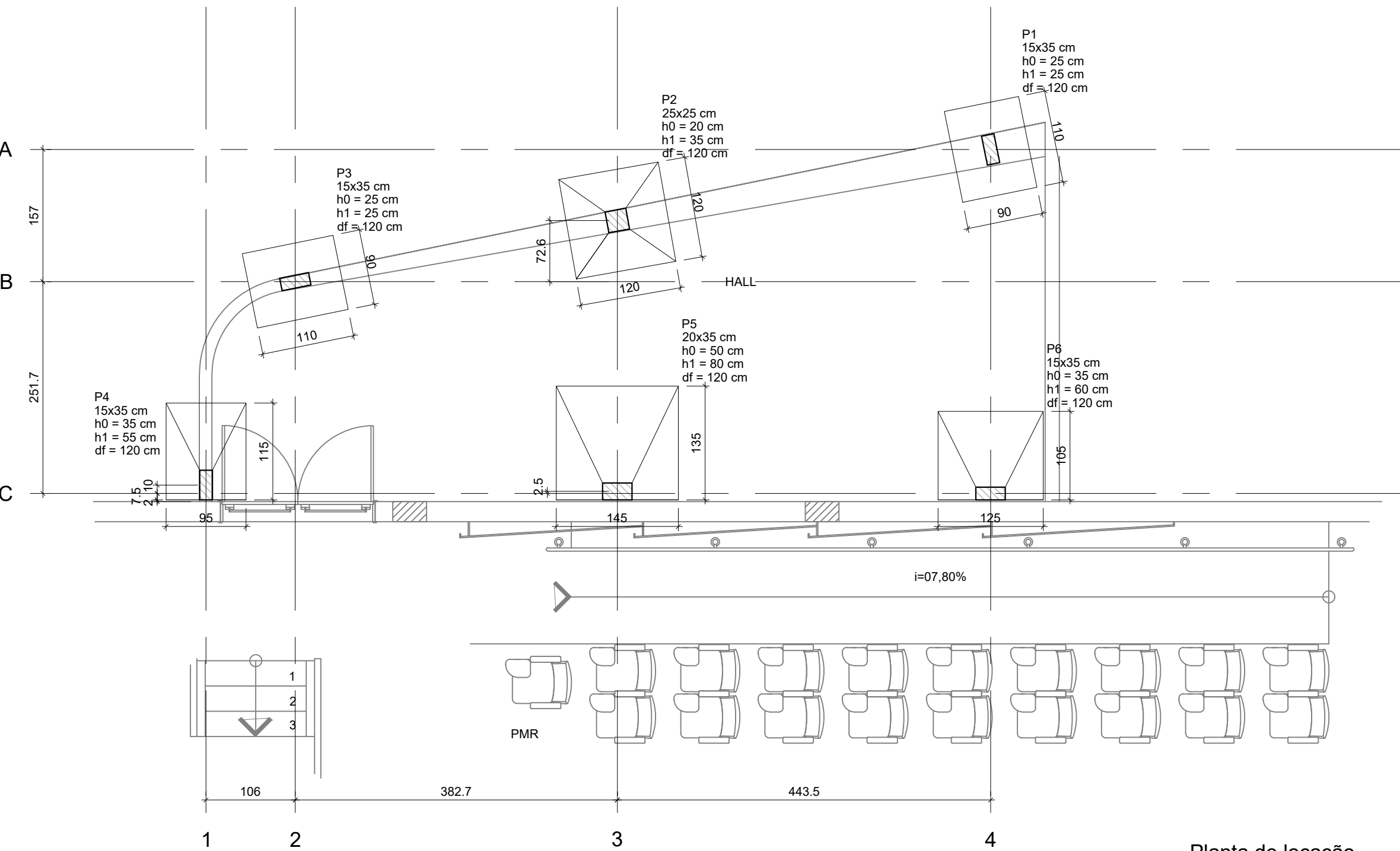


NOTAS:

- 01- SÓ RETIRAR O ESCORAMENTO DAS LAJES APÓS 28 DIAS DA CONCRETAGEM;
- 02- A ESPESSURA MÁXIMA DO REVESTIMENTO DAS PAREDES INCLUINDO CHAPISCO, REBOCO, PINTURA OU CERÂMICA, SERÁ 2,5cm PARA AMBAS AS FACES;
- 03- SALVO CONTRÁRIO, TODAS AS COTAS ESTÃO EM CENTÍMETROS;
- 04- TENSÃO MÍNIMA DE RUPTURA DOS TIJOLOS: 6 MPa;
- 05- OS RASGOS NAS PAREDES SÓ SERÃO PERMITIDOS SUPERFICIAIS E NA DIREÇÃO VERTICAL;
- 06- UTILIZAR "COCADAS" EM TODOS OS ELEMENTOS ESTRUTURAIS;
- 07- ALVENARIAS COM JUNTAS EM ARGAMASSA NA VERTICAL E NA HORIZONTAL COM ESPESSURA MÁXIMA DE 12mm;
- 08- UTILIZAR "CABELO" NAS LIGAÇÕES ENTRE PILARES E ALVENARIA;
- 09- TODAS AS PORTAS DEVEREM POSSUIR VERGAS, E TODAS AS JANELAS DEVEREM POSSUIR VERGAS E CONTRAVERGAS, E TODAS AS ALVENARIAS QUE TIVEREM ALTURA SUPERIOR A 3,00m DEVEREM POSSUIR UMA VERGA LONGITUDINAL CONTÍNUA COMO AMARRAÇÃO;
- VERGAS - 10x20  
CONTRAVERGAS - 10x20
- 10- NENHUMA VIGA, NERVURA OU FAIXA SERÁ ATINGIDA POR FURAÇÃO SEM CONSULTA PRÉVIA AO CALCULISTA.
- 11- NENHUMA SAPATA SERÁ ASSENTADA NUMA PROFUNDIDADE INFERIOR A 120cm EM RELAÇÃO AO NÍVEL DO TERRENO.
- 12- TODAS AS PAREDES SERÃO REBOCADAS NAS DUAS FACES, INCLUSIVE NAS PARTES ENTERRADAS;
- 13- CONCRETO ESTRUTURAL  $f_{ck} \geq 35 \text{ MPa}$ .
- 14- DEVE-SE FAZER A CURA ÚMIDA INICIAL DO CONCRETO POR SETE DIAS.
- 15- CONSULTAR O PROJETISTA NO CASO DE DOVIDAS.



Planta de localização  
escala 1:50

Características dos materiais	
$f_{ck}$ (kgf/cm <sup>2</sup> )	Ecs (kgf/cm <sup>2</sup> )
350	294029

Dimensão máxima do agregado = 19 mm

Pilares			
Nome	Seção (cm)	Elevação (cm)	Nível (cm)
P1	15x35	0	0
P2	25x25	0	0
P3	15x35	0	0
P4	15x35	0	0
P5	20x35	0	0
P6	15x35	0	0

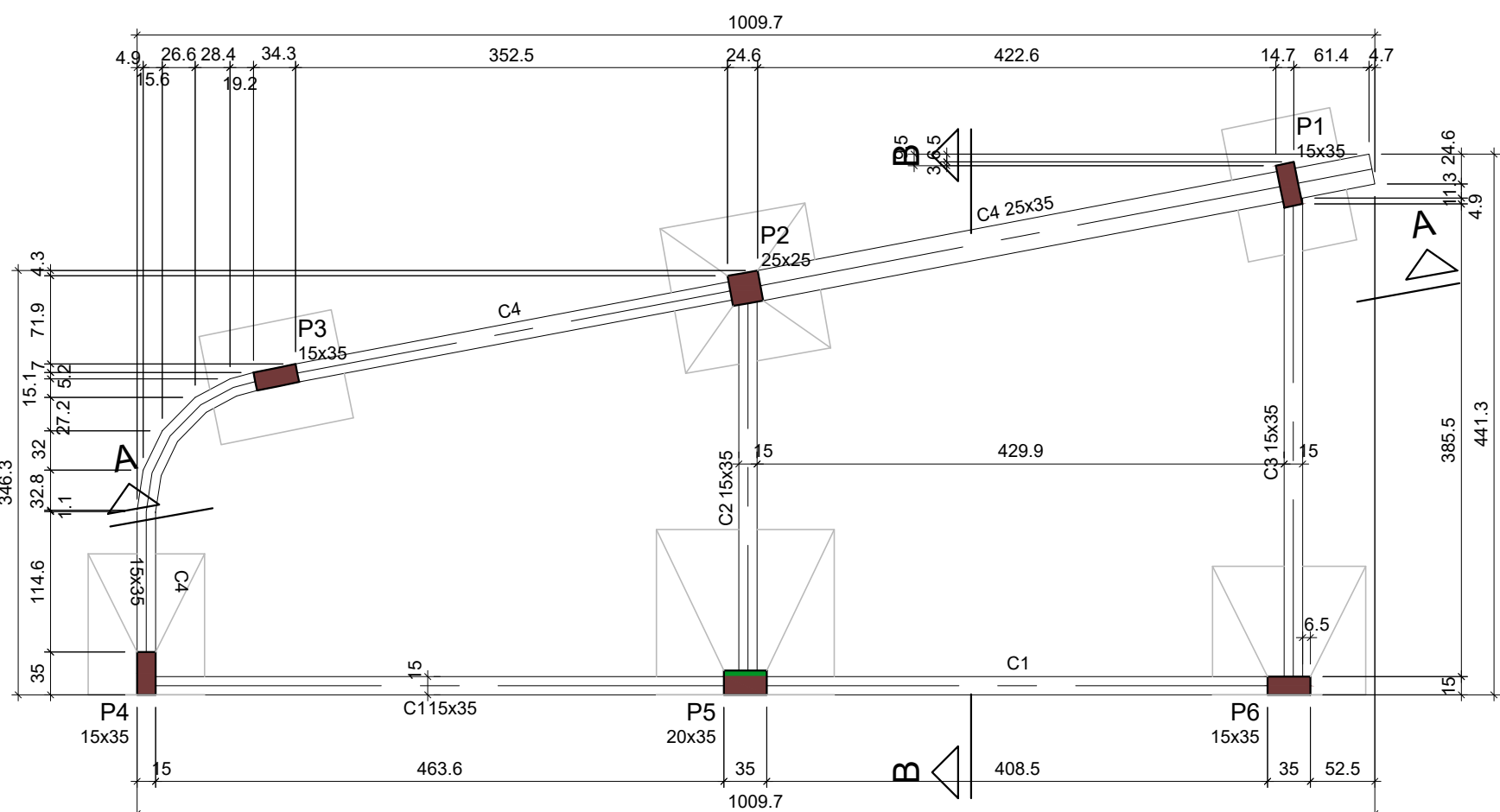
Legenda dos pilares	
	Pilar que passa
	Pilar com mudança de seção

Legenda das vigas e paredes	
	Viga

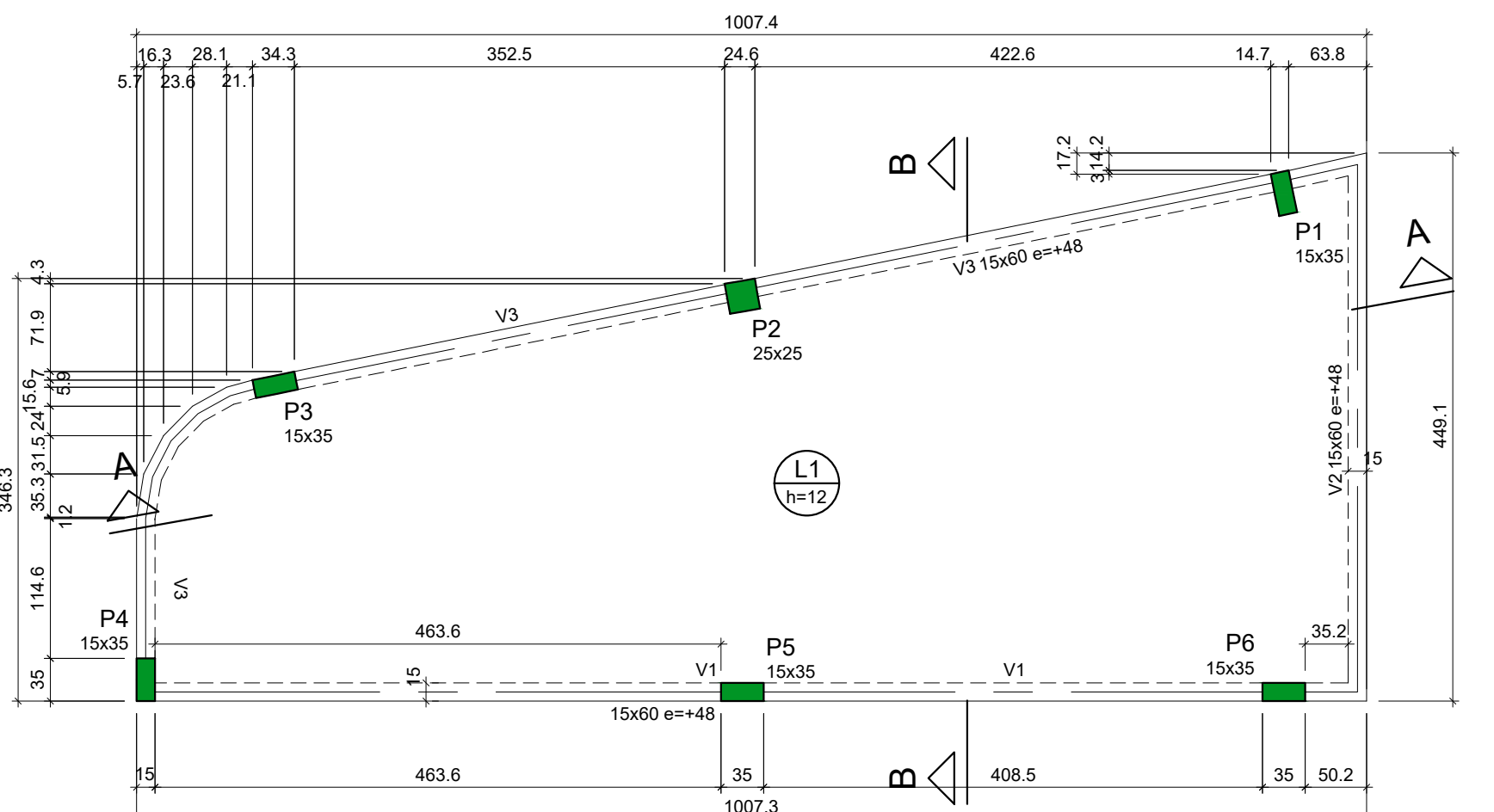
Pilares			
Nome	Seção (cm)	Elevação (cm)	Nível (cm)
P1	15x35	0	363
P2	25x25	0	363
P3	15x35	0	363
P4	15x35	0	363
P5	15x35	0	363
P6	15x35	0	363

Legenda dos pilares	
	Pilar que morre

Legenda das vigas e paredes	
	Viga chata ou invertida

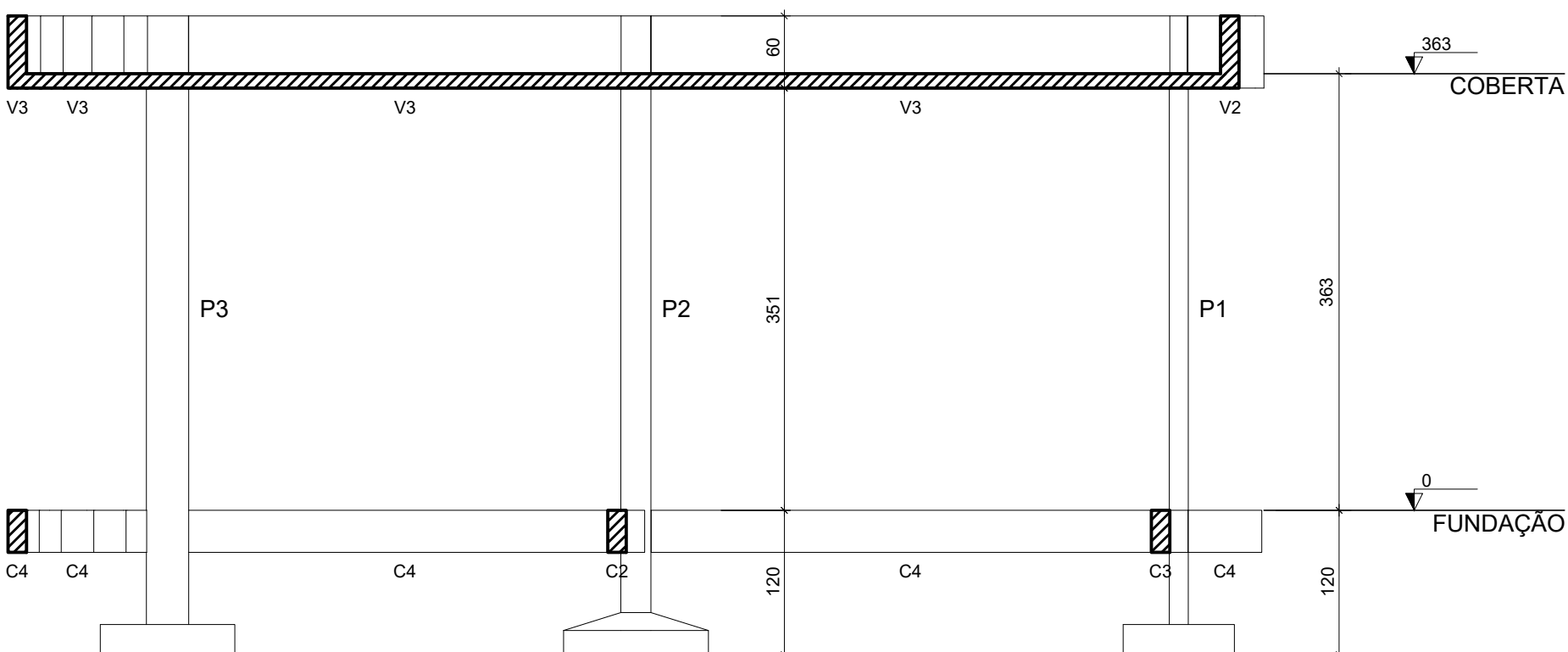
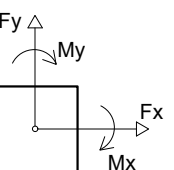
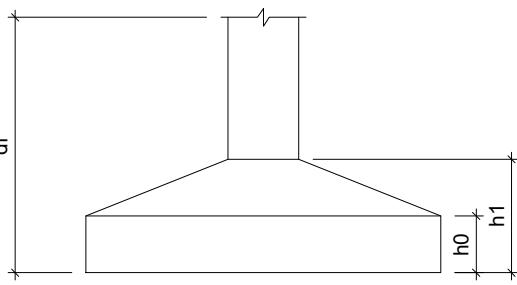


