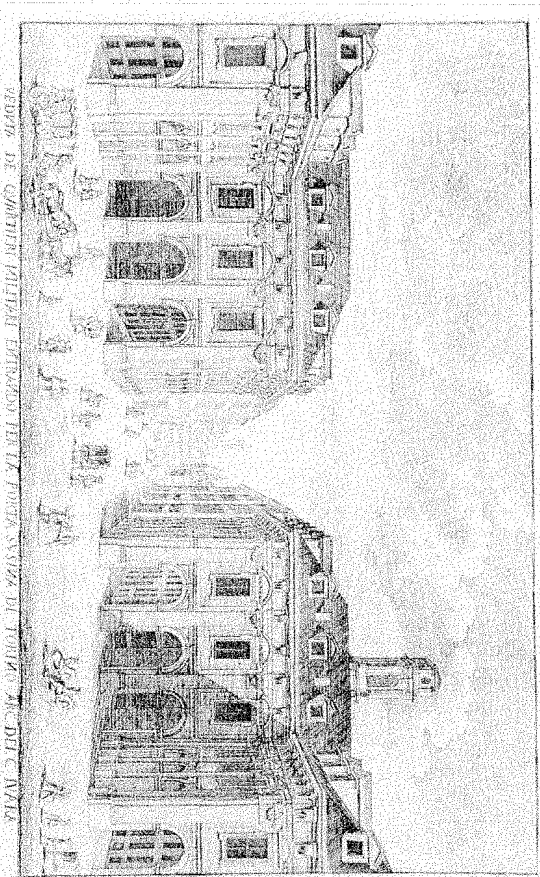


RECUPERO FUNZIONALE

DELL'EDIFICIO DI VIA DEL CARMINE 14

AD USO ARCHIVI ED ATTIVITA' CULTURALI



PROGETTO ESECUTIVO

Responsabile Unico di Procedimento e Dirigente del Settore	Arch. Rosalba Stura
Progettista opere architettoniche	Arch. Emanuela Lavezzo
Progettista opere strutturali	Ing. Gianfranco Giovagnetti
Progettista opere impiantistiche	Ing. Alfonso Famà
Progettista della sicurezza – Collaboratore alle opere strutturali	Ing. Flavio Aquilano
Supporto al R.U.P. per le opere strutturali	Ing. Elena Grillone
Collaboratore progetto opere architettoniche e strutturali	Geom. Bartolo Saullo
Collaboratore progetto opere architettoniche e sicurezza	Geom. Fabrizio Passantino
Collaboratore progetto opere architettoniche	Arch. Michelina Pirrone
Collaboratori progetto opere impiantistiche	P.l. Francesco Ferrari
	P.l. Maurizio Genovese

PROGETTO OPERE STRUTTURALI			
SCALA	ARMATURA TRAVI E SOLAI SECONDO PIANO		S 20
SCALA PLOT	(copertura piano Primo)		
REV	MODIFICHE	DATA	
	Prima Revisione	18/11/2010	Ing. G. GIOVAGNETTI/Ing. L. GIOVAGNETTI

MATERIALI DA UTILIZZARE PER LE NUOVE TRAVI E I NUOVI SOLAI

Calcestruzzo classe di resistenza minima C25 / 30

Consistenza S3 per rampe scale e strutture inclinate e S4 per setti, travi e solai

Granulometria inerti :

sabbia da 0 a 3 mm / ghiaia da 0 a 16 mm.

Acciaio B450 C

MATERIALI DA UTILIZZARE PER IL RINFORZO DELLE TRAVI ESISTENTI

Calcestruzzo speciale auto compattante (SCC) a prestazione garantita, in accordo alla UNI EN 206-1 e UNI 11040 per strutture in elevazione confezionato con aggregati ben lavati, privi di impurità, non reattivi con gli alcali, aventi diametro massimo 16 mm. Consistenza S5 UNI EN 12350 / 2, resistenza a compressione a 28 gg. > 40 MPa (Classe 32/40)

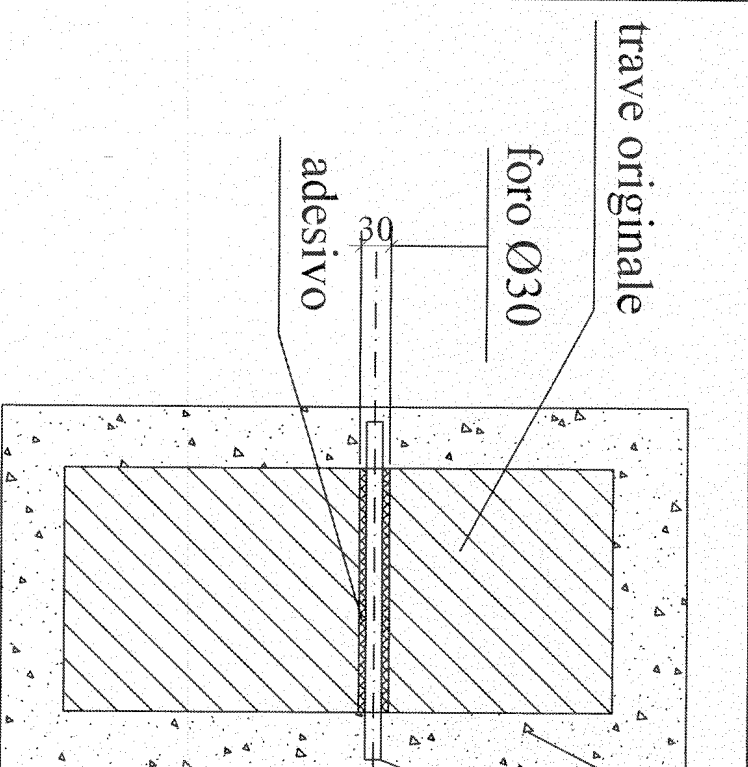
Acciaio armature lente: B450C

Acciaio piastre e profili: S275 Uni 10025-2

Bulloni e tasselli classe 8.8

Saldature classe I

Le piastre per supporto delle travi rinforzate, dovranno essere poste in opera sopra gli interventi di placcaggio delle murature.



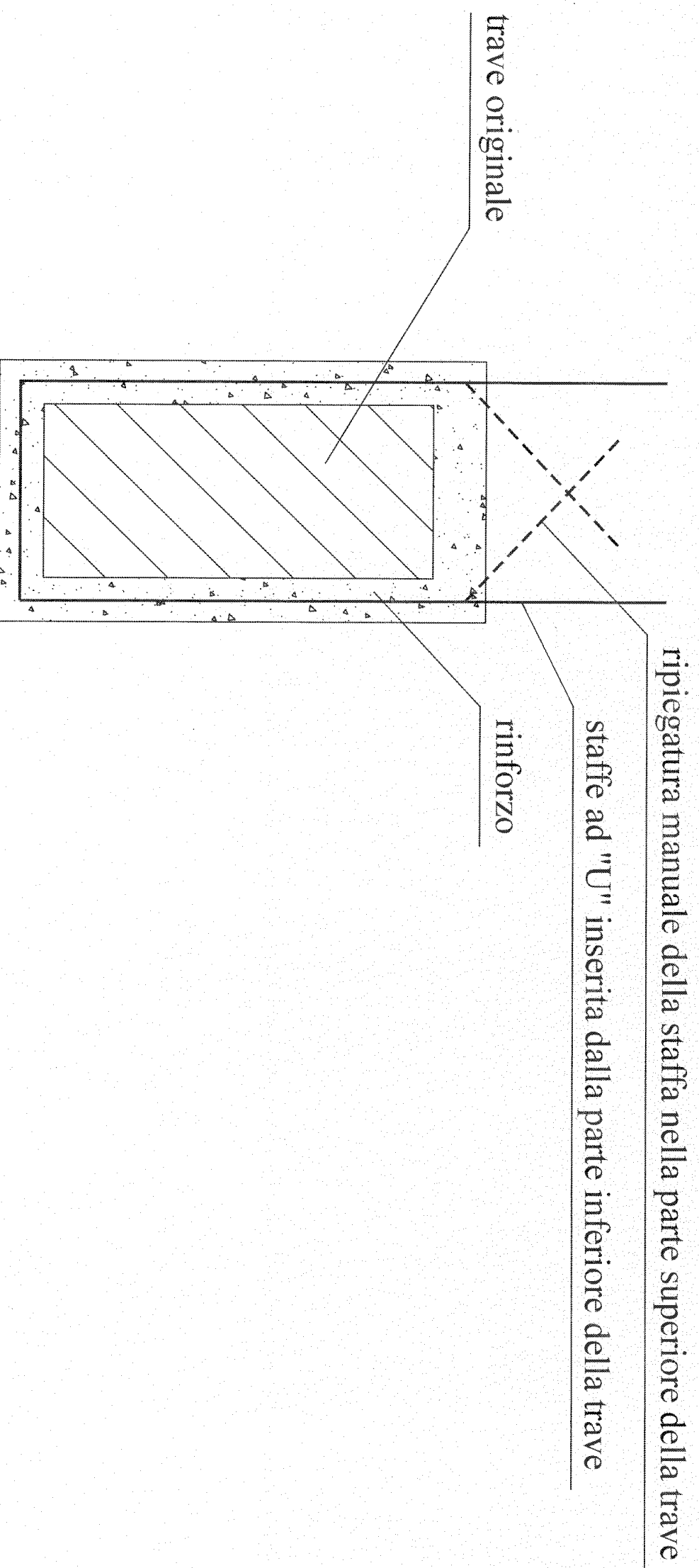
Particolare 6 preparazione travi esistenti

barra 1Ø16 ogni metro

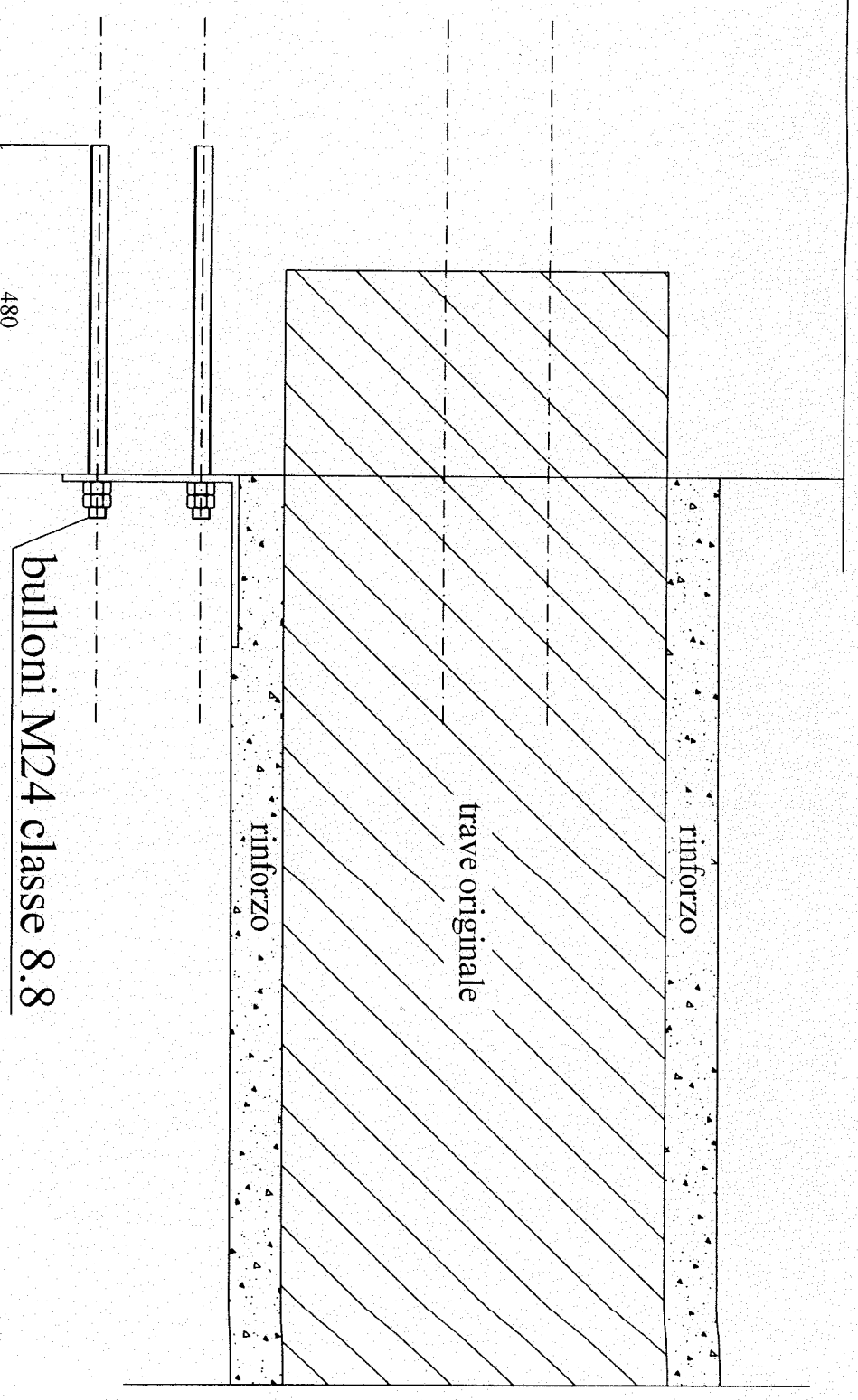
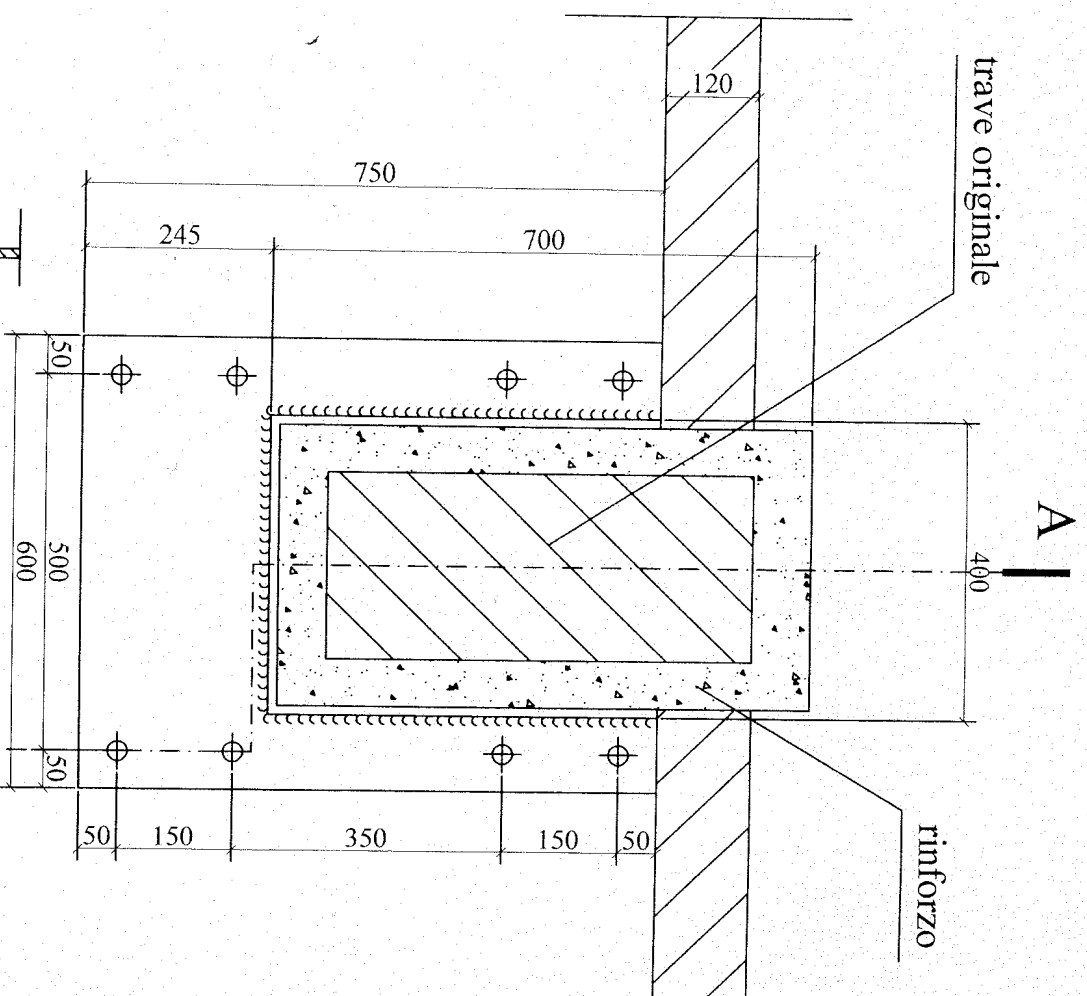
Nelle travi esistenti si devono eseguire la seguenti lavorazioni :

- 1- rimuovere l'intonaco dalla trave;
- 2- picchettare la trave con la martellina per un migliore aggrappo del calcestruzzo di rinforzo;
- 3- eseguire un foro Ø30 mm passante a metà altezza trave ogni metro;
- 4- inserire una barra Ø16 in ogni foro
- 5- iniettare, nel foro in cui è stata inserita la barra Ø16, adesivo epossidico bicomponente fluido, leggermente tixotropico, privo di solventi.

Particolare staffatura delle travi esistenti

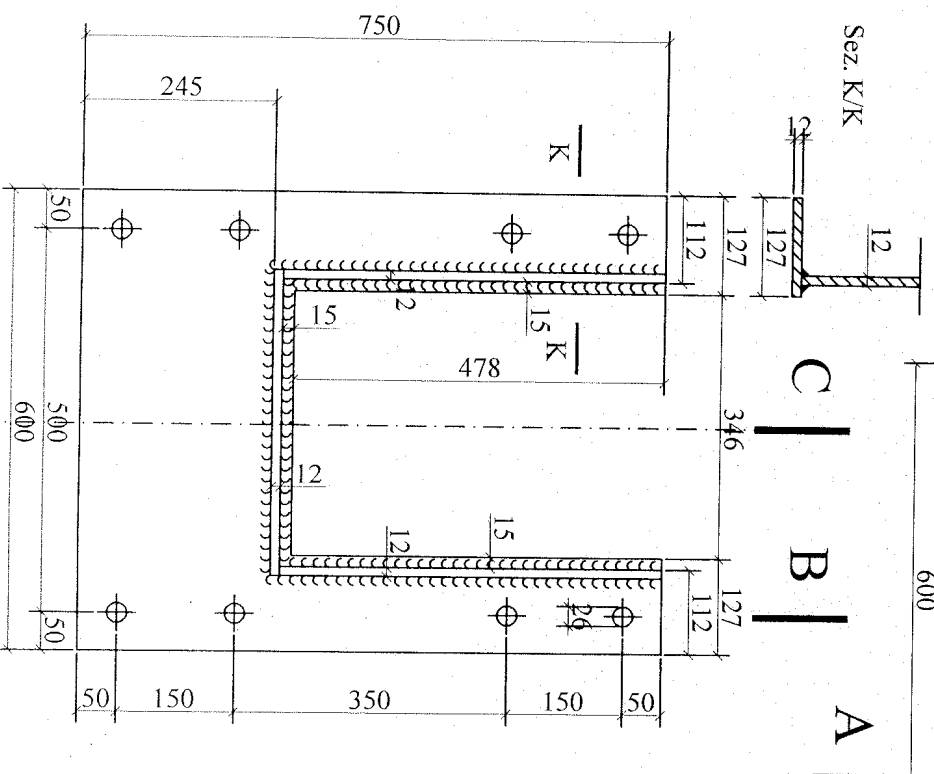


I - Particolare piastre per supporto travi 40x70

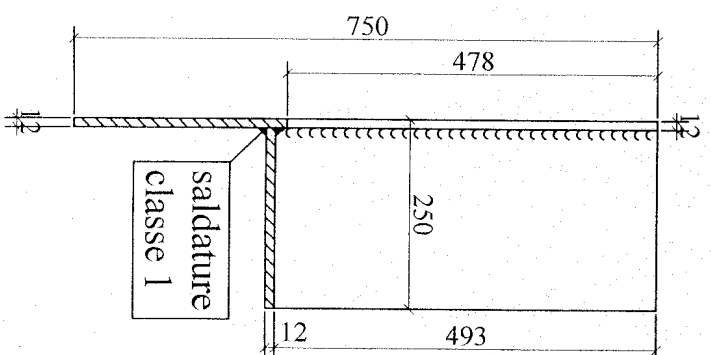


muro in mattoni pieni

Sezione A/A



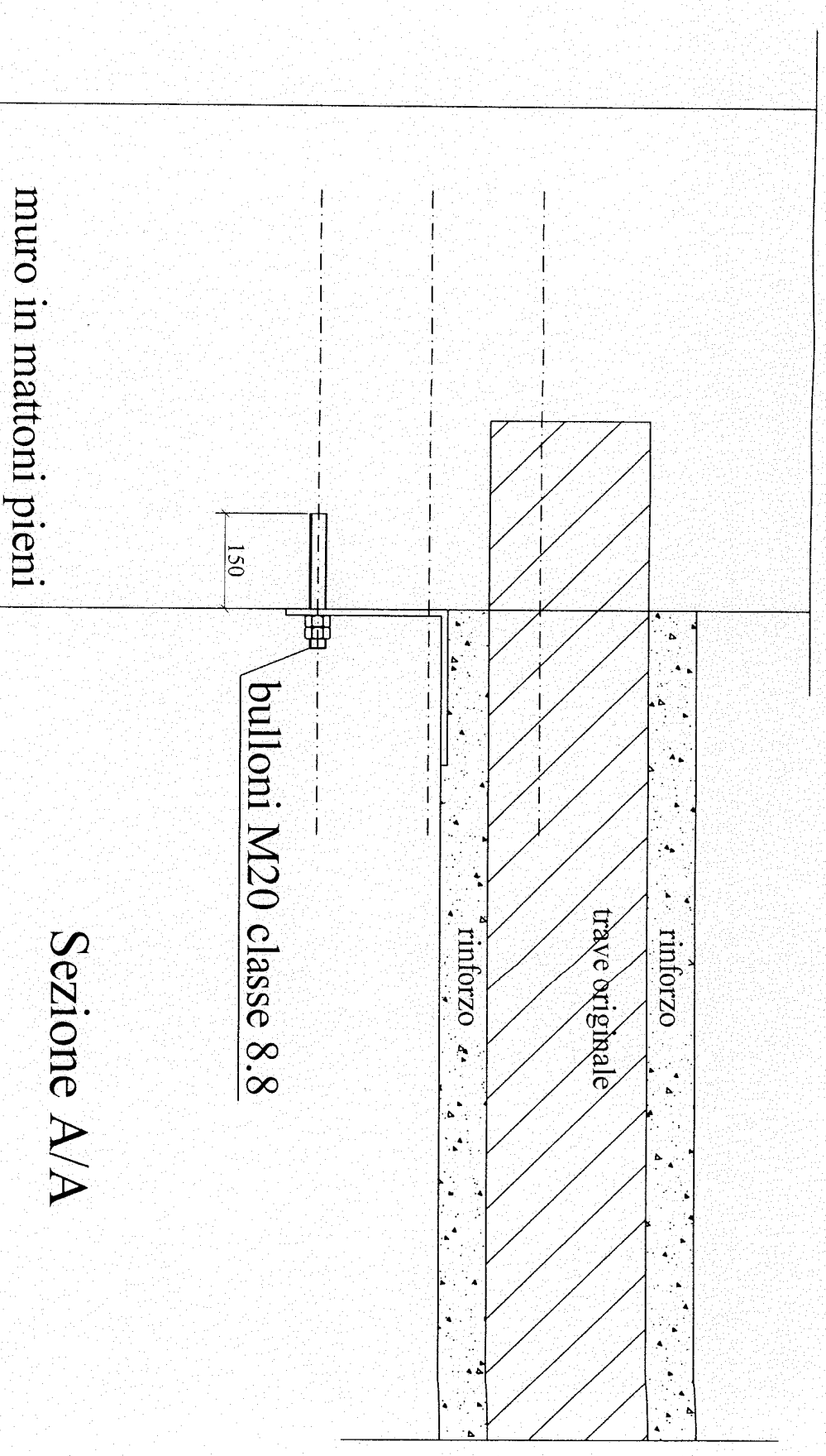
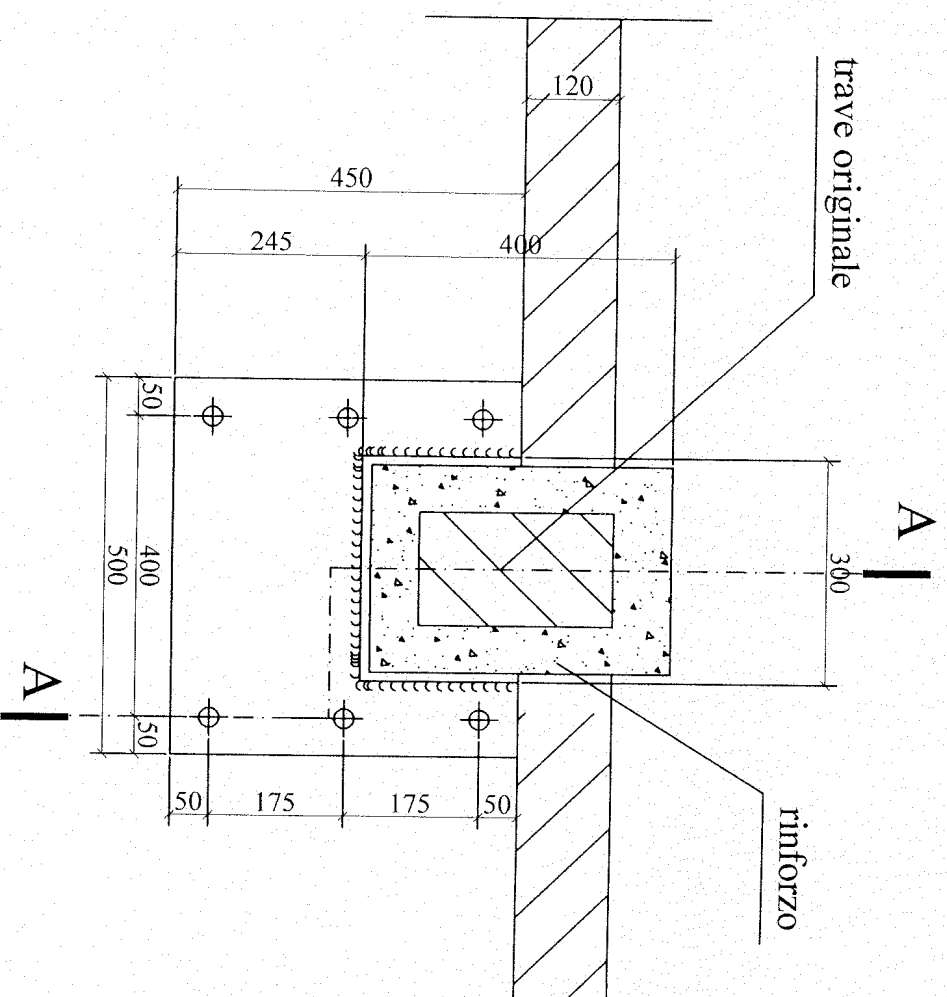
sezione C/C



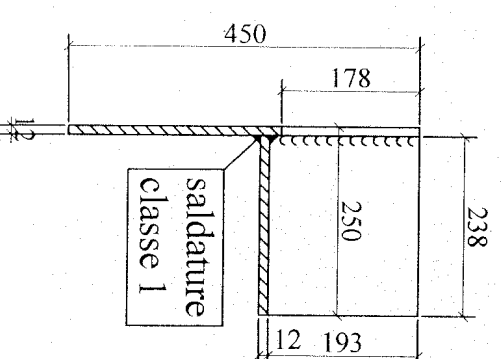
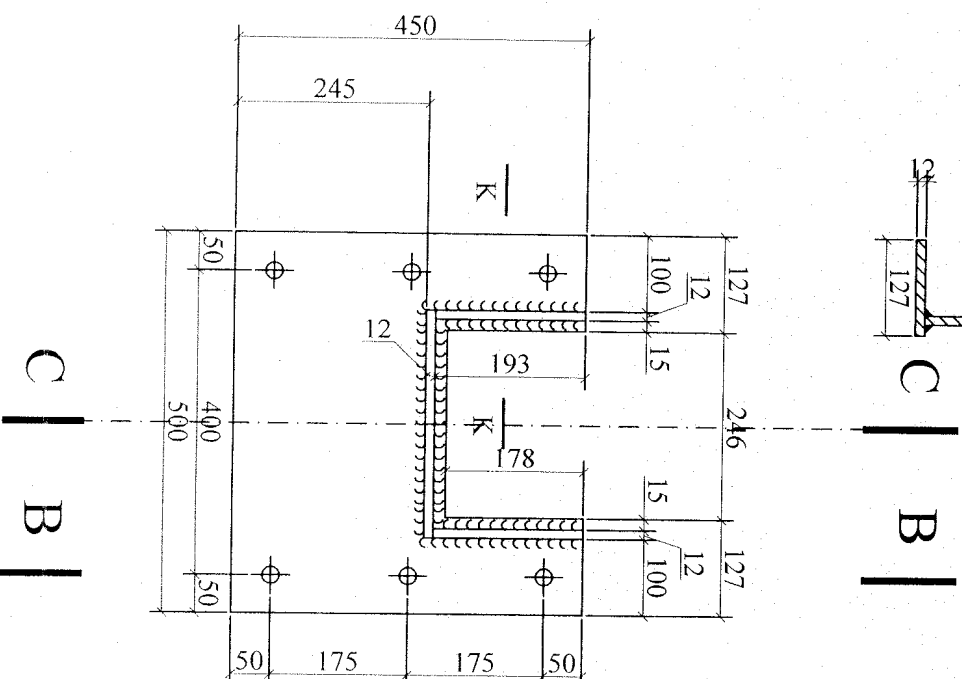
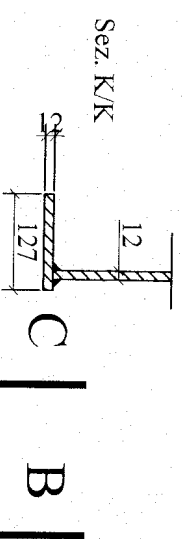
sezione B/B

L'ancoraggio dei bulloni al muro deve essere realizzato tramite adesivo composto da una resina base epossidica bisfenolo A/F (esente da stirene) con riempitivo inorganico e da una miscela indurente con poliammine, polvere di quarzo e cemento. Per garantire la tenuta del fissaggio con la resina, occorre, una volta forata la muratura pulire accuratamente il foro con un getto di aria compressa poi con uno scovolino e poi di nuovo con un getto di aria compressa. Visto che il foro in oggetto è molto profondo, collegare un tubo miscelatore in plastica all'estremità dell'ugello erogatore della resina. Verificare e rispettare, in ogni caso, le norme d'impiego dettate dalla ditta fornitrice del prodotto.

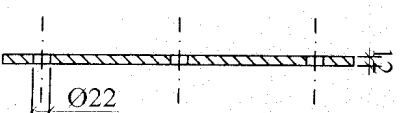
2 - Particolare piastre per supporto travi 30x40



Sezione A/A



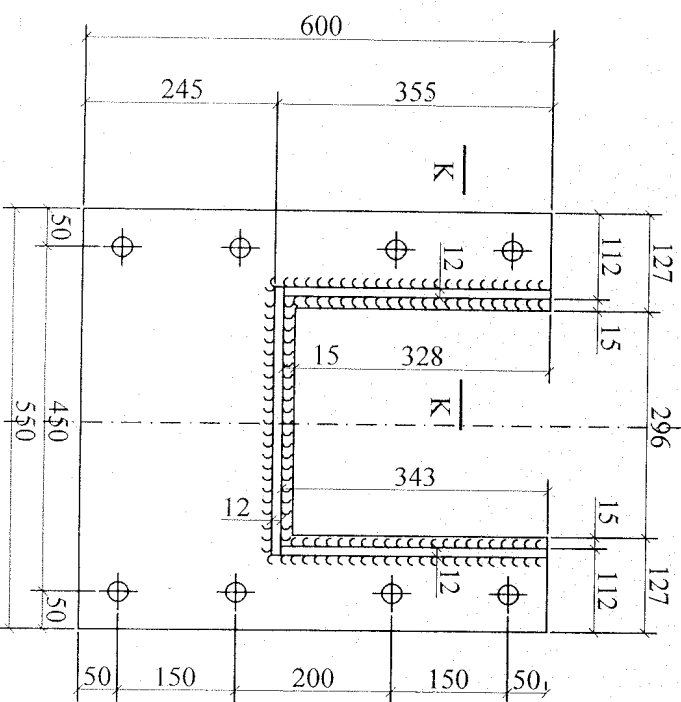
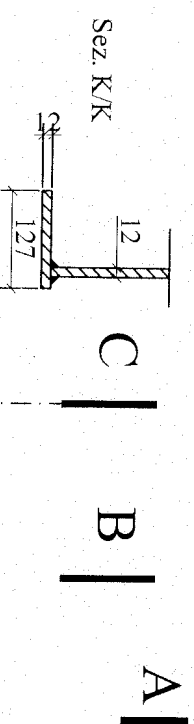
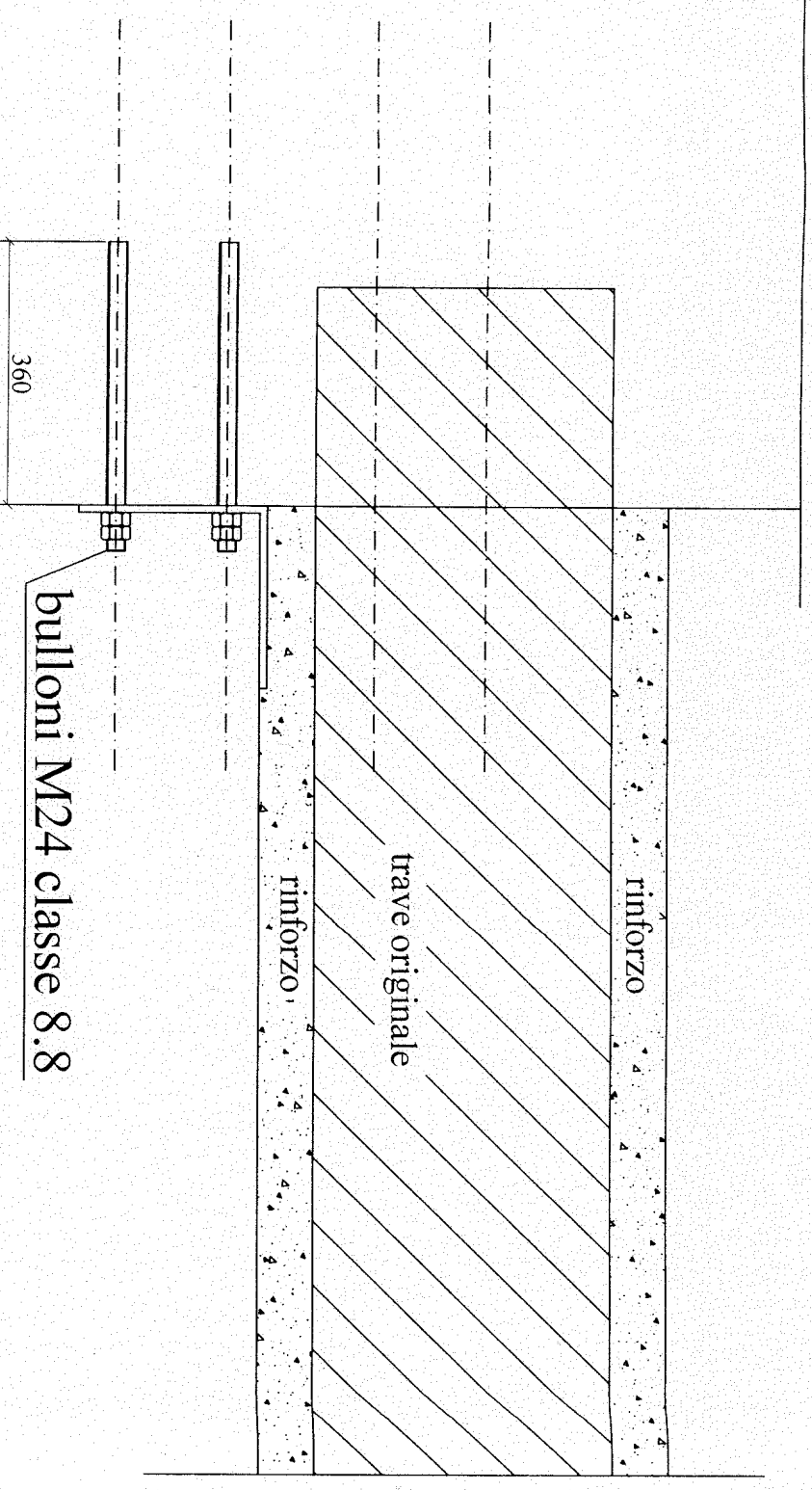
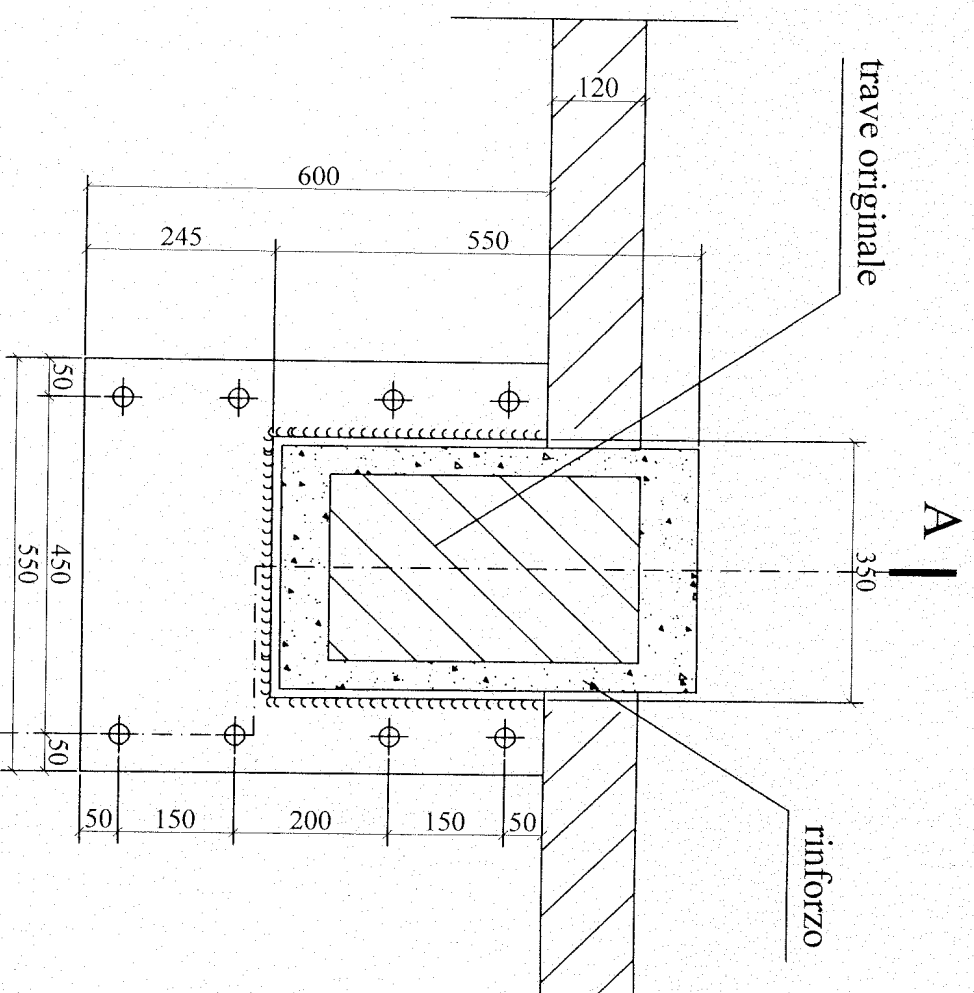
sezione C/C



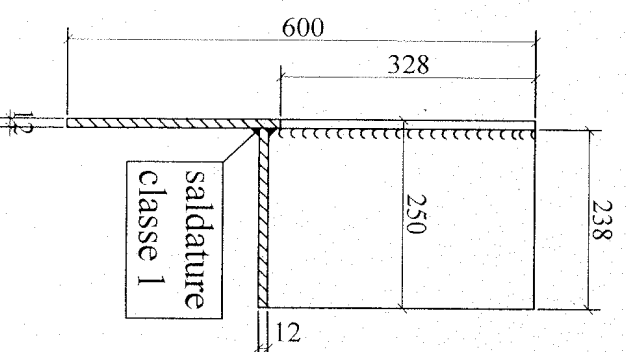
sezione B/B

L'ancoraggio dei bulloni al muro deve essere realizzato tramite adesivo composto da una resina base epossidica bisfenolo A/F (esente da stirene) con riempitivo inorganico e da una miscela indurente con poliammine, polvere di quarzo e cemento. Per garantire la tenuta del fissaggio con la resina, occorre, una volta forata la muratura pulire accuratamente il foro con un getto di aria compressa poi con uno scovolino e poi di nuovo con un getto di aria compressa. Visto che il foro in oggetto è molto profondo, collegare un tubo miscelatore in plastica all'estremità dell'ugello erogatore della resina. Verificare e rispettare, in ogni caso, le norme d'impiego dettate dalla ditta fornitrice del prodotto.

