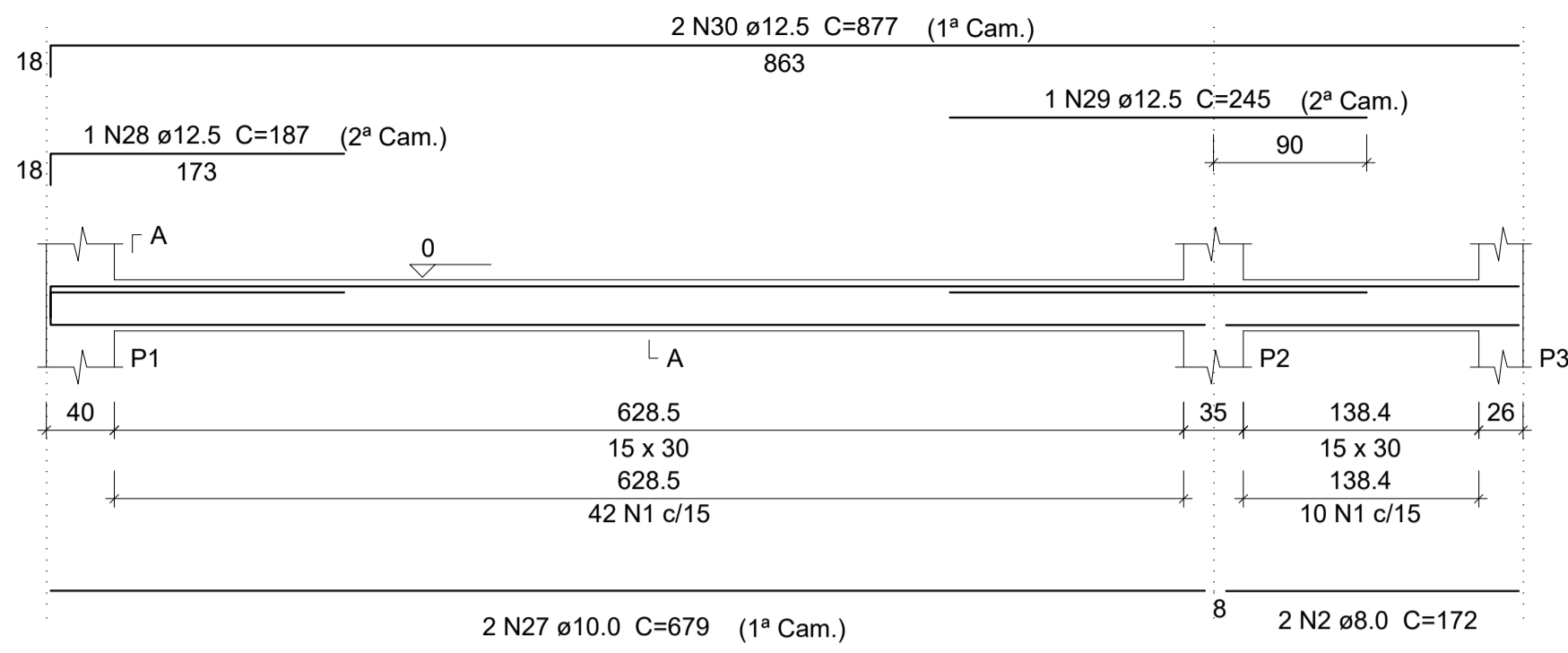


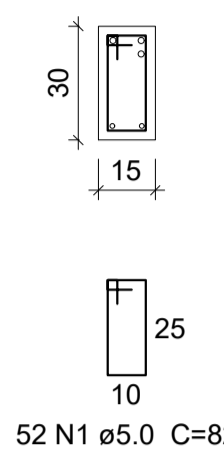
### VB1

ESC 1:50



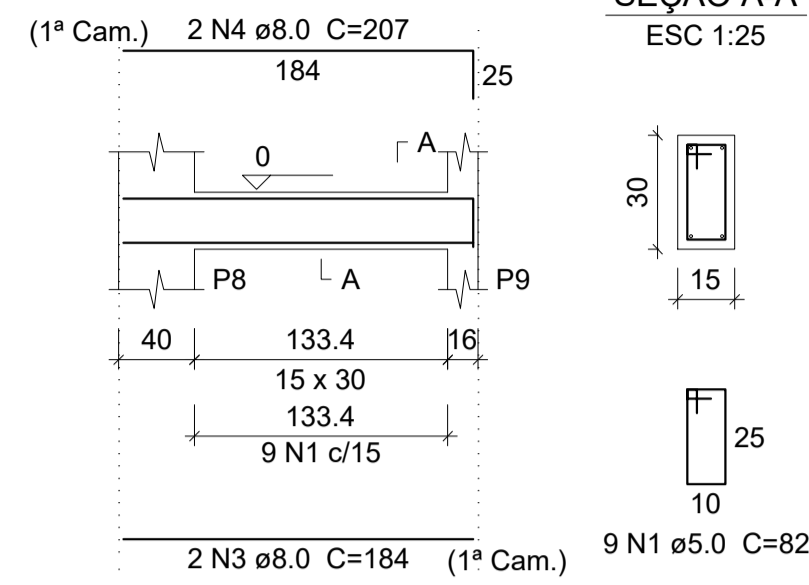
### SEÇÃO A-A

ESC 1:25



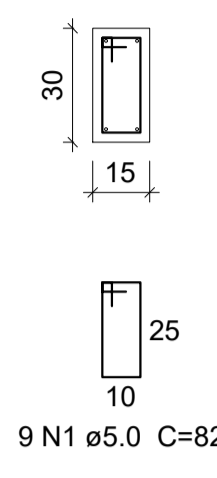
### VB2

ESC 1:50



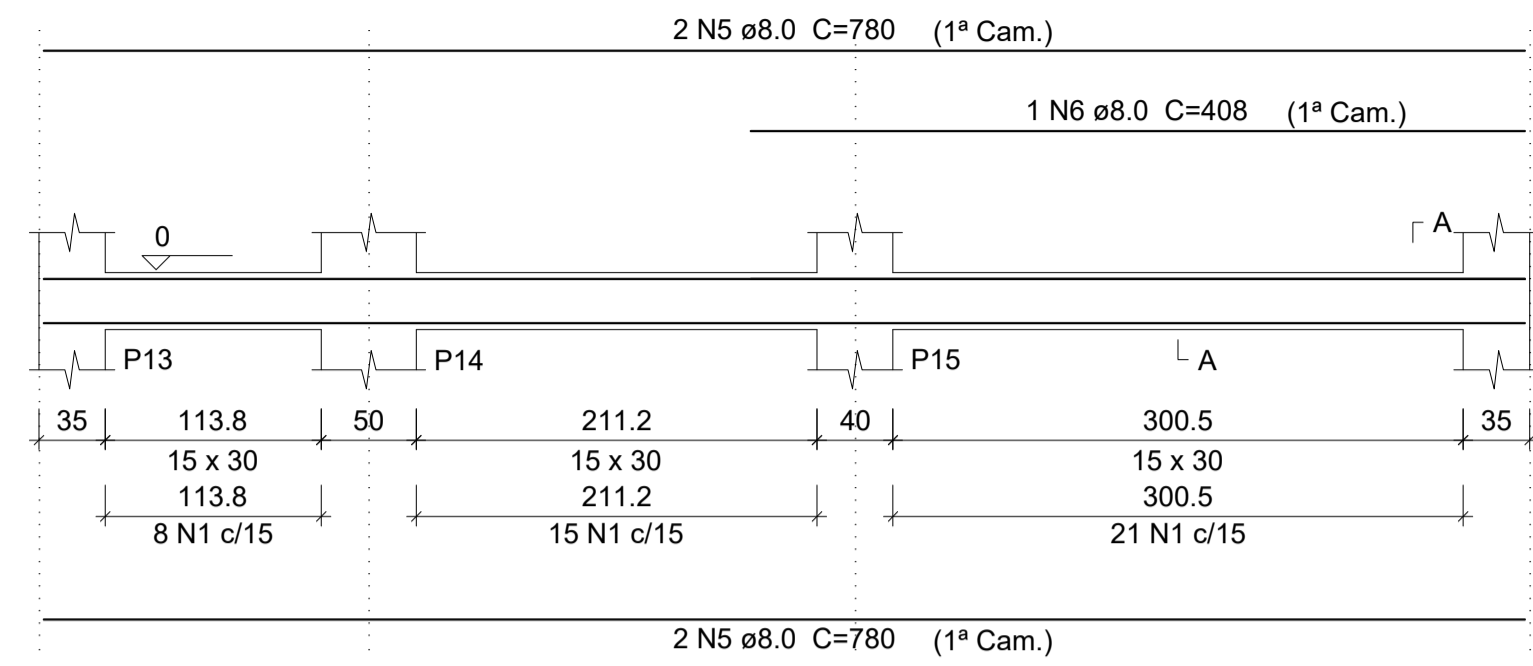
### SEÇÃO A-A

ESC 1:25



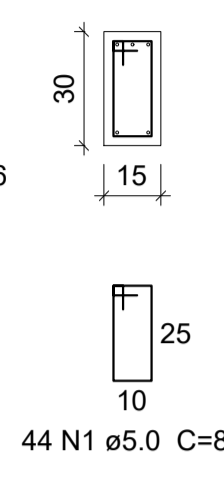
### VB3

ESC 1:50