Forma da FUNDAÇÃO (Nível 0)  
escala 1:50

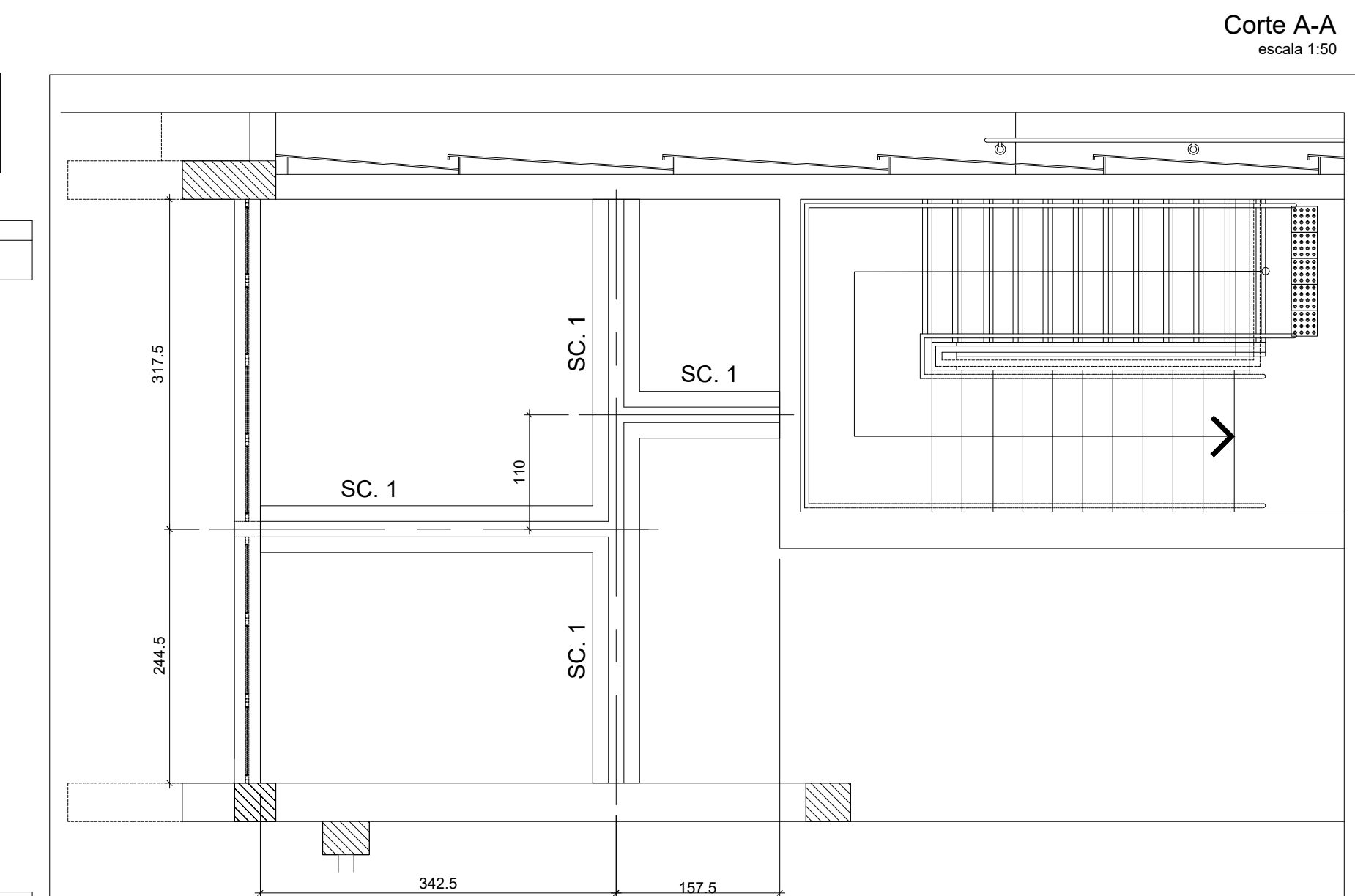


Forma da COBERTA (Nível 363)  
escala 1:50

Pilar		Fundação					
Nome	Seção (cm)	Lado B (cm)	Lado H (cm)	H0 / ha (cm)	h1 / hb (cm)	df (cm)	
P1	15x35	90	110	25	25	120	
P2	25x25	120	120	20	35	120	
P3	15x35	90	110	25	25	120	
P4	15x35	115	95	35	55	120	
P5	20x35	135	145	50	80	120	
P6	15x35	105	125	35	60	120	



Corte B-B  
escala 1:50

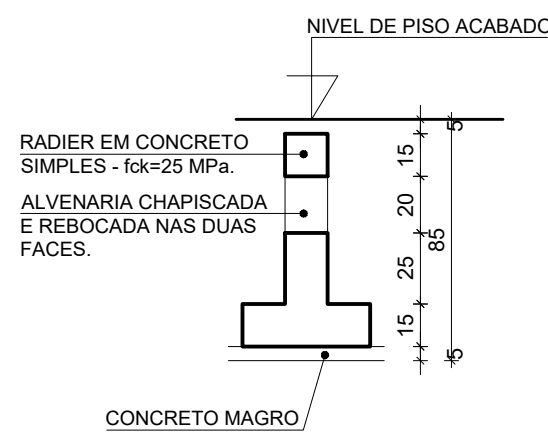
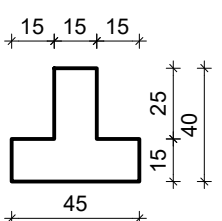


Corte A-A  
escala 1:50

Forma da FUNDAÇÃO - BANHEIRO TÉRREO (Nível 0)  
escala 1:50

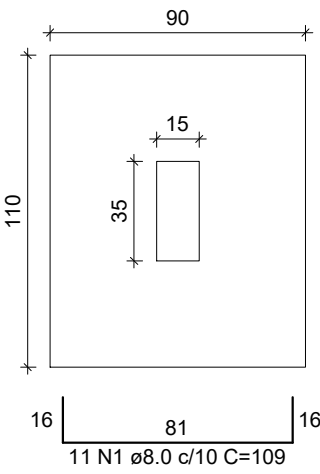
DETALHE DA CAVA DE FUNDAÇÃO

SEÇÃO DA SC. 1

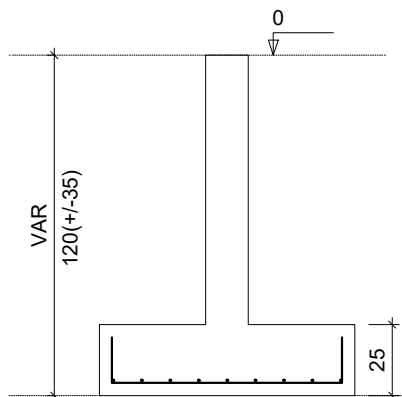


UNIVERSIDADE FEDERAL DE PERNAMBUCO		CAMPUS	
SUPERINTENDÊNCIA DE PROJETOS E OBRAS		JOAQUIM AMAZONAS	
DIRETORIA DE PLANOS E PROJETOS		ÁREA TÉCNICA	
projeto:		ESTRUTURA	
CTG - REFORMA DO AUDITÓRIO NEWTON MAIA		PROJETO EXECUTIVO	
título do documento:		01 / 06	
etapa:		escala	
quatro de áreas:		1:50	
PAVIMENTO TÉRREO		31,78 MP	
TOTAL CONSTRUÇÃO		31,78 MP	
data:		AGOSTO/2023	
responsáveis técnicos:		DIRETORIA	
D.F.O. ALTER SILVEIRA		SUPERINTENDENTE	
ENGENHEIRO - CREA 27.385-D		REITOR	
D.P.P. ISABEL PINTO			
SINFR CARLOS FALCÃO			
U.F.P.E. ALFREDO GOMES			