3 - Particolare piastre per supporto travi 35x55



sezione C/C



sezione B/B

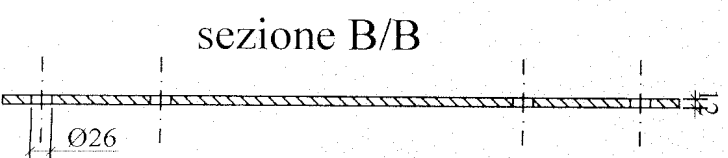
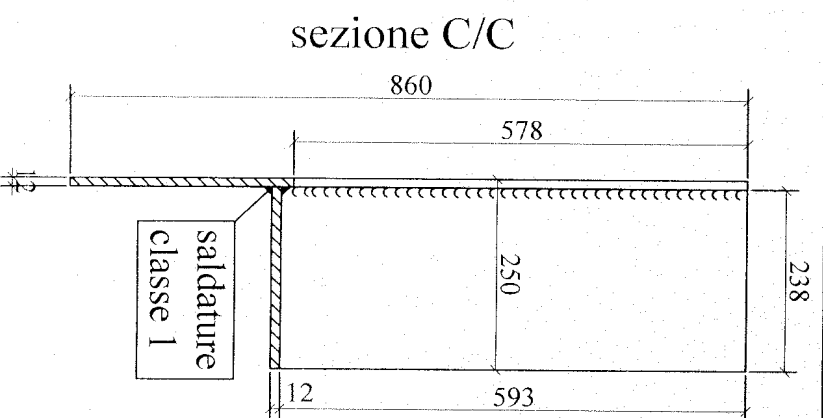
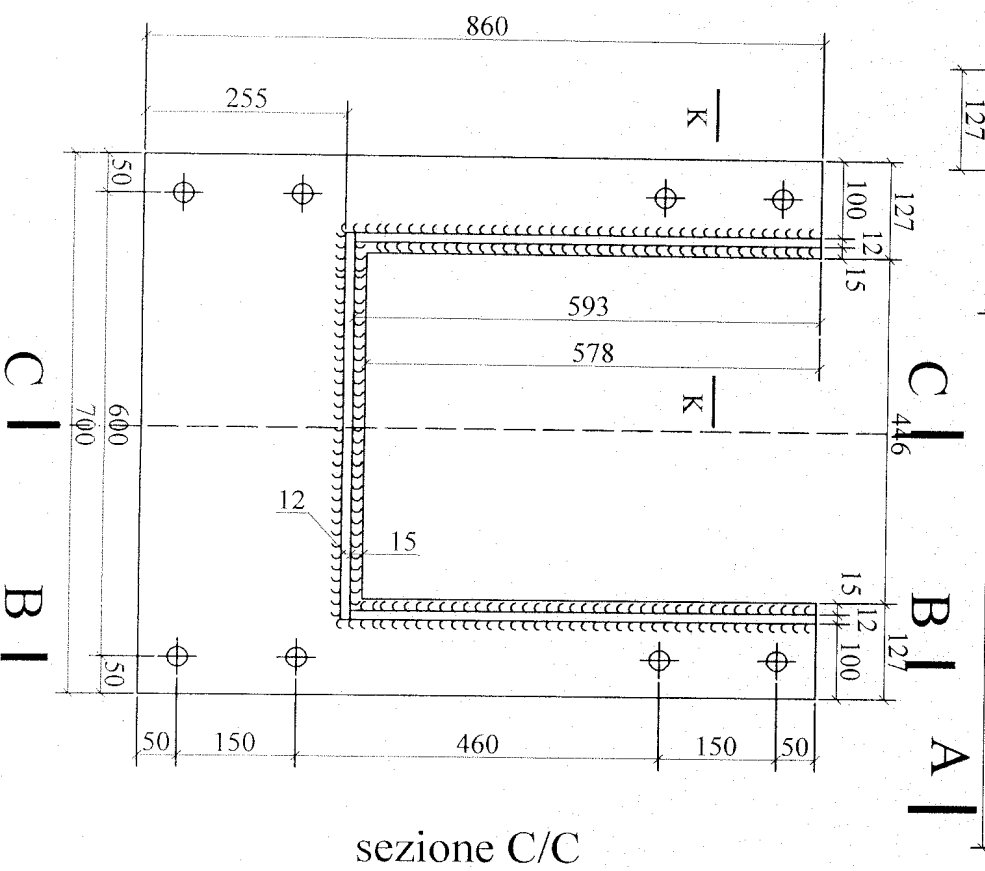
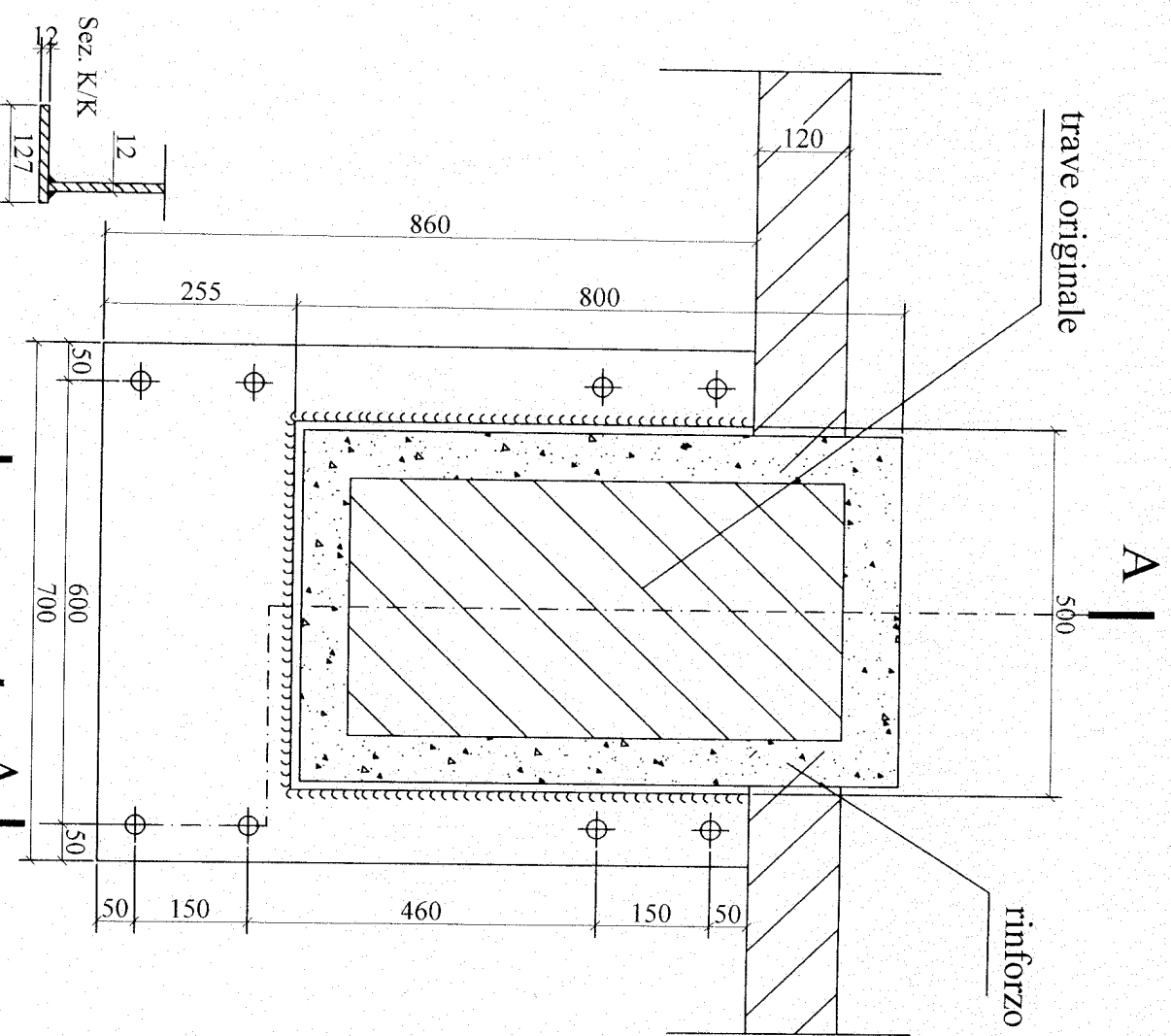
L'ancoraggio dei bulloni al muro deve essere realizzato tramite adesivo composto da una resina base epossidica bisfenolo A/F (esente da stirene) con riempitivo inorganico e da una miscela indurente con poliammine, polvere di quarzo e cemento. Per garantire la tenuta del fissaggio con la resina, occorre, una volta forata la muratura pulire accuratamente il foro con un getto di aria compressa poi con uno scovolino e poi di nuovo con un getto di aria compressa. Visto che il foro in oggetto è molto profondo, collegare un tubo miscelatore in plastica all'estremità dell'ugello erogatore della resina. Verificare e rispettare, in ogni caso, le norme d'impiego dettate dalla ditta fornitrice del prodotto.

muro in mattoni pieni

Sezione A/A

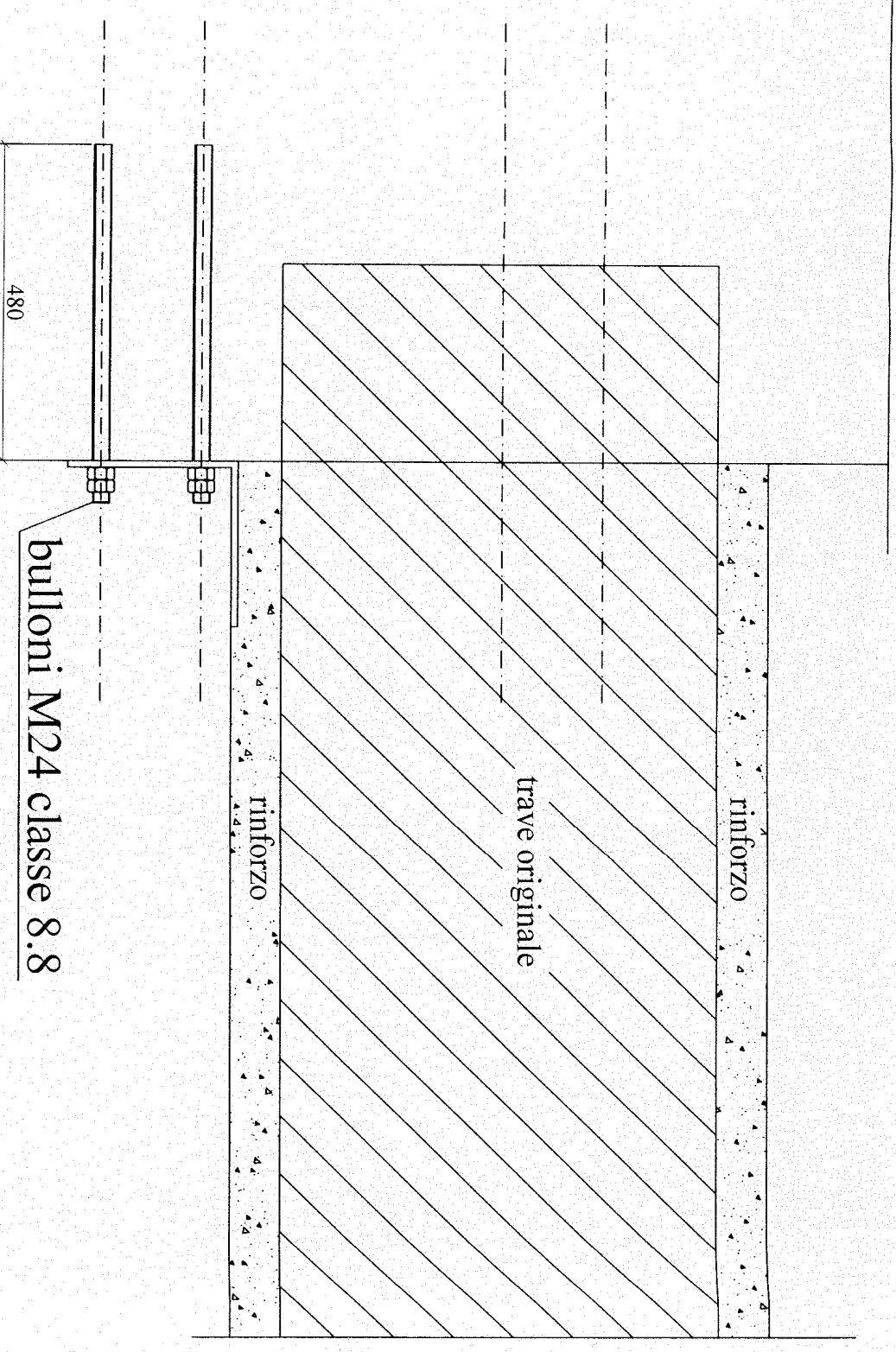
bulloni M24 classe 8.8

8 - Particolare piastre per supporto travi 50x80



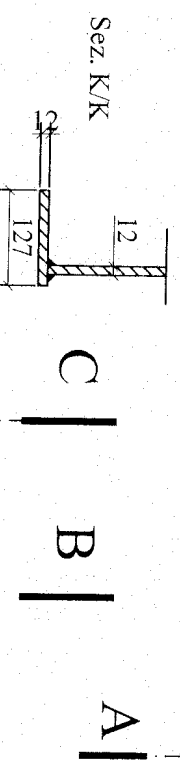
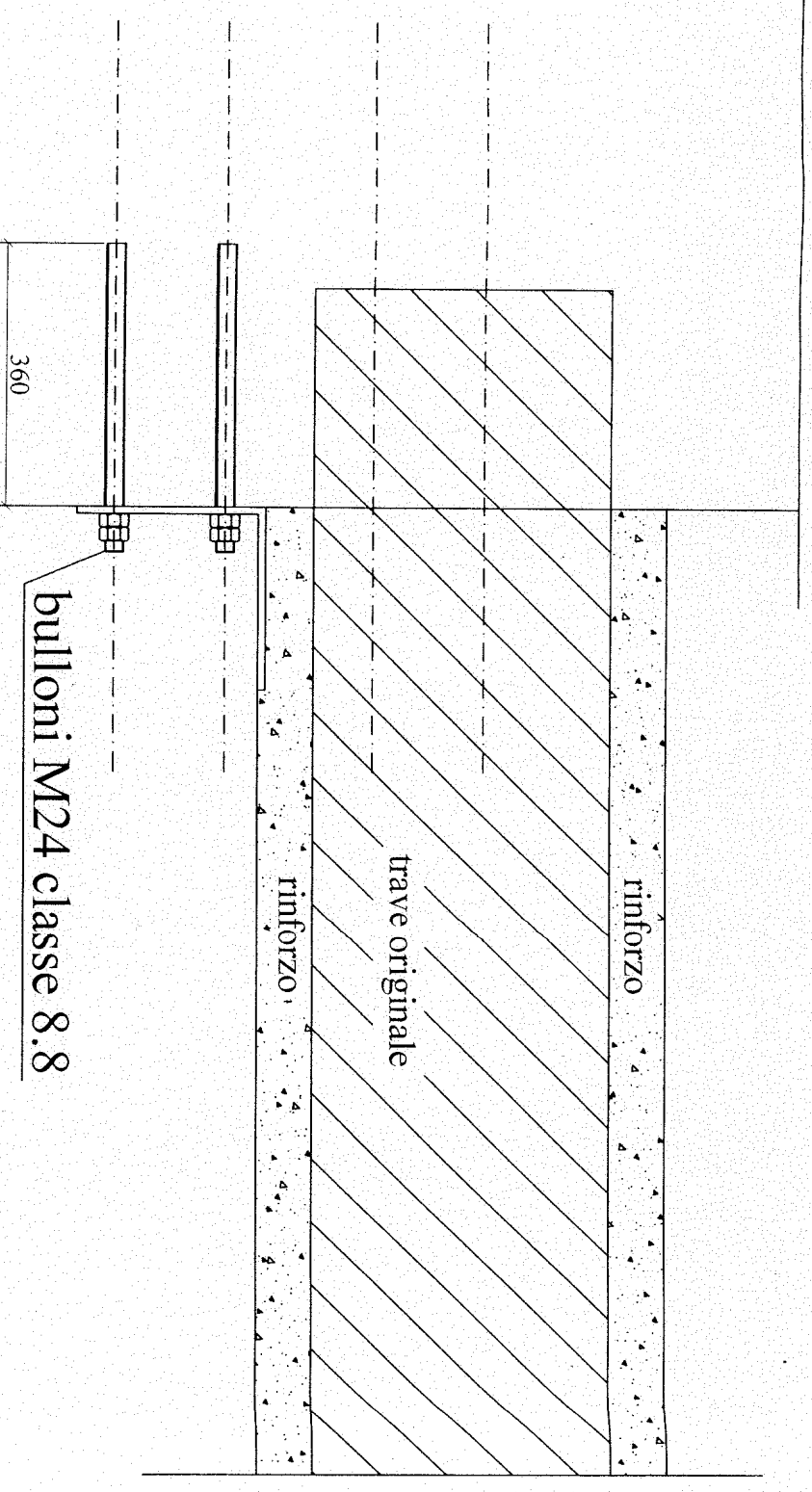
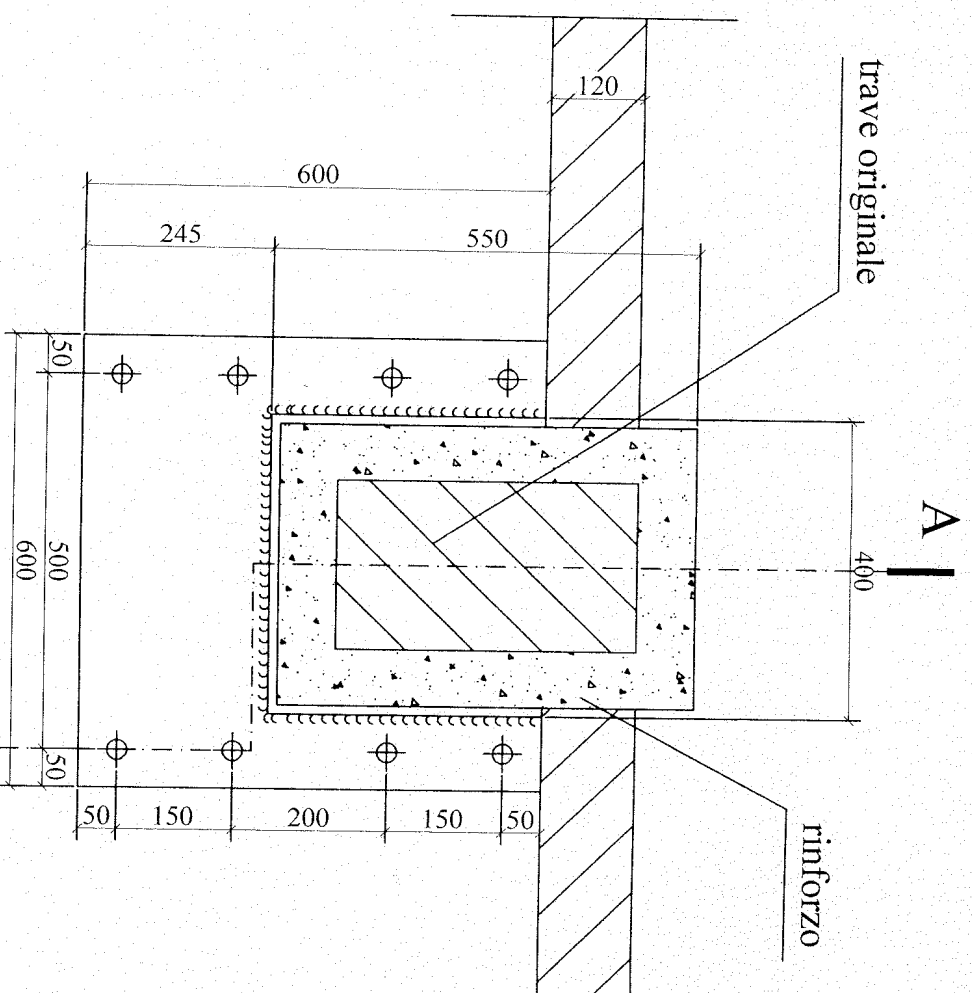
muro in mattoni pieni

Sezione A/A

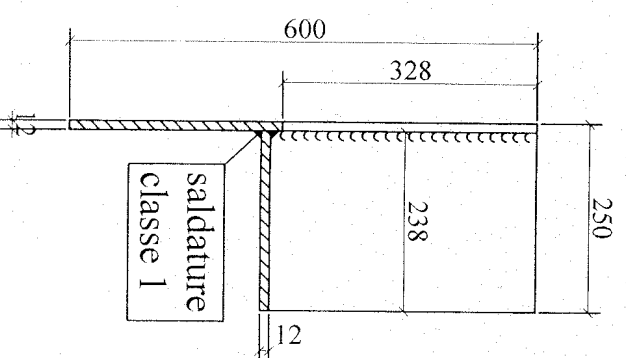
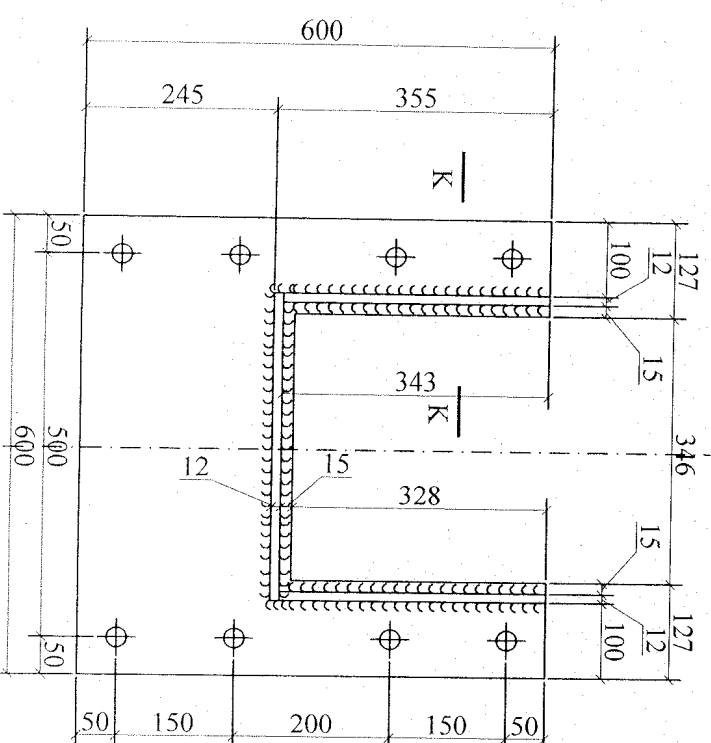


L'ancoraggio dei bulloni al muro deve essere realizzato tramite adesivo composto da una resina base epossidica bisfenolo A/F (esente da stirene) con riempitivo inorganico e da una mistura indurente con poliammine, polvere di quarzo e cemento. Per garantire la tenuta del fissaggio con la resina, occorre, una volta forata la la muratura pulire accuratamente il foro con un getto di aria compressa poi con uno scovolino e poi di nuovo con un getto di aria compressa. Visto che il foro in oggetto è molto profondo, collegare un tubo miscelatore in plastica all'estremità dell'ugello erogatore della resina. Verificare e rispettare, in ogni caso, le norme d'impiego dettate dalla ditta fornitrice del prodotto.

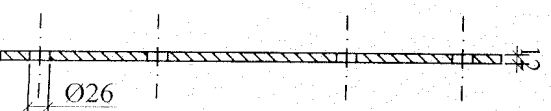
9 - Particolare piastre per supporto travi 40x55



Sezione A/A

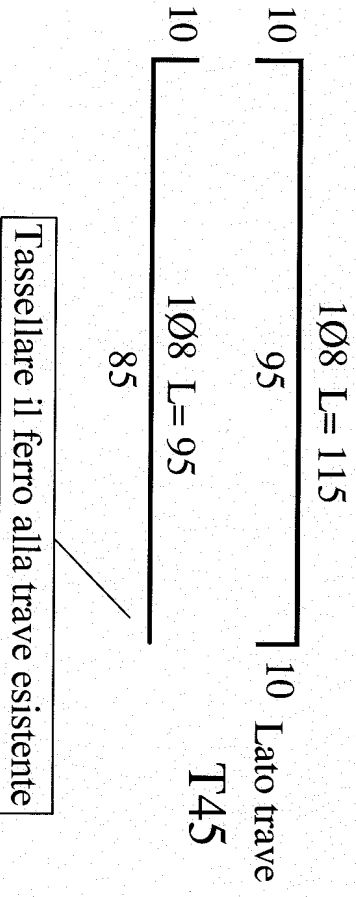
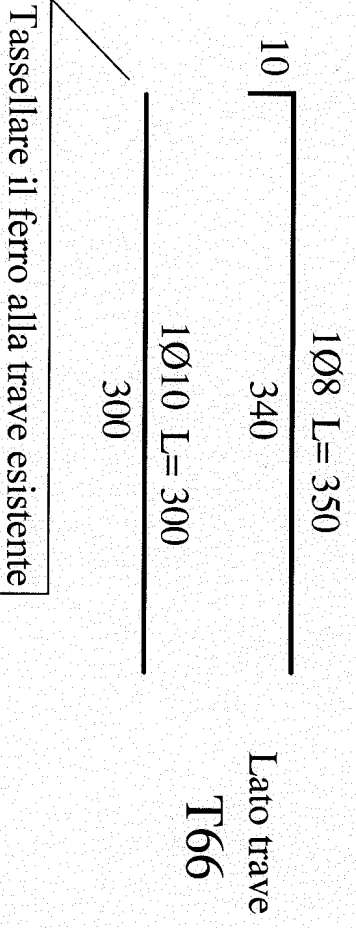
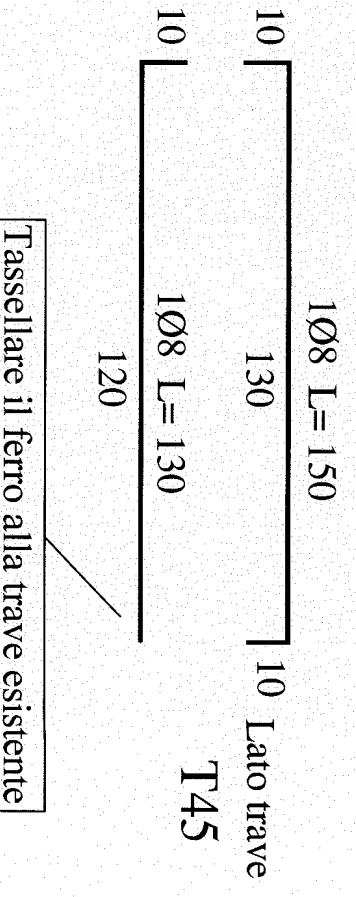
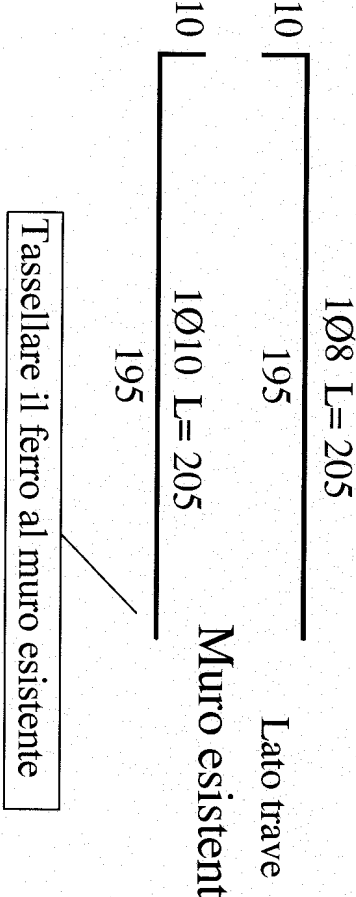
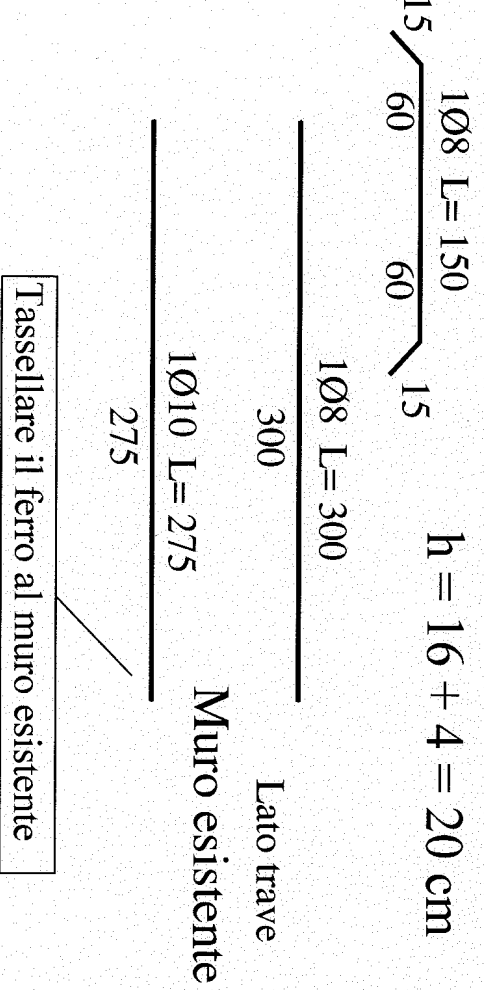
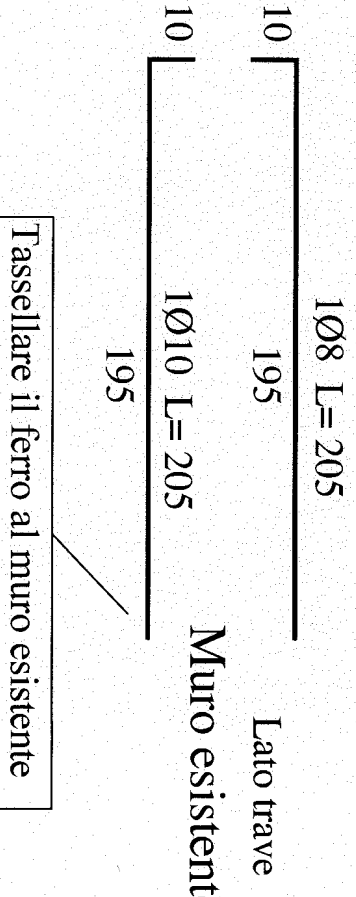
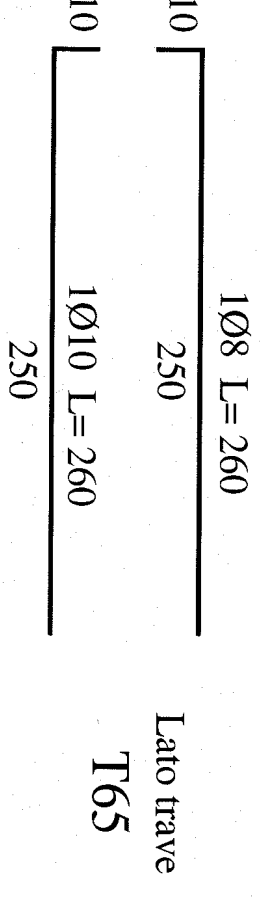
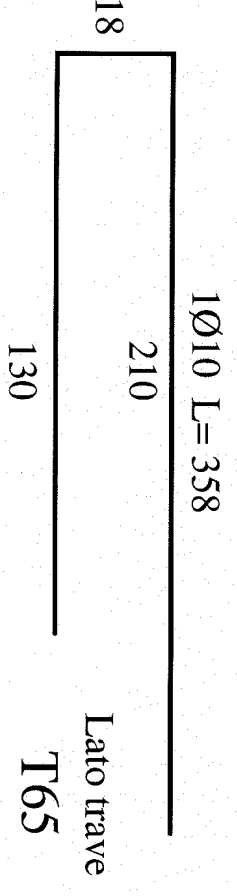


sezione C/C

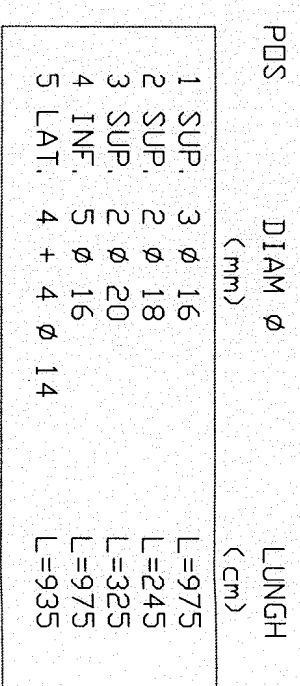


sezione B/B

L'ancoraggio dei bulloni al muro deve essere realizzato tramite adesivo composto da una resina base epossidica bisfenolo A/F (esente da stirene) con riempitivo inorganico e da una miscela indurente con poliammine, polvere di quarzo e cemento. Per garantire la tenuta del fissaggio con la resina, occorre, una volta forata la muratura pulire accuratamente il foro con un getto di aria compressa poi con uno scovolino e poi di nuovo con un getto di aria compressa. Visto che il foro in oggetto è molto profondo, collegare un tubo miscelatore in plastica all'estremità dell'ugello erogatore della resina. Verificare e rispettare, in ogni caso, le norme d'impiego dettate dalla ditta fornitrice del prodotto.

SOLAIO 1 IN TUTTO N° 5 TRAVETTI $h = 16 + 4 = 20 \text{ cm}$ 	SOLAIO 2 IN TUTTO N° 5 TRAVETTI $h = 16 + 4 = 20 \text{ cm}$ 	SOLAIO 3 IN TUTTO N° 4 TRAVETTI $h = 16 + 4 = 20 \text{ cm}$ 
SOLAIO 4 IN TUTTO N° 5 TRAVETTI $h = 16 + 4 = 20 \text{ cm}$ 	SOLAIO 5 IN TUTTO N° 5 TRAVETTI $h = 16 + 4 = 20 \text{ cm}$ 	SOLAIO 6 IN TUTTO N° 4 TRAVETTI $h = 16 + 4 = 20 \text{ cm}$ 
SOLAIO 7 IN TUTTO N° 6 TRAVETTI $h = 18 + 4 = 22 \text{ cm}$ 	SBALZO 1 IN TUTTO N° 6 TRAVETTI $h = 18 + 4 = 22 \text{ cm}$ 	

Travel 1 (40x70)



Technical drawing of a reinforced concrete slab (L.A.T.) showing dimensions and reinforcement details.

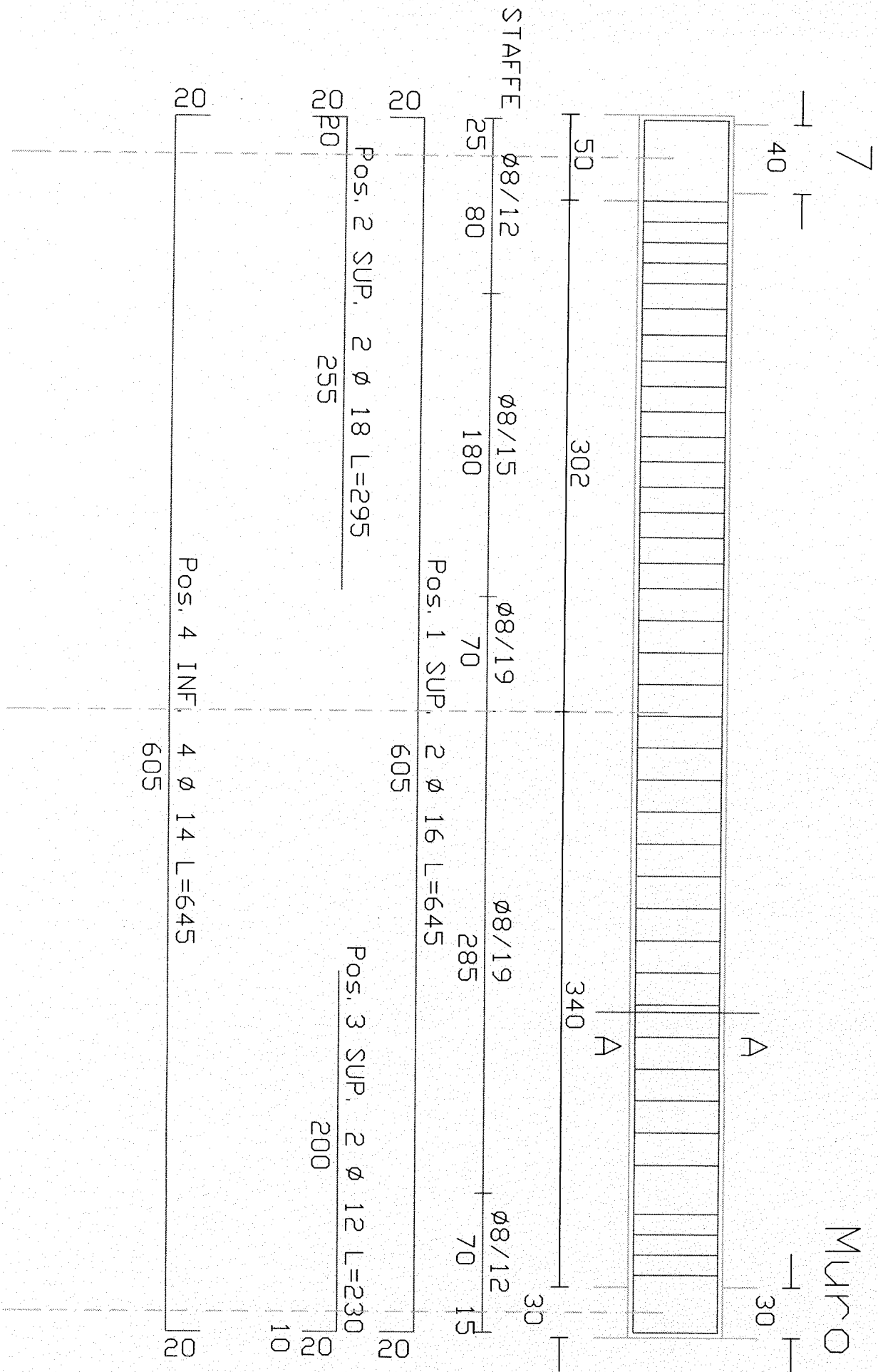
Overall dimensions: 70 (width) x 40 (height).

