.14
	70	-1.74	-1.74	-1.74	72	-1.69	-1.69	-1.69	74	-1.67	-1.67	-1.67
52	2	-2.44	-2.45	-2.45	5	-2.44	-2.46	-2.46	37	-2.29	-2.30	-2.30
	70	-1.79	-1.79	-1.79	72	-1.73	-1.74	-1.74	74	-1.72	-1.72	-1.72
58	2	-1.88	-1.88	-1.88	21	-1.98	-1.95	-1.98	53	-1.85	-1.83	-1.85
	70	-1.39	-1.39	-1.39	72	-1.36	-1.36	-1.36	74	-1.35	-1.35	-1.35
59	2	-1.96	-1.97	-1.97	21	-1.67	-1.66	-1.67	53	-1.62	-1.60	-1.62
	70	-1.45	-1.46	-1.46	72	-1.41	-1.41	-1.41	74	-1.39	-1.39	-1.39
60	2	-2.04	-2.04	-2.04	5	-1.55	-1.56	-1.56	37	-1.54	-1.55	-1.55
	70	-1.50	-1.50	-1.50	72	-1.45	-1.45	-1.45	74	-1.43	-1.43	-1.43
61	2	-2.10	-2.10	-2.10	21	-1.82	-1.84	-1.84	53	-1.75	-1.77	-1.77
	70	-1.54	-1.54	-1.54	72	-1.49	-1.49	-1.49	74	-1.47	-1.47	-1.47
67	2	-1.73	-1.73	-1.73	5	-2.09	-2.07	-2.09	37	-1.91	-1.90	-1.91
	70	-1.28	-1.28	-1.28	72	-1.24	-1.24	-1.24	74	-1.23	-1.23	-1.23
68	2	-1.77	-1.78	-1.78	5	-1.92	-1.91	-1.92	37	-1.78	-1.77	-1.78
	70	-1.31	-1.31	-1.31	72	-1.27	-1.27	-1.27	74	-1.25	-1.26	-1.26
69	2	-1.82	-1.82	-1.82	5	-1.87	-1.88	-1.88	37	-1.75	-1.75	-1.75
	70	-1.34	-1.34	-1.34	72	-1.30	-1.30	-1.30	74	-1.28	-1.28	-1.28
70	2	-1.86	-1.86	-1.86	13	-2.02	-2.03	-2.03	45	-1.87	-1.88	-1.88
	70	-1.37	-1.37	-1.37	72	-1.32	-1.32	-1.32	74	-1.31	-1.31	-1.31
129	2	-2.13	-2.10	-2.13	25	-2.42	-2.36	-2.42	57	-2.23	-2.18	-2.23
	70	-1.57	-1.55	-1.57	72	-1.55	-1.52	-1.55	74	-1.54	-1.51	-1.54
130	2	-1.86	-1.85	-1.86	21	-1.98	-1.97	-1.98	53	-1.84	-1.84	-1.84
	70	-1.38	-1.37	-1.38	72	-1.35	-1.33	-1.35	74	-1.33	-1.32	-1.33
...												
436	70	-1.42	-1.41	-1.42	72	-1.37	-1.36	-1.37	74	-1.35	-1.35	-1.35
Elem.		**Pt ini**	**Pt fin**	**Pt max**		**Pt ini**	**Pt fin**	**Pt max**		**Pt ini**	**Pt fin**	**Pt max**
		-2.74										
		-1.23										



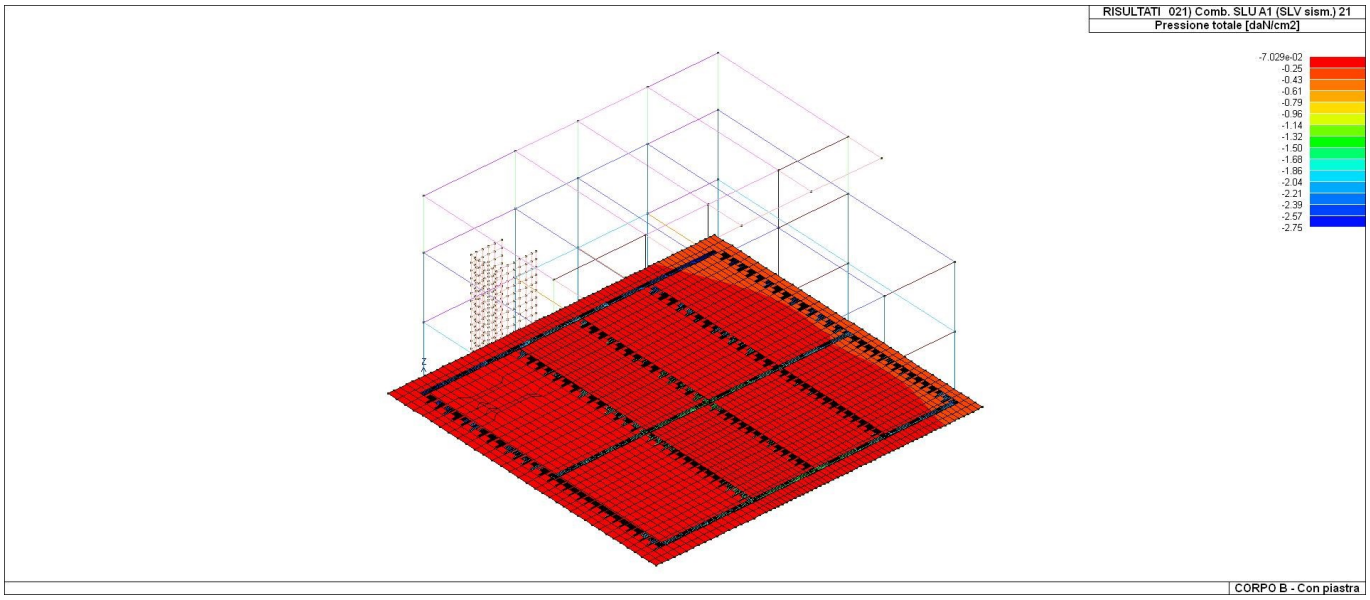
46_RIS_PRESSIONI_002_Comb. SLU A1 2



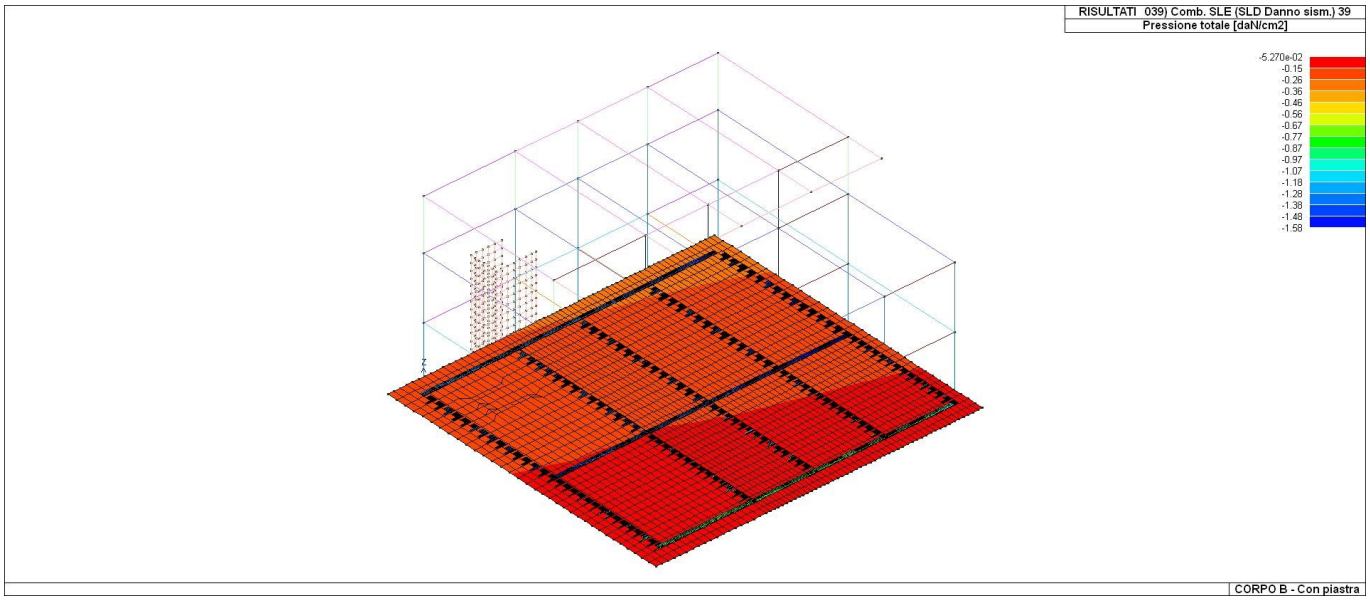
46_RIS_PRESSIONI_003_Comb. SLU A1 3



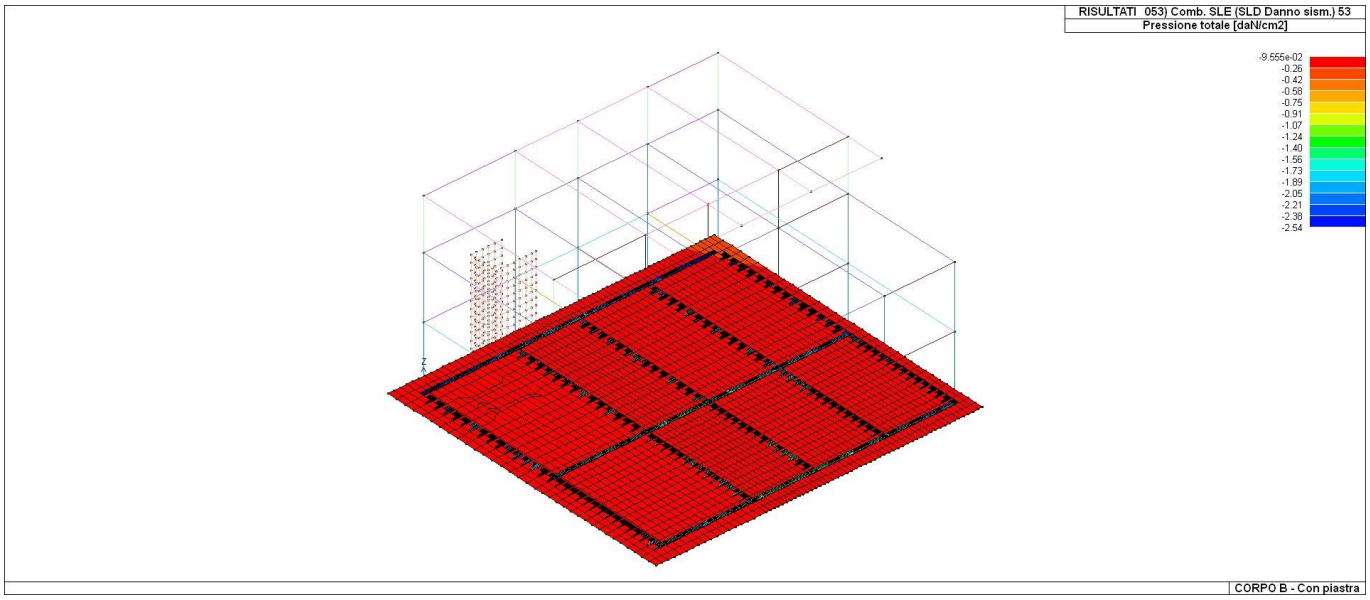
46_RIS_PRESSIONI_007_Comb. SLU A1 (SLV sism.) 7



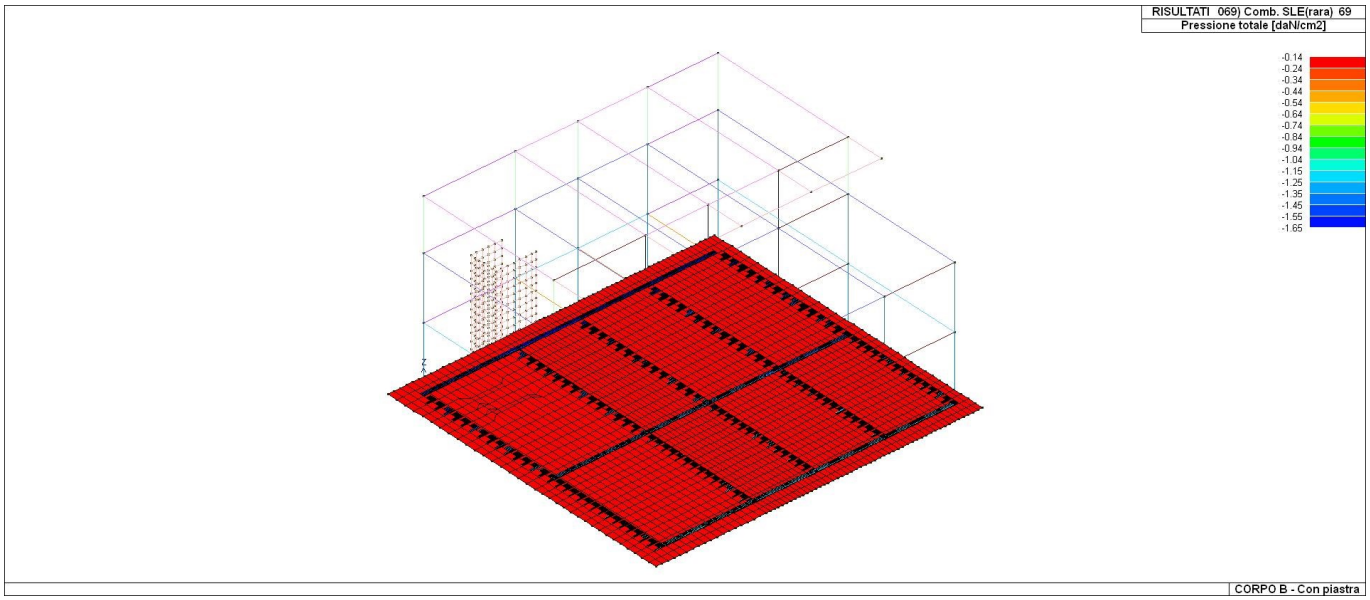
46_RIS_PRESSIONI_021_Comb. SLU A1 (SLV sism.) 21



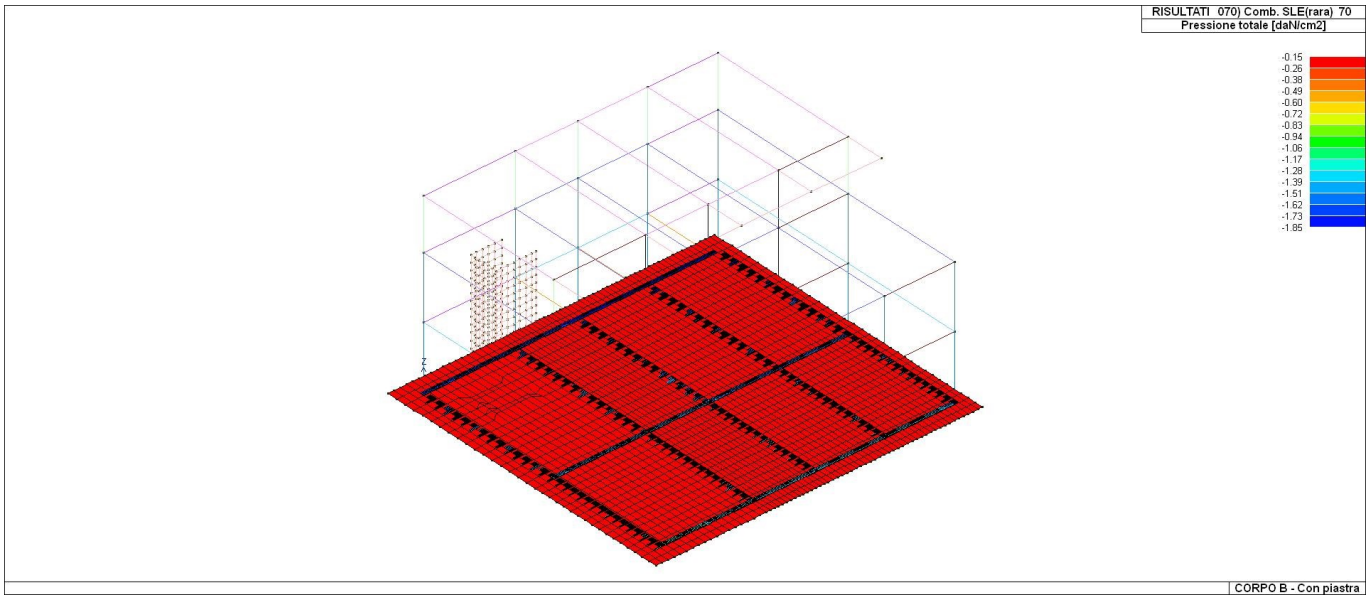
46_RIS_PRESSIONI_039_Comb. SLE (SLD Danno sism.) 39



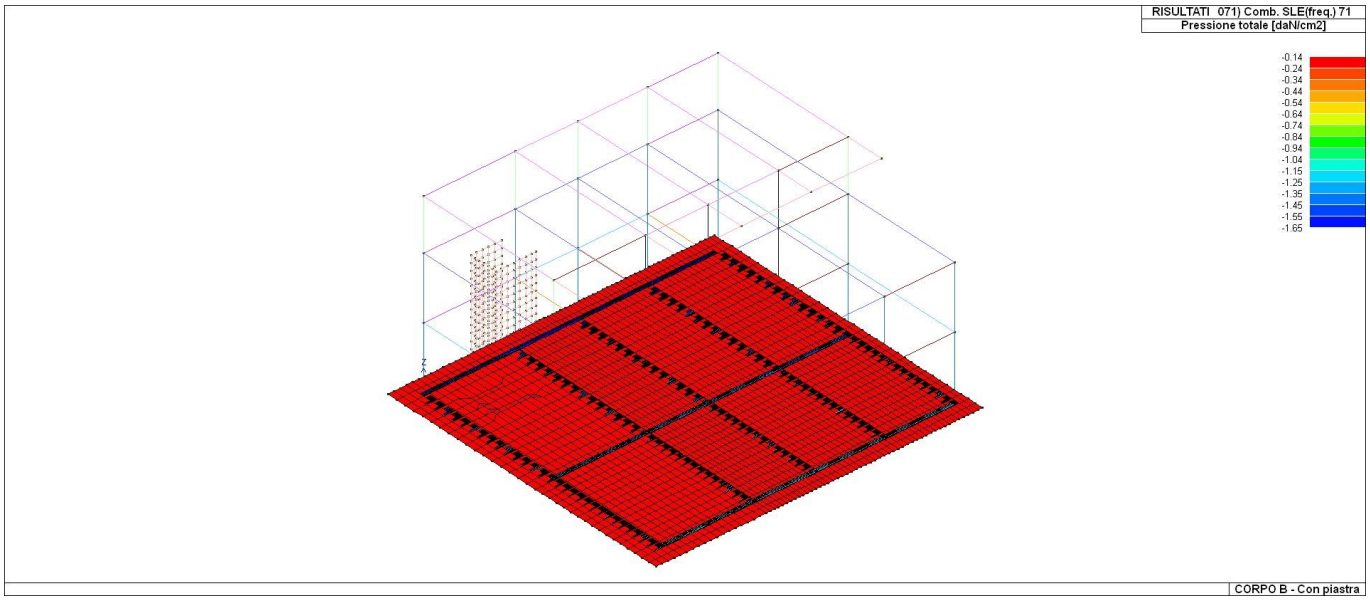
46_RIS_PRESSIONI_053_Comb. SLE (SLD Danno sism.) 53



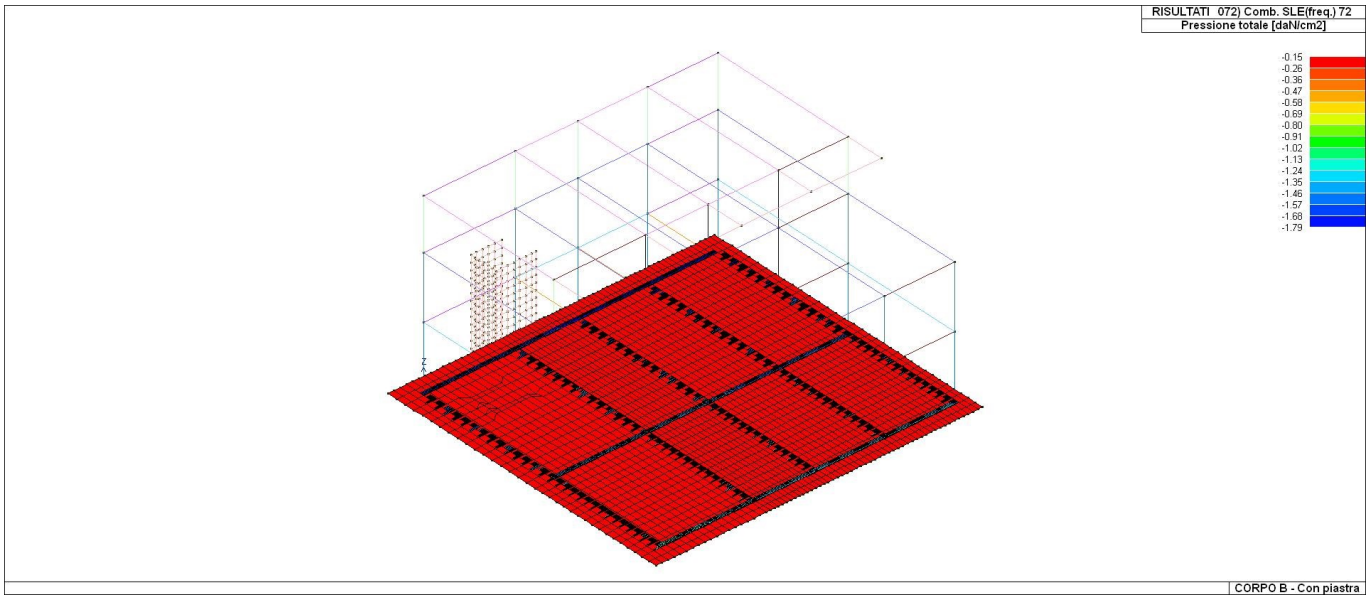
46_RIS_PRESSIONI_069_Comb. SLE(rara) 69



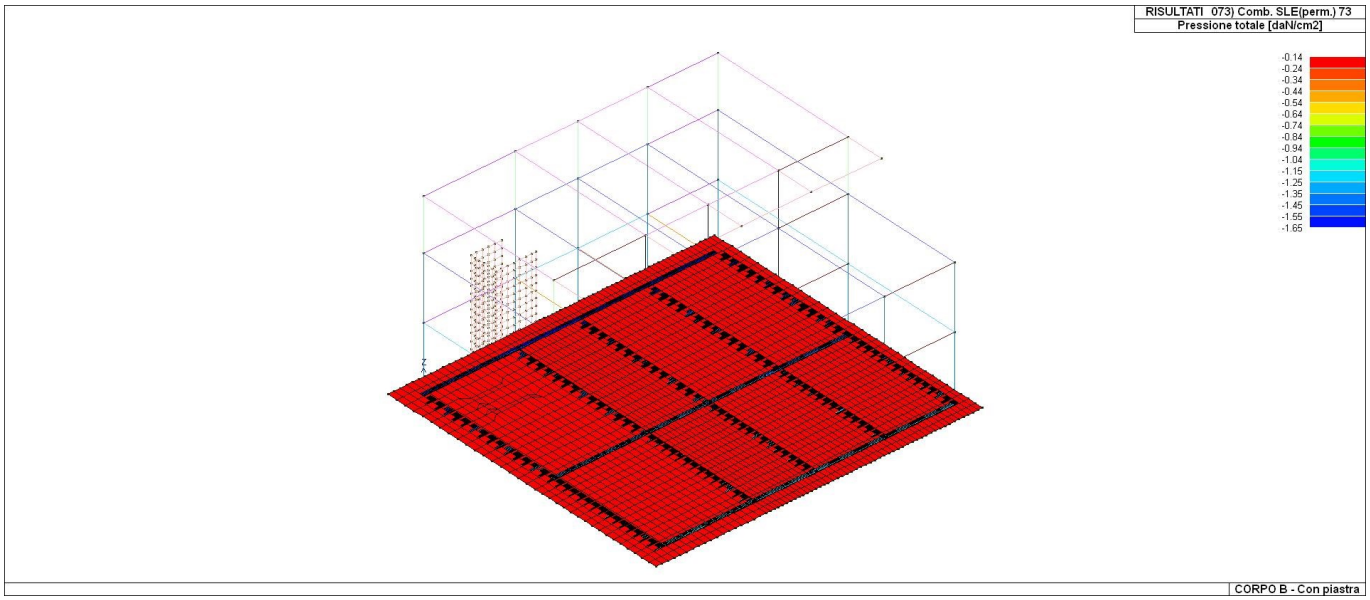
46_RIS_PRESSIONI_070_Comb. SLE(rara) 70



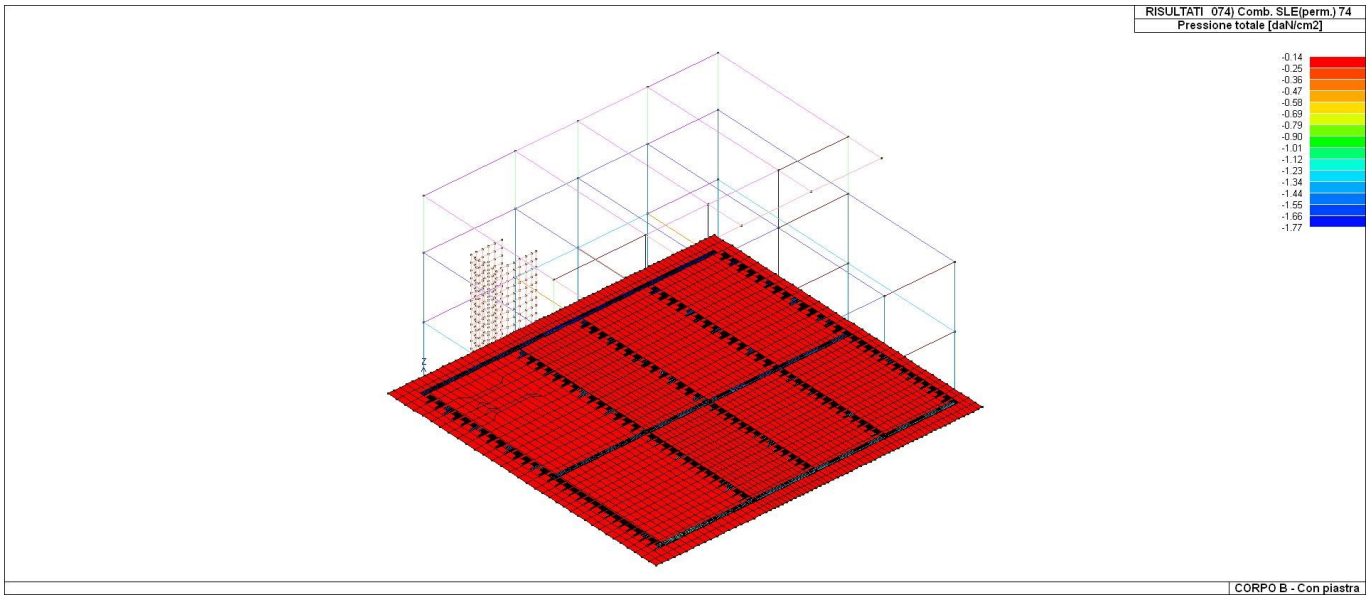
46_RIS_PRESSIONI_071_Comb. SLE(freq.) 71



46_RIS_PRESSIONI_072_Comb. SLE(freq.) 72



46_RIS_PRESSIONI_073_Comb. SLE(perm.) 73



46_RIS_PRESSIONI_074_Comb. SLE(perm.) 74

RISULTATI ELEMENTI TIPO TRAVE

LEGENDA RISULTATI ELEMENTI TIPO TRAVE

Il controllo dei risultati delle analisi condotte, per quanto concerne gli elementi tipo trave, è possibile in relazione alle tabelle sotto riportate.

Gli elementi vengono suddivisi in relazione alle proprietà in elementi:

- tipo **pilastro**
- tipo **trave in elevazione**
- tipo **trave in fondazione**

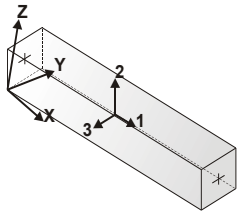
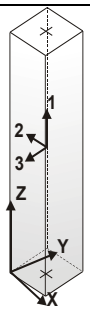
Per ogni elemento e per ogni combinazione (o caso di carico) vengono riportati i risultati più significativi.

Per gli elementi tipo *pilastro* sono riportati in tabella i seguenti valori:

Pilas.	numero dell'elemento pilastro
Cmb	combinazione in cui si verificano i valori riportati
M3 mx/mn	momento flettente in campata M3 max (prima riga) / min (seconda riga)
M2 mx/mn	momento flettente in campata M2 max (prima riga) / min (seconda riga)
D2/D3	freccia massima in direzione 2 (prima riga) / direzione 3 (seconda riga)
Q2/Q3	carico totale in direzione 2 (prima riga) / direzione 3 (seconda riga)
Pos.	ascissa del punto iniziale e finale dell'elemento
N, V2, ecc..	sei componenti di sollecitazione al piede ed in sommità dell'elemento

Per gli elementi tipo *trave in elevazione* sono riportati, oltre al numero dell'elemento, i medesimi risultati visti per i pilastri.

Per gli elementi tipo *trave in fondazione* (trave f.) sono riportati, oltre al numero dell'elemento, i medesimi risultati visti per i pilastri e la massima pressione sul terreno.

 orientamento elementi 2D non verticali	 orientamento elementi 2D verticali

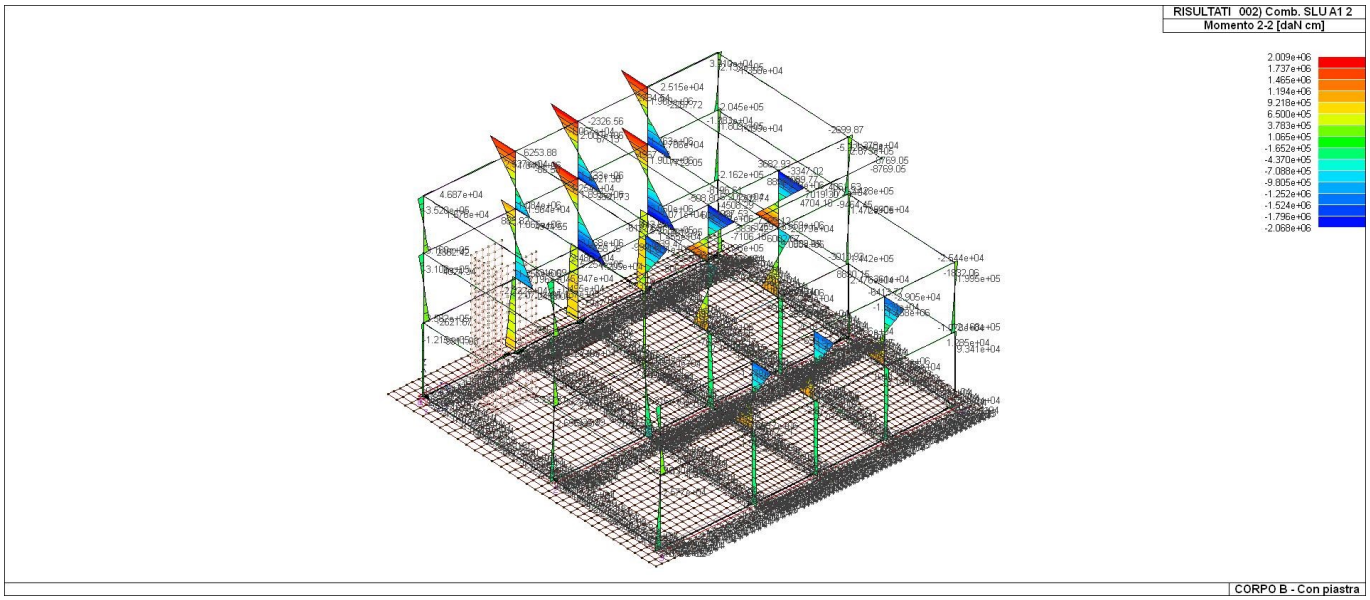
Pilas.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
		daN cm	daN cm	cm	daN	cm	daN	daN	daN	daN cm	daN cm	daN cm
1	1	2.876e+04	-2.005e+04	0.16	0.0	0.0	-5.857e+04	2952.47	337.22	-7732.49	-1.644e+05	-1.235e+06
		-1.235e+06	-1.644e+05	-0.07	0.0	428.0	-5.411e+04	2952.47	337.22	-7732.49	-2.005e+04	2.876e+04
1	2	-3.000e+04	-3.561e+04	0.17	0.0	0.0	-6.508e+04	2699.35	-233.13	-8165.39	-3.561e+04	-1.185e+06
		-1.185e+06	-1.354e+05	-0.11	0.0	428.0	-6.063e+04	2699.35	-233.13	-8165.39	-1.354e+05	-3.000e+04
1	3	2.917e+04	-2.569e+04	0.11	0.0	0.0	-4.012e+04	1973.15	144.41	-4931.56	-8.750e+04	-8.153e+05
		-8.153e+05	-8.750e+04	-0.04	0.0	428.0	-3.670e+04	1973.15	144.41	-4931.56	-2.569e+04	2.917e+04
1	4	-2.959e+04	4.127e+04	0.11	0.0	0.0	-4.664e+04	1720.03	-425.95	-5364.47	4.127e+04	-7.658e+05
		-7.658e+05	-1.410e+05	-0.08	0.0	428.0	-4.322e+04	1720.03	-425.95	-5364.47	-1.410e+05	-2.959e+04
1	10	2.784e+06	1.270e+06	-1.08	0.0	0.0	-3.510e+04	2.566e+04	-5561.16	5255.69	1.270e+06	-8.220e+06
		-8.220e+06	-1.110e+06	0.35	0.0	428.0	-3.168e+04	2.566e+04	-5561.16	5255.69	-1.110e+06	2.784e+06
1	11	6.477e+06	9.779e+05	1.32	0.0	0.0	-5.593e+04	-2.158e+04	5523.68	-1.661e+04	-1.386e+06	6.477e+06
		-2.781e+06	-1.386e+06	-0.48	0.0	428.0	-5.250e+04	-2.158e+04	5523.68	-1.661e+04	9.779e+05	-2.781e+06
1	25	-1.005e+04	1.325e+06	0.13	0.0	0.0	-1.058e+04	-1069.47	7371.20	-5.183e+04	-1.830e+06	-1.005e+04
		-4.667e+05	-1.830e+06	-1.00	0.0	428.0	-7152.06	-1069.47	7371.20	-5.183e+04	1.325e+06	-4.667e+05
1	28	4.700e+05	1.714e+06	0.11	0.0	0.0	-8.045e+04	5150.12	-7408.68	4.047e+04	1.714e+06	-1.733e+06
		-1.733e+06	-1.457e+06	0.87	0.0	428.0	-7.703e+04	5150.12	-7408.68	4.047e+04	-1.457e+06	4.700e+05
1	30	2.347e+06	2.367e+06	-0.50	0.0	0.0	-6.729e+04	2.109e+04	-1.014e+04	8.147e+04	2.367e+06	-6.687e+06
		-6.687e+06	-1.971e+06	0.95	0.0	428.0	-6.387e+04	2.109e+04	-1.014e+04	8.147e+04	-1.971e+06	2.347e+06
1	31	4.944e+06	1.839e+06	0.74	0.0	0.0	-2.374e+04	-1.701e+04	1.010e+04	-9.283e+04	-2.483e+06	4.944e+06
		-2.343e+06	-2.483e+06	-1.08	0.0	428.0	-2.032e+04	-1.701e+04	1.010e+04	-9.283e+04	1.839e+06	-2.343e+06
1	42	2.213e+06	9.905e+05	-0.82	0.0	0.0	-3.726e+04	2.070e+04	-4392.04	2755.60	9.905e+05	-6.669e+06
		-6.669e+06	-8.896e+05	0.26	0.0	428.0	-3.383e+04	2.070e+04	-4392.04	2755.60	-8.896e+05	2.213e+06
1	43	4.926e+06	7.575e+05	1.06	0.0	0.0	-5.377e+04	-1.662e+04	4354.56	-1.411e+04	-1.106e+06	4.926e+06
		-2.210e+06	-1.106e+06	-0.39	0.0	428.0	-5.035e+04	-1.662e+04	4354.56	-1.411e+04	7.575e+05	-2.210e+06
1	57	-1.783e+05	1.024e+06	0.13	0.0	0.0	-1.735e+04	-460.55	5768.45	-4.218e+04	-1.445e+06	-1.783e+05
		-3.742e+05	-1.445e+06	-0.79	0.0	428.0	-1.393e+04	-460.55	5768.45	-4.218e+04	1.024e+06	-3.742e+05
1	60	3.776e+05	1.329e+06	0.11	0.0	0.0	-7.368e+04	4541.20	-5805.93	3.082e+04	1.329e+06	-1.565e+06
		-1.565e+06	-1.156e+06	0.67	0.0	428.0	-7.025e+04	4541.20	-5805.93	3.082e+04	-1.156e+06	3.776e+05
1	62	1.854e+06	1.845e+06	-0.37	0.0	0.0	-6.320e+04	1.706e+04	-7959.48	6.316e+04	1.845e+06	-5.456e+06
		-5.456e+06	-1.562e+06	0.73	0.0	428.0	-5.978e+04	1.706e+04	-7959.48	6.316e+04	-1.562e+06	1.854e+06
1	63	3.713e+06	1.429e+06	0.61	0.0	0.0	-2.783e+04	-1.298e+04	7922.00	-7.452e+04	-1.961e+06	3.713e+06
		-1.850e+06	-1.961e+06	-0.85	0.0	428.0	-2.440e+04	-1.298e+04	7922.00	-7.452e+04	1.429e+06	-1.850e+06
1	69	2.519e+04	-1.989e+04	0.12	0.0	0.0	-4.291e+04	2141.57	209.40	-5506.11	-1.095e+05	-8.914e+05
		-8.914e+05	-1.095e+05	-0.05	0.0	428.0	-3.948e+04	2141.57	209.40	-5506.11	-1.989e+04	2.519e+04
1	70	-1.398e+04	-2.367e+04	0.12	0.0	0.0	-4.725e+04	1972.83	-170.83	-5794.71	-2.367e+04	-8.584e+05
		-8.584e+05	-9.678e+04	-0.07	0.0	428.0	-4.383e+04	1972.83	-170.83	-5794.71	-9.678e+04	-1.398e+04
1	71	2.519e+04	-1.989e+04	0.12	0.0	0.0	-4.291e+04	2141.57	209.40	-5506.11	-1.095e+05	-8.914e+05
		-8.914e+05	-1.095e+05	-0.05	0.0	428.0	-3.948e+04	2141.57	209.40	-5506.11	-1.989e+04	2.519e+04
1	72	-2232.73	-4.942e+04	0.12	0.0	0.0	-4.595e+04	2023.45	-56.76	-5708.13	-4.942e+04	-8.683e+05
		-8.683e+05	-7.371e+04	-0.07	0.0	428.0	-4.253e+04	2023.45	-56.76	-5708.13	-7.371e+04	-2232.73
1	73	2.519e+04	-1.989e+04	0.12	0.0	0.0	-4.291e+04	2141.57	209.40	-5506.11	-1.095e+05	-8.914e+05
		-8.914e+05	-1.095e+05	-0.05	0.0	428.0	-3.948e+04	2141.57	209.40	-5506.11	-1.989e+04	2.519e+04
1	74	1684.64	-5.800e+04	0.12	0.0	0.0	-4.551e+04	2040.33	-18.74	-5679.27	-5.800e+04	-8.716e+05
		-8.716e+05	-6.602e+04	-0.06	0.0	428.0	-4.209e+04	2040.33	-18.74	-5679.27	-6.602e+04	1684.64
2	1	5.573e+05	1.721e+05	0.18	0.0	0.0	-1.007e+05	-2741.19	1340.94	2510.69	-4.018e+05	5.573e+05
		-6.159e+05	-4.018e+05	-0.07	0.0	428.0	-9.512e+04	-2741.19	1340.94	2510.69	1.721e+05	-6.159e+05
2	2	9.977e+05	4.205e+04	0.19	0.0	0.0	-1.194e+05	-4682.97	760.08	-208.36	-2.833e+05	9.977e+05
		-1.007e+06	-2.833e+05	-0.11	0.0	428.0	-1.139e+05	-4682.97	760.08	-208.36	4.205e+04	-1.007e+06
...												
118	74	1959.91	-1.119e+06	-0.06	0.0	334.5	-1.857e+04	20.68	7138.82	2046.42	1.269e+06	8877.43
Pilas.		**M3 mx/mn**	**M2 mx/mn**	**D 2 / D 3**	**Q 2 / Q 3**		**N**	**V 2**	**V 3**	**T**		
		-1.490e+07	-7.078e+06	-1.32	0.0		-2.152e+05	-5.098e+04	-2.595e+04	-1.984e+05		
		1.545e+07	6.369e+06	1.41	0.0		1106.37	4.872e+04	2.824e+04	1.627e+05		

Trave	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
		daN cm	daN cm	cm	daN	cm	daN	daN	daN	daN cm	daN cm	daN cm
16	2	2.182e+05	5040.24	-0.12	-1.073e+04	0.0	1942.70	5833.88	1.79	8737.13	4233.54	-4.949e+05
		-4.949e+05	4233.54	5.06e-03	0.0	450.0	1942.70	-4892.32	1.79	8737.13	5040.24	-2.831e+05
16	3	1.256e+05	2669.13	-0.04	-6553.20	0.0	593.33	3516.05	2.15	4566.36	1699.89	-2.978e+05
		-2.978e+05	1699.89	5.30e-04	0.0	450.0	593.33	-3037.15	2.15	4566.36	2669.13	-1.901e+05
16	33	3.236e+06	3.539e+04	-0.52	-7497.32	0.0	2501.53	-1.183e+04	-212.73	5.801e+04	3.539e+04	3.236e+06
		-3.775e+06	-6.040e+04	0.48	0.0	450.0	2501.53	-1.933e+04	-212.73	5.801e+04	-6.040e+04	-3.775e+06
16	36	3.364e+06	6.707e+04	0.38	-7497.32	0.0	-377.36	1.995e+04	216.34	-4.654e+04	-3.035e+04	-3.925e+06
		-3.925e+06	-3.035e+04	-0.48	0.0	450.0	-377.36	1.245e+04	216.34	-4.654e+04	6.707e+04	3.364e+06
16	65	2.464e+06	2.831e+04	-0.41	-7497.32	0.0	2216.88	-8406.73	-166.37	4.725e+04	2.831e+04	2.464e+06
		-3.006e+06	-4.662e+04	0.38	0.0	450.0	2216.88	-1.590e+04	-166.37	4.725e+04	-4.662e+04	-3.006e+06
16	68	2.595e+06	5.328e+04	0.27	-7497.32	0.0	-92.71	1.652e+04	169.99	-3.578e+04	-2.327e+04	-3.153e+06
		-3.153e+06	-2.327e+04	-0.38	0.0	450.0	-92.71	9025.19	169.99	-3.578e+04	5.328e+04	2.595e+06
16	69	1.412e+05	3115.01	-0.05	-7319.56	0.0	595.92	3974.01	2.88	5170.88	1819.04	-3.436e+05
		-3.436e+05	1819.04	1.05e-03	0.0	450.0	595.92	-3345.56	2.88	5170.88	3115.01	-2.022e+05

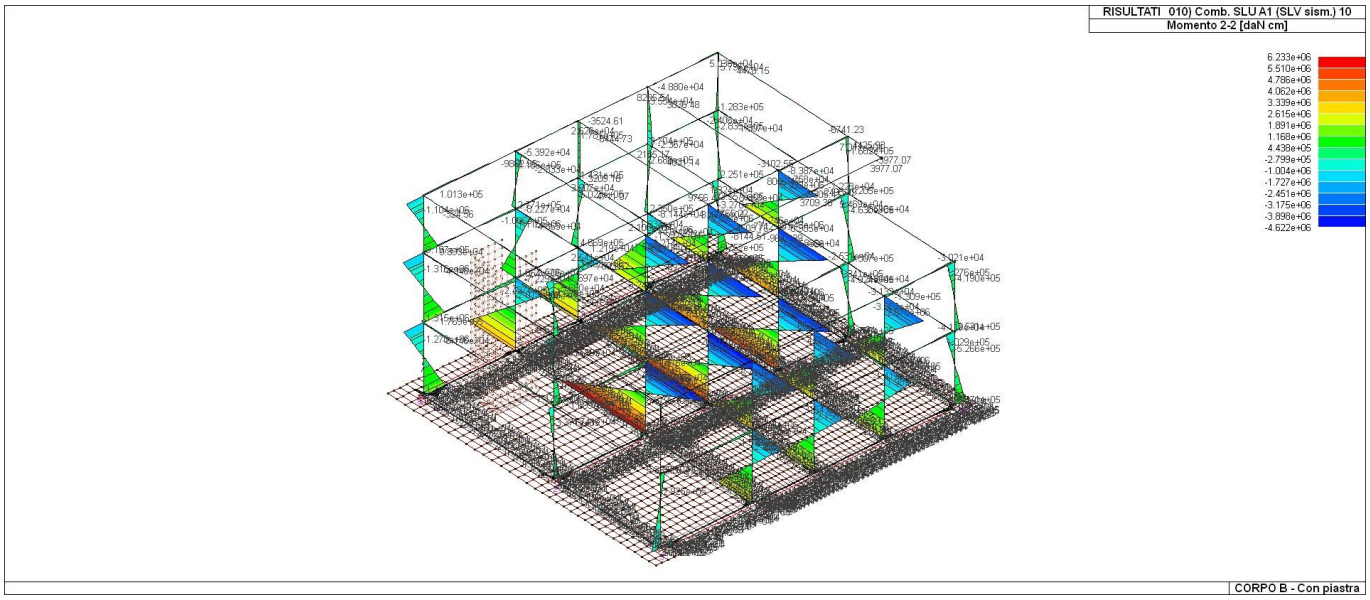
16	70	1.539e+05	3478.25	-0.08	-7615.83	0.0	1372.86	4113.82	1.10	6111.19	2985.46	-3.453e+05
		-3.453e+05	2985.46	3.17e-03	0.0	450.0	1372.86	-3502.01	1.10	6111.19	3478.25	-2.076e+05
16	71	1.412e+05	3115.01	-0.05	-7319.56	0.0	595.92	3974.01	2.88	5170.88	1819.04	-3.436e+05
		-3.436e+05	1819.04	1.05e-03	0.0	450.0	595.92	-3345.56	2.88	5170.88	3115.01	-2.022e+05
16	72	1.501e+05	3369.27	-0.07	-7526.95	0.0	1139.78	4071.87	1.63	5829.10	2635.54	-3.448e+05
		-3.448e+05	2635.54	2.53e-03	0.0	450.0	1139.78	-3455.08	1.63	5829.10	3369.27	-2.060e+05
16	73	1.412e+05	3115.01	-0.05	-7319.56	0.0	595.92	3974.01	2.88	5170.88	1819.04	-3.436e+05
		-3.436e+05	1819.04	1.05e-03	0.0	450.0	595.92	-3345.56	2.88	5170.88	3115.01	-2.022e+05
16	74	1.488e+05	3332.95	-0.07	-7497.32	0.0	1062.09	4057.89	1.81	5735.07	2518.90	-3.446e+05
		-3.446e+05	2518.90	2.32e-03	0.0	450.0	1062.09	-3439.43	1.81	5735.07	3332.95	-2.054e+05
17	1	2.629e+05	3.181e+04	-0.07	-1.138e+04	0.0	1697.23	6256.30	-90.83	-1.362e+05	3.181e+04	-5.107e+05
		-5.107e+05	-9069.88	-1.92e-03	0.0	450.0	1697.23	-5122.37	-90.83	-1.362e+05	-9069.88	-2.555e+05
17	2	2.895e+05	4.747e+04	-0.09	-1.182e+04	0.0	2738.81	5550.49	-137.90	-1.946e+05	4.747e+04	-2.944e+05
		-4.568e+05	-1.458e+04	-1.41e-03	0.0	450.0	2738.81	-6272.58	-137.90	-1.946e+05	-1.458e+04	-4.568e+05
17	3	1.701e+05	2.145e+04	-0.04	-7396.95	0.0	1221.37	3904.59	-59.66	-8.959e+04	2.145e+04	-2.924e+05
		-2.924e+05	-5396.38	-1.94e-03	0.0	450.0	1221.37	-3492.36	-59.66	-8.959e+04	-5396.38	-1.996e+05
17	33	3.436e+06	1.191e+05	-0.60	-8341.07	0.0	1.211e+04	-1.104e+04	127.38	2.750e+04	6.759e+04	3.436e+06
		-3.411e+06	6.759e+04	0.47	0.0	450.0	1.211e+04	-1.939e+04	127.38	2.750e+04	1.191e+05	-3.411e+06
17	36	2.854e+06	-8745.61	0.49	-8341.07	0.0	-8736.13	1.932e+04	-295.90	-2.706e+05	-8745.61	-3.961e+06
		-3.961e+06	-1.360e+05	-0.48	0.0	450.0	-8736.13	1.097e+04	-295.90	-2.706e+05	-1.360e+05	2.854e+06
17	65	2.637e+06	9.180e+04	-0.48	-8341.07	0.0	9871.11	-7766.59	84.83	-3810.59	5.952e+04	2.637e+06
		-2.735e+06	5.952e+04	0.37	0.0	450.0	9871.11	-1.611e+04	84.83	-3810.59	9.180e+04	-2.735e+06
17	68	2.178e+06	-672.71	0.37	-8341.07	0.0	-6499.94	1.604e+04	-253.35	-2.393e+05	-672.71	-3.162e+06
		-3.162e+06	-1.088e+05	-0.38	0.0	450.0	-6499.94	7696.42	-253.35	-2.393e+05	-1.088e+05	2.178e+06
17	69	1.879e+05	2.316e+04	-0.05	-8163.31	0.0	1268.95	4417.78	-65.43	-9.816e+04	2.316e+04	-3.491e+05
		-3.491e+05	-6289.68	-1.68e-03	0.0	450.0	1268.95	-3745.53	-65.43	-9.816e+04	-6289.68	-1.979e+05
17	70	2.079e+05	3.360e+04	-0.06	-8459.58	0.0	1963.34	3947.24	-96.81	-1.371e+05	3.360e+04	-2.049e+05
		-3.321e+05	-9963.16	-1.18e-03	0.0	450.0	1963.34	-4512.34	-96.81	-1.371e+05	-9963.16	-3.321e+05
17	71	1.879e+05	2.316e+04	-0.05	-8163.31	0.0	1268.95	4417.78	-65.43	-9.816e+04	2.316e+04	-3.491e+05
		-3.491e+05	-6289.68	-1.68e-03	0.0	450.0	1268.95	-3745.53	-65.43	-9.816e+04	-6289.68	-1.979e+05
17	72	2.008e+05	3.047e+04	-0.06	-8370.70	0.0	1755.03	4088.40	-87.40	-1.254e+05	3.047e+04	-2.482e+05
		-2.918e+05	-8861.12	-1.25e-03	0.0	450.0	1755.03	-4282.30	-87.40	-1.254e+05	-8861.12	-2.918e+05
17	73	1.879e+05	2.316e+04	-0.05	-8163.31	0.0	1268.95	4417.78	-65.43	-9.816e+04	2.316e+04	-3.491e+05
		-3.491e+05	-6289.68	-1.68e-03	0.0	450.0	1268.95	-3745.53	-65.43	-9.816e+04	-6289.68	-1.979e+05
...												
128	74	-2.945e+06	-8867.57	4.08e-03	0.0	962.5	-1024.52	-1.709e+04	12.06	1271.57	2739.27	-2.945e+06
Trave		**M3 mx/mn**	**M2 mx/mn**	**D 2 / D 3**	**Q 2 / Q 3**		**N**	**V 2**	**V 3**	**T**		
		-8.529e+06	-2.263e+05	-1.01	-7.343e+04		-3.416e+04	-3.966e+04	-766.59	-4.237e+05		
		5.632e+06	1.988e+05	1.53	0.0		3.004e+04	3.377e+04	662.17	4.066e+05		

Trave f.	**Cmb**	**M3 mx/mn**	**M2 mx/mn**	**D 2 / D 3**	**Pt**	**Pos.**	**N**	**V 2**	**V 3**	**T**	**M 2**	**M 3**
		daN cm	daN cm	cm	daN/cm2	cm	daN	daN	daN	daN cm	daN cm	daN cm
30	1	2.411e+06	2.277e+05	0.05	-2.02	0.0	-4322.15	-3.095e+04	-4537.61	-1.452e+05	2.277e+05	2.411e+06
		5.920e+05	-6.347e+04	-5.99e-04		64.2	-4322.15	-2.577e+04	-4537.61	-1.452e+05	-6.347e+04	5.920e+05
30	2	2.448e+06	2.424e+05	-0.05	-2.16	0.0	-2473.03	-3.501e+04	-4627.95	-1.479e+05	2.424e+05	2.448e+06
		3.856e+05	-5.458e+04	-5.99e-04		64.2	-2473.03	-2.929e+04	-4627.95	-1.480e+05	-5.458e+04	3.856e+05
30	4	1.701e+06	1.850e+05	-0.03	-1.58	0.0	-1496.49	-2.522e+04	-3695.38	-1.163e+05	1.850e+05	1.701e+06
		2.222e+05	-5.209e+04	-5.11e-04		64.2	-1496.49	-2.090e+04	-3695.38	-1.164e+05	-5.209e+04	2.222e+05
30	9	7.711e+06	6.912e+04	-2.17	-2.32	0.0	-3.239e+04	-1.320e+04	985.87	-2.443e+05	4992.02	7.711e+06
		5.863e+06	4992.02	8.37e-04		64.2	-3.239e+04	-1.001e+04	985.87	-2.440e+05	6.912e+04	5.863e+06
30	10	5.226e+06	1.442e+05	-1.03	-1.92	0.0	-4.740e+04	-2.659e+04	-2728.99	-1.355e+05	1.442e+05	5.226e+06
		4.129e+06	-3.025e+04	-0.01		64.2	-4.740e+04	-2.192e+04	-2728.99	-1.356e+05	-3.025e+04	4.129e+06
30	11	-1.652e+06	2.136e+05	1.03	-1.23	0.0	4.221e+04	-2.197e+04	-4423.84	-9.165e+04	2.136e+05	-1.652e+06
		-3.406e+06	-7.086e+04	0.01		64.2	4.221e+04	-1.841e+04	-4423.84	-9.161e+04	-7.086e+04	-3.406e+06
30	12	-4.138e+06	3.529e+05	2.17	-0.84	0.0	2.720e+04	-3.536e+04	-8138.70	1.713e+04	3.529e+05	-4.138e+06
		-5.141e+06	-1.702e+05	-1.80e-03		64.2	2.720e+04	-3.033e+04	-8138.70	1.675e+04	-1.702e+05	-5.141e+06
30	36	-3.347e+06	4.512e+05	2.46	-0.74	0.0	-1.952e+04	-4.904e+04	-1.076e+04	9.886e+04	4.512e+05	-3.347e+06
		-3.566e+06	-2.400e+05	-0.03		64.2	-1.952e+04	-4.190e+04	-1.076e+04	9.806e+04	-2.400e+05	-3.566e+06
30	41	6.466e+06	4.776e+04	-1.71	-2.16	0.0	-2.611e+04	-1.496e+04	153.52	-2.189e+05	3.698e+04	6.466e+06
		4.701e+06	3.698e+04	5.23e-04		64.2	-2.611e+04	-1.160e+04	153.52	-2.187e+05	4.776e+04	4.701e+06
30	42	4.507e+06	1.466e+05	-0.82	-1.85	0.0	-3.794e+04	-2.548e+04	-2773.62	-1.336e+05	1.466e+05	4.507e+06
		3.321e+06	-3.069e+04	-0.01		64.2	-3.794e+04	-2.096e+04	-2773.62	-1.337e+05	-3.069e+04	3.321e+06
30	43	-9.333e+05	2.113e+05	0.82	-1.29	0.0	3.275e+04	-2.308e+04	-4379.21	-9.356e+04	2.113e+05	-9.333e+05
		-2.599e+06	-7.042e+04	9.51e-03		64.2	3.275e+04	-1.938e+04	-4379.21	-9.354e+04	-7.042e+04	-2.599e+06
30	44	-2.893e+06	3.209e+05	1.71	-0.99	0.0	2.093e+04	-3.360e+04	-7306.35	-8249.73	3.209e+05	-2.893e+06
		-3.979e+06	-1.489e+05	-1.49e-03		64.2	2.093e+04	-2.874e+04	-7306.35	-8555.46	-1.489e+05	-3.979e+06
30	68	-2.301e+06	3.936e+05	1.94	-0.91	0.0	-1.584e+04	-4.392e+04	-9247.39	5.315e+04	3.936e+05	-2.301e+06
		-2.779e+06	-2.004e+05	-0.02		64.2	-1.584e+04	-3.745e+04	-9247.39	5.252e+04	-2.004e+05	-2.779e+06
30	69	1.772e+06	1.731e+05	0.03	-1.50	0.0	-3333.81	-2.266e+04	-3540.28	-1.125e+05	1.731e+05	1.772e+06
		4.437e+05	-5.411e+04	-4.83e-04		64.2	-3333.81	-1.876e+04	-3540.28	-1.125e+05	-5.411e+04	4.437e+05
30	70	1.797e+06	1.828e+05	-0.03	-1.60	0.0	-2101.07	-2.536e+04	-3600.51	-1.143e+05	1.828e+05	1.797e+06
		3.061e+05	-4.818e+04	-4.82e-04		64.2	-2101.07	-2.111e+04	-3600.51	-1.144e+05	-4.818e+04	3.061e+05
30	71	1.772e+06	1.731e+05	0.03	-1.50	0.0	-3333.81	-2.266e+04	-3540.28	-1.125e+05	1.731e+05	1.772e+06
		4.437e+05	-5.411e+04	-4.83e-04		64.2	-3333.81	-1.876e+04	-3540.28	-1.125e+05	-5.411e+04	4.437e+05
30	72	1.789e+06	1.799e+05	-0.03	-1.57	0.0	-2470.89	-2.455e+04	-3582.44	-1.138e+05	1.799e+05	1.789e+06

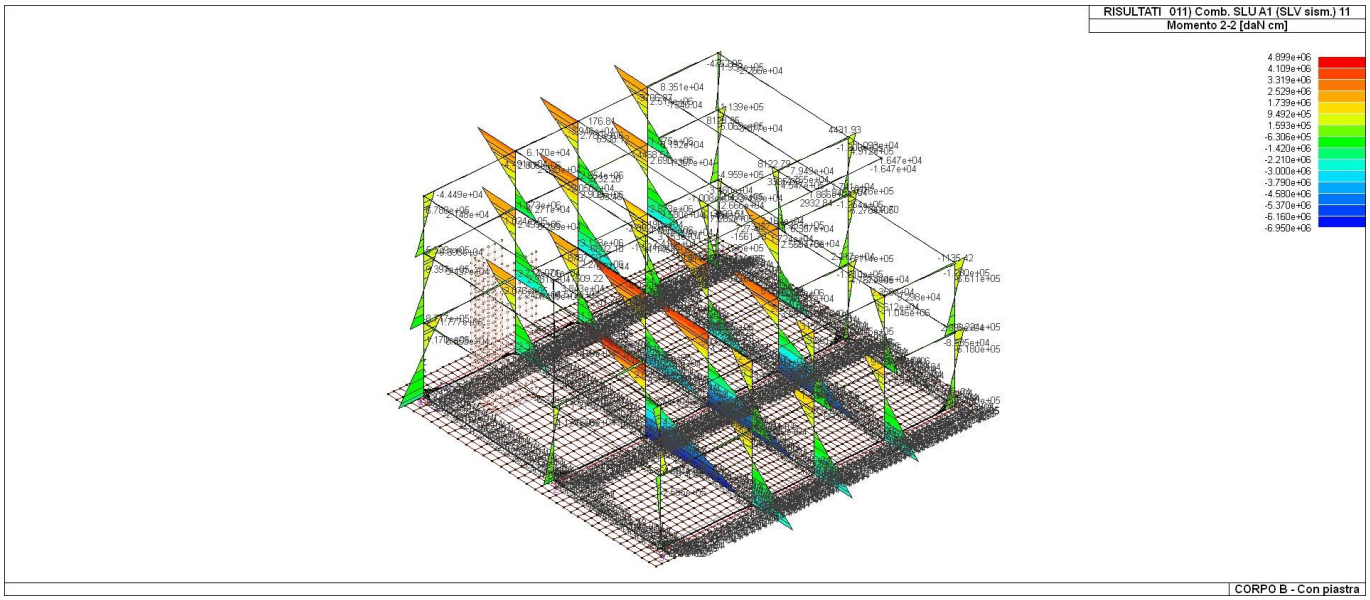
		3.474e+05	-4.996e+04	-4.83e-04		64.2	-2470.89	-2.040e+04	-3582.44	-1.138e+05	-4.996e+04	3.474e+05
30	73	1.772e+06	1.731e+05	0.03	-1.50	0.0	-3333.81	-2.266e+04	-3540.28	-1.125e+05	1.731e+05	1.772e+06
		4.437e+05	-5.411e+04	-4.83e-04		64.2	-3333.81	-1.876e+04	-3540.28	-1.125e+05	-5.411e+04	4.437e+05
30	74	1.787e+06	1.789e+05	-0.03	-1.56	0.0	-2594.16	-2.428e+04	-3576.42	-1.136e+05	1.789e+05	1.787e+06
		3.612e+05	-5.055e+04	-4.83e-04		64.2	-2594.16	-2.017e+04	-3576.42	-1.136e+05	-5.055e+04	3.612e+05
31	1	2.462e+06	9.876e+04	0.02	-1.71	0.0	-1.251e+04	-2.706e+04	-2165.24	-5.274e+04	9.876e+04	2.462e+06
		1.131e+06	-1.462e+04	-2.54e-05		52.4	-1.251e+04	-2.379e+04	-2165.24	-5.268e+04	-1.462e+04	1.131e+06
31	2	3.193e+06	1.128e+05	-0.02	-1.88	0.0	-1.759e+04	-3.251e+04	-2140.58	-5.438e+04	1.128e+05	3.193e+06
		1.591e+06	675.95	2.84e-05		52.4	-1.759e+04	-2.870e+04	-2140.58	-5.440e+04	675.95	1.591e+06
31	3	1.862e+06	6.753e+04	0.01	-1.23	0.0	-9522.05	-1.978e+04	-1497.12	-3.631e+04	6.753e+04	1.862e+06
		8.910e+05	-1.087e+04	-1.73e-05		52.4	-9522.05	-1.733e+04	-1497.12	-3.628e+04	-1.087e+04	8.910e+05
31	8	-3.279e+06	2.071e+05	0.60	-1.07	0.0	6793.49	-5.222e+04	-7165.43	6.000e+04	2.071e+05	-3.689e+06
		-3.689e+06	-1.705e+05	-1.22e-03		52.4	6793.49	-4.878e+04	-7165.43	5.982e+04	-1.705e+05	-3.279e+06
31	9	8.446e+06	1.536e+05	-0.52	-1.62	0.0	-2.851e+04	8100.36	3773.25	-1.346e+05	-4.881e+04	8.446e+06
		5.766e+06	-4.881e+04	4.39e-03		52.4	-2.851e+04	1.013e+04	3773.25	-1.344e+05	1.536e+05	5.766e+06
...												
436	74	5.902e+05	-7.885e+04	-9.39e-05	-1.35	52.4	-2760.32	2.277e+04	-1134.82	-3.134e+04	-7.885e+04	1.712e+06
Trave f.		**M3 mx/mn**	**M2 mx/mn**	**D 2 / D 3**	**Pt**		**N**	**V 2**	**V 3**	**T**		
		-7.686e+06	-9.475e+05	-2.50	-2.69		-8.214e+04	-7.167e+04	-4.417e+04	-1.423e+06		
		1.456e+07	9.146e+05	2.50	-0.43		7.355e+04	7.191e+04	4.958e+04	1.509e+06		



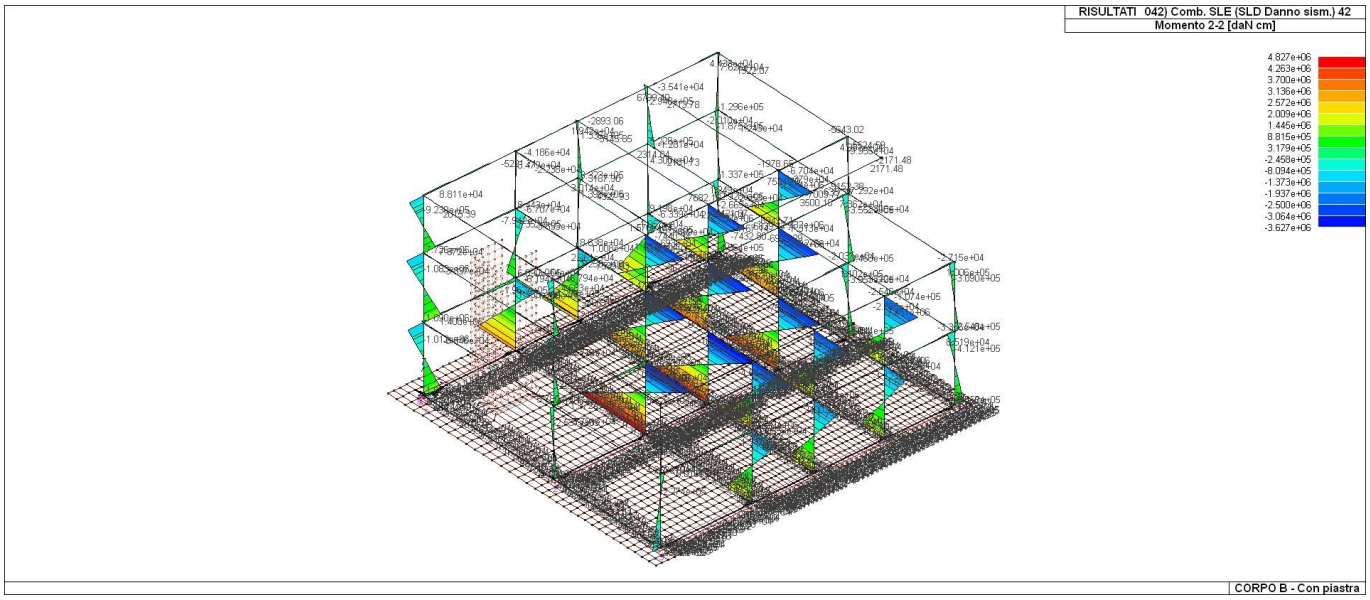
43_RIS_M2_002_Comb. SLU A1 2



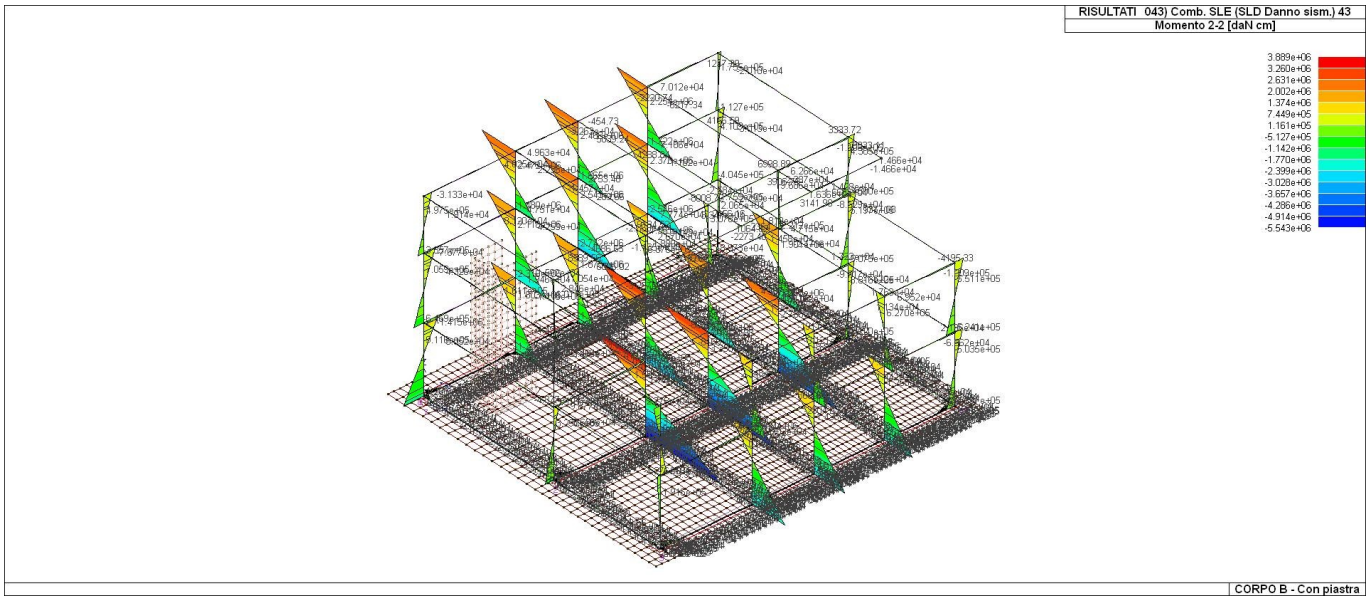
43_RIS_M2_010_Comb. SLU A1 (SLV sism.) 10



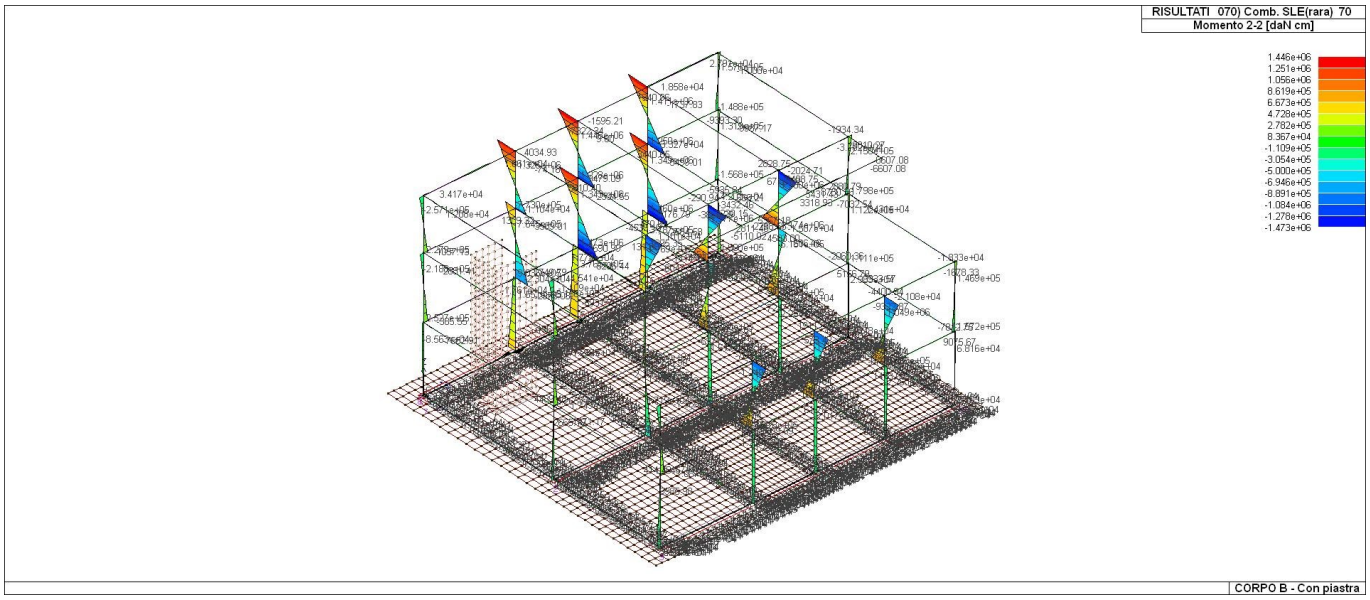
43_RIS_M2_011_Comb. SLU A1 (SLV sism.) 11



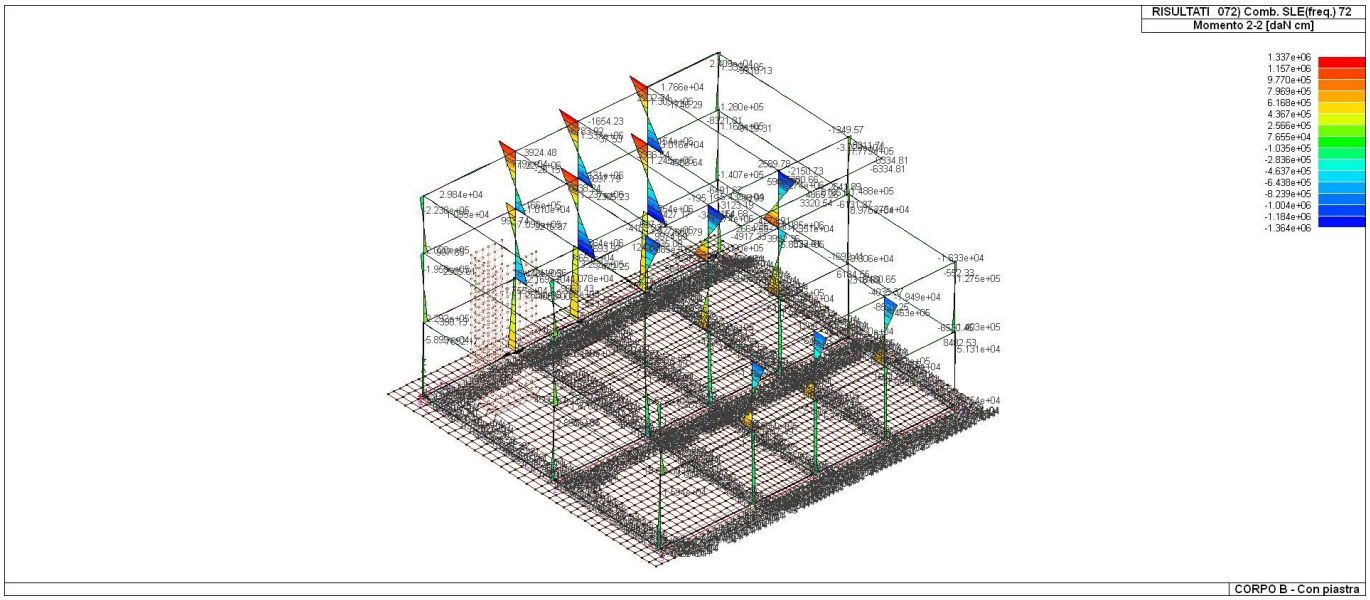
43_RIS_M2_042_Comb. SLE (SLD Danno sism.) 42



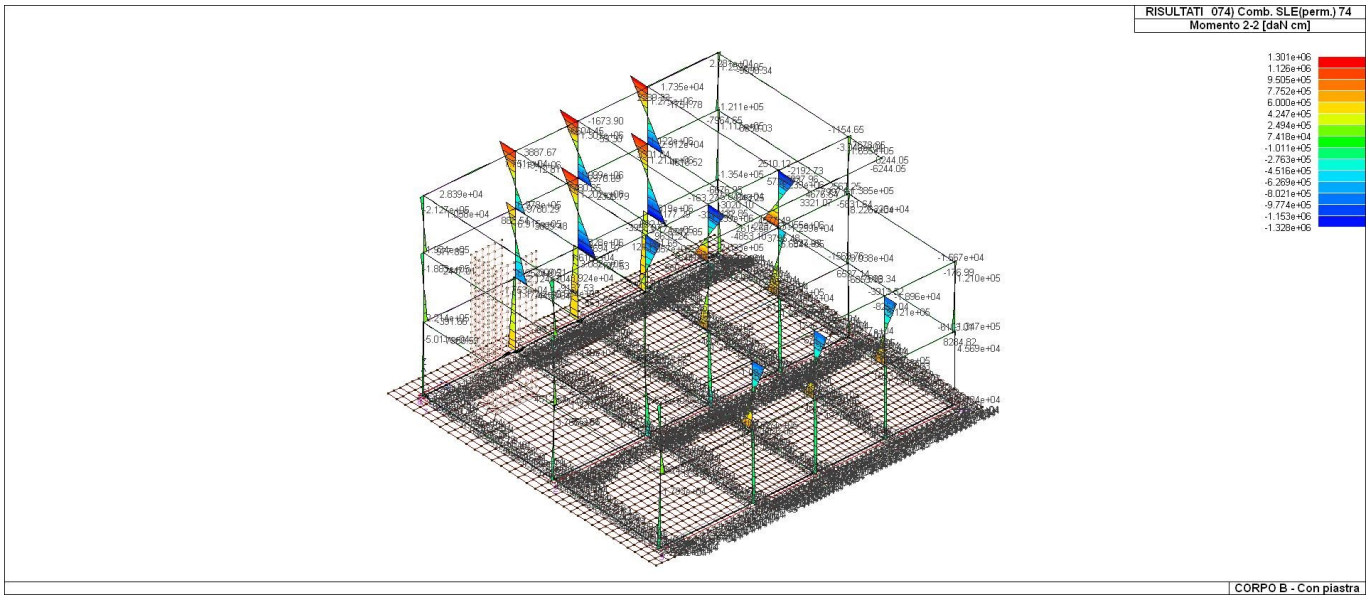
43_RIS_M2_043_Comb. SLE (SLD Danno sism.) 43



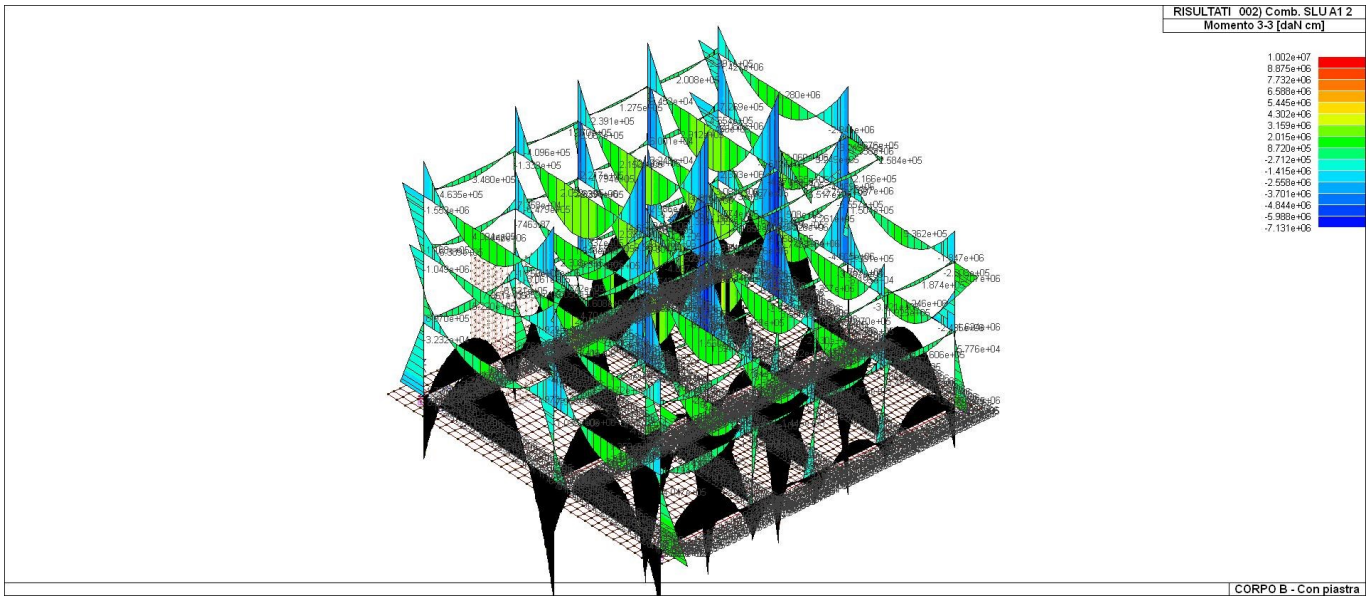
43_RIS_M2_070_Comb. SLE(rara) 70



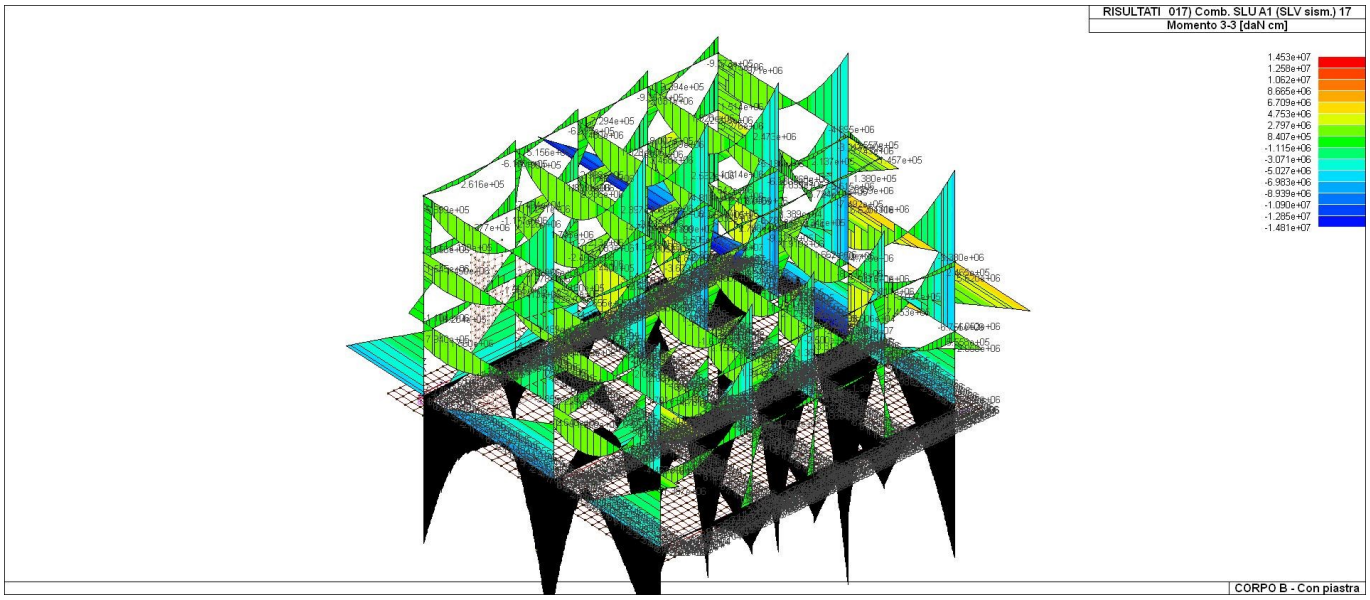
43_RIS_M2_072_Comb. SLE(freq.) 72



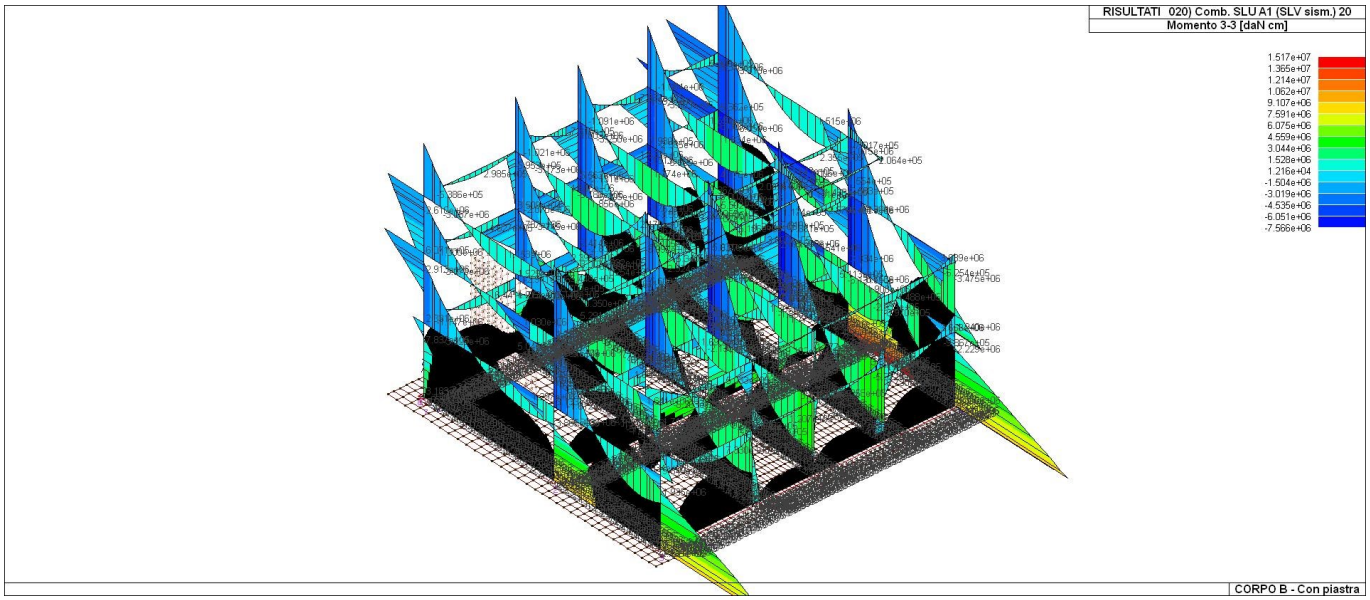
43_RIS_M2_074_Comb. SLE(perm.) 74



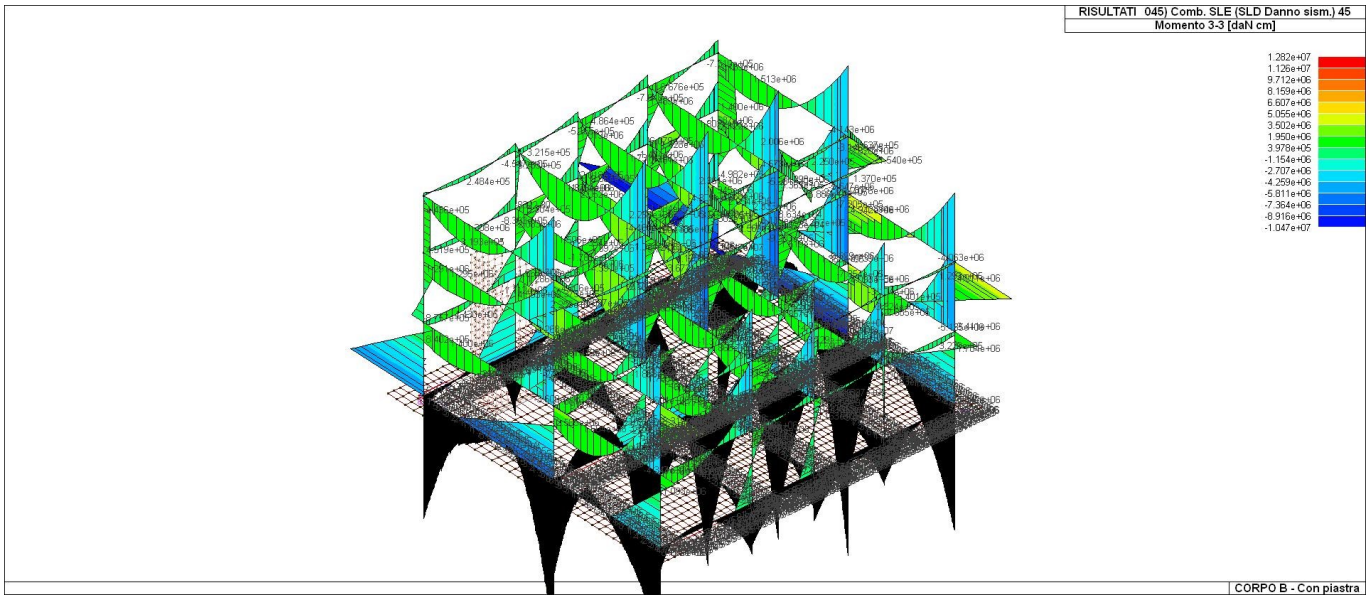
43_RIS_M3_002_Comb. SLU A1 2



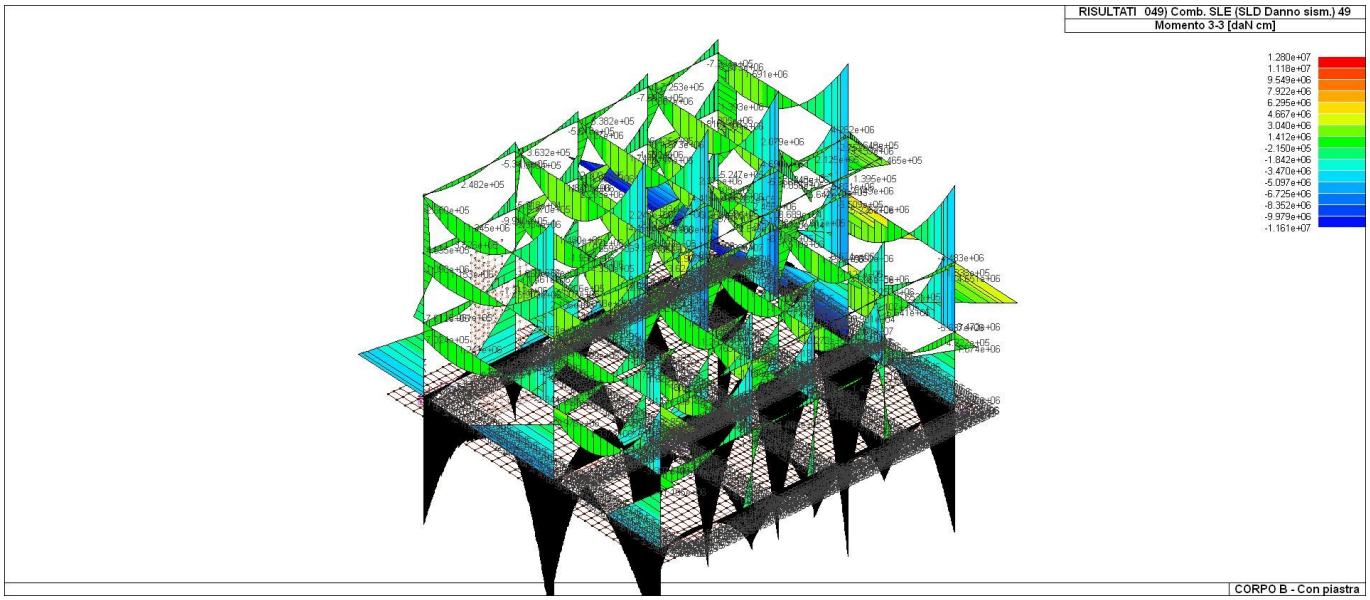
43_RIS_M3_017_Comb. SLU A1 (SLV sism.) 17



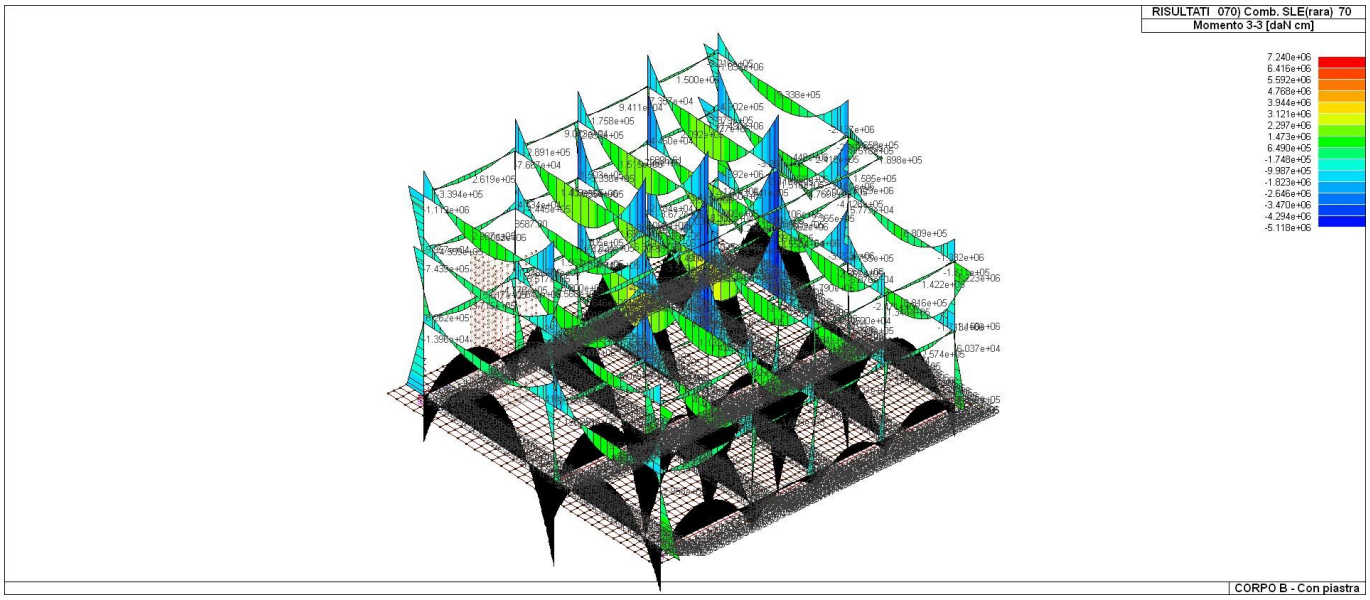
43_RIS_M3_020_Comb. SLU A1 (SLV sism.) 20



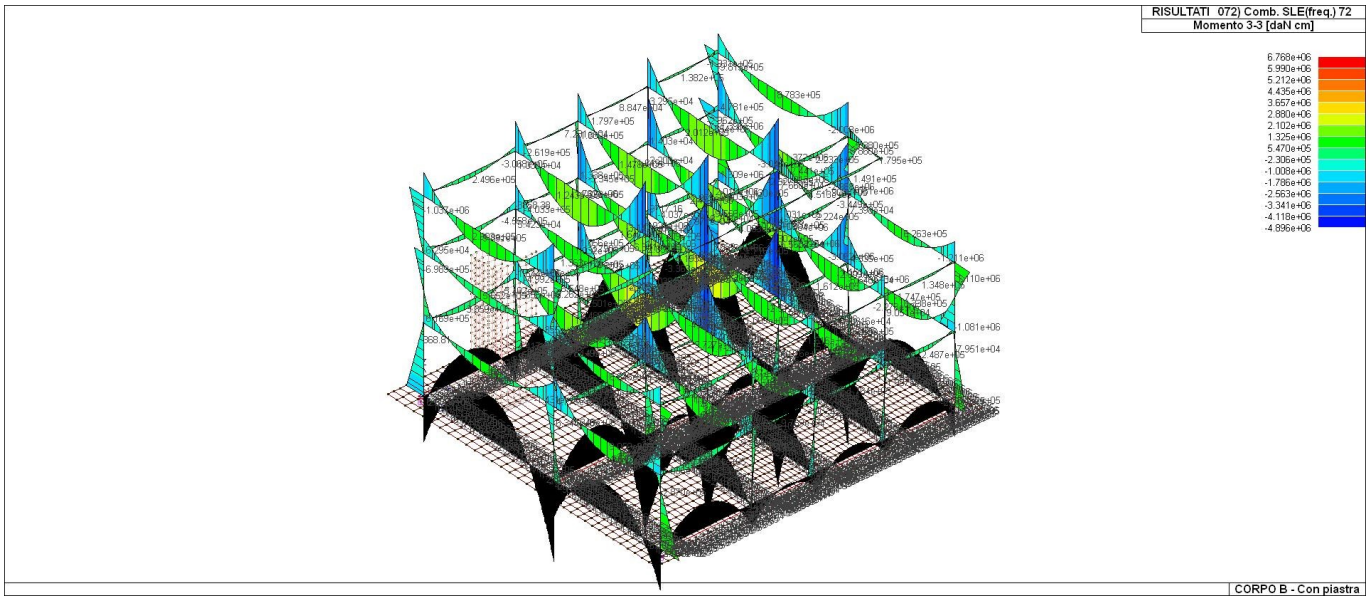
43_RIS_M3_045_Comb. SLE (SLD Danno sism.) 45



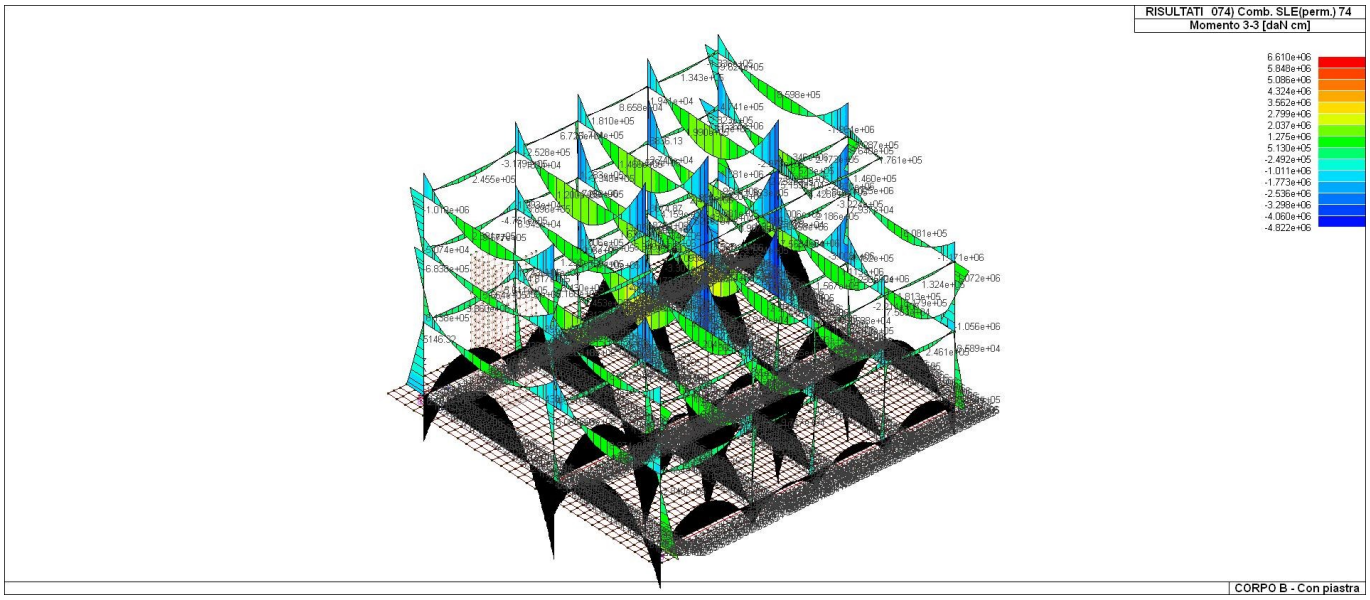
43_RIS_M3_049_Comb. SLE (SLD Danno sism.) 49



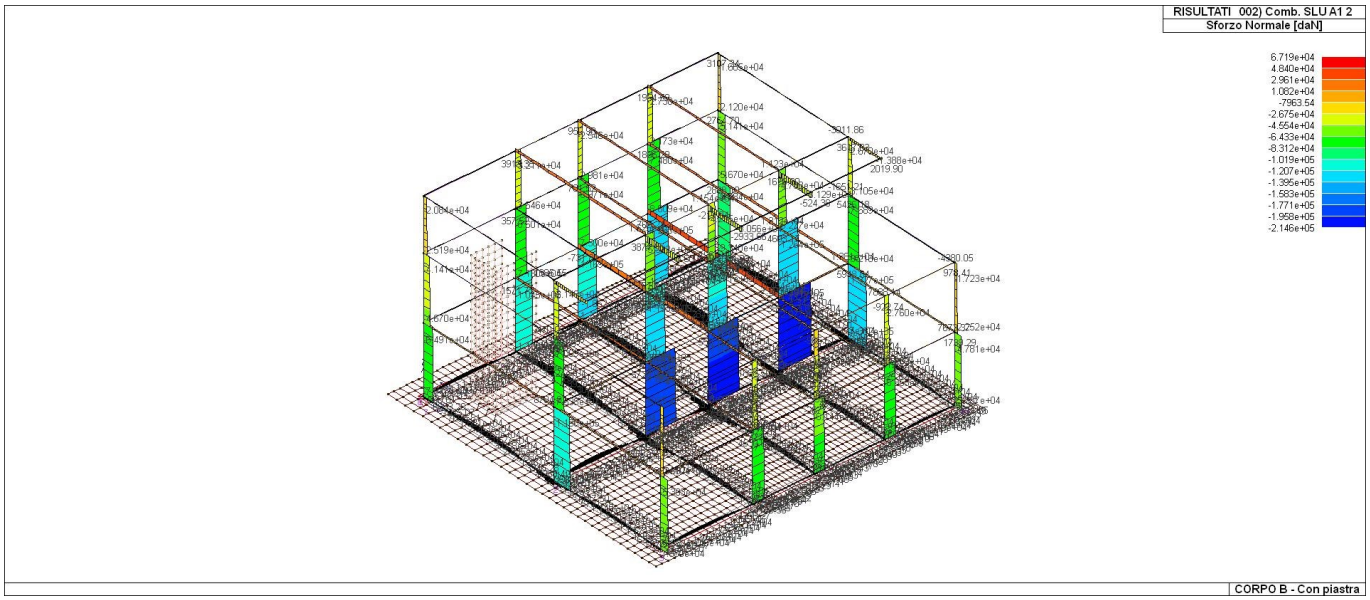
43_RIS_M3_070_Comb. SLE(rara) 70



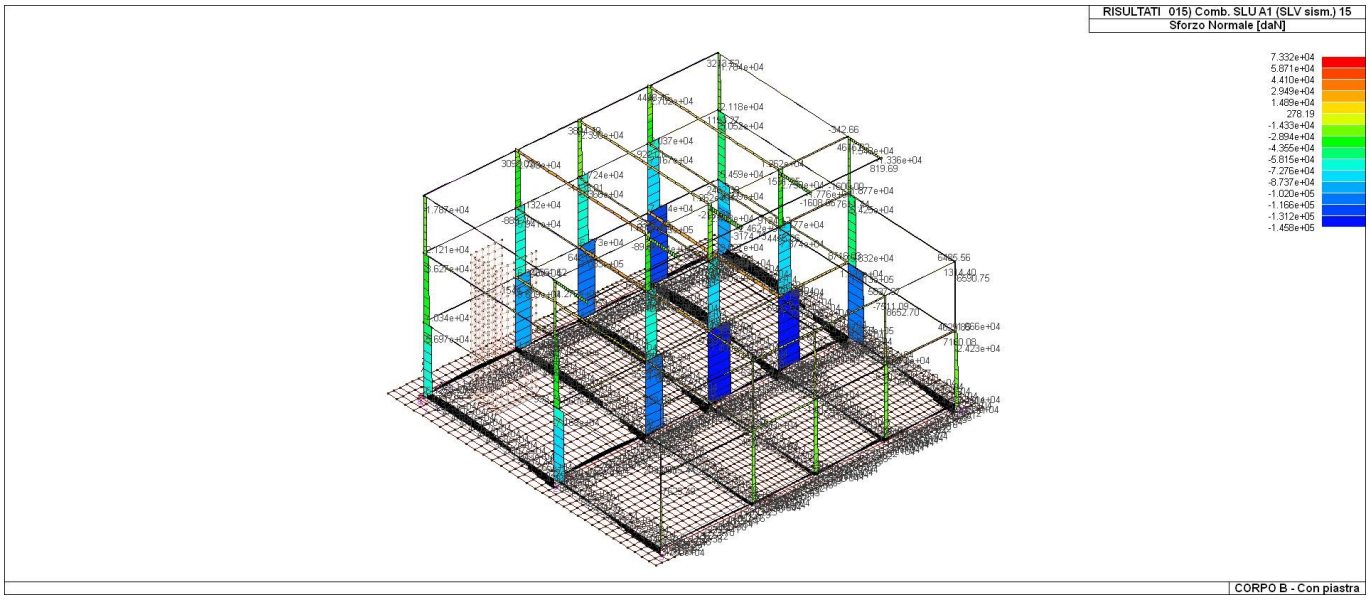
43_RIS_M3_072_Comb. SLE(freq.) 72



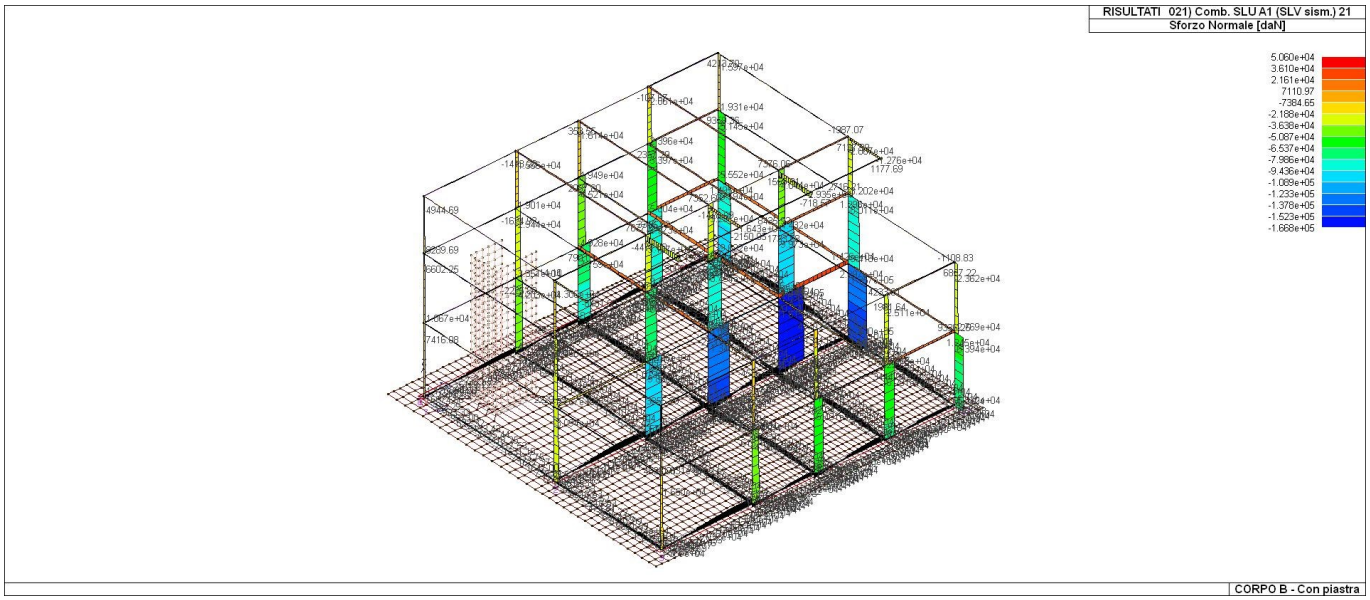
43_RIS_M3_074_Comb. SLE(perm.) 74



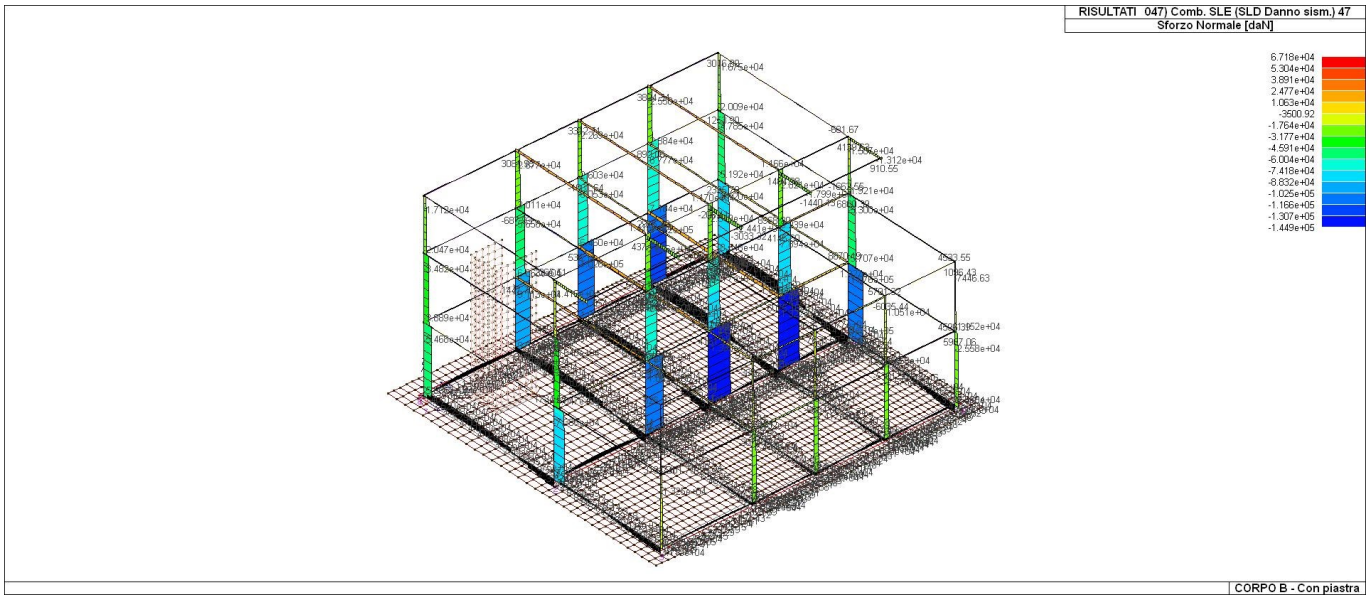
43_RIS_N_002_Comb. SLU A1 2



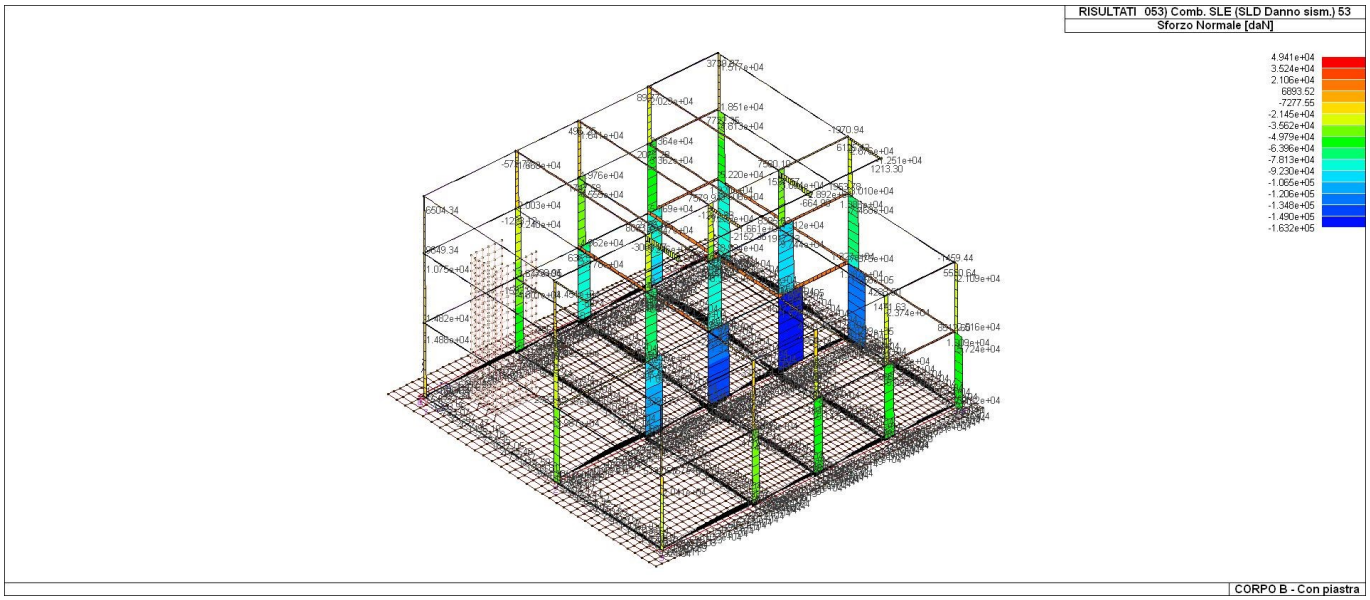
43_RIS_N_015_Comb. SLU A1 (SLV sism.) 15



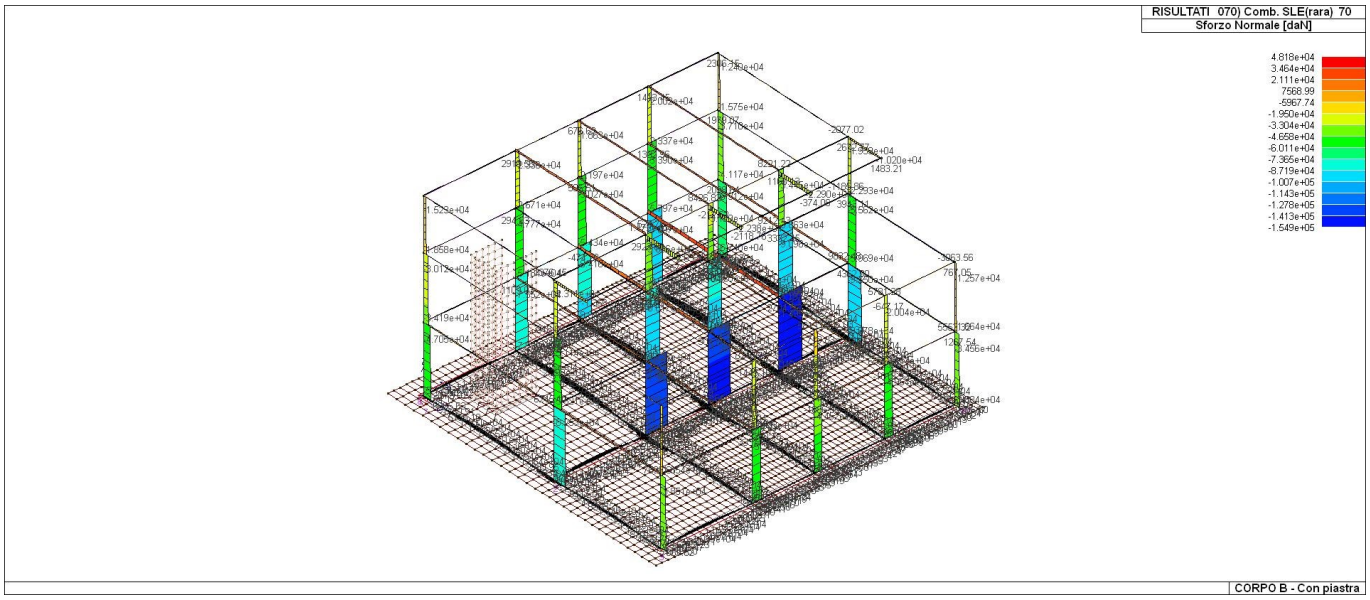
43_RIS_N_021_Comb. SLU A1 (SLV sism.) 21



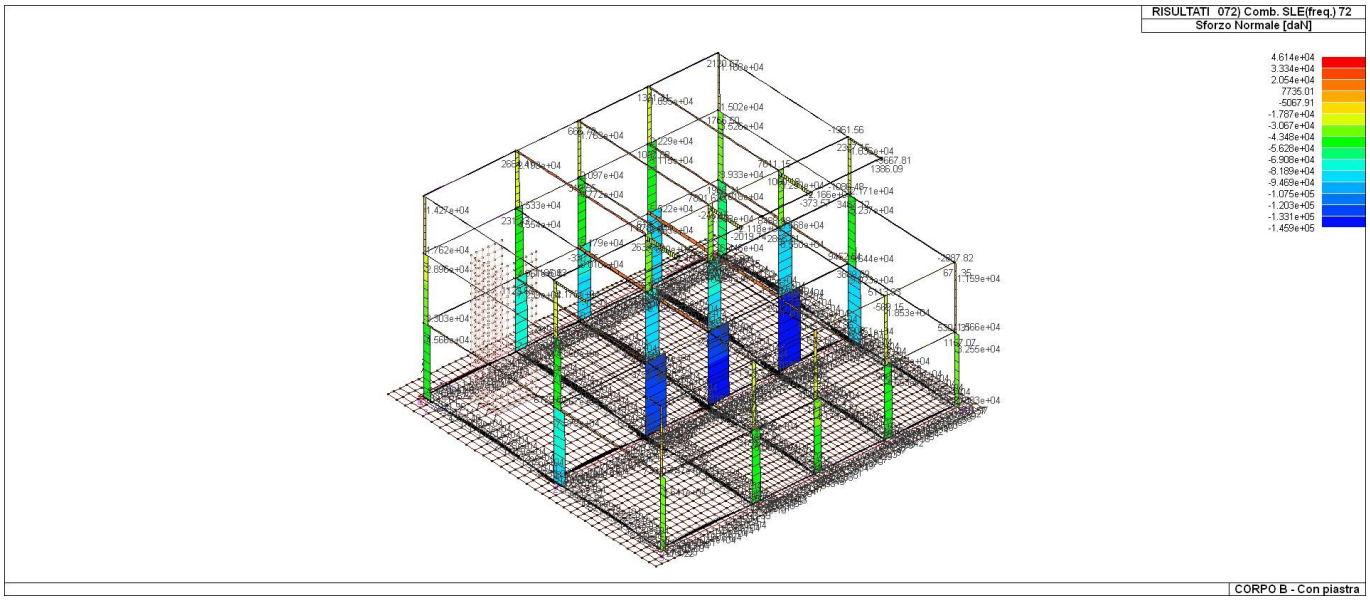
43_RIS_N_047_Comb. SLE (SLD Danno sism.) 47



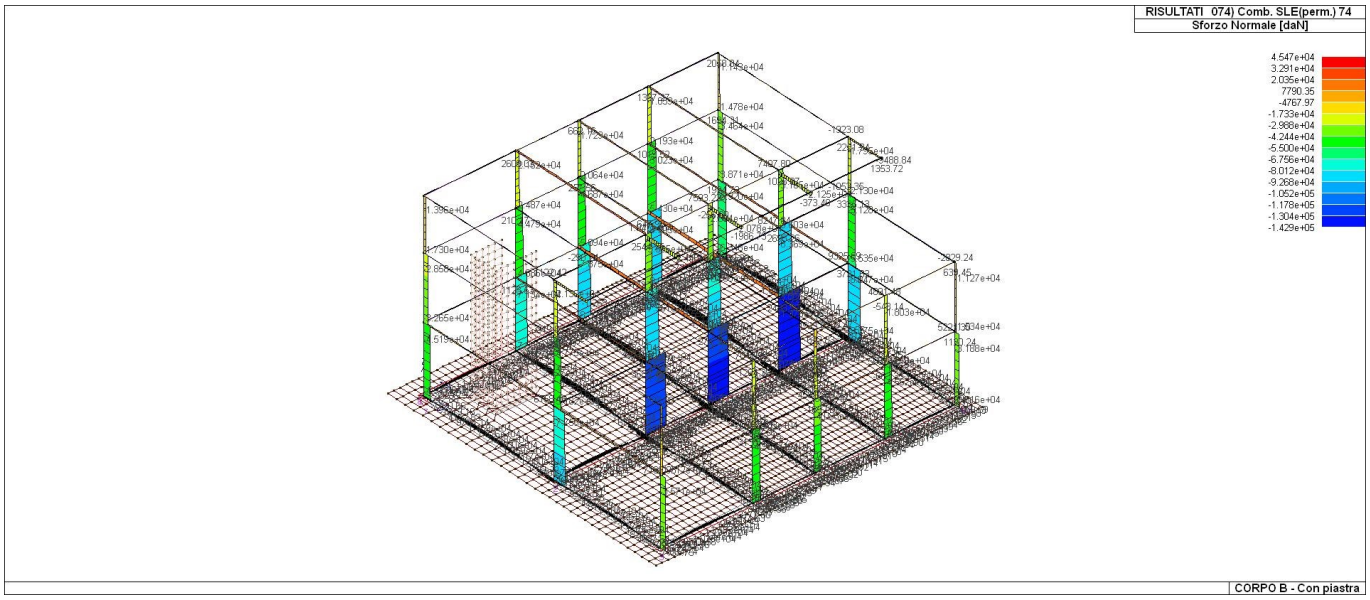
43_RIS_N_053_Comb. SLE (SLD Danno sism.) 53



43_RIS_N_070_Comb. SLE(rara) 70



43_RIS_N_072_Comb. SLE(freq.) 72

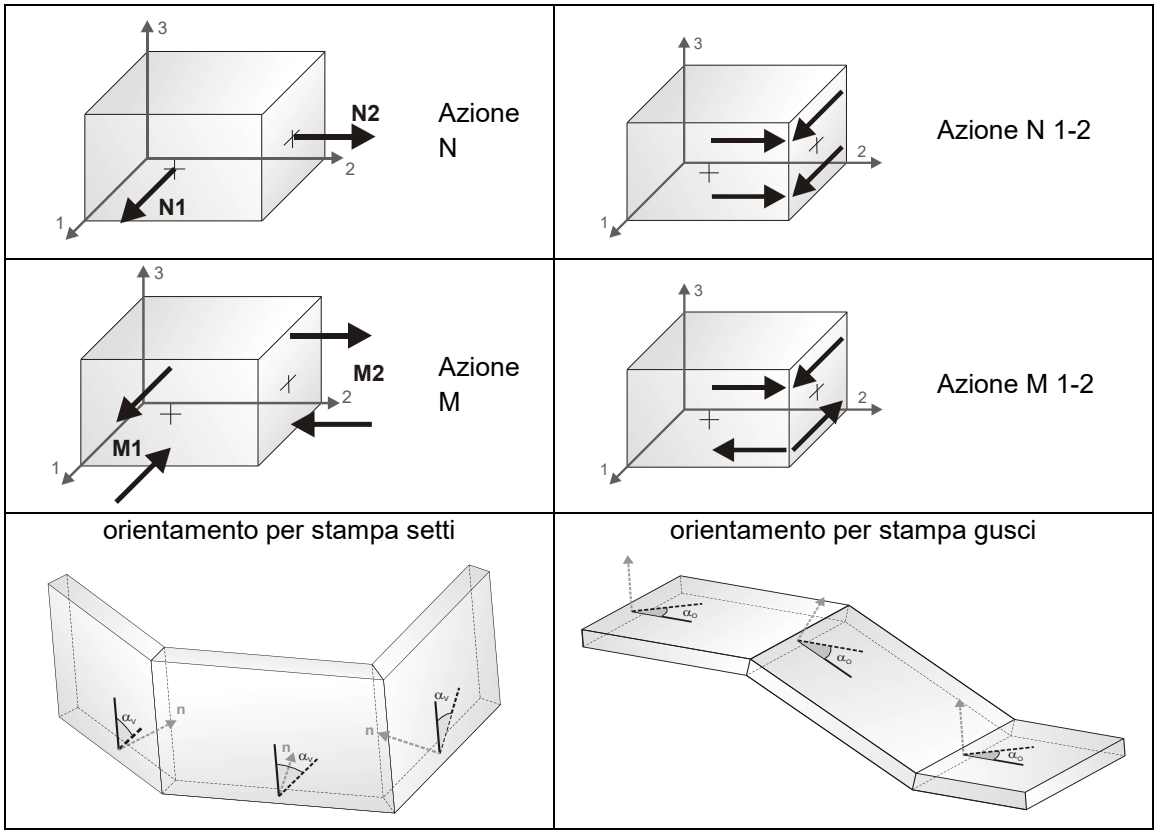


43_RIS_N_074_Comb. SLE(perm.) 74

RISULTATI ELEMENTI TIPO SHELL

LEGENDA RISULTATI ELEMENTI TIPO SHELL

Il controllo dei risultati delle analisi condotte, per quanto concerne gli elementi tipo shell, è possibile in relazione alle tabelle sottoriportate.
Per ogni elemento, e per ogni combinazione(o caso di carico) vengono riportati i risultati più significativi.



In particolare vengono riportati in ogni nodo di un elemento per ogni combinazione:

tensione di Von Mises		(valore riassuntivo del complessivo stato di sollecitazione)
N max		sforzo membranale principale massimo
N min		sforzo membranale principale minimo
M max		sforzo flessionale principale massimo
M min		sforzo flessionale principale minimo
N1	**N2**	sforzi membranali e flessionali in direzione locale 1 e 2 dell'elemento
N1-2	**M1**	(lo sforzo 2-1 è uguale allo sforzo 1-2 per la reciprocità delle tensioni
M2	**M1-2**	tangenziali)

I suddetti risultati possono a scelta del progettista essere preceduti o sostituiti da valori di sollecitazione non più riferiti al sistema locale dell'elemento ma al sistema globale.
In questo caso gli elementi vengono raggruppati in gruppi (M_S: macro gusci o macro setti, raggruppati per materiale, spessore, e posizione fisica) per la valutazione dei valori mediati ai nodi appartenenti agli elementi dei gruppi stessi.
I valori di sollecitazione sono, in questo caso, riferiti ad una terna specifica del gruppo ruotata di α_O attorno all'asse Z per i gusci e ruotata di α_V attorno alla normale (che per definizione è orizzontale) al piano del setto.
Per i setti, in particolare, se α_V è zero, l'asse '1-1 rappresenta la verticale e l'asse '2-2 l'orizzontale contenuta nel setto.
Le azioni sui setti possono essere espresse anche con formato macro, cioè riferite all'intero macroelemento.

In particolare vengono riportati per ogni quota Z dei nodi e per ogni combinazione i seguenti valori:

N memb.	Azione membranale complessiva agente sulla parete in direzione Z
V memb.	Azione complessiva di taglio agente nel piano del macroelemento
V orto	Azione complessiva di taglio agente in direzione perpendicolare al macroelemento
M memb.	Azione flessionale complessiva agente nel piano del macroelemento
M orto	Azione flessionale complessiva agente in direzione perpendicolare al macroelemento
T	Azione torsionale complessiva agente nel piano orizzontale

Macro	Tipo	Angolo 1-Z (gradi)
2	**Setto**	**0.0**

M_S	Cmb	Z	N memb.	V memb.	V orto	M memb.	M orto	T
		cm	daN	daN	daN	daN cm	daN cm	daN cm
2	1	0.0	-1.135e+04	-2805.99	502.68	2.477e+04	-3.387e+04	1.371e+04
2	1	47.56	-1.172e+04	-732.94	80.13	8.365e+04	-1.991e+04	-1.013e+04
2	1	95.11	-1.128e+04	73.44	237.74	9.386e+04	-1.302e+04	-2.294e+04
2	1	142.67	-1.075e+04	265.16	248.34	9.093e+04	-5244.27	-2.759e+04
2	1	190.22	-1.015e+04	276.05	209.37	8.305e+04	36.09	-2.909e+04
2	1	237.78	-9494.08	247.18	164.19	7.368e+04	2901.86	-2.852e+04
2	1	285.33	-8809.39	217.41	127.68	6.425e+04	4109.61	-2.668e+04
2	1	332.89	-8106.64	193.59	101.72	5.532e+04	4363.75	-2.423e+04
2	1	380.44	-7393.37	174.94	84.11	4.705e+04	4151.06	-2.162e+04
2	1	428.00	-6673.49	160.42	72.33	3.944e+04	3766.10	-1.911e+04
2	1	473.22	-5965.96	147.91	65.01	3.278e+04	3363.66	-1.691e+04
2	1	518.44	-5273.61	136.49	58.88	2.658e+04	3018.22	-1.488e+04
2	1	563.67	-4578.21	126.28	53.62	2.082e+04	2739.59	-1.302e+04
2	1	608.89	-3879.93	116.31	48.47	1.549e+04	2519.33	-1.129e+04
2	1	654.11	-3178.86	106.01	42.67	1.060e+04	2320.97	-9663.50
2	1	699.33	-2474.97	94.61	35.48	6200.44	2074.13	-8149.87
2	1	744.56	-1768.24	79.75	26.38	2399.79	1663.06	-6796.21
2	1	789.78	-1059.38	52.03	16.55	-512.11	944.81	-5583.98
2	1	835.00	-356.59	-27.02	6.18	-899.85	-27.49	-2711.19
2	2	0.0	-1.087e+04	-2432.72	673.70	5.086e+04	-6.172e+04	2.389e+04
2	2	47.56	-1.142e+04	-571.22	372.00	1.117e+05	-3.564e+04	-5209.62
2	2	95.11	-1.106e+04	156.86	413.19	1.219e+05	-1.933e+04	-2.879e+04
2	2	142.67	-1.059e+04	331.50	366.73	1.172e+05	-6997.91	-3.741e+04
2	2	190.22	-1.001e+04	340.31	292.88	1.065e+05	485.37	-4.005e+04
2	2	237.78	-9377.42	309.08	225.74	9.413e+04	4319.28	-3.924e+04
2	2	285.33	-8708.07	274.81	174.98	8.186e+04	5856.13	-3.654e+04
2	2	332.89	-8018.91	245.69	139.53	7.038e+04	6122.66	-3.301e+04
2	2	380.44	-7318.02	222.10	115.48	5.984e+04	5780.23	-2.931e+04
2	2	428.00	-6609.46	203.41	99.32	5.018e+04	5218.32	-2.578e+04
2	2	473.22	-5911.78	187.58	89.16	4.173e+04	4640.70	-2.272e+04
2	2	518.44	-5228.41	173.32	80.61	3.386e+04	4144.18	-1.991e+04
2	2	563.67	-4541.18	160.50	73.35	2.655e+04	3740.01	-1.735e+04
2	2	608.89	-3850.30	147.95	66.32	1.976e+04	3416.58	-1.499e+04
2	2	654.11	-3155.84	134.88	58.52	1.353e+04	3125.19	-1.279e+04
2	2	699.33	-2457.77	120.21	48.97	7925.15	2772.86	-1.076e+04
2	2	744.56	-1756.07	100.92	37.06	3075.88	2208.71	-8948.67
2	2	789.78	-1051.65	65.49	24.41	-633.06	1251.40	-7334.05
2	2	835.00	-355.04	-30.10	9.42	-1125.47	-29.25	-3542.19
2	4	0.0	-8368.09	-2172.21	440.61	8438.93	-3.953e+04	1.567e+04
2	4	47.56	-8807.41	-604.88	207.82	6.449e+04	-2.338e+04	-4411.88
2	4	95.11	-8547.99	34.14	269.96	7.779e+04	-1.337e+04	-1.959e+04
2	4	142.67	-8186.73	203.62	250.62	7.775e+04	-5112.75	-2.528e+04
2	4	190.22	-7746.32	224.93	203.59	7.200e+04	77.17	-2.716e+04
2	4	237.78	-7255.97	208.05	157.90	6.428e+04	2799.05	-2.673e+04
2	4	285.33	-6737.00	186.34	122.68	5.624e+04	3922.15	-2.499e+04
2	4	332.89	-6202.16	167.47	97.96	4.852e+04	4147.56	-2.265e+04
2	4	380.44	-5658.29	152.07	81.20	4.134e+04	3937.70	-2.016e+04
2	4	428.00	-5108.78	139.82	69.96	3.471e+04	3567.51	-1.777e+04

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2	74	835.00	-274.06	-21.23	5.77	-725.88	-20.58	-2220.40
M_S			**N memb.**	**V memb.**	**V orto**	**M memb.**	**M orto**	**T**
			-2.407e+04	-5484.96	-2196.40	-1.505e+06	-3.157e+05	-3.003e+05
			6891.01	2439.56	2873.98	1.472e+06	2.410e+05	1.836e+05

Macro	Tipo	Angolo 1-Z (gradi)
3	**Setto**	**0.0**

M_S	**Cmb**	**Z**	**N memb.**	**V memb.**	**V orto**	**M memb.**	**M orto**	**T**
		cm	daN	daN	daN	daN cm	daN cm	daN cm
3	2	0.0	-1.716e+04	-297.25	-3652.04	-3444.10	1.162e+05	-1.539e+04
3	2	47.56	-1.515e+04	-607.55	-718.87	5.991e+04	1.225e+04	-2.739e+04
3	2	95.11	-1.320e+04	-406.24	-94.10	7.428e+04	-2739.94	-2.177e+04
3	2	142.67	-1.174e+04	-231.18	40.12	7.534e+04	-2742.51	-1.977e+04
3	2	190.22	-1.062e+04	-110.46	37.52	6.996e+04	-604.85	-1.833e+04
3	2	237.78	-9695.87	-37.72	16.14	6.206e+04	687.37	-1.722e+04
3	2	285.33	-8875.38	1.61	2.53	5.373e+04	1099.43	-1.637e+04
3	2	332.89	-8103.59	19.94	-2.98	4.590e+04	1064.50	-1.570e+04
3	2	380.44	-7353.22	25.90	-4.20	3.880e+04	880.79	-1.516e+04
3	2	428.00	-6611.78	25.28	-3.63	3.241e+04	681.48	-1.471e+04
3	2	473.22	-5892.46	21.76	-3.02	2.688e+04	516.35	-1.437e+04
3	2	518.44	-5192.86	16.92	-2.60	2.176e+04	383.90	-1.409e+04
3	2	563.67	-4494.56	12.54	-2.07	1.703e+04	276.86	-1.388e+04
3	2	608.89	-3797.58	9.86	-1.55	1.268e+04	193.92	-1.372e+04
3	2	654.11	-3102.15	10.45	-0.96	8801.44	135.83	-1.361e+04
3	2	699.33	-2408.52	16.71	-0.30	5565.36	105.94	-1.355e+04
3	2	744.56	-1716.97	32.97	0.30	3298.01	105.61	-1.346e+04
3	2	789.78	-1027.96	65.92	0.07	2393.27	119.22	-1.299e+04
3	2	835.00	-341.99	71.63	-6.28	1295.00	28.14	-7538.03
3	3	0.0	-1.257e+04	-82.98	-3612.91	-5.606e+04	1.090e+05	-7660.24
3	3	47.56	-1.135e+04	-229.61	-698.00	-630.43	6515.84	-1.460e+04
3	3	95.11	-9979.57	-168.04	-64.44	2.274e+04	-7196.43	-1.115e+04
3	3	142.67	-8913.02	-103.56	63.82	3.161e+04	-5927.61	-9873.84
3	3	190.22	-8075.63	-53.37	54.25	3.263e+04	-2831.76	-8995.88
3	3	237.78	-7380.22	-20.97	27.31	3.002e+04	-882.29	-8354.58
3	3	285.33	-6760.74	-2.50	9.95	2.620e+04	-33.74	-7888.24
3	3	332.89	-6177.17	6.67	2.10	2.230e+04	224.93	-7541.08
3	3	380.44	-5608.83	10.13	-0.58	1.874e+04	246.52	-7272.25
3	3	428.00	-5046.30	10.43	-0.99	1.556e+04	197.62	-7057.72
3	3	473.22	-4499.64	9.24	-0.96	1.286e+04	141.95	-6893.61
3	3	518.44	-3967.55	7.33	-0.93	1.038e+04	95.48	-6760.39
3	3	563.67	-3435.98	5.55	-0.76	8106.11	56.81	-6657.23
3	3	608.89	-2904.99	4.52	-0.55	6023.92	27.05	-6582.28
3	3	654.11	-2374.69	4.98	-0.26	4169.03	8.33	-6532.71
3	3	699.33	-1845.19	8.10	0.18	2626.16	5.80	-6500.55
3	3	744.56	-1316.59	15.90	0.72	1551.54	26.03	-6458.06
3	3	789.78	-789.11	31.52	0.80	1129.06	65.24	-6234.89
3	3	835.00	-263.01	34.21	-4.68	603.06	24.36	-3613.28
3	13	0.0	-617.58	734.68	-2799.66	-2.010e+06	8.616e+04	-7.999e+04
3	13	47.56	2409.87	538.02	-241.94	-1.731e+06	-4108.52	-1.226e+05
3	13	95.11	-393.20	6247.63	-101.76	-1.758e+06	-1.792e+04	-1.361e+05
3	13	142.67	65.57	7867.88	-51.26	-1.585e+06	-2.150e+04	-1.456e+05
3	13	190.22	90.93	8270.61	-24.56	-1.400e+06	-1.340e+04	-1.618e+05
3	13	237.78	-128.69	8461.52	-40.91	-1.225e+06	-6985.77	-1.794e+05
3	13	285.33	-482.54	8423.72	-87.39	-1.055e+06	-2983.98	-1.903e+05
3	13	332.89	-876.26	8186.91	-119.04	-8.911e+05	-1280.39	-2.055e+05
3	13	380.44	-1245.98	7805.83	-138.78	-7.347e+05	737.41	-2.196e+05
3	13	428.00	-1552.17	7319.11	117.10	-5.887e+05	1906.49	-2.307e+05

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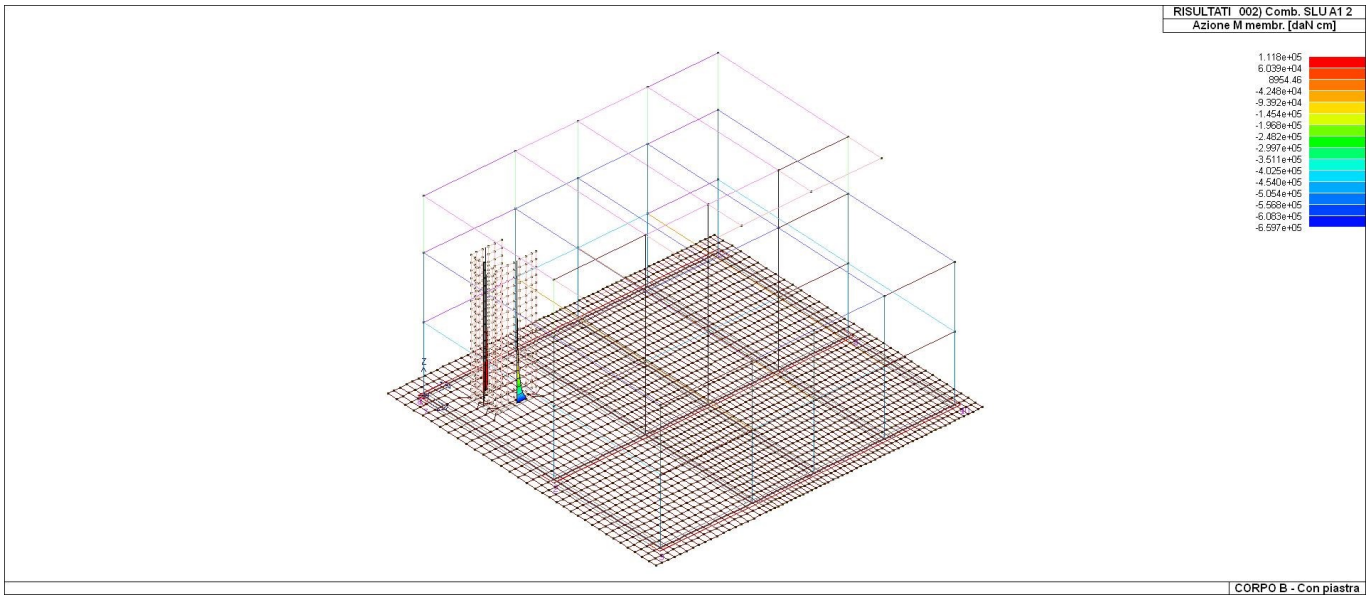
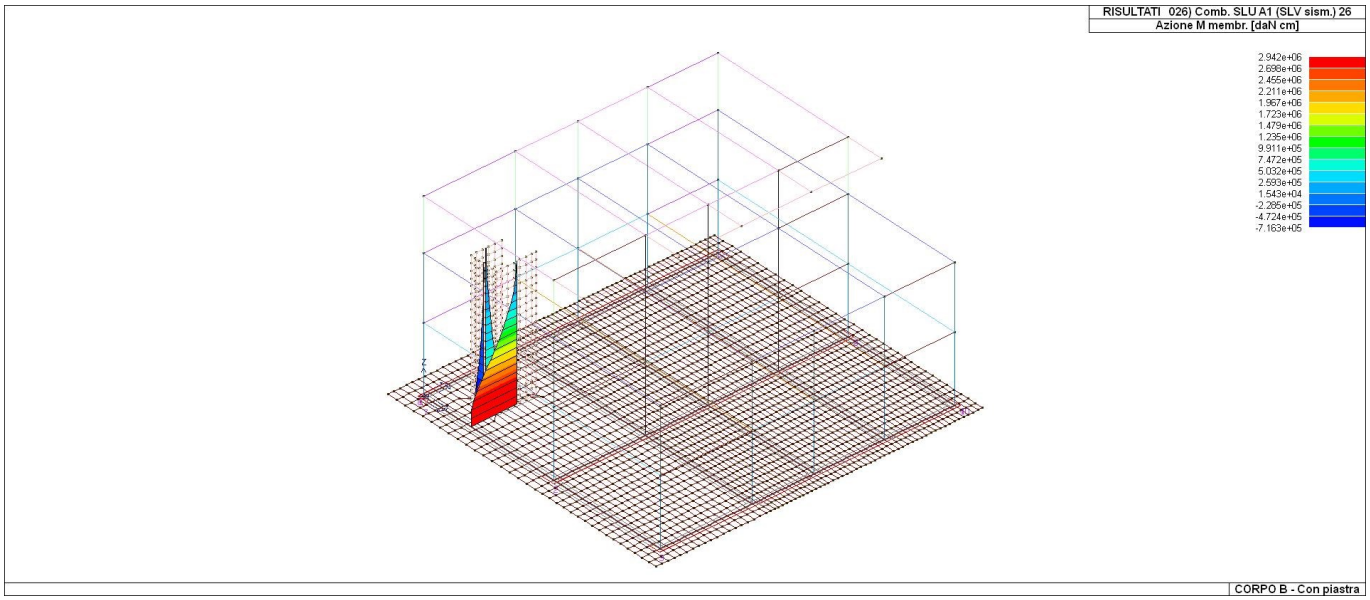
3	74	835.00	-263.04	45.48	-4.76	815.25	22.92	-4792.50
M_S			**N memb.**	**V memb.**	**V orto**	**M memb.**	**M orto**	**T**
			-3.725e+04	-8725.55	-6193.21	-2.010e+06	-6.295e+04	-2.466e+05
			1.258e+04	8461.52	2397.89	2.017e+06	1.697e+05	1.783e+05

Macro	Tipo	Angolo 1-Z (gradi)
4	**Setto**	**0.0**

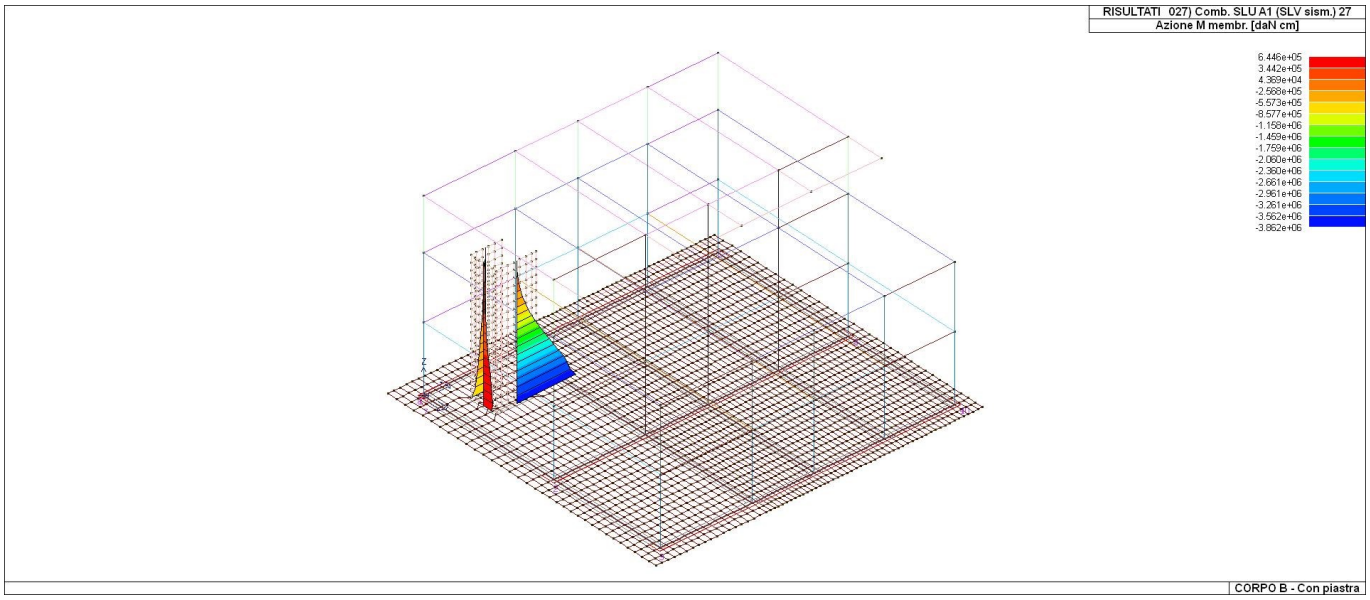
M_S	Cmb	Z	N memb.	V memb.	V orto	M memb.	M orto	T
		cm	daN	daN	daN	daN cm	daN cm	daN cm
4	1	0.0	-1.441e+04	-2887.28	106.22	-6.454e+05	-9771.08	-5203.07
4	1	47.56	-1.568e+04	-291.31	253.35	-3.889e+05	-3516.39	-1.672e+04
4	1	95.11	-1.543e+04	-532.24	98.18	-2.537e+05	1856.78	-2.233e+04
4	1	142.67	-1.487e+04	-383.32	46.48	-1.735e+05	2572.10	-2.420e+04
4	1	190.22	-1.408e+04	-321.68	35.32	-1.263e+05	2417.24	-2.384e+04
4	1	237.78	-1.316e+04	-266.40	34.18	-9.783e+04	2221.69	-2.249e+04
4	1	285.33	-1.218e+04	-219.65	33.87	-7.946e+04	2080.21	-2.081e+04
4	1	332.89	-1.118e+04	-184.52	32.88	-6.625e+04	1958.99	-1.909e+04
4	1	380.44	-1.016e+04	-159.44	31.56	-5.569e+04	1837.71	-1.744e+04
4	1	428.00	-9143.71	-141.22	30.36	-4.655e+04	1717.68	-1.588e+04
4	1	473.22	-8153.67	-128.58	29.47	-3.866e+04	1606.39	-1.450e+04
4	1	518.44	-7189.79	-118.45	28.41	-3.137e+04	1518.70	-1.314e+04
4	1	563.67	-6227.95	-109.12	27.34	-2.458e+04	1446.69	-1.184e+04
4	1	608.89	-5267.94	-100.06	25.97	-1.828e+04	1380.56	-1.059e+04
4	1	654.11	-4309.53	-90.86	24.04	-1.250e+04	1298.26	-9396.87
4	1	699.33	-3352.55	-81.20	21.31	-7343.86	1161.37	-8287.19
4	1	744.56	-2396.85	-69.46	17.85	-2925.07	913.30	-7307.64
4	1	789.78	-1441.34	-46.19	15.23	395.93	512.90	-6368.53
4	1	835.00	-477.30	4.48	3.50	798.39	8.38	-3231.52
4	2	0.0	-1.415e+04	-2685.46	278.40	-7.408e+05	-3019.37	-1.041e+04
4	2	47.56	-1.562e+04	-539.34	123.05	-4.579e+05	2458.06	-2.766e+04
4	2	95.11	-1.545e+04	-720.98	76.40	-3.050e+05	3574.37	-2.994e+04
4	2	142.67	-1.491e+04	-512.40	52.16	-2.129e+05	3373.69	-3.014e+04
4	2	190.22	-1.413e+04	-409.63	48.98	-1.577e+05	2992.45	-2.872e+04
4	2	237.78	-1.322e+04	-332.06	50.04	-1.236e+05	2711.51	-2.667e+04
4	2	285.33	-1.224e+04	-273.35	50.48	-1.010e+05	2508.00	-2.452e+04
4	2	332.89	-1.122e+04	-231.02	49.98	-8.436e+04	2333.50	-2.247e+04
4	2	380.44	-1.020e+04	-200.96	49.15	-7.093e+04	2171.32	-2.056e+04
4	2	428.00	-9179.27	-178.92	48.65	-5.929e+04	2029.29	-1.879e+04
4	2	473.22	-8184.04	-163.30	48.65	-4.925e+04	1900.84	-1.723e+04
4	2	518.44	-7215.45	-150.57	47.79	-3.997e+04	1812.47	-1.570e+04
4	2	563.67	-6249.41	-138.80	46.81	-3.132e+04	1747.22	-1.423e+04
4	2	608.89	-5285.71	-127.33	45.38	-2.329e+04	1691.78	-1.279e+04
4	2	654.11	-4324.04	-115.61	43.17	-1.592e+04	1618.19	-1.141e+04
4	2	699.33	-3364.18	-103.28	39.85	-9335.18	1478.52	-1.010e+04
4	2	744.56	-2405.87	-88.51	35.44	-3691.36	1201.31	-8942.28
4	2	789.78	-1447.73	-59.72	31.73	553.34	730.44	-7817.34
4	2	835.00	-478.75	7.03	13.74	1061.04	100.78	-3971.06
4	3	0.0	-1.103e+04	-2421.23	-29.17	-4.654e+05	-8789.23	-2734.63
4	3	47.56	-1.198e+04	24.81	252.57	-2.713e+05	-4590.51	-8158.59
4	3	95.11	-1.181e+04	-298.62	80.14	-1.707e+05	1210.73	-1.303e+04
4	3	142.67	-1.138e+04	-220.48	29.16	-1.123e+05	1862.45	-1.475e+04
4	3	190.22	-1.078e+04	-196.10	19.25	-7.902e+04	1639.79	-1.473e+04
4	3	237.78	-1.009e+04	-165.51	19.38	-5.986e+04	1416.00	-1.393e+04
4	3	285.33	-9338.78	-136.04	20.24	-4.813e+04	1284.51	-1.288e+04
4	3	332.89	-8568.55	-113.18	20.22	-4.004e+04	1199.77	-1.181e+04
4	3	380.44	-7790.92	-96.99	19.62	-3.370e+04	1127.88	-1.078e+04
4	3	428.00	-7012.04	-85.50	18.92	-2.824e+04	1059.04	-9810.40
...								
4	74	835.00	-367.34	3.77	6.43	649.82	43.59	-2561.57
M_S			**N memb.**	**V memb.**	**V orto**	**M memb.**	**M orto**	**T**
			-3.025e+04	-7053.77	-2309.85	-1.913e+06	-2.615e+05	-4.105e+05
			8326.11	4041.92	2447.48	2.886e+06	2.573e+05	3.809e+05



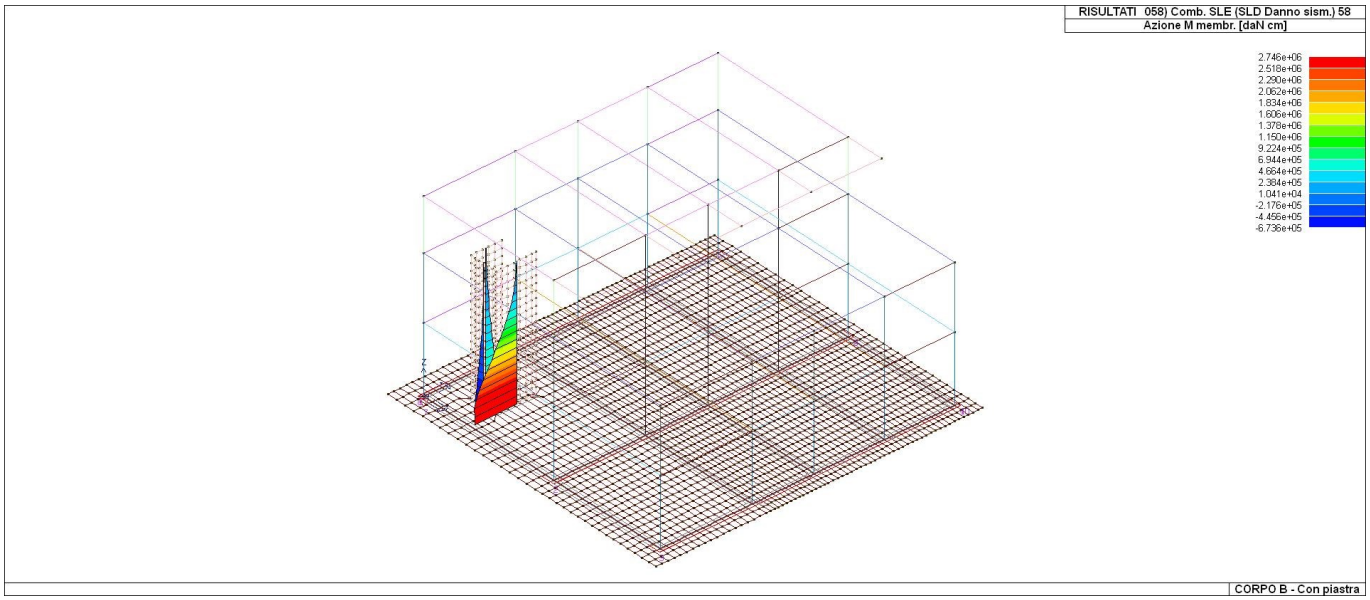
47_RIS_M_002_Comb. SLU A1 2



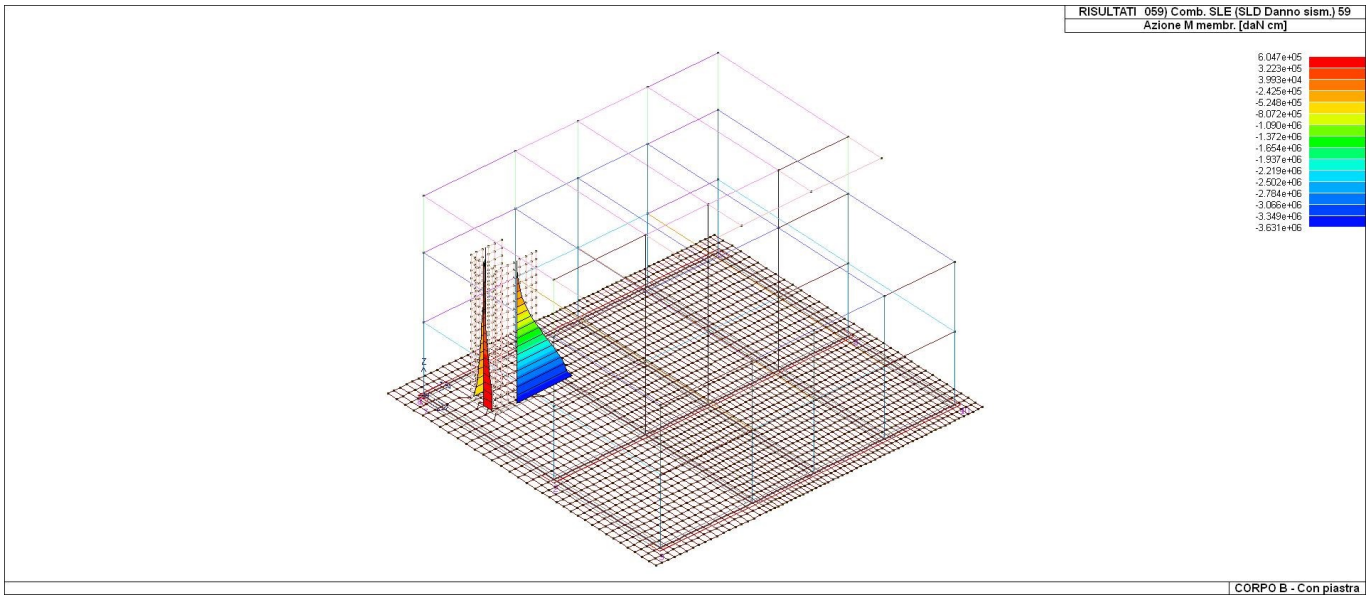
47_RIS_M_026_Comb. SLU A1 (SLV sism.) 26