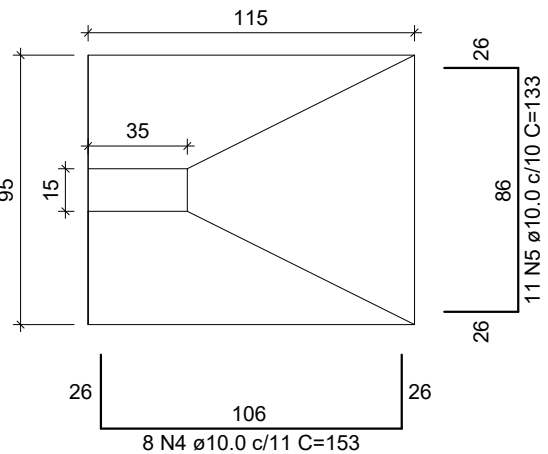
S1=S3  
PLANTA  
ESC 1:25



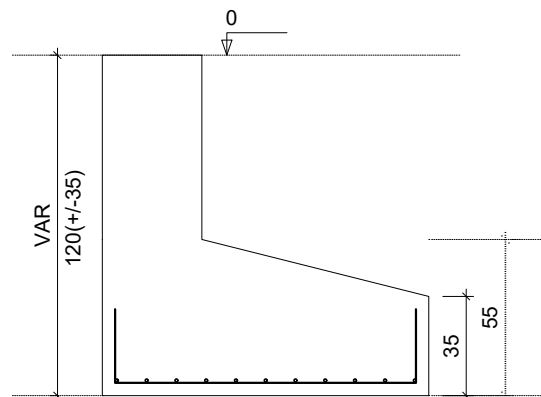
CORTE  
ESC 1:25



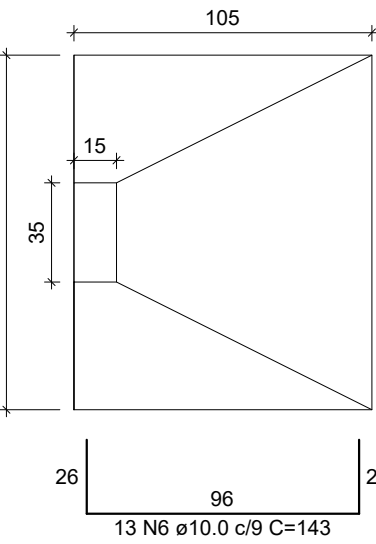
S4  
PLANTA  
ESC 1:25



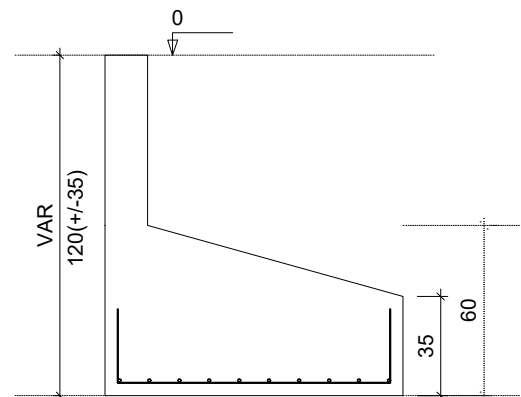
CORTE  
ESC 1:25



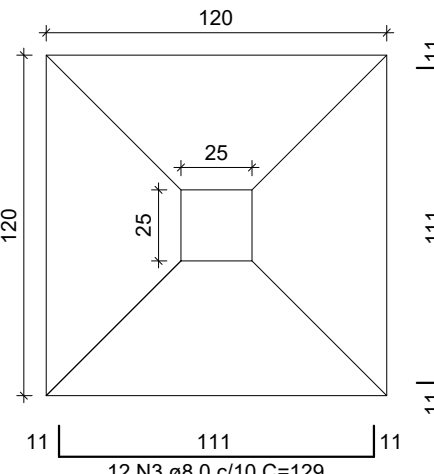
S6  
PLANTA  
ESC 1:25



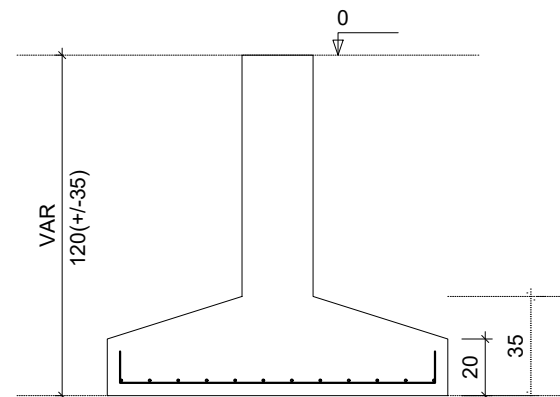
CORTE  
ESC 1:25



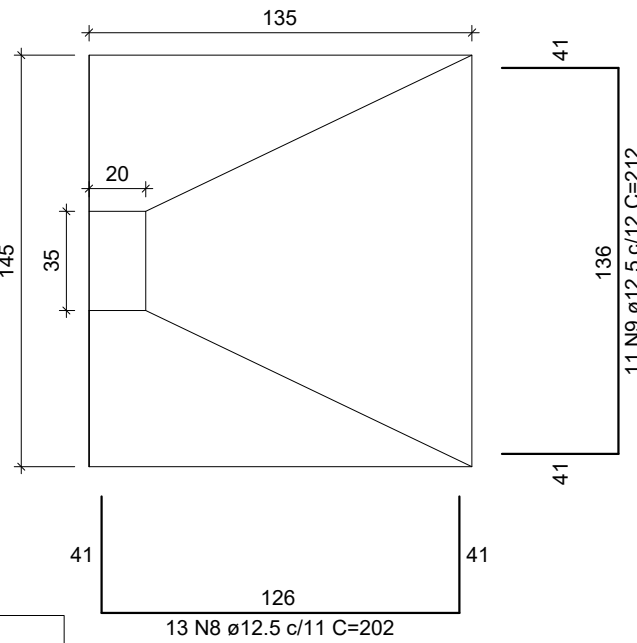
S2  
PLANTA  
ESC 1:25



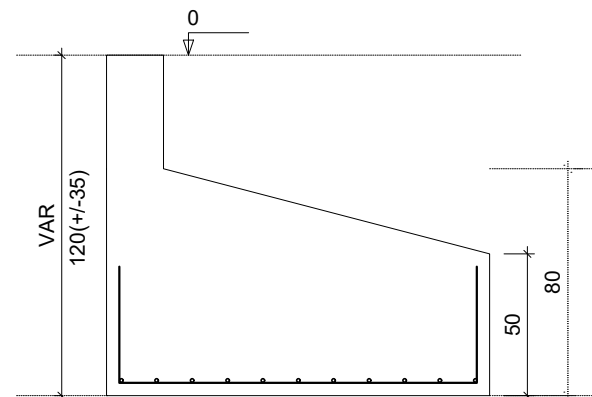
CORTE  
ESC 1:25



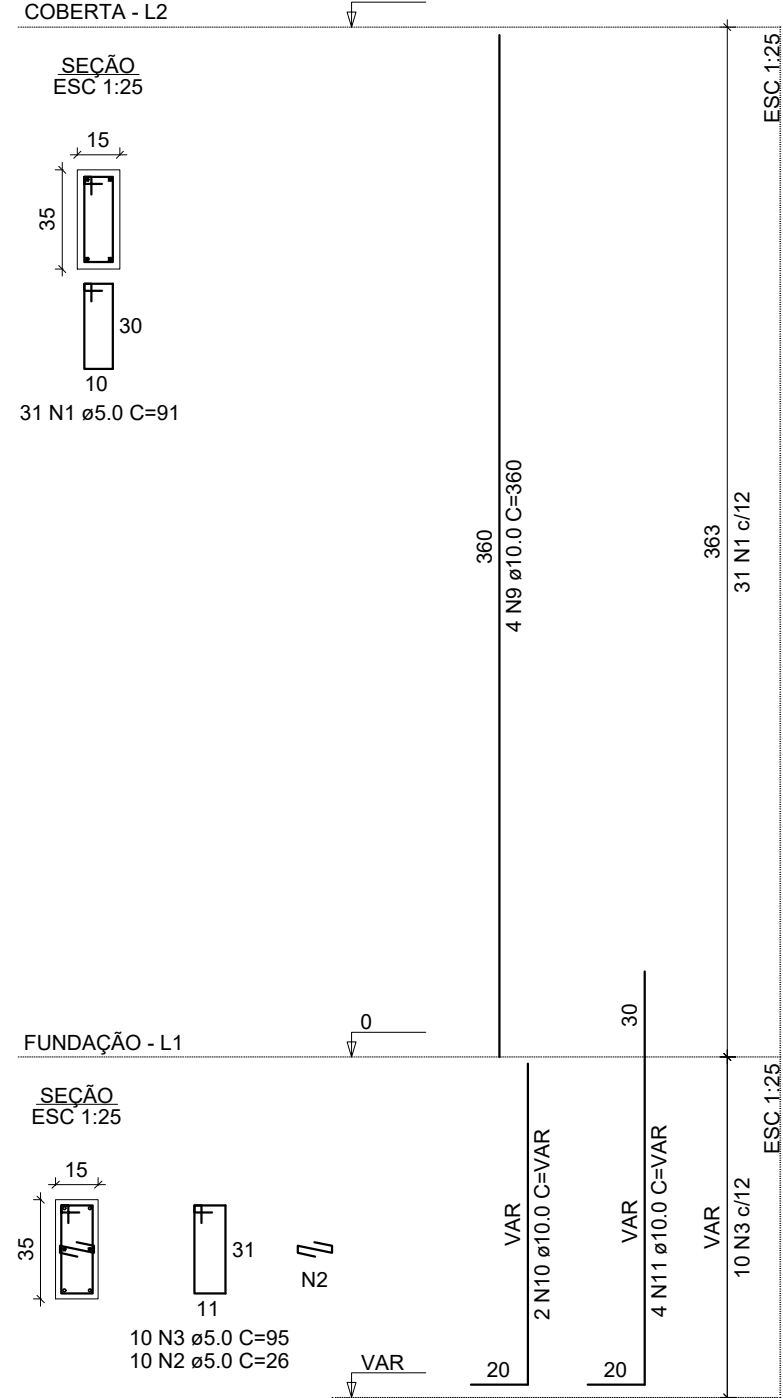
S5  
PLANTA  
ESC 1:25



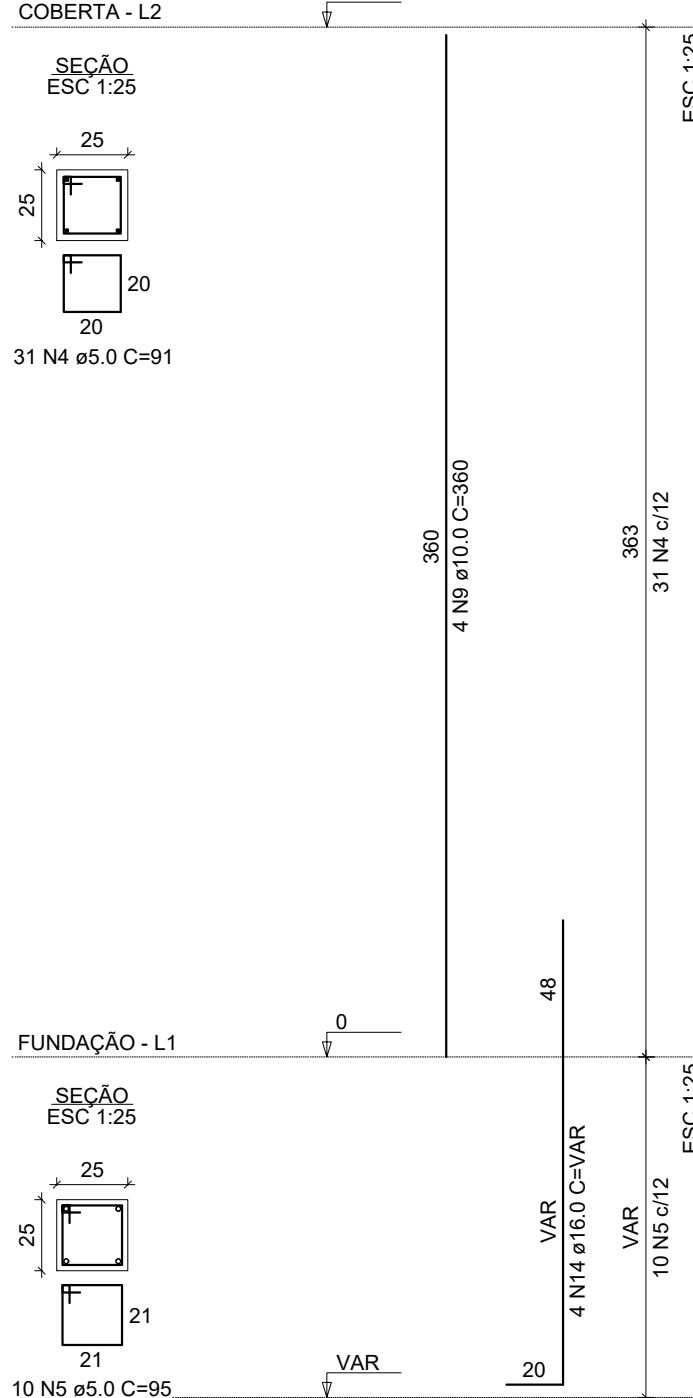
CORTE  
ESC 1:25



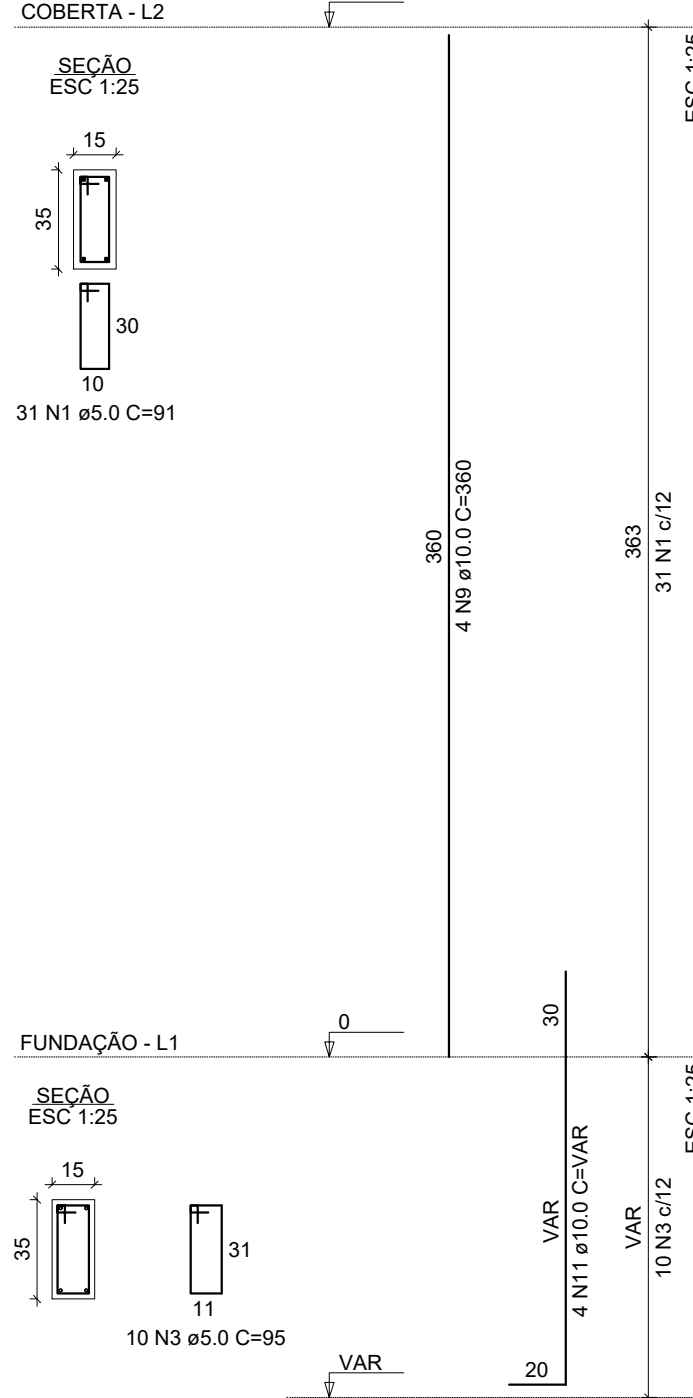
P1



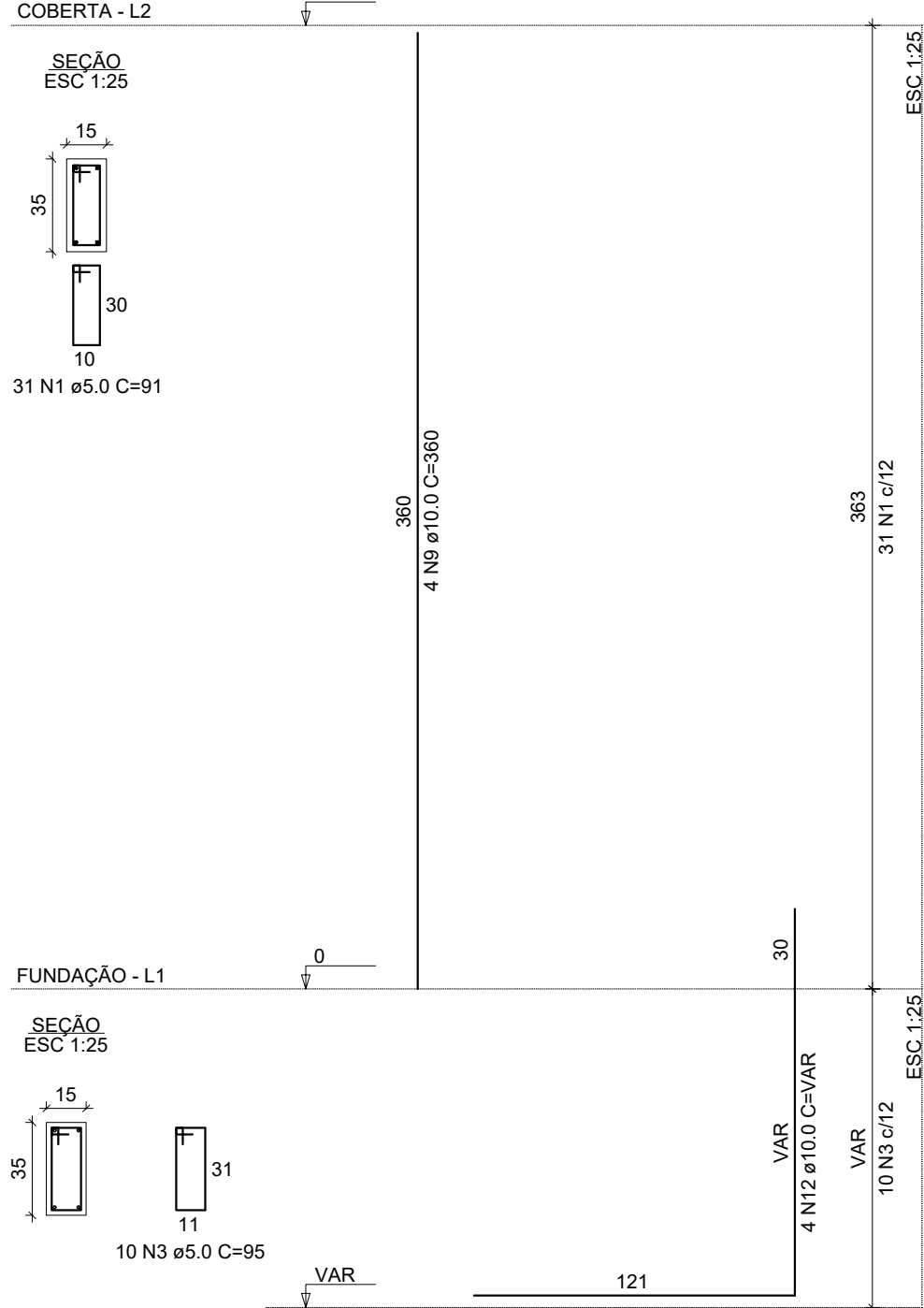
P2



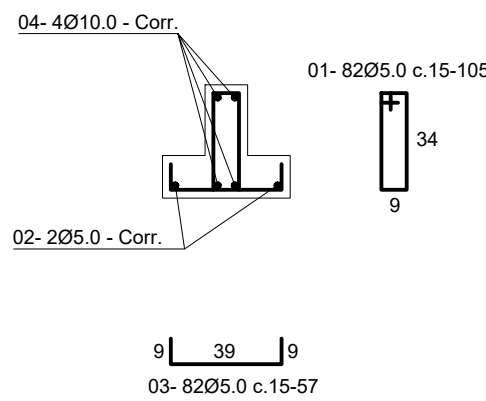
P3



P4



ARMAÇÃO DA SC.1



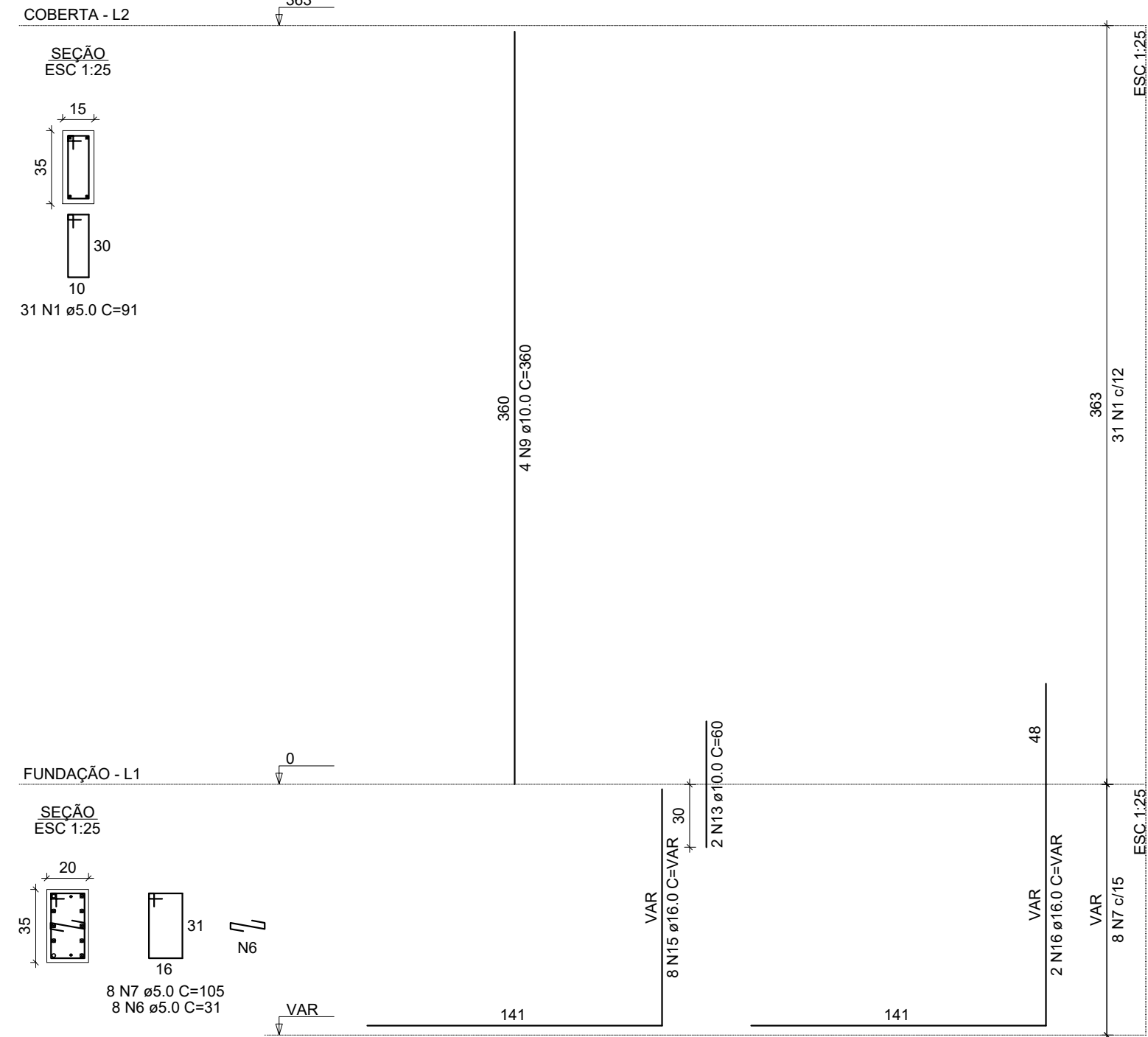
RELAÇÃO DO AÇO

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	82	105	8610
	2	5.0	2	Corr.	2440
	3	5.0	2	Corr.	4674
	4	10.0	4	Corr.	4880

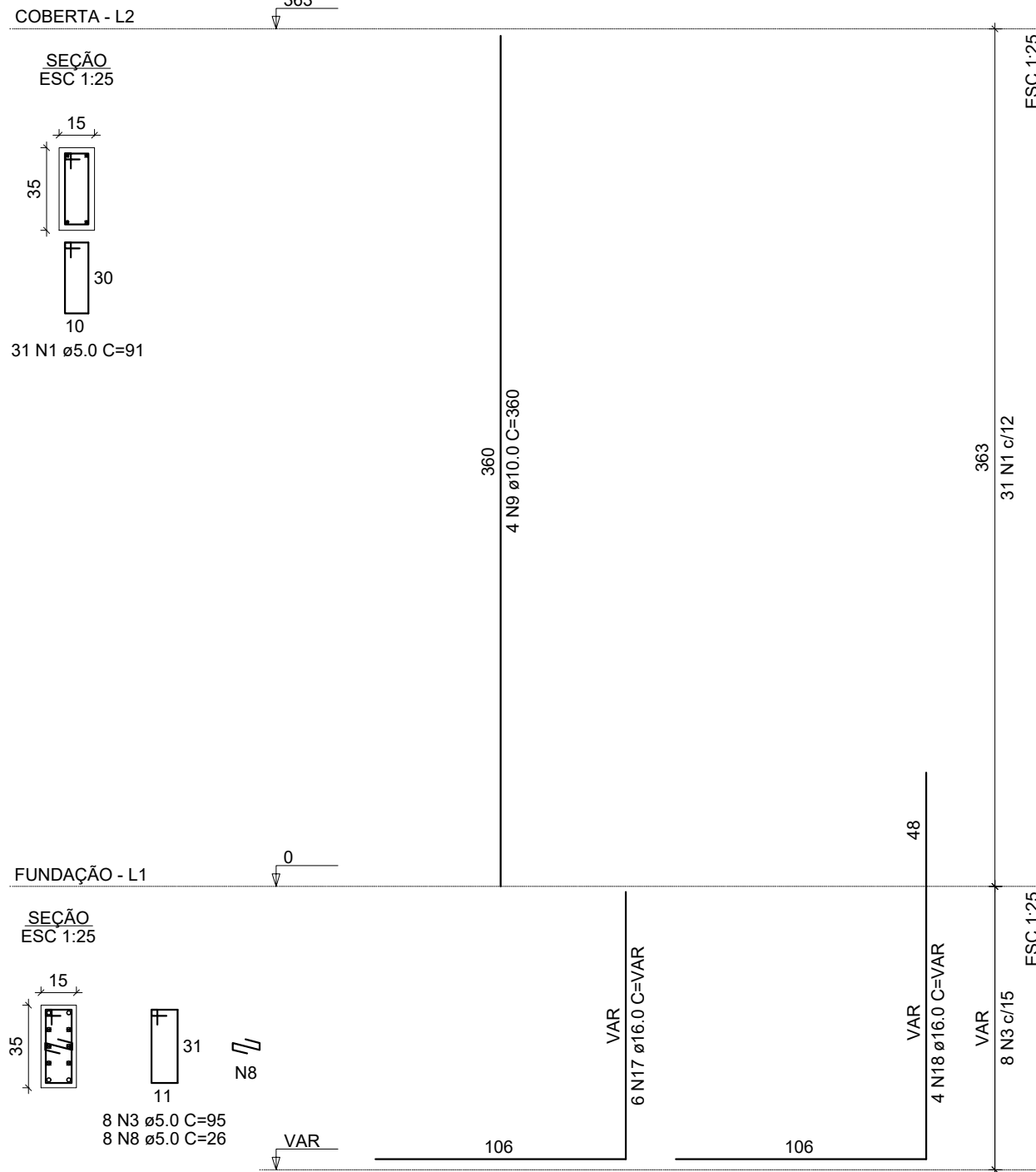
RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	10.0	48.8	30.1
CA60	5.0	157.3	24.3
PESO TOTAL (kg)			
CA50		30.1	
CA60		24.3	

P5



P6



RELAÇÃO DO AÇO

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	155	91	14105
	2	5.0	10	26	260
	3	5.0	38	95	3610
	4	5.0	31	91	2821
CA50	5	5.0	10	95	950
	6	5.0	8	31	248
	7	5.0	8	105	840
	8	5.0	8	26	208
	9	10.0	24	360	8640
	10	10.0	2	VAR	VAR
	11	10.0	8	VAR	VAR
	12	10.0	4	VAR	VAR
	13	10.0	2	60	120
	14	16.0	4	VAR	VAR
	15	16.0	8	VAR	VAR
	16	16.0	2	VAR	VAR
	17	16.0	6	VAR	VAR
	18	16.0	4	VAR	VAR