Reinforcement details:

- Top reinforcement: 2 $\varnothing$ 18 + 3 $\varnothing$ 16
- Bottom reinforcement: 4 + 4 $\varnothing$ 14 L=935
- Side reinforcement: 5 $\varnothing$ 16

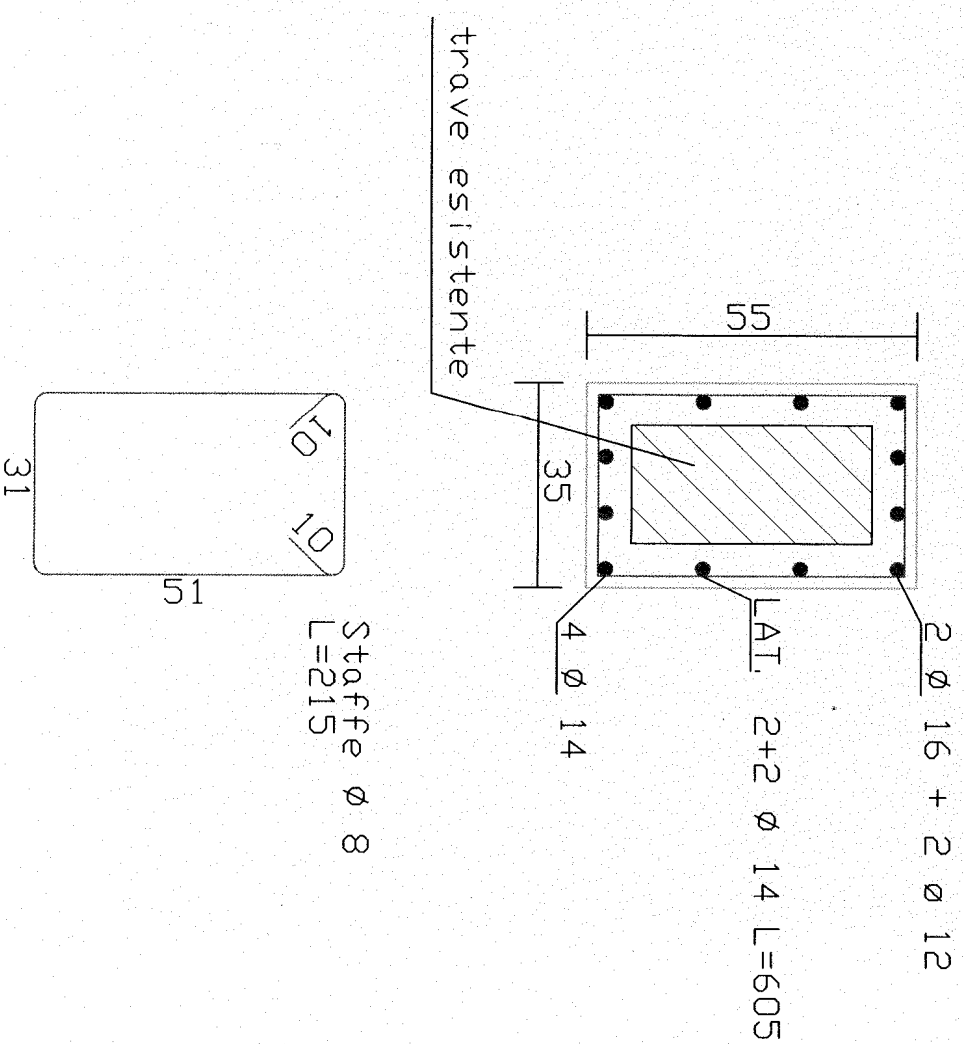
The drawing also indicates a "Trave esistente" (existing span) and a hatched area representing the slab.

Trave 2 (35x55)

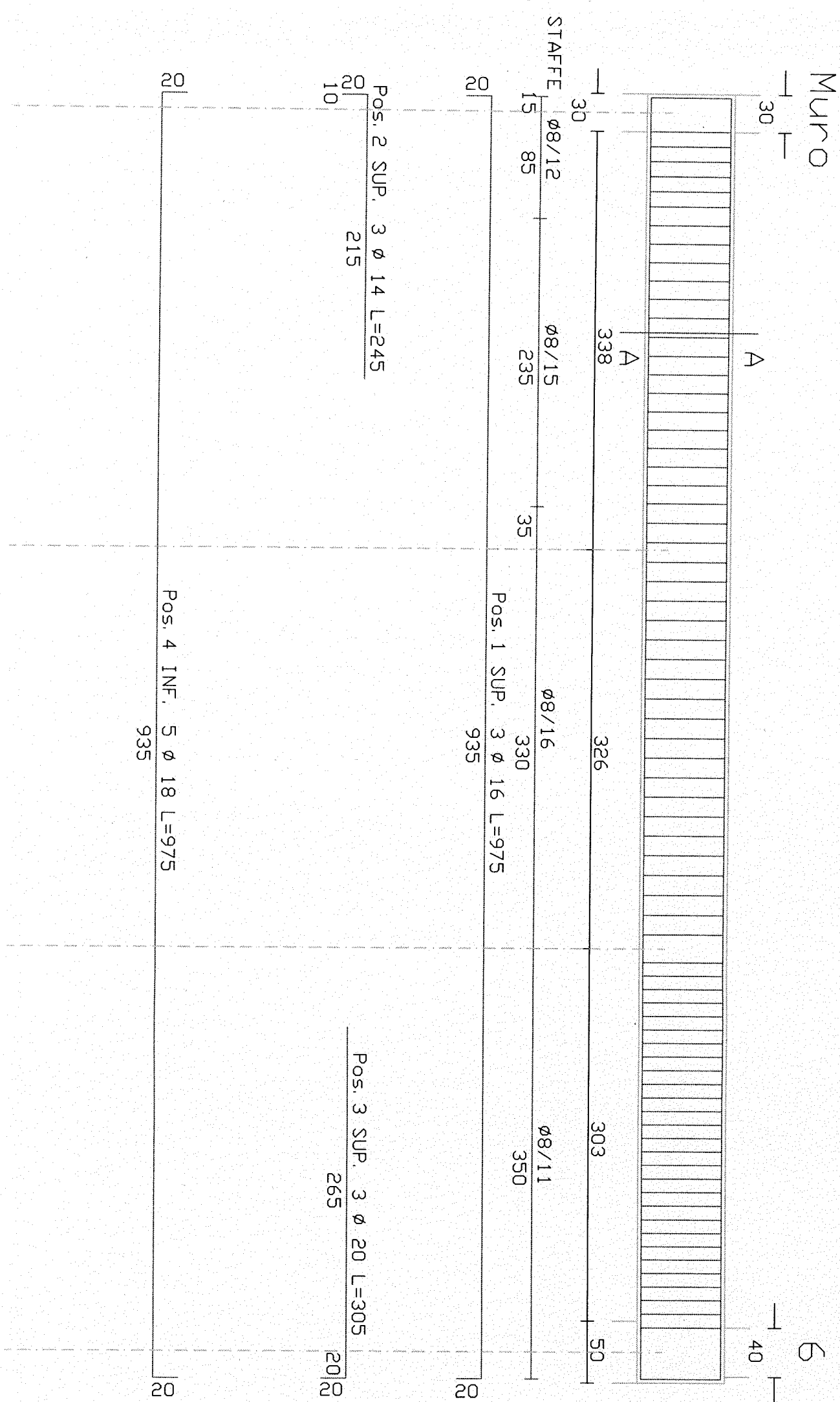


POS	DIAM Ø (mm)	LUNGH (cm)
1 SUP. 2 Ø 16		L=645
2 SUP. 2 Ø 18		L=295
3 SUP. 2 Ø 12		L=230
4 INF. 4 Ø 14		L=645
5 LAT. 2 + 2 Ø 14		L=605

Sez. A-A

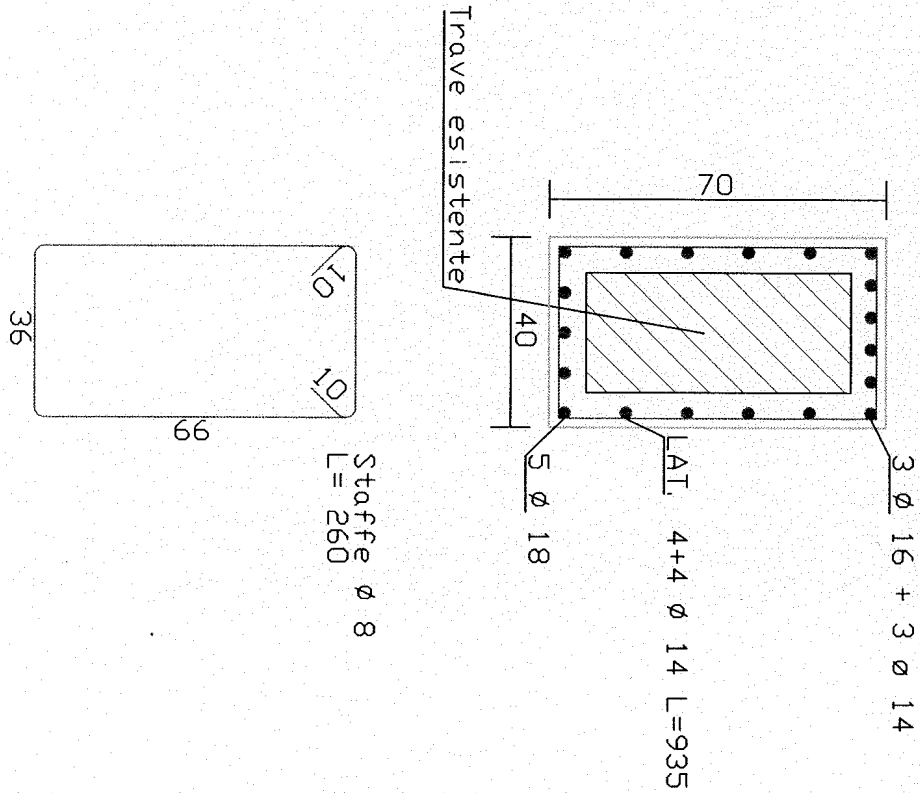


Trave 3 (40x70)

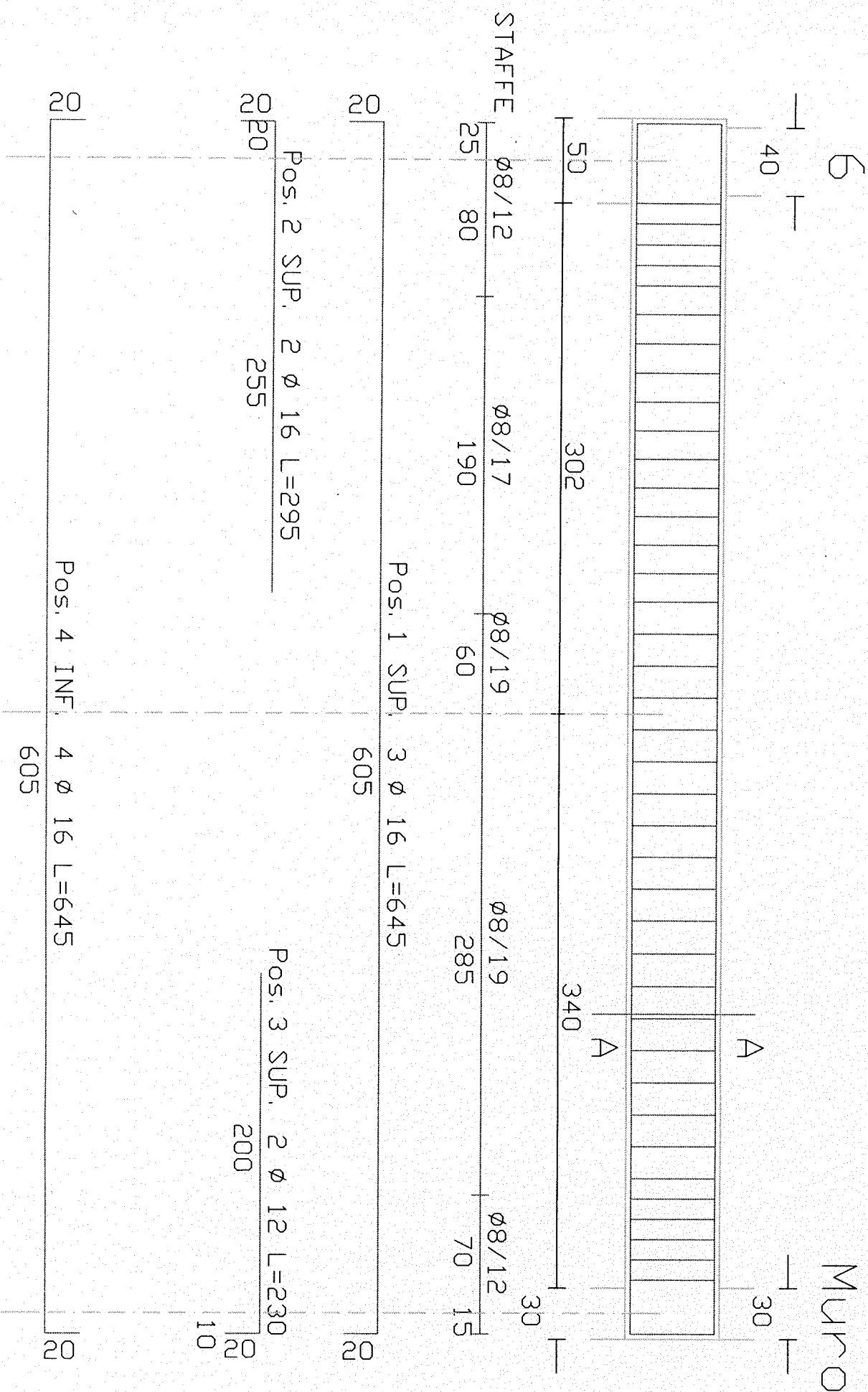


PDS	DIAM Ø (mm)	LUNGH (cm)
1 SUP.	3 Ø 16	L=975
2 SUP.	3 Ø 14	L=245
3 SUP.	3 Ø 20	L=305
4 INF.	5 Ø 18	L=975
5 LAT.	4 + 4 Ø 14	L=935

Sez. A-A

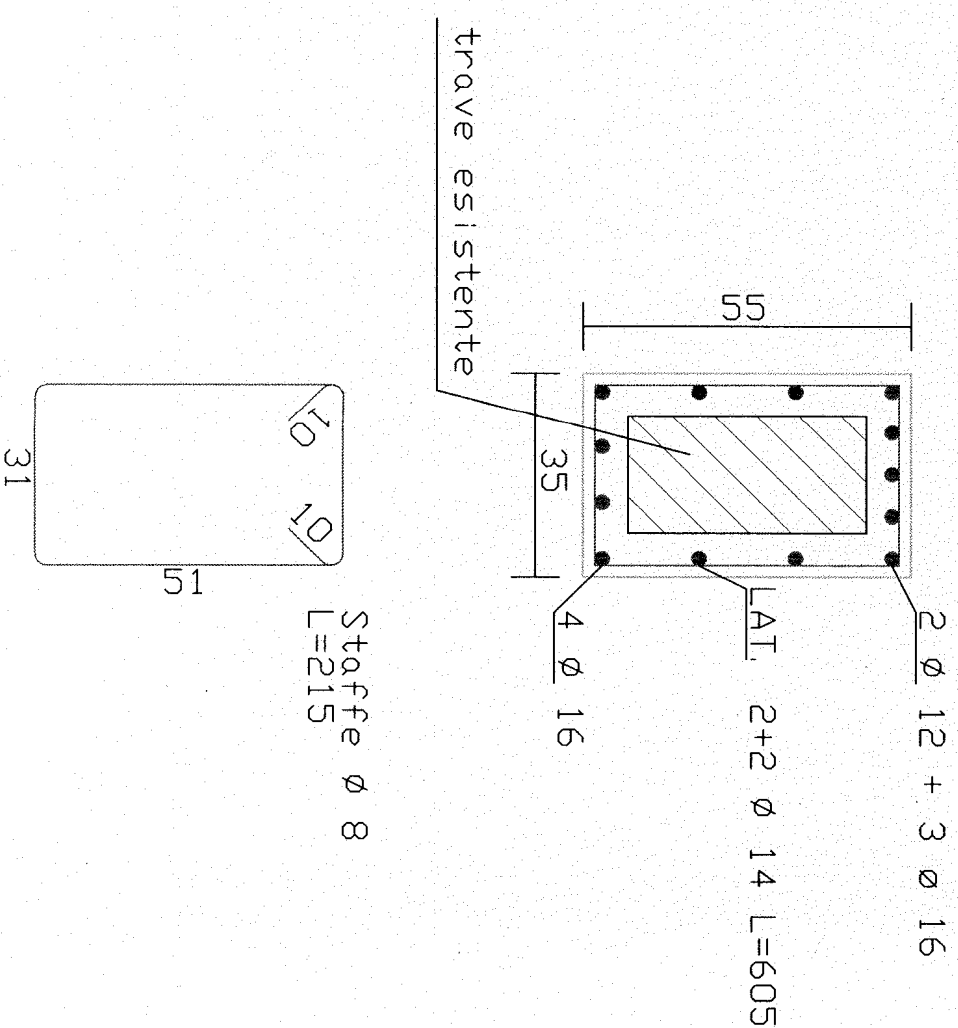


Trave 4 (35x55)

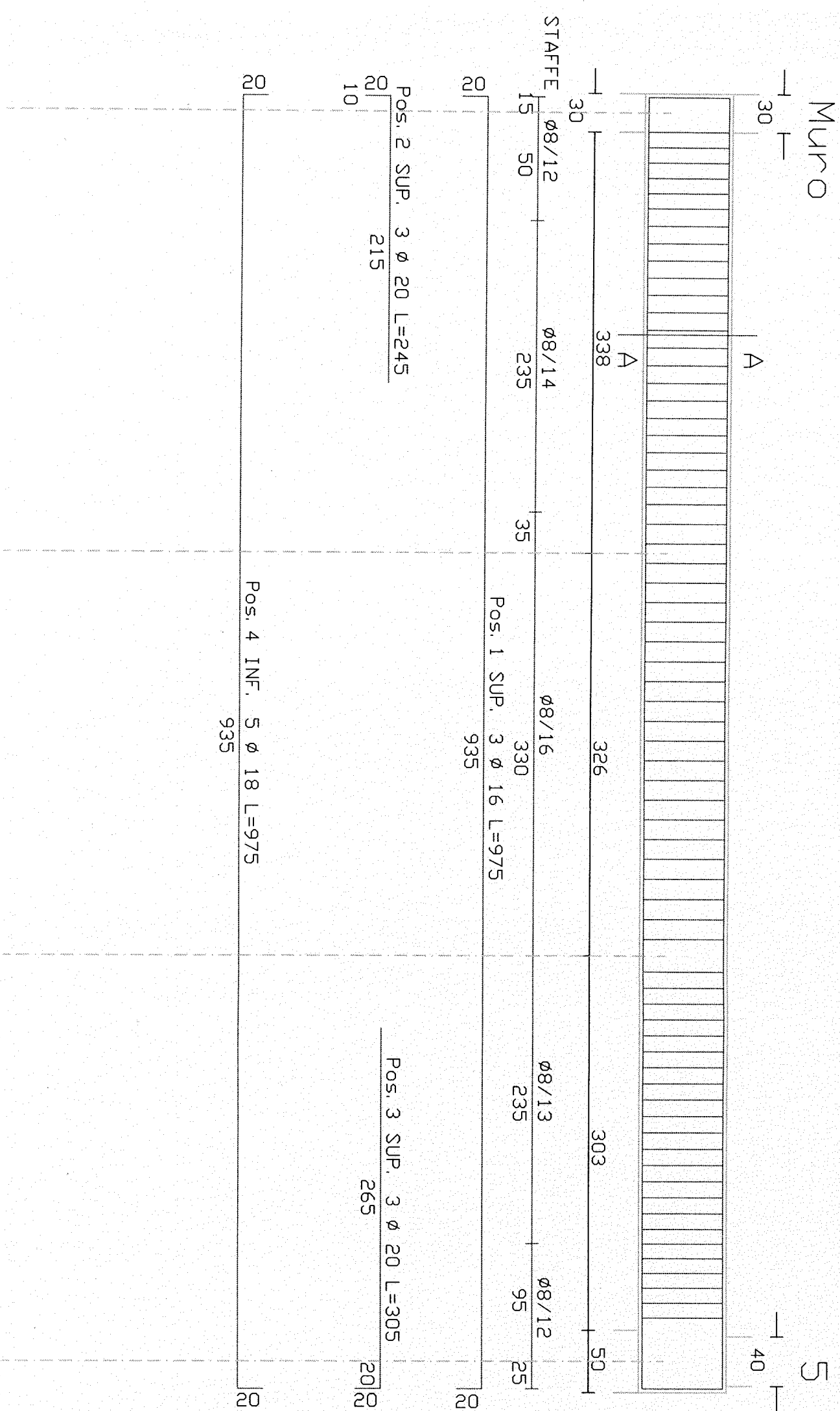


POS	DIAM Ø (mm)	LUNGH (cm)
1 SUP.	3 Ø 16	L=645
2 SUP.	2 Ø 16	L=295
3 SUP.	2 Ø 12	L=230
4 INF.	4 Ø 16	L=645
5 LAT.	2 + 2 Ø 14	L=605

Sez. A-A

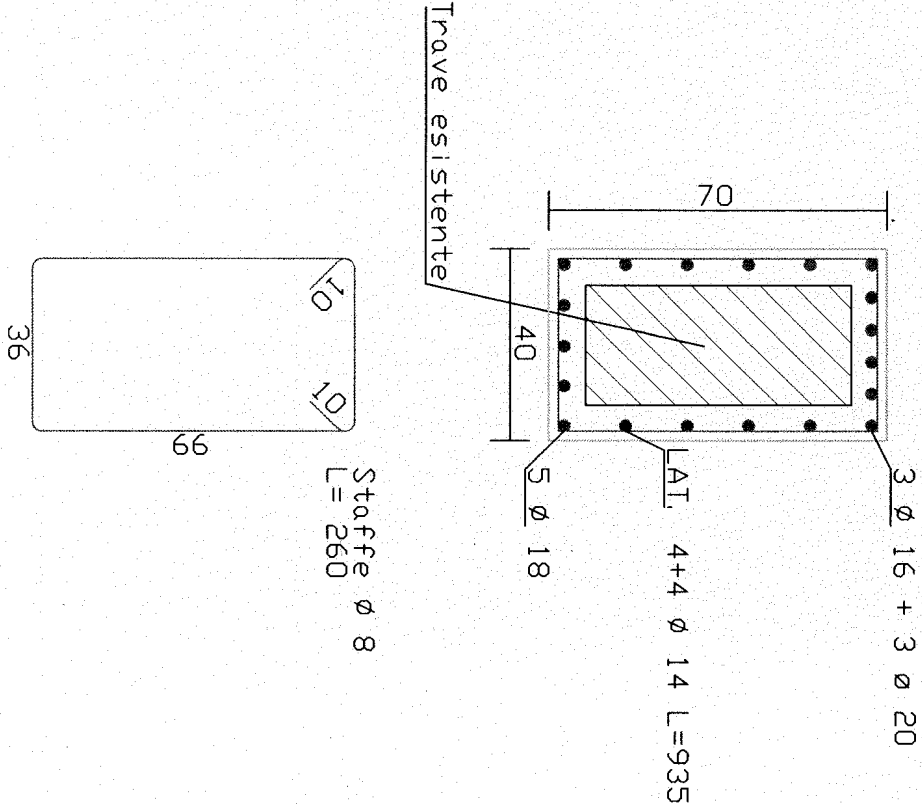


Trave 5 (40x70)

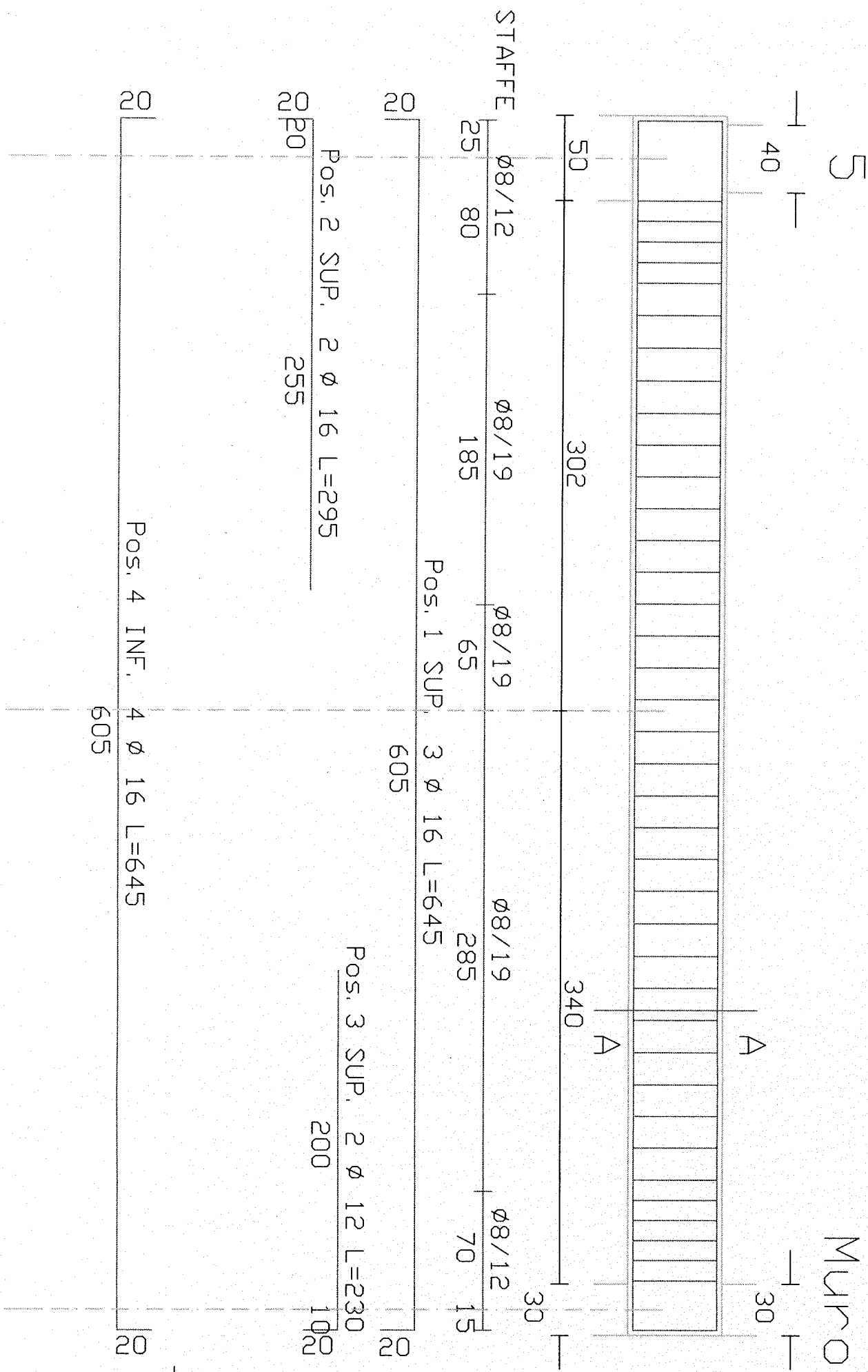


PDS	DIAM Ø (mm)	LUNGH (cm)
1 SUP.	3 Ø 16	L=975
2 SUP.	3 Ø 20	L=245
3 SUP.	3 Ø 20	L=305
4 INF.	5 Ø 18	L=975
5 LAT.	4 + 4 Ø 14	L=935

Sez. A-A

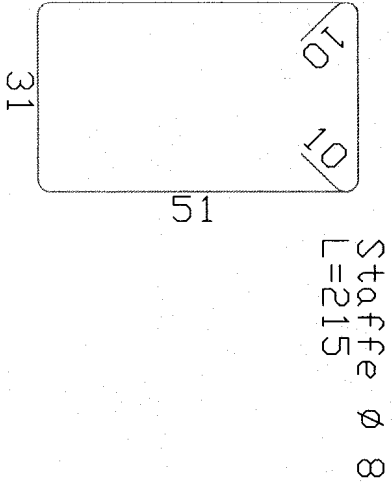
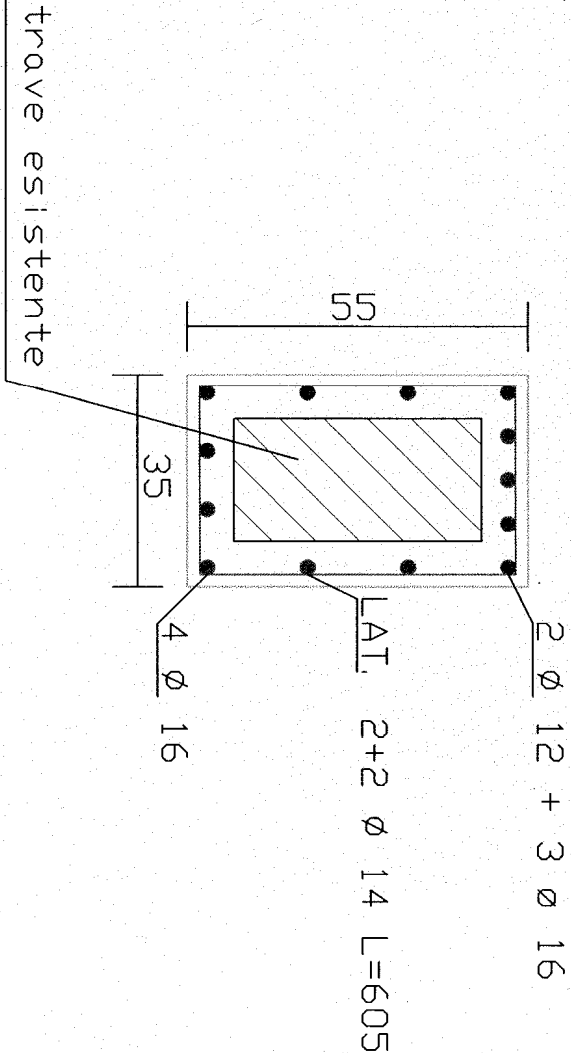


Trave 6 (35x55)

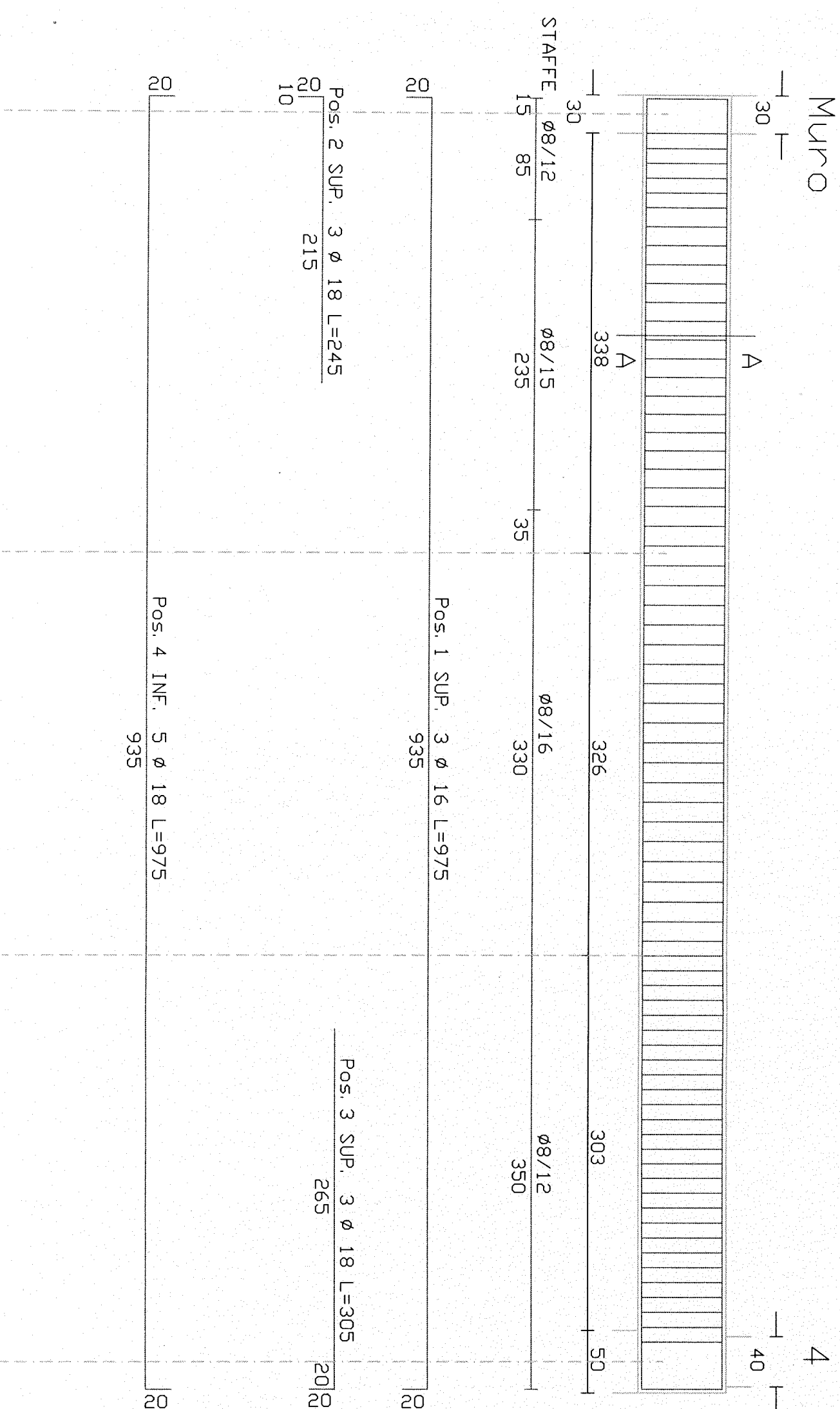


POS	DIAM Ø < mm >	LUNGH < cm >
1 SUP.	3 Ø 16	L=645
2 SUP.	2 Ø 16	L=295
3 SUP.	2 Ø 12	L=230
4 INF.	4 Ø 16	L=645
5 LAT.	2 + 2 Ø 14	L=605

Sez. A-A

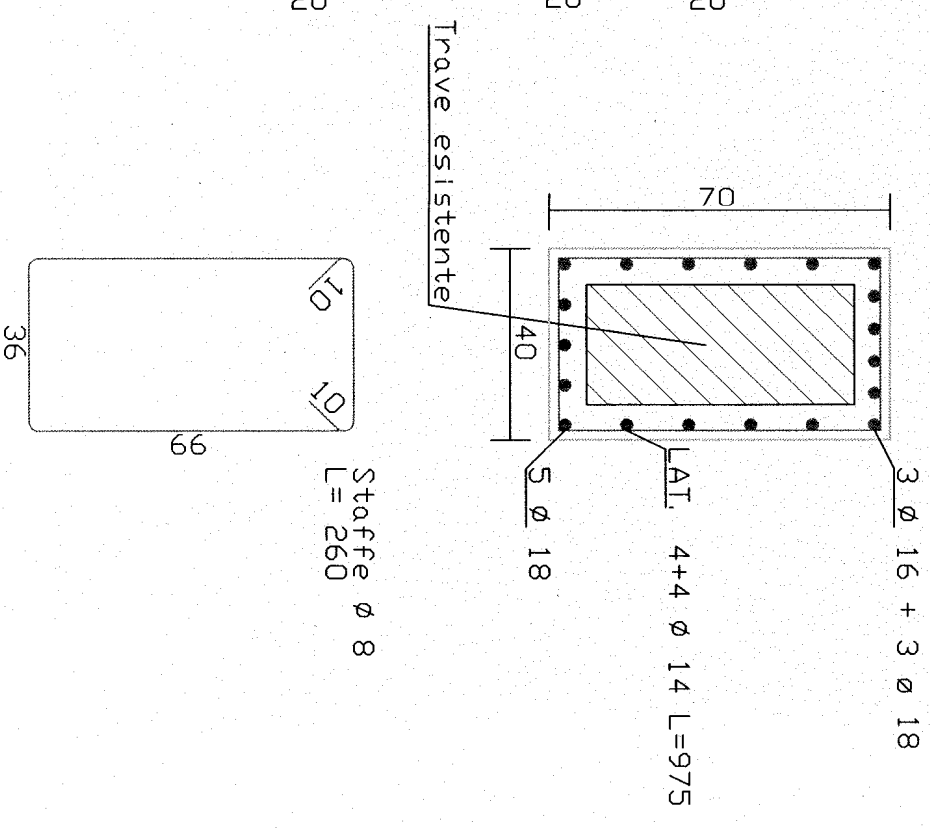


Travel 7 (40x70)

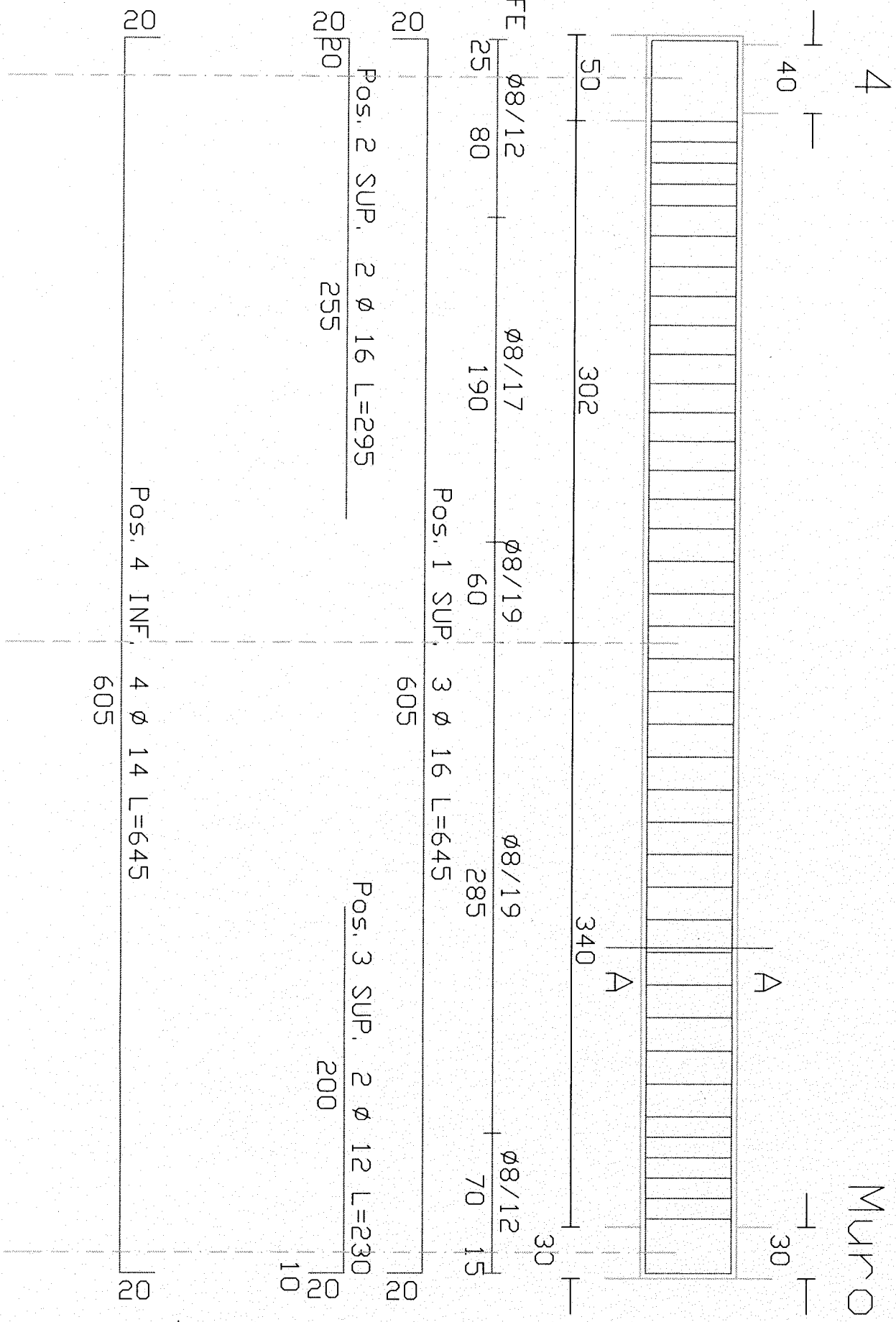


POS	DIAM Ø (mm)	LUNGH (cm)
1 SUP.	3 Ø 16	L=975
2 SUP.	3 Ø 18	L=245
3 SUP.	3 Ø 18	L=305
4 INF.	5 Ø 18	L=975
5 LAT.	4 + 4 Ø 14	L=935