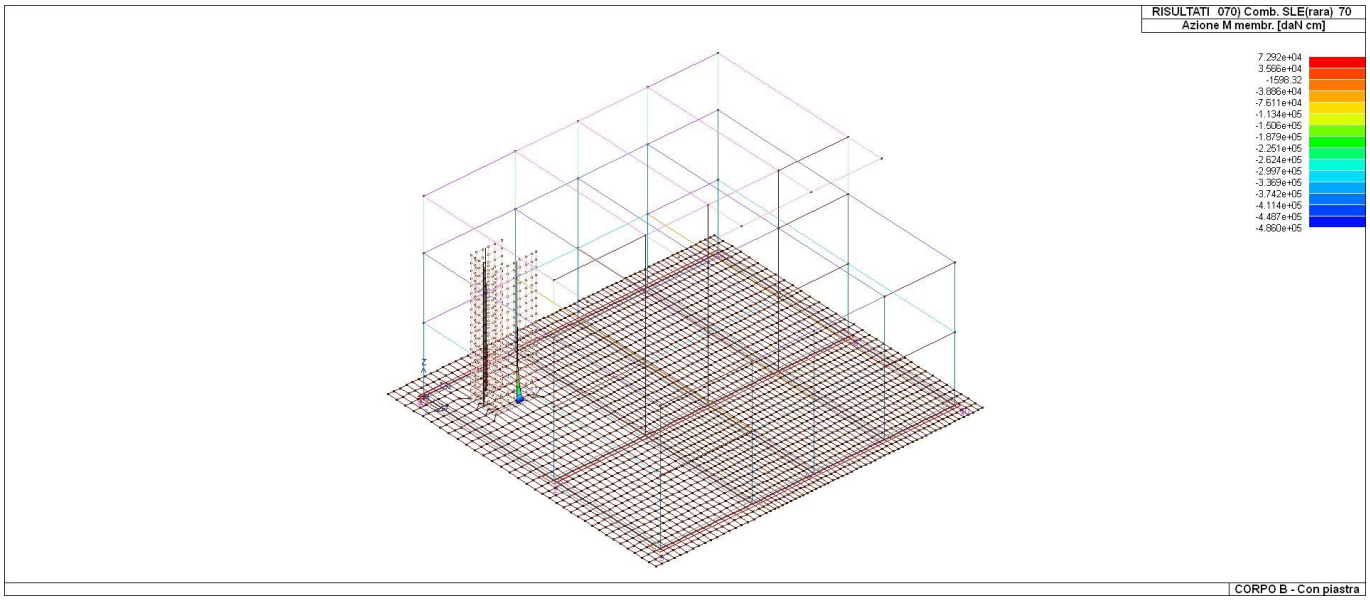
47_RIS_M_027_Comb. SLU A1 (SLV sism.) 27



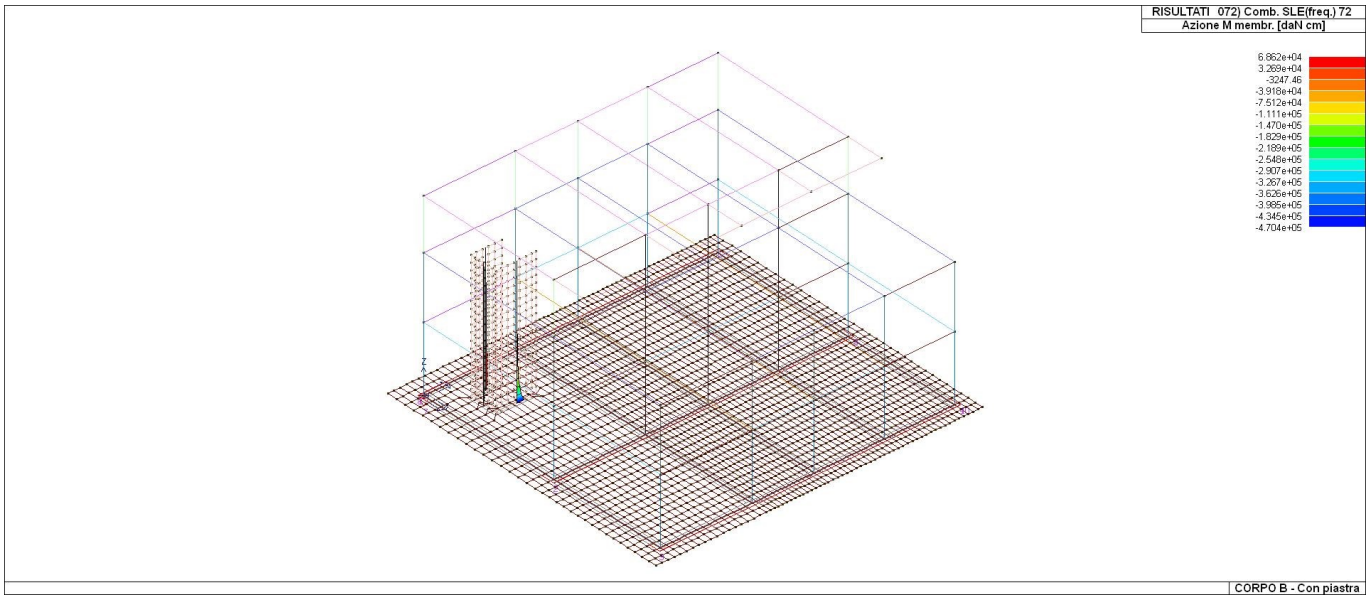
47_RIS_M_058_Comb. SLE (SLD Danno sism.) 58



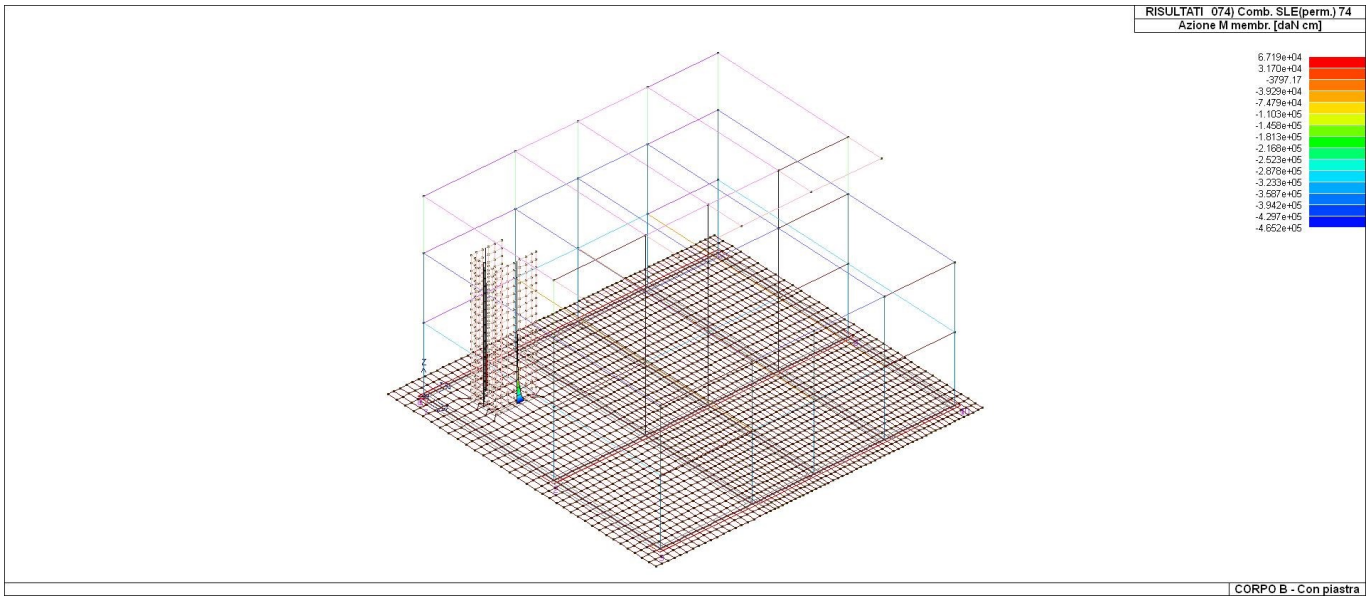
47_RIS_M_059_Comb. SLE (SLD Danno sism.) 59



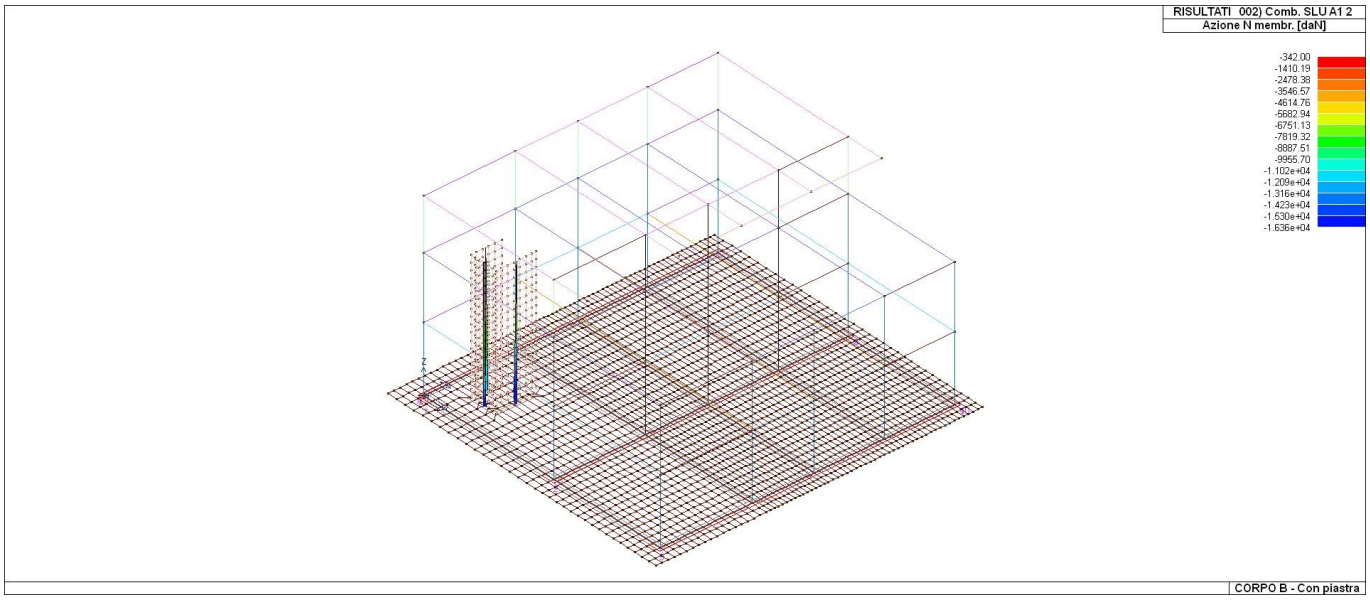
47_RIS_M_070_Comb. SLE(rara) 70



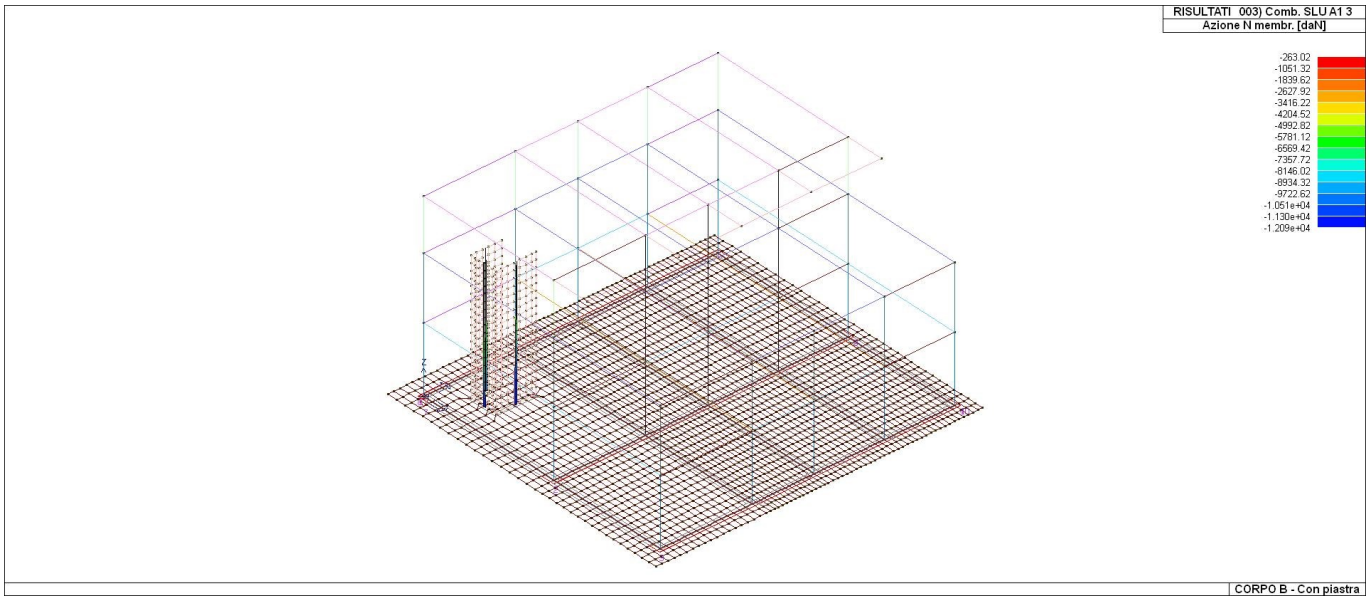
47_RIS_M_072_Comb. SLE(freq.) 72



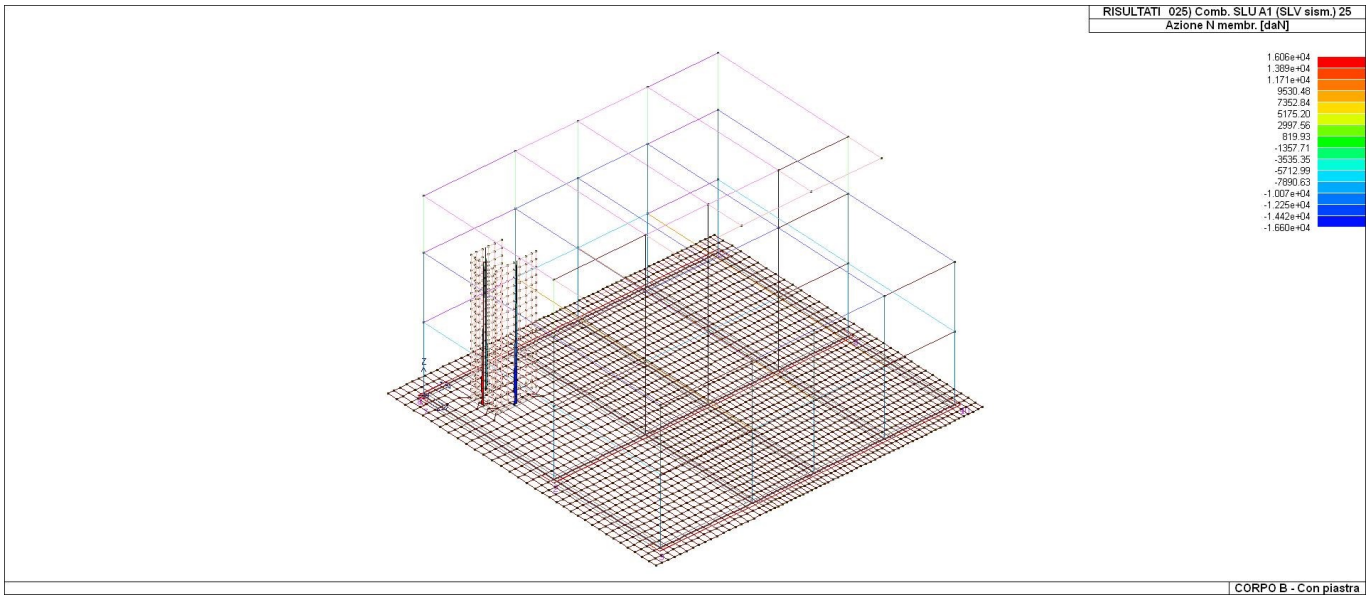
47_RIS_M_074_Comb. SLE(perm.) 74



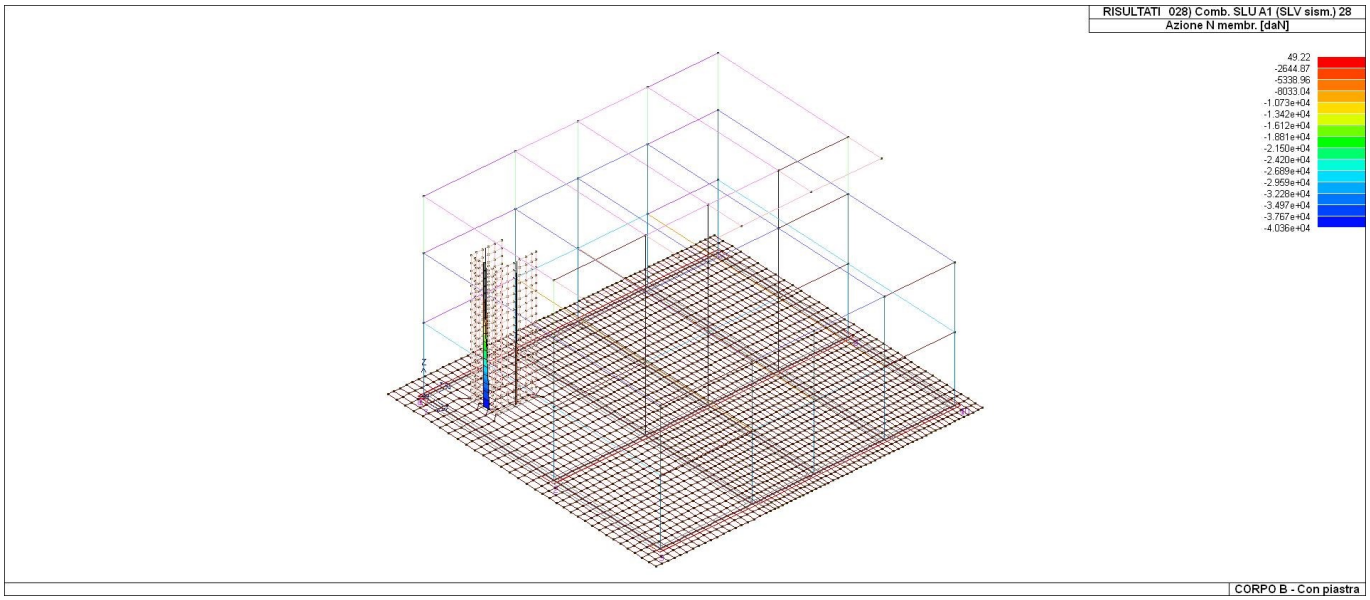
47_RIS_N_002_Comb. SLU A1 2



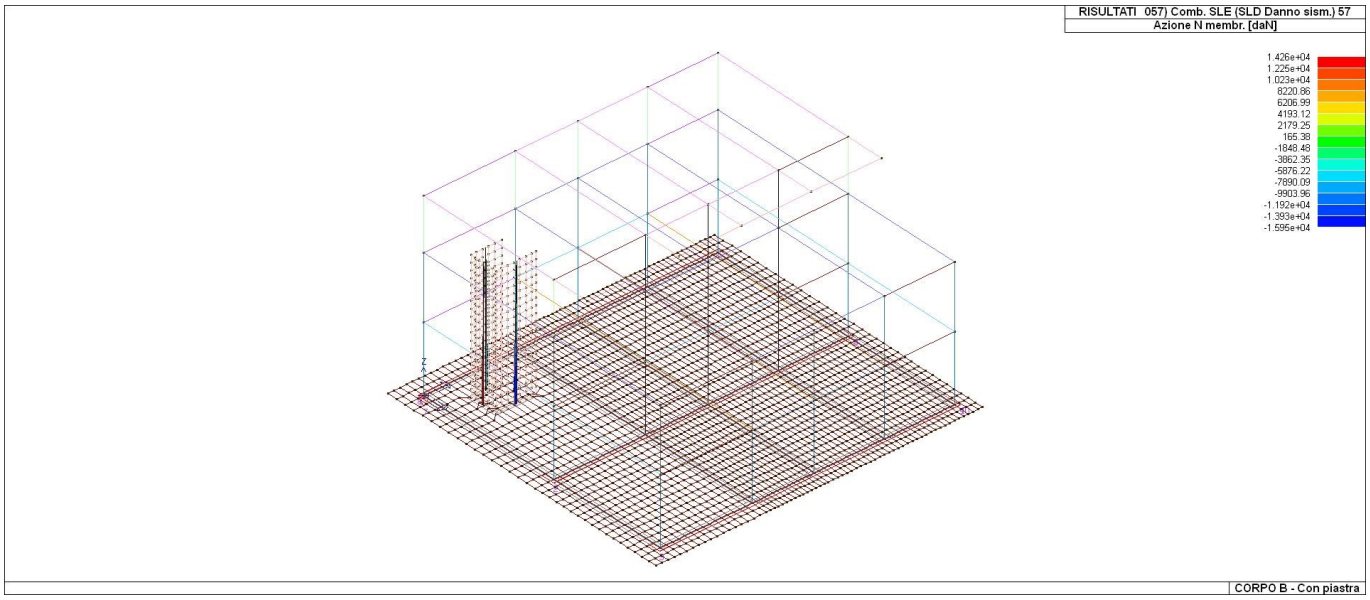
47_RIS_N_003_Comb. SLU A1 3



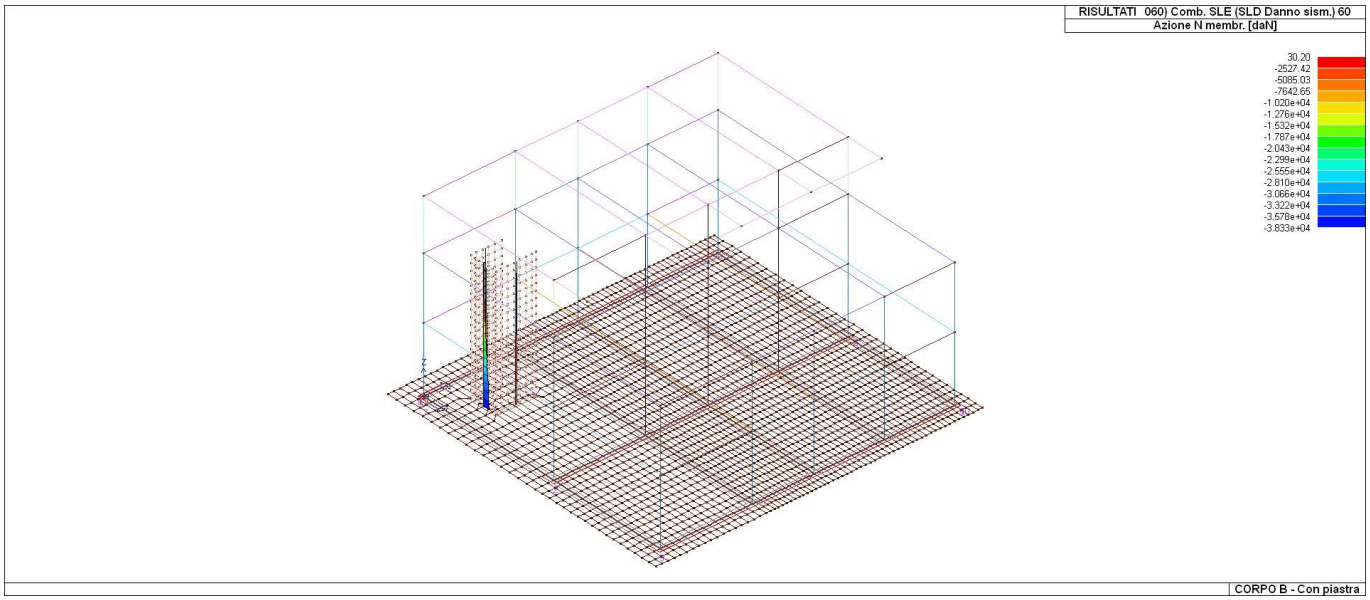
47_RIS_N_025_Comb. SLU A1 (SLV sism.) 25



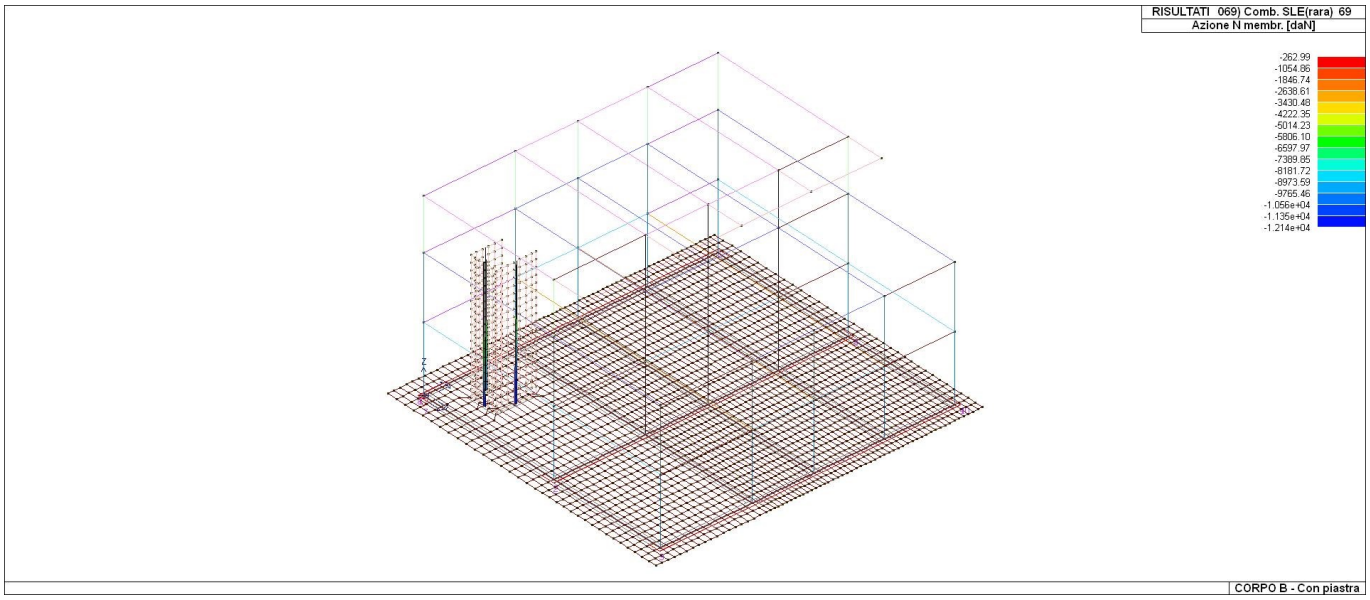
47_RIS_N_028_Comb. SLU A1 (SLV sism.) 28



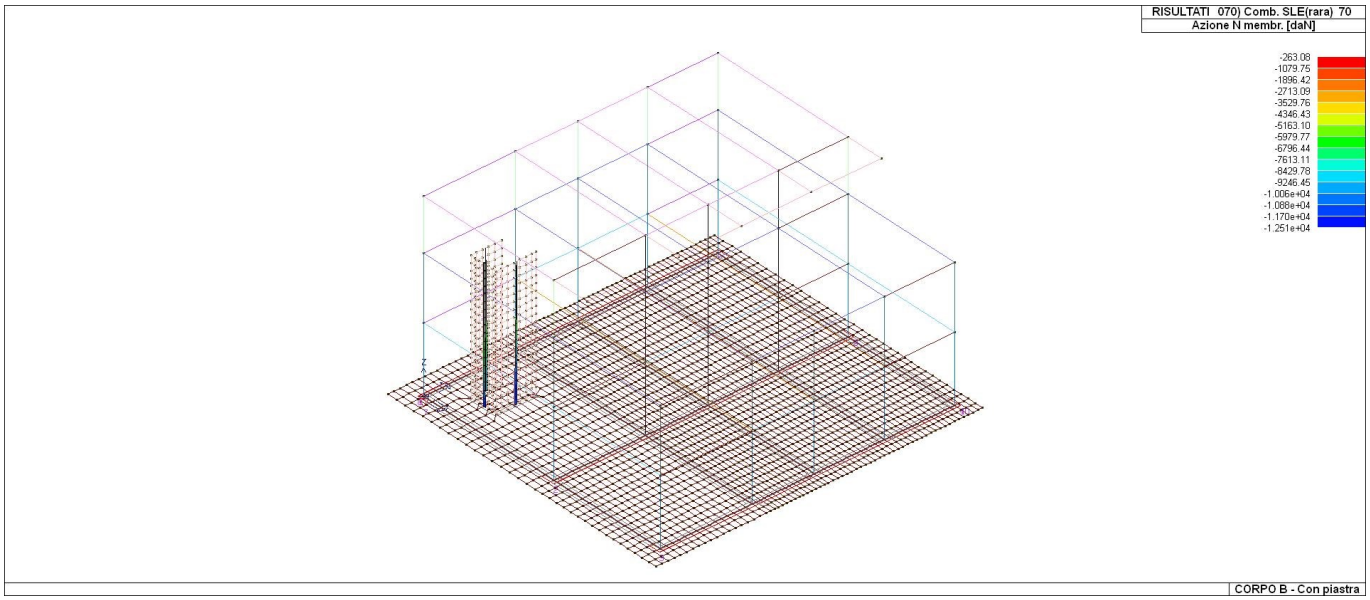
47_RIS_N_057_Comb. SLE (SLD Danno sism.) 57



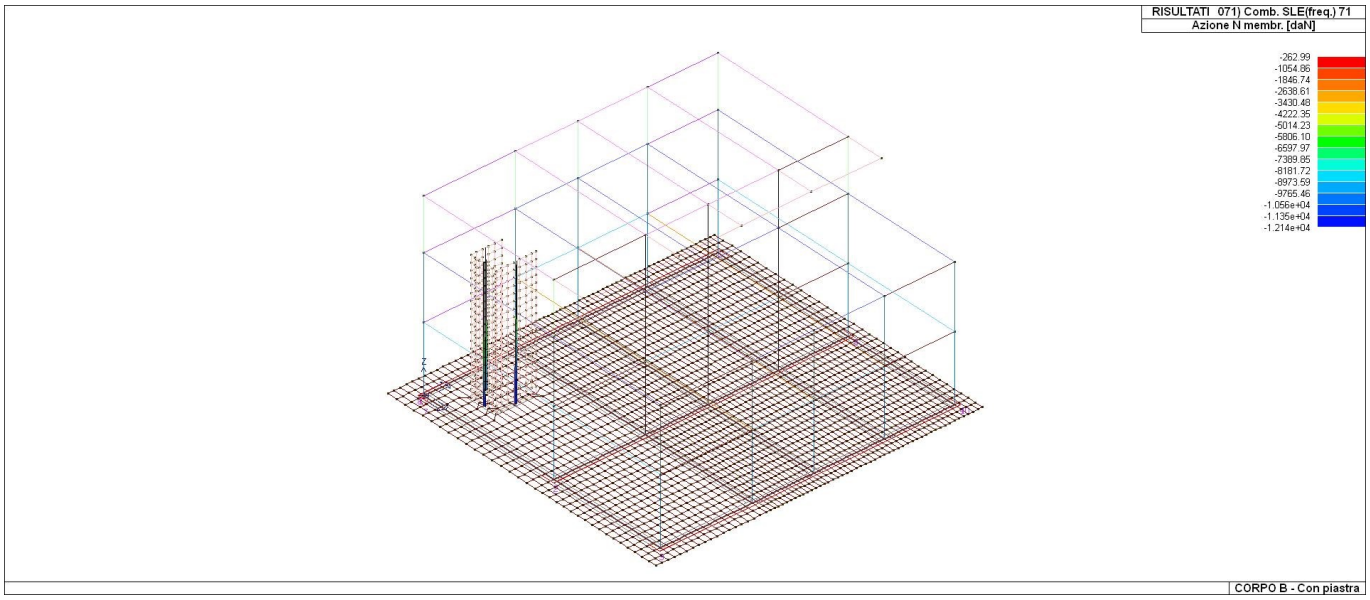
47_RIS_N_060_Comb. SLE (SLD Danno sism.) 60



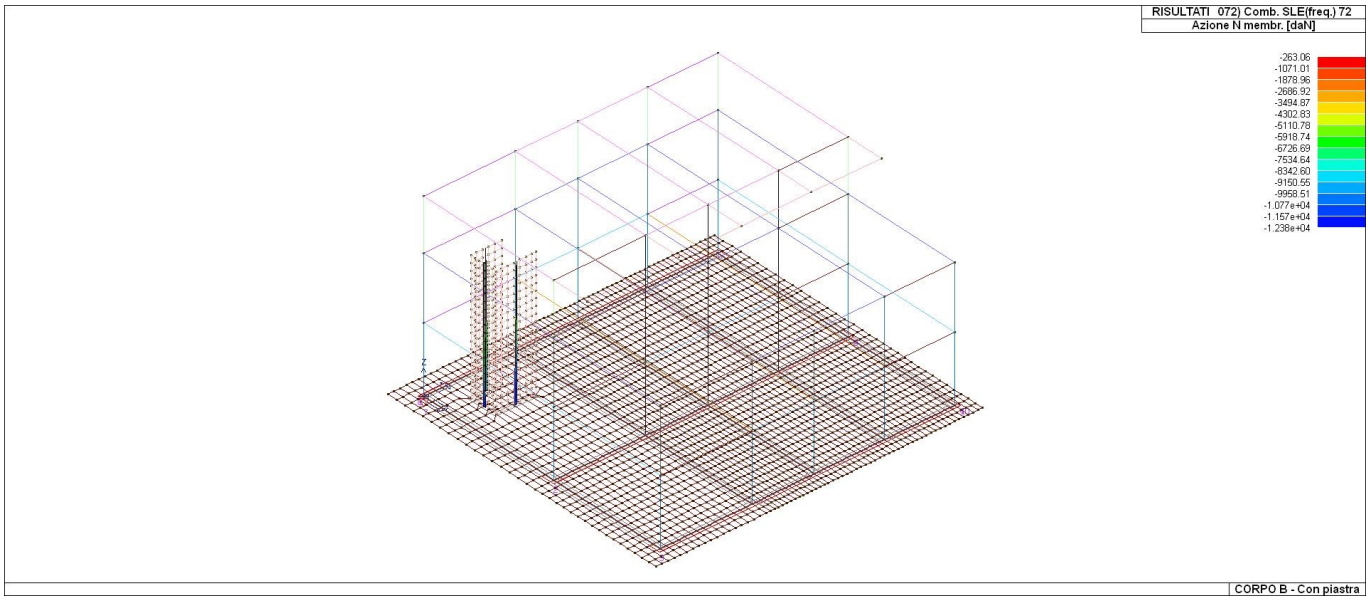
47_RIS_N_069_Comb. SLE(rara) 69



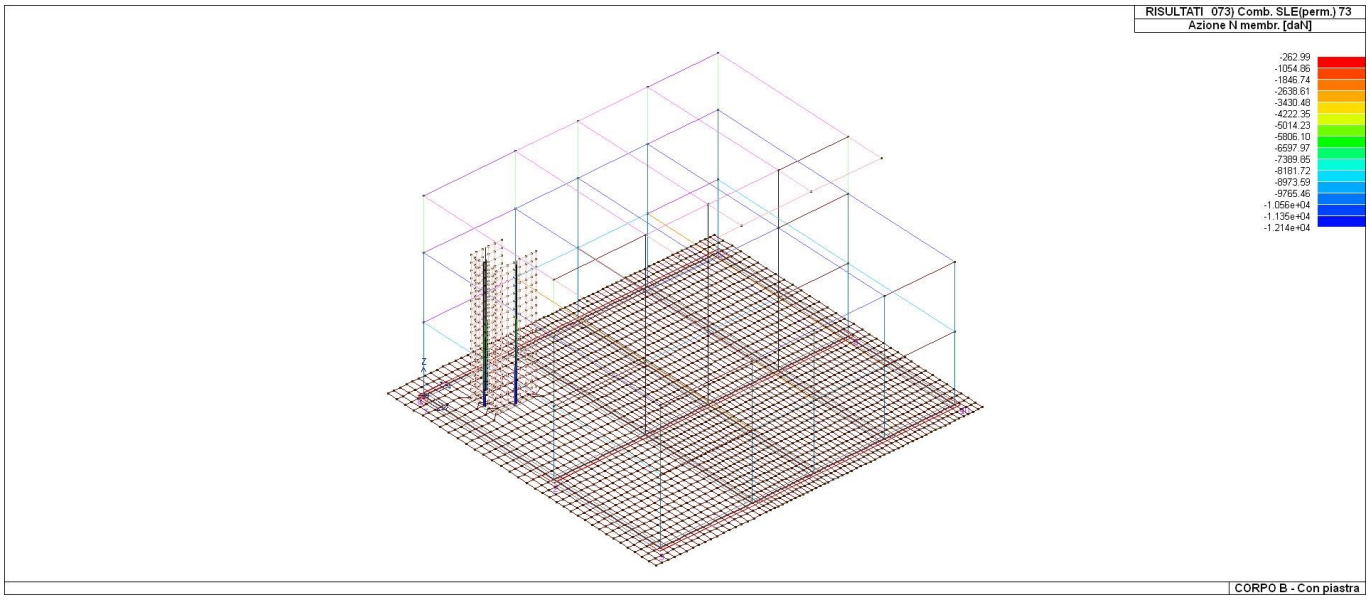
47_RIS_N_070_Comb. SLE(rara) 70



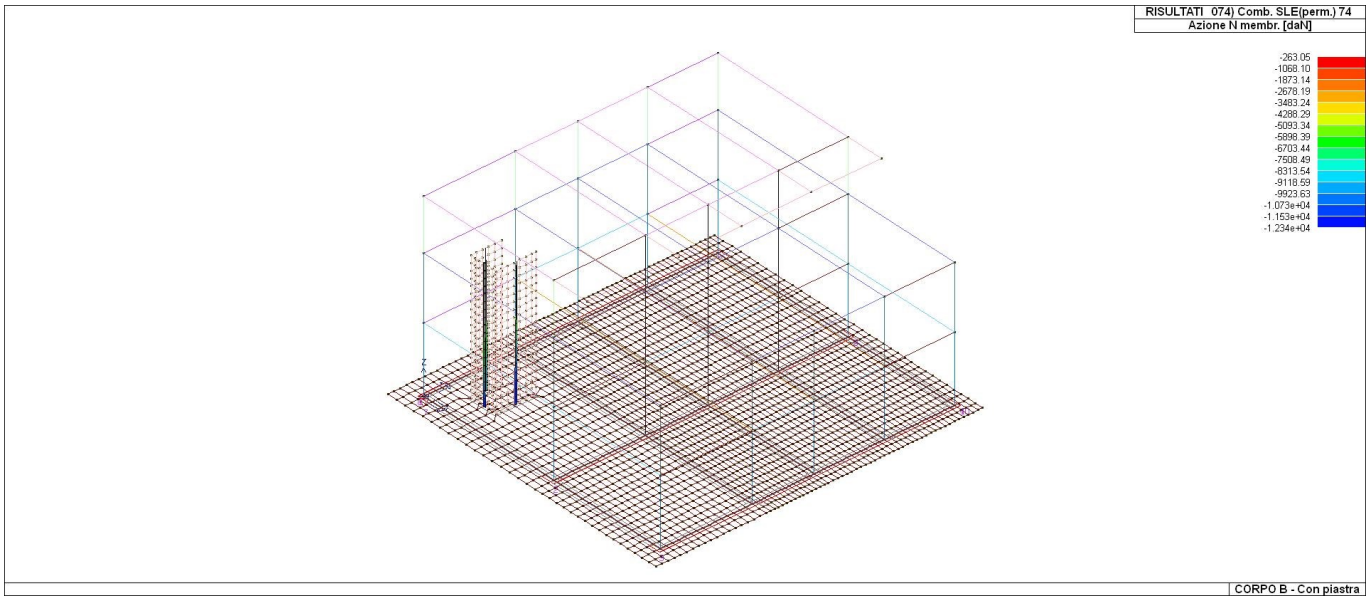
47_RIS_N_071_Comb. SLE(freq.) 71



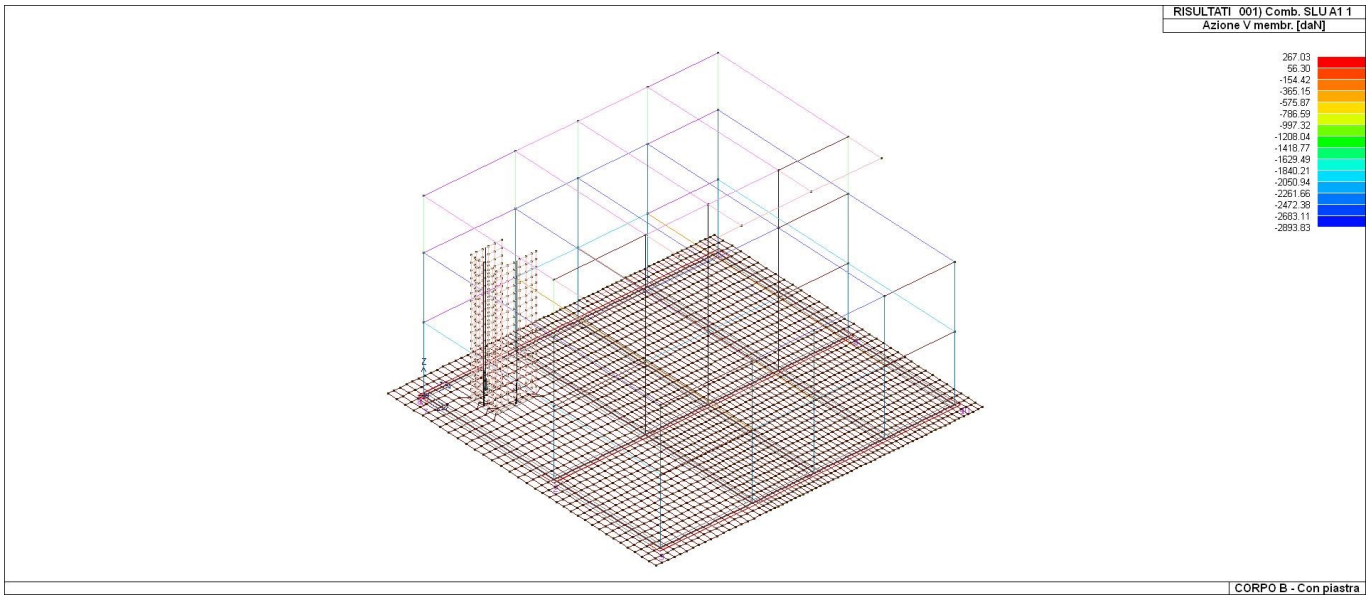
47_RIS_N_072_Comb. SLE(freq.) 72



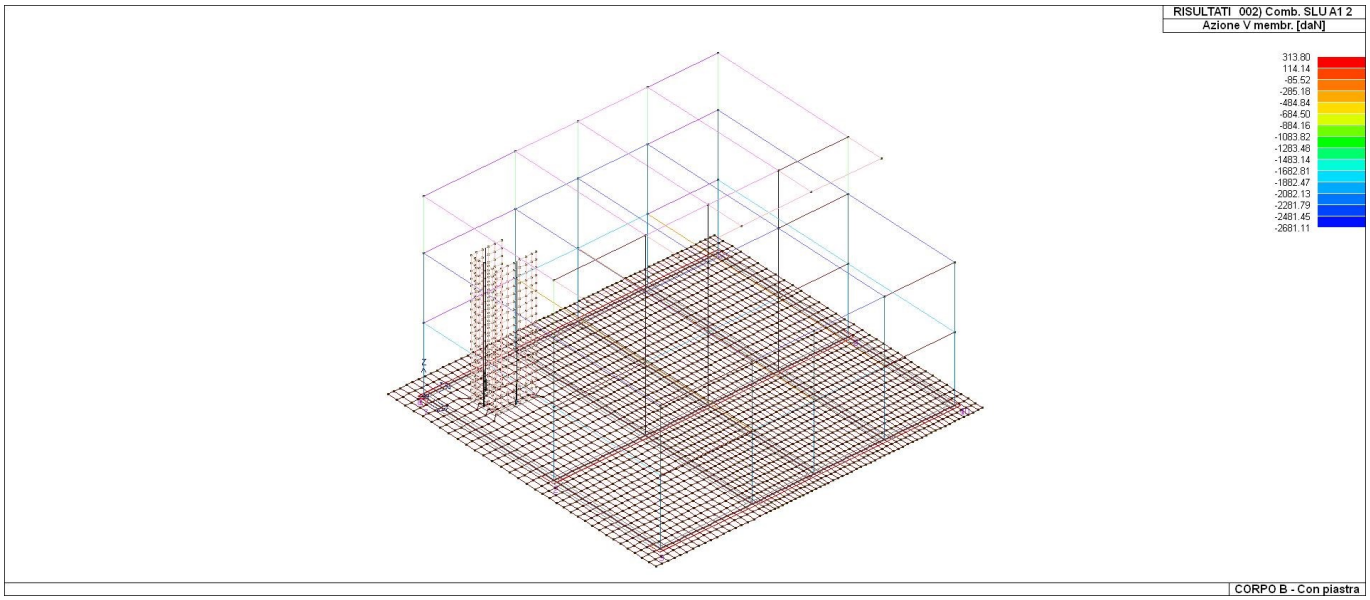
47_RIS_N_073_Comb. SLE(perm.) 73



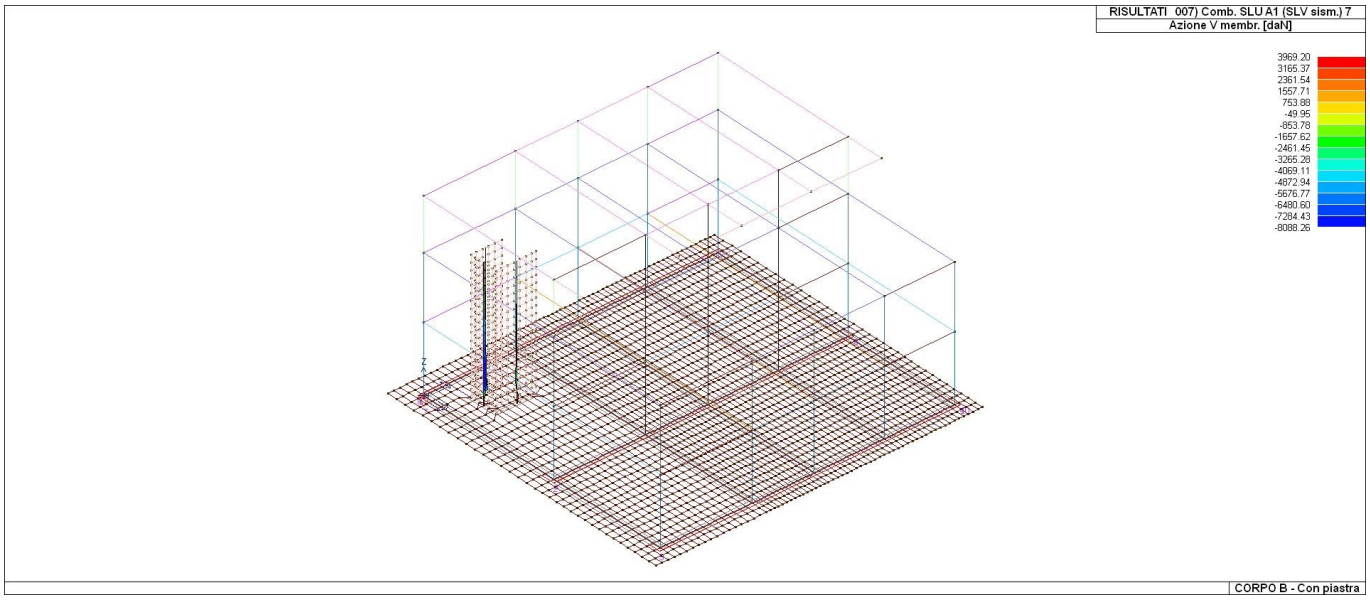
47_RIS_N_074_Comb. SLE(perm.) 74



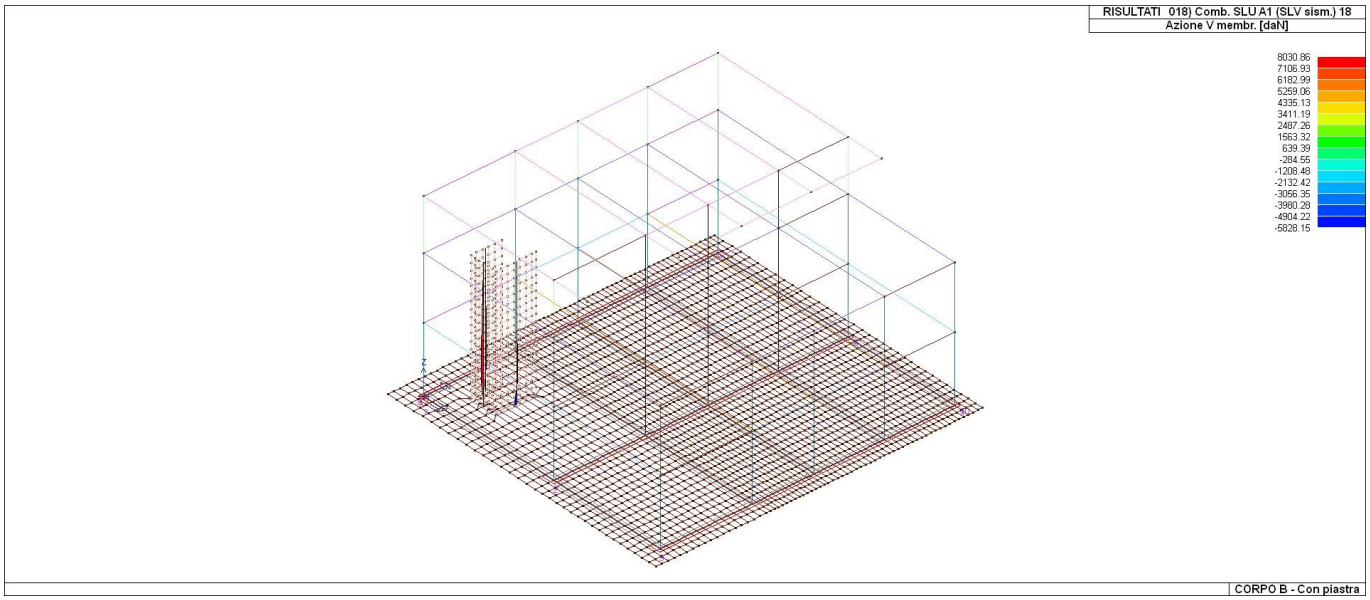
47_RIS_V_001_Comb. SLU A1 1



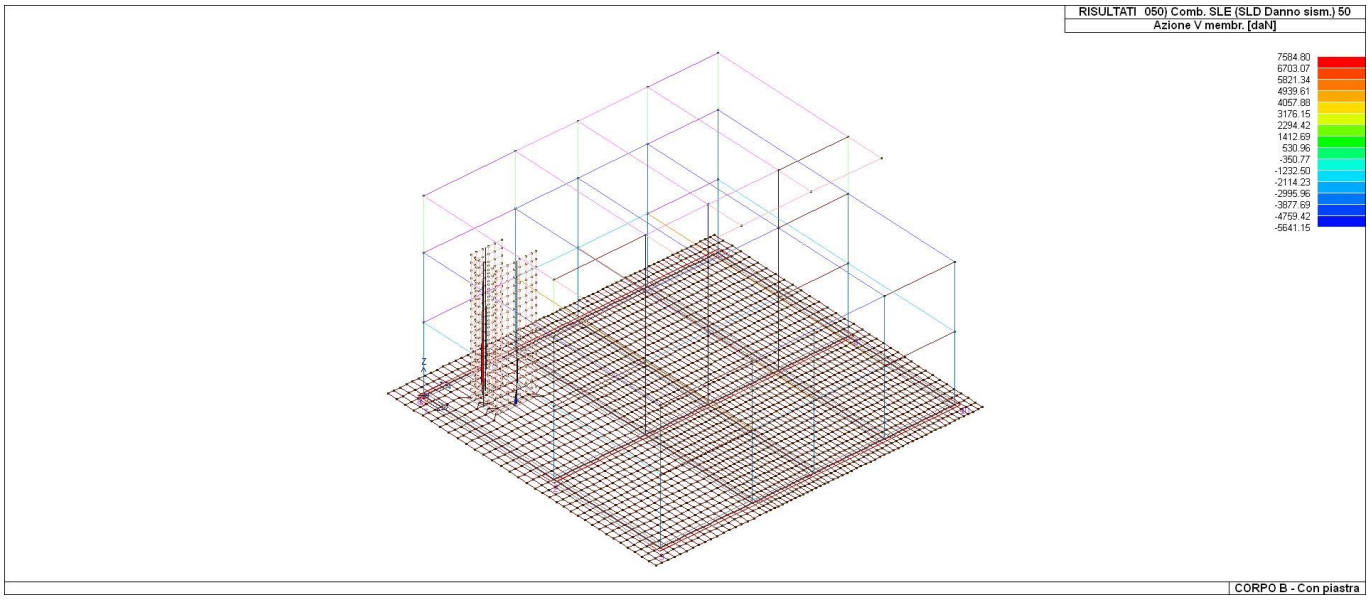
47_RIS_V_002_Comb. SLU A1 2



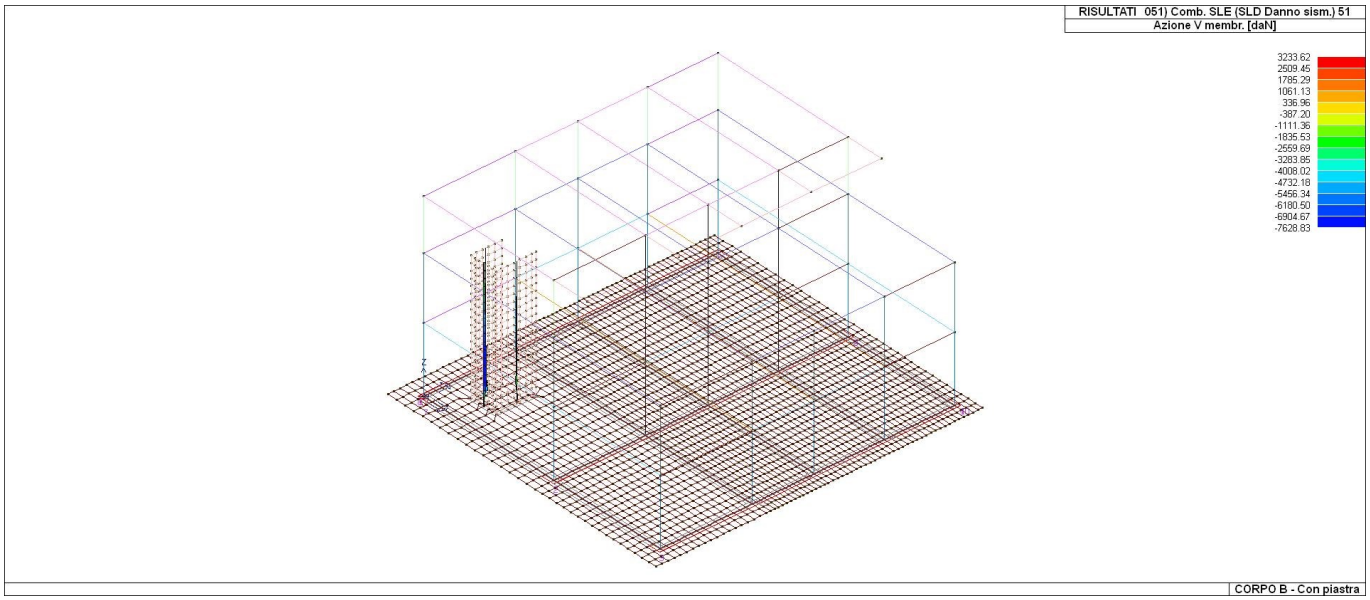
47_RIS_V_007_Comb. SLU A1 (SLV sism.) 7



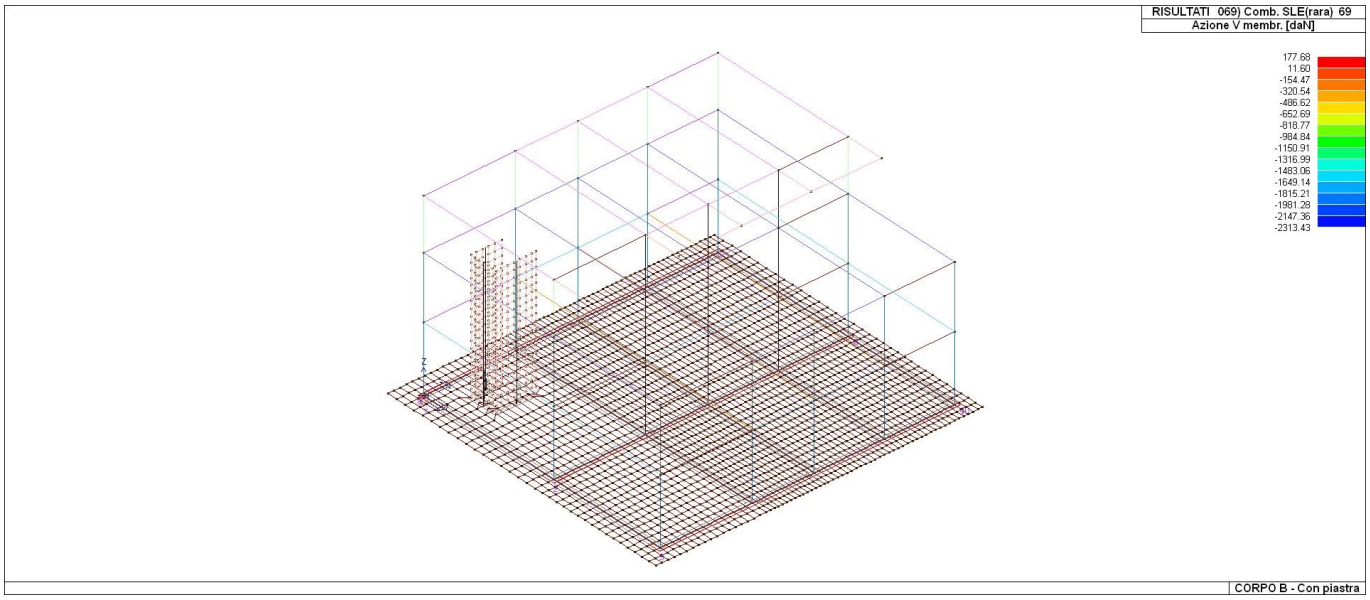
47_RIS_V_018_Comb. SLU A1 (SLV sism.) 18



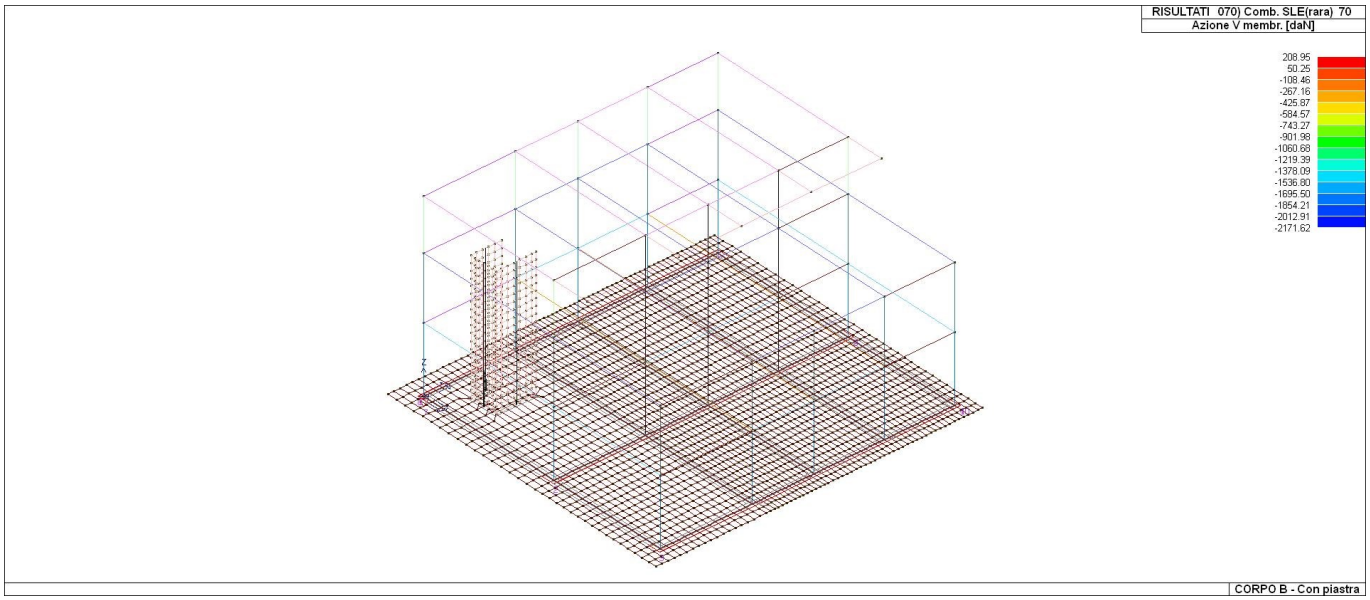
47_RIS_V_050_Comb. SLE (SLD Danno sism.) 50



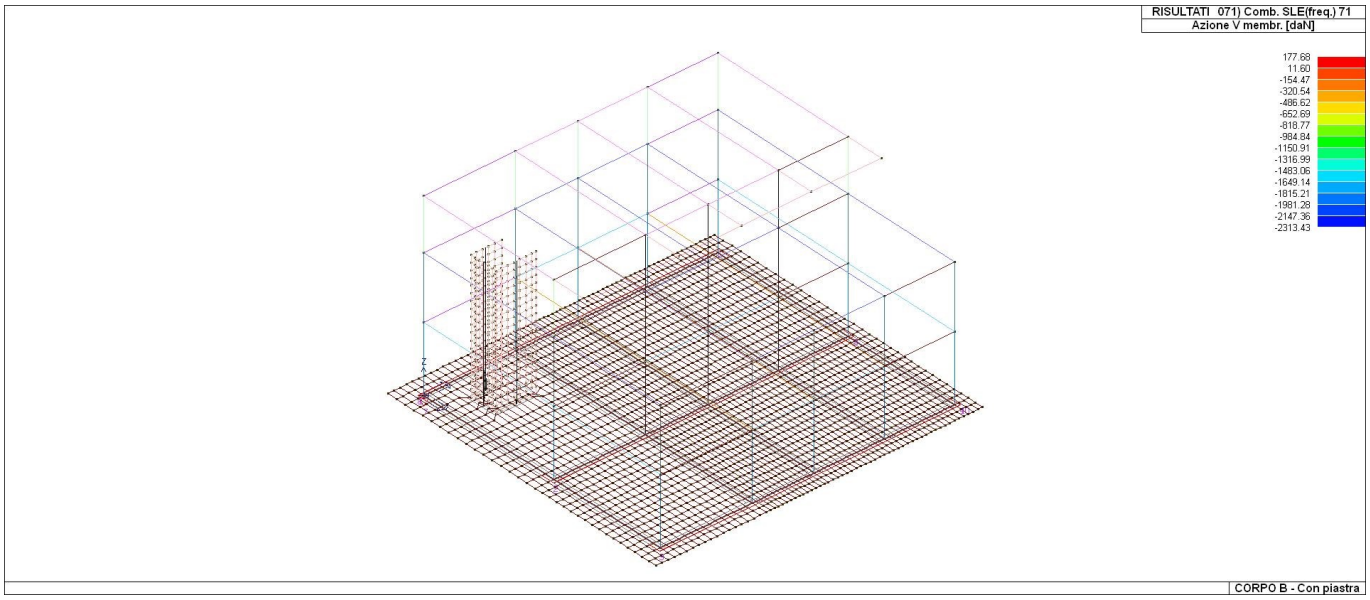
47_RIS_V_051_Comb. SLE (SLD Danno sism.) 51



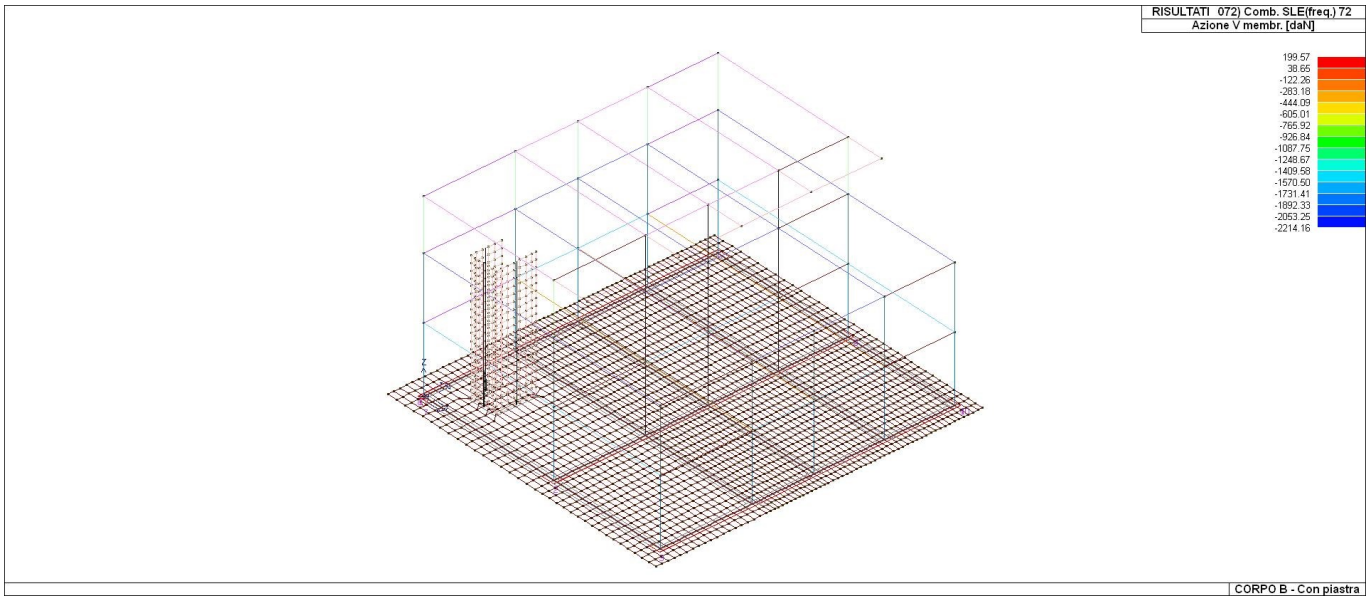
47_RIS_V_069_Comb. SLE(rara) 69



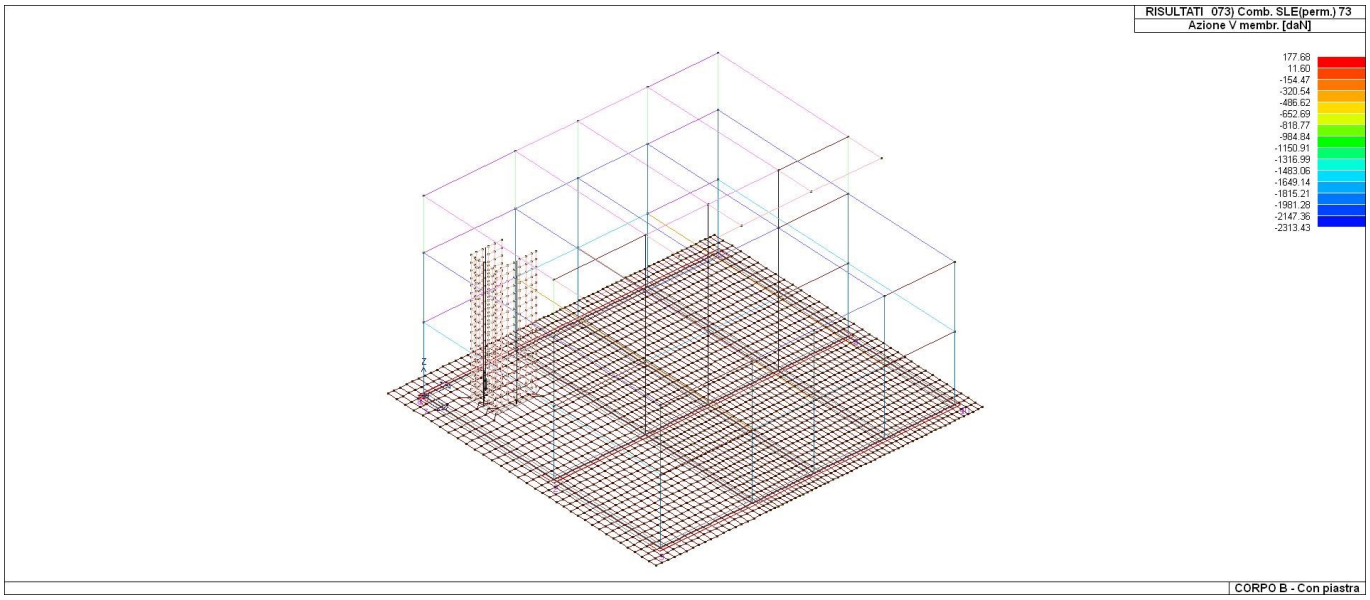
47_RIS_V_070_Comb. SLE(rara) 70



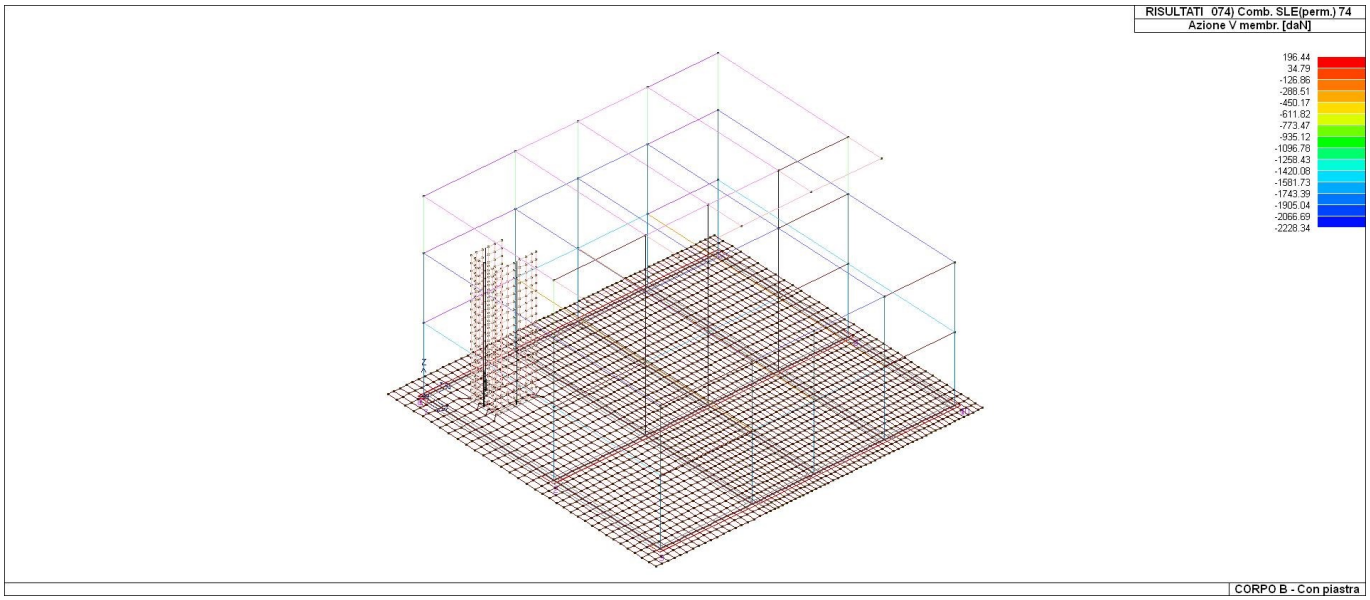
47_RIS_V_071_Comb. SLE(freq.) 71



47_RIS_V_072_Comb. SLE(freq.) 72



47_RIS_V_073_Comb. SLE(perm.) 73



47_RIS_V_074_Comb. SLE(perm.) 74

Macro	Tipo	Angolo 1-X (gradi)
1	**Guscio**	**0.0**

M_G	Cmb	Nodo	N max	N min	N 1	N 2	N 1-2	M max	M min	M 1	M 2	M 1-2
			daN/cm	daN/cm	daN/cm	daN/cm	daN/cm	daN	daN	daN	daN	daN
1	2	1	16.79	-12.14	-3.52	8.17	-13.23	-1327.01	-1746.85	-1518.28	-1555.58	209.09
1	2	2	92.17	-21.40	91.84	-21.06	6.14	-1882.39	-3244.24	-3244.19	-1882.43	-7.84
1	2	3	19.47	-1.51	15.25	2.71	8.41	-889.36	-1098.70	-1098.70	-889.36	-0.72
1	2	4	59.60	-37.43	-35.09	57.26	14.89	-673.27	-2489.23	-1837.56	-1324.94	-871.05
1	2	5	135.27	76.51	135.26	76.52	0.65	-2222.58	-5300.66	-5294.78	-2228.46	134.42
1	2	6	57.98	-25.33	-25.29	57.94	-1.83	-971.87	-1186.59	-986.09	-1172.37	-53.40
1	2	7	79.97	-50.18	-50.15	79.93	-2.20	-1582.59	-2200.53	-2041.88	-1741.24	-269.94
1	2	8	148.04	81.00	147.35	81.70	6.80	-2248.70	-6196.21	-6196.20	-2248.71	-6.58

1	2	9	40.80	-26.30	-25.94	40.44	4.91	-504.19	-872.25	-566.38	-810.06	-137.92
1	2	10	78.21	-47.51	-47.51	78.20	0.68	-1482.05	-2568.93	-2428.09	-1622.88	365.01
1	2	11	149.70	84.97	149.08	85.58	6.29	-2269.15	-6312.35	-6298.14	-2283.36	-239.27
1	2	12	33.07	-26.08	-26.02	33.01	1.86	-560.72	-872.49	-774.29	-658.92	-144.82
1	2	13	18.56	-19.95	1.14	-2.53	19.17	-907.65	-1881.36	-1739.51	-1049.49	343.51
1	2	14	134.00	-36.29	133.97	-36.26	-2.36	-1535.60	-4642.12	-4604.38	-1573.34	-340.33
1	2	15	7.21	-8.44	0.76	-1.99	-7.70	-551.75	-856.21	-820.19	-587.76	-98.33
1	2	61	108.65	-38.51	-10.19	80.34	58.01	-609.88	-2425.59	-1695.06	-1340.42	-890.37
1	2	62	7.98	2.80	3.35	7.43	1.59	640.10	-26.20	-26.12	640.03	7.07
1	2	63	14.68	-55.56	-47.65	6.77	22.21	1068.96	-971.14	397.62	-299.80	-958.59
1	2	64	69.75	-55.56	-26.14	40.34	53.11	247.43	-2073.50	-1241.63	-584.43	-1112.97
1	2	65	1.22	-3.78	-3.66	1.10	0.76	1217.52	-26.37	30.80	1160.35	260.47
1	2	66	35.01	-51.86	-18.54	1.69	42.24	1044.08	-1696.08	-687.26	35.26	-1321.59
1	2	67	2.22	-3.90	-3.44	1.77	1.60	1406.15	-100.11	-28.95	1334.98	319.57
1	2	68	13.73	-49.99	-9.42	-26.84	30.65	1591.22	-1231.83	-170.07	529.47	-1367.50
1	2	69	4.19	-2.07	-1.57	3.69	1.68	1468.95	-129.32	-34.14	1373.76	378.25
1	2	70	6.46	-54.31	-1.55	-46.31	20.55	1961.32	-766.86	284.24	910.22	-1327.70
1	2	71	73.74	0.93	0.94	73.73	0.76	356.08	-22.87	-22.79	356.00	5.56
1	2	72	6.49	-61.23	4.43	-59.17	11.64	2192.99	-342.24	663.35	1187.40	-1240.24
1	2	73	8.89	-0.90	-0.56	8.55	1.78	1487.44	-149.95	-32.25	1369.73	422.94
1	2	74	8.41	-66.52	8.15	-66.25	4.47	2277.69	44.30	956.70	1365.30	-1097.85
1	2	75	14.99	-0.23	-8.38e-02	14.85	1.50	1459.83	-166.36	-29.84	1323.31	450.96
1	2	76	9.78	-69.05	9.72	-69.00	-2.11	2240.39	364.99	1151.86	1453.51	-925.49
1	2	77	20.52	0.13	0.16	20.48	0.87	1374.33	-180.84	-27.38	1220.87	463.80
1	2	78	10.46	-68.74	9.63	-67.91	-8.05	2071.10	610.08	1231.43	1449.75	-722.31
1	2	79	23.61	0.37	0.37	23.61	-5.54e-02	1221.31	-195.86	-24.20	1049.65	462.39
1	2	80	11.26	-65.71	8.53	-62.98	-14.23	1766.43	750.70	1162.88	1354.25	-498.77
1	2	81	3.66	-64.06	-61.56	1.16	-12.79	1334.69	-5.71	1319.57	9.41	-141.58
1	2	82	12.14	-60.72	6.88	-55.47	-18.84	1333.09	743.15	906.32	1169.92	-263.89
1	2	83	1.83	-79.63	-78.98	1.18	-7.26	1597.04	2.55	1592.33	7.26	-86.53
1	2	84	15.46	-52.02	6.05	-42.61	-23.38	902.09	426.57	446.12	882.53	-94.42
1	2	85	44.67	0.81	0.88	44.60	1.75	10.26	-317.74	-9.33e-02	-307.38	-57.36
1	2	86	24.92	-40.54	11.00	-26.62	-26.79	478.49	-155.35	-154.24	477.38	26.58
1	2	87	33.26	0.95	1.17	33.04	2.68	10.16	-488.67	6.46	-484.97	-42.79
1	2	88	38.42	-25.72	15.69	-2.98	-30.68	-185.79	-857.12	-854.01	-188.91	45.59
1	2	89	17.19	0.77	1.51	16.45	3.40	16.22	-669.60	15.17	-668.55	-26.82
1	2	90	27.69	-46.46	8.49	-27.27	-32.48	-246.36	-1236.36	-520.57	-962.15	443.03
1	2	91	74.68	0.93	0.93	74.68	-0.53	375.46	-24.12	-23.72	375.07	-12.56
1	2	92	9.41	-72.08	-68.20	5.53	17.35	2278.45	-308.07	1699.52	270.86	-1078.07
1	2	93	22.58	0.60	0.67	22.50	-1.29	996.79	-215.96	-19.37	800.20	446.96
...												
1	74	2474	-4.81	-45.08	-41.82	-8.07	-10.98	-372.57	-2261.43	-400.76	-2233.25	-229.02
M_G			**N max**	**N min**	**N 1**	**N 2**	**N 1-2**	**M max**	**M min**	**M 1**	**M 2**	**M 1-2**
				-273.62	-273.49	-236.53	-160.12		-7564.11	-7561.96	-7170.08	-3387.38
			341.06		333.41	324.17	133.23	7916.69		5779.34	4649.79	1783.41

VERIFICHE ELEMENTI TRAVE E/O PILASTRO IN C.A.

LEGENDA TABELLA VERIFICHE ELEMENTI TRAVE E/O PILASTRO IN C.A.

In tabella vengono riportati per ogni elemento il numero identificativo ed il codice di verifica con le sigle **Ok** o **NV**.

Nel caso in cui si sia proceduto alla progettazione con il metodo degli stati limite (**S.L.**) vengono riportati: il rapporto x/d, le verifiche per sollecitazioni proporzionali e la verifica per compressione media con l'indicazione delle combinazioni in cui si sono attinti i rispettivi valori.

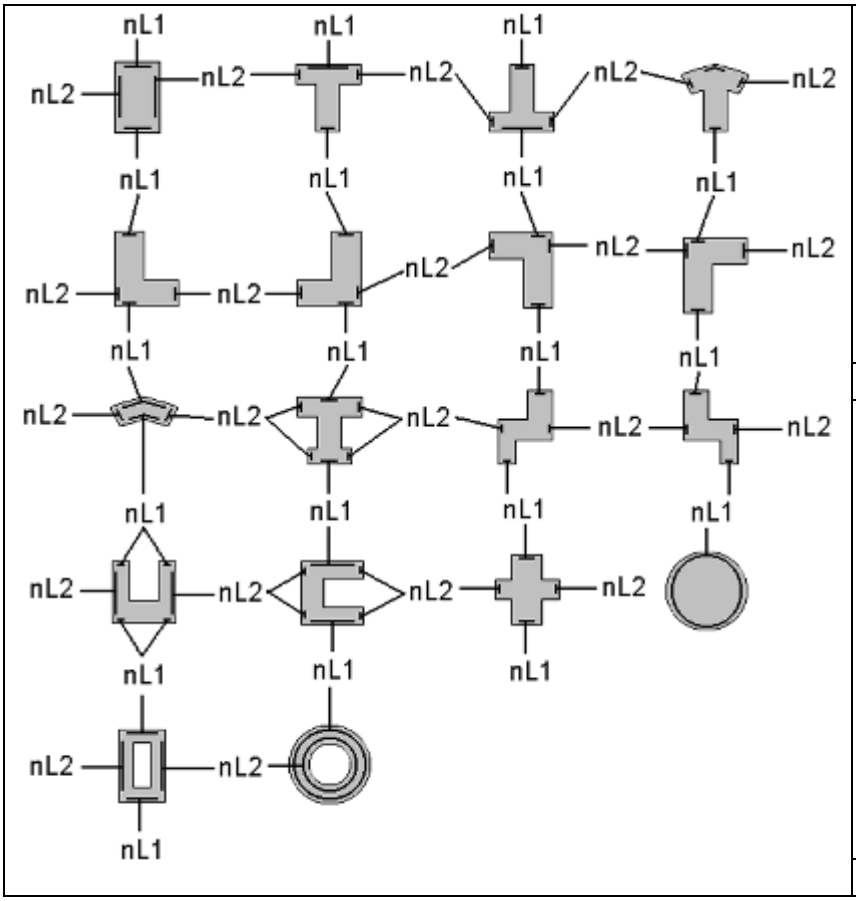
Nel caso in cui si sia proceduto alla progettazione con le tensioni ammissibili (**T.A.**) vengono riportate le massime tensioni nell'elemento (massima compressione nel calcestruzzo, massima compressione media nel calcestruzzo, massima tensione nell'acciaio, massima tensione tangenziale) con l'indicazione delle combinazioni in cui si sono attinti i rispettivi valori.

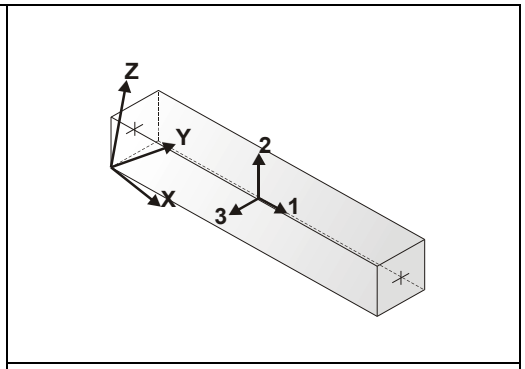
Nel caso in cui la struttura abbia comportamento dissipativo e sia prevista la progettazione con il criterio della gerarchia delle resistenze **(G.R.)** vengono riportate le verifiche di sovraresistenza e del nodo.

Per gli elementi tipo pilastro sono riportati numero e diametro dei ferri di vertice, numero e diametro di ferri disposti lungo i lati L1 (paralleli alla base della sezione) e lungo i lati L2 (paralleli all'altezza della sezione).

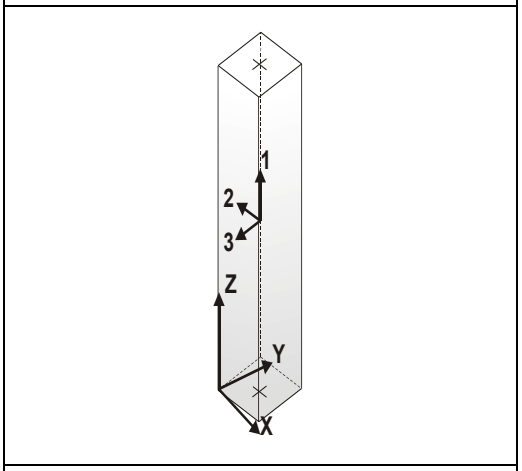
Per gli elementi tipo trave sono riportati infine le quantità di armatura inferiore e superiore.

Schema della distribuzione delle armature longitudinali





Orientamento elementi 2D non verticali



Orientamento elementi 2D verticali

PROGETTAZIONE DELLE FONDAZIONI

Il D.M.17/01/2018 - par: 7.2.5 prevede:

"Sia per CD"A" sia per CD"B" il dimensionamento delle strutture di fondazione e la verifica di sicurezza del complesso fondazione-terreno devono essere eseguiti assumendo come azione in fondazione, trasmessa dagli elementi soprastanti, una tra le seguenti:

- quella derivante dall'analisi strutturale eseguita ipotizzando comportamento strutturale non dissipativo;
- […];
- quella trasferita dagli elementi soprastanti nell'ipotesi di comportamento strutturale dissipativo, amplificata di un coefficiente pari a 1,30 in CD"A" e 1,10 in CD"B";

Nel contesto visualizzazione risultati e nella stampa della relazione sulle fondazioni PRO_SAP mostra le sollecitazioni che derivano dall'analisi non incrementate sia in termini di pressioni sul terreno che in termini di sollecitazioni.

La progettazione degli elementi strutturali con proprietà fondazione è effettuata da PRO_SAP (per travi e platee) o da PRO_CAD Plinti (per plinti e pali di fondazione) incrementando le sollecitazioni delle combinazioni con sisma di un coefficiente pari 1.1 in CDB e 1.3 in CDA per pali, plinti, travi e platee.
Per i bicchieri dei plinti di fondazione prefabbricati l'incremento delle sollecitazioni ha un fattore pari a 1.2 in CDB e 1.35 in CDA.
N.B.: nel caso di comportamento strutturale non dissipativo la progettazione viene effettuata senza nessun incremento.

Le verifiche geotecniche vengono effettuate dal modulo geotecnico incrementando automaticamente le sollecitazioni del fattore 1.1 in CDB e 1.3 in CDA per pali, plinti, travi e platee.
N.B.: nel caso di comportamento strutturale non dissipativo le verifiche geotecniche vengono effettuate senza nessun incremento.

Simbologia adottata nelle tabelle di verifica

Per le verifiche agli S.L. dei pilastri è presente una tabella con i simboli di seguito descritti:

M_P X Y	Numero della pilastrata (P) e posizione in pianta (X,Y)
Pilas.	numero identificativo dell'elemento D2
Note	Codici identificativi delle sezione (s) e materiale (m) pilastro
Stato	Codici relativi all'esito delle verifiche effettuate appresso descritte
Quota	Quota sezione di verifica
%Af	Percentuale di area di armatura rispetto a quella di calcestruzzo
r. snell.	Rapporto di snellezza λ su λ^*: valore superiore a 1 per elementi snelli nel caso in cui viene effettuata la verifica con il metodo diretto dello stato di equilibrio
Armat. long.	Numero e diametro (d) dei ferri di armatura longitudinale distinti in ferri di vertice + ferri di lato nelle posizioni nL1 e nL2, come da schemi in figura precedente
V N/M	Verifica a pressoflessione con rapporto Ed/Rd: valore minore o uguale a 1 per verifica positiva
V N sis	Verifica a compressione solo calcestruzzo con rapporto Nsd/Nrd ed Nrd calcolato come al punto 7.4.4.2.1: valore minore o uguale a 1 per verifica positiva
Staffe	Dati tratto di staffatura oggetto di verifica, nello specifico: numero delle braccia, diametro, passo, lunghezza L tratto
V V/T cls	Verifica a taglio/torsione con rapporto Ved/Vrd: valore minore o uguale a 1 per verifica positiva
Rif. cmb.	Riferimento combinazioni da cui si generano le verifiche più gravose per il pilastro

Per le verifiche alla G.R. dei pilastri è presente una tabella con i simboli di seguito descritti:

Pilas.	numero identificativo dell'elemento D2 pilastro
sovr. Xi (Xf)	Verifica sovraresistenza come da formula 7.4.4 in direzione X, alla base (i) ed alla sommità (f):

	rapporto tra i momenti resistenti dei pilastri e delle travi. La verifica è positiva se maggiore del γ_{Rd} adottato
sovr. Yi (Yf)	Verifica sovraresistenza come da formula 7.4.4 in direzione Y, alla base (i) ed alla sommità (f): rapporto tra i momenti resistenti dei pilastri e delle travi. La verifica è positiva se maggiore del γ_{Rd} adottato
M 2-2 i (f)	Valore del momento resistente 2-2 alla base (i) ed alla sommità (f) con massimo momento in presenza dello sforzo normale di calcolo
M 3-3 i (f)	Valore del momento resistente 3-3 alla base (i) ed alla sommità (f) con massimo momento in presenza dello sforzo normale di calcolo
Luce per V	Luce di calcolo per la definizione del taglio (generato dai momenti resistenti)
V M2-2 (M3-3)	Valore del taglio generato dai momenti resistenti 2-2 (3-3)

Per le verifiche dei dettagli costruttivi per la duttilità è presente una tabella con i simboli di seguito descritti:
(Non presente nel caso di comportamento strutturale non dissipativo)

Pilas	Numero identificativo D2 pilastro
ni	Sforzo assiale adimensionalizzato di progetto relativo alla combinazione sismica SLV
alfaomega	Prodotto tra il coefficiente di efficacia del confinamento e il rapporto meccanico dell'armatura trasversale di confinamento all'interno del nodo
V.7.4.29 2-2 (3-3)	Rapporto tra la domanda di staffe minima nel nodo e il rapporto meccanico dell'armatura trasversale di confinamento inserito all'interno del nodo in direzione 2 (3)
V. 7.4.29 Stato	Codici relativi all'esito della verifica 7.4.29
dmu_fi 2-2 (3-3)	Domanda in duttilità di curvatura in direzione 2 (3)
cmu_fi 2-2 (3-3)	Capacità in duttilità di curvatura in direzione 2 (3)
V. dutt. 2-2 (3-3)	Rapporto tra la domanda in duttilità di curvatura e la capacità in duttilità di curvatura in direzione 2 (3)

Per le verifiche nodi trave-pilastro di elementi nuovi è presente una tabella con i simboli di seguito descritti:

Nodo	Numero identificativo del nodo trave-pilastro
Stato	Esito delle verifiche
Pilastro	Numero identificativo D2 pilastro
Diam st	Diametro staffe nodo
Passo	Passo staffe nodo
n. br. 2 (3)	Numero braccia staffe per il taglio in direzione 2 (3)
Bj2 (3)	Larghezza effettiva del nodo per il taglio in direzione 2 (3)
Hjc2 (3)	Distanza tra le giaciture più esterne delle armature del pilastro per il taglio in direzione 2 (3)
V. 7.4.8	Rapporto tra il taglio Vjbd e il taglio resistente come da formula 7.4.8
V. Ash	Rapporto tra il passo staffe calcolato secondo il capitolo 7.4.4.3.1. e il passo staffe effattivamente inserita nel nodo. Nel caso di valore indica passo staffe utilizzato deriva dalle formule presenti nel paragrafo 7.4.4.3.1. Nel caso di valore minore di 1 il passo staffe utilizzato deriva del pilastro superiore o inferiore al nodo
7.4.10	Check passo staffe valutato in funzione della formula 7.4.10: • SI il passo staffe è calcolato utilizzando la formula 7.4.10; • NO il passo staffe è calcolato utilizzando le formule 7.4.11 e/o 7.4.12; • NR calcolo passo staffe non richiesto;
Rif. comb.	Riferimento combinazioni da cui si generano le verifiche più gravose per il nodo

Per le verifiche nodi trave-pilastro di elementi esistenti è presente una tabella con i simboli di seguito descritti:

Pilastro I	Numero identificativo D2 del pilastro inferiore.

Pilastro S	Numero identificativo D2 del pilastro superiore.
Nodo	Numero identificativo del nodo trave-pilastro.
SL cod	Stato limite di riferimento e relativo esito delle verifiche.
ver. (+)	Fattore di sicurezza nei riguardi della verifica di resistenza a compressione (verificato se < 1.00).
V +	Azione di Taglio presente al di sopra del nodo nella verifica di resistenza a compressione.
V + af s	Sollecitazione di trazione presente nell' armatura longitudinale superiore della trave nella verifica di resistenza a compressione.
N +	Azione Assiale presente al di sopra del nodo nella verifica di resistenza a compressione.
ver. (-)	Fattore di sicurezza nei riguardi della verifica di resistenza a trazione (verificato se < 1.00).
V -	Azione di Taglio presente al di sopra del nodo nella verifica di resistenza a trazione.
V - af s	Sollecitazione di trazione presente nell' armatura longitudinale superiore della trave nella verifica di resistenza a trazione.
N -	Azione Assiale presente al di sopra del nodo nella verifica di resistenza a trazione.
AreaV2	Area resistente del nodo in direzione 2 ($A_{j2}=b_{j2}*h_{jc2}$).
AreaV3	Area resistente del nodo in direzione 3 ($A_{j3}=b_{j3}*h_{jc3}$).
Rif. comb.	Combinazione (direzione) di riferimento nella verifica di trazione.

Per le verifiche agli S.L. delle travi è presente una tabella con i simboli di seguito descritti:

M_T Z P P	Numero della travata (T), quota media (Z), n° pilastrata iniziale (P) e finale (P) (nodo in assenza di pilastrata)
Trave	numero identificativo dell'elemento D2
Note	Codici identificativi sezione (s) e materiale (m) trave; sono inoltre presenti le sigle relative all'esito delle verifiche effettuate appresso descritte
%Af	Percentuale di area di armatura rispetto a quella di calcestruzzo
Af inf.	Area di armatura longitudinale posta all'intradosso
Af sup	Area di armatura longitudinale posta all'estradosso
Af long.	Area complessiva armatura longitudinale
x/d	rapporto tra posizione dell'asse neutro e altezza utile
V N/M	Verifica a pressoflessione rapporto Ed/Rd: valore minore o uguale a 1 per verifica positiva
Staffe	Dati tratto di staffatura oggetto di verifica, nello specifico: numero delle braccia, diametro, passo, lunghezza L tratto
V V/T cls	Verifica a taglio/torsione con rapporto Ved/Vrd: valore minore o uguale a 1 per verifica positiva
Rif. cmb.	Riferimento combinazioni da cui si generano le verifiche più gravose per la trave

Per le verifiche alla G.R. delle travi è presente una tabella con i simboli di seguito descritti:

Trave	numero identificativo dell'elemento D2 trave
M negativo i (f)	Valore del momento resistente negativo all' estremità iniziale i (finale f) della trave
M positivo i (f)	Valore del momento resistente positivo all' estremità iniziale i (finale f) della trave
Luce per V	Luce di calcolo per la definizione del taglio (generato dai momenti resistenti)
V M-i M+f	Taglio generato dai momenti resistenti negativo i e positivo f
V M+i M-f	Taglio generato dai momenti resistenti positivo i e negativo f
VEd, min	Valore di taglio minimo per verifica condizioni p.to 7.4.4.1.1 armatura diagonale (solo per CD "A")
VEd, max	Valore di taglio massimo per verifica condizioni p.to 7.4.4.1.1 armatura diagonale (solo per CD "A")
Vr1	Valore di taglio come da formula 7.4.1 per armatura diagonale (solo per CD "A")
As	Area singolo ordine armature diagonali come da formula 7.4.2 (solo per CD "A")

Per le verifiche a taglio ciclico di travi e pilastri esistenti è presente una tabella con i simboli di seguito descritti:

Trave/Pilastro	Numero identificativo dell'elemento D2 trave/pilastro
V. SLV	Codice relativo all'esito delle verifiche

Nodo	Numero identificativo del nodo di verifica
Ver. VC	Fattore di sicurezza nei confronti della verifica a taglio ciclico (verificato se < 1.00)
Direz.	Direzione di verifica
N fr	Valore di sforzo normale calcolato con fattore di comportamento fragile
V fr	Valore di taglio calcolato con fattore di comportamento fragile
M fr	Valore di momento calcolato con fattore di comportamento fragile
N dutt	Valore di sforzo normale calcolato con fattore di comportamento duttile
LV	Lunghezza di taglio
Mud,pl	Parte plastica della domanda di duttilità
V cic	Resistenza a taglio in condizioni cicliche (C8.7.2.8)
Cmb	Riferimento combinazioni da cui si generano le verifiche più gravose

Per le verifiche alle T.A. di pilastri e travi è presente una tabella con i simboli di seguito descritti:

M_P X Y	Numero della pilastrata (P) e posizione in pianta (X,Y)
M_T Z P P	Numero della travata, quota media pilastrata iniziale e finale (nodo in assenza di pilastrata)
Pilas. o Trave	numero identificativo dell'elemento D2
Note	Viene riportato il codice relativo alla sezione(s) e relativo al materiale(m); nella terza riga viene riportato il valore delle snellezze in direzione 2-2 e 3-3
Stato	Codici di verifica relativi alle tensioni normali e alle tensioni tangenziali
Quota	Ascissa del punto di verifica
%Af	Percentuale di area di armatura rispetto a quella di calcestruzzo
Armat. long.	Numero e diametro dei ferri di armatura longitudinale: ferri di vertice + ferri di lato (come da fig. precedente)
Af inf.	Area di armatura longitudinale posta all'intradosso della trave
Af sup	Area di armatura longitudinale posta all'estradosso della trave
Sc max	Massima tensione di compressione del calcestruzzo
Sc med	Massima tensione media di compressione del calcestruzzo
Sf max	Tensione massima nell'acciaio
staffe	Vengono riportati i dati del tratto di staffatura in cui cade la sezione di verifica; in particolare: numero dei bracci, diametro, passo, lunghezza tratto
Tau max	Tensione massima tangenziale nel cls
Rif. comb	Combinazioni in cui si generano i seguenti valori di tensione: Sc max, Sc med, Sf max, Tau max
AfV	area dell'armatura atta ad assorbire le azioni di taglio
AfT	area dell'armatura atta ad assorbire le azioni di torsione
Scorr. P	Scorrimento dei piegati
Af long.	Area del ferro longitudinale aggiuntivo per assorbire la torsione

					M_P= 1	**X=0.0**	**Y=0.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
			cm						L=cm			
1	s=18,m=3	ok,ok	0.0	2.26	0.58	4d24 2+10 d24	0.93	0.233+5d10/15	L=90	0.90	0.66	10,28,17,17
			214.0	2.26	0.58	4d24 2+10 d24	0.31	0.233+5d10/20	L=248	0.90	0.88	10,28,17,17
	[b=1.0;1.0]		428.0	2.26	0.58	4d24 2+10 d24	0.29	0.223+5d10/15	L=90	0.90	0.66	31,28,17,17
55	s=18,m=3	ok,ok	428.0	2.26	0.44	4d24 2+10 d24	0.45	0.153+5d10/15	L=90	0.90	0.64	31,28,10,10
			631.5	2.26	0.44	4d24 2+10 d24	0.06	0.143+5d10/20	L=227	0.91	0.85	10,28,10,10
	[b=1.0;1.0]		835.0	2.26	0.44	4d24 2+10 d24	0.36	0.143+5d10/15	L=90	0.91	0.64	31,28,10,10
102	s=18,m=3	ok,ok	835.0	2.26	0.25	4d24 2+10 d24	0.26	0.073+5d10/15	L=80	1.00	0.86	30,28,14,10
			1002.3	2.26	0.25	4d24 2+10 d24	0.16	0.073+5d10/15	L=174	1.00	0.86	11,28,14,10
	[b=1.0;1.0]		1169.5	2.26	0.25	4d24 2+10 d24	0.34	0.063+5d10/15	L=80	1.00	0.87	11,28,7,10
					M_P= 2	**X=962.5**	**Y=0.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
2	s=2,m=3	ok,ok	0.0	2.26	0.66	4d24 4+12 d24	0.99	0.303+5d10/15	L=100	1.00	0.99	11,28,9,17

		214.0	1.81	0.66	4d24 2+10 d24	0.37	0.303+5d10/15 L=228	1.00	0.99	11,28,17,17
[b=1.0;1.0]		428.0	1.81	0.66	4d24 2+10 d24	0.27	0.293+5d10/15 L=100	1.00	1.00	31,28,6,17
56 s=3,m=3	ok,ok	428.0	1.58	0.49	4d24 2+8 d24	0.48	0.193+5d10/15 L=105	0.86	0.66	11,26,11,11
		631.5	1.58	0.49	4d24 2+8 d24	0.11	0.183+5d10/20 L=197	0.86	0.88	11,26,11,11
[b=1.0;1.0]		835.0	1.58	0.49	4d24 2+8 d24	0.50	0.183+5d10/15 L=105	0.87	0.66	11,26,11,11
108 s=4,m=3	ok,ok	835.0	1.81	0.27	4d24 2+10 d24	0.27	0.093+5d10/15 L=100	1.00	0.93	24,30,6,11
		1002.3	1.81	0.27	4d24 2+10 d24	0.11	0.083+5d10/15 L=134	1.00	0.94	30,30,17,11
[b=1.0;1.0]		1169.5	1.81	0.27	4d24 2+10 d24	0.26	0.083+5d10/15 L=100	1.00	0.94	34,30,5,11
				M_P= 3	**X=1748.0**	**Y=0.0**				
Pilas. Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis Staffe	V V/T cls	V V/T acc	Rif. cmb
3 s=2,m=3	ok,ok	0.0	1.81	0.49	4d24 2+10 d24	0.87	0.173+5d10/15 L=105	0.93	0.69	11,26,20,20
		214.0	1.81	0.49	4d24 2+10 d24	0.37	0.163+5d10/20 L=218	0.93	0.93	11,26,20,20
[b=1.0;1.0]		428.0	1.81	0.49	4d24 2+10 d24	0.23	0.163+5d10/15 L=105	0.93	0.69	21,26,20,20
57 s=3,m=3	ok,ok	428.0	1.58	0.30	4d24 2+8 d24	0.40	0.073+5d10/15 L=105	0.83	0.60	24,22,8,11
		631.5	1.58	0.30	4d24 2+8 d24	0.08	0.063+5d10/20 L=197	0.84	0.80	8,22,8,11
[b=1.0;1.0]		835.0	1.58	0.30	4d24 2+8 d24	0.38	0.063+5d10/15 L=105	0.84	0.60	5,22,8,11
				M_P= 4	**X=0.0**	**Y=590.0**				
Pilas. Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis Staffe	V V/T cls	V V/T acc	Rif. cmb
4 s=2,m=3	ok,ok	0.0	2.26	0.61	4d24 4+12 d24	0.87	0.263+5d10/12 L=100	1.00	0.87	30,20,31,31
		214.0	1.81	0.61	4d24 2+10 d24	0.26	0.263+5d10/12 L=228	1.00	0.88	30,20,21,31
[b=1.0;1.0]		428.0	1.81	0.61	4d24 2+10 d24	0.34	0.253+5d10/12 L=100	1.00	0.88	31,20,23,31
63 s=3,m=3	ok,ok	428.0	1.58	0.46	4d24 2+8 d24	0.64	0.163+5d10/15 L=105	0.94	0.67	11,20,31,33
		631.5	1.58	0.46	4d24 2+8 d24	0.10	0.163+5d10/20 L=197	0.94	0.90	36,20,31,33
[b=1.0;1.0]		835.0	1.58	0.46	4d24 2+8 d24	0.50	0.153+5d10/15 L=105	0.94	0.67	31,20,31,33
109 s=4,m=3	ok,ok	835.0	1.81	0.27	4d24 2+10 d24	0.35	0.083+5d10/12 L=100	1.00	0.88	11,16,27,31
		1002.3	1.81	0.27	4d24 2+10 d24	0.15	0.073+5d10/12 L=134	1.00	0.88	31,16,23,31
[b=1.0;1.0]		1169.5	1.81	0.27	4d24 2+10 d24	0.43	0.073+5d10/12 L=100	1.00	0.88	11,16,29,31
				M_P= 5	**X=962.5**	**Y=590.0**				
Pilas. Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis Staffe	V V/T cls	V V/T acc	Rif. cmb
5s=14,m=3	ok,ok	0.0	1.45	0.58	4d24 2+10 d24	0.90	0.303+5d10/15 L=100	0.94	0.86	8,26,31,33
		214.0	1.45	0.58	4d24 2+10 d24	0.22	0.303+5d10/15 L=228	0.94	0.86	24,26,31,33
[b=1.0;1.0]		428.0	1.45	0.58	4d24 2+10 d24	0.41	0.293+5d10/15 L=100	0.95	0.86	11,26,31,33
64s=14,m=3	ok,ok	428.0	1.45	0.44	4d24 2+10 d24	0.58	0.193+5d10/15 L=100	0.90	0.82	11,26,31,33
		631.5	1.45	0.44	4d24 2+10 d24	0.09	0.193+5d10/15 L=207	0.90	0.82	24,26,31,33
[b=1.0;1.0]		835.0	1.45	0.44	4d24 2+10 d24	0.40	0.183+5d10/15 L=100	0.91	0.82	11,26,31,33
110s=14,m=3	ok,ok	835.0	1.45	0.25	4d24 2+10 d24	0.37	0.093+5d10/15 L=100	1.00	0.92	5,14,30,30
		1002.3	1.45	0.25	4d24 2+10 d24	0.13	0.093+5d10/15 L=134	1.00	0.92	26,14,34,30
[b=1.0;1.0]		1169.5	1.45	0.25	4d24 2+10 d24	0.32	0.083+5d10/15 L=100	1.00	0.93	10,14,34,30
				M_P= 6	**X=1748.0**	**Y=590.0**				
Pilas. Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis Staffe	V V/T cls	V V/T acc	Rif. cmb
6 s=2,m=3	ok,ok	0.0	1.81	0.53	4d24 2+10 d24	0.70	0.203+5d10/15 L=105	0.99	0.73	27,14,31,36
		214.0	1.81	0.53	4d24 2+10 d24	0.17	0.193+5d10/20 L=218	0.99	0.97	27,14,31,36
[b=1.0;1.0]		428.0	1.81	0.53	4d24 2+10 d24	0.32	0.193+5d10/15 L=105	0.99	0.73	5,14,31,36
65 s=3,m=3	ok,ok	428.0	1.58	0.33	4d24 2+8 d24	0.74	0.093+5d10/15 L=105	0.91	0.64	5,14,30,33
		631.5	1.58	0.33	4d24 2+8 d24	0.08	0.083+5d10/20 L=197	0.92	0.85	21,14,30,33
[b=1.0;1.0]		835.0	1.58	0.33	4d24 2+8 d24	0.58	0.083+5d10/15 L=105	0.92	0.64	5,14,30,33
				M_P= 7	**X=0.0**	**Y=990.0**				
Pilas. Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis Staffe	V V/T cls	V V/T acc	Rif. cmb
7 s=2,m=3	ok,ok	0.0	1.81	0.64	4d24 2+10 d24	0.92	0.273+5d10/15 L=100	0.97	0.75	30,11,30,30
		214.0	1.81	0.64	4d24 2+10 d24	0.24	0.263+5d10/15 L=228	0.98	0.75	30,11,30,30
[b=1.0;1.0]		428.0	1.81	0.64	4d24 2+10 d24	0.32	0.263+5d10/15 L=100	0.98	0.75	20,11,30,30
66 s=3,m=3	ok,ok	428.0	1.58	0.47	4d24 2+8 d24	0.72	0.163+5d10/15 L=105	0.94	0.67	20,11,36,33
		631.5	1.58	0.47	4d24 2+8 d24	0.09	0.163+5d10/20 L=197	0.94	0.90	36,11,36,33
[b=1.0;1.0]		835.0	1.58	0.47	4d24 2+8 d24	0.51	0.153+5d10/15 L=105	0.94	0.67	36,11,36,33
111 s=4,m=3	ok,ok	835.0	1.81	0.25	4d24 2+10 d24	0.43	0.063+5d10/12 L=100	1.00	0.86	7,11,35,31
		1002.3	1.81	0.25	4d24 2+10 d24	0.13	0.063+5d10/12 L=134	1.00	0.86	36,11,36,31
[b=1.0;1.0]		1169.5	1.81	0.25	4d24 2+10 d24	0.40	0.063+5d10/12 L=100	1.00	0.86	20,11,25,31
				M_P= 8	**X=962.5**	**Y=990.0**				
Pilas. Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis Staffe	V V/T cls	V V/T acc	Rif. cmb
8s=14,m=3	ok,ok	0.0	1.45	0.58	4d24 2+10 d24	0.81	0.273+5d10/15 L=100	0.87	0.84	8,7,30,33
		214.0	1.45	0.58	4d24 2+10 d24	0.21	0.273+5d10/15 L=228	0.87	0.84	24,7,30,33
[b=1.0;1.0]		428.0	1.45	0.58	4d24 2+10 d24	0.70	0.263+5d10/15 L=100	0.87	0.84	7,7,30,33
72s=14,m=3	ok,ok	428.0	1.81	0.44	4d24 4+12 d24	0.91	0.173+5d10/15 L=100	0.99	0.93	13,5,33,33
		631.5	1.45	0.44	4d24 2+10 d24	0.08	0.173+5d10/15 L=207	0.99	0.93	24,5,33,33
[b=1.0;1.0]		835.0	1.45	0.44	4d24 2+10 d24	0.40	0.163+5d10/15 L=100	0.99	0.93	5,5,33,33
117s=14,m=3	ok,ok	835.0	1.45	0.22	4d24 2+10 d24	0.42	0.073+5d10/15 L=100	1.00	0.88	14,5,33,33
		1002.3	1.45	0.22	4d24 2+10 d24	0.11	0.073+5d10/15 L=134	1.00	0.89	26,5,33,33
[b=1.0;1.0]		1169.5	1.45	0.22	4d24 2+10 d24	0.33	0.063+5d10/15 L=100	1.00	0.89	14,5,33,33
				M_P= 9	**X=1748.0**	**Y=990.0**				
Pilas. Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis Staffe	V V/T cls	V V/T acc	Rif. cmb
9 s=2,m=3	ok,ok	0.0	1.81	0.49	4d24 2+10 d24	0.71	0.173+5d10/15 L=105	0.94	0.71	27,5,36,33
		214.0	1.81	0.49	4d24 2+10 d24	0.17	0.163+5d10/20 L=218	0.94	0.95	27,5,36,33
[b=1.0;1.0]		428.0	1.81	0.49	4d24 2+10 d24	0.29	0.163+5d10/15 L=105	0.95	0.71	14,5,36,33
73 s=3,m=3	ok,ok	428.0	1.58	0.30	4d24 2+8 d24	0.70	0.073+5d10/15 L=105	0.89	0.62	5,5,33,33
		631.5	1.58	0.30	4d24 2+8 d24	0.08	0.073+5d10/20 L=197	0.90	0.83	21,5,33,33
[b=1.0;1.0]		835.0	1.58	0.30	4d24 2+8 d24	0.55	0.063+5d10/15 L=105	0.90	0.62	5,5,33,33
				M_P= 10	**X=0.0**	**Y=1440.0**				

Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
10	s=2,m=3	ok,ok	0.0	1.81	0.66	4d24 2+10 d24	0.88	0.293+5d10/15	L=105	0.95	0.75	33,15,33,30
			214.0	1.81	0.66	4d24 2+10 d24	0.23	0.293+5d10/20	L=218	0.95	1.00	33,15,33,30
	[b=1.0;1.0]		428.0	1.81	0.66	4d24 2+10 d24	0.68	0.283+5d10/15	L=105	0.96	0.75	10,15,33,30
74	s=3,m=3	ok,ok	428.0	2.04	0.49	4d24 4+10 d24	0.88	0.183+5d10/15	L=100	1.00	0.96	20,15,32,36
			631.5	1.58	0.49	4d24 2+8 d24	0.08	0.173+5d10/15	L=207	1.00	0.96	36,15,28,36
	[b=1.0;1.0]		835.0	1.58	0.49	4d24 2+8 d24	0.56	0.173+5d10/15	L=100	1.00	0.97	36,15,27,36
118	s=4,m=3	ok,ok	835.0	1.81	0.25	4d24 2+10 d24	0.44	0.073+5d10/12	L=100	1.00	0.90	20,7,24,36
			1002.3	1.81	0.25	4d24 2+10 d24	0.12	0.073+5d10/12	L=134	1.00	0.90	36,7,35,36
	[b=1.0;1.0]		1169.5	1.81	0.25	4d24 2+10 d24	0.41	0.063+5d10/12	L=100	1.00	0.90	20,7,28,36
					M_P= 11	**X=962.5**	**Y=1440.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
11	s=14,m=3	ok,ok	0.0	1.45	0.61	4d24 2+10 d24	0.84	0.313+5d10/15	L=100	0.92	0.87	20,21,36,31
			214.0	1.45	0.61	4d24 2+10 d24	0.18	0.313+5d10/15	L=228	0.92	0.87	27,21,36,31
	[b=1.0;1.0]		428.0	1.45	0.61	4d24 2+10 d24	0.78	0.303+5d10/15	L=100	0.92	0.87	7,21,36,31
85	s=14,m=3	ok,ok	428.0	2.17	0.45	4d24 6+14 d24	0.89	0.203+5d10/10	L=100	1.00	0.87	10,21,33,33
			631.5	1.45	0.45	4d24 2+10 d24	0.07	0.193+5d10/10	L=207	1.00	0.87	25,21,33,33
	[b=1.0;1.0]		835.0	1.81	0.45	4d24 4+12 d24	0.89	0.193+5d10/10	L=100	1.00	0.88	12,21,31,33
28	s=14,m=3	ok,ok	835.0	1.45	0.24	4d24 2+10 d24	0.77	0.083+5d10/15	L=100	1.00	0.91	10,25,33,33
			1002.3	1.45	0.24	4d24 2+10 d24	0.11	0.083+5d10/15	L=134	1.00	0.91	33,25,29,33
	[b=1.0;1.0]		1169.5	1.45	0.24	4d24 2+10 d24	0.33	0.083+5d10/15	L=100	1.00	0.91	14,25,30,33
					M_P= 12	**X=1748.0**	**Y=1440.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
12	s=2,m=3	ok,ok	0.0	1.81	0.52	4d24 2+10 d24	0.69	0.193+5d10/15	L=105	0.95	0.72	15,17,30,31
			214.0	1.81	0.52	4d24 2+10 d24	0.15	0.183+5d10/20	L=218	0.96	0.96	27,17,30,31
	[b=1.0;1.0]		428.0	1.81	0.52	4d24 2+10 d24	0.30	0.183+5d10/15	L=105	0.96	0.72	14,17,30,31
86	s=3,m=3	ok,ok	428.0	1.58	0.32	4d24 2+8 d24	0.72	0.083+5d10/15	L=105	0.91	0.63	14,17,33,30
			631.5	1.58	0.32	4d24 2+8 d24	0.07	0.073+5d10/20	L=197	0.92	0.84	27,17,33,30
	[b=1.0;1.0]		835.0	1.58	0.32	4d24 2+8 d24	0.56	0.073+5d10/15	L=105	0.92	0.63	14,17,33,30
					M_P= 13	**X=0.0**	**Y=1890.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
13	s=2,m=3	ok,ok	0.0	2.26	0.60	4d24 4+12 d24	0.89	0.263+5d10/12	L=100	1.00	0.84	17,31,17,10
			214.0	1.81	0.60	4d24 2+10 d24	0.42	0.253+5d10/12	L=228	1.00	0.84	17,31,13,10
	[b=1.0;1.0]		428.0	1.81	0.60	4d24 2+10 d24	0.29	0.253+5d10/12	L=100	1.00	0.85	36,31,17,10
87	s=3,m=3	ok,ok	428.0	1.58	0.43	4d24 2+8 d24	0.54	0.153+5d10/15	L=105	0.90	0.65	36,23,17,17
			631.5	1.58	0.43	4d24 2+8 d24	0.11	0.143+5d10/20	L=197	0.90	0.87	17,23,17,17
	[b=1.0;1.0]		835.0	1.58	0.43	4d24 2+8 d24	0.61	0.143+5d10/15	L=105	0.90	0.65	17,23,17,17
18	s=4,m=3	ok,ok	835.0	1.81	0.21	4d24 2+10 d24	0.22	0.053+5d10/15	L=100	1.00	0.92	17,23,15,17
			1002.3	1.81	0.21	4d24 2+10 d24	0.19	0.053+5d10/15	L=134	1.00	0.92	20,23,10,17
	[b=1.0;1.0]		1169.5	1.81	0.21	4d24 2+10 d24	0.30	0.043+5d10/15	L=100	1.00	0.92	20,23,16,17
					M_P= 14	**X=962.5**	**Y=1890.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
14	s=2,m=3	ok,ok	0.0	2.26	0.70	4d24 4+12 d24	0.95	0.343+5d10/15	L=100	1.00	0.99	20,23,10,10
			214.0	1.81	0.70	4d24 2+10 d24	0.36	0.333+5d10/15	L=228	1.00	1.00	20,23,12,10
	[b=1.0;1.0]		428.0	1.81	0.70	4d24 2+10 d24	0.24	0.333+5d10/12	L=100	1.00	0.83	26,23,5,10
88	s=3,m=3	ok,ok	428.0	1.58	0.50	4d24 2+8 d24	0.41	0.203+5d10/15	L=105	0.85	0.66	17,21,20,17
			631.5	1.58	0.50	4d24 2+8 d24	0.12	0.193+5d10/20	L=197	0.85	0.88	20,21,20,17
	[b=1.0;1.0]		835.0	1.58	0.50	4d24 2+8 d24	0.43	0.193+5d10/15	L=105	0.86	0.66	20,21,20,17
107	s=4,m=3	ok,ok	835.0	1.81	0.26	4d24 2+10 d24	0.25	0.083+5d10/15	L=100	1.00	0.91	26,25,6,15
			1002.3	1.81	0.26	4d24 2+10 d24	0.09	0.073+5d10/15	L=134	1.00	0.91	36,25,12,15
	[b=1.0;1.0]		1169.5	1.81	0.26	4d24 2+10 d24	0.22	0.073+5d10/15	L=100	1.00	0.91	17,25,11,15
					M_P= 15	**X=1748.0**	**Y=1890.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
15	s=2,m=3	ok,ok	0.0	1.81	0.48	4d24 2+10 d24	0.85	0.163+5d10/15	L=105	0.92	0.69	19,21,11,11
			214.0	1.81	0.48	4d24 2+10 d24	0.31	0.153+5d10/20	L=218	0.93	0.92	19,21,11,11
	[b=1.0;1.0]		428.0	1.81	0.48	4d24 2+10 d24	0.19	0.153+5d10/15	L=105	0.93	0.69	26,21,11,11
89	s=3,m=3	ok,ok	428.0	1.58	0.29	4d24 2+8 d24	0.40	0.063+5d10/15	L=105	0.83	0.60	14,21,20,20
			631.5	1.58	0.29	4d24 2+8 d24	0.08	0.063+5d10/25	L=197	0.83	1.00	14,21,20,20
	[b=1.0;1.0]		835.0	1.58	0.29	4d24 2+8 d24	0.41	0.063+5d10/15	L=105	0.83	0.60	14,21,20,20

Pilas.	**%Af**	**r. snell.**	**V N/M**	**V N sis**	**V V/T cls**	**V V/T acc**
	2.26	0.70	0.99	0.34	1.00	1.00

Pilas.	**sovr. Xi**	**sovr. Xf**	**sovr. Yi**	**sovr. Yf**	**M 2-2 i**	**M 2-2 f**	**M 3-3 i**	**M 3-3 f**	**Luce per V**	**V M2-2**	**V M3-3**
					daN cm	daN cm	daN cm	daN cm	cm	daN	daN
1	0.0	3.32	0.0	1.99	5.444e+06	5.400e+06	9.794e+06	9.753e+06	338.00	3.543e+04	6.375e+04
2	0.0	2.06	0.0	1.97	6.856e+06	6.072e+06	1.642e+07	1.391e+07	338.00	4.462e+04	1.069e+05
3	0.0	3.63	0.0	2.18	5.395e+06	5.337e+06	1.297e+07	1.287e+07	338.00	3.511e+04	8.441e+04
4	0.0	1.52	0.0	2.36	6.723e+06	5.877e+06	1.620e+07	1.365e+07	338.00	4.376e+04	1.054e+05
5	0.0	1.30	0.0	3.00	8.634e+06	8.565e+06	1.542e+07	1.533e+07	338.00	5.620e+04	1.004e+05
6	0.0	1.45	0.0	2.90	5.585e+06	5.529e+06	1.328e+07	1.320e+07	338.00	3.635e+04	8.641e+04
7	0.0	1.40	0.0	2.61	5.958e+06	5.905e+06	1.375e+07	1.368e+07	338.00	3.878e+04	8.950e+04
8	0.0	1.38	0.0	3.43	8.413e+06	8.339e+06	1.514e+07	1.506e+07	338.00	5.476e+04	9.857e+04
9	0.0	1.64	0.0	3.26	5.397e+06	5.340e+06	1.297e+07	1.288e+07	338.00	3.513e+04	8.444e+04
10	0.0	1.40	0.0	2.63	6.084e+06	6.041e+06	1.392e+07	1.386e+07	338.00	3.960e+04	9.064e+04
11	0.0	1.39	0.0	3.63	8.691e+06	8.624e+06	1.549e+07	1.541e+07	338.00	5.657e+04	1.009e+05

12	0.0	1.44	0.0	2.89	5.520e+06	5.464e+06	1.318e+07	1.309e+07	338.00	3.593e+04	8.581e+04
13	0.0	3.73	0.0	1.62	6.697e+06	5.839e+06	1.614e+07	1.360e+07	338.00	4.359e+04	1.051e+05
14	0.0	2.08	0.0	2.00	6.979e+06	6.206e+06	1.662e+07	1.415e+07	338.00	4.543e+04	1.082e+05
15	0.0	3.61	0.0	2.16	5.359e+06	5.301e+06	1.291e+07	1.281e+07	338.00	3.488e+04	8.401e+04
18	4.88	0.0	2.21	0.0	4.720e+06	4.672e+06	1.181e+07	1.173e+07	262.00	3.963e+04	9.917e+04
28	1.42	0.0	4.62	0.0	6.676e+06	6.597e+06	1.286e+07	1.276e+07	262.00	5.606e+04	1.080e+05
55	3.32	3.85	1.99	2.36	5.058e+06	5.014e+06	9.431e+06	9.391e+06	337.00	3.302e+04	6.157e+04
56	2.06	2.49	1.97	2.27	4.987e+06	4.934e+06	1.219e+07	1.211e+07	334.50	3.280e+04	8.017e+04
57	3.63	0.0	2.18	0.0	4.304e+06	4.246e+06	1.105e+07	1.093e+07	334.50	2.831e+04	7.265e+04
63	1.52	1.69	2.36	3.31	4.852e+06	4.797e+06	1.198e+07	1.189e+07	334.50	3.191e+04	7.877e+04
64	1.30	1.63	3.00	3.75	7.736e+06	7.646e+06	1.428e+07	1.416e+07	334.50	5.088e+04	9.392e+04
65	1.45	0.0	2.90	0.0	4.403e+06	4.345e+06	1.125e+07	1.113e+07	334.50	2.896e+04	7.396e+04
66	1.40	1.50	2.61	3.74	4.844e+06	4.789e+06	1.196e+07	1.188e+07	334.50	3.186e+04	7.869e+04
72	1.38	1.39	3.43	4.27	8.826e+06	7.445e+06	1.654e+07	1.389e+07	334.50	5.805e+04	1.088e+05
73	1.64	0.0	3.26	0.0	4.312e+06	4.254e+06	1.106e+07	1.095e+07	334.50	2.836e+04	7.276e+04
74	1.40	1.50	2.63	3.27	5.828e+06	4.881e+06	1.466e+07	1.202e+07	334.50	3.833e+04	9.640e+04
85	1.39	1.42	3.63	4.62	1.012e+07	8.927e+06	1.934e+07	1.671e+07	334.50	6.653e+04	1.272e+05
86	1.44	0.0	2.89	0.0	4.368e+06	4.311e+06	1.118e+07	1.106e+07	334.50	2.873e+04	7.351e+04
87	3.73	4.88	1.62	2.21	4.765e+06	4.710e+06	1.184e+07	1.175e+07	334.50	3.134e+04	7.788e+04
88	2.08	2.71	2.00	2.27	5.050e+06	4.997e+06	1.229e+07	1.220e+07	334.50	3.321e+04	8.082e+04
89	3.61	0.0	2.16	0.0	4.281e+06	4.223e+06	1.100e+07	1.088e+07	334.50	2.815e+04	7.234e+04
102	3.85	0.0	2.36	0.0	4.702e+06	4.665e+06	8.994e+06	8.945e+06	264.50	3.911e+04	7.481e+04
107	2.71	0.0	2.27	0.0	4.864e+06	4.817e+06	1.206e+07	1.198e+07	262.00	4.084e+04	1.013e+05
108	2.49	0.0	2.27	0.0	4.930e+06	4.883e+06	1.217e+07	1.209e+07	262.00	4.140e+04	1.022e+05
109	1.69	0.0	3.31	0.0	4.874e+06	4.827e+06	1.208e+07	1.199e+07	262.00	4.092e+04	1.014e+05
110	1.63	0.0	3.75	0.0	6.739e+06	6.660e+06	1.295e+07	1.284e+07	262.00	5.658e+04	1.087e+05
111	1.50	0.0	3.74	0.0	4.794e+06	4.746e+06	1.194e+07	1.186e+07	262.00	4.025e+04	1.002e+05
117	1.39	0.0	4.27	0.0	6.567e+06	6.487e+06	1.272e+07	1.261e+07	262.00	5.514e+04	1.068e+05
118	1.50	0.0	3.27	0.0	4.836e+06	4.789e+06	1.201e+07	1.193e+07	262.00	4.061e+04	1.009e+05

Pilas.					**M 2-2 i**	**M 2-2 f**	**M 3-3 i**	**M 3-3 f**		**V M2-2**	**V M3-3**
					1.012e+07	8.927e+06	1.934e+07	1.671e+07		6.653e+04	1.272e+05

Pilas.	**nid**	**alfaomega**	**V. 7.4.29 2-2**	**V. 7.4.29 3-3**	**V. 7.4.29 Stato**	**dmu_fi 2-2**	**dmu_fi 3-3**	**cmu_fi 2-2**	**cmu_fi 3-3**	**V. dut. 2-2**	**V. dut. 3-3**
1	0.15	0.11	0.33	0.39	ok	7.1	7.1	9.8	6.9	0.72	1.02
	0.15	0.11	0.30	0.36	ok			10.1	7.0	0.70	1.01
2	0.20	0.09	0.56	0.68	ok	7.1	7.1	7.0	5.9	1.01	1.20
	0.19	0.09	0.53	0.64	ok			7.9	6.2	0.90	1.14
3	0.11	0.09	0.14	0.20	ok	7.1	7.1	12.9	7.4	0.55	0.96
	0.10	0.09	0.11	0.17	ok			13.6	7.5	0.52	0.95
4	0.17	0.12	0.35	0.43	ok	7.1	7.1	8.8	7.5	0.80	0.94
	0.16	0.12	0.32	0.40	ok			11.1	7.8	0.64	0.90
5	0.20	0.09	0.60	0.68	ok	7.1	7.1	8.3	6.5	0.85	1.09
	0.19	0.09	0.56	0.64	ok			8.6	6.6	0.82	1.07
6	0.13	0.09	0.24	0.32	ok	7.1	7.1	11.1	7.0	0.64	1.01
	0.12	0.09	0.21	0.29	ok			11.6	7.1	0.61	0.99
7	0.17	0.09	0.46	0.56	ok	7.1	7.1	8.5	6.4	0.83	1.10
	0.17	0.09	0.43	0.53	ok			8.8	6.5	0.80	1.09
8	0.18	0.09	0.49	0.57	ok	7.1	7.1	9.2	6.8	0.77	1.04
	0.17	0.09	0.46	0.53	ok			9.6	6.9	0.74	1.02
9	0.11	0.09	0.14	0.21	ok	7.1	7.1	12.9	7.4	0.55	0.96
	0.10	0.09	0.11	0.17	ok			13.5	7.5	0.52	0.95
10	0.19	0.09	0.54	0.65	ok	7.1	7.1	7.8	6.2	0.91	1.14
	0.18	0.09	0.51	0.62	ok			8.1	6.3	0.88	1.13
11	0.20	0.09	0.62	0.71	ok	7.1	7.1	8.1	6.4	0.88	1.10
	0.20	0.09	0.59	0.67	ok			8.3	6.5	0.85	1.09
12	0.12	0.09	0.21	0.28	ok	7.1	7.1	11.7	7.1	0.61	0.99
	0.12	0.09	0.18	0.25	ok			12.2	7.2	0.58	0.98
13	0.17	0.12	0.33	0.41	ok	7.1	7.1	8.9	7.6	0.79	0.93
	0.16	0.12	0.30	0.38	ok			11.3	7.9	0.62	0.89
14	0.22	0.09	0.68	0.81	ok	7.1	7.1	6.6	5.7	1.07	1.25
	0.21	0.12	0.51	0.61	ok			8.7	7.1	0.82	0.99
15	0.10	0.09	0.12	0.18	ok	7.1	7.1	13.3	7.4	0.53	0.95
	0.10	0.09	0.09	0.15	ok			14.0	7.6	0.51	0.94
18	0.03	0.09	0.0	0.0	ok	7.1	7.1	25.9	9.6	0.27	0.74
	0.03	0.09	0.0	0.0	ok			27.7	9.8	0.26	0.72
28	0.05	0.09	0.0	0.0	ok	7.1	7.1	24.0	10.3	0.30	0.68
	0.05	0.09	0.0	0.0	ok			25.4	10.5	0.28	0.67
55	0.10	0.11	0.08	0.13	ok	7.1	7.1	13.9	7.6	0.51	0.93
	0.09	0.11	0.06	0.10	ok			14.5	7.7	0.49	0.92
56	0.12	0.09	0.20	0.27	ok	7.1	7.1	11.9	8.2	0.60	0.87
	0.11	0.09	0.17	0.24	ok			12.4	8.4	0.57	0.84
57	0.04	0.09	0.0	0.0	ok	7.1	7.1	22.9	10.2	0.31	0.69
	0.04	0.09	0.0	0.0	ok			24.6	10.4	0.29	0.68
63	0.11	0.09	0.13	0.19	ok	7.1	7.1	13.3	8.7	0.53	0.81

	0.10	0.09	0.10	0.16	ok			13.9	8.8	0.51	0.80
64	0.12	0.09	0.23	0.28	ok	7.1	7.1	12.8	7.7	0.55	0.92
	0.12	0.09	0.20	0.25	ok			13.3	7.8	0.53	0.90
65	0.06	0.09	0.0	0.0	ok	7.1	7.1	20.4	9.9	0.35	0.72
	0.05	0.09	0.0	0.0	ok			21.8	10.1	0.33	0.70
66	0.10	0.09	0.12	0.19	ok	7.1	7.1	13.4	8.7	0.53	0.81
	0.10	0.09	0.09	0.15	ok			14.0	8.9	0.51	0.80
72	0.11	0.09	0.16	0.21	ok	7.1	7.1	10.5	7.7	0.68	0.92
	0.10	0.09	0.13	0.18	ok			14.8	8.2	0.48	0.87
73	0.05	0.09	0.0	0.0	ok	7.1	7.1	22.7	10.2	0.31	0.70
	0.04	0.09	0.0	0.0	ok			24.3	10.3	0.29	0.68
74	0.11	0.09	0.17	0.24	ok	7.1	7.1	8.9	7.3	0.79	0.96
	0.11	0.09	0.14	0.21	ok			12.9	8.6	0.55	0.82
85	0.13	0.15	0.15	0.18	ok	7.1	7.1	13.2	10.7	0.54	0.66
	0.12	0.15	0.13	0.16	ok			15.3	11.1	0.46	0.64
86	0.05	0.09	0.0	0.0	ok	7.1	7.1	21.2	10.0	0.33	0.71
	0.05	0.09	0.0	0.0	ok			22.7	10.2	0.31	0.70
87	0.10	0.09	0.08	0.14	ok	7.1	7.1	14.3	8.9	0.50	0.79
	0.09	0.09	0.05	0.10	ok			15.0	9.1	0.47	0.78
88	0.13	0.09	0.24	0.31	ok	7.1	7.1	11.3	7.9	0.63	0.90
	0.12	0.09	0.21	0.28	ok			11.8	8.1	0.60	0.87
89	0.04	0.09	0.0	0.0	ok	7.1	7.1	23.5	10.3	0.30	0.69
	0.04	0.09	0.0	0.0	ok			25.3	10.4	0.28	0.68
102	0.05	0.11	0.0	0.0	ok	7.1	7.1	20.9	8.4	0.34	0.85
	0.04	0.11	0.0	0.0	ok			22.0	8.4	0.32	0.84
107	0.05	0.09	0.0	0.0	ok	7.1	7.1	21.6	8.8	0.33	0.80
	0.04	0.09	0.0	0.0	ok			22.9	9.1	0.31	0.78
108	0.06	0.09	0.0	0.0	ok	7.1	7.1	20.1	8.5	0.35	0.83
	0.05	0.09	0.0	0.0	ok			21.1	8.7	0.33	0.81
109	0.05	0.12	0.0	0.0	ok	7.1	7.1	26.2	10.8	0.27	0.66
	0.04	0.12	0.0	0.0	ok			27.7	11.1	0.26	0.64
110	0.06	0.09	0.0	0.0	ok	7.1	7.1	22.9	10.2	0.31	0.69
	0.05	0.09	0.0	0.0	ok			24.3	10.4	0.29	0.68
111	0.04	0.12	0.0	0.0	ok	7.1	7.1	28.9	11.3	0.25	0.63
	0.04	0.12	0.0	0.0	ok			30.7	11.6	0.23	0.61
117	0.05	0.09	0.0	0.0	ok	7.1	7.1	26.1	10.6	0.27	0.67
	0.04	0.09	0.0	0.0	ok			27.8	10.7	0.25	0.66
118	0.05	0.12	0.0	0.0	ok	7.1	7.1	27.4	11.0	0.26	0.64
	0.04	0.12	0.0	0.0	ok			29.1	11.3	0.24	0.63
			2-2	**3-3**						**2-2**	**3-3**
			0.68	0.81						1.07	1.25

Nodo	Conf.	Stato	Pilas.	Diam st	Passo	n. br. 2	Bj2	Hjc2	n. br. 3	Bj3	Hjc3	V. 7.4.8	V. Ash	7.4.10	Rif. cmb
				mm	cm		cm	cm		cm	cm				
16	NO	ok	88	10	15.0	5	40.0	89.6	7	90.0	29.6	0.5	0.6	SI	12,5
17	NO	ok	87	10	15.0	5	40.0	89.6	7	90.0	29.6	0.4	0.6	SI	27,5
18	NO	ok	57	10	15.0	5	40.0	89.6	7	90.0	29.6	0.3	0.6	SI	5,5
19	NO	ok	89	10	15.0	5	40.0	89.6	7	90.0	29.6	0.3	0.6	NO	5,5
20	NO	ok	63	10	12.5	5	40.0	89.6	7	60.0	29.6	0.8	0.5	SI	17,21
21	NO	ok	85	10	10.0	5	50.0	89.6	7	65.0	39.6	0.9	0.5	NO	11,5
22	NO	ok	64	10	15.0	5	50.0	89.6	7	65.0	39.6	0.7	0.8	SI	20,31
23	NO	ok	28	10	15.0	5	50.0	89.6	7	65.0	39.6	0.5	0.8	SI	5,21
24	NO	ok	18	10	15.0	5	40.0	89.6	7	90.0	29.6	0.2	0.2	SI	5,21
25	NO	ok	107	10	15.0	5	40.0	89.6	7	90.0	29.6	0.2	0.6	SI	5,5
26	NO	ok	65	10	15.0	5	40.0	89.6	7	60.0	29.6	0.5	0.6	NO	5,15
27	NO	ok	66	10	12.5	5	40.0	89.6	7	60.0	29.6	0.9	0.5	SI	9,21
29	NO	ok	86	10	15.0	5	40.0	89.6	7	60.0	29.6	0.5	0.6	NO	5,20
30	NO	ok	1	10	15.0	5	40.0	69.6	7	60.0	29.6	0.7	0.7	NO	24,21
31	NO	ok	2	10	15.0	5	40.0	89.6	7	90.0	29.6	0.7	0.7	NO	14,25
32	NO	ok	3	10	15.0	5	40.0	89.6	7	90.0	29.6	0.4	0.6	SI	20,5
33	NO	ok	4	10	12.5	5	40.0	89.6	7	80.0	29.6	0.7	0.6	NO	20,17
34	NO	ok	5	10	15.0	5	50.0	89.6	7	85.0	39.6	0.7	0.9	NO	14,5
35	NO	ok	6	10	15.0	5	40.0	89.6	7	80.0	29.6	0.6	0.8	NO	20,15
36	NO	ok	7	10	15.0	5	40.0	89.6	7	80.0	29.6	0.8	0.7	NO	17,10
37	NO	ok	8	10	15.0	5	50.0	89.6	7	85.0	39.6	0.8	0.9	NO	15,5
38	NO	ok	9	10	15.0	5	40.0	89.6	7	80.0	29.6	0.5	0.8	NO	15,8
39	NO	ok	10	10	15.0	5	40.0	89.6	7	80.0	29.6	0.9	0.7	NO	5,14
40	NO	ok	11	10	10.0	5	50.0	89.6	7	85.0	39.6	0.9	0.6	NO	11,5
41	NO	ok	12	10	15.0	5	40.0	89.6	7	80.0	29.6	0.6	0.8	NO	11,20
42	NO	ok	13	10	12.5	5	40.0	89.6	7	90.0	29.6	0.5	0.6	NO	27,30
43	NO	ok	14	10	12.5	5	40.0	89.6	7	90.0	29.6	0.7	0.5	NO	11,5
44	NO	ok	15	10	15.0	5	40.0	89.6	7	90.0	29.6	0.4	0.6	SI	11,5
45	NO	ok	72	10	15.0	5	50.0	89.6	7	65.0	39.6	0.9	0.7	NO	19,5
46	NO	ok	73	10	15.0	5	40.0	89.6	7	60.0	29.6	0.5	0.6	NO	5,8
47	NO	ok	74	10	12.5	5	40.0	89.6	7	60.0	29.6	0.9	0.5	SI	13,21

52	NO	ok	102	10	15.0	5	40.0	69.6	7	60.0	29.6	0.4	0.6	NO	21,25
53	NO	ok	108	10	15.0	5	40.0	89.6	7	90.0	29.6	0.3	0.6	SI	21,5
54	NO	ok	109	10	12.5	5	40.0	89.6	7	60.0	29.6	0.7	0.5	NO	5,13
55	NO	ok	110	10	15.0	5	50.0	89.6	7	65.0	39.6	0.5	0.8	SI	5,21
56	NO	ok	111	10	12.5	5	40.0	89.6	7	60.0	29.6	0.5	0.5	NO	5,10
57	NO	ok	117	10	15.0	5	50.0	89.6	7	65.0	39.6	0.5	0.8	SI	5,21
58	NO	ok	118	10	12.5	5	40.0	89.6	7	60.0	29.6	0.5	0.5	NO	5,6
59	NO	ok	55	10	15.0	5	40.0	69.6	7	60.0	29.6	0.5	0.6	NO	24,25
60	NO	ok	56	10	15.0	5	40.0	89.6	7	90.0	29.6	0.5	0.6	NO	19,5

Nodo	**Passo**	**V. 7.4.8**	**V. Ash**
	10.00		
		0.93	0.93

Trave	Note	Pos. cm	%Af	Af inf.	Af. sup	Af long.	**M_T= 5** x/d	**Z=0.0** V N/M	**P=1** V V/T cls	**P=3** V V/T acc	Staffe L=cm	Rif. cmb
30	ok,ok	0.0	0.30	21.8	15.7	0.0	0.06	0.95	0.38	0.16	4d10/10 L=4	12,36,36
	s=1,m=3	64.2	0.26	15.6	18.8	0.0	0.05	0.91	0.34	0.14	4d10/10 L=4	12,36,36
129	ok,ok	0.0	0.26	15.6	18.8	0.0	0.05	0.95	0.35	0.14	4d10/10 L=64	12,28,36
	s=1,m=3	64.2	0.26	15.6	18.8	0.0	0.05	0.98	0.32	0.12	4d10/10 L=64	12,28,32
163	ok,ok	0.0	0.31	15.6	22.0	0.0	0.06	0.87	0.33	0.13	4d10/10 L=64	12,28,28
	s=1,m=3	64.2	0.31	15.6	22.0	0.0	0.06	0.88	0.30	0.11	4d10/10 L=64	8,28,28
185	ok,ok	0.0	0.31	15.6	22.0	0.0	0.06	0.90	0.35	0.12	4d10/10 L=64	8,28,28
	s=1,m=3	64.2	0.31	15.6	22.0	0.0	0.06	0.95	0.32	0.10	4d10/10 L=64	8,28,28
207	ok,ok	0.0	0.31	15.6	22.0	0.0	0.06	0.95	0.33	0.11	4d10/10 L=64	8,28,28
	s=1,m=3	64.2	0.35	15.6	25.1	0.0	0.07	0.87	0.30	0.09	4d10/10 L=64	8,28,28
229	ok,ok	0.0	0.31	15.6	22.0	0.0	0.06	0.99	0.23	0.08	4d10/10 L=64	8,28,24
	s=1,m=3	64.2	0.35	15.6	25.1	0.0	0.07	0.87	0.20	0.06	4d10/10 L=64	8,28,24
251	ok,ok	0.0	0.31	15.6	22.0	0.0	0.06	0.98	0.17	0.06	4d10/10 L=64	8,12,12
	s=1,m=3	64.2	0.35	15.6	25.1	0.0	0.07	0.89	0.15	0.05	4d10/10 L=64	28,12,12
273	ok,ok	0.0	0.35	15.6	25.1	0.0	0.07	0.88	0.18	0.06	4d10/10 L=64	28,12,12
	s=1,m=3	64.2	0.31	15.6	22.0	0.0	0.06	0.98	0.16	0.07	4d10/10 L=64	28,12,9
295	ok,ok	0.0	0.31	15.6	22.0	0.0	0.06	0.96	0.19	0.08	4d10/10 L=64	28,8,9
	s=1,m=3	64.2	0.31	15.6	22.0	0.0	0.06	0.87	0.18	0.09	4d10/10 L=64	28,8,5
317	ok,ok	0.0	0.26	15.6	18.8	0.0	0.05	0.95	0.20	0.10	4d10/10 L=64	28,5,5
	s=1,m=3	64.2	0.26	15.6	18.8	0.0	0.05	0.83	0.22	0.11	4d10/10 L=64	36,5,5
339	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.96	0.24	0.12	4d10/10 L=64	36,5,5
	s=1,m=3	64.2	0.22	15.6	15.7	0.0	0.05	0.83	0.27	0.13	4d10/10 L=64	32,5,5
361	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.76	0.29	0.14	4d10/10 L=64	32,5,5
	s=1,m=3	64.2	0.22	15.6	15.7	0.0	0.05	0.90	0.31	0.15	4d10/10 L=64	9,5,5
383	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.86	0.34	0.16	4d10/10 L=64	9,5,5
	s=1,m=3	64.2	0.30	21.8	15.7	0.0	0.06	0.95	0.37	0.17	4d10/10 L=64	9,5,5
405	ok,ok	0.0	0.28	20.3	15.7	0.0	0.06	0.97	0.40	0.18	4d10/10 L=64	9,5,5
	s=1,m=3	64.2	0.41	29.5	15.7	0.0	0.07	0.96	0.42	0.20	4d10/10 L=64	5,5,5
427	ok,ok	0.0	0.39	28.3	15.7	0.0	0.07	0.98	0.39	0.20	4d10/10 L=0	5,5,5
	s=1,m=3	64.2	0.57	40.8	15.7	0.0	0.11	0.93	0.41	0.21	4d10/10 L=0	5,5,5
31	ok,ok	0.0	0.28	20.3	15.7	0.0	0.06	0.91	0.38	0.18	4d10/10 L=32	9,12,12
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.73	0.36	0.17	4d10/10 L=32	9,12,12
130	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.79	0.40	0.17	4d10/10 L=52	9,12,12
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.57	0.38	0.16	4d10/10 L=52	12,12,12
164	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.58	0.36	0.15	4d10/10 L=52	12,12,12
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.49	0.34	0.14	4d10/10 L=52	8,12,12
186	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.49	0.32	0.13	4d10/10 L=52	12,12,12
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.41	0.30	0.12	4d10/10 L=52	24,12,12
208	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.44	0.29	0.12	4d10/10 L=52	24,12,12
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.55	0.27	0.11	4d10/10 L=52	24,12,12
230	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.57	0.26	0.10	4d10/10 L=52	22,12,12
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.69	0.24	0.09	4d10/10 L=52	24,12,12
252	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.68	0.24	0.09	4d10/10 L=52	28,12,12
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.78	0.22	0.07	4d10/10 L=52	32,12,12
274	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.77	0.21	0.07	4d10/10 L=52	32,12,12
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.86	0.19	0.07	4d10/10 L=52	32,9,9
296	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.84	0.19	0.07	4d10/10 L=52	32,9,9
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.89	0.20	0.07	4d10/10 L=52	32,9,9
318	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.87	0.21	0.07	4d10/10 L=52	32,9,9
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.94	0.21	0.07	4d10/10 L=52	9,5,5
340	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.94	0.22	0.08	4d10/10 L=52	9,5,5
	s=1,m=3	52.4	0.26	18.7	15.7	0.0	0.05	0.93	0.23	0.08	4d10/10 L=52	9,5,5
362	ok,ok	0.0	0.26	18.7	15.7	0.0	0.05	0.92	0.24	0.08	4d10/10 L=52	9,5,5
	s=1,m=3	52.4	0.30	21.8	15.7	0.0	0.05	0.92	0.25	0.09	4d10/10 L=52	9,5,21
384	ok,ok	0.0	0.28	20.3	15.7	0.0	0.05	0.97	0.27	0.10	4d10/10 L=52	5,5,21
	s=1,m=3	52.4	0.32	23.3	15.7	0.0	0.06	0.98	0.29	0.11	4d10/10 L=52	9,21,21
406	ok,ok	0.0	0.32	23.3	15.7	0.0	0.06	0.94	0.32	0.11	4d10/10 L=52	9,21,21
	s=1,m=3	52.4	0.37	26.4	15.7	0.0	0.07	0.97	0.34	0.13	4d10/10 L=52	5,21,21
428	ok,ok	0.0	0.39	28.0	15.7	0.0	0.07	0.94	0.27	0.13	4d10/10 L=0	9,21,21

	s=1,m=3	52.4	0.43	31.0	15.7	0.0	0.08	0.94	0.30	0.14	4d10/10 L=0	9,21,21
							M_T= 6	**Z=0.0**	**P=4**	**P=6**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
32	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.55	0.50	0.15	4d10/10 L=44	29,36,36
	s=1,m=3	64.2	0.22	15.6	15.7	0.0	0.05	0.82	0.46	0.13	4d10/10 L=44	12,36,36
131	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.89	0.57	0.12	4d10/10 L=64	12,36,36
	s=1,m=3	64.2	0.26	15.6	18.8	0.0	0.05	0.92	0.54	0.10	4d10/10 L=64	8,36,36
165	ok,ok	0.0	0.26	15.6	18.8	0.0	0.05	0.96	0.46	0.09	4d10/10 L=64	8,36,36
	s=1,m=3	64.2	0.31	15.6	22.0	0.0	0.06	0.95	0.43	0.08	4d10/10 L=64	8,36,36
187	ok,ok	0.0	0.31	15.6	22.0	0.0	0.06	0.97	0.37	0.07	4d10/10 L=64	8,36,36
	s=1,m=3	64.2	0.35	15.6	25.1	0.0	0.07	0.92	0.33	0.05	4d10/10 L=64	8,36,32
209	ok,ok	0.0	0.35	15.6	25.1	0.0	0.07	0.92	0.28	0.05	4d10/10 L=64	8,36,32
	s=1,m=3	64.2	0.35	15.6	25.1	0.0	0.07	0.96	0.25	0.04	4d10/10 L=64	16,36,32
231	ok,ok	0.0	0.35	15.6	25.1	0.0	0.07	0.96	0.20	0.04	4d10/10 L=64	16,36,8
	s=1,m=3	64.2	0.35	15.6	25.1	0.0	0.07	0.96	0.17	0.03	4d10/10 L=64	16,36,8
253	ok,ok	0.0	0.35	15.6	25.1	0.0	0.07	0.95	0.13	0.03	4d10/10 L=64	16,28,8
	s=1,m=3	64.2	0.35	15.6	25.1	0.0	0.07	0.92	0.13	0.04	4d10/10 L=64	16,25,5
275	ok,ok	0.0	0.35	15.6	25.1	0.0	0.07	0.90	0.12	0.04	4d10/10 L=64	16,5,5
	s=1,m=3	64.2	0.31	15.6	22.0	0.0	0.06	0.95	0.16	0.06	4d10/10 L=64	16,5,5
297	ok,ok	0.0	0.31	15.6	22.0	0.0	0.06	0.92	0.16	0.06	4d10/10 L=64	28,5,5
	s=1,m=3	64.2	0.26	15.6	18.8	0.0	0.05	0.97	0.19	0.08	4d10/10 L=64	28,5,5
319	ok,ok	0.0	0.26	15.6	18.8	0.0	0.05	0.93	0.20	0.08	4d10/10 L=64	28,5,5
	s=1,m=3	64.2	0.22	15.6	15.7	0.0	0.05	0.93	0.23	0.10	4d10/10 L=64	36,5,5
341	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.84	0.25	0.10	4d10/10 L=64	36,5,5
	s=1,m=3	64.2	0.22	15.6	15.7	0.0	0.05	0.62	0.28	0.12	4d10/10 L=64	36,5,5
363	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.55	0.31	0.12	4d10/10 L=64	36,21,5
	s=1,m=3	64.2	0.22	15.6	15.7	0.0	0.05	0.44	0.34	0.14	4d10/10 L=64	5,21,5
385	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.35	0.39	0.14	4d10/10 L=64	5,21,5
	s=1,m=3	64.2	0.22	15.6	15.7	0.0	0.05	0.76	0.42	0.16	4d10/10 L=64	5,21,5
407	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.68	0.49	0.16	4d10/10 L=64	9,21,5
	s=1,m=3	64.2	0.28	20.3	15.7	0.0	0.06	0.91	0.52	0.18	4d10/10 L=64	5,21,5
429	ok,ok	0.0	0.26	18.7	15.7	0.0	0.05	0.91	0.49	0.17	4d10/10 L=39	5,21,2
	s=1,m=3	64.2	0.39	28.0	15.7	0.0	0.07	0.93	0.52	0.19	4d10/10 L=39	5,21,2
33	ok,ok	0.0	0.24	17.2	15.7	0.0	0.05	0.94	0.46	0.18	4d10/10 L=27	29,24,12
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.63	0.43	0.16	4d10/10 L=27	29,24,12
132	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.71	0.44	0.16	4d10/10 L=52	29,24,12
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.37	0.41	0.15	4d10/10 L=52	2,24,12
166	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.43	0.36	0.14	4d10/10 L=52	29,24,12
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.18	0.33	0.13	4d10/10 L=52	2,24,12
188	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.23	0.29	0.13	4d10/10 L=52	2,32,12
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.07	0.27	0.11	4d10/10 L=52	16,32,12
210	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.13	0.24	0.11	4d10/10 L=52	13,32,12
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.28	0.22	0.10	4d10/10 L=52	24,36,12
232	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.30	0.21	0.09	4d10/10 L=52	28,20,12
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.46	0.18	0.08	4d10/10 L=52	24,20,12
254	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.48	0.17	0.08	4d10/10 L=52	24,20,12
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.60	0.15	0.06	4d10/10 L=52	24,20,12
276	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.61	0.14	0.06	4d10/10 L=52	24,20,12
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.69	0.12	0.05	4d10/10 L=52	24,20,12
298	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.69	0.12	0.04	4d10/10 L=52	24,16,12
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.74	0.09	0.03	4d10/10 L=52	32,16,12
320	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.74	0.09	0.02	4d10/10 L=52	32,28,12
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.75	0.08	0.03	4d10/10 L=52	32,28,5
342	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.74	0.10	0.03	4d10/10 L=52	32,25,5
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.71	0.12	0.03	4d10/10 L=52	12,25,5
364	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.69	0.15	0.03	4d10/10 L=52	32,25,21
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.64	0.17	0.04	4d10/10 L=52	12,25,21
386	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.63	0.21	0.05	4d10/10 L=52	12,25,21
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.67	0.23	0.06	4d10/10 L=52	9,25,21
408	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.62	0.28	0.06	4d10/10 L=52	9,25,21
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.71	0.31	0.08	4d10/10 L=52	9,25,25
430	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.66	0.31	0.08	4d10/10 L=32	9,21,25
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.76	0.33	0.10	4d10/10 L=32	5,21,25
							M_T= 7	**Z=0.0**	**P=7**	**P=9**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
34	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.50	0.44	0.16	4d10/10 L=44	20,36,2
	s=1,m=3	64.2	0.22	15.6	15.7	0.0	0.05	0.86	0.40	0.14	4d10/10 L=44	12,36,2
133	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.91	0.47	0.13	4d10/10 L=64	12,36,2
	s=1,m=3	64.2	0.26	15.6	18.8	0.0	0.05	0.99	0.44	0.11	4d10/10 L=64	12,36,2
167	ok,ok	0.0	0.31	15.6	22.0	0.0	0.06	0.88	0.36	0.11	4d10/10 L=64	12,32,2
	s=1,m=3	64.2	0.35	15.6	25.1	0.0	0.07	0.90	0.33	0.08	4d10/10 L=64	12,32,2
189	ok,ok	0.0	0.35	15.6	25.1	0.0	0.07	0.92	0.29	0.08	4d10/10 L=64	12,32,2
	s=1,m=3	64.2	0.39	15.6	28.3	0.0	0.07	0.89	0.26	0.06	4d10/10 L=64	12,32,2
211	ok,ok	0.0	0.39	15.6	28.3	0.0	0.07	0.89	0.22	0.05	4d10/10 L=64	12,32,2
	s=1,m=3	64.2	0.39	15.6	28.3	0.0	0.07	0.92	0.20	0.04	4d10/10 L=64	8,32,16
233	ok,ok	0.0	0.39	15.6	28.3	0.0	0.07	0.92	0.16	0.04	4d10/10 L=64	8,32,16
	s=1,m=3	64.2	0.39	15.6	28.3	0.0	0.07	0.91	0.14	0.03	4d10/10 L=64	8,32,8

