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architettura ingegneria urbanistica
Via Lombardia n. 7, 42124 Reggio Emilia
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titolo del progetto

– PROGETTO PER LA REALIZZAZIONE DI UNA NUOVA PALESTRA
presso la SCUOLA PRIMARIA di via Dossetti n°5 - località Torre Gazzone-Monteveglio
COMUNE DI VALSAMOGGIA (BO)

PROGETTO ESECUTIVO

committente

– COMUNE DI VALSAMOGGIA (Città Metropolitana di Bologna, BO), Piazza Garibaldi n° 1, 40053 - Valsamoggia (BO)

titolo della tavola

– STRUTTURE MODULO B–SERVIZI
ARMATURE PILASTRI, PANNELLI E ANCORAGGI SISMICI

num. pratica	data emissione	redatto da	rapp. disegni	lay-out	fase operativa	file
4097	giugno 2017	LB	–	–	esecutivo	4097–RCS–B.pdf

rev.	data	descrizione	redatto da
A			
B			
C			
D			
E			

Il responsabile della progettazione architettonica

Arch. Enrico Termanini

Il responsabile della progettazione strutturale e impiantistica

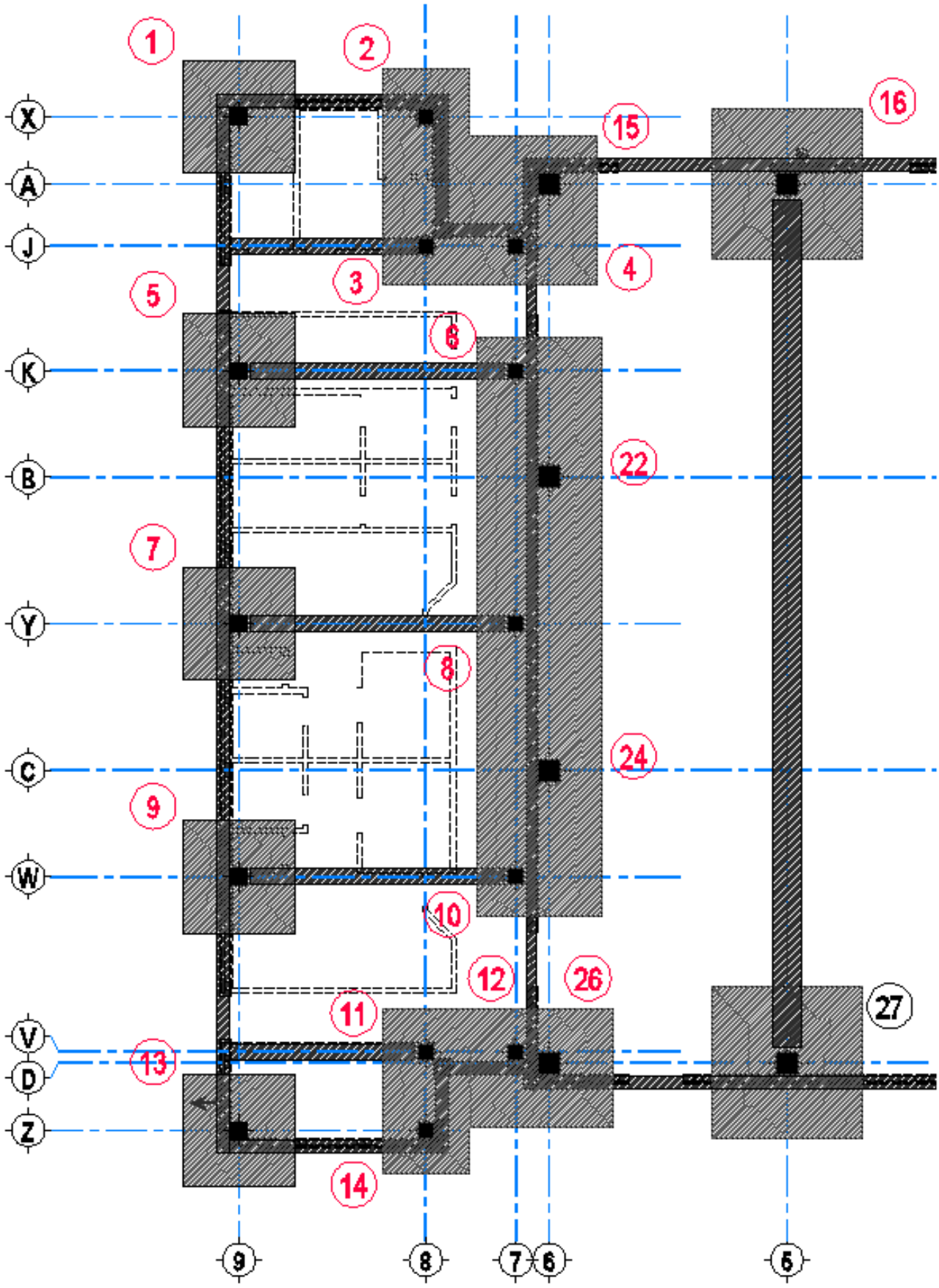
Ing. Davide Bedogni

N°. tavola

S09

orientamento