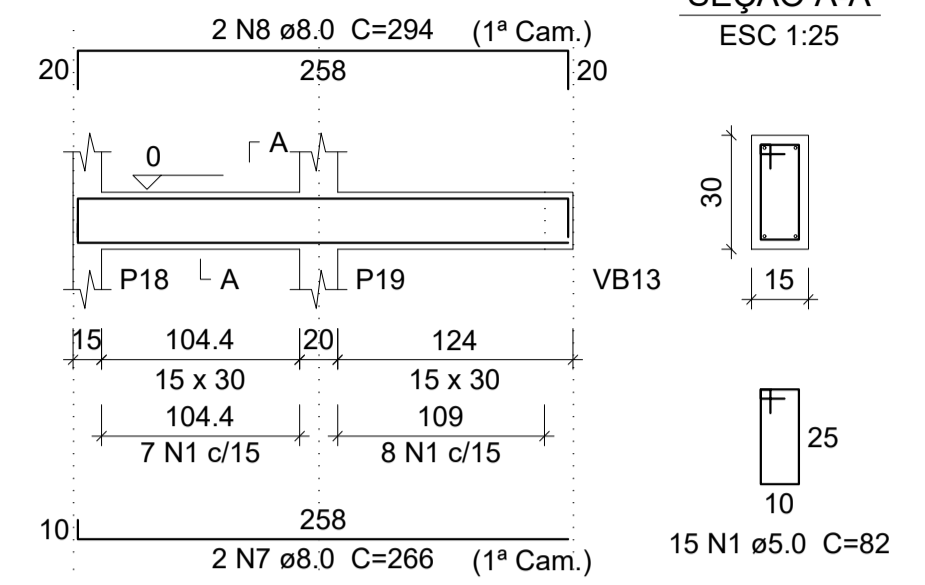
### SEÇÃO A-A

ESC 1:25



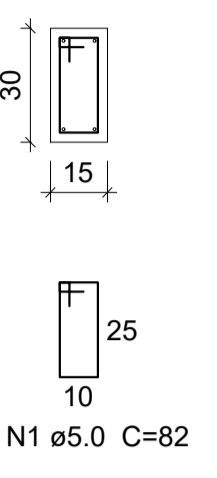
### VB4

ESC 1:50



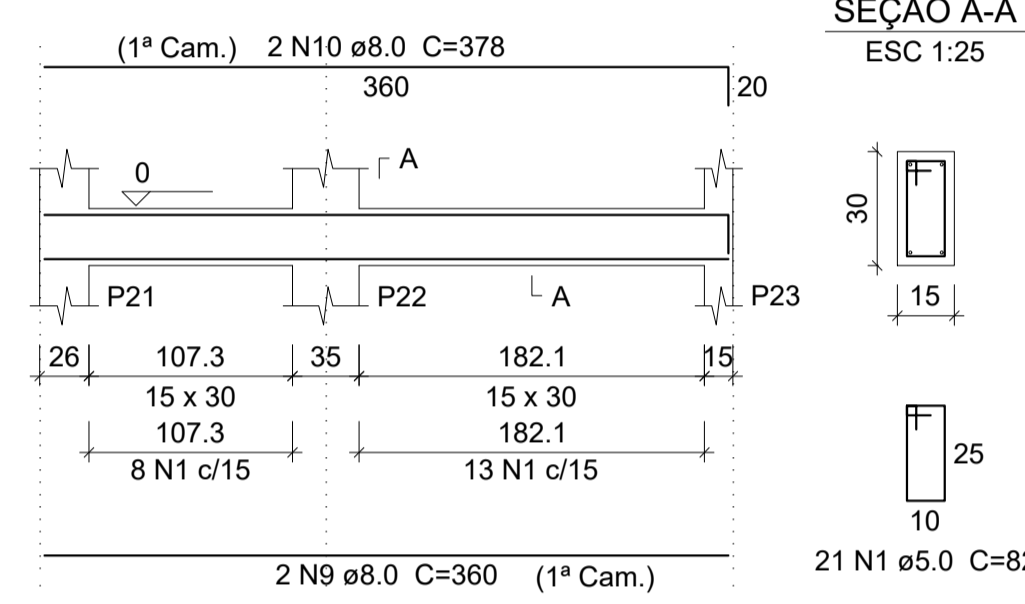
### SEÇÃO A-A

ESC 1:25



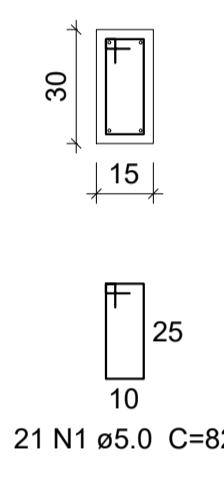
### VB5

ESC 1:50



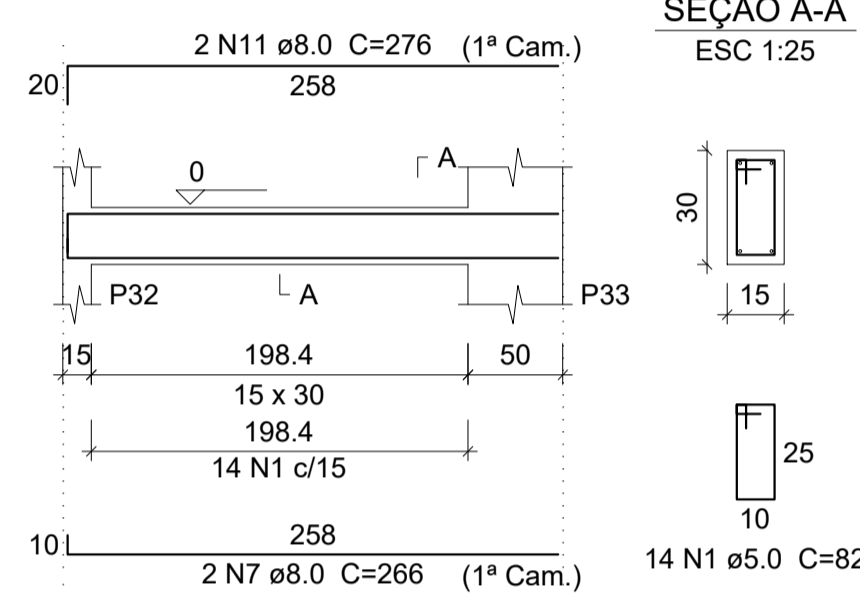
### SEÇÃO A-A

ESC 1:25



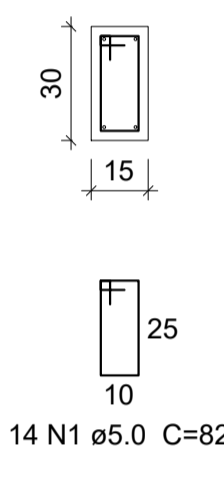
### VB6

ESC 1:50



