

# COMUNE DI CONFLENTI

## Provincia di Catanzaro

**OGGETTO:** Adeguamento sismico dell'edificio scolastico "E. Isabella" di località S. Mazzeo-Coscaro.

### PROGETTO ESECUTIVO ADEGUAMENTO SCUOLA

Decreto Regione Calabria n°178 reg. del 31/10/2019 n° 293 reg. gen.

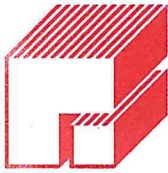
#### ELENCO ELABORATI

- [ ] TAVOLA 1\_SC: ELENCO ELABORATI
- [ ] TAVOLA 2\_SC: RELAZIONE TECNICA
- [ ] TAVOLA 3\_SC: RELAZIONE GENERALE DI CALCOLO
- [ ] TAVOLA 4\_SC: FASCICOLO DEI CALCOLI
- [ ] TAVOLA 5a\_SC: RELAZIONE GEOTECNICA
- [ ] TAVOLA 5b\_SC: RELAZIONE SULLE FONDAZIONI
- [ ] TAVOLA 6a\_SC: RELAZIONE GEOLOGICA
- [ ] TAVOLA 6b\_SC: RELAZIONE DI PERICOLOSITA' SISMICA
- [ ] TAVOLA 7\_SC: PLANIMETRIA PARTICOLAREGGIATA
- [ ] TAVOLA 8\_SC: STRALCIO AEROFOTOGRAMMETRICO CON INDIVIDUAZIONE DELL'EDIFICIO
- [ ] TAVOLA 9\_SC: ARCHITETTONICI STATO DI FATTO
- [ ] TAVOLA 10\_SC: ARCHITETTONICI STATO FUTURO
- [ ] TAVOLA 11\_SC: INTERVENTI IN FONDAZIONE
- [ ] TAVOLA 12\_SC: CARPENTERIA ED ARMATURA PILASTRI E TRAVI
- [ ] TAVOLA 13\_SC: CARPENTERIA ED ARMATURA SETTI
- [ ] TAVOLA 14\_SC: PIANTE STRUTTURALI
- [ ] TAVOLA 15\_SC: PARTICOLARI COSTRUTTIVI
- [ ] TAVOLA 16\_SC: PROVA CAROTE
- [ ] TAVOLA 17\_SC: PROVA BARRE
- ☒ TAVOLA 18\_SC: PROVA RILIEVI STRUTTURALI

Il progettista: Arch. **Attilio Mazzei**

Il RUP: Geom. **Nicola Stranges**

IL SINDACO: rag. **Serafino PIETRO PAOLA**



**PREMAC** s.r.l.

LABORATORIO PROVE E SPERIMENTAZIONI SU MATERIALI DA COSTRUZIONE, GEOTECNICHE SU TERRE E ROCCE  
AUTORIZZAZIONI: D.M. LL.PP. N 37616 DEL 29/09/1993, LEGGE 1086/71 E SUCCESSIVO RINNOVO - D.M. IL TT. 7731 del 02/08/2012 E SUCCESSIVO RINNOVO



## Settore Prove di carico in sito e controllo fabbricati

**Rapporto di prova N°: 0041/R0**

**Feroletto Antico, 21/02/18**

Verbale di Accettazione N°: 0232 del 19/02/18

**Richiedente:** GEOM NICOLA STRANGES in qualità di RUP

**Int. Fattura:** COMUNE DI CONFLENTI  
VIA MARCONI 88040 CONFLENTI -

### Dati cantiere:

**Opera:** EDIFICIO SCUOLA ELEMENTARE E MATERNA "E. ISABELLA" - CIG.N. ZA5223CEC2  
**In:** LOC.TA' SAN MAZZEO - COSCARO di CONFLENTI  
**Proprietà:** COMUNE CONFLENTI  
**Impresa:** ND  
**Direzione Lavori:** ND

**Strutture in esame.....:** Strutture in CA

**Prove richieste.....:** Dettagli strutturali

**Norme di riferimento.....:** Metodo interno

**Prove eseguite dal.....:** 13/02/18 al 13/02/18

**Attrezzatura ..:** Pacometro PS35 prodotto dalla HILTI in grado di stimare posizione e copriferro delle barre.  
Martello demolitore, Metro, Calibro e Macchina fotografica.

### Procedura di prova :

I dettagli strutturali, il numero e la posizione delle barre sono state individuate mediante pacometro mentre il diametro è stato verificato con il calibro dopo aver rimosso il copriferro con il martello demolitore.

Nelle seguenti pagine sono riepilogati i risultati di prova ottenuti in cantiere.

**Note:** Richiesta di prova sottoscritta dalla DD.LL. **No**

**-ALLEGATI-** Schema Ubicazione prove  
Dettagli strutturali  
Documentazione Fotografica

Lo Sperimentatore  
Geom. Alessandro Gallo

Il Direttore del Laboratorio  
Dott. Ing. Giuseppe MASCARO

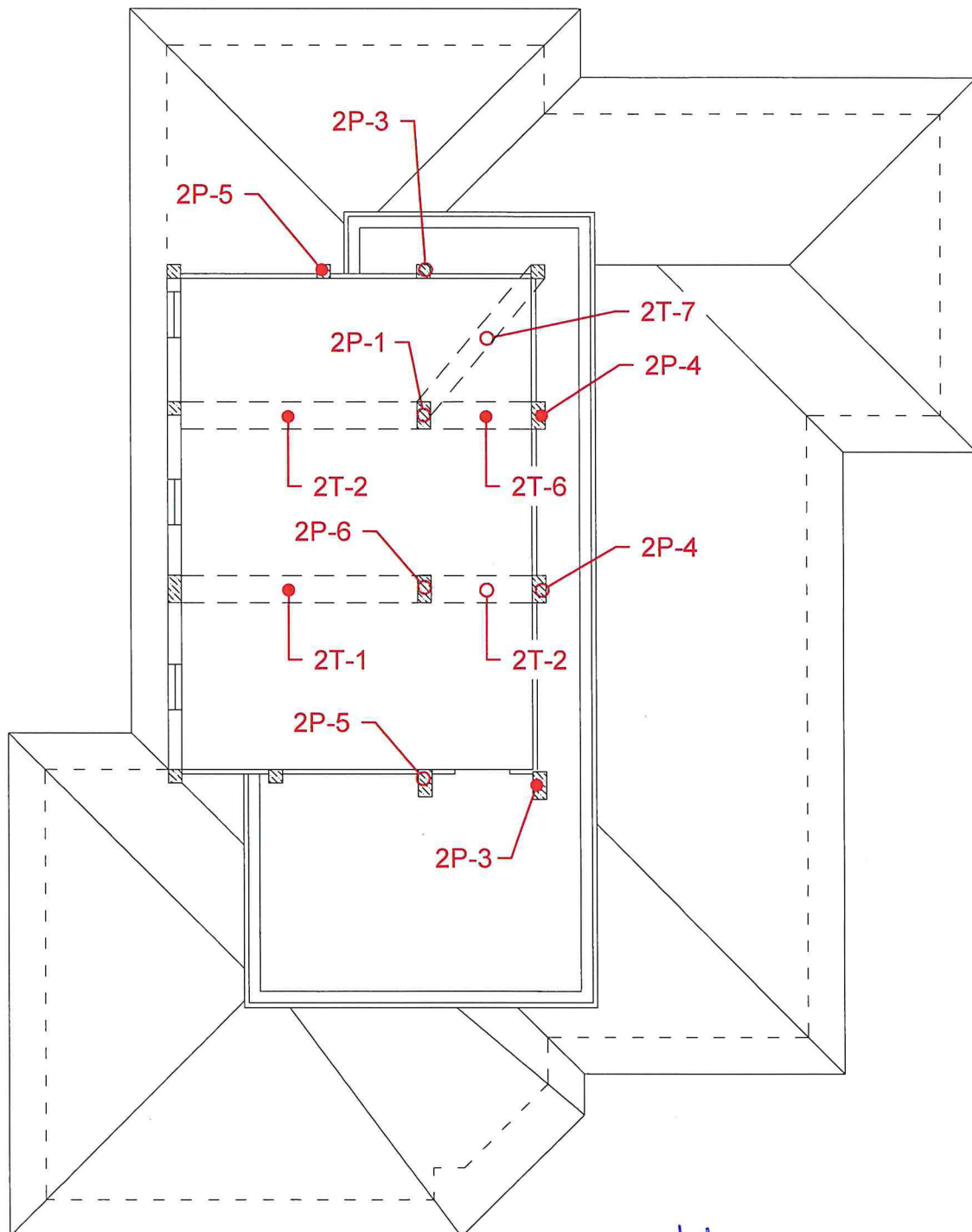
Il presente Rapporto di prova è costituito da n° 1 pagina + n° 18 allegati