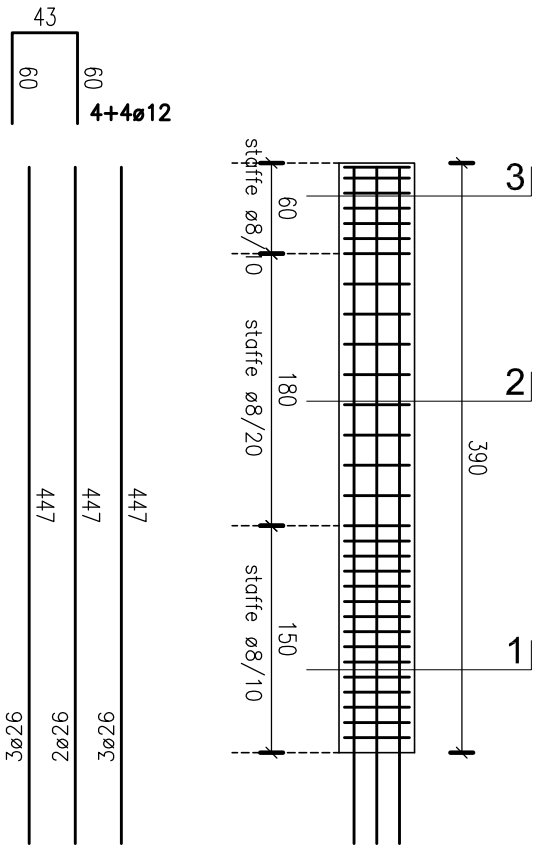
PIANTA CHIAVE
CON NUMERAZIONE PILASTRI

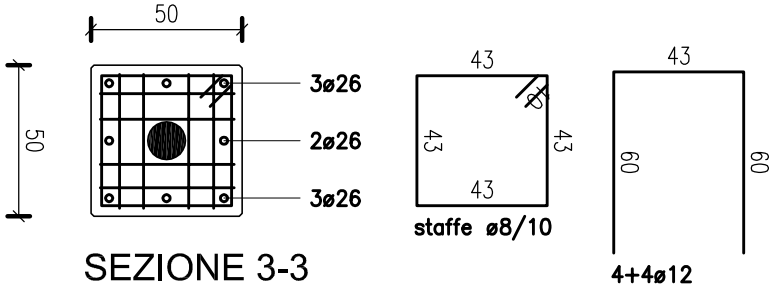


ARMATURA PILASTRI CORPO SERVIZI

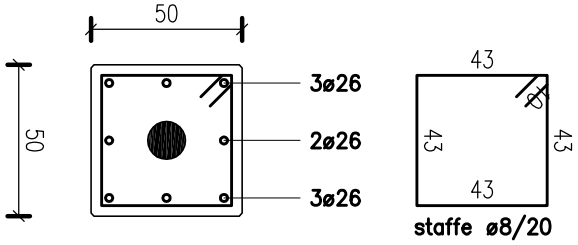
1 13

2 14





SEZIONE 3-3
con PLUVIALE Ø125



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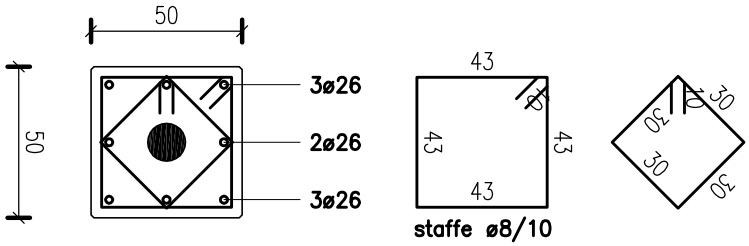
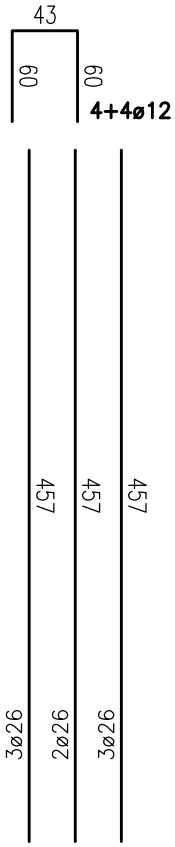


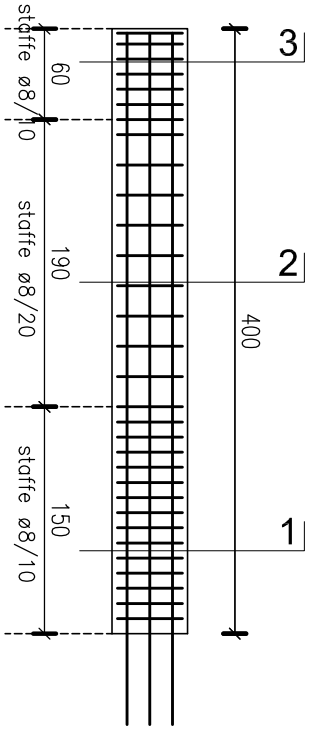
SEZIONE 1-1
con PLUVIALE Ø125

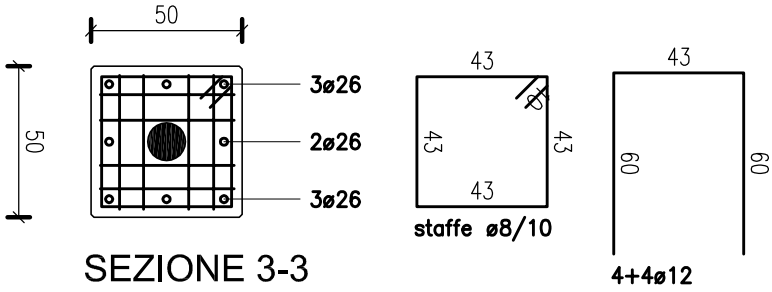
ARMATURA PILASTRI CORPO SERVIZI

5 9

6 10







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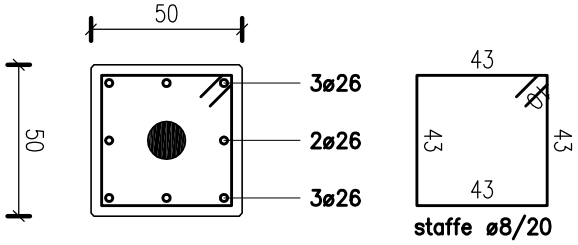
con PLUVIALE Ø125



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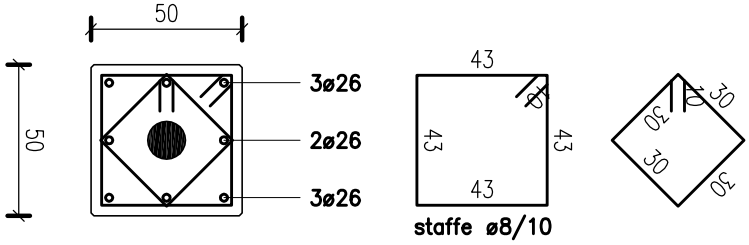
con PLUVIALE Ø125

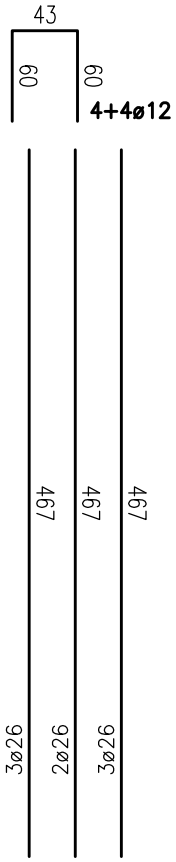


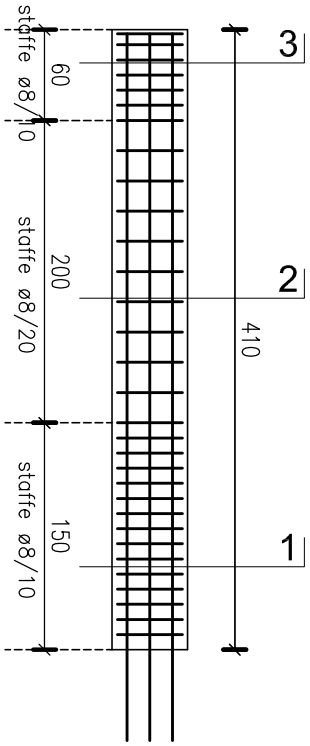
SEZIONE 1-1
con PLUVIALE Ø125

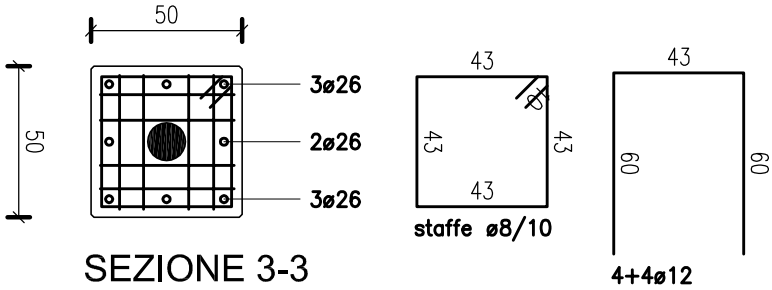
ARMATURA PILASTRI CORPO SERVIZI

7

8







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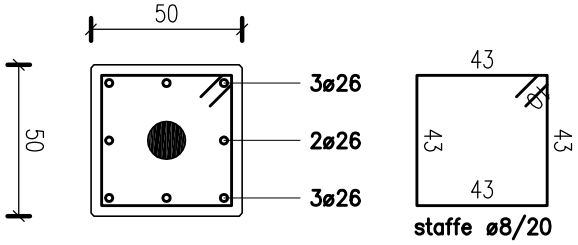