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	10.0	113.9	70.2
CA60	5.0	56.8	89.6
PESO TOTAL (kg)		230.4	35.5
CA50		159.8	
CA60		35.5	

Volume de concreto (C-35) = 1.59 m³  
Área de forma = 29.10 m²

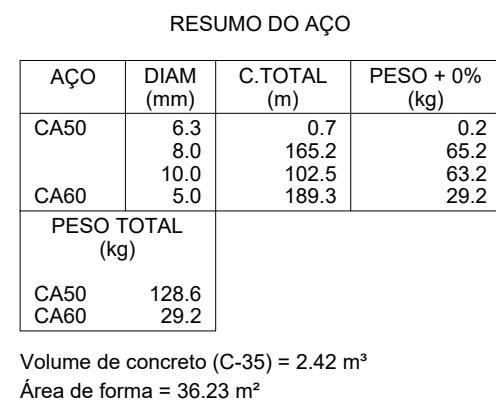
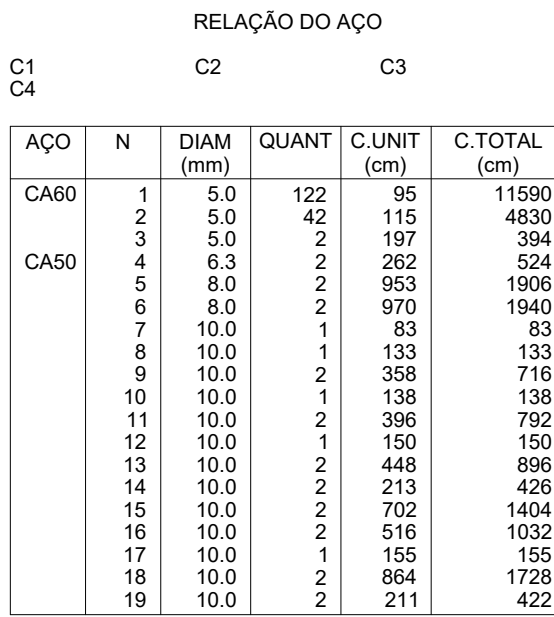
RELAÇÃO DO AÇO

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA50	1	8.0	22	109	2398
	2	8.0	18	129	2322
	3	8.0	24	129	3096
	4	10.0	8	153	1224
	5	10.0	11	133	1463
	6	10.0	13	143	1859
	7	10.0	10	163	1630
	8	12.5	13	202	2626
	9	12.5	11	212	2332

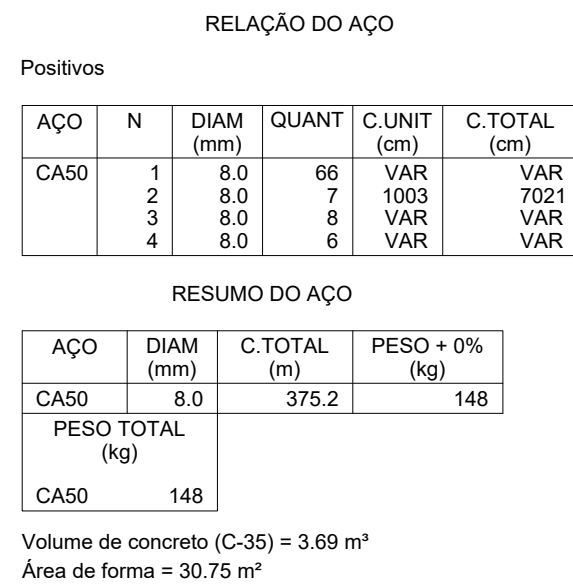
RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	8.0	78.2	30.8
	10.0	61.8	38.1
	12.5	49.6	47.8
PESO TOTAL (kg)			
CA50		116.7	

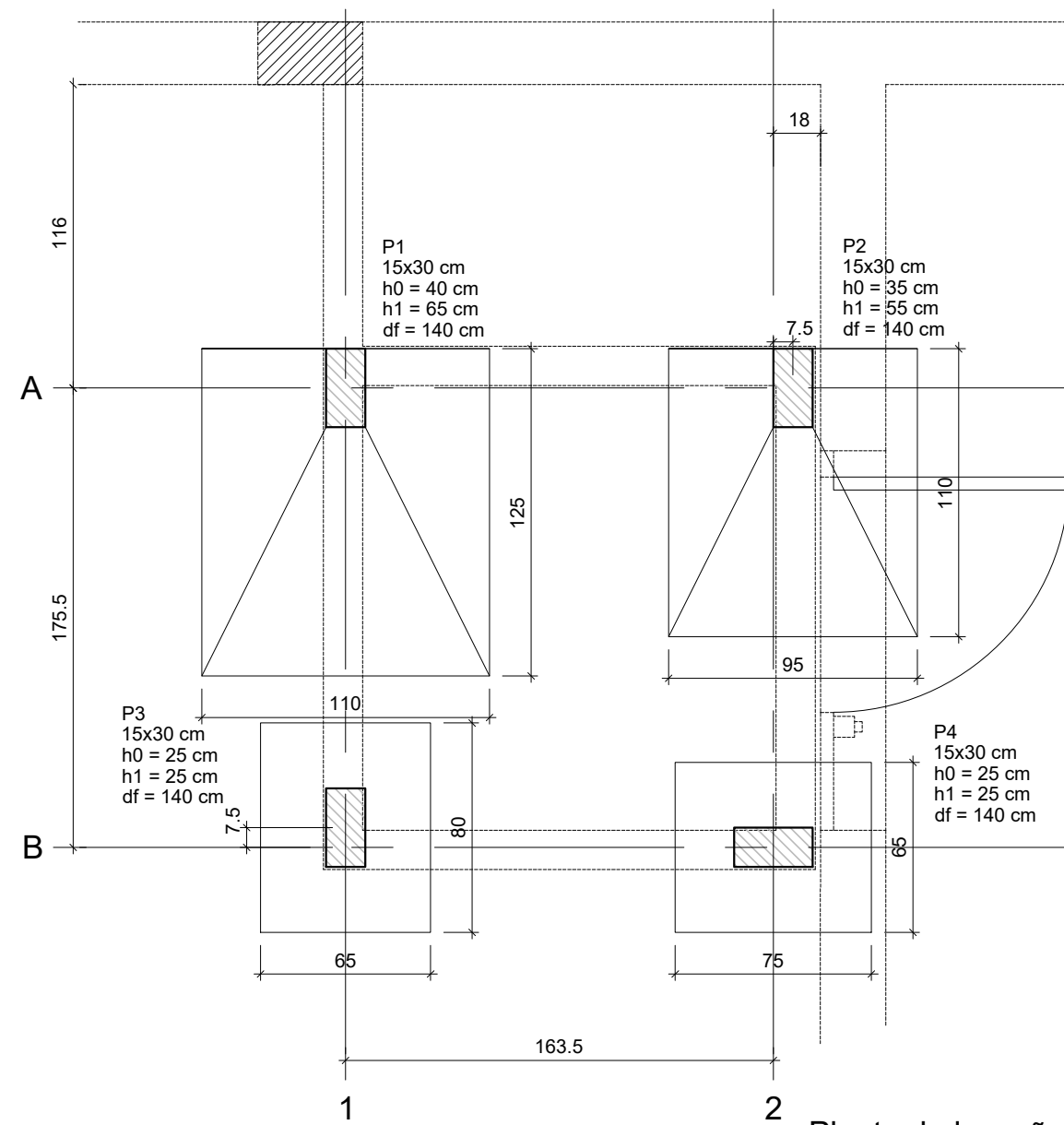
Volume de concreto (C-35) = 3.16 m³  
Área de forma = 9.78 m²



RELACÃO DO AÇO					
V1		V2		V3	
AÇO	N	DIAM (mm)	QUANT	C.UNIT (mm)	C.TOTAL (mm)
CA60	1	5,0	123	145	17835
	2	5,0	2	264	528
CA50	3	5,0	2	282	564
	4	6,3	1	70	70
	5	8,0	6	1016	6096
	6	8,0	6	456	2736
	7	8,0	6	1200	7200
	8	8,0	6	82	492
	9	10,0	2	1011	2022
	10	10,0	2	115	460
	11	10,0	2	723	1446
	12	10,0	2	453	906
13	10,0	2	115	230	
14	10,0	2	1158	2316	
15	10,0	2	80	160	
16	10,0	2	1129	2258	
17	10,0	2	226	452	

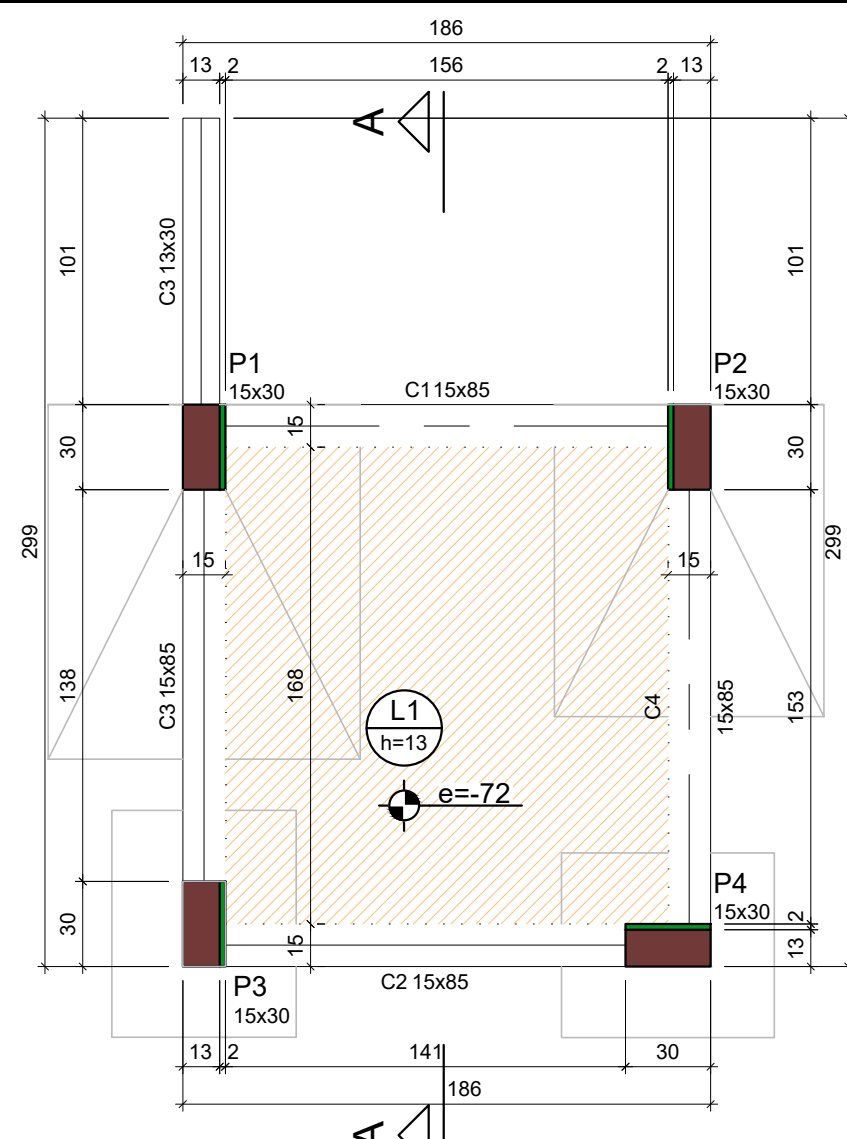
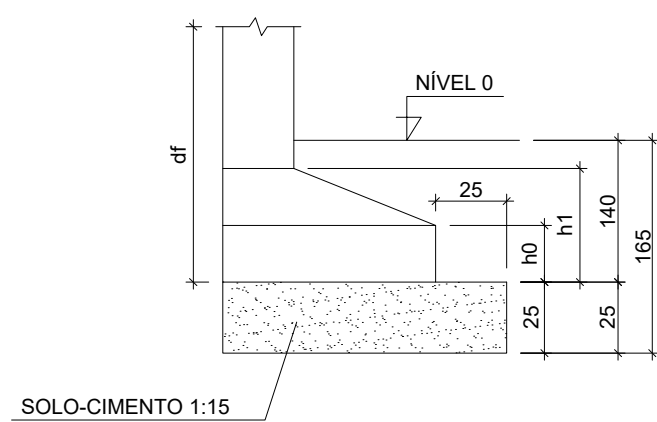




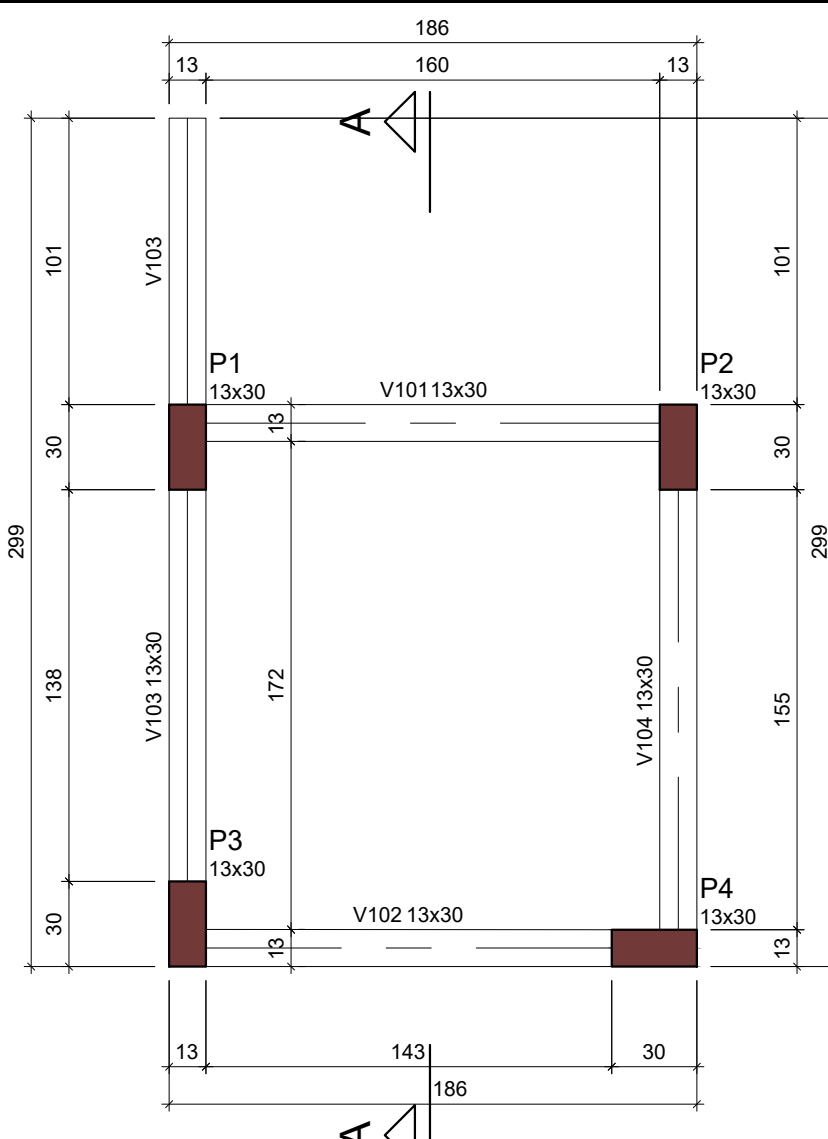


Pilar	Fundação					
	Nome	Seção (cm)	Lado B (cm)	Lado H (cm)	h0 / ha (cm)	h1 / hb (cm)
P1	P1	15x30	125	110	40	65
P2	P2	15x30	110	95	35	55
P3	P3	15x30	65	80	25	25
P4	P4	15x30	65	75	25	25