Sez. A-A

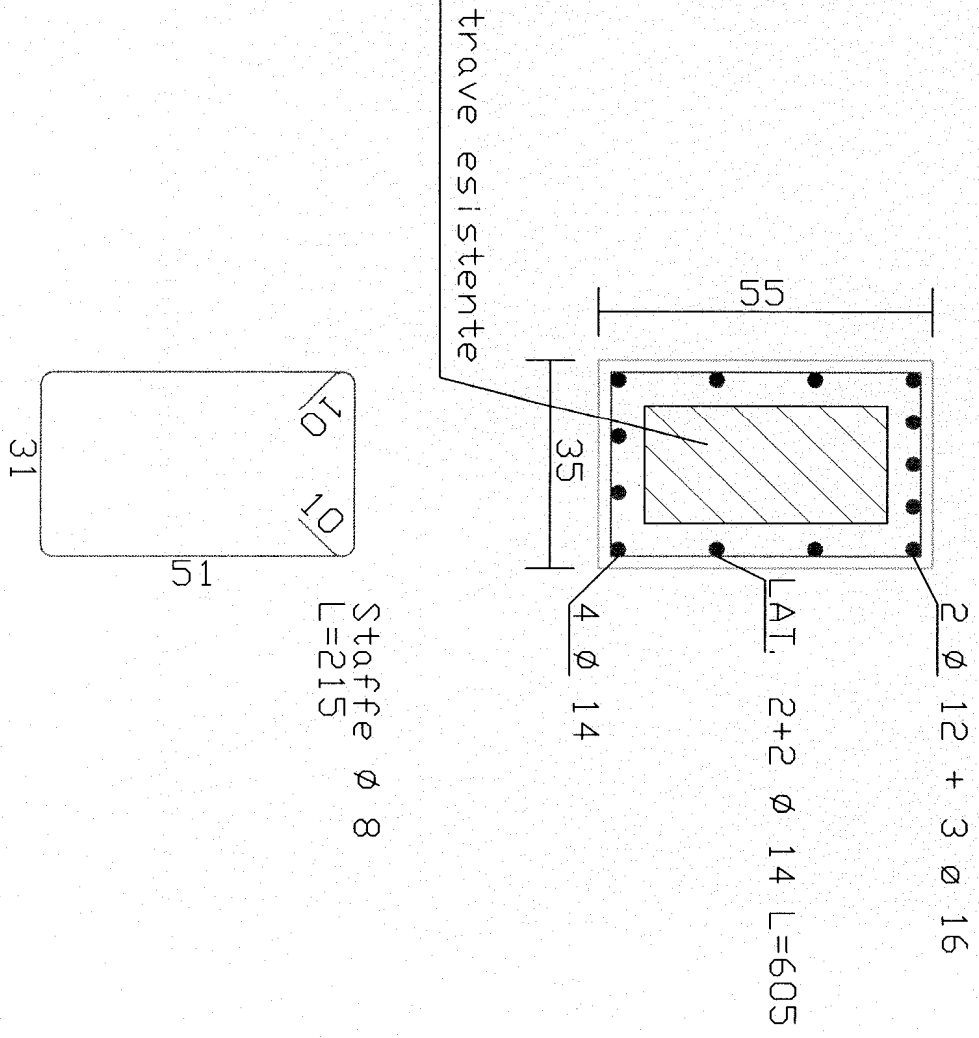


Trave 8 (35x55)

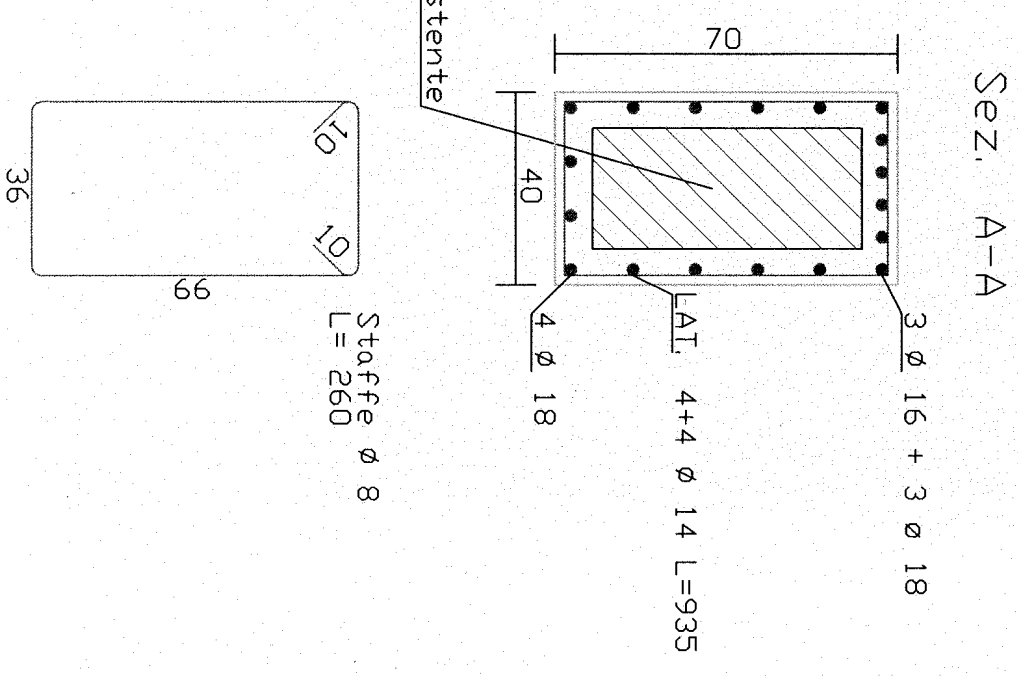
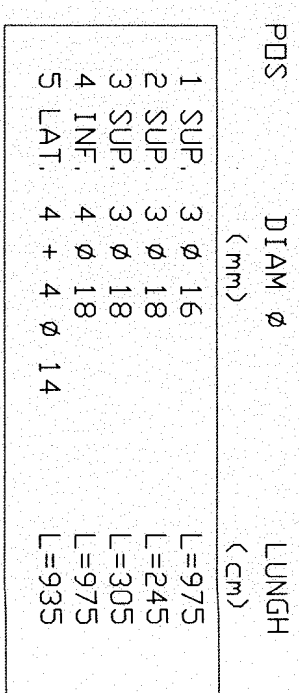


POS	DIAM Ø (mm)	LUNGH (cm)
1 SUP.	3 Ø 16	L=645
2 SUP.	2 Ø 16	L=295
3 SUP.	2 Ø 12	L=230
4 INF.	4 Ø 14	L=645
5 LAT.	2 + 2 Ø 14	L=605

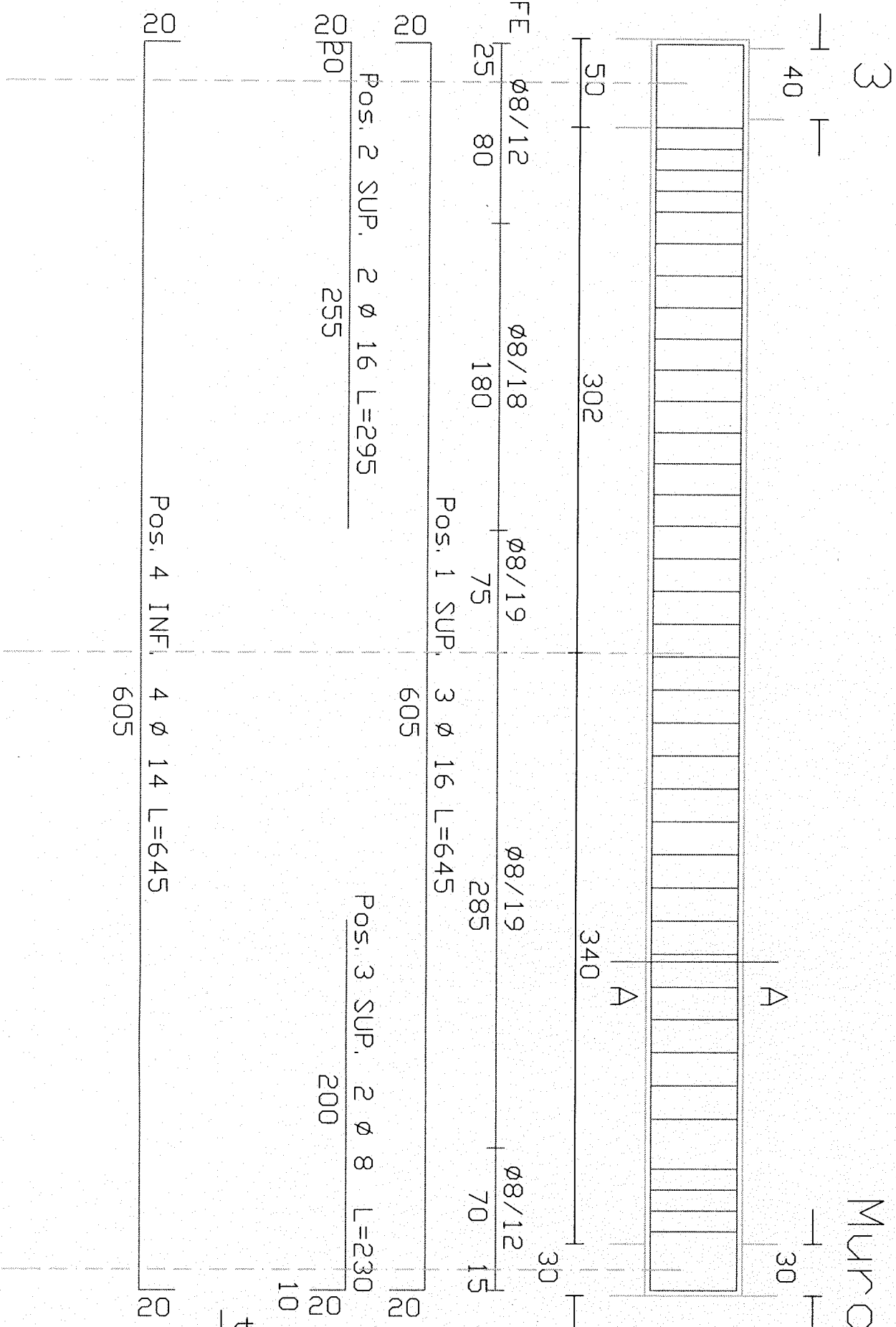
Sez. A-A



Travel 9 (40x70)

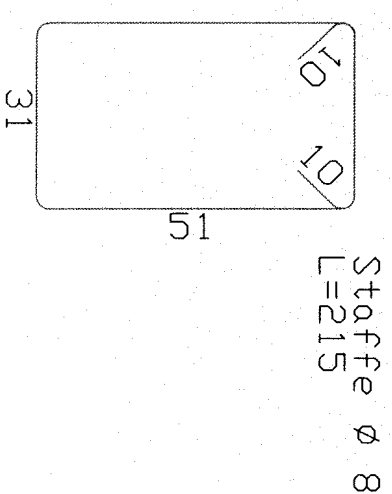
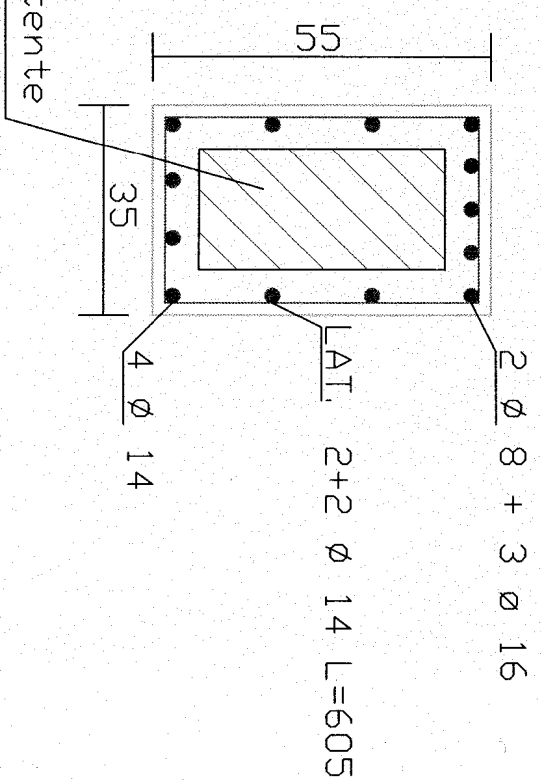


Trave 10 (35x55)

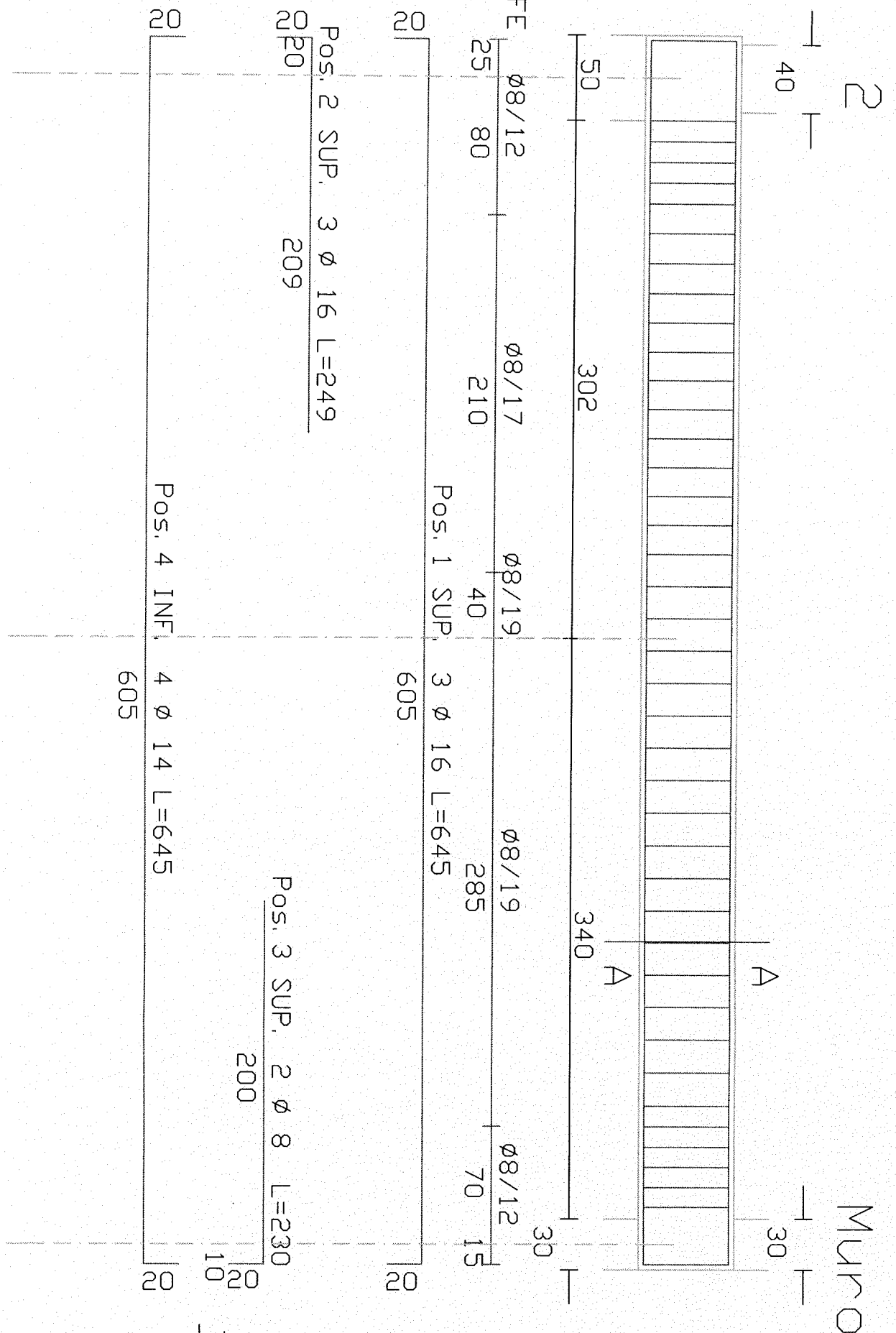


POS	DIAM Ø (mm)	LUNGH (cm)
1 SUP. 3 Ø 16		L=645
2 SUP. 2 Ø 16		L=295
3 SUP. 2 Ø 8		L=230
4 INF. 4 Ø 14		L=645
5 LAT. 2 + 2 Ø 14		L=605

Sez. A-A

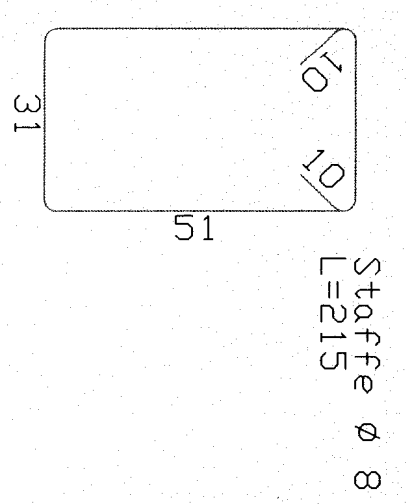
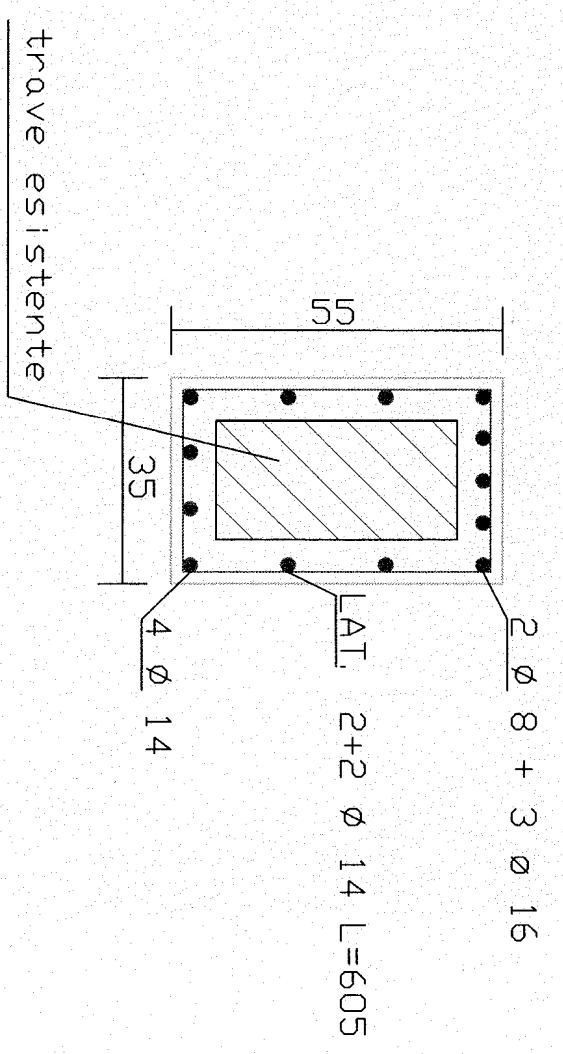


Trave 12 (35x55)

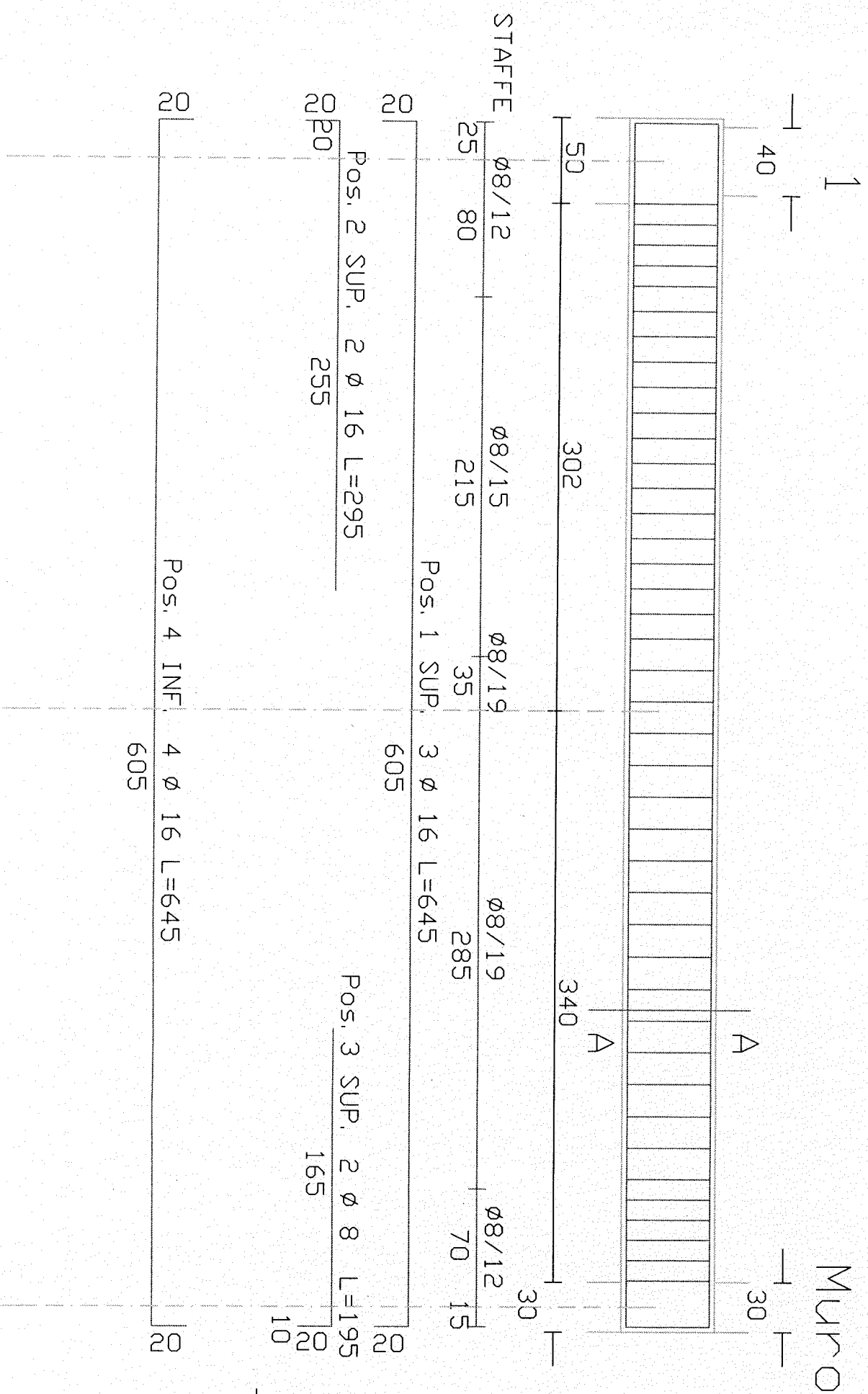


POS	DIAM Ø (mm)	LUNGH (cm)
1 SUP.	3 Ø 16	L=645
2 SUP.	3 Ø 16	L=249
3 SUP.	2 Ø 8	L=230
4 INF.	4 Ø 14	L=645
5 LAT.	2 + 2 Ø 14	L=605

Sez. A-A

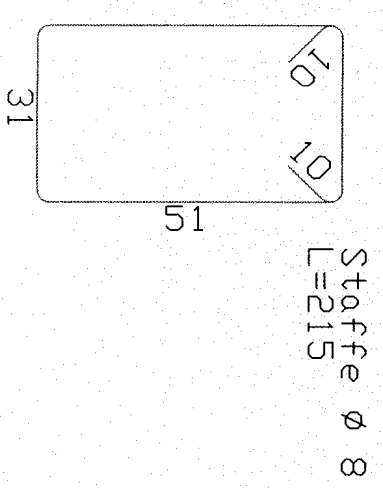
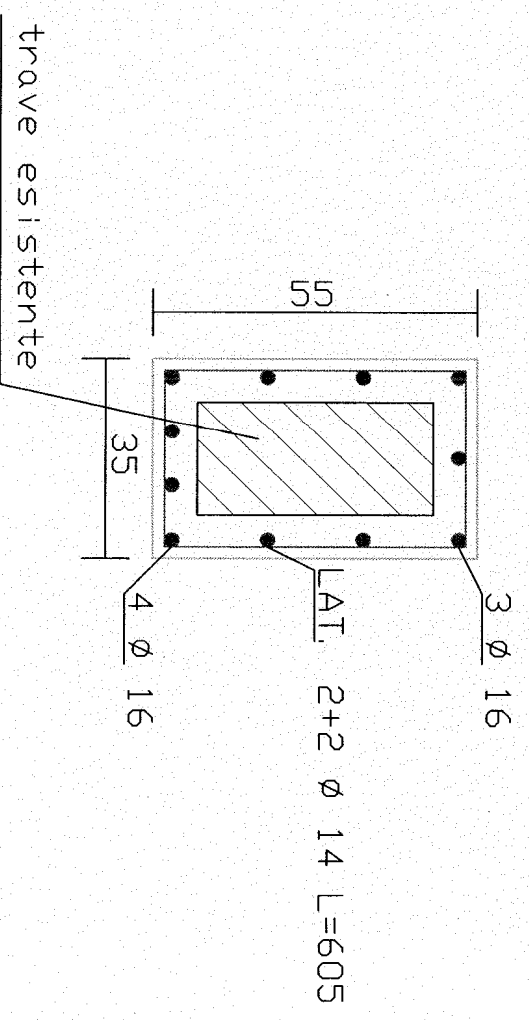


Trave 14 (35x55)



POS	DIAM Ø (mm)	LUNGH (cm)
1 SUP.	3 Ø 16	L=645
2 SUP.	2 Ø 16	L=295
3 SUP.	2 Ø 8	L=195
4 INF.	4 Ø 16	L=645
5 LAT.	2 + 2 Ø 14	L=605

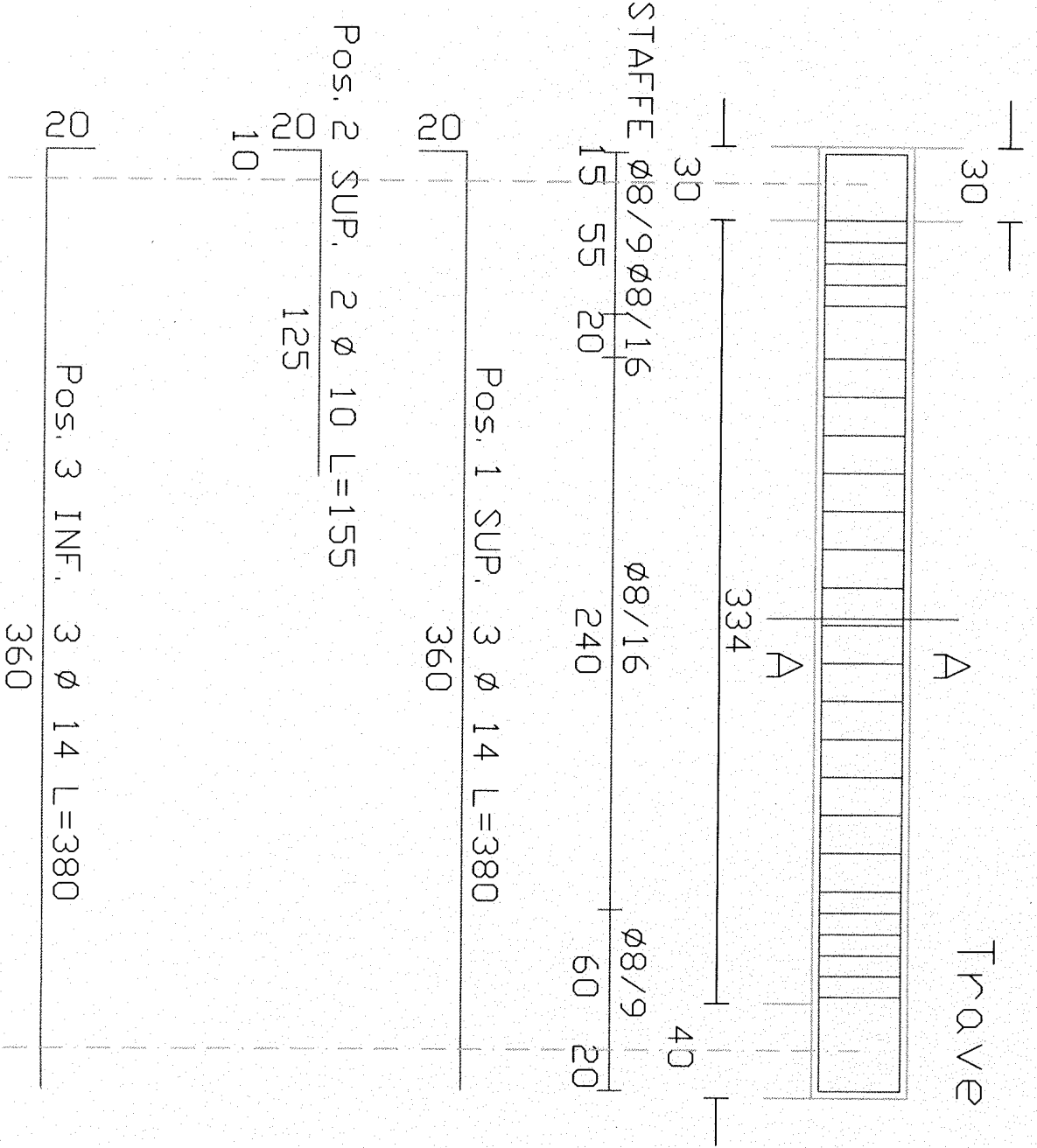
Sez. A-A



Trave 15/16/41/42 (30x40)

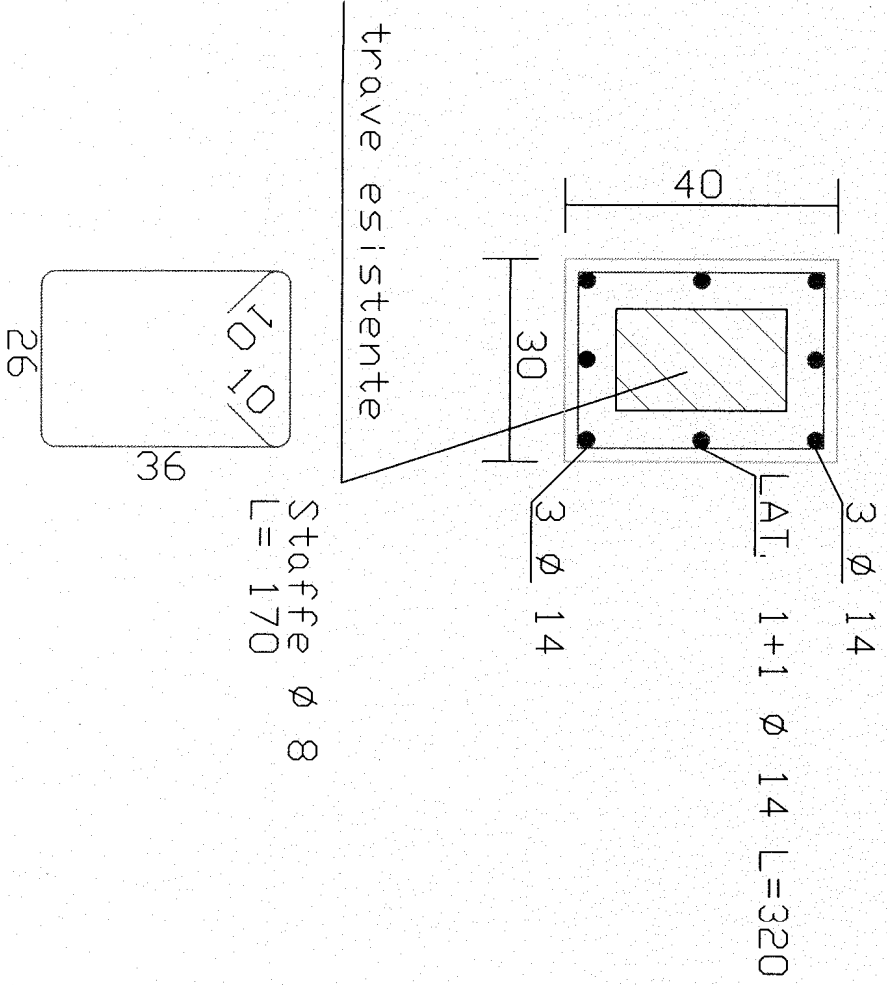
N. k.: Lunghezze variabili. Verificare in cantiere con la D.L.

Muro



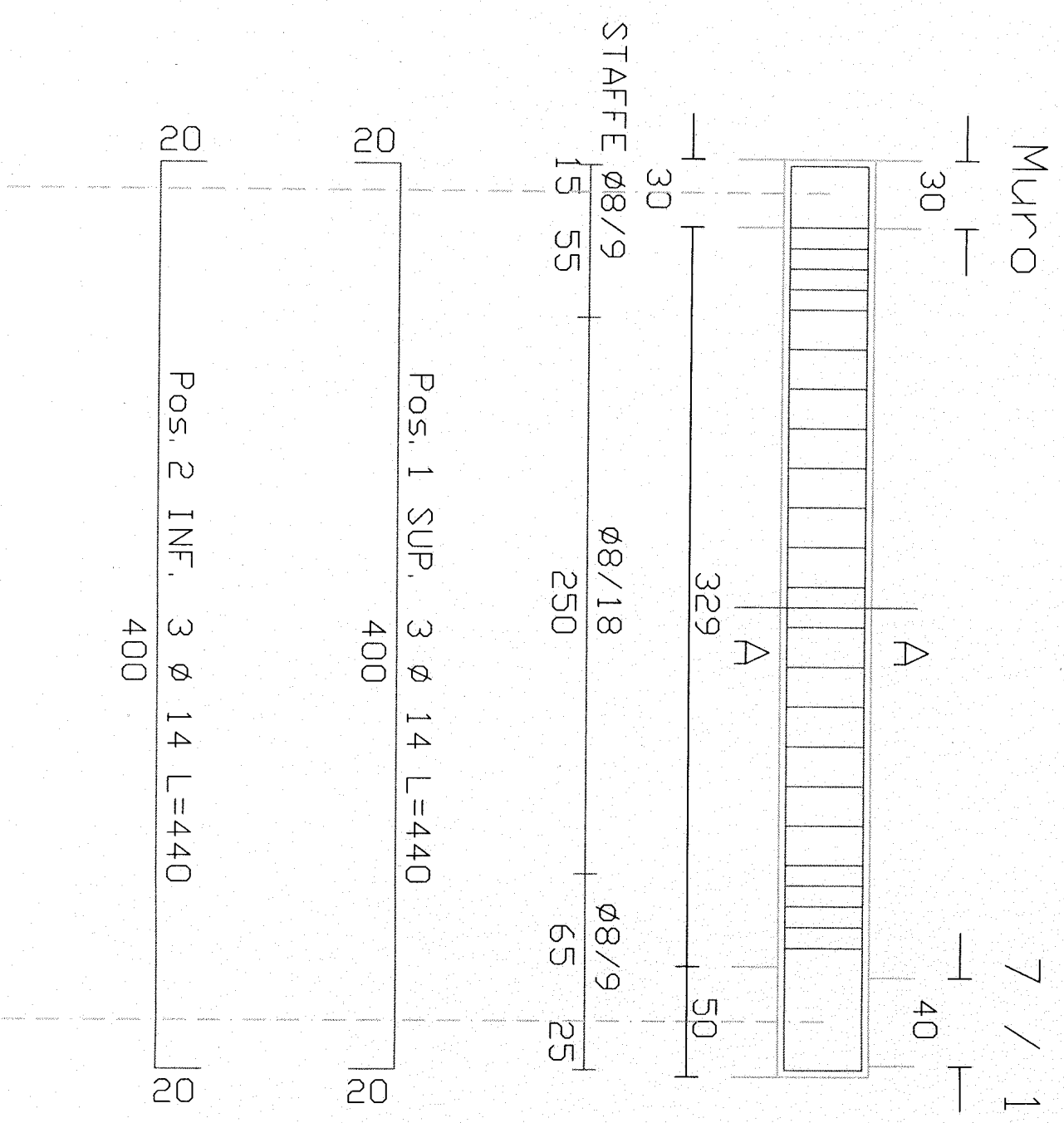
POS	DIAM Ø (mm)	LUNGH (cm)
1 SUP. 3 Ø 14		L=380
2 SUP. 2 Ø 10		L=155
3 INF. 3 Ø 14		L=380
4 LAT. 1 + 1 Ø 14		L=395

Sez. A-A



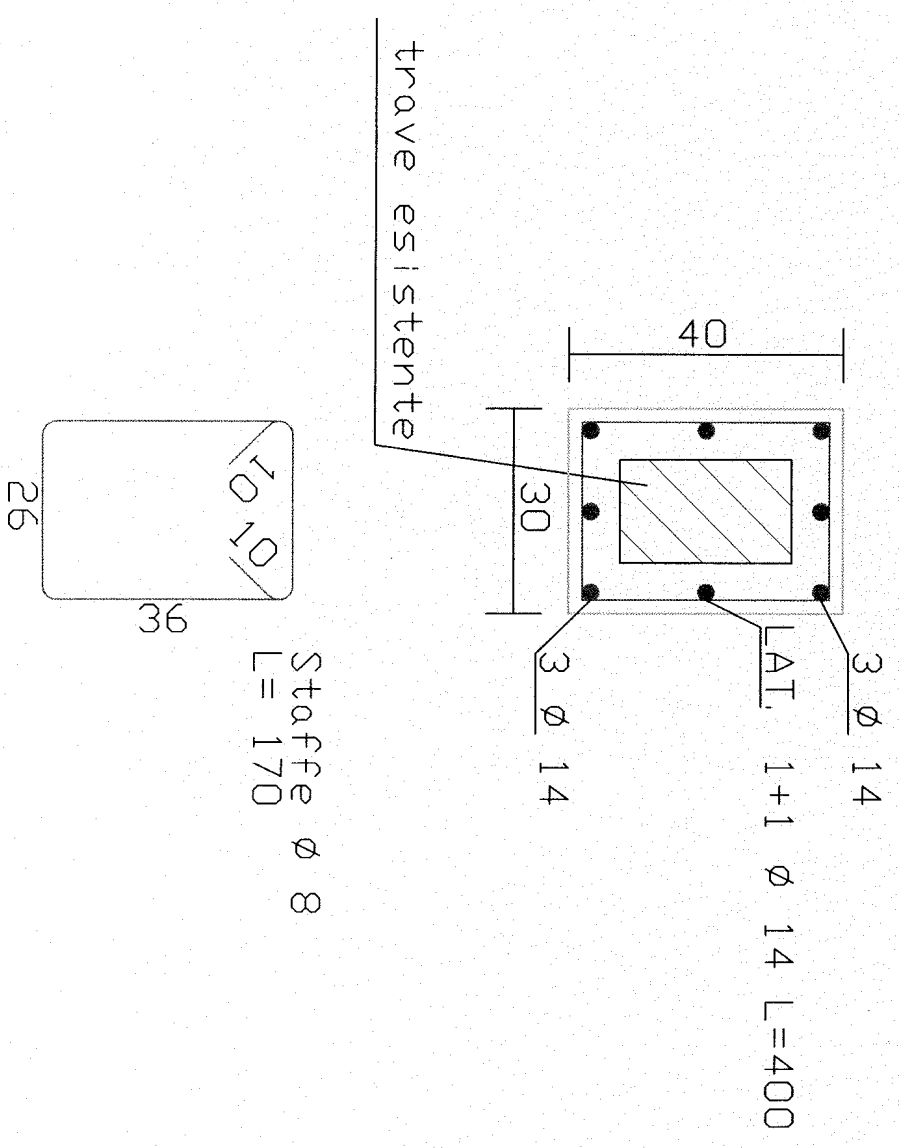
Trave 17/43 (30x40)