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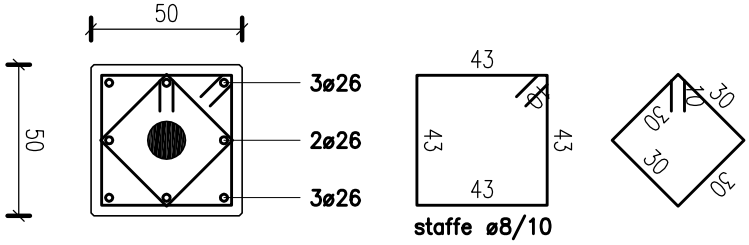
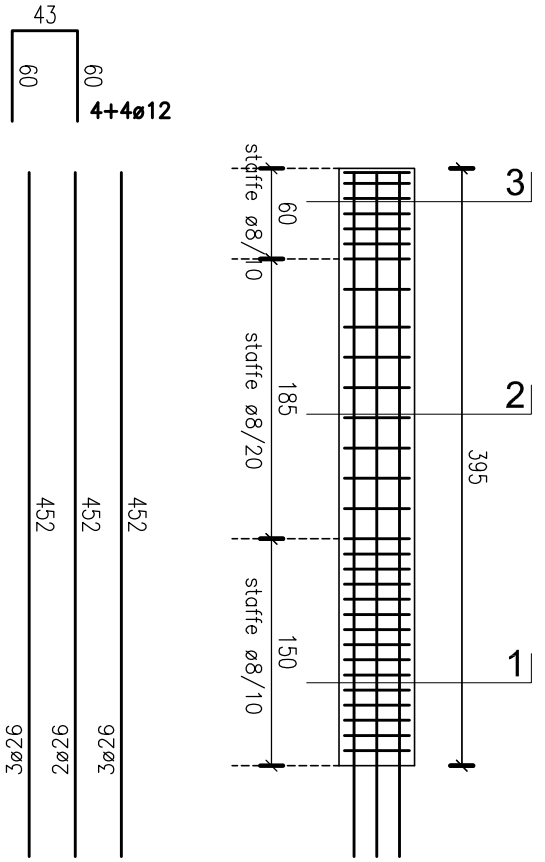


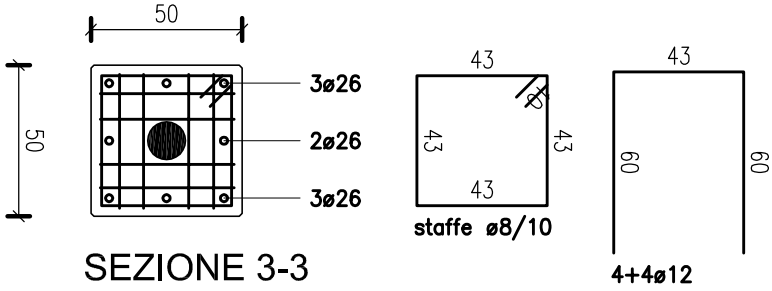
SEZIONE 1-1
con PLUVIALE Ø125

ARMATURA PILASTRI CORPO SERVIZI

3 11

4 12





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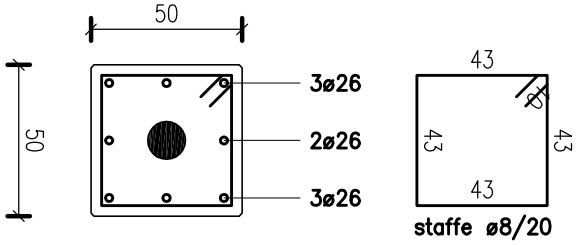

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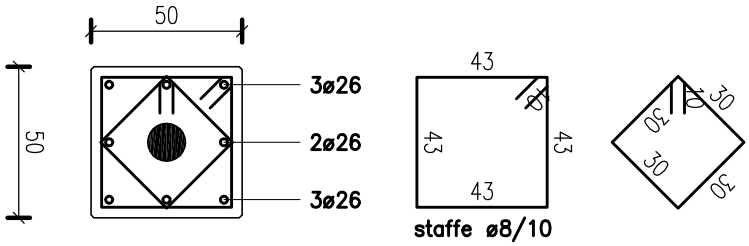

SEZIONE 1-1
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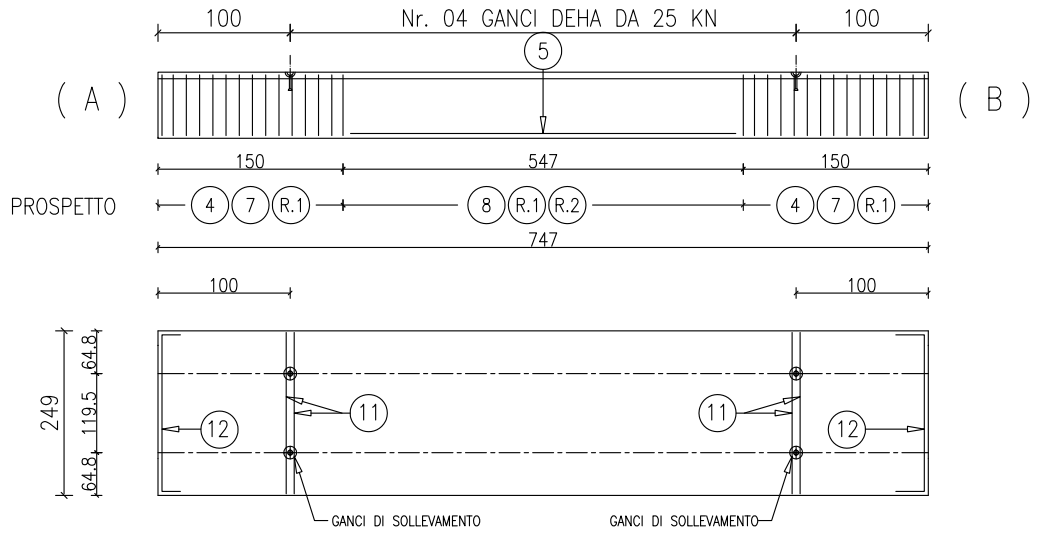
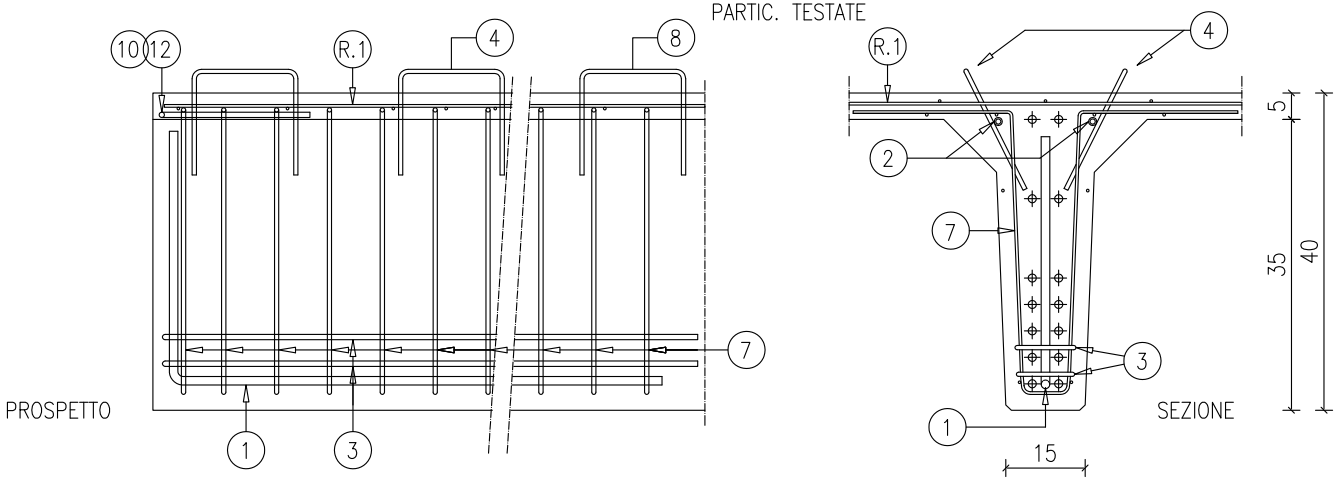
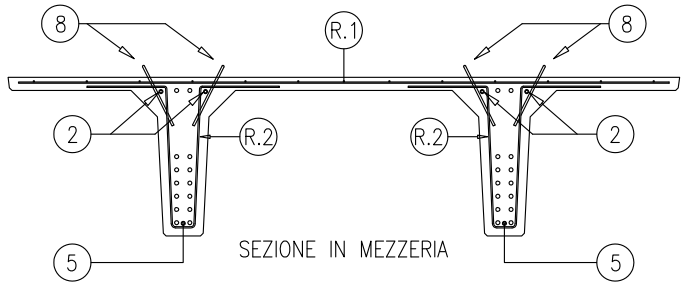
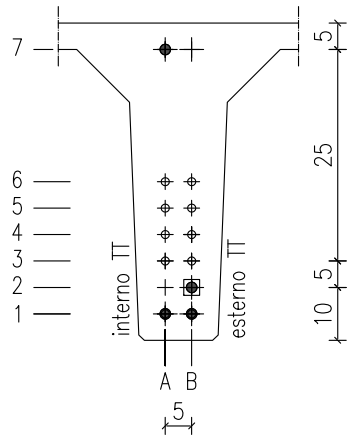