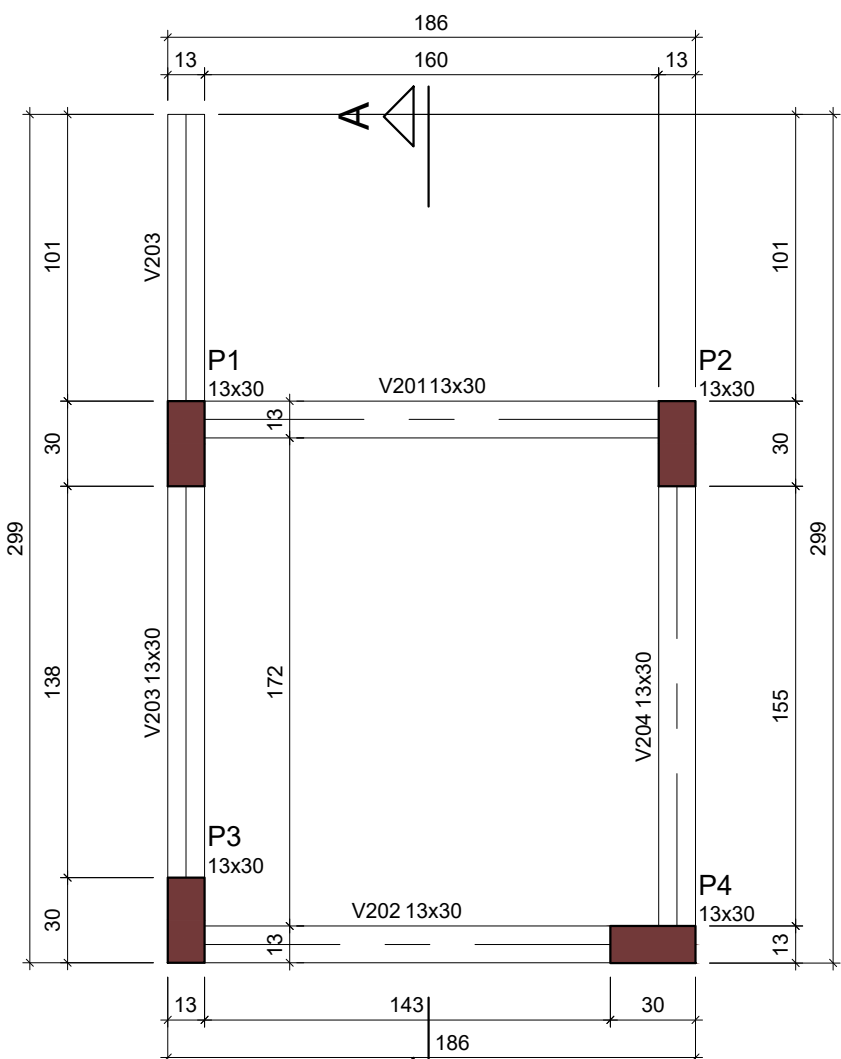
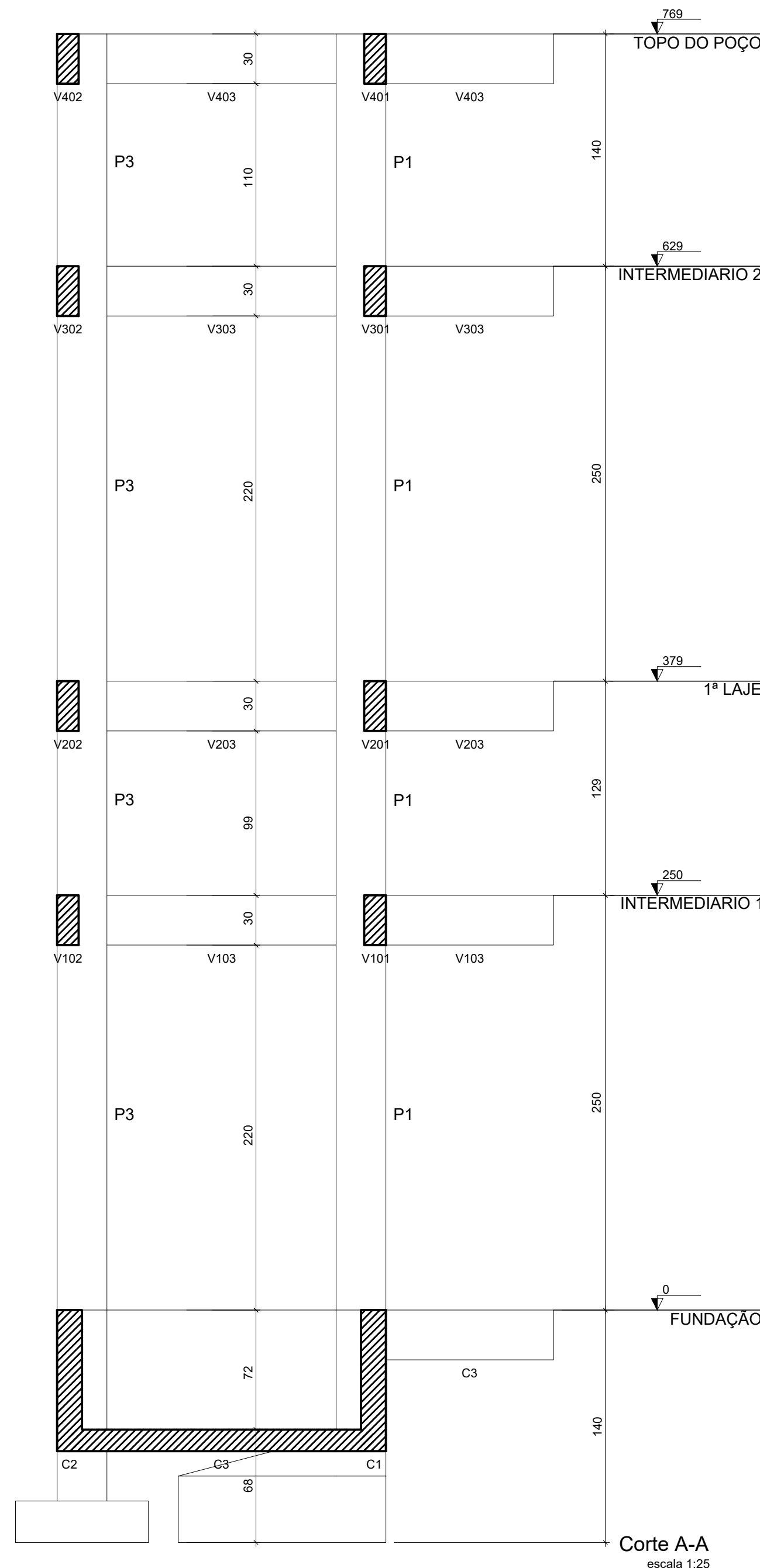
### DETALHE GENÉRICO DA FUNDAÇÃO



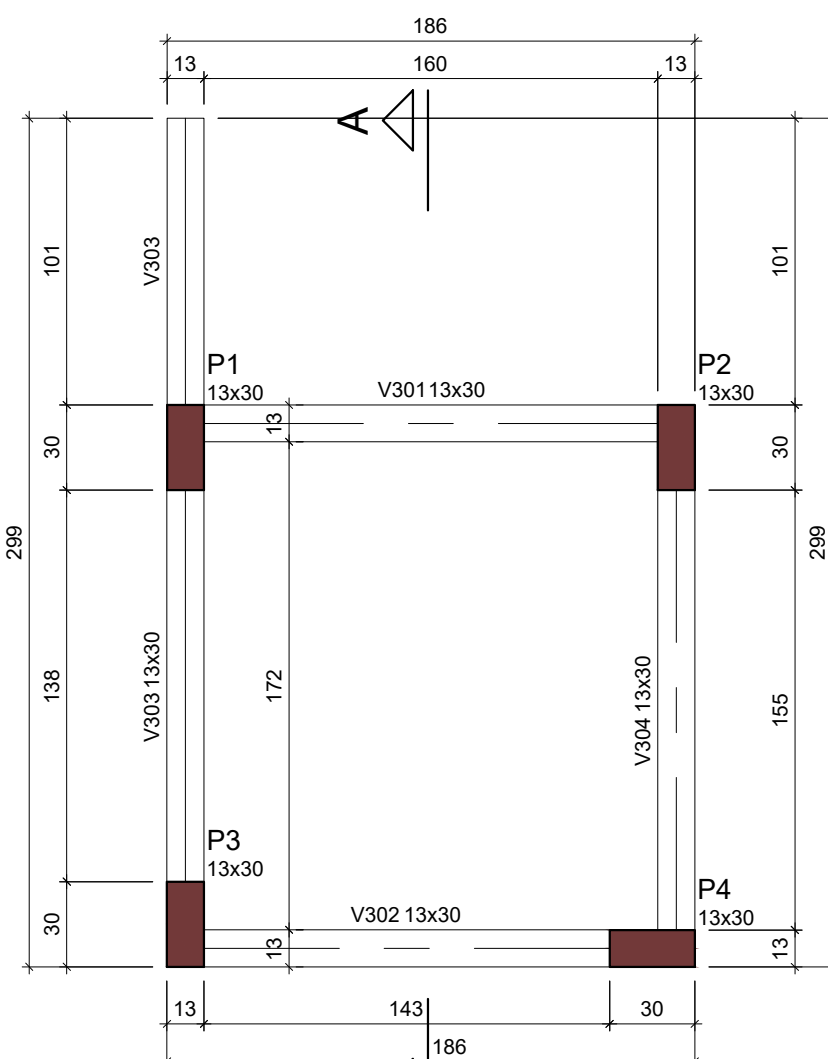
Forma da FUNDAÇÃO (Nível 0)  
escala 1:25



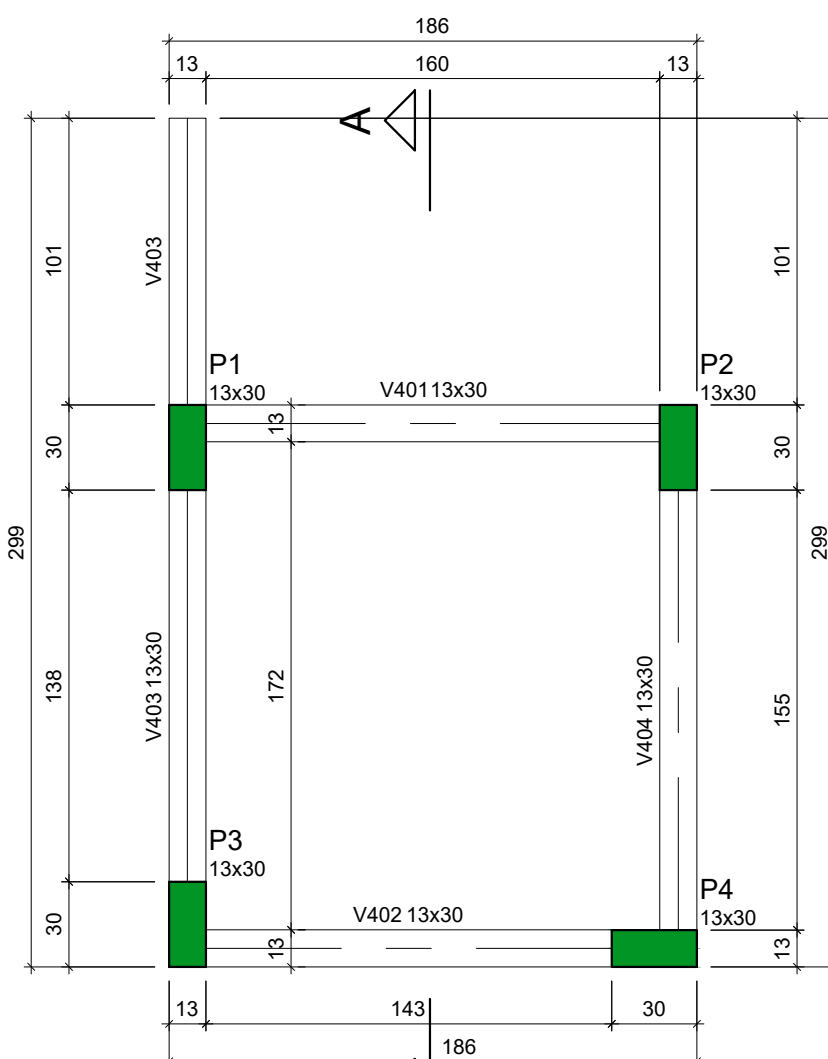
Forma do INTERMEDIÁRIO 1 (Nível 250)  
escala 1:25



Forma da 1ª LAJE (Nível 379)  
escala 1:25



Forma do INTERMEDIÁRIO 2 (Nível 629)  
escala 1:25



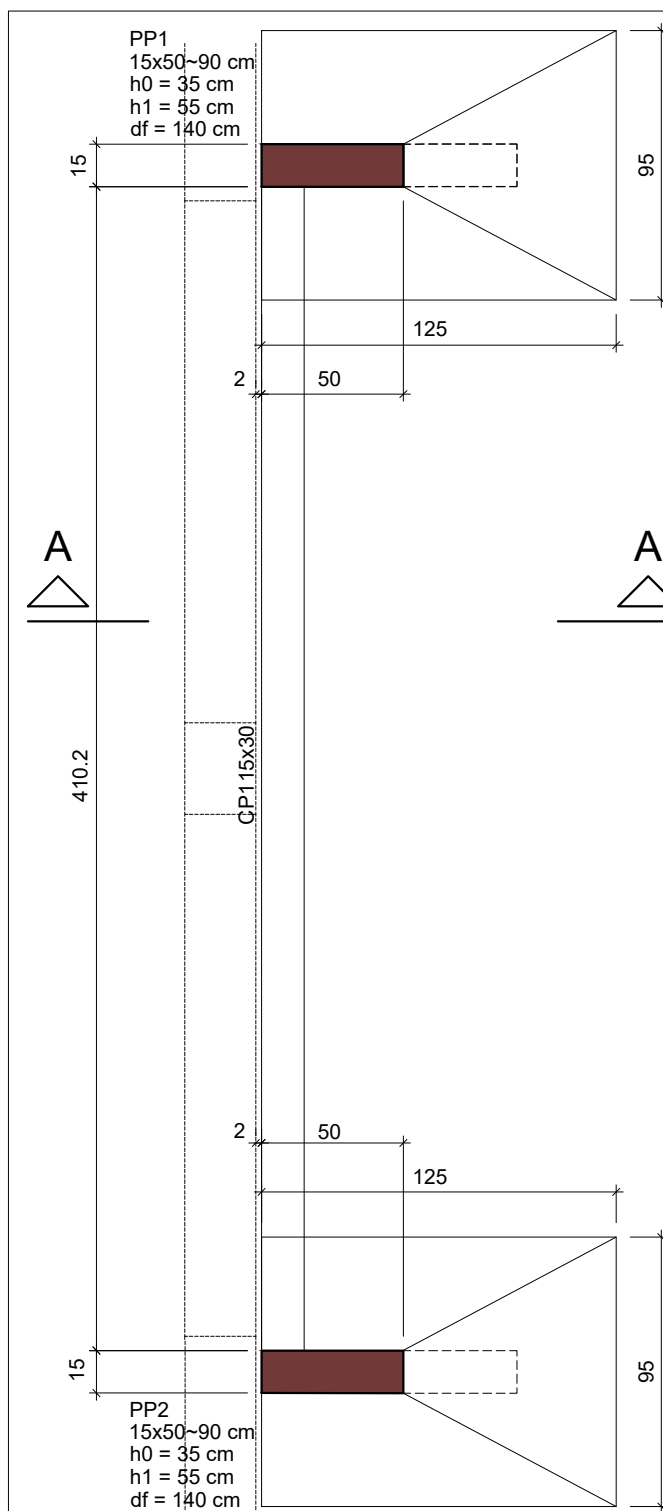
Forma do TOPO DO POÇO (Nível 769)  
escala 1:25

Características dos materiais	
fck	Ecs
350	234029

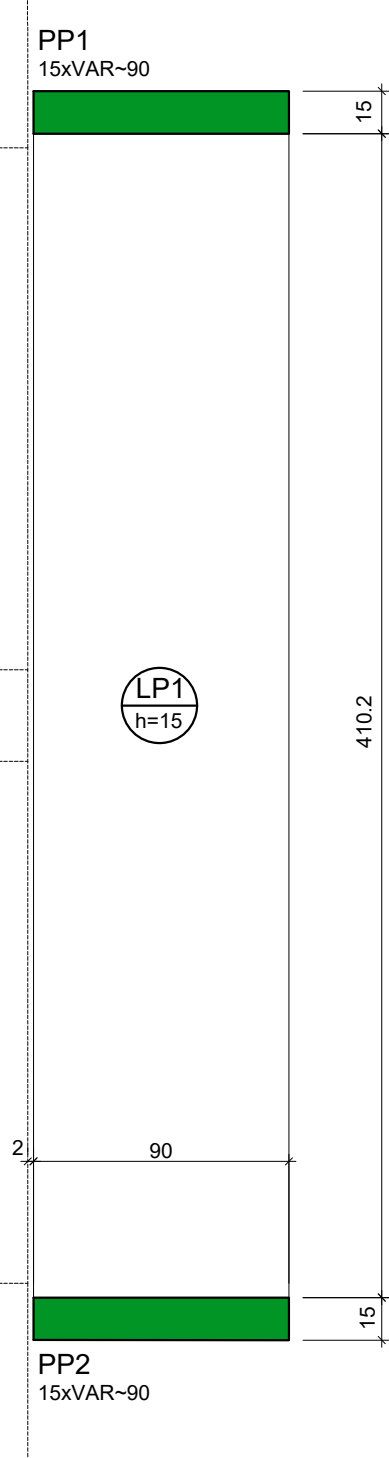
Dimensão máxima do agregado = 19 mm

Legenda dos pilares	
	Pilar com mudança de seção
	Pilar que passa
	Pilar que morre