Allegato al Rapporto di Prova n° 0041/R0 del 2018

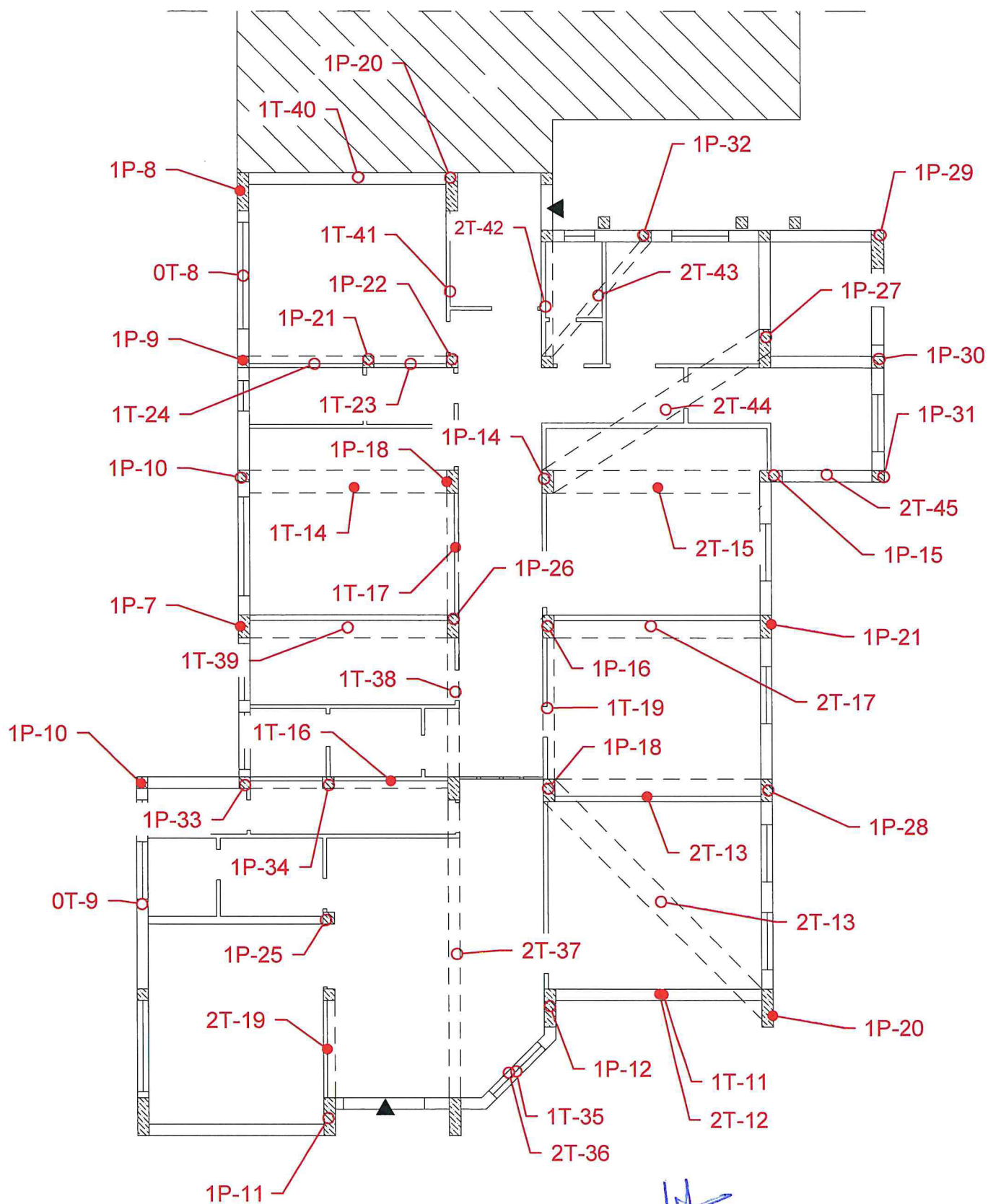
Schema Ubicazione Prove

- — PAC (pacometrica)
- — PAS (pacometrica + saggio)

PIANTA PIANO SOTTOTETTO



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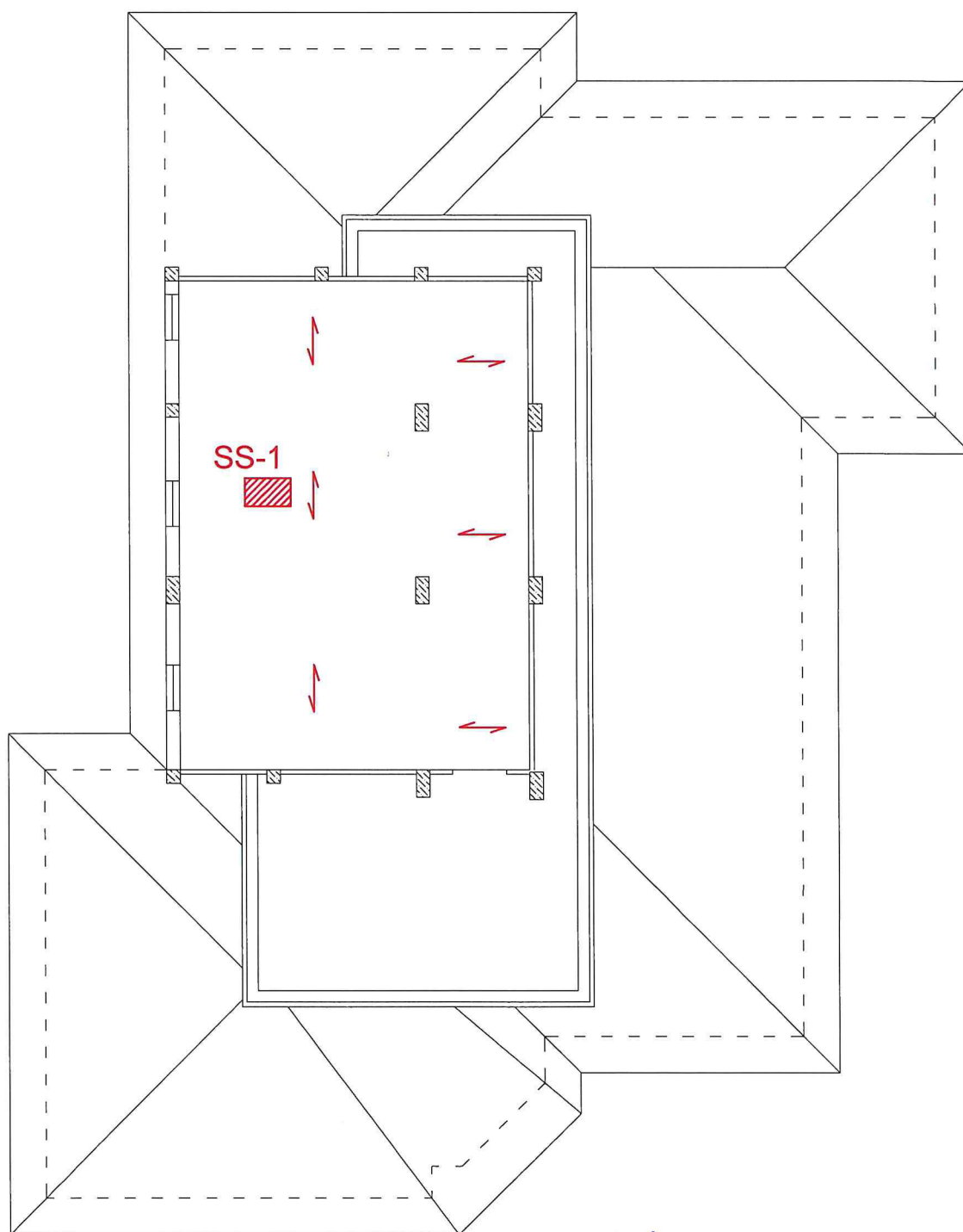