N. k. : Lunghezze variabili. Verificare in cantiere con la D. L.



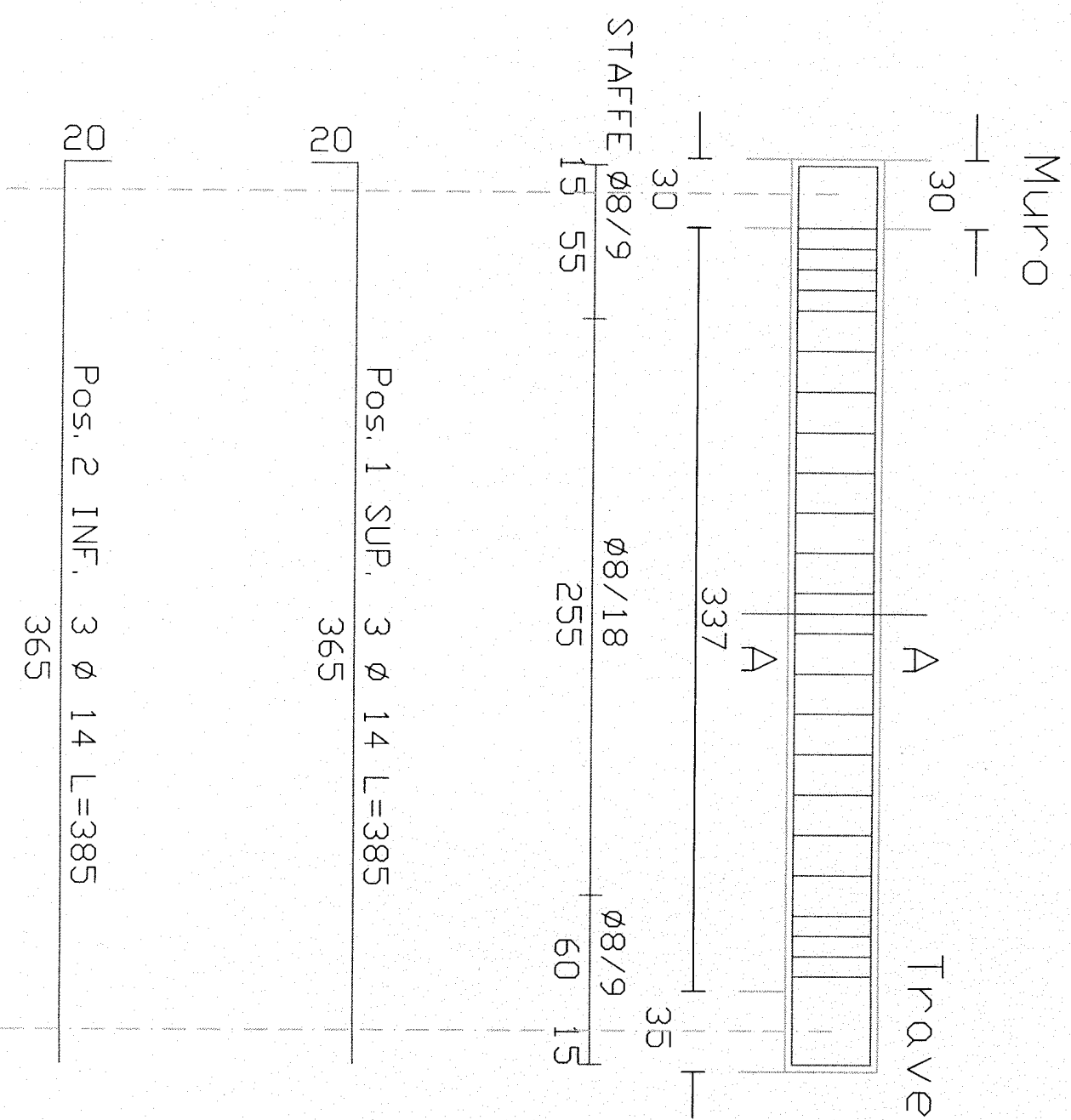
PBS	DIAM $\varnothing$ (mm)	LUNGH (cm)
1 SUP.	3 $\varnothing$ 14	L=440
2 INF.	3 $\varnothing$ 14	L=440
3 LAT.	1 + 1 $\varnothing$ 14	L=400

Sez. A-A



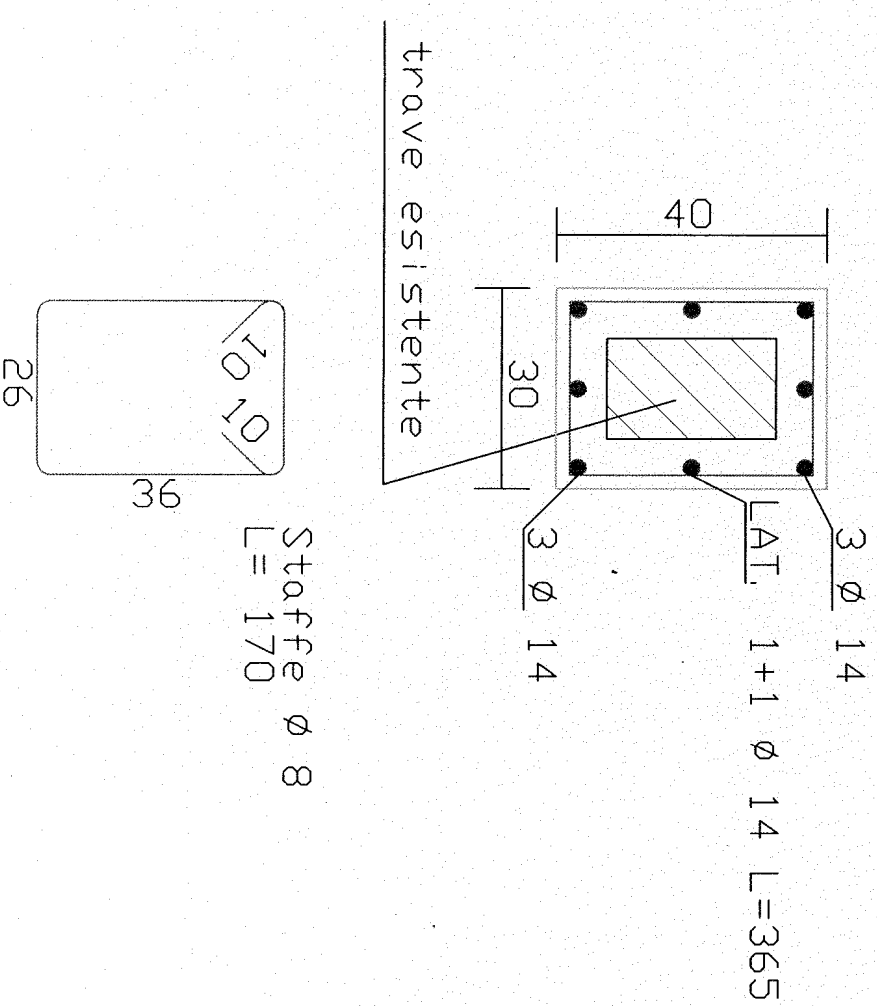
Trave 18/44 (30x40)

N. B. : lunghezze variabili. Verificare in cantiere con la D. L.



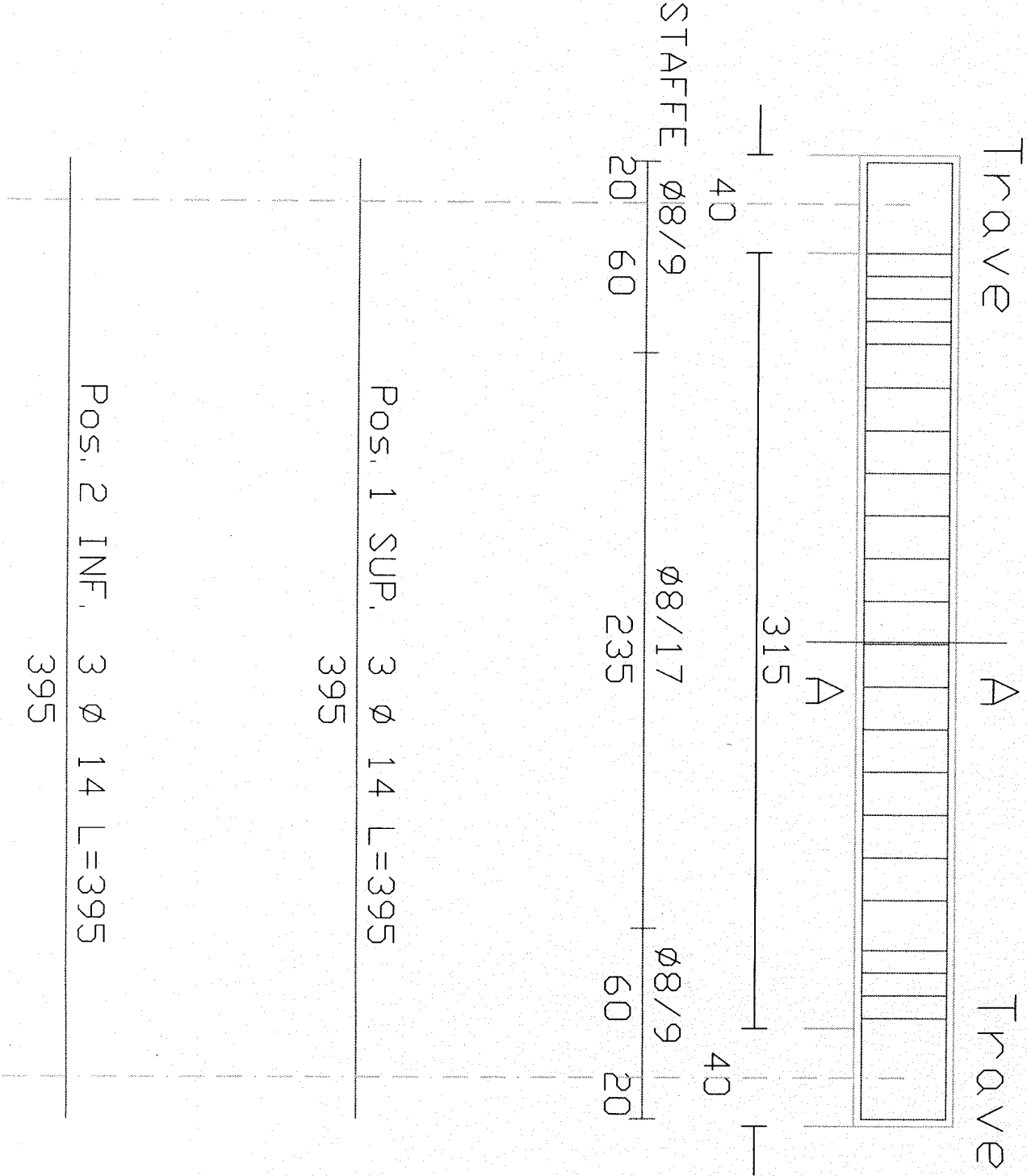
POS	DIAM Ø (mm)	LUNGH (cm)
1 SUP. 3 Ø 14		L=385
2 INF. 3 Ø 14		L=385
3 LAT. 1 + 1 Ø 14		L=365

Sez. A-A



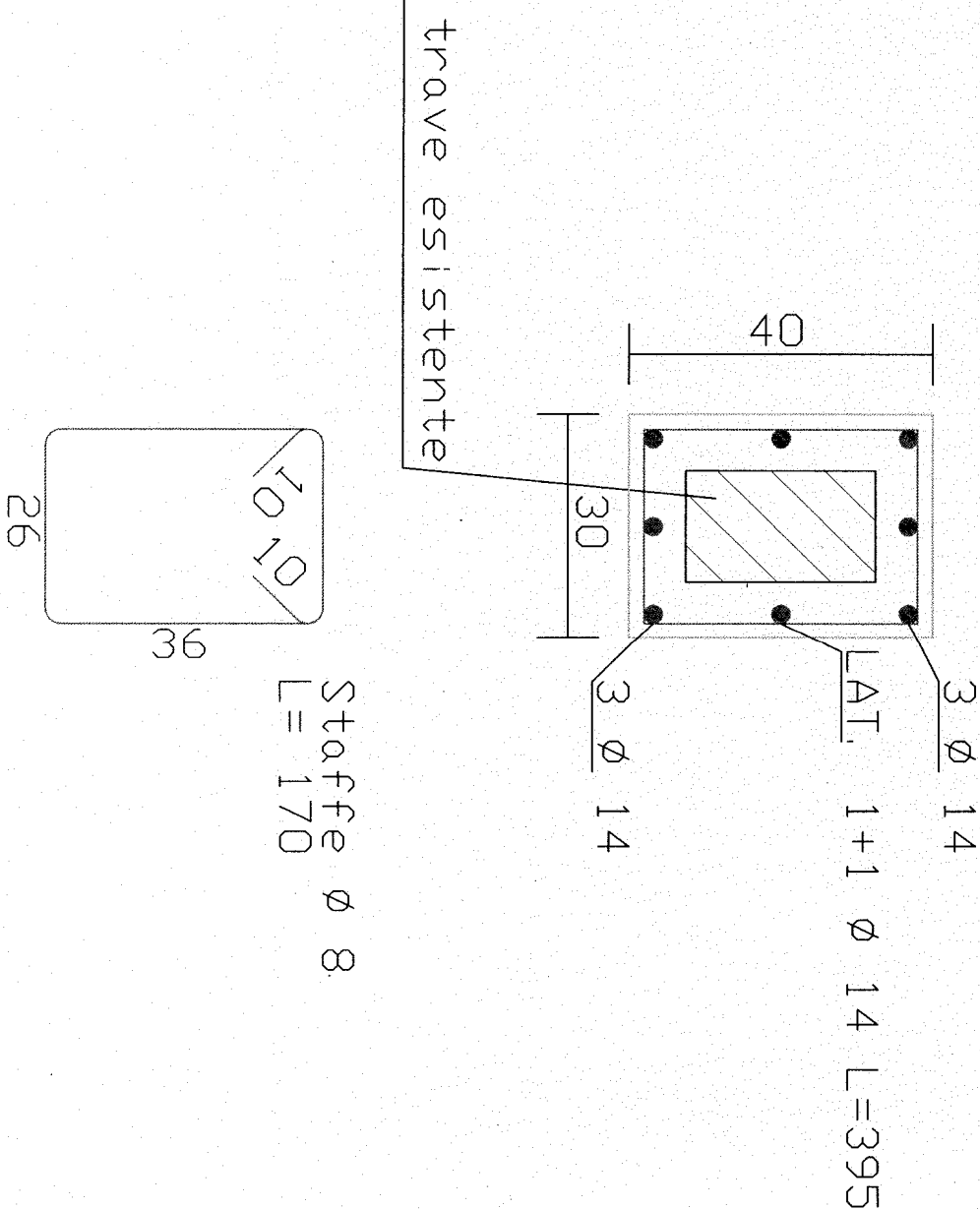
Trave 19/20/23/24/27/28/31/32/35/36 (30x40)

N. B. : lunghezza variabili Verificare con la D.L.



POS	DIAM $\varnothing$ (mm)	LUNGH (cm)
1 SUP.	3 $\varnothing$ 14	L=395
2 INF.	3 $\varnothing$ 14	L=395
3 LAT.	1 + 1 $\varnothing$ 14	L=395

Sez. A-A

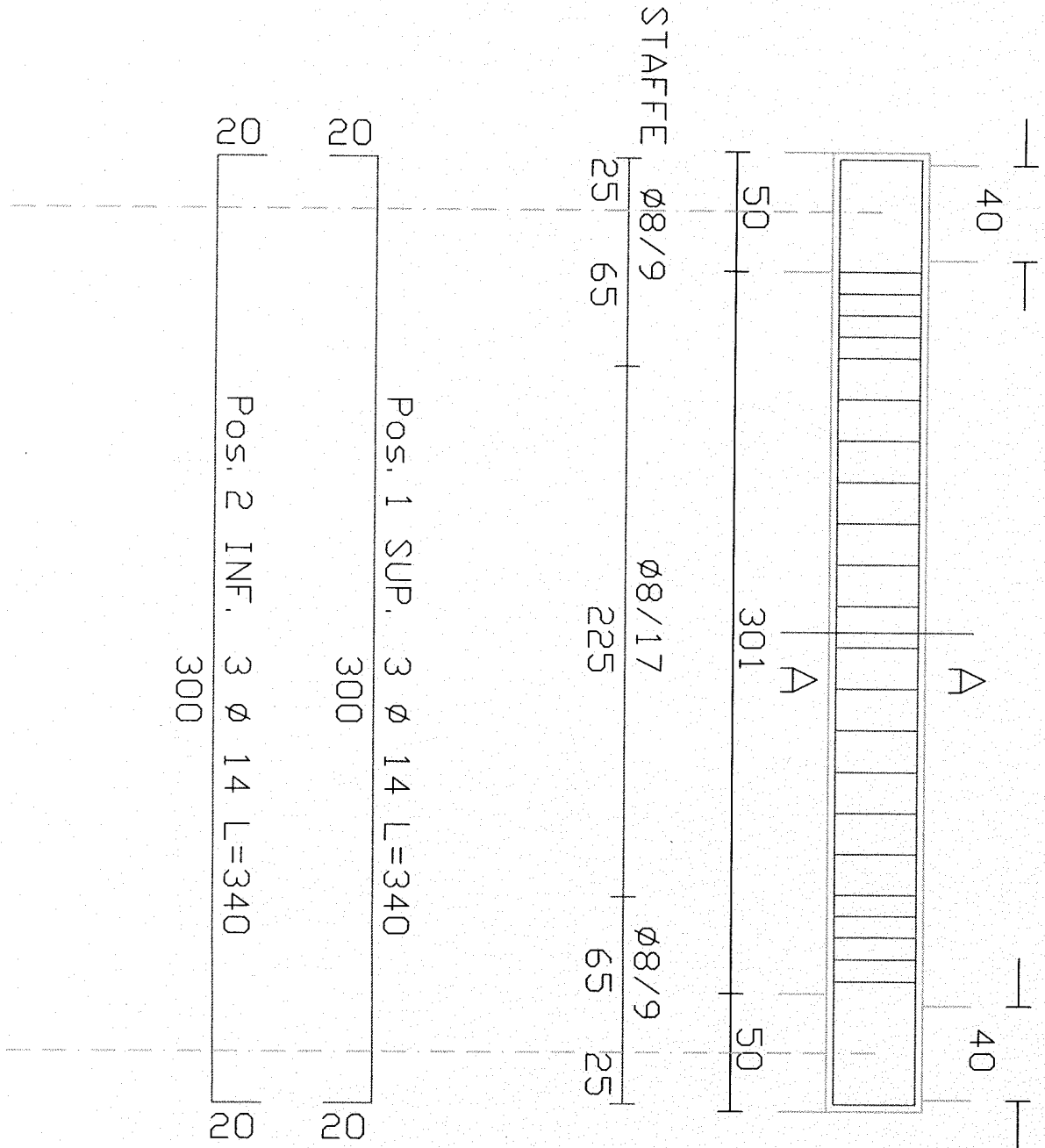


Trave 21/25/29/33/37/39 (30x40)

N. B. : Lunghezze variabili. Verificare in cantiere con la D.L.

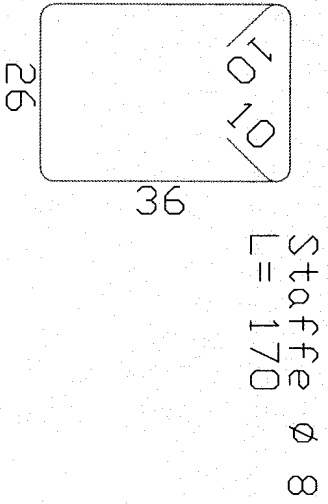
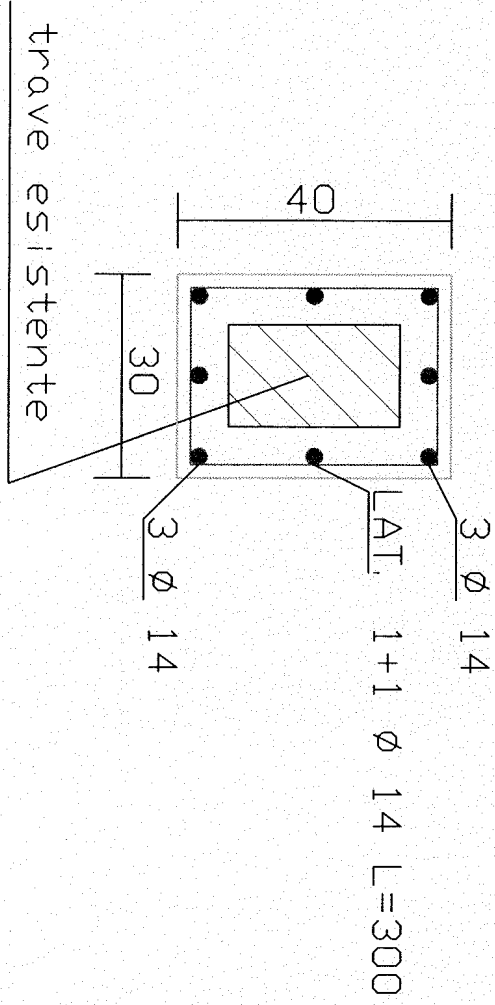
7/6/5/4/3/2

6/5/4/3/2/1



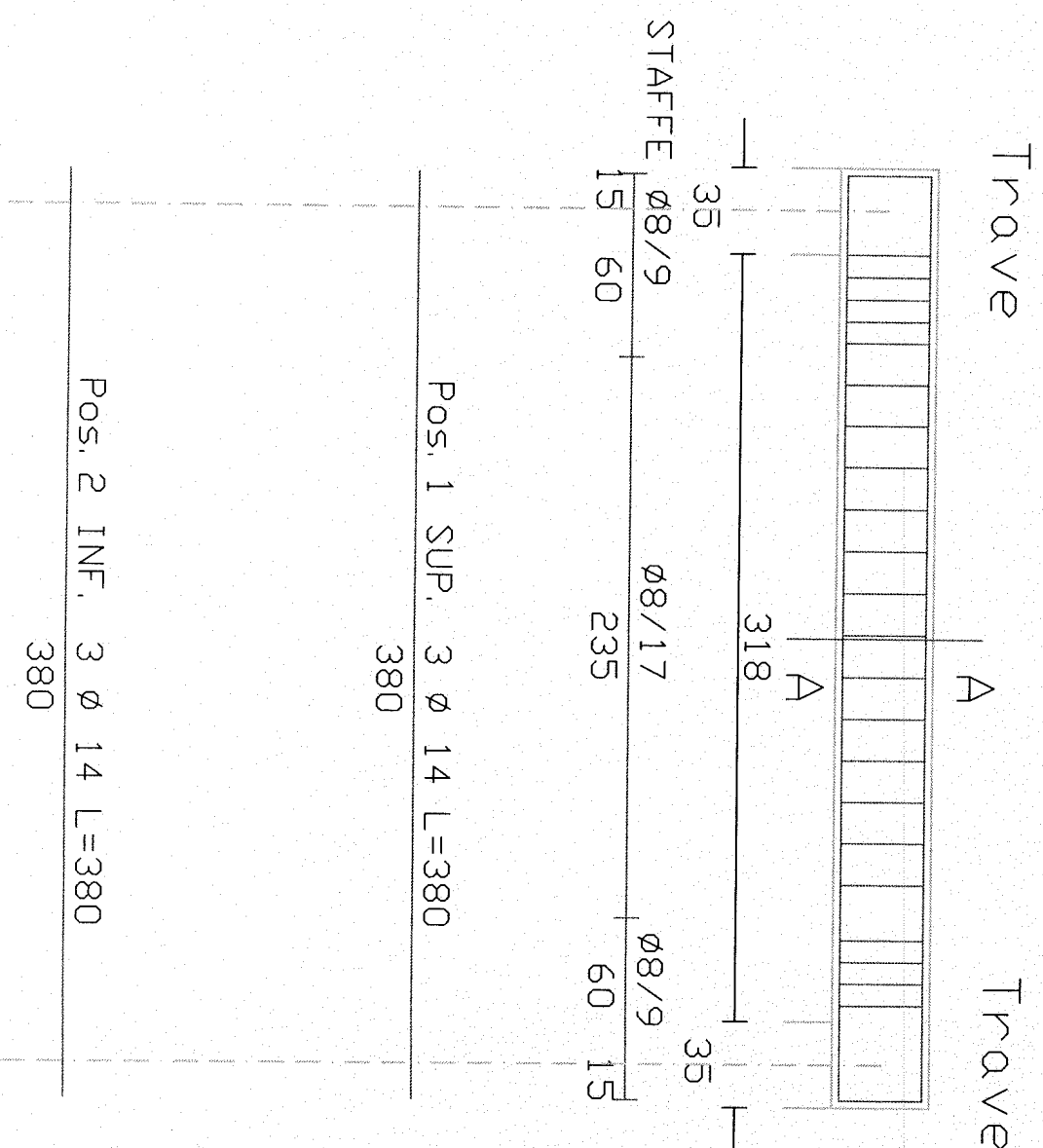
POS	DIAM $\varnothing$ (mm)	LUNGH (cm)
1 SUP. 3 $\varnothing$ 14		L=340
2 INF. 3 $\varnothing$ 14		L=340
3 LAT. 1 + 1 $\varnothing$ 14		L=300

Sez. A-A



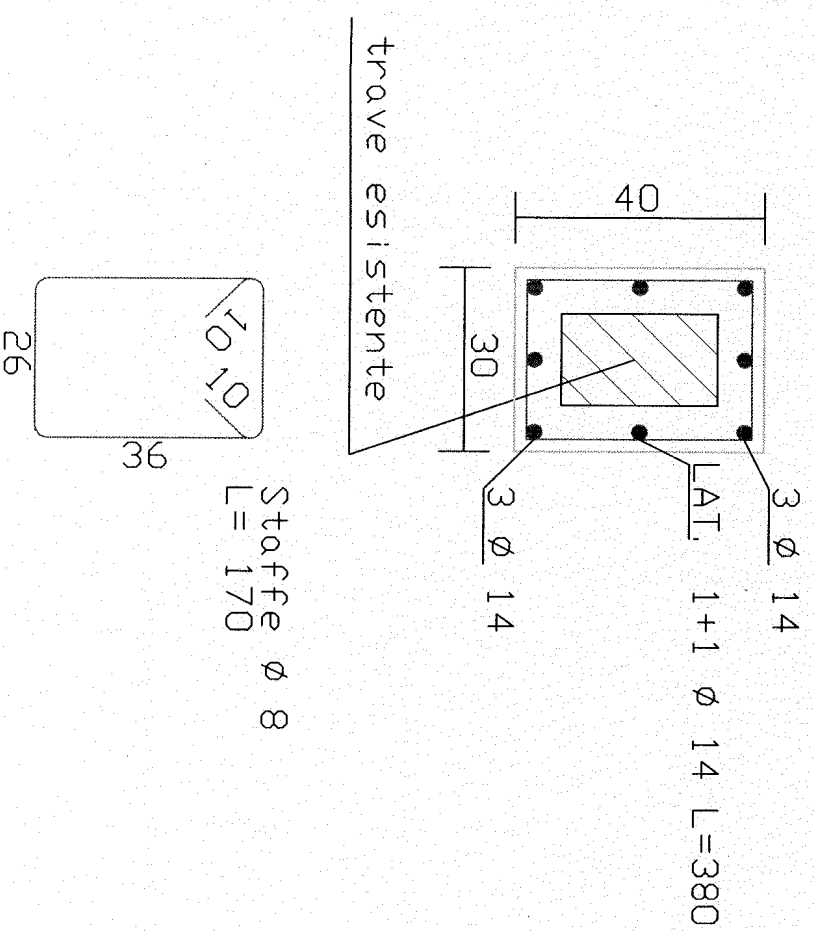
Trave 22/26/30/34/38/40 (30x40)

N. B: lunghezze variabili. Verificare in cantiere con la D.L.

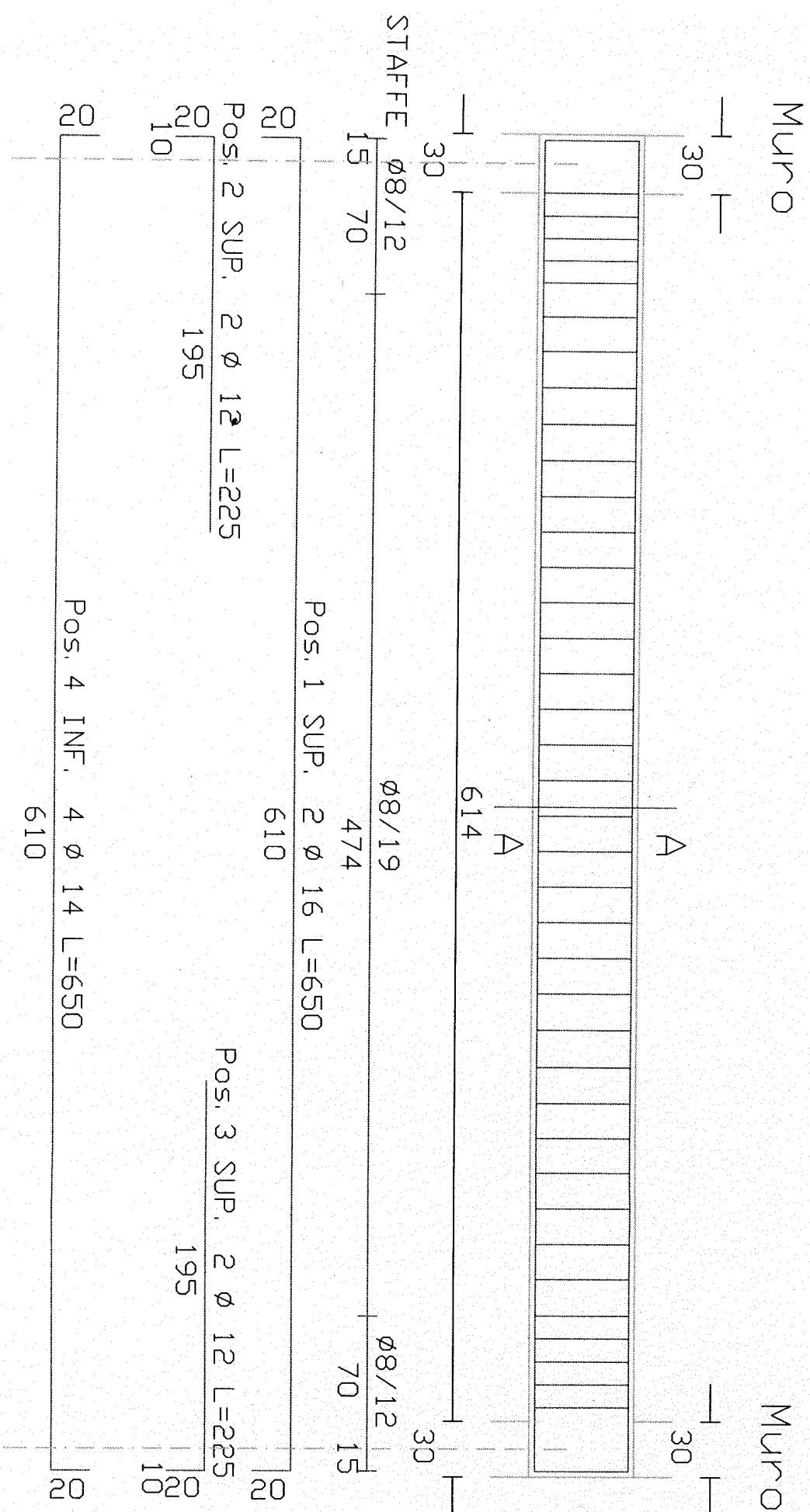


PDS	DIAM $\varnothing$ (mm)	LUNGH (cm)
1 SUP. 3 $\varnothing$ 14		L=380
2 INF. 3 $\varnothing$ 14		L=380
3 LAT. 1 + 1 $\varnothing$ 14		L=380

Sez. A-A

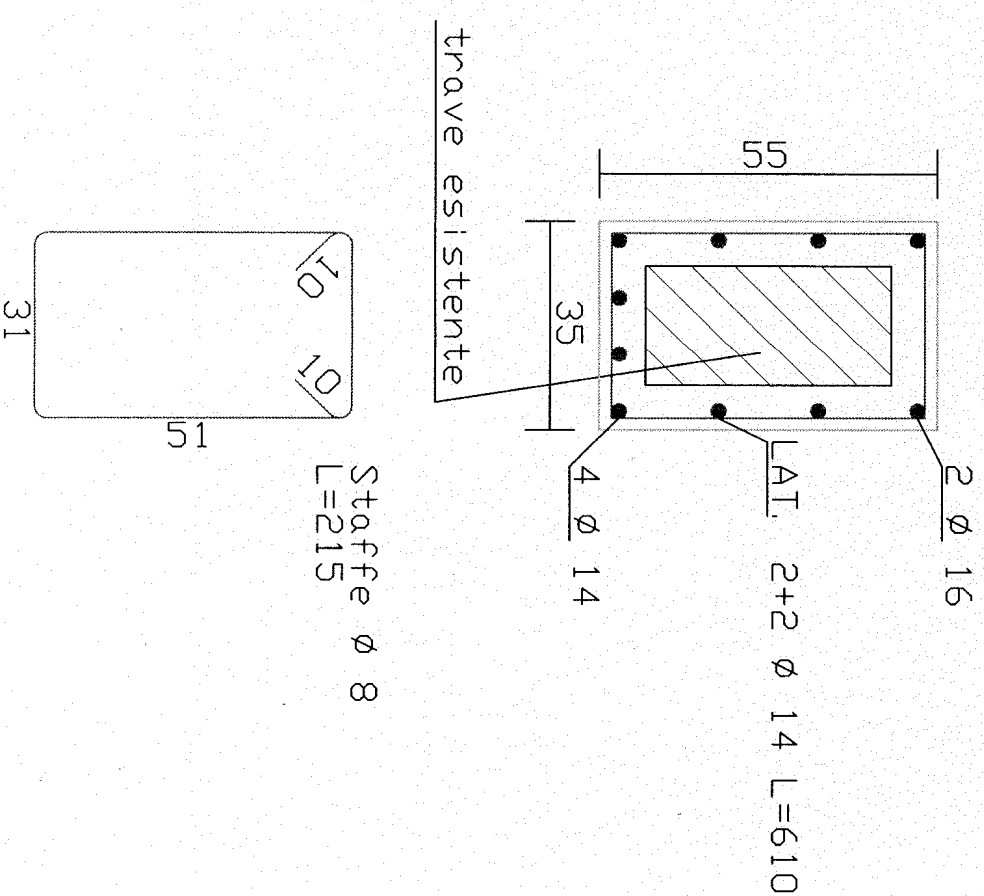


Trave 45 (35x55)

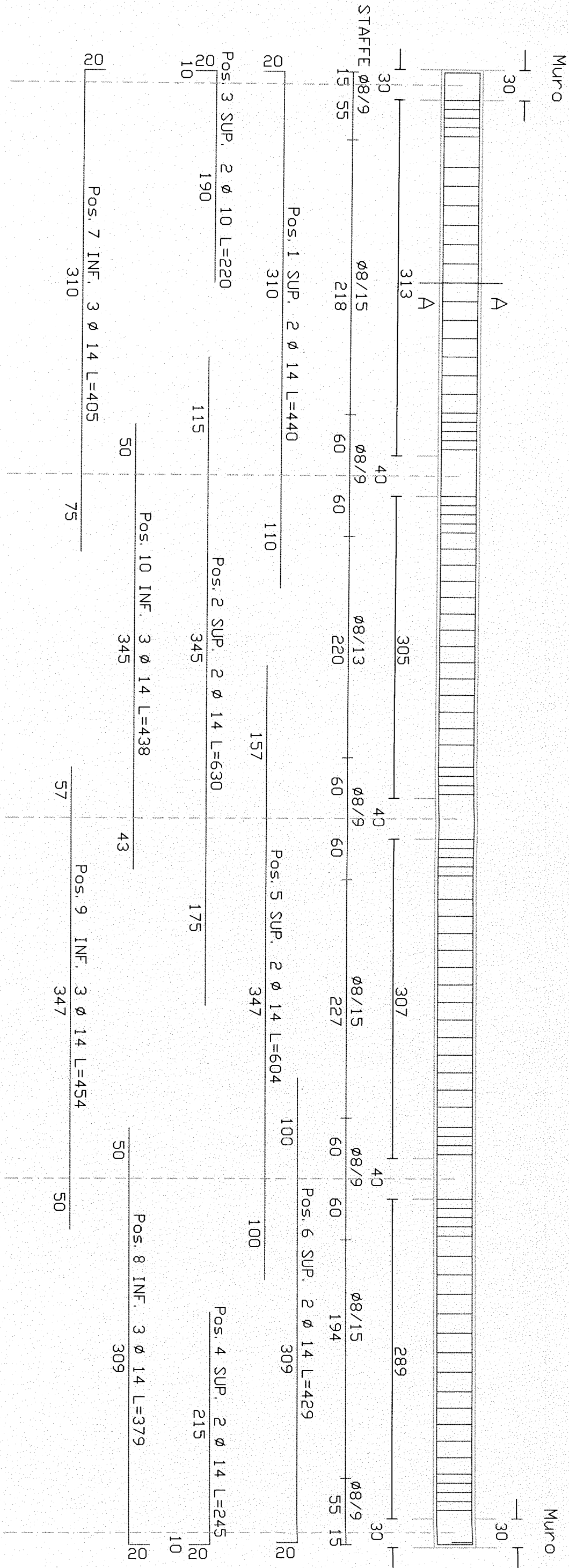


POS	DIAM Ø < mm >	LUNGH < cm >
1 SUP.	2 Ø 16	L=650
2 SUP.	2 Ø 12	L=225
3 SUP.	2 Ø 12	L=225
4 INF.	4 Ø 14	L=650
5 LAT.	2 + 2 Ø 14	L=610

Sez. A-A

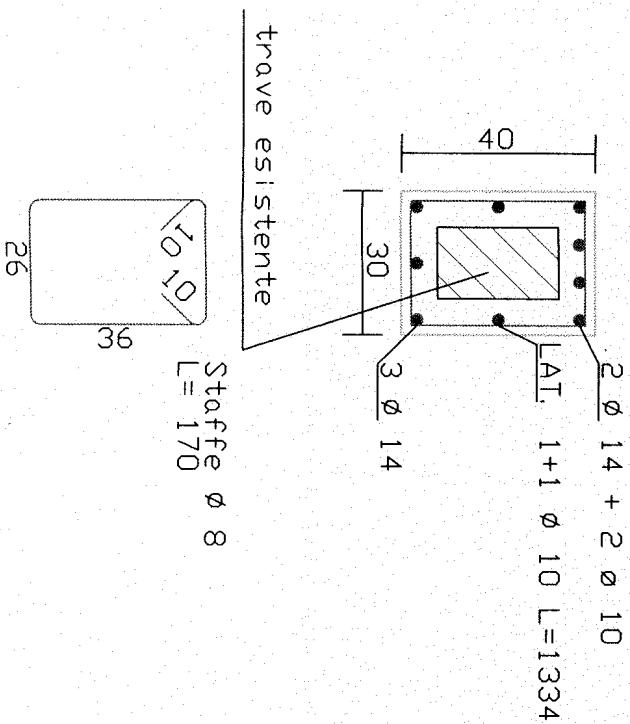


Trave 46 (30x40)