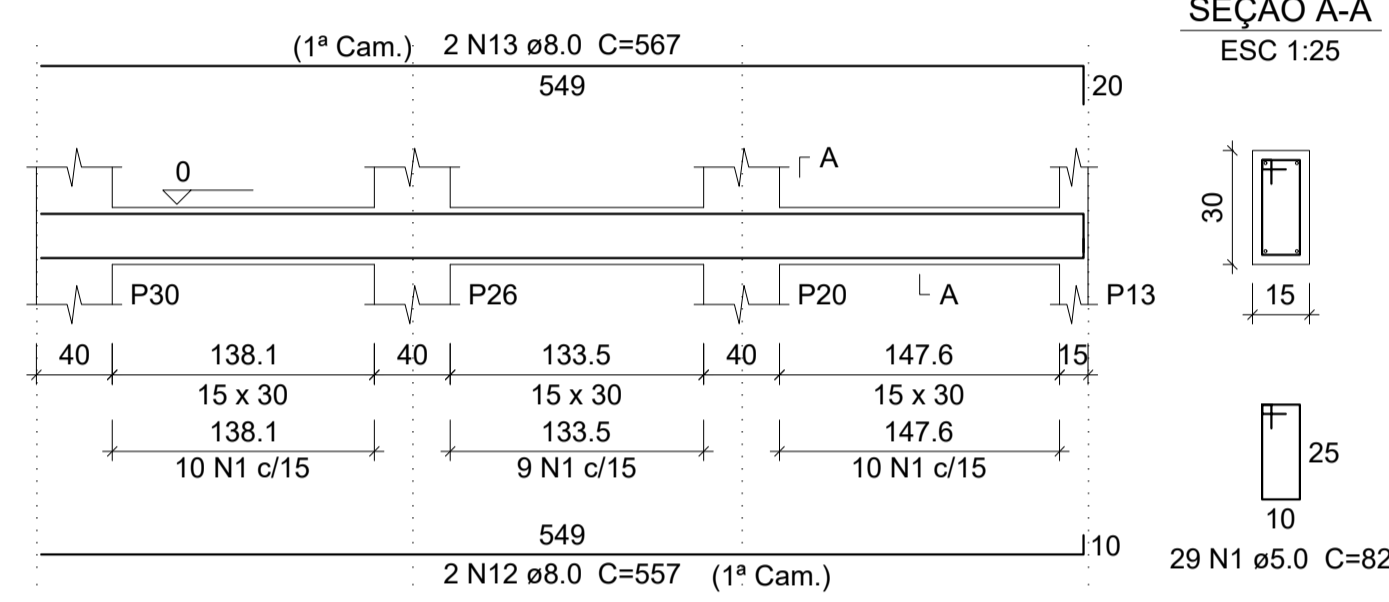
### SEÇÃO A-A

ESC 1:25



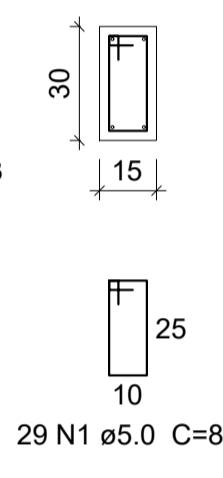
### VB7

ESC 1:50



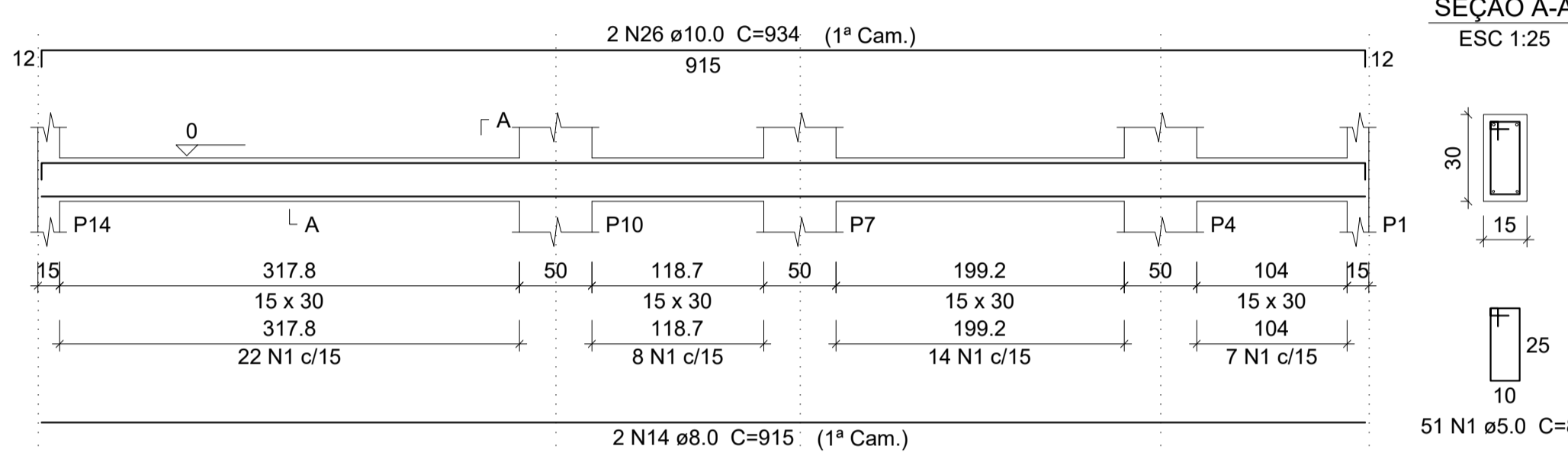
### SEÇÃO A-A

ESC 1:25



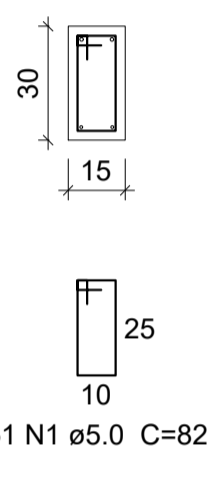
### VB8

ESC 1:50



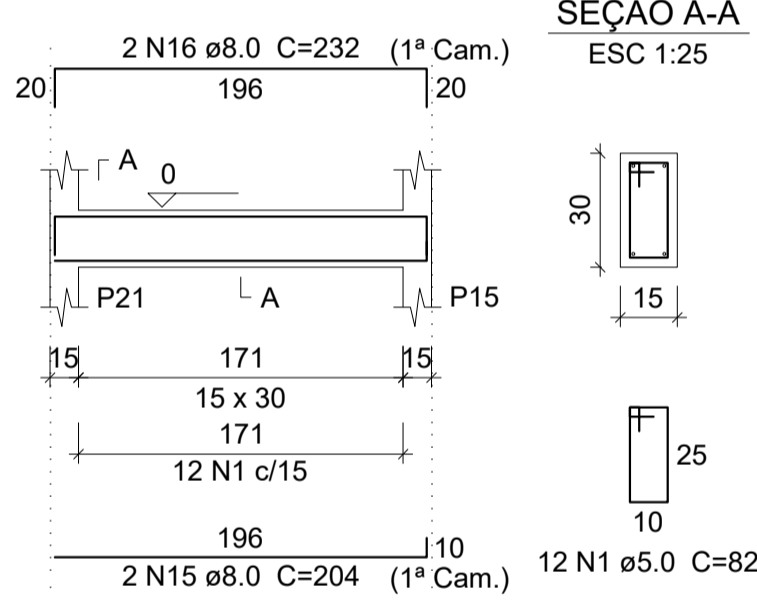
### SEÇÃO A-A

ESC 1:25



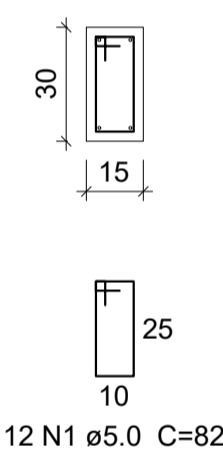