PARTIC. TESTATE







TREFOLI PRECOMPRESSIONE

⌖ TREFOLI DA 0,6"

⊞ NEUTRALIZZAZIONI (GUAINA)

NOTA BENE:
R'ckJ allo scassero
≥ 35 N/mm²

DISTINTA ARMATURA							
Pos	Ø	N	Passo	Sv.	Sagomatura	Peso SAGOMATO	Peso DIRITTO
1	16	4		200	30 170	12.62	
2						0.0	#####
3	8	8		300	144 144 12	9.47	
4	8	32	40	60	20 20 20	7.57	
5							#####
6						####	
7	10	64	10	130	26 27 34 34 9	51.27	
8	8	28	80	60	20 20 20	6.63	
9						####	
10						#####	
11	10	4		244			6.01
12	10	2		300	28 244 28	3.70	
					Tot.	91.25	6.01
					Peso Totale Armatura Kg.	97.26	

DISTINTA RETI							
Pos	Ø	N	Sv.	Lung	Sagomatura	Peso SAGOMATA	Peso DIRITTA
R.1	5 20x20	1	244	747	244	0.0	29.16
R.2	6/5 20x30	2	121	547	22 22 34 34 9	21.31	
					Tot.	21.31	29.16
					Peso Totale Reti Kg.	50.48	

DISTINTA TREFOLI					
POS	Num.	Ø	L. GUAINA A	L. GUAINA B	
A1–B1	4	6/10	–	–	
B2	2	6/10	100	100	
A7	2	6/10	0	0	
		Peso Totale trefoli Kg.		35.40	

PRESCRIZIONI MATERIALI

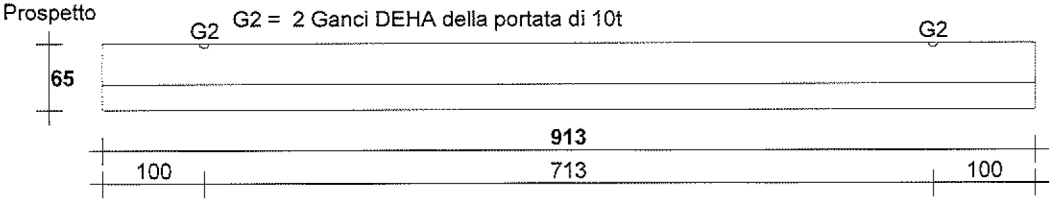
CALCESTRUZZO
Rck a 28 giorni ≥ 55 N/mm²
R'ckJ allo scassero ≥ 35 N/mm²
ACCIAIO B450C
fy nom > 450 N/mm²
ft nom > 540 N/mm²
(ft/fy)k ≥ 1.15
(fy/fynom)k ≤ 1.25
allungamento (Agt)k ≥ 7,5 %
RETI E TRALICCI B450A
fy nom > 450 N/mm²
ft nom > 540 N/mm²
(ft/fy)k ≥ 1.05
(fy/fynom)k ≤ 1.25
allungamento (Agt)k ≥ 2,5 %

ACCIAIO PER C.A.P.
fp(0,1)k ≥ 1670 N/mm²
fptk ≥ 1860 N/mm²
tiro su trefoli 1/2" – 6/10" 1.400 N/cm²
tiro su trecce 3x3 1.200 N/cm²

INTERFERRO ≥ 2 cm, >Ø max
CLASSE DI ESPOSIZIONE XC1
TOLLERANZE POS. ARMATURE
Pos. armature e trefoli ± 5 mm
Passo delle staffe ± 1 cm per passi
fino a 5 cm, ± 3 cm per passi superiori
COPRIFERRO MINIMO cm 3

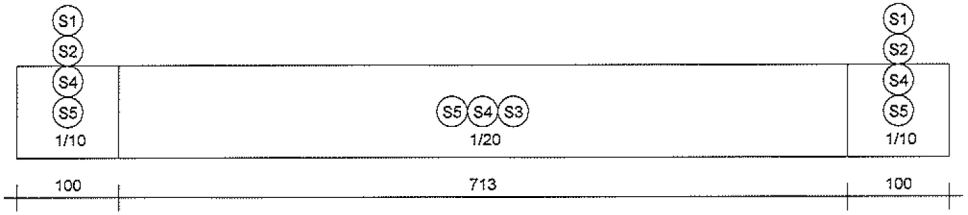
Tipologia manufatto	volume cls mc.	Tipo
TT 40/15	1.94	TT
Resistenza Fuoco	Peso trave TON.	Num. pezzi
	4.86	–
	COMMESSA	
Disegnato	PALESTRA MONTEVEGLIO	
visto Ing. Michielin	TestSystem	

Prospetto



Pianta

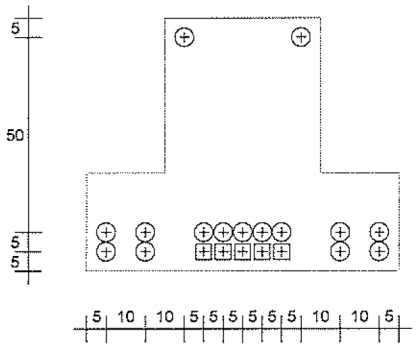
Campi
Staffe



n.tot trefoli = 20

Trefoli da 1.39

Testata Sinistra

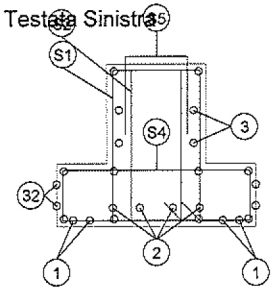


N. 1 guaine a 5cm
per 1m da test.sx/dx

N. 1 guaine a 5cm
per 2m da test.sx/dx

N. 3 guaina a 5cm
per 1m da test.sx/dx

Testata Sinistra



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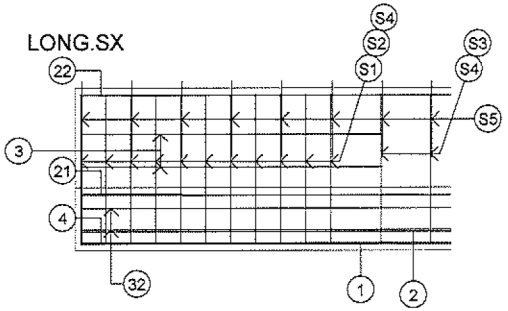
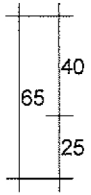
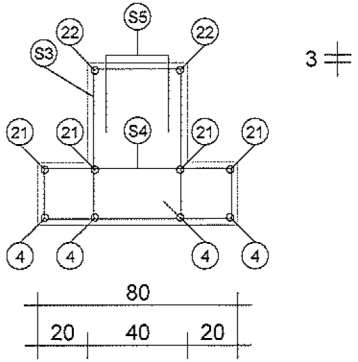




MEZZERIA



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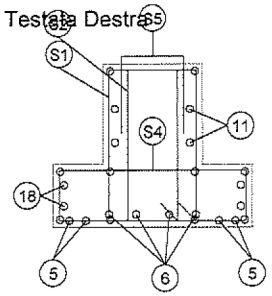
Testata Destra