255	ok,ok	0.0	0.39	15.6	28.3	0.0	0.07	0.90	0.11	0.02	4d10/10 L=64	8,32,8
	s=1,m=3	64.2	0.35	15.6	25.1	0.0	0.07	0.96	0.12	0.04	4d10/10 L=64	2,29,5
277	ok,ok	0.0	0.35	15.6	25.1	0.0	0.07	0.95	0.12	0.04	4d10/10 L=64	2,9,5
	s=1,m=3	64.2	0.35	15.6	25.1	0.0	0.07	0.85	0.15	0.06	4d10/10 L=64	2,9,9
299	ok,ok	0.0	0.35	15.6	25.1	0.0	0.07	0.83	0.15	0.07	4d10/10 L=64	2,9,9
	s=1,m=3	64.2	0.31	15.6	22.0	0.0	0.06	0.82	0.18	0.08	4d10/10 L=64	2,9,9
321	ok,ok	0.0	0.26	15.6	18.8	0.0	0.05	0.96	0.18	0.09	4d10/10 L=64	2,9,9
	s=1,m=3	64.2	0.22	15.6	15.7	0.0	0.05	0.87	0.21	0.10	4d10/10 L=64	2,9,9
343	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.80	0.22	0.11	4d10/10 L=64	2,5,9
	s=1,m=3	64.2	0.22	15.6	15.7	0.0	0.05	0.45	0.25	0.12	4d10/10 L=64	16,5,9
365	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.39	0.27	0.13	4d10/10 L=64	2,5,9
	s=1,m=3	64.2	0.22	15.6	15.7	0.0	0.05	0.41	0.29	0.14	4d10/10 L=64	5,5,2
387	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.29	0.32	0.15	4d10/10 L=64	13,21,2
	s=1,m=3	64.2	0.22	15.6	15.7	0.0	0.05	0.75	0.35	0.17	4d10/10 L=64	5,21,2
409	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.62	0.41	0.17	4d10/10 L=64	5,21,2
	s=1,m=3	64.2	0.26	18.7	15.7	0.0	0.05	0.97	0.44	0.19	4d10/10 L=64	5,21,2
431	ok,ok	0.0	0.24	17.2	15.7	0.0	0.05	0.96	0.41	0.19	4d10/10 L=39	5,21,2
	s=1,m=3	64.2	0.39	28.0	15.7	0.0	0.07	0.93	0.44	0.21	4d10/10 L=39	5,21,2
35	ok,ok	0.0	0.24	17.2	15.7	0.0	0.05	0.94	0.40	0.18	4d10/10 L=27	5,28,2
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.66	0.38	0.16	4d10/10 L=27	2,28,2
134	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.72	0.39	0.16	4d10/10 L=52	2,24,2
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.45	0.37	0.15	4d10/10 L=52	2,24,8
168	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.52	0.32	0.14	4d10/10 L=52	2,24,8
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.26	0.30	0.13	4d10/10 L=52	2,24,8
190	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.32	0.27	0.13	4d10/10 L=52	2,12,8
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.08	0.25	0.11	4d10/10 L=52	4,12,8
212	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.16	0.23	0.11	4d10/10 L=52	13,12,8
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.15	0.21	0.10	4d10/10 L=52	16,12,8
234	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.17	0.20	0.09	4d10/10 L=52	13,12,8
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.33	0.18	0.08	4d10/10 L=52	8,12,8
256	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.31	0.17	0.08	4d10/10 L=52	16,12,8
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.48	0.15	0.06	4d10/10 L=52	8,12,8
278	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.45	0.14	0.06	4d10/10 L=52	8,12,8
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.59	0.12	0.05	4d10/10 L=52	8,12,8
300	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.56	0.11	0.04	4d10/10 L=52	8,8,8
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.65	0.09	0.03	4d10/10 L=52	8,8,8
322	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.62	0.09	0.03	4d10/10 L=52	8,24,8
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.67	0.07	0.02	4d10/10 L=52	8,24,5
344	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.65	0.09	0.02	4d10/10 L=52	8,24,5
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.65	0.10	0.03	4d10/10 L=52	12,26,5
366	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.64	0.12	0.03	4d10/10 L=52	8,21,5
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.60	0.14	0.04	4d10/10 L=52	12,24,2
388	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.59	0.18	0.04	4d10/10 L=52	12,21,2
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.60	0.20	0.06	4d10/10 L=52	9,21,2
410	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.55	0.25	0.06	4d10/10 L=52	5,21,2
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.65	0.27	0.07	4d10/10 L=52	5,21,2
432	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.59	0.25	0.08	4d10/10 L=32	9,21,2
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.69	0.27	0.09	4d10/10 L=32	5,21,2
							M_T= 8	**Z=0.0**	**P=10**	**P=12**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
36	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.58	0.46	0.16	4d10/10 L=44	20,36,2
	s=1,m=3	64.2	0.22	15.6	15.7	0.0	0.05	0.94	0.42	0.14	4d10/10 L=44	20,36,2
135	ok,ok	0.0	0.26	15.6	18.8	0.0	0.05	0.83	0.45	0.14	4d10/10 L=64	20,32,2
	s=1,m=3	64.2	0.31	15.6	22.0	0.0	0.06	0.91	0.41	0.11	4d10/10 L=64	20,32,2
169	ok,ok	0.0	0.31	15.6	22.0	0.0	0.06	0.93	0.36	0.11	4d10/10 L=64	20,32,2
	s=1,m=3	64.2	0.35	15.6	25.1	0.0	0.07	0.94	0.32	0.09	4d10/10 L=64	16,32,2
191	ok,ok	0.0	0.35	15.6	25.1	0.0	0.07	0.96	0.28	0.08	4d10/10 L=64	16,32,2
	s=1,m=3	64.2	0.39	15.6	28.3	0.0	0.07	0.93	0.25	0.06	4d10/10 L=64	16,32,36
213	ok,ok	0.0	0.39	15.6	28.3	0.0	0.07	0.93	0.23	0.06	4d10/10 L=64	16,32,36
	s=1,m=3	64.2	0.39	15.6	28.3	0.0	0.07	0.96	0.20	0.04	4d10/10 L=64	16,32,20
235	ok,ok	0.0	0.39	15.6	28.3	0.0	0.07	0.96	0.18	0.04	4d10/10 L=64	16,32,20
	s=1,m=3	64.2	0.39	15.6	28.3	0.0	0.07	0.95	0.15	0.03	4d10/10 L=64	16,32,20
257	ok,ok	0.0	0.39	15.6	28.3	0.0	0.07	0.93	0.13	0.03	4d10/10 L=64	8,32,20
	s=1,m=3	64.2	0.35	15.6	25.1	0.0	0.07	0.99	0.13	0.04	4d10/10 L=64	8,29,17
279	ok,ok	0.0	0.35	15.6	25.1	0.0	0.07	0.97	0.12	0.05	4d10/10 L=64	8,29,17
	s=1,m=3	64.2	0.35	15.6	25.1	0.0	0.07	0.87	0.15	0.07	4d10/10 L=64	8,9,17
301	ok,ok	0.0	0.35	15.6	25.1	0.0	0.07	0.84	0.14	0.07	4d10/10 L=64	8,9,17
	s=1,m=3	64.2	0.31	15.6	22.0	0.0	0.06	0.82	0.18	0.09	4d10/10 L=64	2,9,13
323	ok,ok	0.0	0.26	15.6	18.8	0.0	0.05	0.97	0.18	0.09	4d10/10 L=64	2,9,13
	s=1,m=3	64.2	0.22	15.6	15.7	0.0	0.05	0.88	0.21	0.11	4d10/10 L=64	2,9,13
345	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.81	0.21	0.11	4d10/10 L=64	2,5,13
	s=1,m=3	64.2	0.22	15.6	15.7	0.0	0.05	0.48	0.25	0.13	4d10/10 L=64	20,2,13
367	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.42	0.26	0.13	4d10/10 L=64	36,2,13
	s=1,m=3	64.2	0.22	15.6	15.7	0.0	0.05	0.50	0.30	0.15	4d10/10 L=64	17,2,13
389	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.37	0.32	0.15	4d10/10 L=64	17,21,13
	s=1,m=3	64.2	0.22	15.6	15.7	0.0	0.05	0.83	0.36	0.17	4d10/10 L=64	17,21,2
411	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.70	0.41	0.17	4d10/10 L=64	17,21,2

	s=1,m=3	64.2	0.28	20.3	15.7	0.0	0.06	0.96	0.44	0.19	4d10/10 L=64	17,21,2
433	ok,ok	0.0	0.26	18.7	15.7	0.0	0.05	0.92	0.42	0.20	4d10/10 L=39	17,21,2
	s=1,m=3	64.2	0.39	28.0	15.7	0.0	0.07	0.96	0.46	0.22	4d10/10 L=39	13,21,2
37	ok,ok	0.0	0.26	18.7	15.7	0.0	0.05	0.91	0.44	0.19	4d10/10 L=27	13,28,2
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.66	0.42	0.17	4d10/10 L=27	2,28,16
136	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.73	0.45	0.17	4d10/10 L=52	13,24,16
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.45	0.42	0.16	4d10/10 L=52	2,24,16
170	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.52	0.38	0.15	4d10/10 L=52	2,32,16
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.25	0.35	0.14	4d10/10 L=52	2,32,16
192	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.31	0.31	0.14	4d10/10 L=52	2,32,16
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.07	0.28	0.12	4d10/10 L=52	4,12,16
214	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.17	0.27	0.12	4d10/10 L=52	13,12,16
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.18	0.24	0.10	4d10/10 L=52	16,12,16
236	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.21	0.23	0.10	4d10/10 L=52	13,12,20
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.38	0.20	0.09	4d10/10 L=52	16,12,20
258	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.35	0.19	0.08	4d10/10 L=52	16,12,20
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.53	0.16	0.07	4d10/10 L=52	16,12,20
280	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.50	0.15	0.06	4d10/10 L=52	16,12,20
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.64	0.13	0.05	4d10/10 L=52	16,12,20
302	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.61	0.12	0.05	4d10/10 L=52	16,8,20
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.70	0.10	0.03	4d10/10 L=52	16,8,20
324	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.68	0.10	0.03	4d10/10 L=52	16,8,16
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.72	0.09	0.02	4d10/10 L=52	20,5,13
346	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.70	0.11	0.02	4d10/10 L=52	16,21,13
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.70	0.13	0.03	4d10/10 L=52	20,21,25
368	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.68	0.15	0.03	4d10/10 L=52	20,21,25
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.66	0.17	0.04	4d10/10 L=52	17,21,21
390	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.63	0.21	0.05	4d10/10 L=52	17,21,21
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.70	0.24	0.06	4d10/10 L=52	17,21,21
412	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.65	0.28	0.06	4d10/10 L=52	17,21,21
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.73	0.31	0.08	4d10/10 L=52	17,21,21
434	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.67	0.28	0.08	4d10/10 L=32	17,21,13
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.75	0.30	0.10	4d10/10 L=32	17,21,13
							M_T= 9	**Z=0.0**	**P=13**	**P=15**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
38	ok,ok	0.0	0.39	28.0	25.1	0.0	0.06	0.90	0.53	0.25	4d10/10 L=0	17,36,36
	s=1,m=3	64.2	0.39	18.7	28.3	0.0	0.05	0.92	0.49	0.23	4d10/10 L=0	20,36,36
137	ok,ok	0.0	0.39	18.7	28.3	0.0	0.05	0.94	0.52	0.22	4d10/10 L=64	20,36,36
	s=1,m=3	64.2	0.39	15.6	28.3	0.0	0.07	0.99	0.48	0.20	4d10/10 L=64	20,36,36
171	ok,ok	0.0	0.44	15.6	31.4	0.0	0.08	0.90	0.44	0.19	4d10/10 L=64	20,36,36
	s=1,m=3	64.2	0.44	15.6	31.4	0.0	0.08	0.92	0.40	0.16	4d10/10 L=64	20,36,36
193	ok,ok	0.0	0.44	15.6	31.4	0.0	0.08	0.92	0.37	0.15	4d10/10 L=64	20,36,36
	s=1,m=3	64.2	0.44	15.6	31.4	0.0	0.08	0.92	0.33	0.13	4d10/10 L=64	20,36,36
215	ok,ok	0.0	0.39	15.6	28.3	0.0	0.07	0.98	0.32	0.12	4d10/10 L=64	16,36,36
	s=1,m=3	64.2	0.39	15.6	28.3	0.0	0.07	0.99	0.28	0.10	4d10/10 L=64	16,36,20
237	ok,ok	0.0	0.39	15.6	28.3	0.0	0.07	0.96	0.27	0.10	4d10/10 L=64	16,36,20
	s=1,m=3	64.2	0.39	15.6	28.3	0.0	0.07	0.93	0.23	0.08	4d10/10 L=64	16,36,20
259	ok,ok	0.0	0.39	15.6	28.3	0.0	0.07	0.90	0.22	0.08	4d10/10 L=64	16,36,20
	s=1,m=3	64.2	0.35	15.6	25.1	0.0	0.07	0.92	0.18	0.07	4d10/10 L=64	16,36,17
281	ok,ok	0.0	0.35	15.6	25.1	0.0	0.07	0.88	0.17	0.07	4d10/10 L=64	8,20,17
	s=1,m=3	64.2	0.31	15.6	22.0	0.0	0.06	0.88	0.19	0.09	4d10/10 L=64	12,17,17
303	ok,ok	0.0	0.26	15.6	18.8	0.0	0.05	0.98	0.19	0.09	4d10/10 L=64	8,17,17
	s=1,m=3	64.2	0.22	15.6	15.7	0.0	0.05	0.98	0.21	0.11	4d10/10 L=64	32,17,17
325	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.93	0.21	0.11	4d10/10 L=64	24,18,17
	s=1,m=3	64.2	0.22	15.6	15.7	0.0	0.05	0.78	0.24	0.13	4d10/10 L=64	36,9,13
347	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.72	0.25	0.13	4d10/10 L=64	30,9,13
	s=1,m=3	64.2	0.22	15.6	15.7	0.0	0.05	0.62	0.28	0.15	4d10/10 L=64	17,9,13
369	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.58	0.29	0.16	4d10/10 L=64	17,9,13
	s=1,m=3	64.2	0.24	17.2	15.7	0.0	0.05	0.93	0.33	0.17	4d10/10 L=64	17,5,13
391	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.96	0.35	0.18	4d10/10 L=64	17,5,13
	s=1,m=3	64.2	0.35	24.9	15.7	0.0	0.06	0.94	0.38	0.20	4d10/10 L=64	17,5,13
413	ok,ok	0.0	0.32	23.3	15.7	0.0	0.06	0.95	0.42	0.21	4d10/10 L=64	17,13,13
	s=1,m=3	64.2	0.48	34.6	15.7	0.0	0.09	0.93	0.45	0.22	4d10/10 L=64	17,13,13
435	ok,ok	0.0	0.43	31.0	15.7	0.0	0.08	0.96	0.44	0.23	4d10/10 L=0	17,13,13
	s=1,m=3	64.2	0.61	44.0	15.7	0.0	0.12	0.94	0.47	0.24	4d10/10 L=0	13,13,13
39	ok,ok	0.0	0.31	22.0	15.7	0.0	0.06	0.95	0.43	0.20	4d10/10 L=32	17,20,20
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.81	0.41	0.19	4d10/10 L=32	17,20,20
138	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.88	0.46	0.19	4d10/10 L=52	17,20,20
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.48	0.44	0.18	4d10/10 L=52	20,20,20
172	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.56	0.41	0.17	4d10/10 L=52	17,20,20
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.39	0.39	0.16	4d10/10 L=52	20,20,20
194	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.35	0.36	0.15	4d10/10 L=52	20,20,20
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.30	0.34	0.14	4d10/10 L=52	16,20,20
216	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.28	0.32	0.14	4d10/10 L=52	16,20,20
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.37	0.30	0.12	4d10/10 L=52	24,20,20
238	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.33	0.28	0.12	4d10/10 L=52	26,20,20
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.50	0.26	0.10	4d10/10 L=52	28,20,20

260	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.46	0.25	0.10	4d10/10 L=52	24,20,20
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.60	0.22	0.09	4d10/10 L=52	28,20,20
282	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.57	0.21	0.08	4d10/10 L=52	28,20,20
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.69	0.19	0.07	4d10/10 L=52	16,20,20
304	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.66	0.18	0.07	4d10/10 L=52	17,20,20
	s=1,m=3	52.4	0.22	15.6	15.7	0.0	0.05	0.81	0.17	0.06	4d10/10 L=52	17,17,17
326	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.85	0.18	0.07	4d10/10 L=52	17,17,17
	s=1,m=3	52.4	0.24	17.2	15.7	0.0	0.05	0.92	0.20	0.07	4d10/10 L=52	17,13,13
348	ok,ok	0.0	0.24	17.2	15.7	0.0	0.05	0.93	0.21	0.07	4d10/10 L=52	17,13,13
	s=1,m=3	52.4	0.26	18.8	15.7	0.0	0.05	0.99	0.22	0.08	4d10/10 L=52	17,13,13
370	ok,ok	0.0	0.26	18.7	15.7	0.0	0.05	1.00	0.24	0.08	4d10/10 L=52	17,13,13
	s=1,m=3	52.4	0.30	21.8	15.7	0.0	0.05	0.99	0.25	0.09	4d10/10 L=52	17,13,13
392	ok,ok	0.0	0.30	21.8	15.7	0.0	0.05	0.97	0.27	0.09	4d10/10 L=52	17,13,13
	s=1,m=3	52.4	0.35	24.9	15.7	0.0	0.05	0.98	0.28	0.11	4d10/10 L=52	17,25,25
414	ok,ok	0.0	0.35	24.9	15.7	0.0	0.05	0.95	0.31	0.11	4d10/10 L=52	17,25,25
	s=1,m=3	52.4	0.39	28.0	15.7	0.0	0.07	0.98	0.34	0.13	4d10/10 L=52	17,25,25
436	ok,ok	0.0	0.37	26.4	15.7	0.0	0.07	0.95	0.32	0.13	4d10/10 L=0	17,25,25
	s=1,m=3	52.4	0.41	29.5	15.7	0.0	0.07	0.97	0.34	0.14	4d10/10 L=0	17,21,25
							M_T= 15	**Z=0.0**	**P=1**	**P=13**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
49	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.34	0.39	0.11	4d10/10 L=19	29,8,12
	s=1,m=3	39.3	0.22	15.6	15.7	0.0	0.05	0.36	0.37	0.10	4d10/10 L=19	32,8,12
415	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.36	0.43	0.10	4d10/10 L=39	32,8,12
	s=1,m=3	39.3	0.22	15.6	15.7	0.0	0.05	0.42	0.41	0.08	4d10/10 L=39	36,8,12
393	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.44	0.35	0.08	4d10/10 L=39	36,8,12
	s=1,m=3	39.3	0.22	15.6	15.7	0.0	0.05	0.50	0.33	0.07	4d10/10 L=39	28,8,12
371	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.50	0.28	0.07	4d10/10 L=39	28,8,12
	s=1,m=3	39.3	0.22	15.6	15.7	0.0	0.05	0.55	0.26	0.06	4d10/10 L=39	28,8,32
349	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.55	0.21	0.06	4d10/10 L=39	28,8,32
	s=1,m=3	39.3	0.22	15.6	15.7	0.0	0.05	0.60	0.22	0.06	4d10/10 L=39	16,5,32
327	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.60	0.20	0.06	4d10/10 L=39	16,5,32
	s=1,m=3	39.3	0.22	15.6	15.7	0.0	0.05	0.65	0.21	0.05	4d10/10 L=39	8,5,32
305	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.64	0.20	0.06	4d10/10 L=39	8,29,32
	s=1,m=3	39.3	0.22	15.6	15.7	0.0	0.05	0.68	0.22	0.05	4d10/10 L=39	8,29,29
283	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.67	0.22	0.06	4d10/10 L=39	8,29,32
	s=1,m=3	39.3	0.22	15.6	15.7	0.0	0.05	0.69	0.24	0.07	4d10/10 L=39	8,29,33
261	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.68	0.25	0.07	4d10/10 L=39	8,33,33
	s=1,m=3	39.3	0.22	15.6	15.7	0.0	0.05	0.69	0.27	0.08	4d10/10 L=39	12,33,33
239	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.67	0.29	0.09	4d10/10 L=39	12,33,33
	s=1,m=3	39.3	0.22	15.6	15.7	0.0	0.05	0.68	0.31	0.10	4d10/10 L=39	12,33,33
217	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.65	0.34	0.11	4d10/10 L=39	12,33,33
	s=1,m=3	39.3	0.22	15.6	15.7	0.0	0.05	0.75	0.36	0.12	4d10/10 L=39	29,33,33
195	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.75	0.40	0.12	4d10/10 L=39	29,33,33
	s=1,m=3	39.3	0.22	15.6	15.7	0.0	0.05	0.97	0.42	0.14	4d10/10 L=39	29,33,33
173	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.96	0.46	0.14	4d10/10 L=39	29,33,33
	s=1,m=3	39.3	0.28	20.3	15.7	0.0	0.06	0.94	0.48	0.16	4d10/10 L=39	29,33,33
151	ok,ok	0.0	0.28	20.3	15.7	0.0	0.06	0.92	0.53	0.16	4d10/10 L=39	29,33,33
	s=1,m=3	39.3	0.35	24.9	15.7	0.0	0.06	0.93	0.55	0.17	4d10/10 L=39	29,33,33
139	ok,ok	0.0	0.35	24.9	15.7	0.0	0.06	0.94	0.41	0.18	4d10/10 L=0	29,33,33
	s=1,m=3	39.3	0.41	29.5	15.7	0.0	0.07	0.96	0.43	0.19	4d10/10 L=0	33,33,33
50	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.68	0.31	0.12	4d10/10 L=0	29,12,32
	s=1,m=3	26.7	0.22	15.6	15.7	0.0	0.05	0.56	0.30	0.12	4d10/10 L=0	36,12,32
416	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.55	0.32	0.12	4d10/10 L=27	36,32,32
	s=1,m=3	26.7	0.22	15.6	15.7	0.0	0.05	0.52	0.31	0.12	4d10/10 L=27	36,32,32
394	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.52	0.29	0.12	4d10/10 L=27	36,32,32
	s=1,m=3	26.7	0.22	15.6	15.7	0.0	0.05	0.48	0.29	0.11	4d10/10 L=27	36,29,32
372	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.48	0.29	0.11	4d10/10 L=27	36,29,32
	s=1,m=3	26.7	0.22	15.6	15.7	0.0	0.05	0.42	0.30	0.10	4d10/10 L=27	36,29,32
350	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.41	0.30	0.10	4d10/10 L=27	36,29,32
	s=1,m=3	26.7	0.22	15.6	15.7	0.0	0.05	0.33	0.31	0.10	4d10/10 L=27	36,29,32
328	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.33	0.31	0.09	4d10/10 L=27	36,29,32
	s=1,m=3	26.7	0.22	15.6	15.7	0.0	0.05	0.26	0.32	0.09	4d10/10 L=27	20,33,32
306	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.26	0.33	0.08	4d10/10 L=27	20,33,32
	s=1,m=3	26.7	0.22	15.6	15.7	0.0	0.05	0.25	0.34	0.08	4d10/10 L=27	12,33,33
284	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.24	0.35	0.09	4d10/10 L=27	7,33,33
	s=1,m=3	26.7	0.22	15.6	15.7	0.0	0.05	0.24	0.36	0.09	4d10/10 L=27	12,33,33
262	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.23	0.37	0.10	4d10/10 L=27	12,33,33
	s=1,m=3	26.7	0.22	15.6	15.7	0.0	0.05	0.28	0.38	0.10	4d10/10 L=27	29,33,33
240	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.29	0.38	0.11	4d10/10 L=27	29,33,33
	s=1,m=3	26.7	0.22	15.6	15.7	0.0	0.05	0.42	0.40	0.11	4d10/10 L=27	29,33,33
218	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.42	0.41	0.12	4d10/10 L=27	29,33,33
	s=1,m=3	26.7	0.22	15.6	15.7	0.0	0.05	0.56	0.42	0.13	4d10/10 L=27	29,33,33
196	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.56	0.43	0.13	4d10/10 L=27	29,33,33
	s=1,m=3	26.7	0.22	15.6	15.7	0.0	0.05	0.71	0.45	0.14	4d10/10 L=27	29,33,33
174	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.70	0.47	0.14	4d10/10 L=27	29,33,33
	s=1,m=3	26.7	0.22	15.6	15.7	0.0	0.05	0.88	0.48	0.15	4d10/10 L=27	33,33,33
152	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.86	0.51	0.15	4d10/10 L=27	33,33,33

	s=1,m=3	26.7	0.24	17.2	15.7	0.0	0.05	0.96	0.52	0.16	4d10/10 L=27 33,33,33
140	ok,ok	0.0	0.24	17.2	15.7	0.0	0.05	0.97	0.36	0.15	4d10/10 L=0 33,33,33
	s=1,m=3	26.7	0.30	21.8	15.7	0.0	0.06	0.92	0.37	0.16	4d10/10 L=0 33,33,33
51	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.95	0.43	0.19	4d10/10 L=0 29,32,32
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.89	0.42	0.18	4d10/10 L=0 36,32,32
417	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.87	0.45	0.18	4d10/10 L=30 36,32,32
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.80	0.44	0.17	4d10/10 L=30 36,32,32
395	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.80	0.42	0.17	4d10/10 L=30 36,32,32
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.71	0.40	0.16	4d10/10 L=30 36,32,32
373	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.70	0.39	0.16	4d10/10 L=30 36,32,32
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.59	0.37	0.15	4d10/10 L=30 36,32,32
351	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.58	0.36	0.14	4d10/10 L=30 36,32,32
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.46	0.35	0.14	4d10/10 L=30 36,32,32
329	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.44	0.34	0.13	4d10/10 L=30 36,32,32
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.35	0.33	0.12	4d10/10 L=30 20,32,32
307	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.35	0.32	0.12	4d10/10 L=30 20,32,36
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.33	0.31	0.11	4d10/10 L=30 12,36,36
285	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.31	0.30	0.11	4d10/10 L=30 11,36,36
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.35	0.31	0.11	4d10/10 L=30 12,33,33
263	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.33	0.31	0.11	4d10/10 L=30 8,33,33
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.39	0.33	0.12	4d10/10 L=30 29,33,33
241	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.41	0.33	0.12	4d10/10 L=30 29,33,33
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.57	0.34	0.13	4d10/10 L=30 29,33,33
219	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.59	0.35	0.13	4d10/10 L=30 29,33,33
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.76	0.36	0.14	4d10/10 L=30 29,33,33
197	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.76	0.36	0.14	4d10/10 L=30 29,33,33
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.97	0.38	0.15	4d10/10 L=30 33,33,33
175	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.96	0.39	0.15	4d10/10 L=30 33,33,33
	s=1,m=3	30.0	0.26	18.7	15.7	0.0	0.05	0.99	0.40	0.15	4d10/10 L=30 33,33,33
153	ok,ok	0.0	0.26	18.7	15.7	0.0	0.05	0.97	0.42	0.15	4d10/10 L=30 33,33,33
	s=1,m=3	30.0	0.32	23.3	15.7	0.0	0.06	0.94	0.43	0.16	4d10/10 L=30 33,33,33
141	ok,ok	0.0	0.32	23.3	15.7	0.0	0.06	0.94	0.34	0.16	4d10/10 L=0 33,33,33
	s=1,m=3	30.0	0.37	26.4	15.7	0.0	0.07	0.98	0.35	0.16	4d10/10 L=0 33,17,33
52	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.68	0.41	0.17	4d10/10 L=0 33,32,32
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.49	0.39	0.16	4d10/10 L=0 36,32,32
418	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.49	0.43	0.15	4d10/10 L=30 36,32,32
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.49	0.41	0.14	4d10/10 L=30 36,32,32
396	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.50	0.40	0.14	4d10/10 L=30 36,32,32
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.50	0.38	0.13	4d10/10 L=30 36,32,32
374	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.50	0.36	0.12	4d10/10 L=30 36,32,32
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.49	0.34	0.11	4d10/10 L=30 20,32,32
352	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.49	0.33	0.10	4d10/10 L=30 20,32,32
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.52	0.31	0.09	4d10/10 L=30 20,32,32
330	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.53	0.30	0.09	4d10/10 L=30 20,20,32
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.55	0.29	0.08	4d10/10 L=30 20,20,32
308	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.55	0.30	0.07	4d10/10 L=30 20,20,36
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.56	0.29	0.06	4d10/10 L=30 16,20,36
286	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.54	0.30	0.06	4d10/10 L=30 16,20,36
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.54	0.30	0.05	4d10/10 L=30 16,20,36
264	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.53	0.31	0.04	4d10/10 L=30 16,20,36
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.53	0.30	0.04	4d10/10 L=30 8,20,33
242	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.52	0.32	0.04	4d10/10 L=30 8,20,33
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.50	0.31	0.05	4d10/10 L=30 12,20,33
220	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.48	0.33	0.05	4d10/10 L=30 12,20,33
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.45	0.33	0.06	4d10/10 L=30 32,20,17
198	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.44	0.35	0.06	4d10/10 L=30 32,20,17
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.41	0.34	0.07	4d10/10 L=30 32,20,17
176	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.40	0.38	0.07	4d10/10 L=30 32,20,17
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.34	0.38	0.08	4d10/10 L=30 36,20,17
154	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.34	0.44	0.09	4d10/10 L=30 36,20,17
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.36	0.44	0.10	4d10/10 L=30 33,20,13
142	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.34	0.58	0.10	4d10/10 L=10 33,17,13
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.42	0.60	0.12	4d10/10 L=10 33,17,13
						M_T= 16	**Z=0.0**		**P=2**	**P=14**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
58	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.32	0.49	0.10	4d10/10 L=19 28,8,2
	s=1,m=3	39.3	0.22	15.6	15.7	0.0	0.05	0.46	0.47	0.09	4d10/10 L=19 24,8,2
419	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.47	0.49	0.08	4d10/10 L=39 24,12,2
	s=1,m=3	39.3	0.22	15.6	15.7	0.0	0.05	0.56	0.47	0.07	4d10/10 L=39 24,12,2
397	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.58	0.39	0.07	4d10/10 L=39 24,12,32
	s=1,m=3	39.3	0.22	15.6	15.7	0.0	0.05	0.63	0.38	0.06	4d10/10 L=39 24,12,32
375	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.63	0.32	0.06	4d10/10 L=39 24,12,32
	s=1,m=3	39.3	0.22	15.6	15.7	0.0	0.05	0.65	0.31	0.06	4d10/10 L=39 24,12,32
353	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.64	0.26	0.06	4d10/10 L=39 24,12,24
	s=1,m=3	39.3	0.22	15.6	15.7	0.0	0.05	0.63	0.25	0.05	4d10/10 L=39 24,12,24
331	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.62	0.21	0.05	4d10/10 L=39 24,12,24
	s=1,m=3	39.3	0.22	15.6	15.7	0.0	0.05	0.57	0.20	0.05	4d10/10 L=39 24,12,24

309	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.53	0.17	0.05	4d10/10 L=39 2,12,24
	s=1,m=3	39.3	0.22	15.6	15.7	0.0	0.05	0.53	0.16	0.05	4d10/10 L=39 2,12,21
287	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.53	0.14	0.06	4d10/10 L=39 2,24,21
	s=1,m=3	39.3	0.22	15.6	15.7	0.0	0.05	0.50	0.15	0.07	4d10/10 L=39 2,23,21
265	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.50	0.15	0.07	4d10/10 L=39 2,23,21
	s=1,m=3	39.3	0.22	15.6	15.7	0.0	0.05	0.46	0.17	0.09	4d10/10 L=39 32,23,21
243	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.43	0.18	0.09	4d10/10 L=39 7,21,21
	s=1,m=3	39.3	0.22	15.6	15.7	0.0	0.05	0.44	0.20	0.10	4d10/10 L=39 32,21,21
221	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.38	0.21	0.11	4d10/10 L=39 12,21,21
	s=1,m=3	39.3	0.22	15.6	15.7	0.0	0.05	0.56	0.23	0.12	4d10/10 L=39 21,21,21
199	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.54	0.25	0.13	4d10/10 L=39 21,21,21
	s=1,m=3	39.3	0.22	15.6	15.7	0.0	0.05	0.79	0.27	0.14	4d10/10 L=39 21,21,21
177	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.76	0.29	0.15	4d10/10 L=39 21,21,21
	s=1,m=3	39.3	0.24	17.2	15.7	0.0	0.05	0.96	0.31	0.16	4d10/10 L=39 21,21,21
155	ok,ok	0.0	0.24	17.2	15.7	0.0	0.05	0.92	0.34	0.17	4d10/10 L=39 21,21,21
	s=1,m=3	39.3	0.30	21.8	15.7	0.0	0.06	0.96	0.35	0.18	4d10/10 L=39 21,21,21
143	ok,ok	0.0	0.30	21.8	15.7	0.0	0.06	0.94	0.36	0.18	4d10/10 L=0 21,21,21
	s=1,m=3	39.3	0.39	28.0	15.7	0.0	0.07	0.94	0.38	0.19	4d10/10 L=0 21,21,21
59	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.79	0.29	0.14	4d10/10 L=0 25,24,28
	s=1,m=3	26.7	0.22	15.6	15.7	0.0	0.05	0.64	0.28	0.13	4d10/10 L=0 28,24,28
420	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.64	0.30	0.14	4d10/10 L=27 25,28,28
	s=1,m=3	26.7	0.22	15.6	15.7	0.0	0.05	0.58	0.29	0.13	4d10/10 L=27 28,28,28
398	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.59	0.29	0.13	4d10/10 L=27 28,28,28
	s=1,m=3	26.7	0.22	15.6	15.7	0.0	0.05	0.53	0.28	0.13	4d10/10 L=27 28,28,28
376	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.52	0.27	0.12	4d10/10 L=27 28,28,28
	s=1,m=3	26.7	0.22	15.6	15.7	0.0	0.05	0.45	0.26	0.12	4d10/10 L=27 28,28,28
354	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.44	0.25	0.12	4d10/10 L=27 28,28,28
	s=1,m=3	26.7	0.22	15.6	15.7	0.0	0.05	0.36	0.25	0.11	4d10/10 L=27 28,28,28
332	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.34	0.23	0.11	4d10/10 L=27 28,28,28
	s=1,m=3	26.7	0.22	15.6	15.7	0.0	0.05	0.25	0.22	0.10	4d10/10 L=27 28,28,28
310	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.23	0.21	0.10	4d10/10 L=27 28,28,28
	s=1,m=3	26.7	0.22	15.6	15.7	0.0	0.05	0.13	0.21	0.10	4d10/10 L=27 24,28,28
288	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.10	0.20	0.09	4d10/10 L=27 8,28,28
	s=1,m=3	26.7	0.22	15.6	15.7	0.0	0.05	0.09	0.19	0.10	4d10/10 L=27 24,28,25
266	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.08	0.19	0.10	4d10/10 L=27 11,21,25
	s=1,m=3	26.7	0.22	15.6	15.7	0.0	0.05	0.21	0.20	0.11	4d10/10 L=27 25,21,25
244	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.22	0.22	0.11	4d10/10 L=27 25,21,25
	s=1,m=3	26.7	0.22	15.6	15.7	0.0	0.05	0.36	0.23	0.12	4d10/10 L=27 25,21,25
222	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.37	0.24	0.12	4d10/10 L=27 25,21,25
	s=1,m=3	26.7	0.22	15.6	15.7	0.0	0.05	0.53	0.25	0.13	4d10/10 L=27 25,21,25
200	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.53	0.27	0.13	4d10/10 L=27 25,21,25
	s=1,m=3	26.7	0.22	15.6	15.7	0.0	0.05	0.70	0.28	0.14	4d10/10 L=27 25,21,25
178	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.69	0.29	0.14	4d10/10 L=27 25,21,25
	s=1,m=3	26.7	0.22	15.6	15.7	0.0	0.05	0.88	0.30	0.15	4d10/10 L=27 25,21,25
156	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.86	0.31	0.15	4d10/10 L=27 25,21,25
	s=1,m=3	26.7	0.24	17.2	15.7	0.0	0.05	0.96	0.32	0.16	4d10/10 L=27 25,21,25
144	ok,ok	0.0	0.24	17.2	15.7	0.0	0.05	0.98	0.32	0.16	4d10/10 L=0 25,25,25
	s=1,m=3	26.7	0.30	21.8	15.7	0.0	0.06	0.92	0.33	0.16	4d10/10 L=0 25,25,25
60	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.90	0.37	0.19	4d10/10 L=0 21,24,24
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.80	0.35	0.18	4d10/10 L=0 28,24,24
421	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.78	0.36	0.18	4d10/10 L=30 28,28,24
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.72	0.35	0.17	4d10/10 L=30 28,28,24
399	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.72	0.34	0.17	4d10/10 L=30 28,28,24
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.63	0.33	0.16	4d10/10 L=30 28,28,24
377	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.62	0.31	0.16	4d10/10 L=30 28,28,24
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.52	0.30	0.15	4d10/10 L=30 28,28,24
355	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.50	0.28	0.15	4d10/10 L=30 28,28,24
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.39	0.27	0.14	4d10/10 L=30 28,28,24
333	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.37	0.25	0.13	4d10/10 L=30 28,28,24
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.25	0.24	0.13	4d10/10 L=30 28,28,24
311	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.23	0.23	0.12	4d10/10 L=30 36,24,24
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.24	0.21	0.11	4d10/10 L=30 24,24,24
289	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.18	0.21	0.11	4d10/10 L=30 7,21,24
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.30	0.22	0.10	4d10/10 L=30 24,21,21
267	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.22	0.23	0.11	4d10/10 L=30 24,21,21
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.37	0.24	0.11	4d10/10 L=30 21,21,21
245	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.40	0.25	0.12	4d10/10 L=30 21,21,21
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.56	0.26	0.12	4d10/10 L=30 21,21,21
223	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.58	0.27	0.12	4d10/10 L=30 21,21,21
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.76	0.28	0.13	4d10/10 L=30 21,21,21
201	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.76	0.29	0.13	4d10/10 L=30 21,21,21
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.95	0.30	0.14	4d10/10 L=30 21,21,21
179	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.94	0.31	0.14	4d10/10 L=30 21,21,21
	s=1,m=3	30.0	0.26	18.7	15.7	0.0	0.05	0.96	0.32	0.15	4d10/10 L=30 21,21,21
157	ok,ok	0.0	0.26	18.7	15.7	0.0	0.05	0.94	0.32	0.15	4d10/10 L=30 21,21,21
	s=1,m=3	30.0	0.30	21.8	15.7	0.0	0.06	0.96	0.33	0.15	4d10/10 L=30 21,21,21
145	ok,ok	0.0	0.30	21.8	15.7	0.0	0.06	0.96	0.32	0.15	4d10/10 L=0 21,33,21

	s=1,m=3	30.0	0.35	25.1	15.7	0.0	0.07	0.97	0.33	0.15	4d10/10 L=0 21,33,21
61	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.67	0.34	0.18	4d10/10 L=0 25,26,24
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.43	0.33	0.17	4d10/10 L=0 25,26,24
422	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.47	0.31	0.16	4d10/10 L=30 25,24,24
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.34	0.30	0.15	4d10/10 L=30 28,24,24
400	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.35	0.28	0.15	4d10/10 L=30 28,28,28
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.34	0.27	0.14	4d10/10 L=30 28,28,28
378	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.35	0.26	0.13	4d10/10 L=30 28,22,28
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.34	0.24	0.12	4d10/10 L=30 36,22,28
356	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.35	0.23	0.11	4d10/10 L=30 36,22,28
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.34	0.22	0.10	4d10/10 L=30 36,22,28
334	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.34	0.21	0.09	4d10/10 L=30 36,22,28
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.35	0.19	0.08	4d10/10 L=30 36,22,28
312	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.35	0.19	0.08	4d10/10 L=30 36,22,28
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.40	0.17	0.07	4d10/10 L=30 32,22,28
290	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.40	0.18	0.06	4d10/10 L=30 32,6,28
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.47	0.17	0.05	4d10/10 L=30 24,6,28
268	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.38	0.18	0.05	4d10/10 L=30 24,14,28
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.43	0.19	0.04	4d10/10 L=30 24,17,28
246	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.41	0.22	0.03	4d10/10 L=30 24,17,25
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.44	0.23	0.04	4d10/10 L=30 24,17,33
224	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.42	0.26	0.04	4d10/10 L=30 24,17,33
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.43	0.27	0.04	4d10/10 L=30 24,17,33
202	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.42	0.31	0.04	4d10/10 L=30 24,17,33
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.40	0.32	0.05	4d10/10 L=30 24,17,33
180	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.39	0.37	0.05	4d10/10 L=30 24,17,33
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.35	0.38	0.06	4d10/10 L=30 28,17,2
158	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.34	0.45	0.06	4d10/10 L=30 28,17,2
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.30	0.46	0.07	4d10/10 L=30 25,17,2
146	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.28	0.42	0.08	4d10/10 L=10 28,20,2
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.33	0.43	0.09	4d10/10 L=10 25,20,2
							M_T= 18	**Z=0.0**	**P=3**	**P=15**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
67	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.34	0.50	0.11	4d10/10 L=19 24,8,12
	s=1,m=3	39.3	0.22	15.6	15.7	0.0	0.05	0.41	0.48	0.10	4d10/10 L=19 24,8,12
423	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.41	0.53	0.10	4d10/10 L=39 24,12,12
	s=1,m=3	39.3	0.22	15.6	15.7	0.0	0.05	0.45	0.51	0.09	4d10/10 L=39 24,12,12
401	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.45	0.46	0.08	4d10/10 L=39 24,12,12
	s=1,m=3	39.3	0.22	15.6	15.7	0.0	0.05	0.49	0.44	0.07	4d10/10 L=39 28,12,12
379	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.49	0.39	0.07	4d10/10 L=39 28,12,8
	s=1,m=3	39.3	0.22	15.6	15.7	0.0	0.05	0.51	0.38	0.06	4d10/10 L=39 24,12,8
357	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.50	0.34	0.06	4d10/10 L=39 28,12,8
	s=1,m=3	39.3	0.22	15.6	15.7	0.0	0.05	0.50	0.32	0.05	4d10/10 L=39 24,12,8
335	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.49	0.30	0.05	4d10/10 L=39 28,12,8
	s=1,m=3	39.3	0.22	15.6	15.7	0.0	0.05	0.50	0.28	0.05	4d10/10 L=39 32,12,24
313	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.45	0.25	0.05	4d10/10 L=39 12,12,24
	s=1,m=3	39.3	0.22	15.6	15.7	0.0	0.05	0.48	0.24	0.04	4d10/10 L=39 12,12,21
291	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.47	0.21	0.05	4d10/10 L=39 12,12,21
	s=1,m=3	39.3	0.22	15.6	15.7	0.0	0.05	0.48	0.20	0.05	4d10/10 L=39 12,12,21
269	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.47	0.18	0.06	4d10/10 L=39 12,12,21
	s=1,m=3	39.3	0.22	15.6	15.7	0.0	0.05	0.47	0.18	0.07	4d10/10 L=39 12,29,21
247	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.45	0.18	0.07	4d10/10 L=39 12,29,25
	s=1,m=3	39.3	0.22	15.6	15.7	0.0	0.05	0.47	0.19	0.08	4d10/10 L=39 5,29,25
225	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.46	0.20	0.08	4d10/10 L=39 5,21,25
	s=1,m=3	39.3	0.22	15.6	15.7	0.0	0.05	0.55	0.21	0.09	4d10/10 L=39 21,21,25
203	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.54	0.22	0.10	4d10/10 L=39 21,21,25
	s=1,m=3	39.3	0.22	15.6	15.7	0.0	0.05	0.72	0.24	0.11	4d10/10 L=39 21,21,25
181	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.71	0.25	0.11	4d10/10 L=39 21,21,25
	s=1,m=3	39.3	0.22	15.6	15.7	0.0	0.05	0.90	0.26	0.12	4d10/10 L=39 21,21,25
159	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.88	0.26	0.12	4d10/10 L=39 21,25,25
	s=1,m=3	39.3	0.26	18.7	15.7	0.0	0.05	0.91	0.28	0.13	4d10/10 L=39 21,25,25
147	ok,ok	0.0	0.24	17.2	15.7	0.0	0.05	0.98	0.28	0.13	4d10/10 L=0 21,25,25
	s=1,m=3	39.3	0.30	21.8	15.7	0.0	0.06	0.94	0.29	0.14	4d10/10 L=0 21,25,25
68	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.63	0.24	0.11	4d10/10 L=0 21,8,24
	s=1,m=3	26.7	0.22	15.6	15.7	0.0	0.05	0.51	0.23	0.10	4d10/10 L=0 25,26,24
424	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.51	0.26	0.10	4d10/10 L=27 25,24,24
	s=1,m=3	26.7	0.22	15.6	15.7	0.0	0.05	0.39	0.25	0.10	4d10/10 L=27 25,24,24
402	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.41	0.25	0.10	4d10/10 L=27 25,24,24
	s=1,m=3	26.7	0.22	15.6	15.7	0.0	0.05	0.30	0.24	0.10	4d10/10 L=27 25,24,24
380	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.33	0.23	0.09	4d10/10 L=27 25,24,24
	s=1,m=3	26.7	0.22	15.6	15.7	0.0	0.05	0.26	0.22	0.09	4d10/10 L=27 28,24,24
358	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.26	0.22	0.09	4d10/10 L=27 25,24,24
	s=1,m=3	26.7	0.22	15.6	15.7	0.0	0.05	0.20	0.21	0.09	4d10/10 L=27 28,24,24
336	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.22	0.21	0.08	4d10/10 L=27 13,24,24
	s=1,m=3	26.7	0.22	15.6	15.7	0.0	0.05	0.17	0.20	0.08	4d10/10 L=27 13,24,24
314	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.19	0.19	0.08	4d10/10 L=27 13,24,24
	s=1,m=3	26.7	0.22	15.6	15.7	0.0	0.05	0.16	0.19	0.07	4d10/10 L=27 5,21,24

292	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.18	0.19	0.07	4d10/10 L=27 5,21,24
	s=1,m=3	26.7	0.22	15.6	15.7	0.0	0.05	0.18	0.19	0.07	4d10/10 L=27 5,21,28
270	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.19	0.20	0.07	4d10/10 L=27 5,25,28
	s=1,m=3	26.7	0.22	15.6	15.7	0.0	0.05	0.22	0.20	0.07	4d10/10 L=27 21,25,25
248	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.24	0.21	0.07	4d10/10 L=27 21,25,25
	s=1,m=3	26.7	0.22	15.6	15.7	0.0	0.05	0.32	0.22	0.08	4d10/10 L=27 21,25,25
226	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.34	0.22	0.08	4d10/10 L=27 21,25,25
	s=1,m=3	26.7	0.22	15.6	15.7	0.0	0.05	0.43	0.23	0.08	4d10/10 L=27 21,25,25
204	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.44	0.24	0.08	4d10/10 L=27 21,25,25
	s=1,m=3	26.7	0.22	15.6	15.7	0.0	0.05	0.54	0.24	0.09	4d10/10 L=27 21,25,25
182	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.54	0.25	0.09	4d10/10 L=27 21,25,25
	s=1,m=3	26.7	0.22	15.6	15.7	0.0	0.05	0.65	0.26	0.10	4d10/10 L=27 21,25,25
160	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.64	0.26	0.10	4d10/10 L=27 21,25,25
	s=1,m=3	26.7	0.22	15.6	15.7	0.0	0.05	0.76	0.27	0.10	4d10/10 L=27 21,25,25
148	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.76	0.24	0.10	4d10/10 L=0 21,13,25
	s=1,m=3	26.7	0.22	15.6	15.7	0.0	0.05	0.87	0.25	0.10	4d10/10 L=0 21,13,25
69	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.72	0.28	0.14	4d10/10 L=0 25,26,24
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.61	0.27	0.13	4d10/10 L=0 28,26,24
425	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.59	0.29	0.13	4d10/10 L=30 28,24,24
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.54	0.28	0.13	4d10/10 L=30 28,24,24
403	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.53	0.27	0.12	4d10/10 L=30 28,24,24
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.47	0.26	0.12	4d10/10 L=30 28,24,24
381	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.46	0.26	0.12	4d10/10 L=30 28,24,24
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.38	0.25	0.11	4d10/10 L=30 28,24,24
359	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.37	0.24	0.11	4d10/10 L=30 28,24,24
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.28	0.23	0.10	4d10/10 L=30 28,24,24
337	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.27	0.23	0.10	4d10/10 L=30 28,24,24
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.22	0.22	0.09	4d10/10 L=30 16,28,28
315	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.23	0.22	0.09	4d10/10 L=30 16,28,28
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.24	0.21	0.09	4d10/10 L=30 16,28,28
293	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.23	0.21	0.09	4d10/10 L=30 20,28,28
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.25	0.21	0.08	4d10/10 L=30 24,25,28
271	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.24	0.22	0.08	4d10/10 L=30 21,25,28
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.34	0.22	0.08	4d10/10 L=30 21,25,25
249	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.36	0.23	0.08	4d10/10 L=30 21,25,25
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.47	0.23	0.09	4d10/10 L=30 21,25,25
227	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.48	0.24	0.09	4d10/10 L=30 21,25,25
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.59	0.24	0.09	4d10/10 L=30 21,25,25
205	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.60	0.25	0.09	4d10/10 L=30 21,25,25
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.72	0.26	0.10	4d10/10 L=30 21,25,25
183	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.72	0.26	0.10	4d10/10 L=30 21,25,25
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.84	0.27	0.10	4d10/10 L=30 21,25,25
161	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.83	0.27	0.10	4d10/10 L=30 21,13,25
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.96	0.29	0.10	4d10/10 L=30 25,13,25
149	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.97	0.30	0.10	4d10/10 L=0 25,13,25
	s=1,m=3	30.0	0.26	18.7	15.7	0.0	0.05	0.93	0.31	0.11	4d10/10 L=0 25,13,25
70	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.52	0.24	0.12	4d10/10 L=0 25,24,24
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.43	0.23	0.11	4d10/10 L=0 13,26,24
426	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.45	0.23	0.11	4d10/10 L=30 13,24,24
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.38	0.22	0.10	4d10/10 L=30 13,24,24
404	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.40	0.21	0.10	4d10/10 L=30 13,28,24
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.33	0.20	0.09	4d10/10 L=30 13,28,24
382	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.35	0.20	0.09	4d10/10 L=30 13,28,24
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.29	0.18	0.08	4d10/10 L=30 17,28,24
360	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.31	0.19	0.07	4d10/10 L=30 17,14,24
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.30	0.18	0.07	4d10/10 L=30 36,14,28
338	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.31	0.19	0.06	4d10/10 L=30 20,14,28
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.34	0.18	0.06	4d10/10 L=30 36,17,28
316	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.34	0.20	0.05	4d10/10 L=30 36,17,28
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.37	0.21	0.05	4d10/10 L=30 36,17,28
294	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.33	0.23	0.04	4d10/10 L=30 20,17,28
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.32	0.24	0.04	4d10/10 L=30 16,17,28
272	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.33	0.26	0.03	4d10/10 L=30 20,17,28
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.33	0.28	0.03	4d10/10 L=30 28,17,13
250	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.32	0.30	0.03	4d10/10 L=30 16,17,13
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.33	0.31	0.04	4d10/10 L=30 24,17,13
228	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.32	0.34	0.04	4d10/10 L=30 24,17,13
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.31	0.35	0.05	4d10/10 L=30 24,17,17
206	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.30	0.38	0.05	4d10/10 L=30 24,17,17
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.28	0.40	0.06	4d10/10 L=30 24,17,17
184	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.28	0.44	0.06	4d10/10 L=30 24,17,17
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.26	0.45	0.07	4d10/10 L=30 28,17,17
162	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.27	0.50	0.08	4d10/10 L=30 28,17,17
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.27	0.52	0.08	4d10/10 L=30 25,17,17
150	ok,ok	0.0	0.22	15.6	15.7	0.0	0.05	0.26	0.46	0.09	4d10/10 L=10 16,17,17
	s=1,m=3	30.0	0.22	15.6	15.7	0.0	0.05	0.31	0.48	0.10	4d10/10 L=10 25,17,17
							M_T= 19	**Z=428.0**	**P=1**	**P=3**	

Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
75	ok,ok	0.0	0.79	18.8	22.0	0.0	0.12	0.91	0.36	0.17	4d10/15 L=70	11,33,36
	s=5,m=3	481.3	0.45	12.6	12.6	0.0	0.09	0.34	0.27	0.23	4d10/30 L=682	1,33,36
		962.5	0.90	15.7	25.1	0.0	0.14	0.84	0.38	0.18	4d10/15 L=70	10,33,36
76	ok,ok	0.0	1.12	18.8	31.4	0.0	0.16	0.88	0.52	0.27	4d10/15 L=70	11,36,36
	s=5,m=3	392.8	0.45	12.6	12.6	0.0	0.09	0.50	0.33	0.32	4d10/30 L=545	2,36,36
		785.5	0.90	18.8	25.1	0.0	0.13	0.84	0.49	0.25	4d10/15 L=70	10,36,36
							M_T= 20	**Z=428.0**	**P=4**	**P=6**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
77	ok,ok	0.0	0.60	15.7	25.1	0.0	0.12	0.93	0.35	0.21	4d10/15 L=70	11,31,36
	s=10,m=3	481.3	0.37	15.7	15.7	0.0	0.09	0.58	0.24	0.23	4d10/30 L=777	2,31,36
		962.5	0.75	15.7	31.4	0.0	0.14	0.88	0.37	0.22	4d10/15 L=70	10,31,36
78	ok,ok	0.0	0.75	15.7	31.4	0.0	0.14	0.91	0.43	0.27	4d10/15 L=70	11,33,36
	s=10,m=3	392.8	0.37	15.7	15.7	0.0	0.09	0.53	0.27	0.28	4d10/30 L=600	2,33,36
		785.5	0.60	15.7	25.1	0.0	0.12	0.98	0.41	0.25	4d10/15 L=70	11,33,36
							M_T= 21	**Z=428.0**	**P=7**	**P=9**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
79	ok,ok	0.0	0.67	15.7	28.3	0.0	0.13	0.90	0.46	0.30	4d10/15 L=70	11,31,36
	s=10,m=3	481.3	0.45	18.8	15.7	0.0	0.10	0.94	0.24	0.24	4d10/30 L=777	2,31,36
		962.5	0.82	18.8	34.6	0.0	0.14	0.93	0.47	0.31	4d10/15 L=70	10,31,36
80	ok,ok	0.0	0.67	15.7	28.3	0.0	0.13	0.94	0.41	0.26	4d10/15 L=70	8,33,36
	s=10,m=3	392.8	0.37	15.7	15.7	0.0	0.09	0.45	0.26	0.26	4d10/30 L=600	2,33,36
		785.5	0.52	15.7	22.0	0.0	0.11	0.95	0.39	0.24	4d10/15 L=70	5,33,36
							M_T= 22	**Z=428.0**	**P=10**	**P=12**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
81	ok,ok	0.0	0.75	15.7	31.4	0.0	0.14	0.88	0.47	0.32	4d10/15 L=70	20,31,36
	s=10,m=3	481.3	0.52	22.0	15.7	0.0	0.11	0.83	0.25	0.25	4d10/30 L=777	2,31,36
		962.5	0.90	18.8	37.7	0.0	0.16	0.92	0.48	0.32	4d10/15 L=70	17,31,36
82	ok,ok	0.0	0.75	15.7	31.4	0.0	0.14	0.89	0.43	0.27	4d10/15 L=70	20,31,36
	s=10,m=3	392.8	0.37	15.7	15.7	0.0	0.09	0.47	0.27	0.28	4d10/30 L=600	2,31,36
		785.5	0.60	15.7	25.1	0.0	0.12	0.90	0.41	0.25	4d10/15 L=70	20,31,36
							M_T= 23	**Z=428.0**	**P=13**	**P=15**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
83	ok,ok	0.0	0.90	15.7	25.1	0.0	0.14	0.88	0.51	0.25	4d10/15 L=70	20,30,36
	s=5,m=3	481.3	0.45	12.6	12.6	0.0	0.09	0.85	0.27	0.24	4d10/30 L=662	2,30,36
		962.5	1.01	15.7	28.3	0.0	0.16	0.88	0.53	0.26	4d10/15 L=70	17,30,36
84	ok,ok	0.0	1.12	18.8	31.4	0.0	0.16	0.85	0.50	0.25	4d10/15 L=70	20,31,36
	s=5,m=3	392.8	0.45	12.6	12.6	0.0	0.09	0.45	0.32	0.30	4d10/30 L=545	2,31,36
		785.5	0.90	15.7	25.1	0.0	0.14	0.94	0.49	0.24	4d10/15 L=70	20,31,36
							M_T= 25	**Z=428.0**	**P=1**	**P=13**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
94	ok,ok	0.0	0.67	15.7	18.8	6.3	0.11	0.85	0.56	0.89	4d10/15 L=70	30,31,11
	s=5,m=3	295.0	0.45	12.6	12.6	6.3	0.09	0.24	0.48	0.79	4d10/15 L=380	30,31,11
		590.0	0.67	18.8	18.8	6.3	0.11	0.89	0.53	0.85	4d10/15 L=70	31,31,11
95	ok,ok	0.0	0.79	18.8	22.0	0.0	0.12	0.90	0.71	0.33	4d10/15 L=70	33,31,36
	s=5,m=3	200.0	0.45	12.6	12.6	0.0	0.09	0.05	0.66	0.60	4d10/30 L=160	33,31,36
		400.0	0.67	18.8	18.8	0.0	0.11	0.94	0.67	0.31	4d10/15 L=70	36,31,36
96	ok,ok	0.0	0.67	18.8	18.8	0.0	0.11	0.91	0.54	0.27	4d10/15 L=70	36,33,36
	s=5,m=3	225.0	0.45	12.6	12.6	0.0	0.09	0.08	0.48	0.47	4d10/30 L=210	2,33,36
		450.0	0.67	18.8	18.8	0.0	0.11	0.91	0.54	0.27	4d10/15 L=70	33,33,36
97	ok,ok	0.0	0.62	22.0	18.8	12.6	0.08	0.87	0.61	0.61	2d10/5 L=70	36,34,20
	s=15,m=3	225.0	0.35	12.6	12.6	12.6	0.08	0.30	0.63	0.64	2d10/5 L=240	33,34,20
		450.0	0.62	15.7	22.0	12.6	0.11	0.89	0.70	0.70	2d10/5 L=70	36,34,20
							M_T= 26	**Z=428.0**	**P=2**	**P=14**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
103	ok,ok	0.0	0.53	15.7	18.8	6.3	0.10	0.94	0.54	0.90	2d10/10 L=520	24,11,10
	s=16,m=3	590.0	0.53	18.8	18.8	6.3	0.09	0.87	0.51	0.85	2d10/10 L=520	24,11,10
104	ok,ok	0.0	0.67	15.7	18.8	0.0	0.11	0.96	0.61	0.29	4d10/15 L=70	23,36,36
	s=5,m=3	200.0	0.45	12.6	12.6	0.0	0.09	0.16	0.58	0.55	4d10/30 L=160	11,36,36
		400.0	0.67	18.8	18.8	0.0	0.11	0.88	0.57	0.27	4d10/15 L=70	24,36,36
105	ok,ok	0.0	0.67	18.8	15.7	0.0	0.11	0.96	0.45	0.22	4d10/15 L=70	24,36,36
	s=5,m=3	225.0	0.45	12.6	12.6	0.0	0.09	0.05	0.48	0.47	4d10/30 L=210	2,36,36
		450.0	0.67	15.7	18.8	0.0	0.11	0.91	0.52	0.26	4d10/15 L=70	24,36,36
106	ok,ok	0.0	0.53	18.8	15.7	6.3	0.08	0.85	0.53	0.77	2d10/8 L=70	23,16,17
	s=16,m=3	225.0	0.35	12.6	12.6	6.3	0.08	0.23	0.57	0.84	2d10/8 L=240	23,16,17
		450.0	0.53	12.6	18.8	6.3	0.10	0.87	0.62	0.90	2d10/8 L=70	23,16,17
							M_T= 27	**Z=428.0**	**P=3**	**P=15**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
112	ok,ok	0.0	0.44	12.6	15.7	6.3	0.09	0.96	0.54	0.93	2d10/10 L=165	24,9,10
	s=16,m=3	295.0	0.35	12.6	12.6	6.3	0.07	0.27	0.43	0.91	2d10/12 L=190	24,9,10
		590.0	0.53	15.7	18.8	6.3	0.10	0.81	0.54	0.93	2d10/10 L=165	21,9,10
113	ok,ok	0.0	0.56	12.6	15.7	0.0	0.11	0.94	0.48	0.24	4d10/15 L=70	21,33,36
	s=5,m=3	200.0	0.45	12.6	12.6	0.0	0.09	0.04	0.43	0.42	4d10/30 L=160	2,33,36
		400.0	0.56	12.6	15.7	0.0	0.11	0.93	0.48	0.24	4d10/15 L=70	26,33,36
114	ok,ok	0.0	0.45	12.6	12.6	0.0	0.09	0.93	0.41	0.19	4d10/15 L=70	27,33,36
	s=5,m=3	225.0	0.45	12.6	12.6	0.0	0.09	0.16	0.38	0.36	4d10/30 L=210	7,33,36
		450.0	0.56	12.6	15.7	0.0	0.11	0.83	0.44	0.21	4d10/15 L=70	26,33,36

115	ok,ok	0.0	0.44	15.7	12.6	6.3	0.08	0.89	0.51	0.97	2d10/10 L=125 26,16,17
	s=16,m=3	225.0	0.35	12.6	12.6	6.3	0.08	0.21	0.51	0.96	2d10/10 L=130 27,16,17
		450.0	0.44	12.6	15.7	6.3	0.09	0.84	0.58	0.87	2d10/8 L=125 27,16,17
							M_T= 1	**Z=835.0**	**P=1**	**P=13**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
27	ok,ok	0.0	0.56	12.6	15.7	0.0	0.11	0.82	0.40	0.16	4d10/15 L=70 30,11,36
	s=6,m=3	295.0	0.45	12.6	12.6	0.0	0.09	0.17	0.34	0.24	4d10/30 L=380 30,11,36
		590.0	0.56	12.6	15.7	0.0	0.11	0.92	0.40	0.16	4d10/15 L=70 30,11,36
101	ok,ok	0.0	0.56	12.6	15.7	0.0	0.11	0.87	0.54	0.23	4d10/15 L=70 33,31,36
	s=6,m=3	200.0	0.45	12.6	12.6	0.0	0.09	0.05	0.49	0.42	4d10/30 L=160 2,31,36
		400.0	0.45	12.6	12.6	0.0	0.09	0.95	0.50	0.21	4d10/15 L=70 30,31,36
16	ok,ok	0.0	0.45	12.6	12.6	0.0	0.09	0.97	0.40	0.19	4d10/15 L=70 36,33,36
	s=6,m=3	225.0	0.45	12.6	12.6	0.0	0.09	0.07	0.34	0.32	4d10/30 L=210 2,33,36
		450.0	0.45	12.6	12.6	0.0	0.09	0.96	0.40	0.19	4d10/15 L=70 33,33,36
17	ok,ok	0.0	0.44	15.7	12.6	6.3	0.08	0.88	0.50	0.86	2d10/10 L=70 36,19,20
	s=15,m=3	225.0	0.35	12.6	12.6	6.3	0.08	0.17	0.50	0.86	2d10/10 L=240 33,19,20
		450.0	0.44	12.6	15.7	6.3	0.09	0.88	0.57	0.98	2d10/10 L=70 33,19,20
							M_T= 3	**Z=835.0**	**P=2**	**P=14**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
23	ok,ok	0.0	0.44	12.6	15.7	0.0	0.09	0.95	0.43	0.36	2d10/15 L=70 24,10,36
	s=16,m=3	295.0	0.35	12.6	12.6	0.0	0.07	0.24	0.33	0.41	2d10/25 L=380 26,10,36
		590.0	0.44	12.6	15.7	0.0	0.09	0.92	0.43	0.36	2d10/15 L=70 24,10,36
24	ok,ok	0.0	0.45	12.6	12.6	0.0	0.09	0.97	0.47	0.21	4d10/15 L=70 22,30,36
	s=6,m=3	200.0	0.45	12.6	12.6	0.0	0.09	0.05	0.42	0.37	4d10/30 L=160 2,30,36
		400.0	0.45	12.6	12.6	0.0	0.09	0.92	0.47	0.21	4d10/15 L=70 22,30,36
25	ok,ok	0.0	0.45	12.6	12.6	0.0	0.09	0.93	0.41	0.20	4d10/15 L=70 24,36,36
	s=6,m=3	225.0	0.45	12.6	12.6	0.0	0.09	0.09	0.34	0.32	4d10/30 L=210 2,36,36
		450.0	0.45	12.6	12.6	0.0	0.09	0.92	0.41	0.20	4d10/15 L=70 27,36,36
26	ok,ok	0.0	0.35	12.6	12.6	0.0	0.08	0.84	0.47	0.38	2d10/15 L=70 23,17,36
	s=16,m=3	225.0	0.35	12.6	12.6	0.0	0.08	0.16	0.43	0.55	2d10/25 L=240 27,17,36
		450.0	0.44	12.6	15.7	0.0	0.09	0.76	0.50	0.41	2d10/15 L=70 23,17,36
							M_T= 12	**Z=835.0**	**P=3**	**P=15**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
42	ok,ok	0.0	0.35	12.6	12.6	6.3	0.08	0.66	0.44	0.99	2d10/12 L=95 24,13,10
	s=16,m=3	295.0	0.35	12.6	12.6	6.3	0.07	0.19	0.37	0.83	2d10/12 L=330 24,13,10
		590.0	0.35	12.6	12.6	6.3	0.08	0.73	0.44	0.99	2d10/12 L=95 21,13,10
43	ok,ok	0.0	0.45	12.6	12.6	0.0	0.09	0.60	0.41	0.20	4d10/15 L=70 26,30,36
	s=6,m=3	200.0	0.45	12.6	12.6	0.0	0.09	0.03	0.39	0.37	4d10/30 L=160 8,30,36
		400.0	0.45	12.6	12.6	0.0	0.09	0.63	0.41	0.20	4d10/15 L=70 21,30,36
44	ok,ok	0.0	0.45	12.6	12.6	0.0	0.09	0.59	0.37	0.18	4d10/15 L=70 26,33,36
	s=6,m=3	225.0	0.45	12.6	12.6	0.0	0.09	0.11	0.34	0.32	4d10/30 L=210 8,33,36
		450.0	0.45	12.6	12.6	0.0	0.09	0.64	0.37	0.18	4d10/15 L=70 21,33,36
45	ok,ok	0.0	0.35	12.6	12.6	12.6	0.08	0.55	0.48	0.92	2d10/10 L=70 27,21,17
	s=16,m=3	225.0	0.35	12.6	12.6	12.6	0.08	0.12	0.44	0.85	2d10/10 L=240 27,21,17
		450.0	0.35	12.6	12.6	12.6	0.08	0.55	0.48	0.92	2d10/10 L=70 27,21,17
							M_T= 28	**Z=835.0**	**P=13**	**P=15**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
128	ok,ok	0.0	0.67	12.6	18.8	0.0	0.12	0.93	0.45	0.22	4d10/15 L=70 20,31,36
	s=6,m=3	481.3	0.45	12.6	12.6	0.0	0.09	0.67	0.22	0.19	4d10/30 L=662 2,31,36
		962.5	0.79	12.6	22.0	0.0	0.14	0.91	0.47	0.23	4d10/15 L=70 17,31,36
116	ok,ok	0.0	0.79	12.6	22.0	0.0	0.14	0.92	0.37	0.18	4d10/15 L=70 17,31,36
	s=6,m=3	392.8	0.45	12.6	12.6	0.0	0.09	0.30	0.25	0.22	4d10/30 L=545 2,31,36
		785.5	0.67	12.6	18.8	0.0	0.12	0.97	0.36	0.17	4d10/15 L=70 20,31,36
							M_T= 29	**Z=835.0**	**P=1**	**P=3**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
120	ok,ok	0.0	0.67	12.6	18.8	0.0	0.12	0.95	0.30	0.14	4d10/15 L=70 10,33,36
	s=6,m=3	481.3	0.45	12.6	12.6	0.0	0.09	0.26	0.20	0.17	4d10/30 L=682 1,33,36
		962.5	0.67	12.6	18.8	0.0	0.12	0.89	0.30	0.14	4d10/15 L=70 10,33,36
121	ok,ok	0.0	0.90	12.6	25.1	0.0	0.16	0.95	0.41	0.21	4d10/15 L=70 10,33,36
	s=6,m=3	392.8	0.45	12.6	12.6	0.0	0.09	0.34	0.28	0.26	4d10/30 L=545 2,33,36
		785.5	0.67	15.7	18.8	0.0	0.11	0.84	0.36	0.18	4d10/15 L=70 10,33,36
							M_T= 30	**Z=835.0**	**P=4**	**P=6**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
122	ok,ok	0.0	0.79	12.6	22.0	0.0	0.14	0.83	0.39	0.18	4d10/15 L=70 11,33,36
	s=6,m=3	481.3	0.45	12.6	12.6	0.0	0.09	0.52	0.21	0.17	4d10/30 L=777 2,33,36
		962.5	0.79	12.6	22.0	0.0	0.14	0.91	0.39	0.18	4d10/15 L=70 10,33,36
123	ok,ok	0.0	0.79	12.6	22.0	0.0	0.14	0.89	0.46	0.22	4d10/15 L=70 11,33,36
	s=6,m=3	392.8	0.45	12.6	12.6	0.0	0.09	0.69	0.25	0.20	4d10/30 L=600 2,33,36
		785.5	0.56	12.6	15.7	0.0	0.11	0.96	0.43	0.20	4d10/15 L=70 10,33,36
							M_T= 31	**Z=835.0**	**P=7**	**P=9**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
124	ok,ok	0.0	0.90	12.6	25.1	0.0	0.16	0.85	0.55	0.27	4d10/15 L=70 7,31,36
	s=6,m=3	481.3	0.56	15.7	12.6	0.0	0.11	0.86	0.24	0.19	4d10/30 L=777 2,31,36
		962.5	1.01	15.7	28.3	0.0	0.16	0.88	0.55	0.28	4d10/15 L=70 6,31,2
125	ok,ok	0.0	0.79	12.6	22.0	0.0	0.14	0.84	0.46	0.22	4d10/15 L=70 16,31,36
	s=6,m=3	392.8	0.45	12.6	12.6	0.0	0.09	0.61	0.25	0.20	4d10/30 L=600 2,31,36
		785.5	0.56	12.6	15.7	0.0	0.11	0.87	0.42	0.20	4d10/15 L=70 5,31,36

							M_T= 32	**Z=835.0**	**P=10**	**P=12**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
126	ok,ok	0.0	0.90	12.6	25.1	0.0	0.16	0.90	0.57	0.28	4d10/15 L=70	20,31,36
	s=6,m=3	481.3	0.56	15.7	12.6	0.0	0.11	0.91	0.25	0.21	4d10/30 L=777	2,31,36
		962.5	1.12	15.7	31.4	0.0	0.18	0.85	0.58	0.29	4d10/15 L=70	17,31,2
127	ok,ok	0.0	0.79	12.6	22.0	0.0	0.14	0.88	0.46	0.22	4d10/15 L=70	20,31,36
	s=6,m=3	392.8	0.45	12.6	12.6	0.0	0.09	0.62	0.25	0.20	4d10/30 L=600	2,31,36
		785.5	0.56	12.6	15.7	0.0	0.11	0.94	0.43	0.20	4d10/15 L=70	17,31,36
							M_T= 2	**Z=1169.5**	**P=1**	**P=13**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
19	ok,ok	0.0	0.45	12.6	12.6	0.0	0.09	0.57	0.41	0.13	4d10/15 L=70	30,11,36
	s=7,m=3	295.0	0.45	12.6	12.6	0.0	0.09	0.14	0.37	0.21	4d10/30 L=380	30,11,36
		590.0	0.45	12.6	12.6	0.0	0.09	0.54	0.41	0.13	4d10/15 L=70	31,11,36
20	ok,ok	0.0	0.45	12.6	12.6	0.0	0.09	0.46	0.40	0.20	4d10/15 L=70	36,35,36
	s=7,m=3	200.0	0.45	12.6	12.6	0.0	0.09	0.03	0.38	0.37	4d10/30 L=160	10,35,36
		400.0	0.45	12.6	12.6	0.0	0.09	0.43	0.40	0.20	4d10/15 L=70	36,35,36
21	ok,ok	0.0	0.45	12.6	12.6	0.0	0.09	0.47	0.35	0.17	4d10/15 L=70	36,15,36
	s=7,m=3	225.0	0.45	12.6	12.6	0.0	0.09	0.04	0.32	0.32	4d10/30 L=210	2,15,36
		450.0	0.45	12.6	12.6	0.0	0.09	0.45	0.35	0.17	4d10/15 L=70	36,15,36
22	ok,ok	0.0	0.35	12.6	12.6	6.3	0.08	0.36	0.47	0.85	2d10/10 L=125	33,27,20
	s=15,m=3	225.0	0.35	12.6	12.6	6.3	0.07	0.08	0.43	0.98	2d10/12 L=130	33,27,20
		450.0	0.35	12.6	12.6	6.3	0.08	0.39	0.47	0.85	2d10/10 L=125	33,27,20
							M_T= 4	**Z=1169.5**	**P=7**	**P=8**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
46	ok,ok	0.0	0.56	12.6	15.7	0.0	0.11	0.86	0.40	0.20	4d10/15 L=70	7,31,36
	s=7,m=3	481.3	0.45	12.6	12.6	0.0	0.09	0.89	0.19	0.17	4d10/30 L=777	2,31,36
		962.5	0.79	12.6	22.0	0.0	0.14	0.84	0.43	0.21	4d10/15 L=70	6,31,36
29	ok,ok	0.0	0.79	12.6	12.6	0.0	0.18	0.59	0.56	0.14	4d10/8 L=40	14,21,36
	s=8,m=3	122.5	0.79	12.6	12.6	0.0	0.18	0.23	0.54	0.40	4d10/25 L=140	14,21,36
		245.0	0.79	12.6	12.6	0.0	0.18	0.30	0.56	0.14	4d10/8 L=40	2,21,36
							M_T= 10	**Z=1169.5**	**P=10**	**P=11**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
98	ok,ok	0.0	0.56	12.6	15.7	0.0	0.11	0.94	0.41	0.20	4d10/15 L=70	20,31,36
	s=7,m=3	481.3	0.45	12.6	12.6	0.0	0.09	0.90	0.19	0.17	4d10/30 L=777	2,31,36
		962.5	0.79	12.6	22.0	0.0	0.14	0.89	0.44	0.22	4d10/15 L=70	17,31,36
40	ok,ok	0.0	0.79	12.6	12.6	0.0	0.18	0.61	0.56	0.13	4d10/8 L=40	2,26,36
	s=8,m=3	122.5	0.79	12.6	12.6	0.0	0.18	0.16	0.54	0.40	4d10/25 L=140	2,26,36
		245.0	0.79	12.6	12.6	0.0	0.18	0.34	0.56	0.13	4d10/8 L=40	2,26,36
							M_T= 11	**Z=1169.5**	**P=13**	**P=14**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
53	ok,ok	0.0	0.45	12.6	12.6	0.0	0.09	0.91	0.32	0.15	4d10/15 L=70	20,31,36
	s=7,m=3	481.3	0.45	12.6	12.6	0.0	0.09	0.40	0.18	0.16	4d10/30 L=662	2,31,36
		962.5	0.56	12.6	15.7	0.0	0.11	0.94	0.33	0.16	4d10/15 L=70	17,31,36
41	ok,ok	0.0	0.79	12.6	12.6	0.0	0.18	0.38	0.59	0.13	4d10/8 L=40	23,27,36
	s=8,m=3	122.5	0.79	12.6	12.6	0.0	0.18	0.13	0.57	0.39	4d10/25 L=145	32,27,36
		245.0	0.79	12.6	12.6	0.0	0.18	0.15	0.59	0.13	4d10/8 L=40	23,27,36
							M_T= 13	**Z=1169.5**	**N=28**	**N=48**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
47	ok,ok	0.0	0.79	12.6	12.6	0.0	0.18	0.15	0.33	0.08	4d10/8 L=40	2,11,36
	s=8,m=3	295.0	0.79	12.6	12.6	0.0	0.18	0.26	0.23	0.15	4d10/25 L=510	2,11,36
		590.0	0.79	12.6	12.6	0.0	0.18	0.33	0.33	0.08	4d10/8 L=40	2,11,36
93	ok,ok	0.0	0.79	12.6	12.6	0.0	0.18	0.19	0.37	0.09	4d10/8 L=40	2,29,36
	s=8,m=3	200.0	0.79	12.6	12.6	0.0	0.18	0.03	0.31	0.22	4d10/25 L=320	2,29,36
		400.0	0.79	12.6	12.6	0.0	0.18	0.15	0.37	0.09	4d10/8 L=40	2,29,36
99	ok,ok	0.0	0.79	12.6	12.6	0.0	0.18	0.18	0.34	0.08	4d10/8 L=40	2,33,36
	s=8,m=3	225.0	0.79	12.6	12.6	0.0	0.18	0.10	0.27	0.20	4d10/25 L=370	2,33,36
		450.0	0.79	12.6	12.6	0.0	0.18	0.15	0.34	0.08	4d10/8 L=40	2,33,36
100	ok,ok	0.0	0.79	12.6	12.6	0.0	0.18	0.18	0.36	0.08	4d10/8 L=40	2,19,36
	s=8,m=3	225.0	0.79	12.6	12.6	0.0	0.18	0.14	0.29	0.20	4d10/25 L=370	2,19,36
		450.0	0.79	12.6	12.6	0.0	0.18	0.08	0.36	0.08	4d10/8 L=40	2,19,36
							M_T= 14	**Z=1169.5**	**P=2**	**P=14**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
48	ok,ok	0.0	0.35	12.6	12.6	0.0	0.08	0.59	0.42	0.31	2d10/15 L=70	22,10,36
	s=16,m=3	295.0	0.35	12.6	12.6	0.0	0.07	0.23	0.34	0.36	2d10/25 L=380	24,10,36
		590.0	0.35	12.6	12.6	0.0	0.08	0.64	0.42	0.31	2d10/15 L=70	21,10,36
54	ok,ok	0.0	0.45	12.6	12.6	0.0	0.09	0.53	0.42	0.21	4d10/15 L=70	26,32,36
	s=7,m=3	200.0	0.45	12.6	12.6	0.0	0.09	0.04	0.38	0.37	4d10/30 L=160	2,32,36
		400.0	0.45	12.6	12.6	0.0	0.09	0.48	0.42	0.21	4d10/15 L=70	26,32,36
90	ok,ok	0.0	0.45	12.6	12.6	0.0	0.09	0.51	0.38	0.19	4d10/15 L=70	26,33,36
	s=7,m=3	225.0	0.45	12.6	12.6	0.0	0.09	0.07	0.33	0.32	4d10/30 L=210	2,33,36
		450.0	0.45	12.6	12.6	0.0	0.09	0.55	0.38	0.19	4d10/15 L=70	21,33,36
91	ok,ok	0.0	0.35	12.6	12.6	0.0	0.08	0.38	0.47	0.36	2d10/15 L=70	26,17,36
	s=16,m=3	225.0	0.35	12.6	12.6	0.0	0.07	0.12	0.41	0.49	2d10/25 L=240	27,17,36
		450.0	0.35	12.6	12.6	0.0	0.08	0.40	0.47	0.36	2d10/15 L=70	27,17,36
							M_T= 17	**Z=1169.5**	**P=4**	**P=5**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
71	ok,ok	0.0	0.67	12.6	18.8	0.0	0.12	0.81	0.44	0.22	4d10/15 L=70	11,33,36

	s=7,m=3	481.3	0.56	15.7	12.6	0.0	0.11	0.80	0.19	0.17	4d10/30 L=777	2,33,36
		962.5	0.79	12.6	22.0	0.0	0.14	0.94	0.45	0.22	4d10/15 L=70	10,33,36
62	ok,ok	0.0	0.79	12.6	12.6	6.3	0.18	0.66	0.61	0.52	4d10/8 L=40	2,27,21
	s=8,m=3	122.5	0.79	12.6	12.6	6.3	0.18	0.23	0.60	0.94	4d10/15 L=140	13,27,21
		245.0	0.79	12.6	12.6	6.3	0.18	0.38	0.61	0.52	4d10/8 L=40	15,27,21
							M_T= 24	**Z=1169.5**	**P=1**	**P=2**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
119	ok,ok	0.0	0.56	12.6	15.7	0.0	0.11	0.87	0.34	0.17	4d10/15 L=70	11,36,36
	s=7,m=3	481.3	0.45	12.6	12.6	0.0	0.09	0.51	0.19	0.17	4d10/30 L=682	2,36,36
		962.5	0.67	12.6	18.8	0.0	0.12	0.86	0.36	0.18	4d10/15 L=70	10,36,36
92	ok,ok	0.0	0.79	12.6	12.6	6.3	0.18	0.44	0.62	0.55	4d10/8 L=40	2,11,24
	s=8,m=3	122.5	0.79	12.6	12.6	6.3	0.18	0.13	0.60	0.84	4d10/12 L=145	2,11,24
		245.0	0.79	12.6	12.6	6.3	0.18	0.20	0.62	0.55	4d10/8 L=40	2,11,24

Trave	**%Af**	**Af inf.**	**Af. sup**	**Af long.**	**x/d**	**V N/M**	**V V/T cls**	**V V/T acc**
	1.12	43.98	37.69	12.57	0.18	1.00	0.71	0.99

Trave	**M negativo i**	**M positivo i**	**M negativo f**	**M positivo f**	**Luce per V**	**V M-i M+f**	**V M+i M-f**	**VEd,min**	**VEd,max**	**Vr1**	**As**
	daN cm	daN cm	daN cm	daN cm	cm	daN	daN	daN	daN	daN	cm2
16	3.029e+06	3.029e+06	3.029e+06	3.029e+06	350.00	1.904e+04	1.904e+04	0.0	0.0	0.0	0.0
17	3.099e+06	3.899e+06	3.858e+06	3.137e+06	380.00	1.805e+04	2.246e+04	0.0	0.0	0.0	0.0
19	3.029e+06	3.029e+06	3.029e+06	3.029e+06	520.00	1.281e+04	1.281e+04	0.0	0.0	0.0	0.0
20	3.029e+06	3.029e+06	3.029e+06	3.029e+06	300.00	2.221e+04	2.221e+04	0.0	0.0	0.0	0.0
21	3.029e+06	3.029e+06	3.029e+06	3.029e+06	350.00	1.904e+04	1.904e+04	0.0	0.0	0.0	0.0
22	3.098e+06	3.137e+06	3.098e+06	3.137e+06	380.00	1.805e+04	1.805e+04	0.0	0.0	0.0	0.0
23	3.858e+06	3.137e+06	3.858e+06	3.137e+06	520.00	1.480e+04	1.480e+04	0.0	0.0	0.0	0.0
24	3.029e+06	3.029e+06	3.029e+06	3.029e+06	300.00	2.221e+04	2.221e+04	0.0	0.0	0.0	0.0
25	3.029e+06	3.029e+06	3.029e+06	3.029e+06	350.00	1.904e+04	1.904e+04	0.0	0.0	0.0	0.0
26	3.098e+06	3.137e+06	3.858e+06	3.137e+06	380.00	1.805e+04	2.025e+04	0.0	0.0	0.0	0.0
27	3.765e+06	3.029e+06	3.765e+06	3.029e+06	520.00	1.437e+04	1.437e+04	0.0	0.0	0.0	0.0
29	1.555e+06	1.555e+06	1.555e+06	1.555e+06	220.00	1.555e+04	1.555e+04	0.0	0.0	0.0	0.0
40	1.555e+06	1.555e+06	1.555e+06	1.555e+06	220.00	1.555e+04	1.555e+04	0.0	0.0	0.0	0.0
41	1.555e+06	1.555e+06	1.555e+06	1.555e+06	225.00	1.520e+04	1.520e+04	0.0	0.0	0.0	0.0
42	3.098e+06	3.137e+06	3.098e+06	3.137e+06	520.00	1.319e+04	1.319e+04	0.0	0.0	0.0	0.0
43	3.029e+06	3.029e+06	3.029e+06	3.029e+06	300.00	2.221e+04	2.221e+04	0.0	0.0	0.0	0.0
44	3.029e+06	3.029e+06	3.029e+06	3.029e+06	350.00	1.904e+04	1.904e+04	0.0	0.0	0.0	0.0
45	3.098e+06	3.137e+06	3.098e+06	3.137e+06	380.00	1.805e+04	1.805e+04	0.0	0.0	0.0	0.0
46	3.765e+06	3.029e+06	5.223e+06	3.030e+06	917.50	8145.64	9893.49	0.0	0.0	0.0	0.0
47	1.555e+06	1.555e+06	1.555e+06	1.555e+06	590.00	5797.02	5797.02	0.0	0.0	0.0	0.0
48	3.098e+06	3.137e+06	3.098e+06	3.137e+06	520.00	1.319e+04	1.319e+04	0.0	0.0	0.0	0.0
53	3.029e+06	3.029e+06	3.765e+06	3.029e+06	802.50	8302.88	9311.58	0.0	0.0	0.0	0.0
54	3.029e+06	3.029e+06	3.029e+06	3.029e+06	300.00	2.221e+04	2.221e+04	0.0	0.0	0.0	0.0
62	1.555e+06	1.555e+06	1.555e+06	1.555e+06	220.00	1.555e+04	1.555e+04	0.0	0.0	0.0	0.0
71	4.497e+06	3.028e+06	5.223e+06	3.030e+06	917.50	9023.18	9893.10	0.0	0.0	0.0	0.0
75	5.236e+06	4.504e+06	5.958e+06	3.766e+06	822.50	1.204e+04	1.399e+04	0.0	0.0	0.0	0.0
76	7.414e+06	4.504e+06	5.967e+06	4.505e+06	685.50	1.912e+04	1.680e+04	0.0	0.0	0.0	0.0
77	6.011e+06	3.806e+06	7.461e+06	3.806e+06	917.50	1.177e+04	1.351e+04	0.0	0.0	0.0	0.0
78	7.461e+06	3.806e+06	6.011e+06	3.806e+06	740.50	1.674e+04	1.458e+04	0.0	0.0	0.0	0.0
79	6.739e+06	3.805e+06	8.196e+06	4.544e+06	917.50	1.353e+04	1.439e+04	0.0	0.0	0.0	0.0
80	6.739e+06	3.805e+06	5.279e+06	3.805e+06	740.50	1.566e+04	1.350e+04	0.0	0.0	0.0	0.0
81	7.461e+06	3.806e+06	8.915e+06	4.542e+06	917.50	1.439e+04	1.525e+04	0.0	0.0	0.0	0.0
82	7.461e+06	3.806e+06	6.011e+06	3.806e+06	740.50	1.674e+04	1.458e+04	0.0	0.0	0.0	0.0
83	5.958e+06	3.766e+06	6.678e+06	3.767e+06	802.50	1.333e+04	1.432e+04	0.0	0.0	0.0	0.0
84	7.414e+06	4.504e+06	5.958e+06	3.766e+06	685.50	1.794e+04	1.679e+04	0.0	0.0	0.0	0.0
90	3.029e+06	3.029e+06	3.029e+06	3.029e+06	350.00	1.904e+04	1.904e+04	0.0	0.0	0.0	0.0
91	3.098e+06	3.137e+06	3.098e+06	3.137e+06	380.00	1.805e+04	1.805e+04	0.0	0.0	0.0	0.0
92	1.555e+06	1.555e+06	1.555e+06	1.555e+06	225.00	1.520e+04	1.520e+04	0.0	0.0	0.0	0.0
93	1.555e+06	1.555e+06	1.555e+06	1.555e+06	400.00	8550.61	8550.61	0.0	0.0	0.0	0.0
94	4.501e+06	3.766e+06	4.502e+06	4.502e+06	520.00	1.905e+04	1.749e+04	0.0	0.0	0.0	0.0
95	5.236e+06	4.504e+06	4.502e+06	4.502e+06	300.00	3.571e+04	3.302e+04	0.0	0.0	0.0	0.0
96	4.502e+06	4.502e+06	4.502e+06	4.502e+06	350.00	2.830e+04	2.830e+04	0.0	0.0	0.0	0.0
97	4.621e+06	5.423e+06	5.373e+06	3.899e+06	380.00	2.466e+04	3.125e+04	0.0	0.0	0.0	0.0
98	3.765e+06	3.029e+06	5.223e+06	3.030e+06	917.50	8145.64	9893.49	0.0	0.0	0.0	0.0
99	1.555e+06	1.555e+06	1.555e+06	1.555e+06	450.00	7600.54	7600.54	0.0	0.0	0.0	0.0
100	1.555e+06	1.555e+06	1.555e+06	1.555e+06	450.00	7600.54	7600.54	0.0	0.0	0.0	0.0
101	3.765e+06	3.029e+06	3.029e+06	3.029e+06	300.00	2.491e+04	2.221e+04	0.0	0.0	0.0	0.0
103	4.618e+06	3.899e+06	4.621e+06	4.661e+06	520.00	1.963e+04	1.802e+04	0.0	0.0	0.0	0.0
104	4.501e+06	3.766e+06	4.502e+06	4.502e+06	300.00	3.301e+04	3.032e+04	0.0	0.0	0.0	0.0
105	3.766e+06	4.501e+06	4.501e+06	3.766e+06	350.00	2.367e+04	2.829e+04	0.0	0.0	0.0	0.0
106	3.861e+06	4.661e+06	4.613e+06	3.136e+06	380.00	2.025e+04	2.685e+04	0.0	0.0	0.0	0.0
112	3.858e+06	3.137e+06	4.618e+06	3.899e+06	520.00	1.641e+04	1.640e+04	0.0	0.0	0.0	0.0
113	3.765e+06	3.029e+06	3.765e+06	3.029e+06	300.00	2.491e+04	2.491e+04	0.0	0.0	0.0	0.0
114	3.029e+06	3.029e+06	3.765e+06	3.029e+06	350.00	1.904e+04	2.135e+04	0.0	0.0	0.0	0.0
115	3.099e+06	3.899e+06	3.858e+06	3.137e+06	380.00	1.805e+04	2.246e+04	0.0	0.0	0.0	0.0
116	5.223e+06	3.030e+06	4.497e+06	3.028e+06	685.50	1.324e+04	1.208e+04	0.0	0.0	0.0	0.0
119	3.765e+06	3.029e+06	4.497e+06	3.028e+06	822.50	9085.00	1.006e+04	0.0	0.0	0.0	0.0

120	4.497e+06	3.028e+06	4.497e+06	3.028e+06	822.50	1.006e+04	1.006e+04	0.0	0.0	0.0	0.0
121	5.943e+06	3.028e+06	4.501e+06	3.766e+06	685.50	1.558e+04	1.208e+04	0.0	0.0	0.0	0.0
122	5.223e+06	3.030e+06	5.223e+06	3.030e+06	917.50	9894.43	9894.43	0.0	0.0	0.0	0.0
123	5.223e+06	3.030e+06	3.765e+06	3.029e+06	740.50	1.226e+04	1.009e+04	0.0	0.0	0.0	0.0
124	5.943e+06	3.028e+06	6.678e+06	3.767e+06	917.50	1.164e+04	1.164e+04	0.0	0.0	0.0	0.0
125	5.223e+06	3.030e+06	3.765e+06	3.029e+06	740.50	1.226e+04	1.009e+04	0.0	0.0	0.0	0.0
126	5.943e+06	3.028e+06	7.387e+06	3.766e+06	917.50	1.164e+04	1.249e+04	0.0	0.0	0.0	0.0
127	5.223e+06	3.030e+06	3.765e+06	3.029e+06	740.50	1.226e+04	1.009e+04	0.0	0.0	0.0	0.0
128	4.497e+06	3.028e+06	5.223e+06	3.030e+06	802.50	1.032e+04	1.131e+04	0.0	0.0	0.0	0.0

Trave	**M negativo i**	**M positivo i**	**M negativo f**	**M positivo f**		**V M-i M+f**	**V M+i M-f**	**VEd,min**	**VEd,max**	**Vr1**	**As**
								0.0			
	7.461e+06	5.423e+06	8.915e+06	4.661e+06		3.571e+04	3.302e+04		0.0	0.0	0.0

STATI LIMITE D' ESERCIZIO

LEGENDA TABELLA STATI LIMITE D' ESERCIZIO

In tabella vengono riportati i valori di interesse per il controllo degli stati limite d'esercizio.

In particolare vengono riportati, in relazione al tipo di elemento strutturale, i risultati relativi alle tre categorie di combinazione considerate:

- Combinazioni rare
- Combinazioni frequenti
- Combinazioni quasi permanenti.

I valori di interesse sono i seguenti:

rRfck	rapporto tra la massima compressione nel calcestruzzo e la tensione fck in combinazioni rare	[*normalizzato a 1*]
rRfyk	rapporto tra la massima tensione nell'acciaio e la tensione fyk in combinazioni rare	[*normalizzato a 1*]
rPfck	rapporto tra la massima compressione nel calcestruzzo e la tensione fck in combinazioni quasi permanenti	[*normalizzato a 1*]
wR	apertura caratteristica delle fessure in combinazioni rare	[*mm*]
wF	apertura caratteristica delle fessure in combinazioni frequenti	[*mm*]
wP	apertura caratteristica delle fessure in combinazioni quasi permanenti	[*mm*]
dR	massima deformazione in combinazioni rare	
dF	massima deformazione in combinazioni frequenti	
dP	massima deformazione in combinazioni quasi permanenti	

Per ognuno dei nove valori soprariportati viene indicata (Rif.cmb) la combinazione in cui si è verificato.

In relazione al tipo di elemento strutturale i valori sono selezionati nel modo seguente:

pilastri	**rRfck**	**rRfyk**	**rPfck**	per sezioni significative
travi	**rRfck**	**rRfyk**	**rPfck**	per sezioni significative
	wR	**wF**	**wP**	per sezioni significative
	dR	**dF**	**dP**	massimi in campata
setti e gusci	**rRfck**	**rRfyk**	**rPfck**	massimi nei nodi dell'elemento
	wR	**wF**	**wP**	massimi nei nodi dell'elemento

Si precisa che i valori di massima deformazione per travi sono riferiti al piano verticale (piano locale 1-2 con momenti flettenti 3-3).

Pilas.	Pos.	rRfck	rRfyk	rPfck	Rif. cmb	Pos.	rRfck	rRfyk	rPfck	Rif. cmb
	cm					cm				
1	0.0	0.16	0.11	0.22	69,69,73	214.0	0.11	0.08	0.15	70,70,74
	428.0	0.09	0.06	0.11	70,70,74					
2	0.0	0.15	0.10	0.20	70,70,74	214.0	0.11	0.08	0.14	70,70,74
	428.0	0.13	0.09	0.15	70,70,74					
3	0.0	0.19	0.12	0.24	70,70,74	214.0	0.10	0.07	0.12	70,70,74
	428.0	0.05	0.03	0.06	70,70,74					
4	0.0	0.20	0.13	0.25	70,70,74	214.0	0.15	0.10	0.19	70,70,74
	428.0	0.13	0.09	0.15	70,70,74					
5	0.0	0.21	0.14	0.25	70,70,74	214.0	0.16	0.11	0.19	70,70,74
	428.0	0.14	0.10	0.17	70,70,74					
6	0.0	0.11	0.07	0.14	70,70,74	214.0	0.10	0.07	0.12	70,70,74
	428.0	0.10	0.07	0.13	70,70,74					
7	0.0	0.22	0.14	0.27	70,70,74	214.0	0.18	0.11	0.22	70,70,74
	428.0	0.17	0.11	0.20	70,70,74					
8	0.0	0.17	0.12	0.21	70,70,74	214.0	0.16	0.11	0.20	70,70,74
	428.0	0.15	0.11	0.18	70,70,74					
9	0.0	0.11	0.08	0.14	70,70,74	214.0	0.09	0.06	0.11	70,70,74
	428.0	0.09	0.06	0.11	70,70,74					
10	0.0	0.21	0.14	0.28	70,70,74	214.0	0.18	0.12	0.23	70,70,74
	428.0	0.17	0.11	0.21	70,70,74					
11	0.0	0.19	0.13	0.23	70,70,74	214.0	0.17	0.12	0.21	70,70,74
	428.0	0.17	0.12	0.21	70,70,74					
12	0.0	0.11	0.07	0.13	70,70,74	214.0	0.09	0.06	0.11	70,70,74
	428.0	0.10	0.06	0.11	70,70,74					
13	0.0	0.29	0.19	0.37	70,70,74	214.0	0.18	0.12	0.22	70,70,74
	428.0	0.10	0.07	0.13	70,70,74					
14	0.0	0.12	0.09	0.16	69,70,73	214.0	0.12	0.08	0.15	70,70,74
	428.0	0.11	0.08	0.14	70,70,74					
15	0.0	0.11	0.07	0.14	69,69,73	214.0	0.07	0.05	0.09	70,70,74
	428.0	0.05	0.04	0.06	70,70,74					
18	0.0	0.08	0.05	0.10	70,70,74	167.3	0.03	0.02	0.04	70,70,74
	334.5	0.10	0.06	0.11	70,70,74					
28	0.0	0.20	0.12	0.24	70,70,74	167.3	0.05	0.03	0.06	70,70,74
	334.5	0.15	0.09	0.17	70,70,74					
55	0.0	0.17	0.10	0.21	70,70,74	203.5	0.05	0.03	0.06	70,70,74
	407.0	0.10	0.06	0.12	70,70,74					
56	0.0	0.14	0.09	0.16	70,70,74	203.5	0.08	0.06	0.10	70,70,74
	407.0	0.13	0.09	0.16	70,70,74					
57	0.0	0.17	0.11	0.21	70,70,74	203.5	0.03	0.02	0.03	70,70,74
	407.0	0.09	0.06	0.11	70,70,74					
63	0.0	0.24	0.14	0.30	70,70,74	203.5	0.07	0.05	0.09	70,70,74
	407.0	0.14	0.08	0.16	70,70,74					
64	0.0	0.11	0.07	0.14	70,70,74	203.5	0.10	0.07	0.12	70,70,74
	407.0	0.10	0.07	0.12	70,70,74					
65	0.0	0.26	0.19	0.31	70,70,74	203.5	0.04	0.03	0.05	70,70,74
	407.0	0.21	0.15	0.24	70,70,74					
66	0.0	0.39	0.25	0.47	70,70,74	203.5	0.07	0.05	0.09	70,70,74
	407.0	0.24	0.13	0.28	70,70,74					
...										
118	334.5	0.20	0.16	0.24	70,70,74	167.3	0.04	0.02	0.05	70,70,74
Pilas.		**rRfck**	**rRfyk**	**rPfck**			**rRfck**	**rRfyk**	**rPfck**	
		0.39	0.27	0.47						

Trave	Pos.	rRfck	rRfyk	rPfck	Rif. cmb	wR	wF	wP	Rif. cmb	dR	dF	dP	Rif. cmb
	cm					mm	mm	mm		cm	cm	cm	
16	0.0	0.03	0.07	0.04	69,70,73	0.0	0.0	0.0	0,0,0	-0.15	-0.14	-0.13	70,72,74
	225.0	0.03	0.07	0.04	70,70,74	0.0	0.0	0.0	0,0,0				
	450.0	9.36e-03	0.03	0.01	69,70,73	0.0	0.0	0.0	0,0,0				
17	0.0	0.03	0.07	0.03	69,69,73	0.0	0.0	0.0	0,0,0	-0.12	-0.11	-0.11	70,72,74
	225.0	0.03	0.09	0.03	70,70,74	0.0	0.0	0.0	0,0,0				
	450.0	0.04	0.09	0.04	70,70,74	0.0	0.0	0.0	0,0,0				
19	0.0	0.04	0.13	0.04	70,70,74	0.0	0.0	0.0	0,0,0	-0.24	-0.20	-0.19	70,72,74
	295.0	0.03	0.11	0.04	70,70,74	0.0	0.0	0.0	0,0,0				
	590.0	0.03	0.09	0.04	69,69,73	0.0	0.0	0.0	0,0,0				
20	0.0	0.04	0.08	0.04	70,70,74	0.0	0.0	0.0	0,0,0	-0.16	-0.14	-0.13	70,72,74
	200.0	6.53e-03	0.03	7.60e-03	70,70,74	0.0	0.0	0.0	0,0,0				
	400.0	0.02	0.05	0.02	70,70,74	0.0	0.0	0.0	0,0,0				
21	0.0	0.02	0.05	0.02	69,69,73	0.0	0.0	0.0	0,0,0	-0.15	-0.14	-0.13	70,72,74
	225.0	0.01	0.05	0.02	70,70,74	0.0	0.0	0.0	0,0,0				
	450.0	0.0	0.02	0.0	0,70,0	0.0	0.0	0.0	0,0,0				

22	0.0	2.24e-03	0.04	2.98e-03	69,70,73	0.0	0.0	0.0	0,0,0	-0.11	-0.10	-0.10	70,72,74
	225.0	0.01	0.07	0.02	70,70,74	0.0	0.0	0.0	0,0,0				
	450.0	0.03	0.09	0.03	70,70,74	0.0	0.0	0.0	0,0,0				
23	0.0	0.07	0.17	0.08	70,70,74	0.0	0.0	0.0	0,0,0	-0.19	-0.16	-0.15	70,72,74
	295.0	0.05	0.19	0.06	70,70,74	0.0	0.0	0.0	0,0,0				
	590.0	0.08	0.17	0.11	69,69,73	0.0	0.0	0.0	0,0,0				
24	0.0	0.04	0.10	0.04	70,70,74	0.0	0.0	0.0	0,0,0	-0.14	-0.12	-0.11	70,72,74
	200.0	0.02	0.06	0.02	69,70,73	0.0	0.0	0.0	0,0,0				
	400.0	3.74e-03	0.03	4.98e-03	69,70,73	0.0	0.0	0.0	0,0,0				
25	0.0	0.02	0.07	0.03	69,69,73	0.0	0.0	0.0	0,0,0	-0.12	-0.11	-0.10	70,72,74
	225.0	0.03	0.10	0.03	69,70,73	0.0	0.0	0.0	0,0,0				
	450.0	0.02	0.10	0.03	70,70,74	0.0	0.0	0.0	0,0,0				
26	0.0	0.04	0.11	0.05	69,69,73	0.0	0.0	0.0	0,0,0	-0.10	-0.09	-0.09	70,72,74
	225.0	0.02	0.12	0.03	70,70,74	0.0	0.0	0.0	0,0,0				
	450.0	0.05	0.13	0.04	70,70,74	0.0	0.0	0.0	0,0,0				
27	0.0	0.06	0.10	0.07	70,70,74	0.0	0.0	0.0	0,0,0	-0.23	-0.19	-0.18	70,72,74
	295.0	0.05	0.10	0.07	70,70,74	0.0	0.0	0.0	0,0,0				
	590.0	0.05	0.09	0.07	69,69,73	0.0	0.0	0.0	0,0,0				
29	0.0	0.48	0.38	0.59	70,70,74	0.10	0.11	0.11	70,72,74	-0.22	-0.21	-0.20	70,72,74
	122.5	0.15	0.09	0.19	70,70,74	0.0	0.0	0.0	0,0,0				
	245.0	0.26	0.15	0.33	70,70,74	0.0	0.0	0.0	0,0,0				
30	0.0	0.08	0.20	0.11	70,70,74	0.0	0.0	0.0	0,0,0	-0.09	-0.09	-0.09	70,72,74
	64.2	0.02	0.05	0.03	69,69,73	0.0	0.0	0.0	0,0,0				
31	0.0	0.12	0.23	0.14	70,70,74	0.0	0.0	0.0	0,0,0	0.04	0.04	0.04	69,71,73
	52.4	0.06	0.10	0.08	70,70,74	0.0	0.0	0.0	0,0,0				
32	0.0	0.05	0.24	0.06	70,70,74	0.0	0.0	0.0	0,0,0	0.13	0.13	0.13	70,72,74
	64.2	0.03	0.18	0.03	70,70,74	0.0	0.0	0.0	0,0,0				
33	0.0	0.30	0.65	0.36	70,70,74	0.22	0.23	0.22	70,72,74	-0.04	-0.04	-0.04	69,71,73
	52.4	0.21	0.39	0.25	70,70,74	0.0	0.0	0.0	0,0,0				
34	0.0	0.04	0.29	0.06	69,70,73	0.0	0.0	0.0	0,0,0	-0.15	-0.15	-0.15	70,72,74
	64.2	0.03	0.26	0.04	70,70,74	0.0	0.0	0.0	0,0,0				
35	0.0	0.35	0.75	0.42	70,70,74	0.27	0.27	0.27	70,72,74	0.07	0.07	0.07	70,72,74
	52.4	0.25	0.48	0.30	70,70,74	0.15	0.0	0.0	70,0,0				
...													
436	52.4	0.07	0.15	0.09	70,70,74	0.0	0.0	0.0	0,0,0	0.03	0.03	0.03	70,72,74
Trave		**rRfck**	**rRfyk**	**rPfck**		**wR**	**wF**	**wP**		**dR**	**dF**	**dP**	
										-0.31	-0.30	-0.29	
		0.57	0.77	0.71		0.30	0.32	0.29		1.55	1.68	1.68	

PRO_SAP

PROfessional Structural Analysis Program

Relazione di calcolo strutturale impostata e redatta secondo le modalità previste nel D.M. 17 Gennaio 2018 cap. 10 “Redazione dei progetti strutturali esecutivi e delle relazioni di calcolo”.

Origine e Caratteristiche dei Codici di Calcolo	
Codice di calcolo:	PRO_SAP PROfessional Structural Analysis Program
Versione:	PROFESSIONAL (build 2020-09-190)
Produttore- Distributore:	2S.I. Software e Servizi per l’Ingegneria s.r.l. Via Garibaldi, 90 44121 Ferrara FE (Italy) Tel. +39 0532 200091 www.2si.it
Codice Licenza:	Licenza dsi4693

Descrizione	
Progetto	Lavori di demolizione e ricostruzione dell'Istituto Tecnico Agrario A.Pugliese
Ubicazione	Comune di GIZZERIA (CZ) (Regione CALABRIA)
	Località GIZZERIA (CZ)
	Longitudine 16.152, Latitudine 38.968
Progettista	

In merito al punto 10.2 delle Norme Tecniche per le Costruzioni (*Affidabilità dei codici utilizzati*), si fa riferimento al **Documento di Affidabilità** “Test di validazione del software di calcolo PRO_SAP e dei moduli aggiuntivi PRO_SAP Modulo Geotecnico, PRO_CAD nodi acciaio e PRO_MST” - versione Agosto 2020, disponibile per il download sul sito: https://www.2si.it/it/prodotti/affidabilita/

INTESTAZIONE E CONTENUTI DELLA RELAZIONE

Progetto
Lavori di demolizione e ricostruzione Dell'Istituto Tecnico Agrario A.Pugliese

Contenuti della relazione:
RELAZIONE DI CALCOLO STRUTTURALE
- Origine e Caratteristiche dei Codici di Calcolo
- Affidabilità dei codici utilizzati
- Validazione dei codici
- Tipo di analisi svolta
- Modalità di presentazione dei risultati
- Informazioni generali sull'elaborazione
- Giudizio motivato di accettabilità dei risultati
STAMPA DEI DATI DI INGRESSO
- Normative prese a riferimento
- Criteri adottati per le misure di sicurezza
- Criteri seguiti nella schematizzazione della struttura, dei vincoli e delle sconessioni
- Interazione tra terreno e struttura
- Legami costitutivi adottati per la modellazione dei materiali e dei terreni
- Schematizzazione delle azioni, condizioni e combinazioni di carico
- Metodologie numeriche utilizzate per l' analisi strutturale
-Metodologie numeriche utilizzate per la progettazione e la verifica degli elementi strutturali
STAMPA DEI RISULTATI

Il Progettista:

RELAZIONE DI CALCOLO STRUTTURALE

Premessa

La presente relazione di calcolo strutturale, in conformità al §10.1 del DM 17/01/18, è comprensiva di una descrizione generale dell'opera e dei criteri generali di analisi e verifica. Segue inoltre le indicazioni fornite al §10.2 del DM stesso per quanto concerne analisi e verifiche svolte con l'ausilio di codici di calcolo.

Nella presente parte sono riportati i principali elementi di inquadramento del progetto esecutivo riguardante le strutture, in relazione agli strumenti urbanistici, al progetto architettonico, al progetto delle componenti tecnologiche in generale ed alle prestazioni attese dalla struttura.

Descrizione generale dell'opera

Descrizione generale dell'opera	
Fabbricato ad uso	EDIFICIO SCOLASTICO
Ubicazione	Comune di GIZZERIA (CZ) (Regione CALABRIA)
	Località GIZZERIA (CZ)
	Longitudine 16.152, Latitudine 38.968
Numero di piani	Fuori terra 3
	Interrati
	le dimensioni dell'opera in pianta sono racchiuse in un rettangolo di

Parametri della struttura			
Classe d'uso	Vita Vn [anni]	Coeff. Uso	Periodo Vr [anni]
III	50.0	1.5	75.0

Quadro normativo di riferimento adottato

Le norme ed i documenti assunti quale riferimento per la progettazione strutturale vengono indicati di seguito.

Nel capitolo "normativa di riferimento" è comunque presente l'elenco completo delle normative disponibili.

Progetto-verifica degli elementi	
Progetto cemento armato	D.M. 17-01-2018
Progetto acciaio	D.M. 17-01-2018
Progetto legno	D.M. 17-01-2018
Progetto muratura	D.M. 17-01-2018
Azione sismica	
Norma applicata per l' azione sismica	D.M. 17-01-2018

Azioni di progetto sulla costruzione

Nei capitoli "modellazione delle azioni" e "schematizzazione dei casi di carico" sono indicate le azioni sulla costruzioni.

Nel prosieguo si indicano tipo di analisi strutturale condotta (statico,dinamico, lineare o non lineare) e il metodo adottato per la risoluzione del problema strutturale nonché le metodologie seguite per la verifica o per il progetto-verifica delle sezioni. Si riportano le combinazioni di carico adottate e, nel caso di calcoli non lineari, i percorsi di carico seguiti; le configurazioni studiate per la struttura in esame *sono risultate effettivamente esaustive per la progettazione-verifica.*

La verifica della sicurezza degli elementi strutturali avviene con i metodi della scienza delle costruzioni. L'analisi strutturale è condotta con il metodo degli spostamenti per la valutazione dello stato tensodeformativo indotto da carichi statici. L'analisi strutturale è condotta con il metodo dell'analisi modale e dello spettro di risposta in termini di accelerazione per la valutazione dello stato tensodeformativo indotto da carichi dinamici (tra cui quelli di tipo sismico).

L'analisi strutturale viene effettuata con il metodo degli elementi finiti. Il metodo sopraindicato si basa sulla schematizzazione della struttura in elementi connessi solo in corrispondenza di un numero prefissato di punti denominati nodi. I nodi sono definiti dalle tre coordinate cartesiane in un sistema di riferimento globale. Le incognite del problema (nell'ambito del metodo degli spostamenti) sono le componenti di spostamento dei nodi riferite al sistema di riferimento globale (traslazioni secondo X, Y, Z, rotazioni attorno X, Y, Z). La soluzione del problema si ottiene con un sistema di equazioni algebriche lineari i cui termini noti sono costituiti dai carichi agenti sulla struttura opportunamente concentrati ai nodi:

K * u = F dove **K** = matrice di rigidezza

u = vettore spostamenti nodali

F = vettore forze nodali

Dagli spostamenti ottenuti con la risoluzione del sistema vengono quindi dedotte le sollecitazioni e/o le tensioni di ogni elemento, riferite generalmente ad una terna locale all'elemento stesso.

Il sistema di riferimento utilizzato è costituito da una terna cartesiana destrorsa XYZ. Si assume l'asse Z verticale ed orientato verso l'alto.

Gli elementi utilizzati per la modellazione dello schema statico della struttura sono i seguenti:

Elemento tipo ***TRUSS*** (biella-D2)

Elemento tipo ***BEAM*** (trave-D2)

Elemento tipo ***MEMBRANE*** (membrana-D3)

Elemento tipo ***PLATE*** (piastra-guscio-D3)

Elemento tipo ***BOUNDARY*** (molla)

Elemento tipo ***STIFFNESS*** (matrice di rigidezza)

Elemento tipo ***BRICK*** (elemento solido)

Elemento tipo ***SOLAIO*** (macro elemento composto da più membrane)

Modello numerico

In questa parte viene descritto il modello numerico utilizzato (o i modelli numerici utilizzati) per l'analisi della struttura. La presentazione delle informazioni deve essere, coerentemente con le prescrizioni del paragrafo 10.2 e relativi sottoparagrafi delle NTC-18, tale da garantirne la leggibilità, la corretta interpretazione e la riproducibilità

Tipo di analisi strutturale	
Carichi verticali	SI
Sismica statica lineare	NO
Sismica dinamica lineare	SI
Sismica statica non lineare (prop. masse)	NO

Sismica statica non lineare (prop. modo)	NO
Sismica statica non lineare (triangolare)	NO
Non linearità geometriche (fattore P delta)	SI

Di seguito si indicano l'origine e le caratteristiche dei codici di calcolo utilizzati riportando titolo, produttore e distributore, versione, estremi della licenza d'uso:

Informazioni sul codice di calcolo	
Titolo:	PRO_SAP PROfessional Structural Analysis Program
Versione:	PROFESSIONAL (build 2020-09-190)
Produttore-Distributore:	2S.I. Software e Servizi per l'Ingegneria s.r.l., Ferrara
Codice Licenza:	Licenza dsi4693

Un attento esame preliminare della documentazione a corredo del software ***ha consentito di valutarne l'affidabilità e soprattutto l'idoneità al caso specifico***. La documentazione, fornita dal produttore e distributore del software, contiene una esauriente descrizione delle basi teoriche e degli algoritmi impiegati, l'individuazione dei campi d'impiego, nonché casi prova interamente risolti e commentati, corredati dei file di input necessari a riprodurre l'elaborazione:

Affidabilità dei codici utilizzati
2S.I. ha verificato l'affidabilità e la robustezza del codice di calcolo attraverso un numero significativo di casi prova in cui i risultati dell'analisi numerica sono stati confrontati con soluzioni teoriche. E' possibile reperire la documentazione contenente alcuni dei più significativi casi trattati al seguente link: https://www.2si.it/it/prodotti/affidabilita/

Modellazione della geometria e proprietà meccaniche:	
nodi	1050
elementi D2 (per aste, travi, pilastri…)	313
elementi D3 (per pareti, platee, gusci…)	868
elementi solaio	27
elementi solidi	0
Dimensione del modello strutturale [cm]:	
X min =	-240.62
Xmax =	1983.65
Ymin =	-240.00
Ymax =	2330.00
Zmin =	0.00
Zmax =	1170.00

Strutture verticali:	
Elementi di tipo asta	NO
Pilastri	SI
Pareti	NO
Setti (a comportamento membranale)	NO
Strutture non verticali:	
Elementi di tipo asta	NO
Travi	SI
Gusci	NO
Membrane	NO
Orizzontamenti:	
Solai con la proprietà piano rigido	SI
Solai senza la proprietà piano rigido	NO
Tipo di vincoli:	
Nodi vincolati rigidamente	NO
Nodi vincolati elasticamente	NO
Nodi con isolatori sismici	NO
Fondazioni puntuali (plinti/plinti su palo)	NO
Fondazioni di tipo trave	SI
Fondazioni di tipo platea	SI
Fondazioni con elementi solidi	NO

Modellazione delle azioni

Si veda il capitolo **"Schematizzazione dei casi di carico"** per le informazioni necessarie alla comprensione ed alla ricostruzione delle azioni applicate al modello numerico, coerentemente con quanto indicato nella parte "*2.6. Azioni di progetto sulla costruzione*".

Combinazioni e/o percorsi di carico

Si veda il capitolo **"Definizione delle combinazioni"** in cui sono indicate le combinazioni di carico adottate e, nel caso di calcoli non lineari, i percorsi di carico seguiti.

Combinazioni dei casi di carico	
APPROCCIO PROGETTUALE	Approccio 2
Tensioni ammissibili	NO
SLU	SI
SLV (SLU con sisma)	SI

SLC	NO
SLD	SI
SLO	NO
SLU GEO A2 (per approccio 1)	NO
SLU EQU	NO
Combinazione caratteristica (rara)	SI
Combinazione frequente	SI
Combinazione quasi permanente (SLE)	SI
SLA (accidentale quale incendio)	NO

Principali risultati

I risultati devono costituire una sintesi completa ed efficace, presentata in modo da riassumere il comportamento della struttura, per ogni tipo di analisi svolta.

Nella presente relazione di calcolo sono riportati i seguenti risultati che il progettista ritiene di interesse per la descrizione e la compresione del/i modello/i e del comportamento della struttura:

per l'analisi modale:

- periodi dei modi di vibrare della struttura
- masse eccitate dai singoli modi
- massa eccitata totale

deformate e sollecitazioni:

- spostamenti e rotazioni dei singoli nodi della struttura
- reazioni vincolari (nel caso siano presenti nodi vincolati rigidamente)
- pressioni sul terreno (nel caso siano presenti elementi di fondazione)
- sollecitazioni sugli elementi d2 nelle combinazioni di calcolo più significative
- tensioni sugli elementi d3 nelle combinazioni di calcolo più significative
- sollecitazioni sui macroelementi da elementi d3 nelle combinazioni di calcolo più significative

altri risultati significativi:

La presente relazione, oltre ad illustrare in modo esaustivo i dati in ingresso ed i risultati delle analisi in forma tabellare, riporta una serie di immagini:

per i dati in ingresso:

- modello solido della struttura
- numerazione di nodi e ed elementi
- configurazioni di carico statiche
- configurazioni di carico sismiche con baricentri delle masse e eccentricità

per le combinazioni più significative (statisticamente più gravose per la struttura):

- configurazioni deformate
- diagrammi e inviluppi delle azioni interne
- mappe delle tensioni
- reazioni vincolari
- mappe delle pressioni sul terreno

per il progetto-verifica degli elementi:

- diagrammi di armatura
- percentuali di sfruttamento
- mappe delle verifiche più significative per i vari stati limite

Informazioni generali sull'elaborazione e giudizio motivato di accettabilità dei risultati.

Il programma prevede una serie di controlli automatici (check) che consentono l'individuazione di errori di modellazione. Al termine dell'analisi un controllo automatico identifica la presenza di spostamenti o rotazioni abnormi. Si può pertanto asserire che l' elaborazione sia corretta e completa. I risultati delle elaborazioni sono stati sottoposti a controlli che ne comprovano l'attendibilità. Tale valutazione ha compreso il confronto con i risultati di semplici calcoli, eseguiti con metodi tradizionali e adottati, anche in fase di primo proporzionamento della struttura. Inoltre, sulla base di considerazioni riguardanti gli stati tensionali e deformativi determinati, si è valutata la validità delle scelte operate in sede di schematizzazione e di modellazione della struttura e delle azioni. Si allega al termine della presente relazione elenco sintetico dei controlli svolti (verifiche di equilibrio tra reazioni vincolari e carichi applicati, comparazioni tra i risultati delle analisi e quelli di valutazioni semplificate, etc.) .

Verifiche agli stati limite ultimi

Nel capitolo relativo alla progettazione degli elementi strutturali agli SLU vengono indicate, con riferimento alla normativa adottata, le modalità ed i criteri seguiti per valutare la sicurezza della struttura nei confronti delle possibili situazioni di crisi ed i risultati delle valutazioni svolte. In via generale, oltre alle verifiche di resistenza e di spostamento, devono essere prese in considerazione verifiche nei confronti dei fenomeni di instabilità, locale e globale, di fatica, di duttilità, di degrado.

Verifiche agli stati limite di esercizio

Nel capitolo relativo alla progettazione degli elementi strutturali agli SLE vengono indicate, con riferimento alla normativa adottata, le modalità seguite per valutare l'affidabilità della struttura nei confronti delle possibili situazioni di perdita di funzionalità (per eccessive deformazioni, fessurazioni, vibrazioni, etc.) ed i risultati delle valutazioni svolte.

RELAZIONE SUI MATERIALI

Il capitolo Materiali riportata informazioni esaustive relative all'elenco dei materiali impiegati e loro modalità di posa in opera e ai valori di calcolo.

NORMATIVA DI RIFERIMENTO

1. D.Min. Infrastrutture Min. Interni e Prot. Civile 17 Gennaio 2018 e allegate "Norme tecniche per le costruzioni".
2. Circolare 21/01/19, n. 7 C.S.LL.PP "Istruzioni per l'applicazione dell'aggiornamento delle Norme Tecniche delle Costruzioni di cui al decreto ministeriale 17 gennaio 2018"
3. D.Min. Infrastrutture e trasporti 14 Settembre 2005 e allegate "Norme tecniche per le costruzioni".
4. D.M. LL.PP. 9 Gennaio 1996 "Norme tecniche per il calcolo, l'esecuzione ed il collaudo delle strutture in cemento armato, normale e precompresso e per le strutture metalliche".
5. D.M. LL.PP. 16 Gennaio 1996 "Norme tecniche relative ai <<Criteri generali per la verifica di sicurezza delle costruzioni e dei carichi e sovraccarichi>>".
6. D.M. LL.PP. 16 Gennaio 1996 "Norme tecniche per le costruzioni in zone sismiche".
7. Circolare 4/07/96, n.156AA.GG./STC. istruzioni per l'applicazione delle "Norme tecniche relative ai <<Criteri generali per la verifica di sicurezza delle costruzioni e dei carichi e sovraccarichi>>" di cui al D.M. 16/01/96.
8. Circolare 10/04/97, n.65AA.GG. istruzioni per l'applicazione delle "Norme tecniche per le costruzioni in zone sismiche" di cui al D.M. 16/01/96.
9. D.M. LL.PP. 20 Novembre 1987 "Norme tecniche per la progettazione, esecuzione e collaudo degli edifici in muratura e per il loro consolidamento".
10. Circolare 4 Gennaio 1989 n. 30787 "Istruzioni in merito alle norme tecniche per la progettazione, esecuzione e collaudo degli edifici in muratura e per il loro consolidamento".
11. D.M. LL.PP. 11 Marzo 1988 "Norme tecniche riguardanti le indagini sui terreni e sulle rocce, la stabilità dei pendii naturali e delle scarpate, i criteri generali e le prescrizioni per la progettazione, l'esecuzione e il collaudo delle opere di sostegno delle terre e delle opere di fondazione".
12. D.M. LL.PP. 3 Dicembre 1987 "Norme tecniche per la progettazione, esecuzione e collaudo delle costruzioni prefabbricate".
13. UNI 9502 - Procedimento analitico per valutare la resistenza al fuoco degli elementi costruttivi di conglomerato cementizio armato, normale e precompresso - edizione maggio 2001
14. Ordinanza del Presidente del Consiglio dei Ministri n. 3274 del 20 marzo 2003 "Primi elementi in materia di criteri generali per la classificazione sismica del territorio nazionale e di normative tecniche per le costruzioni in zona sismica" e successive modificazioni e integrazioni.
15. UNI EN 1990:2006 13/04/2006 Eurocodice 0 - Criteri generali di progettazione strutturale.
16. UNI EN 1991-1-1:2004 01/08/2004 Eurocodice 1 - Azioni sulle strutture - Parte 1-1: Azioni in generale - Pesi per unità di volume, pesi propri e sovraccarichi per gli edifici.
17. UNI EN 1991-2:2005 01/03/2005 Eurocodice 1 - Azioni sulle strutture - Parte 2: Carichi da traffico sui ponti.
18. UNI EN 1991-1-3:2004 01/10/2004 Eurocodice 1 - Azioni sulle strutture - Parte 1-3: Azioni in generale - Carichi da neve.
19. UNI EN 1991-1-4:2005 01/07/2005 Eurocodice 1 - Azioni sulle strutture - Parte 1-4: Azioni in generale - Azioni del vento.
20. UNI EN 1991-1-5:2004 01/10/2004 Eurocodice 1 - Azioni sulle strutture - Parte 1-5: Azioni in generale - Azioni termiche.
21. UNI EN 1992-1-1:2005 24/11/2005 Eurocodice 2 - Progettazione delle strutture di calcestruzzo - Parte 1-1: Regole generali e regole per gli edifici.
22. UNI EN 1992-1-2:2005 01/04/2005 Eurocodice 2 - Progettazione delle strutture di calcestruzzo - Parte 1-2: Regole generali - Progettazione strutturale contro l'incendio.
23. UNI EN 1993-1-1:2005 01/08/2005 Eurocodice 3 - Progettazione delle strutture di acciaio - Parte 1-1: Regole generali e regole per gli edifici.
24. UNI EN 1993-1-8:2005 01/08/2005 Eurocodice 3 - Progettazione delle strutture di acciaio - Parte 1-8: Progettazione dei collegamenti.
25. UNI EN 1994-1-1:2005 01/03/2005 Eurocodice 4 - Progettazione delle strutture composte acciaio-calcestruzzo - Parte 1-1: Regole generali e regole per gli edifici.
26. UNI EN 1994-2:2006 12/01/2006 Eurocodice 4 - Progettazione delle strutture composte acciaio-calcestruzzo - Parte 2: Regole generali e regole per i ponti.
27. UNI EN 1995-1-1:2005 01/02/2005 Eurocodice 5 - Progettazione delle strutture di legno - Parte 1-1: Regole generali – Regole comuni e regole per gli edifici.
28. UNI EN 1995-2:2005 01/01/2005 Eurocodice 5 - Progettazione delle strutture di legno - Parte 2: Ponti.
29. UNI EN 1996-1-1:2006 26/01/2006 Eurocodice 6 - Progettazione delle strutture di muratura - Parte 1-1: Regole generali per strutture di muratura armata e non armata.
30. UNI EN 1996-3:2006 09/03/2006 Eurocodice 6 - Progettazione delle strutture di muratura - Parte 3: Metodi di calcolo semplificato per strutture di muratura non armata.

31. UNI EN 1997-1:2005 01/02/2005 Eurocodice 7 - Progettazione geotecnica - Parte 1: Regole generali.
32. UNI EN 1998-1:2005 01/03/2005 Eurocodice 8 - Progettazione delle strutture per la resistenza sismica - Parte 1: Regole generali, azioni sismiche e regole per gli edifici.
33. UNI EN 1998-3:2005 01/08/2005 Eurocodice 8 - Progettazione delle strutture per la resistenza sismica - Parte 3: Valutazione e adeguamento degli edifici.
34. UNI EN 1998-5:2005 01/01/2005 Eurocodice 8 - Progettazione delle strutture per la resistenza sismica - Parte 5: Fondazioni, strutture di contenimento ed aspetti geotecnici.

NOTA il capitolo "normativa di riferimento": riporta l' elenco delle normative implementate nel software. Le norme utilizzate per la struttura oggetto della presente relazione sono indicate nel precedente capitolo "RELAZIONE DI CALCOLO STRUTTURALE" "ANALISI E VERIFICHE SVOLTE CON L'AUSILIO DI CODICI DI CALCOLO". Laddove nei capitoli successivi vengano richiamate norme antecedenti al DM 17.01.18 è dovuto o a progettazione simulata di edifico esistente.

CARATTERISTICHE MATERIALI UTILIZZATI

LEGENDA TABELLA DATI MATERIALI

Il programma consente l'uso di materiali diversi. Sono previsti i seguenti tipi di materiale:

1	materiale tipo cemento armato
2	materiale tipo acciaio
3	materiale tipo muratura
4	materiale tipo legno
5	materiale tipo generico

I materiali utilizzati nella modellazione sono individuati da una sigla identificativa ed un codice numerico (gli elementi strutturali richiamano quest'ultimo nella propria descrizione). Per ogni materiale vengono riportati in tabella i seguenti dati:

Young	modulo di elasticità normale E
Poisson	coefficiente di contrazione trasversale ni
G	modulo di elasticità tangenziale
Gamma	peso specifico
Alfa	coefficiente di dilatazione termica
Fattore di confidenza FC m	Fattore di confidenza specifico per materiale; (è riportato solo se diverso da quello globale della struttura)
Fattore di confidenza FC a	Fattore di confidenza specifico per l'armatura (è riportato solo se diverso da quello globale della struttura)
Elasto-plastico	Materiale elastico perfettamente plastico per aste non lineari
Massima compressione	Massima tensione di compressione per aste non lineari
Massima trazione	Massima tensione di trazione per aste non lineari
Fattore attrito	Coefficinete di attrito per aste non lineari
Rapporto HRDb	Rapporto di hardening a flessione
Rapporto HRDv	Rapporto di hardening a taglio

I dati soprariportati vengono utilizzati per la modellazione dello schema statico e per la determinazione dei carichi inerziali e termici. In relazione al tipo di materiale vengono riportati inoltre:

1	c.a.		
		Resistenza Rc	resistenza a cmpressione cubica
		Resistenza fctm	resistenza media a trazione semplice
		Coefficiente ksb	Coefficiente di riduzione della resistenza a compressione da utilizzare nello stress block
2	acciaio		
		Tensione ft	Valore della tensione di rottura
		Tensione fy	Valore della tensione di snervamento
		Resistenza fd	Resistenza di calcolo per SL CNR-UNI 10011
		Resistenza fd (>40)	Resistenza di calcolo per SL CNR-UNI 10011 per spessori > 40mm
		Tensione ammissibile	Tensione ammissibile CNR-UNI 10011
		Tensione ammissibile(>40)	Tensione ammissibile CNR-UNI 10011 per spessori > 40mm
3	muratura		

	Muratura consolidata	Muratura per la quale si prevedono interventi di rinforzo"
	Incremento resistenza	Incremento conseguito in termini di resistenza
	Incremento rigidezza	Incremento conseguito in termini di rigidezza
	Resistenza f	Valore della resistenza a compressione
	Resistenza fv0	Valore della resistenza a taglio in assenza di tensioni normali
	Resistenza fh	Valore della resistenza a compressione orizzontale
	Resistenza fb	Valore della resistenza a compressione dei blocchi
	Resistenza fbh	Valore della resistenza a compressione dei blocchi in direzione orizzontale
	Resistenza fv0h	Valore della resistenza a taglio in assenza di tensioni normali per le travi
	Resistenza ft	Valore della resistenza a trazione per fessurazione diagonale
	Resistenza fvlim	Valore della massima resistenza a taglio
	Resistenza fbt	Valore della resistenza a trazione dei blocchi
	Coefficiente mu	Coefficiente d'attrito utilizzato per la resistenza a taglio (tipicamente 0.4)
	Coefficiente fi	Coefficiente d'ingranamento utilizzato per la resistenza a taglio
	Coefficiente ksb	Coefficiente di riduzione della resistenza a compressione da utilizzare nello stress block
4 legno		
	E0,05	Modulo di elasticità corrispondente ad un frattile del 5%
	Resistenza fc0	Valore della resistenza a compressione parallela
	Resistenza ft0	Valore della resistenza a trazione parallela
	Resistenza fm	Valore della resistenza a flessione
	Resistenza fv	Valore della resistenza a taglio
	Resist. ft0k	Resistenza caratteristica (tensione amm. per REGLES) per trazione
	Resist. fmk	Resistenza caratteristica (tensione amm. per REGLES) per flessione
	Resist. fvk	Resistenza caratteristica (tensione amm. per REGLES) per taglio
	Modulo E0,05	Modulo elastico parallelo caratteristico
	Lamellare	lamellare o massiccio

Nel tabulato si riportano sia i valori caratteristici che medi utilizzando gli uni e/o gli altri in relazione alle richieste di normativa ed alla tipologia di verifica. (Cap.7 NTC18 per materiali nuovi, Cap.8 NTC18 e relativa circolare 21/01/2019 per materiali esistenti, Linee Guida Reluis per incamiciatura CAM, CNR-DT 200 per interventi con FRP)

Vengono inoltre riportate le tabelle contenenti il riassunto delle informazioni assegnate nei criteri di progetto in uso.

Id	Tipo / Note	V. caratt.	V. medio	Young	Poisson	G	Gamma	Alfa	Altri
		daN/cm2	daN/cm2	daN/cm2		daN/cm2	daN/cm3		
3	Calcestruzzo Classe C28/35			3.260e+05	0.20	1.358e+05	2.50e-03	1.00e-05	
	Resistenza Rc	350.0							
	Resistenza fctm		28.4						
	Rapporto Rfessurata								1.00
	Coefficiente ksb								0.85
	Rapporto HRDb								1.00e-05
	Rapporto HRDv								1.00e-05
6	Calcestruzzo Classe C35/45			3.460e+05	0.20	1.442e+05	2.50e-03	1.00e-05	
	Resistenza Rc	450.0							
	Resistenza fctm		33.5						
	Rapporto Rfessurata								1.00
	Coefficiente ksb								0.85
	Rapporto HRDb								1.00e-05
	Rapporto HRDv								1.00e-05

Gusci c.a.	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Armatura						
Inclinazione Ax [gradi]	0.0	0.0	0.0			
Angolo Ax-Ay [gradi]	90.00	90.00	90.00			
Minima tesa	0.31	0.20	0.20			
Massima tesa	0.78	0.78	0.78			
Maglia unica centrale	NO	NO	NO			
Copriferro [cm]	2.00	3.00	3.00			
Maglia x						
diametro	10	12	16			
passo	20	20	5			
diametro aggiuntivi	12	12	16			
Maglia y						
diametro	10	12	16			
passo	20	20	5			
diametro aggiuntivi	12	12	16			
Stati limite ultimi						
Tensione fy [daN/cm2]	4500.00	4500.00	4500.00			
Tipo acciaio	tipo C	tipo C	tipo C			
Coefficiente gamma s	1.15	1.15	1.15			
Coefficiente gamma c	1.50	1.50	1.50			
Verifiche con N costante	SI	SI	SI			
Applica SLU da DIN	NO	NO	NO			
Tensioni ammissibili						
Tensione amm. cls [daN/cm2]	97.50	97.50	97.50			
Tensione amm. acciaio [daN/cm2]	2600.00	2600.00	2600.00			
Rapporto omogeneizzazione N	15.00	15.00	15.00			
Massimo rapporto area compressa/tesa	1.00	1.00	1.00			
Resistenza al fuoco						
3- intradosso	NO	NO	NO			
3+ estradosso	NO	NO	NO			
Tempo di esposizione R	15	15	15			

Travi c.a.	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Generalità						
Progetta a filo	SI	NO	NO			
Af inf: da q*L*L /	0.0	0.0	0.0			
Armatura						
Minima tesa	0.31	0.20	0.20			
Minima compressa	0.31	0.20	0.20			
Massima tesa	0.78	0.78	0.78			
Da sezione	SI	SI	SI			
Usa armatura teorica	NO	NO	NO			
Stati limite ultimi						
Tensione fy [daN/cm2]	4500.00	4500.00	4500.00			
Tensione fy staffe [daN/cm2]	4500.00	4500.00	4500.00			
Tipo acciaio	tipo C	tipo C	tipo C			
Coefficiente gamma s	1.15	1.15	1.15			
Coefficiente gamma c	1.50	1.50	1.50			
Verifiche con N costante	SI	SI	SI			
Fattore di ridistribuzione	0.80	0.80	0.80			
Modello per il confinamento						
Relazione tensio-deformativa	Mander	Mander	Mander			
Incrudimento acciaio	5.000e-03	5.000e-03	5.000e-03			
Fattore lambda	1.00	1.00	1.00			
epsilon max,s	4.000e-02	4.000e-02	4.000e-02			
epsilon cu2	4.500e-03	4.500e-03	4.500e-03			
epsilon c2	0.0	0.0	0.0			
epsilon cy	0.0	0.0	0.0			
Tensioni ammissibili						
Tensione amm. cls [daN/cm2]	97.50	97.50	97.50			
Tensione amm. acciaio [daN/cm2]	2600.00	2600.00	2600.00			
Rapporto omogeneizzazione N	15.00	15.00	15.00			
Massimo rapporto area compressa/tesa	1.00	1.00	1.00			
Staffe						
Diametro staffe	0.0	0.0	0.0			
Passo minimo [cm]	3.00	3.00	3.00			
Passo massimo [cm]	10.00	30.00	30.00			
Passo raffittito [cm]	10.00	30.00	30.00			
Lunghezza zona raffittita [cm]	50.00	0.0	0.0			
Ctg(Teta) Max	2.50	2.50	2.50			

Travi c.a.	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Percentuale sagomati	0.0	0.0	0.0			
Luce di taglio per GR [cm]	1.00	1.00	1.00			
Adotta scorrimento medio	NO	NO	NO			
Torsione non essenziale inclusa	NO	NO	NO			

Pilastri c.a.	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Generalità						
Progetto armatura	Privilegia lati	Privilegia lati	Privilegia lati			
Progetta a filo	SI	NO	NO			
Effetti del 2 ordine	SI	SI	SI			
Beta per 2-2	1.00	1.00	1.00			
Beta per 3-3	1.00	1.00	1.00			
Armatura						
Massima tesa	4.00	4.00	4.00			
Minima tesa	1.00	1.00	1.00			
Stati limite ultimi						
Tensione fy [daN/cm2]	4500.00	4500.00	4500.00			
Tensione fy staffe [daN/cm2]	4500.00	4500.00	4500.00			
Tipo acciaio	tipo C	tipo C	tipo C			
Coefficiente gamma s	1.15	1.15	1.15			
Coefficiente gamma c	1.50	1.50	1.50			
Verifiche con N costante	NO	SI	SI			
Modello per il confinamento						
Relazione tensio-deformativa	Mander	Mander	Mander			
Incrudimento acciaio	5.000e-03	5.000e-03	5.000e-03			
Fattore lambda	1.00	1.00	1.00			
epsilon max,s	4.000e-02	4.000e-02	4.000e-02			
epsilon cu2	4.500e-03	4.500e-03	4.500e-03			
epsilon c2	0.0	0.0	0.0			
epsilon cy	0.0	0.0	0.0			
Tensioni ammissibili						
Tensione amm. cls [daN/cm2]	97.50	97.50	97.50			
Tensione amm. acciaio [daN/cm2]	2600.00	2600.00	2600.00			
Rapporto omogeneizzazione N	15.00	15.00	15.00			
Staffe						
Diametro staffe	0.0	0.0	0.0			
Passo minimo [cm]	3.00	5.00	5.00			
Passo massimo [cm]	25.00	25.00	25.00			
Passo raffittito [cm]	10.00	15.00	15.00			
Lunghezza zona raffittita [cm]	45.00	45.00	45.00			
Ctg(Teta) Max	2.50	2.50	2.50			
Luce di taglio per GR [cm]	1.00	1.00	1.00			
Massimizza gerarchia	SI	SI	SI			

Solai e pannelli	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Generalità						
Usa tensioni ammissibili	NO	NO	NO			
Af inf: da traliccio	SI	SI	SI			
Consenti armatura a taglio	NO	NO	NO			
Incrementa armatura longitudinale per taglio	SI	SI	SI			
Af inf: da q*L*L /	20.00	20.00	20.00			
Incremento fascia piena [cm]	5.00	5.00	5.00			
Armatura						
Minima tesa	0.15	0.15	0.15			
Massima tesa	3.00	3.00	3.00			
Minima compressa	0.0	0.0	0.0			
Af/h [cm]	7.000e-02	7.000e-02	7.000e-02			
Stati limite ultimi						
Tensione fy [daN/cm2]	4500.00	4500.00	4500.00			
Tipo acciaio	tipo C	tipo C	tipo C			
Coefficiente gamma s	1.15	1.15	1.15			
Coefficiente gamma c	1.50	1.50	1.50			
Fattore di ridistribuzione	0.0	0.0	0.0			
Tensioni ammissibili						
Tensione amm. cls [daN/cm2]	85.00	85.00	85.00			
Tensione amm. acciaio [daN/cm2]	2600.00	2600.00	2600.00			

Solai e pannelli	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Rapporto omogeneizzazione N	15.00	15.00	15.00			
Massimo rapporto area compressa/tesa	1.00	1.00	1.00			
Verifica freccia						
Infinita	250.00	250.00	250.00			
Istantanea	500.00	500.00	500.00			
Fattore viscosità	3.00	3.00	3.00			
Usa J non fessurato	SI	NO	NO			
Elementi non strutturali						
Tamponatura antiespulsione	NO	NO	NO			
Tamponatura con armatura	NO	NO	NO			
Fattore di struttura/comportamento	2.00	2.00	2.00			
Coefficiente gamma m	0.0	0.0	0.0			
Periodo Ta	0.0	0.0	0.0			
Altezza pannello	0.0	0.0	0.0			

MODELLAZIONE DELLE SEZIONI

LEGENDA TABELLA DATI SEZIONI

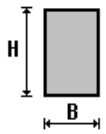
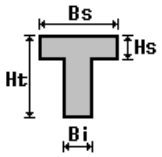
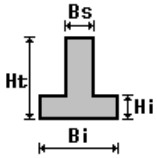
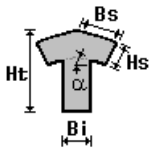
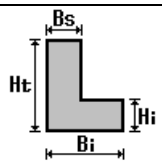
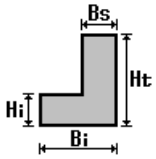
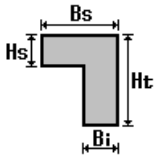
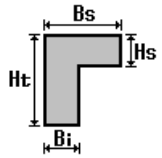
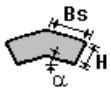
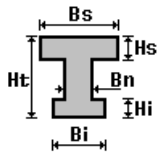
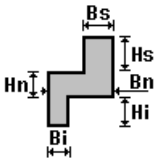
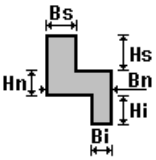
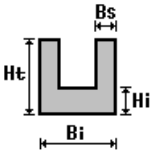
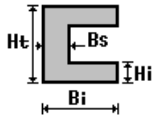
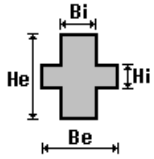
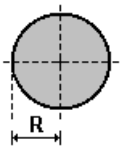
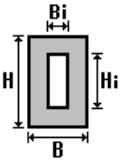
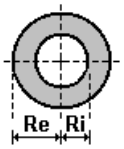
Il programma consente l'uso di sezioni diverse. Sono previsti i seguenti tipi di sezione:

1. sezione di tipo generico
2. profilati semplici
3. profilati accoppiati e speciali

Le sezioni utilizzate nella modellazione sono individuate da una sigla identificativa ed un codice numerico (gli elementi strutturali richiamano quest'ultimo nella propria descrizione). Per ogni sezione vengono riportati in tabella i seguenti dati:

Area	area della sezione
A V2	area della sezione/fattore di taglio (per il taglio in direzione 2)
A V3	area della sezione/fattore di taglio (per il taglio in direzione 3)
Jt	fattore torsionale di rigidezza
J2-2	momento d'inerzia della sezione riferito all'asse 2
J3-3	momento d'inerzia della sezione riferito all'asse 3
W2-2	modulo di resistenza della sezione riferito all'asse 2
W3-3	modulo di resistenza della sezione riferito all'asse 3
Wp2-2	modulo di resistenza plastico della sezione riferito all'asse 2
Wp3-3	modulo di resistenza plastico della sezione riferito all'asse 3

I dati sopra riportati vengono utilizzati per la determinazione dei carichi inerziali e per la definizione delle rigidezze degli elementi strutturali; qualora il valore di Area V2 (e/o Area V3) sia nullo la deformabilità per taglio V2 (e/o V3) è trascurata. La valutazione delle caratteristiche inerziali delle sezioni è condotta nel riferimento 2-3 dell'elemento.

 rettangolare	 a T	 a T rovescia	 a T di colmo	 a L	 a L specchiata
 a L specchiata rovescia	 a L rovescia	 a L di colmo	 a doppio T	 a quattro specchiata	 a quattro
 a U	 a C	 a croce	 circolare	 rettangolare cava	 circolare cava

Per quanto concerne i profilati semplici ed accoppiati l'asse 2 del riferimento coincide con l'asse x riportato nei più diffusi profilatari.

Per quanto concerne le sezioni di tipo generico (tipo 1.):
i valori dimensionali con prefisso B sono riferiti all'asse 2
i valori dimensionali con prefisso H sono riferiti all'asse 3

Id	Tipo	Area	A V2	A V3	Jt	J 2-2	J 3-3	W 2-2	W 3-3	Wp 2-2	Wp 3-3
		cm2	cm2	cm2	cm4	cm4	cm4	cm3	cm3	cm3	cm3
1	FONDAZIONE-Rettangolare: b=50 h=120	6000.00	5000.00	5000.00	3.688e+06	1.250e+06	7.200e+06	5.000e+04	1.200e+05	7.500e+04	1.800e+05
2	PILASTRI PT-Rettangolare: b=40 h=100	4000.00	3333.33	3333.33	1.596e+06	5.333e+05	3.333e+06	2.667e+04	6.667e+04	4.000e+04	1.000e+05
3	PILASTRI PP-Rettangolare: b=40 h=100	4000.00	3333.33	3333.33	1.596e+06	5.333e+05	3.333e+06	2.667e+04	6.667e+04	4.000e+04	1.000e+05
4	PILASTRI PS-Rettangolare: b=40 h=100	4000.00	3333.33	3333.33	1.596e+06	5.333e+05	3.333e+06	2.667e+04	6.667e+04	4.000e+04	1.000e+05
5	TRAVI PRIMO IMPALCATO-Rettangolare: b=40 h=70	2800.00	2333.33	2333.33	9.557e+05	3.733e+05	1.143e+06	1.867e+04	3.267e+04	2.800e+04	4.900e+04
6	TRAVI SECONDO IMPALCATO-Rettangolare: b=40 h=70	2800.00	2333.33	2333.33	9.557e+05	3.733e+05	1.143e+06	1.867e+04	3.267e+04	2.800e+04	4.900e+04
7	TRAVI TERZO IMPALCATO-Rettangolare: b=40 h=70	2800.00	2333.33	2333.33	9.557e+05	3.733e+05	1.143e+06	1.867e+04	3.267e+04	2.800e+04	4.900e+04
8	TRAVI SBALZO-Rettangolare: b=40 h=40	1600.00	1333.33	1333.33	3.599e+05	2.133e+05	2.133e+05	1.067e+04	1.067e+04	1.600e+04	1.600e+04
9	TRAVETTO SOLAIO-T ribassata: bi=12 ht=25 bs=50 hs=5	490.00	0.0	0.0	1.200e+04	5.496e+04	2.765e+04	2198.53	1688.50	3845.00	3024.51
10	TRAVI MODIFICATE-Rettangolare: b=60 h=70	4200.00	3500.00	3500.00	2.448e+06	1.260e+06	1.715e+06	4.200e+04	4.900e+04	6.300e+04	7.350e+04
11	TRAVI MODIFICATE II IMP-Rettangolare: b=45 h=70	3150.00	2625.00	2625.00	1.265e+06	5.316e+05	1.286e+06	2.363e+04	3.675e+04	3.544e+04	5.513e+04
12	PILASTRI PP50-Rettangolare: b=50 h=100	5000.00	4166.67	4166.67	2.854e+06	1.042e+06	4.167e+06	4.167e+04	8.333e+04	6.250e+04	1.250e+05
14	SEZIONE L-L rovescia: bi=40 ht=70 bs=70 hs=25	3550.00	0.0	0.0	1.238e+06	1.154e+06	1.482e+06	2.709e+04	3.728e+04	5.224e+04	6.236e+04
15	L ROV-L inv.ribas.: bi=40 ht=70 bs=70 hs=25	3550.00	0.0	0.0	1.238e+06	1.154e+06	1.482e+06	2.709e+04	3.728e+04	5.224e+04	6.236e+04
16	SEZIONE L sbalzo-L rovescia: bi=40 ht=40 bs=70 hs=25	2350.00	0.0	0.0	6.424e+05	8.951e+05	2.811e+05	2.305e+04	1.255e+04	3.873e+04	2.165e+04

MODELLAZIONE STRUTTURA: NODI

LEGENDA TABELLA DATI NODI

Il programma utilizza per la modellazione nodi strutturali.
Ogni nodo è individuato dalle coordinate cartesiane nel sistema di riferimento globale (X Y Z).
Ad ogni nodo è eventualmente associato un codice di vincolamento rigido, un codice di fondazione speciale, ed un set di sei molle (tre per le traslazioni, tre per le rotazioni). Le tabelle sottoriportate riflettono le succitate possibilità. In particolare per ogni nodo viene indicato in tabella:

Nodo	numero del nodo.
X	valore della coordinata X
Y	valore della coordinata Y
Z	valore della coordinata Z

Per i nodi ai quali sia associato un codice di vincolamento rigido, un codice di fondazione speciale o un set di molle viene indicato in tabella:

Nodo	numero del nodo.
X	valore della coordinata X
Y	valore della coordinata Y
Z	valore della coordinata Z
Note	eventuale codice di vincolo (es. v=110010 sei valori relativi ai sei gradi di libertà previsti per il nodo TxTyTzRxRyRz, il valore 1 indica che lo spostamento o rotazione relativo è impedito, il valore 0 indica che lo spostamento o rotazione relativo è libero).
Note	(FS = 1, 2,…) eventuale codice del tipo di fondazione speciale (1, 2,… fanno riferimento alle tipologie: plinto, palo, plinto su pali,…) che è collegato al nodo. (ISO = "id SIGLA") indice e sigla identificativa dell' eventuale isolatore sismico assegnato al nodo
Rig. TX	valore della rigidezza dei vincoli elastici eventualmente applicati al nodo, nello specifico TX (idem per TY, TZ, RX, RY, RZ).