### VB9

ESC 1:50



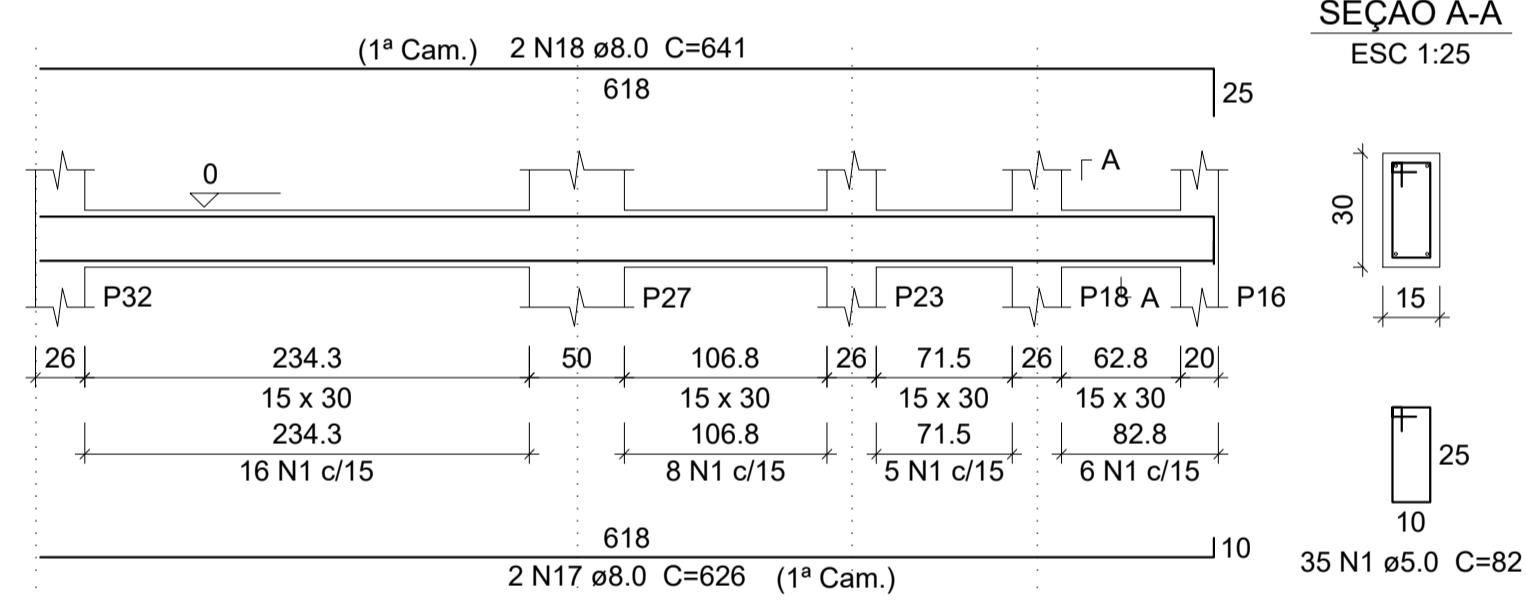
### SEÇÃO A-A

ESC 1:25



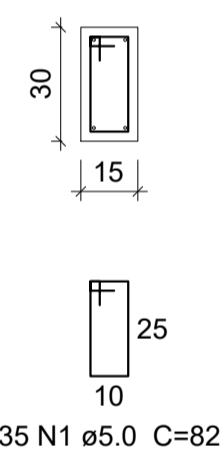
### VB10

ESC 1:50



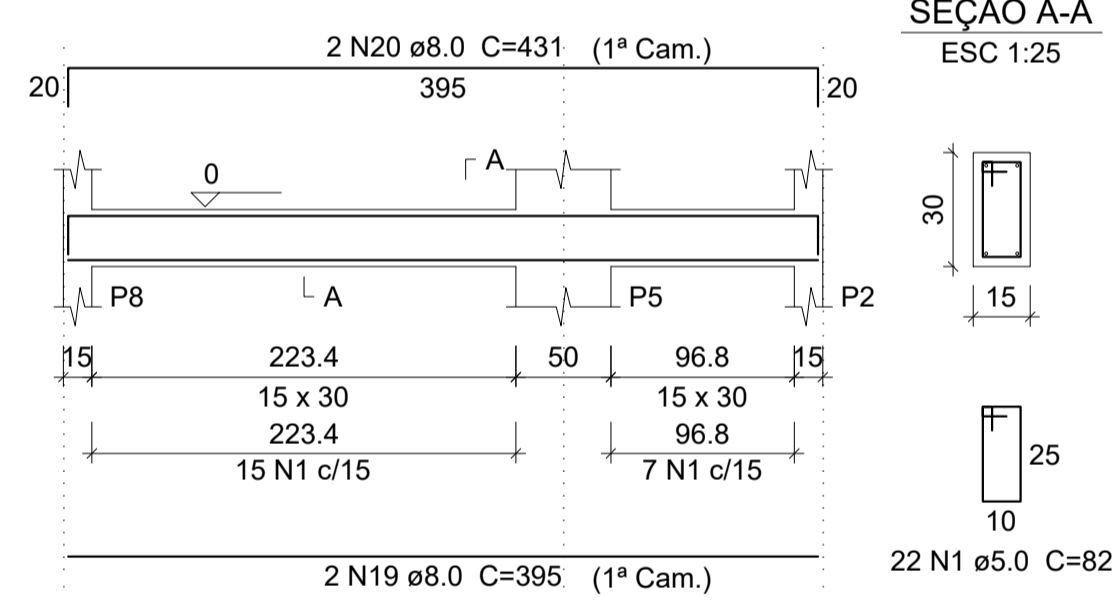
### SEÇÃO A-A

ESC 1:25



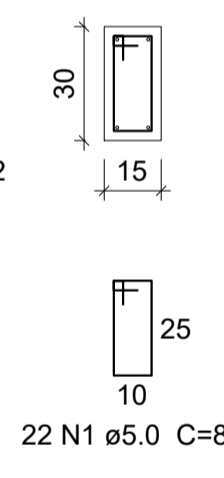
### VB11

ESC 1:50



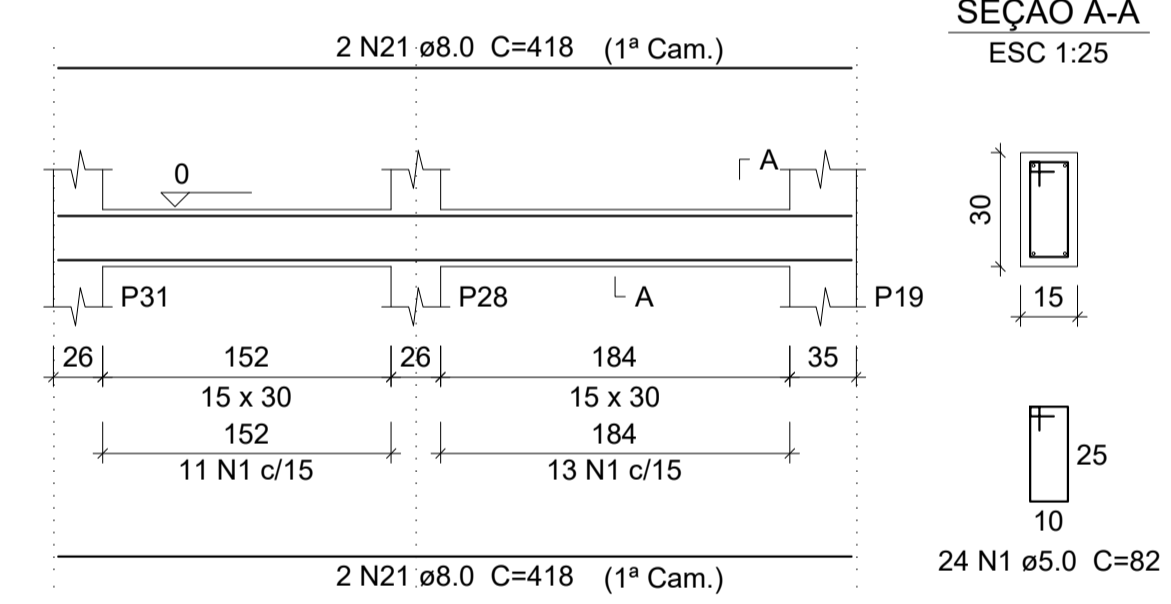
### SEÇÃO A-A

ESC 1:25



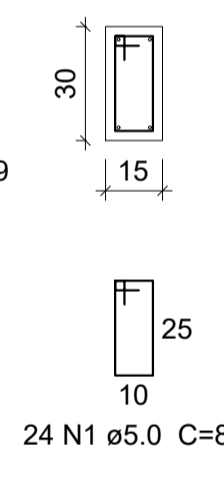