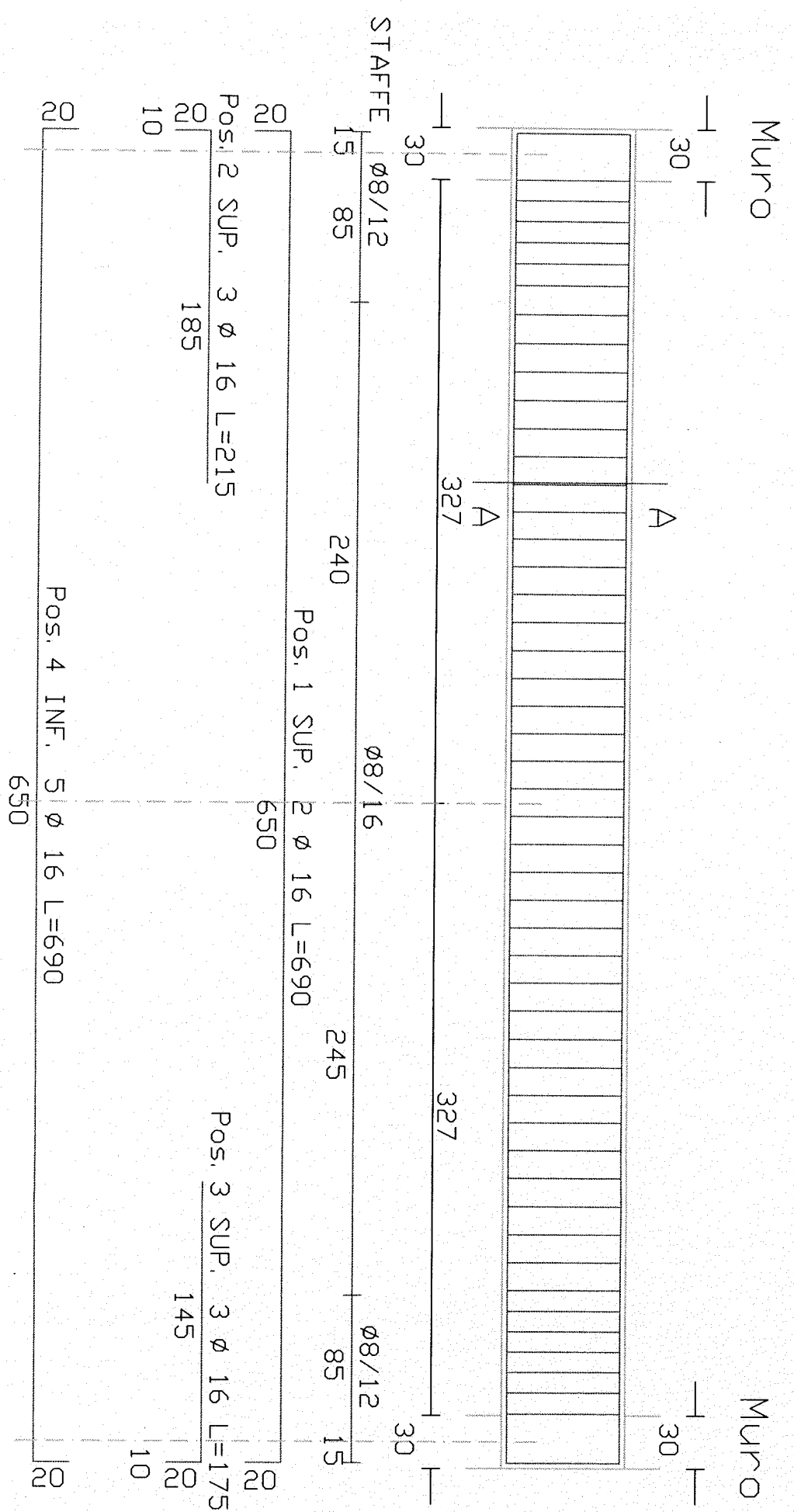


Sez. A-A

POS	DIAM Ø (mm)	LUNGH (cm)
1 SUP.	2 Ø 14	L=440
2 SUP.	2 Ø 14	L=630
3 SUP.	2 Ø 10	L=220
4 SUP.	2 Ø 14	L=245
5 SUP.	2 Ø 14	L=604
6 SUP.	2 Ø 14	L=429
7 INF.	3 Ø 14	L=405
8 INF.	3 Ø 14	L=379
9 INF.	3 Ø 14	L=454
10 INF.	3 Ø 14	L=438
11 LAT.	1 + 1 Ø 10	L=1334

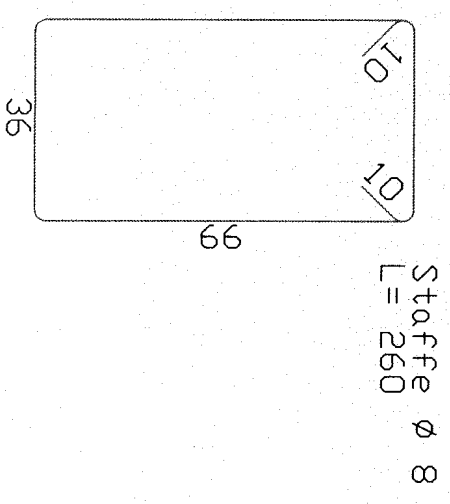
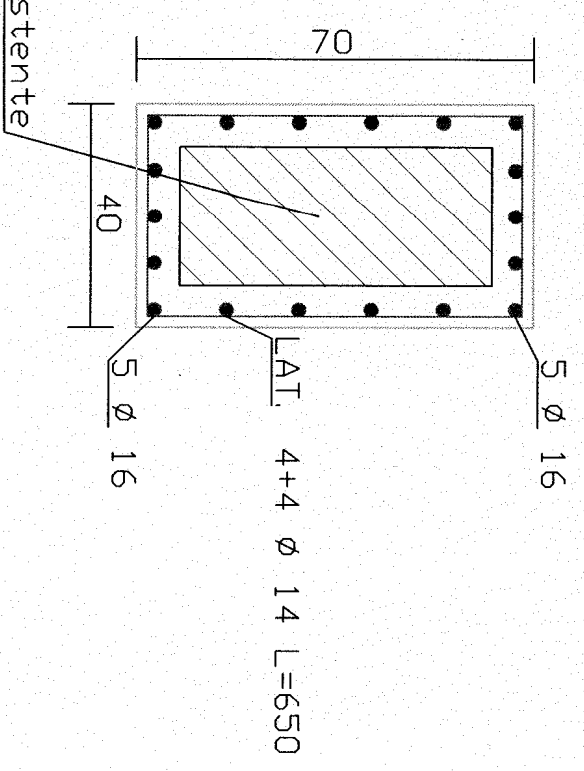


Trave 47 (40x70)

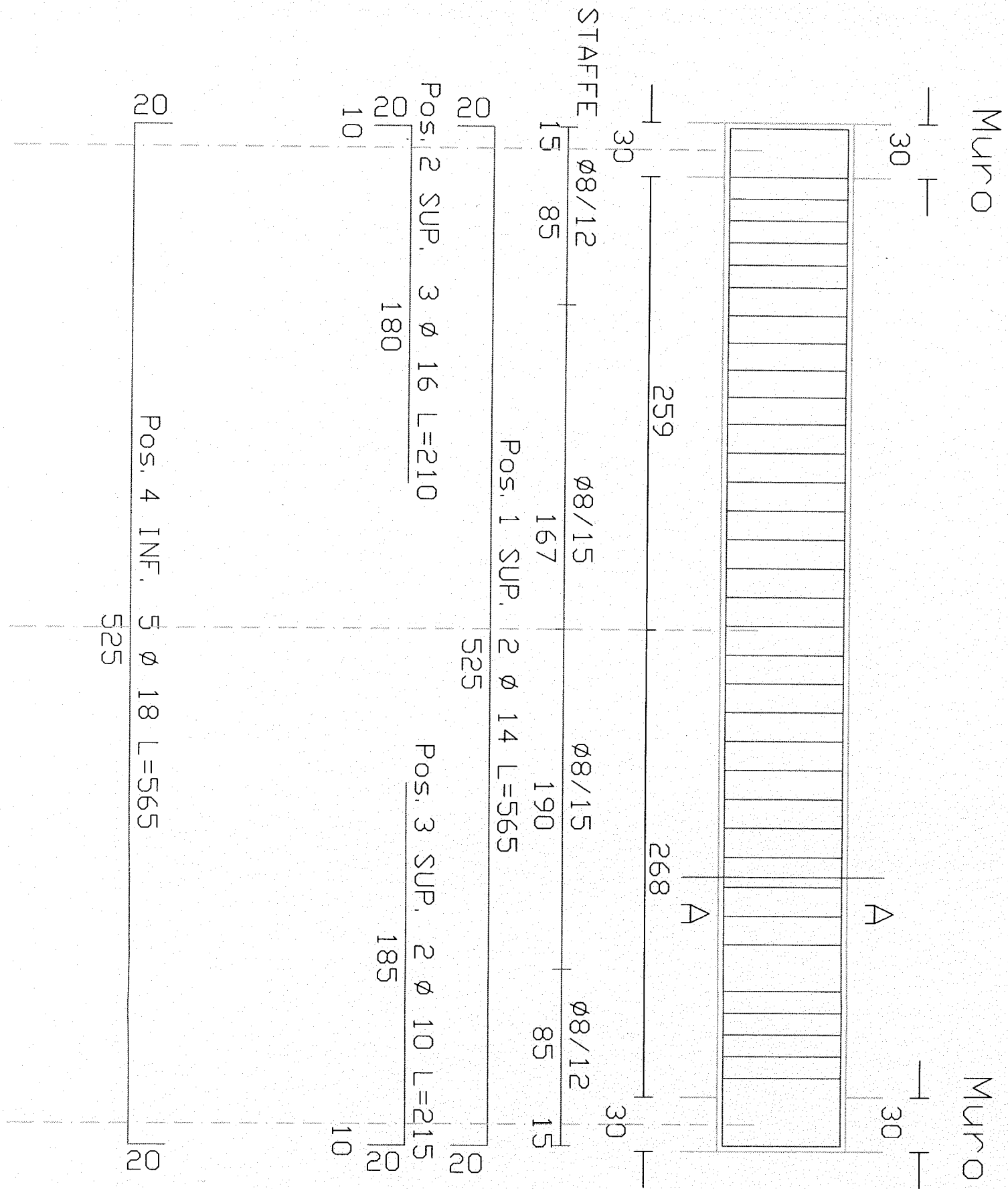


PDS	DIAM Ø (mm)	LUNGH (cm)
1 SUP.	2 Ø 16	L=690
2 SUP.	3 Ø 16	L=215
3 SUP.	3 Ø 16	L=175
4 INF.	5 Ø 16	L=690
5 LAT.	4 + 4 Ø 14	L=650

Sez. A-A

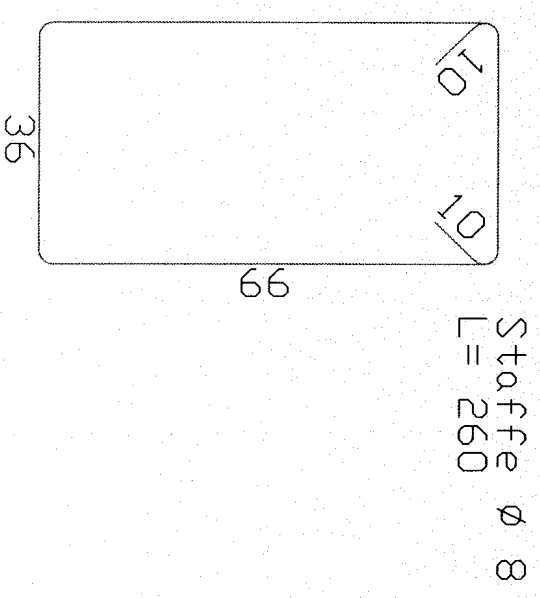
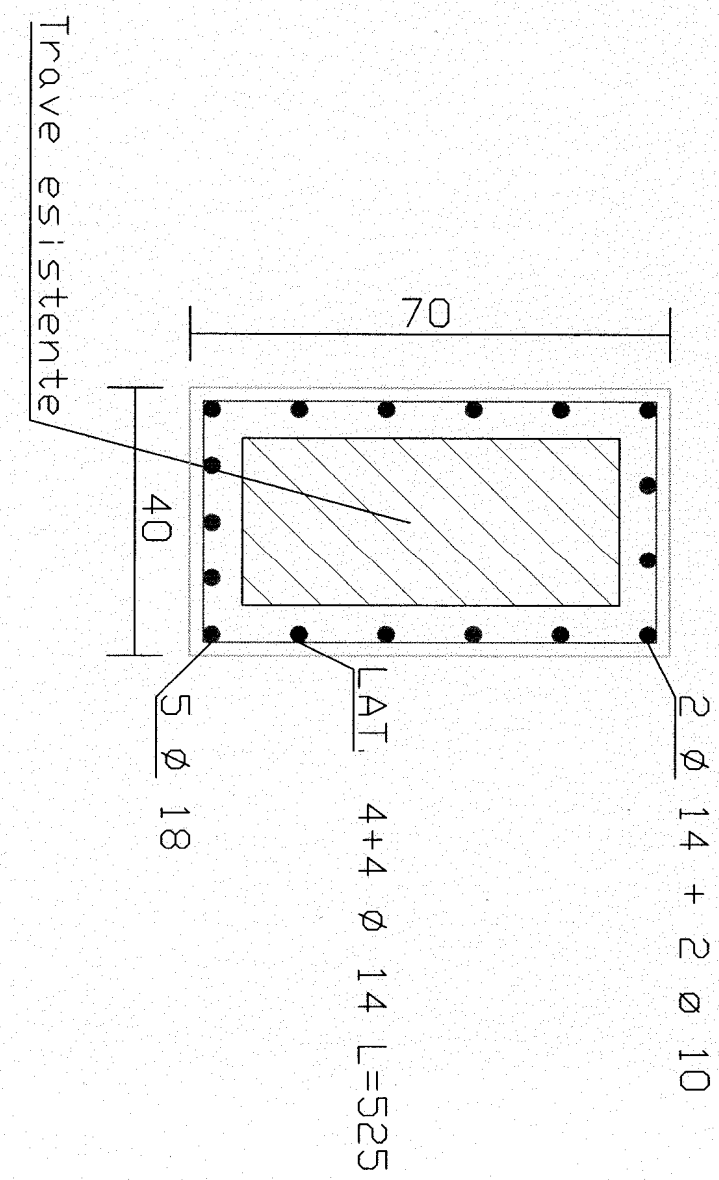


Trave 48 (40x70)

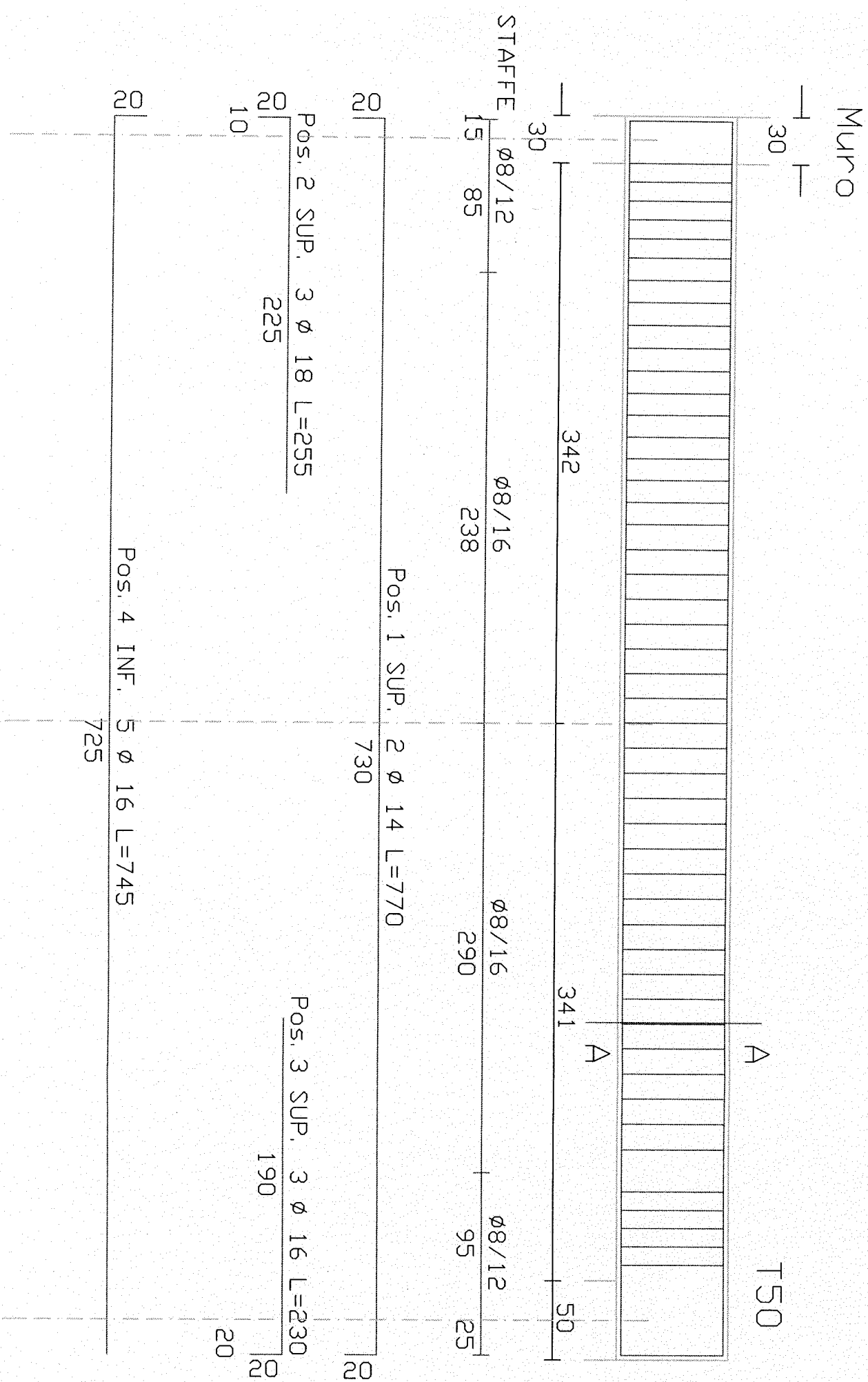


POS	DIAM Ø (mm)	LUNGH (cm)
1 SUP.	2 Ø 14	L=565
2 SUP.	3 Ø 16	L=210
3 SUP.	2 Ø 10	L=215
4 INF.	5 Ø 18	L=565
5 LAT.	4 + 4 Ø 14	L=525

Sez. A-A



Trave 49 (40x70)



POS

DIAM $\varnothing$

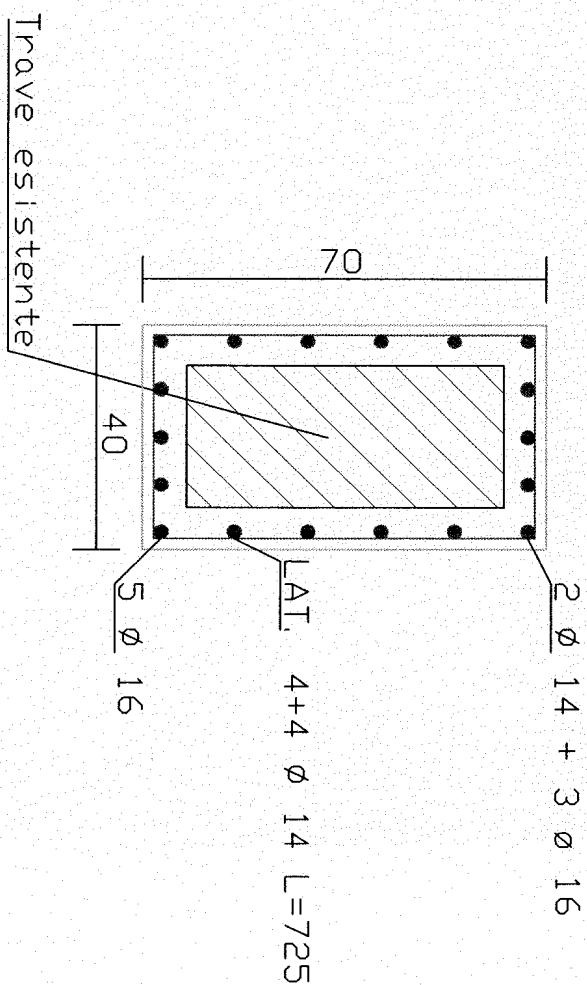
(mm)

LUNGH

(cm)

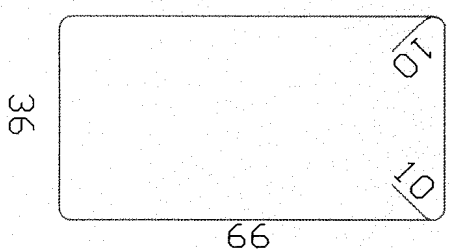
1 SUP.	2 $\varnothing 14$	L=770
2 SUP.	3 $\varnothing 18$	L=255
3 SUP.	3 $\varnothing 16$	L=230
4 INF.	5 $\varnothing 16$	L=745
5 LAT.	4 + 4 $\varnothing 14$	L=725

Sez. A-A

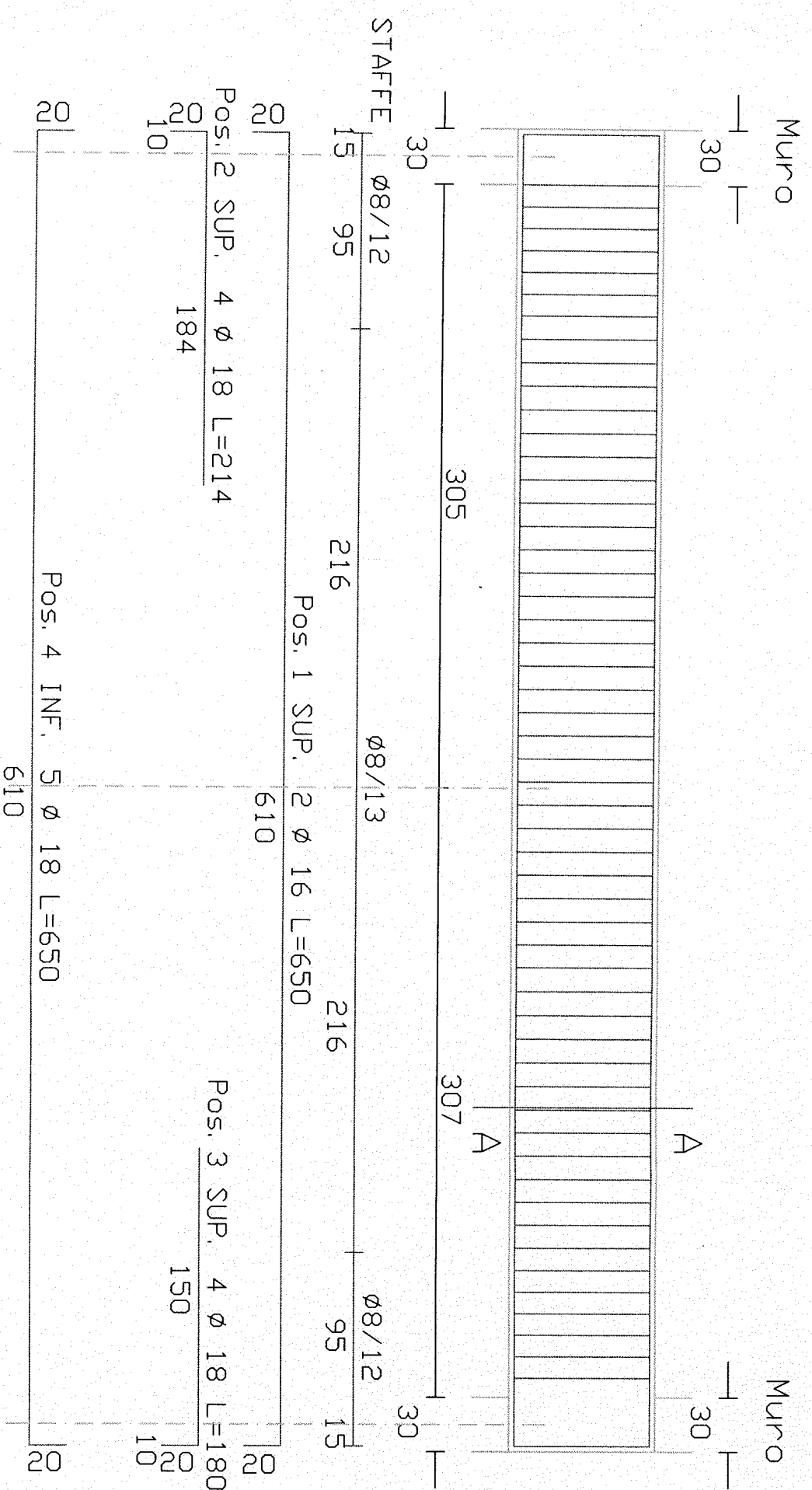


Staffe $\varnothing 8$

L=260

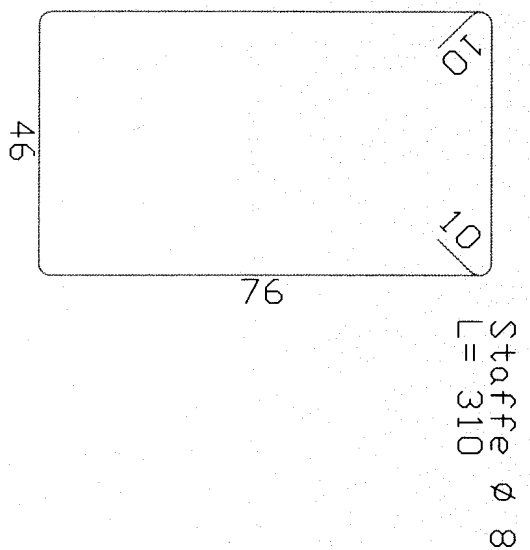
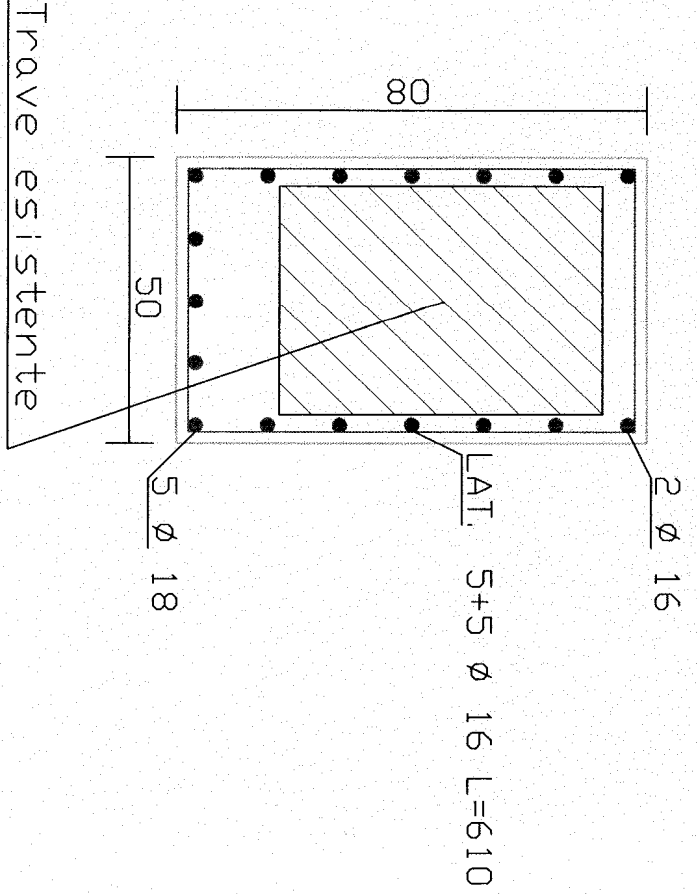


Trave 50 (50x80)

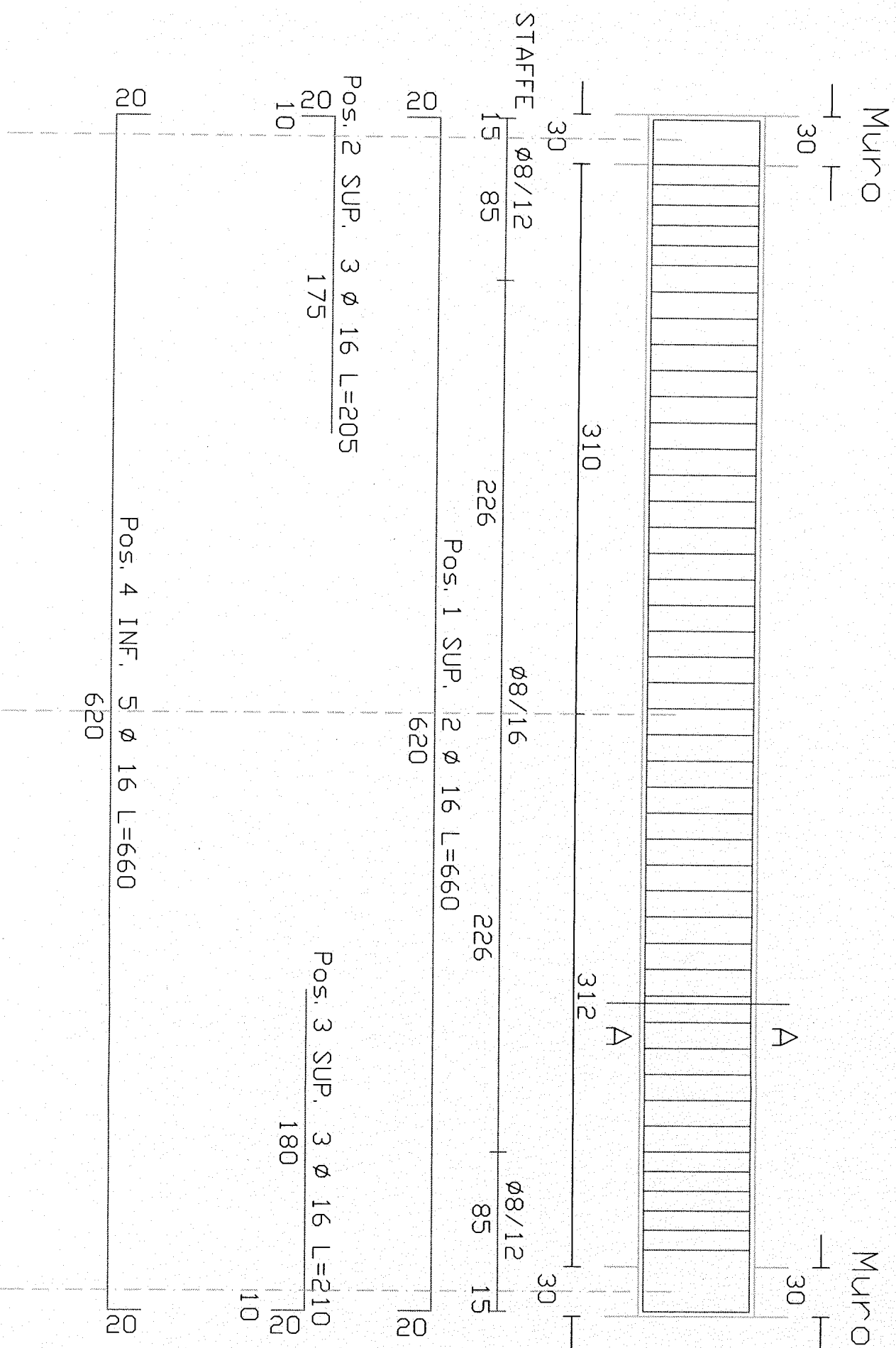


POS	DIAM Ø (mm)	LUNGH (cm)
1 SUP.	2 Ø 16	L=650
2 SUP.	4 Ø 18	L=214
3 SUP.	4 Ø 18	L=180
4 INF.	5 Ø 18	L=650
5 LAT.	5 + 5 Ø 16	L=610

Sez. A-A

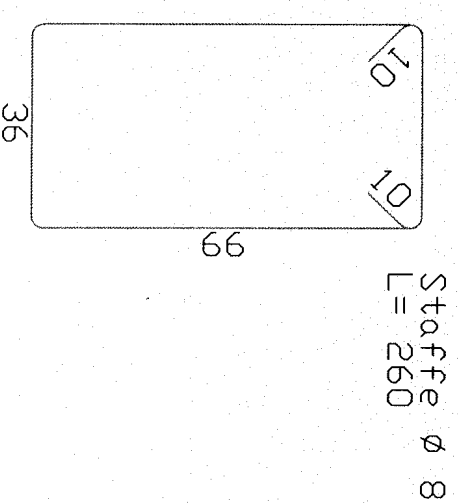
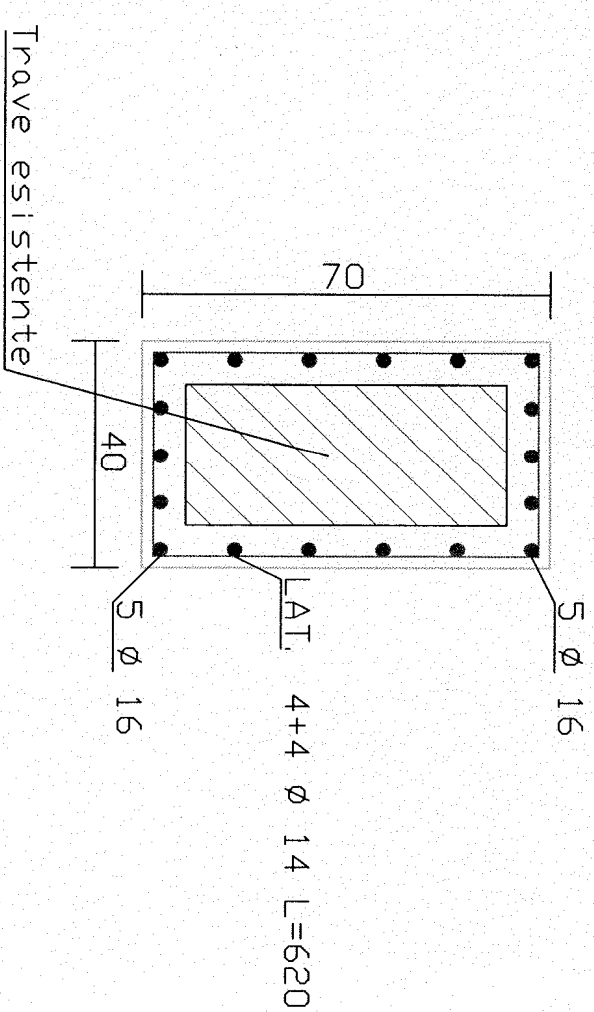


Trave 51/52 (40x70)

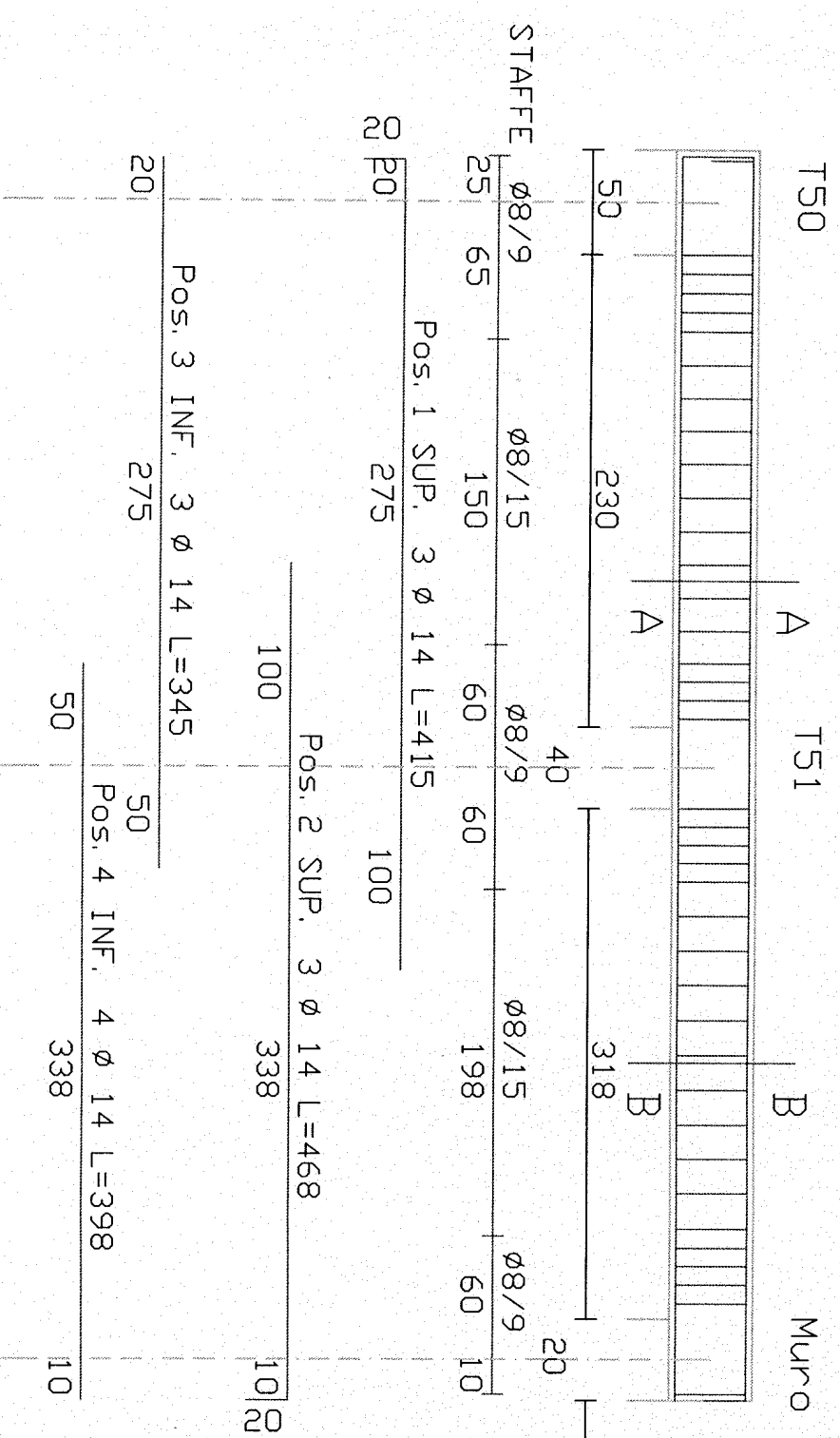


POS	DIAM $\varnothing$ (mm)	LUNGH (cm)
1 SUP.	2 $\varnothing 16$	L=660
2 SUP.	3 $\varnothing 16$	L=205
3 SUP.	3 $\varnothing 16$	L=210
4 INF.	5 $\varnothing 16$	L=660
5 LAT.	4 + 4 $\varnothing 14$	L=620

Sez. A-A

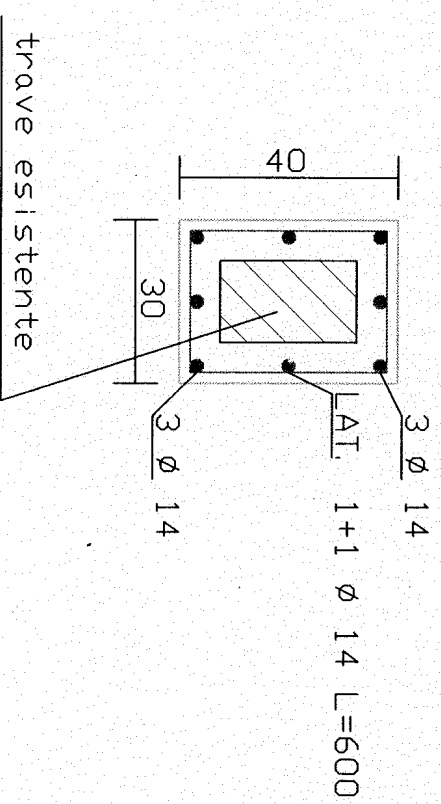


Trave 53 (30x40)

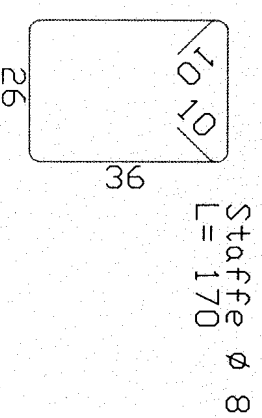
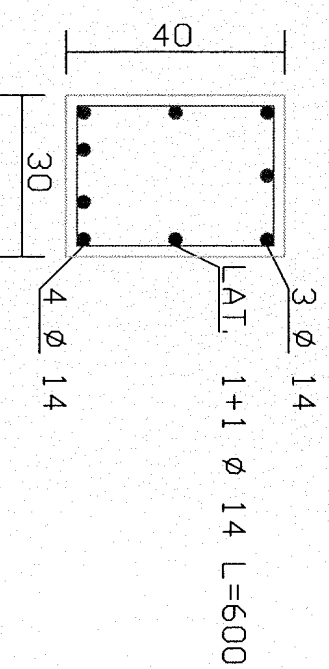


POS	DIAM ϕ (mm)	LUNGH (cm)
1 SUP.	3 ϕ 14	L=415
2 SUP.	3 ϕ 14	L=430
3 INF.	3 ϕ 14	L=468
4 INF.	4 ϕ 14	L=398
5 LAT.	1 + 1 ϕ 14	L=600