Per strutture sismicamente isolate viene inoltre inserita la tabella delle caratteristiche per gli isolatori utilizzati; le caratteristiche sono indicate in conformità al cap. 7.10 del D.M. 17/01/18

TABELLA DATI NODI

Nodo	X	Y	Z	Nodo	X	Y	Z	Nodo	X	Y	Z
	cm	cm	cm		cm	cm	cm		cm	cm	cm
1	0.0	0.0	0.0	2	0.0	0.0	428.0	3	962.5	0.0	0.0
4	962.5	0.0	428.0	5	1748.0	0.0	0.0	6	1748.0	0.0	428.0
7	0.0	400.0	0.0	8	0.0	400.0	428.0	9	962.5	400.0	0.0
10	962.5	400.0	428.0	11	1748.0	400.0	0.0	12	1748.0	400.0	428.0
13	0.0	850.0	0.0	14	0.0	850.0	428.0	15	962.5	850.0	0.0
16	962.5	850.0	428.0	17	1748.0	850.0	0.0	18	1748.0	850.0	428.0
19	0.0	1300.0	0.0	20	0.0	1300.0	428.0	21	962.5	1300.0	0.0
22	962.5	1300.0	428.0	23	1748.0	1300.0	0.0	24	1748.0	1300.0	428.0
25	0.0	1750.0	0.0	26	0.0	1750.0	428.0	27	962.5	1750.0	0.0
28	962.5	1750.0	428.0	29	1748.0	1750.0	0.0	30	1748.0	1750.0	428.0
31	0.0	2135.0	0.0	32	0.0	2135.0	428.0	33	962.5	2135.0	0.0
34	962.5	2135.0	428.0	35	0.0	0.0	835.0	36	0.0	0.0	1170.0
37	962.5	0.0	835.0	38	962.5	0.0	1170.0	39	1748.0	0.0	835.0
40	0.0	1300.0	835.0	41	1748.0	1750.0	835.0	42	1748.0	1300.0	835.0
43	962.5	1750.0	835.0	44	962.5	1750.0	1170.0	45	0.0	1750.0	835.0
46	0.0	1750.0	1170.0	47	962.5	2135.0	835.0	48	962.5	2135.0	1170.0
49	0.0	2135.0	835.0	50	0.0	2135.0	1170.0	51	0.0	400.0	835.0
52	0.0	400.0	1170.0	53	962.5	400.0	835.0	54	962.5	400.0	1170.0
55	1748.0	400.0	835.0	56	0.0	1300.0	1170.0	57	962.5	1300.0	835.0
58	962.5	1300.0	1170.0	59	0.0	850.0	835.0	60	0.0	850.0	1170.0

61	962.5	850.0	835.0	62	962.5	850.0	1170.0	63	1748.0	850.0	835.0
64	1207.5	0.0	1170.0	65	1207.5	1750.0	1170.0	66	240.6	-80.0	0.0
67	1207.5	400.0	1170.0	68	1207.5	1300.0	1170.0	69	1207.5	850.0	1170.0
70	1748.0	2135.0	0.0	71	1669.5	0.0	0.0	72	1590.9	0.0	0.0
73	1512.3	0.0	0.0	74	1433.8	0.0	0.0	75	1355.3	0.0	0.0
76	1276.7	0.0	0.0	77	1198.2	0.0	0.0	78	1119.6	0.0	0.0
79	1041.1	0.0	0.0	80	962.5	80.0	0.0	81	962.5	160.0	0.0
82	962.5	240.0	0.0	83	962.5	320.0	0.0	84	1041.0	400.0	0.0
85	1119.6	400.0	0.0	86	1198.2	400.0	0.0	87	1276.7	400.0	0.0
88	1355.3	400.0	0.0	89	1433.8	400.0	0.0	90	1512.3	400.0	0.0
91	1590.9	400.0	0.0	92	1669.4	400.0	0.0	93	1748.0	320.0	0.0
94	1748.0	240.0	0.0	95	1748.0	160.0	0.0	96	1748.0	80.0	0.0
97	1041.0	320.0	0.0	98	1041.0	240.0	0.0	99	1041.0	160.0	0.0
100	1041.0	80.0	0.0	101	1119.6	320.0	0.0	102	1119.6	240.0	0.0
103	1119.6	160.0	0.0	104	1119.6	80.0	0.0	105	1198.2	320.0	0.0
106	1198.2	240.0	0.0	107	1198.2	160.0	0.0	108	1198.2	80.0	0.0
109	1276.7	320.0	0.0	110	1276.7	240.0	0.0	111	1276.7	160.0	0.0
112	1276.7	80.0	0.0	113	1355.3	320.0	0.0	114	1355.3	240.0	0.0
115	1355.3	160.0	0.0	116	1355.3	80.0	0.0	117	1433.8	320.0	0.0
118	1433.8	240.0	0.0	119	1433.8	160.0	0.0	120	1433.8	80.0	0.0
121	1512.3	320.0	0.0	122	1512.3	240.0	0.0	123	1512.3	160.0	0.0
124	1512.3	80.0	0.0	125	1590.9	320.0	0.0	126	1590.9	240.0	0.0
127	1590.9	160.0	0.0	128	1590.9	80.0	0.0	129	1669.4	320.0	0.0
130	1669.5	240.0	0.0	131	1669.5	160.0	0.0	132	1669.5	80.0	0.0
133	882.3	0.0	0.0	134	802.1	0.0	0.0	135	721.9	0.0	0.0
136	641.7	0.0	0.0	137	561.5	0.0	0.0	138	481.2	0.0	0.0
139	401.0	0.0	0.0	140	320.8	0.0	0.0	141	240.6	0.0	0.0
142	160.4	0.0	0.0	143	80.2	0.0	0.0	144	0.0	80.0	0.0
145	0.0	160.0	0.0	146	0.0	240.0	0.0	147	0.0	320.0	0.0
148	80.2	400.0	0.0	149	160.4	400.0	0.0	150	240.6	400.0	0.0
151	320.8	400.0	0.0	152	401.0	400.0	0.0	153	481.3	400.0	0.0
154	561.5	400.0	0.0	155	641.7	400.0	0.0	156	721.9	400.0	0.0
157	802.1	400.0	0.0	158	882.3	400.0	0.0	159	561.5	160.2	0.0
160	641.7	160.1	0.0	161	722.0	160.1	0.0	162	802.2	160.1	0.0
163	80.1	320.0	0.0	164	80.0	240.0	0.0	165	160.4	319.9	0.0
166	80.1	160.0	0.0	167	240.6	319.9	0.0	168	80.1	80.1	0.0
169	320.8	319.9	0.0	170	401.1	319.9	0.0	171	481.3	319.8	0.0
172	160.4	80.1	0.0	173	561.5	319.9	0.0	174	240.6	80.1	0.0
175	641.7	319.9	0.0	176	320.8	80.1	0.0	177	721.9	319.9	0.0
178	401.0	80.1	0.0	179	802.1	319.9	0.0	180	481.2	80.2	0.0
181	882.4	320.0	0.0	182	561.5	80.1	0.0	183	641.7	80.1	0.0
184	721.9	80.1	0.0	185	882.4	240.0	0.0	186	802.1	80.1	0.0
187	882.4	160.0	0.0	188	882.4	80.0	0.0	189	160.3	240.0	0.0
190	160.3	160.1	0.0	191	240.6	239.9	0.0	192	320.8	239.9	0.0
193	401.0	239.8	0.0	194	481.3	239.6	0.0	195	561.5	239.8	0.0
196	240.6	160.1	0.0	197	641.7	239.8	0.0	198	320.8	160.2	0.0
199	722.0	240.0	0.0	200	401.0	160.2	0.0	201	802.2	240.0	0.0
202	481.2	160.4	0.0	203	962.5	720.0	0.0	204	1041.0	720.0	0.0
205	1041.0	850.0	0.0	206	1355.3	2070.0	0.0	207	962.5	640.0	0.0
208	1041.0	640.0	0.0	209	962.5	560.0	0.0	210	1041.0	560.0	0.0
211	962.5	480.0	0.0	212	1041.0	480.0	0.0	213	1119.6	720.0	0.0
214	1119.6	850.0	0.0	215	1119.6	640.0	0.0	216	1119.6	560.0	0.0
217	1119.6	480.0	0.0	218	1198.2	720.0	0.0	219	1198.2	850.0	0.0
220	1198.2	640.0	0.0	221	1198.2	560.0	0.0	222	1198.2	480.0	0.0
223	1276.7	720.0	0.0	224	1276.7	850.0	0.0	225	1276.7	640.0	0.0
226	1276.7	560.0	0.0	227	1276.7	480.0	0.0	228	1355.3	720.0	0.0
229	1355.3	850.0	0.0	230	1355.3	640.0	0.0	231	1355.3	560.0	0.0
232	1355.3	480.0	0.0	233	1433.8	720.0	0.0	234	1433.8	850.0	0.0
235	1433.8	640.0	0.0	236	1433.8	560.0	0.0	237	1433.8	480.0	0.0
238	1512.3	720.0	0.0	239	1512.3	850.0	0.0	240	1512.3	640.0	0.0
241	1512.3	560.0	0.0	242	1512.3	480.0	0.0	243	1590.9	720.0	0.0
244	1590.9	850.0	0.0	245	1590.9	640.0	0.0	246	1590.9	560.0	0.0
247	1590.9	480.0	0.0	248	1669.4	720.0	0.0	249	1669.4	850.0	0.0
250	1669.5	640.0	0.0	251	1669.5	560.0	0.0	252	1669.5	480.0	0.0
253	1748.0	720.0	0.0	254	1355.3	2135.0	0.0	255	1748.0	640.0	0.0
256	1748.0	560.0	0.0	257	1748.0	480.0	0.0	258	80.1	720.0	0.0
259	160.4	719.9	0.0	260	160.4	850.0	0.0	261	80.2	850.0	0.0
262	160.4	480.1	0.0	263	80.1	480.1	0.0	264	721.9	480.1	0.0
265	802.1	480.1	0.0	266	802.2	560.1	0.0	267	722.0	560.1	0.0
268	882.4	720.0	0.0	269	882.3	850.0	0.0	270	240.6	480.1	0.0
271	320.8	480.1	0.0	272	320.8	560.2	0.0	273	240.6	560.1	0.0
274	802.1	719.9	0.0	275	802.1	850.0	0.0	276	561.5	639.8	0.0
277	641.7	639.8	0.0	278	641.7	719.9	0.0	279	561.5	719.9	0.0
280	641.7	850.0	0.0	281	561.5	850.0	0.0	282	721.9	719.9	0.0
283	721.9	850.0	0.0	284	802.2	640.0	0.0	285	722.0	640.0	0.0
286	481.3	719.8	0.0	287	481.3	850.0	0.0	288	882.4	480.0	0.0
289	882.4	560.0	0.0	290	320.8	639.9	0.0	291	401.0	639.8	0.0

292	401.1	719.9	0.0	293	320.8	719.9	0.0	294	561.5	480.1	0.0
295	481.2	480.2	0.0	296	0.0	480.0	0.0	297	80.1	560.0	0.0
298	0.0	560.0	0.0	299	160.3	560.1	0.0	300	481.2	560.4	0.0
301	561.5	560.2	0.0	302	481.3	639.6	0.0	303	401.0	480.1	0.0
304	401.0	560.2	0.0	305	641.7	480.1	0.0	306	641.7	560.1	0.0
307	240.6	639.9	0.0	308	80.0	640.0	0.0	309	0.0	640.0	0.0
310	882.4	640.0	0.0	311	401.0	850.0	0.0	312	240.6	719.9	0.0
313	0.0	720.0	0.0	314	1355.3	1990.0	0.0	315	240.6	850.0	0.0
316	160.3	640.0	0.0	317	320.8	850.0	0.0	318	1355.3	1910.0	0.0
319	1355.3	1830.0	0.0	320	1433.8	2070.0	0.0	321	1433.8	2135.0	0.0
322	1433.8	1990.0	0.0	323	1433.8	1910.0	0.0	324	1433.8	1830.0	0.0
325	1512.3	2070.0	0.0	326	1512.3	2135.0	0.0	327	1512.3	1990.0	0.0
328	1512.3	1910.0	0.0	329	1512.3	1830.0	0.0	330	1590.9	2070.0	0.0
331	1590.9	2135.0	0.0	332	1590.9	1990.0	0.0	333	1590.9	1910.0	0.0
334	1590.9	1830.0	0.0	335	1669.4	2070.0	0.0	336	1669.4	2135.0	0.0
337	1669.5	1990.0	0.0	338	1669.5	1910.0	0.0	339	1669.5	1830.0	0.0
340	1748.0	2070.0	0.0	341	160.3	1990.0	0.0	342	1748.0	1990.0	0.0
343	1748.0	1910.0	0.0	344	962.5	1170.0	0.0	345	1041.0	1170.0	0.0
346	1041.0	1300.0	0.0	347	1748.0	1830.0	0.0	348	962.5	1090.0	0.0
349	1041.0	1090.0	0.0	350	962.5	1010.0	0.0	351	1041.0	1010.0	0.0
352	962.5	930.0	0.0	353	1041.0	930.0	0.0	354	1119.6	1170.0	0.0
355	1119.6	1300.0	0.0	356	1119.6	1090.0	0.0	357	1119.6	1010.0	0.0
358	1119.6	930.0	0.0	359	1198.2	1170.0	0.0	360	1198.2	1300.0	0.0
361	1198.2	1090.0	0.0	362	1198.2	1010.0	0.0	363	1198.2	930.0	0.0
364	1276.7	1170.0	0.0	365	1276.7	1300.0	0.0	366	1276.7	1090.0	0.0
367	1276.7	1010.0	0.0	368	1276.7	930.0	0.0	369	1355.3	1170.0	0.0
370	1355.3	1300.0	0.0	371	1355.3	1090.0	0.0	372	1355.3	1010.0	0.0
373	1355.3	930.0	0.0	374	1433.8	1170.0	0.0	375	1433.8	1300.0	0.0
376	1433.8	1090.0	0.0	377	1433.8	1010.0	0.0	378	1433.8	930.0	0.0
379	1512.3	1170.0	0.0	380	1512.3	1300.0	0.0	381	1512.3	1090.0	0.0
382	1512.3	1010.0	0.0	383	1512.3	930.0	0.0	384	1590.9	1170.0	0.0
385	1590.9	1300.0	0.0	386	1590.9	1090.0	0.0	387	1590.9	1010.0	0.0
388	1590.9	930.0	0.0	389	1669.4	1170.0	0.0	390	1669.4	1300.0	0.0
391	1669.5	1090.0	0.0	392	1669.5	1010.0	0.0	393	1669.5	930.0	0.0
394	1748.0	1170.0	0.0	395	80.1	2070.0	0.0	396	1748.0	1090.0	0.0
397	1748.0	1010.0	0.0	398	1748.0	930.0	0.0	399	80.1	1170.0	0.0
400	160.4	1169.9	0.0	401	160.4	1300.0	0.0	402	80.2	1300.0	0.0
403	160.4	930.1	0.0	404	80.1	930.1	0.0	405	721.9	930.1	0.0
406	802.1	930.1	0.0	407	802.2	1010.1	0.0	408	722.0	1010.1	0.0
409	882.4	1170.0	0.0	410	882.3	1300.0	0.0	411	240.6	930.1	0.0
412	320.8	930.1	0.0	413	320.8	1010.2	0.0	414	240.6	1010.1	0.0
415	802.1	1169.9	0.0	416	802.1	1300.0	0.0	417	561.5	1089.8	0.0
418	641.7	1089.8	0.0	419	641.7	1169.9	0.0	420	561.5	1169.9	0.0
421	641.7	1300.0	0.0	422	561.5	1300.0	0.0	423	721.9	1169.9	0.0
424	721.9	1300.0	0.0	425	802.2	1090.0	0.0	426	722.0	1090.0	0.0
427	481.3	1169.8	0.0	428	481.3	1300.0	0.0	429	882.4	930.0	0.0
430	882.4	1010.0	0.0	431	320.8	1089.9	0.0	432	401.0	1089.8	0.0
433	401.1	1169.9	0.0	434	320.8	1169.9	0.0	435	561.5	930.1	0.0
436	481.2	930.2	0.0	437	0.0	930.0	0.0	438	80.1	1010.0	0.0
439	0.0	1010.0	0.0	440	160.3	1010.1	0.0	441	481.2	1010.4	0.0
442	561.5	1010.2	0.0	443	481.3	1089.6	0.0	444	401.0	930.1	0.0
445	401.0	1010.2	0.0	446	641.7	930.1	0.0	447	641.7	1010.1	0.0
448	240.6	1089.9	0.0	449	80.0	1090.0	0.0	450	0.0	1090.0	0.0
451	882.4	1090.0	0.0	452	401.0	1300.0	0.0	453	240.6	1169.9	0.0
454	0.0	1170.0	0.0	455	160.4	2069.9	0.0	456	240.6	1300.0	0.0
457	160.3	1090.0	0.0	458	320.8	1300.0	0.0	459	160.4	2135.0	0.0
460	80.2	2135.0	0.0	461	160.4	1830.1	0.0	462	80.1	1830.1	0.0
463	721.9	1830.1	0.0	464	802.1	1830.1	0.0	465	802.2	1910.1	0.0
466	722.0	1910.1	0.0	467	882.4	2070.0	0.0	468	882.3	2135.0	0.0
469	240.6	1830.1	0.0	470	320.8	1830.1	0.0	471	320.8	1910.2	0.0
472	240.6	1910.1	0.0	473	802.1	2069.9	0.0	474	802.1	2135.0	0.0
475	561.5	1989.8	0.0	476	641.7	1989.8	0.0	477	641.7	2069.9	0.0
478	561.5	2069.9	0.0	479	641.7	2135.0	0.0	480	561.5	2135.0	0.0
481	721.9	2069.9	0.0	482	721.9	2135.0	0.0	483	802.2	1990.0	0.0
484	722.0	1990.0	0.0	485	962.5	1620.0	0.0	486	1041.0	1620.0	0.0
487	1041.0	1750.0	0.0	488	481.3	2069.8	0.0	489	962.5	1540.0	0.0
490	1041.0	1540.0	0.0	491	962.5	1460.0	0.0	492	1041.0	1460.0	0.0
493	962.5	1380.0	0.0	494	1041.0	1380.0	0.0	495	1119.6	1620.0	0.0
496	1119.6	1750.0	0.0	497	1119.6	1540.0	0.0	498	1119.6	1460.0	0.0
499	1119.6	1380.0	0.0	500	1198.2	1620.0	0.0	501	1198.2	1750.0	0.0
502	1198.2	1540.0	0.0	503	1198.2	1460.0	0.0	504	1198.2	1380.0	0.0
505	1276.7	1620.0	0.0	506	1276.7	1750.0	0.0	507	1276.7	1540.0	0.0
508	1276.7	1460.0	0.0	509	1276.7	1380.0	0.0	510	1355.3	1620.0	0.0
511	1355.3	1750.0	0.0	512	1355.3	1540.0	0.0	513	1355.3	1460.0	0.0
514	1355.3	1380.0	0.0	515	1433.8	1620.0	0.0	516	1433.8	1750.0	0.0
517	1433.8	1540.0	0.0	518	1433.8	1460.0	0.0	519	1433.8	1380.0	0.0
520	1512.3	1620.0	0.0	521	1512.3	1750.0	0.0	522	1512.3	1540.0	0.0

523	1512.3	1460.0	0.0	524	1512.3	1380.0	0.0	525	1590.9	1620.0	0.0
526	1590.9	1750.0	0.0	527	1590.9	1540.0	0.0	528	1590.9	1460.0	0.0
529	1590.9	1380.0	0.0	530	1669.4	1620.0	0.0	531	1669.4	1750.0	0.0
532	1669.5	1540.0	0.0	533	1669.5	1460.0	0.0	534	1669.5	1380.0	0.0
535	1748.0	1620.0	0.0	536	481.3	2135.0	0.0	537	1748.0	1540.0	0.0
538	1748.0	1460.0	0.0	539	1748.0	1380.0	0.0	540	80.1	1620.0	0.0
541	160.4	1619.9	0.0	542	160.4	1750.0	0.0	543	80.2	1750.0	0.0
544	160.4	1380.1	0.0	545	80.1	1380.1	0.0	546	721.9	1380.1	0.0
547	802.1	1380.1	0.0	548	802.2	1460.1	0.0	549	722.0	1460.1	0.0
550	882.4	1620.0	0.0	551	882.3	1750.0	0.0	552	240.6	1380.1	0.0
553	320.8	1380.1	0.0	554	320.8	1460.2	0.0	555	240.6	1460.1	0.0
556	802.1	1619.9	0.0	557	802.1	1750.0	0.0	558	561.5	1539.8	0.0
559	641.7	1539.8	0.0	560	641.7	1619.9	0.0	561	561.5	1619.9	0.0
562	641.7	1750.0	0.0	563	561.5	1750.0	0.0	564	721.9	1619.9	0.0
565	721.9	1750.0	0.0	566	802.2	1540.0	0.0	567	722.0	1540.0	0.0
568	481.3	1619.8	0.0	569	481.3	1750.0	0.0	570	882.4	1380.0	0.0
571	882.4	1460.0	0.0	572	320.8	1539.9	0.0	573	401.0	1539.8	0.0
574	401.1	1619.9	0.0	575	320.8	1619.9	0.0	576	561.5	1380.1	0.0
577	481.2	1380.2	0.0	578	0.0	1380.0	0.0	579	80.1	1460.0	0.0
580	0.0	1460.0	0.0	581	160.3	1460.1	0.0	582	481.2	1460.4	0.0
583	561.5	1460.2	0.0	584	481.3	1539.6	0.0	585	401.0	1380.1	0.0
586	401.0	1460.2	0.0	587	641.7	1380.1	0.0	588	641.7	1460.1	0.0
589	240.6	1539.9	0.0	590	80.0	1540.0	0.0	591	0.0	1540.0	0.0
592	882.4	1540.0	0.0	593	401.0	1750.0	0.0	594	240.6	1619.9	0.0
595	0.0	1620.0	0.0	596	882.4	1830.0	0.0	597	240.6	1750.0	0.0
598	160.3	1540.0	0.0	599	320.8	1750.0	0.0	600	882.4	1910.0	0.0
601	320.8	1989.9	0.0	602	401.0	1989.8	0.0	603	401.1	2069.9	0.0
604	320.8	2069.9	0.0	605	561.5	1830.1	0.0	606	481.2	1830.2	0.0
607	0.0	1830.0	0.0	608	80.1	1910.0	0.0	609	0.0	1910.0	0.0
610	160.3	1910.1	0.0	611	481.2	1910.4	0.0	612	561.5	1910.2	0.0
613	481.3	1989.6	0.0	614	401.0	1830.1	0.0	615	401.0	1910.2	0.0
616	641.7	1830.1	0.0	617	641.7	1910.1	0.0	618	240.6	1989.9	0.0
619	80.0	1990.0	0.0	620	0.0	1990.0	0.0	621	882.4	1990.0	0.0
622	401.0	2135.0	0.0	623	240.6	2069.9	0.0	624	0.0	2070.0	0.0
625	320.8	2135.0	0.0	626	962.5	2070.0	0.0	627	1041.0	2070.0	0.0
628	1041.0	2135.0	0.0	629	240.6	2135.0	0.0	630	962.5	1990.0	0.0
631	1041.0	1990.0	0.0	632	962.5	1910.0	0.0	633	1041.0	1910.0	0.0
634	962.5	1830.0	0.0	635	1041.0	1830.0	0.0	636	1119.6	2070.0	0.0
637	1119.6	2135.0	0.0	638	1119.6	1990.0	0.0	639	1119.6	1910.0	0.0
640	1119.6	1830.0	0.0	641	1198.2	2070.0	0.0	642	1198.2	2135.0	0.0
643	1198.2	1990.0	0.0	644	1198.2	1910.0	0.0	645	1198.2	1830.0	0.0
646	1276.7	2070.0	0.0	647	1276.7	2135.0	0.0	648	1276.7	1990.0	0.0
649	1276.7	1910.0	0.0	650	1276.7	1830.0	0.0	651	1826.5	0.0	0.0
652	1826.5	400.0	0.0	653	1826.5	1300.0	0.0	654	1826.5	1750.0	0.0
655	1826.5	2135.0	0.0	656	1826.5	320.0	0.0	657	1826.5	240.0	0.0
658	1826.5	160.0	0.0	659	1826.5	80.0	0.0	660	1826.5	720.0	0.0
661	1826.5	640.0	0.0	662	1826.5	560.0	0.0	663	1826.5	480.0	0.0
664	1826.5	2070.0	0.0	665	1826.5	1990.0	0.0	666	1826.5	1910.0	0.0
667	1826.5	1830.0	0.0	668	1826.5	1170.0	0.0	669	1826.5	1090.0	0.0
670	1826.5	1010.0	0.0	671	1826.5	930.0	0.0	672	1826.5	1620.0	0.0
673	1826.5	1540.0	0.0	674	1826.5	1460.0	0.0	675	1826.5	1380.0	0.0
676	1905.1	0.0	0.0	677	1905.1	400.0	0.0	678	1905.1	1300.0	0.0
679	1905.1	1750.0	0.0	680	1905.1	2135.0	0.0	681	1905.1	320.0	0.0
682	1905.1	240.0	0.0	683	1905.1	160.0	0.0	684	1905.1	80.0	0.0
685	1905.1	720.0	0.0	686	1905.1	640.0	0.0	687	1905.1	560.0	0.0
688	1905.1	480.0	0.0	689	1905.1	2070.0	0.0	690	1905.1	1990.0	0.0
691	1905.1	1910.0	0.0	692	1905.1	1830.0	0.0	693	1905.1	1170.0	0.0
694	1905.1	1090.0	0.0	695	1905.1	1010.0	0.0	696	1905.1	930.0	0.0
697	1905.1	1620.0	0.0	698	1905.1	1540.0	0.0	699	1905.1	1460.0	0.0
700	1905.1	1380.0	0.0	701	1983.6	0.0	0.0	702	1983.6	400.0	0.0
703	1983.6	1300.0	0.0	704	1983.6	1750.0	0.0	705	1983.6	2135.0	0.0
706	1983.6	320.0	0.0	707	1983.6	240.0	0.0	708	1983.6	160.0	0.0
709	1983.6	80.0	0.0	710	1983.6	720.0	0.0	711	1983.6	640.0	0.0
712	1983.6	560.0	0.0	713	1983.6	480.0	0.0	714	1983.6	2070.0	0.0
715	1983.6	1990.0	0.0	716	1983.6	1910.0	0.0	717	1983.6	1830.0	0.0
718	1983.6	1170.0	0.0	719	1983.6	1090.0	0.0	720	1983.6	1010.0	0.0
721	1983.6	930.0	0.0	722	1983.6	1620.0	0.0	723	1983.6	1540.0	0.0
724	1983.6	1460.0	0.0	725	1983.6	1380.0	0.0	726	0.0	-80.0	0.0
727	962.5	-80.0	0.0	728	1669.5	-80.0	0.0	729	1590.9	-80.0	0.0
730	1512.3	-80.0	0.0	731	1433.8	-80.0	0.0	732	1355.3	-80.0	0.0
733	1276.7	-80.0	0.0	734	1198.2	-80.0	0.0	735	1119.6	-80.0	0.0
736	1041.1	-80.0	0.0	737	-80.3	-79.9	0.0	738	1669.4	2265.0	0.0
739	962.5	2330.0	0.0	740	1748.0	2330.0	0.0	741	1355.3	2330.0	0.0
742	1433.8	2330.0	0.0	743	1512.3	2330.0	0.0	744	1590.9	2330.0	0.0
745	1669.4	2330.0	0.0	746	160.4	-80.0	0.0	747	80.2	-80.0	0.0
748	1826.5	-80.0	0.0	749	1905.1	-80.0	0.0	750	1983.6	-80.0	0.0
751	0.0	-160.0	0.0	752	962.5	-160.0	0.0	753	1669.5	-160.0	0.0

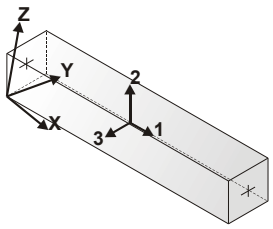
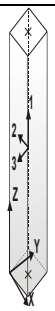
754	1590.9	-160.0	0.0	755	1512.3	-160.0	0.0	756	1433.8	-160.0	0.0
757	1355.3	-160.0	0.0	758	1276.7	-160.0	0.0	759	1198.2	-160.0	0.0
760	1119.6	-160.0	0.0	761	1041.1	-160.0	0.0	762	-160.6	1540.0	0.0
763	-80.4	1990.0	0.0	764	-160.5	-159.9	0.0	765	-160.6	640.0	0.0
766	-80.3	2070.0	0.0	767	-160.5	720.0	0.0	768	-80.3	5.05e-02	0.0
769	1276.7	2330.0	0.0	770	1826.5	2330.0	0.0	771	160.4	-160.0	0.0
772	80.2	-160.0	0.0	773	1826.5	-160.0	0.0	774	1905.1	-160.0	0.0
775	1983.6	-160.0	0.0	776	0.0	-240.0	0.0	777	962.5	-240.0	0.0
778	1669.5	-240.0	0.0	779	1590.9	-240.0	0.0	780	1512.3	-240.0	0.0
781	1433.8	-240.0	0.0	782	1355.3	-240.0	0.0	783	1276.7	-240.0	0.0
784	1198.2	-240.0	0.0	785	1119.6	-240.0	0.0	786	1041.1	-240.0	0.0
787	882.3	-240.0	0.0	788	1905.1	2330.0	0.0	789	1983.6	2330.0	0.0
790	-160.5	930.1	0.0	791	-160.6	1010.0	0.0	792	1041.0	2265.0	0.0
793	-160.5	1620.0	0.0	794	1119.6	2265.0	0.0	795	1198.2	2265.0	0.0
796	160.4	-240.0	0.0	797	80.2	-240.0	0.0	798	1826.5	-240.0	0.0
799	1905.1	-240.0	0.0	800	1983.6	-240.0	0.0	801	-80.2	0.0	0.0
802	-80.2	400.0	0.0	803	-80.2	850.0	0.0	804	-80.2	1300.0	0.0
805	-80.2	1750.0	0.0	806	-160.6	1090.0	0.0	807	-80.2	80.0	0.0
808	-80.2	160.0	0.0	809	-80.2	240.0	0.0	810	-80.2	320.0	0.0
811	-80.2	480.0	0.0	812	-80.2	560.0	0.0	813	-80.2	640.0	0.0
814	-80.2	720.0	0.0	815	-80.2	930.0	0.0	816	-80.2	1010.0	0.0
817	-80.2	1090.0	0.0	818	-80.2	1170.0	0.0	819	-80.2	1380.0	0.0
820	-80.2	1460.0	0.0	821	-80.2	1540.0	0.0	822	-80.2	1620.0	0.0
823	-80.2	1830.0	0.0	824	-80.2	1910.0	0.0	825	-80.2	1990.0	0.0
826	0.1	2329.9	0.0	827	-80.2	-80.0	0.0	828	-80.2	-160.0	0.0
829	-80.2	-240.0	0.0	830	-160.4	0.0	0.0	831	-160.4	400.0	0.0
832	-160.4	850.0	0.0	833	-160.4	1300.0	0.0	834	-160.4	1750.0	0.0
835	-160.5	1170.0	0.0	836	-160.4	80.0	0.0	837	-160.4	160.0	0.0
838	-160.4	240.0	0.0	839	-160.4	320.0	0.0	840	-160.4	480.0	0.0
841	-160.4	560.0	0.0	842	-160.4	640.0	0.0	843	-160.4	720.0	0.0
844	-160.4	930.0	0.0	845	-160.4	1010.0	0.0	846	-160.4	1090.0	0.0
847	-160.4	1170.0	0.0	848	-160.4	1380.0	0.0	849	-160.4	1460.0	0.0
850	-160.4	1540.0	0.0	851	-160.4	1620.0	0.0	852	-160.4	1830.0	0.0
853	-160.4	1910.0	0.0	854	-160.4	1990.0	0.0	855	-160.4	2070.0	0.0
856	-160.4	-80.0	0.0	857	-160.4	-160.0	0.0	858	-160.4	-240.0	0.0
859	-240.6	0.0	0.0	860	-240.6	400.0	0.0	861	-240.6	850.0	0.0
862	-240.6	1300.0	0.0	863	-240.6	1750.0	0.0	864	-80.3	-159.9	0.0
865	-240.6	80.0	0.0	866	-240.6	160.0	0.0	867	-240.6	240.0	0.0
868	-240.6	320.0	0.0	869	-240.6	480.0	0.0	870	-240.6	560.0	0.0
871	-240.6	640.0	0.0	872	-240.6	720.0	0.0	873	-240.6	930.0	0.0
874	-240.6	1010.0	0.0	875	-240.6	1090.0	0.0	876	-240.6	1170.0	0.0
877	-240.6	1380.0	0.0	878	-240.6	1460.0	0.0	879	-240.6	1540.0	0.0
880	-240.6	1620.0	0.0	881	-240.6	1830.0	0.0	882	-240.6	1910.0	0.0
883	-240.6	1990.0	0.0	884	-240.6	2070.0	0.0	885	-240.6	-80.0	0.0
886	-240.6	-160.0	0.0	887	-240.6	-240.0	0.0	888	-160.5	80.1	0.0
889	962.5	2200.0	0.0	890	1748.0	2200.0	0.0	891	1355.3	2200.0	0.0
892	1433.8	2200.0	0.0	893	1512.3	2200.0	0.0	894	1590.9	2200.0	0.0
895	1669.4	2200.0	0.0	896	1276.7	2265.0	0.0	897	-160.5	1830.1	0.0
898	-160.6	160.0	0.0	899	1826.5	2265.0	0.0	900	1905.1	2265.0	0.0
901	1983.6	2265.0	0.0	902	-160.6	1910.0	0.0	903	1041.0	2330.0	0.0
904	-160.6	1990.0	0.0	905	1119.6	2330.0	0.0	906	1041.0	2200.0	0.0
907	1198.2	2330.0	0.0	908	1119.6	2200.0	0.0	909	1198.2	2200.0	0.0
910	1276.7	2200.0	0.0	911	1826.5	2200.0	0.0	912	1905.1	2200.0	0.0
913	1983.6	2200.0	0.0	914	80.3	2329.9	0.0	915	-160.5	5.05e-02	0.0
916	-160.6	240.0	0.0	917	80.3	2200.0	0.0	918	962.5	2265.0	0.0
919	1748.0	2265.0	0.0	920	1355.3	2265.0	0.0	921	1433.8	2265.0	0.0
922	1512.3	2265.0	0.0	923	1590.9	2265.0	0.0	924	1826.5	850.0	0.0
925	1905.1	850.0	0.0	926	1983.6	850.0	0.0	927	1748.0	-80.0	0.0
928	160.4	7.58e-02	0.0	929	80.1	5.05e-02	0.0	930	-160.5	1380.1	0.0
931	-160.6	1460.0	0.0	932	1748.0	-160.0	0.0	933	160.4	-79.9	0.0
934	80.1	-79.9	0.0	935	-160.5	-79.9	0.0	936	882.4	2265.0	0.0
937	401.1	2200.0	0.0	938	-160.5	320.0	0.0	939	-240.5	2264.9	0.0
940	1748.0	-240.0	0.0	941	240.6	-160.0	0.0	942	80.1	-159.9	0.0
943	-160.5	480.1	0.0	944	-160.4	2200.0	0.0	945	882.3	2200.0	0.0
946	-160.6	560.0	0.0	947	882.4	-160.0	0.0	948	-6.83e-02	80.1	0.0
949	-0.1	160.0	0.0	950	-0.2	240.0	0.0	951	-6.52e-02	320.0	0.0
952	-6.83e-02	480.1	0.0	953	-0.1	560.0	0.0	954	-0.2	640.0	0.0
955	-6.52e-02	720.0	0.0	956	-6.83e-02	930.1	0.0	957	-0.1	1010.0	0.0
958	-0.2	1090.0	0.0	959	-6.52e-02	1170.0	0.0	960	-6.83e-02	1380.1	0.0
961	-0.1	1460.0	0.0	962	-0.2	1540.0	0.0	963	-6.52e-02	1620.0	0.0
964	-6.83e-02	1830.1	0.0	965	-0.1	1910.0	0.0	966	-0.2	1990.0	0.0
967	802.1	2330.0	0.0	968	-6.83e-02	5.05e-02	0.0	969	-6.83e-02	-79.9	0.0
970	-6.83e-02	-159.9	0.0	971	-80.3	80.1	0.0	972	-80.3	160.0	0.0
973	-80.4	240.0	0.0	974	-80.3	320.0	0.0	975	-80.3	480.1	0.0
976	-80.3	560.0	0.0	977	-80.4	640.0	0.0	978	-80.3	720.0	0.0
979	-80.3	930.1	0.0	980	-80.3	1010.0	0.0	981	-80.4	1090.0	0.0
982	-80.3	1170.0	0.0	983	-80.3	1380.1	0.0	984	-80.3	1460.0	0.0

985	-80.4	1540.0	0.0	986	-80.3	1620.0	0.0	987	-80.3	1830.1	0.0
988	-80.3	1910.0	0.0	989	321.0	2264.9	0.0	990	0.1	2264.9	0.0
991	6.10e-02	2200.0	0.0	992	802.2	2200.0	0.0	993	-160.3	2264.9	0.0
994	722.0	2264.9	0.0	995	320.9	2200.0	0.0	996	721.9	2200.0	0.0
997	160.5	2200.0	0.0	998	641.8	2264.9	0.0	999	-80.1	2264.9	0.0
1000	641.7	2200.0	0.0	1001	561.6	2329.9	0.0	1002	561.6	2264.9	0.0
1003	-240.6	2200.0	0.0	1004	561.5	2200.0	0.0	1005	240.7	2200.0	0.0
1006	481.4	2264.9	0.0	1007	-80.1	2200.0	0.0	1008	481.3	2200.0	0.0
1009	80.3	2264.9	0.0	1010	401.2	2264.9	0.0	1011	160.5	2264.9	0.0
1012	882.4	2330.0	0.0	1013	-80.1	2329.9	0.0	1014	481.4	2329.9	0.0
1015	401.2	2329.9	0.0	1016	-160.3	2329.9	0.0	1017	722.0	2329.9	0.0
1018	641.8	2329.9	0.0	1019	-240.5	2329.9	0.0	1020	802.1	2265.0	0.0
1021	240.8	2264.9	0.0	1022	321.0	2329.9	0.0	1023	160.5	2329.9	0.0
1024	240.8	2329.9	0.0	1025	-80.3	2135.0	0.0	1026	-160.4	2135.0	0.0
1027	-240.6	2135.0	0.0	1028	882.3	-80.0	0.0	1029	240.6	-240.0	0.0
1030	320.8	-240.0	0.0	1031	401.0	-240.0	0.0	1032	481.3	-240.0	0.0
1033	561.5	-240.0	0.0	1034	641.7	-240.0	0.0	1035	721.9	-240.0	0.0
1036	802.1	-240.0	0.0	1037	802.1	-80.0	0.0	1038	802.1	-160.0	0.0
1039	721.9	-80.0	0.0	1040	721.9	-160.0	0.0	1041	641.7	-80.0	0.0
1042	641.7	-160.0	0.0	1043	561.5	-80.0	0.0	1044	561.5	-160.0	0.0
1045	481.2	-80.0	0.0	1046	481.3	-160.0	0.0	1047	401.0	-80.0	0.0
1048	401.1	-160.0	0.0	1049	320.8	-80.0	0.0	1050	320.8	-160.0	0.0

MODELLAZIONE STRUTTURA: ELEMENTI TRAVE

TABELLA DATI TRAVI

Il programma utilizza per la modellazione elementi a due nodi denominati in generale travi.
Ogni elemento trave è individuato dal nodo iniziale e dal nodo finale.
Ogni elemento è caratterizzato da un insieme di proprietà riportate in tabella che ne completano la modellazione.

 orientamento elementi 2D non verticali	 orientamento elementi 2D verticali

In particolare per ogni elemento viene indicato in tabella:

Elem.	numero dell'elemento
Note	codice di comportamento: trave, trave di fondazione, pilastro, asta, asta tesa, asta compressa,
Nodo I (J)	numero del nodo iniziale (finale)
Mat.	codice del materiale assegnato all'elemento
Sez.	codice della sezione assegnata all'elemento
Rotaz.	valore della rotazione dell'elemento, attorno al proprio asse, nel caso in cui l'orientamento di default non sia adottabile; l'orientamento di default prevede per gli elementi non verticali l'asse 2 contenuto nel piano verticale e l'asse 3 orizzontale, per gli elementi verticali l'asse 2 diretto secondo X negativo e l'asse 3 diretto secondo Y negativo
Svincolo I (J)	codici di svincolo per le azioni interne; i primi sei codici si riferiscono al nodo iniziale, i restanti sei al nodo finale (il valore 1 indica che la relativa azione interna non è attiva)
Wink V	costante di sottofondo (coefficiente di Winkler) per la modellazione della trave su suolo elastico
Wink O	costante di sottofondo (coefficiente di Winkler) per la modellazione del suolo elastico orizzontale

Elem.	Note	Nodo I	Nodo J	Mat.	Sez.	Crit.	Rotaz. gradi	Svincolo I	Svincolo J	Wink V daN/cm3	Wink O daN/cm3
1	Pilas.	1	2	6	2	1					
2	Pilas.	3	4	6	2	1					
3	Pilas.	5	6	6	2	1					
4	Pilas.	7	8	6	2	1	90.00				
5	Pilas.	9	10	6	12	1	90.00				
6	Pilas.	11	12	6	2	1	90.00				
7	Pilas.	13	14	6	2	1	90.00				
8	Pilas.	15	16	6	12	1	90.00				
9	Pilas.	17	18	6	2	1	90.00				
10	Pilas.	19	20	6	2	1	90.00				
11	Pilas.	21	22	6	12	1	90.00				
12	Pilas.	23	24	6	2	1	90.00				
13	Pilas.	25	26	6	2	1	90.00				
14	Pilas.	27	28	6	12	1	90.00				
15	Pilas.	29	30	6	2	1	90.00				
16	Pilas.	31	32	6	2	1					
17	Pilas.	33	34	6	2	1					
18	Pilas.	2	35	6	3	1					
19	Pilas.	35	36	6	4	1					
20	Pilas.	4	37	6	3	1					
21	Pilas.	37	38	6	4	1					
22	Pilas.	6	39	6	3	1					
23	Trave f.	27	634	3	1	2				0.67	0.41
24	Pilas.	30	41	6	3	1	90.00				
25	Trave f.	5	96	3	1	2				0.67	0.41
26	Pilas.	28	43	6	12	1	90.00				
27	Pilas.	43	44	6	4	1	90.00				
28	Pilas.	26	45	6	3	1	90.00				
29	Pilas.	45	46	6	4	1	90.00				
30	Pilas.	34	47	6	3	1					
31	Pilas.	47	48	6	4	1					
32	Pilas.	32	49	6	3	1					
33	Pilas.	49	50	6	4	1					
34	Pilas.	8	51	6	3	1	90.00				
35	Pilas.	51	52	6	4	1	90.00				
36	Pilas.	10	53	6	12	1	90.00				
37	Pilas.	53	54	6	4	1	90.00				
38	Pilas.	12	55	6	3	1	90.00				
39	Trave f.	11	257	3	1	2				0.67	0.41
40	Pilas.	14	59	6	3	1	90.00				
41	Pilas.	59	60	6	4	1	90.00				
42	Pilas.	16	61	6	12	1	90.00				
43	Pilas.	61	62	6	4	1	90.00				
44	Pilas.	18	63	6	3	1	90.00				
45	Trave f.	17	398	3	1	2				0.67	0.41
46	Pilas.	20	40	6	3	1	90.00				
47	Pilas.	40	56	6	4	1	90.00				
48	Pilas.	22	57	6	12	1	90.00				
49	Pilas.	57	58	6	4	1	90.00				
50	Pilas.	24	42	6	3	1	90.00				
51	Trave f.	23	539	3	1	2				0.67	0.41
52	Trave f.	1	143	3	1	2				0.67	0.41
53	Trave f.	3	79	3	1	2				0.67	0.41
54	Trave f.	7	148	3	1	2				0.67	0.41
55	Trave f.	9	84	3	1	2				0.67	0.41
56	Trave f.	13	261	3	1	2				0.67	0.41
57	Trave f.	15	205	3	1	2				0.67	0.41
58	Trave f.	19	402	3	1	2				0.67	0.41
59	Trave f.	21	346	3	1	2				0.67	0.41
60	Trave f.	25	543	3	1	2				0.67	0.41
61	Trave f.	27	487	3	1	2				0.67	0.41
62	Trave f.	31	460	3	1	2				0.68	0.42
63	Trave f.	1	144	3	1	2				0.67	0.41
64	Trave f.	7	296	3	1	2				0.67	0.41
65	Trave f.	13	437	3	1	2				0.67	0.41
66	Trave f.	19	578	3	1	2				0.67	0.41
67	Trave f.	25	607	3	1	2				0.67	0.41
68	Trave f.	3	80	3	1	2				0.67	0.41
69	Trave f.	9	211	3	1	2				0.67	0.41
70	Trave f.	15	352	3	1	2				0.67	0.41
71	Trave f.	21	493	3	1	2				0.67	0.41
72	Trave	64	67	6	8	1					
73	Trave	67	69	6	8	1					

74	Trave	69	68	6	8	1		
75	Trave	68	65	6	8	1		
76	Trave f.	385	390	3	1	2	0.67	0.41
77	Trave f.	526	531	3	1	2	0.67	0.41
78	Trave	44	65	6	16	1		
79	Trave	58	68	6	8	1		
80	Trave	62	69	6	8	1		
81	Trave	54	67	6	8	1		
82	Trave	38	64	6	8	1		
83	Trave	36	52	6	14	1		
84	Trave	52	60	6	7	1		
85	Trave	36	38	6	7	1		
86	Trave	38	54	6	15	1		
87	Trave	46	44	6	14	1		
88	Trave	50	48	6	7	1		
89	Trave	56	58	6	7	1		
90	Trave	60	62	6	7	1		
91	Trave	52	54	6	7	1		
92	Trave	35	51	6	14	1		
93	Trave	37	53	6	15	1		
94	Trave	35	37	6	6	1		
95	Trave	51	53	6	6	1		
96	Trave	37	39	6	6	1		
97	Trave	59	61	6	6	1		
98	Trave	40	57	6	11	1		
99	Trave	45	43	6	14	1		
100	Trave	49	47	6	6	1		
101	Trave	39	55	6	15	1		
102	Trave	2	8	6	14	1		
103	Trave	4	10	6	15	1		
104	Trave	6	12	6	15	1		
105	Trave	32	34	6	5	1		
106	Trave	26	28	6	10	1		
107	Trave	20	22	6	10	1		
108	Trave	14	16	6	10	1		
109	Trave	8	10	6	10	1		
110	Trave	2	4	6	5	1		
111	Trave	46	50	6	14	1		
112	Trave	44	48	6	15	1		
113	Trave	40	45	6	6	1		
114	Trave	43	47	6	15	1		
115	Trave	53	55	6	6	1		
116	Trave	61	63	6	6	1		
117	Trave	57	42	6	11	1		
118	Trave	43	41	6	14	1		
119	Trave	42	41	6	6	1		
120	Trave	8	14	6	5	1		
121	Trave	10	16	6	5	1		
122	Trave	12	18	6	5	1		
123	Trave	28	30	6	10	1		
124	Trave	22	24	6	10	1		
125	Trave	16	18	6	10	1		
126	Trave	10	12	6	10	1		
127	Trave	4	6	6	5	1		
128	Trave	56	46	6	7	1		
129	Trave	54	62	6	7	1		
130	Trave	51	59	6	6	1		
131	Trave	53	61	6	6	1		
132	Trave	55	63	6	6	1		
133	Trave	45	49	6	14	1		
134	Trave	14	20	6	5	1		
135	Trave	16	22	6	5	1		
136	Trave	18	24	6	5	1		
137	Trave	60	56	6	7	1		
138	Trave	58	44	6	7	1		
139	Trave	59	40	6	6	1		
140	Trave	57	43	6	6	1		
141	Trave	63	42	6	6	1		
142	Trave	20	26	6	5	1		
143	Trave	22	28	6	5	1		
144	Trave	24	30	6	5	1		
145	Trave	62	58	6	7	1		
146	Trave	61	57	6	6	1		
147	Trave	26	32	6	14	1		
148	Trave	28	34	6	15	1		
149	Trave f.	156	157	3	1	2	0.67	0.41
150	Trave f.	92	11	3	1	2	0.67	0.41

151	Trave f.	626	33	3	1	2	0.67	0.41
152	Trave f.	93	11	3	1	2	0.67	0.41
153	Trave f.	253	17	3	1	2	0.67	0.41
154	Trave f.	394	23	3	1	2	0.67	0.41
155	Trave f.	535	29	3	1	2	0.67	0.41
156	Trave f.	133	3	3	1	2	0.67	0.41
157	Trave f.	71	5	3	1	2	0.67	0.41
158	Trave f.	148	149	3	1	2	0.67	0.41
159	Trave f.	84	85	3	1	2	0.67	0.41
160	Trave f.	260	315	3	1	2	0.67	0.41
161	Trave f.	205	214	3	1	2	0.67	0.41
162	Trave f.	401	456	3	1	2	0.67	0.41
163	Trave f.	346	355	3	1	2	0.67	0.41
164	Trave f.	542	597	3	1	2	0.67	0.41
165	Trave f.	487	496	3	1	2	0.67	0.41
166	Trave f.	459	629	3	1	2	0.68	0.42
167	Trave f.	144	145	3	1	2	0.67	0.41
168	Trave f.	296	298	3	1	2	0.67	0.41
169	Trave f.	437	439	3	1	2	0.67	0.41
170	Trave f.	578	580	3	1	2	0.67	0.41
171	Trave f.	607	609	3	1	2	0.67	0.41
172	Trave f.	80	81	3	1	2	0.67	0.41
173	Trave f.	203	15	3	1	2	0.67	0.41
174	Trave f.	344	21	3	1	2	0.67	0.41
175	Trave f.	485	27	3	1	2	0.67	0.41
176	Trave f.	249	17	3	1	2	0.67	0.41
177	Trave f.	390	23	3	1	2	0.67	0.41
178	Trave f.	630	626	3	1	2	0.67	0.41
179	Trave f.	94	93	3	1	2	0.67	0.41
180	Trave f.	255	253	3	1	2	0.67	0.41
181	Trave f.	396	394	3	1	2	0.67	0.41
182	Trave f.	537	535	3	1	2	0.67	0.41
183	Trave f.	134	133	3	1	2	0.67	0.41
184	Trave f.	72	71	3	1	2	0.67	0.41
185	Trave f.	261	260	3	1	2	0.67	0.41
186	Trave f.	402	401	3	1	2	0.67	0.41
187	Trave f.	543	542	3	1	2	0.67	0.41
188	Trave f.	460	459	3	1	2	0.68	0.42
189	Trave f.	207	203	3	1	2	0.67	0.41
190	Trave f.	348	344	3	1	2	0.67	0.41
191	Trave f.	489	485	3	1	2	0.67	0.41
192	Trave f.	531	29	3	1	2	0.67	0.41
193	Trave f.	142	141	3	1	2	0.67	0.41
194	Trave f.	149	150	3	1	2	0.67	0.41
195	Trave f.	85	86	3	1	2	0.67	0.41
196	Trave f.	269	15	3	1	2	0.67	0.41
197	Trave f.	214	219	3	1	2	0.67	0.41
198	Trave f.	410	21	3	1	2	0.67	0.41
199	Trave f.	355	360	3	1	2	0.67	0.41
200	Trave f.	551	27	3	1	2	0.67	0.41
201	Trave f.	496	501	3	1	2	0.67	0.41
202	Trave f.	468	33	3	1	2	0.68	0.42
203	Trave f.	145	146	3	1	2	0.67	0.41
204	Trave f.	298	309	3	1	2	0.67	0.41
205	Trave f.	439	450	3	1	2	0.67	0.41
206	Trave f.	580	591	3	1	2	0.67	0.41
207	Trave f.	609	620	3	1	2	0.67	0.41
208	Trave f.	81	82	3	1	2	0.67	0.41
209	Trave f.	157	158	3	1	2	0.67	0.41
210	Trave f.	632	630	3	1	2	0.67	0.41
211	Trave f.	95	94	3	1	2	0.67	0.41
212	Trave f.	256	255	3	1	2	0.67	0.41
213	Trave f.	397	396	3	1	2	0.67	0.41
214	Trave f.	538	537	3	1	2	0.67	0.41
215	Trave f.	135	134	3	1	2	0.67	0.41
216	Trave f.	73	72	3	1	2	0.67	0.41
217	Trave f.	209	207	3	1	2	0.67	0.41
218	Trave f.	350	348	3	1	2	0.67	0.41
219	Trave f.	491	489	3	1	2	0.67	0.41
220	Trave f.	143	142	3	1	2	0.67	0.41
221	Trave f.	275	269	3	1	2	0.67	0.41
222	Trave f.	416	410	3	1	2	0.67	0.41
223	Trave f.	557	551	3	1	2	0.67	0.41
224	Trave f.	474	468	3	1	2	0.68	0.42
225	Trave f.	158	9	3	1	2	0.67	0.41
226	Trave f.	150	151	3	1	2	0.67	0.41
227	Trave f.	86	87	3	1	2	0.67	0.41

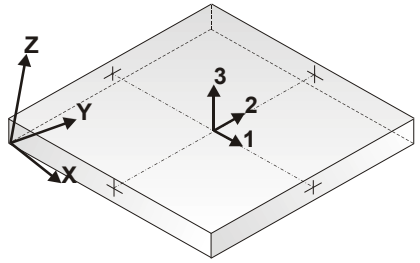
228	Trave f.	219	224	3	1	2	0.67	0.41
229	Trave f.	360	365	3	1	2	0.67	0.41
230	Trave f.	501	506	3	1	2	0.67	0.41
231	Trave f.	146	147	3	1	2	0.67	0.41
232	Trave f.	309	313	3	1	2	0.67	0.41
233	Trave f.	450	454	3	1	2	0.67	0.41
234	Trave f.	591	595	3	1	2	0.67	0.41
235	Trave f.	620	624	3	1	2	0.67	0.41
236	Trave f.	82	83	3	1	2	0.67	0.41
237	Trave f.	629	625	3	1	2	0.68	0.42
238	Trave f.	634	632	3	1	2	0.67	0.41
239	Trave f.	96	95	3	1	2	0.67	0.41
240	Trave f.	257	256	3	1	2	0.67	0.41
241	Trave f.	398	397	3	1	2	0.67	0.41
242	Trave f.	539	538	3	1	2	0.67	0.41
243	Trave f.	136	135	3	1	2	0.67	0.41
244	Trave f.	74	73	3	1	2	0.67	0.41
245	Trave f.	211	209	3	1	2	0.67	0.41
246	Trave f.	352	350	3	1	2	0.67	0.41
247	Trave f.	493	491	3	1	2	0.67	0.41
248	Trave f.	317	311	3	1	2	0.67	0.41
249	Trave f.	280	283	3	1	2	0.67	0.41
250	Trave f.	421	424	3	1	2	0.67	0.41
251	Trave f.	562	565	3	1	2	0.67	0.41
252	Trave f.	479	482	3	1	2	0.68	0.42
253	Trave f.	141	140	3	1	2	0.67	0.41
254	Trave f.	151	152	3	1	2	0.67	0.41
255	Trave f.	87	88	3	1	2	0.67	0.41
256	Trave f.	224	229	3	1	2	0.67	0.41
257	Trave f.	365	370	3	1	2	0.67	0.41
258	Trave f.	506	511	3	1	2	0.67	0.41
259	Trave f.	147	7	3	1	2	0.67	0.41
260	Trave f.	313	13	3	1	2	0.67	0.41
261	Trave f.	454	19	3	1	2	0.67	0.41
262	Trave f.	595	25	3	1	2	0.67	0.41
263	Trave f.	624	31	3	1	2	0.67	0.41
264	Trave f.	83	9	3	1	2	0.67	0.41
265	Trave f.	79	78	3	1	2	0.67	0.41
266	Trave f.	137	136	3	1	2	0.67	0.41
267	Trave f.	75	74	3	1	2	0.67	0.41
268	Trave f.	281	280	3	1	2	0.67	0.41
269	Trave f.	422	421	3	1	2	0.67	0.41
270	Trave f.	563	562	3	1	2	0.67	0.41
271	Trave f.	480	479	3	1	2	0.68	0.42
272	Trave f.	283	275	3	1	2	0.67	0.41
273	Trave f.	424	416	3	1	2	0.67	0.41
274	Trave f.	565	557	3	1	2	0.67	0.41
275	Trave f.	482	474	3	1	2	0.68	0.42
276	Trave f.	458	452	3	1	2	0.67	0.41
277	Trave f.	152	153	3	1	2	0.67	0.41
278	Trave f.	88	89	3	1	2	0.67	0.41
279	Trave f.	229	234	3	1	2	0.67	0.41
280	Trave f.	370	375	3	1	2	0.67	0.41
281	Trave f.	511	516	3	1	2	0.67	0.41
282	Trave f.	599	593	3	1	2	0.67	0.41
283	Trave f.	138	137	3	1	2	0.67	0.41
284	Trave f.	76	75	3	1	2	0.67	0.41
285	Trave f.	287	281	3	1	2	0.67	0.41
286	Trave f.	428	422	3	1	2	0.67	0.41
287	Trave f.	569	563	3	1	2	0.67	0.41
288	Trave f.	536	480	3	1	2	0.68	0.42
289	Trave f.	153	154	3	1	2	0.67	0.41
290	Trave f.	89	90	3	1	2	0.67	0.41
291	Trave f.	234	239	3	1	2	0.67	0.41
292	Trave f.	375	380	3	1	2	0.67	0.41
293	Trave f.	516	521	3	1	2	0.67	0.41
294	Trave f.	139	138	3	1	2	0.67	0.41
295	Trave f.	77	76	3	1	2	0.67	0.41
296	Trave f.	311	287	3	1	2	0.67	0.41
297	Trave f.	452	428	3	1	2	0.67	0.41
298	Trave f.	593	569	3	1	2	0.67	0.41
299	Trave f.	622	536	3	1	2	0.68	0.42
300	Trave f.	154	155	3	1	2	0.67	0.41
301	Trave f.	90	91	3	1	2	0.67	0.41
302	Trave f.	239	244	3	1	2	0.67	0.41
303	Trave f.	380	385	3	1	2	0.67	0.41
304	Trave f.	521	526	3	1	2	0.67	0.41

305	Trave f.	140	139	3	1	2	0.67	0.41
306	Trave f.	78	77	3	1	2	0.67	0.41
307	Trave f.	315	317	3	1	2	0.67	0.41
308	Trave f.	456	458	3	1	2	0.67	0.41
309	Trave f.	597	599	3	1	2	0.67	0.41
310	Trave f.	625	622	3	1	2	0.68	0.42
311	Trave f.	155	156	3	1	2	0.67	0.41
312	Trave f.	91	92	3	1	2	0.67	0.41
313	Trave f.	244	249	3	1	2	0.67	0.41

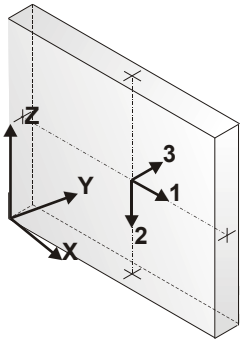
MODELLAZIONE STRUTTURA: ELEMENTI SHELL

LEGENDA TABELLA DATI SHELL

Il programma utilizza per la modellazione elementi a tre o quattro nodi denominati in generale shell.
Ogni elemento shell è individuato dai nodi I, J, K, L (L=I per gli elementi a tre nodi).
Ogni elemento è caratterizzato da un insieme di proprietà riportate in tabella che ne completano la modellazione.



orientamento elementi 3D non verticali



orientamento elementi 3D verticali

In particolare per ogni elemento viene indicato in tabella:

Elem.	numero dell'elemento
Note	codice di comportamento: *Guscio* (elemento guscio in elevazione non verticale) *Guscio fond.* (elemento guscio su suolo elastico) *Setto* (elemento guscio in elevazione verticale) *Membrana* (elemento guscio con comportamento membranale)
Nodo I (J, K, L)	numero del nodo I (J, K, L)
Mat.	codice del materiale assegnato all'elemento
Spessore	spessore dell'elemento (costante)
Wink V	costante di sottofondo (coefficiente di Winkler) per la modellazione del suolo elastico verticale
Wink O	costante di sottofondo (coefficiente di Winkler) per la modellazione del suolo elastico orizzontale

Elem.	Note	Nodo I	Nodo J	Nodo K	Nodo L	Mat.	Crit.	Spessore	Svincolo	Wink V	Wink O
								cm		daN/cm3	daN/cm3
1	Guscio fond.	83	97	84	9	3	3	40.0		1.00	1.00
2	Guscio fond.	82	98	97	83	3	3	40.0		1.00	1.00
3	Guscio fond.	81	99	98	82	3	2	40.0		1.00	1.00
4	Guscio fond.	80	100	99	81	3	3	40.0		1.00	1.00
5	Guscio fond.	3	79	100	80	3	3	40.0		1.00	1.00
6	Guscio fond.	97	101	85	84	3	3	40.0		1.00	1.00
7	Guscio fond.	98	102	101	97	3	3	40.0		1.00	1.00
8	Guscio fond.	99	103	102	98	3	2	40.0		1.00	1.00
9	Guscio fond.	100	104	103	99	3	2	40.0		1.00	1.00
10	Guscio fond.	79	78	104	100	3	3	40.0		1.00	1.00
11	Guscio fond.	101	105	86	85	3	2	40.0		1.00	1.00
12	Guscio fond.	102	106	105	101	3	2	40.0		1.00	1.00
13	Guscio fond.	103	107	106	102	3	2	40.0		1.00	1.00
14	Guscio fond.	104	108	107	103	3	2	40.0		1.00	1.00
15	Guscio fond.	78	77	108	104	3	2	40.0		1.00	1.00
16	Guscio fond.	105	109	87	86	3	2	40.0		1.00	1.00
17	Guscio fond.	106	110	109	105	3	2	40.0		1.00	1.00
18	Guscio fond.	107	111	110	106	3	2	40.0		1.00	1.00
19	Guscio fond.	108	112	111	107	3	2	40.0		1.00	1.00
20	Guscio fond.	77	76	112	108	3	2	40.0		1.00	1.00
21	Guscio fond.	109	113	88	87	3	2	40.0		1.00	1.00
22	Guscio fond.	110	114	113	109	3	2	40.0		1.00	1.00
23	Guscio fond.	111	115	114	110	3	2	40.0		1.00	1.00
24	Guscio fond.	112	116	115	111	3	2	40.0		1.00	1.00
25	Guscio fond.	76	75	116	112	3	2	40.0		1.00	1.00
26	Guscio fond.	113	117	89	88	3	2	40.0		1.00	1.00
27	Guscio fond.	114	118	117	113	3	2	40.0		1.00	1.00
28	Guscio fond.	115	119	118	114	3	2	40.0		1.00	1.00
29	Guscio fond.	116	120	119	115	3	2	40.0		1.00	1.00
30	Guscio fond.	75	74	120	116	3	2	40.0		1.00	1.00
31	Guscio fond.	117	121	90	89	3	2	40.0		1.00	1.00
32	Guscio fond.	118	122	121	117	3	2	40.0		1.00	1.00
33	Guscio fond.	119	123	122	118	3	2	40.0		1.00	1.00
34	Guscio fond.	120	124	123	119	3	2	40.0		1.00	1.00
35	Guscio fond.	74	73	124	120	3	2	40.0		1.00	1.00
36	Guscio fond.	121	125	91	90	3	2	40.0		1.00	1.00
37	Guscio fond.	122	126	125	121	3	2	40.0		1.00	1.00
38	Guscio fond.	123	127	126	122	3	2	40.0		1.00	1.00
39	Guscio fond.	124	128	127	123	3	2	40.0		1.00	1.00
40	Guscio fond.	73	72	128	124	3	2	40.0		1.00	1.00
41	Guscio fond.	125	129	92	91	3	2	40.0		1.00	1.00
42	Guscio fond.	126	130	129	125	3	2	40.0		1.00	1.00
43	Guscio fond.	127	131	130	126	3	2	40.0		1.00	1.00
44	Guscio fond.	128	132	131	127	3	2	40.0		1.00	1.00
45	Guscio fond.	72	71	132	128	3	2	40.0		1.00	1.00
46	Guscio fond.	129	93	11	92	3	2	40.0		1.00	1.00
47	Guscio fond.	130	94	93	129	3	2	40.0		1.00	1.00
48	Guscio fond.	131	95	94	130	3	2	40.0		1.00	1.00
49	Guscio fond.	132	96	95	131	3	2	40.0		1.00	1.00
50	Guscio fond.	71	5	96	132	3	2	40.0		1.00	1.00
51	Guscio fond.	163	165	149	148	3	3	40.0		1.00	1.00
52	Guscio fond.	143	142	172	168	3	3	40.0		1.00	1.00
53	Guscio fond.	184	186	162	161	3	2	40.0		1.00	1.00
54	Guscio fond.	181	83	9	158	3	3	40.0		1.00	1.00
55	Guscio fond.	174	176	198	196	3	2	40.0		1.00	1.00
56	Guscio fond.	179	181	158	157	3	3	40.0		1.00	1.00
57	Guscio fond.	195	197	175	173	3	2	40.0		1.00	1.00
58	Guscio fond.	173	175	155	154	3	2	40.0		1.00	1.00
59	Guscio fond.	175	177	156	155	3	2	40.0		1.00	1.00
60	Guscio fond.	161	162	201	199	3	2	40.0		1.00	1.00
61	Guscio fond.	197	199	177	175	3	2	40.0		1.00	1.00
62	Guscio fond.	199	201	179	177	3	2	40.0		1.00	1.00
63	Guscio fond.	171	173	154	153	3	2	40.0		1.00	1.00
64	Guscio fond.	186	188	187	162	3	3	40.0		1.00	1.00
65	Guscio fond.	192	193	170	169	3	2	40.0		1.00	1.00
66	Guscio fond.	138	137	182	180	3	2	40.0		1.00	1.00
67	Guscio fond.	144	168	166	145	3	3	40.0		1.00	1.00
68	Guscio fond.	168	172	190	166	3	3	40.0		1.00	1.00
69	Guscio fond.	172	174	196	190	3	2	40.0		1.00	1.00
70	Guscio fond.	202	159	195	194	3	2	40.0		1.00	1.00
71	Guscio fond.	176	178	200	198	3	2	40.0		1.00	1.00
72	Guscio fond.	182	183	160	159	3	2	40.0		1.00	1.00
73	Guscio fond.	196	198	192	191	3	2	40.0		1.00	1.00

74	Guscio fond.	145	166	164	146	3	2	40.0	1.00	1.00
75	Guscio fond.	185	82	83	181	3	3	40.0	1.00	1.00
76	Guscio fond.	183	184	161	160	3	2	40.0	1.00	1.00
77	Guscio fond.	136	135	184	183	3	2	40.0	1.00	1.00
78	Guscio fond.	187	81	82	185	3	2	40.0	1.00	1.00
79	Guscio fond.	134	133	188	186	3	3	40.0	1.00	1.00
80	Guscio fond.	201	185	181	179	3	3	40.0	1.00	1.00
81	Guscio fond.	178	180	202	200	3	2	40.0	1.00	1.00
82	Guscio fond.	1	143	168	144	3	3	40.0	1.00	1.00
83	Guscio fond.	135	134	186	184	3	2	40.0	1.00	1.00
84	Guscio fond.	170	171	153	152	3	2	40.0	1.00	1.00
85	Guscio fond.	191	192	169	167	3	2	40.0	1.00	1.00
86	Guscio fond.	188	80	81	187	3	3	40.0	1.00	1.00
87	Guscio fond.	147	163	148	7	3	3	40.0	1.00	1.00
88	Guscio fond.	165	167	150	149	3	2	40.0	1.00	1.00
89	Guscio fond.	189	191	167	165	3	2	40.0	1.00	1.00
90	Guscio fond.	193	194	171	170	3	2	40.0	1.00	1.00
91	Guscio fond.	190	196	191	189	3	2	40.0	1.00	1.00
92	Guscio fond.	142	141	174	172	3	2	40.0	1.00	1.00
93	Guscio fond.	140	139	178	176	3	2	40.0	1.00	1.00
94	Guscio fond.	160	161	199	197	3	2	40.0	1.00	1.00
95	Guscio fond.	177	179	157	156	3	2	40.0	1.00	1.00
96	Guscio fond.	159	160	197	195	3	2	40.0	1.00	1.00
97	Guscio fond.	198	200	193	192	3	2	40.0	1.00	1.00
98	Guscio fond.	194	195	173	171	3	2	40.0	1.00	1.00
99	Guscio fond.	180	182	159	202	3	2	40.0	1.00	1.00
100	Guscio fond.	167	169	151	150	3	2	40.0	1.00	1.00
101	Guscio fond.	146	164	163	147	3	3	40.0	1.00	1.00
102	Guscio fond.	162	187	185	201	3	2	40.0	1.00	1.00
103	Guscio fond.	141	140	176	174	3	2	40.0	1.00	1.00
104	Guscio fond.	164	189	165	163	3	3	40.0	1.00	1.00
105	Guscio fond.	139	138	180	178	3	2	40.0	1.00	1.00
106	Guscio fond.	137	136	183	182	3	2	40.0	1.00	1.00
107	Guscio fond.	200	202	194	193	3	2	40.0	1.00	1.00
108	Guscio fond.	166	190	189	164	3	2	40.0	1.00	1.00
109	Guscio fond.	169	170	152	151	3	2	40.0	1.00	1.00
110	Guscio fond.	336	70	890	895	3	2	40.0	1.00	1.00
111	Guscio fond.	203	204	205	15	3	3	40.0	1.00	1.00
112	Guscio fond.	207	208	204	203	3	2	40.0	1.00	1.00
113	Guscio fond.	209	210	208	207	3	2	40.0	1.00	1.00
114	Guscio fond.	211	212	210	209	3	3	40.0	1.00	1.00
115	Guscio fond.	9	84	212	211	3	3	40.0	1.00	1.00
116	Guscio fond.	204	213	214	205	3	3	40.0	1.00	1.00
117	Guscio fond.	208	215	213	204	3	2	40.0	1.00	1.00
118	Guscio fond.	210	216	215	208	3	2	40.0	1.00	1.00
119	Guscio fond.	212	217	216	210	3	3	40.0	1.00	1.00
120	Guscio fond.	84	85	217	212	3	3	40.0	1.00	1.00
121	Guscio fond.	213	218	219	214	3	2	40.0	1.00	1.00
122	Guscio fond.	215	220	218	213	3	2	40.0	1.00	1.00
123	Guscio fond.	216	221	220	215	3	2	40.0	1.00	1.00
124	Guscio fond.	217	222	221	216	3	2	40.0	1.00	1.00
125	Guscio fond.	85	86	222	217	3	2	40.0	1.00	1.00
126	Guscio fond.	218	223	224	219	3	2	40.0	1.00	1.00
127	Guscio fond.	220	225	223	218	3	2	40.0	1.00	1.00
128	Guscio fond.	221	226	225	220	3	2	40.0	1.00	1.00
129	Guscio fond.	222	227	226	221	3	2	40.0	1.00	1.00
130	Guscio fond.	86	87	227	222	3	2	40.0	1.00	1.00
131	Guscio fond.	223	228	229	224	3	2	40.0	1.00	1.00
132	Guscio fond.	225	230	228	223	3	2	40.0	1.00	1.00
133	Guscio fond.	226	231	230	225	3	2	40.0	1.00	1.00
134	Guscio fond.	227	232	231	226	3	2	40.0	1.00	1.00
135	Guscio fond.	87	88	232	227	3	2	40.0	1.00	1.00
136	Guscio fond.	228	233	234	229	3	2	40.0	1.00	1.00
137	Guscio fond.	230	235	233	228	3	2	40.0	1.00	1.00
138	Guscio fond.	231	236	235	230	3	2	40.0	1.00	1.00
139	Guscio fond.	232	237	236	231	3	2	40.0	1.00	1.00
140	Guscio fond.	88	89	237	232	3	2	40.0	1.00	1.00
141	Guscio fond.	233	238	239	234	3	2	40.0	1.00	1.00
142	Guscio fond.	235	240	238	233	3	2	40.0	1.00	1.00
143	Guscio fond.	236	241	240	235	3	2	40.0	1.00	1.00
144	Guscio fond.	237	242	241	236	3	2	40.0	1.00	1.00
145	Guscio fond.	89	90	242	237	3	2	40.0	1.00	1.00
146	Guscio fond.	238	243	244	239	3	2	40.0	1.00	1.00
147	Guscio fond.	240	245	243	238	3	2	40.0	1.00	1.00
148	Guscio fond.	241	246	245	240	3	2	40.0	1.00	1.00
149	Guscio fond.	242	247	246	241	3	2	40.0	1.00	1.00
150	Guscio fond.	90	91	247	242	3	2	40.0	1.00	1.00

151	Guscio fond.	243	248	249	244	3	2	40.0	1.00	1.00
152	Guscio fond.	245	250	248	243	3	2	40.0	1.00	1.00
153	Guscio fond.	246	251	250	245	3	2	40.0	1.00	1.00
154	Guscio fond.	247	252	251	246	3	2	40.0	1.00	1.00
155	Guscio fond.	91	92	252	247	3	2	40.0	1.00	1.00
156	Guscio fond.	248	253	17	249	3	2	40.0	1.00	1.00
157	Guscio fond.	250	255	253	248	3	2	40.0	1.00	1.00
158	Guscio fond.	251	256	255	250	3	2	40.0	1.00	1.00
159	Guscio fond.	252	257	256	251	3	2	40.0	1.00	1.00
160	Guscio fond.	92	11	257	252	3	2	40.0	1.00	1.00
161	Guscio fond.	258	259	260	261	3	3	40.0	1.00	1.00
162	Guscio fond.	148	149	262	263	3	3	40.0	1.00	1.00
163	Guscio fond.	264	265	266	267	3	2	40.0	1.00	1.00
164	Guscio fond.	268	203	15	269	3	3	40.0	1.00	1.00
165	Guscio fond.	270	271	272	273	3	2	40.0	1.00	1.00
166	Guscio fond.	274	268	269	275	3	3	40.0	1.00	1.00
167	Guscio fond.	276	277	278	279	3	2	40.0	1.00	1.00
168	Guscio fond.	279	278	280	281	3	2	40.0	1.00	1.00
169	Guscio fond.	278	282	283	280	3	2	40.0	1.00	1.00
170	Guscio fond.	267	266	284	285	3	2	40.0	1.00	1.00
171	Guscio fond.	277	285	282	278	3	2	40.0	1.00	1.00
172	Guscio fond.	285	284	274	282	3	2	40.0	1.00	1.00
173	Guscio fond.	286	279	281	287	3	2	40.0	1.00	1.00
174	Guscio fond.	265	288	289	266	3	3	40.0	1.00	1.00
175	Guscio fond.	290	291	292	293	3	2	40.0	1.00	1.00
176	Guscio fond.	153	154	294	295	3	2	40.0	1.00	1.00
177	Guscio fond.	296	263	297	298	3	3	40.0	1.00	1.00
178	Guscio fond.	263	262	299	297	3	3	40.0	1.00	1.00
179	Guscio fond.	262	270	273	299	3	2	40.0	1.00	1.00
180	Guscio fond.	300	301	276	302	3	2	40.0	1.00	1.00
181	Guscio fond.	271	303	304	272	3	2	40.0	1.00	1.00
182	Guscio fond.	294	305	306	301	3	2	40.0	1.00	1.00
183	Guscio fond.	273	272	290	307	3	2	40.0	1.00	1.00
184	Guscio fond.	298	297	308	309	3	2	40.0	1.00	1.00
185	Guscio fond.	310	207	203	268	3	2	40.0	1.00	1.00
186	Guscio fond.	305	264	267	306	3	2	40.0	1.00	1.00
187	Guscio fond.	155	156	264	305	3	2	40.0	1.00	1.00
188	Guscio fond.	289	209	207	310	3	2	40.0	1.00	1.00
189	Guscio fond.	157	158	288	265	3	3	40.0	1.00	1.00
190	Guscio fond.	284	310	268	274	3	2	40.0	1.00	1.00
191	Guscio fond.	303	295	300	304	3	2	40.0	1.00	1.00
192	Guscio fond.	7	148	263	296	3	3	40.0	1.00	1.00
193	Guscio fond.	156	157	265	264	3	2	40.0	1.00	1.00
194	Guscio fond.	292	286	287	311	3	2	40.0	1.00	1.00
195	Guscio fond.	307	290	293	312	3	2	40.0	1.00	1.00
196	Guscio fond.	288	211	209	289	3	3	40.0	1.00	1.00
197	Guscio fond.	313	258	261	13	3	3	40.0	1.00	1.00
198	Guscio fond.	259	312	315	260	3	2	40.0	1.00	1.00
199	Guscio fond.	316	307	312	259	3	2	40.0	1.00	1.00
200	Guscio fond.	291	302	286	292	3	2	40.0	1.00	1.00
201	Guscio fond.	299	273	307	316	3	2	40.0	1.00	1.00
202	Guscio fond.	149	150	270	262	3	2	40.0	1.00	1.00
203	Guscio fond.	151	152	303	271	3	2	40.0	1.00	1.00
204	Guscio fond.	306	267	285	277	3	2	40.0	1.00	1.00
205	Guscio fond.	282	274	275	283	3	2	40.0	1.00	1.00
206	Guscio fond.	301	306	277	276	3	2	40.0	1.00	1.00
207	Guscio fond.	272	304	291	290	3	2	40.0	1.00	1.00
208	Guscio fond.	302	276	279	286	3	2	40.0	1.00	1.00
209	Guscio fond.	295	294	301	300	3	2	40.0	1.00	1.00
210	Guscio fond.	312	293	317	315	3	2	40.0	1.00	1.00
211	Guscio fond.	309	308	258	313	3	2	40.0	1.00	1.00
212	Guscio fond.	266	289	310	284	3	2	40.0	1.00	1.00
213	Guscio fond.	150	151	271	270	3	2	40.0	1.00	1.00
214	Guscio fond.	308	316	259	258	3	2	40.0	1.00	1.00
215	Guscio fond.	152	153	295	303	3	2	40.0	1.00	1.00
216	Guscio fond.	154	155	305	294	3	2	40.0	1.00	1.00
217	Guscio fond.	304	300	302	291	3	2	40.0	1.00	1.00
218	Guscio fond.	297	299	316	308	3	2	40.0	1.00	1.00
219	Guscio fond.	293	292	311	317	3	2	40.0	1.00	1.00
220	Guscio fond.	158	9	211	288	3	3	40.0	1.00	1.00
221	Guscio fond.	344	345	346	21	3	3	40.0	1.00	1.00
222	Guscio fond.	348	349	345	344	3	2	40.0	1.00	1.00
223	Guscio fond.	350	351	349	348	3	2	40.0	1.00	1.00
224	Guscio fond.	352	353	351	350	3	3	40.0	1.00	1.00
225	Guscio fond.	15	205	353	352	3	3	40.0	1.00	1.00
226	Guscio fond.	345	354	355	346	3	3	40.0	1.00	1.00
227	Guscio fond.	349	356	354	345	3	2	40.0	1.00	1.00

228Guscio fond.	351	357	356	349	3	2	40.0	1.00	1.00
229Guscio fond.	353	358	357	351	3	3	40.0	1.00	1.00
230Guscio fond.	205	214	358	353	3	3	40.0	1.00	1.00
231Guscio fond.	354	359	360	355	3	2	40.0	1.00	1.00
232Guscio fond.	356	361	359	354	3	2	40.0	1.00	1.00
233Guscio fond.	357	362	361	356	3	2	40.0	1.00	1.00
234Guscio fond.	358	363	362	357	3	2	40.0	1.00	1.00
235Guscio fond.	214	219	363	358	3	2	40.0	1.00	1.00
236Guscio fond.	359	364	365	360	3	2	40.0	1.00	1.00
237Guscio fond.	361	366	364	359	3	2	40.0	1.00	1.00
238Guscio fond.	362	367	366	361	3	2	40.0	1.00	1.00
239Guscio fond.	363	368	367	362	3	2	40.0	1.00	1.00
240Guscio fond.	219	224	368	363	3	2	40.0	1.00	1.00
241Guscio fond.	364	369	370	365	3	2	40.0	1.00	1.00
242Guscio fond.	366	371	369	364	3	2	40.0	1.00	1.00
243Guscio fond.	367	372	371	366	3	2	40.0	1.00	1.00
244Guscio fond.	368	373	372	367	3	2	40.0	1.00	1.00
245Guscio fond.	224	229	373	368	3	2	40.0	1.00	1.00
246Guscio fond.	369	374	375	370	3	2	40.0	1.00	1.00
247Guscio fond.	371	376	374	369	3	2	40.0	1.00	1.00
248Guscio fond.	372	377	376	371	3	2	40.0	1.00	1.00
249Guscio fond.	373	378	377	372	3	2	40.0	1.00	1.00
250Guscio fond.	229	234	378	373	3	2	40.0	1.00	1.00
251Guscio fond.	374	379	380	375	3	2	40.0	1.00	1.00
252Guscio fond.	376	381	379	374	3	2	40.0	1.00	1.00
253Guscio fond.	377	382	381	376	3	2	40.0	1.00	1.00
254Guscio fond.	378	383	382	377	3	2	40.0	1.00	1.00
255Guscio fond.	234	239	383	378	3	2	40.0	1.00	1.00
256Guscio fond.	379	384	385	380	3	2	40.0	1.00	1.00
257Guscio fond.	381	386	384	379	3	2	40.0	1.00	1.00
258Guscio fond.	382	387	386	381	3	2	40.0	1.00	1.00
259Guscio fond.	383	388	387	382	3	2	40.0	1.00	1.00
260Guscio fond.	239	244	388	383	3	2	40.0	1.00	1.00
261Guscio fond.	384	389	390	385	3	2	40.0	1.00	1.00
262Guscio fond.	386	391	389	384	3	2	40.0	1.00	1.00
263Guscio fond.	387	392	391	386	3	2	40.0	1.00	1.00
264Guscio fond.	388	393	392	387	3	2	40.0	1.00	1.00
265Guscio fond.	244	249	393	388	3	2	40.0	1.00	1.00
266Guscio fond.	389	394	23	390	3	2	40.0	1.00	1.00
267Guscio fond.	391	396	394	389	3	2	40.0	1.00	1.00
268Guscio fond.	392	397	396	391	3	2	40.0	1.00	1.00
269Guscio fond.	393	398	397	392	3	2	40.0	1.00	1.00
270Guscio fond.	249	17	398	393	3	2	40.0	1.00	1.00
271Guscio fond.	399	400	401	402	3	3	40.0	1.00	1.00
272Guscio fond.	261	260	403	404	3	3	40.0	1.00	1.00
273Guscio fond.	405	406	407	408	3	2	40.0	1.00	1.00
274Guscio fond.	409	344	21	410	3	3	40.0	1.00	1.00
275Guscio fond.	411	412	413	414	3	2	40.0	1.00	1.00
276Guscio fond.	415	409	410	416	3	3	40.0	1.00	1.00
277Guscio fond.	417	418	419	420	3	2	40.0	1.00	1.00
278Guscio fond.	420	419	421	422	3	2	40.0	1.00	1.00
279Guscio fond.	419	423	424	421	3	2	40.0	1.00	1.00
280Guscio fond.	408	407	425	426	3	2	40.0	1.00	1.00
281Guscio fond.	418	426	423	419	3	2	40.0	1.00	1.00
282Guscio fond.	426	425	415	423	3	2	40.0	1.00	1.00
283Guscio fond.	427	420	422	428	3	2	40.0	1.00	1.00
284Guscio fond.	406	429	430	407	3	3	40.0	1.00	1.00
285Guscio fond.	431	432	433	434	3	2	40.0	1.00	1.00
286Guscio fond.	287	281	435	436	3	2	40.0	1.00	1.00
287Guscio fond.	437	404	438	439	3	3	40.0	1.00	1.00
288Guscio fond.	404	403	440	438	3	3	40.0	1.00	1.00
289Guscio fond.	403	411	414	440	3	2	40.0	1.00	1.00
290Guscio fond.	441	442	417	443	3	2	40.0	1.00	1.00
291Guscio fond.	412	444	445	413	3	2	40.0	1.00	1.00
292Guscio fond.	435	446	447	442	3	2	40.0	1.00	1.00
293Guscio fond.	414	413	431	448	3	2	40.0	1.00	1.00
294Guscio fond.	439	438	449	450	3	2	40.0	1.00	1.00
295Guscio fond.	451	348	344	409	3	2	40.0	1.00	1.00
296Guscio fond.	446	405	408	447	3	2	40.0	1.00	1.00
297Guscio fond.	280	283	405	446	3	2	40.0	1.00	1.00
298Guscio fond.	430	350	348	451	3	2	40.0	1.00	1.00
299Guscio fond.	275	269	429	406	3	3	40.0	1.00	1.00
300Guscio fond.	425	451	409	415	3	2	40.0	1.00	1.00
301Guscio fond.	444	436	441	445	3	2	40.0	1.00	1.00
302Guscio fond.	13	261	404	437	3	3	40.0	1.00	1.00
303Guscio fond.	283	275	406	405	3	2	40.0	1.00	1.00
304Guscio fond.	433	427	428	452	3	2	40.0	1.00	1.00

305Guscio fond.	448	431	434	453	3	2	40.0	1.00	1.00
306Guscio fond.	429	352	350	430	3	3	40.0	1.00	1.00
307Guscio fond.	454	399	402	19	3	3	40.0	1.00	1.00
308Guscio fond.	400	453	456	401	3	2	40.0	1.00	1.00
309Guscio fond.	457	448	453	400	3	2	40.0	1.00	1.00
310Guscio fond.	432	443	427	433	3	2	40.0	1.00	1.00
311Guscio fond.	440	414	448	457	3	2	40.0	1.00	1.00
312Guscio fond.	260	315	411	403	3	2	40.0	1.00	1.00
313Guscio fond.	317	311	444	412	3	2	40.0	1.00	1.00
314Guscio fond.	447	408	426	418	3	2	40.0	1.00	1.00
315Guscio fond.	423	415	416	424	3	2	40.0	1.00	1.00
316Guscio fond.	442	447	418	417	3	2	40.0	1.00	1.00
317Guscio fond.	413	445	432	431	3	2	40.0	1.00	1.00
318Guscio fond.	443	417	420	427	3	2	40.0	1.00	1.00
319Guscio fond.	436	435	442	441	3	2	40.0	1.00	1.00
320Guscio fond.	453	434	458	456	3	2	40.0	1.00	1.00
321Guscio fond.	450	449	399	454	3	2	40.0	1.00	1.00
322Guscio fond.	407	430	451	425	3	2	40.0	1.00	1.00
323Guscio fond.	315	317	412	411	3	2	40.0	1.00	1.00
324Guscio fond.	449	457	400	399	3	2	40.0	1.00	1.00
325Guscio fond.	311	287	436	444	3	2	40.0	1.00	1.00
326Guscio fond.	281	280	446	435	3	2	40.0	1.00	1.00
327Guscio fond.	445	441	443	432	3	2	40.0	1.00	1.00
328Guscio fond.	438	440	457	449	3	2	40.0	1.00	1.00
329Guscio fond.	434	433	452	458	3	2	40.0	1.00	1.00
330Guscio fond.	269	15	352	429	3	3	40.0	1.00	1.00
331Guscio fond.	485	486	487	27	3	3	40.0	1.00	1.00
332Guscio fond.	489	490	486	485	3	3	40.0	1.00	1.00
333Guscio fond.	491	492	490	489	3	2	40.0	1.00	1.00
334Guscio fond.	493	494	492	491	3	3	40.0	1.00	1.00
335Guscio fond.	21	346	494	493	3	3	40.0	1.00	1.00
336Guscio fond.	486	495	496	487	3	3	40.0	1.00	1.00
337Guscio fond.	490	497	495	486	3	2	40.0	1.00	1.00
338Guscio fond.	492	498	497	490	3	2	40.0	1.00	1.00
339Guscio fond.	494	499	498	492	3	3	40.0	1.00	1.00
340Guscio fond.	346	355	499	494	3	3	40.0	1.00	1.00
341Guscio fond.	495	500	501	496	3	2	40.0	1.00	1.00
342Guscio fond.	497	502	500	495	3	2	40.0	1.00	1.00
343Guscio fond.	498	503	502	497	3	2	40.0	1.00	1.00
344Guscio fond.	499	504	503	498	3	2	40.0	1.00	1.00
345Guscio fond.	355	360	504	499	3	2	40.0	1.00	1.00
346Guscio fond.	500	505	506	501	3	2	40.0	1.00	1.00
347Guscio fond.	502	507	505	500	3	2	40.0	1.00	1.00
348Guscio fond.	503	508	507	502	3	2	40.0	1.00	1.00
349Guscio fond.	504	509	508	503	3	2	40.0	1.00	1.00
350Guscio fond.	360	365	509	504	3	2	40.0	1.00	1.00
351Guscio fond.	505	510	511	506	3	2	40.0	1.00	1.00
352Guscio fond.	507	512	510	505	3	2	40.0	1.00	1.00
353Guscio fond.	508	513	512	507	3	2	40.0	1.00	1.00
354Guscio fond.	509	514	513	508	3	2	40.0	1.00	1.00
355Guscio fond.	365	370	514	509	3	2	40.0	1.00	1.00
356Guscio fond.	510	515	516	511	3	2	40.0	1.00	1.00
357Guscio fond.	512	517	515	510	3	2	40.0	1.00	1.00
358Guscio fond.	513	518	517	512	3	2	40.0	1.00	1.00
359Guscio fond.	514	519	518	513	3	2	40.0	1.00	1.00
360Guscio fond.	370	375	519	514	3	2	40.0	1.00	1.00
361Guscio fond.	515	520	521	516	3	2	40.0	1.00	1.00
362Guscio fond.	517	522	520	515	3	2	40.0	1.00	1.00
363Guscio fond.	518	523	522	517	3	2	40.0	1.00	1.00
364Guscio fond.	519	524	523	518	3	2	40.0	1.00	1.00
365Guscio fond.	375	380	524	519	3	2	40.0	1.00	1.00
366Guscio fond.	520	525	526	521	3	2	40.0	1.00	1.00
367Guscio fond.	522	527	525	520	3	2	40.0	1.00	1.00
368Guscio fond.	523	528	527	522	3	2	40.0	1.00	1.00
369Guscio fond.	524	529	528	523	3	2	40.0	1.00	1.00
370Guscio fond.	380	385	529	524	3	2	40.0	1.00	1.00
371Guscio fond.	525	530	531	526	3	2	40.0	1.00	1.00
372Guscio fond.	527	532	530	525	3	2	40.0	1.00	1.00
373Guscio fond.	528	533	532	527	3	2	40.0	1.00	1.00
374Guscio fond.	529	534	533	528	3	2	40.0	1.00	1.00
375Guscio fond.	385	390	534	529	3	2	40.0	1.00	1.00
376Guscio fond.	530	535	29	531	3	2	40.0	1.00	1.00
377Guscio fond.	532	537	535	530	3	2	40.0	1.00	1.00
378Guscio fond.	533	538	537	532	3	2	40.0	1.00	1.00
379Guscio fond.	534	539	538	533	3	2	40.0	1.00	1.00
380Guscio fond.	390	23	539	534	3	2	40.0	1.00	1.00
381Guscio fond.	540	541	542	543	3	3	40.0	1.00	1.00

382Guscio fond.	402	401	544	545	3	3	40.0	1.00	1.00
383Guscio fond.	546	547	548	549	3	2	40.0	1.00	1.00
384Guscio fond.	550	485	27	551	3	3	40.0	1.00	1.00
385Guscio fond.	552	553	554	555	3	2	40.0	1.00	1.00
386Guscio fond.	556	550	551	557	3	3	40.0	1.00	1.00
387Guscio fond.	558	559	560	561	3	2	40.0	1.00	1.00
388Guscio fond.	561	560	562	563	3	2	40.0	1.00	1.00
389Guscio fond.	560	564	565	562	3	2	40.0	1.00	1.00
390Guscio fond.	549	548	566	567	3	2	40.0	1.00	1.00
391Guscio fond.	559	567	564	560	3	2	40.0	1.00	1.00
392Guscio fond.	567	566	556	564	3	2	40.0	1.00	1.00
393Guscio fond.	568	561	563	569	3	2	40.0	1.00	1.00
394Guscio fond.	547	570	571	548	3	3	40.0	1.00	1.00
395Guscio fond.	572	573	574	575	3	2	40.0	1.00	1.00
396Guscio fond.	428	422	576	577	3	2	40.0	1.00	1.00
397Guscio fond.	578	545	579	580	3	3	40.0	1.00	1.00
398Guscio fond.	545	544	581	579	3	3	40.0	1.00	1.00
399Guscio fond.	544	552	555	581	3	2	40.0	1.00	1.00
400Guscio fond.	582	583	558	584	3	2	40.0	1.00	1.00
401Guscio fond.	553	585	586	554	3	2	40.0	1.00	1.00
402Guscio fond.	576	587	588	583	3	2	40.0	1.00	1.00
403Guscio fond.	555	554	572	589	3	2	40.0	1.00	1.00
404Guscio fond.	580	579	590	591	3	2	40.0	1.00	1.00
405Guscio fond.	592	489	485	550	3	3	40.0	1.00	1.00
406Guscio fond.	587	546	549	588	3	2	40.0	1.00	1.00
407Guscio fond.	421	424	546	587	3	2	40.0	1.00	1.00
408Guscio fond.	571	491	489	592	3	2	40.0	1.00	1.00
409Guscio fond.	416	410	570	547	3	3	40.0	1.00	1.00
410Guscio fond.	566	592	550	556	3	3	40.0	1.00	1.00
411Guscio fond.	585	577	582	586	3	2	40.0	1.00	1.00
412Guscio fond.	19	402	545	578	3	3	40.0	1.00	1.00
413Guscio fond.	424	416	547	546	3	2	40.0	1.00	1.00
414Guscio fond.	574	568	569	593	3	2	40.0	1.00	1.00
415Guscio fond.	589	572	575	594	3	2	40.0	1.00	1.00
416Guscio fond.	570	493	491	571	3	3	40.0	1.00	1.00
417Guscio fond.	595	540	543	25	3	3	40.0	1.00	1.00
418Guscio fond.	541	594	597	542	3	2	40.0	1.00	1.00
419Guscio fond.	598	589	594	541	3	2	40.0	1.00	1.00
420Guscio fond.	573	584	568	574	3	2	40.0	1.00	1.00
421Guscio fond.	581	555	589	598	3	2	40.0	1.00	1.00
422Guscio fond.	401	456	552	544	3	2	40.0	1.00	1.00
423Guscio fond.	458	452	585	553	3	2	40.0	1.00	1.00
424Guscio fond.	588	549	567	559	3	2	40.0	1.00	1.00
425Guscio fond.	564	556	557	565	3	2	40.0	1.00	1.00
426Guscio fond.	583	588	559	558	3	2	40.0	1.00	1.00
427Guscio fond.	554	586	573	572	3	2	40.0	1.00	1.00
428Guscio fond.	584	558	561	568	3	2	40.0	1.00	1.00
429Guscio fond.	577	576	583	582	3	2	40.0	1.00	1.00
430Guscio fond.	594	575	599	597	3	2	40.0	1.00	1.00
431Guscio fond.	591	590	540	595	3	3	40.0	1.00	1.00
432Guscio fond.	548	571	592	566	3	2	40.0	1.00	1.00
433Guscio fond.	456	458	553	552	3	2	40.0	1.00	1.00
434Guscio fond.	590	598	541	540	3	2	40.0	1.00	1.00
435Guscio fond.	452	428	577	585	3	2	40.0	1.00	1.00
436Guscio fond.	422	421	587	576	3	2	40.0	1.00	1.00
437Guscio fond.	586	582	584	573	3	2	40.0	1.00	1.00
438Guscio fond.	579	581	598	590	3	2	40.0	1.00	1.00
439Guscio fond.	575	574	593	599	3	2	40.0	1.00	1.00
440Guscio fond.	410	21	493	570	3	3	40.0	1.00	1.00
441Guscio fond.	626	627	628	33	3	3	40.0	1.00	1.00
442Guscio fond.	630	631	627	626	3	3	40.0	1.00	1.00
443Guscio fond.	632	633	631	630	3	2	40.0	1.00	1.00
444Guscio fond.	634	635	633	632	3	3	40.0	1.00	1.00
445Guscio fond.	27	487	635	634	3	3	40.0	1.00	1.00
446Guscio fond.	627	636	637	628	3	3	40.0	1.00	1.00
447Guscio fond.	631	638	636	627	3	2	40.0	1.00	1.00
448Guscio fond.	633	639	638	631	3	2	40.0	1.00	1.00
449Guscio fond.	635	640	639	633	3	2	40.0	1.00	1.00
450Guscio fond.	487	496	640	635	3	3	40.0	1.00	1.00
451Guscio fond.	636	641	642	637	3	2	40.0	1.00	1.00
452Guscio fond.	638	643	641	636	3	2	40.0	1.00	1.00
453Guscio fond.	639	644	643	638	3	2	40.0	1.00	1.00
454Guscio fond.	640	645	644	639	3	2	40.0	1.00	1.00
455Guscio fond.	496	501	645	640	3	2	40.0	1.00	1.00
456Guscio fond.	641	646	647	642	3	2	40.0	1.00	1.00
457Guscio fond.	643	648	646	641	3	2	40.0	1.00	1.00
458Guscio fond.	644	649	648	643	3	2	40.0	1.00	1.00

459Guscio fond.	645	650	649	644	3	2	40.0	1.00	1.00
460Guscio fond.	501	506	650	645	3	2	40.0	1.00	1.00
461Guscio fond.	646	206	254	647	3	2	40.0	1.00	1.00
462Guscio fond.	648	314	206	646	3	2	40.0	1.00	1.00
463Guscio fond.	649	318	314	648	3	2	40.0	1.00	1.00
464Guscio fond.	650	319	318	649	3	2	40.0	1.00	1.00
465Guscio fond.	506	511	319	650	3	2	40.0	1.00	1.00
466Guscio fond.	206	320	321	254	3	2	40.0	1.00	1.00
467Guscio fond.	314	322	320	206	3	2	40.0	1.00	1.00
468Guscio fond.	318	323	322	314	3	2	40.0	1.00	1.00
469Guscio fond.	319	324	323	318	3	2	40.0	1.00	1.00
470Guscio fond.	511	516	324	319	3	2	40.0	1.00	1.00
471Guscio fond.	320	325	326	321	3	2	40.0	1.00	1.00
472Guscio fond.	322	327	325	320	3	2	40.0	1.00	1.00
473Guscio fond.	323	328	327	322	3	2	40.0	1.00	1.00
474Guscio fond.	324	329	328	323	3	2	40.0	1.00	1.00
475Guscio fond.	516	521	329	324	3	2	40.0	1.00	1.00
476Guscio fond.	325	330	331	326	3	2	40.0	1.00	1.00
477Guscio fond.	327	332	330	325	3	2	40.0	1.00	1.00
478Guscio fond.	328	333	332	327	3	2	40.0	1.00	1.00
479Guscio fond.	329	334	333	328	3	2	40.0	1.00	1.00
480Guscio fond.	521	526	334	329	3	2	40.0	1.00	1.00
481Guscio fond.	330	335	336	331	3	2	40.0	1.00	1.00
482Guscio fond.	332	337	335	330	3	2	40.0	1.00	1.00
483Guscio fond.	333	338	337	332	3	2	40.0	1.00	1.00
484Guscio fond.	334	339	338	333	3	2	40.0	1.00	1.00
485Guscio fond.	526	531	339	334	3	2	40.0	1.00	1.00
486Guscio fond.	335	340	70	336	3	2	40.0	1.00	1.00
487Guscio fond.	337	342	340	335	3	2	40.0	1.00	1.00
488Guscio fond.	338	343	342	337	3	2	40.0	1.00	1.00
489Guscio fond.	339	347	343	338	3	2	40.0	1.00	1.00
490Guscio fond.	531	29	347	339	3	2	40.0	1.00	1.00
491Guscio fond.	455	623	629	459	3	2	40.0	1.00	1.00
492Guscio fond.	543	542	461	462	3	3	40.0	1.00	1.00
493Guscio fond.	463	464	465	466	3	2	40.0	1.00	1.00
494Guscio fond.	488	478	480	536	3	2	40.0	1.00	1.00
495Guscio fond.	469	470	471	472	3	2	40.0	1.00	1.00
496Guscio fond.	477	481	482	479	3	2	40.0	1.00	1.00
497Guscio fond.	475	476	477	478	3	2	40.0	1.00	1.00
498Guscio fond.	918	792	903	739	3	2	40.0	1.00	1.00
499Guscio fond.	792	794	905	903	3	2	40.0	1.00	1.00
500Guscio fond.	466	465	483	484	3	2	40.0	1.00	1.00
501Guscio fond.	476	484	481	477	3	2	40.0	1.00	1.00
502Guscio fond.	484	483	473	481	3	2	40.0	1.00	1.00
503Guscio fond.	794	795	907	905	3	2	40.0	1.00	1.00
504Guscio fond.	464	596	600	465	3	2	40.0	1.00	1.00
505Guscio fond.	601	602	603	604	3	2	40.0	1.00	1.00
506Guscio fond.	569	563	605	606	3	2	40.0	1.00	1.00
507Guscio fond.	607	462	608	609	3	3	40.0	1.00	1.00
508Guscio fond.	462	461	610	608	3	2	40.0	1.00	1.00
509Guscio fond.	461	469	472	610	3	2	40.0	1.00	1.00
510Guscio fond.	611	612	475	613	3	2	40.0	1.00	1.00
511Guscio fond.	470	614	615	471	3	2	40.0	1.00	1.00
512Guscio fond.	605	616	617	612	3	2	40.0	1.00	1.00
513Guscio fond.	472	471	601	618	3	2	40.0	1.00	1.00
514Guscio fond.	609	608	619	620	3	2	40.0	1.00	1.00
515Guscio fond.	621	630	626	467	3	3	40.0	1.00	1.00
516Guscio fond.	616	463	466	617	3	2	40.0	1.00	1.00
517Guscio fond.	562	565	463	616	3	2	40.0	1.00	1.00
518Guscio fond.	600	632	630	621	3	2	40.0	1.00	1.00
519Guscio fond.	557	551	596	464	3	3	40.0	1.00	1.00
520Guscio fond.	483	621	467	473	3	3	40.0	1.00	1.00
521Guscio fond.	614	606	611	615	3	2	40.0	1.00	1.00
522Guscio fond.	25	543	462	607	3	3	40.0	1.00	1.00
523Guscio fond.	565	557	464	463	3	2	40.0	1.00	1.00
524Guscio fond.	795	896	769	907	3	2	40.0	1.00	1.00
525Guscio fond.	618	601	604	623	3	2	40.0	1.00	1.00
526Guscio fond.	596	634	632	600	3	3	40.0	1.00	1.00
527Guscio fond.	604	603	622	625	3	2	40.0	1.00	1.00
528Guscio fond.	896	920	741	769	3	2	40.0	1.00	1.00
529Guscio fond.	341	618	623	455	3	2	40.0	1.00	1.00
530Guscio fond.	602	613	488	603	3	2	40.0	1.00	1.00
531Guscio fond.	610	472	618	341	3	2	40.0	1.00	1.00
532Guscio fond.	542	597	469	461	3	2	40.0	1.00	1.00
533Guscio fond.	599	593	614	470	3	2	40.0	1.00	1.00
534Guscio fond.	617	466	484	476	3	2	40.0	1.00	1.00
535Guscio fond.	920	921	742	741	3	2	40.0	1.00	1.00

536Guscio fond.	612	617	476	475	3	2	40.0	1.00	1.00
537Guscio fond.	471	615	602	601	3	2	40.0	1.00	1.00
538Guscio fond.	613	475	478	488	3	2	40.0	1.00	1.00
539Guscio fond.	606	605	612	611	3	2	40.0	1.00	1.00
540Guscio fond.	921	922	743	742	3	2	40.0	1.00	1.00
541Guscio fond.	620	619	395	624	3	3	40.0	1.00	1.00
542Guscio fond.	465	600	621	483	3	2	40.0	1.00	1.00
543Guscio fond.	597	599	470	469	3	2	40.0	1.00	1.00
544Guscio fond.	619	341	455	395	3	3	40.0	1.00	1.00
545Guscio fond.	593	569	606	614	3	2	40.0	1.00	1.00
546Guscio fond.	563	562	616	605	3	2	40.0	1.00	1.00
547Guscio fond.	615	611	613	602	3	2	40.0	1.00	1.00
548Guscio fond.	608	610	341	619	3	2	40.0	1.00	1.00
549Guscio fond.	922	923	744	743	3	2	40.0	1.00	1.00
550Guscio fond.	551	27	634	596	3	3	40.0	1.00	1.00
551Guscio fond.	93	656	652	11	3	2	40.0	1.00	1.00
552Guscio fond.	94	657	656	93	3	2	40.0	1.00	1.00
553Guscio fond.	95	658	657	94	3	2	40.0	1.00	1.00
554Guscio fond.	96	659	658	95	3	2	40.0	1.00	1.00
555Guscio fond.	5	651	659	96	3	2	40.0	1.00	1.00
556Guscio fond.	253	660	924	17	3	2	40.0	1.00	1.00
557Guscio fond.	255	661	660	253	3	2	40.0	1.00	1.00
558Guscio fond.	256	662	661	255	3	2	40.0	1.00	1.00
559Guscio fond.	257	663	662	256	3	2	40.0	1.00	1.00
560Guscio fond.	11	652	663	257	3	2	40.0	1.00	1.00
561Guscio fond.	394	668	653	23	3	2	40.0	1.00	1.00
562Guscio fond.	396	669	668	394	3	2	40.0	1.00	1.00
563Guscio fond.	397	670	669	396	3	2	40.0	1.00	1.00
564Guscio fond.	398	671	670	397	3	2	40.0	1.00	1.00
565Guscio fond.	17	924	671	398	3	2	40.0	1.00	1.00
566Guscio fond.	535	672	654	29	3	2	40.0	1.00	1.00
567Guscio fond.	537	673	672	535	3	2	40.0	1.00	1.00
568Guscio fond.	538	674	673	537	3	2	40.0	1.00	1.00
569Guscio fond.	539	675	674	538	3	2	40.0	1.00	1.00
570Guscio fond.	23	653	675	539	3	2	40.0	1.00	1.00
571Guscio fond.	340	664	655	70	3	2	40.0	1.00	1.00
572Guscio fond.	342	665	664	340	3	2	40.0	1.00	1.00
573Guscio fond.	343	666	665	342	3	2	40.0	1.00	1.00
574Guscio fond.	347	667	666	343	3	2	40.0	1.00	1.00
575Guscio fond.	29	654	667	347	3	2	40.0	1.00	1.00
576Guscio fond.	656	681	677	652	3	2	40.0	1.00	1.00
577Guscio fond.	657	682	681	656	3	2	40.0	1.00	1.00
578Guscio fond.	658	683	682	657	3	2	40.0	1.00	1.00
579Guscio fond.	659	684	683	658	3	2	40.0	1.00	1.00
580Guscio fond.	651	676	684	659	3	2	40.0	1.00	1.00
581Guscio fond.	660	685	925	924	3	2	40.0	1.00	1.00
582Guscio fond.	661	686	685	660	3	2	40.0	1.00	1.00
583Guscio fond.	662	687	686	661	3	2	40.0	1.00	1.00
584Guscio fond.	663	688	687	662	3	2	40.0	1.00	1.00
585Guscio fond.	652	677	688	663	3	2	40.0	1.00	1.00
586Guscio fond.	668	693	678	653	3	2	40.0	1.00	1.00
587Guscio fond.	669	694	693	668	3	2	40.0	1.00	1.00
588Guscio fond.	670	695	694	669	3	2	40.0	1.00	1.00
589Guscio fond.	671	696	695	670	3	2	40.0	1.00	1.00
590Guscio fond.	924	925	696	671	3	2	40.0	1.00	1.00
591Guscio fond.	672	697	679	654	3	2	40.0	1.00	1.00
592Guscio fond.	673	698	697	672	3	2	40.0	1.00	1.00
593Guscio fond.	674	699	698	673	3	2	40.0	1.00	1.00
594Guscio fond.	675	700	699	674	3	2	40.0	1.00	1.00
595Guscio fond.	653	678	700	675	3	2	40.0	1.00	1.00
596Guscio fond.	664	689	680	655	3	2	40.0	1.00	1.00
597Guscio fond.	665	690	689	664	3	2	40.0	1.00	1.00
598Guscio fond.	666	691	690	665	3	2	40.0	1.00	1.00
599Guscio fond.	667	692	691	666	3	2	40.0	1.00	1.00
600Guscio fond.	654	679	692	667	3	2	40.0	1.00	1.00
601Guscio fond.	681	706	702	677	3	2	40.0	1.00	1.00
602Guscio fond.	682	707	706	681	3	2	40.0	1.00	1.00
603Guscio fond.	683	708	707	682	3	2	40.0	1.00	1.00
604Guscio fond.	684	709	708	683	3	2	40.0	1.00	1.00
605Guscio fond.	676	701	709	684	3	2	40.0	1.00	1.00
606Guscio fond.	685	710	926	925	3	2	40.0	1.00	1.00
607Guscio fond.	686	711	710	685	3	2	40.0	1.00	1.00
608Guscio fond.	687	712	711	686	3	2	40.0	1.00	1.00
609Guscio fond.	688	713	712	687	3	2	40.0	1.00	1.00
610Guscio fond.	677	702	713	688	3	2	40.0	1.00	1.00
611Guscio fond.	693	718	703	678	3	2	40.0	1.00	1.00
612Guscio fond.	694	719	718	693	3	2	40.0	1.00	1.00

613	Guscio fond.	695	720	719	694	3	2	40.0	1.00	1.00
614	Guscio fond.	696	721	720	695	3	2	40.0	1.00	1.00
615	Guscio fond.	925	926	721	696	3	2	40.0	1.00	1.00
616	Guscio fond.	697	722	704	679	3	2	40.0	1.00	1.00
617	Guscio fond.	698	723	722	697	3	2	40.0	1.00	1.00
618	Guscio fond.	699	724	723	698	3	2	40.0	1.00	1.00
619	Guscio fond.	700	725	724	699	3	2	40.0	1.00	1.00
620	Guscio fond.	678	703	725	700	3	2	40.0	1.00	1.00
621	Guscio fond.	689	714	705	680	3	2	40.0	1.00	1.00
622	Guscio fond.	690	715	714	689	3	2	40.0	1.00	1.00
623	Guscio fond.	691	716	715	690	3	2	40.0	1.00	1.00
624	Guscio fond.	692	717	716	691	3	2	40.0	1.00	1.00
625	Guscio fond.	679	704	717	692	3	2	40.0	1.00	1.00
626	Guscio fond.	727	736	79	3	3	3	40.0	1.00	1.00
627	Guscio fond.	736	735	78	79	3	3	40.0	1.00	1.00
628	Guscio fond.	735	734	77	78	3	2	40.0	1.00	1.00
629	Guscio fond.	734	733	76	77	3	2	40.0	1.00	1.00
630	Guscio fond.	733	732	75	76	3	2	40.0	1.00	1.00
631	Guscio fond.	732	731	74	75	3	2	40.0	1.00	1.00
632	Guscio fond.	731	730	73	74	3	2	40.0	1.00	1.00
633	Guscio fond.	730	729	72	73	3	2	40.0	1.00	1.00
634	Guscio fond.	729	728	71	72	3	2	40.0	1.00	1.00
635	Guscio fond.	728	927	5	71	3	2	40.0	1.00	1.00
636	Guscio fond.	747	746	928	929	3	2	40.0	0.62	0.38
637	Guscio fond.	70	655	911	890	3	2	40.0	1.00	1.00
638	Guscio fond.	889	906	792	918	3	3	40.0	1.00	1.00
639	Guscio fond.	906	908	794	792	3	2	40.0	1.00	1.00
640	Guscio fond.	726	747	929	1	3	3	40.0	0.62	0.38
641	Guscio fond.	908	909	795	794	3	2	40.0	1.00	1.00
642	Guscio fond.	909	910	896	795	3	2	40.0	1.00	1.00
643	Guscio fond.	910	891	920	896	3	2	40.0	1.00	1.00
644	Guscio fond.	891	892	921	920	3	2	40.0	1.00	1.00
645	Guscio fond.	892	893	922	921	3	2	40.0	1.00	1.00
646	Guscio fond.	893	894	923	922	3	2	40.0	1.00	1.00
647	Guscio fond.	655	680	912	911	3	2	40.0	1.00	1.00
648	Guscio fond.	927	748	651	5	3	2	40.0	1.00	1.00
649	Guscio fond.	748	749	676	651	3	2	40.0	1.00	1.00
650	Guscio fond.	749	750	701	676	3	2	40.0	1.00	1.00
651	Guscio fond.	752	761	736	727	3	3	40.0	1.00	1.00
652	Guscio fond.	761	760	735	736	3	2	40.0	1.00	1.00
653	Guscio fond.	760	759	734	735	3	2	40.0	1.00	1.00
654	Guscio fond.	759	758	733	734	3	2	40.0	1.00	1.00
655	Guscio fond.	758	757	732	733	3	2	40.0	1.00	1.00
656	Guscio fond.	757	756	731	732	3	2	40.0	1.00	1.00
657	Guscio fond.	756	755	730	731	3	2	40.0	1.00	1.00
658	Guscio fond.	755	754	729	730	3	2	40.0	1.00	1.00
659	Guscio fond.	754	753	728	729	3	2	40.0	1.00	1.00
660	Guscio fond.	753	932	927	728	3	2	40.0	1.00	1.00
661	Guscio fond.	772	771	933	934	3	2	40.0	0.62	0.38
662	Guscio fond.	894	895	738	923	3	2	40.0	1.00	1.00
663	Guscio fond.	895	890	919	738	3	2	40.0	1.00	1.00
664	Guscio fond.	923	738	745	744	3	2	40.0	1.00	1.00
665	Guscio fond.	751	772	934	726	3	2	40.0	0.62	0.38
666	Guscio fond.	680	705	913	912	3	2	40.0	1.00	1.00
667	Guscio fond.	738	919	740	745	3	2	40.0	1.00	1.00
668	Guscio fond.	900	901	789	788	3	2	40.0	1.00	1.00
669	Guscio fond.	468	33	889	945	3	3	40.0	1.00	1.00
670	Guscio fond.	624	395	460	31	3	3	40.0	1.00	1.00
671	Guscio fond.	944	1007	999	993	3	2	40.0	1.00	1.00
672	Guscio fond.	481	473	474	482	3	2	40.0	1.00	1.00
673	Guscio fond.	932	773	748	927	3	2	40.0	1.00	1.00
674	Guscio fond.	773	774	749	748	3	2	40.0	1.00	1.00
675	Guscio fond.	774	775	750	749	3	2	40.0	1.00	1.00
676	Guscio fond.	777	786	761	752	3	2	40.0	1.00	1.00
677	Guscio fond.	786	785	760	761	3	2	40.0	1.00	1.00
678	Guscio fond.	785	784	759	760	3	2	40.0	1.00	1.00
679	Guscio fond.	784	783	758	759	3	2	40.0	1.00	1.00
680	Guscio fond.	783	782	757	758	3	2	40.0	1.00	1.00
681	Guscio fond.	782	781	756	757	3	2	40.0	1.00	1.00
682	Guscio fond.	781	780	755	756	3	2	40.0	1.00	1.00
683	Guscio fond.	780	779	754	755	3	2	40.0	1.00	1.00
684	Guscio fond.	779	778	753	754	3	2	40.0	1.00	1.00
685	Guscio fond.	778	940	932	753	3	2	40.0	1.00	1.00
686	Guscio fond.	797	796	771	942	3	2	40.0	1.00	1.00
687	Guscio fond.	603	488	536	622	3	2	40.0	1.00	1.00
688	Guscio fond.	1004	1000	998	1002	3	2	40.0	1.00	1.00
689	Guscio fond.	919	899	770	740	3	2	40.0	1.00	1.00

690	Guscio fond.	776	797	942	751	3	2	40.0	1.00	1.00
691	Guscio fond.	899	900	788	770	3	2	40.0	1.00	1.00
692	Guscio fond.	917	997	1011	1009	3	3	40.0	1.00	1.00
693	Guscio fond.	890	911	899	919	3	2	40.0	1.00	1.00
694	Guscio fond.	911	912	900	899	3	2	40.0	1.00	1.00
695	Guscio fond.	912	913	901	900	3	2	40.0	1.00	1.00
696	Guscio fond.	623	604	625	629	3	2	40.0	1.00	1.00
697	Guscio fond.	787	777	752	947	3	2	40.0	1.00	1.00
698	Guscio fond.	940	798	773	932	3	2	40.0	1.00	1.00
699	Guscio fond.	798	799	774	773	3	2	40.0	1.00	1.00
700	Guscio fond.	799	800	775	774	3	2	40.0	1.00	1.00
701	Guscio fond.	807	948	949	808	3	3	40.0	1.00	1.00
702	Guscio fond.	808	949	950	809	3	2	40.0	1.00	1.00
703	Guscio fond.	801	1	948	807	3	3	40.0	1.00	1.00
704	Guscio fond.	810	951	7	802	3	3	40.0	1.00	1.00
705	Guscio fond.	809	950	951	810	3	3	40.0	1.00	1.00
706	Guscio fond.	811	952	953	812	3	3	40.0	1.00	1.00
707	Guscio fond.	812	953	954	813	3	2	40.0	1.00	1.00
708	Guscio fond.	802	7	952	811	3	3	40.0	1.00	1.00
709	Guscio fond.	814	955	13	803	3	3	40.0	1.00	1.00
710	Guscio fond.	813	954	955	814	3	2	40.0	1.00	1.00
711	Guscio fond.	815	956	957	816	3	3	40.0	1.00	1.00
712	Guscio fond.	816	957	958	817	3	2	40.0	1.00	1.00
713	Guscio fond.	803	13	956	815	3	3	40.0	1.00	1.00
714	Guscio fond.	818	959	19	804	3	3	40.0	1.00	1.00
715	Guscio fond.	817	958	959	818	3	2	40.0	1.00	1.00
716	Guscio fond.	819	960	961	820	3	3	40.0	1.00	1.00
717	Guscio fond.	820	961	962	821	3	2	40.0	1.00	1.00
718	Guscio fond.	804	19	960	819	3	3	40.0	1.00	1.00
719	Guscio fond.	822	963	25	805	3	3	40.0	1.00	1.00
720	Guscio fond.	821	962	963	822	3	3	40.0	1.00	1.00
721	Guscio fond.	823	964	965	824	3	3	40.0	1.00	1.00
722	Guscio fond.	824	965	966	825	3	2	40.0	1.00	1.00
723	Guscio fond.	805	25	964	823	3	3	40.0	1.00	1.00
724	Guscio fond.	395	455	459	460	3	3	40.0	1.00	1.00
725	Guscio fond.	825	966	624	766	3	3	40.0	1.00	1.00
726	Guscio fond.	827	726	968	801	3	2	40.0	1.00	1.00
727	Guscio fond.	828	751	969	827	3	2	40.0	1.00	1.00
728	Guscio fond.	829	776	970	828	3	2	40.0	1.00	1.00
729	Guscio fond.	836	971	972	837	3	2	40.0	1.00	1.00
730	Guscio fond.	837	972	973	838	3	2	40.0	1.00	1.00
731	Guscio fond.	830	801	971	836	3	3	40.0	1.00	1.00
732	Guscio fond.	839	974	802	831	3	3	40.0	1.00	1.00
733	Guscio fond.	838	973	974	839	3	3	40.0	1.00	1.00
734	Guscio fond.	840	975	976	841	3	3	40.0	1.00	1.00
735	Guscio fond.	841	976	977	842	3	2	40.0	1.00	1.00
736	Guscio fond.	831	802	975	840	3	3	40.0	1.00	1.00
737	Guscio fond.	843	978	803	832	3	3	40.0	1.00	1.00
738	Guscio fond.	842	977	978	843	3	2	40.0	1.00	1.00
739	Guscio fond.	844	979	980	845	3	3	40.0	1.00	1.00
740	Guscio fond.	845	980	981	846	3	2	40.0	1.00	1.00
741	Guscio fond.	832	803	979	844	3	3	40.0	1.00	1.00
742	Guscio fond.	847	982	804	833	3	3	40.0	1.00	1.00
743	Guscio fond.	846	981	982	847	3	2	40.0	1.00	1.00
744	Guscio fond.	848	983	984	849	3	3	40.0	1.00	1.00
745	Guscio fond.	849	984	985	850	3	2	40.0	1.00	1.00
746	Guscio fond.	833	804	983	848	3	3	40.0	1.00	1.00
747	Guscio fond.	851	986	805	834	3	3	40.0	1.00	1.00
748	Guscio fond.	850	985	986	851	3	2	40.0	1.00	1.00
749	Guscio fond.	852	987	988	853	3	2	40.0	1.00	1.00
750	Guscio fond.	853	988	763	854	3	2	40.0	1.00	1.00
751	Guscio fond.	834	805	987	852	3	3	40.0	1.00	1.00
752	Guscio fond.	945	889	918	936	3	3	40.0	1.00	1.00
753	Guscio fond.	854	763	766	855	3	2	40.0	1.00	1.00
754	Guscio fond.	856	827	768	830	3	2	40.0	1.00	1.00
755	Guscio fond.	857	828	737	856	3	2	40.0	1.00	1.00
756	Guscio fond.	858	829	864	857	3	2	40.0	1.00	1.00
757	Guscio fond.	865	888	898	866	3	2	40.0	1.00	1.00
758	Guscio fond.	866	898	916	867	3	2	40.0	1.00	1.00
759	Guscio fond.	859	830	888	865	3	2	40.0	1.00	1.00
760	Guscio fond.	868	938	831	860	3	2	40.0	1.00	1.00
761	Guscio fond.	867	916	938	868	3	2	40.0	1.00	1.00
762	Guscio fond.	869	943	946	870	3	2	40.0	1.00	1.00
763	Guscio fond.	870	946	765	871	3	2	40.0	1.00	1.00
764	Guscio fond.	860	831	943	869	3	2	40.0	1.00	1.00
765	Guscio fond.	872	767	832	861	3	2	40.0	1.00	1.00
766	Guscio fond.	871	765	767	872	3	2	40.0	1.00	1.00

767	Guscio fond.	873	790	791	874	3	2	40.0	1.00	1.00
768	Guscio fond.	874	791	806	875	3	2	40.0	1.00	1.00
769	Guscio fond.	861	832	790	873	3	2	40.0	1.00	1.00
770	Guscio fond.	876	835	833	862	3	2	40.0	1.00	1.00
771	Guscio fond.	875	806	835	876	3	2	40.0	1.00	1.00
772	Guscio fond.	877	930	931	878	3	2	40.0	1.00	1.00
773	Guscio fond.	878	931	762	879	3	2	40.0	1.00	1.00
774	Guscio fond.	862	833	930	877	3	2	40.0	1.00	1.00
775	Guscio fond.	880	793	834	863	3	2	40.0	1.00	1.00
776	Guscio fond.	879	762	793	880	3	2	40.0	1.00	1.00
777	Guscio fond.	881	897	902	882	3	2	40.0	1.00	1.00
778	Guscio fond.	882	902	904	883	3	2	40.0	1.00	1.00
779	Guscio fond.	863	834	897	881	3	2	40.0	1.00	1.00
780	Guscio fond.	478	477	479	480	3	2	40.0	1.00	1.00
781	Guscio fond.	883	904	855	884	3	2	40.0	1.00	1.00
782	Guscio fond.	885	856	915	859	3	2	40.0	1.00	1.00
783	Guscio fond.	886	857	935	885	3	2	40.0	1.00	1.00
784	Guscio fond.	887	858	764	886	3	2	40.0	1.00	1.00
785	Guscio fond.	33	628	906	889	3	3	40.0	1.00	1.00
786	Guscio fond.	628	637	908	906	3	3	40.0	1.00	1.00
787	Guscio fond.	637	642	909	908	3	2	40.0	1.00	1.00
788	Guscio fond.	642	647	910	909	3	2	40.0	1.00	1.00
789	Guscio fond.	647	254	891	910	3	2	40.0	1.00	1.00
790	Guscio fond.	254	321	892	891	3	2	40.0	1.00	1.00
791	Guscio fond.	321	326	893	892	3	2	40.0	1.00	1.00
792	Guscio fond.	326	331	894	893	3	2	40.0	1.00	1.00
793	Guscio fond.	331	336	895	894	3	2	40.0	1.00	1.00
794	Guscio fond.	467	626	33	468	3	3	40.0	1.00	1.00
795	Guscio fond.	473	467	468	474	3	3	40.0	1.00	1.00
796	Guscio fond.	1005	995	989	1021	3	2	40.0	1.00	1.00
797	Guscio fond.	1008	1004	1002	1006	3	2	40.0	1.00	1.00
798	Guscio fond.	1003	944	993	939	3	2	40.0	1.00	1.00
799	Guscio fond.	1007	991	990	999	3	3	40.0	1.00	1.00
800	Guscio fond.	937	1008	1006	1010	3	2	40.0	1.00	1.00
801	Guscio fond.	996	992	1020	994	3	2	40.0	1.00	1.00
802	Guscio fond.	997	1005	1021	1011	3	2	40.0	1.00	1.00
803	Guscio fond.	991	917	1009	990	3	3	40.0	1.00	1.00
804	Guscio fond.	1000	996	994	998	3	2	40.0	1.00	1.00
805	Guscio fond.	995	937	1010	989	3	2	40.0	1.00	1.00
806	Guscio fond.	474	468	945	992	3	3	40.0	1.00	1.00
807	Guscio fond.	992	945	936	1020	3	3	40.0	1.00	1.00
808	Guscio fond.	482	474	992	996	3	2	40.0	1.00	1.00
809	Guscio fond.	479	482	996	1000	3	2	40.0	1.00	1.00
810	Guscio fond.	480	479	1000	1004	3	2	40.0	1.00	1.00
811	Guscio fond.	536	480	1004	1008	3	2	40.0	1.00	1.00
812	Guscio fond.	622	536	1008	937	3	2	40.0	1.00	1.00
813	Guscio fond.	625	622	937	995	3	2	40.0	1.00	1.00
814	Guscio fond.	629	625	995	1005	3	2	40.0	1.00	1.00
815	Guscio fond.	459	629	1005	997	3	2	40.0	1.00	1.00
816	Guscio fond.	460	459	997	917	3	3	40.0	1.00	1.00
817	Guscio fond.	31	460	917	991	3	3	40.0	1.00	1.00
818	Guscio fond.	766	624	31	1025	3	3	40.0	1.00	1.00
819	Guscio fond.	855	766	1025	1026	3	3	40.0	1.00	1.00
820	Guscio fond.	884	855	1026	1027	3	2	40.0	1.00	1.00
821	Guscio fond.	1025	31	991	1007	3	3	40.0	1.00	1.00
822	Guscio fond.	1026	1025	1007	944	3	3	40.0	1.00	1.00
823	Guscio fond.	1027	1026	944	1003	3	2	40.0	1.00	1.00
824	Guscio fond.	936	918	739	1012	3	2	40.0	1.00	1.00
825	Guscio fond.	1020	936	1012	967	3	2	40.0	1.00	1.00
826	Guscio fond.	994	1020	967	1017	3	2	40.0	1.00	1.00
827	Guscio fond.	998	994	1017	1018	3	2	40.0	1.00	1.00
828	Guscio fond.	1002	998	1018	1001	3	2	40.0	1.00	1.00
829	Guscio fond.	1006	1002	1001	1014	3	2	40.0	1.00	1.00
830	Guscio fond.	1010	1006	1014	1015	3	2	40.0	1.00	1.00
831	Guscio fond.	989	1010	1015	1022	3	2	40.0	1.00	1.00
832	Guscio fond.	1021	989	1022	1024	3	2	40.0	1.00	1.00
833	Guscio fond.	1011	1021	1024	1023	3	2	40.0	1.00	1.00
834	Guscio fond.	1009	1011	1023	914	3	2	40.0	1.00	1.00
835	Guscio fond.	990	1009	914	826	3	2	40.0	1.00	1.00
836	Guscio fond.	999	990	826	1013	3	2	40.0	1.00	1.00
837	Guscio fond.	993	999	1013	1016	3	2	40.0	1.00	1.00
838	Guscio fond.	939	993	1016	1019	3	2	40.0	1.00	1.00
839	Guscio fond.	1028	727	3	133	3	3	40.0	1.00	1.00
840	Guscio fond.	947	752	727	1028	3	3	40.0	1.00	1.00
841	Guscio fond.	1037	1028	133	134	3	3	40.0	1.00	1.00
842	Guscio fond.	1038	947	1028	1037	3	3	40.0	1.00	1.00
843	Guscio fond.	1036	787	947	1038	3	2	40.0	1.00	1.00

844	Guscio fond.	1039	1037	134	135	3	2	40.0	1.00	1.00
845	Guscio fond.	1040	1038	1037	1039	3	2	40.0	1.00	1.00
846	Guscio fond.	1035	1036	1038	1040	3	2	40.0	1.00	1.00
847	Guscio fond.	1041	1039	135	136	3	2	40.0	1.00	1.00
848	Guscio fond.	1042	1040	1039	1041	3	2	40.0	1.00	1.00
849	Guscio fond.	1034	1035	1040	1042	3	2	40.0	1.00	1.00
850	Guscio fond.	1043	1041	136	137	3	2	40.0	1.00	1.00
851	Guscio fond.	1044	1042	1041	1043	3	2	40.0	1.00	1.00
852	Guscio fond.	1033	1034	1042	1044	3	2	40.0	1.00	1.00
853	Guscio fond.	1045	1043	137	138	3	2	40.0	1.00	1.00
854	Guscio fond.	1046	1044	1043	1045	3	2	40.0	1.00	1.00
855	Guscio fond.	1032	1033	1044	1046	3	2	40.0	1.00	1.00
856	Guscio fond.	1047	1045	138	139	3	2	40.0	1.00	1.00
857	Guscio fond.	1048	1046	1045	1047	3	2	40.0	1.00	1.00
858	Guscio fond.	1031	1032	1046	1048	3	2	40.0	1.00	1.00
859	Guscio fond.	1049	1047	139	140	3	2	40.0	1.00	1.00
860	Guscio fond.	1050	1048	1047	1049	3	2	40.0	1.00	1.00
861	Guscio fond.	1030	1031	1048	1050	3	2	40.0	1.00	1.00
862	Guscio fond.	66	1049	140	141	3	2	40.0	1.00	1.00
863	Guscio fond.	941	1050	1049	66	3	2	40.0	1.00	1.00
864	Guscio fond.	1029	1030	1050	941	3	2	40.0	1.00	1.00
865	Guscio fond.	746	66	141	142	3	2	40.0	1.00	1.00
866	Guscio fond.	771	941	66	746	3	2	40.0	1.00	1.00
867	Guscio fond.	796	1029	941	771	3	2	40.0	1.00	1.00
868	Guscio fond.	133	3	80	188	3	3	40.0	1.00	1.00

MODELLAZIONE DELLA STRUTTURA: ELEMENTI SOLAIO-PANNELLO

LEGENDA TABELLA DATI SOLAI-PANNELLI

Il programma utilizza per la modellazione elementi a tre o più nodi denominati in generale solaio o pannello.
Ogni elemento solaio-pannello è individuato da una poligonale di nodi 1,2, ..., N.
L'elemento solaio è utilizzato in primo luogo per la modellazione dei carichi agenti sugli elementi strutturali. In secondo luogo può essere utilizzato per la corretta ripartizione delle forze orizzontali agenti nel proprio piano. L'elemento balcone è derivato dall'elemento solaio.
I carichi agenti sugli elementi solaio, raccolti in un archivio, sono direttamente assegnati agli elementi utilizzando le informazioni raccolte nell' archivio (es. i coefficienti combinatori). La tabella seguente riporta i dati utilizzati per la definizione dei carichi e delle masse.
L'elemento pannello è utilizzato solo per l'applicazione dei carichi, quali pesi delle tamponature o spinte dovute al vento o terre. In questo caso i carichi sono applicati in analogia agli altri elementi strutturali (si veda il cap. SCHEMATIZZAZIONE DEI CASI DI CARICO).

Id.Arch.	Identificativo dell' archivio
Tipo	Tipo di carico ***Variab.*** Carico variabile generico ***Var. rid.*** Carico variabile generico con riduzione in funzione dell' area (c.5.5. …) ***Neve*** Carico di neve
G1k	carico permanente (comprensivo del peso proprio)
G2k	carico permanente non strutturale e non compiutamente definito
Qk	carico variabile
Fatt. A	fattore di riduzione del carico variabile (0.5 o 0.75) per tipo "Var.rid."
S sis.	fattore di riduzione del carico variabile per la definizione delle masse sismiche per D.M. 96 (vedi NOTA sul capitolo "normativa di riferimento")
Psi 0	Coefficiente combinatorio dei valori caratteristici delle azioni variabili: ***per valore raro***
Psi 1	Coefficiente combinatorio dei valori caratteristici delle azioni variabili: ***per valore frequente***
Psi 2	Coefficiente combinatorio dei valori caratteristici delle azioni variabili: ***per valore quasi permanente***
Psi S 2	Coefficiente di combinazione che fornisce il valore quasi-permanente dell'azione variabile: ***per la definizione delle masse sismiche***
Fatt. Fi	Coefficiente di correlazione dei carichi per edifici

Ogni elemento è caratterizzato da un insieme di proprietà riportate in tabella che ne completano la modellazione. In particolare per ogni elemento viene indicato in tabella:

Elem	numero dell'elemento
Tipo	codice di comportamento ***S*** elemento utilizzato solo per scarico ***C*** elemento utilizzato per scarico e per modellazione piano rigido ***P*** elemento utilizzato come pannello ***M*** scarico monodirezionale ***B*** scarico bidirezionale
Id.Arch.	Identificativo dell' archivio
Mat	codice del materiale assegnato all'elemento
Spessore	spessore dell'elemento (costante)
Orditura	angolo (rispetto all'asse X) della direzione dei travetti principali

Gk	carico permanente solaio (comprensivo del peso proprio)
Qk	carico variabile solaio
Nodi	numero dei nodi che definiscono l'elemento (5 per riga)

Nel caso in cui si sia proceduto alla progettazione dei solai con le tensioni ammissibili vengono riportate le massime tensioni nell'elemento (massima compressione nel calcestruzzo, massima tensione nell'acciaio, massima tensione tangenziale); nel caso in cui si sia proceduto alla progettazione con il metodo degli stati limite vengono riportati il rapporto x/d e le verifiche per sollecitazioni proporzionali nonché le verifiche in esercizio.

In particolare i simboli utilizzati in tabella assumono il seguente significato:

Elem.	numero identificativo dell'elemento
Stato	Codici di verifica relativi alle tensioni normali e alle tensioni tangenziali
Note	Viene riportato il codice relativo alla sezione(s) e relativo al materiale(m);
Pos.	Ascissa del punto di verifica
F ist, F infi	Frecce instantanee e a tempo infinito
Momento	Momento flettente
Taglio	Sollecitazione di taglio
Af inf.	Area di armatura longitudinale posta all'intradosso della trave
Af sup.	Area di armatura longitudinale posta all'estradosso della trave
AfV	Area dell'armatura atta ad assorbire le azioni di taglio
Beff	Base della sezione di cls per l'assorbimento del taglio
	simboli utilizzati con il metodo delle tensioni ammissibili:
sc max	Massima tensione di compressione del calcestruzzo
sf max	Massima tensione nell'acciaio
tau max	Massima tensione tangenziale nel cls
	simboli utilizzati con il metodo degli stati limite:
x/d	rapporto tra posizione dell'asse neutro e altezza utile alla rottura della sezione (per sola flessione)
verif.	rapporto Sd/Su con sollecitazioni ultime proporzionali: valore minore o uguale a 1 per verifica positiva
Verif.V	rapporto Sd/Su con sollecitazioni taglianti proporzionali valore minore o uguale a 1 per verifica positiva
rRfck	rapporto tra la massima compressione nel calcestruzzo e la tensione fck in combinazioni rare [normalizzato a 1]
rFfck	rapporto tra la massima compressione nel calcestruzzo e la tensione fck in combinazioni frequenti [normalizzato a 1]
rPfck	rapporto tra la massima compressione nel calcestruzzo e la tensione fck in combinazioni quasi permanenti [normalizzato a 1]
rRfyk	rapporto tra la massima tensione nell'acciaio e la tensione fyk in combinazioni frequenti [normalizzato a 1]
rFyk	rapporto tra la massima tensione nell'acciaio e la tensione fyk in combinazioni rare [normalizzato a 1]
rPfyk	rapporto tra la massima tensione nell'acciaio e la tensione fyk in combinazioni quasi permanenti [normalizzato a 1]
wR	apertura caratteristica delle fessure in combinazioni rare [mm]
wF	apertura caratteristica delle fessure in combinazioni frequenti [mm]
wP	apertura caratteristica delle fessure in combinazioni quasi permanenti [mm]

Nel caso in cui si sia proceduto alla verifica delle tamponature secondo il D.M. 17.01.2018 - §7.2.3 viene riportata una tabella riassuntiva delle verifiche degli elementi pannello. La verifica confronta i momenti sollecitanti indotti dal sisma con i momenti resistenti, secondo tre ipotesi, due basate sulla resistenza a pressoflessione della tamponatura ed una basata sul cinematismo a seguito della formazione di tre cerniere plastiche sulla tamponatura (rif. Ufficio di

Vigilanza sulle Costruzioni, Provincia di Terni).
Qualora la tamponatura sia di tipo antiespulsione (nelle due possibili varianti ordinaria o armata) viene condotta una verifica con meccanismo ad arco con degrado di resistenza. La verifica confronta le pressioni sollecitanti indotte dal sisma con le pressioni resistenti che la tamponatura sviluppa attraverso il meccanismo ad arco. La verifica considera anche il degrado di resistenza dovuto al danneggiamento nel piano della tamponatura.
Per quest'ultima tamponatura sono disponibili, in funzione del materiale impiegato (materiale [52] o materiale [53]):

- **Tamponatura Antiespulsione ordinaria Poroton® Cis Edil** sp.30 cm; con metodo di verifica per meccanismo ad arco con degrado di resistenza, sviluppato attraverso i risultati di un progetto di ricerca sperimentale condotto dall'Università degli Studi di Padova.
  Utilizzabile per il materiale [52].
- **Tamponatura Antiespulsione armata Poroton® Cis Edil** sp.30 cm; con metodo di verifica per meccanismo ad arco con degrado di resistenza, sviluppato attraverso i risultati di un progetto di ricerca sperimentale condotto dall'Università degli Studi di Padova.
  Utilizzabile per il materiale [53].

La verifica è stata calibrata sulla base di prove sperimentali sul sistema di Tamponatura Antiespulsione anche in presenza di aperture.
(rif. Rapporti di Prova redatti dal Dipartimento ICEA - Università degli Studi di Padova di test sperimentali condotti sul sistema Tamponatura Antiespulsione di Cis Edil)

In particolare i simboli utilizzati in tabella assumono il seguente significato:

Elem.	Numero identificativo dell'elemento
Stato	Codice di verifica
Ver. c.c.	Verifica nell'ipotesi di trave appoggiata con carico concentrato in mezzeria
Ver. c.d.	Verifica nell'ipotesi di trave appoggiata con carico distribuito
Ver. c.cin.	Verifica nell'ipotesi di cinematismo con formazione di cerniere plastiche in appoggio e mezzeria
Ver. CIS	Rapporto pa/pr (valore minore o uguale a 1 per verifica positiva)
Z	Quota del baricentro dell'elemento
T1	Periodo proprio dell'edificio nella direzione di interesse (ortogonale al pannello)
Ta	Periodo proprio della parete
Sa	Accelerazione massima, adimensionalizzata allo SLV
pa	Pressione sulla parete causata dall'azione sismica
pr	Pressione resistente del meccanismo ad arco
Drift	Spostamento relativo interpiano allo SLV valutato secondo il D.M. 14.01.2018 - § 7.3.3.3
Beta a	Coef. riduttivo per tener conto del danneggiamento del piano dipendente dallo spostamento, ottenuto sperimentalmente

ID Arch.	Tipo	G1k	G2k	Qk	Fatt. A	s sis.	Psi 0	Psi 1	Psi 2	Psi S 2	Fatt. Fi
		daN/cm2	daN/cm2	daN/cm2							
1	Variab.	3.42e-02	3.76e-02	3.00e-02		1.00	0.70	0.70	0.60	0.60	1.00
2	Variab.	3.42e-02	1.61e-02	2.00e-02		1.00	0.0	0.0	0.0	0.0	1.00
3	Variab.	3.42e-02	1.66e-02	3.00e-02		1.00	0.70	0.70	0.60	0.60	1.00

Elem.	Tipo	ID Arch.	Mat.	Spessore	Orditura	G1k	G2k	Qk	Nodo 1/6..	Nodo 2/7..	Nodo 3/8..	Nodo..	Nodo..
						daN/cm2	daN/cm2	daN/cm2					
1	CB	1	m=6	5.0	90.0	3.42e-02	3.76e-02	3.00e-02	4	10	8	2	
2	CB	1	m=6	5.0	0.0	3.42e-02	3.76e-02	3.00e-02	10	16	14	8	
3	CB	1	m=6	5.0	90.0	3.42e-02	3.76e-02	3.00e-02	16	22	20	14	
4	CB	1	m=6	5.0	0.0	3.42e-02	3.76e-02	3.00e-02	22	28	26	20	
5	CB	1	m=6	5.0	90.0	3.42e-02	3.76e-02	3.00e-02	28	34	32	26	
6	CB	1	m=6	5.0	0.0	3.42e-02	3.76e-02	3.00e-02	6	12	10	4	
7	CB	1	m=6	5.0	90.0	3.42e-02	3.76e-02	3.00e-02	12	18	16	10	
8	CB	1	m=6	5.0	0.0	3.42e-02	3.76e-02	3.00e-02	18	24	22	16	
9	CB	1	m=6	5.0	90.0	3.42e-02	3.76e-02	3.00e-02	24	30	28	22	
10	CB	1	m=6	5.0	90.0	3.42e-02	3.76e-02	3.00e-02	37	53	51	35	
11	CB	1	m=6	5.0	0.0	3.42e-02	3.76e-02	3.00e-02	53	61	59	51	

12	CB	1	m=6	5.0	90.0	3.42e-02	3.76e-02	3.00e-02	61	57	40	59
13	CB	1	m=6	5.0	0.0	3.42e-02	3.76e-02	3.00e-02	57	43	45	40
14	CB	1	m=6	5.0	90.0	3.42e-02	3.76e-02	3.00e-02	43	47	49	45
15	CB	3	m=6	5.0	0.0	3.42e-02	1.66e-02	3.00e-02	39	55	53	37
16	CB	3	m=6	5.0	90.0	3.42e-02	1.66e-02	3.00e-02	55	63	61	53
17	CB	3	m=6	5.0	0.0	3.42e-02	1.66e-02	3.00e-02	63	42	57	61
18	CB	3	m=6	5.0	90.0	3.42e-02	1.66e-02	3.00e-02	42	41	43	57
19	CB	2	m=6	5.0	90.0	3.42e-02	1.61e-02	2.00e-02	38	54	52	36
20	CB	2	m=6	5.0	90.0	3.42e-02	1.61e-02	2.00e-02	54	62	60	52
21	CB	2	m=6	5.0	90.0	3.42e-02	1.61e-02	2.00e-02	62	58	56	60
22	CB	2	m=6	5.0	90.0	3.42e-02	1.61e-02	2.00e-02	58	44	46	56
23	CB	2	m=6	5.0	90.0	3.42e-02	1.61e-02	2.00e-02	44	48	50	46
24	CM	2	m=6	5.0	0.0	3.42e-02	1.61e-02	2.00e-02	64	67	54	38
25	CM	2	m=6	5.0	0.0	3.42e-02	1.61e-02	2.00e-02	68	65	44	58
26	CM	2	m=6	5.0	0.0	3.42e-02	1.61e-02	2.00e-02	69	68	58	62
27	CM	2	m=6	5.0	0.0	3.42e-02	1.61e-02	2.00e-02	67	69	62	54

Elem.	**Stato**	**Note**	**f ist**	**f infi**	**Pos.**	**Momento**	**Af inf.**	**Af. sup**	**V N/M**	**x/d**	**Taglio**	**Af V**	**verif. V**	**B eff**
			cm	cm	cm	daN cm	cm2	cm2			daN	cm2		cm
1	ok L	s=9,m=6	-0.18	-0.48	0.0	0.0	0.88	0.0	0.0	0.02	-1416.35	0.0	0.25	50.0
					20.0	2.691e+04	0.88	0.0	0.35	0.02	-1274.72	0.0	0.92	12.0
					200.0	1.416e+05	1.67	0.0	0.98	0.04	0.0	0.0	0.0	12.0
					370.0	3.930e+04	0.88	0.0	0.51	0.02	1203.90	0.0	0.87	12.0
					400.0	0.0	0.78	0.0	0.0	0.02	1416.35	0.0	0.25	50.0
2	ok L	s=9,m=6	-0.29	-0.76	0.0	0.0	0.88	0.0	0.0	0.02	-160.05	0.0	0.03	50.0
					20.0	3134.47	0.88	0.0	0.04	0.02	-153.40	0.0	0.11	12.0
					481.3	3.851e+04	0.88	0.0	0.50	0.02	0.0	0.0	0.0	12.0
					942.5	3134.47	0.88	0.0	0.04	0.02	153.40	0.0	0.11	12.0
					962.5	0.0	0.88	0.0	0.0	0.02	160.05	0.0	0.03	50.0
3	ok L	s=9,m=6	-0.29	-0.76	0.0	0.0	0.74	0.0	0.0	0.02	-1566.10	0.0	0.27	50.0
					30.0	4.385e+04	0.93	0.0	0.54	0.02	-1357.28	0.0	0.98	12.0
					225.0	1.762e+05	2.09	0.0	0.98	0.05	0.0	0.0	0.0	12.0
					420.0	4.385e+04	0.93	0.0	0.54	0.02	1357.28	0.0	0.98	12.0
					450.0	0.0	0.74	0.0	0.0	0.02	1566.10	0.0	0.27	50.0
4	ok L	s=9,m=6	-0.29	-0.76	0.0	0.0	0.88	0.0	0.0	0.02	-160.05	0.0	0.03	50.0
					20.0	3134.47	0.88	0.0	0.04	0.02	-153.40	0.0	0.11	12.0
					481.3	3.851e+04	0.88	0.0	0.50	0.02	0.0	0.0	0.0	12.0
					942.5	3134.47	0.88	0.0	0.04	0.02	153.40	0.0	0.11	12.0
					962.5	0.0	0.88	0.0	0.0	0.02	160.05	0.0	0.03	50.0
5	ok L	s=9,m=6	-0.16	-0.41	0.0	0.0	0.79	0.0	0.0	0.02	-1368.86	0.0	0.24	50.0
					30.0	3.787e+04	0.88	0.0	0.49	0.02	-1155.53	0.0	0.84	12.0
					192.5	1.318e+05	1.55	0.0	0.98	0.04	0.0	0.0	0.0	12.0
					365.0	2.596e+04	0.88	0.0	0.34	0.02	1226.64	0.0	0.89	12.0
					385.0	0.0	0.88	0.0	0.0	0.02	1368.86	0.0	0.24	50.0
6	ok L	s=9,m=6	-0.18	-0.46	0.0	0.0	0.88	0.0	0.0	0.02	-180.47	0.0	0.03	50.0
					20.0	3517.57	0.88	0.0	0.05	0.02	-171.28	0.0	0.12	12.0
					392.8	3.544e+04	0.88	0.0	0.46	0.02	0.0	0.0	0.0	12.0
					765.5	3517.57	0.88	0.0	0.05	0.02	171.28	0.0	0.12	12.0
					785.5	0.0	0.88	0.0	0.0	0.02	180.47	0.0	0.03	50.0
7	ok L	s=9,m=6	-0.27	-0.72	0.0	0.0	0.74	0.0	0.0	0.02	-1481.36	0.0	0.26	50.0
					30.0	4.148e+04	0.88	0.0	0.54	0.02	-1283.85	0.0	0.93	12.0
					225.0	1.667e+05	1.97	0.0	0.98	0.05	0.0	0.0	0.0	12.0
					420.0	4.148e+04	0.88	0.0	0.54	0.02	1283.85	0.0	0.93	12.0
					450.0	0.0	0.74	0.0	0.0	0.02	1481.36	0.0	0.26	50.0
8	ok L	s=9,m=6	-0.27	-0.72	0.0	0.0	0.88	0.0	0.0	0.02	-278.52	0.0	0.05	50.0
					20.0	5428.62	0.88	0.0	0.07	0.02	-264.34	0.0	0.19	12.0
					392.8	5.469e+04	0.88	0.0	0.72	0.02	0.0	0.0	0.0	12.0
					765.5	5428.62	0.88	0.0	0.07	0.02	264.34	0.0	0.19	12.0
					785.5	0.0	0.88	0.0	0.0	0.02	278.52	0.0	0.05	50.0
9	ok L	s=9,m=6	-0.27	-0.72	0.0	0.0	0.74	0.0	0.0	0.02	-1481.36	0.0	0.26	50.0
					30.0	4.148e+04	0.88	0.0	0.54	0.02	-1283.85	0.0	0.93	12.0
					225.0	1.667e+05	1.97	0.0	0.98	0.05	0.0	0.0	0.0	12.0
					420.0	4.148e+04	0.88	0.0	0.54	0.02	1283.85	0.0	0.93	12.0
					450.0	0.0	0.74	0.0	0.0	0.02	1481.36	0.0	0.26	50.0
10	ok L	s=9,m=6	-0.18	-0.48	0.0	0.0	0.88	0.0	0.0	0.02	-1416.35	0.0	0.25	50.0
					20.0	2.691e+04	0.88	0.0	0.35	0.02	-1274.72	0.0	0.92	12.0
					200.0	1.416e+05	1.67	0.0	0.98	0.04	0.0	0.0	0.0	12.0
...														
27	ok L	s=9,m=6	-0.02	-0.04	245.0	0.0	0.88	0.0	0.0	0.02	603.99	0.0	0.10	50.0
Elem.			**f ist**	**f infi**		**Momento**	**Af inf.**	**Af. sup**	**V N/M**	**x/d**	**Taglio**	**Af V**	**verif. V**	
						0.0					-1566.10			
			-0.02	-0.04		1.762e+05	2.09	0.0	0.99	0.05	1566.10	0.0	1.00	

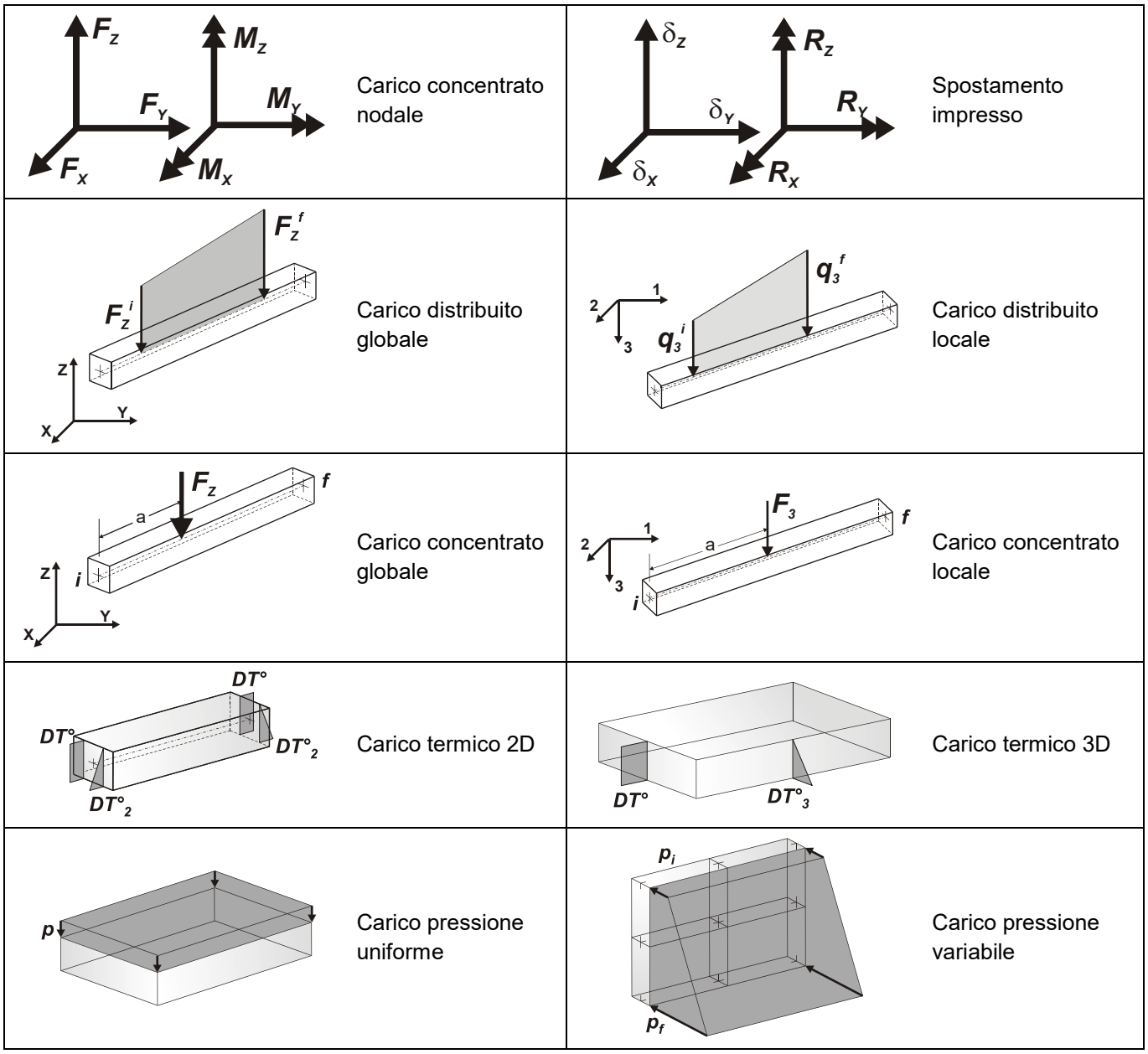
Elem.	Pos.	rRfck	rFfck	rPfck	rRfyk	rFfyk	rPfyk	wR	wF	wP
	cm							mm	mm	mm
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	20.0	0.06	0.06	0.07	0.28	0.25	0.24	0.0	0.0	0.0
	200.0	0.25	0.23	0.30	0.78	0.71	0.69	0.13	0.13	0.13
	370.0	0.09	0.08	0.11	0.40	0.37	0.36	0.0	0.0	0.0
	400.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	20.0	7.33e-03	6.68e-03	8.62e-03	0.03	0.03	0.03	0.0	0.0	0.0
	481.3	0.09	0.08	0.11	0.40	0.36	0.35	0.0	0.0	0.0
	942.5	7.33e-03	6.68e-03	8.62e-03	0.03	0.03	0.03	0.0	0.0	0.0
	962.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	30.0	0.10	0.09	0.12	0.43	0.39	0.38	0.0	0.0	0.0
	225.0	0.28	0.26	0.33	0.78	0.71	0.69	0.13	0.13	0.12
	420.0	0.10	0.09	0.12	0.43	0.39	0.38	0.0	0.0	0.0
	450.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	20.0	7.33e-03	6.68e-03	8.62e-03	0.03	0.03	0.03	0.0	0.0	0.0
	481.3	0.09	0.08	0.11	0.40	0.36	0.35	0.0	0.0	0.0
	942.5	7.33e-03	6.68e-03	8.62e-03	0.03	0.03	0.03	0.0	0.0	0.0
	962.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	30.0	0.09	0.08	0.10	0.39	0.35	0.34	0.0	0.0	0.0
	192.5	0.24	0.22	0.28	0.78	0.71	0.69	0.13	0.14	0.13
	365.0	0.06	0.06	0.07	0.27	0.24	0.24	0.0	0.0	0.0
	385.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	20.0	8.22e-03	7.50e-03	9.67e-03	0.04	0.03	0.03	0.0	0.0	0.0
	392.8	0.08	0.08	0.10	0.37	0.33	0.32	0.0	0.0	0.0
	765.5	8.22e-03	7.50e-03	9.67e-03	0.04	0.03	0.03	0.0	0.0	0.0
	785.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	30.0	0.10	0.09	0.11	0.43	0.39	0.38	0.0	0.0	0.0
	225.0	0.28	0.25	0.32	0.78	0.71	0.69	0.13	0.13	0.12
	420.0	0.10	0.09	0.11	0.43	0.39	0.38	0.0	0.0	0.0
	450.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	20.0	0.01	0.01	0.01	0.06	0.05	0.05	0.0	0.0	0.0
	392.8	0.13	0.12	0.15	0.56	0.51	0.50	0.0	0.0	0.0
	765.5	0.01	0.01	0.01	0.06	0.05	0.05	0.0	0.0	0.0
	785.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	30.0	0.10	0.09	0.11	0.43	0.39	0.38	0.0	0.0	0.0
	225.0	0.28	0.25	0.32	0.78	0.71	0.69	0.13	0.13	0.12
	420.0	0.10	0.09	0.11	0.43	0.39	0.38	0.0	0.0	0.0
	450.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	20.0	0.06	0.06	0.07	0.28	0.25	0.24	0.0	0.0	0.0
	200.0	0.25	0.23	0.30	0.78	0.71	0.69	0.13	0.13	0.13
...										
27	245.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Elem.		**rRfck**	**rFfck**	**rPfck**	**rRfyk**	**rFfyk**	**rPfyk**	**wR**	**wF**	**wP**
		0.28	0.26	0.33	0.80	0.71	0.69	0.14	0.14	0.13

MODELLAZIONE DELLE AZIONI

LEGENDA TABELLA DATI AZIONI

Il programma consente l'uso di diverse tipologie di carico (azioni). Le azioni utilizzate nella modellazione sono individuate da una sigla identificativa ed un codice numerico (gli elementi strutturali richiamano quest'ultimo nella propria descrizione). Per ogni azione applicata alla struttura viene di riportato il codice, il tipo e la sigla identificativa. Le tabelle successive dettagliano i valori caratteristici di ogni azione in relazione al tipo. Le tabelle riportano infatti i seguenti dati in relazione al tipo:

1	**carico concentrato nodale** 6 dati (forza Fx, Fy, Fz, momento Mx, My, Mz)
2	**spostamento nodale impresso** 6 dati (spostamento Tx,Ty,Tz, rotazione Rx,Ry,Rz)
3	**carico distribuito globale su elemento tipo trave** 7 dati (fx,fy,fz,mx,my,mz,ascissa di inizio carico) 7 dati (fx,fy,fz,mx,my,mz,ascissa di fine carico)
4	**carico distribuito locale su elemento tipo trave** 7 dati (f1,f2,f3,m1,m2,m3,ascissa di inizio carico) 7 dati (f1,f2,f3,m1,m2,m3,ascissa di fine carico)
5	**carico concentrato globale su elemento tipo trave** 7 dati (Fx,Fy,Fz,Mx,My,Mz,ascissa di carico)
6	**carico concentrato locale su elemento tipo trave** 7 dati (F1, F2, F3, M1, M2, M3, ascissa di carico)
7	**variazione termica applicata ad elemento tipo trave** 7 dati (variazioni termiche: uniforme, media e differenza in altezza e larghezza al nodo iniziale e finale)
8	**carico di pressione uniforme su elemento tipo piastra** 1 dato (pressione)
9	**carico di pressione variabile su elemento tipo piastra** 4 dati (pressione, quota, pressione, quota)
10	**variazione termica applicata ad elemento tipo piastra** 2 dati (variazioni termiche: media e differenza nello spessore)
11	**carico variabile generale su elementi tipo trave e piastra** 1 dato descrizione della tipologia 4 dati per segmento (posizione, valore, posizione, valore) la tipologia precisa l'ascissa di definizione, la direzione del carico, la modalità di carico e la larghezza d'influenza per gli elementi tipo trave
12	**gruppo di carichi con impronta su piastra** 9 dati (numero di ripetizioni in direzione X e Y, valore di ciascun carico, posizione centrale del primo, dimensioni dell' impronta, interasse tra i carichi



Tipo	carico distribuito globale su trave

Id	Tipo	Pos.	fx	fy	fz	mx	my	mz
		cm	daN/cm	daN/cm	daN/cm	daN	daN	daN
1	TAMPONATURA I PIANO-DG:Fzi=-10.67 Fzf=-10.67	0.0	0.0	0.0	-10.67	0.0	0.0	0.0
		0.0	0.0	0.0	-10.67	0.0	0.0	0.0
2	TAMPONATURA II PIANO-DG:Fzi=-9.48 Fzf=-9.48	0.0	0.0	0.0	-9.48	0.0	0.0	0.0
		0.0	0.0	0.0	-9.48	0.0	0.0	0.0
3	TAMPONATURA II PIANO-DG:Fzi=-7.69 Fzf=-7.69	0.0	0.0	0.0	-7.69	0.0	0.0	0.0
		0.0	0.0	0.0	-7.69	0.0	0.0	0.0

SCHEMATIZZAZIONE DEI CASI DI CARICO

LEGENDA TABELLA CASI DI CARICO

Il programma consente l'applicazione di diverse tipologie di casi di carico.
Sono previsti i seguenti 11 tipi di casi di carico:

	Sigla	***Tipo***	***Descrizione***
1	**Ggk**	A	caso di carico comprensivo del peso proprio struttura
2	**Gk**	NA	caso di carico con azioni permanenti
3	**Qk**	NA	caso di carico con azioni variabili
4	**Gsk**	A	caso di carico comprensivo dei carichi permanenti sui solai e sulle coperture
5	**Qsk**	A	caso di carico comprensivo dei carichi variabili sui solai
6	**Qnk**	A	caso di carico comprensivo dei carichi di neve sulle coperture
7	**Qtk**	SA	caso di carico comprensivo di una variazione termica agente sulla struttura
8	**Qvk**	NA	caso di carico comprensivo di azioni da vento sulla struttura
9	**Esk**	SA	caso di carico sismico con analisi statica equivalente
10	**Edk**	SA	caso di carico sismico con analisi dinamica
11	**Etk**	NA	caso di carico comprensivo di azioni derivanti dall' incremento di spinta delle terre in condizione sismica
12	**Pk**	NA	caso di carico comprensivo di azioni derivanti da coazioni, cedimenti e precompressioni

Sono di tipo automatico A (ossia non prevedono introduzione dati da parte dell'utente) i seguenti casi di carico: 1-Ggk; 4-Gsk; 5-Qsk; 6-Qnk.

Sono di tipo semi-automatico SA (ossia prevedono una minima introduzione dati da parte dell'utente) i seguenti casi di carico:
7-Qtk, in quanto richiede solo il valore della variazione termica;
9-Esk e 10-Edk, in quanto richiedono il valore dell'angolo di ingresso del sisma e l'individuazione dei casi di carico partecipanti alla definizione delle masse.

Sono di tipo non automatico NA ossia prevedono la diretta applicazione di carichi generici agli elementi strutturali (si veda il precedente punto Modellazione delle Azioni) i restanti casi di carico.

Nella tabella successiva vengono riportati i casi di carico agenti sulla struttura, con l'indicazione dei dati relativi al caso di carico stesso:
Numero Tipo e *Sigla identificativa*, *Valore di riferimento* del caso di carico (se previsto).

In successione, per i casi di carico non automatici, viene riportato l'elenco di nodi ed elementi direttamente caricati con la sigla identificativa del carico.

Per i casi di carico di tipo sismico (9-Esk e 10-Edk), viene riportata la tabella di definizione delle masse: per ogni caso di carico partecipante alla definizione delle masse viene indicata la relativa aliquota (partecipazione) considerata. Si precisa che per i caso di carico 5-Qsk e 6-Qnk la partecipazione è prevista localmente per ogni elemento solaio o copertura presente nel modello (si confronti il valore Sksol nel capitolo relativo agli elementi solaio) e pertanto la loro partecipazione è di norma pari a uno.

CDC	Tipo	Sigla Id	Note
1	Ggk	CDC=Ggk (peso proprio della struttura)	
2	Gsk	CDC=G1sk (permanente solai-coperture)	
3	Gsk	CDC=G2sk (permanente solai-coperture n.c.d.)	
4	Qsk	CDC=Qsk (variabile solai)	
5	Edk	CDC=Ed (dinamico SLU) alfa=0.0 (ecc. +)	partecipazione:1.00 per 1 CDC=Ggk (peso proprio della struttura)
			partecipazione:1.00 per 2 CDC=G1sk (permanente solai-coperture)
			partecipazione:1.00 per 3 CDC=G2sk (permanente solai-coperture n.c.d.)