### VB12

ESC 1:50



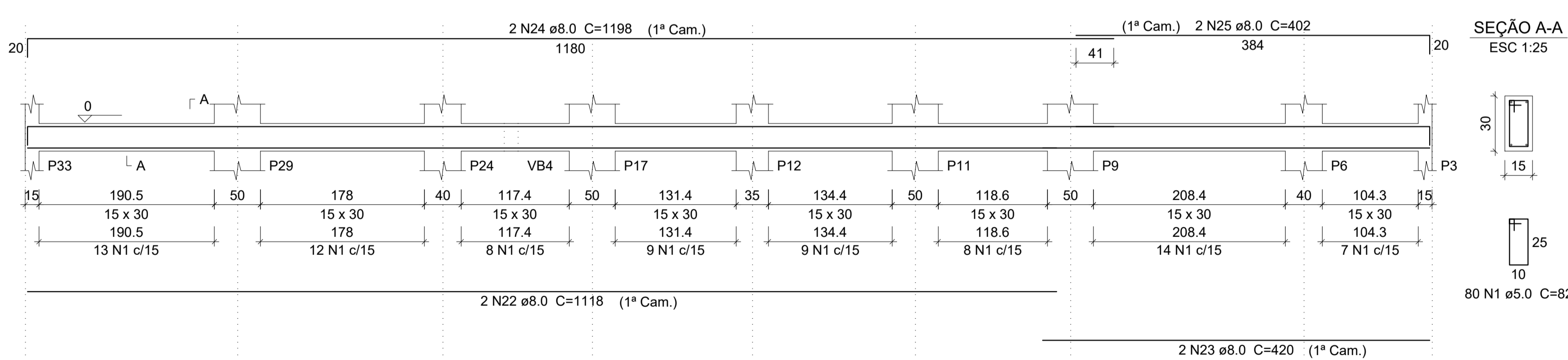
### SEÇÃO A-A

ESC 1:25



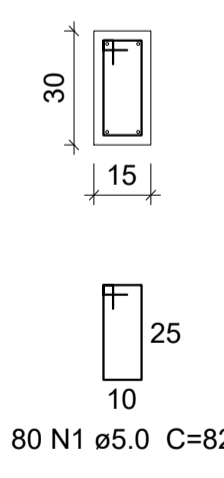
### VB13

ESC 1:50



### SEÇÃO A-A

ESC 1:25



### Relação do aço

AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	408	82	33456
CA50	2	8.0	2	172	344
	3	8.0	2	184	368
	4	8.0	2	207	414
	5	8.0	4	780	3120
	6	8.0	1	408	408