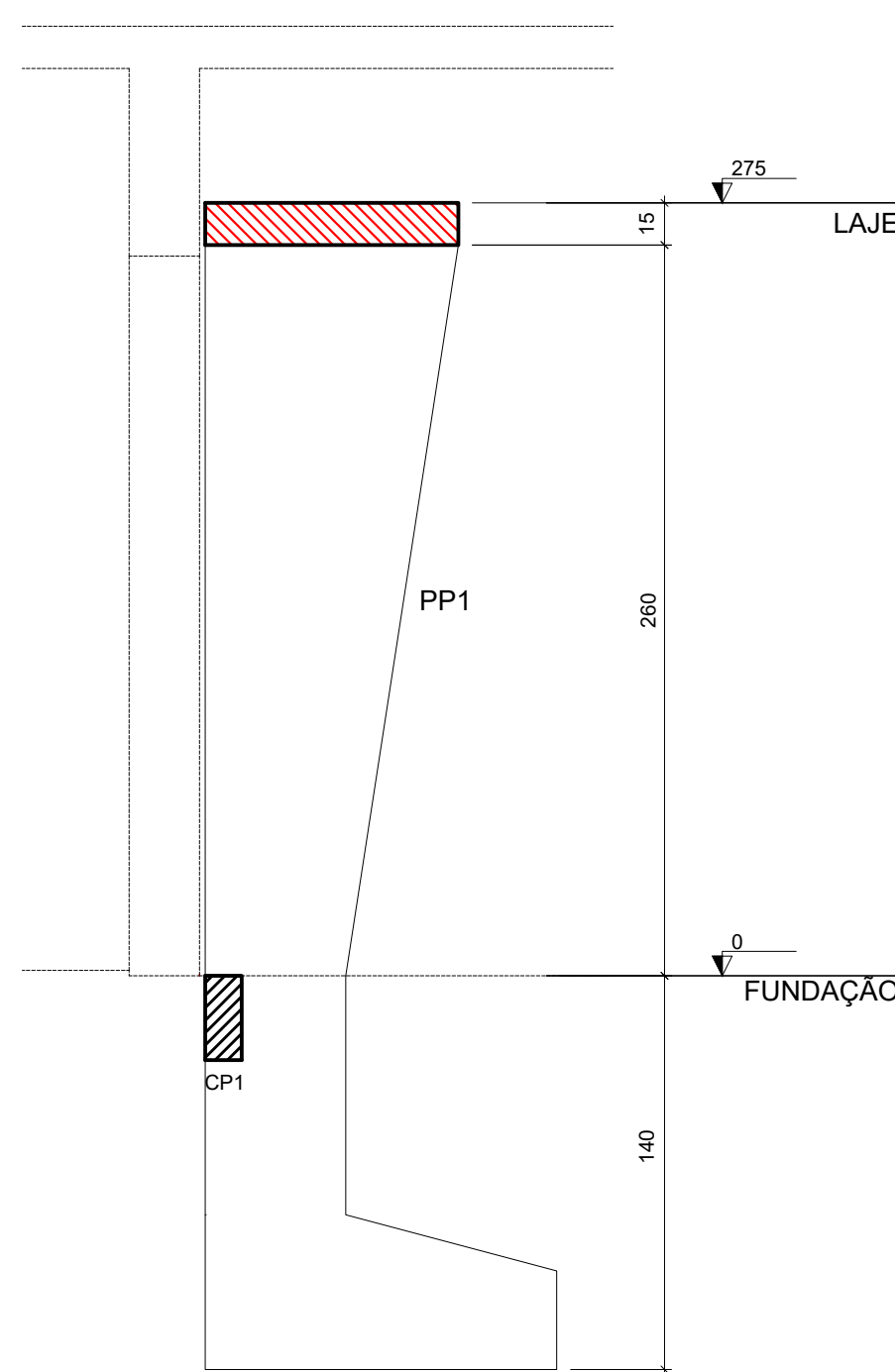
Legenda das vigas e paredes	
	Viga



Forma da FUNDAÇÃO (Nível 0)  
escala 1:25



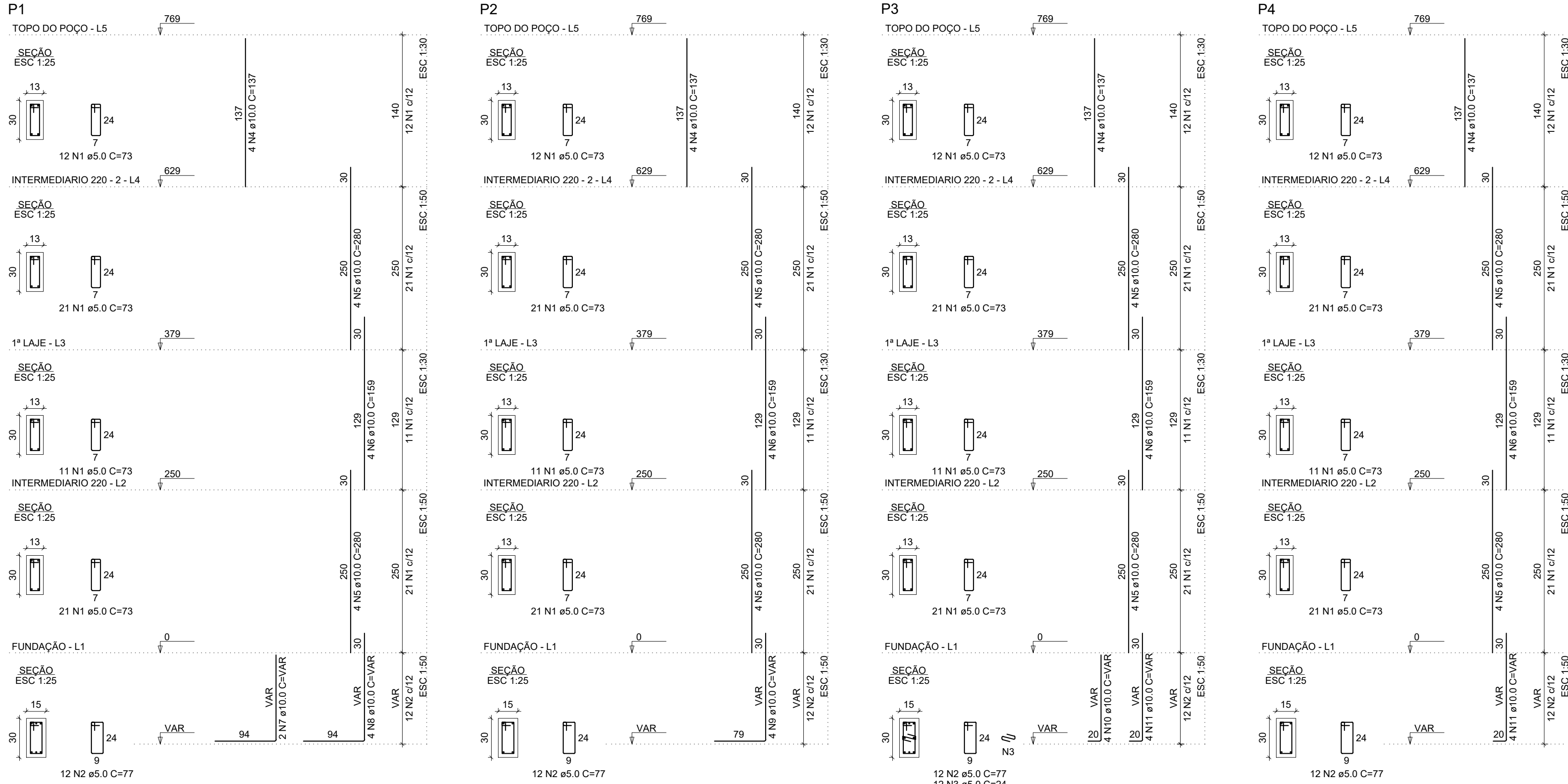
Forma da LAJE (Nível 275)  
escala 1:25



Corte A-A  
escala 1:25

### NOTAS:

- 01- Sã retirar o escoramento das lajes após 28 dias da concretagem;
- 02- UTILIZAR "COCADAS" EM TODOS OS ELEMENTOS ESTRUTURAIS;
- 03- NENHUMA VIGA, NERVURA, FAIXA OU PILAR SERÁ Atingida POR FURAÇÃO SEM CONSULTA PRÉVIA AD CALCULISTA.
- 04- NENHUMA SAPATA SERÁ ASSENTADA NUMA PROFUNDIDADE INFERIOR A 140cm EM RELAÇÃO AO NÍVEL DO TERRENO.
- 05- CONCRETO ESTRUTURAL  $f_{ck} \geq 35MPa$ .
- 06- DEVE-SE FAZER A CURA UMIDA INICIAL DO CONCRETO POR SETE DIAS.
- 07- CONSULTAR O PROJETAISTA NO CASO DE DOVIDAS.



RELAÇÃO DO AÇO

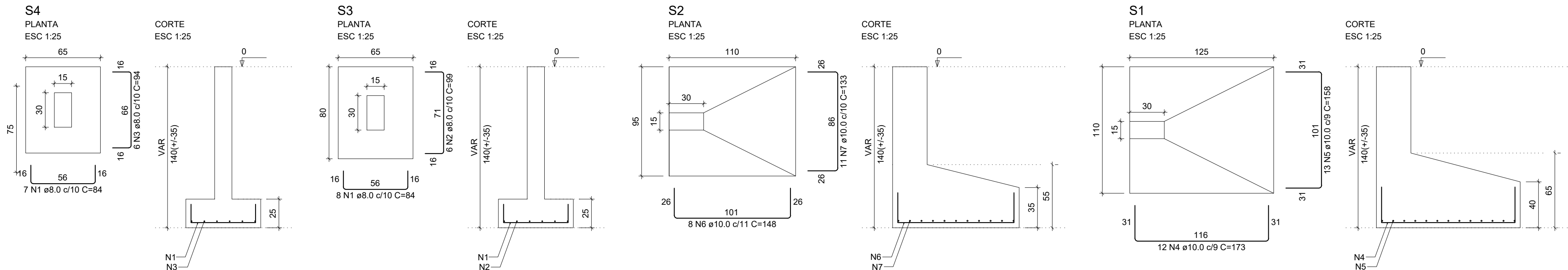
P1-L5	P1-L4	P1-L3
P1-L2	P1-L1	P2-L5
P2-L4	P2-L3	P2-L2
P2-L1	P3-L5	P3-L4
P3-L3	P3-L2	P3-L1
P4-L5	P4-L4	P4-L3
P4-L2	P4-L1	

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	260	73	18980
	2	5.0	48	77	3696
	3	5.0	12	24	288
CA50	4	10.0	16	137	2192
	5	10.0	32	280	8960
	6	10.0	16	159	2544
	7	10.0	2	VAR	VAR
	8	10.0	4	VAR	VAR
	9	10.0	4	VAR	VAR
	10	10.0	4	VAR	VAR
	11	10.0	8	VAR	VAR

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	10.0	182.2	112.3
CA60	5.0	229.6	35.4
PESO TOTAL (kg)			
CA50	112.3		
CA60	35.4		

Volume de concreto (C-35) = 1.38 m³  
Área de forma = 29.96 m²



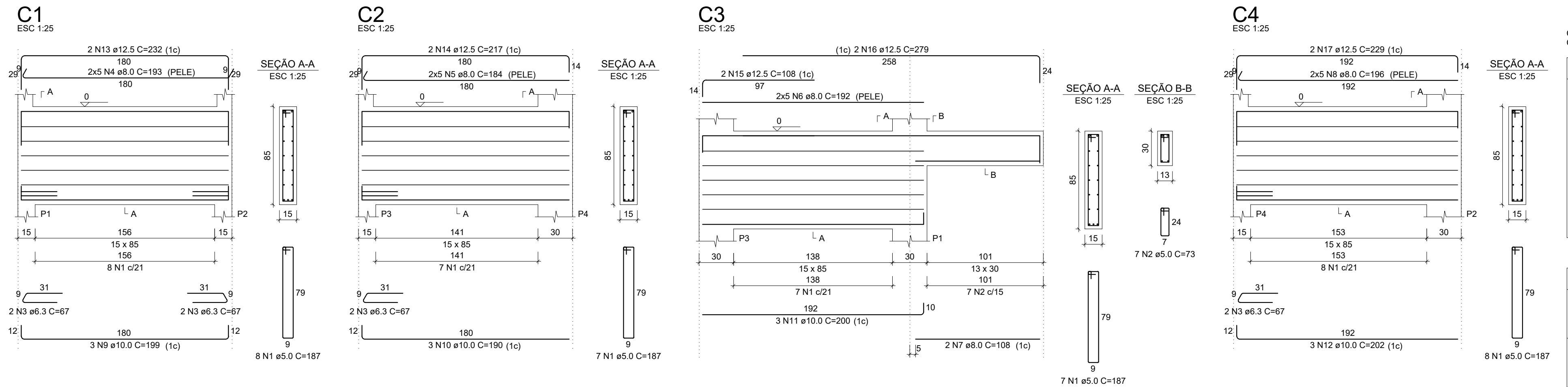
RELAÇÃO DO AÇO

S1

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	8.0	24.2	9.5
	10.0	67.8	41.8
PESO TOTAL (kg)			
CA50	51.3		