# Allegato al Rapporto di Prova n° 0041/R0 del 2018

## Schema Ubicazione Prove

- ↔ Verifica orditura solai  
▨ Punto saggio solaio

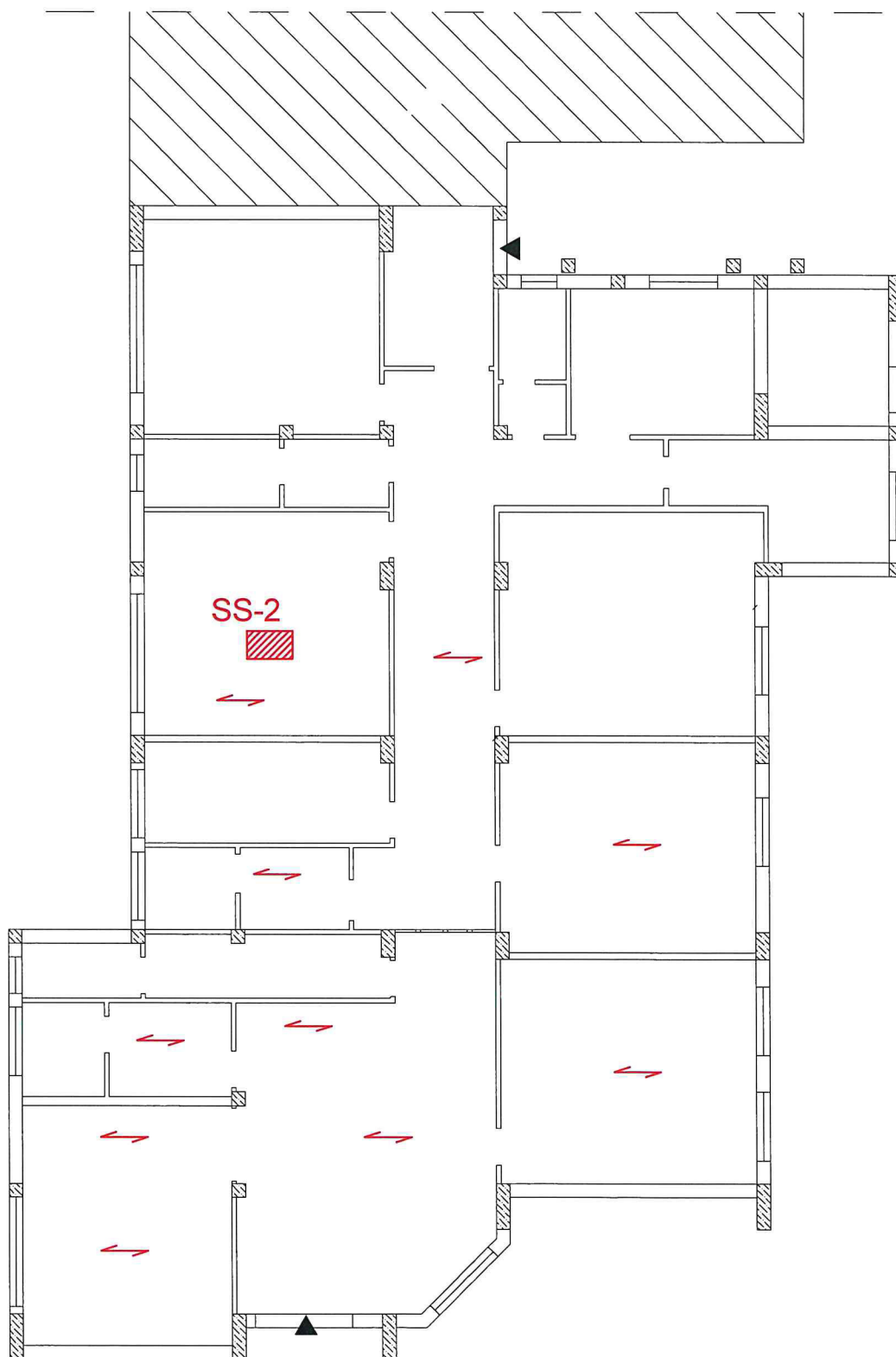


*[Handwritten signature]*

# Allegato al Rapporto di Prova n° 0041/R0 del 2018




## Schema Ubicazione Prove

- ↔ Verifica orditura solai
- ▨ Punto saggio solaio

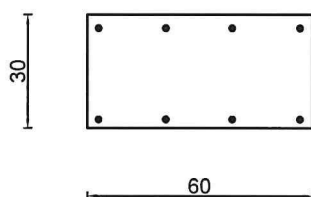


# Allegato al Rapporto di Prova n° 0041/R0 del 2018

## RILIEVI ARMATURA PILASTRI

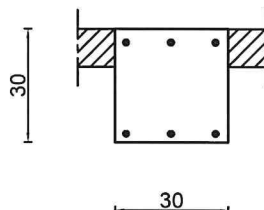
NR Non Rilevato TL Tondo Liscio  Misura  
 Zona Scarificata AM Aderenza Migliorata  
 Muratura

PAC2P-1



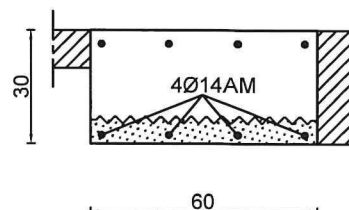
Long. 8 Ø -  
 Staffe Ø - / 25 cm  
 Copriferro - cm

PAC2P-3



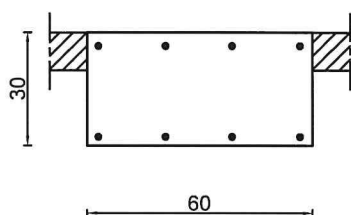
Long. 6 Ø -  
 Staffe Ø - / 17 cm  
 Copriferro - cm

PAS2P-3



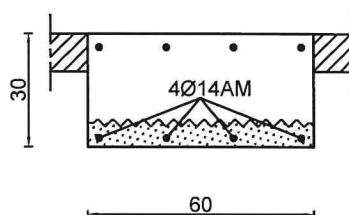
Long. 4 Ø 14 AM + 4 Ø -  
 Staffe Ø 8 AM / 23 cm  
 Copriferro 2 cm

PAC2P-4



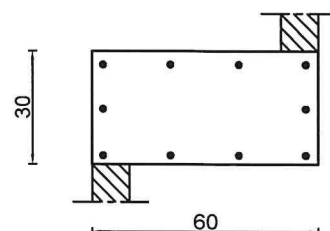
Long. 8 Ø -  
 Staffe Ø - / 18 cm  
 Copriferro - cm

PAS2P-4



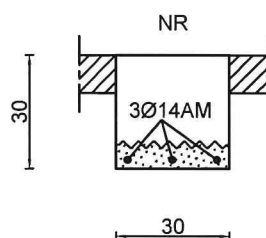
Long. 4 Ø 14 AM + 4 Ø -  
 Staffe Ø 8 AM / 20 cm  
 Copriferro 2 cm

PAC2P-5



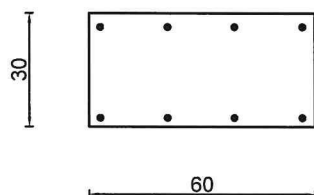
Long. 10 Ø -  
 Staffe Ø - / 22 cm  
 Copriferro - cm

PAS2P-5



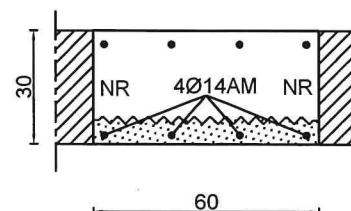
Long. 3 Ø 14 AM  
 Staffe Ø 6 AM / 25 cm  
 Copriferro 2 cm