CDC	Tipo	Sigla Id	Note
			partecipazione:1.00 per 4 CDC=Qsk (variabile solai)
6	Edk	CDC=Ed (dinamico SLU) alfa=0.0 (ecc. -)	come precedente CDC sismico
7	Edk	CDC=Ed (dinamico SLU) alfa=90.00 (ecc. +)	come precedente CDC sismico
8	Edk	CDC=Ed (dinamico SLU) alfa=90.00 (ecc. -)	come precedente CDC sismico
9	Edk	CDC=Ed (dinamico SLD) alfa=0.0 (ecc. +)	come precedente CDC sismico
10	Edk	CDC=Ed (dinamico SLD) alfa=0.0 (ecc. -)	come precedente CDC sismico
11	Edk	CDC=Ed (dinamico SLD) alfa=90.00 (ecc. +)	come precedente CDC sismico
12	Edk	CDC=Ed (dinamico SLD) alfa=90.00 (ecc. -)	come precedente CDC sismico
13	Gk	CDC=G2k (permanente generico n.c.d.) TOMPAGNO	Azioni applicate:
			D2 : 23 Azione : TAMPONATURA I PIANO-DG:Fzi=-10.67 Fzf=-10.67
			D2 : 25 Azione : TAMPONATURA I PIANO-DG:Fzi=-10.67 Fzf=-10.67
			D2 : 39 Azione : TAMPONATURA I PIANO-DG:Fzi=-10.67 Fzf=-10.67
			D2 : 45 Azione : TAMPONATURA I PIANO-DG:Fzi=-10.67 Fzf=-10.67
			D2 : 51 Azione : TAMPONATURA I PIANO-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 61 a 67 Azione : TAMPONATURA I PIANO-DG:Fzi=-10.67 Fzf=-10.67
			D2 : 77 Azione : TAMPONATURA I PIANO-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 92 a 93 Azione : TAMPONATURA II PIANO-DG:Fzi=-7.69 Fzf=-7.69
			D2 : 100 Azione : TAMPONATURA II PIANO-DG:Fzi=-7.69 Fzf=-7.69
			D2 : 102 Azione : TAMPONATURA II PIANO-DG:Fzi=-9.48 Fzf=-9.48
			D2 :da 104 a 105 Azione : TAMPONATURA II PIANO-DG:Fzi=-9.48 Fzf=-9.48
			D2 :da 113 a 114 Azione : TAMPONATURA II PIANO-DG:Fzi=-7.69 Fzf=-7.69
			D2 : 120 Azione : TAMPONATURA II PIANO-DG:Fzi=-9.48 Fzf=-9.48
			D2 :da 122 a 123 Azione : TAMPONATURA II PIANO-DG:Fzi=-9.48 Fzf=-9.48
			D2 :da 130 a 131 Azione : TAMPONATURA II PIANO-DG:Fzi=-7.69 Fzf=-7.69
			D2 : 133 Azione : TAMPONATURA II PIANO-DG:Fzi=-7.69 Fzf=-7.69
			D2 : 134 Azione : TAMPONATURA II PIANO-DG:Fzi=-9.48 Fzf=-9.48
			D2 : 136 Azione : TAMPONATURA II PIANO-DG:Fzi=-9.48 Fzf=-9.48
			D2 :da 139 a 140 Azione : TAMPONATURA II PIANO-DG:Fzi=-7.69 Fzf=-7.69
			D2 : 142 Azione : TAMPONATURA II PIANO-DG:Fzi=-9.48 Fzf=-9.48
			D2 : 144 Azione : TAMPONATURA II PIANO-DG:Fzi=-9.48 Fzf=-9.48
			D2 : 146 Azione : TAMPONATURA II PIANO-DG:Fzi=-7.69 Fzf=-7.69
			D2 :da 147 a 148 Azione : TAMPONATURA II PIANO-DG:Fzi=-9.48 Fzf=-9.48
			D2 :da 151 a 155 Azione : TAMPONATURA I PIANO-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 165 a 171 Azione : TAMPONATURA I PIANO-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 178 a 182 Azione : TAMPONATURA I PIANO-DG:Fzi=-10.67 Fzf=-10.67
			D2 : 188 Azione : TAMPONATURA I PIANO-DG:Fzi=-10.67 Fzf=-10.67
			D2 : 192 Azione : TAMPONATURA I PIANO-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 201 a 207 Azione : TAMPONATURA I PIANO-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 210 a 214 Azione : TAMPONATURA I PIANO-DG:Fzi=-10.67 Fzf=-10.67
			D2 : 224 Azione : TAMPONATURA I PIANO-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 230 a 235 Azione : TAMPONATURA I PIANO-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 237 a 242 Azione : TAMPONATURA I PIANO-DG:Fzi=-10.67 Fzf=-10.67
			D2 : 252 Azione : TAMPONATURA I PIANO-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 258 a 263 Azione : TAMPONATURA I PIANO-DG:Fzi=-10.67 Fzf=-10.67
			D2 : 271 Azione : TAMPONATURA I PIANO-DG:Fzi=-10.67 Fzf=-10.67
			D2 : 275 Azione : TAMPONATURA I PIANO-DG:Fzi=-10.67 Fzf=-10.67
			D2 : 281 Azione : TAMPONATURA I PIANO-DG:Fzi=-10.67 Fzf=-10.67
			D2 : 288 Azione : TAMPONATURA I PIANO-DG:Fzi=-10.67 Fzf=-10.67
			D2 : 293 Azione : TAMPONATURA I PIANO-DG:Fzi=-10.67 Fzf=-10.67
			D2 : 299 Azione : TAMPONATURA I PIANO-DG:Fzi=-10.67 Fzf=-10.67
			D2 : 304 Azione : TAMPONATURA I PIANO-DG:Fzi=-10.67 Fzf=-10.67
			D2 : 310 Azione : TAMPONATURA I PIANO-DG:Fzi=-10.67 Fzf=-10.67

DEFINIZIONE DELLE COMBINAZIONI

LEGENDA TABELLA COMBINAZIONI DI CARICO

Il programma combina i diversi tipi di casi di carico (CDC) secondo le regole previste dalla normativa vigente.
Le combinazioni previste sono destinate al controllo di sicurezza della struttura ed alla verifica degli spostamenti e delle sollecitazioni.

La prima tabella delle combinazioni riportata di seguito comprende le seguenti informazioni: Numero, Tipo, Sigla identificativa. Una seconda tabella riporta il peso nella combinazione assunto per ogni caso di carico.

Ai fini delle verifiche degli stati limite si definiscono le seguenti combinazioni delle azioni:
***Combinazione fondamentale** SLU*

$\gamma G1 \cdot G1 + \gamma G2 \cdot G2 + \gamma P \cdot P + \gamma Q1 \cdot Qk1 + \gamma Q2 \cdot \psi 02 \cdot Qk2 + \gamma Q3 \cdot \psi 03 \cdot Qk3 + \ldots$

***Combinazione caratteristica** (rara) SLE*

$G1 + G2 + P + Qk1 + \psi 02 \cdot Qk2 + \psi 03 \cdot Qk3 + \ldots$

***Combinazione frequente** SLE*

$G1 + G2 + P + \psi 11 \cdot Qk1 + \psi 22 \cdot Qk2 + \psi 23 \cdot Qk3 + \ldots$

***Combinazione quasi permanente** SLE*

$G1 + G2 + P + \psi 21 \cdot Qk1 + \psi 22 \cdot Qk2 + \psi 23 \cdot Qk3 + \ldots$

***Combinazione sismica**, impiegata per gli stati limite ultimi e di esercizio connessi all'azione sismica E*

$E + G1 + G2 + P + \psi 21 \cdot Qk1 + \psi 22 \cdot Qk2 + \ldots$

***Combinazione eccezionale**, impiegata per gli stati limite connessi alle azioni eccezionali*

$G1 + G2 + Ad + P + \psi 21 \cdot Qk1 + \psi 22 \cdot Qk2 + \ldots$

Dove:

NTC 2018 Tabella 2.5.I

Destinazione d'uso/azione	**ψ0**	**ψ1**	**ψ2**
Categoria A residenziali	0,70	0,50	0,30
Categoria B uffici	0,70	0,50	0,30
Categoria C ambienti suscettibili di affollamento	0,70	0,70	0,60
Categoria D ambienti ad uso commerciale	0,70	0,70	0,60
Categoria E biblioteche, archivi, magazzini,…	1,00	0,90	0,80
Categoria F Rimesse e parcheggi (autoveicoli <= 30kN)	0,70	0,70	0,60
Categoria G Rimesse e parcheggi (autoveicoli > 30kN)	0,70	0,50	0,30
Categoria H Coperture	0,00	0,00	0,00
Vento	0,60	0,20	0,00
Neve a quota <= 1000 m	0,50	0,20	0,00
Neve a quota > 1000 m	0,70	0,50	0,20
Variazioni Termiche	0,60	0,50	0,00

Nelle verifiche possono essere adottati in alternativa due diversi approcci progettuali:
- per l'approccio 1 si considerano due diverse combinazioni di gruppi di coefficienti di sicurezza parziali per le azioni, per i materiali e per la resistenza globale (combinazione 1 con coefficienti A1 e combinazione 2 con coefficienti A2),
- per l'approccio 2 si definisce un'unica combinazione per le azioni, per la resistenza dei materiali e per la resistenza globale (con coefficienti A1).

NTC 2018 Tabella 2.6.I

	Coefficiente γf	**EQU**	**A1**	**A2**

Carichi permanenti	*Favorevoli*	*$\gamma G1$*	*0,9*	*1,0*	*1,0*
	Sfavorevoli		*1,1*	*1,3*	*1,0*
Carichi permanenti non strutturali *(Non compiutamente definiti)*	*Favorevoli*	*$\gamma G2$*	*0,8*	*0,8*	*0,8*
	Sfavorevoli		*1,5*	*1,5*	*1,3*
Carichi variabili	*Favorevoli*	*γQi*	*0,0*	*0,0*	*0,0*
	Sfavorevoli		*1,5*	*1,5*	*1,3*

Cmb	Tipo	Sigla Id	effetto P-delta
1	SLU	Comb. SLU A1 1	
2	SLU	Comb. SLU A1 2	
3	SLU	Comb. SLU A1 3	
4	SLU	Comb. SLU A1 4	
5	SLU	Comb. SLU A1 (SLV sism.) 5	SI
6	SLU	Comb. SLU A1 (SLV sism.) 6	SI
7	SLU	Comb. SLU A1 (SLV sism.) 7	SI
8	SLU	Comb. SLU A1 (SLV sism.) 8	SI
9	SLU	Comb. SLU A1 (SLV sism.) 9	SI
10	SLU	Comb. SLU A1 (SLV sism.) 10	SI
11	SLU	Comb. SLU A1 (SLV sism.) 11	SI
12	SLU	Comb. SLU A1 (SLV sism.) 12	SI
13	SLU	Comb. SLU A1 (SLV sism.) 13	SI
14	SLU	Comb. SLU A1 (SLV sism.) 14	SI
15	SLU	Comb. SLU A1 (SLV sism.) 15	SI
16	SLU	Comb. SLU A1 (SLV sism.) 16	SI
17	SLU	Comb. SLU A1 (SLV sism.) 17	SI
18	SLU	Comb. SLU A1 (SLV sism.) 18	SI
19	SLU	Comb. SLU A1 (SLV sism.) 19	SI
20	SLU	Comb. SLU A1 (SLV sism.) 20	SI
21	SLU	Comb. SLU A1 (SLV sism.) 21	SI
22	SLU	Comb. SLU A1 (SLV sism.) 22	SI
23	SLU	Comb. SLU A1 (SLV sism.) 23	SI
24	SLU	Comb. SLU A1 (SLV sism.) 24	SI
25	SLU	Comb. SLU A1 (SLV sism.) 25	SI
26	SLU	Comb. SLU A1 (SLV sism.) 26	SI
27	SLU	Comb. SLU A1 (SLV sism.) 27	SI
28	SLU	Comb. SLU A1 (SLV sism.) 28	SI
29	SLU	Comb. SLU A1 (SLV sism.) 29	SI
30	SLU	Comb. SLU A1 (SLV sism.) 30	SI
31	SLU	Comb. SLU A1 (SLV sism.) 31	SI
32	SLU	Comb. SLU A1 (SLV sism.) 32	SI
33	SLU	Comb. SLU A1 (SLV sism.) 33	SI
34	SLU	Comb. SLU A1 (SLV sism.) 34	SI
35	SLU	Comb. SLU A1 (SLV sism.) 35	SI
36	SLU	Comb. SLU A1 (SLV sism.) 36	SI
37	SLD(sis)	Comb. SLE (SLD Danno sism.) 37	SI
38	SLD(sis)	Comb. SLE (SLD Danno sism.) 38	SI
39	SLD(sis)	Comb. SLE (SLD Danno sism.) 39	SI
40	SLD(sis)	Comb. SLE (SLD Danno sism.) 40	SI
41	SLD(sis)	Comb. SLE (SLD Danno sism.) 41	SI
42	SLD(sis)	Comb. SLE (SLD Danno sism.) 42	SI
43	SLD(sis)	Comb. SLE (SLD Danno sism.) 43	SI
44	SLD(sis)	Comb. SLE (SLD Danno sism.) 44	SI
45	SLD(sis)	Comb. SLE (SLD Danno sism.) 45	SI
46	SLD(sis)	Comb. SLE (SLD Danno sism.) 46	SI
47	SLD(sis)	Comb. SLE (SLD Danno sism.) 47	SI
48	SLD(sis)	Comb. SLE (SLD Danno sism.) 48	SI
49	SLD(sis)	Comb. SLE (SLD Danno sism.) 49	SI
50	SLD(sis)	Comb. SLE (SLD Danno sism.) 50	SI
51	SLD(sis)	Comb. SLE (SLD Danno sism.) 51	SI
52	SLD(sis)	Comb. SLE (SLD Danno sism.) 52	SI
53	SLD(sis)	Comb. SLE (SLD Danno sism.) 53	SI
54	SLD(sis)	Comb. SLE (SLD Danno sism.) 54	SI
55	SLD(sis)	Comb. SLE (SLD Danno sism.) 55	SI
56	SLD(sis)	Comb. SLE (SLD Danno sism.) 56	SI
57	SLD(sis)	Comb. SLE (SLD Danno sism.) 57	SI
58	SLD(sis)	Comb. SLE (SLD Danno sism.) 58	SI

Cmb	Tipo	Sigla Id	effetto P-delta
59	SLD(sis)	Comb. SLE (SLD Danno sism.) 59	SI
60	SLD(sis)	Comb. SLE (SLD Danno sism.) 60	SI
61	SLD(sis)	Comb. SLE (SLD Danno sism.) 61	SI
62	SLD(sis)	Comb. SLE (SLD Danno sism.) 62	SI
63	SLD(sis)	Comb. SLE (SLD Danno sism.) 63	SI
64	SLD(sis)	Comb. SLE (SLD Danno sism.) 64	SI
65	SLD(sis)	Comb. SLE (SLD Danno sism.) 65	SI
66	SLD(sis)	Comb. SLE (SLD Danno sism.) 66	SI
67	SLD(sis)	Comb. SLE (SLD Danno sism.) 67	SI
68	SLD(sis)	Comb. SLE (SLD Danno sism.) 68	SI
69	SLE(r)	Comb. SLE(rara) 69	
70	SLE(r)	Comb. SLE(rara) 70	
71	SLE(f)	Comb. SLE(freq.) 71	
72	SLE(f)	Comb. SLE(freq.) 72	
73	SLE(p)	Comb. SLE(perm.) 73	
74	SLE(p)	Comb. SLE(perm.) 74	

Cmb	CDC 1/15...	CDC 2/16...	CDC 3/17...	CDC 4/18...	CDC 5/19...	CDC 6/20...	CDC 7/21...	CDC 8/22...	CDC 9/23...	CDC 10/24...	CDC 11/25...	CDC 12/26...	CDC 13/27...	CDC 14/28...
1	1.30	1.30	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.50	
2	1.30	1.30	1.50	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.50	
3	1.00	1.00	0.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.80	
4	1.00	1.00	0.80	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.80	
5	1.00	1.00	1.00	0.60	-1.00	0.0	-0.30	0.0	0.0	0.0	0.0	0.0	1.00	
6	1.00	1.00	1.00	0.60	-1.00	0.0	0.30	0.0	0.0	0.0	0.0	0.0	1.00	
7	1.00	1.00	1.00	0.60	1.00	0.0	-0.30	0.0	0.0	0.0	0.0	0.0	1.00	
8	1.00	1.00	1.00	0.60	1.00	0.0	0.30	0.0	0.0	0.0	0.0	0.0	1.00	
9	1.00	1.00	1.00	0.60	-1.00	0.0	0.0	-0.30	0.0	0.0	0.0	0.0	1.00	
10	1.00	1.00	1.00	0.60	-1.00	0.0	0.0	0.30	0.0	0.0	0.0	0.0	1.00	
11	1.00	1.00	1.00	0.60	1.00	0.0	0.0	-0.30	0.0	0.0	0.0	0.0	1.00	
12	1.00	1.00	1.00	0.60	1.00	0.0	0.0	0.30	0.0	0.0	0.0	0.0	1.00	
13	1.00	1.00	1.00	0.60	0.0	-1.00	-0.30	0.0	0.0	0.0	0.0	0.0	1.00	
14	1.00	1.00	1.00	0.60	0.0	-1.00	0.30	0.0	0.0	0.0	0.0	0.0	1.00	
15	1.00	1.00	1.00	0.60	0.0	1.00	-0.30	0.0	0.0	0.0	0.0	0.0	1.00	
16	1.00	1.00	1.00	0.60	0.0	1.00	0.30	0.0	0.0	0.0	0.0	0.0	1.00	
17	1.00	1.00	1.00	0.60	0.0	-1.00	0.0	-0.30	0.0	0.0	0.0	0.0	1.00	
18	1.00	1.00	1.00	0.60	0.0	-1.00	0.0	0.30	0.0	0.0	0.0	0.0	1.00	
19	1.00	1.00	1.00	0.60	0.0	1.00	0.0	-0.30	0.0	0.0	0.0	0.0	1.00	
20	1.00	1.00	1.00	0.60	0.0	1.00	0.0	0.30	0.0	0.0	0.0	0.0	1.00	
21	1.00	1.00	1.00	0.60	-0.30	0.0	-1.00	0.0	0.0	0.0	0.0	0.0	1.00	
22	1.00	1.00	1.00	0.60	-0.30	0.0	1.00	0.0	0.0	0.0	0.0	0.0	1.00	
23	1.00	1.00	1.00	0.60	0.30	0.0	-1.00	0.0	0.0	0.0	0.0	0.0	1.00	
24	1.00	1.00	1.00	0.60	0.30	0.0	1.00	0.0	0.0	0.0	0.0	0.0	1.00	
25	1.00	1.00	1.00	0.60	0.0	-0.30	-1.00	0.0	0.0	0.0	0.0	0.0	1.00	
26	1.00	1.00	1.00	0.60	0.0	-0.30	1.00	0.0	0.0	0.0	0.0	0.0	1.00	
27	1.00	1.00	1.00	0.60	0.0	0.30	-1.00	0.0	0.0	0.0	0.0	0.0	1.00	
28	1.00	1.00	1.00	0.60	0.0	0.30	1.00	0.0	0.0	0.0	0.0	0.0	1.00	
29	1.00	1.00	1.00	0.60	-0.30	0.0	0.0	-1.00	0.0	0.0	0.0	0.0	1.00	
30	1.00	1.00	1.00	0.60	-0.30	0.0	0.0	1.00	0.0	0.0	0.0	0.0	1.00	
31	1.00	1.00	1.00	0.60	0.30	0.0	0.0	-1.00	0.0	0.0	0.0	0.0	1.00	
32	1.00	1.00	1.00	0.60	0.30	0.0	0.0	1.00	0.0	0.0	0.0	0.0	1.00	
33	1.00	1.00	1.00	0.60	0.0	-0.30	0.0	-1.00	0.0	0.0	0.0	0.0	1.00	
34	1.00	1.00	1.00	0.60	0.0	-0.30	0.0	1.00	0.0	0.0	0.0	0.0	1.00	
35	1.00	1.00	1.00	0.60	0.0	0.30	0.0	-1.00	0.0	0.0	0.0	0.0	1.00	
36	1.00	1.00	1.00	0.60	0.0	0.30	0.0	1.00	0.0	0.0	0.0	0.0	1.00	
37	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	-1.00	0.0	-0.30	0.0	1.00	
38	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	-1.00	0.0	0.30	0.0	1.00	
39	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	1.00	0.0	-0.30	0.0	1.00	
40	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	1.00	0.0	0.30	0.0	1.00	
41	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	-1.00	0.0	0.0	-0.30	1.00	
42	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	-1.00	0.0	0.0	0.30	1.00	
43	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	1.00	0.0	0.0	-0.30	1.00	
44	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.30	1.00	
45	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	-1.00	-0.30	0.0	1.00	
46	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	-1.00	0.30	0.0	1.00	
47	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	1.00	-0.30	0.0	1.00	
48	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	1.00	0.30	0.0	1.00	
49	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	-0.30	1.00	
50	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.30	1.00	
51	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	1.00	0.0	-0.30	1.00	

Cmb	CDC 1/15...	CDC 2/16...	CDC 3/17...	CDC 4/18...	CDC 5/19...	CDC 6/20...	CDC 7/21...	CDC 8/22...	CDC 9/23...	CDC 10/24...	CDC 11/25...	CDC 12/26...	CDC 13/27...	CDC 14/28...
52	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.30	1.00	
53	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	-0.30	0.0	-1.00	0.0	1.00	
54	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	-0.30	0.0	1.00	0.0	1.00	
55	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.30	0.0	-1.00	0.0	1.00	
56	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.30	0.0	1.00	0.0	1.00	
57	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	-0.30	-1.00	0.0	1.00	
58	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	-0.30	1.00	0.0	1.00	
59	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	0.30	-1.00	0.0	1.00	
60	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	0.30	1.00	0.0	1.00	
61	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	-1.00	1.00	
62	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	1.00	1.00	
63	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.30	0.0	0.0	-1.00	1.00	
64	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.30	0.0	0.0	1.00	1.00	
65	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	-1.00	1.00	
66	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	1.00	1.00	
67	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	0.30	0.0	-1.00	1.00	
68	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	0.30	0.0	1.00	1.00	
69	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	
70	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	
71	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	
72	1.00	1.00	1.00	0.70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	
73	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	
74	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	

AZIONE SISMICA

VALUTAZIONE DELL' AZIONE SISMICA

L'azione sismica sulle costruzioni è valutata a partire dalla "pericolosità sismica di base", in condizioni ideali di sito di riferimento rigido con superficie topografica orizzontale.
Allo stato attuale, la pericolosità sismica su reticolo di riferimento nell'intervallo di riferimento è fornita dai dati pubblicati sul sito http://esse1.mi.ingv.it/. Per punti non coincidenti con il reticolo di riferimento e periodi di ritorno non contemplati direttamente si opera come indicato nell' allegato alle NTC (rispettivamente media pesata e interpolazione).

L' azione sismica viene definita in relazione ad un periodo di riferimento Vr che si ricava, per ciascun tipo di costruzione, moltiplicandone la vita nominale per il coefficiente d'uso (vedi tabella Parametri della struttura). Fissato il periodo di riferimento Vr e la probabilità di superamento Pver associata a ciascuno degli stati limite considerati, si ottiene il periodo di ritorno Tr e i relativi parametri di pericolosità sismica (vedi tabella successiva):
ag: accelerazione orizzontale massima del terreno;
Fo: valore massimo del fattore di amplificazione dello spettro in accelerazione orizzontale;
T*c: periodo di inizio del tratto a velocità costante dello spettro in accelerazione orizzontale;

Parametri della struttura					
Classe d'uso	Vita Vn [anni]	Coeff. Uso	Periodo Vr [anni]	Tipo di suolo	Categoria topografica
III	50.0	1.5	75.0	D	T1

Per la struttura in esame si sono adottati i parametri di pericolosità sismica da analisi di Risposta Sismica locale; si sono adottati i parametri spettrali riportati nelle seguenti tabelle; i parametri consentono la definizione degli spettri elastici come previsto al cap. 3.2 delle norme tecniche:
lo spettro di risposta elastico in accelerazione della componente orizzontale del moto sismico, Se, è definito dalle seguenti espressioni:

$$0 \le T < T_B \qquad S_e(T) = a_g \cdot S \cdot \eta \cdot F_o \cdot \left[\frac{T}{T_B} + \frac{1}{\eta \cdot F_o}\left(1 - \frac{T}{T_B}\right)\right]$$

$$T_B \le T < T_C \qquad S_e(T) = a_g \cdot S \cdot \eta \cdot F_o$$

$$T_C \le T < T_D \qquad S_e(T) = a_g \cdot S \cdot \eta \cdot F_o \cdot \left(\frac{T_C}{T}\right)$$

$$T_D \le T \qquad S_e(T) = a_g \cdot S \cdot \eta \cdot F_o \cdot \left(\frac{T_C \cdot T_D}{T^2}\right)$$

Lo spettro di risposta elastico in accelerazione della componente verticale del moto sismico, Sve, è definito dalle espressioni:

$$0 \le T < T_B \qquad S_{ve}(T) = a_g \cdot S \cdot \eta \cdot F_v \cdot \left[\frac{T}{T_B} + \frac{1}{\eta \cdot F_o}\left(1 - \frac{T}{T_B}\right)\right]$$

$$T_B \le T < T_C \qquad S_{ve}(T) = a_g \cdot S \cdot \eta \cdot F_v$$

$$T_C \le T < T_D \qquad S_{ve}(T) = a_g \cdot S \cdot \eta \cdot F_v \cdot \left(\frac{T_C}{T}\right)$$

$$T_D \le T \qquad S_{ve}(T) = a_g \cdot S \cdot \eta \cdot F_v \cdot \left(\frac{T_C \cdot T_D}{T^2}\right)$$

I valori di S_S, T_B, T_C e T_D, sono riportati nella seguenteTabella

Categoria di sottosuolo	S_S	T_B	T_C	T_D
A, B, C, D, E	1,0	0,05 s	0,15 s	1,0 s

S è il coefficiente che tiene conto della categoria di sottosuolo e delle condizioni topografiche mediante la relazione seguente S = Ss*St (3.2.3); nel caso di RSL i valori sono unitari
Fo è il fattore che quantifica l'amplificazione spettrale massima, su sito in esame
Fv è il fattore che quantifica l'amplificazione spettrale massima verticale, in termini di accelerazione orizzontale massima del terreno ag su sito in esame
Tb è il periodo corrispondente all'inizio del tratto dello spettro ad accelerazione costante.
Tc è il periodo corrispondente all'inizio del tratto dello spettro a velocità costante.
Td è il periodo corrispondente all'inizio del tratto dello spettro a spostamento costante.

Simbologia adottata nelle tabelle

Se(t)	Accelerazioni dello spettro di input
Tr	Periodo di ritorno
Tmin	Valore minore tra i tre periodi di vibrazione dell'edificio con massa partecipante più elevata
2Tmax	Valore maggiore tra i tre periodi di vibrazione dell'edificio con massa partecipante più elevata moltiplicato per due
Integrale RSL	Integrale dello spettro di risposta sismica locale valutato nell'intervallo compreso tra Tmin e 2Tmax
Integrale NTC*1.2	Integrale dello spettro da normativa amplificato del 20% valutato nell'intervallo compreso tra Tmin e 2Tmax
Rapporto	Rapporto tra Integrale RSL e Integrale NTC*1.2;
Esito confronto RSL vs NTC	- Possibile l'uso dello spettro NTC se Rapporto minore di 1 e RSL < NTC*1.3 - Non ammesso l'uso dello spettro NTC se RSL ≥ NTC*1.3 e Rapporto maggiore di 1 - Non ammesso l'uso dello spettro NTC (30% superato) se RSL ≥ NTC*1.3 - Non ammasso l'uso dello spettro NTC (rapporto integrali) se Rapporto maggiore di 1
Se(t) RSL	Accelerazioni dello spettro di risposta sismica locale
Se(t) NTC*1.3	Accelerazioni dello spettro da normativa amplificate del 30%
Confronto ord.55	Confronto tra lo spettro di risposta sismica locale e lo spettro da normativa amplificato del 30% nell'intervallo compreso tra Tmin e 2Tmax secondo l'Ordinanza n. 55 – 24/04/2018: - Non richiesto (ad di fuori dell'intervallo compreso tra Tmin e 2Tmax); - RSL <= NTC*1.3; - RSL > NTC*1.3
Esito confronto RSL vs NTC (0.7 A)	Se lo spettro di risposta sismica locale è minore del 70% dello spettro da normativa non è consentito l'uso dello spettro di risposta sismica locale (7.2.6 NTC 2018): - Possibile l'uso dello spettro RSL; - Non ammesso l'uso di RSL (0.7 non superato).
Se(t) NTC*0.7 suolo tipo A	70% delle Accelerazioni dello spettro da normativa valutato per categoria A di sottosuolo
Confronto NTC	Confronto tra lo spettro di risposta sismica locale e il 70% dello spettro da normativa: - RSL >= NTC_A*0.7; - RSL < NTC_A*0.7

A seguire sono riportati i confronti tra pericolosità sismica RSL e NTC come previsto da Ordinanza n.55 – 24/04/2018 e NTC (7.2.6)

Id nodo	Longitudine	Latitudine	Distanza
			Km
Loc.	16.152	38.968	
41445	16.187	38.952	3.607
41446	16.251	38.950	5.181
41224	16.253	39.000	4.564
41223	16.189	39.002	2.750

SL	Pver	Tr	ag	Fo	T*c
		Anni	g		sec
SLO	81.0	45.0	0.153	2.085	0.316
SLD	63.0	75.0	0.200	2.101	0.337
SLV	10.0	712.0	0.557	2.226	0.409
SLC	5.0	1462.0	0.737	2.262	0.441

SL	ag	S	Fo	Fv	Tb	Tc	Td
	g				sec	sec	sec
SLO	0.153	1.000	2.085	1.102	0.105	0.316	2.213
SLD	0.200	1.000	2.101	1.269	0.112	0.337	2.400
SLV	0.557	1.000	2.226	2.242	0.136	0.409	3.826
SLC	0.737	1.000	2.262	2.621	0.147	0.441	4.547

Periodo di ritorno <Tr>	Accelerazione max <ag>	Amplificazione <Fo>	Inizio v=costante <T*c>
	[g]		[s]
30	0.122	2.096	0.297
50	0.163	2.082	0.321
72	0.196	2.098	0.336
101	0.232	2.120	0.342
140	0.273	2.146	0.352
201	0.323	2.161	0.363
475	0.472	2.213	0.388
975	0.633	2.237	0.426
2475	0.898	2.295	0.461

Confronto spettri RSL vs NTC	
Tmin	0.100
2Tmax	0.700
Integrale RSL	0.541
Integrale NTC*1.2	0.628
Rapporto	0.860
Esito confronto	Non ammesso l'uso dello spettro NTC (30% superato)

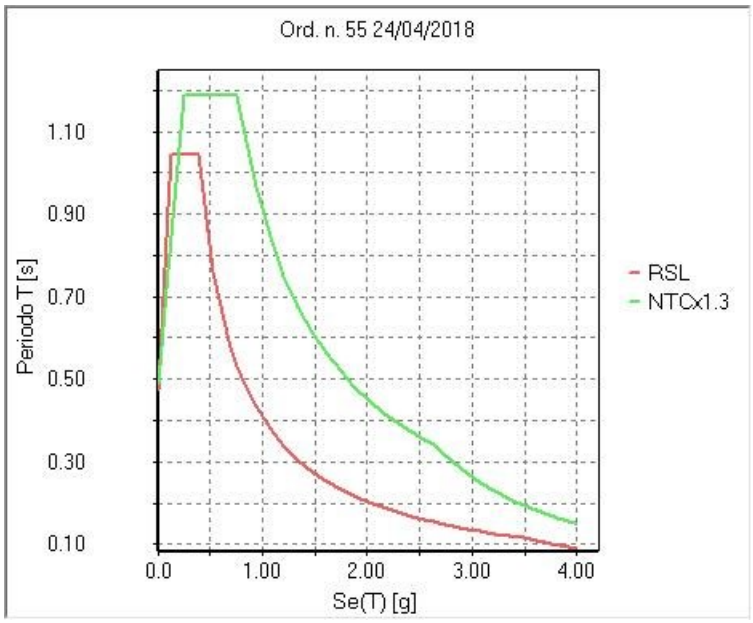


Fig. 1

Periodo	Se(t) RSL	Se(t) NTC*1.3	Confronto ord.55
[s]	[g]	[g]	
0.000	0.472	0.489	Non richiesto
0.100	0.915	0.765	RSL > NTC*1.3
0.129	1.045	0.846	RSL > NTC*1.3
0.253	1.045	1.188	RSL <= NTC*1.3
0.264	1.045	1.188	RSL <= NTC*1.3
0.388	1.045	1.188	RSL <= NTC*1.3
0.398	1.018	1.188	RSL <= NTC*1.3
0.532	0.761	1.188	RSL <= NTC*1.3
0.667	0.608	1.188	RSL <= NTC*1.3
0.700	0.579	1.188	RSL <= NTC*1.3
0.760	0.533	1.188	Non richiesto
0.801	0.506	1.128	Non richiesto
0.935	0.433	0.966	Non richiesto
1.070	0.379	0.845	Non richiesto
1.204	0.337	0.750	Non richiesto
1.338	0.303	0.675	Non richiesto
1.473	0.275	0.614	Non richiesto
1.607	0.252	0.562	Non richiesto
1.741	0.233	0.519	Non richiesto
1.876	0.216	0.482	Non richiesto
2.010	0.202	0.450	Non richiesto
2.145	0.189	0.421	Non richiesto
2.279	0.178	0.397	Non richiesto
2.413	0.168	0.374	Non richiesto
2.548	0.159	0.355	Non richiesto
2.629	0.154	0.344	Non richiesto
2.682	0.151	0.330	Non richiesto
2.816	0.144	0.300	Non richiesto

Periodo	Se(t) RSL	Se(t) NTC*1.3	Confronto ord.55
2.951	0.137	0.273	Non richiesto
3.085	0.131	0.250	Non richiesto
3.219	0.126	0.229	Non richiesto
3.354	0.121	0.211	Non richiesto
3.488	0.116	0.195	Non richiesto
3.508	0.115	0.193	Non richiesto
3.529	0.114	0.191	Non richiesto
3.549	0.112	0.189	Non richiesto
3.570	0.111	0.186	Non richiesto
3.590	0.110	0.184	Non richiesto
3.611	0.108	0.182	Non richiesto
3.631	0.107	0.180	Non richiesto
3.652	0.106	0.178	Non richiesto
3.672	0.105	0.176	Non richiesto
3.693	0.104	0.174	Non richiesto
3.713	0.103	0.172	Non richiesto
3.734	0.101	0.170	Non richiesto
3.754	0.100	0.169	Non richiesto
3.775	0.099	0.167	Non richiesto
3.795	0.098	0.165	Non richiesto
3.816	0.097	0.163	Non richiesto
3.836	0.096	0.161	Non richiesto
3.857	0.095	0.160	Non richiesto
3.877	0.094	0.158	Non richiesto
3.898	0.093	0.156	Non richiesto
3.918	0.092	0.155	Non richiesto
3.939	0.091	0.153	Non richiesto
3.959	0.090	0.152	Non richiesto
3.980	0.089	0.150	Non richiesto
4.000	0.088	0.148	Non richiesto

Confronto spettro RSL vs NTC (0.7 A)	
Esito confronto	Possibile l'uso dello spettro RSL

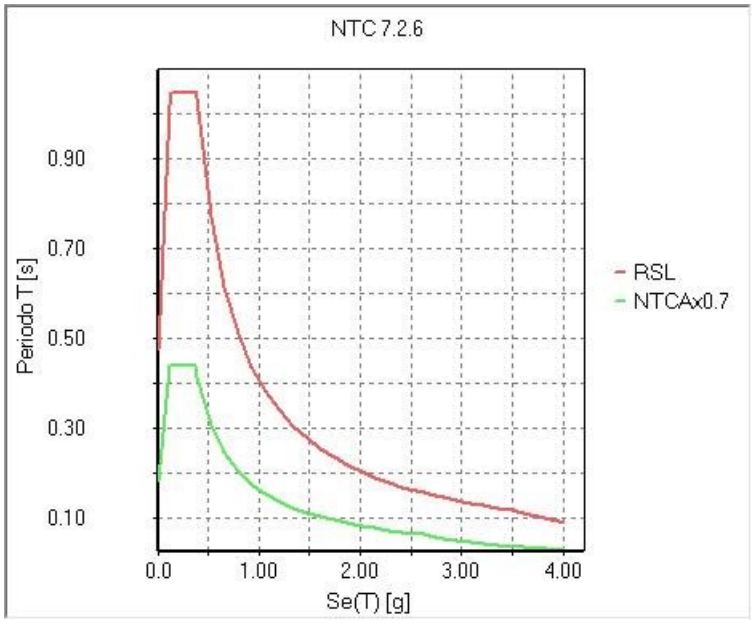


Fig. 2

Periodo	Se(t) RSL	Se(t) NTC*0.7 suolo tipo A	Confronto NTC
[s]	[g]	[g]	
0.000	0.472	0.180	RSL >= NTC_A*0.7
0.123	1.018	0.438	RSL >= NTC_A*0.7
0.129	1.045	0.438	RSL >= NTC_A*0.7
0.258	1.045	0.438	RSL >= NTC_A*0.7
0.370	1.045	0.438	RSL >= NTC_A*0.7
0.388	1.045	0.417	RSL >= NTC_A*0.7
0.393	1.033	0.413	RSL >= NTC_A*0.7
0.527	0.769	0.307	RSL >= NTC_A*0.7
0.662	0.613	0.245	RSL >= NTC_A*0.7
0.796	0.509	0.203	RSL >= NTC_A*0.7
0.931	0.435	0.174	RSL >= NTC_A*0.7
1.065	0.380	0.152	RSL >= NTC_A*0.7
1.200	0.338	0.135	RSL >= NTC_A*0.7
1.335	0.304	0.121	RSL >= NTC_A*0.7
1.469	0.276	0.110	RSL >= NTC_A*0.7
1.604	0.253	0.101	RSL >= NTC_A*0.7
1.738	0.233	0.093	RSL >= NTC_A*0.7
1.873	0.216	0.086	RSL >= NTC_A*0.7
2.008	0.202	0.081	RSL >= NTC_A*0.7
2.142	0.189	0.076	RSL >= NTC_A*0.7
2.277	0.178	0.071	RSL >= NTC_A*0.7
2.411	0.168	0.067	RSL >= NTC_A*0.7
2.546	0.159	0.064	RSL >= NTC_A*0.7
2.629	0.154	0.062	RSL >= NTC_A*0.7
2.680	0.151	0.059	RSL >= NTC_A*0.7
2.815	0.144	0.054	RSL >= NTC_A*0.7
2.950	0.137	0.049	RSL >= NTC_A*0.7
3.084	0.131	0.045	RSL >= NTC_A*0.7
3.219	0.126	0.041	RSL >= NTC_A*0.7
3.353	0.121	0.038	RSL >= NTC_A*0.7
3.488	0.116	0.035	RSL >= NTC_A*0.7
3.508	0.115	0.035	RSL >= NTC_A*0.7

Periodo	Se(t) RSL	Se(t) NTC*0.7 suolo tipo A	Confronto NTC
3.529	0.114	0.034	RSL >= NTC_A*0.7
3.549	0.112	0.034	RSL >= NTC_A*0.7
3.570	0.111	0.033	RSL >= NTC_A*0.7
3.590	0.110	0.033	RSL >= NTC_A*0.7
3.611	0.108	0.033	RSL >= NTC_A*0.7
3.631	0.107	0.032	RSL >= NTC_A*0.7
3.652	0.106	0.032	RSL >= NTC_A*0.7
3.672	0.105	0.032	RSL >= NTC_A*0.7
3.693	0.104	0.031	RSL >= NTC_A*0.7
3.713	0.103	0.031	RSL >= NTC_A*0.7
3.734	0.101	0.031	RSL >= NTC_A*0.7
3.754	0.100	0.030	RSL >= NTC_A*0.7
3.775	0.099	0.030	RSL >= NTC_A*0.7
3.795	0.098	0.030	RSL >= NTC_A*0.7
3.816	0.097	0.029	RSL >= NTC_A*0.7
3.836	0.096	0.029	RSL >= NTC_A*0.7
3.857	0.095	0.029	RSL >= NTC_A*0.7
3.877	0.094	0.028	RSL >= NTC_A*0.7
3.898	0.093	0.028	RSL >= NTC_A*0.7
3.918	0.092	0.028	RSL >= NTC_A*0.7
3.939	0.091	0.027	RSL >= NTC_A*0.7
3.959	0.090	0.027	RSL >= NTC_A*0.7
3.980	0.089	0.027	RSL >= NTC_A*0.7
4.000	0.088	0.027	RSL >= NTC_A*0.7

Periodo di ritorno <Tr>	Esito confronto
30	Possibile l'uso dello spettro RSL
50	Possibile l'uso dello spettro RSL
72	Possibile l'uso dello spettro RSL
101	Possibile l'uso dello spettro RSL
140	Possibile l'uso dello spettro RSL
201	Possibile l'uso dello spettro RSL
475	Possibile l'uso dello spettro RSL
975	Possibile l'uso dello spettro RSL
2475	Possibile l'uso dello spettro RSL

RISULTATI ANALISI SISMICHE

LEGENDA TABELLA ANALISI SISMICHE

Il programma consente l'analisi di diverse configurazioni sismiche.

Sono previsti, infatti, i seguenti casi di carico:

9. Esk caso di carico sismico con analisi statica equivalente
10. Edk caso di carico sismico con analisi dinamica

Ciascun caso di carico è caratterizzato da un angolo di ingresso e da una configurazione di masse determinante la forza sismica complessiva (si rimanda al capitolo relativo ai casi di carico per chiarimenti inerenti questo aspetto).

Nella colonna Note, in funzione della norma in uso sono riportati i parametri fondamentali che caratterizzano l' azione sismica: in particolare possono essere presenti i seguenti valori:

Angolo di ingresso	Angolo di ingresso dell'azione sismica orizzontale
Fattore di importanza	Fattore di importanza dell'edificio, in base alla categoria di appartenenza
Zona sismica	Zona sismica
Accelerazione ag	Accelerazione orizzontale massima sul suolo
Categoria suolo	Categoria di profilo stratigrafico del suolo di fondazione
Fattore q	Fattore di struttura/di comportamento. Dipendente dalla tipologia strutturale
Fattore di sito S	Fattore dipendente dalla stratigrafia e dal profilo topografico
Classe di duttilità CD	Classe di duttilità della struttura – "A" duttilità alta, "B" duttilità bassa
Fattore riduz. SLD	Fattore di riduzione dello spettro elastico per lo stato limite di danno
Periodo proprio T1	Periodo proprio di vibrazione della struttura
Coefficiente Lambda	Coefficiente dipendente dal periodo proprio T1 e dal numero di piani della struttura
Ordinata spettro Sd(T1)	Valore delle ordinate dello spettro di progetto per lo stato limite ultimo, componente orizzontale (verticale Svd)
Ordinata spettro Se(T1)	Valore delle ordinate dello spettro elastico ridotta del fattore SLD per lo stato limite di danno, componente orizzontale (verticale Sve)
Ordinata spettro S (Tb-Tc)	Valore dell' ordinata dello spettro in uso nel tratto costante
numero di modi considerati	Numero di modi di vibrare della struttura considerati nell'analisi dinamica

Per ciascun caso di carico sismico viene riportato l'insieme di dati sotto riportati (le masse sono espresse in unità di forza):

a) **analisi sismica statica equivalente**:
   - quota, posizione del centro di applicazione e azione orizzontale risultante, posizione del baricentro delle rigidezze, rapporto r/Ls (per strutture a nucleo), indici di regolarità e/r secondo EC8 4.2.3.2
   - azione sismica complessiva

b) **analisi sismica dinamica con spettro di risposta**:
   - quota, posizione del centro di massa e massa risultante, posizione del baricentro delle rigidezze, rapporto r/Ls (per strutture a nucleo) **,** indici di regolarità e/r secondo EC8 4.2.3.2
   - frequenza, periodo, accelerazione spettrale, massa eccitata nelle tre direzioni globali per tutti i modi

- massa complessiva ed aliquota di massa complessiva eccitata.

Per ciascuna combinazione sismica definita SLD o SLO viene riportato il livello di deformazione etaT (dr) degli elementi strutturali verticali. Per semplicità di consultazione il livello è espresso anche in unità 1000*etaT/h da confrontare direttamente con i valori forniti nella norma (es. 5 per edifici con tamponamenti collegati rigidamente alla struttura, 10.0 per edifici con tamponamenti collegati elasticamente, 3 per edifici in muratura ordinaria, 4 per edifici in muratura armata).

Qualora si applichi il D.M. 96 (vedi NOTA sul capitolo "normativa di riferimento") l'analisi sismica dinamica può essere comprensiva di sollecitazione verticale contemporanea a quella orizzontale, nel qual caso è effettuata una sovrapposizione degli effetti in ragione della radice dei quadrati degli effetti stessi. Per ciascuna combinazione sismica - analisi effettuate con il D.M. 96 (vedi NOTA sul capitolo "normativa di riferimento") - viene riportato il livello di deformazione etaT, etaP e etaD degli elementi strutturali verticali. Per semplicità di consultazione il livello è espresso in unità 1000*etaT/h da confrontare direttamente con il valore 2 o 4 per la verifica.

Per gli edifici sismicamente isolati si riportano di seguito le verifiche condotte sui dispositivi di isolamento. Le verifiche sono effettuate secondo la circolare n.7/2019 del C.S.LL.PP nelle combinazioni in SLC come previsto dal DM 17-01-2018. Per ogni combinazione è riportato il codice di verifica ed i valori utilizzati per la verifica: spostamento dE, area ridotta e dimensione A2, azione verticale, deformazioni di taglio dell'elastomero e tensioni nell'acciaio.
Qualora si applichi l'Ordinanza 3274 e s.m.i. le verifiche sono eseguite in accordo con l'allegato 10.A.
In particolare la tabella, per ogni combinazione di calcolo, riporta:

Nodo	Nodo di appoggio dell' isolatore
Cmb	Combinazione oggetto della verifica
Verif.	Codice di verifica ok – verifica positiva , NV – verifica negativa, ND – verifica non completata
dE	Spostamento relativo tra le due facce (amplificato del 20% per Ordinanza 3274 e smi) combinato con la regola del 30%
Ang fi	Angolo utilizzato per il calcolo dell' area ridotta Ar (per dispositivi circolari)
V	Azione verticale agente
Ar	Area ridotta efficace
Dim A2	Dimensione utile per il calcolo della deformazione per rotazione
Sig s	Tensione nell' inserto in acciaio
Gam c(a,s,t)	Deformazioni di taglio dell' elestomero
Vcr	Carico critico per instabilità

Affinché la verifica sia positiva deve essere:

1) V > 0
2) Sig s < fyk
3) Gam t < 5
4) Gam s < Gam * (caratteristica dell' elastomero)
5) Gam s < 2
6) V < 0.5 Vcr

Calcolo dei fattori di comportamento secondo il D.M. 17/01/2018

La costruzione, nuova, è caratterizzata da non regolarità sia in pianta sia in altezza ed è progettata in classe di duttilità media (CD"B").

Parametri fattore in direzione x e y

Sistema costruttivo: calcestruzzo

Tipologia strutturale: strutture a telaio, a pareti accoppiate, miste

Definizione rapporto α_u/α_1: media tra 1 e il valore da normativa

Riferimento normativo α_u/α_1: strutture a telaio con più piani e più campate

Valore rapporto α_u/α_1 = 1.150

Valore base fattore q_0 = 3.000 α_u/α_1 = 3.450

Fattore pareti k_w = 1.000

Fattore di regolarità K_R = 0.8

Fattore dissipativo $q_D = q_0 \cdot k_w \cdot K_R$ = 2.760

Fattori di comportamento utilizzati

	Dissipativi
q SLU x	2.760
q SLU y	2.760
q SLU z	1.500

CDC	Tipo	Sigla Id	Note
5	Edk	CDC=Ed (dinamico SLU) alfa=0.0 (ecc. +)	
			categoria suolo: D
			fattore di sito S = 1.000
			ordinata spettro (tratto Tb-Tc) = 0.449 g
			angolo di ingresso:0.0
			eccentricità aggiuntiva: positiva
			periodo proprio T1: 0.444 sec.
			fattore q: 2.760
			fattore per spost. mu d: 2.760
			classe di duttilità CD: B
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
1170.00	2.325e+05	573.05	1047.26	0.0	-106.75	481.25	1067.50	1.582	0.103	0.018
835.00	4.544e+05	786.95	1010.20	0.0	-106.75	897.18	925.73	1.444	0.115	0.065
428.00	5.213e+05	838.88	998.11	0.0	-106.75	897.18	925.73	1.444	0.061	0.056
Risulta	1.208e+06									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	2.254	0.444	0.414	1.050e+06	86.9	3.40	2.81e-04	92.22	7.63e-03	0.0	0.0
2	3.046	0.328	0.449	137.83	1.14e-02	8.047e+05	66.6	0.37	3.06e-05	0.0	0.0
3	3.529	0.283	0.449	636.94	5.27e-02	2.675e+05	22.1	2.73	2.26e-04	0.0	0.0
4	6.928	0.144	0.449	1.250e+05	10.3	8.97	7.42e-04	7601.07	0.6	0.0	0.0
5	8.959	0.112	0.468	8076.38	0.7	32.01	2.65e-03	8.563e+05	70.9	0.0	0.0
6	10.423	0.096	0.481	1710.40	0.1	1.106e+05	9.2	2.976e+04	2.5	0.0	0.0
7	10.584	0.094	0.482	9567.30	0.8	1.850e+04	1.5	1.732e+05	14.3	0.0	0.0
8	12.355	0.081	0.493	1.028e+04	0.9	125.44	1.04e-02	4.031e+04	3.3	0.0	0.0
9	13.615	0.073	0.498	2329.62	0.2	68.34	5.66e-03	9.895e+04	8.2	0.0	0.0
Risulta				1.207e+06		1.202e+06		1.206e+06			
In percentuale				99.93		99.45		99.84			

CDC	Tipo	Sigla Id	Note
6	Edk	CDC=Ed (dinamico SLU) alfa=0.0 (ecc. -)	
			categoria suolo: D
			fattore di sito S = 1.000
			ordinata spettro (tratto Tb-Tc) = 0.449 g
			angolo di ingresso:0.0

CDC	Tipo	Sigla Id	Note
			eccentricità aggiuntiva: negativa
			periodo proprio T1: 0.450 sec.
			fattore q: 2.760
			fattore per spost. mu d: 2.760
			classe di duttilità CD: B
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
1170.00	2.325e+05	573.05	1047.26	0.0	106.75	481.25	1067.50	1.582	0.103	0.018
835.00	4.544e+05	786.95	1010.20	0.0	106.75	897.18	925.73	1.444	0.115	0.065
428.00	5.213e+05	838.88	998.11	0.0	106.75	897.18	925.73	1.444	0.061	0.056
Risulta	1.208e+06									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	2.220	0.450	0.408	1.022e+06	84.6	2198.04	0.2	87.62	7.25e-03	0.0	0.0
2	3.062	0.327	0.449	1.347e+04	1.1	8.368e+05	69.3	3.52	2.91e-04	0.0	0.0
3	3.550	0.282	0.449	1.538e+04	1.3	2.330e+05	19.3	5.98	4.95e-04	0.0	0.0
4	6.909	0.145	0.449	1.260e+05	10.4	143.42	1.19e-02	6169.42	0.5	0.0	0.0
5	8.933	0.112	0.468	6230.45	0.5	152.96	1.27e-02	8.300e+05	68.7	0.0	0.0
6	10.299	0.097	0.480	826.79	6.84e-02	1.005e+05	8.3	3.874e+04	3.2	0.0	0.0
7	10.458	0.096	0.481	6299.77	0.5	1.406e+04	1.2	1.946e+05	16.1	0.0	0.0
8	11.938	0.084	0.490	1.583e+04	1.3	1.527e+04	1.3	383.16	3.17e-02	0.0	0.0
9	13.335	0.075	0.497	384.85	3.19e-02	55.48	4.59e-03	1.362e+05	11.3	0.0	0.0
Risulta				1.207e+06		1.202e+06		1.206e+06			
In percentuale				99.88		99.50		99.84			

CDC	Tipo	Sigla Id	Note
7	Edk	CDC=Ed (dinamico SLU) alfa=90.00 (ecc. +)	
			categoria suolo: D
			fattore di sito S = 1.000
			ordinata spettro (tratto Tb-Tc) = 0.449 g
			angolo di ingresso:90.00
			eccentricità aggiuntiva: positiva
			periodo proprio T1: 0.318 sec.
			fattore q: 2.760
			fattore per spost. mu d: 3.263
			classe di duttilità CD: B
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
1170.00	2.325e+05	573.05	1047.26	60.38	0.0	481.25	1067.50	1.582	0.103	0.018
835.00	4.544e+05	786.95	1010.20	87.40	0.0	897.18	925.73	1.444	0.115	0.065
428.00	5.213e+05	838.88	998.11	87.40	0.0	897.18	925.73	1.444	0.061	0.056
Risulta	1.208e+06									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
1	2.250	0.444	0.413	1.046e+06	86.5	205.22	1.70e-02	93.16	7.71e-03	0.0	0.0
2	3.144	0.318	0.449	1171.70	9.70e-02	9.791e+05	81.0	0.29	2.39e-05	0.0	0.0
3	3.413	0.293	0.449	4042.97	0.3	9.214e+04	7.6	0.31	2.58e-05	0.0	0.0
4	6.970	0.143	0.449	1.263e+05	10.5	54.73	4.53e-03	7623.19	0.6	0.0	0.0
5	8.948	0.112	0.468	7633.51	0.6	684.48	5.67e-02	8.360e+05	69.2	0.0	0.0
6	10.007	0.100	0.477	121.79	1.01e-02	8.798e+04	7.3	6.352e+04	5.3	0.0	0.0
7	10.604	0.094	0.482	1.135e+04	0.9	1.956e+04	1.6	1.592e+05	13.2	0.0	0.0
8	12.424	0.080	0.493	9756.59	0.8	2.024e+04	1.7	8265.82	0.7	0.0	0.0
9	13.316	0.075	0.497	495.39	4.10e-02	2395.70	0.2	1.314e+05	10.9	0.0	0.0
Risulta				1.206e+06		1.202e+06		1.206e+06			
In percentuale				99.86		99.51		99.83			

CDC	Tipo	Sigla Id	Note
8	Edk	CDC=Ed (dinamico SLU) alfa=90.00 (ecc. -)	
			categoria suolo: D
			fattore di sito S = 1.000
			ordinata spettro (tratto Tb-Tc) = 0.449 g
			angolo di ingresso:90.00
			eccentricità aggiuntiva: negativa
			periodo proprio T1: 0.341 sec.
			fattore q: 2.760
			fattore per spost. mu d: 3.110
			classe di duttilità CD: B
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
1170.00	2.325e+05	573.05	1047.26	-60.38	0.0	481.25	1067.50	1.582	0.103	0.018
835.00	4.544e+05	786.95	1010.20	-87.40	0.0	897.18	925.73	1.444	0.115	0.065
428.00	5.213e+05	838.88	998.11	-87.40	0.0	897.18	925.73	1.444	0.061	0.056
Risulta	1.208e+06									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	2.249	0.445	0.413	1.043e+06	86.3	1623.21	0.1	92.92	7.69e-03	0.0	0.0
2	2.931	0.341	0.449	5814.10	0.5	7.307e+05	60.5	0.72	5.98e-05	0.0	0.0
3	3.648	0.274	0.449	1755.68	0.1	3.405e+05	28.2	0.09	7.44e-06	0.0	0.0
4	6.963	0.144	0.449	1.262e+05	10.4	14.45	1.20e-03	7496.47	0.6	0.0	0.0
5	8.952	0.112	0.468	7784.52	0.6	3.91	3.24e-04	8.489e+05	70.3	0.0	0.0
6	10.408	0.096	0.481	2227.28	0.2	1.056e+05	8.7	3.434e+04	2.8	0.0	0.0
7	10.555	0.095	0.482	6341.42	0.5	2.281e+04	1.9	1.797e+05	14.9	0.0	0.0
8	12.461	0.080	0.493	1.195e+04	1.0	504.88	4.18e-02	2.345e+04	1.9	0.0	0.0
9	13.493	0.074	0.498	2011.78	0.2	11.51	9.53e-04	1.123e+05	9.3	0.0	0.0
Risulta				1.207e+06		1.202e+06		1.206e+06			
In percentuale				99.92		99.47		99.84			

CDC	Tipo	Sigla Id	Note
9	Edk	CDC=Ed (dinamico SLD) alfa=0.0 (ecc. +)	
			categoria suolo: D
			fattore di sito S = 1.000
			ordinata spettro (tratto Tb-Tc) = 0.420 g
			angolo di ingresso:0.0
			eccentricità aggiuntiva: positiva
			periodo proprio T1: 0.444 sec.
			numero di modi considerati: 9

CDC	Tipo	Sigla Id	Note
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
1170.00	2.325e+05	573.05	1047.26	0.0	-106.75	481.25	1067.50	1.582	0.103	0.018
835.00	4.544e+05	786.95	1010.20	0.0	-106.75	897.18	925.73	1.444	0.115	0.065
428.00	5.213e+05	838.88	998.11	0.0	-106.75	897.18	925.73	1.444	0.061	0.056
Risulta	1.208e+06									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	2.254	0.444	0.319	1.050e+06	86.9	3.40	2.81e-04	92.22	7.63e-03	0.0	0.0
2	3.046	0.328	0.420	137.83	1.14e-02	8.047e+05	66.6	0.37	3.06e-05	0.0	0.0
3	3.529	0.283	0.420	636.94	5.27e-02	2.675e+05	22.1	2.73	2.26e-04	0.0	0.0
4	6.928	0.144	0.420	1.250e+05	10.3	8.97	7.42e-04	7601.07	0.6	0.0	0.0
5	8.959	0.112	0.420	8076.38	0.7	32.01	2.65e-03	8.563e+05	70.9	0.0	0.0
6	10.423	0.096	0.389	1710.40	0.1	1.106e+05	9.2	2.976e+04	2.5	0.0	0.0
7	10.584	0.094	0.386	9567.30	0.8	1.850e+04	1.5	1.732e+05	14.3	0.0	0.0
8	12.355	0.081	0.359	1.028e+04	0.9	125.44	1.04e-02	4.031e+04	3.3	0.0	0.0
9	13.615	0.073	0.345	2329.62	0.2	68.34	5.66e-03	9.895e+04	8.2	0.0	0.0
Risulta				1.207e+06		1.202e+06		1.206e+06			
In percentuale				99.93		99.45		99.84			

CDC	Tipo	Sigla Id	Note
10	Edk	CDC=Ed (dinamico SLD) alfa=0.0 (ecc. -)	
			categoria suolo: D
			fattore di sito S = 1.000
			ordinata spettro (tratto Tb-Tc) = 0.420 g
			angolo di ingresso:0.0
			eccentricità aggiuntiva: negativa
			periodo proprio T1: 0.450 sec.
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
1170.00	2.325e+05	573.05	1047.26	0.0	106.75	481.25	1067.50	1.582	0.103	0.018
835.00	4.544e+05	786.95	1010.20	0.0	106.75	897.18	925.73	1.444	0.115	0.065
428.00	5.213e+05	838.88	998.11	0.0	106.75	897.18	925.73	1.444	0.061	0.056
Risulta	1.208e+06									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	2.220	0.450	0.314	1.022e+06	84.6	2198.04	0.2	87.62	7.25e-03	0.0	0.0
2	3.062	0.327	0.420	1.347e+04	1.1	8.368e+05	69.3	3.52	2.91e-04	0.0	0.0
3	3.550	0.282	0.420	1.538e+04	1.3	2.330e+05	19.3	5.98	4.95e-04	0.0	0.0
4	6.909	0.145	0.420	1.260e+05	10.4	143.42	1.19e-02	6169.42	0.5	0.0	0.0
5	8.933	0.112	0.420	6230.45	0.5	152.96	1.27e-02	8.300e+05	68.7	0.0	0.0
6	10.299	0.097	0.391	826.79	6.84e-02	1.005e+05	8.3	3.874e+04	3.2	0.0	0.0
7	10.458	0.096	0.388	6299.77	0.5	1.406e+04	1.2	1.946e+05	16.1	0.0	0.0
8	11.938	0.084	0.365	1.583e+04	1.3	1.527e+04	1.3	383.16	3.17e-02	0.0	0.0
9	13.335	0.075	0.348	384.85	3.19e-02	55.48	4.59e-03	1.362e+05	11.3	0.0	0.0

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
Risulta				1.207e+06		1.202e+06		1.206e+06			
In percentuale				99.88		99.50		99.84			

CDC	Tipo	Sigla Id	Note
11	Edk	CDC=Ed (dinamico SLD) alfa=90.00 (ecc. +)	
			categoria suolo: D
			fattore di sito S = 1.000
			ordinata spettro (tratto Tb-Tc) = 0.420 g
			angolo di ingresso:90.00
			eccentricità aggiuntiva: positiva
			periodo proprio T1: 0.318 sec.
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
1170.00	2.325e+05	573.05	1047.26	60.38	0.0	481.25	1067.50	1.582	0.103	0.018
835.00	4.544e+05	786.95	1010.20	87.40	0.0	897.18	925.73	1.444	0.115	0.065
428.00	5.213e+05	838.88	998.11	87.40	0.0	897.18	925.73	1.444	0.061	0.056
Risulta	1.208e+06									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	2.250	0.444	0.319	1.046e+06	86.5	205.22	1.70e-02	93.16	7.71e-03	0.0	0.0
2	3.144	0.318	0.420	1171.70	9.70e-02	9.791e+05	81.0	0.29	2.39e-05	0.0	0.0
3	3.413	0.293	0.420	4042.97	0.3	9.214e+04	7.6	0.31	2.58e-05	0.0	0.0
4	6.970	0.143	0.420	1.263e+05	10.5	54.73	4.53e-03	7623.19	0.6	0.0	0.0
5	8.948	0.112	0.420	7633.51	0.6	684.48	5.67e-02	8.360e+05	69.2	0.0	0.0
6	10.007	0.100	0.397	121.79	1.01e-02	8.798e+04	7.3	6.352e+04	5.3	0.0	0.0
7	10.604	0.094	0.386	1.135e+04	0.9	1.956e+04	1.6	1.592e+05	13.2	0.0	0.0
8	12.424	0.080	0.358	9756.59	0.8	2.024e+04	1.7	8265.82	0.7	0.0	0.0
9	13.316	0.075	0.348	495.39	4.10e-02	2395.70	0.2	1.314e+05	10.9	0.0	0.0
Risulta				1.206e+06		1.202e+06		1.206e+06			
In percentuale				99.86		99.51		99.83			

CDC	Tipo	Sigla Id	Note
12	Edk	CDC=Ed (dinamico SLD) alfa=90.00 (ecc. -)	
			categoria suolo: D
			fattore di sito S = 1.000
			ordinata spettro (tratto Tb-Tc) = 0.420 g
			angolo di ingresso:90.00
			eccentricità aggiuntiva: negativa
			periodo proprio T1: 0.341 sec.
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
1170.00	2.325e+05	573.05	1047.26	-60.38	0.0	481.25	1067.50	1.582	0.103	0.018
835.00	4.544e+05	786.95	1010.20	-87.40	0.0	897.18	925.73	1.444	0.115	0.065
428.00	5.213e+05	838.88	998.11	-87.40	0.0	897.18	925.73	1.444	0.061	0.056

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
Risulta	1.208e+06									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	2.249	0.445	0.319	1.043e+06	86.3	1623.21	0.1	92.92	7.69e-03	0.0	0.0
2	2.931	0.341	0.415	5814.10	0.5	7.307e+05	60.5	0.72	5.98e-05	0.0	0.0
3	3.648	0.274	0.420	1755.68	0.1	3.405e+05	28.2	0.09	7.44e-06	0.0	0.0
4	6.963	0.144	0.420	1.262e+05	10.4	14.45	1.20e-03	7496.47	0.6	0.0	0.0
5	8.952	0.112	0.420	7784.52	0.6	3.91	3.24e-04	8.489e+05	70.3	0.0	0.0
6	10.408	0.096	0.389	2227.28	0.2	1.056e+05	8.7	3.434e+04	2.8	0.0	0.0
7	10.555	0.095	0.386	6341.42	0.5	2.281e+04	1.9	1.797e+05	14.9	0.0	0.0
8	12.461	0.080	0.358	1.195e+04	1.0	504.88	4.18e-02	2.345e+04	1.9	0.0	0.0
9	13.493	0.074	0.346	2011.78	0.2	11.51	9.53e-04	1.123e+05	9.3	0.0	0.0
Risulta				1.207e+06		1.202e+06		1.206e+06			
In percentuale				99.92		99.47		99.84			

Cmb	Pilas.	1000 etaT/h	etaT	inter. h	Pilas.	1000 etaT/h	etaT	inter. h	Pilas.	1000 etaT/h	etaT	inter. h
			cm	cm			cm	cm			cm	cm
37	1	1.52	0.65	428.0	2	1.56	0.67	428.0	3	1.53	0.66	428.0
	4	1.67	0.71	428.0	5	1.61	0.69	428.0	6	1.61	0.69	428.0
	7	1.79	0.77	428.0	8	1.71	0.73	428.0	9	1.71	0.73	428.0
	10	1.78	0.76	428.0	11	1.68	0.72	428.0	12	1.68	0.72	428.0
	13	1.76	0.76	428.0	14	1.69	0.73	428.0	15	1.72	0.73	428.0
	16	1.67	0.71	428.0	17	1.62	0.69	428.0	18	1.93	0.79	407.0
	19	2.33	0.78	335.0	20	1.92	0.78	407.0	21	2.36	0.79	335.0
	22	1.89	0.77	407.0	24	1.91	0.78	407.0	26	1.95	0.79	407.0
	27	1.56	0.52	335.0	28	1.95	0.79	407.0	29	1.55	0.52	335.0
	30	1.99	0.81	407.0	31	1.53	0.51	335.0	32	1.99	0.81	407.0
	33	1.53	0.51	335.0	34	1.92	0.78	407.0	35	2.07	0.69	335.0
	36	1.91	0.78	407.0	37	2.09	0.70	335.0	38	1.89	0.77	407.0
	40	1.97	0.80	407.0	41	1.64	0.55	335.0	42	1.97	0.80	407.0
	43	1.66	0.56	335.0	44	1.94	0.79	407.0	46	1.93	0.79	407.0
	47	1.58	0.53	335.0	48	1.93	0.78	407.0	49	1.60	0.54	335.0
	50	1.90	0.77	407.0								
38	1	1.79	0.77	428.0	2	1.76	0.75	428.0	3	1.71	0.73	428.0
	4	1.84	0.79	428.0	5	1.74	0.74	428.0	6	1.71	0.73	428.0
	7	1.76	0.75	428.0	8	1.64	0.70	428.0	9	1.62	0.69	428.0
	10	1.73	0.74	428.0	11	1.63	0.70	428.0	12	1.62	0.69	428.0
	13	1.62	0.69	428.0	14	1.56	0.67	428.0	15	1.57	0.67	428.0
	16	1.44	0.62	428.0	17	1.43	0.61	428.0	18	2.17	0.88	407.0
	19	1.10	0.37	335.0	20	2.13	0.87	407.0	21	1.10	0.37	335.0
	22	2.08	0.85	407.0	24	1.75	0.71	407.0	26	1.80	0.73	407.0
	27	1.46	0.49	335.0	28	1.84	0.75	407.0	29	1.49	0.50	335.0
	30	1.77	0.72	407.0	31	1.39	0.46	335.0	32	1.79	0.73	407.0
	33	1.43	0.48	335.0	34	2.08	0.85	407.0	35	1.28	0.43	335.0
	36	2.04	0.83	407.0	37	1.27	0.43	335.0	38	2.00	0.81	407.0
	40	1.93	0.79	407.0	41	1.62	0.54	335.0	42	1.90	0.77	407.0
	43	1.61	0.54	335.0	44	1.85	0.75	407.0	46	1.90	0.78	407.0
	47	1.56	0.52	335.0	48	1.87	0.76	407.0	49	1.55	0.52	335.0
	50	1.82	0.74	407.0								
39	1	1.92	0.82	428.0	2	1.94	0.83	428.0	3	1.88	0.81	428.0
	4	1.88	0.81	428.0	5	1.95	0.84	428.0	6	1.92	0.82	428.0
	7	1.77	0.76	428.0	8	1.86	0.80	428.0	9	1.83	0.79	428.0
	10	1.74	0.75	428.0	11	1.85	0.79	428.0	12	1.82	0.78	428.0
	13	1.66	0.71	428.0	14	1.77	0.76	428.0	15	1.76	0.75	428.0
	16	1.57	0.67	428.0	17	1.62	0.69	428.0	18	2.25	0.92	407.0
	19	0.91	0.31	335.0	20	2.23	0.91	407.0	21	0.93	0.31	335.0
	22	2.23	0.91	407.0	24	1.88	0.77	407.0	26	1.92	0.78	407.0
	27	1.36	0.45	335.0	28	1.96	0.80	407.0	29	1.32	0.44	335.0
	30	1.87	0.76	407.0	31	1.33	0.44	335.0	32	1.90	0.77	407.0
	33	1.32	0.44	335.0	34	2.20	0.89	407.0	35	1.08	0.36	335.0
	36	2.16	0.88	407.0	37	1.11	0.37	335.0	38	2.14	0.87	407.0
	40	2.07	0.84	407.0	41	1.41	0.47	335.0	42	2.02	0.82	407.0
	43	1.45	0.48	335.0	44	2.00	0.81	407.0	46	2.04	0.83	407.0
	47	1.37	0.46	335.0	48	1.99	0.81	407.0	49	1.41	0.47	335.0
	50	1.97	0.80	407.0								

...

68	50	1.12	0.46	407.0	48	1.22	0.50	407.0	49	0.76	0.25	335.0
Cmb		**1000 etaT/h**										
		2.80										

RISULTATI NODALI

LEGENDA RISULTATI NODALI

Il controllo dei risultati delle analisi condotte, per quanto concerne i nodi strutturali, è possibile in relazione alle tabelle sottoriportate.

Una prima tabella riporta infatti per ogni nodo e per ogni combinazione (o caso di carico) gli spostamenti nodali.

Una seconda tabella riporta per ogni nodo a cui sia associato un vincolo rigido e/o elastico o una fondazione speciale e per ogni combinazione (o caso di carico) i valori delle azioni esercitate dalla struttura sui vincoli (reazioni vincolari cambiate di segno).

Una terza tabella, infine riassume per ogni nodo le sei combinazioni in cui si attingono i valori minimi e massimi della reazione Fz, della reazione Mx e della reazione My.

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
		cm	cm	cm			
1	2	-0.02	0.02	-0.60	-1.98e-04	-2.85e-04	2.03e-05
1	11	-0.17	0.05	-0.55	-1.87e-04	-8.91e-04	-2.68e-05
1	16	-0.12	-0.05	-0.70	4.35e-05	-8.59e-04	4.22e-05
1	33	-0.05	0.13	-0.17	-4.33e-04	1.50e-04	-5.77e-05
1	43	-0.14	0.05	-0.52	-1.86e-04	-7.21e-04	-2.06e-05
1	60	-0.06	-0.09	-0.67	1.49e-04	-4.21e-04	4.71e-05
1	65	-0.05	0.12	-0.20	-4.07e-04	9.49e-05	-5.20e-05
1	70	-0.01	0.01	-0.44	-1.39e-04	-2.05e-04	1.48e-05
1	72	-0.01	0.01	-0.43	-1.32e-04	-1.96e-04	1.42e-05
1	74	-0.01	0.01	-0.42	-1.30e-04	-1.94e-04	1.40e-05
2	1	-0.05	0.01	-0.55	-1.58e-04	1.47e-05	1.82e-05
2	2	-0.06	0.01	-0.62	-1.86e-04	2.83e-05	2.43e-05
2	11	-1.25	0.25	-0.63	-2.53e-04	-2.86e-03	-4.88e-05
2	16	-0.82	-0.41	-0.77	3.85e-04	-1.86e-03	3.35e-04
2	33	-0.23	0.81	-0.17	-9.53e-04	-3.89e-04	-4.53e-04
2	43	-0.99	0.23	-0.57	-2.58e-04	-2.23e-03	-5.14e-05
2	48	-0.63	-0.35	-0.70	3.08e-04	-1.41e-03	2.72e-04
2	65	-0.26	0.74	-0.20	-8.79e-04	-4.55e-04	-4.07e-04
2	69	-0.04	7.34e-03	-0.41	-1.12e-04	1.08e-05	1.32e-05
2	70	-0.05	6.99e-03	-0.46	-1.31e-04	1.98e-05	1.73e-05
2	71	-0.04	7.34e-03	-0.41	-1.12e-04	1.08e-05	1.32e-05
2	72	-0.04	7.10e-03	-0.44	-1.25e-04	1.71e-05	1.61e-05
2	73	-0.04	7.34e-03	-0.41	-1.12e-04	1.08e-05	1.32e-05
2	74	-0.04	7.13e-03	-0.44	-1.23e-04	1.62e-05	1.56e-05
3	2	-1.54e-03	0.03	-0.52	-2.72e-04	-8.99e-05	1.30e-06
3	11	-0.13	0.03	-0.35	-1.73e-04	-5.22e-04	-2.96e-05
3	24	-0.01	-0.07	-0.52	3.64e-06	-2.28e-04	1.73e-05
3	25	-2.75e-03	0.10	-0.21	-3.58e-04	8.75e-05	-2.56e-05
3	43	-0.10	0.03	-0.35	-1.81e-04	-4.19e-04	-2.51e-05
3	57	-6.21e-03	0.10	-0.22	-3.45e-04	5.93e-05	-2.32e-05
3	60	4.07e-03	-0.06	-0.51	-1.21e-05	-1.81e-04	2.49e-05
3	70	-1.16e-03	0.02	-0.38	-1.95e-04	-6.51e-05	0.0
3	72	-1.09e-03	0.02	-0.37	-1.83e-04	-6.19e-05	0.0
3	74	-1.07e-03	0.02	-0.37	-1.79e-04	-6.09e-05	0.0
4	1	-0.05	4.06e-03	-0.48	-1.32e-04	-1.12e-04	-2.02e-05
4	2	-0.06	1.82e-03	-0.56	-1.68e-04	-1.34e-04	-2.65e-05
4	11	-1.25	0.13	-0.31	-3.29e-04	-2.76e-03	-7.89e-05
4	22	0.45	-0.59	-0.58	5.70e-04	1.01e-03	-1.58e-04
4	27	-0.46	0.61	-0.21	-7.96e-04	-1.03e-03	1.86e-04
4	43	-0.99	0.12	-0.32	-3.04e-04	-2.18e-03	-8.02e-05
4	58	0.31	-0.57	-0.56	5.32e-04	6.96e-04	-1.96e-04
4	59	-0.40	0.58	-0.22	-7.52e-04	-8.78e-04	1.61e-04
4	69	-0.04	2.14e-03	-0.36	-9.57e-05	-8.20e-05	-1.49e-05
4	70	-0.05	6.43e-04	-0.41	-1.19e-04	-9.70e-05	-1.91e-05
4	71	-0.04	2.14e-03	-0.36	-9.57e-05	-8.20e-05	-1.49e-05
4	72	-0.04	1.09e-03	-0.40	-1.12e-04	-9.25e-05	-1.79e-05
4	73	-0.04	2.14e-03	-0.36	-9.57e-05	-8.20e-05	-1.49e-05
4	74	-0.04	1.24e-03	-0.39	-1.10e-04	-9.10e-05	-1.75e-05

...

1050	74	-8.57e-03	0.04	-0.29	-3.98e-04	-1.30e-04	0.0
Nodo		**Traslazione X**	**Traslazione Y**	**Traslazione Z**	**Rotazione X**	**Rotazione Y**	**Rotazione Z**
		-3.55	-1.55	-1.09	-1.46e-03	-3.42e-03	-1.16e-03
		3.18	1.87	0.07	1.20e-03	2.56e-03	8.74e-04

Nodo	**Cmb**	**Azione X**	**Azione Y**	**Azione Z**	**Azione RX**	**Azione RY**	**Azione RZ**
		daN	daN	daN	daN cm	daN cm	daN cm

Nodo	**Azione X**	**Azione Y**	**Azione Z**	**Azione RX**	**Azione RY**	**Azione RZ**

Nodo	**Cmb**	**Azione X**	**Azione Y**	**Azione Z**	**Azione RX**	**Azione RY**	**Azione RZ**
		daN	daN	daN	daN cm	daN cm	daN cm

RISULTATI OPERE DI FONDAZIONE

LEGENDA RISULTATI OPERE DI FONDAZIONE

Il controllo dei risultati delle analisi condotte, per quanto concerne le opere di fondazione, è possibile in relazione alle tabelle sotto riportate.

La prima tabella è riferita alle fondazioni tipo palo e plinto su pali.
Per questo tipo di fondazione vengono riportate le sei componenti di sollecitazione (espresse nel riferimento globale della struttura) per ogni palo componente l'opera.
In particolare viene riportato:

Nodo	numero del nodo a cui è applicato il plinto
Tipo	codice corrispondente al nome assegnato al tipo di plinto di fondazione: 3) palo singolo (*PALO*) 4) plinto su palo 5) plinto su due pali (*PL.2P*) 6) plinto su tre pali (*PL.3P*) 7) plinto su quattro pali (*PL.4P*) 8) plinto rettangolare su cinque pali (*PL.5P.R*) 9) plinto pentagonale su cinque pali (*PL.5P*) 10) plinto su sei pali (*PL.6P*)
Palo	numero del palo
Comb.	combinazione di carico in cui si verificano le sei componenti di sollecitazione.
Quota	quota assoluta della sezione del palo per cui si riportano le sei componenti di sollecitazione.

L'azione Fz (corrispondente allo sforzo normale nel palo) è costante poiché il peso del palo stesso non è considerato nella modellazione.

La seconda tabella è riferita alle fondazioni tipo plinto su suolo elastico.
Per questo tipo di fondazione vengono riportate le pressioni nei quattro vertici dell'impronta sul terreno.
In particolare viene riportato:

Nodo	numero del nodo a cui è applicato il plinto
Tipo	Codice identificativo del nome assegnato al plinto
area	area dell'impronta del plinto
Wink O Wink V	coefficienti di Winkler (orizzontale e verticale) adottati
Comb	Combinazione di carico in cui si verificano i valori riportati
Pt (P1 P2 P3 P4)	valori di pressione nei vertici

La terza tabella è riferita alle fondazioni tipo platea su suolo elastico.
Per questo tipo di fondazione vengono riportate le pressioni in ogni vertice (nodo) degli elementi costituenti la platea.

La quarta tabella è riferita alle fondazioni tipo trave su suolo elastico.
Per questo tipo di fondazione vengono riportate le pressioni alle estremità dell'elemento e la massima (in valore assoluto) pressione lungo lo sviluppo dell'elemento.
Vengono inoltre riportati, con funzione statistica, i valori massimo e minimo delle pressioni che compaiono nella tabella.

Nodo (G) Pt 1/12 Pt 2/13 Pt 3... Pt 4...

	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2
1	-0.60	-0.70	-0.67	-0.44	-0.43	-0.42					
3	-0.52	-0.52	-0.51	-0.38	-0.37	-0.37					
5	-0.40	-0.53	-0.48	-0.30	-0.29	-0.29					
7	-0.67	-0.68	-0.63	-0.49	-0.48	-0.47					
9	-0.61	-0.50	-0.50	-0.45	-0.43	-0.43					
11	-0.46	-0.52	-0.48	-0.34	-0.33	-0.33					
13	-0.71	-0.65	-0.62	-0.52	-0.50	-0.49					
15	-0.65	-0.47	-0.47	-0.48	-0.46	-0.45					
17	-0.49	-0.49	-0.46	-0.36	-0.35	-0.34					
19	-0.71	-0.66	-0.62	-0.52	-0.50	-0.50					
21	-0.65	-0.48	-0.47	-0.48	-0.46	-0.45					
23	-0.47	-0.49	-0.45	-0.35	-0.34	-0.34					
25	-0.69	-0.68	-0.64	-0.50	-0.48	-0.48					
27	-0.61	-0.53	-0.52	-0.45	-0.43	-0.43					
29	-0.41	-0.47	-0.46	-0.30	-0.30	-0.29					
31	-0.63	-0.71	-0.68	-0.46	-0.44	-0.44					
33	-0.55	-0.61	-0.59	-0.40	-0.39	-0.39					
66	-0.47	-0.54	-0.52	-0.35	-0.34	-0.34					
70	-0.19	-0.21	-0.20	-0.14	-0.14	-0.14					
71	-0.41	-0.49	-0.47	-0.30	-0.29	-0.29					
72	-0.41	-0.48	-0.46	-0.31	-0.30	-0.29					
73	-0.42	-0.47	-0.45	-0.31	-0.30	-0.30					
74	-0.42	-0.46	-0.45	-0.31	-0.31	-0.30					
75	-0.44	-0.46	-0.45	-0.32	-0.31	-0.31					
76	-0.45	-0.47	-0.46	-0.33	-0.32	-0.32					
77	-0.47	-0.49	-0.47	-0.35	-0.34	-0.33					
78	-0.49	-0.50	-0.49	-0.36	-0.35	-0.35					
79	-0.51	-0.51	-0.50	-0.38	-0.36	-0.36					
80	-0.54	-0.52	-0.51	-0.40	-0.38	-0.38					
81	-0.56	-0.52	-0.51	-0.41	-0.40	-0.39					
82	-0.58	-0.52	-0.51	-0.43	-0.41	-0.41					
83	-0.60	-0.52	-0.51	-0.44	-0.42	-0.42					
84	-0.60	-0.50	-0.49	-0.45	-0.43	-0.42					
85	-0.59	-0.49	-0.48	-0.43	-0.41	-0.41					
86	-0.56	-0.47	-0.47	-0.41	-0.40	-0.39					
87	-0.54	-0.46	-0.45	-0.40	-0.38	-0.38					
88	-0.51	-0.45	-0.44	-0.38	-0.37	-0.36					
89	-0.50	-0.45	-0.43	-0.37	-0.35	-0.35					
90	-0.48	-0.46	-0.43	-0.36	-0.34	-0.34					
91	-0.47	-0.47	-0.44	-0.35	-0.34	-0.34					
92	-0.47	-0.49	-0.46	-0.35	-0.34	-0.33					
93	-0.45	-0.52	-0.48	-0.34	-0.33	-0.32					
94	-0.44	-0.52	-0.48	-0.33	-0.32	-0.31					
95	-0.43	-0.53	-0.48	-0.32	-0.31	-0.31					
96	-0.42	-0.53	-0.48	-0.31	-0.30	-0.30					
97	-0.59	-0.51	-0.50	-0.43	-0.42	-0.41					
98	-0.57	-0.51	-0.50	-0.42	-0.40	-0.40					
99	-0.55	-0.51	-0.50	-0.40	-0.39	-0.38					
...											
1050	-0.41	-0.46	-0.45	-0.30	-0.29	-0.29					
Nodo (G)	**Pt 1/12**	**Pt 2/13**	**Pt 3...**	**Pt 4...**							
	-0.72										
	-0.05										

Elem.	**Cmb**	**Pt ini**	**Pt fin**	**Pt max**	**Cmb**	**Pt ini**	**Pt fin**	**Pt max**	**Cmb**	**Pt ini**	**Pt fin**	**Pt max**
		daN/cm2	daN/cm2	daN/cm2		daN/cm2	daN/cm2	daN/cm2		daN/cm2	daN/cm2	daN/cm2
23	2	-0.41	-0.40	-0.41	25	-0.36	-0.37	-0.37	57	-0.35	-0.36	-0.36
	70	-0.30	-0.30	-0.30	72	-0.29	-0.29	-0.29	74	-0.29	-0.28	-0.29
25	2	-0.27	-0.28	-0.28	13	-0.36	-0.36	-0.36	45	-0.33	-0.33	-0.33
	70	-0.20	-0.21	-0.21	72	-0.20	-0.20	-0.20	74	-0.19	-0.20	-0.20
39	2	-0.31	-0.32	-0.32	5	-0.35	-0.35	-0.35	37	-0.33	-0.32	-0.33
	70	-0.23	-0.23	-0.23	72	-0.22	-0.23	-0.23	74	-0.22	-0.22	-0.22
45	2	-0.33	-0.33	-0.33	9	-0.34	-0.34	-0.34	41	-0.31	-0.31	-0.31
	70	-0.24	-0.24	-0.24	72	-0.23	-0.23	-0.23	74	-0.23	-0.23	-0.23
51	2	-0.32	-0.32	-0.32	5	-0.33	-0.33	-0.33	37	-0.31	-0.31	-0.31
	70	-0.24	-0.23	-0.24	72	-0.23	-0.23	-0.23	74	-0.23	-0.22	-0.23
52	2	-0.41	-0.39	-0.41	13	-0.48	-0.43	-0.48	57	-0.46	-0.43	-0.46
	70	-0.30	-0.29	-0.30	72	-0.29	-0.28	-0.29	74	-0.29	-0.27	-0.29
53	2	-0.35	-0.35	-0.35	25	-0.36	-0.35	-0.36	57	-0.35	-0.34	-0.35
	70	-0.26	-0.26	-0.26	72	-0.25	-0.25	-0.25	74	-0.25	-0.24	-0.25
54	2	-0.45	-0.43	-0.45	13	-0.46	-0.42	-0.46	45	-0.43	-0.40	-0.43
	70	-0.33	-0.31	-0.33	72	-0.32	-0.30	-0.32	74	-0.32	-0.30	-0.32
55	2	-0.41	-0.41	-0.41	25	-0.34	-0.34	-0.34	57	-0.34	-0.34	-0.34
	70	-0.30	-0.30	-0.30	72	-0.29	-0.29	-0.29	74	-0.29	-0.28	-0.29

56	2	-0.48	-0.45	-0.48	5	-0.44	-0.40	-0.44	37	-0.42	-0.38	-0.42
	70	-0.35	-0.33	-0.35	72	-0.34	-0.31	-0.34	74	-0.33	-0.31	-0.33
57	2	-0.44	-0.43	-0.44	5	-0.32	-0.32	-0.32	53	-0.32	-0.32	-0.32
	70	-0.32	-0.32	-0.32	72	-0.31	-0.30	-0.31	74	-0.30	-0.30	-0.30
58	2	-0.48	-0.45	-0.48	9	-0.44	-0.40	-0.44	41	-0.42	-0.38	-0.42
	70	-0.35	-0.33	-0.35	72	-0.34	-0.32	-0.34	74	-0.33	-0.31	-0.33
59	2	-0.44	-0.43	-0.44	13	-0.32	-0.33	-0.33	57	-0.32	-0.32	-0.32
	70	-0.32	-0.32	-0.32	72	-0.31	-0.30	-0.31	74	-0.30	-0.30	-0.30
60	2	-0.46	-0.44	-0.46	5	-0.46	-0.42	-0.46	37	-0.43	-0.39	-0.43
	70	-0.34	-0.32	-0.34	72	-0.33	-0.31	-0.33	74	-0.32	-0.30	-0.32
61	2	-0.41	-0.41	-0.41	25	-0.36	-0.36	-0.36	57	-0.36	-0.35	-0.36
	70	-0.30	-0.30	-0.30	72	-0.29	-0.29	-0.29	74	-0.29	-0.28	-0.29
62	2	-0.43	-0.41	-0.43	21	-0.49	-0.46	-0.49	53	-0.47	-0.44	-0.47
	70	-0.31	-0.30	-0.31	72	-0.30	-0.29	-0.30	74	-0.30	-0.29	-0.30
63	2	-0.41	-0.42	-0.42	13	-0.49	-0.49	-0.49	57	-0.45	-0.45	-0.45
	70	-0.30	-0.31	-0.31	72	-0.29	-0.30	-0.30	74	-0.29	-0.30	-0.30
64	2	-0.46	-0.46	-0.46	13	-0.47	-0.46	-0.47	45	-0.44	-0.43	-0.44
	70	-0.34	-0.34	-0.34	72	-0.32	-0.33	-0.33	74	-0.32	-0.32	-0.32
65	2	-0.48	-0.49	-0.49	5	-0.45	-0.45	-0.45	37	-0.43	-0.42	-0.43
	70	-0.35	-0.35	-0.35	72	-0.34	-0.34	-0.34	74	-0.34	-0.34	-0.34
66	2	-0.49	-0.49	-0.49	9	-0.45	-0.46	-0.46	37	-0.43	-0.43	-0.43
	70	-0.36	-0.35	-0.36	72	-0.34	-0.34	-0.34	74	-0.34	-0.34	-0.34
67	2	-0.47	-0.46	-0.47	5	-0.47	-0.47	-0.47	37	-0.44	-0.44	-0.44
	70	-0.34	-0.34	-0.34	72	-0.33	-0.32	-0.33	74	-0.33	-0.32	-0.33
68	2	-0.35	-0.36	-0.36	25	-0.35	-0.35	-0.35	57	-0.35	-0.35	-0.35
	70	-0.26	-0.27	-0.27	72	-0.25	-0.26	-0.26	74	-0.25	-0.26	-0.26
69	2	-0.41	-0.41	-0.41	25	-0.34	-0.33	-0.34	57	-0.33	-0.32	-0.33
	70	-0.30	-0.31	-0.31	72	-0.29	-0.29	-0.29	74	-0.29	-0.29	-0.29
70	2	-0.44	-0.43	-0.44	5	-0.32	-0.32	-0.32	37	-0.32	-0.32	-0.32
	70	-0.32	-0.32	-0.32	72	-0.31	-0.31	-0.31	74	-0.30	-0.30	-0.30
...												
313	70	-0.25	-0.24	-0.25	72	-0.24	-0.24	-0.24	74	-0.24	-0.23	-0.24
Elem.		**Pt ini**	**Pt fin**	**Pt max**		**Pt ini**	**Pt fin**	**Pt max**		**Pt ini**	**Pt fin**	**Pt max**
		-0.49										
		-0.19										

RISULTATI ELEMENTI TIPO TRAVE

LEGENDA RISULTATI ELEMENTI TIPO TRAVE

Il controllo dei risultati delle analisi condotte, per quanto concerne gli elementi tipo trave, è possibile in relazione alle tabelle sotto riportate.

Gli elementi vengono suddivisi in relazione alle proprietà in elementi:

- tipo **pilastro**
- tipo **trave in elevazione**
- tipo **trave in fondazione**

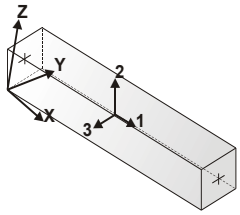
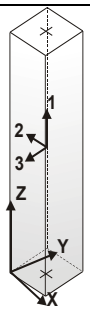
Per ogni elemento e per ogni combinazione (o caso di carico) vengono riportati i risultati più significativi.

Per gli elementi tipo *pilastro* sono riportati in tabella i seguenti valori:

Pilas.	numero dell'elemento pilastro
Cmb	combinazione in cui si verificano i valori riportati
M3 mx/mn	momento flettente in campata M3 max (prima riga) / min (seconda riga)
M2 mx/mn	momento flettente in campata M2 max (prima riga) / min (seconda riga)
D2/D3	freccia massima in direzione 2 (prima riga) / direzione 3 (seconda riga)
Q2/Q3	carico totale in direzione 2 (prima riga) / direzione 3 (seconda riga)
Pos.	ascissa del punto iniziale e finale dell'elemento
N, V2, ecc..	sei componenti di sollecitazione al piede ed in sommità dell'elemento

Per gli elementi tipo *trave in elevazione* sono riportati, oltre al numero dell'elemento, i medesimi risultati visti per i pilastri.

Per gli elementi tipo *trave in fondazione* (trave f.) sono riportati, oltre al numero dell'elemento, i medesimi risultati visti per i pilastri e la massima pressione sul terreno.

 orientamento elementi 2D non verticali	 orientamento elementi 2D verticali

Pilas.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
		daN cm	daN cm	cm	daN	cm	daN	daN	daN	daN cm	daN cm	daN cm
1	2	-5.079e+05	5.273e+05	0.05	0.0	0.0	-8.901e+04	1567.85	-2440.10	2154.51	5.273e+05	-1.179e+06
		-1.179e+06	-5.170e+05	0.01	0.0	428.0	-8.345e+04	1567.85	-2440.10	2154.51	-5.170e+05	-5.079e+05
1	3	-2.281e+05	2.795e+05	0.03	0.0	0.0	-5.219e+04	1124.53	-1297.40	-1.69	2.795e+05	-7.094e+05
		-7.094e+05	-2.758e+05	7.04e-03	0.0	428.0	-4.791e+04	1124.53	-1297.40	-1.69	-2.758e+05	-2.281e+05
1	10	3.136e+06	1.317e+06	-1.02	0.0	0.0	-5.526e+04	4.257e+04	-5995.52	1.408e+04	1.317e+06	-1.526e+07
		-1.526e+07	-1.249e+06	0.21	0.0	428.0	-5.098e+04	4.257e+04	-5995.52	1.408e+04	-1.249e+06	3.136e+06
1	11	1.362e+07	5.670e+05	1.08	0.0	0.0	-6.652e+04	-4.022e+04	2778.79	-1.232e+04	-6.228e+05	1.362e+07
		-3.763e+06	-6.228e+05	-0.20	0.0	428.0	-6.224e+04	-4.022e+04	2778.79	-1.232e+04	5.670e+05	-3.763e+06
1	25	-4.212e+05	1.710e+06	0.02	0.0	0.0	-903.82	-941.02	8987.21	-1.129e+05	-2.137e+06	-4.212e+05
		-8.125e+05	-2.137e+06	-0.62	0.0	428.0	3376.18	-941.02	8987.21	-1.129e+05	1.710e+06	-8.125e+05
1	28	1.859e+05	2.832e+06	0.05	0.0	0.0	-1.209e+05	3296.54	-1.220e+04	1.146e+05	2.832e+06	-1.214e+06
		-1.214e+06	-2.392e+06	0.63	0.0	428.0	-1.166e+05	3296.54	-1.220e+04	1.146e+05	-2.392e+06	1.859e+05
1	36	9.589e+05	3.100e+06	-0.12	0.0	0.0	-1.203e+05	1.323e+04	-1.342e+04	2.147e+05	3.100e+06	-4.654e+06
		-4.654e+06	-2.644e+06	0.68	0.0	428.0	-1.160e+05	1.323e+04	-1.342e+04	2.147e+05	-2.644e+06	9.589e+05
1	42	2.532e+06	1.214e+06	-0.79	0.0	0.0	-5.883e+04	3.404e+04	-5501.57	1.887e+04	1.214e+06	-1.222e+07
		-1.222e+07	-1.141e+06	0.19	0.0	428.0	-5.455e+04	3.404e+04	-5501.57	1.887e+04	-1.141e+06	2.532e+06
1	43	1.059e+07	4.584e+05	0.85	0.0	0.0	-6.294e+04	-3.168e+04	2284.84	-1.712e+04	-5.200e+05	1.059e+07
		-3.159e+06	-5.200e+05	-0.18	0.0	428.0	-5.866e+04	-3.168e+04	2284.84	-1.712e+04	4.584e+05	-3.159e+06
1	57	-1.193e+04	1.560e+06	0.05	0.0	0.0	-6383.14	-1958.16	8206.45	-9.904e+04	-1.952e+06	-1.193e+04
		-8.257e+05	-1.952e+06	-0.57	0.0	428.0	-2103.14	-1958.16	8206.45	-9.904e+04	1.560e+06	-8.257e+05
1	60	1.991e+05	2.647e+06	0.02	0.0	0.0	-1.154e+05	4313.68	-1.142e+04	1.008e+05	2.647e+06	-1.623e+06
		-1.623e+06	-2.243e+06	0.58	0.0	428.0	-1.111e+05	4313.68	-1.142e+04	1.008e+05	-2.243e+06	1.991e+05
1	68	9.285e+05	2.871e+06	-0.15	0.0	0.0	-1.143e+05	1.349e+04	-1.244e+04	1.930e+05	2.871e+06	-4.794e+06
		-4.794e+06	-2.456e+06	0.63	0.0	428.0	-1.100e+05	1.349e+04	-1.244e+04	1.930e+05	-2.456e+06	9.285e+05
1	69	-2.365e+05	3.049e+05	0.03	0.0	0.0	-5.511e+04	1260.10	-1417.04	206.83	3.049e+05	-7.758e+05
		-7.758e+05	-3.016e+05	6.75e-03	0.0	428.0	-5.083e+04	1260.10	-1417.04	206.83	-3.016e+05	-2.365e+05
1	70	-3.645e+05	3.753e+05	0.03	0.0	0.0	-6.474e+04	1122.86	-1735.91	1324.90	3.753e+05	-8.451e+05
		-8.451e+05	-3.677e+05	9.80e-03	0.0	428.0	-6.046e+04	1122.86	-1735.91	1324.90	-3.677e+05	-3.645e+05
1	71	-2.365e+05	3.049e+05	0.03	0.0	0.0	-5.511e+04	1260.10	-1417.04	206.83	3.049e+05	-7.758e+05
		-7.758e+05	-3.016e+05	6.75e-03	0.0	428.0	-5.083e+04	1260.10	-1417.04	206.83	-3.016e+05	-2.365e+05
1	72	-3.261e+05	3.542e+05	0.03	0.0	0.0	-6.185e+04	1164.04	-1640.25	989.48	3.542e+05	-8.243e+05
		-8.243e+05	-3.479e+05	8.88e-03	0.0	428.0	-5.757e+04	1164.04	-1640.25	989.48	-3.479e+05	-3.261e+05
1	73	-2.365e+05	3.049e+05	0.03	0.0	0.0	-5.511e+04	1260.10	-1417.04	206.83	3.049e+05	-7.758e+05
		-7.758e+05	-3.016e+05	6.75e-03	0.0	428.0	-5.083e+04	1260.10	-1417.04	206.83	-3.016e+05	-2.365e+05
1	74	-3.133e+05	3.471e+05	0.03	0.0	0.0	-6.089e+04	1177.76	-1608.37	877.67	3.471e+05	-8.174e+05
		-8.174e+05	-3.413e+05	8.58e-03	0.0	428.0	-5.661e+04	1177.76	-1608.37	877.67	-3.413e+05	-3.133e+05
2	2	5.892e+05	7.307e+05	0.06	0.0	0.0	-1.243e+05	-2192.22	-3205.00	-1.497e+04	7.307e+05	5.892e+05
		-3.490e+05	-6.410e+05	0.03	0.0	428.0	-1.187e+05	-2192.22	-3205.00	-1.497e+04	-6.410e+05	-3.490e+05
2	3	3.409e+05	3.880e+05	0.04	0.0	0.0	-7.076e+04	-1275.61	-1699.77	-7939.52	3.880e+05	3.409e+05
		-2.051e+05	-3.395e+05	0.01	0.0	428.0	-6.648e+04	-1275.61	-1699.77	-7939.52	-3.395e+05	-2.051e+05
2	10	7.147e+06	9.722e+05	-1.03	0.0	0.0	-8.780e+04	6.048e+04	-4075.09	7456.56	9.722e+05	-1.878e+07
		-1.878e+07	-7.553e+05	0.13	0.0	428.0	-8.352e+04	6.048e+04	-4075.09	7456.56	-7.553e+05	7.147e+06
2	11	1.958e+07	-1.176e+04	1.12	0.0	0.0	-8.010e+04	-6.347e+04	-135.82	-2.713e+04	-1.176e+04	1.958e+07
		-7.626e+06	-8.649e+04	-0.10	0.0	428.0	-7.582e+04	-6.347e+04	-135.82	-2.713e+04	-8.649e+04	-7.626e+06
2	21	2.864e+06	1.376e+06	-0.10	0.0	0.0	-2.734e+04	2.430e+04	7232.90	3.984e+04	-1.725e+06	-1.803e+06
		-1.803e+06	-1.725e+06	-0.50	0.0	428.0	-2.306e+04	2.430e+04	7232.90	3.984e+04	1.376e+06	2.864e+06
2	24	2.606e+06	2.686e+06	0.18	0.0	0.0	-1.406e+05	-2.730e+04	-1.144e+04	-5.951e+04	2.686e+06	2.606e+06
		-3.343e+06	-2.217e+06	0.53	0.0	428.0	-1.363e+05	-2.730e+04	-1.144e+04	-5.951e+04	-2.217e+06	-3.343e+06
...												
50	74	-3.348e+05	-1.026e+06	-0.03	0.0	407.0	-1.592e+04	1931.78	-4855.79	2228.19	-1.026e+06	4.515e+05

Pilas.	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	N	V 2	V 3	T
	-1.878e+07	-9.214e+06	-1.33	0.0	-2.107e+05	-6.347e+04	-3.709e+04	-3.434e+05
	1.958e+07	9.044e+06	1.37	0.0	1.308e+04	6.048e+04	3.650e+04	3.469e+05

Trave	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
		daN cm	daN cm	cm	daN	cm	daN	daN	daN	daN cm	daN cm	daN cm
72	1	1.461e+05	6281.54	-0.11	-5441.89	0.0	1531.47	2500.77	20.65	9996.32	-1980.17	-8.320e+04
		-1.713e+05	-1980.17	-4.98e-03	0.0	400.0	1531.47	-2941.12	20.65	9996.32	6281.54	-1.713e+05
72	2	1.857e+05	6828.91	-0.14	-6911.89	0.0	1931.26	3161.85	19.46	1.024e+04	-955.97	-1.030e+05
		-2.206e+05	-955.97	-6.53e-03	0.0	400.0	1931.26	-3750.04	19.46	1.024e+04	6828.91	-2.206e+05
72	3	1.047e+05	4793.48	-0.08	-3906.92	0.0	1080.97	1794.55	16.53	7718.45	-1819.98	-5.980e+04
		-1.234e+05	-1819.98	-3.66e-03	0.0	400.0	1080.97	-2112.37	16.53	7718.45	4793.48	-1.234e+05
72	9	1.324e+05	4.671e+04	-0.04	-4652.70	0.0	2224.80	1756.80	-220.74	-4.945e+04	4.671e+04	-9089.81
		-2.134e+05	-4.171e+04	0.07	0.0	400.0	2224.80	-2895.90	-220.74	-4.945e+04	-4.171e+04	-2.134e+05
72	10	1.113e+05	2.942e+04	0.04	-4652.70	0.0	1961.70	1862.81	-136.47	-3.088e+04	2.942e+04	-2.814e+04
		-2.380e+05	-2.507e+04	-0.16	0.0	400.0	1961.70	-2789.89	-136.47	-3.088e+04	-2.507e+04	-2.380e+05
72	12	1.259e+05	5.178e+04	-0.16	-4652.70	0.0	366.72	2507.13	252.13	6.505e+04	-4.920e+04	-1.311e+05
		-1.311e+05	-4.920e+04	-0.08	0.0	400.0	366.72	-2145.57	252.13	6.505e+04	5.178e+04	-8.233e+04
72	31	1.640e+05	1.578e+04	-0.24	-4652.70	0.0	1495.02	2051.93	-66.46	-8758.45	1.578e+04	-5.379e+04
		-8.349e+04	-1.117e+04	0.40	0.0	400.0	1495.02	-2600.77	-66.46	-8758.45	-1.117e+04	-8.349e+04

72	41	1.311e+05	3.721e+04	-0.05	-4652.70	0.0	2078.67	1833.97	-173.95	-3.783e+04	3.721e+04	-2.136e+04
		-1.964e+05	-3.248e+04	0.07	0.0	400.0	2078.67	-2818.73	-173.95	-3.783e+04	-3.248e+04	-1.964e+05
72	42	1.114e+05	2.109e+04	0.01	-4652.70	0.0	1832.79	1932.48	-95.34	-2.059e+04	2.109e+04	-3.909e+04
		-2.193e+05	-1.696e+04	-0.14	0.0	400.0	1832.79	-2720.22	-95.34	-2.059e+04	-1.696e+04	-2.193e+05
72	44	1.236e+05	4.255e+04	-0.14	-4652.70	0.0	512.85	2429.96	205.33	5.343e+04	-3.970e+04	-1.188e+05
		-1.188e+05	-3.970e+04	-0.08	0.0	400.0	512.85	-2222.74	205.33	5.343e+04	4.255e+04	-9.928e+04
72	63	1.605e+05	1.651e+04	-0.23	-4652.70	0.0	1507.57	2042.40	-70.22	-9834.79	1.651e+04	-5.251e+04
		-9.178e+04	-1.191e+04	0.37	0.0	400.0	1507.57	-2610.30	-70.22	-9834.79	-1.191e+04	-9.178e+04
72	69	1.090e+05	4815.22	-0.08	-4064.70	0.0	1135.85	1867.53	16.17	7702.07	-1652.24	-6.217e+04
		-1.281e+05	-1652.24	-3.76e-03	0.0	400.0	1135.85	-2197.17	16.17	7702.07	4815.22	-1.281e+05
72	70	1.355e+05	5180.14	-0.10	-5044.70	0.0	1402.37	2308.25	15.37	7863.00	-969.44	-7.537e+04
		-1.610e+05	-969.44	-4.79e-03	0.0	400.0	1402.37	-2736.45	15.37	7863.00	5180.14	-1.610e+05
72	71	1.090e+05	4815.22	-0.08	-4064.70	0.0	1135.85	1867.53	16.17	7702.07	-1652.24	-6.217e+04
		-1.281e+05	-1652.24	-3.76e-03	0.0	400.0	1135.85	-2197.17	16.17	7702.07	4815.22	-1.281e+05
72	72	1.275e+05	5070.66	-0.10	-4750.70	0.0	1322.41	2176.03	15.61	7814.72	-1174.28	-7.141e+04
		-1.511e+05	-1174.28	-4.48e-03	0.0	400.0	1322.41	-2574.67	15.61	7814.72	5070.66	-1.511e+05
72	73	1.090e+05	4815.22	-0.08	-4064.70	0.0	1135.85	1867.53	16.17	7702.07	-1652.24	-6.217e+04
		-1.281e+05	-1652.24	-3.76e-03	0.0	400.0	1135.85	-2197.17	16.17	7702.07	4815.22	-1.281e+05
72	74	1.249e+05	5034.17	-0.10	-4652.70	0.0	1295.76	2131.96	15.69	7798.63	-1242.56	-7.009e+04
		-1.478e+05	-1242.56	-4.38e-03	0.0	400.0	1295.76	-2520.74	15.69	7798.63	5034.17	-1.478e+05
73	2	1.814e+05	2543.83	-0.06	-7775.88	0.0	1423.37	3782.40	-14.52	-3358.48	2543.83	-2.322e+05
		-2.797e+05	-3989.14	-3.96e-03	0.0	450.0	1423.37	-3993.48	-14.52	-3358.48	-3989.14	-2.797e+05
73	3	1.019e+05	1275.88	-0.03	-4395.28	0.0	813.73	2134.97	-7.24	-654.57	1275.88	-1.312e+05
		-1.594e+05	-1982.26	-2.10e-03	0.0	450.0	813.73	-2260.32	-7.24	-654.57	-1982.26	-1.594e+05
73	5	8.164e+04	1.686e+04	-0.01	-5234.29	0.0	3616.97	2601.14	-83.08	-3.446e+04	1.686e+04	-1.775e+05
		-2.481e+05	-2.057e+04	-0.10	0.0	450.0	3616.97	-2633.14	-83.08	-3.446e+04	-2.057e+04	-2.481e+05
73	8	1.620e+05	1.546e+04	-0.07	-5234.29	0.0	-1690.13	2487.92	64.45	3.113e+04	-1.359e+04	-1.351e+05
		-1.351e+05	-1.359e+04	0.10	0.0	450.0	-1690.13	-2746.37	64.45	3.113e+04	1.546e+04	-1.297e+05
73	11	1.655e+05	4282.43	-0.09	-5234.29	0.0	-1114.88	2363.73	14.02	3.389e+04	-1998.71	-1.021e+05
		-1.557e+05	-1998.71	0.18	0.0	450.0	-1114.88	-2870.55	14.02	3.389e+04	4282.43	-1.557e+05
73	21	1.186e+05	2.584e+04	-0.04	-5234.29	0.0	2817.12	2339.24	-114.03	-2.808e+04	2.584e+04	-1.060e+05
		-2.552e+05	-2.551e+04	-0.18	0.0	450.0	2817.12	-2895.05	-114.03	-2.808e+04	-2.551e+04	-2.552e+05
73	37	9.093e+04	1.449e+04	-0.02	-5234.29	0.0	3226.80	2582.24	-71.08	-2.729e+04	1.449e+04	-1.701e+05
		-2.369e+05	-1.754e+04	-0.09	0.0	450.0	3226.80	-2652.05	-71.08	-2.729e+04	-1.754e+04	-2.369e+05
...												
148	74	-8.883e+05	-4.615e+04	5.57e-03	0.0	385.0	6542.05	-8128.21	-161.37	1.488e+04	-4.615e+04	-8.883e+05
Trave		**M3 mx/mn**	**M2 mx/mn**	**D 2 / D 3**	**Q 2 / Q 3**		**N**	**V 2**	**V 3**	**T**		
		-9.971e+06	-5.013e+05	-0.81	-7.343e+04		-3.257e+04	-4.158e+04	-1729.69	-6.653e+05		
		8.035e+06	5.187e+05	0.81	0.0		3.048e+04	3.699e+04	1587.51	6.951e+05		

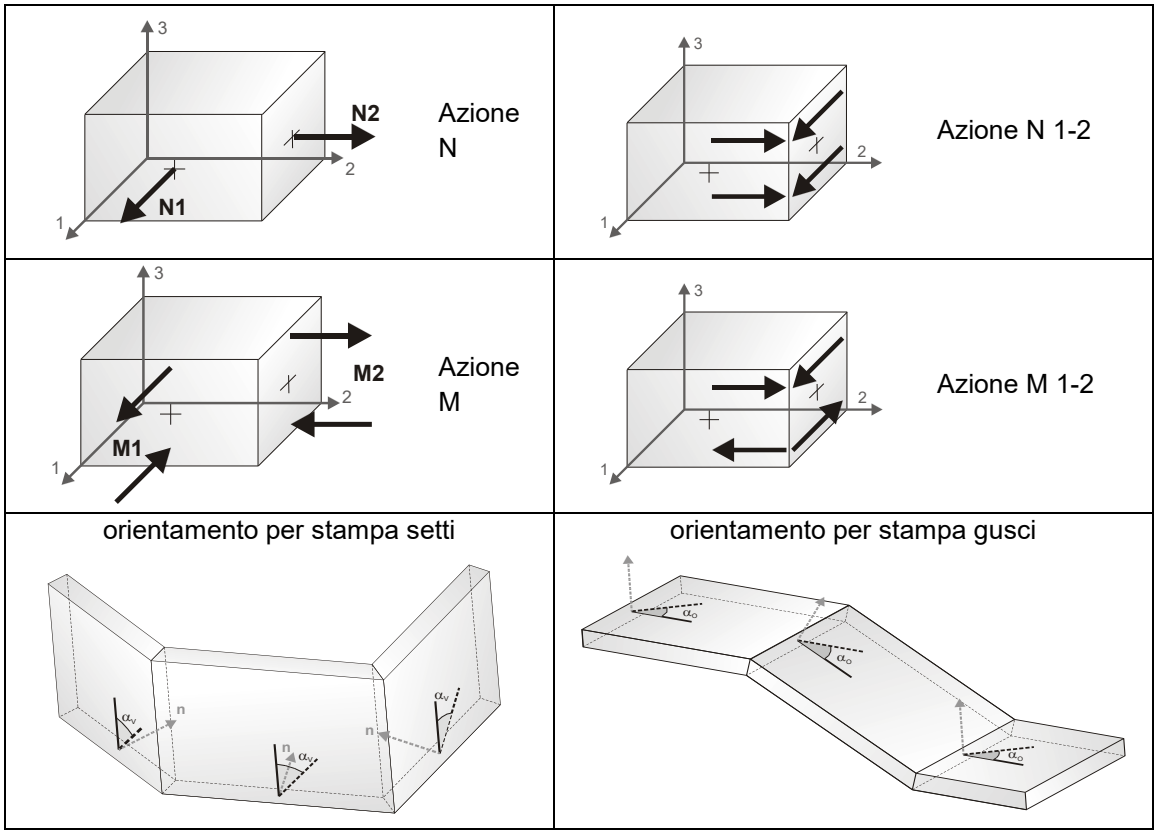
Trave f.	**Cmb**	**M3 mx/mn**	**M2 mx/mn**	**D 2 / D 3**	**Pt**	**Pos.**	**N**	**V 2**	**V 3**	**T**	**M 2**	**M 3**
		daN cm	daN cm	cm	daN/cm2	cm	daN	daN	daN	daN cm	daN cm	daN cm
23	1	1.298e+06	2.306e+04	9.45e-03	-0.36	0.0	-1.738e+04	-1.796e+04	-653.61	-1.954e+04	2.306e+04	1.298e+06
		-1.961e+05	-2.922e+04	-2.40e-04		80.0	-1.738e+04	-1.938e+04	-653.61	-1.956e+04	-2.922e+04	-1.961e+05
23	2	1.703e+06	2.494e+04	0.01	-0.41	0.0	-2.165e+04	-2.360e+04	-635.33	-2.097e+04	2.494e+04	1.703e+06
		-2.337e+05	-2.589e+04	-2.41e-04		80.0	-2.165e+04	-2.481e+04	-635.33	-2.099e+04	-2.589e+04	-2.337e+05
23	3	9.332e+05	1.438e+04	7.16e-03	-0.25	0.0	-1.232e+04	-1.279e+04	-397.77	-1.244e+04	1.438e+04	9.332e+05
		-1.252e+05	-1.744e+04	-1.59e-04		80.0	-1.232e+04	-1.367e+04	-397.77	-1.245e+04	-1.744e+04	-1.252e+05
23	17	2.759e+06	2.665e+05	-9.67e-03	-0.35	0.0	-4120.42	-9831.36	-2563.23	-1.509e+05	2.665e+05	2.759e+06
		1.133e+06	4.298e+04	2.71e-03		80.0	-4120.42	-1.082e+04	-2563.23	-1.507e+05	4.298e+04	1.133e+06
23	20	-4.950e+05	-8.089e+04	0.03	-0.24	0.0	-2.512e+04	-2.142e+04	1663.61	1.219e+05	-2.324e+05	-4.950e+05
		-1.442e+06	-2.324e+05	-3.06e-03		80.0	-2.512e+04	-2.226e+04	1663.61	1.217e+05	-8.089e+04	-1.442e+06
23	25	3.845e+06	7.183e+04	-0.02	-0.37	0.0	-3.028e+04	-522.49	-1381.62	-6.162e+04	7.183e+04	3.845e+06
		1.400e+06	-3.366e+04	1.89e-03		80.0	-3.028e+04	-1692.40	-1381.62	-6.158e+04	-3.366e+04	1.400e+06
23	26	-9.289e+05	1.054e+05	-0.03	-0.24	0.0	1.023e+04	-2.933e+04	-738.73	-4.587e+04	1.054e+05	-9.289e+05
		-1.105e+06	4.179e+04	-1.26e-03		80.0	1.023e+04	-3.000e+04	-738.73	-4.584e+04	4.179e+04	-1.105e+06
23	27	3.193e+06	-7.139e+04	0.01	-0.34	0.0	-3.947e+04	-1921.23	-160.89	1.692e+04	-7.139e+04	3.193e+06
		7.954e+05	-7.970e+04	9.08e-04		80.0	-3.947e+04	-3084.60	-160.89	1.686e+04	-7.970e+04	7.954e+05
23	28	-1.581e+06	-4249.15	0.04	-0.22	0.0	1033.08	-3.073e+04	482.00	3.267e+04	-3.778e+04	-1.581e+06
		-1.709e+06	-3.778e+04	-2.24e-03		80.0	1033.08	-3.139e+04	482.00	3.260e+04	-4249.15	-1.709e+06
23	49	2.485e+06	2.105e+05	-6.83e-03	-0.34	0.0	-7159.46	-1.025e+04	-2086.79	-1.202e+05	2.105e+05	2.485e+06
		8.823e+05	2.649e+04	2.25e-03		80.0	-7159.46	-1.125e+04	-2086.79	-1.200e+05	2.649e+04	8.823e+05
23	52	-2.214e+05	-6.440e+04	0.02	-0.25	0.0	-2.208e+04	-2.100e+04	1187.17	9.120e+04	-1.765e+05	-2.214e+05
		-1.192e+06	-1.765e+05	-2.60e-03		80.0	-2.208e+04	-2.184e+04	1187.17	9.107e+04	-6.440e+04	-1.192e+06
23	57	3.610e+06	5.648e+04	-0.02	-0.36	0.0	-2.975e+04	-1539.68	-1218.85	-5.191e+04	5.648e+04	3.610e+06
		1.242e+06	-3.650e+04	1.68e-03		80.0	-2.975e+04	-2696.76	-1218.85	-5.188e+04	-3.650e+04	1.242e+06
23	58	-8.354e+05	8.772e+04	-0.03	-0.25	0.0	7609.25	-2.842e+04	-619.86	-3.743e+04	8.772e+04	-8.354e+05
		-1.085e+06	3.414e+04	-1.27e-03		80.0	7609.25	-2.911e+04	-619.86	-3.742e+04	3.414e+04	-1.085e+06
23	59	3.099e+06	-5.367e+04	0.01	-0.34	0.0	-3.685e+04	-2833.38	-279.76	8480.18	-5.367e+04	3.099e+06
		7.757e+05	-7.206e+04	9.24e-04		80.0	-3.685e+04	-3978.11	-279.76	8437.54	-7.206e+04	7.757e+05
23	60	-1.346e+06	-1416.91	0.04	-0.23	0.0	501.46	-2.972e+04	319.24	2.296e+04	-2.242e+04	-1.346e+06
		-1.551e+06	-2.242e+04	-2.03e-03		80.0	501.46	-3.039e+04	319.24	2.290e+04	-1416.91	-1.551e+06
23	69	9.699e+05	1.628e+04	7.22e-03	-0.27	0.0	-1.291e+04	-1.337e+04	-457.12	-1.390e+04	1.628e+04	9.699e+05
		-1.397e+05	-2.029e+04	-1.74e-04		80.0	-1.291e+04	-1.437e+04	-457.12	-1.392e+04	-2.029e+04	-1.397e+05
23	70	1.240e+06	1.753e+04	0.01	-0.30	0.0	-1.576e+04	-1.713e+04	-444.93	-1.486e+04	1.753e+04	1.240e+06

		-1.648e+05	-1.807e+04	-1.74e-04		80.0	-1.576e+04	-1.799e+04	-444.93	-1.487e+04	-1.807e+04	-1.648e+05
23	71	9.699e+05	1.628e+04	7.22e-03	-0.27	0.0	-1.291e+04	-1.337e+04	-457.12	-1.390e+04	1.628e+04	9.699e+05
		-1.397e+05	-2.029e+04	-1.74e-04		80.0	-1.291e+04	-1.437e+04	-457.12	-1.392e+04	-2.029e+04	-1.397e+05
23	72	1.159e+06	1.715e+04	9.28e-03	-0.29	0.0	-1.491e+04	-1.600e+04	-448.59	-1.457e+04	1.715e+04	1.159e+06
		-1.572e+05	-1.873e+04	-1.74e-04		80.0	-1.491e+04	-1.691e+04	-448.59	-1.459e+04	-1.873e+04	-1.572e+05
23	73	9.699e+05	1.628e+04	7.22e-03	-0.27	0.0	-1.291e+04	-1.337e+04	-457.12	-1.390e+04	1.628e+04	9.699e+05
		-1.397e+05	-2.029e+04	-1.74e-04		80.0	-1.291e+04	-1.437e+04	-457.12	-1.392e+04	-2.029e+04	-1.397e+05
23	74	1.132e+06	1.703e+04	8.99e-03	-0.29	0.0	-1.462e+04	-1.563e+04	-449.81	-1.447e+04	1.703e+04	1.132e+06
		-1.547e+05	-1.896e+04	-1.74e-04		80.0	-1.462e+04	-1.654e+04	-449.81	-1.449e+04	-1.896e+04	-1.547e+05
25	2	7.453e+05	-7461.84	-0.01	-0.28	0.0	-1.175e+04	-6441.49	-286.83	-2.282e+04	-7461.84	7.453e+05
		1.600e+05	-3.041e+04	-2.22e-04		80.0	-1.175e+04	-8186.51	-286.83	-2.288e+04	-3.041e+04	1.600e+05
25	3	4.729e+05	-8293.41	-7.96e-03	-0.18	0.0	-7288.85	-3964.73	-82.45	-1.163e+04	-8293.41	4.729e+05
		1.089e+05	-1.489e+04	-1.23e-04		80.0	-7288.85	-5131.48	-82.45	-1.166e+04	-1.489e+04	1.089e+05
25	4	5.845e+05	-1835.63	-0.01	-0.21	0.0	-8837.20	-5405.49	-326.07	-1.949e+04	-1835.63	5.845e+05
		1.097e+05	-2.792e+04	-1.76e-04		80.0	-8837.20	-6458.92	-326.07	-1.954e+04	-2.792e+04	1.097e+05
...												
313	74	-1.011e+06	-1732.04	4.52e-05	-0.24	78.5	9507.40	1.424e+04	94.70	2822.89	5706.57	1.184e+05
Trave f.		**M3 mx/mn**	**M2 mx/mn**	**D 2 / D 3**	**Pt**		**N**	**V 2**	**V 3**	**T**		
		-6.627e+06	-1.109e+06	-0.50	-0.49		-1.476e+05	-7.141e+04	-3.226e+04	-1.012e+06		
		1.314e+07	1.227e+06	0.51	-0.06		1.147e+05	7.283e+04	3.352e+04	1.278e+06		

RISULTATI ELEMENTI TIPO SHELL

LEGENDA RISULTATI ELEMENTI TIPO SHELL

Il controllo dei risultati delle analisi condotte, per quanto concerne gli elementi tipo shell, è possibile in relazione alle tabelle sottoriportate.
Per ogni elemento, e per ogni combinazione(o caso di carico) vengono riportati i risultati più significativi.



In particolare vengono riportati in ogni nodo di un elemento per ogni combinazione:

tensione di Von Mises		(valore riassuntivo del complessivo stato di sollecitazione)
N max		sforzo membranale principale massimo
N min		sforzo membranale principale minimo
M max		sforzo flessionale principale massimo
M min		sforzo flessionale principale minimo
N1	**N2**	sforzi membranali e flessionali in direzione locale 1 e 2 dell'elemento
N1-2	**M1**	(lo sforzo 2-1 è uguale allo sforzo 1-2 per la reciprocità delle tensioni
M2	**M1-2**	tangenziali)

I suddetti risultati possono a scelta del progettista essere preceduti o sostituiti da valori di sollecitazione non più riferiti al sistema locale dell'elemento ma al sistema globale.
In questo caso gli elementi vengono raggruppati in gruppi (M_S: macro gusci o macro setti, raggruppati per materiale, spessore, e posizione fisica) per la valutazione dei valori mediati ai nodi appartenenti agli elementi dei gruppi stessi.
I valori di sollecitazione sono, in questo caso, riferiti ad una terna specifica del gruppo ruotata di α_O attorno all'asse Z per i gusci e ruotata di α_V attorno alla normale (che per definizione è orizzontale) al piano del setto.
Per i setti, in particolare, se α_V è zero, l'asse '1-1 rappresenta la verticale e l'asse '2-2 l'orizzontale contenuta nel setto.
Le azioni sui setti possono essere espresse anche con formato macro, cioè riferite all'intero macroelemento.

In particolare vengono riportati per ogni quota Z dei nodi e per ogni combinazione i seguenti valori:

N memb.	Azione membranale complessiva agente sulla parete in direzione Z
V memb.	Azione complessiva di taglio agente nel piano del macroelemento
V orto	Azione complessiva di taglio agente in direzione perpendicolare al macroelemento
M memb.	Azione flessionale complessiva agente nel piano del macroelemento
M orto	Azione flessionale complessiva agente in direzione perpendicolare al macroelemento
T	Azione torsionale complessiva agente nel piano orizzontale

Macro	Tipo	Angolo 1-X (gradi)
1	**Guscio**	**0.0**

M_G	Cmb	Nodo	N max	N min	N 1	N 2	N 1-2	M max	M min	M 1	M 2	M 1-2
			daN/cm	daN/cm	daN/cm	daN/cm	daN/cm	daN	daN	daN	daN	daN
1	2	1	589.19	204.94	580.19	213.94	-58.12	-2430.65	-1.858e+04	-1.337e+04	-7635.31	7546.99
1	2	3	309.06	-84.26	309.03	-84.23	3.44	-5246.20	-6014.87	-5250.33	-6010.74	56.19
1	2	5	53.04	-7.67	52.74	-7.36	4.27	-5243.15	-5373.67	-5367.29	-5249.53	28.13
1	2	7	530.05	415.03	530.04	415.03	-0.78	-1.032e+04	-1.301e+04	-1.300e+04	-1.033e+04	-168.97
1	2	9	364.09	44.92	363.93	45.07	7.09	-3558.31	-5987.64	-5979.33	-3566.62	141.86
1	2	11	71.07	19.07	19.41	70.72	4.20	-2223.89	-4252.58	-4252.04	-2224.42	33.01
1	2	13	443.11	372.88	440.14	375.85	-14.13	-9229.75	-1.458e+04	-1.391e+04	-9897.75	1767.61
1	2	15	464.14	-20.45	464.11	-20.42	4.10	-3514.47	-6064.13	-6064.04	-3514.55	15.09
1	2	17	44.99	36.32	37.20	44.11	2.61	-2190.31	-4392.38	-4357.79	-2224.89	-273.79
1	2	19	437.20	360.87	437.18	360.88	-1.12	-9352.93	-1.475e+04	-1.406e+04	-1.004e+04	1801.87
1	2	21	471.97	-21.15	471.91	-21.09	5.11	-3492.71	-6077.48	-6076.95	-3493.24	-36.95
1	2	23	62.63	33.36	33.72	62.27	3.24	-2276.82	-4251.90	-4205.12	-2323.60	-300.34
1	2	25	361.02	282.00	360.64	282.38	-5.46	-7943.69	-1.220e+04	-1.185e+04	-8293.39	1168.18
1	2	27	416.49	-42.61	416.49	-42.61	-0.85	-3043.65	-5499.71	-5467.74	-3075.61	-278.35
1	2	29	31.24	28.25	30.57	28.93	-1.25	-6200.20	-7506.29	-6406.26	-7300.23	-476.10
1	2	31	122.42	-17.10	121.54	-16.22	11.05	-1.002e+04	-1.337e+04	-1.337e+04	-1.002e+04	93.71
1	2	33	126.93	-8.80	126.93	-8.80	0.34	-9909.18	-1.286e+04	-1.266e+04	-1.011e+04	-742.44
1	2	66	39.39	-119.94	-49.80	-30.75	79.10	750.95	-3660.37	340.19	-3249.61	-1281.91
1	2	70	9.75	-0.21	2.12	7.42	-4.21	1150.10	234.57	255.39	1129.29	136.48
1	2	71	54.21	-0.69	53.31	0.20	6.95	-1366.77	-4214.29	-1389.34	-4191.72	252.51
1	2	72	33.82	-14.14	-13.35	33.03	-6.12	-480.75	-4029.41	-481.28	-4028.88	43.39
1	2	73	45.50	-67.54	-67.53	45.49	-1.09	22.16	-4093.91	20.46	-4092.22	-83.56
1	2	74	54.41	-94.09	-94.04	54.36	-2.54	273.96	-4218.30	263.55	-4207.89	-216.03
1	2	75	58.99	-96.70	-96.56	58.85	-4.66	268.36	-4341.43	251.29	-4324.36	-279.97
1	2	76	58.42	-74.89	-74.62	58.15	-6.05	10.12	-4467.18	-13.41	-4443.65	-323.73
1	2	77	50.44	-25.85	-25.55	50.13	-4.79	-513.06	-4608.51	-552.38	-4569.20	-399.34
1	2	78	58.80	29.45	57.32	30.93	6.41	-1358.65	-4775.85	-1403.45	-4731.04	-388.71
1	2	79	177.23	-12.00	177.09	-11.86	-5.11	-2640.50	-5132.59	-2706.87	-5066.21	-401.27
1	2	80	232.11	45.74	229.32	48.53	22.64	-1061.39	-5098.47	-5075.96	-1083.89	300.59
1	2	81	157.96	66.35	156.73	67.58	10.54	-1259.80	-6514.66	-6492.82	-1281.65	338.09
1	2	82	157.16	111.75	157.16	111.75	0.33	-1785.74	-7245.91	-7230.25	-1801.40	291.97
1	2	83	233.71	186.15	232.60	187.26	-7.19	-2727.82	-6979.36	-6968.55	-2738.63	214.09
1	2	84	340.49	39.76	340.24	40.01	8.65	-3997.87	-4117.95	-4102.40	-4013.42	-40.32
1	2	85	153.05	41.51	152.69	41.88	6.36	-2278.34	-4778.11	-2289.06	-4767.38	-163.40
1	2	86	66.05	24.83	24.92	65.97	1.84	-1011.21	-5103.60	-1024.06	-5090.75	-228.99
1	2	87	75.22	-60.81	-60.81	75.21	-0.63	-149.92	-4987.69	-158.99	-4978.63	-209.21
1	2	88	76.38	-106.46	-106.44	76.36	-1.90	390.13	-4658.84	385.36	-4654.07	-155.08
1	2	89	73.81	-118.24	-118.22	73.79	-2.10	621.05	-4215.93	619.70	-4214.58	-80.78
1	2	90	68.55	-99.52	-99.50	68.54	-1.49	574.29	-3632.30	574.29	-3632.30	-1.15
1	2	91	62.34	-53.10	-53.09	62.33	-0.83	282.97	-2804.97	282.11	-2804.11	51.59
1	2	92	66.70	12.25	12.26	66.68	0.89	-307.84	-1817.60	-310.01	-1815.43	57.18
1	2	93	101.45	-8.58	-2.54	95.41	-25.05	-1740.71	-4577.27	-4572.99	-1744.99	-110.14
1	2	94	53.18	10.03	10.07	53.14	1.34	-1196.89	-4543.34	-4543.27	-1196.95	15.04
1	2	95	33.37	23.37	24.48	32.27	3.13	-965.73	-4313.86	-4309.61	-969.97	119.17
1	2	96	66.35	2.18	41.91	26.63	31.16	-988.84	-4194.10	-4159.86	-1023.08	329.52
1	2	97	242.27	119.54	239.14	122.67	19.36	-1680.90	-3296.36	-3098.95	-1878.31	529.09
1	2	98	135.81	79.73	119.32	96.22	25.55	-543.56	-2509.71	-2500.19	-553.08	136.52
1	2	99	105.49	58.28	102.64	61.12	11.23	-93.87	-2143.72	-2118.09	-119.50	-227.77

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1	74	1050	3.87	-21.65	-15.16	-2.62	11.12	1032.42	-627.93	835.27	-430.78	-537.11
M_G			**N max**	**N min**	**N 1**	**N 2**	**N 1-2**	**M max**	**M min**	**M 1**	**M 2**	**M 1-2**
				-655.80	-536.06	-649.46	-255.85		-2.170e+04	-2.108e+04	-1.133e+04	-9234.21
			832.78		828.11	620.73	182.59	1.044e+04		1.039e+04	6635.20	7671.83

Macro	Tipo	Angolo 1-X (gradi)
2	**Guscio**	**0.0**

M_G	**Cmb**	**Nodo**	**N max**	**N min**	**N 1**	**N 2**	**N 1-2**	**M max**	**M min**	**M 1**	**M 2**	**M 1-2**
			daN/cm	daN/cm	daN/cm	daN/cm	daN/cm	daN	daN	daN	daN	daN
2	2	1	259.42	-349.61	-342.36	252.18	-66.05	-750.84	-2.372e+04	-7853.18	-1.662e+04	1.062e+04
2	2	726	362.38	175.39	358.77	179.00	25.74	9491.70	-9094.45	679.43	-282.19	-9280.63
2	2	746	139.60	-400.08	131.34	-391.82	66.26	-36.43	-3010.82	-278.66	-2768.59	813.52
2	2	747	448.72	106.23	448.72	106.23	-0.22	3589.19	-2291.10	-2189.66	3487.76	765.61
2	2	928	116.39	-87.46	-63.85	92.78	65.23	2099.21	-350.11	891.35	857.75	-1224.54
2	2	929	-164.01	-415.37	-406.73	-172.65	45.81	2777.71	-7584.66	251.97	-5058.92	-4448.97
2	30	1	180.72	-331.71	-245.42	94.43	-191.76	-2.337e+04	-5.478e+04	-5.271e+04	-2.544e+04	7791.21
2	30	726	365.62	48.02	303.29	110.36	-126.15	2.427e+04	-3.234e+04	-4285.09	-3783.36	-2.831e+04
2	30	746	575.21	-85.73	574.68	-85.20	-18.82	-1728.01	-8956.66	-6615.76	-4068.91	3382.56
2	30	747	579.32	-1.25	559.88	18.19	-104.44	-1763.99	-6869.33	-6862.46	-1770.86	-187.18
2	30	928	73.29	-117.75	-116.14	71.68	-17.48	3666.35	-1784.97	1068.39	812.99	2722.67
2	30	929	-167.98	-363.59	-331.28	-200.29	-72.64	2322.85	-7618.88	1459.14	-6755.17	-2800.14
2	31	1	277.72	-235.71	-216.56	258.57	97.28	4.306e+04	1434.22	4.191e+04	2587.59	6832.64
2	31	726	324.63	-4.70	184.06	135.86	162.89	1.983e+04	-1.126e+04	5220.62	3345.71	1.552e+04
2	31	746	-308.26	-531.34	-388.39	-451.21	107.03	6894.49	-499.21	6170.56	224.72	-2197.37
2	31	747	201.70	-15.68	58.17	127.85	102.95	7064.68	3331.51	3812.94	6583.25	1251.19
2	31	928	150.04	-68.98	25.61	55.45	108.49	4688.69	-4147.51	171.41	369.78	-4416.99
2	31	929	31.71	-296.68	-226.15	-38.82	134.86	2650.48	-4027.12	-1148.15	-228.49	-3306.99
2	62	1	177.54	-343.81	-275.93	109.66	-175.45	-2.194e+04	-5.142e+04	-4.923e+04	-2.413e+04	7728.72
2	62	726	359.60	72.92	308.38	124.14	-109.82	2.311e+04	-3.077e+04	-3902.66	-3753.99	-2.694e+04
2	62	746	522.61	-110.34	522.54	-110.27	-6.66	-1651.61	-8221.20	-5890.54	-3982.27	3143.16
2	62	747	553.43	9.25	538.05	24.64	-90.20	-1317.25	-6276.76	-6272.71	-1321.30	-141.58
2	62	928	61.20	-116.85	-116.70	61.04	-5.31	3205.29	-1488.14	1054.57	662.58	2338.52
2	62	929	-174.96	-365.84	-345.89	-194.91	-58.40	2418.53	-7296.10	1520.81	-6398.38	-2813.38
2	63	1	258.11	-200.81	-186.05	243.35	80.97	3.967e+04	40.31	3.843e+04	1278.68	6895.12
2	63	726	299.82	1.22	178.97	122.08	146.57	1.825e+04	-1.009e+04	4838.19	3316.33	1.415e+04
2	63	746	-276.22	-486.17	-336.25	-426.14	94.87	6089.51	-506.08	5445.35	138.08	-1957.97
2	63	747	191.80	9.61	80.01	121.41	88.71	6568.19	2788.68	3223.19	6133.68	1205.58
2	63	928	144.50	-52.24	26.17	66.09	96.32	4389.02	-3683.60	185.22	520.20	-4032.84
2	63	929	18.92	-274.67	-211.54	-44.20	120.62	2410.97	-4206.08	-1209.83	-585.28	-3293.75
2	70	1	190.83	-252.57	-247.14	185.40	-48.75	-536.25	-1.727e+04	-5713.56	-1.210e+04	7736.02
2	70	726	262.06	127.86	259.35	130.57	18.88	6908.97	-6642.70	492.77	-226.50	-6766.28
2	70	746	102.17	-290.82	96.26	-284.91	47.83	-25.27	-2228.84	-212.83	-2041.27	614.92
2	70	747	326.46	77.33	326.46	77.33	-0.43	2622.48	-1677.23	-1601.94	2547.18	563.99
2	70	928	84.87	-64.02	-46.80	67.65	47.63	1532.98	-258.68	651.39	622.91	-895.72
2	70	929	-120.07	-301.88	-295.60	-126.36	33.22	2009.54	-5525.26	175.18	-3690.90	-3233.68
2	72	1	184.14	-240.44	-235.03	178.73	-47.62	-513.02	-1.656e+04	-5478.92	-1.159e+04	7417.95
2	72	726	250.32	122.25	247.59	124.98	18.50	6623.04	-6369.77	474.02	-220.75	-6487.11
2	72	746	99.38	-277.83	93.92	-272.38	45.03	-33.63	-2138.42	-220.16	-1951.89	598.18
2	72	747	313.39	74.10	313.39	74.10	-0.66	2513.31	-1615.92	-1544.05	2441.44	540.00
2	72	928	81.28	-62.34	-45.65	64.59	46.04	1472.94	-245.90	627.77	599.27	-859.30
2	72	929	-115.29	-288.91	-282.94	-121.26	31.64	1918.77	-5299.95	160.41	-3541.60	-3098.59
2	74	1	181.91	-236.40	-230.99	176.50	-47.24	-505.28	-1.632e+04	-5400.71	-1.143e+04	7311.92
2	74	726	246.41	120.37	243.68	123.11	18.37	6527.74	-6278.80	467.77	-218.83	-6394.06
2	74	746	98.45	-273.51	93.14	-268.20	44.10	-36.37	-2108.32	-222.60	-1922.09	592.59
2	74	747	309.03	73.02	309.03	73.02	-0.74	2476.92	-1595.49	-1524.76	2406.19	532.00
2	74	928	80.09	-61.78	-45.27	63.57	45.51	1452.92	-241.64	619.90	591.39	-847.16
2	74	929	-113.69	-284.58	-278.72	-119.56	31.11	1888.52	-5224.85	155.49	-3491.83	-3053.57
M_G			**N max**	**N min**	**N 1**	**N 2**	**N 1-2**	**M max**	**M min**	**M 1**	**M 2**	**M 1-2**
				-531.34	-406.73	-451.21	-191.76		-5.478e+04	-5.271e+04	-2.544e+04	-2.831e+04
			579.32		574.68	258.57	162.89	4.306e+04		4.191e+04	6583.25	1.552e+04

Macro	Tipo	Angolo 1-X (gradi)
3	**Guscio**	**0.0**

M_G	Cmb	Nodo	N max	N min	N 1	N 2	N 1-2	M max	M min	M 1	M 2	M 1-2
			daN/cm	daN/cm	daN/cm	daN/cm	daN/cm	daN	daN	daN	daN	daN
3	2	726	136.03	-48.42	120.43	-32.82	-51.33	1709.41	-7070.55	1027.10	-6388.24	2350.56
3	2	751	-10.61	-62.72	-51.12	-22.21	21.67	4265.74	-8229.22	-6280.12	2316.64	-4533.75
3	2	771	158.05	13.22	131.62	39.65	-55.94	4175.73	-992.96	-99.19	3281.96	-1954.68
3	2	772	76.95	-6.28	75.68	-5.01	-10.18	-133.41	-1390.68	-1369.22	-154.87	-162.86
3	2	933	-12.50	-81.86	-62.81	-31.55	30.96	494.56	3.29	143.78	354.08	221.99
3	2	934	41.93	-12.70	-6.63	35.86	-17.17	1599.76	-1870.05	-111.93	-158.36	-1734.75
3	11	726	102.62	53.67	66.74	89.56	-21.66	7525.54	-5020.25	7217.35	-4712.05	-1942.05
3	11	751	93.75	-94.59	-89.93	89.09	29.27	4270.17	-1.188e+04	-6992.01	-617.05	-7418.95
3	11	771	6.41	-54.27	-43.10	-4.76	-23.51	6845.41	649.90	3541.37	3953.93	-3090.88
3	11	772	-28.13	-56.76	-54.54	-30.35	7.66	-95.67	-916.04	-627.93	-383.78	-391.60
3	11	933	20.56	-53.67	-13.26	-19.85	36.97	1706.98	-876.78	-312.92	1143.11	-1067.22
3	11	934	18.05	-10.37	-10.07	17.75	2.89	3211.47	-129.07	2955.17	127.23	-889.10
3	16	726	92.53	-25.84	82.04	-15.35	-33.64	2935.23	-7822.41	2882.35	-7769.54	-752.33
3	16	751	-6.48	-60.35	-54.06	-12.77	17.30	1205.75	-1.460e+04	-1.008e+04	-3310.89	-7139.71
3	16	771	86.65	0.49	64.49	22.65	-37.66	4513.96	-268.62	885.81	3359.53	-2046.57
3	16	772	30.12	-7.90	29.33	-7.12	-5.42	356.82	-1911.11	-1719.04	164.75	-631.44
3	16	933	-3.00	-50.83	-34.11	-19.72	22.81	1202.47	-636.98	-535.33	1100.82	-420.30
3	16	934	30.77	-2.30	1.22	27.25	-10.20	1735.65	306.23	1316.60	725.28	-650.69
3	48	726	92.94	-29.85	82.58	-19.49	-34.12	2305.96	-7095.61	2302.37	-7092.02	-183.56
3	48	751	-8.73	-56.30	-49.34	-15.69	16.81	1410.00	-1.274e+04	-9062.52	-2263.10	-6202.14
3	48	771	93.10	3.02	72.07	24.05	-38.11	4054.68	-385.03	598.01	3071.64	-1843.38
3	48	772	36.74	-6.54	35.92	-5.72	-5.88	265.42	-1721.03	-1579.28	123.68	-511.35
3	48	933	-4.63	-52.27	-36.65	-20.25	22.36	958.03	-451.64	-397.87	904.26	-270.00
3	48	934	30.72	-3.74	-4.33e-02	27.03	-10.67	1517.63	-18.34	940.97	558.32	-743.77
3	57	726	93.36	33.43	70.43	56.37	-29.13	3020.90	-902.00	2086.56	32.34	1671.03
3	57	751	67.14	-55.49	-51.48	63.13	21.81	6807.62	-90.95	114.39	6602.28	-1172.36
3	57	771	55.77	-8.84	33.94	13.00	-30.56	3673.43	-14.85	1445.36	2213.23	-1803.73
3	57	772	6.23	-19.69	6.23	-19.69	0.40	1135.65	-790.92	1080.49	-735.76	321.28
3	57	933	2.96	-58.20	-33.98	-21.26	29.91	600.21	52.46	598.66	54.02	-29.17
3	57	934	15.53	-16.61	-16.00	14.92	-4.38	1282.97	-2245.65	193.29	-1155.97	-1630.23
3	70	726	99.46	-35.05	88.01	-23.59	-37.54	1242.66	-5184.69	736.78	-4678.81	1730.77
3	70	751	-7.44	-45.86	-37.47	-15.84	15.88	3103.48	-5982.13	-4560.46	1681.82	-3300.84
3	70	771	115.32	9.66	95.99	28.99	-40.85	3024.57	-720.42	-76.62	2380.77	-1412.99
3	70	772	55.93	-4.71	54.99	-3.78	-7.48	-95.03	-1018.02	-1003.74	-109.32	-113.94
3	70	933	-9.08	-59.69	-45.81	-22.95	22.58	359.04	3.03	105.82	256.25	161.33
3	70	934	30.50	-9.09	-4.64	26.05	-12.51	1160.46	-1358.86	-88.03	-110.37	-1259.61
3	72	726	96.13	-33.56	85.06	-22.49	-36.24	1198.01	-4977.15	713.15	-4492.28	1661.03
3	72	751	-7.27	-44.40	-36.32	-15.35	15.32	2974.50	-5745.31	-4379.67	1608.86	-3169.09
3	72	771	111.24	9.38	92.54	28.08	-39.44	2899.89	-695.10	-83.61	2288.40	-1350.70
3	72	772	53.77	-4.54	52.86	-3.63	-7.23	-90.77	-983.09	-969.74	-104.12	-108.32
3	72	933	-8.74	-57.53	-44.15	-22.12	21.77	346.49	4.23	103.72	246.99	155.42
3	72	934	29.36	-8.64	-4.31	25.02	-12.08	1108.85	-1304.31	-90.35	-105.11	-1206.55
3	74	726	95.01	-33.07	84.07	-22.12	-35.80	1183.13	-4907.96	705.27	-4430.11	1637.78
3	74	751	-7.21	-43.91	-35.94	-15.18	15.14	2931.51	-5666.37	-4319.41	1584.55	-3125.17
3	74	771	109.88	9.29	91.39	27.78	-38.97	2858.34	-686.67	-85.94	2257.60	-1329.94
3	74	772	53.06	-4.49	52.15	-3.59	-7.15	-89.35	-971.45	-958.41	-102.39	-106.45
3	74	933	-8.63	-56.81	-43.59	-21.84	21.49	342.31	4.62	103.03	243.90	153.45
3	74	934	28.98	-8.49	-4.20	24.68	-11.94	1091.64	-1286.12	-91.13	-103.35	-1188.87
M_G			**N max**	**N min**	**N 1**	**N 2**	**N 1-2**	**M max**	**M min**	**M 1**	**M 2**	**M 1-2**
				-94.59	-89.93	-32.82	-55.94		-1.460e+04	-1.008e+04	-7769.54	-7418.95
			158.05		131.62	89.56	36.97	7525.54		7217.35	6602.28	2350.56

Macro	Tipo	Angolo 1-X (gradi)
4	**Guscio**	**0.0**

M_G	Cmb	Nodo	N max	N min	N 1	N 2	N 1-2	M max	M min	M 1	M 2	M 1-2
			daN/cm	daN/cm	daN/cm	daN/cm	daN/cm	daN	daN	daN	daN	daN
4	2	726	-101.79	-290.74	-189.06	-203.47	94.20	5089.98	-3.487e+04	-2.461e+04	-5167.79	1.745e+04
4	2	801	-141.02	-333.85	-259.00	-215.87	93.97	4257.53	-3.071e+04	-7049.61	-1.940e+04	1.636e+04
4	2	827	232.43	122.13	219.81	134.75	-35.11	1.119e+04	-1.080e+04	-560.89	957.98	-1.097e+04
4	2	968	183.64	113.39	149.98	147.06	-35.10	1.509e+04	-4917.59	5414.44	4761.79	-1.000e+04
4	8	726	-130.22	-504.99	-346.81	-288.40	185.09	3467.82	-4.182e+04	-3.505e+04	-3300.30	1.615e+04
4	8	801	-49.41	-422.98	-262.31	-210.09	184.95	771.43	-3.216e+04	-7735.81	-2.366e+04	1.442e+04
4	8	827	83.36	-115.90	-43.00	10.46	95.98	-5296.52	-2.810e+04	-2.011e+04	-1.329e+04	-1.088e+04
4	8	968	84.62	-109.56	1.80	-26.74	96.03	8603.55	1536.38	3385.15	6754.77	3106.07
4	29	726	-121.61	-217.08	-159.29	-179.40	46.66	4582.29	-1.663e+04	-9980.01	-2067.79	9840.75

4	29	801	-1.29	-149.21	-132.78	-17.71	46.48	5204.19	-1.134e+04	-3355.01	-2784.78	8269.17
4	29	827	292.36	195.30	267.35	220.30	-42.45	2.407e+04	8705.82	2.000e+04	1.278e+04	-6783.75
4	29	968	129.92	38.42	101.31	67.03	-42.42	1.736e+04	-1.586e+04	-1734.18	3235.84	-1.642e+04
4	40	726	-115.91	-434.21	-298.22	-251.90	157.46	3289.38	-3.808e+04	-3.136e+04	-3427.91	1.526e+04
4	40	801	-64.17	-381.65	-244.15	-201.68	157.31	1215.16	-3.006e+04	-7097.49	-2.175e+04	1.382e+04
4	40	827	81.52	-57.18	0.41	23.93	68.34	-2641.57	-2.393e+04	-1.592e+04	-1.065e+04	-1.031e+04
4	40	968	83.96	-54.28	24.87	4.82	68.39	6354.86	3072.60	3491.40	5936.06	1095.09
4	61	726	-121.42	-230.12	-167.26	-184.27	53.68	4460.44	-1.784e+04	-1.124e+04	-2145.49	1.018e+04
4	61	801	-7.11	-161.41	-139.85	-28.67	53.50	4842.52	-1.236e+04	-3595.81	-3923.62	8600.67
4	61	827	270.60	188.30	250.39	208.51	-35.43	2.217e+04	6918.17	1.770e+04	1.139e+04	-6943.35
4	61	968	119.09	40.58	96.81	62.87	-35.40	1.656e+04	-1.450e+04	-1351.80	3414.21	-1.535e+04
4	70	726	-74.02	-211.82	-137.61	-148.23	68.70	3698.97	-2.535e+04	-1.789e+04	-3765.18	1.269e+04
4	70	801	-102.61	-243.19	-188.53	-157.27	68.53	3100.49	-2.233e+04	-5110.33	-1.412e+04	1.189e+04
4	70	827	169.15	88.91	159.92	98.15	-25.61	8138.21	-7858.70	-402.72	682.22	-7980.04
4	70	968	133.71	82.49	109.08	107.12	-25.59	1.098e+04	-3574.08	3935.56	3467.32	-7271.75
4	72	726	-70.88	-202.94	-131.89	-141.93	65.84	3549.32	-2.433e+04	-1.717e+04	-3611.00	1.218e+04
4	72	801	-98.42	-233.14	-180.72	-150.84	65.68	2976.23	-2.140e+04	-4893.44	-1.353e+04	1.140e+04
4	72	827	162.17	85.05	153.33	93.89	-24.56	7803.75	-7545.35	-388.28	646.68	-7657.08
4	72	968	128.22	79.08	104.58	102.73	-24.55	1.053e+04	-3426.32	3775.37	3327.22	-6974.02
4	74	726	-69.84	-199.98	-129.99	-139.84	64.89	3499.44	-2.398e+04	-1.693e+04	-3559.60	1.201e+04
4	74	801	-97.03	-229.79	-178.12	-148.69	64.73	2934.81	-2.110e+04	-4821.14	-1.334e+04	1.124e+04
4	74	827	159.84	83.77	151.14	92.47	-24.22	7692.27	-7440.90	-383.47	634.84	-7549.43
4	74	968	126.39	77.95	103.08	101.26	-24.20	1.038e+04	-3377.07	3721.97	3280.52	-6874.77
M_G			**N max**	**N min**	**N 1**	**N 2**	**N 1-2**	**M max**	**M min**	**M 1**	**M 2**	**M 1-2**
				-504.99	-346.81	-288.40	-42.45		-4.182e+04	-3.505e+04	-2.366e+04	-1.642e+04
			292.36		267.35	220.30	185.09	2.407e+04		2.000e+04	1.278e+04	1.745e+04

Macro	Tipo	Angolo 1-X (gradi)
5	**Guscio**	**0.0**

M_G	**Cmb**	**Nodo**	**N max**	**N min**	**N 1**	**N 2**	**N 1-2**	**M max**	**M min**	**M 1**	**M 2**	**M 1-2**
			daN/cm	daN/cm	daN/cm	daN/cm	daN/cm	daN	daN	daN	daN	daN
5	2	751	52.20	-35.82	24.13	-7.75	-41.02	2203.77	-1.405e+04	-1.016e+04	-1687.35	6936.08
5	2	827	10.92	-88.72	-66.98	-10.82	-41.14	944.87	-1.680e+04	-8194.23	-7664.96	8870.52
5	2	828	117.23	10.82	111.59	16.47	23.85	6170.68	-1593.79	605.70	3971.19	-3498.59
5	2	969	43.90	-3.84	20.54	19.51	23.86	6336.04	-3302.73	1976.92	1056.38	-4797.35
5	13	751	63.88	-17.14	44.24	2.51	-34.72	55.66	-7240.46	-4265.55	-2919.25	3585.42
5	13	827	16.02	-68.06	-49.58	-2.45	-34.82	1995.48	-5655.35	-921.86	-2738.01	3716.08
5	13	828	107.21	15.43	106.16	16.48	9.77	1.051e+04	4122.55	9338.95	5289.57	-2467.31
5	13	969	22.12	1.39	8.29	15.21	9.77	9808.15	-6630.28	4871.65	-1693.78	-7535.20
5	32	751	109.40	17.40	83.75	43.05	-41.25	1695.12	-1.440e+04	-1.137e+04	-1336.20	6292.18
5	32	827	-27.79	-111.64	-62.64	-76.79	-41.32	791.90	-1.985e+04	-1.047e+04	-8583.64	1.028e+04
5	32	828	123.69	-45.91	123.62	-45.85	3.27	-274.21	-5346.35	-4534.80	-1085.76	-1859.49
5	32	969	50.34	21.12	21.48	49.97	3.23	1139.12	-964.53	-880.23	1054.82	-412.58
5	57	751	-8.60	-54.83	-23.42	-40.02	-21.57	1249.26	-5601.72	-3060.95	-1291.51	3309.27
5	57	827	51.30	-41.54	-36.18	45.93	-21.67	1472.10	-5718.72	-2174.62	-2072.00	3595.05
5	57	828	78.02	32.01	52.79	57.24	22.89	9228.06	3488.77	6377.48	6339.36	-2869.58
5	57	969	21.12	-29.25	6.33	-14.47	22.93	9302.31	-5561.01	3671.98	69.32	-7210.05
5	64	751	108.21	16.23	82.86	41.57	-41.10	1603.16	-1.379e+04	-1.074e+04	-1445.54	6135.35
5	64	827	-26.18	-109.27	-62.17	-73.29	-41.17	839.35	-1.902e+04	-9932.08	-8246.46	9892.78
5	64	828	123.74	-42.44	123.67	-42.37	3.42	199.37	-4705.06	-3820.93	-684.77	-1885.33
5	64	969	48.93	20.22	20.62	48.52	3.39	1208.36	-913.02	-585.36	880.70	-766.64
5	70	751	37.81	-26.11	17.52	-5.81	-29.76	1599.00	-1.022e+04	-7388.61	-1237.29	5048.91
5	70	827	7.70	-64.58	-48.82	-8.06	-29.84	686.31	-1.222e+04	-5951.10	-5585.45	6452.00
5	70	828	85.32	8.01	81.22	12.11	17.32	4488.18	-1157.45	446.06	2884.67	-2545.89
5	70	969	31.97	-2.70	14.94	14.33	17.33	4611.25	-2402.22	1437.70	771.32	-3490.87
5	72	751	36.35	-24.95	16.89	-5.49	-28.53	1535.50	-9813.79	-7092.69	-1185.60	4845.43
5	72	827	7.27	-62.00	-46.88	-7.86	-28.62	659.05	-1.172e+04	-5703.14	-5359.80	6188.14
5	72	828	81.91	7.56	78.00	11.47	16.60	4304.18	-1116.96	425.32	2761.91	-2445.87
5	72	969	30.67	-2.57	14.28	13.82	16.61	4425.61	-2303.13	1380.29	742.19	-3349.21
5	74	751	35.86	-24.56	16.68	-5.39	-28.12	1514.33	-9676.75	-6994.04	-1168.37	4777.60
5	74	827	7.12	-61.14	-46.23	-7.79	-28.21	649.97	-1.156e+04	-5620.49	-5284.59	6100.19
5	74	828	80.78	7.41	76.92	11.26	16.36	4242.85	-1103.46	418.40	2720.99	-2412.53
5	74	969	30.23	-2.52	14.06	13.65	16.38	4363.74	-2270.09	1361.16	732.48	-3301.99
M_G			**N max**	**N min**	**N 1**	**N 2**	**N 1-2**	**M max**	**M min**	**M 1**	**M 2**	**M 1-2**
				-111.64	-66.98	-76.79	-41.32		-1.985e+04	-1.137e+04	-8583.64	-7535.20
			123.74		123.67	57.24	23.86	1.051e+04		9338.95	6339.36	1.028e+04

Macro	Tipo	Angolo 1-X (gradi)
6	**Guscio**	**0.0**

M_G	Cmb	Nodo	N max	N min	N 1	N 2	N 1-2	M max	M min	M 1	M 2	M 1-2
			daN/cm	daN/cm	daN/cm	daN/cm	daN/cm	daN	daN	daN	daN	daN
6	2	776	59.19	-6.18	47.18	5.84	-25.32	1483.41	-7337.91	-5244.78	-609.72	3752.73
6	2	828	11.84	-62.92	-52.99	1.91	-25.38	1713.17	-7023.62	-4449.46	-861.00	3982.91
6	2	829	93.69	-10.21	90.19	-6.71	18.75	3163.88	-2800.99	-1706.99	2069.89	-2308.41
6	2	970	12.75	-25.48	-9.95	-2.77	18.77	2661.87	-2205.85	823.19	-367.16	-2359.97
6	13	776	36.51	-6.04	28.84	1.64	-16.36	4903.29	-2411.22	3646.90	-1154.83	2758.87
6	13	828	10.22	-42.65	-36.95	4.51	-16.40	1822.68	-3398.77	-1114.13	-461.97	2590.28
6	13	829	62.62	-4.98	59.67	-2.03	13.80	6449.72	1452.95	6176.57	1726.10	-1135.88
6	13	970	8.02	-20.07	-8.55	-3.51	13.82	4432.57	-4231.98	2101.74	-1901.14	-3842.24
6	16	776	44.52	-2.52	35.82	6.18	-18.26	808.95	-1.136e+04	-1.087e+04	314.94	2401.69
6	16	828	5.76	-44.15	-36.16	-2.23	-18.30	718.30	-6447.05	-4992.66	-736.09	2882.00
6	16	829	66.40	-9.01	64.48	-7.09	11.90	1528.00	-8928.67	-8514.13	1113.45	-2040.32
6	16	970	9.61	-14.73	-5.03	-8.04e-02	11.92	1544.92	-1109.48	-968.85	1404.29	594.57
6	45	776	36.67	-6.02	28.96	1.69	-16.43	3855.92	-2404.63	2415.89	-964.60	2634.71
6	45	828	10.12	-42.49	-36.71	4.33	-16.46	1661.53	-3660.52	-1505.13	-493.86	2612.54
6	45	829	62.64	-5.04	59.73	-2.13	13.74	5301.26	1258.78	4881.52	1678.52	-1233.13
6	45	970	8.15	-19.76	-8.17	-3.45	13.75	3957.73	-3689.26	1783.20	-1514.73	-3449.64
6	48	776	44.36	-2.54	35.70	6.13	-18.20	739.61	-1.025e+04	-9635.96	124.71	2525.85
6	48	828	5.84	-44.28	-36.40	-2.04	-18.24	807.66	-6113.51	-4601.66	-704.20	2859.74
6	48	829	66.37	-8.95	64.42	-6.99	11.96	1589.64	-7647.69	-7219.08	1161.03	-1943.08
6	48	970	9.49	-15.04	-5.41	-0.14	11.98	1041.98	-674.41	-650.31	1017.88	201.97
6	70	776	42.92	-4.55	34.22	4.14	-18.36	1075.43	-5333.49	-3810.56	-447.50	2727.82
6	70	828	8.50	-45.76	-38.57	1.30	-18.40	1242.21	-5107.48	-3234.31	-630.96	2895.73
6	70	829	68.12	-7.33	65.57	-4.79	13.61	2301.14	-2030.15	-1235.47	1506.46	-1676.45
6	70	970	9.30	-18.46	-7.20	-1.95	13.63	1935.89	-1604.13	597.72	-265.95	-1716.52
6	72	776	41.12	-4.35	32.80	3.97	-17.58	1032.73	-5119.73	-3660.17	-426.83	2617.16
6	72	828	8.06	-43.93	-37.06	1.18	-17.61	1189.95	-4895.58	-3098.62	-607.01	2776.04
6	72	829	65.38	-7.05	62.95	-4.62	13.04	2205.94	-1949.95	-1185.45	1441.45	-1610.19
6	72	970	8.94	-17.66	-6.89	-1.83	13.06	1858.86	-1537.40	574.26	-252.81	-1647.01
6	74	776	40.52	-4.28	32.33	3.91	-17.31	1018.49	-5048.47	-3610.04	-419.94	2580.28
6	74	828	7.91	-43.32	-36.55	1.14	-17.35	1172.53	-4824.95	-3053.40	-599.03	2736.14
6	74	829	64.47	-6.95	62.07	-4.56	12.85	2174.21	-1923.21	-1168.78	1419.78	-1588.10
6	74	970	8.81	-17.40	-6.79	-1.80	12.87	1833.18	-1515.16	566.44	-248.43	-1623.84
M_G			**N max**	**N min**	**N 1**	**N 2**	**N 1-2**	**M max**	**M min**	**M 1**	**M 2**	**M 1-2**
				-62.92	-52.99	-7.09	-25.38		-1.136e+04	-1.087e+04	-1901.14	-3842.24
			93.69		90.19	6.18	18.77	6449.72		6176.57	2069.89	3982.91