Volume de concreto (C-35) = 1.39 m³  
Área de forma = 5.21 m²



RELAÇÃO DO AÇO

C1

C2

C3

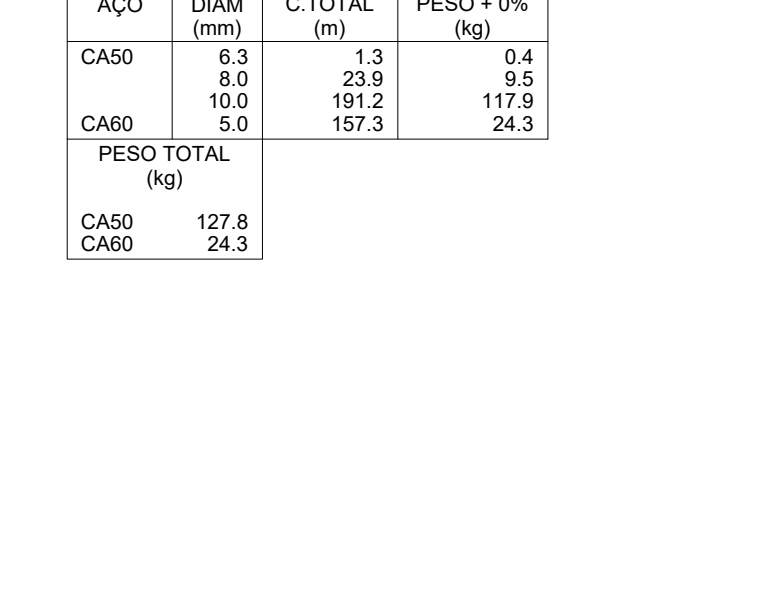
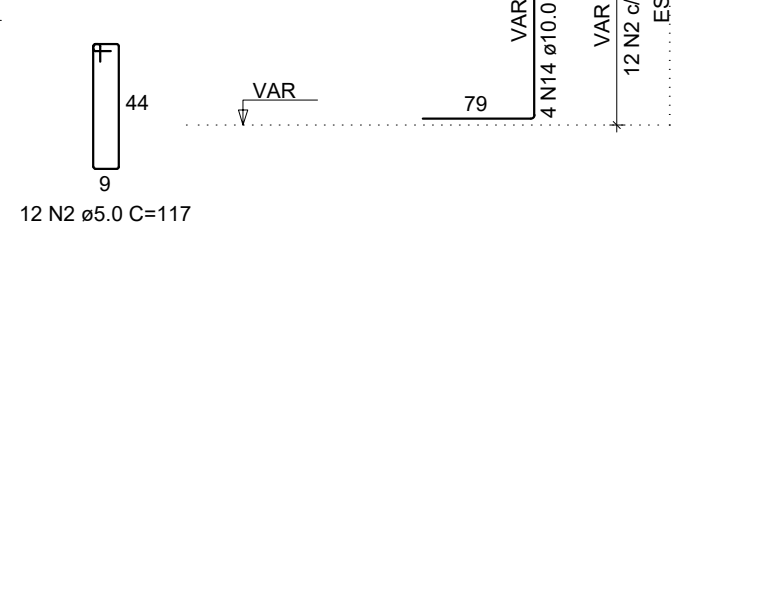
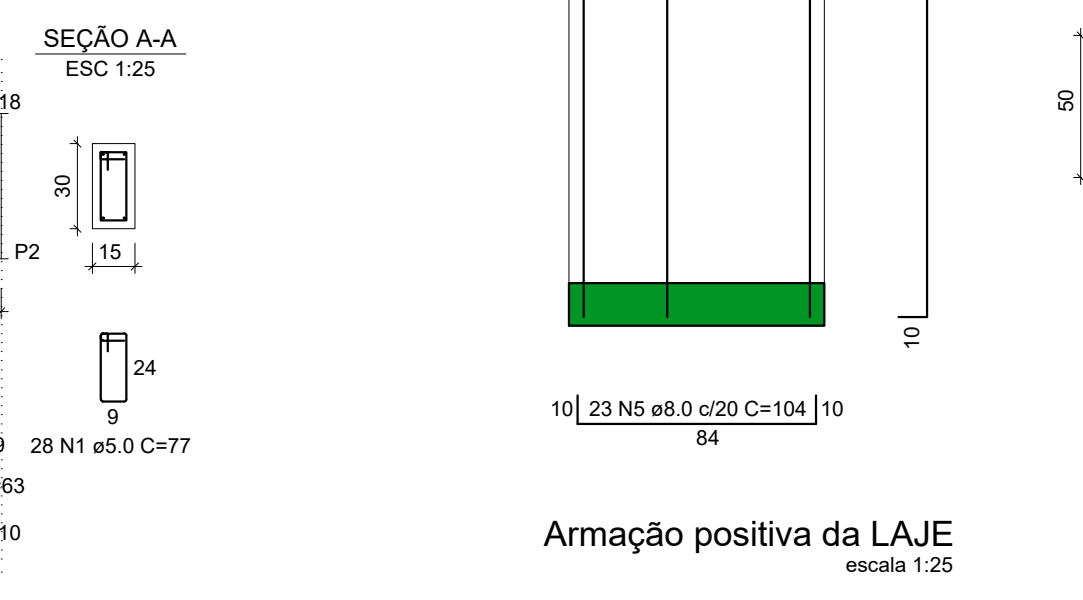
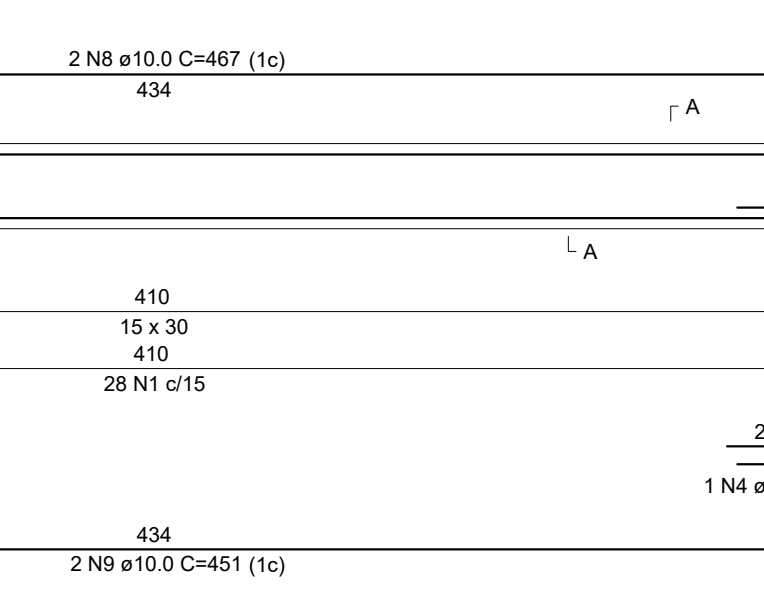
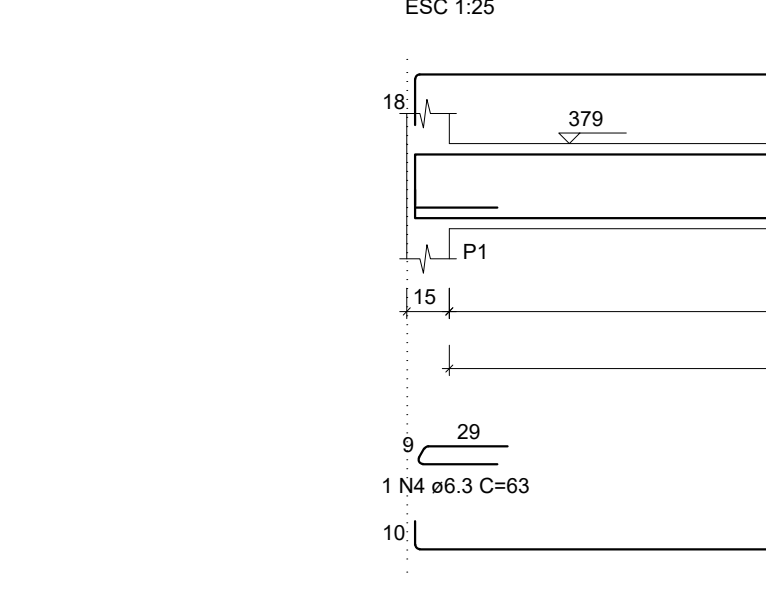
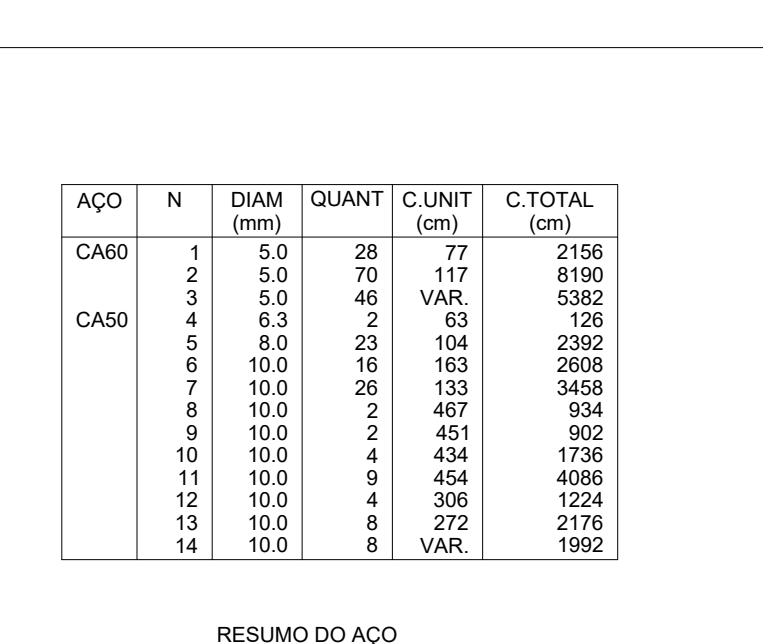
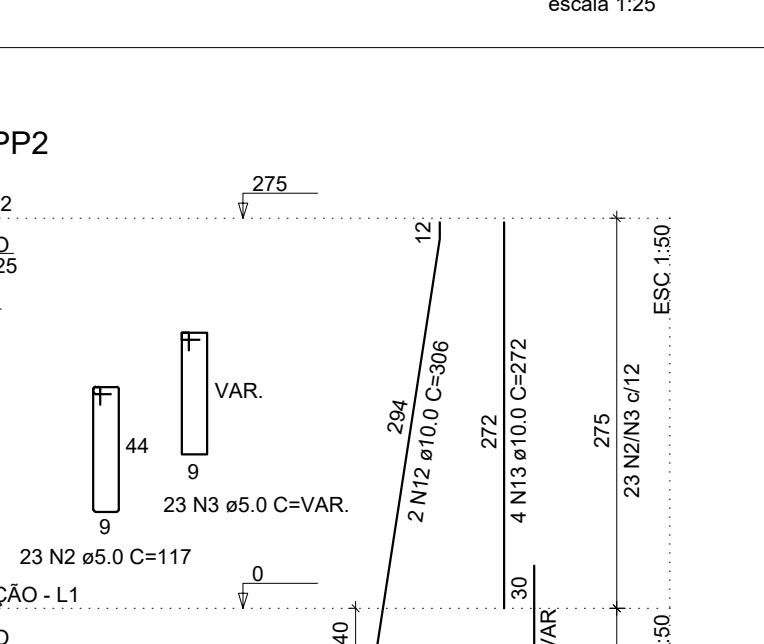
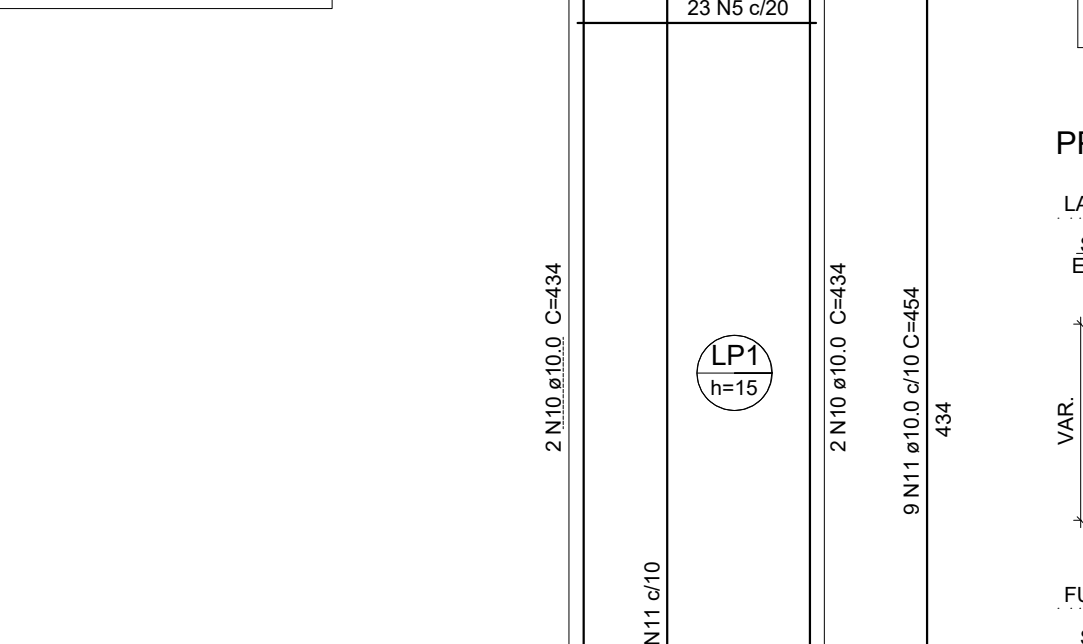
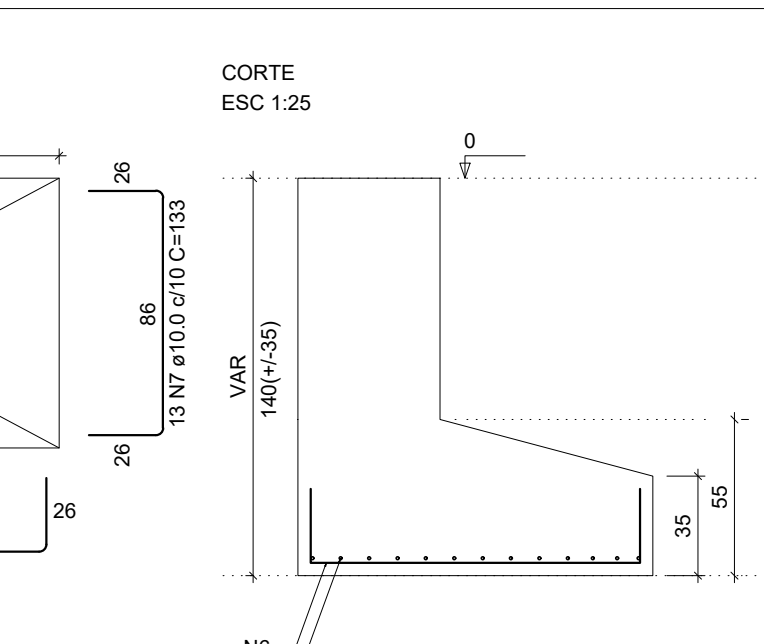
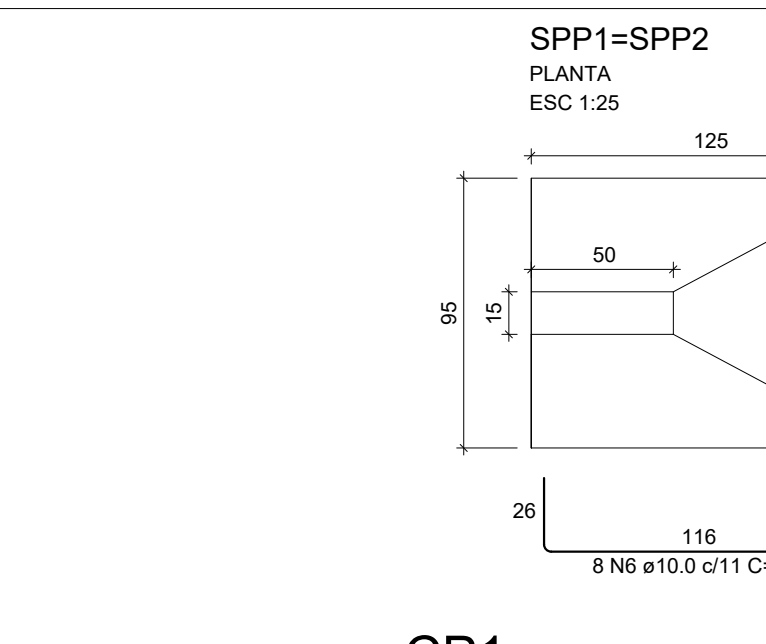
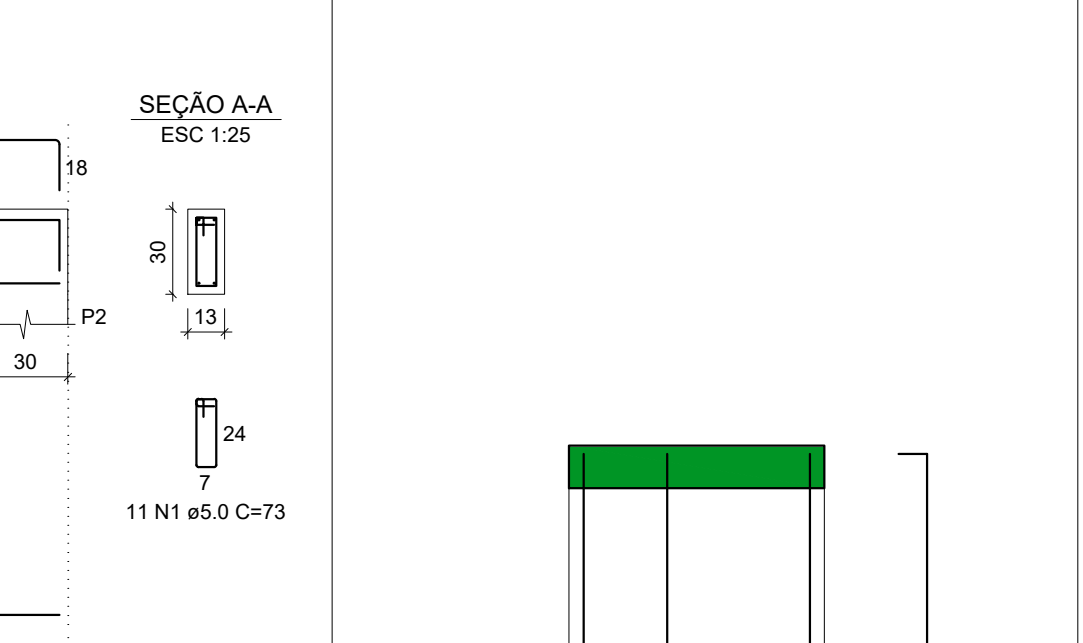
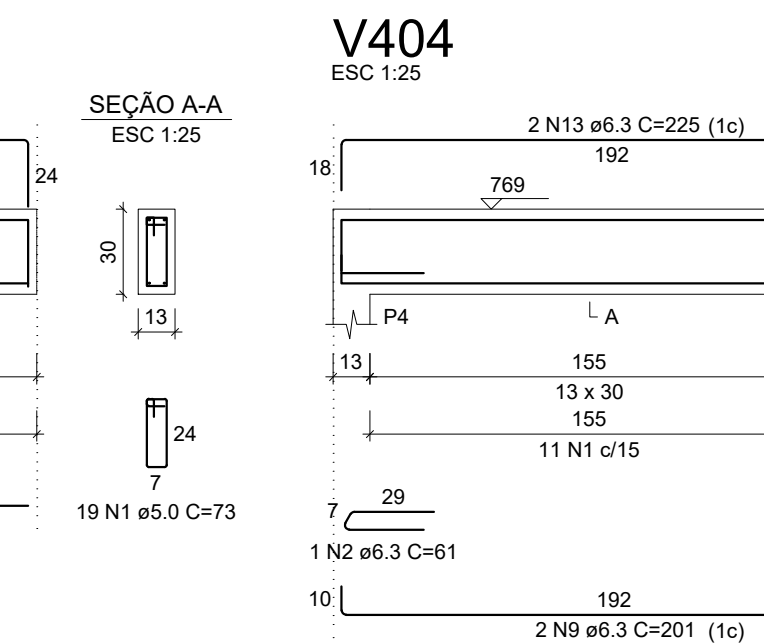
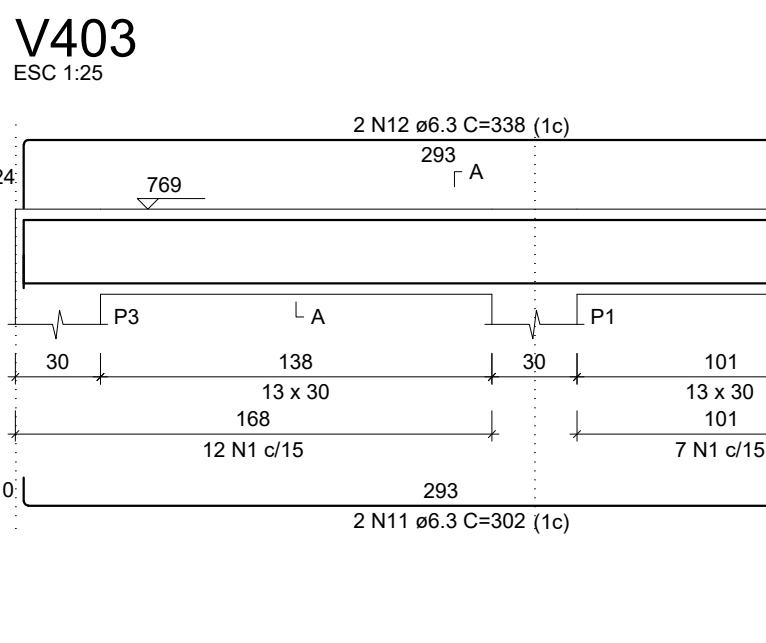
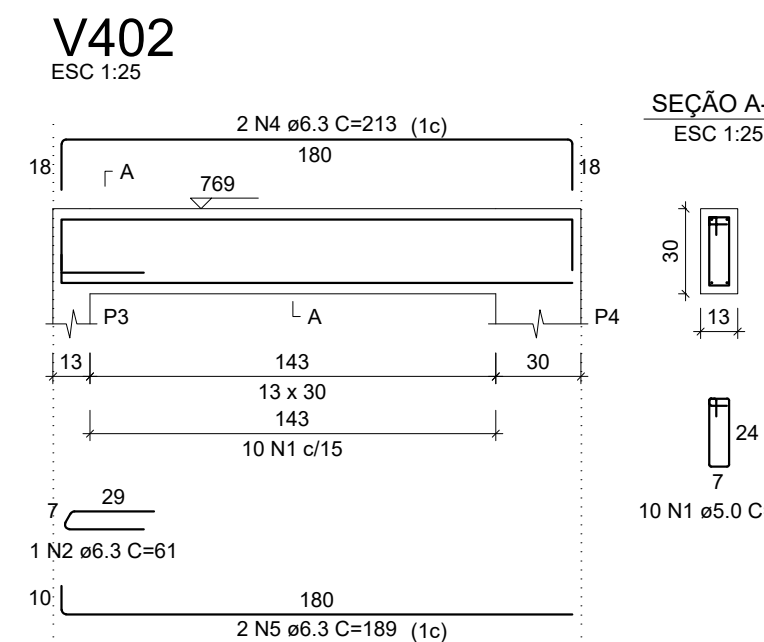
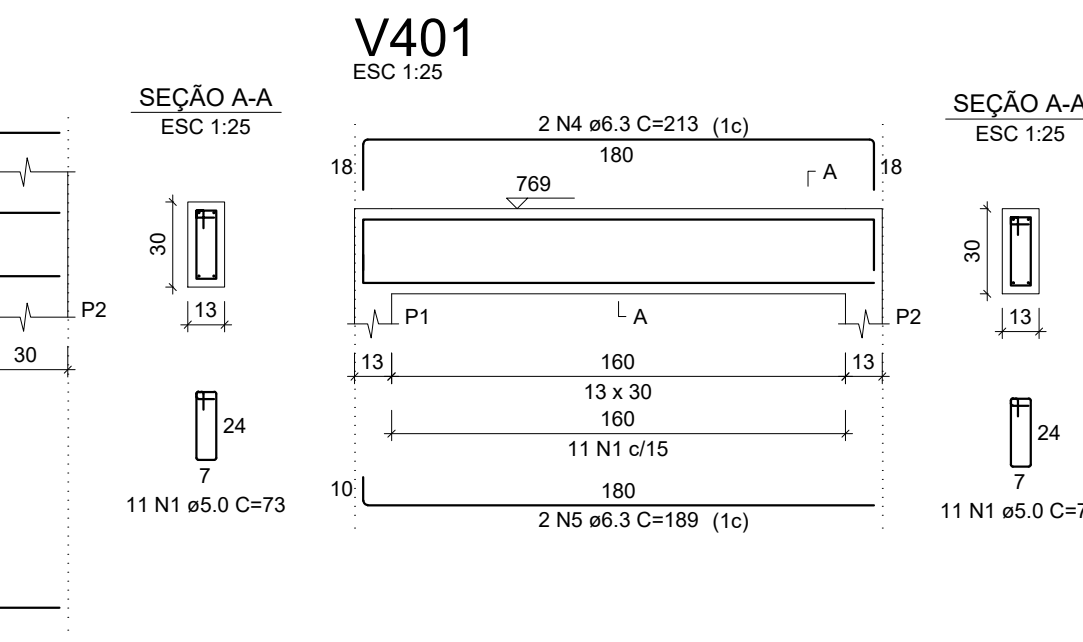
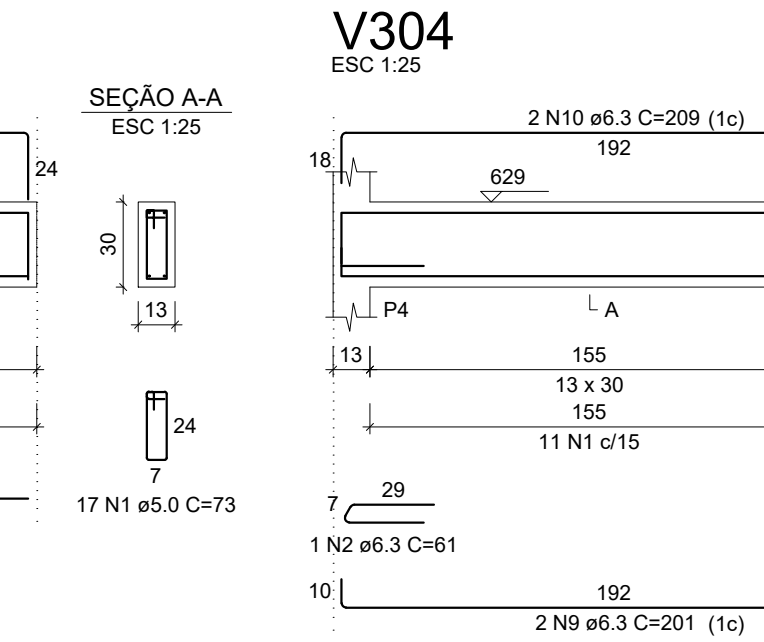
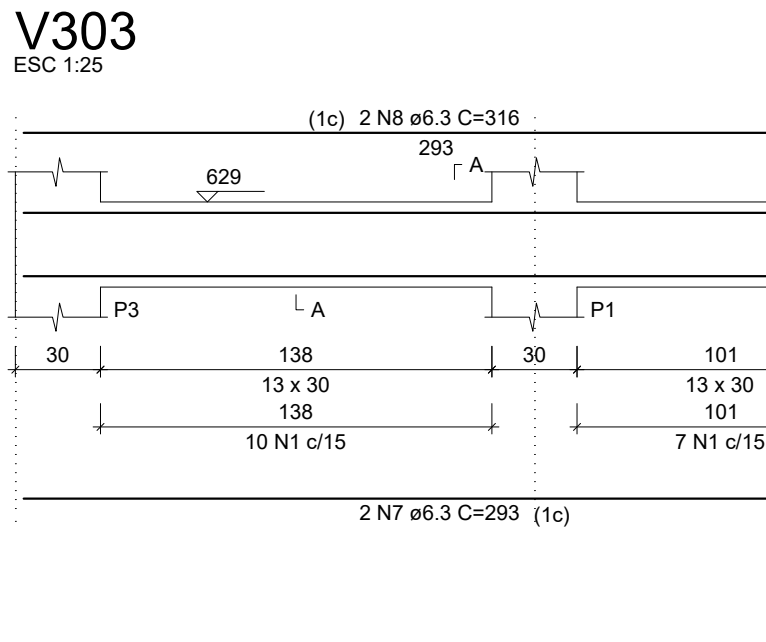
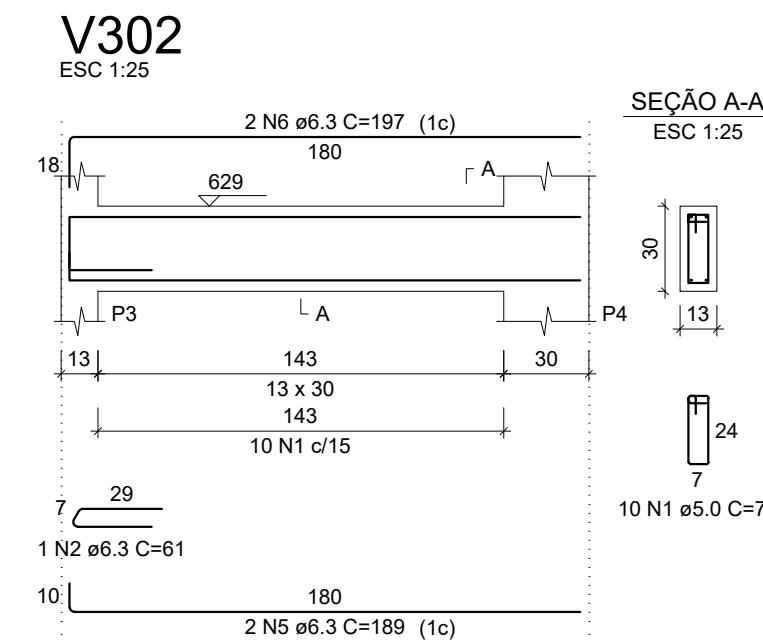
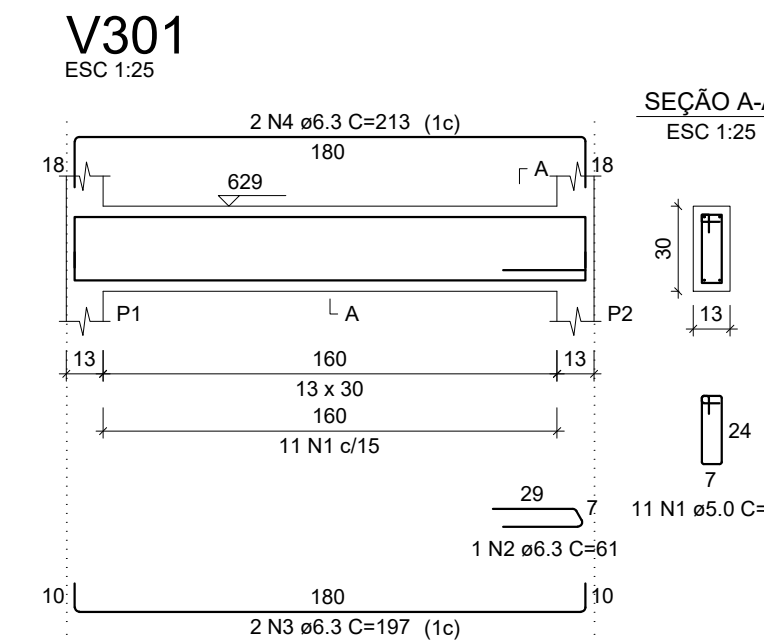
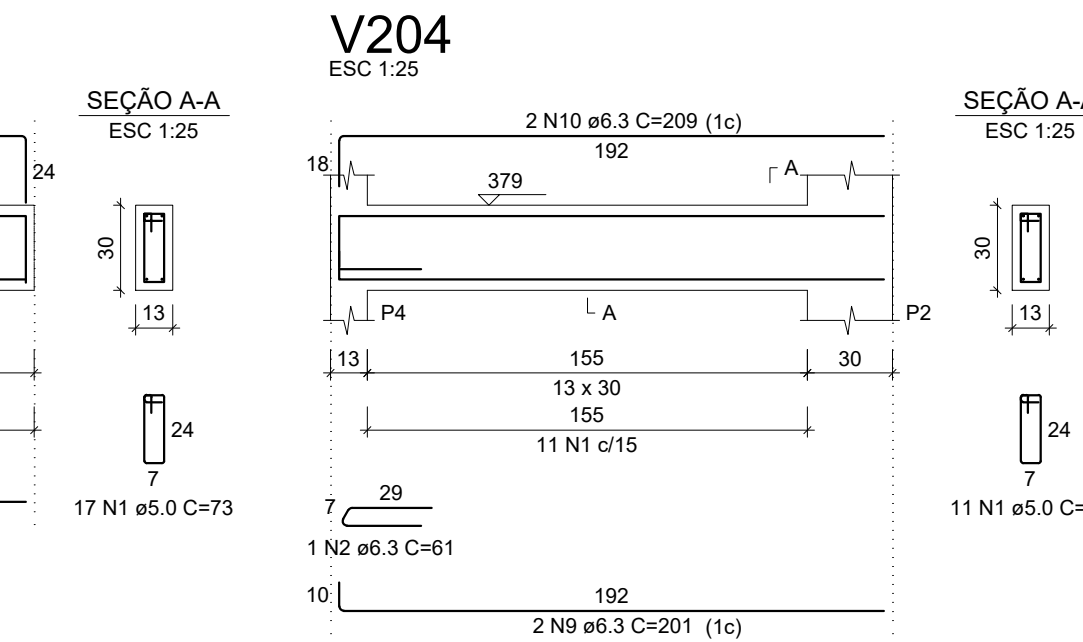