PAC2P-6



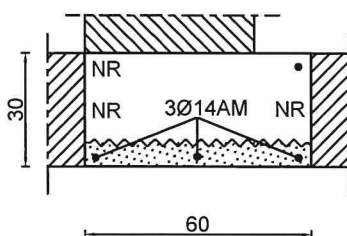
Long. 8 Ø -  
 Staffe Ø - / 22 cm  
 Copriferro - cm

PAS1P-7



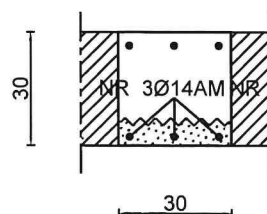
Long. 4 Ø 14 AM + 4 Ø -  
 Staffe Ø 8 AM / 18 cm  
 Copriferro 2 cm

PAS1P-8



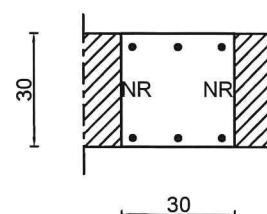
Long. 3 Ø 14 AM + 1 Ø -  
 Staffe Ø 8 AM / 20 cm  
 Copriferro 2 cm

PAS1P-9



Long. 3 Ø 14 AM + 3 Ø -  
 Staffe Ø 8 AM / 20 cm  
 Copriferro 2 cm



PAC1P-10



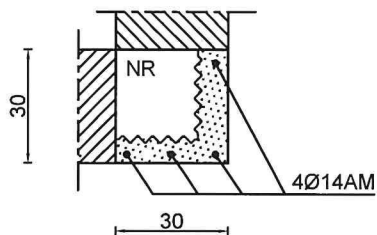
Long. 6 Ø -  
 Staffe Ø - / 22 cm  
 Copriferro - cm

# Allegato al Rapporto di Prova n° 0041/R0 del 2018

## **RILIEVI ARMATURA PILASTRI**

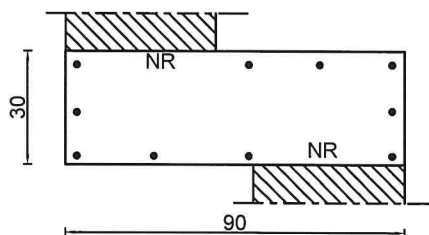
NR Non Rilevato      TL Tondo Liscio      Misura  
 Zona Scarificata      AM Aderenza Migliorata  
 Muratura

**PAS1P-10**



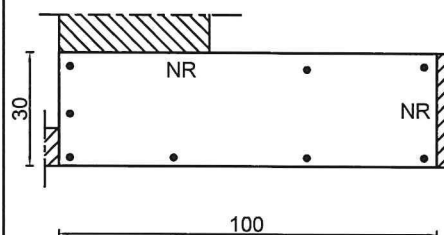
Long. 4 Ø 14 AM  
 Staffe Ø 8 AM / 18 cm  
 Copriferro 2 cm

**PAC1P-11**



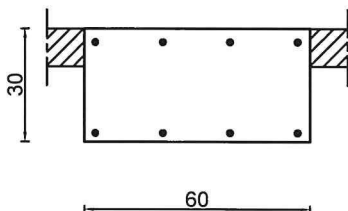
Long. 10 Ø -  
 Staffe Ø - / 23 cm  
 Copriferro - cm

**PAC1P-12**



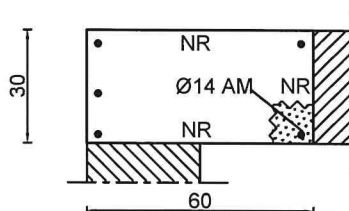
Long. 8 Ø -  
 Staffe Ø - / 25 cm  
 Copriferro - cm

**PAC1P-14**



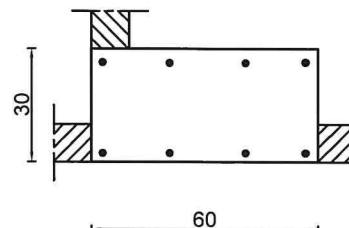
Long. 8 Ø -  
 Staffe Ø - / 25 cm  
 Copriferro - cm

**PAC1P-15**



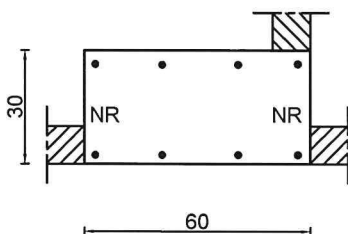
Long. 1 Ø 14 AM + 4 Ø -  
 Staffe Ø - / 25 cm  
 Copriferro - cm

**PAC1P-16**



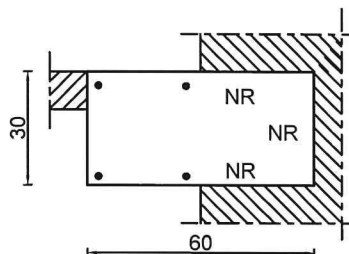
Long. 8 Ø -  
 Staffe Ø - / 18 cm  
 Copriferro - cm

**PAC1P-18**



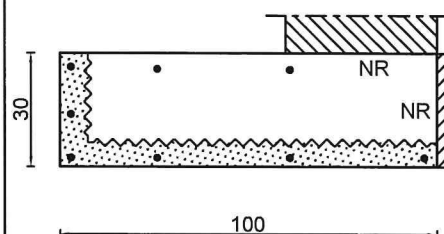
Long. 8 Ø -  
 Staffe Ø - / 20 cm  
 Copriferro - cm

**PAC1P-20**



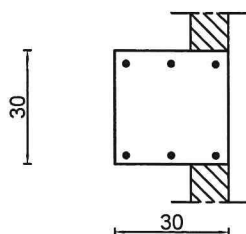
Long. 4 Ø -  
 Staffe Ø - / 25 cm  
 Copriferro - cm

**PAS1P-20**



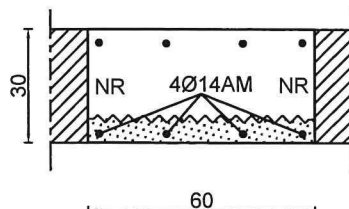
Long. 6 Ø 14 AM + 2 Ø -  
 Staffe Ø 8 AM / 20 cm  
 Copriferro 2 cm

**PAC1P-21**



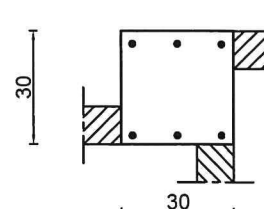
Long. 6 Ø -  
 Staffe Ø - / 23 cm  
 Copriferro - cm

**PAS1P-21**



Long. 4 Ø 14 AM + 4 Ø -  
 Staffe Ø 6 / 17 cm  
 Copriferro 2 cm

**PAC1P-22**




Long. 6 Ø -  
 Staffe Ø - / 20 cm  
 Copriferro - cm



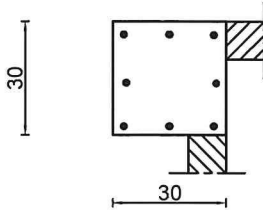
# Allegato al Rapporto di Prova n° 0041/R0 del 2018

## RILIEVI ARMATURA PILASTRI

NR Non Rilevato  
 Zona Scarificata  
 Muratura

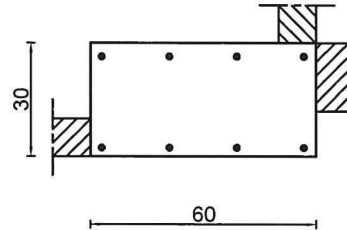
TL Tondo Liscio  Misura  
 AM Aderenza Migliorata

PAC1P-25



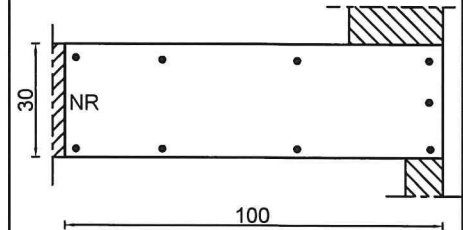
Long. 8 Ø -  
 Staffe Ø - / 23 cm  
 Copriferro - cm

PAC1P-26



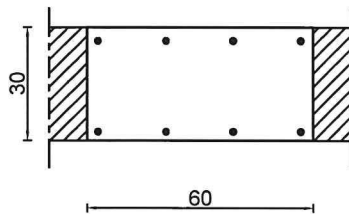
Long. 8 Ø -  
 Staffe Ø - / 22 cm  
 Copriferro - cm