LONG.DX

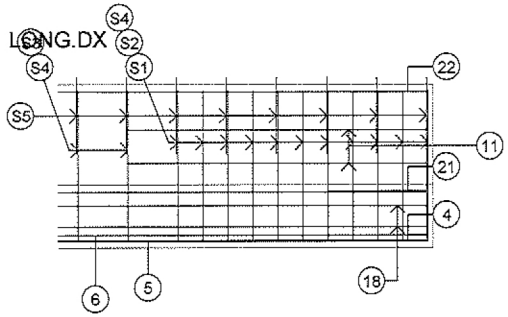


TABELLA ARMATURE

TIPO	D	N	Taglio	Sagomatura	Descrizione	Peso	TIPO	D	N	Taglio	Sagomatura	Descrizione	Peso
1	10	4	210	20 40 150	Ferri a taglio dell'ala SX	5.2	**2**	16	4	200	50 150	Ferri a taglio dell'anima SX	12.6
3	12	2	275	35 120 120	Moiette dell'anima SX	4.9	**4**	8	4	908	908	Ferri Correnti 1	14.3
5	10	4	210	20 40 150	Ferri a taglio dell'ala DX	5.2	**6**	16	4	205	55 150	Ferri a taglio dell'anima DX	12.9
11	12	2	275	35 120 120	Moiette dell'anima DX	4.9	**18**	16	2	371	71 150 150	Moiette dell'ala DX	11.7
21	12	4	908	908	Ferri Correnti 2	32.2	**22**	16	2	908	908	Ferri Correnti 3	28.7
32	16	2	880	80 400 400	Moiette dell'ala in test.SX	27.8	**S1**	10	22	210	10 60 35	Staffa di testata	28.5
S2	10	22	180	10 60 20	Staffa di testata 2	24.4	**S3**	10	35	210	10 60 35	Staffa di mezzeria	45.3
S4	8	57	210	75 20 10	Staffe dell'ala	47.2	**S5**	8	57	87	25 31	Staffe Emergenti	19.6

Totale kg 325.4

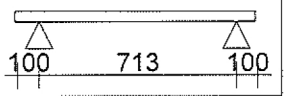
PRESCRIZIONI
- Tesatura trefoli: 14000 Kg/cm2
- fptk Trefoli: 19000 Kg/cm2
- Res.a 28gg RCK>= 550 Kg/cm2
- Res.allo sbanco RCJ>= 450 Kg/cm2
- Acciaio B450C controllato in stabilimento

QUANTITA'
- Volume CLS: 3.2868 m3
- Peso CLS: 82.17 KN
- Peso trefoli: 199.034 Kg
- Peso ferri: 325.4 Kg
- Peso reti: 0 Kg
- Ferro/CLS: 99.00 Kg/m3

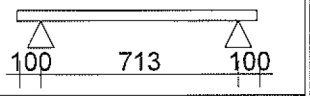
N.20 Trefoli da 1.39

Tolleranze di produzione
1)Lunghezza +/- 1.5cm
2)Dimensione sezione +/-1cm
3)Posiz.cavi di prec.+/-0.5cm
4)Ricoprim. staffe 2.5cm

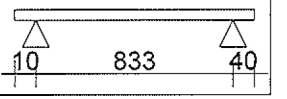
SOLLEVAMENTO



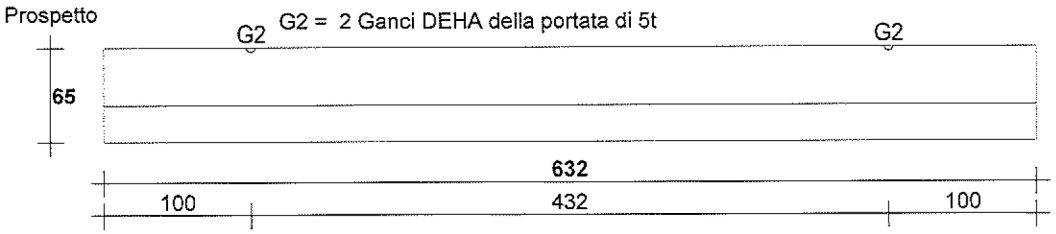
TRASPORTO



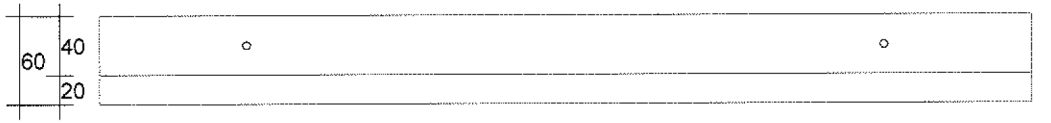
ESERCIZIO

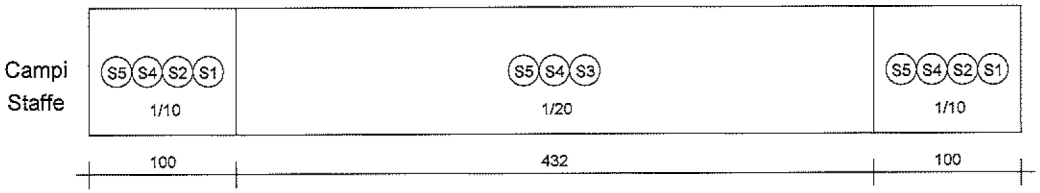


Prospetto



Pianta

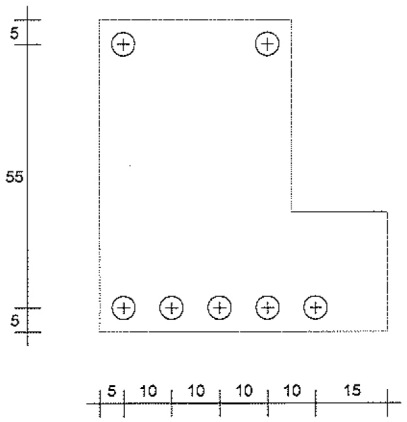




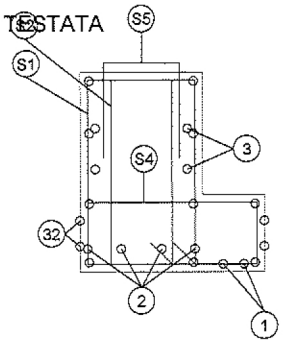
n.tot trefoli = 7

Trefoli da 1.39

Testata Sinistra



TESTATA



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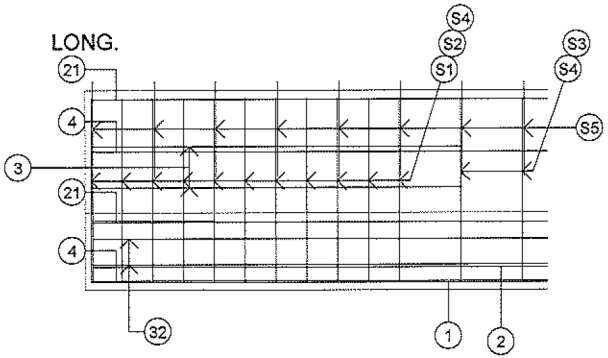


MEZZERIA

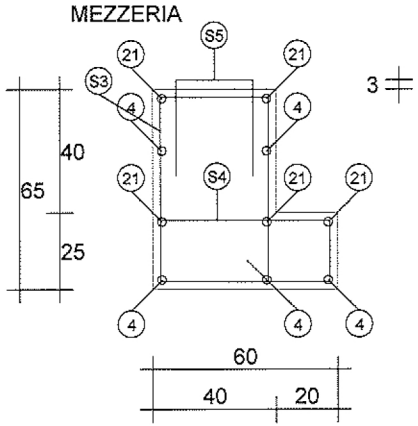


TABELLA ARMATURE

TIPO	D	N	Taglio	Sagomatura	Descrizione	Peso
1	10	4	210	20 40 150	Ferri a taglio dell'ala	5.2
3	12	4	275	35 120 120	Moiette dell'anima	9.8
21	12	5	627	627	Ferri Correnti 2	27.8
S1	8	22	210	10 60 35	Staffa di testata	18.2
S3	10	21	210	10 60 35	Staffa di mezzeria	27.2
S5	6	43	87	25 31	Staffe Emergenti	8.3
2	10	8	200	50 150	Ferri a taglio dell'anima	9.9
4	10	5	627	627	Ferri Correnti 1	19.3
32	10	4	860	60 400 400	Moiette dell'ala	21.2
S2	8	22	180	10 60 20	Staffa di testata 2	15.6
S4	8	43	170	55 20 10	Staffe dell'ala	28.8