Macro	Tipo	Angolo 1-X (gradi)
7	**Guscio**	**0.0**

M_G	Cmb	Nodo	N max	N min	N 1	N 2	N 1-2	M max	M min	M 1	M 2	M 1-2
			daN/cm	daN/cm	daN/cm	daN/cm	daN/cm	daN	daN	daN	daN	daN
7	2	768	51.78	-29.08	25.90	-3.20	37.72	6612.24	-3757.45	1098.05	1756.73	-5174.37
7	2	827	48.62	-93.99	-0.75	-44.62	-67.85	951.78	-1.840e+04	-9628.02	-7818.60	9632.70
7	2	830	106.93	-47.91	-7.51	66.54	-67.99	1353.02	-1.517e+04	-4722.56	-9090.89	7965.73
7	2	856	123.64	16.94	32.59	107.99	37.75	6722.54	150.37	4598.13	2274.78	-3073.90
7	9	768	36.34	21.20	29.21	28.33	7.56	1.069e+04	-5710.76	1376.27	3603.72	-8124.78
7	9	827	111.03	-32.19	70.31	8.53	-64.60	2755.79	-4728.97	77.73	-2050.91	3587.85
7	9	830	66.93	-63.36	-5.82	9.39	-64.70	1665.35	-3861.10	-1802.74	-393.01	2671.81
7	9	856	77.66	49.67	75.41	51.91	7.61	1.282e+04	6086.75	1.010e+04	8798.21	-3300.73
7	12	768	34.95	-61.01	6.09	-32.15	44.00	691.60	-1737.38	133.47	-1179.25	1021.85
7	12	827	-42.22	-98.62	-71.12	-69.72	-28.19	-1078.94	-2.089e+04	-1.329e+04	-8678.81	9632.01
7	12	830	89.45	-13.13	-4.62	80.94	-28.29	688.88	-1.743e+04	-4630.17	-1.212e+04	8252.78
7	12	856	109.63	-44.39	-30.58	95.82	44.00	-3421.71	-6098.16	-3805.50	-5714.37	-938.03
7	41	768	35.41	8.75	25.01	19.15	13.00	9364.90	-5087.49	1145.39	3132.03	-7157.60
7	41	827	92.13	-39.57	55.20	-2.63	-59.16	2348.26	-6303.89	-1236.14	-2719.48	4262.03
7	41	830	65.83	-55.10	-6.62	17.35	-59.26	1373.79	-5145.11	-2176.52	-1594.79	3246.45
7	41	856	74.18	47.25	64.05	57.38	13.04	1.111e+04	4928.18	8691.61	7350.82	-3019.51
7	44	768	35.65	-48.33	10.29	-22.97	38.56	367.13	-710.33	364.35	-707.55	54.67
7	44	827	-23.63	-90.93	-56.00	-58.56	-33.63	-817.12	-1.917e+04	-1.197e+04	-8010.23	8957.83
7	44	830	85.69	-16.52	-3.81	72.99	-33.73	783.50	-1.595e+04	-4256.39	-1.091e+04	7678.14
7	44	856	102.57	-31.43	-19.22	90.36	38.56	-1791.71	-4867.55	-2392.28	-4266.98	-1219.25
7	70	768	37.56	-20.99	18.73	-2.16	27.35	4805.37	-2727.39	798.00	1279.97	-3758.66

7	70	827	35.23	-68.21	-0.48	-32.50	-49.18	691.75	-1.336e+04	-6988.46	-5681.29	6996.17
7	70	830	77.37	-34.81	-5.51	48.07	-49.28	986.77	-1.101e+04	-3412.26	-6614.80	5782.70
7	70	856	89.76	12.36	23.70	78.42	27.37	4882.52	94.35	3337.19	1639.67	-2238.59
7	72	768	35.97	-20.03	17.92	-1.97	26.17	4608.12	-2613.30	765.65	1229.17	-3603.26
7	72	827	33.77	-65.27	-0.42	-31.07	-47.09	663.66	-1.281e+04	-6700.40	-5443.97	6706.49
7	72	830	73.98	-33.38	-5.29	45.89	-47.19	947.30	-1.056e+04	-3265.41	-6344.47	5542.39
7	72	856	85.87	11.87	22.74	75.01	26.19	4680.01	82.90	3196.55	1566.36	-2149.18
7	74	768	35.44	-19.70	17.65	-1.91	25.78	4542.37	-2575.27	754.87	1212.24	-3551.46
7	74	827	33.29	-64.29	-0.40	-30.60	-46.39	654.30	-1.262e+04	-6604.38	-5364.86	6609.93
7	74	830	72.86	-32.91	-5.22	45.17	-46.49	934.15	-1.040e+04	-3216.46	-6254.36	5462.29
7	74	856	84.58	11.70	22.41	73.87	25.80	4612.50	79.08	3149.67	1541.92	-2119.38
M_G			**N max**	**N min**	**N 1**	**N 2**	**N 1-2**	**M max**	**M min**	**M 1**	**M 2**	**M 1-2**
				-98.62	-71.12	-69.72	-67.99		-2.089e+04	-1.329e+04	-1.212e+04	-8124.78
			123.64		75.41	107.99	44.00	1.282e+04		1.010e+04	8798.21	9632.70

Macro	Tipo	Angolo 1-X (gradi)
8	**Guscio**	**0.0**

M_G	**Cmb**	**Nodo**	**N max**	**N min**	**N 1**	**N 2**	**N 1-2**	**M max**	**M min**	**M 1**	**M 2**	**M 1-2**
			daN/cm	daN/cm	daN/cm	daN/cm	daN/cm	daN	daN	daN	daN	daN
8	2	737	30.55	-13.89	13.91	2.75	21.51	3629.68	-2747.81	443.33	438.53	-3188.74
8	2	828	38.67	-45.87	10.26	-17.46	-39.93	274.39	-1.002e+04	-5482.19	-4259.31	5108.68
8	2	856	46.97	-46.28	-23.57	24.25	-40.03	265.64	-1.005e+04	-5280.72	-4500.22	5141.32
8	2	857	67.66	24.51	47.69	44.48	21.51	4251.79	2433.85	3270.79	3414.84	-906.11
8	13	737	16.94	-15.17	0.70	1.07	16.05	6910.88	-4048.38	2435.11	427.39	-5386.90
8	13	828	37.11	-23.68	22.31	-8.89	-26.09	998.05	-2552.82	773.45	-2328.22	864.34
8	13	856	21.05	-40.53	-25.98	6.50	-26.16	973.94	-1920.74	-1078.43	131.63	1314.81
8	13	857	54.84	16.31	46.20	24.95	16.07	9079.71	3941.86	7042.76	5978.81	-2513.24
8	16	737	26.01	-4.88	18.17	2.97	13.44	600.33	-2243.90	-1825.42	181.85	1007.54
8	16	828	17.47	-40.38	-7.91	-14.99	-28.71	684.71	-1.250e+04	-8296.60	-3523.24	6147.59
8	16	856	43.14	-23.09	-6.36	26.41	-28.77	-499.19	-1.198e+04	-6146.03	-6329.31	5737.75
8	16	857	43.41	11.83	19.33	35.91	13.44	-520.14	-3337.15	-2553.53	-1303.76	1262.30
8	45	737	17.42	-14.71	1.95	0.76	16.05	6046.13	-3626.94	1968.34	450.85	-4776.65
8	45	828	33.84	-25.65	18.39	-10.20	-26.09	487.66	-3019.52	-98.66	-2433.20	1308.65
8	45	856	23.56	-38.43	-24.05	9.18	-26.16	794.69	-2892.80	-1613.16	-484.94	1755.33
8	45	857	52.74	16.70	42.89	26.55	16.06	7905.27	3458.25	6089.27	5274.25	-2185.85
8	48	737	25.17	-4.98	16.92	3.27	13.45	256.14	-1456.40	-1358.65	158.39	397.29
8	48	828	20.28	-37.95	-3.99	-13.68	-28.71	623.45	-1.147e+04	-7424.49	-3418.27	5703.29
8	48	856	40.64	-25.20	-8.29	23.73	-28.77	-364.55	-1.096e+04	-5611.30	-5712.74	5297.23
8	48	857	43.13	13.82	22.65	34.30	13.44	-39.20	-2160.03	-1600.04	-599.19	934.90
8	70	737	22.18	-10.05	10.05	2.08	15.62	2638.53	-1996.10	322.14	320.30	-2317.31
8	70	828	28.09	-33.32	7.51	-12.75	-28.99	198.28	-7276.08	-3979.45	-3098.35	3711.12
8	70	856	34.01	-33.64	-17.13	17.51	-29.06	191.37	-7297.01	-3828.53	-3277.10	3734.02
8	70	857	49.17	17.84	34.66	32.35	15.62	3089.20	1766.10	2377.23	2478.06	-659.63
8	72	737	21.25	-9.62	9.59	2.03	14.97	2530.44	-1912.73	309.17	308.54	-2221.59
8	72	828	27.01	-31.87	7.28	-12.14	-27.79	189.92	-6974.85	-3816.04	-2968.89	3557.26
8	72	856	32.57	-32.26	-16.41	16.72	-27.86	182.90	-6992.61	-3666.30	-3143.41	3578.21
8	72	857	47.09	17.06	33.24	30.91	14.97	2961.00	1689.43	2277.77	2372.66	-634.01
8	74	737	20.93	-9.48	9.43	2.02	14.75	2494.41	-1884.95	304.85	304.62	-2189.68
8	74	828	26.65	-31.39	7.20	-11.94	-27.40	187.14	-6874.44	-3761.57	-2925.73	3505.97
8	74	856	32.09	-31.80	-16.17	16.46	-27.46	180.07	-6891.14	-3612.23	-3098.84	3526.28
8	74	857	46.40	16.80	32.77	30.43	14.75	2918.27	1663.88	2244.62	2337.53	-625.47
M_G			**N max**	**N min**	**N 1**	**N 2**	**N 1-2**	**M max**	**M min**	**M 1**	**M 2**	**M 1-2**
				-46.28	-25.98	-17.46	-40.03		-1.250e+04	-8296.60	-6329.31	-5386.90
			67.66		47.69	44.48	21.51	9079.71		7042.76	5978.81	6147.59

Macro	Tipo	Angolo 1-X (gradi)
9	**Guscio**	**0.0**

M_G	**Cmb**	**Nodo**	**N max**	**N min**	**N 1**	**N 2**	**N 1-2**	**M max**	**M min**	**M 1**	**M 2**	**M 1-2**
			daN/cm	daN/cm	daN/cm	daN/cm	daN/cm	daN	daN	daN	daN	daN
9	2	829	52.90	-5.86	37.57	9.47	-25.80	284.93	-3905.32	-2114.16	-1506.23	2072.96
9	2	857	27.99	-31.69	-16.76	13.06	-25.85	675.63	-4601.06	-3183.90	-741.52	2338.71
9	2	858	46.04	-5.67	41.85	-1.48	14.10	2131.78	343.32	577.44	1897.66	-603.25

9	2	864	5.81	-23.35	-12.46	-5.08	14.10	1358.77	-1765.16	-39.41	-366.98	-1553.35
9	13	829	33.07	-3.78	24.54	4.75	-15.54	2135.16	-1039.79	2107.06	-1011.69	-297.37
9	13	857	16.33	-22.46	-14.63	8.50	-15.57	493.42	-936.65	-346.14	-97.10	704.11
9	13	858	32.12	-5.60	27.93	-1.41	11.85	4449.40	1419.82	3922.84	1946.38	-1148.03
9	13	864	3.44	-21.49	-12.91	-5.14	11.85	3649.05	-2171.66	1715.51	-238.12	-2741.54
9	16	829	39.75	-4.28	27.18	8.29	-19.88	674.97	-6735.91	-5004.46	-1056.49	3135.87
9	16	857	22.23	-21.35	-8.42	9.30	-19.91	466.15	-5406.45	-4014.64	-925.66	2497.28
9	16	858	31.35	-2.46	29.59	-0.70	7.51	682.33	-3148.83	-3121.49	654.99	322.49
9	16	864	4.60	-10.64	-4.31	-1.73	7.51	-46.58	-1987.14	-1771.78	-261.94	609.54
9	45	829	33.35	-3.94	24.58	4.84	-15.82	1482.16	-998.91	1481.86	-998.62	-27.16
9	45	857	16.99	-22.01	-13.87	8.85	-15.85	469.11	-1379.42	-727.28	-183.03	883.29
9	45	858	32.00	-5.16	27.96	-1.12	11.57	3783.19	1308.24	3279.41	1812.02	-996.52
9	45	864	3.52	-20.67	-12.10	-5.06	11.57	3106.40	-1987.97	1353.11	-234.69	-2420.30
9	48	829	39.44	-4.10	27.14	8.20	-19.60	584.76	-6033.57	-4379.26	-1069.56	2865.66
9	48	857	21.50	-21.73	-9.17	8.94	-19.63	469.83	-4943.06	-3633.50	-839.73	2318.10
9	48	858	31.44	-2.86	29.57	-0.99	7.79	798.27	-2486.98	-2478.06	789.35	170.97
9	48	864	4.50	-11.43	-5.11	-1.82	7.79	-196.82	-1477.93	-1409.38	-265.37	288.31
9	70	829	38.43	-4.27	27.31	6.84	-18.74	205.24	-2834.03	-1532.44	-1096.35	1503.91
9	70	857	20.29	-23.03	-12.19	9.45	-18.77	488.28	-3339.84	-2310.95	-540.62	1697.09
9	70	858	33.45	-4.09	30.41	-1.05	10.24	1548.51	253.26	422.67	1379.10	-436.73
9	70	864	4.23	-16.96	-9.07	-3.66	10.24	986.75	-1282.56	-29.48	-266.32	-1128.46
9	72	829	36.88	-4.06	26.22	6.60	-17.97	196.00	-2715.29	-1469.63	-1049.65	1440.42
9	72	857	19.44	-22.09	-11.69	9.04	-18.00	466.53	-3198.25	-2213.03	-518.69	1624.79
9	72	858	32.08	-3.96	29.18	-1.06	9.82	1483.12	243.34	406.17	1320.29	-418.76
9	72	864	4.05	-16.27	-8.72	-3.49	9.82	946.19	-1228.77	-28.47	-254.10	-1081.61
9	74	829	36.37	-3.99	25.86	6.52	-17.71	192.92	-2675.70	-1448.70	-1034.09	1419.25
9	74	857	19.16	-21.78	-11.52	8.90	-17.74	459.28	-3151.05	-2180.39	-511.38	1600.70
9	74	858	31.63	-3.92	28.76	-1.06	9.68	1461.32	240.04	400.67	1300.68	-412.77
9	74	864	4.00	-16.04	-8.61	-3.44	9.68	932.67	-1210.84	-28.13	-250.03	-1066.00
M_G			**N max**	**N min**	**N 1**	**N 2**	**N 1-2**	**M max**	**M min**	**M 1**	**M 2**	**M 1-2**
				-31.69	-16.76	-5.14	-25.85		-6735.91	-5004.46	-1506.23	-2741.54
			52.90		41.85	13.06	14.10	4449.40		3922.84	1946.38	3135.87

Macro	Tipo	Angolo 1-X (gradi)
10	**Guscio**	**0.0**

M_G	**Cmb**	**Nodo**	**N max**	**N min**	**N 1**	**N 2**	**N 1-2**	**M max**	**M min**	**M 1**	**M 2**	**M 1-2**
			daN/cm	daN/cm	daN/cm	daN/cm	daN/cm	daN	daN	daN	daN	daN
10	2	856	-0.53	-57.89	-6.12	-52.30	-17.02	1564.37	-8261.18	-1489.62	-5207.19	4547.56
10	2	859	33.85	-25.44	-20.02	28.43	-17.09	948.78	-6695.26	-2061.59	-3684.88	3734.84
10	2	885	82.72	16.46	19.86	79.31	14.63	3670.02	-1260.23	3112.37	-702.58	-1561.52
10	2	915	17.36	-12.79	5.98	-1.42	14.61	2371.52	-2499.65	-668.60	540.48	-2359.36
10	13	856	14.22	-37.36	5.49	-28.63	-19.34	1320.20	-2420.03	-399.96	-699.87	1864.09
10	13	859	34.59	-15.17	-5.89	25.31	-19.39	3195.25	-1463.35	-1404.91	3136.81	518.47
10	13	885	60.48	22.53	22.70	60.31	2.51	6460.82	2306.84	3366.65	5401.00	-1810.87
10	13	915	12.79	5.09	11.88	6.01	2.50	5555.12	-3518.94	-991.15	3027.33	-4067.87
10	16	856	-12.88	-43.53	-13.47	-42.94	-4.21	949.37	-9016.61	-1635.66	-6431.58	4368.06
10	16	859	14.35	-21.60	-21.09	13.84	-4.25	927.99	-1.055e+04	-1389.69	-8229.68	4607.02
10	16	885	54.63	-2.01	4.16	48.46	17.65	899.63	-6407.66	882.72	-6390.75	-351.12
10	16	915	11.76	-23.72	-3.99	-7.97	17.63	341.11	-2537.47	78.71	-2275.07	828.55
10	45	856	10.89	-37.83	3.54	-30.49	-17.44	1250.26	-3085.60	-548.14	-1287.20	2136.21
10	45	859	31.58	-15.60	-7.85	23.83	-17.48	2304.71	-1660.71	-1440.19	2084.18	908.75
10	45	885	59.37	20.30	20.81	58.87	4.42	5435.39	1984.92	3113.88	4306.44	-1618.91
10	45	915	12.23	1.74	9.85	4.13	4.40	4754.02	-3196.66	-925.57	2482.93	-3591.50
10	48	856	-10.31	-42.30	-11.52	-41.08	-6.11	973.33	-8305.07	-1487.48	-5844.25	4095.95
10	48	859	16.39	-20.20	-19.13	15.32	-6.16	858.39	-9389.86	-1354.41	-7177.05	4216.74
10	48	885	54.97	0.98	6.05	49.90	15.74	1181.03	-5341.71	1135.50	-5296.18	-543.08
10	48	915	11.84	-19.89	-1.96	-6.09	15.73	81.56	-1799.10	13.12	-1730.67	352.17
10	70	856	-0.26	-42.05	-4.33	-37.98	-12.39	1137.49	-5993.21	-1078.08	-3777.64	3299.97
10	70	859	24.62	-18.39	-14.42	20.65	-12.44	691.60	-4866.40	-1485.40	-2689.40	2713.01
10	70	885	60.09	11.85	14.33	57.62	10.64	2662.29	-927.89	2253.35	-518.95	-1140.59
10	70	915	12.56	-9.33	4.25	-1.02	10.63	1725.76	-1813.85	-483.86	395.78	-1714.28
10	72	856	-0.15	-40.26	-4.08	-36.33	-11.93	1090.38	-5741.96	-1032.88	-3618.70	3162.05
10	72	859	23.68	-17.56	-13.72	19.84	-11.97	663.77	-4665.27	-1419.33	-2582.18	2600.31
10	72	885	57.57	11.27	13.65	55.19	10.22	2550.44	-894.48	2156.85	-500.89	-1095.89
10	72	915	12.02	-8.99	4.02	-0.99	10.20	1655.62	-1737.70	-463.13	381.04	-1643.32
10	74	856	-0.11	-39.67	-3.99	-35.78	-11.77	1074.67	-5658.21	-1017.81	-3565.72	3116.08
10	74	859	23.37	-17.28	-13.49	19.58	-11.82	654.50	-4598.23	-1397.30	-2546.44	2562.74
10	74	885	56.73	11.08	13.43	54.39	10.08	2513.16	-883.35	2124.69	-494.87	-1081.00
10	74	915	11.84	-8.88	3.94	-0.98	10.06	1632.23	-1712.32	-456.22	376.13	-1619.66

M_G	N max	N min	N 1	N 2	N 1-2	M max	M min	M 1	M 2	M 1-2
		-57.89	-21.09	-52.30	-19.39		-1.055e+04	-2061.59	-8229.68	-4067.87
	82.72		22.70	79.31	17.65	6460.82		3366.65	5401.00	4607.02

Macro	Tipo	Angolo 1-X (gradi)
11	**Guscio**	**0.0**

M_G	Cmb	Nodo	N max	N min	N 1	N 2	N 1-2	M max	M min	M 1	M 2	M 1-2
			daN/cm	daN/cm	daN/cm	daN/cm	daN/cm	daN	daN	daN	daN	daN
11	2	857	17.20	-28.95	5.89	-17.63	-19.85	580.98	-4794.02	-1046.76	-3166.27	2469.73
11	2	885	38.65	-13.87	-4.75	29.53	-19.90	304.63	-3841.05	-2136.56	-1399.86	2039.85
11	2	886	42.13	6.58	10.80	37.91	11.49	2326.78	687.06	2235.05	778.79	-376.81
11	2	935	7.88	-16.95	0.18	-9.25	11.49	1238.38	-1840.19	-529.79	-72.02	-1522.17
11	13	857	15.64	-17.59	8.93	-10.88	-13.33	302.27	-768.77	-200.83	-265.67	534.54
11	13	885	21.73	-12.43	-5.99	15.29	-13.36	1794.19	-505.38	-503.67	1792.48	-62.73
11	13	886	30.93	7.93	11.40	27.46	8.23	4728.08	1668.87	2585.70	3811.25	-1401.50
11	13	935	4.26	-12.73	-2.10	-6.37	8.22	3821.71	-1596.23	380.41	1845.07	-2608.10
11	20	857	10.77	-21.24	1.41	-11.88	-14.56	559.04	-5711.07	-1135.58	-4016.46	2784.54
11	20	885	30.05	-7.47	-0.50	23.07	-14.59	-209.11	-6039.96	-2386.84	-3862.23	2820.55
11	20	886	26.89	2.79	5.03	24.65	7.00	777.25	-2887.71	571.21	-2681.66	844.21
11	20	935	6.20	-9.60	1.97	-5.37	7.00	-889.52	-2097.33	-1092.15	-1894.71	451.31
11	45	857	14.48	-18.20	7.68	-11.40	-13.27	295.70	-1236.01	-321.32	-618.99	751.26
11	45	885	22.56	-11.78	-5.46	16.25	-13.30	1281.56	-739.68	-711.67	1253.56	236.25
11	45	886	30.54	6.97	10.38	27.13	8.29	4023.78	1544.54	2392.14	3176.18	-1176.01
11	45	935	4.42	-12.83	-1.82	-6.59	8.29	3250.20	-1554.14	207.70	1488.37	-2315.25
11	68	857	30.00	-13.64	15.82	0.55	-20.44	567.98	-4490.33	-601.00	-3321.35	2132.26
11	68	885	31.24	-13.95	-0.92	18.22	-20.47	-261.78	-5367.33	-1859.51	-3769.60	2367.39
11	68	886	29.46	17.09	17.19	29.36	1.13	1358.90	-1861.55	1337.86	-1840.51	259.49
11	68	935	5.11	2.48	3.09	4.50	1.12	-525.64	-1262.58	-552.83	-1235.38	-138.94
11	70	857	12.54	-21.03	4.33	-12.82	-14.43	422.37	-3479.22	-757.44	-2299.42	1791.97
11	70	885	28.08	-10.05	-3.41	21.44	-14.46	219.65	-2788.33	-1546.52	-1022.17	1480.96
11	70	886	30.62	4.75	7.80	27.56	8.35	1688.67	496.21	1621.23	563.65	-275.45
11	70	935	5.70	-12.32	7.75e-02	-6.70	8.35	900.55	-1336.27	-384.37	-51.35	-1105.94
11	72	857	12.09	-20.13	4.20	-12.25	-13.85	404.64	-3332.65	-725.11	-2202.89	1716.36
11	72	885	26.94	-9.62	-3.23	20.55	-13.88	209.77	-2670.69	-1479.79	-981.13	1418.48
11	72	886	29.32	4.52	7.45	26.39	8.02	1617.69	473.86	1552.68	538.87	-264.83
11	72	935	5.45	-11.82	3.73e-02	-6.42	8.01	863.49	-1280.27	-368.41	-48.37	-1059.87
11	74	857	11.94	-19.83	4.16	-12.06	-13.66	398.74	-3283.79	-714.34	-2170.72	1691.15
11	74	885	26.57	-9.47	-3.17	20.26	-13.69	206.48	-2631.47	-1457.55	-967.45	1397.66
11	74	886	28.89	4.44	7.34	25.99	7.90	1594.03	466.41	1529.83	530.61	-261.29
11	74	935	5.36	-11.66	2.38e-02	-6.32	7.90	851.14	-1261.60	-363.09	-47.37	-1044.51

M_G	N max	N min	N 1	N 2	N 1-2	M max	M min	M 1	M 2	M 1-2
		-28.95	-5.99	-17.63	-20.47		-6039.96	-2386.84	-4016.46	-2608.10
	42.13		17.19	37.91	11.49	4728.08		2585.70	3811.25	2820.55

Macro	Tipo	Angolo 1-X (gradi)
12	**Guscio**	**0.0**

M_G	Cmb	Nodo	N max	N min	N 1	N 2	N 1-2	M max	M min	M 1	M 2	M 1-2
			daN/cm	daN/cm	daN/cm	daN/cm	daN/cm	daN	daN	daN	daN	daN
12	2	764	-4.94	-15.76	-10.62	-10.08	5.40	374.44	-1219.25	-467.05	-377.75	-795.59
12	2	858	26.50	-2.58	18.37	5.55	-13.05	294.45	-1521.81	-108.52	-1118.84	754.66
12	2	886	25.24	-5.02	2.48	17.74	-13.06	382.45	-1522.87	-1211.08	70.67	704.87
12	2	887	9.31	-1.95	5.26	2.11	5.40	806.69	334.17	619.66	521.19	-231.08
12	13	764	-3.90	-13.20	-9.54	-7.56	4.54	1710.39	-729.90	402.98	577.51	-1217.02
12	13	858	17.49	-1.32	12.80	3.38	-8.14	840.87	45.22	803.18	82.91	-169.02
12	13	886	15.31	-4.38	-5.55e-02	10.98	-8.15	730.72	-78.77	-69.68	721.64	-85.27
12	13	887	6.96	-2.70	3.76	0.50	4.54	1883.78	428.57	1278.05	1034.30	-717.32
12	16	764	-2.75	-8.63	-5.13	-6.25	2.89	-942.41	-1198.08	-1046.03	-1094.45	125.52
12	16	858	19.04	-2.21	12.53	4.29	-9.79	-36.20	-2528.06	-945.47	-1618.79	1199.59
12	16	886	19.40	-2.53	3.52	13.35	-9.81	46.06	-2258.99	-1586.74	-626.19	1047.69
12	16	887	5.82	-4.68e-02	3.42	2.36	2.89	30.24	-777.67	-426.26	-321.17	400.52
12	45	764	-3.84	-12.80	-9.12	-7.52	4.41	1430.75	-752.82	246.46	431.48	-1087.86
12	45	858	17.53	-1.47	12.71	3.36	-8.27	647.89	-61.06	644.49	-57.66	-48.98
12	45	886	15.78	-4.07	0.39	11.32	-8.28	592.93	-227.91	-227.01	592.03	27.20

12	45	887	6.88	-2.44	3.71	0.73	4.41	1620.57	402.31	1119.78	903.11	-599.42
12	68	764	0.42	-9.03	-9.00	0.39	0.56	-609.09	-1135.42	-959.52	-784.99	-248.27
12	68	858	30.98	5.05	22.63	13.40	-12.12	202.38	-1605.44	-178.28	-1224.78	737.06
12	68	886	16.60	-9.87	-1.93	8.66	-12.13	-104.76	-2312.29	-1678.02	-739.02	998.93
12	68	887	11.43	7.77e-02	11.41	0.11	0.57	339.97	-359.71	286.21	-305.96	186.34
12	70	764	-3.60	-11.46	-7.74	-7.32	3.93	271.82	-885.97	-339.70	-274.45	-577.98
12	70	858	19.27	-1.87	13.37	4.03	-9.48	214.41	-1104.17	-76.48	-813.27	546.76
12	70	886	18.34	-3.64	1.82	12.88	-9.49	276.61	-1104.37	-878.30	50.54	510.98
12	70	887	6.76	-1.42	3.81	1.54	3.93	585.96	242.93	450.37	378.53	-167.71
12	72	764	-3.45	-11.00	-7.44	-7.01	3.77	260.45	-848.99	-326.07	-262.47	-553.81
12	72	858	18.50	-1.78	12.84	3.88	-9.10	205.45	-1057.21	-72.48	-779.27	523.15
12	72	886	17.58	-3.49	1.75	12.35	-9.11	264.48	-1056.78	-840.73	48.43	488.65
12	72	887	6.47	-1.37	3.64	1.46	3.77	561.53	232.55	432.01	362.06	-160.73
12	74	764	-3.40	-10.84	-7.34	-6.90	3.71	256.66	-836.66	-321.52	-258.47	-545.75
12	74	858	18.25	-1.75	12.67	3.83	-8.97	202.46	-1041.56	-71.15	-767.94	515.28
12	74	886	17.33	-3.44	1.73	12.17	-8.98	260.43	-1040.92	-828.21	47.72	481.21
12	74	887	6.38	-1.36	3.59	1.43	3.71	553.38	229.08	425.90	356.57	-158.40
M_G			**N max**	**N min**	**N 1**	**N 2**	**N 1-2**	**M max**	**M min**	**M 1**	**M 2**	**M 1-2**
				-15.76	-10.62	-10.08	-13.06		-2528.06	-1678.02	-1618.79	-1217.02
			30.98		22.63	17.74	5.40	1883.78		1278.05	1034.30	1199.59

VERIFICHE ELEMENTI TRAVE E/O PILASTRO IN C.A.

LEGENDA TABELLA VERIFICHE ELEMENTI TRAVE E/O PILASTRO IN C.A.

In tabella vengono riportati per ogni elemento il numero identificativo ed il codice di verifica con le sigle **Ok** o **NV**.

Nel caso in cui si sia proceduto alla progettazione con il metodo degli stati limite (**S.L.**) vengono riportati: il rapporto x/d, le verifiche per sollecitazioni proporzionali e la verifica per compressione media con l'indicazione delle combinazioni in cui si sono attinti i rispettivi valori.

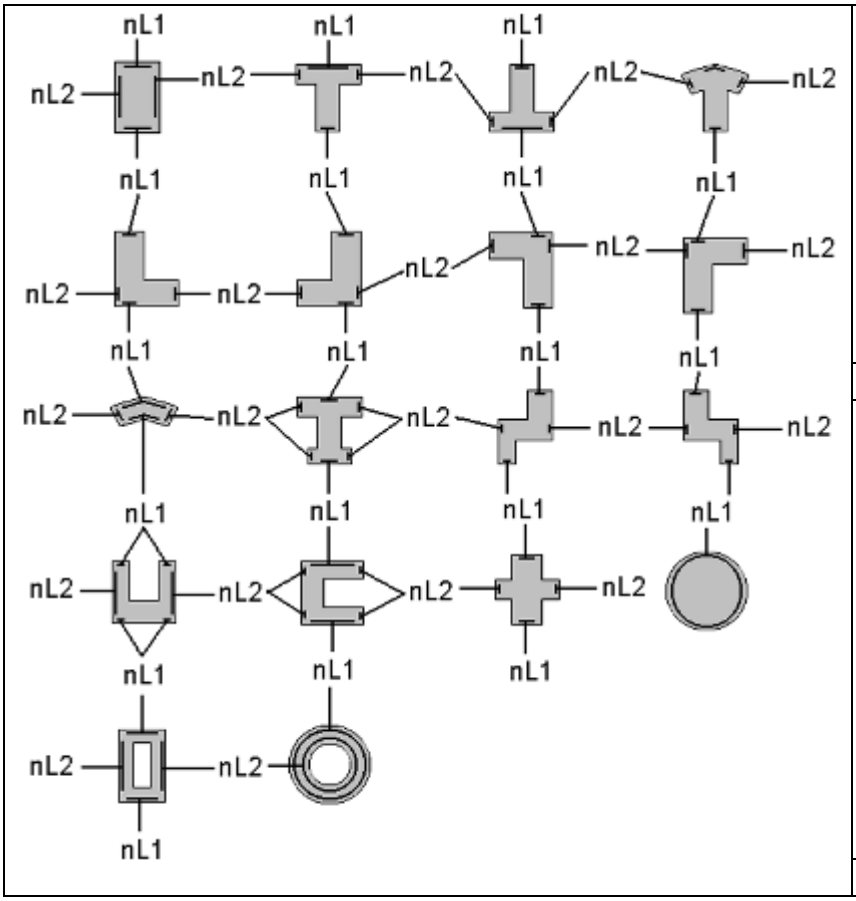
Nel caso in cui si sia proceduto alla progettazione con le tensioni ammissibili (**T.A.**) vengono riportate le massime tensioni nell'elemento (massima compressione nel calcestruzzo, massima compressione media nel calcestruzzo, massima tensione nell'acciaio, massima tensione tangenziale) con l'indicazione delle combinazioni in cui si sono attinti i rispettivi valori.

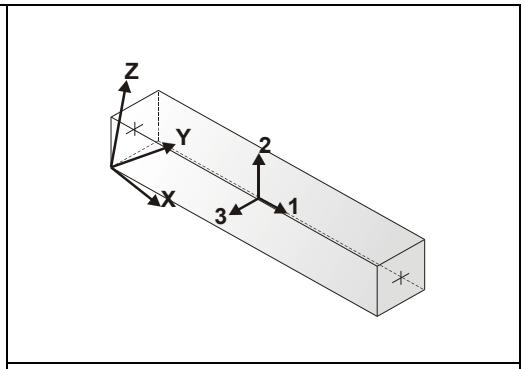
Nel caso in cui la struttura abbia comportamento dissipativo e sia prevista la progettazione con il criterio della gerarchia delle resistenze **(G.R.)** vengono riportate le verifiche di sovraresistenza e del nodo.

Per gli elementi tipo pilastro sono riportati numero e diametro dei ferri di vertice, numero e diametro di ferri disposti lungo i lati L1 (paralleli alla base della sezione) e lungo i lati L2 (paralleli all'altezza della sezione).

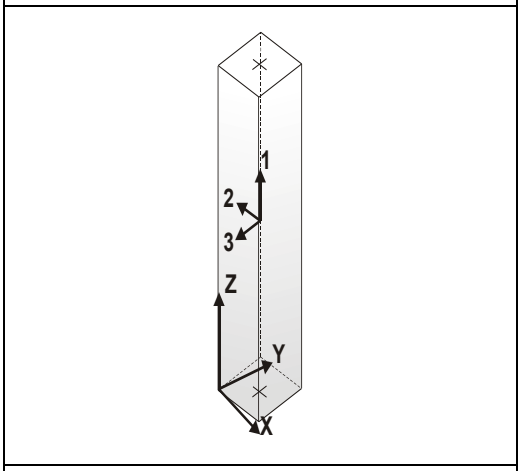
Per gli elementi tipo trave sono riportati infine le quantità di armatura inferiore e superiore.

Schema della distribuzione delle armature longitudinali





Orientamento elementi 2D non verticali



Orientamento elementi 2D verticali

PROGETTAZIONE DELLE FONDAZIONI

Il D.M.17/01/2018 - par: 7.2.5 prevede:

"Sia per CD"A" sia per CD"B" il dimensionamento delle strutture di fondazione e la verifica di sicurezza del complesso fondazione-terreno devono essere eseguiti assumendo come azione in fondazione, trasmessa dagli elementi soprastanti, una tra le seguenti:

- quella derivante dall'analisi strutturale eseguita ipotizzando comportamento strutturale non dissipativo;
- […];
- quella trasferita dagli elementi soprastanti nell'ipotesi di comportamento strutturale dissipativo, amplificata di un coefficiente pari a 1,30 in CD"A" e 1,10 in CD"B";

Nel contesto visualizzazione risultati e nella stampa della relazione sulle fondazioni PRO_SAP mostra le sollecitazioni che derivano dall'analisi non incrementate sia in termini di pressioni sul terreno che in termini di sollecitazioni.

La progettazione degli elementi strutturali con proprietà fondazione è effettuata da PRO_SAP (per travi e platee) o da PRO_CAD Plinti (per plinti e pali di fondazione) incrementando le sollecitazioni delle combinazioni con sisma di un coefficiente pari 1.1 in CDB e 1.3 in CDA per pali, plinti, travi e platee.
Per i bicchieri dei plinti di fondazione prefabbricati l'incremento delle sollecitazioni ha un fattore pari a 1.2 in CDB e 1.35 in CDA.
N.B.: nel caso di comportamento strutturale non dissipativo la progettazione viene effettuata senza nessun incremento.

Le verifiche geotecniche vengono effettuate dal modulo geotecnico incrementando automaticamente le sollecitazioni del fattore 1.1 in CDB e 1.3 in CDA per pali, plinti, travi e platee.
N.B.: nel caso di comportamento strutturale non dissipativo le verifiche geotecniche vengono effettuate senza nessun incremento.

Simbologia adottata nelle tabelle di verifica

Per le verifiche agli S.L. dei pilastri è presente una tabella con i simboli di seguito descritti:

M_P X Y	Numero della pilastrata (P) e posizione in pianta (X,Y)
Pilas.	numero identificativo dell'elemento D2
Note	Codici identificativi delle sezione (s) e materiale (m) pilastro
Stato	Codici relativi all'esito delle verifiche effettuate appresso descritte
Quota	Quota sezione di verifica
%Af	Percentuale di area di armatura rispetto a quella di calcestruzzo
r. snell.	Rapporto di snellezza λ su λ^*: valore superiore a 1 per elementi snelli nel caso in cui viene effettuata la verifica con il metodo diretto dello stato di equilibrio
Armat. long.	Numero e diametro (d) dei ferri di armatura longitudinale distinti in ferri di vertice + ferri di lato nelle posizioni nL1 e nL2, come da schemi in figura precedente
V N/M	Verifica a pressoflessione con rapporto Ed/Rd: valore minore o uguale a 1 per verifica positiva
V N sis	Verifica a compressione solo calcestruzzo con rapporto Nsd/Nrd ed Nrd calcolato come al punto 7.4.4.2.1: valore minore o uguale a 1 per verifica positiva
Staffe	Dati tratto di staffatura oggetto di verifica, nello specifico: numero delle braccia, diametro, passo, lunghezza L tratto
V V/T cls	Verifica a taglio/torsione con rapporto Ved/Vrd: valore minore o uguale a 1 per verifica positiva
Rif. cmb.	Riferimento combinazioni da cui si generano le verifiche più gravose per il pilastro

Per le verifiche alla G.R. dei pilastri è presente una tabella con i simboli di seguito descritti:

Pilas.	numero identificativo dell'elemento D2 pilastro
sovr. Xi (Xf)	Verifica sovraresistenza come da formula 7.4.4 in direzione X, alla base (i) ed alla sommità (f):

	rapporto tra i momenti resistenti dei pilastri e delle travi. La verifica è positiva se maggiore del γ_{Rd} adottato
sovr. Yi (Yf)	Verifica sovraresistenza come da formula 7.4.4 in direzione Y, alla base (i) ed alla sommità (f): rapporto tra i momenti resistenti dei pilastri e delle travi. La verifica è positiva se maggiore del γ_{Rd} adottato
M 2-2 i (f)	Valore del momento resistente 2-2 alla base (i) ed alla sommità (f) con massimo momento in presenza dello sforzo normale di calcolo
M 3-3 i (f)	Valore del momento resistente 3-3 alla base (i) ed alla sommità (f) con massimo momento in presenza dello sforzo normale di calcolo
Luce per V	Luce di calcolo per la definizione del taglio (generato dai momenti resistenti)
V M2-2 (M3-3)	Valore del taglio generato dai momenti resistenti 2-2 (3-3)

Per le verifiche dei dettagli costruttivi per la duttilità è presente una tabella con i simboli di seguito descritti:
(Non presente nel caso di comportamento strutturale non dissipativo)

Pilas	Numero identificativo D2 pilastro
ni	Sforzo assiale adimensionalizzato di progetto relativo alla combinazione sismica SLV
alfaomega	Prodotto tra il coefficiente di efficacia del confinamento e il rapporto meccanico dell'armatura trasversale di confinamento all'interno del nodo
V.7.4.29 2-2 (3-3)	Rapporto tra la domanda di staffe minima nel nodo e il rapporto meccanico dell'armatura trasversale di confinamento inserito all'interno del nodo in direzione 2 (3)
V. 7.4.29 Stato	Codici relativi all'esito della verifica 7.4.29
dmu_fi 2-2 (3-3)	Domanda in duttilità di curvatura in direzione 2 (3)
cmu_fi 2-2 (3-3)	Capacità in duttilità di curvatura in direzione 2 (3)
V. dutt. 2-2 (3-3)	Rapporto tra la domanda in duttilità di curvatura e la capacità in duttilità di curvatura in direzione 2 (3)

Per le verifiche nodi trave-pilastro di elementi nuovi è presente una tabella con i simboli di seguito descritti:

Nodo	Numero identificativo del nodo trave-pilastro
Stato	Esito delle verifiche
Pilastro	Numero identificativo D2 pilastro
Diam st	Diametro staffe nodo
Passo	Passo staffe nodo
n. br. 2 (3)	Numero braccia staffe per il taglio in direzione 2 (3)
Bj2 (3)	Larghezza effettiva del nodo per il taglio in direzione 2 (3)
Hjc2 (3)	Distanza tra le giaciture più esterne delle armature del pilastro per il taglio in direzione 2 (3)
V. 7.4.8	Rapporto tra il taglio Vjbd e il taglio resistente come da formula 7.4.8
V. Ash	Rapporto tra il passo staffe calcolato secondo il capitolo 7.4.4.3.1. e il passo staffe effattivamente inserita nel nodo. Nel caso di valore indica passo staffe utilizzato deriva dalle formule presenti nel paragrafo 7.4.4.3.1. Nel caso di valore minore di 1 il passo staffe utilizzato deriva del pilastro superiore o inferiore al nodo
7.4.10	Check passo staffe valutato in funzione della formula 7.4.10: • SI il passo staffe è calcolato utilizzando la formula 7.4.10; • NO il passo staffe è calcolato utilizzando le formule 7.4.11 e/o 7.4.12; • NR calcolo passo staffe non richiesto;
Rif. comb.	Riferimento combinazioni da cui si generano le verifiche più gravose per il nodo

Per le verifiche nodi trave-pilastro di elementi esistenti è presente una tabella con i simboli di seguito descritti:

Pilastro I	Numero identificativo D2 del pilastro inferiore.

Pilastro S	Numero identificativo D2 del pilastro superiore.
Nodo	Numero identificativo del nodo trave-pilastro.
SL cod	Stato limite di riferimento e relativo esito delle verifiche.
ver. (+)	Fattore di sicurezza nei riguardi della verifica di resistenza a compressione (verificato se < 1.00).
V +	Azione di Taglio presente al di sopra del nodo nella verifica di resistenza a compressione.
V + af s	Sollecitazione di trazione presente nell' armatura longitudinale superiore della trave nella verifica di resistenza a compressione.
N +	Azione Assiale presente al di sopra del nodo nella verifica di resistenza a compressione.
ver. (-)	Fattore di sicurezza nei riguardi della verifica di resistenza a trazione (verificato se < 1.00).
V -	Azione di Taglio presente al di sopra del nodo nella verifica di resistenza a trazione.
V - af s	Sollecitazione di trazione presente nell' armatura longitudinale superiore della trave nella verifica di resistenza a trazione.
N -	Azione Assiale presente al di sopra del nodo nella verifica di resistenza a trazione.
AreaV2	Area resistente del nodo in direzione 2 ($A_{j2}=b_{j2}*h_{jc2}$).
AreaV3	Area resistente del nodo in direzione 3 ($A_{j3}=b_{j3}*h_{jc3}$).
Rif. comb.	Combinazione (direzione) di riferimento nella verifica di trazione.

Per le verifiche agli S.L. delle travi è presente una tabella con i simboli di seguito descritti:

M_T Z P P	Numero della travata (T), quota media (Z), n° pilastrata iniziale (P) e finale (P) (nodo in assenza di pilastrata)
Trave	numero identificativo dell'elemento D2
Note	Codici identificativi sezione (s) e materiale (m) trave; sono inoltre presenti le sigle relative all'esito delle verifiche effettuate appresso descritte
%Af	Percentuale di area di armatura rispetto a quella di calcestruzzo
Af inf.	Area di armatura longitudinale posta all'intradosso
Af sup	Area di armatura longitudinale posta all'estradosso
Af long.	Area complessiva armatura longitudinale
x/d	rapporto tra posizione dell'asse neutro e altezza utile
V N/M	Verifica a pressoflessione rapporto Ed/Rd: valore minore o uguale a 1 per verifica positiva
Staffe	Dati tratto di staffatura oggetto di verifica, nello specifico: numero delle braccia, diametro, passo, lunghezza L tratto
V V/T cls	Verifica a taglio/torsione con rapporto Ved/Vrd: valore minore o uguale a 1 per verifica positiva
Rif. cmb.	Riferimento combinazioni da cui si generano le verifiche più gravose per la trave

Per le verifiche alla G.R. delle travi è presente una tabella con i simboli di seguito descritti:

Trave	numero identificativo dell'elemento D2 trave
M negativo i (f)	Valore del momento resistente negativo all' estremità iniziale i (finale f) della trave
M positivo i (f)	Valore del momento resistente positivo all' estremità iniziale i (finale f) della trave
Luce per V	Luce di calcolo per la definizione del taglio (generato dai momenti resistenti)
V M-i M+f	Taglio generato dai momenti resistenti negativo i e positivo f
V M+i M-f	Taglio generato dai momenti resistenti positivo i e negativo f
VEd, min	Valore di taglio minimo per verifica condizioni p.to 7.4.4.1.1 armatura diagonale (solo per CD "A")
VEd, max	Valore di taglio massimo per verifica condizioni p.to 7.4.4.1.1 armatura diagonale (solo per CD "A")
Vr1	Valore di taglio come da formula 7.4.1 per armatura diagonale (solo per CD "A")
As	Area singolo ordine armature diagonali come da formula 7.4.2 (solo per CD "A")

Per le verifiche a taglio ciclico di travi e pilastri esistenti è presente una tabella con i simboli di seguito descritti:

Trave/Pilastro	Numero identificativo dell'elemento D2 trave/pilastro
V. SLV	Codice relativo all'esito delle verifiche

Nodo	Numero identificativo del nodo di verifica
Ver. VC	Fattore di sicurezza nei confronti della verifica a taglio ciclico (verificato se < 1.00)
Direz.	Direzione di verifica
N fr	Valore di sforzo normale calcolato con fattore di comportamento fragile
V fr	Valore di taglio calcolato con fattore di comportamento fragile
M fr	Valore di momento calcolato con fattore di comportamento fragile
N dutt	Valore di sforzo normale calcolato con fattore di comportamento duttile
LV	Lunghezza di taglio
Mud,pl	Parte plastica della domanda di duttilità
V cic	Resistenza a taglio in condizioni cicliche (C8.7.2.8)
Cmb	Riferimento combinazioni da cui si generano le verifiche più gravose

Per le verifiche alle T.A. di pilastri e travi è presente una tabella con i simboli di seguito descritti:

M_P X Y	Numero della pilastrata (P) e posizione in pianta (X,Y)
M_T Z P P	Numero della travata, quota media pilastrata iniziale e finale (nodo in assenza di pilastrata)
Pilas. o Trave	numero identificativo dell'elemento D2
Note	Viene riportato il codice relativo alla sezione(s) e relativo al materiale(m); nella terza riga viene riportato il valore delle snellezze in direzione 2-2 e 3-3
Stato	Codici di verifica relativi alle tensioni normali e alle tensioni tangenziali
Quota	Ascissa del punto di verifica
%Af	Percentuale di area di armatura rispetto a quella di calcestruzzo
Armat. long.	Numero e diametro dei ferri di armatura longitudinale: ferri di vertice + ferri di lato (come da fig. precedente)
Af inf.	Area di armatura longitudinale posta all'intradosso della trave
Af sup	Area di armatura longitudinale posta all'estradosso della trave
Sc max	Massima tensione di compressione del calcestruzzo
Sc med	Massima tensione media di compressione del calcestruzzo
Sf max	Tensione massima nell'acciaio
staffe	Vengono riportati i dati del tratto di staffatura in cui cade la sezione di verifica; in particolare: numero dei bracci, diametro, passo, lunghezza tratto
Tau max	Tensione massima tangenziale nel cls
Rif. comb	Combinazioni in cui si generano i seguenti valori di tensione: Sc max, Sc med, Sf max, Tau max
AfV	area dell'armatura atta ad assorbire le azioni di taglio
AfT	area dell'armatura atta ad assorbire le azioni di torsione
Scorr. P	Scorrimento dei piegati
Af long.	Area del ferro longitudinale aggiuntivo per assorbire la torsione

					M_P= 1	**X=0.0**	**Y=0.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
			cm						L=cm			
1	s=2,m=6	ok,ok	0.0	2.26	0.56	4d24 4+12 d24	0.97	0.223+5d10/10	L=100	1.00	0.63	10,28,17,17
			214.0	1.81	0.56	4d24 2+10 d24	0.42	0.223+5d10/15	L=228	1.00	0.95	10,28,17,17
	[b=1.0;1.0]		428.0	1.81	0.56	4d24 2+10 d24	0.58	0.213+5d10/10	L=100	1.00	0.64	25,28,17,17
18	s=3,m=6	ok,ok	428.0	2.04	0.40	4d24 4+10 d24	0.87	0.133+5d10/10	L=100	0.89	0.56	31,28,17,20
			631.5	1.58	0.40	4d24 2+8 d24	0.08	0.123+5d10/15	L=207	0.90	0.83	11,28,17,20
	[b=1.0;1.0]		835.0	1.58	0.40	4d24 2+8 d24	0.66	0.123+5d10/10	L=100	0.90	0.56	10,28,17,20
19	s=4,m=6	ok,ok	835.0	2.04	0.20	4d24 2+12 d24	0.25	0.053+5d10/10	L=100	0.98	0.61	30,28,10,20
			1002.5	2.04	0.20	4d24 2+12 d24	0.23	0.043+5d10/15	L=135	0.98	0.91	11,28,10,20
	[b=1.0;1.0]		1170.0	2.04	0.20	4d24 2+12 d24	0.31	0.043+5d10/10	L=100	0.99	0.61	11,28,10,20
					M_P= 2	**X=962.5**	**Y=0.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
2	s=2,m=6	ok,ok	0.0	2.71	0.60	4d24 6+14 d24	0.99	0.263+5d10/10	L=100	1.00	0.79	11,24,20,17

		214.0	1.81	0.60	4d24 2+10 d24	0.38	0.253+5d10/12 L=228	1.00	0.98	11,24,12,17
[b=1.0;1.0]		428.0	1.81	0.60	4d24 2+10 d24	0.28	0.253+5d10/10 L=100	1.00	0.79	24,24,16,17
20 s=3,m=6	ok,ok	428.0	1.58	0.44	4d24 2+8 d24	0.51	0.153+5d10/10 L=100	0.75	0.48	10,26,20,20
		631.5	1.58	0.44	4d24 2+8 d24	0.14	0.153+5d10/20 L=207	0.75	0.96	23,26,20,20
[b=1.0;1.0]		835.0	1.58	0.44	4d24 2+8 d24	0.51	0.143+5d10/10 L=100	0.75	0.48	11,26,20,20
21 s=4,m=6	ok,ok	835.0	2.04	0.23	4d24 2+12 d24	0.30	0.063+5d10/10 L=100	0.99	0.62	5,22,20,17
		1002.5	2.04	0.23	4d24 2+12 d24	0.11	0.063+5d10/15 L=135	0.99	0.93	31,22,20,17
[b=1.0;1.0]		1170.0	2.04	0.23	4d24 2+12 d24	0.23	0.053+5d10/10 L=100	0.99	0.62	30,22,20,17
				M_P= 3	**X=1748.0**	**Y=0.0**				
Pilas. Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis Staffe	V V/T cls	V V/T acc	Rif. cmb
3 s=2,m=6	ok,ok	0.0	2.26	0.46	4d24 4+12 d24	1.00	0.153+5d10/10 L=100	0.95	0.60	11,26,15,17
		214.0	1.81	0.46	4d24 2+10 d24	0.48	0.143+5d10/15 L=228	0.95	0.90	11,26,15,17
[b=1.0;1.0]		428.0	1.81	0.46	4d24 2+10 d24	0.24	0.143+5d10/10 L=100	0.95	0.60	27,26,15,17
22 s=3,m=6	ok,ok	428.0	1.58	0.28	4d24 2+8 d24	0.43	0.063+5d10/10 L=100	0.71	0.43	5,26,20,17
		631.5	1.58	0.28	4d24 2+8 d24	0.13	0.063+5d10/20 L=207	0.71	0.86	19,26,20,17
[b=1.0;1.0]		835.0	1.58	0.28	4d24 2+8 d24	0.47	0.053+5d10/10 L=100	0.72	0.43	5,26,20,17
				M_P= 4	**X=0.0**	**Y=400.0**				
Pilas. Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis Staffe	V V/T cls	V V/T acc	Rif. cmb
4 s=2,m=6	ok,ok	0.0	1.81	0.56	4d24 2+10 d24	0.99	0.213+5d10/10 L=100	0.84	0.54	30,11,30,33
		214.0	1.81	0.56	4d24 2+10 d24	0.19	0.213+5d10/15 L=228	0.84	0.81	30,11,30,33
[b=1.0;1.0]		428.0	1.81	0.56	4d24 2+10 d24	0.80	0.203+5d10/10 L=100	0.84	0.54	17,11,30,33
34 s=3,m=6	ok,ok	428.0	2.94	0.41	4d24 8+14 d24	0.91	0.123+5d10/8 L=100	1.00	0.80	20,8,22,31
		631.5	1.58	0.41	4d24 2+8 d24	0.08	0.123+5d10/8 L=207	1.00	0.80	36,8,32,31
[b=1.0;1.0]		835.0	2.04	0.41	4d24 4+10 d24	0.84	0.123+5d10/8 L=100	1.00	0.81	17,8,28,31
35 s=4,m=6	ok,ok	835.0	2.04	0.21	4d24 2+12 d24	0.53	0.053+5d10/10 L=100	1.00	0.68	16,8,31,31
		1002.5	2.04	0.21	4d24 2+12 d24	0.10	0.053+5d10/12 L=135	1.00	0.86	28,8,31,31
[b=1.0;1.0]		1170.0	2.04	0.21	4d24 2+12 d24	0.40	0.043+5d10/10 L=100	1.00	0.69	11,8,27,31
				M_P= 5	**X=962.5**	**Y=400.0**				
Pilas. Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis Staffe	V V/T cls	V V/T acc	Rif. cmb
5s=12,m=6	ok,ok	0.0	1.63	0.51	4d24 4+10 d24	0.93	0.203+5d10/10 L=100	0.85	0.67	8,5,31,36
		214.0	1.27	0.51	4d24 2+8 d24	0.18	0.203+5d10/12 L=228	0.85	0.84	26,5,31,36
[b=1.0;1.0]		428.0	1.63	0.51	4d24 4+10 d24	0.83	0.193+5d10/10 L=100	0.85	0.67	16,5,31,36
36s=12,m=6	ok,ok	428.0	2.71	0.38	4d24 10+16 d24	0.97	0.133+5d10/8 L=100	1.00	0.90	14,5,22,30
		631.5	1.27	0.38	4d24 2+8 d24	0.10	0.123+5d10/8 L=207	1.00	0.90	2,5,30,30
[b=1.0;1.0]		835.0	1.99	0.38	4d24 6+12 d24	0.90	0.123+5d10/8 L=100	1.00	0.91	19,5,32,30
37 s=4,m=6	ok,ok	835.0	2.04	0.27	4d24 2+12 d24	0.90	0.073+5d10/10 L=100	1.00	0.71	17,10,30,33
		1002.5	2.04	0.27	4d24 2+12 d24	0.10	0.073+5d10/12 L=135	1.00	0.89	30,10,30,33
[b=1.0;1.0]		1170.0	2.04	0.27	4d24 2+12 d24	0.31	0.073+5d10/10 L=100	1.00	0.72	10,10,30,33
				M_P= 6	**X=1748.0**	**Y=400.0**				
Pilas. Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis Staffe	V V/T cls	V V/T acc	Rif. cmb
6 s=2,m=6	ok,ok	0.0	1.81	0.46	4d24 2+10 d24	0.81	0.153+5d10/10 L=100	0.83	0.52	8,9,30,33
		214.0	1.81	0.46	4d24 2+10 d24	0.13	0.143+5d10/15 L=228	0.84	0.77	8,9,30,33
[b=1.0;1.0]		428.0	1.81	0.46	4d24 2+10 d24	0.81	0.143+5d10/10 L=100	0.84	0.52	12,9,30,33
38 s=3,m=6	ok,ok	428.0	2.94	0.27	4d24 8+14 d24	0.93	0.063+5d10/10 L=100	1.00	0.93	14,10,25,30
		631.5	1.58	0.27	4d24 2+8 d24	0.06	0.053+5d10/10 L=207	1.00	0.93	26,10,36,30
[b=1.0;1.0]		835.0	1.58	0.27	4d24 2+8 d24	0.65	0.053+5d10/10 L=100	1.00	0.93	10,10,34,30
				M_P= 7	**X=0.0**	**Y=850.0**				
Pilas. Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis Staffe	V V/T cls	V V/T acc	Rif. cmb
7 s=2,m=6	ok,ok	0.0	1.81	0.58	4d24 2+10 d24	0.96	0.213+5d10/10 L=100	0.83	0.55	30,8,31,33
		214.0	1.81	0.58	4d24 2+10 d24	0.21	0.213+5d10/15 L=228	0.83	0.82	30,8,31,33
[b=1.0;1.0]		428.0	1.81	0.58	4d24 2+10 d24	0.64	0.203+5d10/10 L=100	0.83	0.55	17,8,31,33
40 s=3,m=6	ok,ok	428.0	2.04	0.43	4d24 4+10 d24	0.89	0.133+5d10/10 L=100	0.94	0.58	20,8,31,36
		631.5	1.58	0.43	4d24 2+8 d24	0.09	0.123+5d10/15 L=207	0.94	0.87	36,8,31,36
[b=1.0;1.0]		835.0	1.58	0.43	4d24 2+8 d24	0.52	0.123+5d10/10 L=100	0.94	0.58	31,8,31,36
41 s=4,m=6	ok,ok	835.0	2.04	0.23	4d24 2+12 d24	0.45	0.053+5d10/10 L=100	1.00	0.66	11,8,35,31
		1002.5	2.04	0.23	4d24 2+12 d24	0.11	0.053+5d10/15 L=135	1.00	1.00	31,8,24,31
[b=1.0;1.0]		1170.0	2.04	0.23	4d24 2+12 d24	0.41	0.053+5d10/10 L=100	1.00	0.67	11,8,33,31
				M_P= 8	**X=962.5**	**Y=850.0**				
Pilas. Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis Staffe	V V/T cls	V V/T acc	Rif. cmb
8s=12,m=6	ok,ok	0.0	1.63	0.53	4d24 4+10 d24	0.88	0.223+5d10/10 L=100	0.83	0.67	8,8,31,33
		214.0	1.27	0.53	4d24 2+8 d24	0.20	0.213+5d10/12 L=228	0.83	0.84	27,8,31,33
[b=1.0;1.0]		428.0	1.27	0.53	4d24 2+8 d24	0.93	0.213+5d10/10 L=100	0.83	0.67	20,8,31,33
42s=12,m=6	ok,ok	428.0	2.71	0.39	4d24 10+16 d24	0.94	0.133+5d10/8 L=100	1.00	0.85	5,6,24,30
		631.5	1.27	0.39	4d24 2+8 d24	0.11	0.133+5d10/8 L=207	1.00	0.86	2,6,26,30
[b=1.0;1.0]		835.0	1.99	0.39	4d24 6+12 d24	0.94	0.133+5d10/8 L=100	1.00	0.86	15,6,25,30
43 s=4,m=6	ok,ok	835.0	2.04	0.28	4d24 2+12 d24	0.91	0.073+5d10/10 L=100	1.00	0.70	17,6,30,33
		1002.5	2.04	0.28	4d24 2+12 d24	0.08	0.073+5d10/12 L=135	1.00	0.88	30,6,31,33
[b=1.0;1.0]		1170.0	2.04	0.28	4d24 2+12 d24	0.33	0.073+5d10/10 L=100	1.00	0.71	5,6,21,33
				M_P= 9	**X=1748.0**	**Y=850.0**				
Pilas. Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis Staffe	V V/T cls	V V/T acc	Rif. cmb
9 s=2,m=6	ok,ok	0.0	1.81	0.45	4d24 2+10 d24	0.80	0.143+5d10/10 L=100	0.81	0.52	19,6,30,36
		214.0	1.81	0.45	4d24 2+10 d24	0.15	0.143+5d10/15 L=228	0.81	0.77	27,6,30,36
[b=1.0;1.0]		428.0	1.81	0.45	4d24 2+10 d24	0.73	0.133+5d10/10 L=100	0.82	0.52	15,6,30,36
44 s=3,m=6	ok,ok	428.0	2.49	0.27	4d24 6+12 d24	0.93	0.063+5d10/10 L=100	1.00	0.65	14,6,33,30
		631.5	1.58	0.27	4d24 2+8 d24	0.06	0.053+5d10/15 L=207	1.00	0.98	26,6,29,30
[b=1.0;1.0]		835.0	1.58	0.27	4d24 2+8 d24	0.67	0.053+5d10/10 L=100	1.00	0.66	5,6,34,30
				M_P= 10	**X=0.0**	**Y=1300.0**				

Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
10	s=2,m=6	ok,ok	0.0	2.26	0.58	4d24 4+12 d24	0.86	0.213+5d10/10	L=100	0.96	0.63	33,7,36,33
			214.0	1.81	0.58	4d24 2+10 d24	0.23	0.213+5d10/15	L=228	0.96	0.94	33,7,36,33
	[b=1.0;1.0]		428.0	1.81	0.58	4d24 2+10 d24	0.61	0.203+5d10/10	L=100	0.96	0.63	17,7,36,33
46	s=3,m=6	ok,ok	428.0	2.04	0.43	4d24 4+10 d24	0.89	0.133+5d10/10	L=100	0.95	0.58	20,7,36,33
			631.5	1.58	0.43	4d24 2+8 d24	0.08	0.123+5d10/15	L=207	0.95	0.87	31,7,36,33
	[b=1.0;1.0]		835.0	2.04	0.43	4d24 4+10 d24	0.88	0.123+5d10/10	L=100	0.95	0.58	5,7,36,33
47	s=4,m=6	ok,ok	835.0	2.04	0.23	4d24 2+12 d24	0.66	0.053+5d10/10	L=100	1.00	0.67	15,7,30,36
			1002.5	2.04	0.23	4d24 2+12 d24	0.11	0.053+5d10/12	L=135	1.00	0.84	36,7,30,36
	[b=1.0;1.0]		1170.0	2.04	0.23	4d24 2+12 d24	0.44	0.043+5d10/10	L=100	1.00	0.68	20,7,30,36
					M_P= 11	**X=962.5**	**Y=1300.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
11	s=12,m=6	ok,ok	0.0	1.63	0.53	4d24 4+10 d24	0.95	0.213+5d10/10	L=100	0.85	0.67	15,21,36,33
			214.0	1.27	0.53	4d24 2+8 d24	0.21	0.213+5d10/12	L=228	0.85	0.84	27,21,36,33
	[b=1.0;1.0]		428.0	1.27	0.53	4d24 2+8 d24	0.98	0.213+5d10/10	L=100	0.85	0.67	15,21,36,33
48	s=12,m=6	ok,ok	428.0	2.71	0.39	4d24 10+16 d24	0.97	0.133+5d10/8	L=100	1.00	0.88	5,5,22,33
			631.5	1.27	0.39	4d24 2+8 d24	0.11	0.133+5d10/8	L=207	1.00	0.88	2,5,28,33
	[b=1.0;1.0]		835.0	1.99	0.39	4d24 6+12 d24	0.94	0.133+5d10/8	L=100	1.00	0.88	8,5,21,33
49	s=4,m=6	ok,ok	835.0	2.04	0.28	4d24 2+12 d24	0.92	0.073+5d10/10	L=100	1.00	0.70	18,13,29,30
			1002.5	2.04	0.28	4d24 2+12 d24	0.08	0.073+5d10/12	L=135	1.00	0.88	29,13,29,30
	[b=1.0;1.0]		1170.0	2.04	0.28	4d24 2+12 d24	0.34	0.073+5d10/10	L=100	1.00	0.71	14,13,26,30
					M_P= 12	**X=1748.0**	**Y=1300.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
12	s=2,m=6	ok,ok	0.0	1.81	0.44	4d24 2+10 d24	0.89	0.143+5d10/10	L=100	0.83	0.51	15,5,33,33
			214.0	1.81	0.44	4d24 2+10 d24	0.15	0.133+5d10/15	L=228	0.83	0.77	15,5,33,33
	[b=1.0;1.0]		428.0	1.81	0.44	4d24 2+10 d24	0.72	0.133+5d10/10	L=100	0.83	0.51	15,5,33,33
50	s=3,m=6	ok,ok	428.0	2.49	0.27	4d24 6+12 d24	0.93	0.053+5d10/10	L=100	1.00	0.66	5,5,34,33
			631.5	1.58	0.27	4d24 2+8 d24	0.06	0.053+5d10/12	L=207	1.00	0.83	27,5,29,33
	[b=1.0;1.0]		835.0	1.58	0.27	4d24 2+8 d24	0.72	0.053+5d10/10	L=100	1.00	0.67	14,5,34,33
					M_P= 13	**X=0.0**	**Y=1750.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
13	s=2,m=6	ok,ok	0.0	2.26	0.56	4d24 4+12 d24	0.89	0.223+5d10/10	L=100	0.98	0.62	33,20,33,36
			214.0	1.81	0.56	4d24 2+10 d24	0.21	0.223+5d10/15	L=228	0.98	0.93	33,20,33,36
	[b=1.0;1.0]		428.0	1.81	0.56	4d24 2+10 d24	0.84	0.213+5d10/10	L=100	0.98	0.62	17,20,33,36
28	s=3,m=6	ok,ok	428.0	2.94	0.41	4d24 8+14 d24	0.91	0.133+5d10/8	L=100	1.00	0.83	20,20,36,36
			631.5	1.58	0.41	4d24 2+8 d24	0.08	0.133+5d10/8	L=207	1.00	0.84	36,20,26,36
	[b=1.0;1.0]		835.0	2.49	0.41	4d24 6+12 d24	0.88	0.123+5d10/8	L=100	1.00	0.84	5,20,33,36
29	s=4,m=6	ok,ok	835.0	2.04	0.22	4d24 2+12 d24	0.80	0.053+5d10/10	L=100	1.00	0.74	7,15,31,36
			1002.5	2.04	0.22	4d24 2+12 d24	0.10	0.053+5d10/12	L=135	1.00	0.92	36,15,36,36
	[b=1.0;1.0]		1170.0	2.04	0.22	4d24 2+12 d24	0.46	0.053+5d10/10	L=100	1.00	0.74	20,15,36,36
					M_P= 14	**X=962.5**	**Y=1750.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
14	s=12,m=6	ok,ok	0.0	1.99	0.49	4d24 6+12 d24	0.94	0.193+5d10/10	L=100	0.97	0.75	15,18,33,33
			214.0	1.27	0.49	4d24 2+8 d24	0.19	0.193+5d10/12	L=228	0.97	0.93	27,18,33,33
	[b=1.0;1.0]		428.0	1.63	0.49	4d24 4+10 d24	0.85	0.193+5d10/10	L=100	0.98	0.75	15,18,33,33
26	s=12,m=6	ok,ok	428.0	3.08	0.36	4d24 12+18 d24	0.91	0.123+5d10/5	L=100	1.00	0.76	10,17,28,33
			631.5	1.27	0.36	4d24 2+8 d24	0.09	0.123+5d10/5	L=207	1.00	0.76	2,17,24,33
	[b=1.0;1.0]		835.0	2.35	0.36	4d24 8+14 d24	0.97	0.123+5d10/5	L=100	1.00	0.77	12,17,22,33
27	s=4,m=6	ok,ok	835.0	2.49	0.26	4d24 4+14 d24	0.92	0.073+5d10/8	L=100	1.00	0.85	10,17,23,30
			1002.5	2.04	0.26	4d24 2+12 d24	0.12	0.073+5d10/8	L=135	1.00	0.85	29,17,34,30
	[b=1.0;1.0]		1170.0	2.04	0.26	4d24 2+12 d24	0.41	0.063+5d10/8	L=100	1.00	0.86	17,17,34,30
					M_P= 15	**X=1748.0**	**Y=1750.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
15	s=2,m=6	ok,ok	0.0	2.26	0.46	4d24 4+12 d24	0.82	0.153+5d10/10	L=100	1.00	0.63	15,21,32,36
			214.0	1.81	0.46	4d24 2+10 d24	0.19	0.143+5d10/15	L=228	1.00	0.95	27,21,32,36
	[b=1.0;1.0]		428.0	2.26	0.46	4d24 4+12 d24	0.83	0.143+5d10/10	L=100	1.00	0.63	12,21,32,36
24	s=3,m=6	ok,ok	428.0	3.39	0.28	4d24 10+16 d24	0.98	0.06 3+5d10/5	L=97	1.00	0.70	10,21,33,33
	[b=1.0;1.0]		835.0	1.58	0.28	4d24 2+8 d24	0.84	0.053+5d10/5	L=310	1.00	0.71	17,21,32,33
					M_P= 16	**X=0.0**	**Y=2135.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
16	s=2,m=6	ok,ok	0.0	2.71	0.59	4d24 6+14 d24	0.93	0.243+5d10/10	L=100	1.00	0.76	17,31,7,10
			214.0	1.81	0.59	4d24 2+10 d24	0.45	0.243+5d10/12	L=228	1.00	0.95	17,31,6,10
	[b=1.0;1.0]		428.0	1.81	0.59	4d24 2+10 d24	0.53	0.233+5d10/10	L=100	1.00	0.77	22,31,5,10
32	s=3,m=6	ok,ok	428.0	2.04	0.42	4d24 4+10 d24	0.84	0.133+5d10/10	L=100	0.94	0.57	36,23,17,17
			631.5	1.58	0.42	4d24 2+8 d24	0.09	0.133+5d10/15	L=207	0.94	0.86	20,23,17,17
	[b=1.0;1.0]		835.0	1.58	0.42	4d24 2+8 d24	0.80	0.133+5d10/10	L=100	0.95	0.57	13,23,17,17
33	s=4,m=6	ok,ok	835.0	2.04	0.20	4d24 2+12 d24	0.27	0.053+5d10/10	L=100	1.00	0.62	33,23,17,17
			1002.5	2.04	0.20	4d24 2+12 d24	0.23	0.043+5d10/15	L=135	1.00	0.93	20,23,17,17
	[b=1.0;1.0]		1170.0	2.04	0.20	4d24 2+12 d24	0.34	0.043+5d10/10	L=100	1.00	0.62	20,23,17,17
					M_P= 17	**X=962.5**	**Y=2135.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
17	s=2,m=6	ok,ok	0.0	2.71	0.59	4d24 6+14 d24	0.96	0.243+5d10/10	L=100	1.00	0.76	20,25,10,11
			214.0	1.81	0.59	4d24 2+10 d24	0.52	0.243+5d10/12	L=228	1.00	0.95	20,25,8,11
	[b=1.0;1.0]		428.0	1.81	0.59	4d24 2+10 d24	0.22	0.233+5d10/10	L=100	1.00	0.76	27,25,14,11
30	s=3,m=6	ok,ok	428.0	1.58	0.42	4d24 2+8 d24	0.43	0.143+5d10/10	L=100	0.76	0.49	26,21,20,20
			631.5	1.58	0.42	4d24 2+8 d24	0.19	0.133+5d10/20	L=207	0.76	0.98	36,21,20,20
	[b=1.0;1.0]		835.0	1.58	0.42	4d24 2+8 d24	0.89	0.133+5d10/10	L=100	0.76	0.49	16,21,20,20

31	s=4,m=6	ok,ok	835.0	2.04	0.21	4d24 2+12 d24	0.30	0.053+5d10/10 L=100	1.00	0.64	15,21,15,20
			1002.5	2.04	0.21	4d24 2+12 d24	0.22	0.053+5d10/15 L=135	1.00	0.96	20,21,15,20
	[b=1.0;1.0]		1170.0	2.04	0.21	4d24 2+12 d24	0.32	0.043+5d10/10 L=100	1.00	0.64	17,21,15,20

Pilas.	%Af	r. snell.	V N/M	V N sis	V V/T cls	V V/T acc
	3.39	0.60	1.00	0.26	1.00	1.00

Pilas.	sovr. Xi	sovr. Xf	sovr. Yi	sovr. Yf	M 2-2 i	M 2-2 f	M 3-3 i	M 3-3 f	Luce per V	V M2-2	V M3-3
					daN cm	daN cm	daN cm	daN cm	cm	daN	daN
1	0.0	3.73	0.0	1.37	7.031e+06	6.099e+06	1.723e+07	1.469e+07	338.00	4.576e+04	1.121e+05
2	0.0	1.75	0.0	1.47	8.123e+06	6.350e+06	2.006e+07	1.510e+07	338.00	5.287e+04	1.306e+05
3	0.0	2.91	0.0	1.76	6.587e+06	5.556e+06	1.640e+07	1.372e+07	338.00	4.287e+04	1.068e+05
4	0.0	1.38	0.0	2.48	6.090e+06	6.035e+06	1.467e+07	1.457e+07	338.00	3.964e+04	9.549e+04
5	0.0	1.35	0.0	3.76	9.063e+06	8.997e+06	1.751e+07	1.738e+07	338.00	5.899e+04	1.140e+05
6	0.0	1.41	0.0	3.34	5.617e+06	5.558e+06	1.383e+07	1.372e+07	338.00	3.656e+04	9.000e+04
7	0.0	1.31	0.0	2.29	6.103e+06	6.048e+06	1.469e+07	1.459e+07	338.00	3.973e+04	9.563e+04
8	0.0	1.36	0.0	4.27	9.176e+06	7.864e+06	1.773e+07	1.508e+07	338.00	5.972e+04	1.154e+05
9	0.0	1.31	0.0	3.42	5.571e+06	5.512e+06	1.374e+07	1.364e+07	338.00	3.626e+04	8.946e+04
10	0.0	1.31	0.0	2.44	6.987e+06	6.046e+06	1.715e+07	1.459e+07	338.00	4.548e+04	1.116e+05
11	0.0	1.35	0.0	4.24	9.171e+06	7.858e+06	1.772e+07	1.508e+07	338.00	5.970e+04	1.154e+05
12	0.0	1.31	0.0	3.75	5.538e+06	5.479e+06	1.369e+07	1.358e+07	338.00	3.605e+04	8.908e+04
13	0.0	1.36	0.0	2.45	7.031e+06	6.099e+06	1.723e+07	1.468e+07	338.00	4.576e+04	1.121e+05
14	0.0	1.34	0.0	3.67	1.012e+07	8.920e+06	1.995e+07	1.725e+07	338.00	6.585e+04	1.299e+05
15	0.0	1.37	0.0	11.61	6.600e+06	6.552e+06	1.643e+07	1.634e+07	338.00	4.296e+04	1.069e+05
16	0.0	3.11	0.0	1.40	8.045e+06	6.244e+06	1.992e+07	1.494e+07	338.00	5.237e+04	1.297e+05
17	0.0	2.80	0.0	1.42	8.054e+06	6.256e+06	1.994e+07	1.496e+07	338.00	5.242e+04	1.298e+05
18	3.73	3.93	1.37	1.68	5.942e+06	4.886e+06	1.513e+07	1.249e+07	334.50	3.908e+04	9.954e+04
19	3.93	0.0	1.68	0.0	5.362e+06	5.313e+06	1.344e+07	1.335e+07	262.50	4.493e+04	1.127e+05
20	1.75	2.14	1.47	2.01	5.130e+06	5.074e+06	1.298e+07	1.287e+07	334.50	3.374e+04	8.538e+04
21	2.14	0.0	2.01	0.0	5.473e+06	5.425e+06	1.365e+07	1.356e+07	262.50	4.586e+04	1.144e+05
22	2.91	0.0	1.76	0.0	4.427e+06	4.368e+06	1.153e+07	1.140e+07	334.50	2.912e+04	7.580e+04
24	1.37	0.0	11.61	0.0	8.223e+06	4.364e+06	2.200e+07	1.139e+07	334.50	5.408e+04	1.447e+05
26	1.34	1.32	3.67	4.27	1.302e+07	1.057e+07	2.647e+07	2.123e+07	334.50	8.562e+04	1.741e+05
27	1.32	0.0	4.27	0.0	6.567e+06	5.503e+06	1.638e+07	1.371e+07	262.50	5.504e+04	1.373e+05
28	1.36	1.36	2.45	2.96	7.787e+06	6.795e+06	2.032e+07	1.773e+07	334.50	5.121e+04	1.336e+05
29	1.36	0.0	2.96	0.0	5.404e+06	5.356e+06	1.352e+07	1.343e+07	262.50	4.529e+04	1.133e+05
30	2.80	3.54	1.42	1.70	5.035e+06	4.979e+06	1.279e+07	1.268e+07	334.50	3.312e+04	8.414e+04
31	3.54	0.0	1.70	0.0	5.384e+06	5.336e+06	1.349e+07	1.340e+07	262.50	4.513e+04	1.130e+05
32	3.11	3.52	1.40	1.69	6.004e+06	4.953e+06	1.525e+07	1.262e+07	334.50	3.949e+04	1.003e+05
33	3.52	0.0	1.69	0.0	5.368e+06	5.320e+06	1.346e+07	1.337e+07	262.50	4.499e+04	1.128e+05
34	1.38	1.41	2.48	2.71	7.750e+06	5.879e+06	2.024e+07	1.502e+07	334.50	5.097e+04	1.331e+05
35	1.41	0.0	2.71	0.0	5.392e+06	5.344e+06	1.350e+07	1.341e+07	262.50	4.519e+04	1.131e+05
36	1.35	1.37	3.76	3.72	1.188e+07	9.369e+06	2.402e+07	1.871e+07	334.50	7.815e+04	1.580e+05
37	1.37	0.0	3.72	0.0	5.570e+06	5.522e+06	1.384e+07	1.375e+07	262.50	4.668e+04	1.160e+05
38	1.41	0.0	3.34	0.0	7.304e+06	4.355e+06	1.939e+07	1.137e+07	334.50	4.804e+04	1.276e+05
40	1.31	1.44	2.29	2.73	5.957e+06	4.902e+06	1.516e+07	1.252e+07	334.50	3.918e+04	9.972e+04
41	1.44	0.0	2.73	0.0	5.406e+06	5.358e+06	1.353e+07	1.344e+07	262.50	4.531e+04	1.134e+05
42	1.36	1.39	4.27	4.21	1.192e+07	9.423e+06	2.411e+07	1.881e+07	334.50	7.843e+04	1.586e+05
43	1.39	0.0	4.21	0.0	5.577e+06	5.529e+06	1.385e+07	1.376e+07	262.50	4.674e+04	1.161e+05
44	1.31	0.0	3.42	0.0	6.352e+06	4.341e+06	1.677e+07	1.134e+07	334.50	4.178e+04	1.103e+05
46	1.31	1.43	2.44	3.30	5.958e+06	5.904e+06	1.516e+07	1.506e+07	334.50	3.918e+04	9.973e+04
47	1.43	0.0	3.30	0.0	5.400e+06	5.351e+06	1.352e+07	1.342e+07	262.50	4.525e+04	1.133e+05
48	1.35	1.38	4.24	4.20	1.193e+07	9.432e+06	2.412e+07	1.882e+07	334.50	7.847e+04	1.587e+05
49	1.38	0.0	4.20	0.0	5.567e+06	5.519e+06	1.383e+07	1.374e+07	262.50	4.666e+04	1.159e+05
50	1.31	0.0	3.75	0.0	6.340e+06	4.326e+06	1.674e+07	1.131e+07	334.50	4.170e+04	1.101e+05

Pilas.	M 2-2 i	M 2-2 f	M 3-3 i	M 3-3 f	V M2-2	V M3-3
	1.302e+07	1.057e+07	2.647e+07	2.123e+07	8.562e+04	1.741e+05

Pilas.	nid	alfaomega	V. 7.4.29 2-2	V. 7.4.29 3-3	V. 7.4.29 Stato	dmu_fi 2-2	dmu_fi 3-3	cmu_fi 2-2	cmu_fi 3-3	V. dut. 2-2	V. dut. 3-3
1	0.14	0.12	0.34	0.30	ok	8.5	7.1	11.1	8.9	0.77	0.80
	0.14	0.12	0.31	0.28	ok			14.6	9.1	0.58	0.78
2	0.17	0.12	0.44	0.39	ok	8.5	7.1	9.8	8.0	0.86	0.89
	0.16	0.12	0.42	0.37	ok			12.6	8.7	0.67	0.82
3	0.09	0.12	0.13	0.10	ok	8.5	7.1	14.6	9.9	0.58	0.72
	0.09	0.12	0.11	0.08	ok			21.0	11.0	0.40	0.64
4	0.14	0.12	0.21	0.39	ok	7.1	8.5	14.7	9.1	0.48	0.93
	0.13	0.12	0.19	0.36	ok			15.2	9.2	0.47	0.92
5	0.13	0.12	0.21	0.36	ok	7.1	8.5	13.0	10.4	0.55	0.82
	0.13	0.12	0.19	0.33	ok			13.4	10.6	0.53	0.80
6	0.10	0.12	0.06	0.18	ok	7.1	8.5	20.1	10.7	0.35	0.79
	0.09	0.12	0.04	0.16	ok			21.0	11.0	0.34	0.77
7	0.14	0.12	0.22	0.39	ok	7.1	8.5	14.6	9.1	0.49	0.93

	0.13	0.12	0.20	0.37	ok			15.1	9.2	0.47	0.92
8	0.14	0.12	0.24	0.40	ok	7.1	8.5	12.4	10.0	0.57	0.85
	0.13	0.12	0.22	0.38	ok			15.9	11.4	0.44	0.75
9	0.09	0.12	0.05	0.16	ok	7.1	8.5	20.8	10.9	0.34	0.78
	0.09	0.12	0.03	0.14	ok			21.8	11.2	0.33	0.76
10	0.14	0.12	0.21	0.39	ok	7.1	8.5	11.4	9.0	0.62	0.95
	0.13	0.12	0.20	0.37	ok			15.1	9.2	0.47	0.92
11	0.14	0.12	0.24	0.40	ok	7.1	8.5	12.4	10.0	0.57	0.85
	0.13	0.12	0.22	0.37	ok			16.0	11.4	0.44	0.74
12	0.09	0.12	0.04	0.15	ok	7.1	8.5	21.3	11.1	0.33	0.77
	0.08	0.12	0.02	0.12	ok			22.3	11.4	0.32	0.75
13	0.14	0.12	0.23	0.41	ok	7.1	8.5	11.1	8.9	0.64	0.96
	0.14	0.12	0.21	0.39	ok			14.6	9.1	0.48	0.93
14	0.13	0.12	0.19	0.33	ok	7.1	8.5	11.8	9.8	0.60	0.86
	0.12	0.12	0.17	0.31	ok			13.8	10.9	0.51	0.78
15	0.10	0.12	0.06	0.19	ok	7.1	8.5	14.5	9.9	0.49	0.86
	0.09	0.12	0.05	0.16	ok			15.0	10.0	0.47	0.85
16	0.16	0.12	0.39	0.35	ok	8.5	7.1	10.1	8.2	0.84	0.87
	0.15	0.12	0.37	0.33	ok			13.4	8.8	0.63	0.80
17	0.16	0.12	0.40	0.36	ok	8.5	7.1	10.1	8.1	0.84	0.87
	0.15	0.12	0.38	0.34	ok			13.3	8.8	0.64	0.80
18	0.08	0.12	0.07	0.05	ok	8.5	7.1	16.0	11.6	0.53	0.61
	0.08	0.12	0.05	0.03	ok			23.9	12.8	0.36	0.55
19	0.03	0.12	0.0	0.0	ok	8.5	7.1	41.0	11.9	0.21	0.59
	0.03	0.12	0.0	0.0	ok			43.6	12.2	0.19	0.58
20	0.10	0.12	0.14	0.12	ok	8.5	7.1	19.8	12.0	0.43	0.59
	0.09	0.12	0.12	0.10	ok			20.6	12.2	0.41	0.58
21	0.04	0.12	0.0	0.0	ok	8.5	7.1	36.0	11.4	0.24	0.62
	0.04	0.12	0.0	0.0	ok			38.1	11.6	0.22	0.61
22	0.04	0.12	0.0	0.0	ok	8.5	7.1	36.8	14.2	0.23	0.50
	0.03	0.12	0.0	0.0	ok			39.3	14.4	0.22	0.49
24	0.04	0.28	0.0	0.0	ok	7.1	8.5	26.6	21.4	0.27	0.40
	0.03	0.28	0.0	0.0	ok			53.0	27.4	0.13	0.31
26	0.08	0.25	4.05e-03	0.05	ok	7.1	8.5	23.6	19.6	0.30	0.43
	0.08	0.25	0.0	0.04	ok			25.5	20.6	0.28	0.41
27	0.05	0.16	0.0	0.0	ok	7.1	8.5	26.9	13.3	0.26	0.64
	0.04	0.16	0.0	0.0	ok			44.6	14.4	0.16	0.59
28	0.08	0.16	0.02	0.10	ok	7.1	8.5	15.1	12.4	0.47	0.69
	0.08	0.16	4.94e-03	0.08	ok			16.0	12.7	0.44	0.67
29	0.03	0.12	0.0	0.0	ok	7.1	8.5	39.0	11.7	0.18	0.73
	0.03	0.12	0.0	0.0	ok			41.3	12.0	0.17	0.71
30	0.09	0.12	0.11	0.08	ok	8.5	7.1	21.2	12.3	0.40	0.58
	0.08	0.12	0.09	0.06	ok			22.2	12.5	0.38	0.57
31	0.03	0.12	0.0	0.0	ok	8.5	7.1	39.9	11.8	0.21	0.60
	0.03	0.12	0.0	0.0	ok			42.4	12.1	0.20	0.59
32	0.09	0.12	0.10	0.07	ok	8.5	7.1	15.4	11.3	0.55	0.63
	0.08	0.12	0.08	0.05	ok			22.6	12.6	0.38	0.56
33	0.03	0.12	0.0	0.0	ok	8.5	7.1	40.7	11.9	0.21	0.60
	0.03	0.12	0.0	0.0	ok			43.2	12.1	0.20	0.58
34	0.08	0.16	7.26e-03	0.09	ok	7.1	8.5	15.2	12.5	0.46	0.68
	0.08	0.16	0.0	0.07	ok			21.3	15.3	0.33	0.56
35	0.03	0.12	0.0	0.0	ok	7.1	8.5	39.6	11.8	0.18	0.72
	0.03	0.12	0.0	0.0	ok			42.0	12.0	0.17	0.71
36	0.08	0.15	0.01	0.09	ok	7.1	8.5	15.9	12.8	0.44	0.66
	0.08	0.15	5.49e-04	0.07	ok			18.6	14.5	0.38	0.59
37	0.05	0.12	0.0	0.0	ok	7.1	8.5	32.4	10.9	0.22	0.78
	0.04	0.12	0.0	0.0	ok			34.1	11.1	0.21	0.76
38	0.04	0.12	0.0	0.0	ok	7.1	8.5	14.0	11.1	0.51	0.76
	0.03	0.12	0.0	0.0	ok			40.0	14.4	0.18	0.59
40	0.08	0.12	0.02	0.12	ok	7.1	8.5	15.8	11.5	0.45	0.74
	0.08	0.12	0.0	0.10	ok			23.6	12.7	0.30	0.67
41	0.03	0.12	0.0	0.0	ok	7.1	8.5	38.9	11.7	0.18	0.73
	0.03	0.12	0.0	0.0	ok			41.2	11.9	0.17	0.71
42	0.09	0.15	0.02	0.10	ok	7.1	8.5	15.8	12.7	0.45	0.67
	0.08	0.15	0.01	0.08	ok			18.2	14.2	0.39	0.60
43	0.05	0.12	0.0	0.0	ok	7.1	8.5	32.2	10.9	0.22	0.78
	0.04	0.12	0.0	0.0	ok			33.9	11.1	0.21	0.77
44	0.04	0.12	0.0	0.0	ok	7.1	8.5	16.4	11.8	0.43	0.72
	0.03	0.12	0.0	0.0	ok			40.7	14.5	0.17	0.59
46	0.08	0.12	0.02	0.12	ok	7.1	8.5	15.8	11.5	0.45	0.74
	0.08	0.12	1.66e-05	0.10	ok			16.4	11.8	0.43	0.72
47	0.03	0.12	0.0	0.0	ok	7.1	8.5	39.2	11.7	0.18	0.72
	0.03	0.12	0.0	0.0	ok			41.6	12.0	0.17	0.71
48	0.09	0.15	0.03	0.10	ok	7.1	8.5	15.8	12.7	0.45	0.67
	0.08	0.15	0.01	0.09	ok			18.2	14.2	0.39	0.60
49	0.05	0.12	0.0	0.0	ok	7.1	8.5	32.5	10.9	0.22	0.78
	0.04	0.12	0.0	0.0	ok			34.2	11.1	0.21	0.76

50	0.04	0.12	0.0	0.0	ok	7.1	8.5	16.6	11.9	0.43	0.71
	0.03	0.12	0.0	0.0	ok			41.4	14.5	0.17	0.59
			2-2	**3-3**						**2-2**	**3-3**
			0.44	0.41						0.86	0.96

Nodo	**Conf.**	**Stato**	**Pilas.**	**Diam st**	**Passo**	**n. br. 2**	**Bj2**	**Hjc2**	**n. br. 3**	**Bj3**	**Hjc3**	**V. 7.4.8**	**V. Ash**	**7.4.10**	**Rif. cmb**
				mm	cm		cm	cm		cm	cm				
2	NO	ok	1	10	10.0	4	40.0	89.6	7	90.0	29.6	0.5	0.5	SI	24,5
4	NO	ok	2	10	10.0	4	40.0	89.6	7	90.0	29.6	0.7	0.5	NO	17,5
6	NO	ok	3	10	10.0	4	40.0	89.6	7	90.0	29.6	0.4	0.5	SI	20,5
8	NO	ok	4	10	8.0	4	40.0	89.6	7	80.0	29.6	0.8	0.5	NO	17,5
10	NO	ok	5	10	8.0	4	50.0	89.6	7	85.0	39.6	0.7	0.5	SI	20,31
12	NO	ok	6	10	10.0	4	40.0	89.6	7	80.0	29.6	0.7	0.6	NO	20,5
14	NO	ok	7	10	10.0	4	40.0	89.6	7	80.0	29.6	0.8	0.6	NO	17,5
16	NO	ok	8	10	8.0	4	50.0	89.6	7	85.0	39.6	0.7	0.5	SI	20,31
18	NO	ok	9	10	10.0	4	40.0	89.6	7	80.0	29.6	0.7	0.6	NO	20,5
20	NO	ok	10	10	10.0	4	40.0	89.6	7	80.0	29.6	0.7	0.6	NO	10,5
22	NO	ok	11	10	8.0	4	50.0	89.6	7	85.0	39.6	0.7	0.5	SI	11,32
24	NO	ok	12	10	10.0	4	40.0	89.6	7	80.0	29.6	0.7	0.6	NO	11,5
26	NO	ok	13	10	8.0	4	40.0	89.6	7	80.0	29.6	0.8	0.5	NO	10,5
28	NO	ok	14	10	5.0	4	50.0	89.6	7	85.0	39.6	0.8	0.3	SI	11,21
30	NO	ok	15	10	5.0	4	40.0	89.6	7	80.0	29.6	0.8	0.3	NO	11,5
32	NO	ok	16	10	10.0	4	40.0	89.6	7	90.0	29.6	0.5	0.6	NO	27,30
34	NO	ok	17	10	10.0	4	40.0	89.6	7	90.0	29.6	0.5	0.5	SI	33,5
35	NO	ok	18	10	10.0	4	40.0	89.6	7	90.0	29.6	0.4	0.5	SI	21,5
36	NO	ok	19	10	10.0	4	40.0	89.6	7	90.0	29.6	0.3	0.5	SI	5,5
37	NO	ok	20	10	10.0	4	40.0	89.6	7	90.0	29.6	0.6	0.5	NO	19,5
38	NO	ok	21	10	10.0	4	40.0	89.6	7	90.0	29.6	0.4	0.5	NO	5,5
39	NO	ok	22	10	10.0	4	40.0	89.6	7	90.0	29.6	0.3	0.5	NO	5,5
40	NO	ok	46	10	10.0	4	40.0	89.6	7	65.0	29.6	0.8	0.5	SI	5,21
41	NO	ok	24	10	5.0	4	40.0	89.6	7	90.0	29.6	0.4	0.3	NO	5,8
42	NO	ok	50	10	10.0	4	40.0	89.6	7	65.0	29.6	0.6	0.5	SI	5,21
43	NO	ok	26	10	5.0	4	50.0	89.6	7	95.0	39.6	0.6	0.3	NO	12,5
44	NO	ok	27	10	8.0	4	40.0	89.6	7	90.0	29.6	0.6	0.5	NO	5,5
45	NO	ok	28	10	8.0	4	40.0	89.6	7	90.0	29.6	0.6	0.5	NO	10,17
46	NO	ok	29	10	10.0	4	40.0	89.6	7	90.0	29.6	0.4	0.5	SI	5,21
47	NO	ok	30	10	10.0	4	40.0	89.6	7	90.0	29.6	0.4	0.5	SI	36,5
48	NO	ok	31	10	10.0	4	40.0	89.6	7	90.0	29.6	0.3	0.5	SI	5,5
49	NO	ok	32	10	10.0	4	40.0	89.6	7	90.0	29.6	0.4	0.5	NO	26,5
50	NO	ok	33	10	10.0	4	40.0	89.6	7	90.0	29.6	0.3	0.5	SI	5,5
51	NO	ok	34	10	8.0	4	40.0	89.6	7	60.0	29.6	0.9	0.4	NO	17,21
52	NO	ok	35	10	10.0	4	40.0	89.6	7	60.0	29.6	0.5	0.5	SI	5,21
53	NO	ok	36	10	8.0	4	50.0	89.6	7	65.0	39.6	0.7	0.5	SI	19,21
54	NO	ok	37	10	10.0	4	40.0	89.6	7	60.0	29.6	0.6	0.5	SI	5,21
55	NO	ok	38	10	10.0	4	40.0	89.6	7	60.0	29.6	0.6	0.5	SI	5,21
56	NO	ok	47	10	10.0	4	40.0	89.6	7	60.0	29.6	0.4	0.5	SI	5,21
57	NO	ok	48	10	8.0	4	50.0	89.6	7	70.0	39.6	0.7	0.5	SI	8,22
58	NO	ok	49	10	10.0	4	40.0	89.6	7	60.0	29.6	0.6	0.5	SI	5,21
59	NO	ok	40	10	10.0	4	40.0	89.6	7	60.0	29.6	0.8	0.5	NO	17,21
60	NO	ok	41	10	10.0	4	40.0	89.6	7	60.0	29.6	0.4	0.5	SI	5,21
61	NO	ok	42	10	8.0	4	50.0	89.6	7	65.0	39.6	0.7	0.5	SI	15,23
62	NO	ok	43	10	10.0	4	40.0	89.6	7	60.0	29.6	0.6	0.5	SI	5,21
63	NO	ok	44	10	10.0	4	40.0	89.6	7	60.0	29.6	0.5	0.5	SI	5,21

Nodo	**Passo**	**V. 7.4.8**	**V. Ash**
	5.00		
		0.89	0.60

							M_T= 1	**Z=0.0**	**P=2**	**P=17**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
		cm									L=cm	
68	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.17	0.37	0.10	4d10/30 L=60	21,8,12
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.06	0.37	0.10	4d10/30 L=60	21,8,12
172	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.10	0.27	0.08	4d10/30 L=55	21,8,32
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.15	0.27	0.09	4d10/30 L=25	21,8,24
208	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.13	0.17	0.18	4d10/30 L=80	23,7,21
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.40	0.17	0.18	4d10/30 L=80	21,7,21
236	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.28	0.24	0.30	4d10/30 L=25	23,23,21
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.75	0.24	0.30	4d10/30 L=55	25,23,25
264	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.56	0.31	0.39	4d10/30 L=30	25,21,25
	s=1,m=3	80.0	0.26	15.7	12.6	0.0	0.06	0.96	0.31	0.39	4d10/30 L=30	25,21,25
69	ok,ok	0.0	0.26	12.6	15.7	0.0	0.05	0.96	0.33	0.42	4d10/30 L=30	28,24,28
	s=1,m=3	80.0	0.26	12.6	15.7	0.0	0.06	0.95	0.33	0.42	4d10/30 L=30	28,24,28

245	ok,ok	0.0	0.26	12.6	15.7	0.0	0.05	0.91	0.34	0.42	4d10/30 L=40 28,28,28
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.88	0.34	0.42	4d10/30 L=40 28,28,28
217	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.82	0.28	0.36	4d10/30 L=80 28,28,28
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.41	0.28	0.36	4d10/30 L=80 24,28,28
189	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.25	0.32	0.42	4d10/30 L=80 28,25,25
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.43	0.32	0.42	4d10/30 L=80 25,25,25
173	ok,ok	0.0	0.37	22.0	12.6	0.0	0.05	0.18	0.37	0.49	4d10/30 L=10 25,25,25
	s=1,m=3	130.0	0.37	22.0	12.6	0.0	0.07	0.92	0.37	0.49	4d10/30 L=70 25,25,25
70	ok,ok	0.0	0.26	12.6	15.7	0.0	0.05	0.84	0.38	0.50	4d10/30 L=30 28,22,28
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.98	0.38	0.50	4d10/30 L=30 28,22,28
246	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.94	0.37	0.47	4d10/30 L=40 28,28,28
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.66	0.37	0.47	4d10/30 L=40 26,28,28
218	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.59	0.29	0.38	4d10/30 L=80 28,28,28
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.46	0.29	0.38	4d10/30 L=80 28,28,28
190	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.38	0.34	0.42	4d10/30 L=80 25,25,25
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.75	0.34	0.42	4d10/30 L=80 25,25,25
174	ok,ok	0.0	0.42	25.1	12.6	0.0	0.05	0.32	0.36	0.46	4d10/30 L=10 25,25,25
	s=1,m=3	130.0	0.42	25.1	12.6	0.0	0.08	0.92	0.36	0.46	4d10/30 L=70 25,25,25
71	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.86	0.41	0.53	4d10/30 L=30 25,22,28
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.59	0.41	0.53	4d10/30 L=30 28,22,28
247	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.55	0.35	0.48	4d10/30 L=40 28,28,28
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.24	0.35	0.47	4d10/30 L=40 26,28,28
219	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.34	0.27	0.37	4d10/30 L=80 25,28,28
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.42	0.27	0.37	4d10/30 L=80 25,28,28
191	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.46	0.34	0.42	4d10/30 L=80 25,25,25
	s=1,m=3	80.0	0.26	15.7	12.6	0.0	0.06	0.87	0.34	0.42	4d10/30 L=80 25,25,25
175	ok,ok	0.0	0.47	28.3	12.6	0.0	0.05	0.44	0.35	0.43	4d10/30 L=10 25,25,25
	s=1,m=3	130.0	0.47	28.3	12.6	0.0	0.09	0.93	0.35	0.43	4d10/30 L=40 25,25,25
23	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.55	0.24	0.30	4d10/30 L=60 13,28,28
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.38	0.24	0.31	4d10/30 L=60 28,28,28
238	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.40	0.28	0.23	4d10/30 L=55 13,20,28
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.33	0.29	0.23	4d10/30 L=25 26,20,28
210	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.32	0.37	0.12	4d10/30 L=80 28,20,16
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.22	0.38	0.14	4d10/30 L=80 26,20,16
178	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.25	0.67	0.28	4d10/30 L=10 16,17,17
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.17	0.67	0.27	4d10/30 L=70 16,17,17
151	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.21	0.83	0.50	4d10/30 L=45 28,17,13
	s=1,m=3	65.0	0.21	12.6	12.6	0.0	0.05	0.38	0.82	0.50	4d10/30 L=45 17,17,13
							M_T= 2	**Z=0.0**	**P=3**	**P=15**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
25	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.34	0.48	0.26	4d10/30 L=60 12,12,12
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.14	0.48	0.27	4d10/30 L=60 27,12,12
239	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.14	0.44	0.14	4d10/30 L=55 29,9,12
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.08	0.43	0.15	4d10/30 L=25 27,12,12
211	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.09	0.28	0.14	4d10/30 L=80 27,9,21
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.30	0.26	0.13	4d10/30 L=80 21,9,21
179	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.26	0.20	0.23	4d10/30 L=25 21,33,25
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.58	0.19	0.22	4d10/30 L=55 21,33,25
152	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.51	0.24	0.31	4d10/30 L=30 21,13,25
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.96	0.24	0.30	4d10/30 L=30 25,13,25
39	ok,ok	0.0	0.26	12.6	15.7	0.0	0.05	0.83	0.32	0.33	4d10/30 L=30 24,8,8
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.91	0.32	0.33	4d10/30 L=30 24,8,8
240	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.85	0.28	0.31	4d10/30 L=40 24,8,24
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.64	0.29	0.32	4d10/30 L=40 24,8,24
212	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.58	0.22	0.27	4d10/30 L=80 28,24,24
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.28	0.23	0.28	4d10/30 L=80 24,24,28
180	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.18	0.26	0.33	4d10/30 L=80 5,25,25
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.39	0.25	0.32	4d10/30 L=80 21,25,25
153	ok,ok	0.0	0.31	18.8	12.6	0.0	0.05	0.24	0.28	0.38	4d10/30 L=10 21,25,25
	s=1,m=3	130.0	0.31	18.8	12.6	0.0	0.06	0.83	0.27	0.37	4d10/30 L=70 25,25,25
45	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.83	0.30	0.38	4d10/30 L=30 24,8,24
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.67	0.30	0.39	4d10/30 L=30 24,8,24
241	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.61	0.27	0.34	4d10/30 L=40 28,24,24
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.36	0.28	0.35	4d10/30 L=40 24,24,24
213	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.31	0.24	0.29	4d10/30 L=80 28,25,28
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.28	0.24	0.30	4d10/30 L=80 24,28,28
181	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.26	0.28	0.33	4d10/30 L=80 27,25,25
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.66	0.27	0.32	4d10/30 L=80 25,25,25
154	ok,ok	0.0	0.31	18.8	12.6	0.0	0.05	0.41	0.28	0.34	4d10/30 L=10 27,13,25
	s=1,m=3	130.0	0.31	18.8	12.6	0.0	0.06	0.93	0.27	0.32	4d10/30 L=70 25,13,25
51	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.59	0.28	0.36	4d10/30 L=30 21,26,24
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.27	0.29	0.37	4d10/30 L=30 28,26,24
242	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.30	0.24	0.28	4d10/30 L=40 25,26,24
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.05	0.25	0.29	4d10/30 L=40 24,26,24
214	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.15	0.19	0.21	4d10/30 L=80 25,25,28
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.16	0.19	0.22	4d10/30 L=80 25,28,28
182	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.22	0.21	0.21	4d10/30 L=80 27,25,25

	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.49	0.20	0.20	4d10/30 L=80	25,25,25
155	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.48	0.20	0.22	4d10/30 L=10	27,13,13
	s=1,m=3	130.0	0.21	12.6	12.6	0.0	0.05	0.79	0.19	0.21	4d10/30 L=40	25,13,13
							M_T= 3	**Z=0.0**	**P=1**	**P=3**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
52	ok,ok	0.0	0.63	37.7	25.1	0.0	0.08	0.91	0.59	0.68	4d10/30 L=0	29,32,32
	s=1,m=3	80.2	0.42	22.0	25.1	0.0	0.06	0.95	0.59	0.67	4d10/30 L=0	12,32,32
220	ok,ok	0.0	0.42	25.1	25.1	0.0	0.06	0.97	0.61	0.64	4d10/30 L=35	12,32,32
	s=1,m=3	80.2	0.47	12.6	28.3	0.0	0.09	0.96	0.60	0.64	4d10/30 L=45	11,32,32
193	ok,ok	0.0	0.47	15.7	28.3	0.0	0.08	0.99	0.46	0.50	4d10/30 L=80	8,32,32
	s=1,m=3	80.2	0.52	12.6	31.4	0.0	0.10	0.91	0.46	0.50	4d10/30 L=80	8,32,32
253	ok,ok	0.0	0.52	12.6	31.4	0.0	0.10	0.91	0.33	0.35	4d10/30 L=80	12,32,32
	s=1,m=3	80.2	0.47	12.6	28.3	0.0	0.09	0.97	0.33	0.35	4d10/30 L=80	12,32,32
305	ok,ok	0.0	0.47	12.6	28.3	0.0	0.09	0.94	0.22	0.27	4d10/30 L=80	8,32,12
	s=1,m=3	80.2	0.42	12.6	25.1	0.0	0.08	0.98	0.22	0.27	4d10/30 L=80	8,32,12
294	ok,ok	0.0	0.42	12.6	25.1	0.0	0.08	0.94	0.20	0.23	4d10/30 L=80	8,9,9
	s=1,m=3	80.2	0.42	12.6	25.1	0.0	0.08	0.82	0.19	0.23	4d10/30 L=80	28,9,9
283	ok,ok	0.0	0.37	12.6	22.0	0.0	0.07	0.93	0.25	0.30	4d10/30 L=80	28,9,9
	s=1,m=3	80.2	0.37	12.6	22.0	0.0	0.07	0.81	0.25	0.30	4d10/30 L=80	28,9,9
266	ok,ok	0.0	0.31	12.6	18.8	0.0	0.06	0.89	0.31	0.38	4d10/30 L=80	28,9,9
	s=1,m=3	80.2	0.26	12.6	15.7	0.0	0.06	0.91	0.30	0.38	4d10/30 L=80	32,9,9
243	ok,ok	0.0	0.26	12.6	15.7	0.0	0.06	0.92	0.38	0.47	4d10/30 L=80	30,5,5
	s=1,m=3	80.2	0.21	12.6	12.6	0.0	0.05	0.92	0.38	0.47	4d10/30 L=80	6,5,5
215	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.83	0.46	0.58	4d10/30 L=80	30,5,5
	s=1,m=3	80.2	0.31	18.8	12.6	0.0	0.06	0.98	0.46	0.58	4d10/30 L=80	10,5,5
183	ok,ok	0.0	0.31	18.8	12.6	0.0	0.06	0.89	0.54	0.68	4d10/30 L=45	9,21,5
	s=1,m=3	80.2	0.52	31.4	12.6	0.0	0.10	0.94	0.55	0.68	4d10/30 L=35	9,21,5
156	ok,ok	0.0	0.47	28.3	12.6	0.0	0.09	0.92	0.57	0.73	4d10/30 L=0	9,21,5
	s=1,m=3	80.2	0.73	44.0	12.6	0.0	0.16	0.93	0.57	0.73	4d10/30 L=0	9,21,21
53	ok,ok	0.0	0.37	22.0	12.6	0.0	0.07	0.92	0.45	0.58	4d10/30 L=59	29,24,24
	s=1,m=3	78.6	0.21	12.6	12.6	0.0	0.05	0.89	0.45	0.58	4d10/30 L=59	7,24,24
265	ok,ok	0.0	0.26	15.7	12.6	0.0	0.06	0.87	0.44	0.54	4d10/30 L=37	12,24,12
	s=1,m=3	78.5	0.21	12.6	12.6	0.0	0.05	0.76	0.44	0.54	4d10/30 L=42	11,24,12
306	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.76	0.36	0.47	4d10/30 L=79	8,12,12
	s=1,m=3	78.5	0.21	12.6	12.6	0.0	0.05	0.59	0.36	0.48	4d10/30 L=79	8,12,12
295	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.55	0.30	0.39	4d10/30 L=79	12,12,12
	s=1,m=3	78.5	0.21	12.6	12.6	0.0	0.05	0.64	0.30	0.39	4d10/30 L=79	24,12,12
284	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.66	0.25	0.32	4d10/30 L=79	26,12,12
	s=1,m=3	78.5	0.21	12.6	12.6	0.0	0.05	0.81	0.25	0.32	4d10/30 L=79	24,12,12
267	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.86	0.21	0.25	4d10/30 L=79	22,12,9
	s=1,m=3	78.5	0.21	12.6	12.6	0.0	0.05	0.86	0.21	0.25	4d10/30 L=79	9,12,12
244	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.95	0.22	0.29	4d10/30 L=79	30,9,9
	s=1,m=3	78.5	0.31	18.8	12.6	0.0	0.05	0.90	0.22	0.29	4d10/30 L=79	32,9,9
216	ok,ok	0.0	0.31	18.8	12.6	0.0	0.05	1.00	0.27	0.34	4d10/30 L=79	30,9,9
	s=1,m=3	78.6	0.37	22.0	12.6	0.0	0.05	0.99	0.26	0.34	4d10/30 L=79	6,9,9
184	ok,ok	0.0	0.37	22.0	12.6	0.0	0.05	0.98	0.34	0.35	4d10/30 L=42	5,21,5
	s=1,m=3	78.5	0.47	28.3	12.6	0.0	0.09	0.97	0.34	0.35	4d10/30 L=37	5,21,5
157	ok,ok	0.0	0.52	31.4	12.6	0.0	0.10	0.90	0.36	0.44	4d10/30 L=0	9,25,25
	s=1,m=3	78.5	0.58	34.6	12.6	0.0	0.11	0.95	0.36	0.44	4d10/30 L=0	9,25,25
							M_T= 4	**Z=0.0**	**P=4**	**P=6**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
54	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.76	0.47	0.47	4d10/30 L=60	35,36,2
	s=1,m=3	80.2	0.21	12.6	12.6	0.0	0.05	0.94	0.47	0.47	4d10/30 L=60	8,36,2
158	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	1.00	0.43	0.37	4d10/30 L=35	8,28,2
	s=1,m=3	80.2	0.31	12.6	18.8	0.0	0.06	0.94	0.43	0.37	4d10/30 L=45	8,28,2
194	ok,ok	0.0	0.37	12.6	22.0	0.0	0.07	0.86	0.31	0.26	4d10/30 L=80	12,36,2
	s=1,m=3	80.2	0.37	12.6	22.0	0.0	0.07	0.99	0.31	0.26	4d10/30 L=80	12,36,2
226	ok,ok	0.0	0.42	12.6	25.1	0.0	0.08	0.87	0.21	0.16	4d10/30 L=80	12,36,12
	s=1,m=3	80.2	0.42	12.6	25.1	0.0	0.08	0.92	0.21	0.17	4d10/30 L=80	8,36,12
254	ok,ok	0.0	0.52	12.6	31.4	0.0	0.10	0.73	0.13	0.12	4d10/30 L=80	8,36,12
	s=1,m=3	80.2	0.58	12.6	34.6	0.0	0.11	0.64	0.13	0.12	4d10/30 L=80	8,36,12
277	ok,ok	0.0	0.58	12.6	34.6	0.0	0.11	0.63	0.12	0.14	4d10/30 L=80	8,9,9
	s=1,m=3	80.2	0.52	12.6	31.4	0.0	0.10	0.61	0.12	0.14	4d10/30 L=80	8,9,9
289	ok,ok	0.0	0.37	12.6	22.0	0.0	0.07	0.84	0.19	0.22	4d10/30 L=80	8,9,9
	s=1,m=3	80.2	0.47	12.6	28.3	0.0	0.09	0.53	0.19	0.22	4d10/30 L=80	28,9,9
300	ok,ok	0.0	0.31	12.6	18.8	0.0	0.06	0.76	0.25	0.30	4d10/30 L=80	2,9,9
	s=1,m=3	80.2	0.31	12.6	18.8	0.0	0.06	0.55	0.25	0.30	4d10/30 L=80	32,9,9
311	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.81	0.31	0.38	4d10/30 L=80	30,5,5
	s=1,m=3	80.2	0.21	12.6	12.6	0.0	0.05	0.54	0.31	0.38	4d10/30 L=80	6,5,5
149	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.41	0.38	0.46	4d10/30 L=80	30,5,5
	s=1,m=3	80.2	0.21	12.6	12.6	0.0	0.05	0.86	0.38	0.46	4d10/30 L=80	9,5,5
209	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.46	0.47	0.53	4d10/30 L=45	9,21,2
	s=1,m=3	80.2	0.31	18.8	12.6	0.0	0.06	0.85	0.47	0.53	4d10/30 L=35	9,21,2
225	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.85	0.45	0.59	4d10/30 L=55	9,21,2
	s=1,m=3	80.2	0.37	22.0	12.6	0.0	0.07	0.96	0.45	0.59	4d10/30 L=55	9,21,2
55	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.85	0.43	0.51	4d10/30 L=54	9,28,2
	s=1,m=3	78.5	0.21	12.6	12.6	0.0	0.05	0.34	0.43	0.51	4d10/30 L=54	2,28,2

159	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.55	0.41	0.46	4d10/30 L=37	2,24,12
	s=1,m=3	78.5	0.21	12.6	12.6	0.0	0.05	0.13	0.41	0.46	4d10/30 L=42	9,24,12
195	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.35	0.33	0.40	4d10/30 L=79	2,8,12
	s=1,m=3	78.6	0.21	12.6	12.6	0.0	0.05	0.09	0.33	0.40	4d10/30 L=79	11,8,12
227	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.16	0.26	0.31	4d10/30 L=79	9,12,12
	s=1,m=3	78.5	0.21	12.6	12.6	0.0	0.05	0.36	0.26	0.31	4d10/30 L=79	8,12,12
255	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.36	0.19	0.22	4d10/30 L=79	22,12,12
	s=1,m=3	78.5	0.21	12.6	12.6	0.0	0.05	0.55	0.19	0.22	4d10/30 L=79	24,12,12
278	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.57	0.12	0.13	4d10/30 L=79	22,12,12
	s=1,m=3	78.5	0.21	12.6	12.6	0.0	0.05	0.64	0.12	0.13	4d10/30 L=79	32,12,12
290	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.66	0.10	0.10	4d10/30 L=79	30,17,9
	s=1,m=3	78.5	0.21	12.6	12.6	0.0	0.05	0.61	0.10	0.10	4d10/30 L=79	9,17,9
301	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.62	0.16	0.13	4d10/30 L=79	30,25,5
	s=1,m=3	78.5	0.21	12.6	12.6	0.0	0.05	0.74	0.16	0.12	4d10/30 L=79	6,25,5
312	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.60	0.24	0.19	4d10/30 L=42	5,25,2
	s=1,m=3	78.5	0.21	12.6	12.6	0.0	0.05	0.79	0.24	0.18	4d10/30 L=37	9,25,2
150	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.63	0.24	0.21	4d10/30 L=59	5,21,2
	s=1,m=3	78.6	0.21	12.6	12.6	0.0	0.05	0.77	0.24	0.20	4d10/30 L=59	5,21,2
							M_T= 5	**Z=0.0**	**P=7**	**P=9**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
56	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.72	0.50	0.53	4d10/30 L=60	2,36,2
	s=1,m=3	80.2	0.21	12.6	12.6	0.0	0.05	0.88	0.49	0.52	4d10/30 L=60	12,36,2
185	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.93	0.41	0.41	4d10/30 L=35	12,36,2
	s=1,m=3	80.2	0.31	12.6	18.8	0.0	0.06	0.92	0.41	0.41	4d10/30 L=45	12,36,2
160	ok,ok	0.0	0.31	12.6	18.8	0.0	0.06	0.95	0.27	0.29	4d10/30 L=80	12,36,2
	s=1,m=3	80.2	0.37	12.6	22.0	0.0	0.07	0.97	0.27	0.29	4d10/30 L=80	12,36,2
307	ok,ok	0.0	0.58	12.6	34.6	0.0	0.11	0.63	0.17	0.17	4d10/30 L=80	8,36,2
	s=1,m=3	80.2	0.47	12.6	28.3	0.0	0.09	0.82	0.17	0.17	4d10/30 L=80	8,36,2
248	ok,ok	0.0	0.63	12.6	37.7	0.0	0.13	0.61	0.10	0.10	4d10/30 L=80	8,20,12
	s=1,m=3	80.2	0.63	12.6	37.7	0.0	0.13	0.60	0.10	0.11	4d10/30 L=80	8,20,12
296	ok,ok	0.0	0.63	12.6	37.7	0.0	0.13	0.59	0.09	0.12	4d10/30 L=80	8,17,9
	s=1,m=3	80.2	0.63	12.6	37.7	0.0	0.13	0.53	0.09	0.12	4d10/30 L=80	8,17,9
285	ok,ok	0.0	0.42	12.6	25.1	0.0	0.08	0.80	0.15	0.21	4d10/30 L=80	2,17,9
	s=1,m=3	80.2	0.52	12.6	31.4	0.0	0.10	0.48	0.15	0.21	4d10/30 L=80	16,17,9
268	ok,ok	0.0	0.31	12.6	18.8	0.0	0.06	0.96	0.22	0.30	4d10/30 L=80	2,5,5
	s=1,m=3	80.2	0.37	12.6	22.0	0.0	0.07	0.45	0.22	0.30	4d10/30 L=80	24,5,5
249	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.93	0.30	0.39	4d10/30 L=80	2,5,2
	s=1,m=3	80.2	0.21	12.6	12.6	0.0	0.05	0.54	0.30	0.39	4d10/30 L=80	9,5,2
272	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.36	0.38	0.50	4d10/30 L=80	10,13,2
	s=1,m=3	80.2	0.21	12.6	12.6	0.0	0.05	0.84	0.38	0.50	4d10/30 L=80	9,13,2
221	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.34	0.48	0.60	4d10/30 L=45	9,25,2
	s=1,m=3	80.2	0.26	15.7	12.6	0.0	0.06	0.97	0.48	0.60	4d10/30 L=35	9,25,2
196	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.73	0.48	0.67	4d10/30 L=55	9,21,2
	s=1,m=3	80.2	0.37	22.0	12.6	0.0	0.07	0.96	0.48	0.67	4d10/30 L=55	9,21,2
57	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.82	0.43	0.57	4d10/30 L=54	9,28,2
	s=1,m=3	78.5	0.21	12.6	12.6	0.0	0.05	0.36	0.43	0.57	4d10/30 L=54	2,28,2
161	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.60	0.40	0.50	4d10/30 L=37	2,24,2
	s=1,m=3	78.5	0.21	12.6	12.6	0.0	0.05	0.15	0.40	0.50	4d10/30 L=42	9,24,2
197	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.40	0.32	0.41	4d10/30 L=79	2,8,2
	s=1,m=3	78.6	0.21	12.6	12.6	0.0	0.05	0.08	0.32	0.41	4d10/30 L=79	12,8,2
228	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.18	0.25	0.32	4d10/30 L=79	17,8,12
	s=1,m=3	78.5	0.21	12.6	12.6	0.0	0.05	0.33	0.24	0.32	4d10/30 L=79	8,8,12
256	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.30	0.17	0.22	4d10/30 L=79	18,20,12
	s=1,m=3	78.5	0.21	12.6	12.6	0.0	0.05	0.52	0.17	0.22	4d10/30 L=79	2,20,12
279	ok,ok	0.0	0.26	12.6	15.7	0.0	0.06	0.43	0.11	0.12	4d10/30 L=79	18,20,12
	s=1,m=3	78.5	0.21	12.6	12.6	0.0	0.05	0.62	0.11	0.12	4d10/30 L=79	2,20,12
291	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.61	0.09	0.09	4d10/30 L=79	2,13,9
	s=1,m=3	78.5	0.26	12.6	15.7	0.0	0.06	0.50	0.09	0.09	4d10/30 L=79	9,13,9
302	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.54	0.16	0.13	4d10/30 L=79	10,25,9
	s=1,m=3	78.5	0.21	12.6	12.6	0.0	0.05	0.64	0.15	0.13	4d10/30 L=79	9,25,2
313	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.50	0.24	0.20	4d10/30 L=42	5,25,2
	s=1,m=3	78.5	0.21	12.6	12.6	0.0	0.05	0.73	0.24	0.20	4d10/30 L=37	5,25,2
176	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.55	0.24	0.22	4d10/30 L=59	9,25,2
	s=1,m=3	78.6	0.21	12.6	12.6	0.0	0.05	0.75	0.24	0.22	4d10/30 L=59	9,25,2
							M_T= 6	**Z=0.0**	**P=10**	**P=12**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
58	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.73	0.51	0.53	4d10/30 L=60	2,36,2
	s=1,m=3	80.2	0.21	12.6	12.6	0.0	0.05	0.88	0.50	0.53	4d10/30 L=60	20,36,2
186	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.91	0.39	0.41	4d10/30 L=35	20,36,2
	s=1,m=3	80.2	0.31	12.6	18.8	0.0	0.06	0.91	0.39	0.41	4d10/30 L=45	20,36,2
162	ok,ok	0.0	0.31	12.6	18.8	0.0	0.06	0.94	0.25	0.30	4d10/30 L=80	15,32,2
	s=1,m=3	80.2	0.37	12.6	22.0	0.0	0.07	0.97	0.25	0.30	4d10/30 L=80	20,32,2
308	ok,ok	0.0	0.58	12.6	34.6	0.0	0.11	0.62	0.16	0.18	4d10/30 L=80	15,32,2
	s=1,m=3	80.2	0.47	12.6	28.3	0.0	0.09	0.81	0.16	0.18	4d10/30 L=80	20,32,2
276	ok,ok	0.0	0.63	12.6	37.7	0.0	0.13	0.60	0.10	0.10	4d10/30 L=80	20,12,20
	s=1,m=3	80.2	0.63	12.6	37.7	0.0	0.13	0.59	0.10	0.11	4d10/30 L=80	20,12,20
297	ok,ok	0.0	0.63	12.6	37.7	0.0	0.13	0.58	0.10	0.12	4d10/30 L=80	20,9,17

	s=1,m=3	80.2	0.63	12.6	37.7	0.0	0.13	0.52	0.10	0.12	4d10/30 L=80	12,9,17
286	ok,ok	0.0	0.42	12.6	25.1	0.0	0.08	0.81	0.16	0.21	4d10/30 L=80	2,9,17
	s=1,m=3	80.2	0.52	12.6	31.4	0.0	0.10	0.48	0.16	0.21	4d10/30 L=80	12,9,17
269	ok,ok	0.0	0.37	12.6	22.0	0.0	0.07	0.75	0.23	0.29	4d10/30 L=80	2,5,17
	s=1,m=3	80.2	0.37	12.6	22.0	0.0	0.07	0.43	0.23	0.29	4d10/30 L=80	15,5,17
250	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.93	0.30	0.39	4d10/30 L=80	2,13,2
	s=1,m=3	80.2	0.21	12.6	12.6	0.0	0.05	0.54	0.30	0.39	4d10/30 L=80	13,13,2
273	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.33	0.38	0.51	4d10/30 L=80	14,13,2
	s=1,m=3	80.2	0.21	12.6	12.6	0.0	0.05	0.81	0.38	0.51	4d10/30 L=80	17,13,2
222	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.29	0.47	0.60	4d10/30 L=45	17,25,2
	s=1,m=3	80.2	0.26	15.7	12.6	0.0	0.06	0.92	0.47	0.60	4d10/30 L=35	17,25,2
198	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.66	0.49	0.67	4d10/30 L=55	17,25,2
	s=1,m=3	80.2	0.37	22.0	12.6	0.0	0.07	0.92	0.49	0.67	4d10/30 L=55	17,25,2
59	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.83	0.44	0.57	4d10/30 L=54	13,28,2
	s=1,m=3	78.5	0.21	12.6	12.6	0.0	0.05	0.37	0.43	0.57	4d10/30 L=54	2,28,2
163	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.60	0.39	0.50	4d10/30 L=37	2,28,2
	s=1,m=3	78.5	0.21	12.6	12.6	0.0	0.05	0.17	0.39	0.50	4d10/30 L=42	17,28,2
199	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.40	0.33	0.42	4d10/30 L=79	2,16,20
	s=1,m=3	78.6	0.21	12.6	12.6	0.0	0.05	0.15	0.33	0.42	4d10/30 L=79	16,16,20
229	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.21	0.26	0.32	4d10/30 L=79	17,20,20
	s=1,m=3	78.5	0.21	12.6	12.6	0.0	0.05	0.31	0.26	0.32	4d10/30 L=79	16,20,20
257	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.24	0.19	0.23	4d10/30 L=79	10,20,20
	s=1,m=3	78.5	0.21	12.6	12.6	0.0	0.05	0.49	0.19	0.23	4d10/30 L=79	16,20,20
280	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.51	0.14	0.14	4d10/30 L=79	18,20,20
	s=1,m=3	78.5	0.21	12.6	12.6	0.0	0.05	0.59	0.14	0.14	4d10/30 L=79	2,20,20
292	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.58	0.11	0.10	4d10/30 L=79	18,13,17
	s=1,m=3	78.5	0.26	12.6	15.7	0.0	0.06	0.50	0.10	0.09	4d10/30 L=79	5,13,17
303	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.52	0.17	0.14	4d10/30 L=79	14,25,17
	s=1,m=3	78.5	0.21	12.6	12.6	0.0	0.05	0.65	0.17	0.14	4d10/30 L=79	17,25,17
76	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.51	0.25	0.19	4d10/30 L=42	17,25,2
	s=1,m=3	78.5	0.21	12.6	12.6	0.0	0.05	0.75	0.25	0.19	4d10/30 L=37	17,25,2
177	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.56	0.24	0.22	4d10/30 L=59	17,21,2
	s=1,m=3	78.6	0.21	12.6	12.6	0.0	0.05	0.76	0.24	0.21	4d10/30 L=59	17,21,2
							M_T= 7	**Z=0.0**	**P=13**	**P=15**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
60	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.63	0.50	0.47	4d10/30 L=60	2,36,2
	s=1,m=3	80.2	0.21	12.6	12.6	0.0	0.05	0.98	0.50	0.46	4d10/30 L=60	20,36,2
187	ok,ok	0.0	0.26	12.6	15.7	0.0	0.05	0.81	0.36	0.36	4d10/30 L=35	20,2,2
	s=1,m=3	80.2	0.31	12.6	18.8	0.0	0.06	0.95	0.36	0.36	4d10/30 L=45	20,2,2
164	ok,ok	0.0	0.31	12.6	18.8	0.0	0.06	0.94	0.26	0.26	4d10/30 L=80	15,2,2
	s=1,m=3	80.2	0.37	12.6	22.0	0.0	0.07	0.94	0.26	0.26	4d10/30 L=80	16,2,2
309	ok,ok	0.0	0.42	12.6	25.1	0.0	0.08	0.83	0.16	0.17	4d10/30 L=80	15,36,20
	s=1,m=3	80.2	0.37	12.6	22.0	0.0	0.07	0.99	0.16	0.18	4d10/30 L=80	16,32,20
282	ok,ok	0.0	0.52	12.6	31.4	0.0	0.10	0.68	0.10	0.12	4d10/30 L=80	15,36,20
	s=1,m=3	80.2	0.58	12.6	34.6	0.0	0.11	0.60	0.10	0.12	4d10/30 L=80	16,36,20
298	ok,ok	0.0	0.58	12.6	34.6	0.0	0.11	0.58	0.11	0.13	4d10/30 L=80	20,17,17
	s=1,m=3	80.2	0.52	12.6	31.4	0.0	0.10	0.56	0.11	0.13	4d10/30 L=80	20,17,17
287	ok,ok	0.0	0.37	12.6	22.0	0.0	0.07	0.77	0.16	0.20	4d10/30 L=80	12,18,17
	s=1,m=3	80.2	0.42	12.6	25.1	0.0	0.08	0.53	0.15	0.20	4d10/30 L=80	12,18,17
270	ok,ok	0.0	0.31	12.6	18.8	0.0	0.06	0.73	0.22	0.27	4d10/30 L=80	2,2,13
	s=1,m=3	80.2	0.31	12.6	18.8	0.0	0.06	0.42	0.21	0.27	4d10/30 L=80	15,2,13
251	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.70	0.30	0.35	4d10/30 L=80	2,2,2
	s=1,m=3	80.2	0.21	12.6	12.6	0.0	0.05	0.48	0.30	0.35	4d10/30 L=80	17,2,2
274	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.24	0.39	0.45	4d10/30 L=80	2,2,2
	s=1,m=3	80.2	0.21	12.6	12.6	0.0	0.05	0.68	0.39	0.45	4d10/30 L=80	17,2,2
223	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.21	0.44	0.54	4d10/30 L=45	17,2,2
	s=1,m=3	80.2	0.21	12.6	12.6	0.0	0.05	0.91	0.44	0.54	4d10/30 L=35	17,2,2
200	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.48	0.43	0.60	4d10/30 L=50	17,22,2
	s=1,m=3	80.2	0.31	18.8	12.6	0.0	0.06	0.85	0.43	0.60	4d10/30 L=50	17,2,2
61	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.82	0.42	0.48	4d10/30 L=59	13,28,2
	s=1,m=3	78.5	0.21	12.6	12.6	0.0	0.05	0.45	0.42	0.49	4d10/30 L=59	17,28,2
165	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.55	0.48	0.48	4d10/30 L=37	2,28,20
	s=1,m=3	78.5	0.21	12.6	12.6	0.0	0.05	0.51	0.49	0.49	4d10/30 L=42	20,28,20
201	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.55	0.43	0.46	4d10/30 L=79	33,16,20
	s=1,m=3	78.6	0.21	12.6	12.6	0.0	0.05	0.51	0.43	0.46	4d10/30 L=79	19,16,20
230	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.48	0.38	0.38	4d10/30 L=79	15,16,20
	s=1,m=3	78.5	0.21	12.6	12.6	0.0	0.05	0.51	0.38	0.38	4d10/30 L=79	19,16,20
258	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.47	0.31	0.28	4d10/30 L=79	15,20,20
	s=1,m=3	78.5	0.21	12.6	12.6	0.0	0.05	0.56	0.32	0.29	4d10/30 L=79	19,20,20
281	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.44	0.25	0.19	4d10/30 L=79	10,20,20
	s=1,m=3	78.5	0.21	12.6	12.6	0.0	0.05	0.59	0.25	0.20	4d10/30 L=79	19,20,20
293	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.55	0.20	0.14	4d10/30 L=79	14,17,17
	s=1,m=3	78.5	0.21	12.6	12.6	0.0	0.05	0.55	0.19	0.13	4d10/30 L=79	15,20,17
304	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.53	0.27	0.19	4d10/30 L=79	14,13,13
	s=1,m=3	78.5	0.21	12.6	12.6	0.0	0.05	0.75	0.27	0.18	4d10/30 L=79	17,13,13
77	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.60	0.50	0.29	4d10/30 L=42	13,25,25
	s=1,m=3	78.5	0.21	12.6	12.6	0.0	0.05	0.87	0.49	0.29	4d10/30 L=37	13,25,25

192	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.73	0.52	0.47	4d10/30 L=59 14,21,21
	s=1,m=3	78.6	0.21	12.6	12.6	0.0	0.05	0.96	0.52	0.47	4d10/30 L=59 13,21,21
							M_T= 8	**Z=0.0**	**P=16**	**P=17**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
62	ok,ok	0.0	0.52	18.8	31.4	0.0	0.05	0.95	0.64	0.76	4d10/30 L=0 20,36,36
	s=1,m=3	80.2	0.58	12.6	34.6	0.0	0.05	0.91	0.64	0.76	4d10/30 L=0 20,36,36
188	ok,ok	0.0	0.52	12.6	31.4	0.0	0.05	0.99	0.62	0.66	4d10/30 L=35 20,36,36
	s=1,m=3	80.2	0.52	12.6	31.4	0.0	0.10	0.94	0.62	0.66	4d10/30 L=45 20,36,36
166	ok,ok	0.0	0.52	12.6	31.4	0.0	0.05	0.92	0.46	0.52	4d10/30 L=80 20,36,20
	s=1,m=3	80.2	0.47	12.6	28.3	0.0	0.09	0.94	0.47	0.53	4d10/30 L=80 20,36,20
237	ok,ok	0.0	0.42	12.6	25.1	0.0	0.08	0.97	0.35	0.43	4d10/30 L=80 15,36,20
	s=1,m=3	80.2	0.42	12.6	25.1	0.0	0.08	0.88	0.35	0.44	4d10/30 L=80 16,36,20
310	ok,ok	0.0	0.37	12.6	22.0	0.0	0.07	0.97	0.27	0.35	4d10/30 L=80 15,20,20
	s=1,m=3	80.2	0.31	12.6	18.8	0.0	0.06	0.95	0.28	0.36	4d10/30 L=80 20,20,20
299	ok,ok	0.0	0.42	12.6	25.1	0.0	0.08	0.71	0.22	0.28	4d10/30 L=80 25,20,20
	s=1,m=3	80.2	0.42	12.6	25.1	0.0	0.08	0.77	0.23	0.28	4d10/30 L=80 23,20,20
288	ok,ok	0.0	0.26	12.6	15.7	0.0	0.06	0.83	0.23	0.32	4d10/30 L=80 2,17,17
	s=1,m=3	80.2	0.37	12.6	22.0	0.0	0.07	0.86	0.22	0.31	4d10/30 L=80 33,17,17
271	ok,ok	0.0	0.26	12.6	15.7	0.0	0.06	0.78	0.28	0.37	4d10/30 L=80 33,17,17
	s=1,m=3	80.2	0.26	15.7	15.7	0.0	0.05	0.87	0.27	0.36	4d10/30 L=80 17,13,17
252	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.97	0.36	0.44	4d10/30 L=80 17,13,13
	s=1,m=3	80.2	0.37	22.0	12.6	0.0	0.05	0.91	0.35	0.43	4d10/30 L=80 17,13,13
275	ok,ok	0.0	0.31	18.8	12.6	0.0	0.05	0.94	0.46	0.53	4d10/30 L=80 17,13,13
	s=1,m=3	80.2	0.47	28.3	12.6	0.0	0.09	0.96	0.45	0.52	4d10/30 L=80 17,13,13
224	ok,ok	0.0	0.42	25.1	12.6	0.0	0.05	0.95	0.57	0.59	4d10/30 L=45 17,13,13
	s=1,m=3	80.2	0.63	37.7	12.6	0.0	0.13	0.92	0.57	0.58	4d10/30 L=35 17,13,13
202	ok,ok	0.0	0.52	31.4	12.6	0.0	0.10	0.92	0.54	0.66	4d10/30 L=0 14,25,25
	s=1,m=3	80.2	0.68	40.8	12.6	0.0	0.14	0.96	0.54	0.65	4d10/30 L=0 13,25,25
							M_T= 9	**Z=0.0**	**P=1**	**P=16**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
63	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.24	0.49	0.10	4d10/30 L=60 29,9,29
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.08	0.48	0.11	4d10/30 L=60 29,9,32
167	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.18	0.40	0.14	4d10/30 L=55 29,9,29
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.09	0.39	0.14	4d10/30 L=25 33,9,29
203	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.10	0.34	0.18	4d10/30 L=80 29,9,29
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.34	0.33	0.18	4d10/30 L=80 33,9,29
231	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.33	0.29	0.23	4d10/30 L=25 33,9,33
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.69	0.28	0.22	4d10/30 L=55 33,9,33
259	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.64	0.21	0.27	4d10/30 L=30 33,33,33
	s=1,m=3	80.0	0.26	15.7	12.6	0.0	0.06	0.86	0.21	0.26	4d10/30 L=30 33,33,33
64	ok,ok	0.0	0.42	12.6	25.1	0.0	0.05	0.91	0.32	0.36	4d10/30 L=30 36,32,32
	s=1,m=3	80.0	0.31	12.6	18.8	0.0	0.05	0.96	0.32	0.36	4d10/30 L=30 36,32,32
168	ok,ok	0.0	0.31	12.6	18.8	0.0	0.05	0.93	0.31	0.37	4d10/30 L=40 36,29,32
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.92	0.31	0.38	4d10/30 L=40 36,36,32
204	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.86	0.32	0.36	4d10/30 L=80 36,33,33
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.32	0.31	0.36	4d10/30 L=80 36,33,36
232	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.22	0.34	0.41	4d10/30 L=80 20,33,33
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.42	0.34	0.40	4d10/30 L=80 29,33,33
260	ok,ok	0.0	0.37	22.0	12.6	0.0	0.05	0.24	0.33	0.43	4d10/30 L=10 33,33,33
	s=1,m=3	130.0	0.37	22.0	12.6	0.0	0.07	0.89	0.32	0.43	4d10/30 L=70 33,33,33
65	ok,ok	0.0	0.37	15.7	22.0	0.0	0.05	0.92	0.33	0.40	4d10/30 L=30 36,36,36
	s=1,m=3	80.0	0.26	12.6	15.7	0.0	0.05	0.95	0.34	0.41	4d10/30 L=30 36,36,36
169	ok,ok	0.0	0.26	12.6	15.7	0.0	0.05	0.91	0.32	0.41	4d10/30 L=40 36,36,36
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.64	0.32	0.42	4d10/30 L=40 36,36,36
205	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.58	0.30	0.38	4d10/30 L=80 36,33,36
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.32	0.31	0.39	4d10/30 L=80 32,36,36
233	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.22	0.32	0.41	4d10/30 L=80 11,33,33
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.71	0.32	0.41	4d10/30 L=80 33,33,33
261	ok,ok	0.0	0.42	25.1	12.6	0.0	0.05	0.38	0.34	0.43	4d10/30 L=10 33,33,33
	s=1,m=3	130.0	0.42	25.1	12.6	0.0	0.08	0.93	0.33	0.42	4d10/30 L=70 33,33,33
66	ok,ok	0.0	0.31	15.7	18.8	0.0	0.05	0.84	0.34	0.44	4d10/30 L=30 36,36,36
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.77	0.35	0.45	4d10/30 L=30 36,36,36
170	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.72	0.34	0.43	4d10/30 L=40 36,36,36
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.18	0.34	0.44	4d10/30 L=40 36,36,36
206	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.35	0.34	0.40	4d10/30 L=80 33,36,36
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.45	0.34	0.40	4d10/30 L=80 33,36,36
234	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.52	0.34	0.43	4d10/30 L=80 33,33,33
	s=1,m=3	80.0	0.26	15.7	12.6	0.0	0.06	0.95	0.34	0.43	4d10/30 L=80 33,33,33
262	ok,ok	0.0	0.52	31.4	12.6	0.0	0.10	0.50	0.34	0.42	4d10/30 L=10 33,33,33
	s=1,m=3	130.0	0.52	31.4	12.6	0.0	0.10	0.94	0.33	0.41	4d10/30 L=40 33,33,33
67	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.58	0.22	0.26	4d10/30 L=60 36,36,36
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.43	0.22	0.26	4d10/30 L=60 36,36,36
171	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.43	0.35	0.21	4d10/30 L=55 36,20,36
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.29	0.36	0.22	4d10/30 L=25 36,20,36
207	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.27	0.41	0.17	4d10/30 L=80 36,20,36
	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.23	0.42	0.17	4d10/30 L=80 36,20,36
235	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.11	0.50	0.13	4d10/30 L=10 30,20,36

	s=1,m=3	80.0	0.21	12.6	12.6	0.0	0.05	0.30	0.51	0.13	4d10/30 L=70 36,20,36
263	ok,ok	0.0	0.21	12.6	12.6	0.0	0.05	0.23	0.65	0.34	4d10/30 L=45 30,17,5
	s=1,m=3	65.0	0.21	12.6	12.6	0.0	0.05	0.48	0.65	0.34	4d10/30 L=45 14,17,5
							M_T= 28	**Z=428.0**	**P=1**	**P=16**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
102	ok,ok	0.0	0.80	15.7	28.3	0.0	0.12	0.93	0.98	0.86	2d8/10 L=70 33,11,36
	s=14,m=6	200.0	0.53	18.8	12.6	0.0	0.07	0.24	0.93	0.79	2d8/10 L=190 36,11,36
		400.0	0.80	28.3	18.8	0.0	0.09	0.90	0.89	0.73	2d8/10 L=70 33,11,36
120	ok,ok	0.0	0.90	18.8	25.1	0.0	0.12	0.96	0.56	0.23	4d10/10 L=70 33,31,36
	s=5,m=6	225.0	0.45	12.6	12.6	0.0	0.09	0.11	0.51	0.21	4d10/10 L=210 2,31,36
		450.0	0.90	25.1	22.0	0.0	0.11	0.89	0.48	0.19	4d10/10 L=70 33,31,36
134	ok,ok	0.0	0.90	25.1	25.1	0.0	0.11	0.91	0.55	0.23	4d10/10 L=70 36,36,36
	s=5,m=6	225.0	0.45	12.6	12.6	0.0	0.09	0.10	0.50	0.21	4d10/10 L=210 2,36,36
		450.0	0.90	25.1	25.1	0.0	0.11	0.89	0.55	0.23	4d10/10 L=70 33,36,36
142	ok,ok	0.0	0.79	22.0	22.0	0.0	0.10	0.93	0.49	0.20	4d10/10 L=70 33,36,36
	s=5,m=6	225.0	0.45	12.6	12.6	0.0	0.09	0.10	0.47	0.19	4d10/10 L=180 9,36,36
		450.0	0.67	15.7	18.8	0.0	0.10	0.91	0.51	0.21	4d10/10 L=70 36,36,36
147	ok,ok	0.0	0.97	34.6	25.1	0.0	0.09	0.93	1.00	0.78	2d8/10 L=70 33,20,36
	s=14,m=6	192.5	0.53	18.8	15.7	0.0	0.07	0.27	1.00	0.89	2d8/10 L=205 33,20,20
		385.0	0.80	18.8	28.3	0.0	0.11	0.94	1.00	0.81	2d8/8 L=70 33,16,20
							M_T= 29	**Z=428.0**	**P=2**	**P=17**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
103	ok,ok	0.0	0.71	12.6	25.1	0.0	0.12	0.90	0.79	0.75	2d8/10 L=70 28,10,36
	s=15,m=6	200.0	0.44	15.7	12.6	0.0	0.07	0.24	0.76	0.71	2d8/10 L=190 28,10,36
		400.0	0.71	25.1	12.6	0.0	0.09	0.94	0.73	0.66	2d8/10 L=70 25,10,36
121	ok,ok	0.0	0.67	15.7	18.8	0.0	0.10	0.94	0.43	0.17	4d10/10 L=70 26,36,36
	s=5,m=6	225.0	0.45	12.6	12.6	0.0	0.09	0.06	0.40	0.16	4d10/10 L=210 1,36,36
		450.0	0.67	18.8	18.8	0.0	0.10	0.93	0.40	0.16	4d10/10 L=70 26,36,36
135	ok,ok	0.0	0.67	18.8	18.8	0.0	0.10	0.95	0.42	0.17	4d10/10 L=70 26,36,36
	s=5,m=6	225.0	0.45	12.6	12.6	0.0	0.09	0.07	0.39	0.16	4d10/10 L=210 2,36,36
		450.0	0.67	18.8	18.8	0.0	0.10	0.94	0.42	0.17	4d10/10 L=70 27,36,36
143	ok,ok	0.0	0.67	18.8	15.7	0.0	0.10	0.91	0.37	0.15	4d10/10 L=70 26,33,36
	s=5,m=6	225.0	0.45	12.6	12.6	0.0	0.09	0.05	0.39	0.16	4d10/10 L=180 23,33,36
		450.0	0.56	12.6	15.7	0.0	0.10	0.89	0.43	0.17	4d10/10 L=70 27,33,36
148	ok,ok	0.0	0.88	31.4	18.8	0.0	0.09	0.88	0.88	0.69	2d8/10 L=70 26,17,36
	s=15,m=6	192.5	0.53	18.8	12.6	0.0	0.07	0.25	0.92	0.76	2d8/10 L=205 27,17,36
		385.0	0.71	12.6	25.1	0.0	0.12	0.91	0.97	0.82	2d8/10 L=70 26,17,36
							M_T= 30	**Z=428.0**	**P=3**	**P=15**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
104	ok,ok	0.0	0.53	12.6	18.8	0.0	0.09	0.96	0.76	0.60	2d8/10 L=70 24,10,36
	s=15,m=6	200.0	0.35	12.6	12.6	0.0	0.07	0.27	0.72	0.53	2d8/10 L=190 24,10,36
		400.0	0.53	18.8	12.6	0.0	0.07	0.96	0.67	0.46	2d8/10 L=70 24,10,36
122	ok,ok	0.0	0.67	12.6	18.8	0.0	0.11	0.96	0.42	0.17	4d10/10 L=70 27,36,36
	s=5,m=6	225.0	0.45	12.6	12.6	0.0	0.09	0.12	0.37	0.15	4d10/10 L=210 2,36,36
		450.0	0.56	15.7	15.7	0.0	0.09	0.94	0.37	0.14	4d10/10 L=70 26,36,36
136	ok,ok	0.0	0.67	15.7	18.8	0.0	0.10	0.88	0.42	0.17	4d10/10 L=70 27,36,36
	s=5,m=6	225.0	0.45	12.6	12.6	0.0	0.09	0.11	0.36	0.15	4d10/10 L=210 2,36,36
		450.0	0.56	15.7	15.7	0.0	0.09	0.95	0.39	0.16	4d10/10 L=70 27,36,36
144	ok,ok	0.0	0.56	15.7	15.7	0.0	0.09	0.81	0.38	0.16	4d10/10 L=70 27,33,36
	s=5,m=6	225.0	0.45	12.6	12.6	0.0	0.09	0.10	0.33	0.13	4d10/10 L=180 24,33,36
		450.0	0.45	12.6	12.6	0.0	0.09	0.95	0.38	0.16	4d10/10 L=70 27,33,36
							M_T= 31	**Z=428.0**	**P=16**	**P=17**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
105	ok,ok	0.0	1.23	22.0	34.6	0.0	0.14	0.88	0.45	0.19	4d10/10 L=70 20,11,36
	s=5,m=6	481.3	0.56	15.7	12.6	0.0	0.10	0.81	0.26	0.10	4d10/10 L=662 2,11,36
		962.5	1.23	22.0	34.6	0.0	0.14	0.88	0.45	0.19	4d10/10 L=70 20,11,36
							M_T= 32	**Z=428.0**	**P=13**	**P=15**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
106	ok,ok	0.0	0.90	22.0	37.7	0.0	0.13	0.90	0.41	0.22	4d10/10 L=70 20,36,36
	s=10,m=6	481.3	0.52	22.0	15.7	0.0	0.10	0.96	0.24	0.10	4d10/10 L=772 2,36,36
		962.5	0.97	22.0	40.8	0.0	0.14	0.95	0.41	0.23	4d10/10 L=70 17,36,36
123	ok,ok	0.0	0.97	25.1	40.8	0.0	0.13	0.95	0.42	0.22	4d10/10 L=70 17,36,36
	s=10,m=6	392.8	0.37	15.7	15.7	0.0	0.08	0.61	0.31	0.14	4d10/10 L=605 2,36,36
		785.5	0.97	28.3	40.8	0.0	0.12	0.90	0.42	0.21	4d10/10 L=70 17,36,36
							M_T= 33	**Z=428.0**	**P=10**	**P=12**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
107	ok,ok	0.0	0.82	18.8	34.6	0.0	0.13	0.94	0.42	0.22	4d10/10 L=70 20,33,36
	s=10,m=6	481.3	0.60	25.1	15.7	0.0	0.10	0.89	0.24	0.10	4d10/10 L=777 2,33,36
		962.5	0.97	22.0	40.8	0.0	0.14	0.92	0.42	0.23	4d10/10 L=70 17,33,36
124	ok,ok	0.0	0.90	18.8	37.7	0.0	0.14	0.95	0.42	0.22	4d10/10 L=70 20,33,36
	s=10,m=6	392.8	0.37	15.7	15.7	0.0	0.08	0.79	0.28	0.12	4d10/10 L=600 2,33,36
		785.5	0.82	22.0	34.6	0.0	0.12	0.92	0.40	0.21	4d10/10 L=70 17,33,36
							M_T= 34	**Z=428.0**	**P=7**	**P=9**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
108	ok,ok	0.0	0.82	18.8	34.6	0.0	0.13	0.94	0.42	0.22	4d10/10 L=70 11,33,36
	s=10,m=6	481.3	0.60	25.1	15.7	0.0	0.10	0.89	0.24	0.10	4d10/10 L=777 2,33,36
		962.5	0.97	22.0	40.8	0.0	0.14	0.91	0.42	0.23	4d10/10 L=70 10,33,36

125	ok,ok	0.0	0.90	18.8	37.7	0.0	0.14	0.92	0.42	0.22	4d10/10 L=70 11,33,36
	s=10,m=6	392.8	0.37	15.7	15.7	0.0	0.08	0.80	0.27	0.12	4d10/10 L=600 2,33,36
		785.5	0.82	22.0	34.6	0.0	0.12	0.89	0.40	0.21	4d10/10 L=70 10,33,36
							M_T= 35	**Z=428.0**	**P=4**	**P=6**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
109	ok,ok	0.0	0.90	18.8	37.7	0.0	0.14	0.90	0.41	0.22	4d10/10 L=70 11,33,36
	s=10,m=6	481.3	0.60	25.1	15.7	0.0	0.10	0.85	0.23	0.10	4d10/10 L=777 2,33,36
		962.5	0.97	22.0	40.8	0.0	0.14	0.94	0.41	0.22	4d10/10 L=70 10,33,36
126	ok,ok	0.0	0.97	22.0	40.8	0.0	0.14	0.89	0.42	0.22	4d10/10 L=70 11,36,36
	s=10,m=6	392.8	0.37	15.7	15.7	0.0	0.08	0.78	0.28	0.12	4d10/10 L=600 2,36,36
		785.5	0.82	22.0	34.6	0.0	0.12	0.97	0.40	0.21	4d10/10 L=70 11,36,36
							M_T= 36	**Z=428.0**	**P=1**	**P=3**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
110	ok,ok	0.0	1.01	18.8	28.3	0.0	0.13	0.97	0.36	0.15	4d10/10 L=70 10,17,36
	s=5,m=6	481.3	0.45	12.6	12.6	0.0	0.09	0.73	0.22	0.09	4d10/10 L=662 2,17,36
		962.5	1.01	18.8	28.3	0.0	0.13	0.91	0.36	0.15	4d10/10 L=70 10,17,36
127	ok,ok	0.0	1.35	28.3	37.7	0.0	0.14	0.90	0.43	0.19	4d10/10 L=70 11,33,36
	s=5,m=6	392.8	0.45	12.6	12.6	0.0	0.09	0.45	0.32	0.13	4d10/10 L=545 2,33,36
		785.5	1.12	25.1	31.4	0.0	0.12	0.92	0.42	0.18	4d10/10 L=70 11,33,36
							M_T= 19	**Z=835.0**	**P=1**	**P=16**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
92	ok,ok	0.0	0.62	12.6	22.0	0.0	0.10	0.85	0.68	0.68	2d8/10 L=70 35,11,36
	s=14,m=6	200.0	0.35	12.6	12.6	0.0	0.07	0.23	0.64	0.62	2d8/10 L=190 30,11,36
		400.0	0.62	22.0	12.6	0.0	0.08	0.94	0.60	0.56	2d8/10 L=70 35,11,36
130	ok,ok	0.0	0.67	15.7	18.8	0.0	0.10	0.89	0.45	0.18	4d10/10 L=70 33,33,36
	s=6,m=6	225.0	0.45	12.6	12.6	0.0	0.09	0.11	0.40	0.16	4d10/10 L=210 2,33,36
		450.0	0.67	18.8	15.7	0.0	0.10	0.94	0.39	0.15	4d10/10 L=70 33,33,36
139	ok,ok	0.0	0.67	18.8	18.8	0.0	0.10	0.91	0.44	0.18	4d10/10 L=70 36,30,36
	s=6,m=6	225.0	0.45	12.6	12.6	0.0	0.09	0.10	0.40	0.16	4d10/10 L=210 2,30,36
		450.0	0.67	18.8	18.8	0.0	0.10	0.87	0.44	0.18	4d10/10 L=70 33,30,36
113	ok,ok	0.0	0.56	15.7	15.7	0.0	0.09	0.96	0.38	0.15	4d10/10 L=70 36,36,36
	s=6,m=6	225.0	0.45	12.6	12.6	0.0	0.09	0.09	0.37	0.14	4d10/10 L=180 1,36,36
		450.0	0.56	12.6	15.7	0.0	0.10	0.95	0.41	0.17	4d10/10 L=70 36,36,36
133	ok,ok	0.0	0.71	25.1	18.8	0.0	0.08	0.91	0.70	0.58	2d8/10 L=70 33,20,36
	s=14,m=6	192.5	0.44	15.7	12.6	0.0	0.07	0.20	0.73	0.63	2d8/10 L=205 33,20,36
		385.0	0.62	12.6	22.0	0.0	0.10	0.92	0.77	0.69	2d8/10 L=70 36,20,36
							M_T= 20	**Z=835.0**	**P=2**	**P=17**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
93	ok,ok	0.0	0.53	12.6	18.8	0.0	0.09	0.93	0.59	0.60	2d8/10 L=70 24,10,36
	s=15,m=6	200.0	0.35	12.6	12.6	0.0	0.07	0.22	0.55	0.53	2d8/10 L=190 24,10,36
		400.0	0.53	18.8	12.6	0.0	0.07	0.87	0.50	0.47	2d8/10 L=70 24,10,36
131	ok,ok	0.0	0.56	12.6	15.7	0.0	0.10	0.94	0.39	0.16	4d10/10 L=70 27,36,36
	s=6,m=6	225.0	0.45	12.6	12.6	0.0	0.09	0.13	0.34	0.13	4d10/10 L=210 2,36,36
		450.0	0.56	15.7	15.7	0.0	0.09	0.82	0.36	0.14	4d10/10 L=70 27,36,36
146	ok,ok	0.0	0.56	15.7	15.7	0.0	0.09	0.85	0.39	0.16	4d10/10 L=70 26,30,36
	s=6,m=6	225.0	0.45	12.6	12.6	0.0	0.09	0.12	0.34	0.13	4d10/10 L=210 2,30,36
		450.0	0.56	15.7	15.7	0.0	0.09	0.92	0.39	0.16	4d10/10 L=70 27,30,36
140	ok,ok	0.0	0.56	15.7	12.6	0.0	0.10	0.88	0.35	0.14	4d10/10 L=70 26,30,36
	s=6,m=6	225.0	0.45	12.6	12.6	0.0	0.09	0.08	0.33	0.13	4d10/10 L=180 2,30,36
		450.0	0.45	12.6	12.6	0.0	0.09	0.89	0.38	0.15	4d10/10 L=70 27,30,36
114	ok,ok	0.0	0.62	22.0	12.6	0.0	0.08	0.94	0.69	0.53	2d8/10 L=70 27,17,36
	s=15,m=6	192.5	0.35	12.6	12.6	0.0	0.07	0.25	0.73	0.59	2d8/10 L=205 27,17,36
		385.0	0.62	12.6	22.0	0.0	0.10	0.82	0.77	0.65	2d8/10 L=70 27,17,36
							M_T= 21	**Z=835.0**	**P=1**	**P=3**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
94	ok,ok	0.0	0.90	15.7	25.1	0.0	0.13	0.92	0.34	0.14	4d10/10 L=70 10,36,36
	s=6,m=6	481.3	0.45	12.6	12.6	0.0	0.09	0.66	0.20	0.07	4d10/10 L=662 2,36,36
		962.5	0.90	15.7	25.1	0.0	0.13	0.89	0.34	0.14	4d10/10 L=70 10,36,36
96	ok,ok	0.0	1.12	22.0	31.4	0.0	0.13	0.91	0.37	0.16	4d10/10 L=70 10,36,36
	s=6,m=6	392.8	0.45	12.6	12.6	0.0	0.09	0.47	0.27	0.11	4d10/10 L=545 23,36,36
		785.5	0.90	22.0	25.1	0.0	0.11	0.86	0.34	0.14	4d10/10 L=70 11,36,36
							M_T= 22	**Z=835.0**	**P=4**	**P=6**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
95	ok,ok	0.0	1.12	15.7	31.4	0.0	0.15	0.88	0.47	0.19	4d10/10 L=70 11,36,36
	s=6,m=6	481.3	0.67	18.8	12.6	0.0	0.11	0.97	0.22	0.07	4d10/10 L=777 2,36,36
		962.5	1.12	15.7	31.4	0.0	0.15	0.93	0.47	0.19	4d10/10 L=70 10,36,36
115	ok,ok	0.0	0.90	12.6	25.1	0.0	0.14	0.93	0.37	0.15	4d10/10 L=70 11,36,36
	s=6,m=6	392.8	0.45	12.6	12.6	0.0	0.09	0.75	0.21	0.07	4d10/10 L=600 2,36,36
		785.5	0.79	12.6	22.0	0.0	0.12	0.90	0.35	0.14	4d10/10 L=70 11,36,36
							M_T= 23	**Z=835.0**	**P=7**	**P=9**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
97	ok,ok	0.0	1.01	15.7	28.3	0.0	0.14	0.95	0.47	0.19	4d10/10 L=70 11,36,36
	s=6,m=6	481.3	0.79	22.0	12.6	0.0	0.12	0.86	0.22	0.07	4d10/10 L=777 2,36,36
		962.5	1.12	15.7	31.4	0.0	0.15	0.91	0.48	0.20	4d10/10 L=70 10,36,36
116	ok,ok	0.0	0.90	12.6	25.1	0.0	0.14	0.89	0.37	0.15	4d10/10 L=70 11,33,36
	s=6,m=6	392.8	0.45	12.6	12.6	0.0	0.09	0.78	0.21	0.07	4d10/10 L=600 2,33,36
		785.5	0.67	12.6	18.8	0.0	0.11	0.96	0.35	0.14	4d10/10 L=70 10,33,36