PAC1P-27



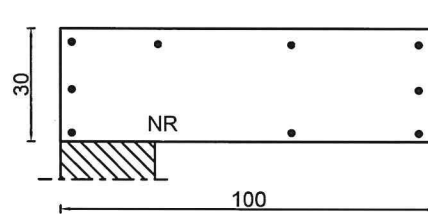
Long. 9 Ø -  
 Staffe Ø - / 20 cm  
 Copriferro - cm

PAC1P-28



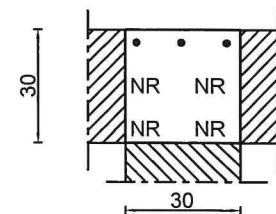
Long. 8 Ø -  
 Staffe Ø - / 25 cm  
 Copriferro - cm

PAC1P-29



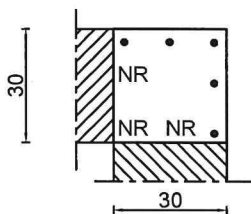
Long. 9 Ø -  
 Staffe Ø - / 20 cm  
 Copriferro - cm

PAC1P-30



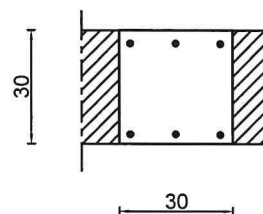
Long. 3 Ø -  
 Staffe Ø - / 22 cm  
 Copriferro - cm

PAC1P-31



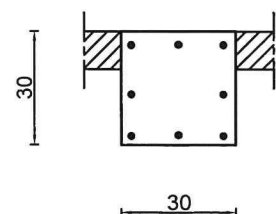
Long. 5 Ø -  
 Staffe Ø - / 23 cm  
 Copriferro - cm

PAC1P-32



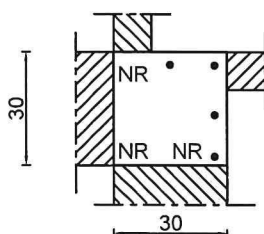
Long. 6 Ø -  
 Staffe Ø - / 22 cm  
 Copriferro - cm

PAC1P-33




Long. 8 Ø -  
 Staffe Ø - / 23 cm  
 Copriferro - cm

PAC1P-34






Long. 4 Ø -  
 Staffe Ø - / 23 cm  
 Copriferro - cm

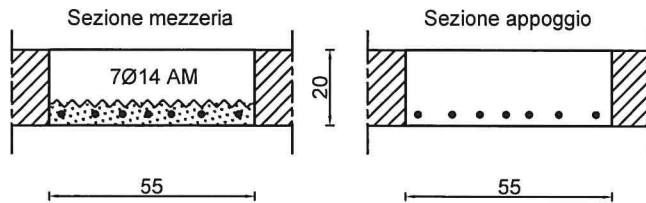


# Allegato al Rapporto di Prova n° 0041/R0 del 2018

## **RILIEVI ARMATURA TRAVI**

NR Non Rilevato      TL Tondo Liscio       Misura  
 Zona Scarificata      AM Aderenza Migliorata  
 Muratura

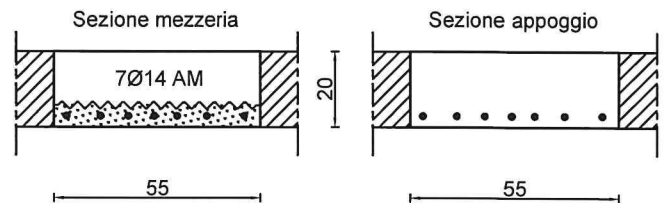
PAS2T-1



Long. 7 Ø 14 AM  
 Staffe 6 Ø AM / 18 cm  
 Copriferro 2 cm

Long. 7 Ø -  
 Staffe Ø - / 17 cm  
 Copriferro - cm

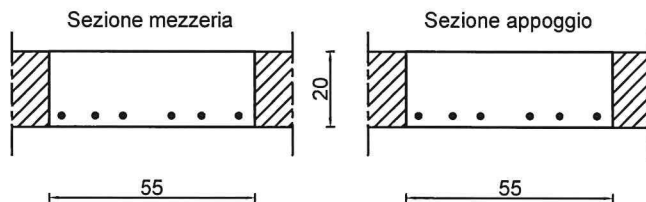
PAS2T-2



Long. 7 Ø 14 AM  
 Staffe 6 Ø AM / 18 cm  
 Copriferro 2 cm

Long. 7 Ø -  
 Staffe Ø - / 17 cm  
 Copriferro - cm

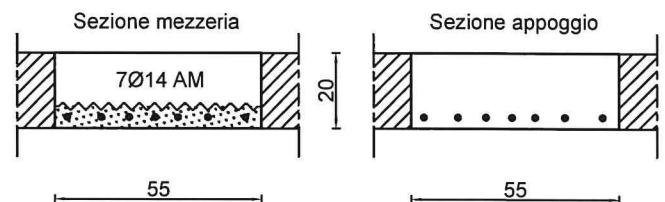
PAC2T-2



Long. 6 Ø -  
 Staffe - Ø - / 20 cm  
 Copriferro - cm

Long. 6 Ø -  
 Staffe Ø - / 17 cm  
 Copriferro - cm

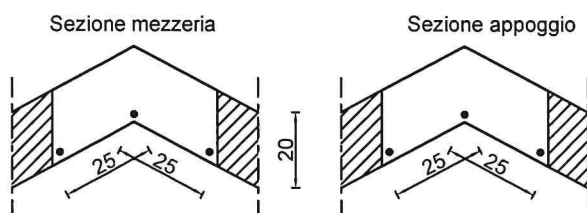
PAS2T-6



Long. 7 Ø 14 AM  
 Staffe 6 Ø AM / 20 cm  
 Copriferro 2 cm

Long. 7 Ø -  
 Staffe Ø - / 15 cm  
 Copriferro - cm

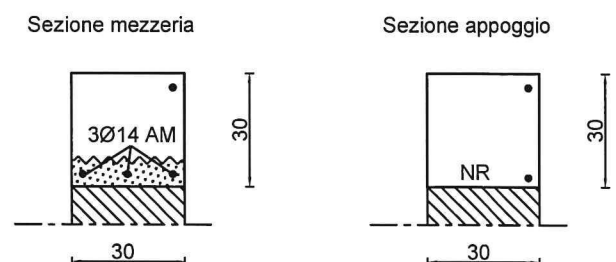
PAC2T-7



Long. 3 Ø -  
 Staffe - Ø - / 18 cm  
 Copriferro - cm

Long. 3 Ø -  
 Staffe Ø - / 18 cm  
 Copriferro - cm

PAS1T-11






Long. 3 Ø 14 + 1 Ø -  
 Staffe Ø 6 AM / 18 cm  
 Copriferro - cm

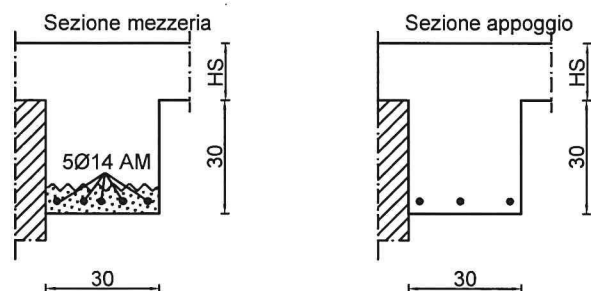
Long. 2 Ø -  
 Staffe Ø - / 18 cm -  
 Copriferro - cm

# Allegato al Rapporto di Prova n° 0041/R0 del 2018

## RILIEVI ARMATURA TRAVI

NR Non Rilevato TL Tondo Liscio  Misura  
 Zona Scarificata AM Aderenza Migliorata  
 Muratura