Sez. A-A



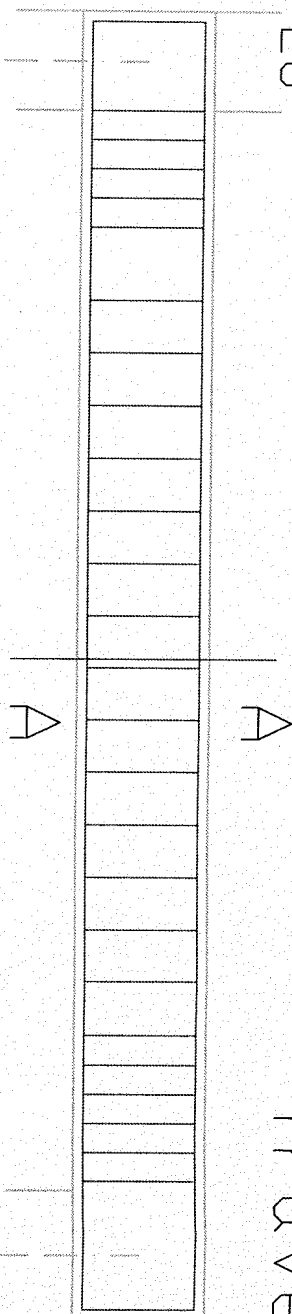
Sez. B-B



Trave 54 (30x40)

Setto Ca

20



Trave

257

40

STAFFE $\varnothing 8/9$ 10 55 142 60 20

Pos. 1 SUP. 3 $\varnothing$ 14 L=320 300

Pos. 2 SUP. 2 $\varnothing$ 10 L=155 125 10

Pos. 3 INF. 3 $\varnothing$ 14 L=320 300

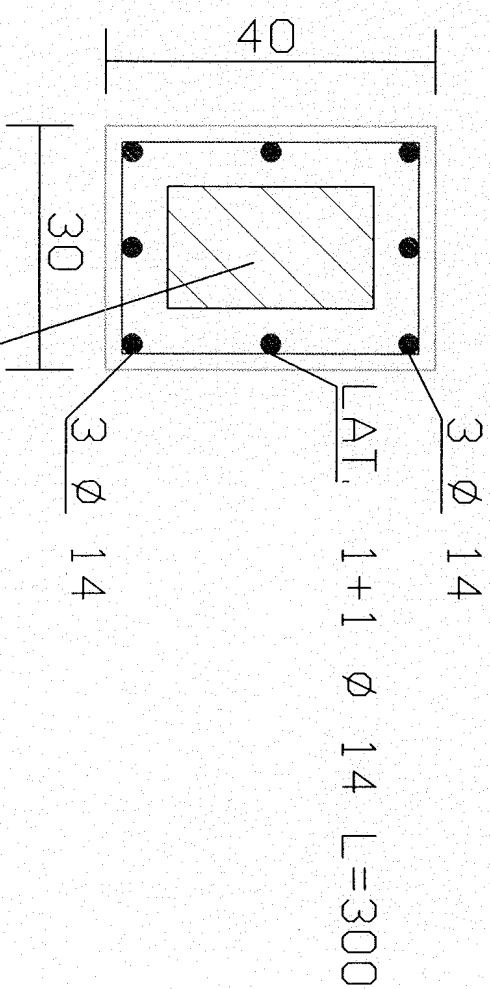
POS

DIAM $\varnothing$
(mm)

LUNGH
(cm)

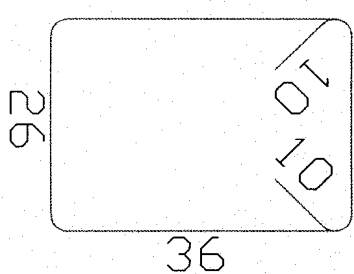
1 SUP.	3 $\varnothing$ 14	L=320
2 SUP.	2 $\varnothing$ 10	L=155
3 INF.	3 $\varnothing$ 14	L=320
4 LAT.	1 + 1 $\varnothing$ 14	L=300

Sez. A-A

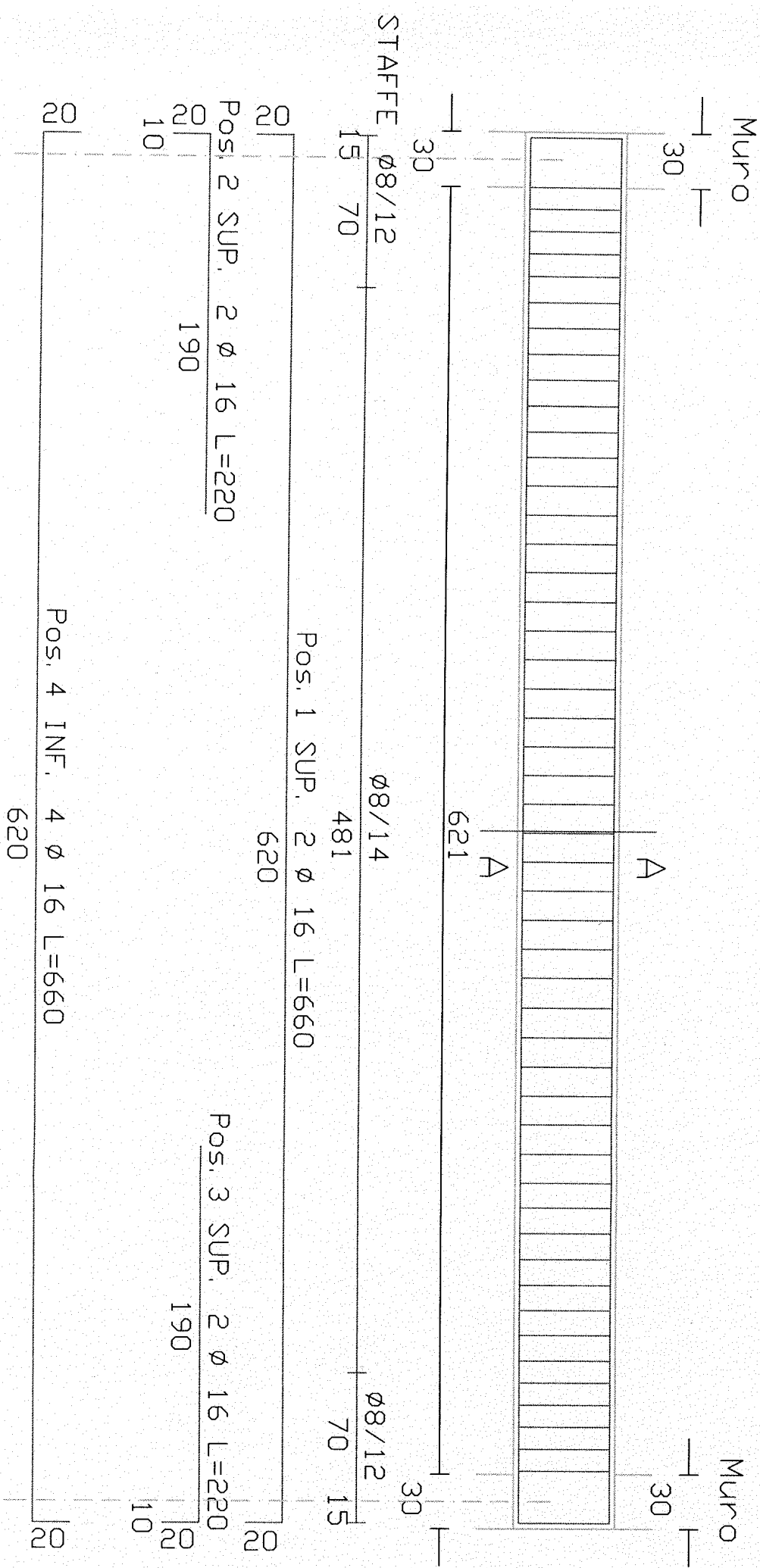


trave esistente

Staffe $\varnothing$ 8
L=170

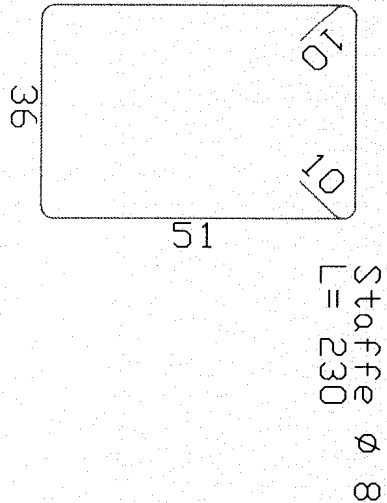
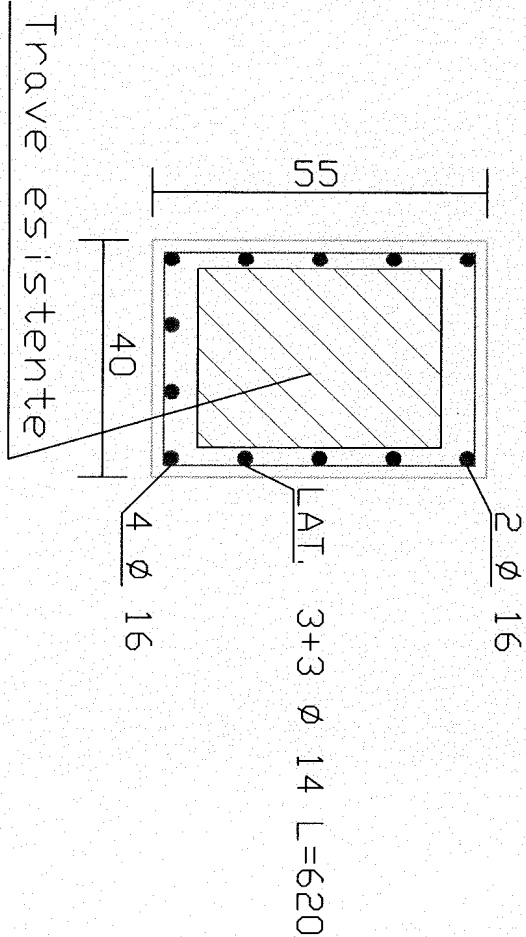


Trave 55/56 (40x55)

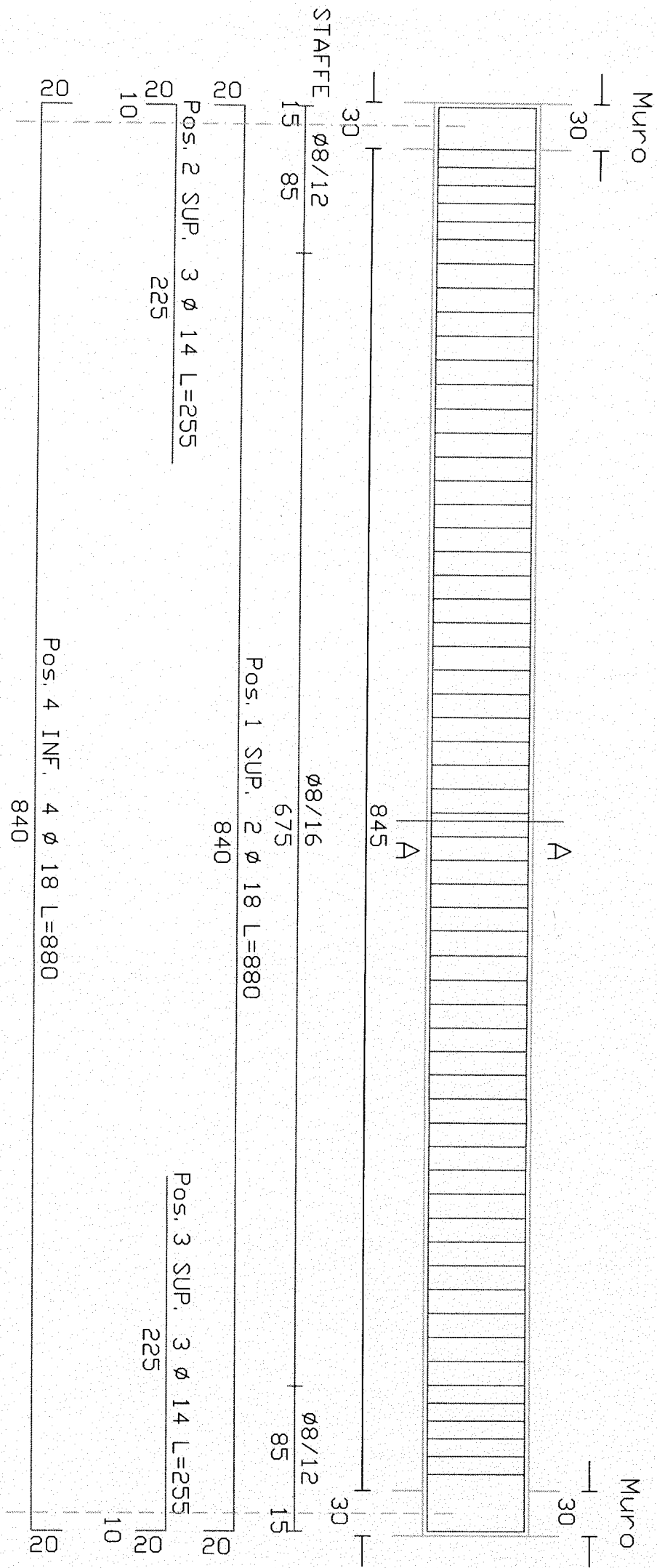


POS	DIAM Ø (mm)	LUNGH (cm)
1 SUP. 2 Ø 16		L=660
2 SUP. 2 Ø 16		L=220
3 SUP. 2 Ø 16		L=220
4 INF. 4 Ø 16		L=660
5 LAT. 3 + 3 Ø 14		L=620

Sez. A-A

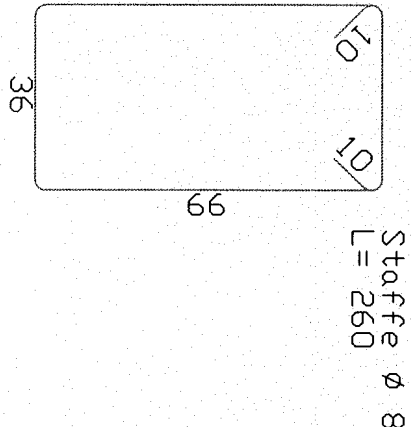
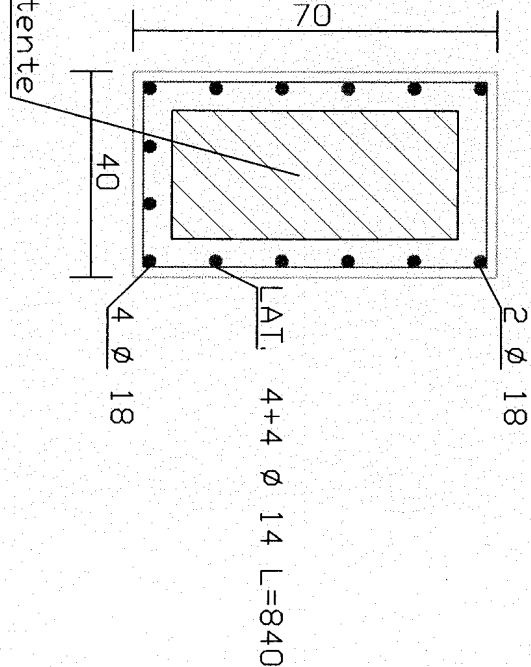


Trave 57/58 (40x70)

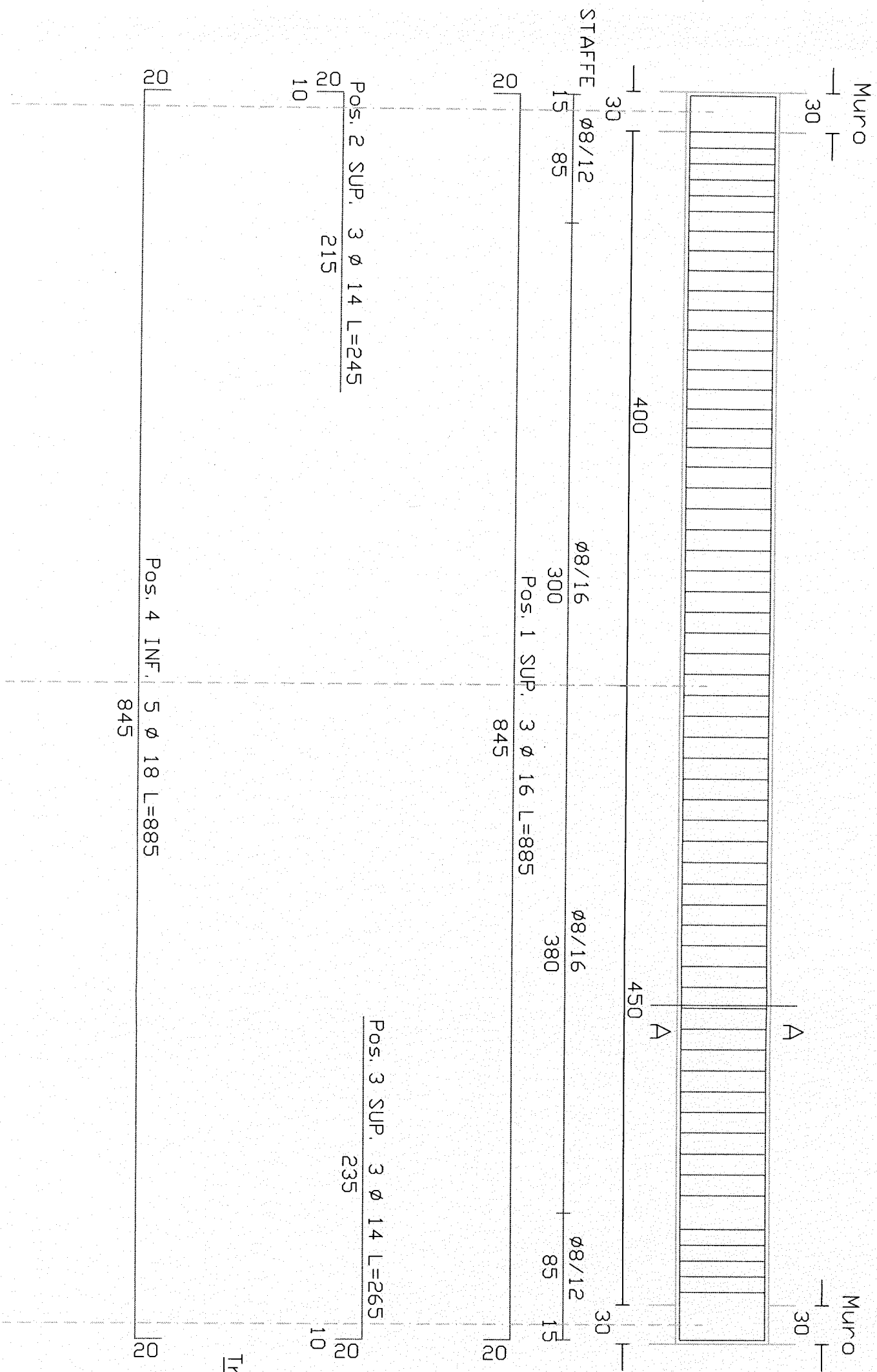


POS	DIAM Ø (mm)	LUNGH (cm)
1 SUP.	2 Ø 18	L=880
2 SUP.	3 Ø 14	L=255
3 SUP.	3 Ø 14	L=255
4 INF.	4 Ø 18	L=880
5 LAT.	4 + 4 Ø 14	L=840

Sez. A-A

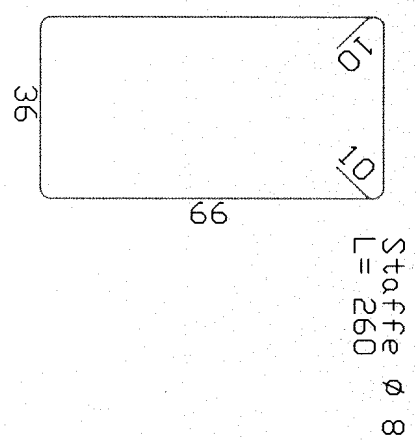
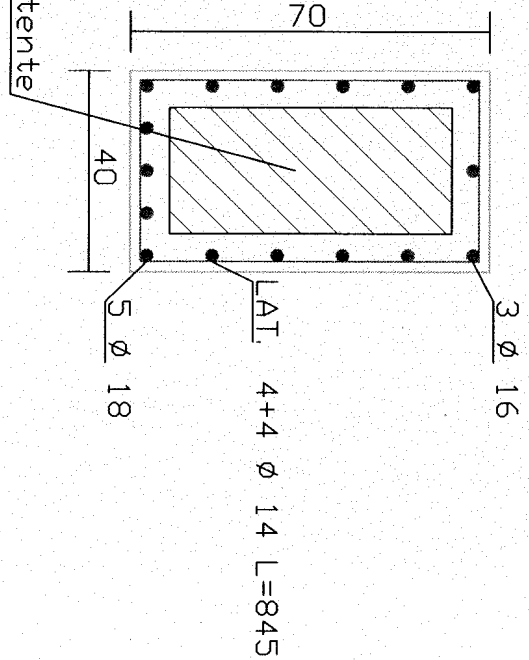


Trave 59 (40x70)

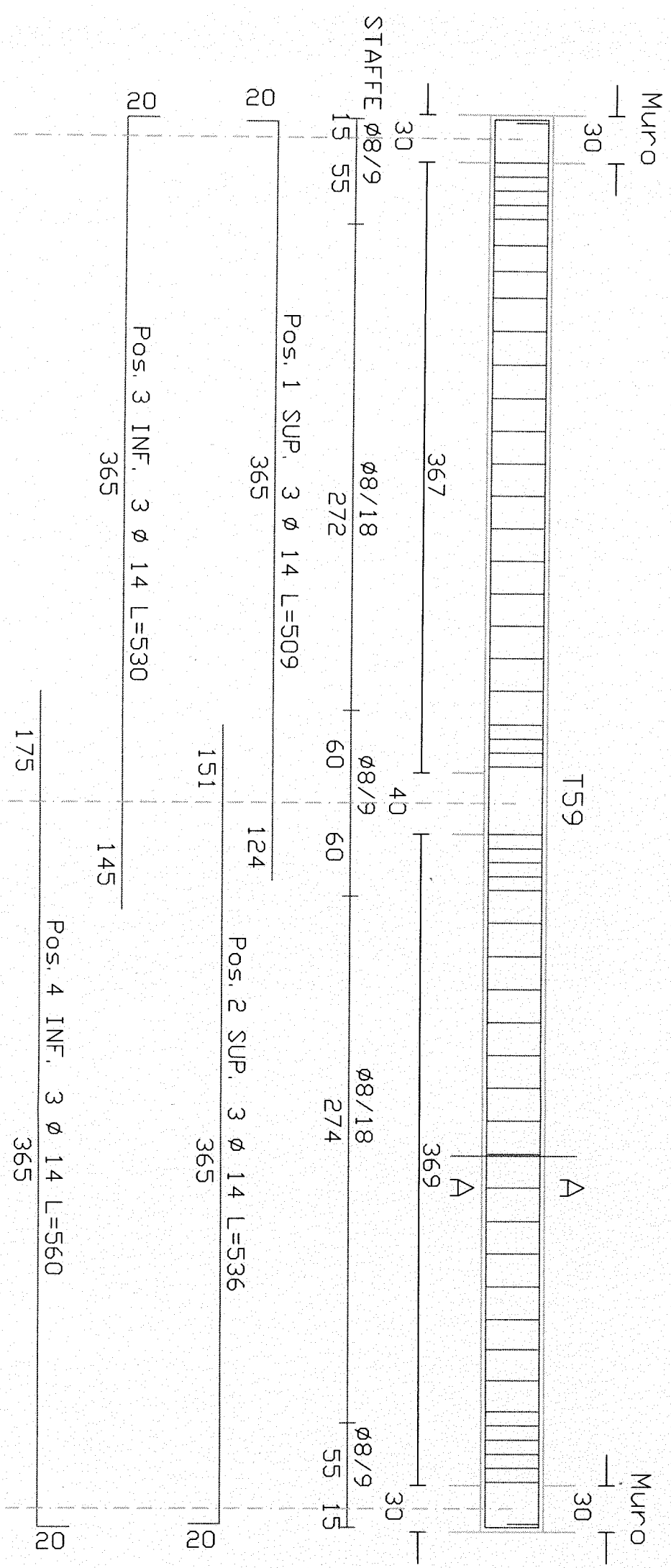


POS	DIAM ø (mm)		LUNGH (cm)
1 SUP.	3	ø 16	L=885
2 SUP.	3	ø 14	L=245
3 SUP.	3	ø 14	L=265
4 INF.	5	ø 18	L=885
5 LAT.	4 + 4	ø 14	L=845

Sez. A-A

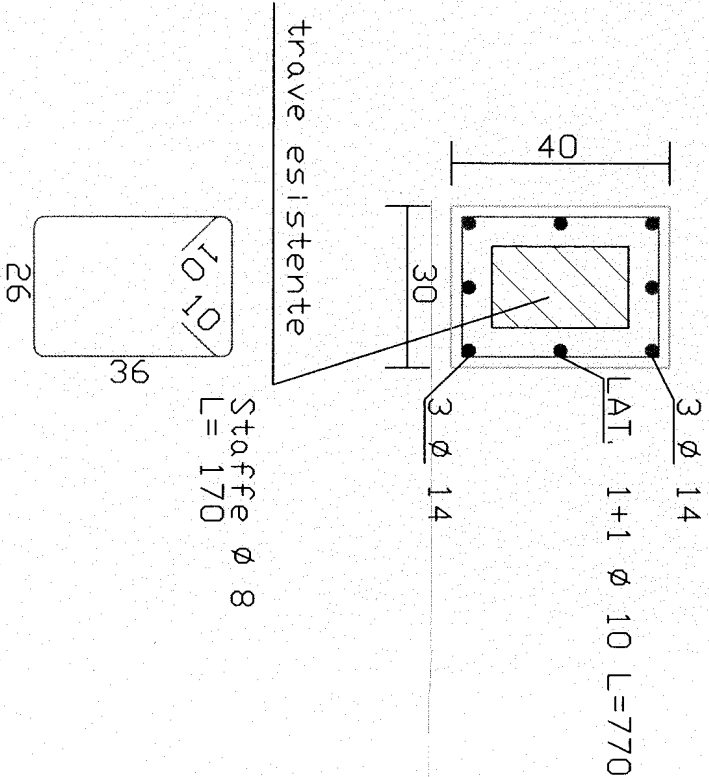


Trave 60 (35x55)



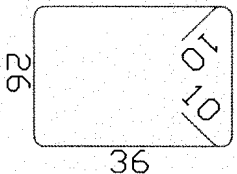
PDS	DIAM Ø (mm)	LUNGH (cm)
1 SUP. 3 Ø 14	14	L=509
2 SUP. 3 Ø 14	14	L=536
3 INF. 3 Ø 14	14	L=530
4 INF. 3 Ø 14	14	L=560
5 LAT. 1 + 1 Ø 10	10	L=770

Sez. A-A

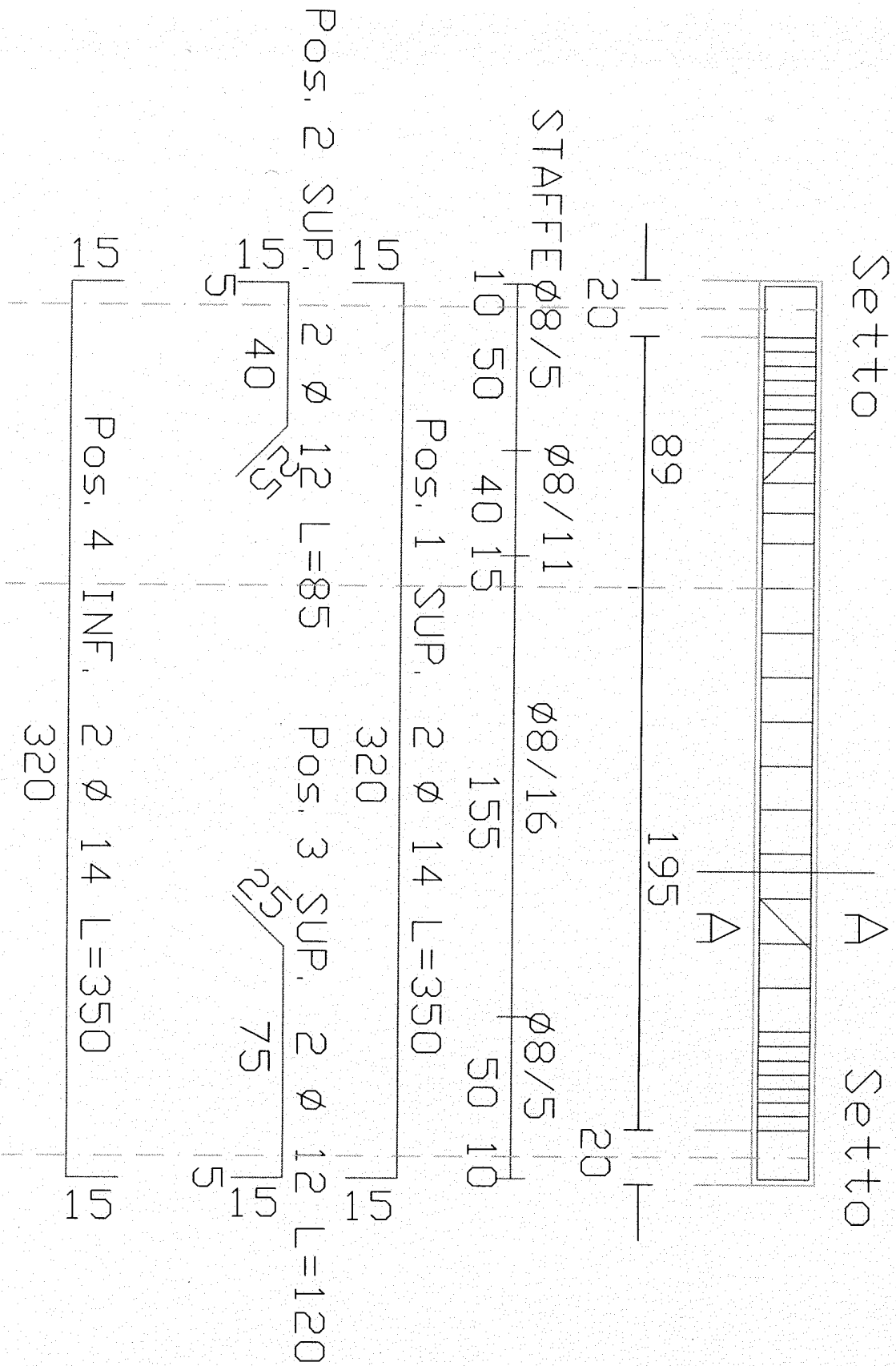


trave esistente

Staffe Ø 8
L=170

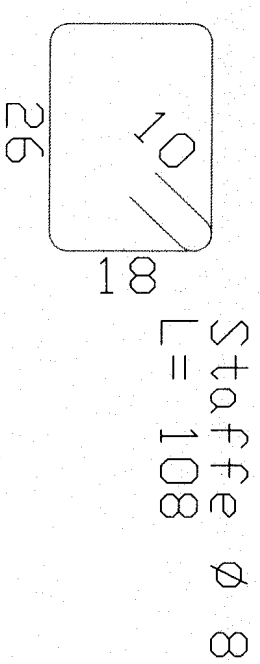
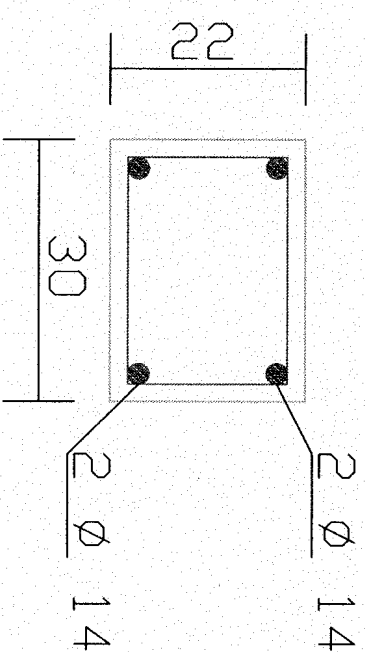


Trave 61 (30x22)

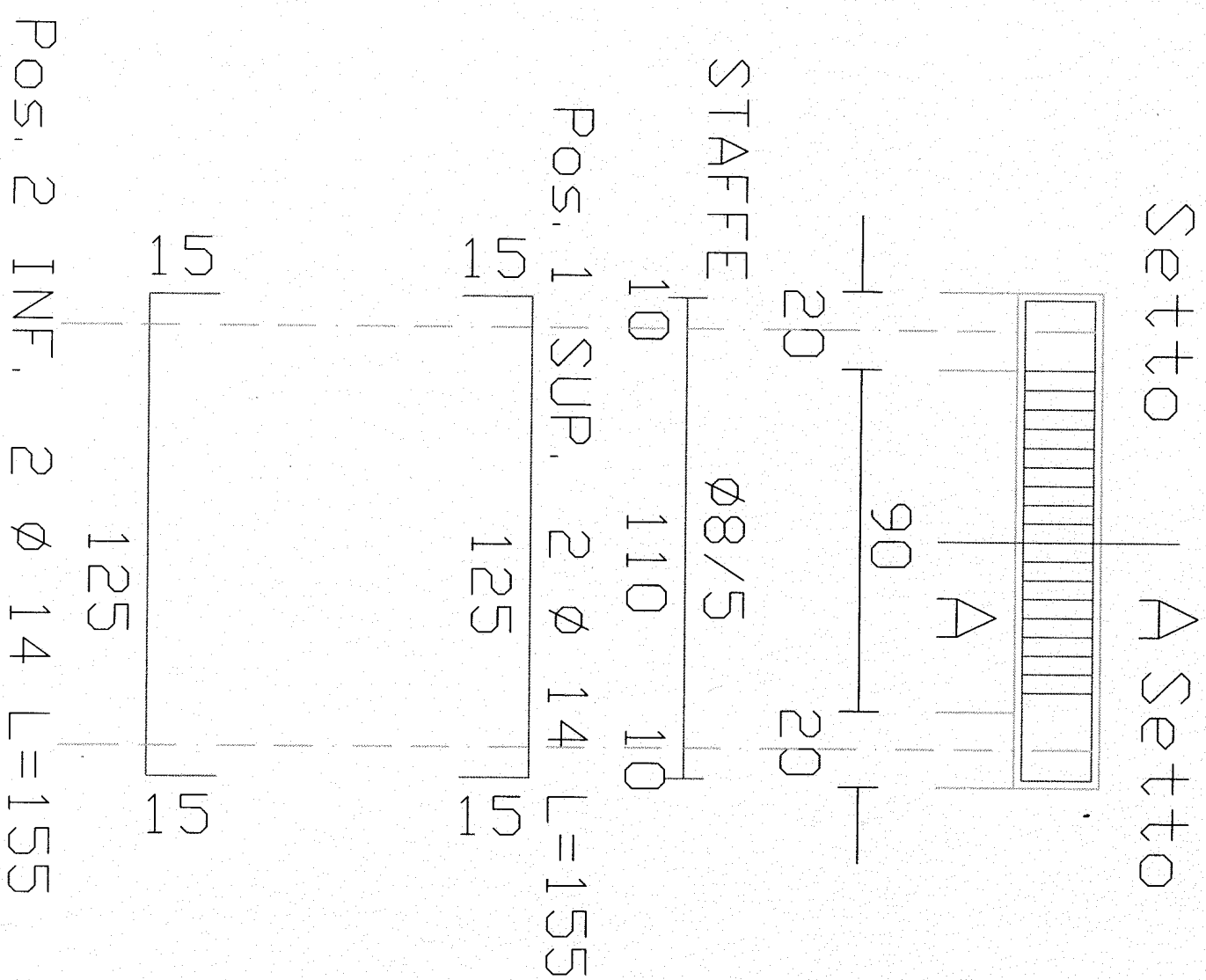


POS	DIAM Ø (mm)		LUNGH (cm)
1 SUP.	2 Ø 14		L=350
2 SUP.	2 Ø 12		L=85
3 SUP.	2 Ø 12		L=120
4 INF.	2 Ø 14		L=350

Sez. A-A

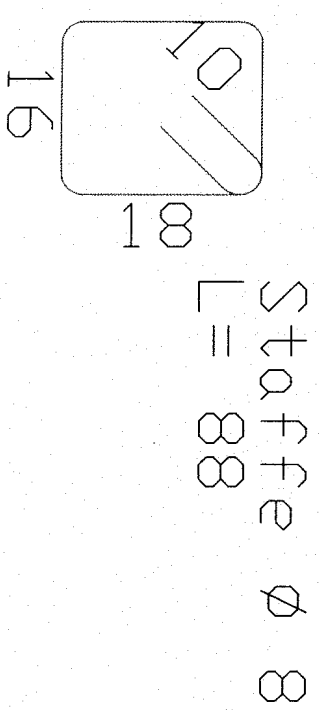
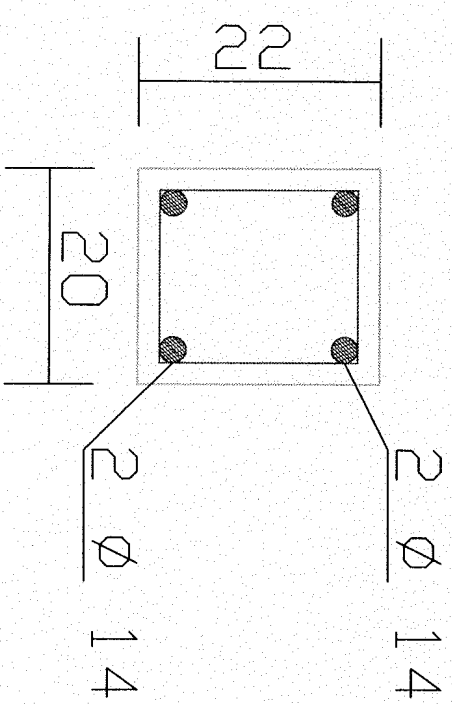


Trave 62 (20x22)