Totale kg 191.3

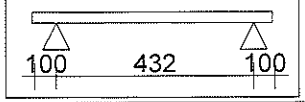
PRESCRIZIONI
- Tesatura trefoli: 14000 Kg/cm2
- fptk Trefoli: 19000 Kg/cm2
- Res.a 28gg RCK>= 550 Kg/cm2
- Res.allo sbanco RCJ>= 450 Kg/cm2
- Acciaio B450C controllato in stabilimento

QUANTITA'
- Volume CLS: 1.9592 m3
- Peso CLS: 48.98 KN
- Peso trefoli: 48.2216 Kg
- Peso ferri: 191.3 Kg
- Peso reti: 0 Kg
- Ferro/CLS: 97.64 Kg/m3

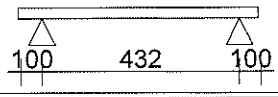
N.7 Trefoli da 1.39

Tolleranze di produzione
1)Lunghezza +/- 1.5cm
2)Dimensione sezione +/-1cm
3)Posiz.cavi di prec.+/-0.5cm
4)Ricoprim. staffe 2.5cm

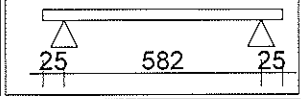
SOLLEVAMENTO



TRASPORTO



ESERCIZIO



Eiseko Computers

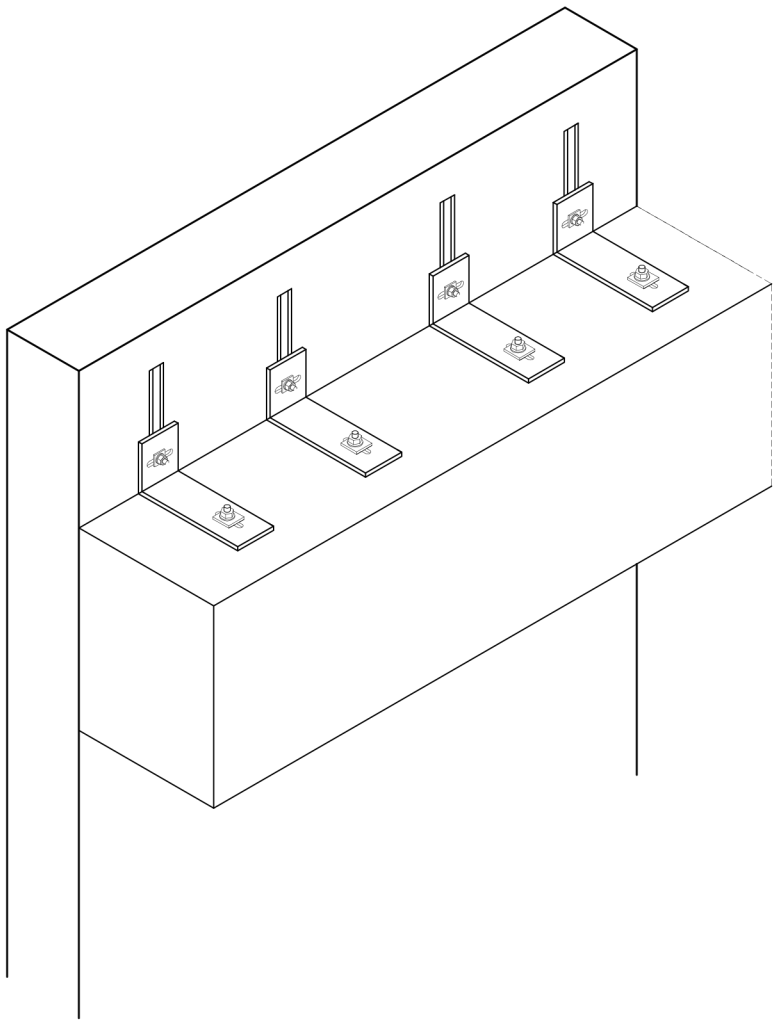
-

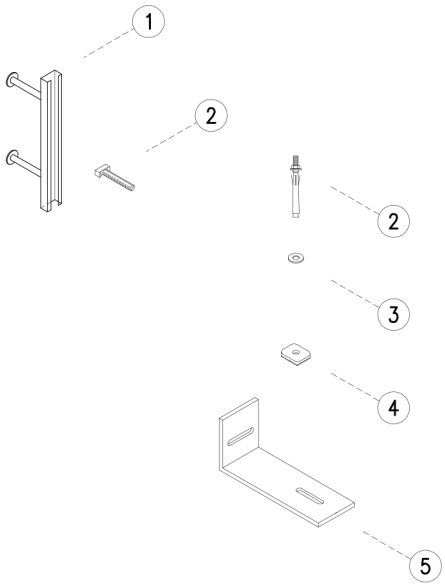
-

03/04/2017 19:14:23

Committente -		Disegno N.
Lavoro		Visto
Ordinativo		N° Comm
Contrassegno	N° Pezzi	Disegnatore