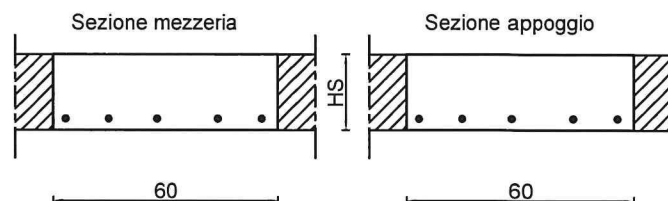
PAS2T-12



Long. 3 Ø 14 AM  
 Staffe Ø 6 AM / 20 cm  
 Copriferro 2 cm

Long. 3 Ø -  
 Staffe Ø - / 18 cm -  
 Copriferro - cm

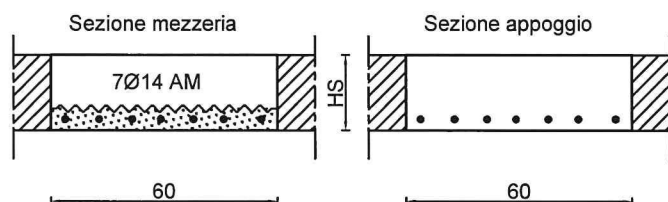
PAC2T-13



Long. 5 Ø -  
 Staffe - Ø - / 20 cm  
 Copriferro - cm

Long. 5 Ø -  
 Staffe Ø - / 20 cm  
 Copriferro - cm

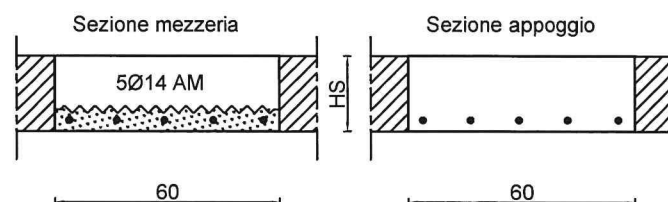
PAS2T-13



Long. 7 Ø 14 AM  
 Staffe - Ø 8 AM / 20 cm  
 Copriferro 2 cm

Long. 7 Ø -  
 Staffe Ø - / 20 cm  
 Copriferro - cm

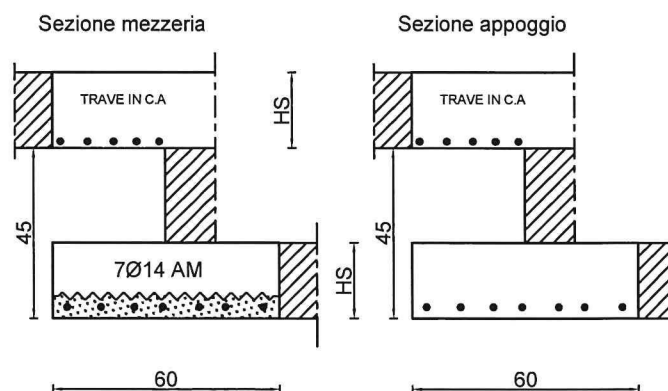
PAS1T-14



Long. 5 Ø 14 AM  
 Staffe - Ø 8 AM / 18 cm  
 Copriferro 2 cm

Long. 5 Ø -  
 Staffe Ø - / 18 cm  
 Copriferro - cm

PAS2T-15



Long. 7 Ø 14 AM  
 Staffe - Ø 6 AM / 25 cm  
 Copriferro 2 cm

Long. 7 Ø -  
 Staffe Ø - / 20 cm  
 Copriferro - cm

PAS1T-16






Long. 4 Ø 14  
 Staffe Ø 8 AM / 20 cm  
 Copriferro 2 cm

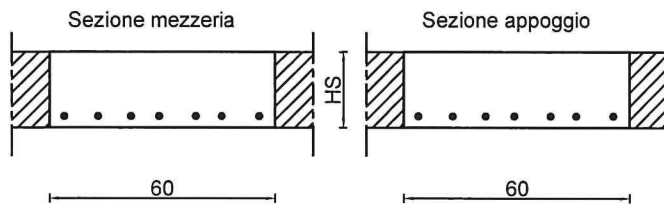
Long. 2 Ø -  
 Staffe Ø - / 18 cm -  
 Copriferro - cm

# Allegato al Rapporto di Prova n° 0041/R0 del 2018

## **RILIEVI ARMATURA TRAVI**

NR Non Rilevato      TL Tondo Liscio       Misura  
 Zona Scarificata      AM Aderenza Migliorata  
 Muratura

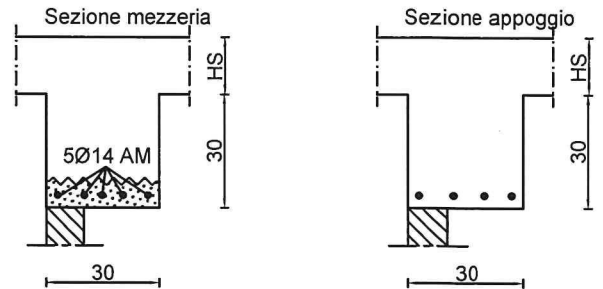
**PAC1T-17**



Long. 7 Ø -  
 Staffe - Ø - / 22 cm  
 Copriferro - cm

Long. 7 Ø -  
 Staffe Ø - / 18 cm  
 Copriferro - cm

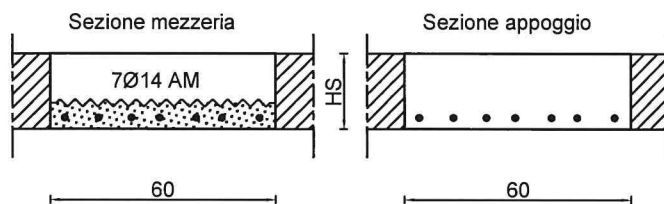
**PAS1T-17**



Long. 5 Ø 14 AM  
 Staffe Ø 8 AM / 22 cm  
 Copriferro 2 cm

Long. 4 Ø -  
 Staffe Ø - / 20 cm  
 Copriferro - cm

**PAS1T-19**



Long. 7 Ø 14 AM  
 Staffe - Ø 8 AM / 25 cm  
 Copriferro 2 cm

Long. 7 Ø -  
 Staffe Ø - / 18 cm  
 Copriferro - cm

**PAC1T-19**



Long. 4 Ø -  
 Staffe Ø - / 25 cm  
 Copriferro - cm

Long. 3 Ø -  
 Staffe Ø - / 23 cm -  
 Copriferro - cm

**PAC1T-23**



Long. 3 Ø -  
 Staffe Ø - / 25 cm  
 Copriferro - cm

Long. 3 Ø -  
 Staffe Ø - / 22 cm -  
 Copriferro - cm

**PAC1T-24**






Long. 4 Ø -  
 Staffe Ø - / 18 cm  
 Copriferro - cm

Long. 4 Ø -  
 Staffe Ø - / 15 cm  
 Copriferro - cm



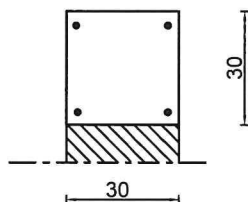
# Allegato al Rapporto di Prova n° 0041/R0 del 2018

## RILIEVI ARMATURA TRAVI

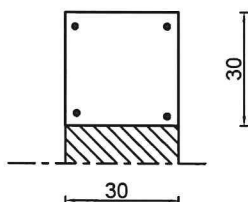
NR Non Rilevato      TL Tondo Liscio       Misura  
 Zona Scarificata      AM Aderenza Migliorata  
 Muratura

PAC1T-35

Sezione mezzeria



Sezione appoggio

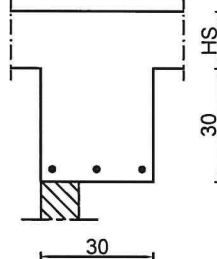


Long. 4 Ø -  
Staffe Ø - / 20 cm  
Copriferro - cm

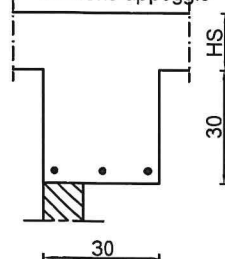
Long. 4 Ø -  
Staffe Ø - / 20 cm  
Copriferro - cm

PAC2T-36

Sezione mezzeria



Sezione appoggio

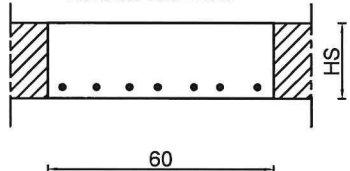


Long. 3 Ø -  
Staffe Ø - / 20 cm  
Copriferro - cm

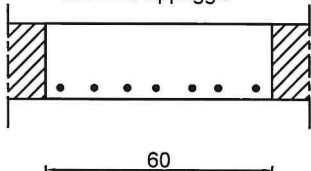
Long. 3 Ø -  
Staffe Ø - / 20 cm  
Copriferro - cm