							M_T= 24	**Z=835.0**	**P=10**	**P=12**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
98	ok,ok	0.0	1.00	15.7	31.4	0.0	0.14	0.89	0.44	0.20	4d10/10 L=70	20,36,36
	s=11,m=6	481.3	0.70	22.0	12.6	0.0	0.11	0.89	0.21	0.08	4d10/10 L=777	2,36,36
		962.5	1.00	15.7	31.4	0.0	0.14	0.94	0.44	0.20	4d10/10 L=70	17,36,36
117	ok,ok	0.0	0.80	12.6	25.1	0.0	0.13	0.94	0.35	0.15	4d10/10 L=70	20,33,36
	s=11,m=6	392.8	0.40	12.6	12.6	0.0	0.08	0.80	0.21	0.07	4d10/10 L=600	2,33,36
		785.5	0.70	12.6	22.0	0.0	0.11	0.86	0.34	0.15	4d10/10 L=70	17,33,36
							M_T= 25	**Z=835.0**	**P=13**	**P=15**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
99	ok,ok	0.0	0.97	18.8	34.6	0.0	0.14	0.87	0.50	0.64	2d8/10 L=70	20,36,36
	s=14,m=6	481.3	0.53	18.8	12.6	0.0	0.07	0.95	0.25	0.27	2d8/10 L=772	2,36,36
		962.5	0.97	18.8	34.6	0.0	0.14	0.89	0.50	0.64	2d8/10 L=70	17,36,36
118	ok,ok	0.0	0.80	15.7	28.3	0.0	0.12	0.95	0.36	0.43	2d8/10 L=70	17,33,36
	s=14,m=6	392.8	0.35	12.6	12.6	0.0	0.06	0.44	0.26	0.27	2d8/10 L=605	2,33,36
		785.5	0.62	15.7	22.0	0.0	0.09	0.91	0.34	0.39	2d8/10 L=70	20,33,36
							M_T= 26	**Z=835.0**	**P=16**	**P=17**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
100	ok,ok	0.0	1.01	15.7	28.3	0.0	0.14	0.94	0.38	0.16	4d10/10 L=70	17,11,36
	s=6,m=6	481.3	0.45	12.6	12.6	0.0	0.09	0.89	0.20	0.08	4d10/10 L=662	2,11,36
		962.5	1.01	15.7	28.3	0.0	0.14	0.91	0.38	0.16	4d10/10 L=70	17,11,36
							M_T= 27	**Z=835.0**	**P=3**	**P=15**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
101	ok,ok	0.0	0.35	12.6	12.6	0.0	0.07	0.77	0.58	0.39	2d8/10 L=70	26,10,36
	s=15,m=6	200.0	0.35	12.6	12.6	0.0	0.07	0.18	0.56	0.36	2d8/10 L=190	24,10,36
		400.0	0.35	12.6	12.6	0.0	0.07	0.85	0.58	0.39	2d8/10 L=70	24,10,36
132	ok,ok	0.0	0.45	12.6	12.6	0.0	0.09	0.73	0.31	0.12	4d10/10 L=70	26,30,36
	s=6,m=6	225.0	0.45	12.6	12.6	0.0	0.09	0.07	0.29	0.11	4d10/10 L=210	2,30,36
		450.0	0.45	12.6	12.6	0.0	0.09	0.74	0.31	0.12	4d10/10 L=70	27,30,36
141	ok,ok	0.0	0.45	12.6	12.6	0.0	0.09	0.76	0.30	0.12	4d10/10 L=70	27,31,36
	s=6,m=6	225.0	0.45	12.6	12.6	0.0	0.09	0.06	0.27	0.11	4d10/10 L=210	2,31,36
		450.0	0.45	12.6	12.6	0.0	0.09	0.80	0.30	0.12	4d10/10 L=70	27,31,36
119	ok,ok	0.0	0.45	12.6	12.6	0.0	0.09	0.71	0.34	0.13	4d10/10 L=70	27,7,36
	s=6,m=6	225.0	0.45	12.6	12.6	0.0	0.09	0.09	0.32	0.12	4d10/10 L=180	26,7,36
		450.0	0.45	12.6	12.6	0.0	0.09	0.72	0.34	0.13	4d10/10 L=70	27,7,36
							M_T= 10	**Z=1170.0**	**N=64**	**N=65**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
72	ok,ok	0.0	0.79	12.6	12.6	0.0	0.16	0.07	0.34	0.09	4d10/8 L=50	12,12,36
	s=8,m=6	200.0	0.79	12.6	12.6	0.0	0.16	0.14	0.29	0.09	4d10/10 L=300	2,12,36
		400.0	0.79	12.6	12.6	0.0	0.16	0.12	0.34	0.09	4d10/8 L=50	10,12,36
73	ok,ok	0.0	0.79	12.6	12.6	0.0	0.16	0.12	0.28	0.09	4d10/8 L=50	2,30,36
	s=8,m=6	225.0	0.79	12.6	12.6	0.0	0.16	0.15	0.22	0.08	4d10/10 L=350	2,30,36
		450.0	0.79	12.6	12.6	0.0	0.16	0.14	0.28	0.09	4d10/8 L=50	2,30,36
74	ok,ok	0.0	0.79	12.6	12.6	0.0	0.16	0.14	0.28	0.09	4d10/8 L=50	2,30,36
	s=8,m=6	225.0	0.79	12.6	12.6	0.0	0.16	0.15	0.22	0.08	4d10/10 L=350	2,30,36
		450.0	0.79	12.6	12.6	0.0	0.16	0.12	0.28	0.09	4d10/8 L=50	2,30,36
75	ok,ok	0.0	0.79	12.6	12.6	0.0	0.16	0.11	0.32	0.09	4d10/8 L=50	22,22,36
	s=8,m=6	225.0	0.79	12.6	12.6	0.0	0.16	0.16	0.26	0.08	4d10/10 L=350	2,22,36
		450.0	0.79	12.6	12.6	0.0	0.16	0.16	0.32	0.09	4d10/8 L=50	21,22,36
							M_T= 11	**Z=1170.0**	**P=13**	**P=14**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
87	ok,ok	0.0	0.62	12.6	22.0	0.0	0.10	0.86	0.35	0.45	2d8/10 L=70	20,31,36
	s=14,m=6	481.3	0.44	15.7	12.6	0.0	0.06	0.94	0.17	0.19	2d8/10 L=782	2,31,36
		962.5	0.71	12.6	25.1	0.0	0.12	0.90	0.36	0.47	2d8/10 L=70	17,31,36
78	ok,ok	0.0	0.53	9.4	12.6	0.0	0.14	0.47	0.57	0.38	2d8/8 L=50	2,21,36
	s=16,m=6	122.5	0.53	9.4	12.6	0.0	0.14	0.19	0.56	0.45	2d8/10 L=125	5,21,36
		245.0	0.53	9.4	12.6	0.0	0.10	0.14	0.57	0.38	2d8/8 L=50	2,21,36
							M_T= 12	**Z=1170.0**	**P=10**	**P=11**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
89	ok,ok	0.0	0.56	12.6	15.7	0.0	0.10	0.86	0.32	0.14	4d10/10 L=70	15,36,36
	s=7,m=6	481.3	0.56	15.7	12.6	0.0	0.10	0.98	0.15	0.06	4d10/10 L=782	2,36,36
		962.5	0.79	12.6	22.0	0.0	0.12	0.94	0.34	0.15	4d10/10 L=70	17,36,36
79	ok,ok	0.0	0.79	12.6	12.6	0.0	0.16	0.65	0.50	0.13	4d10/8 L=50	5,27,36
	s=8,m=6	122.5	0.79	12.6	12.6	0.0	0.16	0.28	0.49	0.16	4d10/10 L=125	5,27,36
		245.0	0.79	12.6	12.6	0.0	0.16	0.32	0.50	0.13	4d10/8 L=50	24,27,36
							M_T= 13	**Z=1170.0**	**P=7**	**P=8**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
90	ok,ok	0.0	0.56	12.6	15.7	0.0	0.10	0.85	0.33	0.14	4d10/10 L=70	11,36,36
	s=7,m=6	481.3	0.56	15.7	12.6	0.0	0.10	0.97	0.16	0.06	4d10/10 L=782	2,36,36
		962.5	0.79	12.6	22.0	0.0	0.12	0.95	0.35	0.15	4d10/10 L=70	10,36,36
80	ok,ok	0.0	0.79	12.6	12.6	0.0	0.16	0.64	0.47	0.13	4d10/8 L=50	6,27,36
	s=8,m=6	122.5	0.79	12.6	12.6	0.0	0.16	0.27	0.46	0.16	4d10/10 L=125	6,27,36
		245.0	0.79	12.6	12.6	0.0	0.16	0.38	0.47	0.13	4d10/8 L=50	8,27,36
							M_T= 14	**Z=1170.0**	**P=4**	**P=5**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
91	ok,ok	0.0	0.67	12.6	18.8	0.0	0.11	0.95	0.33	0.14	4d10/10 L=70	11,36,36
	s=7,m=6	481.3	0.56	15.7	12.6	0.0	0.10	0.91	0.17	0.06	4d10/10 L=782	2,36,36

		962.5	0.90	12.6	25.1	0.0	0.14	0.87	0.35	0.15	4d10/10 L=70	10,36,36
81	ok,ok	0.0	0.79	12.6	12.6	0.0	0.16	0.60	0.48	0.13	4d10/8 L=50	2,24,36
	s=8,m=6	122.5	0.79	12.6	12.6	0.0	0.16	0.17	0.47	0.16	4d10/10 L=125	2,24,36
		245.0	0.79	12.6	12.6	0.0	0.16	0.30	0.48	0.13	4d10/8 L=50	2,24,36
							M_T= 15	**Z=1170.0**	**P=1**	**P=2**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
85	ok,ok	0.0	0.67	12.6	18.8	0.0	0.11	0.95	0.26	0.11	4d10/10 L=70	10,20,36
	s=7,m=6	481.3	0.45	12.6	12.6	0.0	0.09	0.51	0.16	0.06	4d10/10 L=662	2,20,36
		962.5	0.79	12.6	22.0	0.0	0.12	0.86	0.27	0.11	4d10/10 L=70	10,20,36
82	ok,ok	0.0	0.79	12.6	12.6	0.0	0.16	0.35	0.50	0.13	4d10/8 L=50	2,8,36
	s=8,m=6	122.5	0.79	12.6	12.6	0.0	0.16	0.11	0.49	0.16	4d10/10 L=125	11,8,36
		245.0	0.79	12.6	12.6	0.0	0.16	0.13	0.50	0.13	4d10/8 L=50	2,8,36
							M_T= 16	**Z=1170.0**	**P=1**	**P=16**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
83	ok,ok	0.0	0.35	12.6	12.6	0.0	0.07	0.58	0.53	0.39	2d8/10 L=70	30,11,36
	s=14,m=6	200.0	0.35	12.6	12.6	0.0	0.06	0.12	0.50	0.36	2d8/10 L=190	30,11,36
		400.0	0.35	12.6	12.6	0.0	0.07	0.60	0.53	0.39	2d8/10 L=70	30,11,36
84	ok,ok	0.0	0.45	12.6	12.6	0.0	0.09	0.60	0.30	0.12	4d10/10 L=70	36,32,36
	s=7,m=6	225.0	0.45	12.6	12.6	0.0	0.09	0.06	0.28	0.11	4d10/10 L=210	2,32,36
		450.0	0.45	12.6	12.6	0.0	0.09	0.57	0.30	0.12	4d10/10 L=70	36,32,36
137	ok,ok	0.0	0.45	12.6	12.6	0.0	0.09	0.65	0.29	0.12	4d10/10 L=70	36,36,36
	s=7,m=6	225.0	0.45	12.6	12.6	0.0	0.09	0.05	0.26	0.11	4d10/10 L=210	2,36,36
		450.0	0.45	12.6	12.6	0.0	0.09	0.63	0.29	0.12	4d10/10 L=70	33,36,36
128	ok,ok	0.0	0.45	12.6	12.6	0.0	0.09	0.58	0.31	0.13	4d10/10 L=70	33,30,36
	s=7,m=6	225.0	0.45	12.6	12.6	0.0	0.09	0.05	0.29	0.12	4d10/10 L=180	24,30,36
		450.0	0.45	12.6	12.6	0.0	0.09	0.51	0.31	0.13	4d10/10 L=70	33,30,36
111	ok,ok	0.0	0.35	12.6	12.6	0.0	0.07	0.72	0.59	0.37	2d8/10 L=70	33,20,36
	s=14,m=6	192.5	0.35	12.6	12.6	0.0	0.06	0.12	0.57	0.34	2d8/10 L=205	33,20,36
		385.0	0.35	12.6	12.6	0.0	0.07	0.59	0.59	0.37	2d8/10 L=70	33,20,36
							M_T= 17	**Z=1170.0**	**P=2**	**P=17**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
86	ok,ok	0.0	0.35	12.6	12.6	0.0	0.07	0.60	0.51	0.42	2d8/10 L=70	24,10,36
	s=15,m=6	200.0	0.35	12.6	12.6	0.0	0.06	0.15	0.47	0.36	2d8/10 L=190	24,10,36
		400.0	0.35	12.6	12.6	0.0	0.07	0.60	0.51	0.42	2d8/10 L=70	24,10,36
129	ok,ok	0.0	0.45	12.6	12.6	0.0	0.09	0.54	0.32	0.13	4d10/10 L=70	26,30,36
	s=7,m=6	225.0	0.45	12.6	12.6	0.0	0.09	0.11	0.28	0.11	4d10/10 L=210	2,30,36
		450.0	0.45	12.6	12.6	0.0	0.09	0.53	0.32	0.13	4d10/10 L=70	21,30,36
145	ok,ok	0.0	0.45	12.6	12.6	0.0	0.09	0.58	0.32	0.13	4d10/10 L=70	26,36,36
	s=7,m=6	225.0	0.45	12.6	12.6	0.0	0.09	0.10	0.28	0.11	4d10/10 L=210	2,36,36
		450.0	0.45	12.6	12.6	0.0	0.09	0.58	0.32	0.13	4d10/10 L=70	21,36,36
138	ok,ok	0.0	0.45	12.6	12.6	0.0	0.09	0.52	0.35	0.14	4d10/10 L=70	27,30,36
	s=7,m=6	225.0	0.45	12.6	12.6	0.0	0.09	0.08	0.30	0.12	4d10/10 L=180	16,30,36
		450.0	0.45	12.6	12.6	0.0	0.09	0.46	0.35	0.14	4d10/10 L=70	27,30,36
112	ok,ok	0.0	0.35	12.6	12.6	0.0	0.07	0.72	0.54	0.37	2d8/10 L=70	27,17,36
	s=15,m=6	192.5	0.35	12.6	12.6	0.0	0.06	0.12	0.52	0.34	2d8/10 L=205	27,17,36
		385.0	0.35	12.6	12.6	0.0	0.07	0.60	0.54	0.37	2d8/10 L=70	27,17,36
							M_T= 18	**Z=1170.0**	**P=16**	**P=17**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
88	ok,ok	0.0	0.67	12.6	18.8	0.0	0.11	0.91	0.26	0.11	4d10/10 L=70	17,10,36
	s=7,m=6	481.3	0.45	12.6	12.6	0.0	0.09	0.50	0.15	0.06	4d10/10 L=662	2,10,36
		962.5	0.67	12.6	18.8	0.0	0.11	0.92	0.26	0.11	4d10/10 L=70	17,10,36

Trave	**%Af**	**Af inf.**	**Af. sup**	**Af long.**	**x/d**	**V N/M**	**V V/T cls**	**V V/T acc**
	1.35	43.98	40.83	0.0	0.16	1.00	1.00	0.89

Trave	**M negativo i**	**M positivo i**	**M negativo f**	**M positivo f**	**Luce per V**	**V M-i M+f**	**V M+i M-f**	**VEd,min**	**VEd,max**	**Vr1**	**As**
	daN cm	daN cm	daN cm	daN cm	cm	daN	daN	daN	daN	daN	cm2
72	1.577e+06	1.577e+06	1.577e+06	1.577e+06	400.00	8674.20	8674.20	0.0	0.0	0.0	0.0
73	1.577e+06	1.577e+06	1.577e+06	1.577e+06	450.00	7710.40	7710.40	0.0	0.0	0.0	0.0
74	1.577e+06	1.577e+06	1.577e+06	1.577e+06	450.00	7710.40	7710.40	0.0	0.0	0.0	0.0
75	1.577e+06	1.577e+06	1.577e+06	1.577e+06	450.00	7710.40	7710.40	0.0	0.0	0.0	0.0
78	1.652e+06	1.294e+06	1.652e+06	1.294e+06	225.00	1.440e+04	1.440e+04	0.0	0.0	0.0	0.0
79	1.577e+06	1.577e+06	1.577e+06	1.577e+06	225.00	1.542e+04	1.542e+04	0.0	0.0	0.0	0.0
80	1.577e+06	1.577e+06	1.577e+06	1.577e+06	225.00	1.542e+04	1.542e+04	0.0	0.0	0.0	0.0
81	1.577e+06	1.577e+06	1.577e+06	1.577e+06	225.00	1.542e+04	1.542e+04	0.0	0.0	0.0	0.0
82	1.577e+06	1.577e+06	1.577e+06	1.577e+06	225.00	1.542e+04	1.542e+04	0.0	0.0	0.0	0.0
83	3.127e+06	3.169e+06	3.127e+06	3.169e+06	330.00	2.099e+04	2.099e+04	0.0	0.0	0.0	0.0
84	3.051e+06	3.051e+06	3.051e+06	3.051e+06	350.00	1.918e+04	1.918e+04	0.0	0.0	0.0	0.0
85	4.524e+06	3.050e+06	5.255e+06	3.051e+06	802.50	1.038e+04	1.138e+04	0.0	0.0	0.0	0.0
86	3.127e+06	3.169e+06	3.127e+06	3.169e+06	330.00	2.099e+04	2.099e+04	0.0	0.0	0.0	0.0
87	5.413e+06	3.169e+06	6.166e+06	3.170e+06	922.50	1.024e+04	1.113e+04	0.0	0.0	0.0	0.0
88	4.524e+06	3.050e+06	4.524e+06	3.050e+06	802.50	1.038e+04	1.038e+04	0.0	0.0	0.0	0.0
89	3.789e+06	3.052e+06	5.255e+06	3.051e+06	922.50	8157.02	9905.28	0.0	0.0	0.0	0.0
90	3.789e+06	3.052e+06	5.255e+06	3.051e+06	922.50	8157.02	9905.28	0.0	0.0	0.0	0.0
91	4.524e+06	3.050e+06	5.980e+06	3.050e+06	922.50	9031.52	1.077e+04	0.0	0.0	0.0	0.0
92	5.413e+06	3.169e+06	3.126e+06	5.471e+06	330.00	3.628e+04	2.098e+04	0.0	0.0	0.0	0.0

93	4.655e+06	3.169e+06	3.127e+06	4.706e+06	330.00	3.120e+04	2.099e+04	0.0	0.0	0.0	0.0
94	5.989e+06	3.790e+06	5.989e+06	3.790e+06	802.50	1.340e+04	1.340e+04	0.0	0.0	0.0	0.0
95	7.433e+06	3.788e+06	7.433e+06	3.788e+06	917.50	1.345e+04	1.345e+04	0.0	0.0	0.0	0.0
96	7.458e+06	5.265e+06	5.997e+06	5.263e+06	685.50	2.041e+04	1.807e+04	0.0	0.0	0.0	0.0
97	6.713e+06	3.790e+06	7.433e+06	3.788e+06	917.50	1.259e+04	1.345e+04	0.0	0.0	0.0	0.0
98	7.456e+06	3.801e+06	7.456e+06	3.801e+06	917.50	1.350e+04	1.350e+04	0.0	0.0	0.0	0.0
99	8.441e+06	4.706e+06	8.441e+06	4.706e+06	912.50	1.585e+04	1.585e+04	0.0	0.0	0.0	0.0
100	6.713e+06	3.790e+06	6.713e+06	3.790e+06	802.50	1.440e+04	1.440e+04	0.0	0.0	0.0	0.0
101	3.127e+06	3.169e+06	3.127e+06	3.169e+06	330.00	2.099e+04	2.099e+04	0.0	0.0	0.0	0.0
102	6.932e+06	3.938e+06	4.661e+06	7.002e+06	330.00	4.644e+04	2.866e+04	0.0	0.0	0.0	0.0
103	6.166e+06	3.170e+06	3.126e+06	6.234e+06	330.00	4.133e+04	2.099e+04	0.0	0.0	0.0	0.0
104	4.655e+06	3.169e+06	3.127e+06	4.706e+06	330.00	3.120e+04	2.099e+04	0.0	0.0	0.0	0.0
105	8.184e+06	5.264e+06	8.184e+06	5.264e+06	802.50	1.843e+04	1.843e+04	0.0	0.0	0.0	0.0
106	8.980e+06	5.317e+06	9.706e+06	5.316e+06	912.50	1.723e+04	1.811e+04	0.0	0.0	0.0	0.0
107	8.247e+06	4.577e+06	9.706e+06	5.316e+06	917.50	1.626e+04	1.712e+04	0.0	0.0	0.0	0.0
108	8.247e+06	4.577e+06	9.706e+06	5.316e+06	917.50	1.626e+04	1.712e+04	0.0	0.0	0.0	0.0
109	8.971e+06	4.576e+06	9.706e+06	5.316e+06	917.50	1.713e+04	1.712e+04	0.0	0.0	0.0	0.0
110	6.724e+06	4.527e+06	6.724e+06	4.527e+06	802.50	1.542e+04	1.542e+04	0.0	0.0	0.0	0.0
111	3.127e+06	3.169e+06	3.127e+06	3.169e+06	345.00	2.007e+04	2.007e+04	0.0	0.0	0.0	0.0
112	3.127e+06	3.169e+06	3.127e+06	3.169e+06	345.00	2.007e+04	2.007e+04	0.0	0.0	0.0	0.0
113	3.789e+06	3.789e+06	3.789e+06	3.052e+06	320.00	2.352e+04	2.605e+04	0.0	0.0	0.0	0.0
114	3.126e+06	5.471e+06	5.413e+06	3.169e+06	345.00	2.007e+04	3.471e+04	0.0	0.0	0.0	0.0
115	5.980e+06	3.050e+06	5.255e+06	3.051e+06	740.50	1.342e+04	1.234e+04	0.0	0.0	0.0	0.0
116	5.980e+06	3.050e+06	4.524e+06	3.050e+06	740.50	1.341e+04	1.125e+04	0.0	0.0	0.0	0.0
117	5.999e+06	3.064e+06	5.271e+06	3.063e+06	740.50	1.346e+04	1.238e+04	0.0	0.0	0.0	0.0
118	6.932e+06	3.938e+06	5.420e+06	3.938e+06	745.50	1.604e+04	1.381e+04	0.0	0.0	0.0	0.0
119	3.051e+06	3.051e+06	3.051e+06	3.051e+06	320.00	2.098e+04	2.098e+04	0.0	0.0	0.0	0.0
120	5.995e+06	4.527e+06	5.263e+06	5.997e+06	350.00	3.769e+04	3.077e+04	0.0	0.0	0.0	0.0
121	4.526e+06	3.790e+06	4.526e+06	4.526e+06	350.00	2.845e+04	2.614e+04	0.0	0.0	0.0	0.0
122	4.524e+06	3.050e+06	3.789e+06	3.789e+06	350.00	2.613e+04	2.150e+04	0.0	0.0	0.0	0.0
123	9.715e+06	6.053e+06	9.723e+06	6.790e+06	745.50	2.435e+04	2.328e+04	0.0	0.0	0.0	0.0
124	8.971e+06	4.576e+06	8.253e+06	5.317e+06	740.50	2.122e+04	1.906e+04	0.0	0.0	0.0	0.0
125	8.971e+06	4.576e+06	8.253e+06	5.317e+06	740.50	2.122e+04	1.906e+04	0.0	0.0	0.0	0.0
126	9.706e+06	5.316e+06	8.253e+06	5.317e+06	740.50	2.232e+04	2.016e+04	0.0	0.0	0.0	0.0
127	8.929e+06	6.739e+06	7.465e+06	6.001e+06	685.50	2.396e+04	2.279e+04	0.0	0.0	0.0	0.0
128	3.051e+06	3.051e+06	3.051e+06	3.051e+06	320.00	2.098e+04	2.098e+04	0.0	0.0	0.0	0.0
129	3.051e+06	3.051e+06	3.051e+06	3.051e+06	350.00	1.918e+04	1.918e+04	0.0	0.0	0.0	0.0
130	4.526e+06	3.790e+06	3.790e+06	4.526e+06	350.00	2.845e+04	2.382e+04	0.0	0.0	0.0	0.0
131	3.789e+06	3.052e+06	3.789e+06	3.789e+06	350.00	2.382e+04	2.150e+04	0.0	0.0	0.0	0.0
132	3.051e+06	3.051e+06	3.051e+06	3.051e+06	350.00	1.918e+04	1.918e+04	0.0	0.0	0.0	0.0
133	4.660e+06	6.239e+06	5.413e+06	3.169e+06	345.00	2.496e+04	3.715e+04	0.0	0.0	0.0	0.0
134	5.999e+06	5.999e+06	5.999e+06	5.999e+06	350.00	3.771e+04	3.771e+04	0.0	0.0	0.0	0.0
135	4.526e+06	4.526e+06	4.526e+06	4.526e+06	350.00	2.845e+04	2.845e+04	0.0	0.0	0.0	0.0
136	4.526e+06	3.790e+06	3.789e+06	3.789e+06	350.00	2.613e+04	2.382e+04	0.0	0.0	0.0	0.0
137	3.051e+06	3.051e+06	3.051e+06	3.051e+06	350.00	1.918e+04	1.918e+04	0.0	0.0	0.0	0.0
138	3.051e+06	3.051e+06	3.051e+06	3.051e+06	320.00	2.098e+04	2.098e+04	0.0	0.0	0.0	0.0
139	4.526e+06	4.526e+06	4.526e+06	4.526e+06	350.00	2.845e+04	2.845e+04	0.0	0.0	0.0	0.0
140	3.052e+06	3.789e+06	3.051e+06	3.051e+06	320.00	2.098e+04	2.351e+04	0.0	0.0	0.0	0.0
141	3.051e+06	3.051e+06	3.051e+06	3.051e+06	350.00	1.918e+04	1.918e+04	0.0	0.0	0.0	0.0
142	5.264e+06	5.264e+06	4.526e+06	3.790e+06	320.00	3.112e+04	3.365e+04	0.0	0.0	0.0	0.0
143	3.790e+06	4.526e+06	3.789e+06	3.052e+06	320.00	2.352e+04	2.858e+04	0.0	0.0	0.0	0.0
144	3.789e+06	3.789e+06	3.051e+06	3.051e+06	320.00	2.351e+04	2.351e+04	0.0	0.0	0.0	0.0
145	3.051e+06	3.051e+06	3.051e+06	3.051e+06	350.00	1.918e+04	1.918e+04	0.0	0.0	0.0	0.0
146	3.789e+06	3.789e+06	3.789e+06	3.789e+06	350.00	2.382e+04	2.382e+04	0.0	0.0	0.0	0.0
147	6.194e+06	8.531e+06	6.943e+06	4.706e+06	345.00	3.475e+04	4.934e+04	0.0	0.0	0.0	0.0
148	4.662e+06	7.762e+06	6.166e+06	3.170e+06	345.00	2.497e+04	4.441e+04	0.0	0.0	0.0	0.0

Trave	**M negativo i**	**M positivo i**	**M negativo f**	**M positivo f**	**V M-i M+f**	**V M+i M-f**	**VEd,min**	**VEd,max**	**Vr1**	**As**
	9.715e+06	8.531e+06	9.723e+06	7.002e+06	4.644e+04	4.934e+04	0.0	0.0	0.0	0.0

STATI LIMITE D' ESERCIZIO

LEGENDA TABELLA STATI LIMITE D' ESERCIZIO

In tabella vengono riportati i valori di interesse per il controllo degli stati limite d'esercizio.

In particolare vengono riportati, in relazione al tipo di elemento strutturale, i risultati relativi alle tre categorie di combinazione considerate:

- Combinazioni rare
- Combinazioni frequenti
- Combinazioni quasi permanenti.

I valori di interesse sono i seguenti:

rRfck	rapporto tra la massima compressione nel calcestruzzo e la tensione fck in combinazioni rare	[*normalizzato a 1*]
rRfyk	rapporto tra la massima tensione nell'acciaio e la tensione fyk in combinazioni rare	[*normalizzato a 1*]
rPfck	rapporto tra la massima compressione nel calcestruzzo e la tensione fck in combinazioni quasi permanenti	[*normalizzato a 1*]
wR	apertura caratteristica delle fessure in combinazioni rare	[*mm*]
wF	apertura caratteristica delle fessure in combinazioni frequenti	[*mm*]
wP	apertura caratteristica delle fessure in combinazioni quasi permanenti	[*mm*]
dR	massima deformazione in combinazioni rare	
dF	massima deformazione in combinazioni frequenti	
dP	massima deformazione in combinazioni quasi permanenti	

Per ognuno dei nove valori soprariportati viene indicata (Rif.cmb) la combinazione in cui si è verificato.

In relazione al tipo di elemento strutturale i valori sono selezionati nel modo seguente:

pilastri	**rRfck**	**rRfyk**	**rPfck**	per sezioni significative
travi	**rRfck**	**rRfyk**	**rPfck**	per sezioni significative
	wR	**wF**	**wP**	per sezioni significative
	dR	**dF**	**dP**	massimi in campata
setti e gusci	**rRfck**	**rRfyk**	**rPfck**	massimi nei nodi dell'elemento
	wR	**wF**	**wP**	massimi nei nodi dell'elemento

Si precisa che i valori di massima deformazione per travi sono riferiti al piano verticale (piano locale 1-2 con momenti flettenti 3-3).

Pilas.	Pos.	rRfck	rRfyk	rPfck	Rif. cmb	Pos.	rRfck	rRfyk	rPfck	Rif. cmb
	cm					cm				
1	0.0	0.13	0.11	0.17	70,70,74	214.0	0.09	0.08	0.11	70,70,74
	428.0	0.10	0.09	0.13	70,70,74					
2	0.0	0.14	0.12	0.17	70,70,74	214.0	0.09	0.08	0.11	70,70,74
	428.0	0.12	0.10	0.15	70,70,74					
3	0.0	0.08	0.06	0.10	70,70,74	214.0	0.04	0.04	0.05	70,70,74
	428.0	0.06	0.05	0.08	70,70,74					
4	0.0	0.13	0.11	0.16	70,70,74	214.0	0.12	0.10	0.15	70,70,74
	428.0	0.16	0.13	0.19	70,70,74					
5	0.0	0.17	0.15	0.21	70,70,74	214.0	0.12	0.11	0.15	70,70,74
	428.0	0.13	0.12	0.16	70,70,74					
6	0.0	0.09	0.08	0.11	70,70,74	214.0	0.06	0.05	0.08	70,70,74
	428.0	0.10	0.08	0.13	70,70,74					
7	0.0	0.12	0.10	0.14	70,70,74	214.0	0.13	0.11	0.16	70,70,74
	428.0	0.15	0.13	0.19	70,70,74					
8	0.0	0.14	0.13	0.18	70,70,74	214.0	0.13	0.12	0.16	70,70,74
	428.0	0.13	0.12	0.16	70,70,74					
9	0.0	0.07	0.06	0.08	70,70,74	214.0	0.07	0.06	0.08	70,70,74
	428.0	0.10	0.08	0.12	70,70,74					
10	0.0	0.11	0.10	0.14	70,70,74	214.0	0.13	0.11	0.16	70,70,74
	428.0	0.15	0.12	0.18	70,70,74					
11	0.0	0.14	0.12	0.17	70,70,74	214.0	0.13	0.12	0.16	70,70,74
	428.0	0.12	0.11	0.15	70,70,74					
12	0.0	0.09	0.08	0.11	70,70,74	214.0	0.07	0.06	0.08	70,70,74
	428.0	0.10	0.08	0.12	70,70,74					
13	0.0	0.14	0.12	0.17	70,70,74	214.0	0.13	0.11	0.16	70,70,74
	428.0	0.15	0.12	0.18	70,70,74					
14	0.0	0.15	0.14	0.19	70,70,74	214.0	0.13	0.12	0.16	70,70,74
	428.0	0.12	0.10	0.14	70,70,74					
15	0.0	0.14	0.12	0.17	70,70,74	214.0	0.08	0.06	0.10	70,70,74
	428.0	0.09	0.07	0.11	70,70,74					
16	0.0	0.11	0.10	0.14	70,70,74	214.0	0.09	0.08	0.11	70,70,74
	428.0	0.12	0.10	0.15	70,70,74					
17	0.0	0.12	0.10	0.15	70,70,74	214.0	0.09	0.08	0.11	70,70,74
	428.0	0.11	0.10	0.14	70,70,74					
18	0.0	0.14	0.11	0.17	70,70,74	203.5	0.04	0.04	0.05	70,70,74
	407.0	0.12	0.10	0.15	70,70,74					
19	0.0	0.07	0.05	0.08	70,70,74	167.5	0.04	0.04	0.05	70,70,74
	335.0	0.11	0.09	0.13	70,70,74					
20	0.0	0.09	0.08	0.12	70,70,74	203.5	0.07	0.06	0.08	70,70,74
	407.0	0.10	0.08	0.12	70,70,74					
21	0.0	0.15	0.12	0.19	70,70,74	167.5	0.03	0.03	0.04	70,70,74
	335.0	0.08	0.06	0.10	70,70,74					
22	0.0	0.12	0.10	0.15	70,70,74	203.5	0.02	0.02	0.03	70,70,74
	407.0	0.11	0.10	0.13	70,70,74					
24	0.0	0.13	0.11	0.16	70,70,74	407.0	0.14	0.15	0.16	70,70,74
26	0.0	0.10	0.08	0.12	70,70,74	203.5	0.06	0.06	0.08	70,70,74
	407.0	0.09	0.07	0.10	70,70,74					
27	0.0	0.19	0.16	0.23	70,70,74	167.5	0.05	0.04	0.06	70,70,74
...										
50	407.0	0.18	0.20	0.22	70,70,74	203.5	0.03	0.02	0.03	70,70,74
Pilas.		**rRfck**	**rRfyk**	**rPfck**			**rRfck**	**rRfyk**	**rPfck**	
		0.30	0.26	0.36						

Trave	Pos.	rRfck	rRfyk	rPfck	Rif. cmb	wR	wF	wP	Rif. cmb	dR	dF	dP	Rif. cmb
	cm					mm	mm	mm		cm	cm	cm	
23	0.0	0.08	0.11	0.10	70,70,74	0.0	0.0	0.0	0,0,0	0.09	0.08	0.08	70,72,74
	80.0	0.02	0.02	0.03	70,70,74	0.0	0.0	0.0	0,0,0				
25	0.0	0.04	0.04	0.05	70,70,74	0.0	0.0	0.0	0,0,0	-0.06	-0.06	-0.05	70,72,74
	80.0	0.01	0.01	0.02	70,70,74	0.0	0.0	0.0	0,0,0				
39	0.0	0.08	0.14	0.09	70,70,74	0.0	0.0	0.0	0,0,0	-0.02	-0.02	-0.02	70,72,74
	80.0	0.01	0.01	0.02	70,70,74	0.0	0.0	0.0	0,0,0				
45	0.0	0.09	0.20	0.11	70,70,74	0.0	0.0	0.0	0,0,0	-0.01	-9.75e-03	-0.01	70,72,74
	80.0	0.01	0.01	0.02	70,70,74	0.0	0.0	0.0	0,0,0				
51	0.0	0.12	0.22	0.15	70,70,74	0.0	0.0	0.0	0,0,0	0.06	0.05	0.05	70,72,74
	80.0	0.04	0.04	0.05	70,70,74	0.0	0.0	0.0	0,0,0				
52	0.0	0.15	0.24	0.19	70,70,74	0.05	0.06	0.06	70,72,74	0.24	0.23	0.23	70,72,74
	80.2	0.05	0.07	0.07	70,70,74	0.0	0.0	0.0	0,0,0				
53	0.0	0.21	0.22	0.26	70,70,74	0.0	0.0	0.0	0,0,0	0.05	0.05	0.05	70,72,74
	78.6	0.08	0.08	0.10	70,70,74	0.0	0.0	0.0	0,0,0				
54	0.0	0.15	0.56	0.19	70,70,74	0.0	0.0	0.0	0,0,0	0.09	0.09	0.09	70,72,74

	80.2	0.02	0.12	0.02	70,70,74	0.0	0.0	0.0	0,0,0				
55	0.0	0.38	0.56	0.46	70,70,74	0.19	0.21	0.20	70,72,74	-0.16	-0.14	-0.14	70,72,74
	78.5	0.17	0.17	0.21	70,70,74	0.0	0.0	0.0	0,0,0				
56	0.0	0.16	0.60	0.20	70,70,74	0.0	0.0	0.0	0,0,0	0.29	0.28	0.27	70,72,74
	80.2	0.02	0.17	0.03	70,70,74	0.0	0.0	0.0	0,0,0				
57	0.0	0.42	0.61	0.51	70,70,74	0.22	0.24	0.23	70,72,74	-0.21	-0.19	-0.19	70,72,74
	78.5	0.19	0.19	0.23	70,70,74	0.0	0.0	0.0	0,0,0				
58	0.0	0.16	0.60	0.20	70,70,74	0.0	0.0	0.0	0,0,0	0.20	0.18	0.17	70,72,74
	80.2	0.02	0.16	0.03	70,70,74	0.0	0.0	0.0	0,0,0				
59	0.0	0.42	0.61	0.52	70,70,74	0.22	0.24	0.23	70,72,74	-0.26	-0.24	-0.23	70,72,74
	78.5	0.20	0.19	0.24	70,70,74	0.0	0.0	0.0	0,0,0				
60	0.0	0.15	0.52	0.19	70,70,74	0.0	0.0	0.0	0,0,0	0.27	0.26	0.25	70,72,74
	80.2	0.02	0.10	0.03	70,70,74	0.0	0.0	0.0	0,0,0				
61	0.0	0.37	0.52	0.46	70,70,74	0.17	0.19	0.18	70,72,74	-0.12	-0.12	-0.11	70,72,74
	78.5	0.18	0.17	0.22	70,70,74	0.0	0.0	0.0	0,0,0				
62	0.0	0.18	0.36	0.23	70,70,74	0.10	0.0	0.0	70,0,0	0.23	0.22	0.22	70,72,74
	80.2	0.05	0.04	0.06	70,70,74	0.0	0.0	0.0	0,0,0				
63	0.0	9.45e-03	9.65e-03	0.01	70,70,74	0.0	0.0	0.0	0,0,0	-0.10	-0.09	-0.09	70,72,74
	80.0	8.63e-03	8.88e-03	0.01	70,70,74	0.0	0.0	0.0	0,0,0				
64	0.0	0.03	0.06	0.04	70,70,74	0.0	0.0	0.0	0,0,0	0.03	0.03	0.03	70,72,74
	80.0	7.32e-03	7.32e-03	9.52e-03	70,70,74	0.0	0.0	0.0	0,0,0				
65	0.0	0.05	0.09	0.06	70,70,74	0.0	0.0	0.0	0,0,0	5.82e-03	5.72e-03	5.69e-03	70,72,74
	80.0	0.01	0.01	0.01	70,70,74	0.0	0.0	0.0	0,0,0				
66	0.0	0.06	0.10	0.07	70,70,74	0.0	0.0	0.0	0,0,0	-0.05	-0.03	-0.02	70,72,74
	80.0	0.02	0.02	0.03	70,70,74	0.0	0.0	0.0	0,0,0				
67	0.0	0.07	0.09	0.08	70,70,74	0.0	0.0	0.0	0,0,0	0.08	0.08	0.07	70,72,74
	80.0	0.02	0.02	0.02	70,70,74	0.0	0.0	0.0	0,0,0				
68	0.0	0.03	0.03	0.04	70,70,74	0.0	0.0	0.0	0,0,0	-0.11	-0.10	-0.10	70,72,74
	80.0	0.01	0.01	0.02	70,70,74	0.0	0.0	0.0	0,0,0				
69	0.0	0.12	0.20	0.15	70,70,74	0.0	0.0	0.0	0,0,0	0.02	0.02	0.02	70,72,74
	80.0	0.02	0.02	0.02	70,70,74	0.0	0.0	0.0	0,0,0				
70	0.0	0.13	0.27	0.16	70,70,74	0.0	0.0	0.0	0,0,0	0.01	9.02e-03	8.63e-03	70,72,74
	80.0	0.01	0.01	0.02	70,70,74	0.0	0.0	0.0	0,0,0				
...													
313	78.5	0.0	0.14	0.0	0,70,0	0.0	0.0	0.0	0,0,0	-0.21	-0.19	-0.19	70,72,74
Trave		**rRfck**	**rRfyk**	**rPfck**		**wR**	**wF**	**wP**		**dR**	**dF**	**dP**	
										-2.08	-2.03	-1.97	
		0.42	0.80	0.52		0.43	0.28	0.28		0.51	0.47	0.46	

Relazione di calcolo strutturale impostata e redatta secondo le modalità previste nel D.M. 17 Gennaio 2018 cap. 10 “Redazione dei progetti strutturali esecutivi e delle relazioni di calcolo”.

Origine e Caratteristiche dei Codici di Calcolo	
Codice di calcolo:	PRO_SAP PROfessional Structural Analysis Program
Versione:	PROFESSIONAL (build 2020-09-190)
Produttore- Distributore:	2S.I. Software e Servizi per l’Ingegneria s.r.l. Via Garibaldi, 90 44121 Ferrara FE (Italy) Tel. +39 0532 200091 www.2si.it
Codice Licenza:	Licenza dsi4693

Descrizione	
Progetto	Lavori di demolizione e ricostruzione dell'Istituto Tecnico Agrario A.Pugliese
Ubicazione	Comune di GIZZERIA (CZ) (Regione CALABRIA)
	Località GIZZERIA (CZ)
	Longitudine 16.152, Latitudine 38.968
Progettista	CO.MA.TE.C. SRL

In merito al punto 10.2 delle Norme Tecniche per le Costruzioni (*Affidabilità dei codici utilizzati*), si fa riferimento al **Documento di Affidabilità** “Test di validazione del software di calcolo PRO_SAP e dei moduli aggiuntivi PRO_SAP Modulo Geotecnico, PRO_CAD nodi acciaio e PRO_MST” - versione Agosto 2020, disponibile per il download sul sito: https://www.2si.it/it/prodotti/affidabilita/

INTESTAZIONE E CONTENUTI DELLA RELAZIONE

Progetto
Lavori di demolizione e ricostruzione dell'Istituto Tecnico Agrario A.Pugliese

Contenuti della relazione:
RELAZIONE DI CALCOLO STRUTTURALE
- Origine e Caratteristiche dei Codici di Calcolo
- Affidabilità dei codici utilizzati
- Validazione dei codici
- Tipo di analisi svolta
- Modalità di presentazione dei risultati
- Informazioni generali sull'elaborazione
- Giudizio motivato di accettabilità dei risultati
STAMPA DEI DATI DI INGRESSO
- Normative prese a riferimento
- Criteri adottati per le misure di sicurezza
- Criteri seguiti nella schematizzazione della struttura, dei vincoli e delle sconessioni
- Interazione tra terreno e struttura
- Legami costitutivi adottati per la modellazione dei materiali e dei terreni
- Schematizzazione delle azioni, condizioni e combinazioni di carico
- Metodologie numeriche utilizzate per l' analisi strutturale
-Metodologie numeriche utilizzate per la progettazione e la verifica degli elementi strutturali
STAMPA DEI RISULTATI

Il Progettista:

RELAZIONE DI CALCOLO STRUTTURALE

Premessa

La presente relazione di calcolo strutturale, in conformità al §10.1 del DM 17/01/18, è comprensiva di una descrizione generale dell'opera e dei criteri generali di analisi e verifica. Segue inoltre le indicazioni fornite al §10.2 del DM stesso per quanto concerne analisi e verifiche svolte con l'ausilio di codici di calcolo.

Nella presente parte sono riportati i principali elementi di inquadramento del progetto esecutivo riguardante le strutture, in relazione agli strumenti urbanistici, al progetto architettonico, al progetto delle componenti tecnologiche in generale ed alle prestazioni attese dalla struttura.

Descrizione generale dell'opera

Descrizione generale dell'opera	
Fabbricato ad uso	Edilizia scolastica
Ubicazione	Comune di GIZZERIA (CZ) (Regione CALABRIA)
	Località GIZZERIA (CZ)
	Longitudine 16.152, Latitudine 38.968
Numero di piani	Fuori terra 3
	Interrati
	le dimensioni dell'opera in pianta sono racchiuse in un rettangolo di

Parametri della struttura			
Classe d'uso	Vita Vn [anni]	Coeff. Uso	Periodo Vr [anni]
III	50.0	1.5	75.0

Quadro normativo di riferimento adottato

Le norme ed i documenti assunti quale riferimento per la progettazione strutturale vengono indicati di seguito.

Nel capitolo "normativa di riferimento" è comunque presente l'elenco completo delle normative disponibili.

Progetto-verifica degli elementi	
Progetto cemento armato	D.M. 17-01-2018
Progetto acciaio	D.M. 17-01-2018
Progetto legno	D.M. 17-01-2018
Progetto muratura	D.M. 17-01-2018
Azione sismica	
Norma applicata per l' azione sismica	D.M. 17-01-2018

Azioni di progetto sulla costruzione

Nei capitoli "modellazione delle azioni" e "schematizzazione dei casi di carico" sono indicate le azioni sulla costruzioni.

Nel prosieguo si indicano tipo di analisi strutturale condotta (statico,dinamico, lineare o non lineare) e il metodo adottato per la risoluzione del problema strutturale nonché le metodologie seguite per la verifica o per il progetto-verifica delle sezioni. Si riportano le combinazioni di carico adottate e, nel caso di calcoli non lineari, i percorsi di carico seguiti; le configurazioni studiate per la struttura in esame *sono risultate effettivamente esaustive per la progettazione-verifica.*

La verifica della sicurezza degli elementi strutturali avviene con i metodi della scienza delle costruzioni. L'analisi strutturale è condotta con il metodo degli spostamenti per la valutazione dello stato tensodeformativo indotto da carichi statici. L'analisi strutturale è condotta con il metodo dell'analisi modale e dello spettro di risposta in termini di accelerazione per la valutazione dello stato tensodeformativo indotto da carichi dinamici (tra cui quelli di tipo sismico).

L'analisi strutturale viene effettuata con il metodo degli elementi finiti. Il metodo sopraindicato si basa sulla schematizzazione della struttura in elementi connessi solo in corrispondenza di un numero prefissato di punti denominati nodi. I nodi sono definiti dalle tre coordinate cartesiane in un sistema di riferimento globale. Le incognite del problema (nell'ambito del metodo degli spostamenti) sono le componenti di spostamento dei nodi riferite al sistema di riferimento globale (traslazioni secondo X, Y, Z, rotazioni attorno X, Y, Z). La soluzione del problema si ottiene con un sistema di equazioni algebriche lineari i cui termini noti sono costituiti dai carichi agenti sulla struttura opportunamente concentrati ai nodi:

K * u = F dove **K** = matrice di rigidezza

u = vettore spostamenti nodali

F = vettore forze nodali

Dagli spostamenti ottenuti con la risoluzione del sistema vengono quindi dedotte le sollecitazioni e/o le tensioni di ogni elemento, riferite generalmente ad una terna locale all'elemento stesso.

Il sistema di riferimento utilizzato è costituito da una terna cartesiana destrorsa XYZ. Si assume l'asse Z verticale ed orientato verso l'alto.

Gli elementi utilizzati per la modellazione dello schema statico della struttura sono i seguenti:

Elemento tipo ***TRUSS*** (biella-D2)

Elemento tipo ***BEAM*** (trave-D2)

Elemento tipo ***MEMBRANE*** (membrana-D3)

Elemento tipo ***PLATE*** (piastra-guscio-D3)

Elemento tipo ***BOUNDARY*** (molla)

Elemento tipo ***STIFFNESS*** (matrice di rigidezza)

Elemento tipo ***BRICK*** (elemento solido)

Elemento tipo ***SOLAIO*** (macro elemento composto da più membrane)

Modello numerico

In questa parte viene descritto il modello numerico utilizzato (o i modelli numerici utilizzati) per l'analisi della struttura. La presentazione delle informazioni deve essere, coerentemente con le prescrizioni del paragrafo 10.2 e relativi sottoparagrafi delle NTC-18, tale da garantirne la leggibilità, la corretta interpretazione e la riproducibilità

Tipo di analisi strutturale	
Carichi verticali	SI
Sismica statica lineare	NO
Sismica dinamica lineare	SI
Sismica statica non lineare (prop. masse)	NO

Sismica statica non lineare (prop. modo)	NO
Sismica statica non lineare (triangolare)	NO
Non linearità geometriche (fattore P delta)	SI

Di seguito si indicano l'origine e le caratteristiche dei codici di calcolo utilizzati riportando titolo, produttore e distributore, versione, estremi della licenza d'uso:

Informazioni sul codice di calcolo	
Titolo:	PRO_SAP PROfessional Structural Analysis Program
Versione:	PROFESSIONAL (build 2020-09-190)
Produttore-Distributore:	2S.I. Software e Servizi per l'Ingegneria s.r.l., Ferrara
Codice Licenza:	Licenza dsi4693

Un attento esame preliminare della documentazione a corredo del software ***ha consentito di valutarne l'affidabilità e soprattutto l'idoneità al caso specifico***. La documentazione, fornita dal produttore e distributore del software, contiene una esauriente descrizione delle basi teoriche e degli algoritmi impiegati, l'individuazione dei campi d'impiego, nonché casi prova interamente risolti e commentati, corredati dei file di input necessari a riprodurre l'elaborazione:

Affidabilità dei codici utilizzati
2S.I. ha verificato l'affidabilità e la robustezza del codice di calcolo attraverso un numero significativo di casi prova in cui i risultati dell'analisi numerica sono stati confrontati con soluzioni teoriche. E' possibile reperire la documentazione contenente alcuni dei più significativi casi trattati al seguente link: https://www.2si.it/it/prodotti/affidabilita/

Modellazione della geometria e proprietà meccaniche:	
nodi	111
elementi D2 (per aste, travi, pilastri…)	54
elementi D3 (per pareti, platee, gusci…)	80
elementi solaio	4
elementi solidi	0
Dimensione del modello strutturale [cm]:	
X min =	0.00
Xmax =	855.00
Ymin =	-285.00
Ymax =	665.00
Zmin =	0.00
Zmax =	835.00

Strutture verticali:	
Elementi di tipo asta	NO
Pilastri	SI
Pareti	NO
Setti (a comportamento membranale)	NO
Strutture non verticali:	
Elementi di tipo asta	NO
Travi	SI
Gusci	NO
Membrane	NO
Orizzontamenti:	
Solai con la proprietà piano rigido	SI
Solai senza la proprietà piano rigido	NO
Tipo di vincoli:	
Nodi vincolati rigidamente	NO
Nodi vincolati elasticamente	NO
Nodi con isolatori sismici	NO
Fondazioni puntuali (plinti/plinti su palo)	NO
Fondazioni di tipo trave	SI
Fondazioni di tipo platea	SI
Fondazioni con elementi solidi	NO

Modellazione delle azioni

Si veda il capitolo **"Schematizzazione dei casi di carico"** per le informazioni necessarie alla comprensione ed alla ricostruzione delle azioni applicate al modello numerico, coerentemente con quanto indicato nella parte "*2.6. Azioni di progetto sulla costruzione*".

Combinazioni e/o percorsi di carico

Si veda il capitolo **"Definizione delle combinazioni"** in cui sono indicate le combinazioni di carico adottate e, nel caso di calcoli non lineari, i percorsi di carico seguiti.

Combinazioni dei casi di carico	
APPROCCIO PROGETTUALE	Approccio 2
Tensioni ammissibili	NO
SLU	SI
SLV (SLU con sisma)	SI

SLC	NO
SLD	SI
SLO	NO
SLU GEO A2 (per approccio 1)	NO
SLU EQU	NO
Combinazione caratteristica (rara)	SI
Combinazione frequente	SI
Combinazione quasi permanente (SLE)	SI
SLA (accidentale quale incendio)	NO

Principali risultati

I risultati devono costituire una sintesi completa ed efficace, presentata in modo da riassumere il comportamento della struttura, per ogni tipo di analisi svolta.

Nella presente relazione di calcolo sono riportati i seguenti risultati che il progettista ritiene di interesse per la descrizione e la compresione del/i modello/i e del comportamento della struttura:

per l'analisi modale:

- periodi dei modi di vibrare della struttura
- masse eccitate dai singoli modi
- massa eccitata totale

deformate e sollecitazioni:

- spostamenti e rotazioni dei singoli nodi della struttura
- reazioni vincolari (nel caso siano presenti nodi vincolati rigidamente)
- pressioni sul terreno (nel caso siano presenti elementi di fondazione)
- sollecitazioni sugli elementi d2 nelle combinazioni di calcolo più significative
- tensioni sugli elementi d3 nelle combinazioni di calcolo più significative
- sollecitazioni sui macroelementi da elementi d3 nelle combinazioni di calcolo più significative

altri risultati significativi:

La presente relazione, oltre ad illustrare in modo esaustivo i dati in ingresso ed i risultati delle analisi in forma tabellare, riporta una serie di immagini:

per i dati in ingresso:

- modello solido della struttura
- numerazione di nodi e ed elementi
- configurazioni di carico statiche
- configurazioni di carico sismiche con baricentri delle masse e eccentricità

per le combinazioni più significative (statisticamente più gravose per la struttura):

- configurazioni deformate
- diagrammi e inviluppi delle azioni interne
- mappe delle tensioni
- reazioni vincolari
- mappe delle pressioni sul terreno

per il progetto-verifica degli elementi:

- diagrammi di armatura
- percentuali di sfruttamento
- mappe delle verifiche più significative per i vari stati limite

Informazioni generali sull'elaborazione e giudizio motivato di accettabilità dei risultati.

Il programma prevede una serie di controlli automatici (check) che consentono l'individuazione di errori di modellazione. Al termine dell'analisi un controllo automatico identifica la presenza di spostamenti o rotazioni abnormi. Si può pertanto asserire che l' elaborazione sia corretta e completa. I risultati delle elaborazioni sono stati sottoposti a controlli che ne comprovano l'attendibilità. Tale valutazione ha compreso il confronto con i risultati di semplici calcoli, eseguiti con metodi tradizionali e adottati, anche in fase di primo proporzionamento della struttura. Inoltre, sulla base di considerazioni riguardanti gli stati tensionali e deformativi determinati, si è valutata la validità delle scelte operate in sede di schematizzazione e di modellazione della struttura e delle azioni. Si allega al termine della presente relazione elenco sintetico dei controlli svolti (verifiche di equilibrio tra reazioni vincolari e carichi applicati, comparazioni tra i risultati delle analisi e quelli di valutazioni semplificate, etc.) .

Verifiche agli stati limite ultimi

Nel capitolo relativo alla progettazione degli elementi strutturali agli SLU vengono indicate, con riferimento alla normativa adottata, le modalità ed i criteri seguiti per valutare la sicurezza della struttura nei confronti delle possibili situazioni di crisi ed i risultati delle valutazioni svolte. In via generale, oltre alle verifiche di resistenza e di spostamento, devono essere prese in considerazione verifiche nei confronti dei fenomeni di instabilità, locale e globale, di fatica, di duttilità, di degrado.

Verifiche agli stati limite di esercizio

Nel capitolo relativo alla progettazione degli elementi strutturali agli SLE vengono indicate, con riferimento alla normativa adottata, le modalità seguite per valutare l'affidabilità della struttura nei confronti delle possibili situazioni di perdita di funzionalità (per eccessive deformazioni, fessurazioni, vibrazioni, etc.) ed i risultati delle valutazioni svolte.

RELAZIONE SUI MATERIALI

Il capitolo Materiali riportata informazioni esaustive relative all'elenco dei materiali impiegati e loro modalità di posa in opera e ai valori di calcolo.

NORMATIVA DI RIFERIMENTO

1. D.Min. Infrastrutture Min. Interni e Prot. Civile 17 Gennaio 2018 e allegate "Norme tecniche per le costruzioni".
2. Circolare 21/01/19, n. 7 C.S.LL.PP "Istruzioni per l'applicazione dell'aggiornamento delle Norme Tecniche delle Costruzioni di cui al decreto ministeriale 17 gennaio 2018"
3. D.Min. Infrastrutture e trasporti 14 Settembre 2005 e allegate "Norme tecniche per le costruzioni".
4. D.M. LL.PP. 9 Gennaio 1996 "Norme tecniche per il calcolo, l'esecuzione ed il collaudo delle strutture in cemento armato, normale e precompresso e per le strutture metalliche".
5. D.M. LL.PP. 16 Gennaio 1996 "Norme tecniche relative ai <<Criteri generali per la verifica di sicurezza delle costruzioni e dei carichi e sovraccarichi>>".
6. D.M. LL.PP. 16 Gennaio 1996 "Norme tecniche per le costruzioni in zone sismiche".
7. Circolare 4/07/96, n.156AA.GG./STC. istruzioni per l'applicazione delle "Norme tecniche relative ai <<Criteri generali per la verifica di sicurezza delle costruzioni e dei carichi e sovraccarichi>>" di cui al D.M. 16/01/96.
8. Circolare 10/04/97, n.65AA.GG. istruzioni per l'applicazione delle "Norme tecniche per le costruzioni in zone sismiche" di cui al D.M. 16/01/96.
9. D.M. LL.PP. 20 Novembre 1987 "Norme tecniche per la progettazione, esecuzione e collaudo degli edifici in muratura e per il loro consolidamento".
10. Circolare 4 Gennaio 1989 n. 30787 "Istruzioni in merito alle norme tecniche per la progettazione, esecuzione e collaudo degli edifici in muratura e per il loro consolidamento".
11. D.M. LL.PP. 11 Marzo 1988 "Norme tecniche riguardanti le indagini sui terreni e sulle rocce, la stabilità dei pendii naturali e delle scarpate, i criteri generali e le prescrizioni per la progettazione, l'esecuzione e il collaudo delle opere di sostegno delle terre e delle opere di fondazione".
12. D.M. LL.PP. 3 Dicembre 1987 "Norme tecniche per la progettazione, esecuzione e collaudo delle costruzioni prefabbricate".
13. UNI 9502 - Procedimento analitico per valutare la resistenza al fuoco degli elementi costruttivi di conglomerato cementizio armato, normale e precompresso - edizione maggio 2001
14. Ordinanza del Presidente del Consiglio dei Ministri n. 3274 del 20 marzo 2003 "Primi elementi in materia di criteri generali per la classificazione sismica del territorio nazionale e di normative tecniche per le costruzioni in zona sismica" e successive modificazioni e integrazioni.
15. UNI EN 1990:2006 13/04/2006 Eurocodice 0 - Criteri generali di progettazione strutturale.
16. UNI EN 1991-1-1:2004 01/08/2004 Eurocodice 1 - Azioni sulle strutture - Parte 1-1: Azioni in generale - Pesi per unità di volume, pesi propri e sovraccarichi per gli edifici.
17. UNI EN 1991-2:2005 01/03/2005 Eurocodice 1 - Azioni sulle strutture - Parte 2: Carichi da traffico sui ponti.
18. UNI EN 1991-1-3:2004 01/10/2004 Eurocodice 1 - Azioni sulle strutture - Parte 1-3: Azioni in generale - Carichi da neve.
19. UNI EN 1991-1-4:2005 01/07/2005 Eurocodice 1 - Azioni sulle strutture - Parte 1-4: Azioni in generale - Azioni del vento.
20. UNI EN 1991-1-5:2004 01/10/2004 Eurocodice 1 - Azioni sulle strutture - Parte 1-5: Azioni in generale - Azioni termiche.
21. UNI EN 1992-1-1:2005 24/11/2005 Eurocodice 2 - Progettazione delle strutture di calcestruzzo - Parte 1-1: Regole generali e regole per gli edifici.
22. UNI EN 1992-1-2:2005 01/04/2005 Eurocodice 2 - Progettazione delle strutture di calcestruzzo - Parte 1-2: Regole generali - Progettazione strutturale contro l'incendio.
23. UNI EN 1993-1-1:2005 01/08/2005 Eurocodice 3 - Progettazione delle strutture di acciaio - Parte 1-1: Regole generali e regole per gli edifici.
24. UNI EN 1993-1-8:2005 01/08/2005 Eurocodice 3 - Progettazione delle strutture di acciaio - Parte 1-8: Progettazione dei collegamenti.
25. UNI EN 1994-1-1:2005 01/03/2005 Eurocodice 4 - Progettazione delle strutture composte acciaio-calcestruzzo - Parte 1-1: Regole generali e regole per gli edifici.
26. UNI EN 1994-2:2006 12/01/2006 Eurocodice 4 - Progettazione delle strutture composte acciaio-calcestruzzo - Parte 2: Regole generali e regole per i ponti.
27. UNI EN 1995-1-1:2005 01/02/2005 Eurocodice 5 - Progettazione delle strutture di legno - Parte 1-1: Regole generali – Regole comuni e regole per gli edifici.
28. UNI EN 1995-2:2005 01/01/2005 Eurocodice 5 - Progettazione delle strutture di legno - Parte 2: Ponti.
29. UNI EN 1996-1-1:2006 26/01/2006 Eurocodice 6 - Progettazione delle strutture di muratura - Parte 1-1: Regole generali per strutture di muratura armata e non armata.
30. UNI EN 1996-3:2006 09/03/2006 Eurocodice 6 - Progettazione delle strutture di muratura - Parte 3: Metodi di calcolo semplificato per strutture di muratura non armata.

31. UNI EN 1997-1:2005 01/02/2005 Eurocodice 7 - Progettazione geotecnica - Parte 1: Regole generali.
32. UNI EN 1998-1:2005 01/03/2005 Eurocodice 8 - Progettazione delle strutture per la resistenza sismica - Parte 1: Regole generali, azioni sismiche e regole per gli edifici.
33. UNI EN 1998-3:2005 01/08/2005 Eurocodice 8 - Progettazione delle strutture per la resistenza sismica - Parte 3: Valutazione e adeguamento degli edifici.
34. UNI EN 1998-5:2005 01/01/2005 Eurocodice 8 - Progettazione delle strutture per la resistenza sismica - Parte 5: Fondazioni, strutture di contenimento ed aspetti geotecnici.

NOTA il capitolo "normativa di riferimento": riporta l' elenco delle normative implementate nel software. Le norme utilizzate per la struttura oggetto della presente relazione sono indicate nel precedente capitolo "RELAZIONE DI CALCOLO STRUTTURALE" "ANALISI E VERIFICHE SVOLTE CON L'AUSILIO DI CODICI DI CALCOLO". Laddove nei capitoli successivi vengano richiamate norme antecedenti al DM 17.01.18 è dovuto o a progettazione simulata di edifico esistente.

CARATTERISTICHE MATERIALI UTILIZZATI

LEGENDA TABELLA DATI MATERIALI

Il programma consente l'uso di materiali diversi. Sono previsti i seguenti tipi di materiale:

1	materiale tipo cemento armato
2	materiale tipo acciaio
3	materiale tipo muratura
4	materiale tipo legno
5	materiale tipo generico

I materiali utilizzati nella modellazione sono individuati da una sigla identificativa ed un codice numerico (gli elementi strutturali richiamano quest'ultimo nella propria descrizione). Per ogni materiale vengono riportati in tabella i seguenti dati:

Young	modulo di elasticità normale E
Poisson	coefficiente di contrazione trasversale ni
G	modulo di elasticità tangenziale
Gamma	peso specifico
Alfa	coefficiente di dilatazione termica
Fattore di confidenza FC m	Fattore di confidenza specifico per materiale; (è riportato solo se diverso da quello globale della struttura)
Fattore di confidenza FC a	Fattore di confidenza specifico per l'armatura (è riportato solo se diverso da quello globale della struttura)
Elasto-plastico	Materiale elastico perfettamente plastico per aste non lineari
Massima compressione	Massima tensione di compressione per aste non lineari
Massima trazione	Massima tensione di trazione per aste non lineari
Fattore attrito	Coefficinete di attrito per aste non lineari
Rapporto HRDb	Rapporto di hardening a flessione
Rapporto HRDv	Rapporto di hardening a taglio

I dati soprariportati vengono utilizzati per la modellazione dello schema statico e per la determinazione dei carichi inerziali e termici. In relazione al tipo di materiale vengono riportati inoltre:

1	c.a.		
		Resistenza Rc	resistenza a cmpressione cubica
		Resistenza fctm	resistenza media a trazione semplice
		Coefficiente ksb	Coefficiente di riduzione della resistenza a compressione da utilizzare nello stress block
2	acciaio		
		Tensione ft	Valore della tensione di rottura
		Tensione fy	Valore della tensione di snervamento
		Resistenza fd	Resistenza di calcolo per SL CNR-UNI 10011
		Resistenza fd (>40)	Resistenza di calcolo per SL CNR-UNI 10011 per spessori > 40mm
		Tensione ammissibile	Tensione ammissibile CNR-UNI 10011
		Tensione ammissibile(>40)	Tensione ammissibile CNR-UNI 10011 per spessori > 40mm
3	muratura		

	Muratura consolidata	Muratura per la quale si prevedono interventi di rinforzo"
	Incremento resistenza	Incremento conseguito in termini di resistenza
	Incremento rigidezza	Incremento conseguito in termini di rigidezza
	Resistenza f	Valore della resistenza a compressione
	Resistenza fv0	Valore della resistenza a taglio in assenza di tensioni normali
	Resistenza fh	Valore della resistenza a compressione orizzontale
	Resistenza fb	Valore della resistenza a compressione dei blocchi
	Resistenza fbh	Valore della resistenza a compressione dei blocchi in direzione orizzontale
	Resistenza fv0h	Valore della resistenza a taglio in assenza di tensioni normali per le travi
	Resistenza ft	Valore della resistenza a trazione per fessurazione diagonale
	Resistenza fvlim	Valore della massima resistenza a taglio
	Resistenza fbt	Valore della resistenza a trazione dei blocchi
	Coefficiente mu	Coefficiente d'attrito utilizzato per la resistenza a taglio (tipicamente 0.4)
	Coefficiente fi	Coefficiente d'ingranamento utilizzato per la resistenza a taglio
	Coefficiente ksb	Coefficiente di riduzione della resistenza a compressione da utilizzare nello stress block
4 legno		
	E0,05	Modulo di elasticità corrispondente ad un frattile del 5%
	Resistenza fc0	Valore della resistenza a compressione parallela
	Resistenza ft0	Valore della resistenza a trazione parallela
	Resistenza fm	Valore della resistenza a flessione
	Resistenza fv	Valore della resistenza a taglio
	Resist. ft0k	Resistenza caratteristica (tensione amm. per REGLES) per trazione
	Resist. fmk	Resistenza caratteristica (tensione amm. per REGLES) per flessione
	Resist. fvk	Resistenza caratteristica (tensione amm. per REGLES) per taglio
	Modulo E0,05	Modulo elastico parallelo caratteristico
	Lamellare	lamellare o massiccio

Nel tabulato si riportano sia i valori caratteristici che medi utilizzando gli uni e/o gli altri in relazione alle richieste di normativa ed alla tipologia di verifica. (Cap.7 NTC18 per materiali nuovi, Cap.8 NTC18 e relativa circolare 21/01/2019 per materiali esistenti, Linee Guida Reluis per incamiciatura CAM, CNR-DT 200 per interventi con FRP)

Vengono inoltre riportate le tabelle contenenti il riassunto delle informazioni assegnate nei criteri di progetto in uso.

Id	Tipo / Note	V. caratt.	V. medio	Young	Poisson	G	Gamma	Alfa	Altri
		daN/cm2	daN/cm2	daN/cm2		daN/cm2	daN/cm3		
1	Calcestruzzo Classe C25/30			3.145e+05	0.20	1.310e+05	2.50e-03	1.00e-05	
	Resistenza Rc	300.0							
	Resistenza fctm		25.6						
	Rapporto Rfessurata								1.00
	Coefficiente ksb								0.85
	Rapporto HRDb								1.00e-05
	Rapporto HRDv								1.00e-05
3	Calcestruzzo Classe C28/35			3.260e+05	0.20	1.358e+05	2.50e-03	1.00e-05	
	Resistenza Rc	350.0							
	Resistenza fctm		28.4						
	Rapporto Rfessurata								1.00
	Coefficiente ksb								0.85
	Rapporto HRDb								1.00e-05
	Rapporto HRDv								1.00e-05

Gusci c.a.	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Armatura						
Inclinazione Ax [gradi]	0.0	0.0				
Angolo Ax-Ay [gradi]	90.00	90.00				
Minima tesa	0.31	0.20				
Massima tesa	0.78	0.78				
Maglia unica centrale	NO	NO				
Copriferro [cm]	2.00	3.00				
Maglia x						
diametro	10	16				
passo	20	20				
diametro aggiuntivi	12	16				
Maglia y						
diametro	10	16				
passo	20	20				
diametro aggiuntivi	12	16				
Stati limite ultimi						
Tensione fy [daN/cm2]	4500.00	4500.00				
Tipo acciaio	tipo C	tipo C				
Coefficiente gamma s	1.15	1.15				
Coefficiente gamma c	1.50	1.50				
Verifiche con N costante	SI	SI				
Applica SLU da DIN	NO	NO				
Tensioni ammissibili						
Tensione amm. cls [daN/cm2]	97.50	97.50				
Tensione amm. acciaio [daN/cm2]	2600.00	2600.00				
Rapporto omogeneizzazione N	15.00	15.00				
Massimo rapporto area compressa/tesa	1.00	1.00				
Resistenza al fuoco						
3- intradosso	NO	NO				
3+ estradosso	NO	NO				
Tempo di esposizione R	15	15				

Travi c.a.	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Generalità						
Progetta a filo	SI	NO				
Af inf: da q*L*L /	0.0	0.0				
Armatura						
Minima tesa	0.31	0.31				
Minima compressa	0.31	0.31				
Massima tesa	0.78	0.78				
Da sezione	SI	SI				
Usa armatura teorica	NO	NO				
Stati limite ultimi						
Tensione fy [daN/cm2]	4500.00	4500.00				
Tensione fy staffe [daN/cm2]	4500.00	4500.00				
Tipo acciaio	tipo C	tipo C				
Coefficiente gamma s	1.15	1.15				
Coefficiente gamma c	1.50	1.50				
Verifiche con N costante	SI	SI				
Fattore di ridistribuzione	0.0	0.0				
Modello per il confinamento						
Relazione tensio-deformativa	Mander	Mander				
Incrudimento acciaio	5.000e-03	5.000e-03				
Fattore lambda	1.00	1.00				
epsilon max,s	4.000e-02	4.000e-02				
epsilon cu2	4.500e-03	4.500e-03				
epsilon c2	0.0	0.0				
epsilon cy	0.0	0.0				
Tensioni ammissibili						
Tensione amm. cls [daN/cm2]	97.50	97.50				
Tensione amm. acciaio [daN/cm2]	2600.00	2600.00				
Rapporto omogeneizzazione N	15.00	15.00				
Massimo rapporto area compressa/tesa	1.00	1.00				
Staffe						
Diametro staffe	10.00	0.0				
Passo minimo [cm]	5.00	4.00				
Passo massimo [cm]	30.00	30.00				
Passo raffittito [cm]	15.00	15.00				
Lunghezza zona raffittita [cm]	0.0	50.00				
Ctg(Teta) Max	2.50	2.50				

Travi c.a.	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Percentuale sagomati	0.0	0.0				
Luce di taglio per GR [cm]	1.00	1.00				
Adotta scorrimento medio	NO	NO				
Torsione non essenziale inclusa	SI	SI				

Pilastri c.a.	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Generalità						
Progetto armatura	Privilegia spigoli	Privilegia lati				
Progetta a filo	NO	NO				
Effetti del 2 ordine	SI	SI				
Beta per 2-2	1.00	1.00				
Beta per 3-3	1.00	1.00				
Armatura						
Massima tesa	4.00	4.00				
Minima tesa	1.00	1.00				
Stati limite ultimi						
Tensione fy [daN/cm2]	4500.00	4500.00				
Tensione fy staffe [daN/cm2]	4500.00	4500.00				
Tipo acciaio	tipo C	tipo C				
Coefficiente gamma s	1.15	1.15				
Coefficiente gamma c	1.50	1.50				
Verifiche con N costante	SI	SI				
Modello per il confinamento						
Relazione tensio-deformativa	Mander	Mander				
Incrudimento acciaio	5.000e-03	5.000e-03				
Fattore lambda	1.00	1.00				
epsilon max,s	4.000e-02	4.000e-02				
epsilon cu2	4.500e-03	4.500e-03				
epsilon c2	0.0	0.0				
epsilon cy	0.0	0.0				
Tensioni ammissibili						
Tensione amm. cls [daN/cm2]	97.50	97.50				
Tensione amm. acciaio [daN/cm2]	2600.00	2600.00				
Rapporto omogeneizzazione N	15.00	15.00				
Staffe						
Diametro staffe	10.00	0.0				
Passo minimo [cm]	1.00	5.00				
Passo massimo [cm]	25.00	25.00				
Passo raffittito [cm]	15.00	15.00				
Lunghezza zona raffittita [cm]	0.0	45.00				
Ctg(Teta) Max	2.50	2.50				
Luce di taglio per GR [cm]	1.00	1.00				
Massimizza gerarchia	SI	SI				

Solai e pannelli	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Generalità						
Usa tensioni ammissibili	NO	NO				
Af inf: da traliccio	SI	SI				
Consenti armatura a taglio	NO	NO				
Incrementa armatura longitudinale per taglio	SI	SI				
Af inf: da q*L*L /	20.00	20.00				
Incremento fascia piena [cm]	5.00	5.00				
Armatura						
Minima tesa	0.15	0.15				
Massima tesa	3.00	3.00				
Minima compressa	0.0	0.0				
Af/h [cm]	7.000e-02	7.000e-02				
Stati limite ultimi						
Tensione fy [daN/cm2]	4500.00	4500.00				
Tipo acciaio	tipo C	tipo C				
Coefficiente gamma s	1.15	1.15				
Coefficiente gamma c	1.50	1.50				
Fattore di ridistribuzione	0.0	0.0				
Tensioni ammissibili						
Tensione amm. cls [daN/cm2]	85.00	85.00				
Tensione amm. acciaio [daN/cm2]	2600.00	2600.00				

Solai e pannelli	**1/7/..**	**2/8/..**	**3/9/..**	**4/10/..**	**5/11/..**	**6/12/..**
Rapporto omogeneizzazione N	15.00	15.00				
Massimo rapporto area compressa/tesa	1.00	1.00				
Verifica freccia						
Infinita	250.00	250.00				
Istantanea	500.00	500.00				
Fattore viscosità	3.00	3.00				
Usa J non fessurato	SI	NO				
Elementi non strutturali						
Tamponatura antiespulsione	NO	NO				
Tamponatura con armatura	NO	NO				
Fattore di struttura/comportamento	2.00	2.00				
Coefficiente gamma m	0.0	0.0				
Periodo Ta	0.0	0.0				
Altezza pannello	0.0	0.0				

MODELLAZIONE DELLE SEZIONI

LEGENDA TABELLA DATI SEZIONI

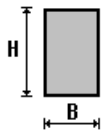
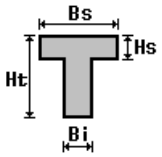
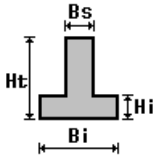
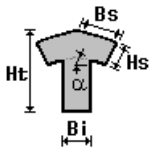
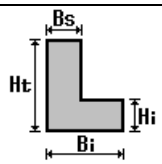
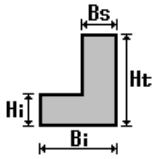
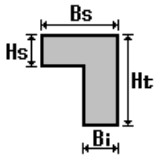
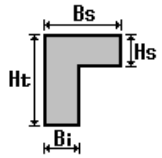
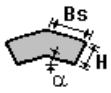
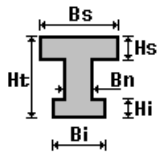
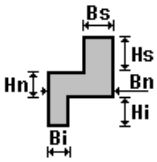
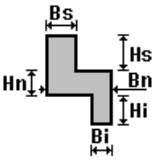
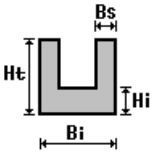
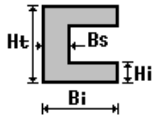
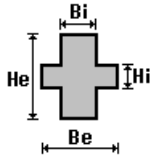
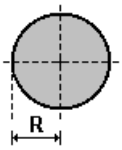
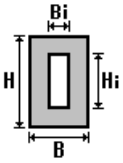
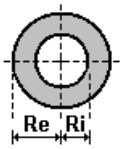
Il programma consente l'uso di sezioni diverse. Sono previsti i seguenti tipi di sezione:

1. sezione di tipo generico
2. profilati semplici
3. profilati accoppiati e speciali

Le sezioni utilizzate nella modellazione sono individuate da una sigla identificativa ed un codice numerico (gli elementi strutturali richiamano quest'ultimo nella propria descrizione). Per ogni sezione vengono riportati in tabella i seguenti dati:

Area	area della sezione
A V2	area della sezione/fattore di taglio (per il taglio in direzione 2)
A V3	area della sezione/fattore di taglio (per il taglio in direzione 3)
Jt	fattore torsionale di rigidezza
J2-2	momento d'inerzia della sezione riferito all'asse 2
J3-3	momento d'inerzia della sezione riferito all'asse 3
W2-2	modulo di resistenza della sezione riferito all'asse 2
W3-3	modulo di resistenza della sezione riferito all'asse 3
Wp2-2	modulo di resistenza plastico della sezione riferito all'asse 2
Wp3-3	modulo di resistenza plastico della sezione riferito all'asse 3

I dati sopra riportati vengono utilizzati per la determinazione dei carichi inerziali e per la definizione delle rigidezze degli elementi strutturali; qualora il valore di Area V2 (e/o Area V3) sia nullo la deformabilità per taglio V2 (e/o V3) è trascurata. La valutazione delle caratteristiche inerziali delle sezioni è condotta nel riferimento 2-3 dell'elemento.

 rettangolare	 a T	 a T rovescia	 a T di colmo	 a L	 a L specchiata
 a L specchiata rovescia	 a L rovescia	 a L di colmo	 a doppio T	 a quattro specchiata	 a quattro
 a U	 a C	 a croce	 circolare	 rettangolare cava	 circolare cava

Per quanto concerne i profilati semplici ed accoppiati l'asse 2 del riferimento coincide con l'asse x riportato nei più diffusi profilatari.

Per quanto concerne le sezioni di tipo generico (tipo 1.):
i valori dimensionali con prefisso B sono riferiti all'asse 2
i valori dimensionali con prefisso H sono riferiti all'asse 3

Id	Tipo	Area	A V2	A V3	Jt	J 2-2	J 3-3	W 2-2	W 3-3	Wp 2-2	Wp 3-3
		cm2	cm2	cm2	cm4	cm4	cm4	cm3	cm3	cm3	cm3
1	TRAVE FONDAZIONE-Rettangolare: b=50 h=100	5000.00	4166.67	4166.67	2.854e+06	1.042e+06	4.167e+06	4.167e+04	8.333e+04	6.250e+04	1.250e+05
2	PILASTRI PT-Rettangolare: b=30 h=60	1800.00	1500.00	1500.00	3.699e+05	1.350e+05	5.400e+05	9000.00	1.800e+04	1.350e+04	2.700e+04
3	TRAVI 1° E 2° IMPALCATO-Rettangolare: b=30 h=50	1500.00	1250.00	1250.00	2.799e+05	1.125e+05	3.125e+05	7500.00	1.250e+04	1.125e+04	1.875e+04
7	TRAVETTO SOLAIO-T ribassata: bi=12 ht=25 bs=50 hs=5	490.00	0.0	0.0	1.200e+04	5.496e+04	2.765e+04	2198.53	1688.50	3845.00	3024.51

MODELLAZIONE STRUTTURA: NODI

LEGENDA TABELLA DATI NODI

Il programma utilizza per la modellazione nodi strutturali.
Ogni nodo è individuato dalle coordinate cartesiane nel sistema di riferimento globale (X Y Z).
Ad ogni nodo è eventualmente associato un codice di vincolamento rigido, un codice di fondazione speciale, ed un set di sei molle (tre per le traslazioni, tre per le rotazioni). Le tabelle sottoriportate riflettono le succitate possibilità. In particolare per ogni nodo viene indicato in tabella:

Nodo	numero del nodo.
X	valore della coordinata X
Y	valore della coordinata Y
Z	valore della coordinata Z

Per i nodi ai quali sia associato un codice di vincolamento rigido, un codice di fondazione speciale o un set di molle viene indicato in tabella:

Nodo	numero del nodo.
X	valore della coordinata X
Y	valore della coordinata Y
Z	valore della coordinata Z
Note	eventuale codice di vincolo (es. v=110010 sei valori relativi ai sei gradi di libertà previsti per il nodo TxTyTzRxRyRz, il valore 1 indica che lo spostamento o rotazione relativo è impedito, il valore 0 indica che lo spostamento o rotazione relativo è libero).
Note	(FS = 1, 2,…) eventuale codice del tipo di fondazione speciale (1, 2,… fanno riferimento alle tipologie: plinto, palo, plinto su pali,…) che è collegato al nodo. (ISO = "id SIGLA") indice e sigla identificativa dell' eventuale isolatore sismico assegnato al nodo
Rig. TX	valore della rigidezza dei vincoli elastici eventualmente applicati al nodo, nello specifico TX (idem per TY, TZ, RX, RY, RZ).

Per strutture sismicamente isolate viene inoltre inserita la tabella delle caratteristiche per gli isolatori utilizzati; le caratteristiche sono indicate in conformità al cap. 7.10 del D.M. 17/01/18

TABELLA DATI NODI

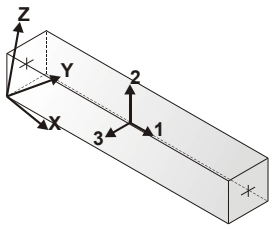
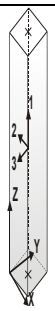
Nodo	X	Y	Z	Nodo	X	Y	Z	Nodo	X	Y	Z
	cm	cm	cm		cm	cm	cm		cm	cm	cm
1	0.0	0.0	0.0	2	427.5	0.0	0.0	3	855.0	0.0	0.0
4	0.0	380.0	0.0	5	427.5	380.0	0.0	6	855.0	380.0	0.0
7	0.0	0.0	428.0	8	427.5	0.0	428.0	9	855.0	0.0	428.0
10	0.0	380.0	428.0	11	427.5	380.0	428.0	12	855.0	380.0	428.0
13	0.0	0.0	835.0	14	427.5	0.0	835.0	15	855.0	0.0	835.0
16	0.0	380.0	835.0	17	427.5	380.0	835.0	18	855.0	380.0	835.0
19	0.0	285.0	0.0	20	106.9	285.0	0.0	21	106.9	380.0	0.0
22	0.0	190.0	0.0	23	106.9	190.0	0.0	24	0.0	95.0	0.0
25	106.9	95.0	0.0	26	106.9	0.0	0.0	27	213.8	285.0	0.0
28	213.8	380.0	0.0	29	213.8	190.0	0.0	30	213.8	95.0	0.0
31	213.8	0.0	0.0	32	320.6	285.0	0.0	33	320.6	380.0	0.0
34	320.6	190.0	0.0	35	320.6	95.0	0.0	36	320.6	0.0	0.0
37	427.5	285.0	0.0	38	427.5	190.0	0.0	39	427.5	95.0	0.0
40	534.4	285.0	0.0	41	534.4	380.0	0.0	42	534.4	190.0	0.0
43	534.4	95.0	0.0	44	534.4	0.0	0.0	45	641.3	285.0	0.0
46	641.3	380.0	0.0	47	641.3	190.0	0.0	48	641.3	95.0	0.0
49	641.3	0.0	0.0	50	748.1	285.0	0.0	51	748.1	380.0	0.0
52	748.1	190.0	0.0	53	748.1	95.0	0.0	54	748.1	0.0	0.0
55	855.0	285.0	0.0	56	855.0	190.0	0.0	57	855.0	95.0	0.0
58	106.9	475.0	0.0	59	0.0	475.0	0.0	60	213.8	475.0	0.0

61	320.6	475.0	0.0	62	427.5	475.0	0.0	63	534.4	475.0	0.0
64	641.3	475.0	0.0	65	748.1	475.0	0.0	66	855.0	475.0	0.0
67	0.0	-95.0	0.0	68	106.9	-95.0	0.0	69	213.8	-95.0	0.0
70	320.6	-95.0	0.0	71	427.5	-95.0	0.0	72	534.4	-95.0	0.0
73	641.3	-95.0	0.0	74	748.1	-95.0	0.0	75	855.0	-95.0	0.0
76	0.0	-190.0	0.0	77	106.9	-190.0	0.0	78	213.8	-190.0	0.0
79	320.6	-190.0	0.0	80	427.5	-190.0	0.0	81	534.4	-190.0	0.0
82	641.3	-190.0	0.0	83	748.1	-190.0	0.0	84	855.0	-190.0	0.0
85	106.9	570.0	0.0	86	0.0	570.0	0.0	87	213.8	570.0	0.0
88	320.6	570.0	0.0	89	427.5	570.0	0.0	90	534.4	570.0	0.0
91	641.3	570.0	0.0	92	748.1	570.0	0.0	93	855.0	570.0	0.0
94	106.9	665.0	0.0	95	0.0	665.0	0.0	96	213.8	665.0	0.0
97	320.6	665.0	0.0	98	427.5	665.0	0.0	99	534.4	665.0	0.0
100	641.3	665.0	0.0	101	748.1	665.0	0.0	102	855.0	665.0	0.0
103	0.0	-285.0	0.0	104	106.9	-285.0	0.0	105	213.8	-285.0	0.0
106	320.6	-285.0	0.0	107	427.5	-285.0	0.0	108	534.4	-285.0	0.0
109	641.3	-285.0	0.0	110	748.1	-285.0	0.0	111	855.0	-285.0	0.0

MODELLAZIONE STRUTTURA: ELEMENTI TRAVE

TABELLA DATI TRAVI

Il programma utilizza per la modellazione elementi a due nodi denominati in generale travi.
Ogni elemento trave è individuato dal nodo iniziale e dal nodo finale.
Ogni elemento è caratterizzato da un insieme di proprietà riportate in tabella che ne completano la modellazione.

 orientamento elementi 2D non verticali	 orientamento elementi 2D verticali

In particolare per ogni elemento viene indicato in tabella:

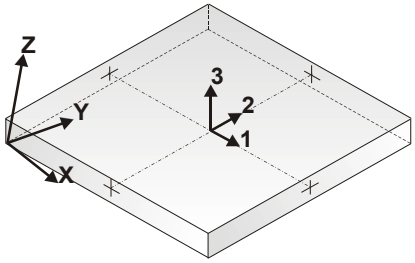
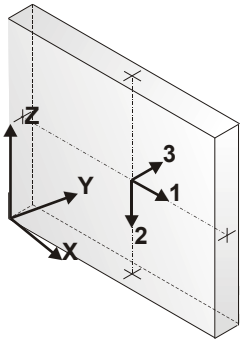
Elem.	numero dell'elemento
Note	codice di comportamento: trave, trave di fondazione, pilastro, asta, asta tesa, asta compressa,
Nodo I (J)	numero del nodo iniziale (finale)
Mat.	codice del materiale assegnato all'elemento
Sez.	codice della sezione assegnata all'elemento
Rotaz.	valore della rotazione dell'elemento, attorno al proprio asse, nel caso in cui l'orientamento di default non sia adottabile; l'orientamento di default prevede per gli elementi non verticali l'asse 2 contenuto nel piano verticale e l'asse 3 orizzontale, per gli elementi verticali l'asse 2 diretto secondo X negativo e l'asse 3 diretto secondo Y negativo
Svincolo I (J)	codici di svincolo per le azioni interne; i primi sei codici si riferiscono al nodo iniziale, i restanti sei al nodo finale (il valore 1 indica che la relativa azione interna non è attiva)
Wink V	costante di sottofondo (coefficiente di Winkler) per la modellazione della trave su suolo elastico
Wink O	costante di sottofondo (coefficiente di Winkler) per la modellazione del suolo elastico orizzontale

Elem.	Note	Nodo I	Nodo J	Mat.	Sez.	Crit.	Rotaz.	Svincolo I	Svincolo J	Wink V	Wink O
							gradi			daN/cm3	daN/cm3
1	Trave f.	1	24	3	1	2				0.73	0.45
2	Trave f.	2	39	3	1	2				0.73	0.45
3	Trave f.	3	57	3	1	2				0.73	0.45
4	Trave f.	1	26	3	1	2				0.69	0.42
5	Trave f.	2	44	3	1	2				0.69	0.42
6	Trave f.	4	21	3	1	2				0.69	0.42
7	Trave f.	5	41	3	1	2				0.69	0.42
8	Trave	7	10	3	3	1					
9	Trave	8	11	3	3	1					
10	Trave	9	12	3	3	1					
11	Trave	7	8	3	3	1					
12	Trave	8	9	3	3	1					
13	Trave	10	11	3	3	1					
14	Trave	11	12	3	3	1					
15	Trave	13	16	3	3	1					
16	Trave	14	17	3	3	1					
17	Trave	15	18	3	3	1					
18	Trave	13	14	3	3	1					
19	Trave	14	15	3	3	1					
20	Trave	16	17	3	3	1					
21	Trave	17	18	3	3	1					
22	Pilas.	1	7	3	2	1	90.00				
23	Pilas.	4	10	3	2	1					
24	Pilas.	2	8	3	2	1					
25	Pilas.	5	11	3	2	1					
26	Pilas.	3	9	3	2	1					
27	Pilas.	6	12	3	2	1	90.00				
28	Pilas.	7	13	3	2	1	90.00				
29	Pilas.	10	16	3	2	1					
30	Pilas.	8	14	3	2	1					
31	Pilas.	11	17	3	2	1					
32	Pilas.	9	15	3	2	1					
33	Pilas.	12	18	3	2	1	90.00				
34	Trave f.	19	4	3	1	2				0.73	0.45
35	Trave f.	37	5	3	1	2				0.73	0.45
36	Trave f.	55	6	3	1	2				0.73	0.45
37	Trave f.	26	31	3	1	2				0.69	0.42
38	Trave f.	44	49	3	1	2				0.69	0.42
39	Trave f.	21	28	3	1	2				0.69	0.42
40	Trave f.	41	46	3	1	2				0.69	0.42
41	Trave f.	22	19	3	1	2				0.73	0.45
42	Trave f.	38	37	3	1	2				0.73	0.45
43	Trave f.	56	55	3	1	2				0.73	0.45
44	Trave f.	31	36	3	1	2				0.69	0.42
45	Trave f.	49	54	3	1	2				0.69	0.42
46	Trave f.	28	33	3	1	2				0.69	0.42
47	Trave f.	46	51	3	1	2				0.69	0.42
48	Trave f.	24	22	3	1	2				0.73	0.45
49	Trave f.	39	38	3	1	2				0.73	0.45
50	Trave f.	57	56	3	1	2				0.73	0.45
51	Trave f.	36	2	3	1	2				0.69	0.42
52	Trave f.	54	3	3	1	2				0.69	0.42
53	Trave f.	33	5	3	1	2				0.69	0.42
54	Trave f.	51	6	3	1	2				0.69	0.42

MODELLAZIONE STRUTTURA: ELEMENTI SHELL

LEGENDA TABELLA DATI SHELL

Il programma utilizza per la modellazione elementi a tre o quattro nodi denominati in generale shell.
Ogni elemento shell è individuato dai nodi I, J, K, L (L=I per gli elementi a tre nodi).
Ogni elemento è caratterizzato da un insieme di proprietà riportate in tabella che ne completano la modellazione.

 orientamento elementi 3D non verticali	 orientamento elementi 3D verticali

In particolare per ogni elemento viene indicato in tabella:

Elem.	numero dell'elemento
Note	codice di comportamento: *Guscio* (elemento guscio in elevazione non verticale) *Guscio fond.* (elemento guscio su suolo elastico) *Setto* (elemento guscio in elevazione verticale) *Membrana* (elemento guscio con comportamento membranale)
Nodo I (J, K, L)	numero del nodo I (J, K, L)
Mat.	codice del materiale assegnato all'elemento
Spessore	spessore dell'elemento (costante)
Wink V	costante di sottofondo (coefficiente di Winkler) per la modellazione del suolo elastico verticale
Wink O	costante di sottofondo (coefficiente di Winkler) per la modellazione del suolo elastico orizzontale

Elem.	Note	Nodo I	Nodo J	Nodo K	Nodo L	Mat.	Crit.	Spessore	Svincolo	Wink V	Wink O
								cm		daN/cm3	daN/cm3
1	Guscio fond.	19	20	21	4	1	2	40.0		0.14	0.08
2	Guscio fond.	22	23	20	19	1	2	40.0		0.14	0.08
3	Guscio fond.	24	25	23	22	1	2	40.0		0.14	0.08
4	Guscio fond.	1	26	25	24	1	2	40.0		0.14	0.08
5	Guscio fond.	20	27	28	21	1	2	40.0		0.14	0.08
6	Guscio fond.	23	29	27	20	1	2	40.0		0.14	0.08
7	Guscio fond.	25	30	29	23	1	2	40.0		0.14	0.08
8	Guscio fond.	26	31	30	25	1	2	40.0		0.14	0.08
9	Guscio fond.	27	32	33	28	1	2	40.0		0.14	0.08
10	Guscio fond.	29	34	32	27	1	2	40.0		0.14	0.08
11	Guscio fond.	30	35	34	29	1	2	40.0		0.14	0.08
12	Guscio fond.	31	36	35	30	1	2	40.0		0.14	0.08
13	Guscio fond.	32	37	5	33	1	2	40.0		0.14	0.08
14	Guscio fond.	34	38	37	32	1	2	40.0		0.14	0.08
15	Guscio fond.	35	39	38	34	1	2	40.0		0.14	0.08
16	Guscio fond.	36	2	39	35	1	2	40.0		0.14	0.08
17	Guscio fond.	37	40	41	5	1	2	40.0		0.14	0.08
18	Guscio fond.	38	42	40	37	1	2	40.0		0.14	0.08
19	Guscio fond.	39	43	42	38	1	2	40.0		0.14	0.08
20	Guscio fond.	2	44	43	39	1	2	40.0		0.14	0.08
21	Guscio fond.	40	45	46	41	1	2	40.0		0.14	0.08
22	Guscio fond.	42	47	45	40	1	2	40.0		0.14	0.08
23	Guscio fond.	43	48	47	42	1	2	40.0		0.14	0.08
24	Guscio fond.	44	49	48	43	1	2	40.0		0.14	0.08
25	Guscio fond.	45	50	51	46	1	2	40.0		0.14	0.08
26	Guscio fond.	47	52	50	45	1	2	40.0		0.14	0.08
27	Guscio fond.	48	53	52	47	1	2	40.0		0.14	0.08
28	Guscio fond.	49	54	53	48	1	2	40.0		0.14	0.08
29	Guscio fond.	50	55	6	51	1	2	40.0		0.14	0.08
30	Guscio fond.	52	56	55	50	1	2	40.0		0.14	0.08
31	Guscio fond.	53	57	56	52	1	2	40.0		0.14	0.08
32	Guscio fond.	54	3	57	53	1	2	40.0		0.14	0.08
33	Guscio fond.	4	21	58	59	1	2	40.0		0.14	0.08
34	Guscio fond.	21	28	60	58	1	2	40.0		0.14	0.08
35	Guscio fond.	28	33	61	60	1	2	40.0		0.14	0.08
36	Guscio fond.	33	5	62	61	1	2	40.0		0.14	0.08
37	Guscio fond.	5	41	63	62	1	2	40.0		0.14	0.08
38	Guscio fond.	41	46	64	63	1	2	40.0		0.14	0.08
39	Guscio fond.	46	51	65	64	1	2	40.0		0.14	0.08
40	Guscio fond.	51	6	66	65	1	2	40.0		0.14	0.08
41	Guscio fond.	67	68	26	1	1	2	40.0		0.14	0.08
42	Guscio fond.	68	69	31	26	1	2	40.0		0.14	0.08
43	Guscio fond.	69	70	36	31	1	2	40.0		0.14	0.08
44	Guscio fond.	70	71	2	36	1	2	40.0		0.14	0.08
45	Guscio fond.	71	72	44	2	1	2	40.0		0.14	0.08
46	Guscio fond.	72	73	49	44	1	2	40.0		0.14	0.08
47	Guscio fond.	73	74	54	49	1	2	40.0		0.14	0.08
48	Guscio fond.	74	75	3	54	1	2	40.0		0.14	0.08
49	Guscio fond.	76	77	68	67	1	2	40.0		0.14	0.08
50	Guscio fond.	77	78	69	68	1	2	40.0		0.14	0.08
51	Guscio fond.	78	79	70	69	1	2	40.0		0.14	0.08
52	Guscio fond.	79	80	71	70	1	2	40.0		0.14	0.08
53	Guscio fond.	80	81	72	71	1	2	40.0		0.14	0.08
54	Guscio fond.	81	82	73	72	1	2	40.0		0.14	0.08
55	Guscio fond.	82	83	74	73	1	2	40.0		0.14	0.08
56	Guscio fond.	83	84	75	74	1	2	40.0		0.14	0.08
57	Guscio fond.	59	58	85	86	1	2	40.0		0.14	0.08
58	Guscio fond.	58	60	87	85	1	2	40.0		0.14	0.08
59	Guscio fond.	60	61	88	87	1	2	40.0		0.14	0.08
60	Guscio fond.	61	62	89	88	1	2	40.0		0.14	0.08
61	Guscio fond.	62	63	90	89	1	2	40.0		0.14	0.08
62	Guscio fond.	63	64	91	90	1	2	40.0		0.14	0.08
63	Guscio fond.	64	65	92	91	1	2	40.0		0.14	0.08
64	Guscio fond.	65	66	93	92	1	2	40.0		0.14	0.08
65	Guscio fond.	86	85	94	95	1	2	40.0		0.14	0.09
66	Guscio fond.	85	87	96	94	1	2	40.0		0.14	0.08
67	Guscio fond.	87	88	97	96	1	2	40.0		0.14	0.08
68	Guscio fond.	88	89	98	97	1	2	40.0		0.14	0.08
69	Guscio fond.	89	90	99	98	1	2	40.0		0.14	0.08
70	Guscio fond.	90	91	100	99	1	2	40.0		0.14	0.08
71	Guscio fond.	91	92	101	100	1	2	40.0		0.14	0.08
72	Guscio fond.	92	93	102	101	1	2	40.0		0.14	0.08
73	Guscio fond.	103	104	77	76	1	2	40.0		0.14	0.08

74	Guscio fond.	104	105	78	77	1	2	40.0	0.14	0.08
75	Guscio fond.	105	106	79	78	1	2	40.0	0.14	0.08
76	Guscio fond.	106	107	80	79	1	2	40.0	0.14	0.08
77	Guscio fond.	107	108	81	80	1	2	40.0	0.14	0.08
78	Guscio fond.	108	109	82	81	1	2	40.0	0.14	0.08
79	Guscio fond.	109	110	83	82	1	2	40.0	0.14	0.08
80	Guscio fond.	110	111	84	83	1	2	40.0	0.14	0.08

MODELLAZIONE DELLA STRUTTURA: ELEMENTI SOLAIO-PANNELLO

LEGENDA TABELLA DATI SOLAI-PANNELLI

Il programma utilizza per la modellazione elementi a tre o più nodi denominati in generale solaio o pannello.
Ogni elemento solaio-pannello è individuato da una poligonale di nodi 1,2, ..., N.
L'elemento solaio è utilizzato in primo luogo per la modellazione dei carichi agenti sugli elementi strutturali. In secondo luogo può essere utilizzato per la corretta ripartizione delle forze orizzontali agenti nel proprio piano. L'elemento balcone è derivato dall'elemento solaio.
I carichi agenti sugli elementi solaio, raccolti in un archivio, sono direttamente assegnati agli elementi utilizzando le informazioni raccolte nell' archivio (es. i coefficienti combinatori). La tabella seguente riporta i dati utilizzati per la definizione dei carichi e delle masse.
L'elemento pannello è utilizzato solo per l'applicazione dei carichi, quali pesi delle tamponature o spinte dovute al vento o terre. In questo caso i carichi sono applicati in analogia agli altri elementi strutturali (si veda il cap. SCHEMATIZZAZIONE DEI CASI DI CARICO).

Id.Arch.	Identificativo dell' archivio
Tipo	Tipo di carico ***Variab.*** Carico variabile generico ***Var. rid.*** Carico variabile generico con riduzione in funzione dell' area (c.5.5. …) ***Neve*** Carico di neve
G1k	carico permanente (comprensivo del peso proprio)
G2k	carico permanente non strutturale e non compiutamente definito
Qk	carico variabile
Fatt. A	fattore di riduzione del carico variabile (0.5 o 0.75) per tipo "Var.rid."
S sis.	fattore di riduzione del carico variabile per la definizione delle masse sismiche per D.M. 96 (vedi NOTA sul capitolo "normativa di riferimento")
Psi 0	Coefficiente combinatorio dei valori caratteristici delle azioni variabili: ***per valore raro***
Psi 1	Coefficiente combinatorio dei valori caratteristici delle azioni variabili: ***per valore frequente***
Psi 2	Coefficiente combinatorio dei valori caratteristici delle azioni variabili: ***per valore quasi permanente***
Psi S 2	Coefficiente di combinazione che fornisce il valore quasi-permanente dell'azione variabile: ***per la definizione delle masse sismiche***
Fatt. Fi	Coefficiente di correlazione dei carichi per edifici

Ogni elemento è caratterizzato da un insieme di proprietà riportate in tabella che ne completano la modellazione. In particolare per ogni elemento viene indicato in tabella:

Elem	numero dell'elemento
Tipo	codice di comportamento ***S*** elemento utilizzato solo per scarico ***C*** elemento utilizzato per scarico e per modellazione piano rigido ***P*** elemento utilizzato come pannello ***M*** scarico monodirezionale ***B*** scarico bidirezionale
Id.Arch.	Identificativo dell' archivio
Mat	codice del materiale assegnato all'elemento
Spessore	spessore dell'elemento (costante)
Orditura	angolo (rispetto all'asse X) della direzione dei travetti principali

Gk	carico permanente solaio (comprensivo del peso proprio)
Qk	carico variabile solaio
Nodi	numero dei nodi che definiscono l'elemento (5 per riga)

Nel caso in cui si sia proceduto alla progettazione dei solai con le tensioni ammissibili vengono riportate le massime tensioni nell'elemento (massima compressione nel calcestruzzo, massima tensione nell'acciaio, massima tensione tangenziale); nel caso in cui si sia proceduto alla progettazione con il metodo degli stati limite vengono riportati il rapporto x/d e le verifiche per sollecitazioni proporzionali nonché le verifiche in esercizio.

In particolare i simboli utilizzati in tabella assumono il seguente significato:

Elem.	numero identificativo dell'elemento
Stato	Codici di verifica relativi alle tensioni normali e alle tensioni tangenziali
Note	Viene riportato il codice relativo alla sezione(s) e relativo al materiale(m);
Pos.	Ascissa del punto di verifica
F ist, F infi	Frecce instantanee e a tempo infinito
Momento	Momento flettente
Taglio	Sollecitazione di taglio
Af inf.	Area di armatura longitudinale posta all'intradosso della trave
Af sup.	Area di armatura longitudinale posta all'estradosso della trave
AfV	Area dell'armatura atta ad assorbire le azioni di taglio
Beff	Base della sezione di cls per l'assorbimento del taglio
	simboli utilizzati con il metodo delle tensioni ammissibili:
sc max	Massima tensione di compressione del calcestruzzo
sf max	Massima tensione nell'acciaio
tau max	Massima tensione tangenziale nel cls
	simboli utilizzati con il metodo degli stati limite:
x/d	rapporto tra posizione dell'asse neutro e altezza utile alla rottura della sezione (per sola flessione)
verif.	rapporto Sd/Su con sollecitazioni ultime proporzionali: valore minore o uguale a 1 per verifica positiva
Verif.V	rapporto Sd/Su con sollecitazioni taglianti proporzionali valore minore o uguale a 1 per verifica positiva
rRfck	rapporto tra la massima compressione nel calcestruzzo e la tensione fck in combinazioni rare [normalizzato a 1]
rFfck	rapporto tra la massima compressione nel calcestruzzo e la tensione fck in combinazioni frequenti [normalizzato a 1]
rPfck	rapporto tra la massima compressione nel calcestruzzo e la tensione fck in combinazioni quasi permanenti [normalizzato a 1]
rRfyk	rapporto tra la massima tensione nell'acciaio e la tensione fyk in combinazioni frequenti [normalizzato a 1]
rFyk	rapporto tra la massima tensione nell'acciaio e la tensione fyk in combinazioni rare [normalizzato a 1]
rPfyk	rapporto tra la massima tensione nell'acciaio e la tensione fyk in combinazioni quasi permanenti [normalizzato a 1]
wR	apertura caratteristica delle fessure in combinazioni rare [mm]
wF	apertura caratteristica delle fessure in combinazioni frequenti [mm]
wP	apertura caratteristica delle fessure in combinazioni quasi permanenti [mm]

Nel caso in cui si sia proceduto alla verifica delle tamponature secondo il D.M. 17.01.2018 - §7.2.3 viene riportata una tabella riassuntiva delle verifiche degli elementi pannello. La verifica confronta i momenti sollecitanti indotti dal sisma con i momenti resistenti, secondo tre ipotesi, due basate sulla resistenza a pressoflessione della tamponatura ed una basata sul cinematismo a seguito della formazione di tre cerniere plastiche sulla tamponatura (rif. Ufficio di

Vigilanza sulle Costruzioni, Provincia di Terni).
Qualora la tamponatura sia di tipo antiespulsione (nelle due possibili varianti ordinaria o armata) viene condotta una verifica con meccanismo ad arco con degrado di resistenza. La verifica confronta le pressioni sollecitanti indotte dal sisma con le pressioni resistenti che la tamponatura sviluppa attraverso il meccanismo ad arco. La verifica considera anche il degrado di resistenza dovuto al danneggiamento nel piano della tamponatura.
Per quest'ultima tamponatura sono disponibili, in funzione del materiale impiegato (materiale [52] o materiale [53]):

- **Tamponatura Antiespulsione ordinaria Poroton® Cis Edil** sp.30 cm; con metodo di verifica per meccanismo ad arco con degrado di resistenza, sviluppato attraverso i risultati di un progetto di ricerca sperimentale condotto dall'Università degli Studi di Padova.
  Utilizzabile per il materiale [52].
- **Tamponatura Antiespulsione armata Poroton® Cis Edil** sp.30 cm; con metodo di verifica per meccanismo ad arco con degrado di resistenza, sviluppato attraverso i risultati di un progetto di ricerca sperimentale condotto dall'Università degli Studi di Padova.
  Utilizzabile per il materiale [53].

La verifica è stata calibrata sulla base di prove sperimentali sul sistema di Tamponatura Antiespulsione anche in presenza di aperture.
(rif. Rapporti di Prova redatti dal Dipartimento ICEA - Università degli Studi di Padova di test sperimentali condotti sul sistema Tamponatura Antiespulsione di Cis Edil)

In particolare i simboli utilizzati in tabella assumono il seguente significato:

Elem.	Numero identificativo dell'elemento
Stato	Codice di verifica
Ver. c.c.	Verifica nell'ipotesi di trave appoggiata con carico concentrato in mezzeria
Ver. c.d.	Verifica nell'ipotesi di trave appoggiata con carico distribuito
Ver. c.cin.	Verifica nell'ipotesi di cinematismo con formazione di cerniere plastiche in appoggio e mezzeria
Ver. CIS	Rapporto pa/pr (valore minore o uguale a 1 per verifica positiva)
Z	Quota del baricentro dell'elemento
T1	Periodo proprio dell'edificio nella direzione di interesse (ortogonale al pannello)
Ta	Periodo proprio della parete
Sa	Accelerazione massima, adimensionalizzata allo SLV
pa	Pressione sulla parete causata dall'azione sismica
pr	Pressione resistente del meccanismo ad arco
Drift	Spostamento relativo interpiano allo SLV valutato secondo il D.M. 14.01.2018 - § 7.3.3.3
Beta a	Coef. riduttivo per tener conto del danneggiamento del piano dipendente dallo spostamento, ottenuto sperimentalmente

ID Arch.	Tipo	G1k	G2k	Qk	Fatt. A	s sis.	Psi 0	Psi 1	Psi 2	Psi S 2	Fatt. Fi
		daN/cm2	daN/cm2	daN/cm2							
1	Variab.	3.42e-02	3.76e-02	3.00e-02		1.00	0.70	0.70	0.60	0.60	1.00
2	Variab.	3.42e-02	9.96e-02	2.00e-02		1.00	0.70	0.50	0.30	0.30	1.00

Elem.	Tipo	ID Arch.	Mat.	Spessore	Orditura	G1k	G2k	Qk	Nodo 1/6..	Nodo 2/7..	Nodo 3/8..	Nodo..	Nodo..
						daN/cm2	daN/cm2	daN/cm2					
1	CM	2	m=3	5.0	0.0	3.42e-02	9.96e-02	2.00e-02	14	17	16	13	
2	CM	2	m=3	5.0	0.0	3.42e-02	9.96e-02	2.00e-02	15	18	17	14	
3	CM	1	m=3	5.0	0.0	3.42e-02	3.76e-02	3.00e-02	8	11	10	7	
4	CM	1	m=3	5.0	0.0	3.42e-02	3.76e-02	3.00e-02	12	11	8	9	

Elem.	Stato	Note	f ist	f infi	Pos.	Momento	Af inf.	Af. sup	V N/M	x/d	Taglio	Af V	verif. V	B eff
			cm	cm	cm	daN cm	cm2	cm2			daN	cm2		cm
1	ok L	s=7,m=3	-0.37	-1.01	0.0	0.0	1.08	0.0	0.0	0.03	-2179.61	0.0	0.38	50.0
					15.0	3.155e+04	3.09	0.0	0.12	0.08	-2026.65	0.0	1.00	12.0
					213.8	2.329e+05	2.81	0.0	0.97	0.07	0.0	0.0	0.0	12.0
					412.5	3.155e+04	3.09	0.0	0.12	0.08	2026.65	0.0	1.00	12.0

				427.5	0.0	1.08	0.0	0.0	0.03	2179.61	0.0	0.38	50.0
2	ok L s=7,m=3	-0.37	-1.01	0.0	0.0	1.08	0.0	0.0	0.03	-2179.61	0.0	0.38	50.0
				15.0	3.155e+04	3.09	0.0	0.12	0.08	-2026.65	0.0	1.00	12.0
				213.8	2.329e+05	2.81	0.0	0.97	0.07	0.0	0.0	0.0	12.0
				412.5	3.155e+04	3.09	0.0	0.12	0.08	2026.65	0.0	1.00	12.0
				427.5	0.0	1.08	0.0	0.0	0.03	2179.61	0.0	0.38	50.0
3	ok L s=7,m=3	-0.24	-0.65	0.0	0.0	0.88	0.0	0.0	0.02	-1478.51	0.0	0.26	50.0
				15.0	2.140e+04	0.97	0.0	0.25	0.03	-1374.75	0.0	1.00	12.0
				213.8	1.580e+05	1.87	0.0	0.98	0.05	0.0	0.0	0.0	12.0
				412.5	2.140e+04	0.97	0.0	0.25	0.03	1374.75	0.0	1.00	12.0
				427.5	0.0	0.88	0.0	0.0	0.02	1478.51	0.0	0.26	50.0
4	ok L s=7,m=3	-0.24	-0.65	0.0	0.0	0.88	0.0	0.0	0.02	-1478.51	0.0	0.26	50.0
				15.0	2.140e+04	0.97	0.0	0.25	0.03	-1374.75	0.0	1.00	12.0
				213.8	1.580e+05	1.87	0.0	0.98	0.05	0.0	0.0	0.0	12.0
				412.5	2.140e+04	0.97	0.0	0.25	0.03	1374.75	0.0	1.00	12.0
				427.5	0.0	0.88	0.0	0.0	0.02	1478.51	0.0	0.26	50.0

Elem.		f ist	f infi		Momento	Af inf.	Af. sup	V N/M	x/d	Taglio	Af V	verif. V
					0.0					-2179.61		
		-0.24	-0.65		2.329e+05	3.09	0.0	0.98	0.08	2179.61	0.0	1.00

Elem.	Pos.	rRfck	rFfck	rPfck	rRfyk	rFfyk	rPfyk	wR	wF	wP
	cm							mm	mm	mm
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	15.0	0.05	0.04	0.06	0.10	0.10	0.09	0.0	0.0	0.0
	213.8	0.36	0.34	0.44	0.84	0.78	0.76	0.13	0.13	0.13
	412.5	0.05	0.04	0.06	0.10	0.10	0.09	0.0	0.0	0.0
	427.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	15.0	0.05	0.04	0.06	0.10	0.10	0.09	0.0	0.0	0.0
	213.8	0.36	0.34	0.44	0.84	0.78	0.76	0.13	0.13	0.13
	412.5	0.05	0.04	0.06	0.10	0.10	0.09	0.0	0.0	0.0
	427.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	15.0	0.05	0.05	0.06	0.21	0.19	0.19	0.0	0.0	0.0
	213.8	0.28	0.26	0.33	0.82	0.75	0.72	0.14	0.14	0.13
	412.5	0.05	0.05	0.06	0.21	0.19	0.19	0.0	0.0	0.0
	427.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	15.0	0.05	0.05	0.06	0.21	0.19	0.19	0.0	0.0	0.0
	213.8	0.28	0.26	0.33	0.82	0.75	0.72	0.14	0.14	0.13
	412.5	0.05	0.05	0.06	0.21	0.19	0.19	0.0	0.0	0.0
	427.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

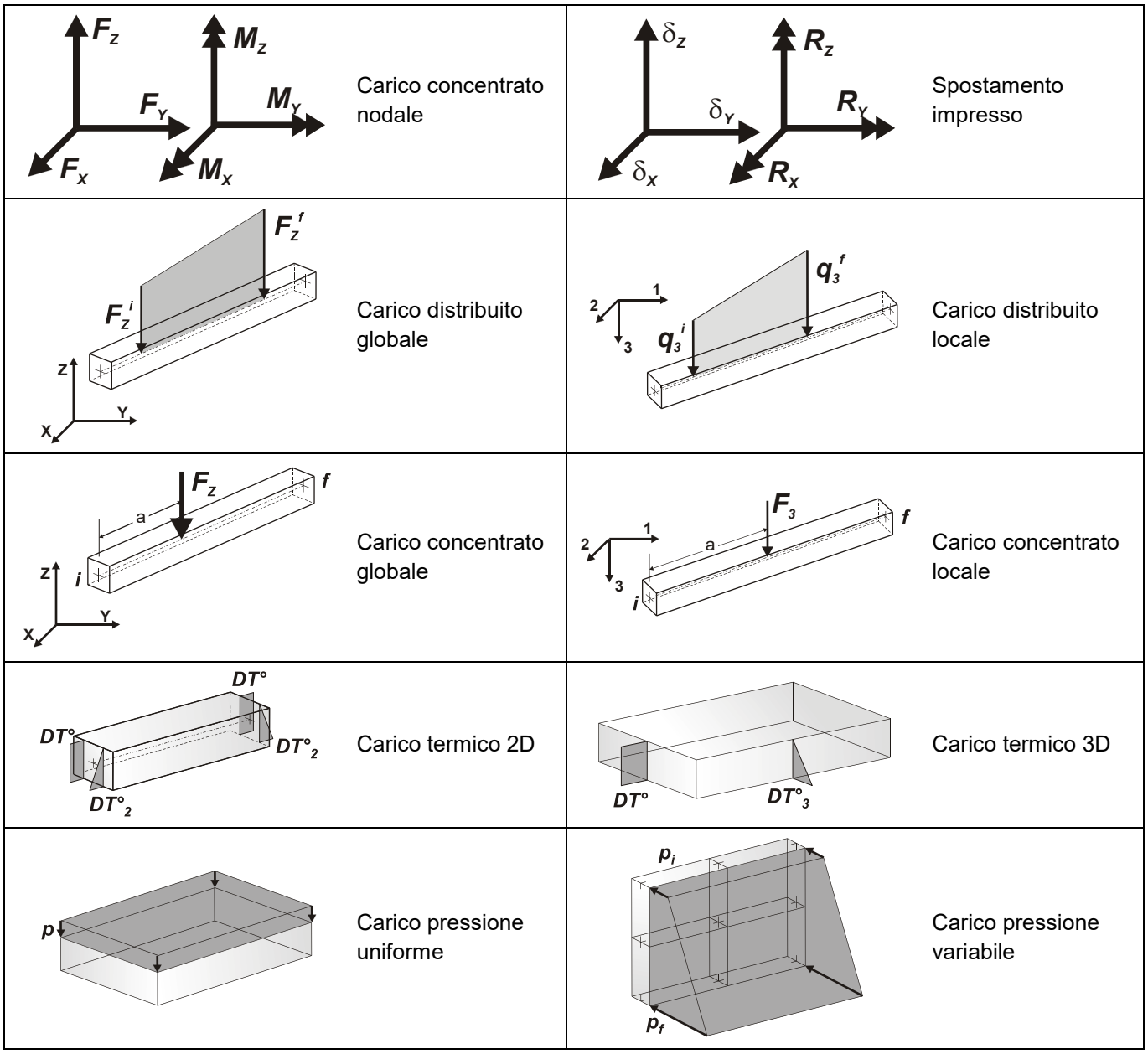
Elem.	rRfck	rFfck	rPfck	rRfyk	rFfyk	rPfyk	wR	wF	wP
	0.36	0.34	0.44	0.84	0.78	0.76	0.14	0.14	0.13

MODELLAZIONE DELLE AZIONI

LEGENDA TABELLA DATI AZIONI

Il programma consente l'uso di diverse tipologie di carico (azioni). Le azioni utilizzate nella modellazione sono individuate da una sigla identificativa ed un codice numerico (gli elementi strutturali richiamano quest'ultimo nella propria descrizione). Per ogni azione applicata alla struttura viene di riportato il codice, il tipo e la sigla identificativa. Le tabelle successive dettagliano i valori caratteristici di ogni azione in relazione al tipo. Le tabelle riportano infatti i seguenti dati in relazione al tipo:

1	**carico concentrato nodale** 6 dati (forza Fx, Fy, Fz, momento Mx, My, Mz)
2	**spostamento nodale impresso** 6 dati (spostamento Tx,Ty,Tz, rotazione Rx,Ry,Rz)
3	**carico distribuito globale su elemento tipo trave** 7 dati (fx,fy,fz,mx,my,mz,ascissa di inizio carico) 7 dati (fx,fy,fz,mx,my,mz,ascissa di fine carico)
4	**carico distribuito locale su elemento tipo trave** 7 dati (f1,f2,f3,m1,m2,m3,ascissa di inizio carico) 7 dati (f1,f2,f3,m1,m2,m3,ascissa di fine carico)
5	**carico concentrato globale su elemento tipo trave** 7 dati (Fx,Fy,Fz,Mx,My,Mz,ascissa di carico)
6	**carico concentrato locale su elemento tipo trave** 7 dati (F1, F2, F3, M1, M2, M3, ascissa di carico)
7	**variazione termica applicata ad elemento tipo trave** 7 dati (variazioni termiche: uniforme, media e differenza in altezza e larghezza al nodo iniziale e finale)
8	**carico di pressione uniforme su elemento tipo piastra** 1 dato (pressione)
9	**carico di pressione variabile su elemento tipo piastra** 4 dati (pressione, quota, pressione, quota)
10	**variazione termica applicata ad elemento tipo piastra** 2 dati (variazioni termiche: media e differenza nello spessore)
11	**carico variabile generale su elementi tipo trave e piastra** 1 dato descrizione della tipologia 4 dati per segmento (posizione, valore, posizione, valore) la tipologia precisa l'ascissa di definizione, la direzione del carico, la modalità di carico e la larghezza d'influenza per gli elementi tipo trave
12	**gruppo di carichi con impronta su piastra** 9 dati (numero di ripetizioni in direzione X e Y, valore di ciascun carico, posizione centrale del primo, dimensioni dell' impronta, interasse tra i carichi



Tipo	carico distribuito globale su trave

Id	Tipo	Pos.	fx	fy	fz	mx	my	mz
		cm	daN/cm	daN/cm	daN/cm	daN	daN	daN
1	TAMP.PT-DG:Fzi=-10.67 Fzf=-10.67	0.0	0.0	0.0	-10.67	0.0	0.0	0.0
		0.0	0.0	0.0	-10.67	0.0	0.0	0.0
2	TAMP.P1-DG:Fzi=-9.48 Fzf=-9.48	0.0	0.0	0.0	-9.48	0.0	0.0	0.0
		0.0	0.0	0.0	-9.48	0.0	0.0	0.0

SCHEMATIZZAZIONE DEI CASI DI CARICO

LEGENDA TABELLA CASI DI CARICO

Il programma consente l'applicazione di diverse tipologie di casi di carico.
Sono previsti i seguenti 11 tipi di casi di carico:

	Sigla	***Tipo***	***Descrizione***
1	**Ggk**	A	caso di carico comprensivo del peso proprio struttura
2	**Gk**	NA	caso di carico con azioni permanenti
3	**Qk**	NA	caso di carico con azioni variabili
4	**Gsk**	A	caso di carico comprensivo dei carichi permanenti sui solai e sulle coperture
5	**Qsk**	A	caso di carico comprensivo dei carichi variabili sui solai
6	**Qnk**	A	caso di carico comprensivo dei carichi di neve sulle coperture
7	**Qtk**	SA	caso di carico comprensivo di una variazione termica agente sulla struttura
8	**Qvk**	NA	caso di carico comprensivo di azioni da vento sulla struttura
9	**Esk**	SA	caso di carico sismico con analisi statica equivalente
10	**Edk**	SA	caso di carico sismico con analisi dinamica
11	**Etk**	NA	caso di carico comprensivo di azioni derivanti dall' incremento di spinta delle terre in condizione sismica
12	**Pk**	NA	caso di carico comprensivo di azioni derivanti da coazioni, cedimenti e precompressioni

Sono di tipo automatico A (ossia non prevedono introduzione dati da parte dell'utente) i seguenti casi di carico: 1-Ggk; 4-Gsk; 5-Qsk; 6-Qnk.

Sono di tipo semi-automatico SA (ossia prevedono una minima introduzione dati da parte dell'utente) i seguenti casi di carico:
7-Qtk, in quanto richiede solo il valore della variazione termica;
9-Esk e 10-Edk, in quanto richiedono il valore dell'angolo di ingresso del sisma e l'individuazione dei casi di carico partecipanti alla definizione delle masse.

Sono di tipo non automatico NA ossia prevedono la diretta applicazione di carichi generici agli elementi strutturali (si veda il precedente punto Modellazione delle Azioni) i restanti casi di carico.

Nella tabella successiva vengono riportati i casi di carico agenti sulla struttura, con l'indicazione dei dati relativi al caso di carico stesso:
Numero Tipo e *Sigla identificativa*, *Valore di riferimento* del caso di carico (se previsto).

In successione, per i casi di carico non automatici, viene riportato l'elenco di nodi ed elementi direttamente caricati con la sigla identificativa del carico.

Per i casi di carico di tipo sismico (9-Esk e 10-Edk), viene riportata la tabella di definizione delle masse: per ogni caso di carico partecipante alla definizione delle masse viene indicata la relativa aliquota (partecipazione) considerata. Si precisa che per i caso di carico 5-Qsk e 6-Qnk la partecipazione è prevista localmente per ogni elemento solaio o copertura presente nel modello (si confronti il valore Sksol nel capitolo relativo agli elementi solaio) e pertanto la loro partecipazione è di norma pari a uno.

CDC	Tipo	Sigla Id	Note
1	Ggk	CDC=Ggk (peso proprio della struttura)	
2	Gsk	CDC=G1sk (permanente solai-coperture)	
3	Gsk	CDC=G2sk (permanente solai-coperture n.c.d.)	
4	Qsk	CDC=Qsk (variabile solai)	
5	Edk	CDC=Ed (dinamico SLU) alfa=0.0 (ecc. +)	partecipazione:1.00 per 1 CDC=Ggk (peso proprio della struttura)
			partecipazione:1.00 per 2 CDC=G1sk (permanente solai-coperture)
			partecipazione:1.00 per 3 CDC=G2sk (permanente solai-coperture n.c.d.)

CDC	Tipo	Sigla Id	Note
			partecipazione:1.00 per 4 CDC=Qsk (variabile solai)
			partecipazione:1.00 per 13 CDC=G1k TAMPONATURE
6	Edk	CDC=Ed (dinamico SLU) alfa=0.0 (ecc. -)	come precedente CDC sismico
7	Edk	CDC=Ed (dinamico SLU) alfa=90.00 (ecc. +)	come precedente CDC sismico
8	Edk	CDC=Ed (dinamico SLU) alfa=90.00 (ecc. -)	come precedente CDC sismico
9	Edk	CDC=Ed (dinamico SLD) alfa=0.0 (ecc. +)	come precedente CDC sismico
10	Edk	CDC=Ed (dinamico SLD) alfa=0.0 (ecc. -)	come precedente CDC sismico
11	Edk	CDC=Ed (dinamico SLD) alfa=90.00 (ecc. +)	come precedente CDC sismico
12	Edk	CDC=Ed (dinamico SLD) alfa=90.00 (ecc. -)	come precedente CDC sismico
13	Gk	CDC=G1k TAMPONATURE	Azioni applicate:
			D2 :da 4 a 7 Azione : TAMP.PT-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 11 a 14 Azione : TAMP.P1-DG:Fzi=-9.48 Fzf=-9.48
			D2 :da 37 a 40 Azione : TAMP.PT-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 44 a 47 Azione : TAMP.PT-DG:Fzi=-10.67 Fzf=-10.67
			D2 :da 51 a 54 Azione : TAMP.PT-DG:Fzi=-10.67 Fzf=-10.67

DEFINIZIONE DELLE COMBINAZIONI

LEGENDA TABELLA COMBINAZIONI DI CARICO

Il programma combina i diversi tipi di casi di carico (CDC) secondo le regole previste dalla normativa vigente.
Le combinazioni previste sono destinate al controllo di sicurezza della struttura ed alla verifica degli spostamenti e delle sollecitazioni.

La prima tabella delle combinazioni riportata di seguito comprende le seguenti informazioni: Numero, Tipo, Sigla identificativa. Una seconda tabella riporta il peso nella combinazione assunto per ogni caso di carico.

Ai fini delle verifiche degli stati limite si definiscono le seguenti combinazioni delle azioni:
***Combinazione fondamentale** SLU*

$\gamma G1 \cdot G1 + \gamma G2 \cdot G2 + \gamma P \cdot P + \gamma Q1 \cdot Qk1 + \gamma Q2 \cdot \psi 02 \cdot Qk2 + \gamma Q3 \cdot \psi 03 \cdot Qk3 + \ldots$

***Combinazione caratteristica** (rara) SLE*

$G1 + G2 + P + Qk1 + \psi 02 \cdot Qk2 + \psi 03 \cdot Qk3 + \ldots$

***Combinazione frequente** SLE*

$G1 + G2 + P + \psi 11 \cdot Qk1 + \psi 22 \cdot Qk2 + \psi 23 \cdot Qk3 + \ldots$

***Combinazione quasi permanente** SLE*

$G1 + G2 + P + \psi 21 \cdot Qk1 + \psi 22 \cdot Qk2 + \psi 23 \cdot Qk3 + \ldots$

***Combinazione sismica**, impiegata per gli stati limite ultimi e di esercizio connessi all'azione sismica E*

$E + G1 + G2 + P + \psi 21 \cdot Qk1 + \psi 22 \cdot Qk2 + \ldots$

***Combinazione eccezionale**, impiegata per gli stati limite connessi alle azioni eccezionali*

$G1 + G2 + Ad + P + \psi 21 \cdot Qk1 + \psi 22 \cdot Qk2 + \ldots$

Dove:

NTC 2018 Tabella 2.5.I

Destinazione d'uso/azione	**ψ0**	**ψ1**	**ψ2**
Categoria A residenziali	0,70	0,50	0,30
Categoria B uffici	0,70	0,50	0,30
Categoria C ambienti suscettibili di affollamento	0,70	0,70	0,60
Categoria D ambienti ad uso commerciale	0,70	0,70	0,60
Categoria E biblioteche, archivi, magazzini,…	1,00	0,90	0,80
Categoria F Rimesse e parcheggi (autoveicoli <= 30kN)	0,70	0,70	0,60
Categoria G Rimesse e parcheggi (autoveicoli > 30kN)	0,70	0,50	0,30
Categoria H Coperture	0,00	0,00	0,00
Vento	0,60	0,20	0,00
Neve a quota <= 1000 m	0,50	0,20	0,00
Neve a quota > 1000 m	0,70	0,50	0,20
Variazioni Termiche	0,60	0,50	0,00

Nelle verifiche possono essere adottati in alternativa due diversi approcci progettuali:
- per l'approccio 1 si considerano due diverse combinazioni di gruppi di coefficienti di sicurezza parziali per le azioni, per i materiali e per la resistenza globale (combinazione 1 con coefficienti A1 e combinazione 2 con coefficienti A2),
- per l'approccio 2 si definisce un'unica combinazione per le azioni, per la resistenza dei materiali e per la resistenza globale (con coefficienti A1).

NTC 2018 Tabella 2.6.I

	Coefficiente γf	**EQU**	**A1**	**A2**

Carichi permanenti	*Favorevoli*	*$\gamma G1$*	*0,9*	*1,0*	*1,0*
	Sfavorevoli		*1,1*	*1,3*	*1,0*
Carichi permanenti non strutturali *(Non compiutamente definiti)*	*Favorevoli*	*$\gamma G2$*	*0,8*	*0,8*	*0,8*
	Sfavorevoli		*1,5*	*1,5*	*1,3*
Carichi variabili	*Favorevoli*	*γQi*	*0,0*	*0,0*	*0,0*
	Sfavorevoli		*1,5*	*1,5*	*1,3*

Cmb	Tipo	Sigla Id	effetto P-delta
1	SLU	Comb. SLU A1 1	
2	SLU	Comb. SLU A1 2	
3	SLU	Comb. SLU A1 3	
4	SLU	Comb. SLU A1 4	
5	SLU	Comb. SLU A1 (SLV sism.) 5	SI
6	SLU	Comb. SLU A1 (SLV sism.) 6	SI
7	SLU	Comb. SLU A1 (SLV sism.) 7	SI
8	SLU	Comb. SLU A1 (SLV sism.) 8	SI
9	SLU	Comb. SLU A1 (SLV sism.) 9	SI
10	SLU	Comb. SLU A1 (SLV sism.) 10	SI
11	SLU	Comb. SLU A1 (SLV sism.) 11	SI
12	SLU	Comb. SLU A1 (SLV sism.) 12	SI
13	SLU	Comb. SLU A1 (SLV sism.) 13	SI
14	SLU	Comb. SLU A1 (SLV sism.) 14	SI
15	SLU	Comb. SLU A1 (SLV sism.) 15	SI
16	SLU	Comb. SLU A1 (SLV sism.) 16	SI
17	SLU	Comb. SLU A1 (SLV sism.) 17	SI
18	SLU	Comb. SLU A1 (SLV sism.) 18	SI
19	SLU	Comb. SLU A1 (SLV sism.) 19	SI
20	SLU	Comb. SLU A1 (SLV sism.) 20	SI
21	SLU	Comb. SLU A1 (SLV sism.) 21	SI
22	SLU	Comb. SLU A1 (SLV sism.) 22	SI
23	SLU	Comb. SLU A1 (SLV sism.) 23	SI
24	SLU	Comb. SLU A1 (SLV sism.) 24	SI
25	SLU	Comb. SLU A1 (SLV sism.) 25	SI
26	SLU	Comb. SLU A1 (SLV sism.) 26	SI
27	SLU	Comb. SLU A1 (SLV sism.) 27	SI
28	SLU	Comb. SLU A1 (SLV sism.) 28	SI
29	SLU	Comb. SLU A1 (SLV sism.) 29	SI
30	SLU	Comb. SLU A1 (SLV sism.) 30	SI
31	SLU	Comb. SLU A1 (SLV sism.) 31	SI
32	SLU	Comb. SLU A1 (SLV sism.) 32	SI
33	SLU	Comb. SLU A1 (SLV sism.) 33	SI
34	SLU	Comb. SLU A1 (SLV sism.) 34	SI
35	SLU	Comb. SLU A1 (SLV sism.) 35	SI
36	SLU	Comb. SLU A1 (SLV sism.) 36	SI
37	SLD(sis)	Comb. SLE (SLD Danno sism.) 37	SI
38	SLD(sis)	Comb. SLE (SLD Danno sism.) 38	SI
39	SLD(sis)	Comb. SLE (SLD Danno sism.) 39	SI
40	SLD(sis)	Comb. SLE (SLD Danno sism.) 40	SI
41	SLD(sis)	Comb. SLE (SLD Danno sism.) 41	SI
42	SLD(sis)	Comb. SLE (SLD Danno sism.) 42	SI
43	SLD(sis)	Comb. SLE (SLD Danno sism.) 43	SI
44	SLD(sis)	Comb. SLE (SLD Danno sism.) 44	SI
45	SLD(sis)	Comb. SLE (SLD Danno sism.) 45	SI
46	SLD(sis)	Comb. SLE (SLD Danno sism.) 46	SI
47	SLD(sis)	Comb. SLE (SLD Danno sism.) 47	SI
48	SLD(sis)	Comb. SLE (SLD Danno sism.) 48	SI
49	SLD(sis)	Comb. SLE (SLD Danno sism.) 49	SI
50	SLD(sis)	Comb. SLE (SLD Danno sism.) 50	SI
51	SLD(sis)	Comb. SLE (SLD Danno sism.) 51	SI
52	SLD(sis)	Comb. SLE (SLD Danno sism.) 52	SI
53	SLD(sis)	Comb. SLE (SLD Danno sism.) 53	SI
54	SLD(sis)	Comb. SLE (SLD Danno sism.) 54	SI
55	SLD(sis)	Comb. SLE (SLD Danno sism.) 55	SI
56	SLD(sis)	Comb. SLE (SLD Danno sism.) 56	SI
57	SLD(sis)	Comb. SLE (SLD Danno sism.) 57	SI
58	SLD(sis)	Comb. SLE (SLD Danno sism.) 58	SI

Cmb	Tipo	Sigla Id	effetto P-delta
59	SLD(sis)	Comb. SLE (SLD Danno sism.) 59	SI
60	SLD(sis)	Comb. SLE (SLD Danno sism.) 60	SI
61	SLD(sis)	Comb. SLE (SLD Danno sism.) 61	SI
62	SLD(sis)	Comb. SLE (SLD Danno sism.) 62	SI
63	SLD(sis)	Comb. SLE (SLD Danno sism.) 63	SI
64	SLD(sis)	Comb. SLE (SLD Danno sism.) 64	SI
65	SLD(sis)	Comb. SLE (SLD Danno sism.) 65	SI
66	SLD(sis)	Comb. SLE (SLD Danno sism.) 66	SI
67	SLD(sis)	Comb. SLE (SLD Danno sism.) 67	SI
68	SLD(sis)	Comb. SLE (SLD Danno sism.) 68	SI
69	SLE(r)	Comb. SLE(rara) 69	
70	SLE(r)	Comb. SLE(rara) 70	
71	SLE(f)	Comb. SLE(freq.) 71	
72	SLE(f)	Comb. SLE(freq.) 72	
73	SLE(p)	Comb. SLE(perm.) 73	
74	SLE(p)	Comb. SLE(perm.) 74	

Cmb	CDC 1/15...	CDC 2/16...	CDC 3/17...	CDC 4/18...	CDC 5/19...	CDC 6/20...	CDC 7/21...	CDC 8/22...	CDC 9/23...	CDC 10/24...	CDC 11/25...	CDC 12/26...	CDC 13/27...	CDC 14/28...
1	1.30	1.30	1.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.30	
2	1.30	1.30	1.30	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.30	
3	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	
4	1.00	1.00	1.00	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	
5	1.00	1.00	1.00	0.60	-1.00	0.0	-0.30	0.0	0.0	0.0	0.0	0.0	1.00	
6	1.00	1.00	1.00	0.60	-1.00	0.0	0.30	0.0	0.0	0.0	0.0	0.0	1.00	
7	1.00	1.00	1.00	0.60	1.00	0.0	-0.30	0.0	0.0	0.0	0.0	0.0	1.00	
8	1.00	1.00	1.00	0.60	1.00	0.0	0.30	0.0	0.0	0.0	0.0	0.0	1.00	
9	1.00	1.00	1.00	0.60	-1.00	0.0	0.0	-0.30	0.0	0.0	0.0	0.0	1.00	
10	1.00	1.00	1.00	0.60	-1.00	0.0	0.0	0.30	0.0	0.0	0.0	0.0	1.00	
11	1.00	1.00	1.00	0.60	1.00	0.0	0.0	-0.30	0.0	0.0	0.0	0.0	1.00	
12	1.00	1.00	1.00	0.60	1.00	0.0	0.0	0.30	0.0	0.0	0.0	0.0	1.00	
13	1.00	1.00	1.00	0.60	0.0	-1.00	-0.30	0.0	0.0	0.0	0.0	0.0	1.00	
14	1.00	1.00	1.00	0.60	0.0	-1.00	0.30	0.0	0.0	0.0	0.0	0.0	1.00	
15	1.00	1.00	1.00	0.60	0.0	1.00	-0.30	0.0	0.0	0.0	0.0	0.0	1.00	
16	1.00	1.00	1.00	0.60	0.0	1.00	0.30	0.0	0.0	0.0	0.0	0.0	1.00	
17	1.00	1.00	1.00	0.60	0.0	-1.00	0.0	-0.30	0.0	0.0	0.0	0.0	1.00	
18	1.00	1.00	1.00	0.60	0.0	-1.00	0.0	0.30	0.0	0.0	0.0	0.0	1.00	
19	1.00	1.00	1.00	0.60	0.0	1.00	0.0	-0.30	0.0	0.0	0.0	0.0	1.00	
20	1.00	1.00	1.00	0.60	0.0	1.00	0.0	0.30	0.0	0.0	0.0	0.0	1.00	
21	1.00	1.00	1.00	0.60	-0.30	0.0	-1.00	0.0	0.0	0.0	0.0	0.0	1.00	
22	1.00	1.00	1.00	0.60	-0.30	0.0	1.00	0.0	0.0	0.0	0.0	0.0	1.00	
23	1.00	1.00	1.00	0.60	0.30	0.0	-1.00	0.0	0.0	0.0	0.0	0.0	1.00	
24	1.00	1.00	1.00	0.60	0.30	0.0	1.00	0.0	0.0	0.0	0.0	0.0	1.00	
25	1.00	1.00	1.00	0.60	0.0	-0.30	-1.00	0.0	0.0	0.0	0.0	0.0	1.00	
26	1.00	1.00	1.00	0.60	0.0	-0.30	1.00	0.0	0.0	0.0	0.0	0.0	1.00	
27	1.00	1.00	1.00	0.60	0.0	0.30	-1.00	0.0	0.0	0.0	0.0	0.0	1.00	
28	1.00	1.00	1.00	0.60	0.0	0.30	1.00	0.0	0.0	0.0	0.0	0.0	1.00	
29	1.00	1.00	1.00	0.60	-0.30	0.0	0.0	-1.00	0.0	0.0	0.0	0.0	1.00	
30	1.00	1.00	1.00	0.60	-0.30	0.0	0.0	1.00	0.0	0.0	0.0	0.0	1.00	
31	1.00	1.00	1.00	0.60	0.30	0.0	0.0	-1.00	0.0	0.0	0.0	0.0	1.00	
32	1.00	1.00	1.00	0.60	0.30	0.0	0.0	1.00	0.0	0.0	0.0	0.0	1.00	
33	1.00	1.00	1.00	0.60	0.0	-0.30	0.0	-1.00	0.0	0.0	0.0	0.0	1.00	
34	1.00	1.00	1.00	0.60	0.0	-0.30	0.0	1.00	0.0	0.0	0.0	0.0	1.00	
35	1.00	1.00	1.00	0.60	0.0	0.30	0.0	-1.00	0.0	0.0	0.0	0.0	1.00	
36	1.00	1.00	1.00	0.60	0.0	0.30	0.0	1.00	0.0	0.0	0.0	0.0	1.00	
37	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	-1.00	0.0	-0.30	0.0	1.00	
38	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	-1.00	0.0	0.30	0.0	1.00	
39	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	1.00	0.0	-0.30	0.0	1.00	
40	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	1.00	0.0	0.30	0.0	1.00	
41	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	-1.00	0.0	0.0	-0.30	1.00	
42	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	-1.00	0.0	0.0	0.30	1.00	
43	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	1.00	0.0	0.0	-0.30	1.00	
44	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.30	1.00	
45	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	-1.00	-0.30	0.0	1.00	
46	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	-1.00	0.30	0.0	1.00	
47	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	1.00	-0.30	0.0	1.00	
48	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	1.00	0.30	0.0	1.00	
49	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	-0.30	1.00	
50	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.30	1.00	
51	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	1.00	0.0	-0.30	1.00	

Cmb	CDC 1/15...	CDC 2/16...	CDC 3/17...	CDC 4/18...	CDC 5/19...	CDC 6/20...	CDC 7/21...	CDC 8/22...	CDC 9/23...	CDC 10/24...	CDC 11/25...	CDC 12/26...	CDC 13/27...	CDC 14/28...
52	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.30	1.00	
53	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	-0.30	0.0	-1.00	0.0	1.00	
54	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	-0.30	0.0	1.00	0.0	1.00	
55	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.30	0.0	-1.00	0.0	1.00	
56	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.30	0.0	1.00	0.0	1.00	
57	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	-0.30	-1.00	0.0	1.00	
58	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	-0.30	1.00	0.0	1.00	
59	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	0.30	-1.00	0.0	1.00	
60	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	0.30	1.00	0.0	1.00	
61	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	-1.00	1.00	
62	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	1.00	1.00	
63	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.30	0.0	0.0	-1.00	1.00	
64	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.30	0.0	0.0	1.00	1.00	
65	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	-1.00	1.00	
66	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	1.00	1.00	
67	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	0.30	0.0	-1.00	1.00	
68	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	0.30	0.0	1.00	1.00	
69	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	
70	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	
71	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	
72	1.00	1.00	1.00	0.70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	
73	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	
74	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	

AZIONE SISMICA

VALUTAZIONE DELL' AZIONE SISMICA

L'azione sismica sulle costruzioni è valutata a partire dalla "pericolosità sismica di base", in condizioni ideali di sito di riferimento rigido con superficie topografica orizzontale.
Allo stato attuale, la pericolosità sismica su reticolo di riferimento nell'intervallo di riferimento è fornita dai dati pubblicati sul sito http://esse1.mi.ingv.it/. Per punti non coincidenti con il reticolo di riferimento e periodi di ritorno non contemplati direttamente si opera come indicato nell' allegato alle NTC (rispettivamente media pesata e interpolazione).

L' azione sismica viene definita in relazione ad un periodo di riferimento Vr che si ricava, per ciascun tipo di costruzione, moltiplicandone la vita nominale per il coefficiente d'uso (vedi tabella Parametri della struttura). Fissato il periodo di riferimento Vr e la probabilità di superamento Pver associata a ciascuno degli stati limite considerati, si ottiene il periodo di ritorno Tr e i relativi parametri di pericolosità sismica (vedi tabella successiva):
ag: accelerazione orizzontale massima del terreno;
Fo: valore massimo del fattore di amplificazione dello spettro in accelerazione orizzontale;
T*c: periodo di inizio del tratto a velocità costante dello spettro in accelerazione orizzontale;

Parametri della struttura					
Classe d'uso	Vita Vn [anni]	Coeff. Uso	Periodo Vr [anni]	Tipo di suolo	Categoria topografica
III	50.0	1.5	75.0	B	T1

Per la struttura in esame si sono adottati i parametri di pericolosità sismica da analisi di Risposta Sismica locale; si sono adottati i parametri spettrali riportati nelle seguenti tabelle; i parametri consentono la definizione degli spettri elastici come previsto al cap. 3.2 delle norme tecniche:
lo spettro di risposta elastico in accelerazione della componente orizzontale del moto sismico, Se, è definito dalle seguenti espressioni:

$$0 \le T < T_B \qquad S_e(T) = a_g \cdot S \cdot \eta \cdot F_o \cdot \left[\frac{T}{T_B} + \frac{1}{\eta \cdot F_o}\left(1 - \frac{T}{T_B}\right)\right]$$

$$T_B \le T < T_C \qquad S_e(T) = a_g \cdot S \cdot \eta \cdot F_o$$

$$T_C \le T < T_D \qquad S_e(T) = a_g \cdot S \cdot \eta \cdot F_o \cdot \left(\frac{T_C}{T}\right)$$

$$T_D \le T \qquad S_e(T) = a_g \cdot S \cdot \eta \cdot F_o \cdot \left(\frac{T_C \cdot T_D}{T^2}\right)$$

Lo spettro di risposta elastico in accelerazione della componente verticale del moto sismico, Sve, è definito dalle espressioni:

$$0 \le T < T_B \qquad S_{ve}(T) = a_g \cdot S \cdot \eta \cdot F_v \cdot \left[\frac{T}{T_B} + \frac{1}{\eta \cdot F_o}\left(1 - \frac{T}{T_B}\right)\right]$$

$$T_B \le T < T_C \qquad S_{ve}(T) = a_g \cdot S \cdot \eta \cdot F_v$$

$$T_C \le T < T_D \qquad S_{ve}(T) = a_g \cdot S \cdot \eta \cdot F_v \cdot \left(\frac{T_C}{T}\right)$$

$$T_D \le T \qquad S_{ve}(T) = a_g \cdot S \cdot \eta \cdot F_v \cdot \left(\frac{T_C \cdot T_D}{T^2}\right)$$

I valori di S_S, T_B, T_C e T_D, sono riportati nella seguenteTabella

Categoria di sottosuolo	S_S	T_B	T_C	T_D
A, B, C, D, E	1,0	0,05 s	0,15 s	1,0 s

S è il coefficiente che tiene conto della categoria di sottosuolo e delle condizioni topografiche mediante la relazione seguente S = Ss*St (3.2.3); nel caso di RSL i valori sono unitari
Fo è il fattore che quantifica l'amplificazione spettrale massima, su sito in esame
Fv è il fattore che quantifica l'amplificazione spettrale massima verticale, in termini di accelerazione orizzontale massima del terreno ag su sito in esame
Tb è il periodo corrispondente all'inizio del tratto dello spettro ad accelerazione costante.
Tc è il periodo corrispondente all'inizio del tratto dello spettro a velocità costante.
Td è il periodo corrispondente all'inizio del tratto dello spettro a spostamento costante.