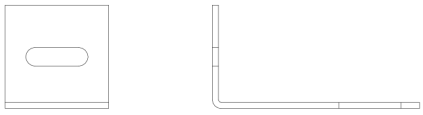
PARTICOLARE FISSAGGIO PANNELLIO VERTICALE SU ARCHITRAVE



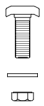


TASSELLI DI FISSAGGIO COMPLETO

Tasselli HILTI HSA M12x145 mm



PIASTRA 05/01

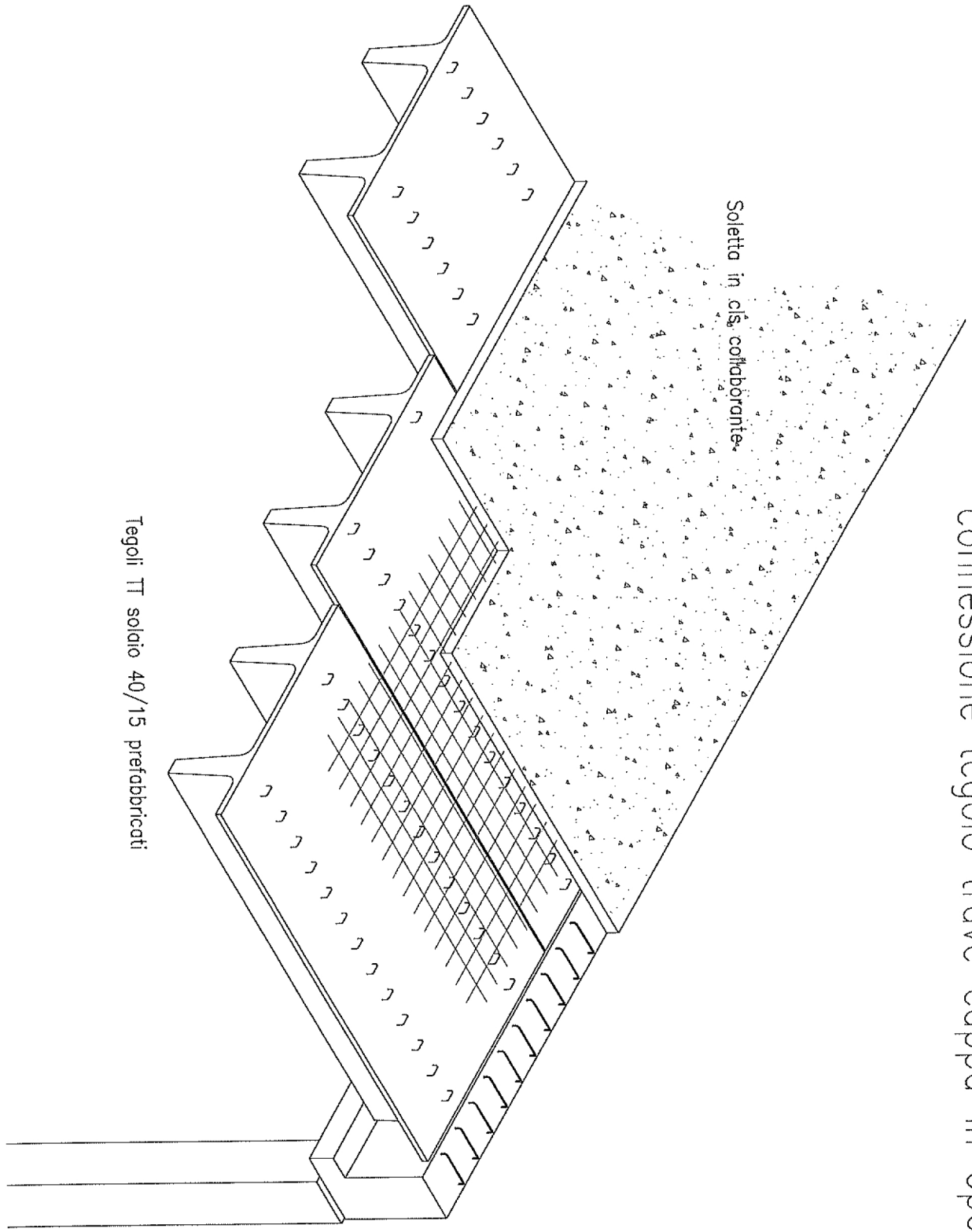


BULLONE TESTA AD ANCORA TIPO V40/22

DZ1640 – M16x40 mm

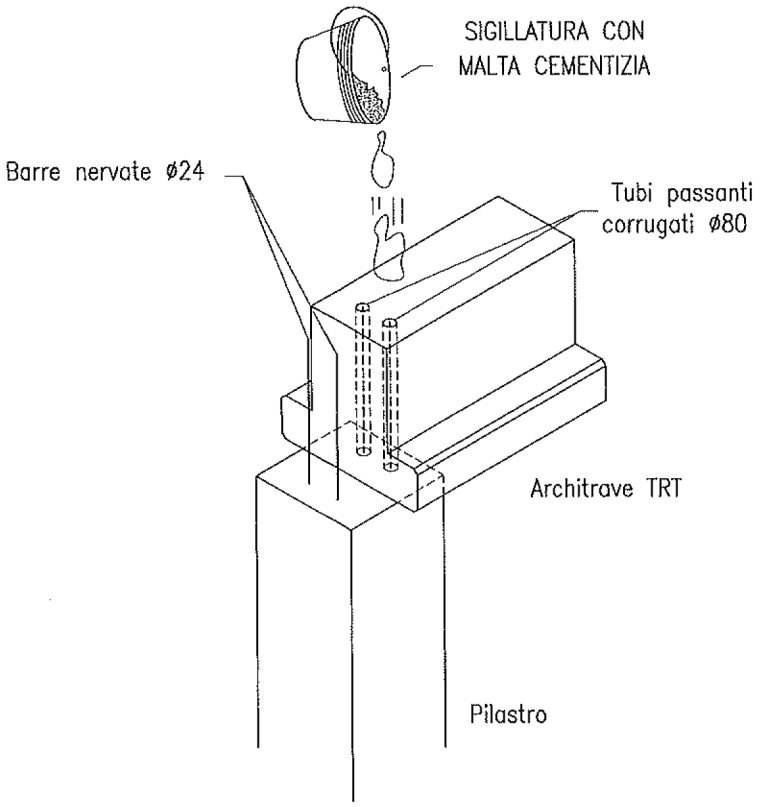
(Completo di dado e rondella piana)

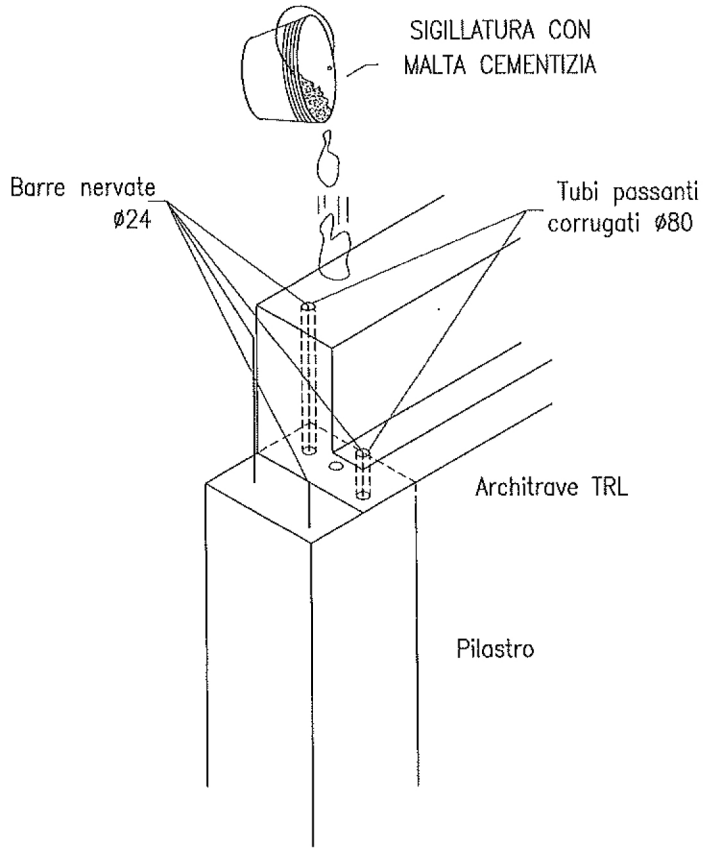
Inserti di montaggio:



connessione tegolo trave cappa in opera

Inserti di montaggio:

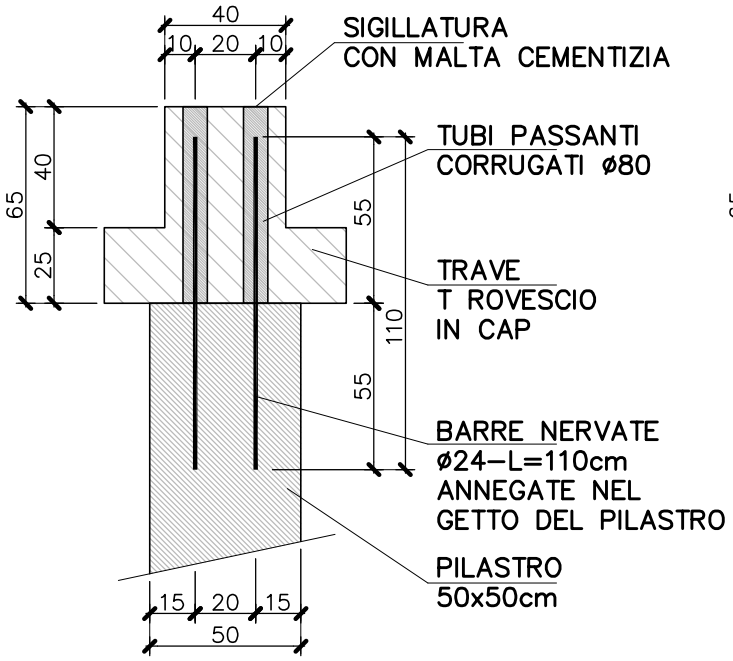




Dett. FISSAGGIO TRAVE T ROVESCIO. AL PILASTRO

scala 1:25

Prospetto 1



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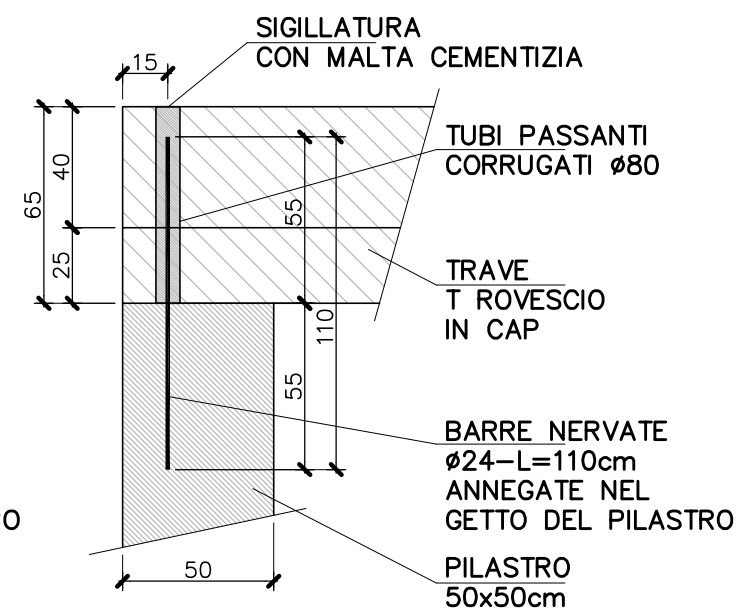
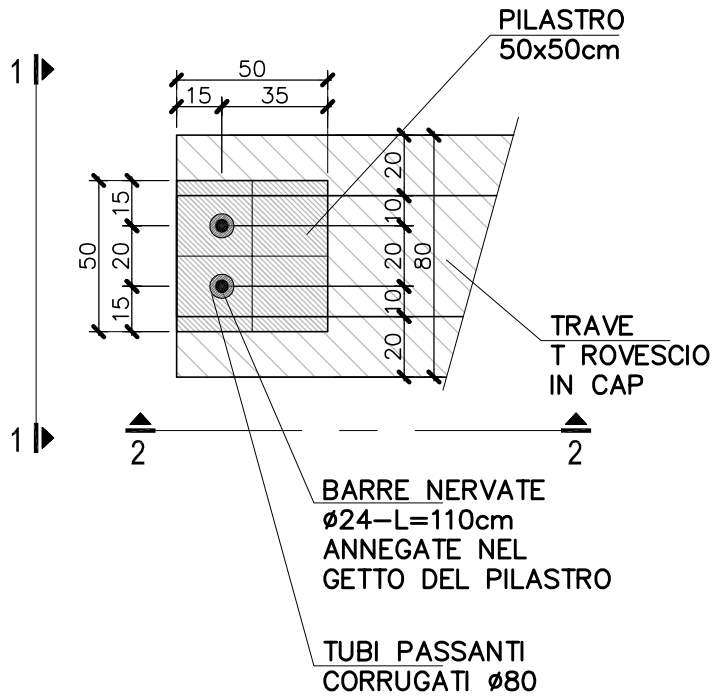


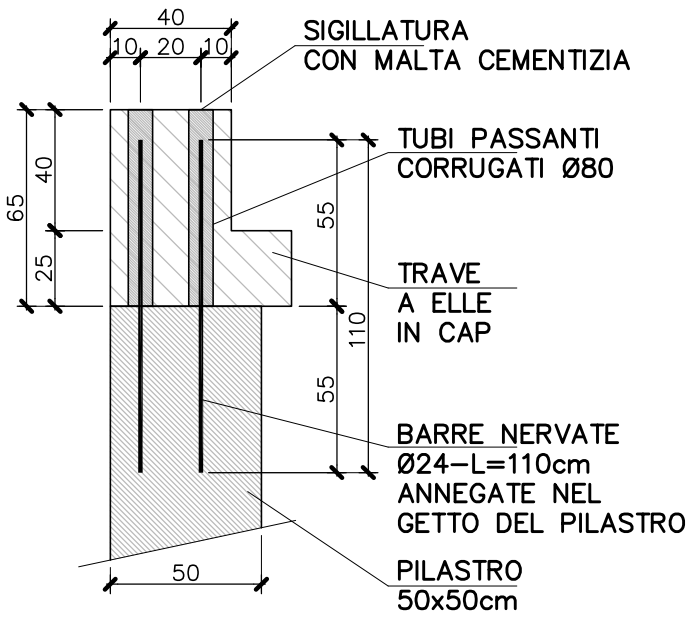
Pianta



Dett. FISSAGGIO TRAVE ELLE AL PILASTRO

scala 1:25

Prospetto 1



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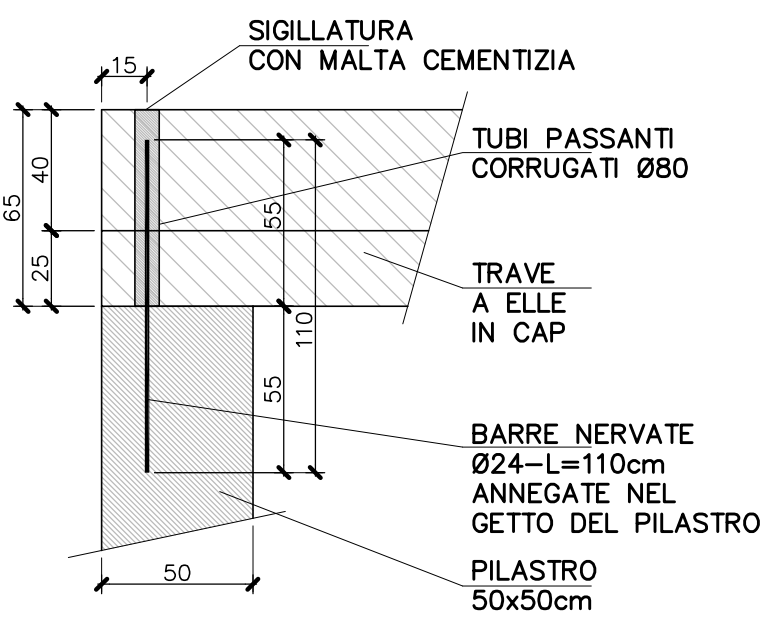

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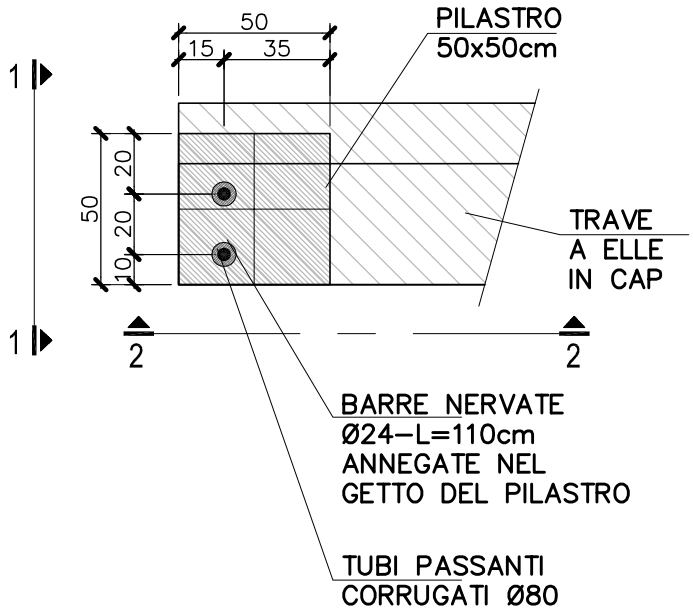

Collegamento pannello di tamponamento alla trave di collegamento

scala 1:25