PAC2T-37

Sezione mezzeria



Sezione appoggio

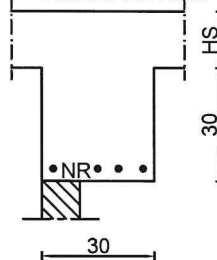


Long. 7 Ø -  
Staffe - Ø - / 22 cm  
Copriferro - cm

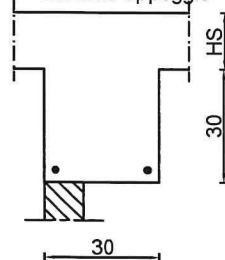
Long. 7 Ø -  
Staffe Ø - / 17 cm  
Copriferro - cm

PAC1T-38

Sezione mezzeria



Sezione appoggio

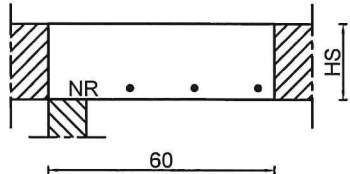


Long. 4 Ø -  
Staffe Ø - / 25 cm  
Copriferro - cm

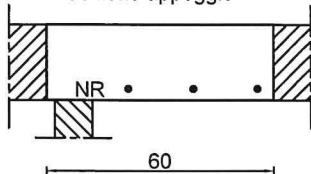
Long. 2 Ø -  
Staffe Ø - / 20 cm -  
Copriferro - cm

PAC1T-39

Sezione mezzeria



Sezione appoggio

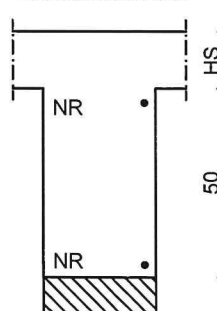


Long. 3 Ø -  
Staffe - Ø - / 23 cm  
Copriferro - cm

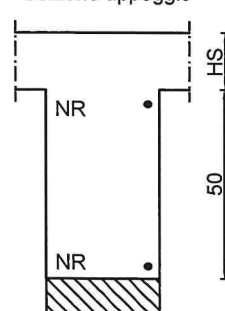
Long. 3 Ø -  
Staffe Ø - / 20 cm  
Copriferro - cm

PAC1T-40

Sezione mezzeria



Sezione appoggio






Long. 2 Ø -  
Staffe Ø - / 25 cm  
Copriferro - cm

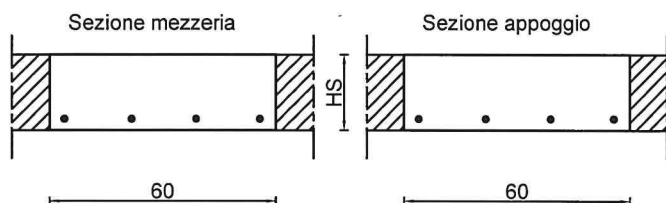
Long. 2 Ø -  
Staffe Ø - / 20 cm -  
Copriferro - cm

# Allegato al Rapporto di Prova n° 0041/R0 del 2018

## **RILIEVI ARMATURA TRAVI**

NR Non Rilevato      TL Tondo Liscio       Misura  
 Zona Scarificata      AM Aderenza Migliorata  
 Muratura

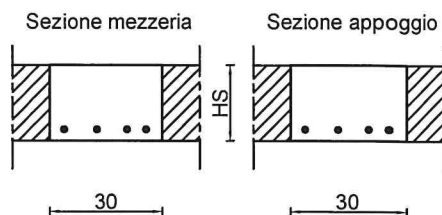
**PAC2T-41**



Long. 4 Ø -  
 Staffe - Ø - / 22 cm  
 Copriferro - cm

Long. 4 Ø -  
 Staffe Ø - / 20 cm  
 Copriferro - cm

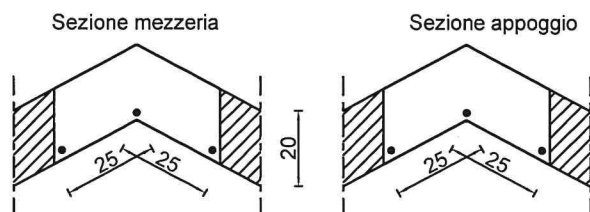
**PAC2T-42**



Long. 4 Ø -  
 Staffe - Ø - / 22 cm  
 Copriferro - cm

Long. 4 Ø -  
 Staffe Ø - / 20 cm  
 Copriferro - cm

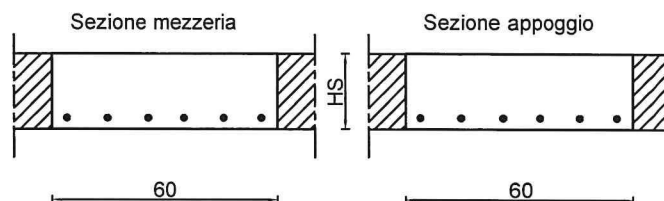
**PAC2T-43**



Long. 3 Ø -  
 Staffe - Ø - / 20 cm  
 Copriferro - cm

Long. 3 Ø -  
 Staffe Ø - / 20 cm  
 Copriferro - cm

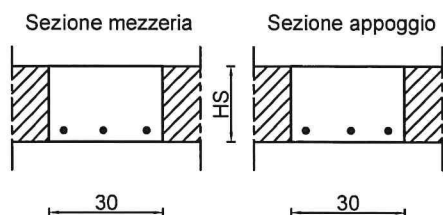
**PAC2T-44**



Long. 6 Ø -  
 Staffe - Ø - / 22 cm  
 Copriferro - cm

Long. 6 Ø -  
 Staffe Ø - / 20 cm  
 Copriferro - cm

**PAC2T-45**





Long. 3 Ø -  
 Staffe - Ø - / 22 cm  
 Copriferro - cm

Long. 3 Ø -  
 Staffe Ø - / 20 cm  
 Copriferro - cm

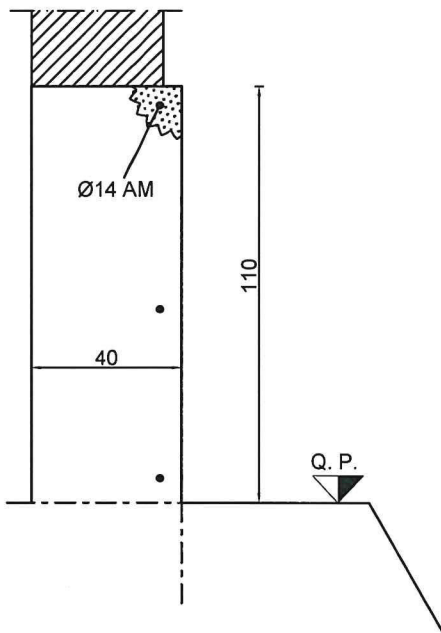
*[Handwritten signature]*

# Allegato al Rapporto di Prova n° 0041/R0 del 2018

## RILIEVI FONDAZIONI

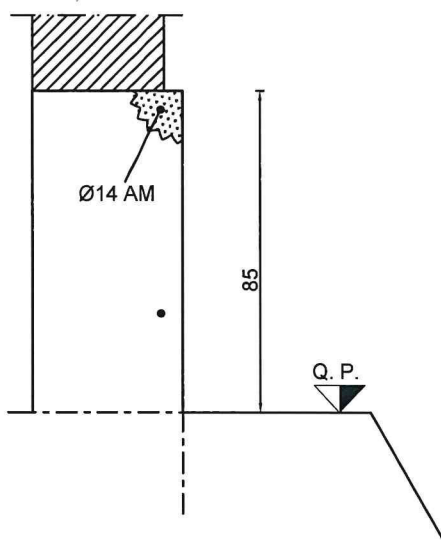
NR	Non Rilevato	TL	Tondo Liscio	↔	Misura
	Zona Scarificata	AM	Aderenza Migliorata		
	Muratura				