Simbologia adottata nelle tabelle

Se(t)	Accelerazioni dello spettro di input
Tr	Periodo di ritorno
Tmin	Valore minore tra i tre periodi di vibrazione dell'edificio con massa partecipante più elevata
2Tmax	Valore maggiore tra i tre periodi di vibrazione dell'edificio con massa partecipante più elevata moltiplicato per due
Integrale RSL	Integrale dello spettro di risposta sismica locale valutato nell'intervallo compreso tra Tmin e 2Tmax
Integrale NTC*1.2	Integrale dello spettro da normativa amplificato del 20% valutato nell'intervallo compreso tra Tmin e 2Tmax
Rapporto	Rapporto tra Integrale RSL e Integrale NTC*1.2;
Esito confronto RSL vs NTC	- Possibile l'uso dello spettro NTC se Rapporto minore di 1 e RSL < NTC*1.3 - Non ammesso l'uso dello spettro NTC se RSL ≥ NTC*1.3 e Rapporto maggiore di 1 - Non ammesso l'uso dello spettro NTC (30% superato) se RSL ≥ NTC*1.3 - Non ammasso l'uso dello spettro NTC (rapporto integrali) se Rapporto maggiore di 1
Se(t) RSL	Accelerazioni dello spettro di risposta sismica locale
Se(t) NTC*1.3	Accelerazioni dello spettro da normativa amplificate del 30%
Confronto ord.55	Confronto tra lo spettro di risposta sismica locale e lo spettro da normativa amplificato del 30% nell'intervallo compreso tra Tmin e 2Tmax secondo l'Ordinanza n. 55 – 24/04/2018: - Non richiesto (ad di fuori dell'intervallo compreso tra Tmin e 2Tmax); - RSL <= NTC*1.3; - RSL > NTC*1.3
Esito confronto RSL vs NTC (0.7 A)	Se lo spettro di risposta sismica locale è minore del 70% dello spettro da normativa non è consentito l'uso dello spettro di risposta sismica locale (7.2.6 NTC 2018): - Possibile l'uso dello spettro RSL; - Non ammesso l'uso di RSL (0.7 non superato).
Se(t) NTC*0.7 suolo tipo A	70% delle Accelerazioni dello spettro da normativa valutato per categoria A di sottosuolo
Confronto NTC	Confronto tra lo spettro di risposta sismica locale e il 70% dello spettro da normativa: - RSL >= NTC_A*0.7; - RSL < NTC_A*0.7

A seguire sono riportati i confronti tra pericolosità sismica RSL e NTC come previsto da Ordinanza n.55 – 24/04/2018 e NTC (7.2.6)

Id nodo	Longitudine	Latitudine	Distanza
			Km
Loc.	16.152	38.968	
41444	16.123	38.953	3.008
41445	16.187	38.952	3.505
41223	16.189	39.002	4.927
41222	16.125	39.003	4.513

SL	Pver	Tr	ag	Fo	T*c
		Anni	g		sec
SLO	81.0	45.0	0.156	2.105	0.320
SLD	63.0	75.0	0.203	2.115	0.337
SLV	10.0	712.0	0.555	2.224	0.412
SLC	5.0	1462.0	0.732	2.262	0.443

SL	ag	S	Fo	Fv	Tb	Tc	Td
	g				sec	sec	sec
SLO	0.156	1.000	2.105	1.123	0.107	0.320	2.224
SLD	0.203	1.000	2.115	1.287	0.112	0.337	2.413
SLV	0.555	1.000	2.224	2.237	0.137	0.412	3.820
SLC	0.732	1.000	2.262	2.612	0.148	0.443	4.527

Periodo di ritorno <Tr>	Accelerazione max <ag>	Amplificazione <Fo>	Inizio v=costante <T*c>
	[g]		[s]
30	0.125	2.119	0.297
50	0.165	2.101	0.326
72	0.199	2.113	0.336
101	0.235	2.127	0.347
140	0.275	2.150	0.357
201	0.326	2.166	0.367
475	0.472	2.213	0.388
975	0.630	2.232	0.431
2475	0.889	2.302	0.460

Confronto spettri RSL vs NTC	
Tmin	0.100
2Tmax	0.700
Integrale RSL	0.540
Integrale NTC*1.2	0.449
Rapporto	1.202
Esito confronto	Non ammesso l'uso dello spettro NTC

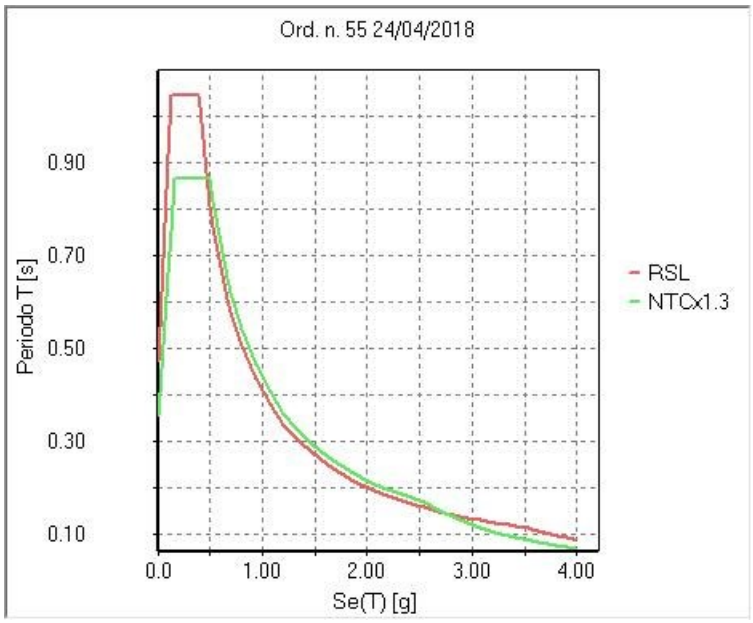


Fig. 1

Periodo	Se(t) RSL	Se(t) NTC*1.3	Confronto ord.55
[s]	[g]	[g]	
0.000	0.472	0.355	Non richiesto
0.100	0.915	0.660	RSL > NTC*1.3
0.129	1.045	0.750	RSL > NTC*1.3
0.167	1.045	0.866	RSL > NTC*1.3
0.264	1.045	0.866	RSL > NTC*1.3
0.388	1.045	0.866	RSL > NTC*1.3
0.398	1.018	0.866	RSL > NTC*1.3
0.502	0.807	0.866	RSL <= NTC*1.3
0.532	0.761	0.816	RSL <= NTC*1.3
0.667	0.608	0.652	RSL <= NTC*1.3
0.700	0.579	0.621	RSL <= NTC*1.3
0.801	0.506	0.542	Non richiesto
0.935	0.433	0.465	Non richiesto
1.070	0.379	0.406	Non richiesto
1.204	0.337	0.361	Non richiesto
1.338	0.303	0.325	Non richiesto
1.473	0.275	0.295	Non richiesto
1.607	0.252	0.270	Non richiesto
1.741	0.233	0.250	Non richiesto
1.876	0.216	0.232	Non richiesto
2.010	0.202	0.216	Non richiesto
2.145	0.189	0.203	Non richiesto
2.279	0.178	0.191	Non richiesto
2.413	0.168	0.180	Non richiesto
2.530	0.160	0.172	Non richiesto
2.548	0.159	0.169	Non richiesto
2.682	0.151	0.153	Non richiesto
2.816	0.144	0.139	Non richiesto

Periodo	Se(t) RSL	Se(t) NTC*1.3	Confronto ord.55
2.951	0.137	0.126	Non richiesto
3.085	0.131	0.116	Non richiesto
3.219	0.126	0.106	Non richiesto
3.354	0.121	0.098	Non richiesto
3.488	0.116	0.090	Non richiesto
3.508	0.115	0.089	Non richiesto
3.529	0.114	0.088	Non richiesto
3.549	0.112	0.087	Non richiesto
3.570	0.111	0.086	Non richiesto
3.590	0.110	0.085	Non richiesto
3.611	0.108	0.084	Non richiesto
3.631	0.107	0.083	Non richiesto
3.652	0.106	0.082	Non richiesto
3.672	0.105	0.082	Non richiesto
3.693	0.104	0.081	Non richiesto
3.713	0.103	0.080	Non richiesto
3.734	0.101	0.079	Non richiesto
3.754	0.100	0.078	Non richiesto
3.775	0.099	0.077	Non richiesto
3.795	0.098	0.076	Non richiesto
3.816	0.097	0.076	Non richiesto
3.836	0.096	0.075	Non richiesto
3.857	0.095	0.074	Non richiesto
3.877	0.094	0.073	Non richiesto
3.898	0.093	0.072	Non richiesto
3.918	0.092	0.072	Non richiesto
3.939	0.091	0.071	Non richiesto
3.959	0.090	0.070	Non richiesto
3.980	0.089	0.069	Non richiesto
4.000	0.088	0.069	Non richiesto

Confronto spettro RSL vs NTC (0.7 A)	
Esito confronto	Possibile l'uso dello spettro RSL

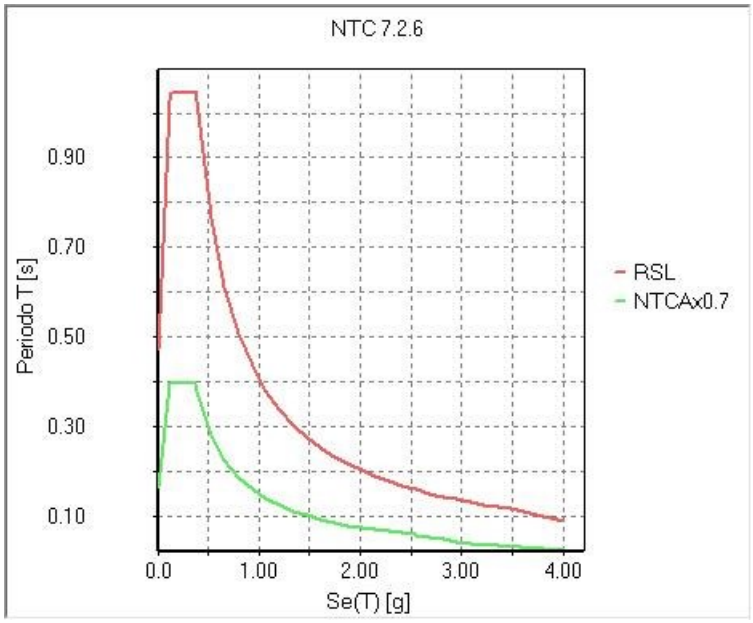


Fig. 2

Periodo	Se(t) RSL	Se(t) NTC*0.7 suolo tipo A	Confronto NTC
[s]	[g]	[g]	
0.000	0.472	0.163	RSL >= NTC_A*0.7
0.125	1.025	0.397	RSL >= NTC_A*0.7
0.129	1.045	0.397	RSL >= NTC_A*0.7
0.260	1.045	0.397	RSL >= NTC_A*0.7
0.375	1.045	0.397	RSL >= NTC_A*0.7
0.388	1.045	0.384	RSL >= NTC_A*0.7
0.394	1.029	0.378	RSL >= NTC_A*0.7
0.529	0.767	0.282	RSL >= NTC_A*0.7
0.663	0.611	0.225	RSL >= NTC_A*0.7
0.798	0.508	0.187	RSL >= NTC_A*0.7
0.932	0.435	0.160	RSL >= NTC_A*0.7
1.067	0.380	0.140	RSL >= NTC_A*0.7
1.201	0.337	0.124	RSL >= NTC_A*0.7
1.336	0.303	0.112	RSL >= NTC_A*0.7
1.470	0.276	0.101	RSL >= NTC_A*0.7
1.605	0.253	0.093	RSL >= NTC_A*0.7
1.739	0.233	0.086	RSL >= NTC_A*0.7
1.874	0.216	0.080	RSL >= NTC_A*0.7
2.008	0.202	0.074	RSL >= NTC_A*0.7
2.143	0.189	0.070	RSL >= NTC_A*0.7
2.277	0.178	0.065	RSL >= NTC_A*0.7
2.412	0.168	0.062	RSL >= NTC_A*0.7
2.530	0.160	0.059	RSL >= NTC_A*0.7
2.546	0.159	0.058	RSL >= NTC_A*0.7
2.681	0.151	0.052	RSL >= NTC_A*0.7
2.815	0.144	0.048	RSL >= NTC_A*0.7
2.950	0.137	0.043	RSL >= NTC_A*0.7
3.084	0.131	0.040	RSL >= NTC_A*0.7
3.219	0.126	0.036	RSL >= NTC_A*0.7
3.353	0.121	0.034	RSL >= NTC_A*0.7
3.488	0.116	0.031	RSL >= NTC_A*0.7
3.508	0.115	0.031	RSL >= NTC_A*0.7

Periodo	Se(t) RSL	Se(t) NTC*0.7 suolo tipo A	Confronto NTC
3.529	0.114	0.030	RSL >= NTC_A*0.7
3.549	0.112	0.030	RSL >= NTC_A*0.7
3.570	0.111	0.030	RSL >= NTC_A*0.7
3.590	0.110	0.029	RSL >= NTC_A*0.7
3.611	0.108	0.029	RSL >= NTC_A*0.7
3.631	0.107	0.029	RSL >= NTC_A*0.7
3.652	0.106	0.028	RSL >= NTC_A*0.7
3.672	0.105	0.028	RSL >= NTC_A*0.7
3.693	0.104	0.028	RSL >= NTC_A*0.7
3.713	0.103	0.027	RSL >= NTC_A*0.7
3.734	0.101	0.027	RSL >= NTC_A*0.7
3.754	0.100	0.027	RSL >= NTC_A*0.7
3.775	0.099	0.026	RSL >= NTC_A*0.7
3.795	0.098	0.026	RSL >= NTC_A*0.7
3.816	0.097	0.026	RSL >= NTC_A*0.7
3.836	0.096	0.026	RSL >= NTC_A*0.7
3.857	0.095	0.025	RSL >= NTC_A*0.7
3.877	0.094	0.025	RSL >= NTC_A*0.7
3.898	0.093	0.025	RSL >= NTC_A*0.7
3.918	0.092	0.025	RSL >= NTC_A*0.7
3.939	0.091	0.024	RSL >= NTC_A*0.7
3.959	0.090	0.024	RSL >= NTC_A*0.7
3.980	0.089	0.024	RSL >= NTC_A*0.7
4.000	0.088	0.024	RSL >= NTC_A*0.7

Periodo di ritorno <Tr>	Esito confronto
30	Possibile l'uso dello spettro RSL
50	Possibile l'uso dello spettro RSL
72	Possibile l'uso dello spettro RSL
101	Possibile l'uso dello spettro RSL
140	Possibile l'uso dello spettro RSL
201	Possibile l'uso dello spettro RSL
475	Possibile l'uso dello spettro RSL
975	Possibile l'uso dello spettro RSL
2475	Possibile l'uso dello spettro RSL

RISULTATI ANALISI SISMICHE

LEGENDA TABELLA ANALISI SISMICHE

Il programma consente l'analisi di diverse configurazioni sismiche.

Sono previsti, infatti, i seguenti casi di carico:

9. Esk caso di carico sismico con analisi statica equivalente
10. Edk caso di carico sismico con analisi dinamica

Ciascun caso di carico è caratterizzato da un angolo di ingresso e da una configurazione di masse determinante la forza sismica complessiva (si rimanda al capitolo relativo ai casi di carico per chiarimenti inerenti questo aspetto).

Nella colonna Note, in funzione della norma in uso sono riportati i parametri fondamentali che caratterizzano l' azione sismica: in particolare possono essere presenti i seguenti valori:

Angolo di ingresso	Angolo di ingresso dell'azione sismica orizzontale
Fattore di importanza	Fattore di importanza dell'edificio, in base alla categoria di appartenenza
Zona sismica	Zona sismica
Accelerazione ag	Accelerazione orizzontale massima sul suolo
Categoria suolo	Categoria di profilo stratigrafico del suolo di fondazione
Fattore q	Fattore di struttura/di comportamento. Dipendente dalla tipologia strutturale
Fattore di sito S	Fattore dipendente dalla stratigrafia e dal profilo topografico
Classe di duttilità CD	Classe di duttilità della struttura – "A" duttilità alta, "B" duttilità bassa
Fattore riduz. SLD	Fattore di riduzione dello spettro elastico per lo stato limite di danno
Periodo proprio T1	Periodo proprio di vibrazione della struttura
Coefficiente Lambda	Coefficiente dipendente dal periodo proprio T1 e dal numero di piani della struttura
Ordinata spettro Sd(T1)	Valore delle ordinate dello spettro di progetto per lo stato limite ultimo, componente orizzontale (verticale Svd)
Ordinata spettro Se(T1)	Valore delle ordinate dello spettro elastico ridotta del fattore SLD per lo stato limite di danno, componente orizzontale (verticale Sve)
Ordinata spettro S (Tb-Tc)	Valore dell' ordinata dello spettro in uso nel tratto costante
numero di modi considerati	Numero di modi di vibrare della struttura considerati nell'analisi dinamica

Per ciascun caso di carico sismico viene riportato l'insieme di dati sotto riportati (le masse sono espresse in unità di forza):

a) **analisi sismica statica equivalente**:
   - quota, posizione del centro di applicazione e azione orizzontale risultante, posizione del baricentro delle rigidezze, rapporto r/Ls (per strutture a nucleo), indici di regolarità e/r secondo EC8 4.2.3.2
   - azione sismica complessiva

b) **analisi sismica dinamica con spettro di risposta**:
   - quota, posizione del centro di massa e massa risultante, posizione del baricentro delle rigidezze, rapporto r/Ls (per strutture a nucleo) **,** indici di regolarità e/r secondo EC8 4.2.3.2
   - frequenza, periodo, accelerazione spettrale, massa eccitata nelle tre direzioni globali per tutti i modi

- massa complessiva ed aliquota di massa complessiva eccitata.

Per ciascuna combinazione sismica definita SLD o SLO viene riportato il livello di deformazione etaT (dr) degli elementi strutturali verticali. Per semplicità di consultazione il livello è espresso anche in unità 1000*etaT/h da confrontare direttamente con i valori forniti nella norma (es. 5 per edifici con tamponamenti collegati rigidamente alla struttura, 10.0 per edifici con tamponamenti collegati elasticamente, 3 per edifici in muratura ordinaria, 4 per edifici in muratura armata).

Qualora si applichi il D.M. 96 (vedi NOTA sul capitolo "normativa di riferimento") l'analisi sismica dinamica può essere comprensiva di sollecitazione verticale contemporanea a quella orizzontale, nel qual caso è effettuata una sovrapposizione degli effetti in ragione della radice dei quadrati degli effetti stessi. Per ciascuna combinazione sismica - analisi effettuate con il D.M. 96 (vedi NOTA sul capitolo "normativa di riferimento") - viene riportato il livello di deformazione etaT, etaP e etaD degli elementi strutturali verticali. Per semplicità di consultazione il livello è espresso in unità 1000*etaT/h da confrontare direttamente con il valore 2 o 4 per la verifica.

Per gli edifici sismicamente isolati si riportano di seguito le verifiche condotte sui dispositivi di isolamento. Le verifiche sono effettuate secondo la circolare n.7/2019 del C.S.LL.PP nelle combinazioni in SLC come previsto dal DM 17-01-2018. Per ogni combinazione è riportato il codice di verifica ed i valori utilizzati per la verifica: spostamento dE, area ridotta e dimensione A2, azione verticale, deformazioni di taglio dell'elastomero e tensioni nell'acciaio.
Qualora si applichi l'Ordinanza 3274 e s.m.i. le verifiche sono eseguite in accordo con l'allegato 10.A.
In particolare la tabella, per ogni combinazione di calcolo, riporta:

Nodo	Nodo di appoggio dell' isolatore
Cmb	Combinazione oggetto della verifica
Verif.	Codice di verifica ok – verifica positiva , NV – verifica negativa, ND – verifica non completata
dE	Spostamento relativo tra le due facce (amplificato del 20% per Ordinanza 3274 e smi) combinato con la regola del 30%
Ang fi	Angolo utilizzato per il calcolo dell' area ridotta Ar (per dispositivi circolari)
V	Azione verticale agente
Ar	Area ridotta efficace
Dim A2	Dimensione utile per il calcolo della deformazione per rotazione
Sig s	Tensione nell' inserto in acciaio
Gam c(a,s,t)	Deformazioni di taglio dell' elestomero
Vcr	Carico critico per instabilità

Affinché la verifica sia positiva deve essere:

1) V > 0
2) Sig s < fyk
3) Gam t < 5
4) Gam s < Gam * (caratteristica dell' elastomero)
5) Gam s < 2
6) V < 0.5 Vcr

Calcolo dei fattori di comportamento secondo il D.M. 17/01/2018

La costruzione, nuova, è caratterizzata da non regolarità sia in pianta sia in altezza ed è progettata in classe di duttilità media (CD"B").

Parametri fattore in direzione x e y

Sistema costruttivo: calcestruzzo

Tipologia strutturale: altre tipologie

Valore base fattore q_0 = 3.450

Fattore di regolarità K_R = 0.8

Fattore dissipativo $q_D = q_0 \cdot K_R$ = 2.760

Fattori di comportamento utilizzati

	Dissipativi
q SLU x	2.760
q SLU y	2.760
q SLU z	1.500

CDC	Tipo	Sigla Id	Note
5	Edk	CDC=Ed (dinamico SLU) alfa=0.0 (ecc. +)	
			categoria suolo: B
			fattore di sito S = 1.000
			ordinata spettro (tratto Tb-Tc) = 0.447 g
			angolo di ingresso:0.0
			eccentricità aggiuntiva: positiva
			periodo proprio T1: 0.566 sec.
			fattore q: 2.760
			fattore per spost. mu d: 2.760
			classe di duttilità CD: B
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
835.00	6.160e+04	427.50	190.00	0.0	-19.00	427.50	190.00	1.859	0.0	0.0
428.00	6.735e+04	427.50	190.00	0.0	-19.00	427.50	190.00	1.859	0.0	0.0
Risulta	1.289e+05									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	1.519	0.658	0.280	22.37	1.73e-02	1.163e+05	90.2	5.77e-04	0.0	0.0	0.0
2	1.766	0.566	0.325	1.126e+05	87.3	20.61	1.60e-02	0.01	1.06e-05	0.0	0.0
3	2.598	0.385	0.447	169.69	0.1	0.04	3.07e-05	5.79	4.49e-03	0.0	0.0
4	6.231	0.160	0.447	0.10	7.38e-05	1.46e-03	1.13e-06	1.289e+05	100.0	0.0	0.0
5	7.083	0.141	0.447	46.82	3.63e-02	1.142e+04	8.9	1.86e-04	0.0	0.0	0.0
6	7.559	0.132	0.451	1.566e+04	12.1	30.89	2.40e-02	1.65	1.28e-03	0.0	0.0
7	8.828	0.113	0.466	18.58	1.44e-02	0.54	4.15e-04	30.66	2.38e-02	0.0	0.0
8	9.378	0.107	0.471	479.34	0.4	1.77	1.37e-03	2.44	1.89e-03	0.0	0.0
9	11.268	0.089	0.485	0.77	6.00e-04	1126.15	0.9	3.02e-03	2.34e-06	0.0	0.0
Risulta				1.289e+05		1.289e+05		1.289e+05			
In percentuale				100.00		99.99		100.00			

CDC	Tipo	Sigla Id	Note
6	Edk	CDC=Ed (dinamico SLU) alfa=0.0 (ecc. -)	
			categoria suolo: B
			fattore di sito S = 1.000
			ordinata spettro (tratto Tb-Tc) = 0.447 g
			angolo di ingresso:0.0
			eccentricità aggiuntiva: negativa
			periodo proprio T1: 0.566 sec.
			fattore q: 2.760
			fattore per spost. mu d: 2.760
			classe di duttilità CD: B
			numero di modi considerati: 9

CDC	Tipo	Sigla Id	Note
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
835.00	6.160e+04	427.50	190.00	0.0	19.00	427.50	190.00	1.859	0.0	0.0
428.00	6.735e+04	427.50	190.00	0.0	19.00	427.50	190.00	1.859	0.0	0.0
Risulta	1.289e+05									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	1.519	0.658	0.280	22.89	1.78e-02	1.163e+05	90.2	5.03e-04	0.0	0.0	0.0
2	1.766	0.566	0.325	1.125e+05	87.3	21.22	1.65e-02	5.39e-03	4.18e-06	0.0	0.0
3	2.598	0.385	0.447	172.73	0.1	7.89e-03	6.12e-06	5.82	4.51e-03	0.0	0.0
4	6.231	0.160	0.447	0.03	2.65e-05	1.85e-03	1.43e-06	1.289e+05	100.0	0.0	0.0
5	7.083	0.141	0.447	46.69	3.62e-02	1.142e+04	8.9	7.00e-03	5.43e-06	0.0	0.0
6	7.560	0.132	0.451	1.566e+04	12.1	30.82	2.39e-02	1.05	8.18e-04	0.0	0.0
7	8.827	0.113	0.466	17.36	1.35e-02	0.54	4.18e-04	31.20	2.42e-02	0.0	0.0
8	9.379	0.107	0.471	478.07	0.4	1.76	1.37e-03	2.20	1.70e-03	0.0	0.0
9	11.268	0.089	0.485	0.78	6.02e-04	1126.15	0.9	3.10e-03	2.41e-06	0.0	0.0
Risulta				1.289e+05		1.289e+05		1.289e+05			
In percentuale				100.00		99.99		100.00			

CDC	Tipo	Sigla Id	Note
7	Edk	CDC=Ed (dinamico SLU) alfa=90.00 (ecc. +)	
			categoria suolo: B
			fattore di sito S = 1.000
			ordinata spettro (tratto Tb-Tc) = 0.447 g
			angolo di ingresso:90.00
			eccentricità aggiuntiva: positiva
			periodo proprio T1: 0.661 sec.
			fattore q: 2.760
			fattore per spost. mu d: 2.760
			classe di duttilità CD: B
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
835.00	6.160e+04	427.50	190.00	42.75	0.0	427.50	190.00	1.859	0.0	0.0
428.00	6.735e+04	427.50	190.00	42.75	0.0	427.50	190.00	1.859	0.0	0.0
Risulta	1.289e+05									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	1.513	0.661	0.279	21.33	1.65e-02	1.160e+05	90.0	0.01	8.32e-06	0.0	0.0
2	1.768	0.566	0.326	1.127e+05	87.4	19.52	1.51e-02	6.09e-04	0.0	0.0	0.0
3	2.618	0.382	0.447	0.02	1.19e-05	334.41	0.3	5.92	4.59e-03	0.0	0.0
4	6.231	0.160	0.447	6.23e-03	4.83e-06	0.75	5.83e-04	1.289e+05	100.0	0.0	0.0
5	7.008	0.143	0.447	32.26	2.50e-02	1.100e+04	8.5	16.92	1.31e-02	0.0	0.0
6	7.570	0.132	0.451	1.574e+04	12.2	19.32	1.50e-02	1.43e-03	1.11e-06	0.0	0.0
7	9.007	0.111	0.468	1.08	8.38e-04	472.29	0.4	29.06	2.25e-02	0.0	0.0
8	9.313	0.107	0.471	423.16	0.3	3.83	2.97e-03	0.03	2.32e-05	0.0	0.0

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
9	11.290	0.089	0.485	0.77	5.99e-04	1079.04	0.8	0.04	2.84e-05	0.0	0.0
Risulta				1.289e+05		1.289e+05		1.289e+05			
In percentuale				100.00		99.99		100.00			

CDC	Tipo	Sigla Id	Note
8	Edk	CDC=Ed (dinamico SLU) alfa=90.00 (ecc. -)	
			categoria suolo: B
			fattore di sito S = 1.000
			ordinata spettro (tratto Tb-Tc) = 0.447 g
			angolo di ingresso:90.00
			eccentricità aggiuntiva: negativa
			periodo proprio T1: 0.661 sec.
			fattore q: 2.760
			fattore per spost. mu d: 2.760
			classe di duttilità CD: B
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
835.00	6.160e+04	427.50	190.00	-42.75	0.0	427.50	190.00	1.859	0.0	0.0
428.00	6.735e+04	427.50	190.00	-42.75	0.0	427.50	190.00	1.859	0.0	0.0
Risulta	1.289e+05									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	1.514	0.661	0.279	21.04	1.63e-02	1.160e+05	90.0	0.02	1.74e-05	0.0	0.0
2	1.768	0.566	0.326	1.127e+05	87.4	19.18	1.49e-02	3.53e-04	0.0	0.0	0.0
3	2.618	0.382	0.447	0.06	4.39e-05	324.40	0.3	5.87	4.55e-03	0.0	0.0
4	6.231	0.160	0.447	2.01e-03	1.56e-06	0.90	6.98e-04	1.289e+05	100.0	0.0	0.0
5	7.008	0.143	0.447	31.81	2.47e-02	1.100e+04	8.5	17.54	1.36e-02	0.0	0.0
6	7.570	0.132	0.451	1.574e+04	12.2	18.83	1.46e-02	0.09	6.76e-05	0.0	0.0
7	9.006	0.111	0.468	1.46	1.13e-03	471.99	0.4	28.89	2.24e-02	0.0	0.0
8	9.313	0.107	0.471	422.94	0.3	4.04	3.14e-03	8.15e-03	6.32e-06	0.0	0.0
9	11.290	0.089	0.485	0.78	6.04e-04	1079.38	0.8	0.09	6.99e-05	0.0	0.0
Risulta				1.289e+05		1.289e+05		1.289e+05			
In percentuale				100.00		99.99		100.00			

CDC	Tipo	Sigla Id	Note
9	Edk	CDC=Ed (dinamico SLD) alfa=0.0 (ecc. +)	
			categoria suolo: B
			fattore di sito S = 1.000
			ordinata spettro (tratto Tb-Tc) = 0.430 g
			angolo di ingresso:0.0
			eccentricità aggiuntiva: positiva
			periodo proprio T1: 0.566 sec.
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
835.00	6.160e+04	427.50	190.00	0.0	-19.00	427.50	190.00	1.859	0.0	0.0
428.00	6.735e+04	427.50	190.00	0.0	-19.00	427.50	190.00	1.859	0.0	0.0
Risulta	1.289e+05									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	1.519	0.658	0.220	22.37	1.73e-02	1.163e+05	90.2	5.77e-04	0.0	0.0	0.0
2	1.766	0.566	0.256	1.126e+05	87.3	20.61	1.60e-02	0.01	1.06e-05	0.0	0.0
3	2.598	0.385	0.376	169.69	0.1	0.04	3.07e-05	5.79	4.49e-03	0.0	0.0
4	6.231	0.160	0.430	0.10	7.38e-05	1.46e-03	1.13e-06	1.289e+05	100.0	0.0	0.0
5	7.083	0.141	0.430	46.82	3.63e-02	1.142e+04	8.9	1.86e-04	0.0	0.0	0.0
6	7.559	0.132	0.430	1.566e+04	12.1	30.89	2.40e-02	1.65	1.28e-03	0.0	0.0
7	8.828	0.113	0.430	18.58	1.44e-02	0.54	4.15e-04	30.66	2.38e-02	0.0	0.0
8	9.378	0.107	0.419	479.34	0.4	1.77	1.37e-03	2.44	1.89e-03	0.0	0.0
9	11.268	0.089	0.383	0.77	6.00e-04	1126.15	0.9	3.02e-03	2.34e-06	0.0	0.0
Risulta				1.289e+05		1.289e+05		1.289e+05			
In percentuale				100.00		99.99		100.00			

CDC	Tipo	Sigla Id	Note
10	Edk	CDC=Ed (dinamico SLD) alfa=0.0 (ecc. -)	
			categoria suolo: B
			fattore di sito S = 1.000
			ordinata spettro (tratto Tb-Tc) = 0.430 g
			angolo di ingresso:0.0
			eccentricità aggiuntiva: negativa
			periodo proprio T1: 0.566 sec.
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
835.00	6.160e+04	427.50	190.00	0.0	19.00	427.50	190.00	1.859	0.0	0.0
428.00	6.735e+04	427.50	190.00	0.0	19.00	427.50	190.00	1.859	0.0	0.0
Risulta	1.289e+05									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	1.519	0.658	0.220	22.89	1.78e-02	1.163e+05	90.2	5.03e-04	0.0	0.0	0.0
2	1.766	0.566	0.256	1.125e+05	87.3	21.22	1.65e-02	5.39e-03	4.18e-06	0.0	0.0
3	2.598	0.385	0.376	172.73	0.1	7.89e-03	6.12e-06	5.82	4.51e-03	0.0	0.0
4	6.231	0.160	0.430	0.03	2.65e-05	1.85e-03	1.43e-06	1.289e+05	100.0	0.0	0.0
5	7.083	0.141	0.430	46.69	3.62e-02	1.142e+04	8.9	7.00e-03	5.43e-06	0.0	0.0
6	7.560	0.132	0.430	1.566e+04	12.1	30.82	2.39e-02	1.05	8.18e-04	0.0	0.0
7	8.827	0.113	0.430	17.36	1.35e-02	0.54	4.18e-04	31.20	2.42e-02	0.0	0.0
8	9.379	0.107	0.419	478.07	0.4	1.76	1.37e-03	2.20	1.70e-03	0.0	0.0
9	11.268	0.089	0.383	0.78	6.02e-04	1126.15	0.9	3.10e-03	2.41e-06	0.0	0.0
Risulta				1.289e+05		1.289e+05		1.289e+05			
In percentuale				100.00		99.99		100.00			

CDC	Tipo	Sigla Id	Note
11	Edk	CDC=Ed (dinamico SLD) alfa=90.00 (ecc. +)	

CDC	Tipo	Sigla Id	Note
			categoria suolo: B
			fattore di sito S = 1.000
			ordinata spettro (tratto Tb-Tc) = 0.430 g
			angolo di ingresso:90.00
			eccentricità aggiuntiva: positiva
			periodo proprio T1: 0.661 sec.
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
835.00	6.160e+04	427.50	190.00	42.75	0.0	427.50	190.00	1.859	0.0	0.0
428.00	6.735e+04	427.50	190.00	42.75	0.0	427.50	190.00	1.859	0.0	0.0
Risulta	1.289e+05									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	1.513	0.661	0.219	21.33	1.65e-02	1.160e+05	90.0	0.01	8.32e-06	0.0	0.0
2	1.768	0.566	0.256	1.127e+05	87.4	19.52	1.51e-02	6.09e-04	0.0	0.0	0.0
3	2.618	0.382	0.379	0.02	1.19e-05	334.41	0.3	5.92	4.59e-03	0.0	0.0
4	6.231	0.160	0.430	6.23e-03	4.83e-06	0.75	5.83e-04	1.289e+05	100.0	0.0	0.0
5	7.008	0.143	0.430	32.26	2.50e-02	1.100e+04	8.5	16.92	1.31e-02	0.0	0.0
6	7.570	0.132	0.430	1.574e+04	12.2	19.32	1.50e-02	1.43e-03	1.11e-06	0.0	0.0
7	9.007	0.111	0.428	1.08	8.38e-04	472.29	0.4	29.06	2.25e-02	0.0	0.0
8	9.313	0.107	0.420	423.16	0.3	3.83	2.97e-03	0.03	2.32e-05	0.0	0.0
9	11.290	0.089	0.382	0.77	5.99e-04	1079.04	0.8	0.04	2.84e-05	0.0	0.0
Risulta				1.289e+05		1.289e+05		1.289e+05			
In percentuale				100.00		99.99		100.00			

CDC	Tipo	Sigla Id	Note
12	Edk	CDC=Ed (dinamico SLD) alfa=90.00 (ecc. -)	
			categoria suolo: B
			fattore di sito S = 1.000
			ordinata spettro (tratto Tb-Tc) = 0.430 g
			angolo di ingresso:90.00
			eccentricità aggiuntiva: negativa
			periodo proprio T1: 0.661 sec.
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
835.00	6.160e+04	427.50	190.00	-42.75	0.0	427.50	190.00	1.859	0.0	0.0
428.00	6.735e+04	427.50	190.00	-42.75	0.0	427.50	190.00	1.859	0.0	0.0
Risulta	1.289e+05									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	1.514	0.661	0.219	21.04	1.63e-02	1.160e+05	90.0	0.02	1.74e-05	0.0	0.0
2	1.768	0.566	0.256	1.127e+05	87.4	19.18	1.49e-02	3.53e-04	0.0	0.0	0.0
3	2.618	0.382	0.379	0.06	4.39e-05	324.40	0.3	5.87	4.55e-03	0.0	0.0
4	6.231	0.160	0.430	2.01e-03	1.56e-06	0.90	6.98e-04	1.289e+05	100.0	0.0	0.0

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
5	7.008	0.143	0.430	31.81	2.47e-02	1.100e+04	8.5	17.54	1.36e-02	0.0	0.0
6	7.570	0.132	0.430	1.574e+04	12.2	18.83	1.46e-02	0.09	6.76e-05	0.0	0.0
7	9.006	0.111	0.428	1.46	1.13e-03	471.99	0.4	28.89	2.24e-02	0.0	0.0
8	9.313	0.107	0.420	422.94	0.3	4.04	3.14e-03	8.15e-03	6.32e-06	0.0	0.0
9	11.290	0.089	0.382	0.78	6.04e-04	1079.38	0.8	0.09	6.99e-05	0.0	0.0
Risulta				1.289e+05		1.289e+05		1.289e+05			
In percentuale				100.00		99.99		100.00			

Cmb	Pilas.	1000 etaT/h	etaT cm	inter. h cm	Pilas.	1000 etaT/h	etaT cm	inter. h cm	Pilas.	1000 etaT/h	etaT cm	inter. h cm
37	22	2.63	1.12	428.0	23	2.48	1.06	428.0	24	2.67	1.14	428.0
	25	2.52	1.08	428.0	26	2.76	1.18	428.0	27	2.61	1.12	428.0
	28	2.59	1.05	407.0	29	2.46	1.00	407.0	30	2.62	1.07	407.0
	31	2.49	1.02	407.0	32	2.70	1.10	407.0	33	2.58	1.05	407.0
38	22	2.66	1.14	428.0	23	2.64	1.13	428.0	24	2.66	1.14	428.0
	25	2.62	1.12	428.0	26	2.61	1.12	428.0	27	2.56	1.10	428.0
	28	2.61	1.06	407.0	29	2.59	1.05	407.0	30	2.61	1.06	407.0
	31	2.60	1.06	407.0	32	2.57	1.05	407.0	33	2.56	1.04	407.0
39	22	2.65	1.13	428.0	23	2.62	1.12	428.0	24	2.66	1.14	428.0
	25	2.62	1.12	428.0	26	2.61	1.12	428.0	27	2.57	1.10	428.0
	28	2.64	1.07	407.0	29	2.59	1.05	407.0	30	2.63	1.07	407.0
	31	2.57	1.05	407.0	32	2.57	1.05	407.0	33	2.52	1.03	407.0
40	22	2.61	1.12	428.0	23	2.48	1.06	428.0	24	2.66	1.14	428.0
	25	2.52	1.08	428.0	26	2.76	1.18	428.0	27	2.62	1.12	428.0
	28	2.60	1.06	407.0	29	2.44	1.00	407.0	30	2.63	1.07	407.0
	31	2.48	1.01	407.0	32	2.72	1.11	407.0	33	2.58	1.05	407.0
41	22	2.60	1.11	428.0	23	2.57	1.10	428.0	24	2.61	1.12	428.0
	25	2.57	1.10	428.0	26	2.66	1.14	428.0	27	2.61	1.12	428.0
	28	2.57	1.05	407.0	29	2.55	1.04	407.0	30	2.57	1.05	407.0
	31	2.54	1.04	407.0	32	2.61	1.06	407.0	33	2.59	1.06	407.0
42	22	2.76	1.18	428.0	23	2.62	1.12	428.0	24	2.71	1.16	428.0
	25	2.57	1.10	428.0	26	2.64	1.13	428.0	27	2.48	1.06	428.0
	28	2.69	1.10	407.0	29	2.58	1.05	407.0	30	2.66	1.08	407.0
	31	2.55	1.04	407.0	32	2.59	1.06	407.0	33	2.48	1.01	407.0
43	22	2.74	1.17	428.0	23	2.61	1.12	428.0	24	2.71	1.16	428.0
	25	2.57	1.10	428.0	26	2.64	1.13	428.0	27	2.48	1.06	428.0
	28	2.73	1.11	407.0	29	2.58	1.05	407.0	30	2.68	1.09	407.0
	31	2.53	1.03	407.0	32	2.59	1.06	407.0	33	2.44	0.99	407.0
44	22	2.59	1.11	428.0	23	2.57	1.10	428.0	24	2.61	1.12	428.0
	25	2.58	1.10	428.0	26	2.66	1.14	428.0	27	2.62	1.12	428.0
	28	2.57	1.05	407.0	29	2.53	1.03	407.0	30	2.58	1.05	407.0
	31	2.53	1.03	407.0	32	2.63	1.07	407.0	33	2.59	1.05	407.0
45	22	2.62	1.12	428.0	23	2.66	1.14	428.0	24	2.58	1.10	428.0
	25	2.61	1.12	428.0	26	2.57	1.10	428.0	27	2.59	1.11	428.0
	28	2.59	1.05	407.0	29	2.63	1.07	407.0	30	2.53	1.03	407.0
	31	2.58	1.05	407.0	32	2.53	1.03	407.0	33	2.58	1.05	407.0
46	22	2.49	1.06	428.0	23	2.64	1.13	428.0	24	2.57	1.10	428.0
	25	2.71	1.16	428.0	26	2.62	1.12	428.0	27	2.75	1.18	428.0
	28	2.44	0.99	407.0	29	2.60	1.06	407.0	30	2.53	1.03	407.0
	31	2.68	1.09	407.0	32	2.58	1.05	407.0	33	2.73	1.11	407.0
47	22	2.47	1.06	428.0	23	2.63	1.13	428.0	24	2.57	1.10	428.0
	25	2.71	1.16	428.0	26	2.62	1.12	428.0	27	2.75	1.18	428.0
	28	2.47	1.01	407.0	29	2.59	1.05	407.0	30	2.54	1.04	407.0
	31	2.66	1.08	407.0	32	2.58	1.05	407.0	33	2.69	1.10	407.0
48	22	2.61	1.12	428.0	23	2.66	1.14	428.0	24	2.57	1.10	428.0
	25	2.61	1.12	428.0	26	2.57	1.10	428.0	27	2.60	1.11	428.0
	28	2.59	1.06	407.0	29	2.61	1.06	407.0	30	2.54	1.04	407.0
	31	2.57	1.04	407.0	32	2.54	1.04	407.0	33	2.57	1.05	407.0
...												
68	31	3.09	1.26	407.0	32	2.88	1.17	407.0	33	2.93	1.19	407.0
Cmb		**1000 etaT/h**										
		3.38										

RISULTATI NODALI

LEGENDA RISULTATI NODALI

Il controllo dei risultati delle analisi condotte, per quanto concerne i nodi strutturali, è possibile in relazione alle tabelle sottoriportate.

Una prima tabella riporta infatti per ogni nodo e per ogni combinazione (o caso di carico) gli spostamenti nodali.

Una seconda tabella riporta per ogni nodo a cui sia associato un vincolo rigido e/o elastico o una fondazione speciale e per ogni combinazione (o caso di carico) i valori delle azioni esercitate dalla struttura sui vincoli (reazioni vincolari cambiate di segno).

Una terza tabella, infine riassume per ogni nodo le sei combinazioni in cui si attingono i valori minimi e massimi della reazione Fz, della reazione Mx e della reazione My.

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
		cm	cm	cm			
1	1	-1.31e-03	-2.02e-05	-1.63	2.22e-06	-7.41e-05	0.0
1	2	-1.51e-03	-7.77e-06	-1.75	3.13e-06	-8.64e-05	0.0
1	11	-0.36	0.15	-1.96	-7.58e-04	-1.88e-03	-1.36e-04
1	20	-0.31	-0.15	-2.23	6.68e-04	-1.98e-03	1.38e-04
1	36	-0.07	-0.38	-1.98	2.37e-03	-7.37e-04	1.81e-04
1	43	-0.28	0.11	-1.82	-5.95e-04	-1.49e-03	-1.09e-04
1	52	-0.25	-0.12	-2.03	5.24e-04	-1.57e-03	1.11e-04
1	68	-0.05	-0.30	-1.83	1.86e-03	-5.93e-04	1.45e-04
1	69	-1.01e-03	-1.55e-05	-1.25	1.71e-06	-5.70e-05	0.0
1	70	-1.14e-03	-7.25e-06	-1.33	2.32e-06	-6.52e-05	0.0
1	71	-1.01e-03	-1.55e-05	-1.25	1.71e-06	-5.70e-05	0.0
1	72	-1.10e-03	-9.74e-06	-1.31	2.13e-06	-6.27e-05	0.0
1	73	-1.01e-03	-1.55e-05	-1.25	1.71e-06	-5.70e-05	0.0
1	74	-1.09e-03	-1.06e-05	-1.30	2.07e-06	-6.19e-05	0.0
2	2	1.42e-04	2.01e-04	-1.73	-1.10e-05	0.0	0.0
2	10	0.36	-0.10	-1.40	5.88e-04	1.84e-03	1.33e-04
2	24	-0.13	-0.30	-1.70	2.15e-03	-5.12e-04	-1.70e-04
2	27	-0.07	0.31	-0.89	-2.14e-03	-5.97e-04	1.70e-04
2	42	0.28	-0.08	-1.38	4.60e-04	1.44e-03	1.06e-04
2	56	-0.10	-0.24	-1.61	1.69e-03	-4.03e-04	-1.36e-04
2	59	-0.05	0.24	-0.97	-1.68e-03	-4.70e-04	1.36e-04
2	70	1.07e-04	1.50e-04	-1.32	-8.15e-06	0.0	0.0
2	72	1.02e-04	1.41e-04	-1.30	-7.61e-06	0.0	0.0
2	74	9.99e-05	1.38e-04	-1.29	-7.43e-06	0.0	0.0
3	1	1.07e-03	-1.43e-04	-1.63	0.0	5.93e-05	0.0
3	2	1.24e-03	-9.75e-05	-1.75	-3.83e-06	6.72e-05	0.0
3	10	0.36	-0.03	-2.22	7.03e-04	2.02e-03	1.34e-04
3	14	0.31	-0.14	-2.23	7.30e-04	2.03e-03	-1.31e-04
3	24	-0.13	-0.37	-1.51	2.28e-03	-4.22e-04	-1.68e-04
3	42	0.28	-0.03	-2.02	5.52e-04	1.60e-03	1.08e-04
3	46	0.25	-0.11	-2.03	5.73e-04	1.61e-03	-1.06e-04
3	56	-0.10	-0.29	-1.46	1.79e-03	-3.22e-04	-1.35e-04
3	69	8.23e-04	-1.10e-04	-1.25	0.0	4.56e-05	0.0
3	70	9.36e-04	-7.96e-05	-1.33	-2.55e-06	5.09e-05	0.0
3	71	8.23e-04	-1.10e-04	-1.25	0.0	4.56e-05	0.0
3	72	9.02e-04	-8.87e-05	-1.31	-1.78e-06	4.93e-05	0.0
3	73	8.23e-04	-1.10e-04	-1.25	0.0	4.56e-05	0.0
3	74	8.91e-04	-9.17e-05	-1.30	-1.52e-06	4.88e-05	0.0
4	2	-1.14e-03	-7.86e-05	-1.74	9.47e-06	-6.39e-05	0.0
4	11	-0.31	0.14	-2.23	-7.23e-04	-2.03e-03	-1.32e-04
4	15	-0.36	0.03	-2.21	-6.98e-04	-2.02e-03	1.34e-04
4	36	-0.13	-0.37	-1.09	2.28e-03	-5.22e-04	1.67e-04
4	43	-0.25	0.11	-2.03	-5.66e-04	-1.61e-03	-1.06e-04
4	47	-0.28	0.03	-2.02	-5.47e-04	-1.60e-03	1.08e-04
4	68	-0.10	-0.29	-1.14	1.79e-03	-4.21e-04	1.34e-04
4	70	-8.59e-04	-5.39e-05	-1.33	6.86e-06	-4.84e-05	0.0
4	72	-8.27e-04	-4.12e-05	-1.31	6.02e-06	-4.68e-05	0.0
4	74	-8.17e-04	-3.69e-05	-1.30	5.73e-06	-4.63e-05	0.0

...

111	74	4.89e-05	-1.88e-04	-1.25	-2.27e-04	3.89e-05	0.0
Nodo		**Traslazione X**	**Traslazione Y**	**Traslazione Z**	**Rotazione X**	**Rotazione Y**	**Rotazione Z**
		-3.04	-3.83	-2.49	-3.48e-03	-2.94e-03	-7.72e-04
		3.04	3.83	-0.07	4.06e-03	3.20e-03	4.78e-04

Nodo	**Cmb**	**Azione X**	**Azione Y**	**Azione Z**	**Azione RX**	**Azione RY**	**Azione RZ**
		daN	daN	daN	daN cm	daN cm	daN cm

Nodo	**Azione X**	**Azione Y**	**Azione Z**	**Azione RX**	**Azione RY**	**Azione RZ**

Nodo	**Cmb**	**Azione X**	**Azione Y**	**Azione Z**	**Azione RX**	**Azione RY**	**Azione RZ**
		daN	daN	daN	daN cm	daN cm	daN cm

RISULTATI OPERE DI FONDAZIONE

LEGENDA RISULTATI OPERE DI FONDAZIONE

Il controllo dei risultati delle analisi condotte, per quanto concerne le opere di fondazione, è possibile in relazione alle tabelle sotto riportate.

La prima tabella è riferita alle fondazioni tipo palo e plinto su pali.
Per questo tipo di fondazione vengono riportate le sei componenti di sollecitazione (espresse nel riferimento globale della struttura) per ogni palo componente l'opera.
In particolare viene riportato:

Nodo	numero del nodo a cui è applicato il plinto
Tipo	codice corrispondente al nome assegnato al tipo di plinto di fondazione: 3) palo singolo (*PALO*) 4) plinto su palo 5) plinto su due pali (*PL.2P*) 6) plinto su tre pali (*PL.3P*) 7) plinto su quattro pali (*PL.4P*) 8) plinto rettangolare su cinque pali (*PL.5P.R*) 9) plinto pentagonale su cinque pali (*PL.5P*) 10) plinto su sei pali (*PL.6P*)
Palo	numero del palo
Comb.	combinazione di carico in cui si verificano le sei componenti di sollecitazione.
Quota	quota assoluta della sezione del palo per cui si riportano le sei componenti di sollecitazione.

L'azione Fz (corrispondente allo sforzo normale nel palo) è costante poiché il peso del palo stesso non è considerato nella modellazione.

La seconda tabella è riferita alle fondazioni tipo plinto su suolo elastico.
Per questo tipo di fondazione vengono riportate le pressioni nei quattro vertici dell'impronta sul terreno.
In particolare viene riportato:

Nodo		numero del nodo a cui è applicato il plinto
Tipo		Codice identificativo del nome assegnato al plinto
area		area dell'impronta del plinto
Wink O	**Wink V**	coefficienti di Winkler (orizzontale e verticale) adottati
Comb		Combinazione di carico in cui si verificano i valori riportati
Pt (P1 P2 P3 P4)		valori di pressione nei vertici

La terza tabella è riferita alle fondazioni tipo platea su suolo elastico.
Per questo tipo di fondazione vengono riportate le pressioni in ogni vertice (nodo) degli elementi costituenti la platea.

La quarta tabella è riferita alle fondazioni tipo trave su suolo elastico.
Per questo tipo di fondazione vengono riportate le pressioni alle estremità dell'elemento e la massima (in valore assoluto) pressione lungo lo sviluppo dell'elemento.
Vengono inoltre riportati, con funzione statistica, i valori massimo e minimo delle pressioni che compaiono nella tabella.

Nodo (G) **Pt 1/12** **Pt 2/13** **Pt 3...** **Pt 4...**

	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2
1	-0.24	-0.30	-0.28	-0.18	-0.18	-0.18					
2	-0.24	-0.23	-0.22	-0.18	-0.18	-0.18					
3	-0.24	-0.30	-0.28	-0.18	-0.18	-0.18					
4	-0.24	-0.30	-0.28	-0.18	-0.18	-0.18					
5	-0.24	-0.23	-0.22	-0.18	-0.18	-0.18					
6	-0.24	-0.30	-0.28	-0.18	-0.18	-0.18					
19	-0.24	-0.29	-0.27	-0.18	-0.18	-0.18					
20	-0.24	-0.27	-0.25	-0.18	-0.18	-0.18					
21	-0.24	-0.27	-0.25	-0.18	-0.18	-0.18					
22	-0.24	-0.29	-0.26	-0.18	-0.18	-0.18					
23	-0.24	-0.26	-0.24	-0.18	-0.18	-0.18					
24	-0.24	-0.29	-0.27	-0.18	-0.18	-0.18					
25	-0.24	-0.27	-0.25	-0.18	-0.18	-0.18					
26	-0.24	-0.27	-0.25	-0.18	-0.18	-0.18					
27	-0.24	-0.24	-0.22	-0.18	-0.18	-0.18					
28	-0.24	-0.25	-0.23	-0.18	-0.18	-0.18					
29	-0.24	-0.23	-0.22	-0.18	-0.18	-0.18					
30	-0.24	-0.24	-0.23	-0.18	-0.18	-0.18					
31	-0.24	-0.25	-0.23	-0.18	-0.18	-0.18					
32	-0.24	-0.21	-0.20	-0.18	-0.18	-0.18					
33	-0.24	-0.24	-0.23	-0.18	-0.18	-0.18					
34	-0.24	-0.20	-0.20	-0.18	-0.18	-0.18					
35	-0.24	-0.21	-0.20	-0.18	-0.18	-0.18					
36	-0.24	-0.24	-0.23	-0.18	-0.18	-0.18					
37	-0.24	-0.20	-0.20	-0.18	-0.18	-0.18					
38	-0.24	-0.18	-0.18	-0.18	-0.18	-0.18					
39	-0.24	-0.20	-0.20	-0.18	-0.18	-0.18					
40	-0.24	-0.21	-0.20	-0.18	-0.18	-0.18					
41	-0.24	-0.24	-0.23	-0.18	-0.18	-0.18					
42	-0.24	-0.20	-0.20	-0.18	-0.18	-0.18					
43	-0.24	-0.21	-0.20	-0.18	-0.18	-0.18					
44	-0.24	-0.24	-0.23	-0.18	-0.18	-0.18					
45	-0.24	-0.24	-0.23	-0.18	-0.18	-0.18					
46	-0.24	-0.25	-0.23	-0.18	-0.18	-0.18					
47	-0.24	-0.23	-0.22	-0.18	-0.18	-0.18					
48	-0.24	-0.24	-0.22	-0.18	-0.18	-0.18					
49	-0.24	-0.25	-0.23	-0.18	-0.18	-0.18					
50	-0.24	-0.27	-0.25	-0.18	-0.18	-0.18					
51	-0.24	-0.27	-0.25	-0.18	-0.18	-0.18					
52	-0.24	-0.26	-0.24	-0.18	-0.18	-0.18					
53	-0.24	-0.27	-0.25	-0.18	-0.18	-0.18					
54	-0.24	-0.27	-0.25	-0.18	-0.18	-0.18					
55	-0.24	-0.29	-0.27	-0.18	-0.18	-0.18					
56	-0.24	-0.29	-0.26	-0.18	-0.18	-0.18					
57	-0.24	-0.29	-0.27	-0.18	-0.18	-0.18					
58	-0.23	-0.28	-0.26	-0.18	-0.18	-0.17					
59	-0.24	-0.31	-0.28	-0.18	-0.18	-0.18					
60	-0.23	-0.27	-0.25	-0.18	-0.17	-0.17					
...											
111	-0.23	-0.34	-0.30	-0.17	-0.17	-0.17					
Nodo (G)	**Pt 1/12**	**Pt 2/13**	**Pt 3...**	**Pt 4...**							
	-0.35										
	-0.17										

Elem.	**Cmb**	**Pt ini**	**Pt fin**	**Pt max**	**Cmb**	**Pt ini**	**Pt fin**	**Pt max**	**Cmb**	**Pt ini**	**Pt fin**	**Pt max**
		daN/cm2	daN/cm2	daN/cm2		daN/cm2	daN/cm2	daN/cm2		daN/cm2	daN/cm2	daN/cm2
1	2	-1.29	-1.29	-1.29	17	-1.68	-1.62	-1.68	49	-1.52	-1.48	-1.52
	70	-0.98	-0.98	-0.98	72	-0.96	-0.96	-0.96	74	-0.96	-0.96	-0.96
2	2	-1.27	-1.27	-1.27	21	-1.26	-1.11	-1.26	53	-1.19	-1.08	-1.19
	70	-0.97	-0.97	-0.97	72	-0.95	-0.95	-0.95	74	-0.95	-0.95	-0.95
3	2	-1.28	-1.28	-1.28	13	-1.67	-1.62	-1.67	45	-1.52	-1.48	-1.52
	70	-0.98	-0.98	-0.98	72	-0.96	-0.96	-0.96	74	-0.96	-0.96	-0.96
4	2	-1.20	-1.20	-1.20	17	-1.55	-1.40	-1.55	49	-1.41	-1.29	-1.41
	70	-0.92	-0.91	-0.92	72	-0.90	-0.90	-0.90	74	-0.90	-0.89	-0.90
5	2	-1.19	-1.19	-1.19	25	-1.21	-1.25	-1.25	57	-1.14	-1.17	-1.17
	70	-0.91	-0.91	-0.91	72	-0.89	-0.89	-0.89	74	-0.89	-0.89	-0.89
6	2	-1.20	-1.20	-1.20	9	-1.54	-1.39	-1.54	41	-1.40	-1.29	-1.40
	70	-0.91	-0.91	-0.91	72	-0.90	-0.90	-0.90	74	-0.89	-0.89	-0.89
7	2	-1.19	-1.19	-1.19	21	-1.21	-1.25	-1.25	53	-1.14	-1.17	-1.17
	70	-0.91	-0.91	-0.91	72	-0.89	-0.89	-0.89	74	-0.89	-0.89	-0.89
34	2	-1.28	-1.28	-1.28	9	-1.62	-1.67	-1.67	41	-1.48	-1.52	-1.52
	70	-0.98	-0.98	-0.98	72	-0.96	-0.96	-0.96	74	-0.96	-0.95	-0.96
35	2	-1.27	-1.27	-1.27	29	-1.11	-1.26	-1.26	61	-1.08	-1.19	-1.19
	70	-0.97	-0.97	-0.97	72	-0.95	-0.95	-0.95	74	-0.95	-0.95	-0.95

36	2	-1.29	-1.29	-1.29	5	-1.62	-1.68	-1.68	37	-1.48	-1.52	-1.52
	70	-0.98	-0.98	-0.98	72	-0.96	-0.96	-0.96	74	-0.96	-0.96	-0.96
37	2	-1.20	-1.19	-1.20	17	-1.40	-1.26	-1.40	49	-1.29	-1.18	-1.29
	70	-0.91	-0.91	-0.91	72	-0.90	-0.89	-0.90	74	-0.89	-0.89	-0.89
38	2	-1.19	-1.19	-1.19	25	-1.25	-1.29	-1.29	57	-1.17	-1.21	-1.21
	70	-0.91	-0.91	-0.91	72	-0.89	-0.89	-0.89	74	-0.89	-0.89	-0.89
39	2	-1.20	-1.19	-1.20	9	-1.39	-1.25	-1.39	41	-1.29	-1.17	-1.29
	70	-0.91	-0.91	-0.91	72	-0.90	-0.89	-0.90	74	-0.89	-0.89	-0.89
40	2	-1.19	-1.19	-1.19	21	-1.25	-1.29	-1.29	53	-1.17	-1.21	-1.21
	70	-0.91	-0.91	-0.91	72	-0.89	-0.89	-0.89	74	-0.89	-0.89	-0.89
41	2	-1.28	-1.28	-1.28	9	-1.57	-1.62	-1.62	41	-1.44	-1.48	-1.48
	70	-0.98	-0.98	-0.98	72	-0.96	-0.96	-0.96	74	-0.96	-0.96	-0.96
42	2	-1.27	-1.27	-1.27	33	-0.96	-1.11	-1.11	65	-0.96	-1.08	-1.08
	70	-0.97	-0.97	-0.97	72	-0.95	-0.95	-0.95	74	-0.95	-0.95	-0.95
43	2	-1.28	-1.29	-1.29	5	-1.58	-1.62	-1.62	37	-1.44	-1.48	-1.48
	70	-0.98	-0.98	-0.98	72	-0.96	-0.96	-0.96	74	-0.96	-0.96	-0.96
44	2	-1.19	-1.19	-1.19	33	-1.29	-1.25	-1.29	65	-1.21	-1.17	-1.21
	70	-0.91	-0.91	-0.91	72	-0.89	-0.89	-0.89	74	-0.89	-0.89	-0.89
45	2	-1.19	-1.20	-1.20	13	-1.25	-1.40	-1.40	45	-1.17	-1.29	-1.29
	70	-0.91	-0.91	-0.91	72	-0.89	-0.90	-0.90	74	-0.89	-0.89	-0.89
46	2	-1.19	-1.19	-1.19	29	-1.29	-1.25	-1.29	61	-1.21	-1.17	-1.21
	70	-0.91	-0.91	-0.91	72	-0.89	-0.89	-0.89	74	-0.89	-0.89	-0.89
47	2	-1.19	-1.20	-1.20	5	-1.26	-1.40	-1.40	37	-1.18	-1.29	-1.29
	70	-0.91	-0.91	-0.91	72	-0.89	-0.90	-0.90	74	-0.89	-0.89	-0.89
48	2	-1.29	-1.28	-1.29	17	-1.62	-1.57	-1.62	49	-1.48	-1.44	-1.48
	70	-0.98	-0.98	-0.98	72	-0.96	-0.96	-0.96	74	-0.96	-0.96	-0.96
49	2	-1.27	-1.27	-1.27	21	-1.11	-0.96	-1.11	53	-1.08	-0.96	-1.08
	70	-0.97	-0.97	-0.97	72	-0.95	-0.95	-0.95	74	-0.95	-0.95	-0.95
50	2	-1.28	-1.28	-1.28	13	-1.62	-1.57	-1.62	45	-1.48	-1.44	-1.48
	70	-0.98	-0.98	-0.98	72	-0.96	-0.96	-0.96	74	-0.96	-0.96	-0.96
...												
54	70	-0.91	-0.92	-0.92	72	-0.90	-0.90	-0.90	74	-0.89	-0.90	-0.90
Elem.		**Pt ini**	**Pt fin**	**Pt max**		**Pt ini**	**Pt fin**	**Pt max**		**Pt ini**	**Pt fin**	**Pt max**
		-1.68										
		-0.89										

RISULTATI ELEMENTI TIPO TRAVE

LEGENDA RISULTATI ELEMENTI TIPO TRAVE

Il controllo dei risultati delle analisi condotte, per quanto concerne gli elementi tipo trave, è possibile in relazione alle tabelle sotto riportate.

Gli elementi vengono suddivisi in relazione alle proprietà in elementi:

- tipo **pilastro**
- tipo **trave in elevazione**
- tipo **trave in fondazione**

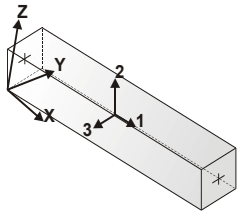
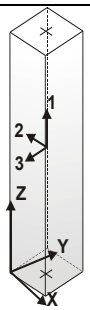
Per ogni elemento e per ogni combinazione (o caso di carico) vengono riportati i risultati più significativi.

Per gli elementi tipo *pilastro* sono riportati in tabella i seguenti valori:

Pilas.	numero dell'elemento pilastro
Cmb	combinazione in cui si verificano i valori riportati
M3 mx/mn	momento flettente in campata M3 max (prima riga) / min (seconda riga)
M2 mx/mn	momento flettente in campata M2 max (prima riga) / min (seconda riga)
D2/D3	freccia massima in direzione 2 (prima riga) / direzione 3 (seconda riga)
Q2/Q3	carico totale in direzione 2 (prima riga) / direzione 3 (seconda riga)
Pos.	ascissa del punto iniziale e finale dell'elemento
N, V2, ecc..	sei componenti di sollecitazione al piede ed in sommità dell'elemento

Per gli elementi tipo *trave in elevazione* sono riportati, oltre al numero dell'elemento, i medesimi risultati visti per i pilastri.

Per gli elementi tipo *trave in fondazione* (trave f.) sono riportati, oltre al numero dell'elemento, i medesimi risultati visti per i pilastri e la massima pressione sul terreno.

 orientamento elementi 2D non verticali	 orientamento elementi 2D verticali

Pilas.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
		daN cm	daN cm	cm	daN	cm	daN	daN	daN	daN cm	daN cm	daN cm
22	1	2.429e+04	3.001e+04	3.13e-03	0.0	0.0	-2.269e+04	-157.64	44.57	-312.88	1.093e+04	2.429e+04
		-4.318e+04	1.093e+04	-8.58e-03	0.0	428.0	-2.018e+04	-157.64	44.57	-312.88	3.001e+04	-4.318e+04
22	2	3.486e+04	2.710e+04	3.90e-03	0.0	0.0	-2.592e+04	-245.76	25.48	-572.13	1.619e+04	3.486e+04
		-7.033e+04	1.619e+04	-9.18e-03	0.0	428.0	-2.341e+04	-245.76	25.48	-572.13	2.710e+04	-7.033e+04
22	3	1.868e+04	2.308e+04	2.41e-03	0.0	0.0	-1.745e+04	-121.26	34.28	-240.67	8410.33	1.868e+04
		-3.322e+04	8410.33	-6.60e-03	0.0	428.0	-1.552e+04	-121.26	34.28	-240.67	2.308e+04	-3.322e+04
22	10	1.066e+06	7.265e+05	0.59	0.0	0.0	-1.246e+04	-3976.79	-2973.17	2.645e+04	7.265e+05	1.066e+06
		-6.399e+05	-5.461e+05	1.38	0.0	428.0	-1.053e+04	-3976.79	-2973.17	2.645e+04	-5.461e+05	-6.399e+05
22	11	5.518e+05	5.900e+05	-0.59	0.0	0.0	-2.503e+04	3663.76	3026.47	-2.713e+04	-7.054e+05	-1.020e+06
		-1.020e+06	-7.054e+05	-1.37	0.0	428.0	-2.310e+04	3663.76	3026.47	-2.713e+04	5.900e+05	5.518e+05
22	33	1.592e+06	6.147e+04	-1.78	0.0	0.0	-1687.14	1.051e+04	-172.51	-2.934e+04	6.147e+04	-2.918e+06
		-2.918e+06	-1.237e+04	0.33	0.0	428.0	238.86	1.051e+04	-172.51	-2.934e+04	-1.237e+04	1.592e+06
22	36	2.964e+06	5.620e+04	1.79	0.0	0.0	-3.580e+04	-1.083e+04	225.81	2.865e+04	-4.044e+04	2.964e+06
		-1.680e+06	-4.044e+04	-0.32	0.0	428.0	-3.387e+04	-1.083e+04	225.81	2.865e+04	5.620e+04	-1.680e+06
22	42	8.491e+05	5.760e+05	0.46	0.0	0.0	-1.371e+04	-3193.88	-2344.57	2.106e+04	5.760e+05	8.491e+05
		-5.224e+05	-4.276e+05	1.08	0.0	428.0	-1.179e+04	-3193.88	-2344.57	2.106e+04	-4.276e+05	-5.224e+05
22	43	4.343e+05	4.714e+05	-0.46	0.0	0.0	-2.377e+04	2880.86	2397.87	-2.175e+04	-5.550e+05	-8.033e+05
		-8.033e+05	-5.550e+05	-1.08	0.0	428.0	-2.185e+04	2880.86	2397.87	-2.175e+04	4.714e+05	4.343e+05
22	65	1.263e+06	5.124e+04	-1.40	0.0	0.0	-5277.80	8287.69	-133.16	-2.359e+04	5.124e+04	-2.296e+06
		-2.296e+06	-5748.37	0.26	0.0	428.0	-3351.80	8287.69	-133.16	-2.359e+04	-5748.37	1.263e+06
22	68	2.342e+06	4.959e+04	1.40	0.0	0.0	-3.221e+04	-8600.71	186.46	2.291e+04	-3.022e+04	2.342e+06
		-1.351e+06	-3.022e+04	-0.25	0.0	428.0	-3.028e+04	-8600.71	186.46	2.291e+04	4.959e+04	-1.351e+06
22	69	1.868e+04	2.308e+04	2.41e-03	0.0	0.0	-1.745e+04	-121.26	34.28	-240.67	8410.33	1.868e+04
		-3.322e+04	8410.33	-6.60e-03	0.0	428.0	-1.552e+04	-121.26	34.28	-240.67	2.308e+04	-3.322e+04
22	70	2.573e+04	2.114e+04	2.92e-03	0.0	0.0	-1.961e+04	-180.01	21.56	-413.51	1.191e+04	2.573e+04
		-5.132e+04	1.191e+04	-7.00e-03	0.0	428.0	-1.768e+04	-180.01	21.56	-413.51	2.114e+04	-5.132e+04
22	71	1.868e+04	2.308e+04	2.41e-03	0.0	0.0	-1.745e+04	-121.26	34.28	-240.67	8410.33	1.868e+04
		-3.322e+04	8410.33	-6.60e-03	0.0	428.0	-1.552e+04	-121.26	34.28	-240.67	2.308e+04	-3.322e+04
22	72	2.362e+04	2.172e+04	2.77e-03	0.0	0.0	-1.896e+04	-162.39	25.38	-361.66	1.086e+04	2.362e+04
		-4.589e+04	1.086e+04	-6.88e-03	0.0	428.0	-1.703e+04	-162.39	25.38	-361.66	2.172e+04	-4.589e+04
22	73	1.868e+04	2.308e+04	2.41e-03	0.0	0.0	-1.745e+04	-121.26	34.28	-240.67	8410.33	1.868e+04
		-3.322e+04	8410.33	-6.60e-03	0.0	428.0	-1.552e+04	-121.26	34.28	-240.67	2.308e+04	-3.322e+04
22	74	2.291e+04	2.192e+04	2.72e-03	0.0	0.0	-1.874e+04	-156.51	26.65	-344.38	1.051e+04	2.291e+04
		-4.408e+04	1.051e+04	-6.84e-03	0.0	428.0	-1.682e+04	-156.51	26.65	-344.38	2.192e+04	-4.408e+04
23	2	-2.065e+04	6.209e+04	5.32e-03	0.0	0.0	-2.452e+04	121.45	217.61	1301.77	-3.105e+04	-7.263e+04
		-7.263e+04	-3.105e+04	-7.12e-03	0.0	428.0	-2.201e+04	121.45	217.61	1301.77	6.209e+04	-2.065e+04
23	3	-2.436e+04	3.178e+04	3.86e-03	0.0	0.0	-1.660e+04	46.91	109.59	897.67	-1.513e+04	-4.444e+04
		-4.444e+04	-1.513e+04	-3.35e-03	0.0	428.0	-1.467e+04	46.91	109.59	897.67	3.178e+04	-2.436e+04
23	4	-1.335e+04	5.256e+04	4.16e-03	0.0	0.0	-1.954e+04	107.38	184.73	1032.47	-2.651e+04	-5.930e+04
		-5.930e+04	-2.651e+04	-6.12e-03	0.0	428.0	-1.761e+04	107.38	184.73	1032.47	5.256e+04	-1.335e+04
23	17	1.174e+06	3.352e+05	-1.38	0.0	0.0	-1.094e+04	7933.43	1669.73	-2.620e+04	-3.796e+05	-2.226e+06
		-2.226e+06	-3.796e+05	-0.60	0.0	428.0	-9018.10	7933.43	1669.73	-2.620e+04	3.352e+05	1.174e+06
23	20	2.125e+06	3.402e+05	1.37	0.0	0.0	-2.460e+04	-7791.24	-1390.44	2.811e+04	3.402e+05	2.125e+06
		-1.214e+06	-2.550e+05	0.61	0.0	428.0	-2.268e+04	-7791.24	-1390.44	2.811e+04	-2.550e+05	-1.214e+06
23	30	8.897e+04	9.129e+05	-0.36	0.0	0.0	-92.89	938.86	-3775.26	3.532e+04	9.129e+05	-3.133e+05
		-3.133e+05	-7.032e+05	1.77	0.0	428.0	1833.11	938.86	-3775.26	3.532e+04	-7.032e+05	8.897e+04
23	31	2.126e+05	7.834e+05	0.36	0.0	0.0	-3.546e+04	-796.66	4054.55	-3.341e+04	-9.523e+05	2.126e+05
		-1.289e+05	-9.523e+05	-1.77	0.0	428.0	-3.353e+04	-796.66	4054.55	-3.341e+04	7.834e+05	-1.289e+05
...												
33	74	-8.702e+04	-3.433e+04	5.09e-03	0.0	407.0	-7868.77	644.53	-209.31	-2512.10	-3.433e+04	1.753e+05

Pilas.	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	N	V 2	V 3	T
	-2.961e+06	-9.626e+05	-1.79	0.0	-4.579e+04	-1.083e+04	-4097.87	-4.089e+04
	2.964e+06	9.608e+05	1.79	0.0	1833.11	1.081e+04	4105.31	3.597e+04

Trave	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
		daN cm	daN cm	cm	daN	cm	daN	daN	daN	daN cm	daN cm	daN cm
8	1	1.846e+05	225.45	-0.02	-9434.04	0.0	2600.00	4969.86	-7.30	-7255.07	225.45	-3.116e+05
		-3.116e+05	-2549.01	-2.22e-03	0.0	380.0	2600.00	-4464.18	-7.30	-7255.07	-2549.01	-2.155e+05
8	2	2.610e+05	-149.09	-0.03	-1.309e+04	0.0	3766.18	6894.97	-7.15	-7462.39	-149.09	-4.273e+05
		-4.273e+05	-2866.70	-2.11e-03	0.0	380.0	3766.18	-6194.20	-7.15	-7462.39	-2866.70	-2.942e+05
8	3	1.420e+05	173.42	-0.01	-7256.96	0.0	2000.00	3822.97	-5.62	-5580.82	173.42	-2.397e+05
		-2.397e+05	-1960.78	-1.71e-03	0.0	380.0	2000.00	-3433.98	-5.62	-5580.82	-1960.78	-1.658e+05
8	8	1.912e+05	1854.22	0.24	-8719.01	0.0	-363.00	6471.86	-24.43	-4.569e+04	1854.22	-8.436e+05
		-8.436e+05	-1.170e+04	0.12	0.0	380.0	-363.00	-2247.15	-24.43	-4.569e+04	-1.170e+04	1.194e+05
8	33	1.776e+06	1.077e+04	-0.91	-8719.01	0.0	1.305e+04	-5123.83	-31.47	6333.73	1.077e+04	1.776e+06
		-1.828e+06	-4570.57	0.18	0.0	380.0	1.305e+04	-1.384e+04	-31.47	6333.73	-4570.57	-1.828e+06
8	36	1.433e+06	394.87	0.92	-8719.01	0.0	-8122.02	1.431e+04	20.36	-1.766e+04	-1.073e+04	-2.348e+06
		-2.348e+06	-1.073e+04	-0.18	0.0	380.0	-8122.02	5590.85	20.36	-1.766e+04	394.87	1.433e+06
8	56	7.828e+05	-5625.21	0.69	-8719.01	0.0	-3926.77	1.041e+04	20.42	814.96	-5625.21	-1.556e+06
		-1.556e+06	-1.082e+04	0.14	0.0	380.0	-3926.77	1688.76	20.42	814.96	-1.082e+04	7.828e+05

8	65	1.333e+06	8779.50	-0.72	-8719.01	0.0	1.079e+04	-3036.26	-25.90	3308.90	8779.50	1.333e+06
		-1.477e+06	-4371.63	0.14	0.0	380.0	1.079e+04	-1.176e+04	-25.90	3308.90	-4371.63	-1.477e+06
8	68	1.083e+06	195.93	0.73	-8719.01	0.0	-5852.13	1.222e+04	14.79	-1.464e+04	-8732.29	-1.905e+06
		-1.905e+06	-8732.29	-0.15	0.0	380.0	-5852.13	3503.29	14.79	-1.464e+04	195.93	1.083e+06
8	69	1.420e+05	173.42	-0.01	-7256.96	0.0	2000.00	3822.97	-5.62	-5580.82	173.42	-2.397e+05
		-2.397e+05	-1960.78	-1.71e-03	0.0	380.0	2000.00	-3433.98	-5.62	-5580.82	-1960.78	-1.658e+05
8	70	1.929e+05	-76.27	-0.02	-9693.71	0.0	2777.45	5106.37	-5.52	-5719.04	-76.27	-3.168e+05
		-3.168e+05	-2172.57	-1.64e-03	0.0	380.0	2777.45	-4587.33	-5.52	-5719.04	-2172.57	-2.182e+05
8	71	1.420e+05	173.42	-0.01	-7256.96	0.0	2000.00	3822.97	-5.62	-5580.82	173.42	-2.397e+05
		-2.397e+05	-1960.78	-1.71e-03	0.0	380.0	2000.00	-3433.98	-5.62	-5580.82	-1960.78	-1.658e+05
8	72	1.776e+05	-1.36	-0.02	-8962.68	0.0	2544.22	4721.35	-5.55	-5677.57	-1.36	-2.937e+05
		-2.937e+05	-2109.03	-1.66e-03	0.0	380.0	2544.22	-4241.33	-5.55	-5677.57	-2109.03	-2.025e+05
8	73	1.420e+05	173.42	-0.01	-7256.96	0.0	2000.00	3822.97	-5.62	-5580.82	173.42	-2.397e+05
		-2.397e+05	-1960.78	-1.71e-03	0.0	380.0	2000.00	-3433.98	-5.62	-5580.82	-1960.78	-1.658e+05
8	74	1.725e+05	23.60	-0.02	-8719.01	0.0	2466.47	4593.01	-5.56	-5663.75	23.60	-2.860e+05
		-2.860e+05	-2087.85	-1.67e-03	0.0	380.0	2466.47	-4125.99	-5.56	-5663.75	-2087.85	-1.972e+05
9	2	5.321e+05	2048.48	-0.07	-2.433e+04	0.0	1.019e+04	1.216e+04	10.82	1905.71	-2062.59	-6.234e+05
		-6.234e+05	-2062.59	-4.24e-04	0.0	380.0	1.019e+04	-1.216e+04	10.82	1905.71	2048.48	-6.234e+05
9	3	2.826e+05	1200.42	-0.03	-1.309e+04	0.0	5321.48	6544.57	6.34	1278.38	-1209.61	-3.391e+05
		-3.391e+05	-1209.61	-4.39e-04	0.0	380.0	5321.48	-6544.34	6.34	1278.38	1200.42	-3.391e+05
9	21	9.225e+05	4899.94	-0.84	-1.601e+04	0.0	6154.68	1053.83	27.50	-1.599e+04	-5696.06	9.094e+05
		-1.733e+06	-5696.06	-0.18	0.0	380.0	6154.68	-1.496e+04	27.50	-1.599e+04	4899.94	-1.733e+06
9	24	9.216e+05	2884.78	0.84	-1.601e+04	0.0	7109.71	1.496e+04	-12.76	1.874e+04	2884.78	-1.734e+06
		-1.734e+06	-2108.75	0.18	0.0	380.0	7109.71	-1053.65	-12.76	1.874e+04	-2108.75	9.084e+05
9	26	9.359e+05	2542.06	0.83	-1.601e+04	0.0	7109.43	1.505e+04	-12.79	1.875e+04	2542.06	-1.750e+06
		-1.750e+06	-2460.60	0.18	0.0	380.0	7109.43	-967.24	-12.79	1.875e+04	-2460.60	9.248e+05
9	27	9.369e+05	5251.79	-0.83	-1.601e+04	0.0	6154.95	967.42	27.53	-1.600e+04	-5353.35	9.258e+05
		-1.749e+06	-5353.35	-0.18	0.0	380.0	6154.95	-1.505e+04	27.53	-1.600e+04	5251.79	-1.749e+06
9	36	9.221e+05	5683.17	0.84	-1.601e+04	0.0	6157.18	1.496e+04	27.43	-1.597e+04	-4882.98	-1.732e+06
		-1.732e+06	-4882.98	-0.18	0.0	380.0	6157.18	-1056.81	27.43	-1.597e+04	5683.17	9.089e+05
9	53	6.997e+05	4593.74	-0.66	-1.601e+04	0.0	6248.28	2549.89	26.02	-1.251e+04	-5402.81	6.250e+05
		-1.449e+06	-5402.81	-0.15	0.0	380.0	6248.28	-1.346e+04	26.02	-1.251e+04	4593.74	-1.449e+06
9	56	6.990e+05	2591.52	0.66	-1.601e+04	0.0	7016.11	1.346e+04	-11.27	1.526e+04	2591.52	-1.449e+06
		-1.449e+06	-1802.55	0.15	0.0	380.0	7016.11	-2549.71	-11.27	1.526e+04	-1802.55	6.243e+05
...												
21	74	-5.777e+04	-2679.67	4.34e-03	0.0	427.5	787.45	-833.39	-16.14	-2.354e+04	-2679.67	-5.777e+04
Trave		**M3 mx/mn**	**M2 mx/mn**	**D 2 / D 3**	**Q 2 / Q 3**		**N**	**V 2**	**V 3**	**T**		
		-2.348e+06	-3.979e+04	-0.92	-3.498e+04		-8122.02	-1.749e+04	-137.01	-5.538e+04		
		1.776e+06	3.962e+04	0.92	0.0		1.912e+04	1.749e+04	165.39	2.844e+04		

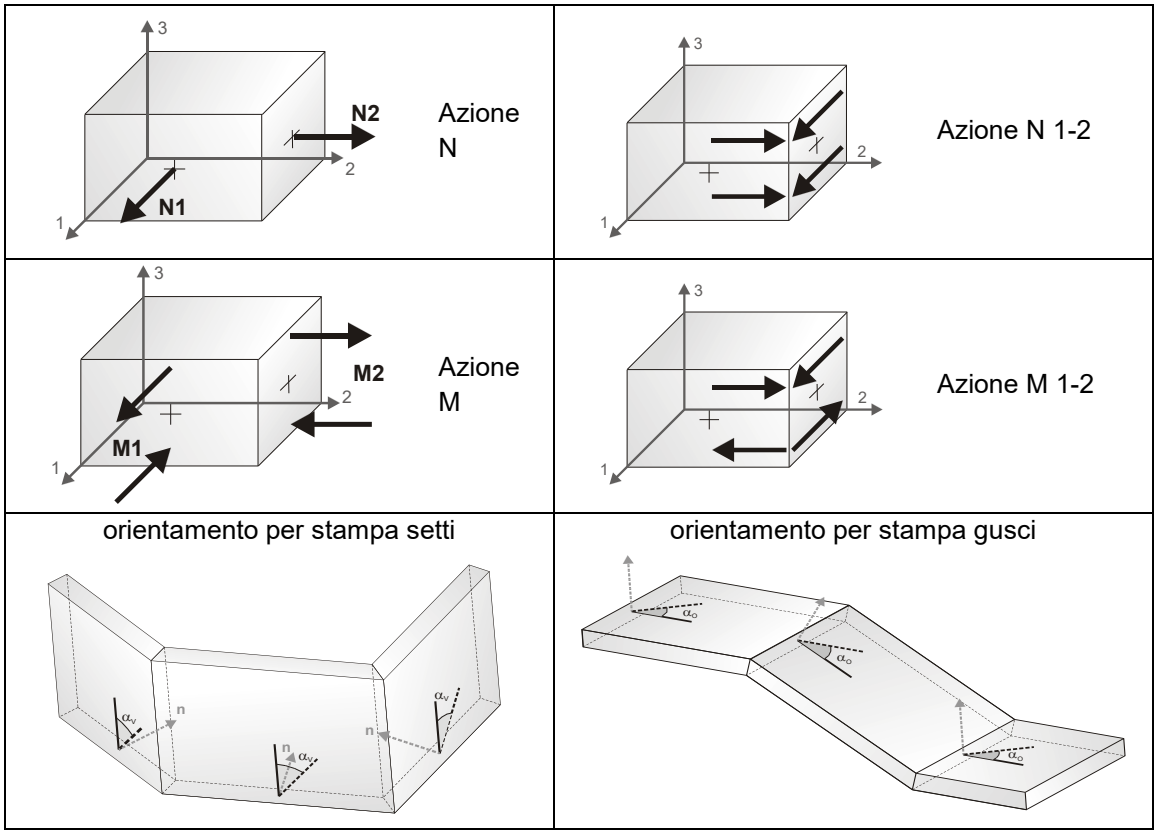
Trave f.	**Cmb**	**M3 mx/mn**	**M2 mx/mn**	**D 2 / D 3**	**Pt**	**Pos.**	**N**	**V 2**	**V 3**	**T**	**M 2**	**M 3**
		daN cm	daN cm	cm	daN/cm2	cm	daN	daN	daN	daN cm	daN cm	daN cm
1	1	5.087e+05	7294.91	1.15e-03	-1.20	0.0	3055.73	-8168.25	396.48	4.856e+04	-3.037e+04	5.087e+05
		-7.046e+04	-3.037e+04	3.42e-04		95.0	3055.73	-4024.56	396.48	4.851e+04	7294.91	-7.046e+04
1	2	5.752e+05	8139.23	1.38e-03	-1.29	0.0	3747.96	-9002.00	477.29	5.740e+04	-3.720e+04	5.752e+05
		-6.345e+04	-3.720e+04	4.00e-04		95.0	3747.96	-4444.57	477.29	5.734e+04	8139.23	-6.345e+04
1	3	3.913e+05	5611.47	8.85e-04	-0.92	0.0	2350.56	-6283.27	304.98	3.735e+04	-2.336e+04	3.913e+05
		-5.420e+04	-2.336e+04	2.63e-04		95.0	2350.56	-3095.81	304.98	3.731e+04	5611.47	-5.420e+04
1	29	1.549e+06	1.262e+05	-1.12	-1.46	0.0	9932.93	-1162.87	-1813.33	-1.779e+05	1.262e+05	1.549e+06
		6.005e+05	-4.723e+04	0.01		95.0	9932.93	2400.04	-1813.33	-1.782e+05	-4.723e+04	6.005e+05
1	30	-4.941e+05	6.230e+04	0.18	-0.98	0.0	-5451.24	-8453.28	3135.77	2.344e+05	-2.368e+05	-4.941e+05
		-6.860e+05	-2.368e+05	-0.02		95.0	-5451.24	-6963.17	3135.77	2.339e+05	6.230e+04	-6.513e+05
1	31	1.330e+06	1.847e+05	-0.18	-1.11	0.0	1.071e+04	-4780.26	-2461.15	-1.526e+05	1.847e+05	1.330e+06
		5.485e+05	-5.040e+04	0.02		95.0	1.071e+04	435.53	-2461.15	-1.522e+05	-5.040e+04	5.485e+05
1	32	-7.033e+05	5.912e+04	1.12	-0.63	0.0	-4678.02	-1.207e+04	2487.95	2.597e+05	-1.784e+05	-7.131e+05
		-7.322e+05	-1.784e+05	-0.01		95.0	-4678.02	-8927.67	2487.95	2.599e+05	5.912e+04	-7.033e+05
1	61	1.317e+06	9.336e+04	-0.88	-1.36	0.0	8511.98	-2212.25	-1349.74	-1.310e+05	9.336e+04	1.317e+06
		4.642e+05	-3.622e+04	9.01e-03		95.0	8511.98	1274.29	-1349.74	-1.313e+05	-3.622e+04	4.642e+05
1	62	-3.091e+05	5.066e+04	0.14	-0.98	0.0	-3878.57	-8174.24	2535.90	1.926e+05	-1.917e+05	-3.091e+05
		-5.366e+05	-1.917e+05	-0.01		95.0	-3878.57	-6255.43	2535.90	1.923e+05	5.066e+04	-5.249e+05
1	63	1.145e+06	1.395e+05	-0.14	-1.08	0.0	9133.48	-5059.30	-1861.29	-1.109e+05	1.395e+05	1.145e+06
		4.221e+05	-3.876e+04	0.01		95.0	9133.48	-272.21	-1861.29	-1.106e+05	-3.876e+04	4.221e+05
1	68	-4.478e+05	4.889e+04	0.89	-0.70	0.0	-3788.95	-1.086e+04	2115.16	2.068e+05	-1.531e+05	-4.478e+05
		-5.852e+05	-1.531e+05	-0.01		95.0	-3788.95	-7640.95	2115.16	2.068e+05	4.889e+04	-5.852e+05
1	69	3.913e+05	5611.47	8.85e-04	-0.92	0.0	2350.56	-6283.27	304.98	3.735e+04	-2.336e+04	3.913e+05
		-5.420e+04	-2.336e+04	2.63e-04		95.0	2350.56	-3095.81	304.98	3.731e+04	5611.47	-5.420e+04
1	70	4.357e+05	6174.35	1.04e-03	-0.98	0.0	2812.05	-6839.10	358.86	4.325e+04	-2.792e+04	4.357e+05
		-4.953e+04	-2.792e+04	3.02e-04		95.0	2812.05	-3375.82	358.86	4.320e+04	6174.35	-4.953e+04
1	71	3.913e+05	5611.47	8.85e-04	-0.92	0.0	2350.56	-6283.27	304.98	3.735e+04	-2.336e+04	3.913e+05
		-5.420e+04	-2.336e+04	2.63e-04		95.0	2350.56	-3095.81	304.98	3.731e+04	5611.47	-5.420e+04
1	72	4.223e+05	6005.49	9.93e-04	-0.96	0.0	2673.60	-6672.35	342.69	4.148e+04	-2.655e+04	4.223e+05
		-5.093e+04	-2.655e+04	2.90e-04		95.0	2673.60	-3291.82	342.69	4.144e+04	6005.49	-5.093e+04
1	73	3.913e+05	5611.47	8.85e-04	-0.92	0.0	2350.56	-6283.27	304.98	3.735e+04	-2.336e+04	3.913e+05
		-5.420e+04	-2.336e+04	2.63e-04		95.0	2350.56	-3095.81	304.98	3.731e+04	5611.47	-5.420e+04
1	74	4.179e+05	5949.20	9.77e-04	-0.96	0.0	2627.45	-6616.77	337.31	4.089e+04	-2.610e+04	4.179e+05

		-5.140e+04	-2.610e+04	2.86e-04		95.0	2627.45	-3263.82	337.31	4.085e+04	5949.20	-5.140e+04
2	1	3.732e+05	-717.77	-1.19e-04	-1.19	0.0	4421.58	-6054.07	17.39	957.53	-2370.23	3.732e+05
		-7116.88	-2370.23	4.89e-06		95.0	4421.58	-1953.38	17.39	958.72	-717.77	-7116.88
2	2	4.180e+05	-904.96	2.24e-04	-1.27	0.0	5410.23	-6555.72	42.07	2759.59	-4901.52	4.180e+05
		9257.69	-4901.52	7.91e-06		95.0	5410.23	-2048.68	42.07	2760.31	-904.96	9257.69
2	3	2.871e+05	-552.13	-9.18e-05	-0.91	0.0	3401.21	-4656.97	13.38	736.56	-1823.25	2.871e+05
		-5474.52	-1823.25	3.76e-06		95.0	3401.21	-1502.60	13.38	737.47	-552.13	-5474.52
2	10	3.313e+05	629.91	0.17	-0.94	0.0	1999.48	-4639.60	107.85	-1.914e+04	-6790.28	3.313e+05
		3989.31	-6790.28	-0.01		95.0	1999.48	-1453.19	107.85	-1.796e+04	629.91	3989.31
2	11	2.787e+05	1118.74	-0.17	-1.06	0.0	5593.86	-5075.67	-61.35	2.206e+04	1118.74	2.787e+05
		-1838.70	-1883.93	0.01		95.0	5593.86	-1628.25	-61.35	2.088e+04	-1883.93	-1838.70
2	24	2.163e+05	2.109e+04	0.62	-0.81	0.0	3029.36	-5671.03	311.51	3.346e+04	2.109e+04	2.163e+05
		-3.490e+04	1.182e+04	0.02		95.0	3029.36	-2895.38	311.51	3.309e+04	1.182e+04	-3.490e+04
2	25	3.947e+05	-1.349e+04	-0.62	-1.26	0.0	4640.78	-4005.97	-377.18	-3.961e+04	-1.739e+04	3.947e+05
		3.505e+04	-1.739e+04	-0.01		95.0	4640.78	-147.31	-377.18	-3.920e+04	-1.349e+04	3.505e+04
...												
54	74	-5.284e+05	-1.358e+05	1.92e-04	-0.90	106.9	-5612.49	8859.67	-1726.47	-9.706e+04	-1.358e+05	2.956e+05
Trave f.		**M3 mx/mn**	**M2 mx/mn**	**D 2 / D 3**	**Pt**		**N**	**V 2**	**V 3**	**T**		
		-1.292e+06	-7.216e+05	-1.64	-1.67		-3.124e+04	-2.150e+04	-8492.38	-6.003e+05		
		1.552e+06	7.016e+05	1.64	-0.36		1.880e+04	2.160e+04	7985.19	4.085e+05		

RISULTATI ELEMENTI TIPO SHELL

LEGENDA RISULTATI ELEMENTI TIPO SHELL

Il controllo dei risultati delle analisi condotte, per quanto concerne gli elementi tipo shell, è possibile in relazione alle tabelle sottoriportate.
Per ogni elemento, e per ogni combinazione(o caso di carico) vengono riportati i risultati più significativi.



In particolare vengono riportati in ogni nodo di un elemento per ogni combinazione:

tensione di Von Mises		(valore riassuntivo del complessivo stato di sollecitazione)
N max		sforzo membranale principale massimo
N min		sforzo membranale principale minimo
M max		sforzo flessionale principale massimo
M min		sforzo flessionale principale minimo
N1	**N2**	sforzi membranali e flessionali in direzione locale 1 e 2 dell'elemento
N1-2	**M1**	(lo sforzo 2-1 è uguale allo sforzo 1-2 per la reciprocità delle tensioni
M2	**M1-2**	tangenziali)

I suddetti risultati possono a scelta del progettista essere preceduti o sostituiti da valori di sollecitazione non più riferiti al sistema locale dell'elemento ma al sistema globale.
In questo caso gli elementi vengono raggruppati in gruppi (M_S: macro gusci o macro setti, raggruppati per materiale, spessore, e posizione fisica) per la valutazione dei valori mediati ai nodi appartenenti agli elementi dei gruppi stessi.
I valori di sollecitazione sono, in questo caso, riferiti ad una terna specifica del gruppo ruotata di α_O attorno all'asse Z per i gusci e ruotata di α_V attorno alla normale (che per definizione è orizzontale) al piano del setto.
Per i setti, in particolare, se α_V è zero, l'asse '1-1 rappresenta la verticale e l'asse '2-2 l'orizzontale contenuta nel setto.
Le azioni sui setti possono essere espresse anche con formato macro, cioè riferite all'intero macroelemento.

In particolare vengono riportati per ogni quota Z dei nodi e per ogni combinazione i seguenti valori:

N memb.	Azione membranale complessiva agente sulla parete in direzione Z
V memb.	Azione complessiva di taglio agente nel piano del macroelemento
V orto	Azione complessiva di taglio agente in direzione perpendicolare al macroelemento
M memb.	Azione flessionale complessiva agente nel piano del macroelemento
M orto	Azione flessionale complessiva agente in direzione perpendicolare al macroelemento
T	Azione torsionale complessiva agente nel piano orizzontale

Macro	Tipo	Angolo 1-X (gradi)
1	**Guscio**	**0.0**

M_G	Cmb	Nodo	N max	N min	N 1	N 2	N 1-2	M max	M min	M 1	M 2	M 1-2
			daN/cm	daN/cm	daN/cm	daN/cm	daN/cm	daN	daN	daN	daN	daN
1	2	1	89.35	17.44	80.38	26.41	-23.76	-70.99	-4526.38	-616.44	-3980.93	1460.36
1	2	2	4.78	0.62	4.24	1.16	1.40	-1264.04	-4010.98	-1264.13	-4010.89	15.77
1	2	3	44.31	36.27	42.49	38.09	3.37	-197.17	-4422.25	-805.23	-3814.19	-1483.02
1	2	4	43.73	34.96	43.21	35.47	2.06	-195.58	-4475.32	-812.17	-3858.73	-1502.88
1	2	5	4.44	1.27	4.42	1.29	-0.26	-1263.39	-4013.67	-1263.42	-4013.64	9.05
1	2	6	87.32	28.14	78.99	36.47	-20.57	-100.30	-4531.23	-657.68	-3973.85	1469.37
1	2	19	24.77	-30.74	-1.29	-4.69	-27.70	474.89	232.75	458.37	249.27	61.05
1	2	20	26.62	10.25	26.62	10.25	7.42e-02	67.11	-390.00	4.54	-327.43	-157.12
1	2	21	28.79	-3.92	27.61	-2.74	-6.11	-184.41	-3024.82	-187.04	-3022.18	-86.48
1	2	22	15.23	-21.10	-11.94	6.07	15.77	307.10	140.87	209.11	238.86	81.78
1	2	23	35.23	7.55	31.84	10.94	9.08	225.57	59.76	177.69	107.64	75.14
1	2	24	27.23	-37.95	-7.35	-3.37	32.53	377.02	150.28	366.14	161.16	48.46
1	2	25	18.99	-19.04	11.88	-11.94	-14.82	311.77	-318.70	225.14	-232.06	217.06
1	2	26	47.56	-17.35	41.85	-11.64	18.39	-66.04	-3028.81	-72.26	-3022.60	135.56
1	2	27	40.60	3.69	40.42	3.87	2.56	215.51	-484.58	213.92	-483.00	33.29
1	2	28	46.21	-17.33	46.14	-17.25	2.17	98.25	-2649.17	98.15	-2649.06	16.95
1	2	29	20.38	-9.03	16.23	-4.88	-10.24	302.76	95.43	299.39	98.80	26.21
1	2	30	40.55	1.38	38.10	3.83	9.49	255.42	-458.94	252.55	-456.07	45.19
1	2	31	53.20	-14.82	52.97	-14.59	-3.90	151.89	-2582.47	151.88	-2582.46	4.25
1	2	32	29.32	-16.71	27.19	-14.58	-9.66	123.92	-462.30	49.13	-387.51	195.57
1	2	33	21.91	-9.02	20.84	-7.95	5.66	-223.78	-3035.62	-227.42	-3031.98	101.13
1	2	34	23.37	-9.05	22.59	-8.27	-4.98	268.18	259.96	267.40	260.74	-2.41
1	2	35	24.17	-14.96	20.73	-11.53	11.08	119.74	-413.86	60.69	-354.80	-167.41
1	2	36	26.59	-11.68	26.24	-11.34	-3.60	-186.22	-3028.03	-188.02	-3026.23	-71.50
1	2	37	9.87	-19.54	9.64	-19.31	-2.60	418.07	112.76	418.07	112.76	0.33
1	2	38	16.04	-7.40	15.89	-7.26	-1.85	315.18	166.56	315.05	166.69	4.39
1	2	39	8.31	-18.64	8.31	-18.64	0.18	408.31	111.45	407.82	111.93	11.95
1	2	40	26.43	-12.28	25.69	-11.54	5.27	108.63	-442.63	41.05	-375.06	-180.79
1	2	41	22.54	-8.16	21.82	-7.44	-4.66	-194.44	-2998.34	-196.33	-2996.44	-72.82
1	2	42	28.57	-8.03	28.51	-7.97	-1.49	254.26	214.79	250.61	218.45	11.45
1	2	43	25.69	-12.05	24.13	-10.50	-7.50	104.09	-462.41	20.21	-378.52	201.21
1	2	44	20.47	-8.15	19.39	-7.08	5.44	-225.31	-3019.04	-228.66	-3015.69	96.74
1	2	45	37.39	1.31	37.38	1.32	0.74	271.04	-463.62	270.16	-462.75	25.38
1	2	46	51.09	-21.41	51.07	-21.39	1.35	169.00	-2612.74	168.80	-2612.54	24.04
1	2	47	24.61	2.57	24.57	2.62	-0.96	266.76	115.32	261.43	120.66	27.91
1	2	48	35.81	2.51	35.67	2.64	-2.13	225.59	-459.13	225.14	-458.68	17.53
1	2	49	45.53	-18.62	45.53	-18.61	0.71	101.19	-2639.33	101.17	-2639.31	5.77
1	2	50	24.34	1.67	24.33	1.69	-0.55	225.09	-477.76	120.65	-373.32	250.00
1	2	51	39.88	-17.77	36.28	-14.18	13.94	-58.15	-3004.54	-62.93	-2999.76	118.65
1	2	52	25.51	7.16	25.51	7.16	-3.13e-03	310.58	179.65	256.43	233.80	64.48
1	2	53	25.60	4.37	25.47	4.50	1.65	99.12	-365.67	44.56	-311.11	-149.60
1	2	54	29.09	-5.24	28.16	-4.31	-5.57	-179.66	-3014.19	-182.48	-3011.37	-89.36
1	2	55	25.17	-48.76	-4.14	-19.46	36.16	450.98	140.43	440.17	151.24	56.92
1	2	56	9.00	-14.23	-10.98	5.75	8.06	258.64	106.25	152.49	212.40	70.06
1	2	57	27.49	-27.02	-2.69	3.17	-27.09	471.38	239.90	443.01	268.28	75.92
1	2	58	20.64	3.00	20.32	3.32	2.35	3.61	-1812.77	-2.57	-1806.59	105.79
1	2	59	10.97	5.32	10.71	5.58	1.19	222.03	-1917.93	74.10	-1770.00	542.85
1	2	60	34.07	3.85	33.24	4.68	4.93	230.46	-1790.04	230.42	-1790.00	8.31

...

1	74	111	0.22	-1.14	-1.02	9.38e-02	-0.40	49.31	-96.56	-57.85	10.60	64.41
M_G			**N max**	**N min**	**N 1**	**N 2**	**N 1-2**	**M max**	**M min**	**M 1**	**M 2**	**M 1-2**
				-246.81	-63.24	-244.62	-59.45		-6900.79	-1440.09	-5935.10	-2075.49
			246.20		121.36	217.99	72.92	3339.07		1089.64	3242.24	2403.50

VERIFICHE ELEMENTI TRAVE E/O PILASTRO IN C.A.

LEGENDA TABELLA VERIFICHE ELEMENTI TRAVE E/O PILASTRO IN C.A.

In tabella vengono riportati per ogni elemento il numero identificativo ed il codice di verifica con le sigle **Ok** o **NV**.

Nel caso in cui si sia proceduto alla progettazione con il metodo degli stati limite (**S.L.**) vengono riportati: il rapporto x/d, le verifiche per sollecitazioni proporzionali e la verifica per compressione media con l'indicazione delle combinazioni in cui si sono attinti i rispettivi valori.

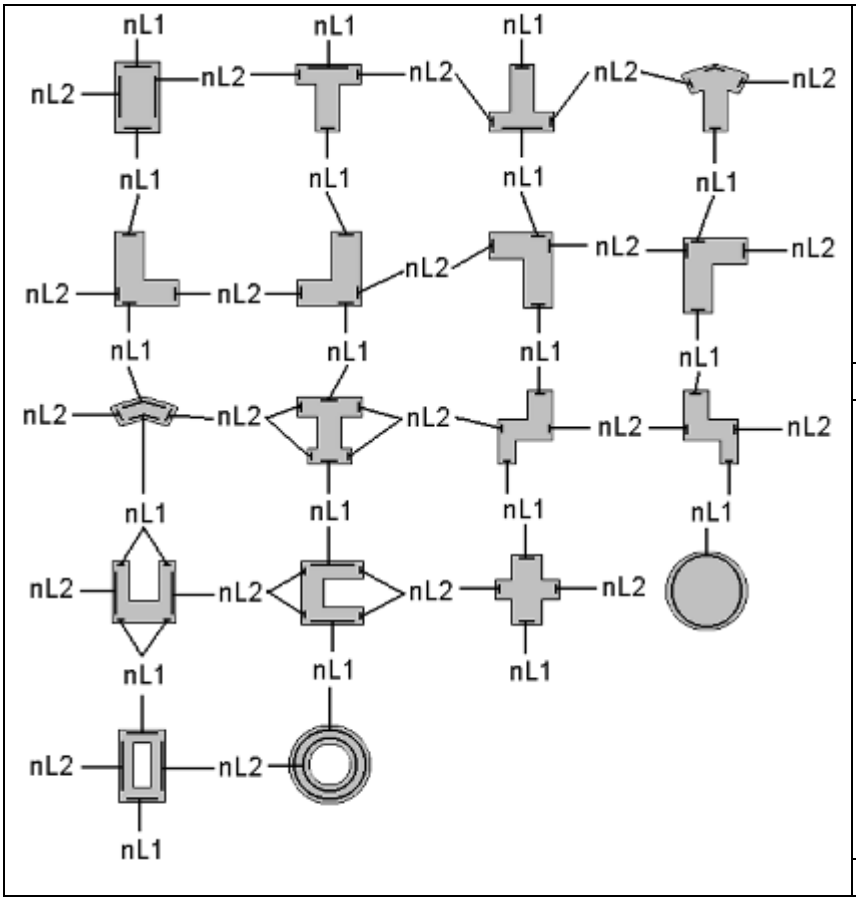
Nel caso in cui si sia proceduto alla progettazione con le tensioni ammissibili (**T.A.**) vengono riportate le massime tensioni nell'elemento (massima compressione nel calcestruzzo, massima compressione media nel calcestruzzo, massima tensione nell'acciaio, massima tensione tangenziale) con l'indicazione delle combinazioni in cui si sono attinti i rispettivi valori.

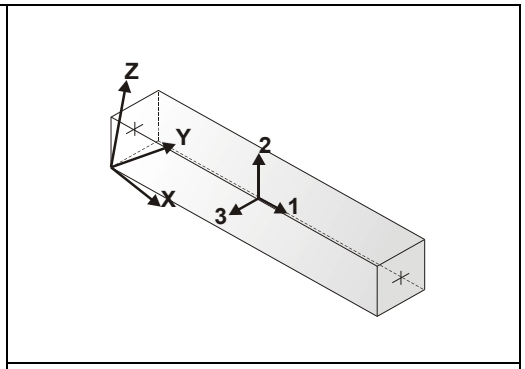
Nel caso in cui la struttura abbia comportamento dissipativo e sia prevista la progettazione con il criterio della gerarchia delle resistenze **(G.R.)** vengono riportate le verifiche di sovraresistenza e del nodo.

Per gli elementi tipo pilastro sono riportati numero e diametro dei ferri di vertice, numero e diametro di ferri disposti lungo i lati L1 (paralleli alla base della sezione) e lungo i lati L2 (paralleli all'altezza della sezione).

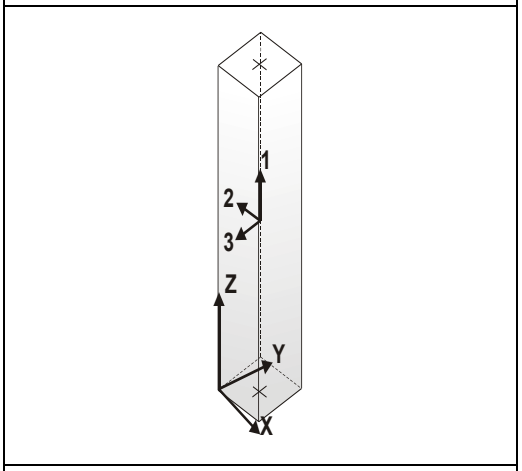
Per gli elementi tipo trave sono riportati infine le quantità di armatura inferiore e superiore.

Schema della distribuzione delle armature longitudinali





Orientamento elementi 2D non verticali



Orientamento elementi 2D verticali

PROGETTAZIONE DELLE FONDAZIONI

Il D.M.17/01/2018 - par: 7.2.5 prevede:

"Sia per CD"A" sia per CD"B" il dimensionamento delle strutture di fondazione e la verifica di sicurezza del complesso fondazione-terreno devono essere eseguiti assumendo come azione in fondazione, trasmessa dagli elementi soprastanti, una tra le seguenti:

- quella derivante dall'analisi strutturale eseguita ipotizzando comportamento strutturale non dissipativo;
- […];
- quella trasferita dagli elementi soprastanti nell'ipotesi di comportamento strutturale dissipativo, amplificata di un coefficiente pari a 1,30 in CD"A" e 1,10 in CD"B";

Nel contesto visualizzazione risultati e nella stampa della relazione sulle fondazioni PRO_SAP mostra le sollecitazioni che derivano dall'analisi non incrementate sia in termini di pressioni sul terreno che in termini di sollecitazioni.

La progettazione degli elementi strutturali con proprietà fondazione è effettuata da PRO_SAP (per travi e platee) o da PRO_CAD Plinti (per plinti e pali di fondazione) incrementando le sollecitazioni delle combinazioni con sisma di un coefficiente pari 1.1 in CDB e 1.3 in CDA per pali, plinti, travi e platee.
Per i bicchieri dei plinti di fondazione prefabbricati l'incremento delle sollecitazioni ha un fattore pari a 1.2 in CDB e 1.35 in CDA.
N.B.: nel caso di comportamento strutturale non dissipativo la progettazione viene effettuata senza nessun incremento.

Le verifiche geotecniche vengono effettuate dal modulo geotecnico incrementando automaticamente le sollecitazioni del fattore 1.1 in CDB e 1.3 in CDA per pali, plinti, travi e platee.
N.B.: nel caso di comportamento strutturale non dissipativo le verifiche geotecniche vengono effettuate senza nessun incremento.

Simbologia adottata nelle tabelle di verifica

Per le verifiche agli S.L. dei pilastri è presente una tabella con i simboli di seguito descritti:

M_P X Y	Numero della pilastrata (P) e posizione in pianta (X,Y)
Pilas.	numero identificativo dell'elemento D2
Note	Codici identificativi delle sezione (s) e materiale (m) pilastro
Stato	Codici relativi all'esito delle verifiche effettuate appresso descritte
Quota	Quota sezione di verifica
%Af	Percentuale di area di armatura rispetto a quella di calcestruzzo
r. snell.	Rapporto di snellezza λ su λ^*: valore superiore a 1 per elementi snelli nel caso in cui viene effettuata la verifica con il metodo diretto dello stato di equilibrio
Armat. long.	Numero e diametro (d) dei ferri di armatura longitudinale distinti in ferri di vertice + ferri di lato nelle posizioni nL1 e nL2, come da schemi in figura precedente
V N/M	Verifica a pressoflessione con rapporto Ed/Rd: valore minore o uguale a 1 per verifica positiva
V N sis	Verifica a compressione solo calcestruzzo con rapporto Nsd/Nrd ed Nrd calcolato come al punto 7.4.4.2.1: valore minore o uguale a 1 per verifica positiva
Staffe	Dati tratto di staffatura oggetto di verifica, nello specifico: numero delle braccia, diametro, passo, lunghezza L tratto
V V/T cls	Verifica a taglio/torsione con rapporto Ved/Vrd: valore minore o uguale a 1 per verifica positiva
Rif. cmb.	Riferimento combinazioni da cui si generano le verifiche più gravose per il pilastro

Per le verifiche alla G.R. dei pilastri è presente una tabella con i simboli di seguito descritti:

Pilas.	numero identificativo dell'elemento D2 pilastro
sovr. Xi (Xf)	Verifica sovraresistenza come da formula 7.4.4 in direzione X, alla base (i) ed alla sommità (f):

	rapporto tra i momenti resistenti dei pilastri e delle travi. La verifica è positiva se maggiore del γ_{Rd} adottato
sovr. Yi (Yf)	Verifica sovraresistenza come da formula 7.4.4 in direzione Y, alla base (i) ed alla sommità (f): rapporto tra i momenti resistenti dei pilastri e delle travi. La verifica è positiva se maggiore del γ_{Rd} adottato
M 2-2 i (f)	Valore del momento resistente 2-2 alla base (i) ed alla sommità (f) con massimo momento in presenza dello sforzo normale di calcolo
M 3-3 i (f)	Valore del momento resistente 3-3 alla base (i) ed alla sommità (f) con massimo momento in presenza dello sforzo normale di calcolo
Luce per V	Luce di calcolo per la definizione del taglio (generato dai momenti resistenti)
V M2-2 (M3-3)	Valore del taglio generato dai momenti resistenti 2-2 (3-3)

Per le verifiche dei dettagli costruttivi per la duttilità è presente una tabella con i simboli di seguito descritti:
(Non presente nel caso di comportamento strutturale non dissipativo)

Pilas	Numero identificativo D2 pilastro
ni	Sforzo assiale adimensionalizzato di progetto relativo alla combinazione sismica SLV
alfaomega	Prodotto tra il coefficiente di efficacia del confinamento e il rapporto meccanico dell'armatura trasversale di confinamento all'interno del nodo
V.7.4.29 2-2 (3-3)	Rapporto tra la domanda di staffe minima nel nodo e il rapporto meccanico dell'armatura trasversale di confinamento inserito all'interno del nodo in direzione 2 (3)
V. 7.4.29 Stato	Codici relativi all'esito della verifica 7.4.29
dmu_fi 2-2 (3-3)	Domanda in duttilità di curvatura in direzione 2 (3)
cmu_fi 2-2 (3-3)	Capacità in duttilità di curvatura in direzione 2 (3)
V. dutt. 2-2 (3-3)	Rapporto tra la domanda in duttilità di curvatura e la capacità in duttilità di curvatura in direzione 2 (3)

Per le verifiche nodi trave-pilastro di elementi nuovi è presente una tabella con i simboli di seguito descritti:

Nodo	Numero identificativo del nodo trave-pilastro
Stato	Esito delle verifiche
Pilastro	Numero identificativo D2 pilastro
Diam st	Diametro staffe nodo
Passo	Passo staffe nodo
n. br. 2 (3)	Numero braccia staffe per il taglio in direzione 2 (3)
Bj2 (3)	Larghezza effettiva del nodo per il taglio in direzione 2 (3)
Hjc2 (3)	Distanza tra le giaciture più esterne delle armature del pilastro per il taglio in direzione 2 (3)
V. 7.4.8	Rapporto tra il taglio Vjbd e il taglio resistente come da formula 7.4.8
V. Ash	Rapporto tra il passo staffe calcolato secondo il capitolo 7.4.4.3.1. e il passo staffe effattivamente inserita nel nodo. Nel caso di valore indica passo staffe utilizzato deriva dalle formule presenti nel paragrafo 7.4.4.3.1. Nel caso di valore minore di 1 il passo staffe utilizzato deriva del pilastro superiore o inferiore al nodo
7.4.10	Check passo staffe valutato in funzione della formula 7.4.10: • SI il passo staffe è calcolato utilizzando la formula 7.4.10; • NO il passo staffe è calcolato utilizzando le formule 7.4.11 e/o 7.4.12; • NR calcolo passo staffe non richiesto;
Rif. comb.	Riferimento combinazioni da cui si generano le verifiche più gravose per il nodo

Per le verifiche nodi trave-pilastro di elementi esistenti è presente una tabella con i simboli di seguito descritti:

Pilastro I	Numero identificativo D2 del pilastro inferiore.

Pilastro S	Numero identificativo D2 del pilastro superiore.
Nodo	Numero identificativo del nodo trave-pilastro.
SL cod	Stato limite di riferimento e relativo esito delle verifiche.
ver. (+)	Fattore di sicurezza nei riguardi della verifica di resistenza a compressione (verificato se < 1.00).
V +	Azione di Taglio presente al di sopra del nodo nella verifica di resistenza a compressione.
V + af s	Sollecitazione di trazione presente nell' armatura longitudinale superiore della trave nella verifica di resistenza a compressione.
N +	Azione Assiale presente al di sopra del nodo nella verifica di resistenza a compressione.
ver. (-)	Fattore di sicurezza nei riguardi della verifica di resistenza a trazione (verificato se < 1.00).
V -	Azione di Taglio presente al di sopra del nodo nella verifica di resistenza a trazione.
V - af s	Sollecitazione di trazione presente nell' armatura longitudinale superiore della trave nella verifica di resistenza a trazione.
N -	Azione Assiale presente al di sopra del nodo nella verifica di resistenza a trazione.
AreaV2	Area resistente del nodo in direzione 2 ($A_{j2}=b_{j2}*h_{jc2}$).
AreaV3	Area resistente del nodo in direzione 3 ($A_{j3}=b_{j3}*h_{jc3}$).
Rif. comb.	Combinazione (direzione) di riferimento nella verifica di trazione.

Per le verifiche agli S.L. delle travi è presente una tabella con i simboli di seguito descritti:

M_T Z P P	Numero della travata (T), quota media (Z), n° pilastrata iniziale (P) e finale (P) (nodo in assenza di pilastrata)
Trave	numero identificativo dell'elemento D2
Note	Codici identificativi sezione (s) e materiale (m) trave; sono inoltre presenti le sigle relative all'esito delle verifiche effettuate appresso descritte
%Af	Percentuale di area di armatura rispetto a quella di calcestruzzo
Af inf.	Area di armatura longitudinale posta all'intradosso
Af sup	Area di armatura longitudinale posta all'estradosso
Af long.	Area complessiva armatura longitudinale
x/d	rapporto tra posizione dell'asse neutro e altezza utile
V N/M	Verifica a pressoflessione rapporto Ed/Rd: valore minore o uguale a 1 per verifica positiva
Staffe	Dati tratto di staffatura oggetto di verifica, nello specifico: numero delle braccia, diametro, passo, lunghezza L tratto
V V/T cls	Verifica a taglio/torsione con rapporto Ved/Vrd: valore minore o uguale a 1 per verifica positiva
Rif. cmb.	Riferimento combinazioni da cui si generano le verifiche più gravose per la trave

Per le verifiche alla G.R. delle travi è presente una tabella con i simboli di seguito descritti:

Trave	numero identificativo dell'elemento D2 trave
M negativo i (f)	Valore del momento resistente negativo all' estremità iniziale i (finale f) della trave
M positivo i (f)	Valore del momento resistente positivo all' estremità iniziale i (finale f) della trave
Luce per V	Luce di calcolo per la definizione del taglio (generato dai momenti resistenti)
V M-i M+f	Taglio generato dai momenti resistenti negativo i e positivo f
V M+i M-f	Taglio generato dai momenti resistenti positivo i e negativo f
VEd, min	Valore di taglio minimo per verifica condizioni p.to 7.4.4.1.1 armatura diagonale (solo per CD "A")
VEd, max	Valore di taglio massimo per verifica condizioni p.to 7.4.4.1.1 armatura diagonale (solo per CD "A")
Vr1	Valore di taglio come da formula 7.4.1 per armatura diagonale (solo per CD "A")
As	Area singolo ordine armature diagonali come da formula 7.4.2 (solo per CD "A")

Per le verifiche a taglio ciclico di travi e pilastri esistenti è presente una tabella con i simboli di seguito descritti:

Trave/Pilastro	Numero identificativo dell'elemento D2 trave/pilastro
V. SLV	Codice relativo all'esito delle verifiche

Nodo	Numero identificativo del nodo di verifica
Ver. VC	Fattore di sicurezza nei confronti della verifica a taglio ciclico (verificato se < 1.00)
Direz.	Direzione di verifica
N fr	Valore di sforzo normale calcolato con fattore di comportamento fragile
V fr	Valore di taglio calcolato con fattore di comportamento fragile
M fr	Valore di momento calcolato con fattore di comportamento fragile
N dutt	Valore di sforzo normale calcolato con fattore di comportamento duttile
LV	Lunghezza di taglio
Mud,pl	Parte plastica della domanda di duttilità
V cic	Resistenza a taglio in condizioni cicliche (C8.7.2.8)
Cmb	Riferimento combinazioni da cui si generano le verifiche più gravose

Per le verifiche alle T.A. di pilastri e travi è presente una tabella con i simboli di seguito descritti:

M_P X Y	Numero della pilastrata (P) e posizione in pianta (X,Y)
M_T Z P P	Numero della travata, quota media pilastrata iniziale e finale (nodo in assenza di pilastrata)
Pilas. o Trave	numero identificativo dell'elemento D2
Note	Viene riportato il codice relativo alla sezione(s) e relativo al materiale(m); nella terza riga viene riportato il valore delle snellezze in direzione 2-2 e 3-3
Stato	Codici di verifica relativi alle tensioni normali e alle tensioni tangenziali
Quota	Ascissa del punto di verifica
%Af	Percentuale di area di armatura rispetto a quella di calcestruzzo
Armat. long.	Numero e diametro dei ferri di armatura longitudinale: ferri di vertice + ferri di lato (come da fig. precedente)
Af inf.	Area di armatura longitudinale posta all'intradosso della trave
Af sup	Area di armatura longitudinale posta all'estradosso della trave
Sc max	Massima tensione di compressione del calcestruzzo
Sc med	Massima tensione media di compressione del calcestruzzo
Sf max	Tensione massima nell'acciaio
staffe	Vengono riportati i dati del tratto di staffatura in cui cade la sezione di verifica; in particolare: numero dei bracci, diametro, passo, lunghezza tratto
Tau max	Tensione massima tangenziale nel cls
Rif. comb	Combinazioni in cui si generano i seguenti valori di tensione: Sc max, Sc med, Sf max, Tau max
AfV	area dell'armatura atta ad assorbire le azioni di taglio
AfT	area dell'armatura atta ad assorbire le azioni di torsione
Scorr. P	Scorrimento dei piegati
Af long.	Area del ferro longitudinale aggiuntivo per assorbire la torsione

					M_P= 1	**X=0.0**	**Y=0.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
			cm						L=cm			
22	s=2,m=3	ok,ok	0.0	1.98	0.69	4d18 4+6 d18	0.92	0.193+4d10/12	L=75	0.65	0.29	31,36,21,24
			214.0	1.41	0.69	4d18 2+4 d18	0.28	0.183+4d10/20	L=278	0.65	0.47	33,36,21,24
	[b=1.0;1.0]		428.0	1.41	0.69	4d18 2+4 d18	0.70	0.183+4d10/12	L=75	0.65	0.29	31,36,21,24
28	s=2,m=3	ok,ok	428.0	1.41	0.44	4d18 2+4 d18	0.45	0.083+4d10/12	L=75	0.51	0.22	11,36,31,24
			631.5	1.41	0.44	4d18 2+4 d18	0.11	0.083+4d10/20	L=257	0.51	0.36	36,36,31,24
	[b=1.0;1.0]		835.0	1.41	0.44	4d18 2+4 d18	0.61	0.073+4d10/12	L=75	0.51	0.22	30,36,31,24
					M_P= 2	**X=427.5**	**Y=0.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
24	s=2,m=3	ok,ok	0.0	1.41	0.78	4d18 2+4 d18	0.91	0.243+4d10/12	L=75	0.50	0.24	10,24,14,14
			214.0	1.41	0.78	4d18 2+4 d18	0.16	0.233+4d10/20	L=278	0.51	0.38	8,24,14,14
	[b=1.0;1.0]		428.0	1.41	0.78	4d18 2+4 d18	0.65	0.233+4d10/12	L=75	0.51	0.24	10,24,14,14
30	s=2,m=3	ok,ok	428.0	1.41	0.51	4d18 2+4 d18	0.62	0.113+4d10/12	L=75	0.50	0.22	30,24,14,17

			631.5	1.41	0.51	4d18 2+4 d18	0.08	0.103+4d10/20 L=257		0.50	0.35	10,24,14,17
	[b=1.0;1.0]		835.0	1.41	0.51	4d18 2+4 d18	0.74	0.103+4d10/12 L=75		0.50	0.22	30,24,14,17
					M_P= 3	**X=855.0**	**Y=0.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
26	s=2,m=3	ok,ok	0.0	1.98	0.68	4d18 4+6 d18	0.73	0.183+4d10/12 L=75		0.65	0.29	8,26,15,5
			214.0	1.41	0.68	4d18 2+4 d18	0.22	0.183+4d10/20 L=278		0.65	0.46	11,26,15,5
	[b=1.0;1.0]		428.0	1.98	0.68	4d18 4+6 d18	0.86	0.173+4d10/12 L=75		0.65	0.29	35,26,15,5
32	s=2,m=3	ok,ok	428.0	1.41	0.43	4d18 2+4 d18	0.88	0.083+4d10/12 L=75		0.51	0.22	36,26,8,8
			631.5	1.41	0.43	4d18 2+4 d18	0.10	0.083+4d10/20 L=257		0.51	0.35	8,26,8,8
	[b=1.0;1.0]		835.0	1.41	0.43	4d18 2+4 d18	0.76	0.073+4d10/12 L=75		0.52	0.22	24,26,8,8
					M_P= 4	**X=0.0**	**Y=380.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
23	s=2,m=3	ok,ok	0.0	1.98	0.68	4d18 4+6 d18	0.73	0.183+4d10/12 L=75		0.65	0.29	17,31,10,20
			214.0	1.41	0.68	4d18 2+4 d18	0.22	0.183+4d10/20 L=278		0.65	0.46	14,31,10,20
	[b=1.0;1.0]		428.0	1.98	0.68	4d18 4+6 d18	0.85	0.173+4d10/12 L=75		0.65	0.29	26,31,10,20
29	s=2,m=3	ok,ok	428.0	1.41	0.43	4d18 2+4 d18	0.87	0.083+4d10/12 L=75		0.51	0.22	21,31,17,17
			631.5	1.41	0.43	4d18 2+4 d18	0.10	0.083+4d10/20 L=257		0.51	0.35	17,31,17,17
	[b=1.0;1.0]		835.0	1.41	0.43	4d18 2+4 d18	0.76	0.073+4d10/12 L=75		0.52	0.22	33,31,17,17
					M_P= 5	**X=427.5**	**Y=380.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
25	s=2,m=3	ok,ok	0.0	1.41	0.78	4d18 2+4 d18	0.91	0.243+4d10/12 L=75		0.50	0.24	15,33,11,11
			214.0	1.41	0.78	4d18 2+4 d18	0.16	0.233+4d10/20 L=278		0.50	0.38	17,33,11,11
	[b=1.0;1.0]		428.0	1.41	0.78	4d18 2+4 d18	0.65	0.233+4d10/12 L=75		0.51	0.24	15,33,11,11
31	s=2,m=3	ok,ok	428.0	1.41	0.51	4d18 2+4 d18	0.62	0.113+4d10/12 L=75		0.50	0.22	27,33,11,8
			631.5	1.41	0.51	4d18 2+4 d18	0.08	0.103+4d10/20 L=257		0.50	0.35	15,33,11,8
	[b=1.0;1.0]		835.0	1.41	0.51	4d18 2+4 d18	0.75	0.103+4d10/12 L=75		0.50	0.22	27,33,11,8
					M_P= 6	**X=855.0**	**Y=380.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
27	s=2,m=3	ok,ok	0.0	1.98	0.69	4d18 4+6 d18	0.92	0.193+4d10/12 L=75		0.65	0.29	26,21,36,33
			214.0	1.41	0.69	4d18 2+4 d18	0.28	0.183+4d10/20 L=278		0.65	0.47	24,21,36,33
	[b=1.0;1.0]		428.0	1.41	0.69	4d18 2+4 d18	0.69	0.183+4d10/12 L=75		0.65	0.29	26,21,36,33
33	s=2,m=3	ok,ok	428.0	1.41	0.44	4d18 2+4 d18	0.45	0.083+4d10/12 L=75		0.51	0.22	14,21,26,33
			631.5	1.41	0.44	4d18 2+4 d18	0.11	0.083+4d10/20 L=257		0.51	0.36	21,21,26,33
	[b=1.0;1.0]		835.0	1.41	0.44	4d18 2+4 d18	0.61	0.073+4d10/12 L=75		0.51	0.22	27,21,26,33

Pilas.	**%Af**	**r. snell.**	**V N/M**	**V N sis**	**V V/T cls**	**V V/T acc**
	1.98	0.78	0.92	0.24	0.65	0.47

Pilas.	**sovr. Xi**	**sovr. Xf**	**sovr. Yi**	**sovr. Yf**	**M 2-2 i**	**M 2-2 f**	**M 3-3 i**	**M 3-3 f**	**Luce per V**	**V M2-2**	**V M3-3**
					daN cm	daN cm	daN cm	daN cm	cm	daN	daN
22	0.0	1.51	0.0	2.48	1.779e+06	1.446e+06	3.919e+06	3.085e+06	358.00	1.093e+04	2.409e+04
23	0.0	3.57	0.0	1.33	1.776e+06	1.763e+06	3.915e+06	3.887e+06	358.00	1.092e+04	2.406e+04
24	0.0	2.03	0.0	1.44	1.550e+06	1.533e+06	3.238e+06	3.214e+06	358.00	9522.20	1.990e+04
25	0.0	2.03	0.0	1.44	1.549e+06	1.533e+06	3.237e+06	3.213e+06	358.00	9520.34	1.989e+04
26	0.0	3.57	0.0	1.33	1.776e+06	1.762e+06	3.913e+06	3.886e+06	358.00	1.091e+04	2.405e+04
27	0.0	1.51	0.0	2.48	1.778e+06	1.446e+06	3.919e+06	3.085e+06	358.00	1.093e+04	2.408e+04
28	1.51	0.0	2.48	0.0	1.280e+06	1.262e+06	2.849e+06	2.818e+06	354.50	7943.75	1.768e+04
29	3.57	0.0	1.33	0.0	1.275e+06	1.257e+06	2.842e+06	2.807e+06	354.50	7911.66	1.764e+04
30	2.03	0.0	1.44	0.0	1.327e+06	1.310e+06	2.915e+06	2.891e+06	354.50	8236.33	1.809e+04
31	2.03	0.0	1.44	0.0	1.327e+06	1.310e+06	2.915e+06	2.891e+06	354.50	8235.45	1.809e+04
32	3.57	0.0	1.33	0.0	1.274e+06	1.257e+06	2.841e+06	2.807e+06	354.50	7909.28	1.763e+04
33	1.51	0.0	2.48	0.0	1.280e+06	1.262e+06	2.849e+06	2.817e+06	354.50	7942.14	1.768e+04

Pilas.	**M 2-2 i**	**M 2-2 f**	**M 3-3 i**	**M 3-3 f**	**V M2-2**	**V M3-3**
	1.779e+06	1.763e+06	3.919e+06	3.887e+06	1.093e+04	2.409e+04

Pilas.	**nid**	**alfaomega**	**V. 7.4.29 2-2**	**V. 7.4.29 3-3**	**V. 7.4.29 Stato**	**dmu_fi 2-2**	**dmu_fi 3-3**	**cmu_fi 2-2**	**cmu_fi 3-3**	**V. dut. 2-2**	**V. dut. 3-3**
22	0.12	0.14	0.15	0.22	ok	7.1	7.1	10.2	10.7	0.69	0.66
	0.11	0.14	0.13	0.19	ok			14.4	10.4	0.49	0.68
23	0.12	0.14	0.15	0.21	ok	7.1	7.1	10.3	10.7	0.69	0.66
	0.11	0.14	0.13	0.19	ok			10.4	10.8	0.68	0.65
24	0.15	0.14	0.27	0.35	ok	7.1	7.1	11.3	9.7	0.62	0.73
	0.15	0.14	0.25	0.32	ok			11.8	9.8	0.60	0.72
25	0.15	0.14	0.27	0.35	ok	7.1	7.1	11.4	9.7	0.62	0.73
	0.15	0.14	0.25	0.32	ok			11.8	9.8	0.60	0.72
26	0.12	0.14	0.15	0.21	ok	7.1	7.1	10.3	10.7	0.69	0.66
	0.11	0.14	0.13	0.19	ok			10.4	10.8	0.68	0.65
27	0.12	0.14	0.15	0.22	ok	7.1	7.1	10.2	10.7	0.69	0.66
	0.11	0.14	0.13	0.19	ok			14.5	10.4	0.49	0.68
28	0.05	0.14	0.0	0.0	ok	7.1	7.1	23.0	13.2	0.31	0.54
	0.05	0.14	0.0	0.0	ok			24.4	13.7	0.29	0.52
29	0.05	0.14	0.0	0.0	ok	7.1	7.1	23.4	13.3	0.30	0.53
	0.05	0.14	0.0	0.0	ok			24.8	13.8	0.29	0.51

30	0.07	0.14	0.0	0.02	ok	7.1	7.1	19.9	12.1	0.36	0.59
	0.06	0.14	0.0	3.84e-04	ok			20.9	12.5	0.34	0.57
31	0.07	0.14	0.0	0.02	ok	7.1	7.1	19.9	12.1	0.36	0.59
	0.06	0.14	0.0	1.92e-04	ok			20.9	12.5	0.34	0.57
32	0.05	0.14	0.0	0.0	ok	7.1	7.1	23.4	13.3	0.30	0.53
	0.05	0.14	0.0	0.0	ok			24.8	13.8	0.29	0.51
33	0.05	0.14	0.0	0.0	ok	7.1	7.1	23.0	13.2	0.31	0.54
	0.05	0.14	0.0	0.0	ok			24.4	13.7	0.29	0.52
			2-2	**3-3**						**2-2**	**3-3**
			0.27	0.35						0.69	0.73

Nodo	**Conf.**	**Stato**	**Pilas.**	**Diam st**	**Passo**	**n. br. 2**	**Bj2**	**Hjc2**	**n. br. 3**	**Bj3**	**Hjc3**	**V. 7.4.8**	**V. Ash**	**7.4.10**	**Rif. cmb**
				mm	cm		cm	cm		cm	cm				
7	NO	ok	22	10	8.0	3	30.0	50.2	4	45.0	20.2	0.6	0.9	SI	20,21
8	NO	ok	24	10	5.0	3	30.0	50.2	4	45.0	20.2	0.7	0.9	NO	24,5
9	NO	ok	26	10	10.0	3	30.0	50.2	4	45.0	20.2	0.8	0.9	SI	30,15
10	NO	ok	23	10	10.0	3	30.0	50.2	4	45.0	20.2	0.8	0.9	SI	27,10
11	NO	ok	25	10	5.0	3	30.0	50.2	4	45.0	20.2	0.7	0.9	NO	33,20
12	NO	ok	27	10	8.0	3	30.0	50.2	4	45.0	20.2	0.6	0.9	SI	5,36
13	NO	ok	28	10	12.5	3	30.0	50.2	4	45.0	20.2	0.5	0.9	SI	5,21
14	NO	ok	30	10	5.0	3	30.0	50.2	4	45.0	20.2	0.6	0.9	NO	21,5
15	NO	ok	32	10	12.5	3	30.0	50.2	4	45.0	20.2	0.5	0.9	SI	21,5
16	NO	ok	29	10	12.5	3	30.0	50.2	4	45.0	20.2	0.5	0.9	SI	21,5
17	NO	ok	31	10	5.0	3	30.0	50.2	4	45.0	20.2	0.6	0.9	NO	21,5
18	NO	ok	33	10	12.5	3	30.0	50.2	4	45.0	20.2	0.5	0.9	SI	5,21
Nodo					**Passo**							**V. 7.4.8**	**V. Ash**		
					5.00										
												0.83	0.93		

							M_T= 1	**Z=0.0**	**P=1**	**P=4**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
		cm									L=cm	
1	ok,ok	0.0	0.32	16.1	16.1	0.0	0.06	0.38	0.23	0.23	3d8/20 L=50	29,32,12
	s=1,m=3	95.0	0.32	16.1	16.1	0.0	0.06	0.21	0.21	0.15	3d8/20 L=50	33,32,32
48	ok,ok	0.0	0.32	16.1	16.1	0.0	0.06	0.21	0.23	0.15	3d8/20 L=95	33,32,32
	s=1,m=3	95.0	0.32	16.1	16.1	0.0	0.06	0.10	0.20	0.09	3d8/20 L=95	33,32,36
41	ok,ok	0.0	0.32	16.1	16.1	0.0	0.06	0.10	0.14	0.06	3d8/20 L=95	33,32,36
	s=1,m=3	95.0	0.32	16.1	16.1	0.0	0.06	0.06	0.16	0.12	3d8/20 L=95	33,29,17
34	ok,ok	0.0	0.32	16.1	16.1	0.0	0.06	0.08	0.15	0.11	3d8/20 L=80	11,29,17
	s=1,m=3	95.0	0.32	16.1	16.1	0.0	0.06	0.13	0.19	0.21	3d8/20 L=80	33,9,17
							M_T= 2	**Z=0.0**	**P=2**	**P=5**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
2	ok,ok	0.0	0.32	16.1	16.1	0.0	0.06	0.11	0.09	0.10	3d8/20 L=80	23,20,2
	s=1,m=3	95.0	0.32	16.1	16.1	0.0	0.06	0.05	0.06	0.05	3d8/20 L=80	23,20,28
49	ok,ok	0.0	0.32	16.1	16.1	0.0	0.06	0.04	0.06	0.07	3d8/20 L=95	33,36,2
	s=1,m=3	95.0	0.32	16.1	16.1	0.0	0.06	0.03	0.03	0.02	3d8/20 L=95	8,36,32
42	ok,ok	0.0	0.32	16.1	16.1	0.0	0.06	0.03	0.03	0.02	3d8/20 L=95	26,24,25
	s=1,m=3	95.0	0.32	16.1	16.1	0.0	0.06	0.05	0.06	0.07	3d8/20 L=95	33,21,2
35	ok,ok	0.0	0.32	16.1	16.1	0.0	0.06	0.05	0.06	0.05	3d8/20 L=80	34,21,29
	s=1,m=3	95.0	0.32	16.1	16.1	0.0	0.06	0.11	0.08	0.10	3d8/20 L=80	13,5,2
							M_T= 3	**Z=0.0**	**P=3**	**P=6**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
3	ok,ok	0.0	0.32	16.1	16.1	0.0	0.06	0.14	0.18	0.21	3d8/20 L=80	10,16,8
	s=1,m=3	95.0	0.32	16.1	16.1	0.0	0.06	0.09	0.15	0.11	3d8/20 L=80	24,28,8
50	ok,ok	0.0	0.32	16.1	16.1	0.0	0.06	0.08	0.17	0.12	3d8/20 L=95	24,28,8
	s=1,m=3	95.0	0.32	16.1	16.1	0.0	0.06	0.15	0.15	0.06	3d8/20 L=95	24,25,21
43	ok,ok	0.0	0.32	16.1	16.1	0.0	0.06	0.16	0.16	0.07	3d8/20 L=95	24,28,21
	s=1,m=3	95.0	0.32	16.1	16.1	0.0	0.06	0.17	0.19	0.12	3d8/20 L=95	24,25,25
36	ok,ok	0.0	0.32	16.1	16.1	0.0	0.06	0.23	0.17	0.14	3d8/20 L=50	24,25,25
	s=1,m=3	95.0	0.32	16.1	16.1	0.0	0.06	0.24	0.20	0.22	3d8/20 L=50	25,25,13
							M_T= 4	**Z=0.0**	**P=1**	**P=3**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
4	ok,ok	0.0	0.32	16.1	16.1	8.0	0.06	0.19	0.43	0.86	3d8/12 L=92	29,36,33
	s=1,m=3	106.9	0.32	16.1	16.1	8.0	0.06	0.16	0.39	0.85	3d8/12 L=92	36,36,33
37	ok,ok	0.0	0.32	16.1	16.1	0.0	0.06	0.08	0.20	0.13	3d8/20 L=107	33,32,32
	s=1,m=3	106.9	0.32	16.1	16.1	0.0	0.06	0.10	0.21	0.09	3d8/20 L=107	33,29,12
44	ok,ok	0.0	0.32	16.1	16.1	0.0	0.06	0.12	0.11	0.14	3d8/20 L=107	19,9,9
	s=1,m=3	106.9	0.32	16.1	16.1	0.0	0.06	0.18	0.14	0.19	3d8/20 L=107	29,9,5
51	ok,ok	0.0	0.32	16.1	16.1	0.0	0.06	0.18	0.17	0.30	3d8/20 L=77	11,5,5
	s=1,m=3	106.9	0.32	16.1	16.1	0.0	0.06	0.31	0.20	0.35	3d8/20 L=77	29,5,5
5	ok,ok	0.0	0.32	16.1	16.1	0.0	0.06	0.28	0.21	0.33	3d8/20 L=77	21,32,12
	s=1,m=3	106.9	0.32	16.1	16.1	0.0	0.06	0.15	0.18	0.28	3d8/20 L=77	29,32,12

38	ok,ok	0.0	0.32	16.1	16.1	0.0	0.06	0.16	0.11	0.19	3d8/20 L=107	31,7,8
	s=1,m=3	106.9	0.32	16.1	16.1	0.0	0.06	0.23	0.08	0.14	3d8/20 L=107	7,5,8
45	ok,ok	0.0	0.32	16.1	16.1	0.0	0.06	0.21	0.18	0.13	3d8/20 L=107	11,28,5
	s=1,m=3	106.9	0.32	16.1	16.1	0.0	0.06	0.28	0.18	0.17	3d8/20 L=107	7,25,21
52	ok,ok	0.0	0.32	16.1	16.1	8.0	0.06	0.39	0.31	0.84	3d8/15 L=62	8,25,28
	s=1,m=3	106.9	0.32	16.1	16.1	8.0	0.06	0.25	0.35	0.84	3d8/15 L=62	8,25,28
							M_T= 5	**Z=0.0**	**P=4**	**P=6**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
6	ok,ok	0.0	0.32	16.1	16.1	8.0	0.06	0.41	0.40	0.93	3d8/10 L=62	17,34,32
	s=1,m=3	106.9	0.32	16.1	16.1	8.0	0.06	0.22	0.36	0.85	3d8/10 L=62	17,34,32
39	ok,ok	0.0	0.32	16.1	16.1	0.0	0.06	0.22	0.22	0.17	3d8/20 L=107	14,32,36
	s=1,m=3	106.9	0.32	16.1	16.1	0.0	0.06	0.26	0.19	0.13	3d8/20 L=107	26,32,20
46	ok,ok	0.0	0.32	16.1	16.1	0.0	0.06	0.24	0.11	0.14	3d8/20 L=107	28,17,17
	s=1,m=3	106.9	0.32	16.1	16.1	0.0	0.06	0.20	0.13	0.19	3d8/20 L=107	26,17,17
53	ok,ok	0.0	0.32	16.1	16.1	0.0	0.06	0.30	0.25	0.28	3d8/20 L=77	28,25,13
	s=1,m=3	106.9	0.32	16.1	16.1	0.0	0.06	0.22	0.28	0.33	3d8/20 L=77	14,25,13
7	ok,ok	0.0	0.32	16.1	16.1	0.0	0.06	0.38	0.26	0.35	3d8/20 L=77	18,20,20
	s=1,m=3	106.9	0.32	16.1	16.1	0.0	0.06	0.35	0.24	0.30	3d8/20 L=77	26,20,20
40	ok,ok	0.0	0.32	16.1	16.1	0.0	0.06	0.23	0.17	0.20	3d8/20 L=107	28,16,20
	s=1,m=3	106.9	0.32	16.1	16.1	0.0	0.06	0.27	0.15	0.15	3d8/20 L=107	28,16,16
47	ok,ok	0.0	0.32	16.1	16.1	0.0	0.06	0.27	0.23	0.11	3d8/20 L=107	24,25,13
	s=1,m=3	106.9	0.32	16.1	16.1	0.0	0.06	0.16	0.25	0.16	3d8/20 L=107	28,25,25
54	ok,ok	0.0	0.32	16.1	16.1	8.0	0.06	0.25	0.38	0.76	3d8/8 L=92	24,35,21
	s=1,m=3	106.9	0.32	16.1	16.1	8.0	0.06	0.11	0.41	0.84	3d8/8 L=92	23,35,21
							M_T= 6	**Z=428.0**	**P=1**	**P=4**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
8	ok,ok	0.0	0.85	12.7	10.2	0.0	0.16	0.95	0.57	0.15	3d10/10 L=50	36,15,36
	s=3,m=3	190.0	0.51	7.6	7.6	0.0	0.12	0.40	0.56	0.45	3d10/30 L=220	29,15,36
		380.0	0.82	7.6	12.2	0.0	0.16	0.95	0.69	0.19	3d10/10 L=50	36,15,36
							M_T= 7	**Z=428.0**	**P=2**	**P=5**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
9	ok,ok	0.0	0.71	7.6	10.7	0.0	0.15	0.95	0.55	0.19	3d10/10 L=50	26,26,36
	s=3,m=3	190.0	0.51	7.6	7.6	0.0	0.12	0.51	0.31	0.30	3d10/30 L=250	2,26,36
		380.0	0.71	7.6	10.7	0.0	0.15	0.95	0.55	0.19	3d10/10 L=50	31,26,36
							M_T= 8	**Z=428.0**	**P=3**	**P=6**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
10	ok,ok	0.0	0.82	7.6	12.2	0.0	0.16	0.94	0.69	0.19	3d10/10 L=50	21,10,36
	s=3,m=3	190.0	0.51	7.6	7.6	0.0	0.12	0.40	0.56	0.45	3d10/30 L=220	28,10,36
		380.0	0.85	12.7	10.2	0.0	0.16	0.95	0.57	0.15	3d10/10 L=50	21,10,36
							M_T= 9	**Z=428.0**	**P=1**	**P=3**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
11	ok,ok	0.0	0.61	7.6	9.2	3.1	0.14	0.83	0.47	0.51	3d10/10 L=50	11,31,36
	s=3,m=3	213.8	0.51	7.6	7.6	3.1	0.12	0.17	0.39	0.87	3d10/20 L=282	11,31,36
		427.5	0.61	7.6	9.2	3.1	0.14	0.86	0.47	0.51	3d10/10 L=50	11,31,36
12	ok,ok	0.0	0.61	7.6	9.2	0.0	0.14	0.97	0.42	0.14	3d10/10 L=50	8,26,36
	s=3,m=3	213.8	0.51	7.6	7.6	0.0	0.12	0.15	0.34	0.32	3d10/30 L=252	11,26,36
		427.5	0.68	10.2	9.2	0.0	0.14	0.84	0.39	0.12	3d10/10 L=50	10,26,36
							M_T= 10	**Z=428.0**	**P=4**	**P=6**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
13	ok,ok	0.0	0.68	10.2	9.2	0.0	0.14	0.84	0.38	0.12	3d10/10 L=50	15,31,36
	s=3,m=3	213.8	0.51	7.6	7.6	0.0	0.12	0.15	0.34	0.32	3d10/30 L=252	14,31,36
		427.5	0.61	7.6	9.2	0.0	0.14	0.97	0.42	0.14	3d10/10 L=50	17,31,36
14	ok,ok	0.0	0.61	7.6	9.2	3.1	0.14	0.87	0.47	0.51	3d10/10 L=50	14,26,27
	s=3,m=3	213.8	0.51	7.6	7.6	3.1	0.12	0.17	0.39	0.87	3d10/20 L=282	14,26,27
		427.5	0.61	7.6	9.2	3.1	0.14	0.83	0.47	0.51	3d10/10 L=50	14,26,27
							M_T= 11	**Z=835.0**	**P=1**	**P=4**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
15	ok,ok	0.0	0.51	7.6	7.6	0.0	0.12	0.82	0.55	0.16	3d10/10 L=50	36,15,36
	s=3,m=3	190.0	0.51	7.6	7.6	0.0	0.12	0.44	0.36	0.28	3d10/30 L=220	33,15,36
		380.0	0.51	7.6	7.6	0.0	0.12	0.94	0.55	0.16	3d10/10 L=50	33,15,36
							M_T= 12	**Z=835.0**	**P=2**	**P=5**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
16	ok,ok	0.0	0.61	7.6	9.2	0.0	0.14	0.88	0.64	0.23	3d10/10 L=50	26,31,36
	s=3,m=3	190.0	0.68	10.2	7.6	0.0	0.14	0.66	0.27	0.28	3d10/30 L=250	2,31,36
		380.0	0.61	7.6	9.2	0.0	0.14	0.88	0.64	0.23	3d10/10 L=50	31,31,36
							M_T= 13	**Z=835.0**	**P=3**	**P=6**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
17	ok,ok	0.0	0.51	7.6	7.6	0.0	0.12	0.94	0.55	0.16	3d10/10 L=50	24,10,36
	s=3,m=3	190.0	0.51	7.6	7.6	0.0	0.12	0.44	0.36	0.28	3d10/30 L=220	24,10,36
		380.0	0.51	7.6	7.6	0.0	0.12	0.81	0.55	0.16	3d10/10 L=50	21,10,36
							M_T= 14	**Z=835.0**	**P=1**	**P=3**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
18	ok,ok	0.0	0.51	7.6	7.6	0.0	0.12	0.53	0.42	0.09	3d10/10 L=50	11,30,36
	s=3,m=3	213.8	0.51	7.6	7.6	0.0	0.12	0.07	0.39	0.23	3d10/30 L=282	11,30,36
		427.5	0.51	7.6	7.6	0.0	0.12	0.52	0.42	0.09	3d10/10 L=50	10,30,36
19	ok,ok	0.0	0.51	7.6	7.6	0.0	0.12	0.58	0.32	0.09	3d10/10 L=50	8,26,36
	s=3,m=3	213.8	0.51	7.6	7.6	0.0	0.12	0.08	0.29	0.25	3d10/30 L=252	31,26,36

		427.5	0.51	7.6	7.6	0.0	0.12	0.61	0.32	0.09	3d10/10 L=50 10,26,36
							M_T= 15	**Z=835.0**	**P=4**	**P=6**	
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
20	ok,ok	0.0	0.51	7.6	7.6	0.0	0.12	0.61	0.31	0.09	3d10/10 L=50 15,31,36
	s=3,m=3	213.8	0.51	7.6	7.6	0.0	0.12	0.08	0.29	0.25	3d10/30 L=252 26,31,36
		427.5	0.51	7.6	7.6	0.0	0.12	0.58	0.31	0.09	3d10/10 L=50 17,31,36
21	ok,ok	0.0	0.51	7.6	7.6	0.0	0.12	0.52	0.42	0.09	3d10/10 L=50 15,27,36
	s=3,m=3	213.8	0.51	7.6	7.6	0.0	0.12	0.07	0.39	0.23	3d10/30 L=282 14,27,36
		427.5	0.51	7.6	7.6	0.0	0.12	0.53	0.42	0.09	3d10/10 L=50 14,27,36

Trave	**%Af**	**Af inf.**	**Af. sup**	**Af long.**	**x/d**	**V N/M**	**V V/T cls**	**V V/T acc**
	0.85	16.08	16.08	8.04	0.16	0.97	0.69	0.93

Trave	**M negativo i**	**M positivo i**	**M negativo f**	**M positivo f**	**Luce per V**	**V M-i M+f**	**V M+i M-f**	**VEd,min**	**VEd,max**	**Vr1**	**As**
	daN cm	daN cm	daN cm	daN cm	cm	daN	daN	daN	daN	daN	cm2
8	1.661e+06	2.060e+06	1.984e+06	1.260e+06	320.00	1.004e+04	1.390e+04	0.0	0.0	0.0	0.0
9	1.744e+06	1.260e+06	1.744e+06	1.260e+06	350.00	9438.81	9438.81	0.0	0.0	0.0	0.0
10	1.984e+06	1.260e+06	1.661e+06	2.060e+06	320.00	1.390e+04	1.004e+04	0.0	0.0	0.0	0.0
11	1.502e+06	1.260e+06	1.502e+06	1.260e+06	382.50	7943.18	7943.18	0.0	0.0	0.0	0.0
12	1.502e+06	1.260e+06	1.502e+06	1.661e+06	352.50	9871.13	8619.13	0.0	0.0	0.0	0.0
13	1.502e+06	1.661e+06	1.502e+06	1.260e+06	352.50	8619.13	9871.13	0.0	0.0	0.0	0.0
14	1.502e+06	1.260e+06	1.502e+06	1.260e+06	382.50	7943.18	7943.18	0.0	0.0	0.0	0.0
15	1.260e+06	1.260e+06	1.260e+06	1.260e+06	320.00	8659.25	8659.25	0.0	0.0	0.0	0.0
16	1.502e+06	1.260e+06	1.502e+06	1.260e+06	350.00	8680.76	8680.76	0.0	0.0	0.0	0.0
17	1.260e+06	1.260e+06	1.260e+06	1.260e+06	320.00	8659.25	8659.25	0.0	0.0	0.0	0.0
18	1.260e+06	1.260e+06	1.260e+06	1.260e+06	382.50	7244.34	7244.34	0.0	0.0	0.0	0.0
19	1.260e+06	1.260e+06	1.260e+06	1.260e+06	352.50	7860.88	7860.88	0.0	0.0	0.0	0.0
20	1.260e+06	1.260e+06	1.260e+06	1.260e+06	352.50	7860.88	7860.88	0.0	0.0	0.0	0.0
21	1.260e+06	1.260e+06	1.260e+06	1.260e+06	382.50	7244.34	7244.34	0.0	0.0	0.0	0.0

Trave	**M negativo i**	**M positivo i**	**M negativo f**	**M positivo f**	**V M-i M+f**	**V M+i M-f**	**VEd,min**	**VEd,max**	**Vr1**	**As**
							0.0			
	1.984e+06	2.060e+06	1.984e+06	2.060e+06	1.390e+04	1.390e+04		0.0	0.0	0.0

STATI LIMITE D' ESERCIZIO

LEGENDA TABELLA STATI LIMITE D' ESERCIZIO

In tabella vengono riportati i valori di interesse per il controllo degli stati limite d'esercizio.

In particolare vengono riportati, in relazione al tipo di elemento strutturale, i risultati relativi alle tre categorie di combinazione considerate:

- Combinazioni rare
- Combinazioni frequenti
- Combinazioni quasi permanenti.

I valori di interesse sono i seguenti:

rRfck	rapporto tra la massima compressione nel calcestruzzo e la tensione fck in combinazioni rare	[*normalizzato a 1*]
rRfyk	rapporto tra la massima tensione nell'acciaio e la tensione fyk in combinazioni rare	[*normalizzato a 1*]
rPfck	rapporto tra la massima compressione nel calcestruzzo e la tensione fck in combinazioni quasi permanenti	[*normalizzato a 1*]
wR	apertura caratteristica delle fessure in combinazioni rare	[*mm*]
wF	apertura caratteristica delle fessure in combinazioni frequenti	[*mm*]
wP	apertura caratteristica delle fessure in combinazioni quasi permanenti	[*mm*]
dR	massima deformazione in combinazioni rare	
dF	massima deformazione in combinazioni frequenti	
dP	massima deformazione in combinazioni quasi permanenti	

Per ognuno dei nove valori soprariportati viene indicata (Rif.cmb) la combinazione in cui si è verificato.

In relazione al tipo di elemento strutturale i valori sono selezionati nel modo seguente:

pilastri	**rRfck**	**rRfyk**	**rPfck**	per sezioni significative
travi	**rRfck**	**rRfyk**	**rPfck**	per sezioni significative
	wR	**wF**	**wP**	per sezioni significative
	dR	**dF**	**dP**	massimi in campata
setti e gusci	**rRfck**	**rRfyk**	**rPfck**	massimi nei nodi dell'elemento
	wR	**wF**	**wP**	massimi nei nodi dell'elemento

Si precisa che i valori di massima deformazione per travi sono riferiti al piano verticale (piano locale 1-2 con momenti flettenti 3-3).

Pilas.	Pos.	rRfck	rRfyk	rPfck	Rif. cmb	Pos.	rRfck	rRfyk	rPfck	Rif. cmb
	cm					cm				
22	0.0	0.06	0.04	0.08	70,70,74	214.0	0.06	0.04	0.08	70,70,74
	428.0	0.07	0.05	0.09	70,70,74					
23	0.0	0.07	0.05	0.09	70,70,74	214.0	0.06	0.04	0.08	70,70,74
	428.0	0.07	0.04	0.08	70,70,74					
24	0.0	0.11	0.08	0.14	70,70,74	214.0	0.10	0.07	0.12	70,70,74
	428.0	0.13	0.08	0.16	70,70,74					
25	0.0	0.11	0.08	0.14	70,70,74	214.0	0.10	0.07	0.12	70,70,74
	428.0	0.13	0.08	0.16	70,70,74					
26	0.0	0.07	0.05	0.09	70,70,74	214.0	0.06	0.04	0.08	70,70,74
	428.0	0.07	0.04	0.08	70,70,74					
27	0.0	0.06	0.04	0.08	70,70,74	214.0	0.06	0.04	0.08	70,70,74
	428.0	0.07	0.05	0.09	70,70,74					
28	0.0	0.08	0.05	0.10	70,70,74	203.5	0.04	0.03	0.05	70,70,74
	407.0	0.10	0.06	0.13	70,70,74					
29	0.0	0.11	0.06	0.13	70,70,74	203.5	0.04	0.02	0.05	70,70,74
	407.0	0.13	0.08	0.16	70,70,74					
30	0.0	0.15	0.08	0.18	70,70,74	203.5	0.05	0.04	0.07	70,70,74
	407.0	0.19	0.09	0.23	70,70,74					
31	0.0	0.15	0.08	0.18	70,70,74	203.5	0.05	0.04	0.07	70,70,74
	407.0	0.19	0.09	0.23	70,70,74					
32	0.0	0.11	0.06	0.13	70,70,74	203.5	0.04	0.02	0.05	70,70,74
	407.0	0.13	0.08	0.16	70,70,74					
33	0.0	0.08	0.05	0.10	70,70,74	203.5	0.04	0.03	0.05	70,70,74
	407.0	0.10	0.06	0.13	70,70,74					

Pilas.	rRfck	rRfyk	rPfck	rRfck	rRfyk	rPfck
	0.19	0.09	0.23			

Trave	Pos.	rRfck	rRfyk	rPfck	Rif. cmb	wR	wF	wP	Rif. cmb	dR	dF	dP	Rif. cmb
	cm					mm	mm	mm		cm	cm	cm	
1	0.0	0.03	0.11	0.03	70,70,74	0.0	0.0	0.0	0,0,0	2.69e-03	2.57e-03	2.53e-03	70,72,74
	95.0	0.0	0.03	0.0	0,70,0	0.0	0.0	0.0	0,0,0				
2	0.0	0.02	0.10	0.02	70,70,74	0.0	0.0	0.0	0,0,0	4.06e-04	3.28e-04	3.03e-04	70,72,74
	95.0	0.0	0.04	0.0	0,70,0	0.0	0.0	0.0	0,0,0				
3	0.0	0.01	0.05	0.02	70,70,74	0.0	0.0	0.0	0,0,0	7.37e-04	7.37e-04	7.37e-04	69,71,73
	95.0	5.28e-03	0.03	7.03e-03	69,70,73	0.0	0.0	0.0	0,0,0				
4	0.0	0.02	0.02	0.03	70,70,74	0.0	0.0	0.0	0,0,0	-0.02	0.02	0.02	70,72,74
	106.9	0.04	0.07	0.06	70,70,74	0.0	0.0	0.0	0,0,0				
5	0.0	0.04	0.08	0.05	70,70,74	0.0	0.0	0.0	0,0,0	1.79e-03	1.65e-03	1.61e-03	70,72,74
	106.9	0.03	0.06	0.04	70,70,74	0.0	0.0	0.0	0,0,0				
6	0.0	0.04	0.07	0.05	70,70,74	0.0	0.0	0.0	0,0,0	0.01	0.01	0.01	70,72,74
	106.9	0.04	0.07	0.05	70,70,74	0.0	0.0	0.0	0,0,0				
7	0.0	0.04	0.08	0.05	70,70,74	0.0	0.0	0.0	0,0,0	-1.35e-03	-1.32e-03	-1.31e-03	70,72,74
	106.9	0.04	0.07	0.05	70,70,74	0.0	0.0	0.0	0,0,0				
8	0.0	0.04	0.11	0.05	70,70,74	0.0	0.0	0.0	0,0,0	-0.04	-0.04	-0.04	70,72,74
	190.0	0.09	0.22	0.11	70,70,74	0.0	0.0	0.0	0,0,0				
	380.0	0.06	0.12	0.07	70,70,74	0.0	0.0	0.0	0,0,0				
9	0.0	0.12	0.31	0.14	70,70,74	0.08	0.07	0.07	70,72,74	-0.19	-0.18	-0.17	70,72,74
	190.0	0.17	0.48	0.20	70,70,74	0.15	0.15	0.15	70,72,74				
	380.0	0.12	0.31	0.14	70,70,74	0.08	0.07	0.07	70,72,74				
10	0.0	0.06	0.12	0.07	70,70,74	0.0	0.0	0.0	0,0,0	-0.04	-0.04	-0.04	70,72,74
	190.0	0.09	0.22	0.11	70,70,74	0.0	0.0	0.0	0,0,0				
	380.0	0.04	0.11	0.05	70,70,74	0.0	0.0	0.0	0,0,0				
11	0.0	0.03	0.08	0.04	69,70,73	0.0	0.0	0.0	0,0,0	-0.03	-0.03	-0.03	70,72,74
	213.8	0.06	0.14	0.08	69,70,73	0.0	0.0	0.0	0,0,0				
	427.5	0.07	0.14	0.09	69,70,73	0.0	0.0	0.0	0,0,0				
12	0.0	0.06	0.11	0.08	69,69,73	0.0	0.0	0.0	0,0,0	-0.03	-0.03	-0.03	69,71,73
	213.8	0.05	0.11	0.07	69,70,73	0.0	0.0	0.0	0,0,0				
	427.5	0.03	0.06	0.03	70,70,74	0.0	0.0	0.0	0,0,0				
13	0.0	0.03	0.06	0.03	70,70,74	0.0	0.0	0.0	0,0,0	-0.03	-0.03	-0.03	70,72,74
	213.8	0.05	0.11	0.07	69,70,73	0.0	0.0	0.0	0,0,0				
	427.5	0.06	0.11	0.08	69,69,73	0.0	0.0	0.0	0,0,0				
14	0.0	0.07	0.14	0.09	69,70,73	0.0	0.0	0.0	0,0,0	-0.03	-0.03	-0.03	70,72,74
	213.8	0.06	0.14	0.08	69,70,73	0.0	0.0	0.0	0,0,0				
	427.5	0.03	0.08	0.04	69,70,73	0.0	0.0	0.0	0,0,0				
15	0.0	0.03	0.21	0.04	70,70,74	0.0	0.0	0.0	0,0,0	-0.12	-0.14	-0.12	70,72,74
	190.0	0.15	0.38	0.18	70,70,74	0.12	0.12	0.11	70,72,74				
	380.0	0.06	0.25	0.07	70,70,74	0.0	0.0	0.0	0,0,0				
16	0.0	0.13	0.53	0.17	70,70,74	0.16	0.18	0.18	70,72,74	-0.35	-0.37	-0.36	70,72,74
	190.0	0.24	0.62	0.30	70,70,74	0.20	0.22	0.21	70,72,74				
	380.0	0.13	0.53	0.17	70,70,74	0.16	0.18	0.18	70,72,74				

17	0.0	0.06	0.25	0.07	70,70,74	0.0	0.0	0.0	0,0,0	-0.12	-0.14	-0.12	70,72,74
	190.0	0.15	0.38	0.18	70,70,74	0.12	0.12	0.11	70,72,74				
	380.0	0.03	0.21	0.04	70,70,74	0.0	0.0	0.0	0,0,0				
18	0.0	0.02	0.06	0.03	70,70,74	0.0	0.0	0.0	0,0,0	-9.52e-03	-9.42e-03	-9.41e-03	70,72,74
	213.8	0.01	0.05	0.02	69,70,73	0.0	0.0	0.0	0,0,0				
	427.5	9.05e-03	0.03	0.01	69,69,73	0.0	0.0	0.0	0,0,0				
19	0.0	7.78e-03	0.02	0.01	69,69,73	0.0	0.0	0.0	0,0,0	0.01	0.01	0.01	70,72,74
...													
54	106.9	0.03	0.02	0.03	70,70,74	0.0	0.0	0.0	0,0,0	-0.02	-0.02	-0.02	70,72,74
Trave		**rRfck**	**rRfyk**	**rPfck**		**wR**	**wF**	**wP**		**dR**	**dF**	**dP**	
										-0.35	-0.37	-0.36	
		0.24	0.62	0.30		0.20	0.22	0.21		0.02	0.02	0.02	