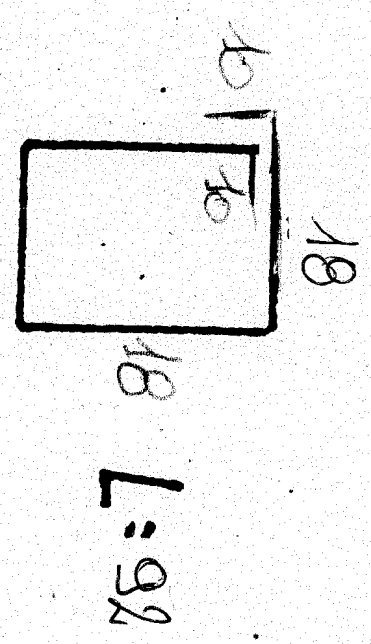
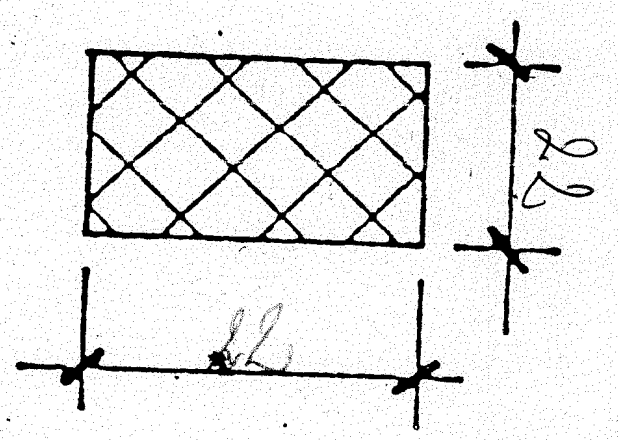
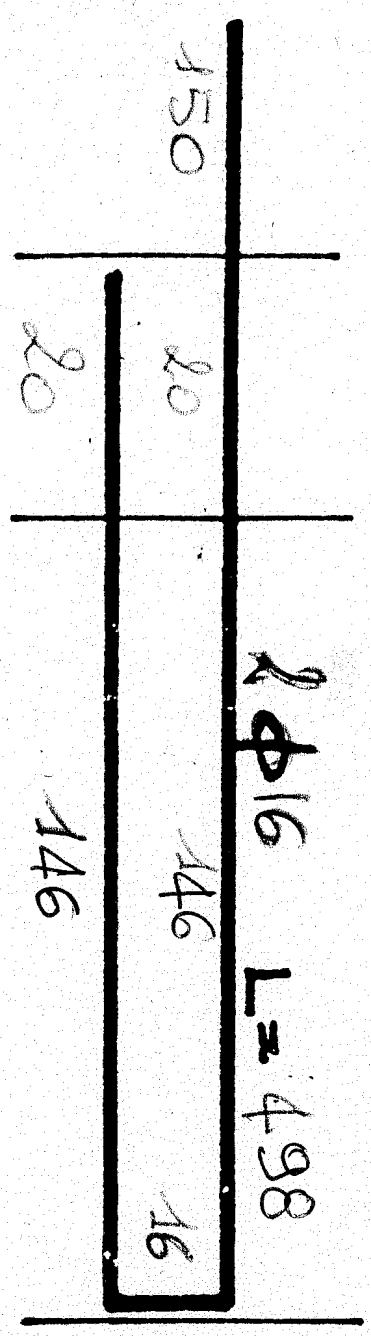
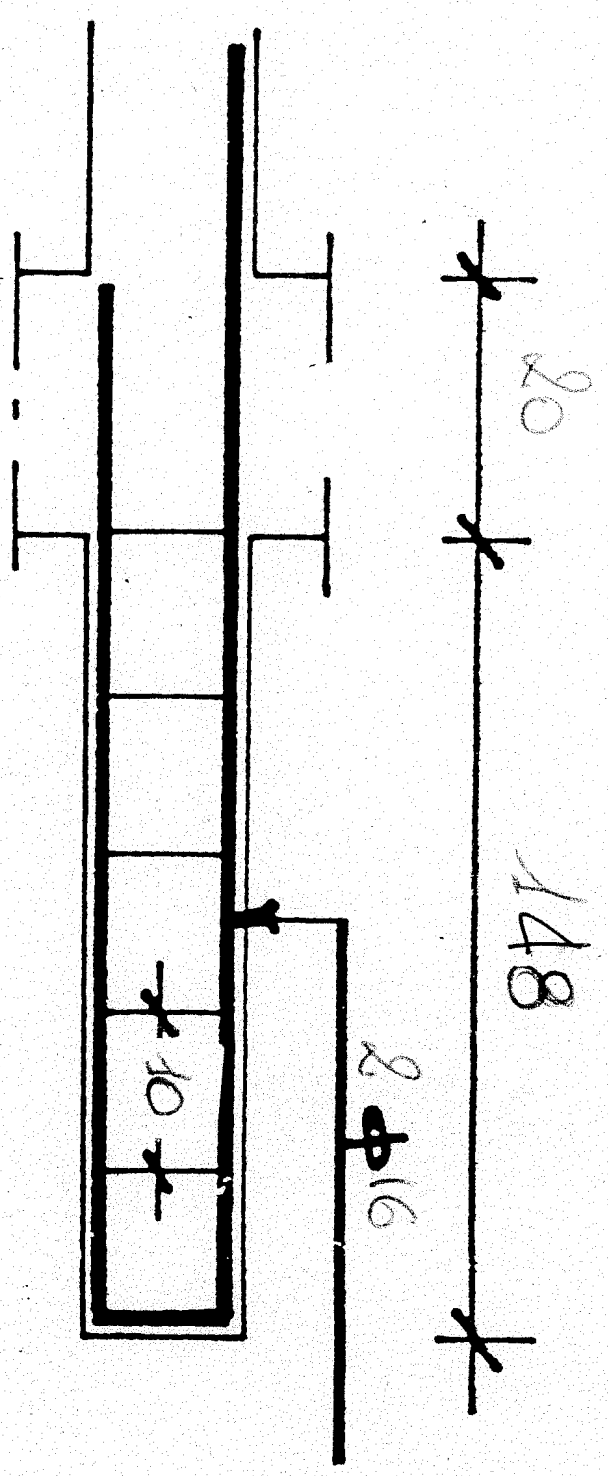


POS	DIAM Ø (mm)	LUNGH (cm)
1 SUP. 2 Ø 14		L=155
2 INF. 2 Ø 14		L=155

Sez. A-A

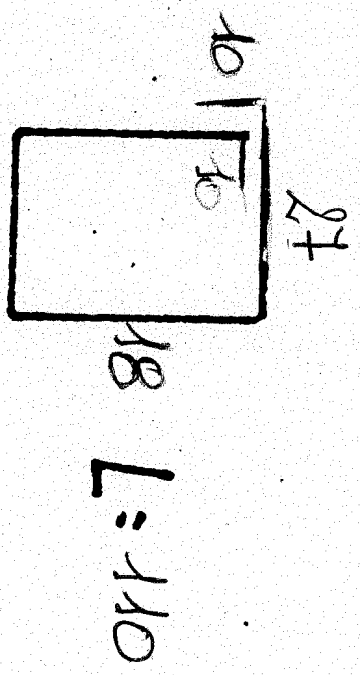
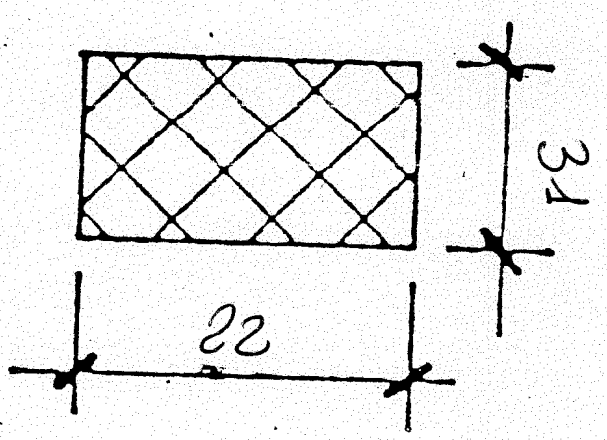
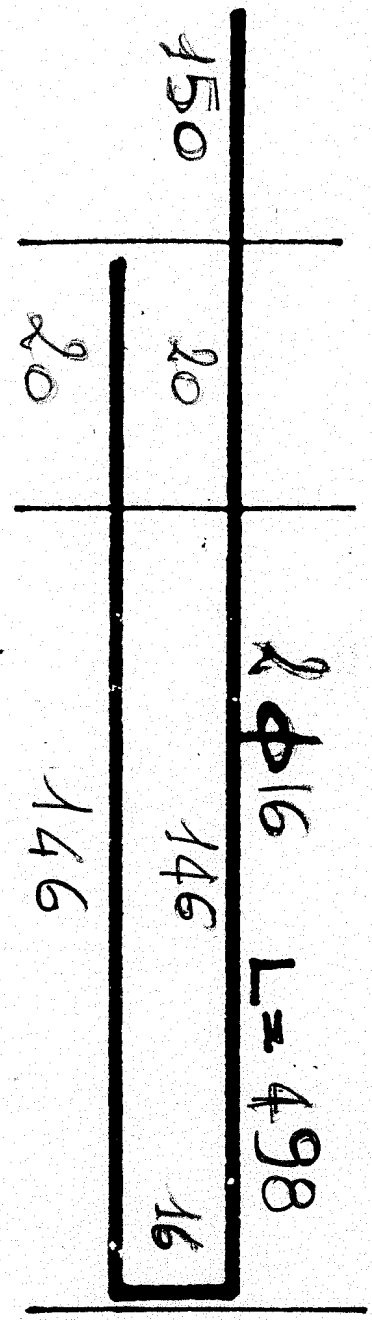
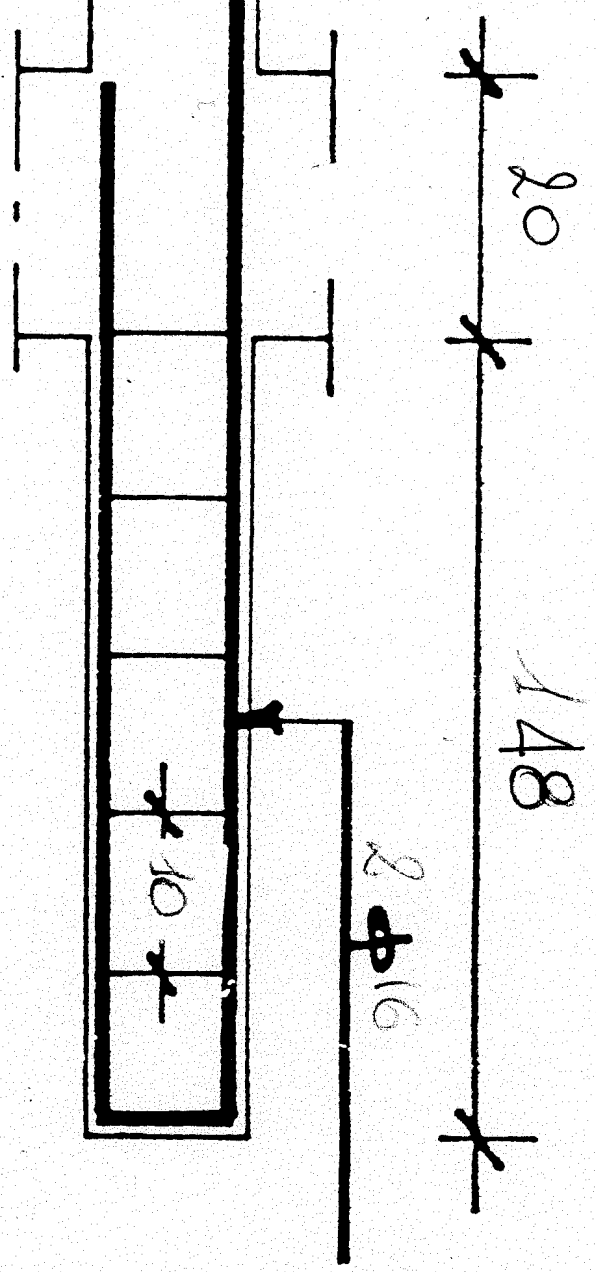


seção T 63 (22 x 22)



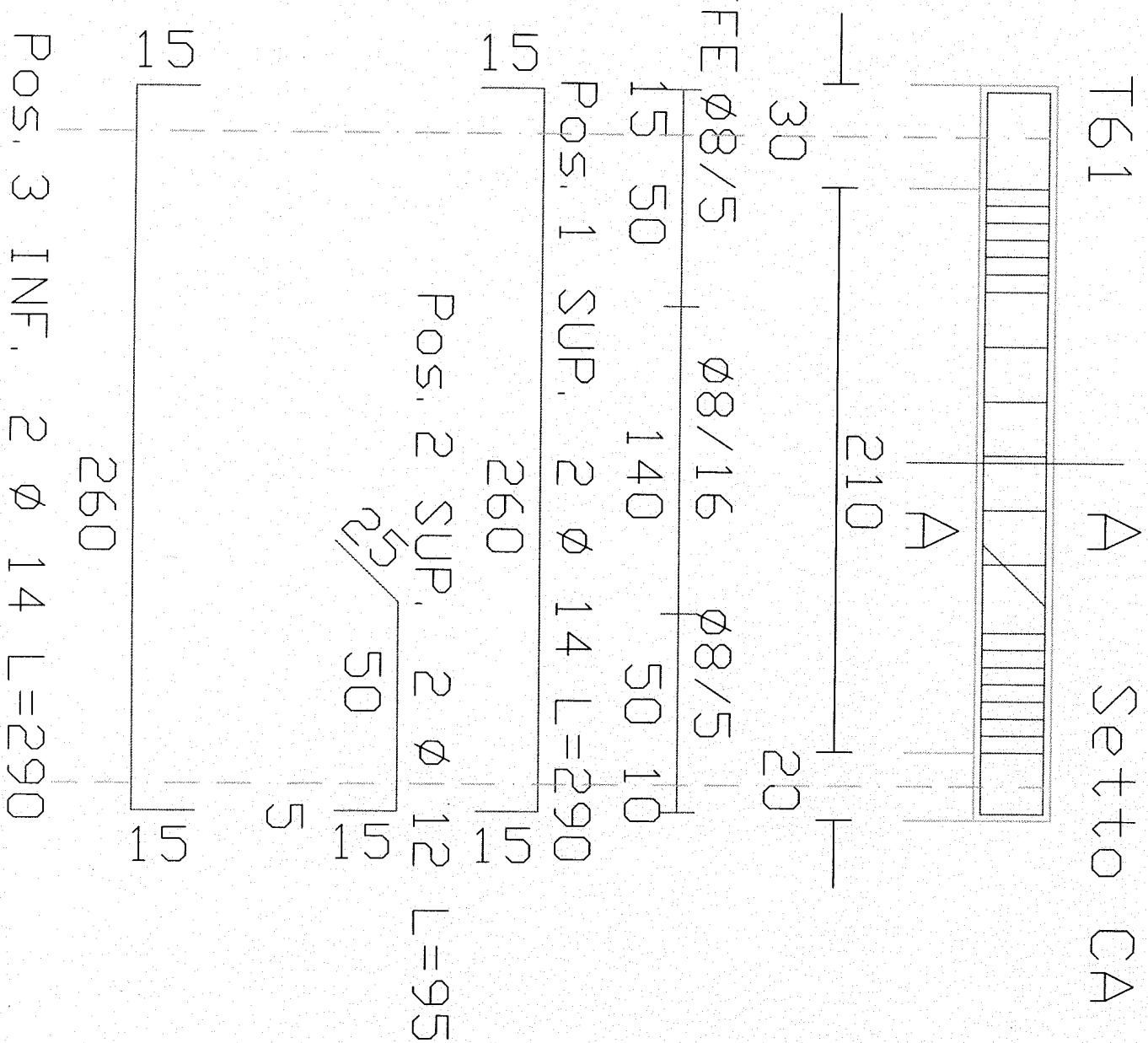
16 staffe φ8
passo 10 cm.

Selfo T 64 (34 x 22)



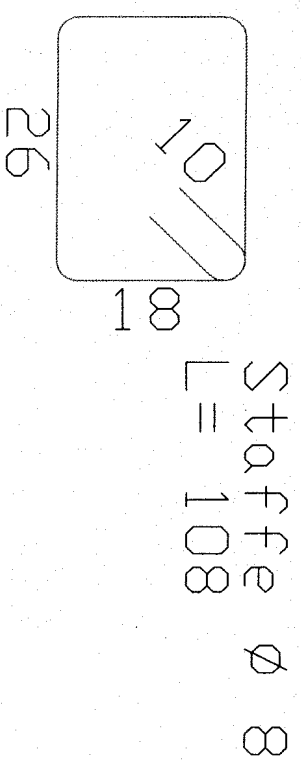
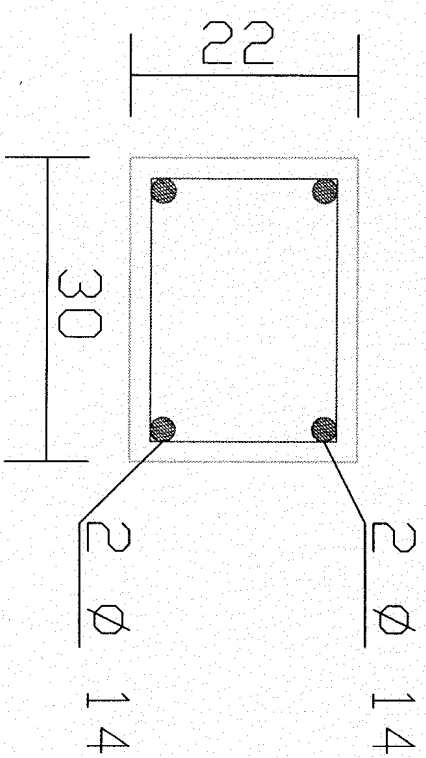
H. 16 staffe $\phi 8$
passo 10 cm.

Trave 65 (30x22)

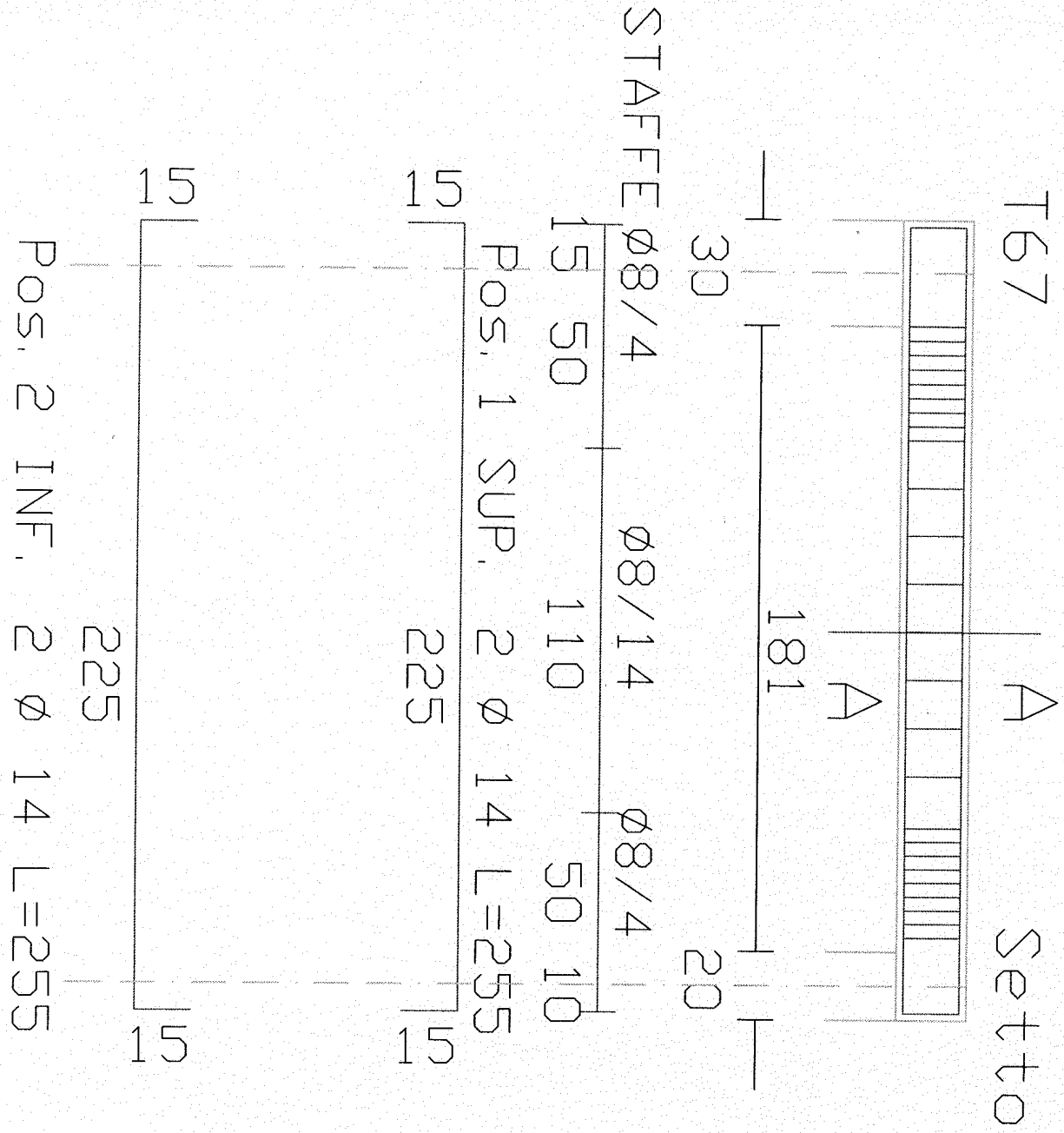


POS	DIAM $\varnothing$ (mm)		LUNGH (cm)
1 SUP.	2	$\varnothing$ 14	L=290
2 SUP.	2	$\varnothing$ 12	L=95
3 INF.	2	$\varnothing$ 14	L=290

Sez. A-A

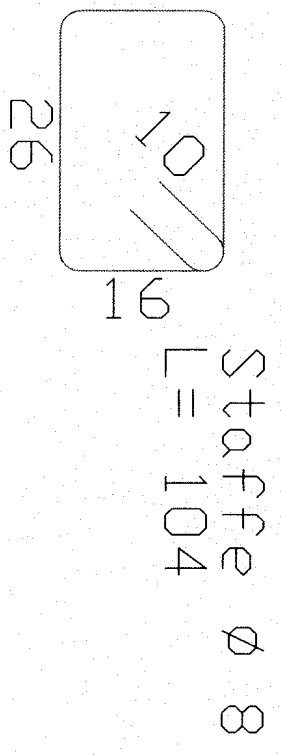
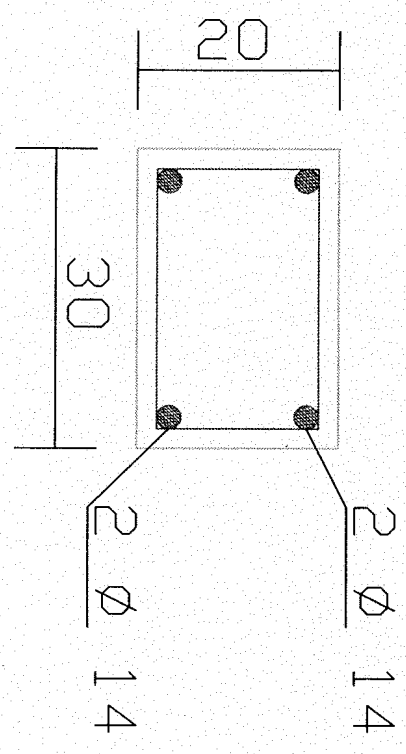


Trave 66 (30x20)

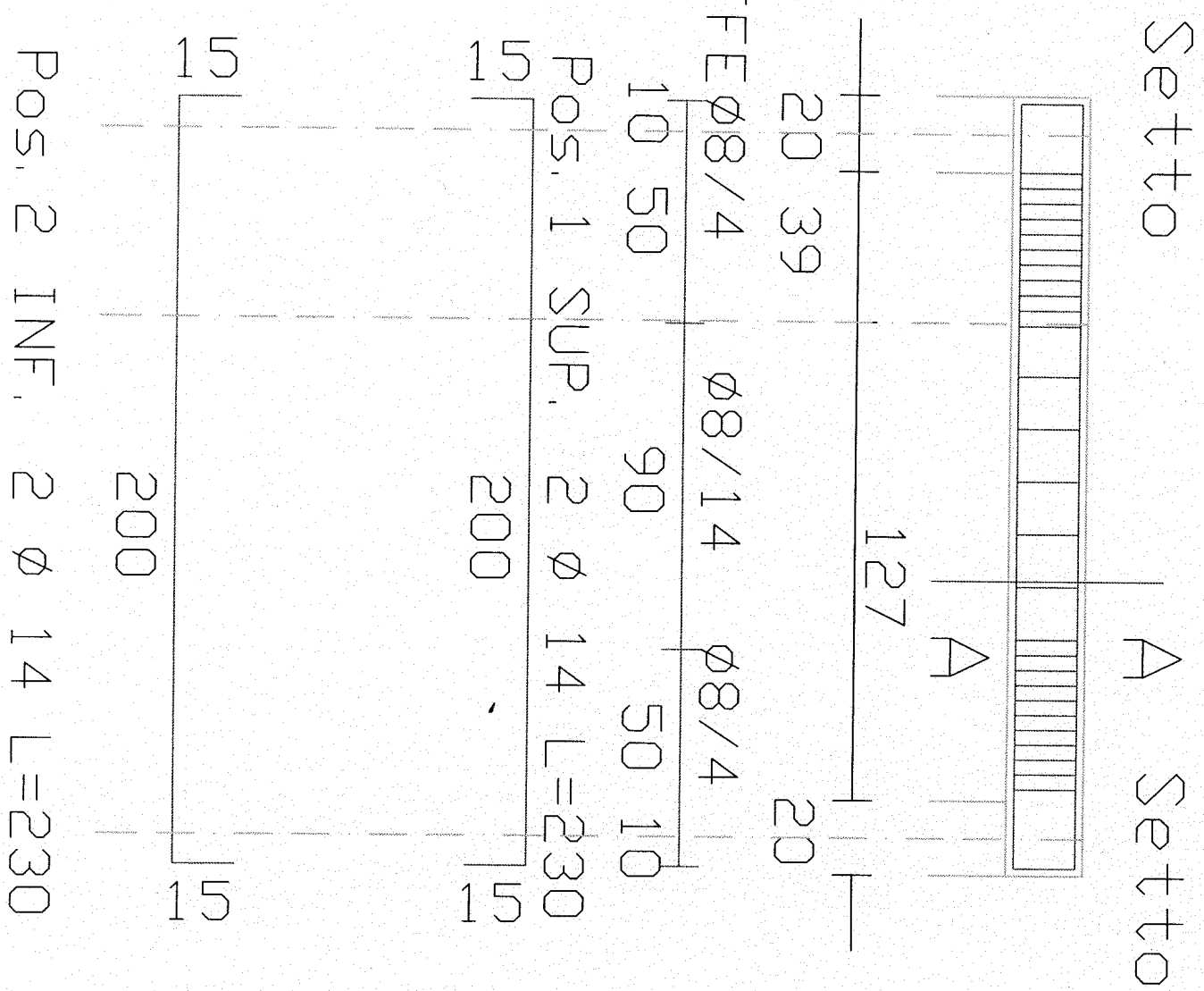


POS	DIAM ø (mm)	LUNGH (cm)
1 SUP. 2 ø 14		L=255
2 INF. 2 ø 14		L=255

Sez. A-A

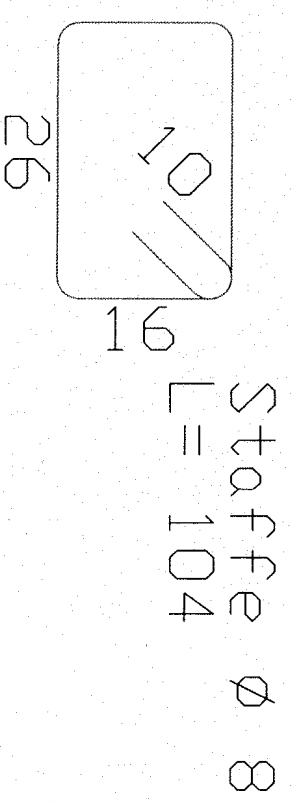
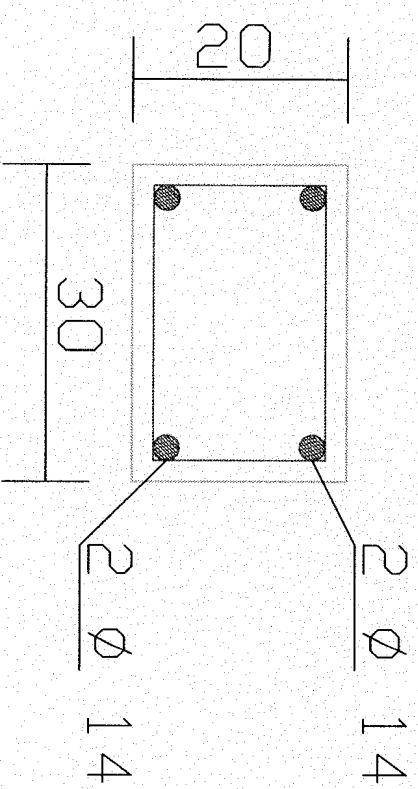


Trave 67 (30x20)



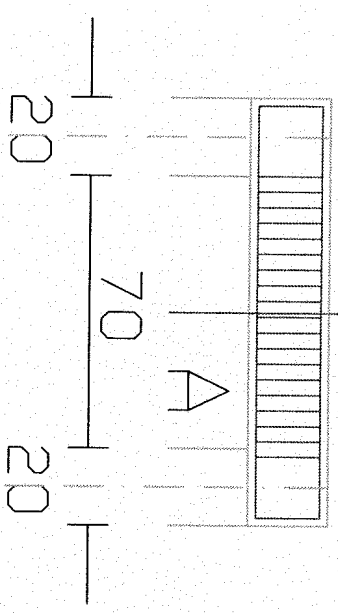
POS	DIAM $\varnothing$ (mm)	LUNGH (cm)
1 SUP.	2 $\varnothing 14$	L=230
2 INF.	2 $\varnothing 14$	L=230

Sez. A-A



Trave 68 (20x20)

Setto A Setto



STAFFE $\varnothing 8/4$
10 100

Pos. 1 SUP. 2 $\varnothing 14$ L=135
5 105 5

Pos. 2 INF. 2 $\varnothing 14$ L=135
5 105 5

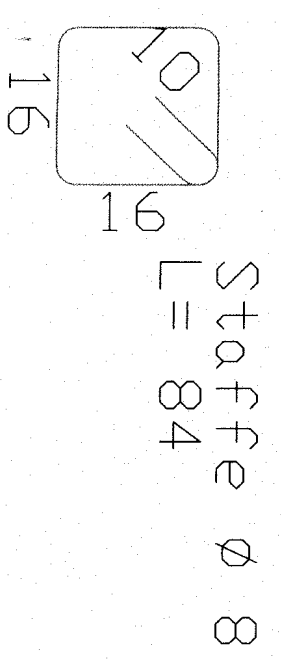
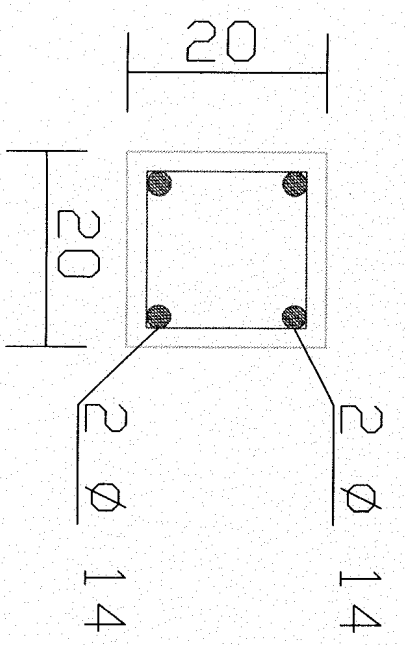
POS

DIAM $\varnothing$
(mm)

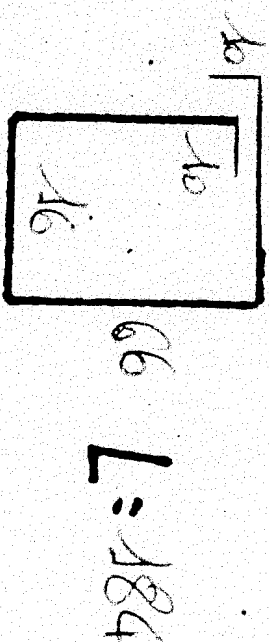
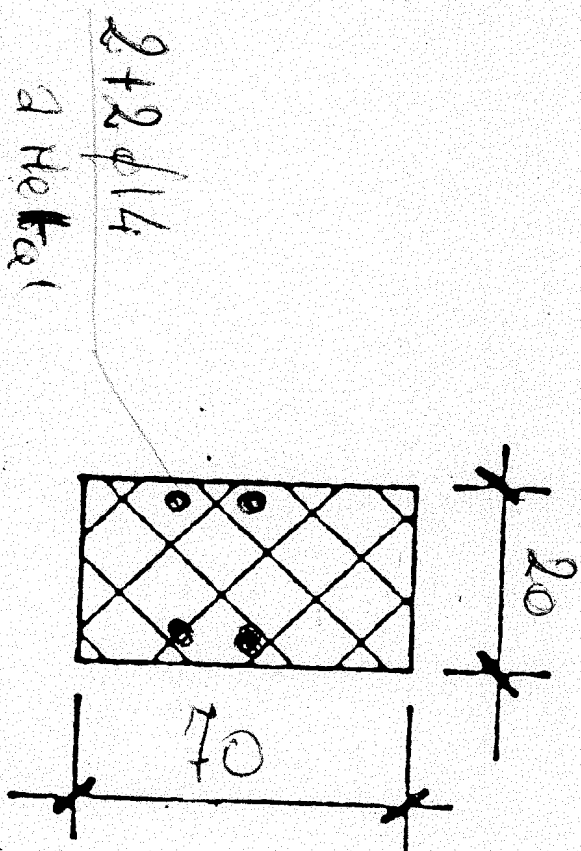
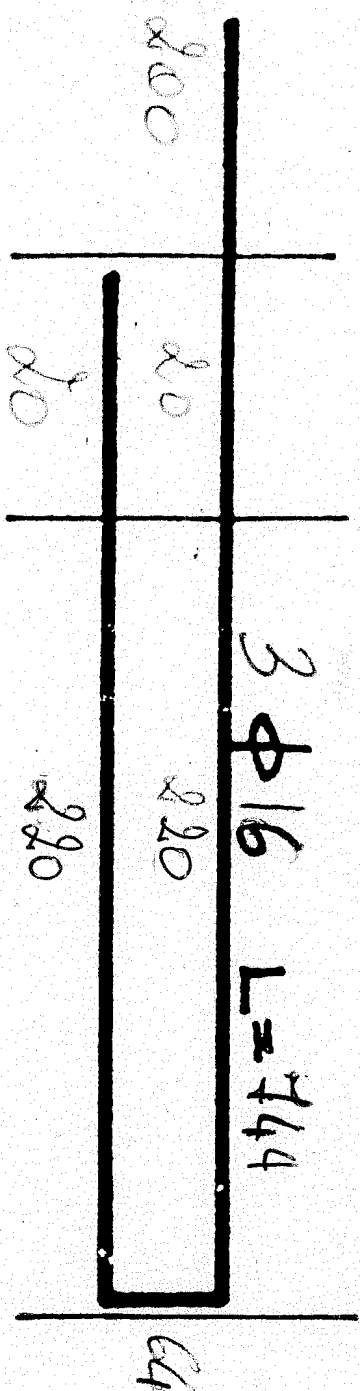
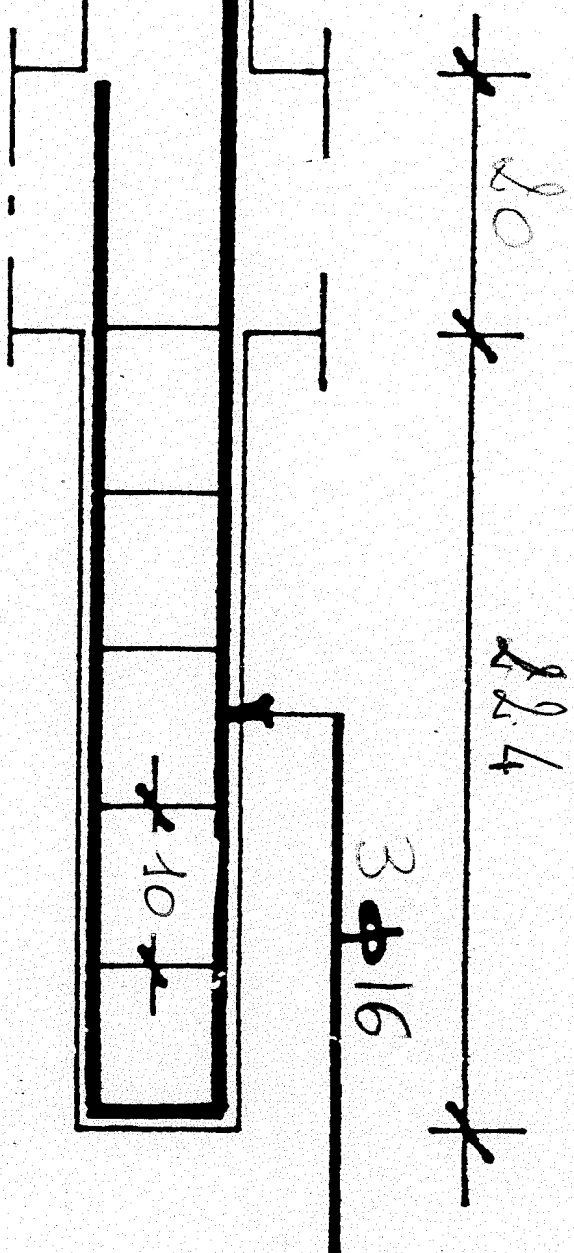
LUNGH
(cm)

1 SUP.	2 $\varnothing 14$	L=135
2 INF.	2 $\varnothing 14$	L=135

Sez. A-A

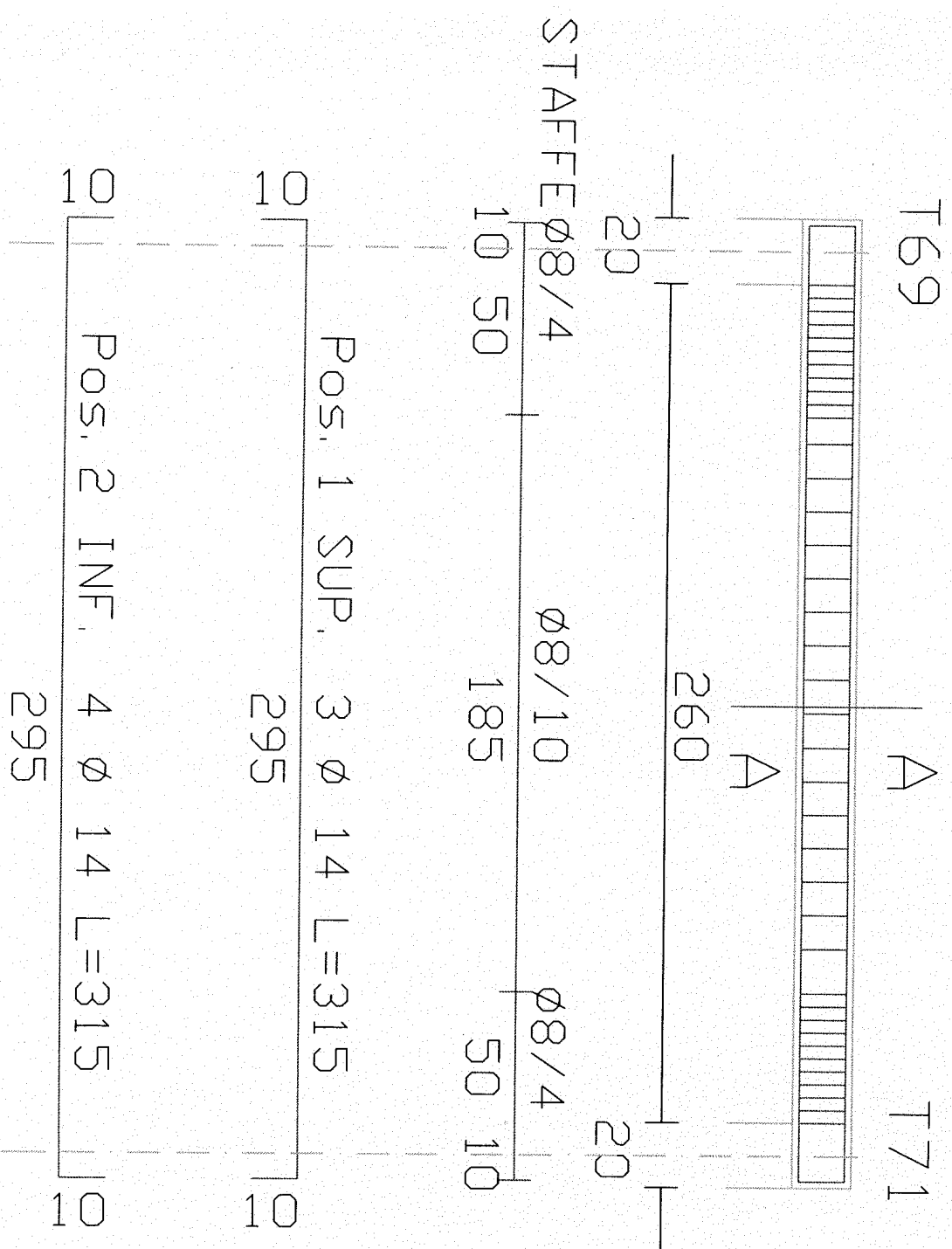


Sethor C.A T 69/71 (20 x 40)



H. 24 staffe \phi 8
passo 10 cm.

Trave 70 (50x18)



POS	DIAM ø (mm)	LUNGH (cm)
1 SUP.	3 ø 14	L=315
2 INF.	4 ø 14	L=315

Sez. A-A