### PAC0T-8 (FONDAZIONE)



Long. 1 Ø 14 + 2 Ø -  
Staffe Ø 8 AM/ 25  
Copriferro 2 cm

### PAC0T-9 (FONDAZIONE)





Long. 1 Ø 14 + 1 Ø -  
Staffe Ø 8 AM/ 25  
Copriferro 2 cm

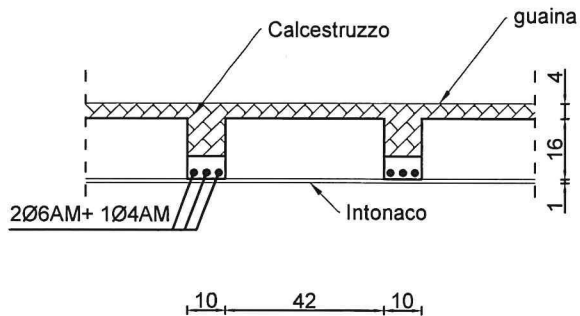
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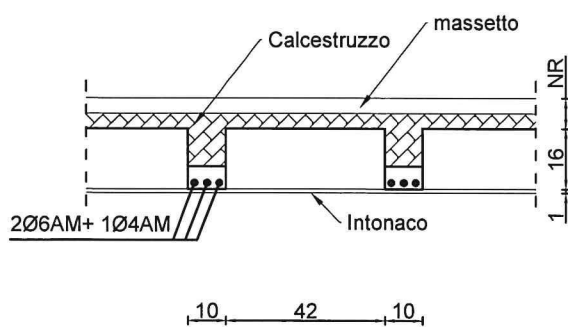
# RILIEVI SOLAI

NR	Non Rilevato	TL	Tondo Liscio	↔	Misura
	Zona Scarificata	AM	Aderenza Migliorata		
	Muratura				

SS-1



SS-2

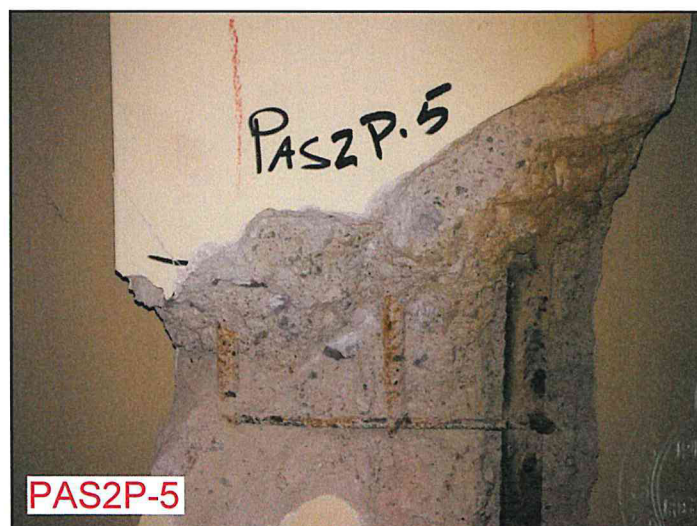
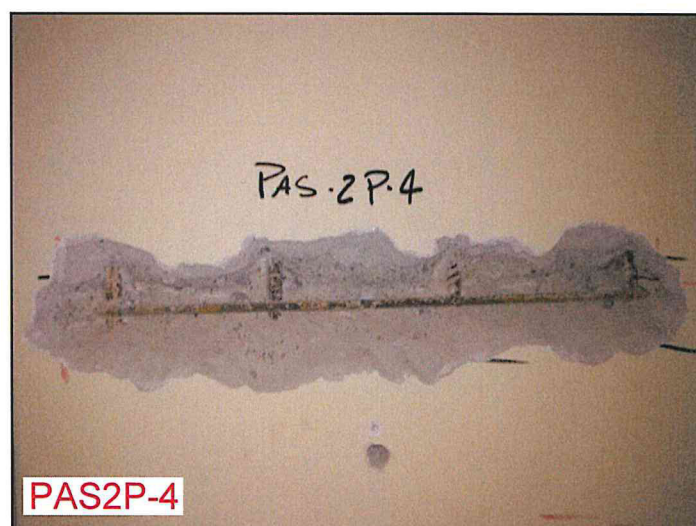
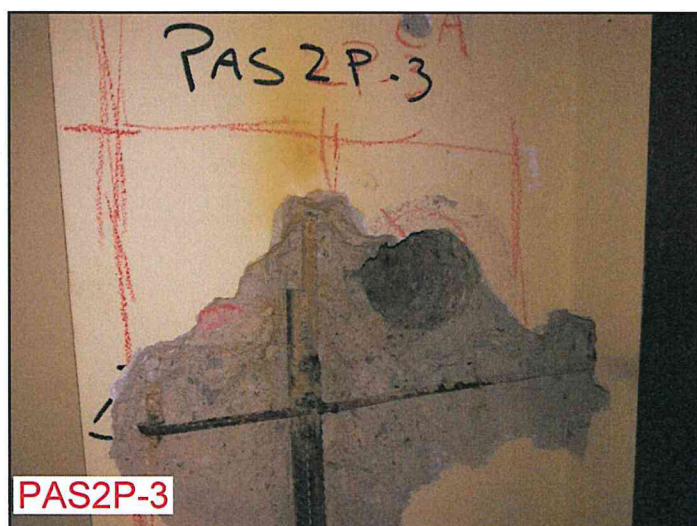


*[Handwritten signature]*



Allegato al Rapporto di Prova n° 0041/R0 del 2018

FOTOGRAFIE





Allegato al Rapporto di Prova n° 0041/R0 del 2018

FOTOGRAFIE

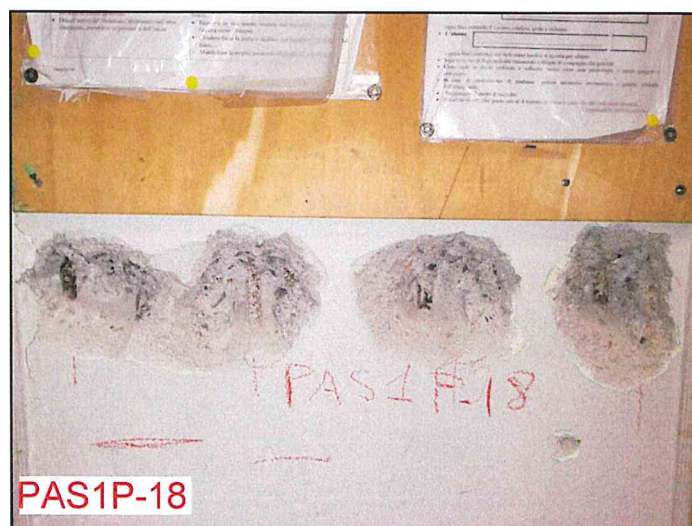


Handwritten signature in blue ink.



Allegato al Rapporto di Prova n° 0041/R0 del 2018

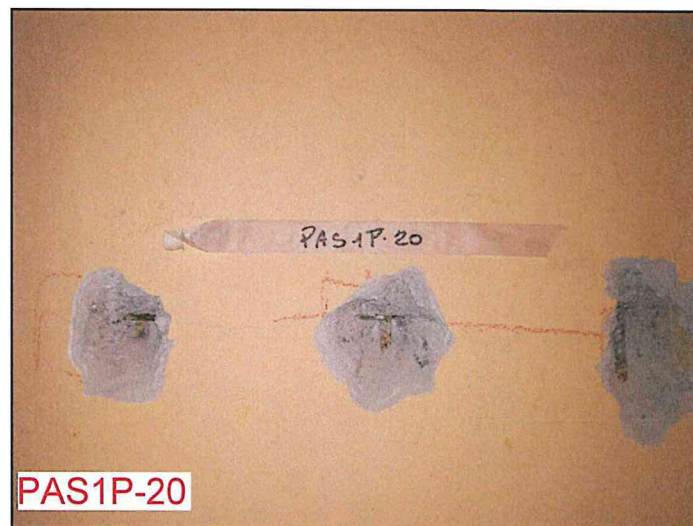
FOTOGRAFIE





Allegato al Rapporto di Prova n° 0041/R0 del 2018

FOTOGRAFIE



*[Handwritten signature]*