	7	8.0	4	266	1064
	8	8.0	2	294	588
	9	8.0	2	360	720
	10	8.0	2	378	756
	11	8.0	2	276	552
	12	8.0	2	557	1114
	13	8.0	2	567	1134
	14	8.0	2	915	1830
	15	8.0	2	204	408
	16	8.0	2	232	464
	17	8.0	2	626	1252
	18	8.0	2	641	1282
	19	8.0	2	395	790
	20	8.0	2	431	862
	21	8.0	4	418	1672
	22	8.0	2	1118	2236
	23	8.0	2	420	840
	24	8.0	2	1198	2396
	25	8.0	2	402	804
	26	10.0	2	934	1868
	27	12.5	2	679	1358
	28	16.0	1	187	187
	29	16.0	1	245	245
	30	16.0	2	877	1754

### Resumo do aço

AÇO	DIAM	C.TOTAL (m)	PESO + 10 % (kg)
CA50	8.0	254.2	110.3
	10.0	18.7	12.7
	12.5	13.6	14.4
	16.0	21.9	38
CA60	5.0	334.6	56.7
<b>PESO TOTAL</b>			
CA50	175.3		
CA60	56.7		

Vol. de concreto total (C-25) = 3.32 m<sup>3</sup>  
Área de forma total = 55.38 m<sup>2</sup>

### PROJETO ESTRUTURAL

OBRA: RESIDÊNCIA EM ALVENARIA

CLIENTE: SILAS AUGUSTO BULGARELLI DE FREITAS

ENDEREÇO: RUA ARACÊ, nº 24 FAZENDA SÃO JOSÉ - SANTANA DE PARNAÍBA - SP

RESPONSÁVEL TÉCNICO: GUSTAVO H. S. BELANSON CREA-PR 193709/D

CONTEÚDO: VIGAS DE BALDRAME

ESCALA: 1:50 DATA: 31/01/2022 PRANCHA: 01/01  
UNIDADE: cm ARQUIVO: DWG REVISÃO: 00

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