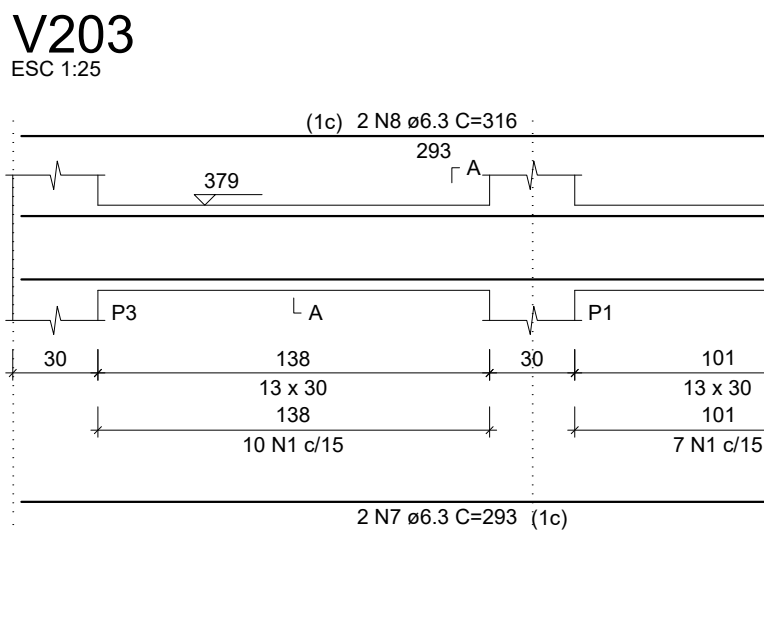
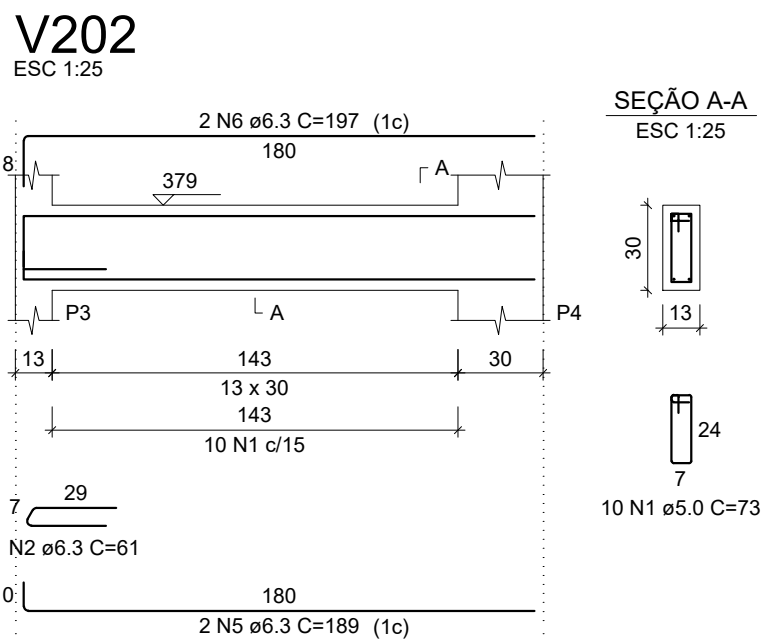
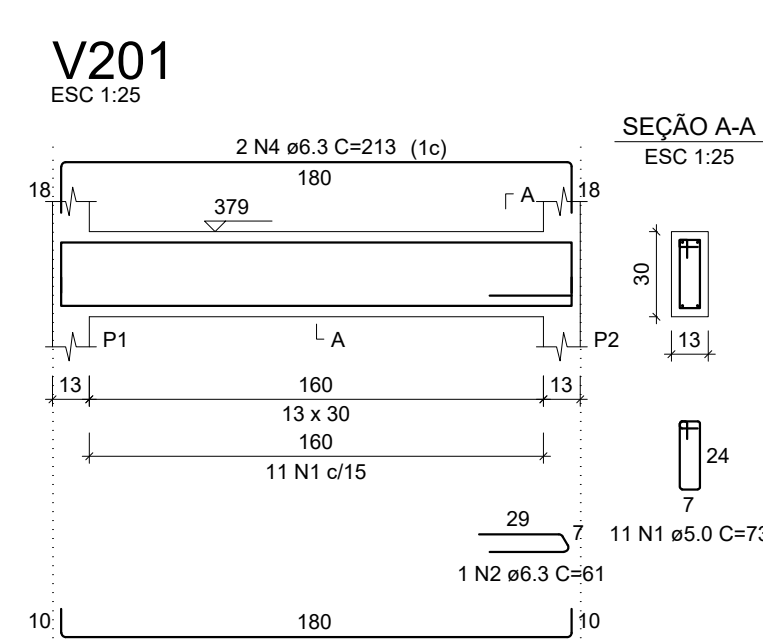
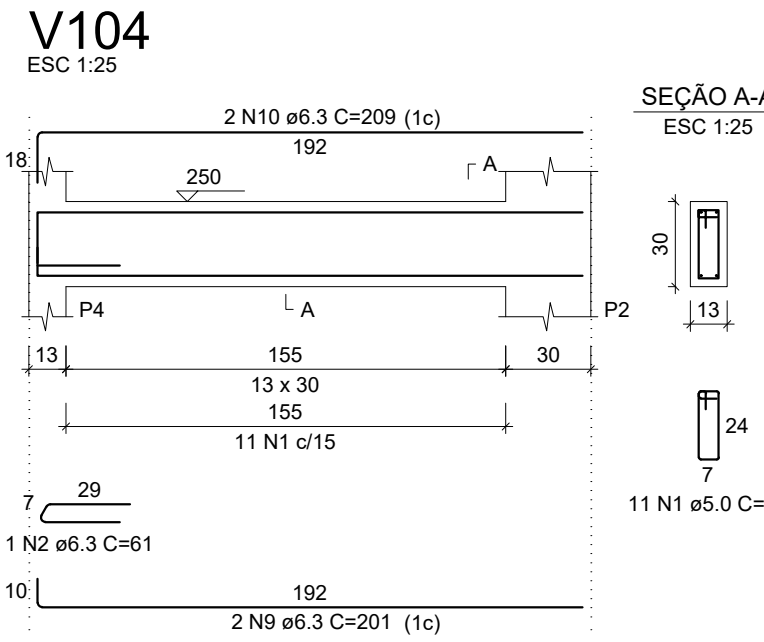
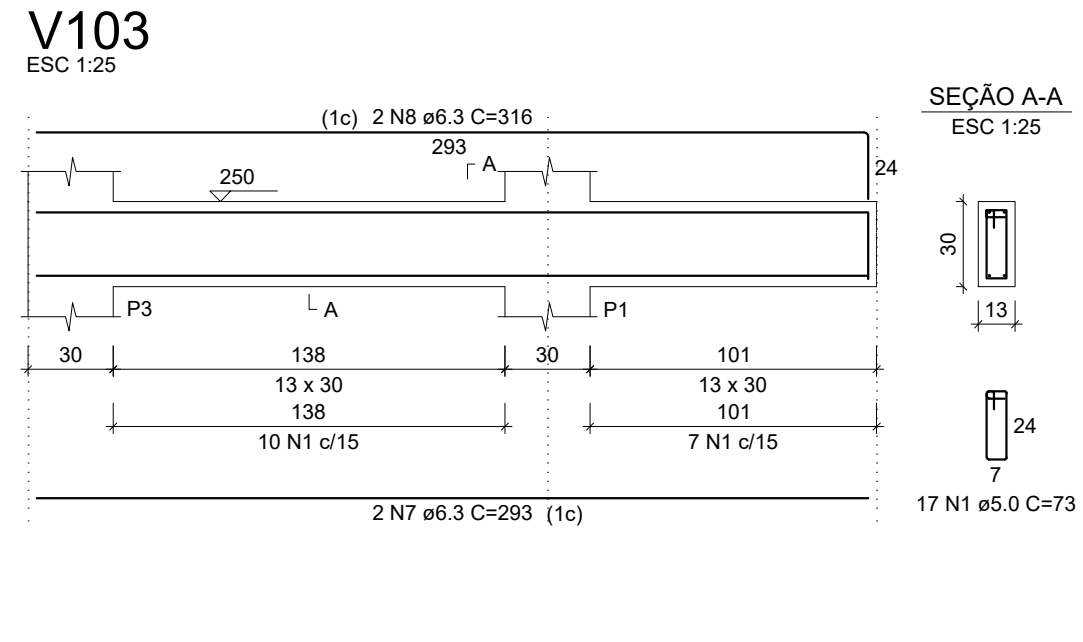
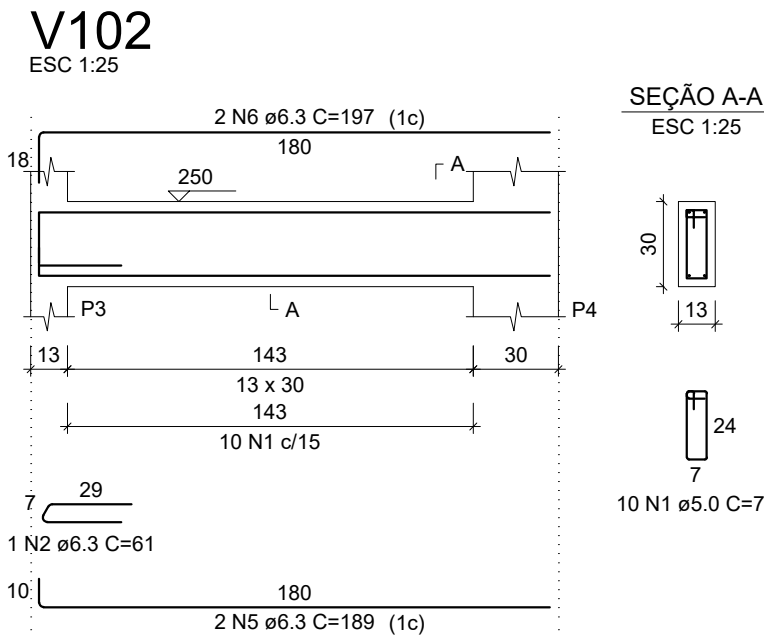
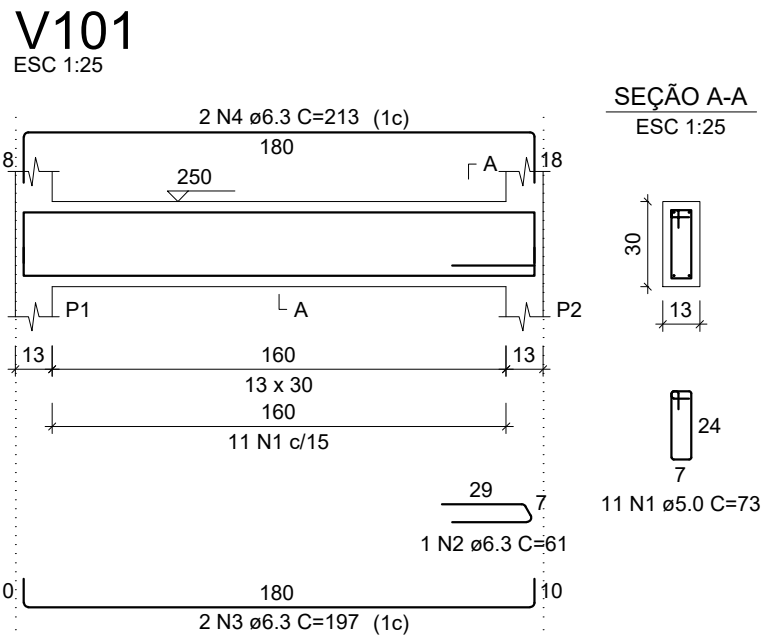
C4

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	30	187	5610
	2	5.0	7	73	511
	3	6.3	8	67	536
CA50	4	8.0	10	193	1930
	5	8.0	10	184	1840
	6	8.0	10	192	1920
	7	8.0	2	108	216
	8	8.0	10	196	1960
	9	10.0	3	199	597
	10	10.0	3	190	570
	11	10.0	3	200	600
	12	10.0	3	202	606
	13	12.5	2	232	464
	14	12.5	2	217	434
	15	12.5	1	108	216
	16	12.5	2	279	558
	17	12.5	2	229	458

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	6.3	5.4	1.3
	8.0	78.7	31
	10.0	23.7	14.6
	12.5	21.3	20.5
CA60	5.0	61.2	9.4
PESO TOTAL (kg)			
CA50	67.5		
CA60	9.4		

Volume de concreto (C-35) = 0.79 m³  
Área de forma = 10.85 m²



RELAÇÃO DO AÇO

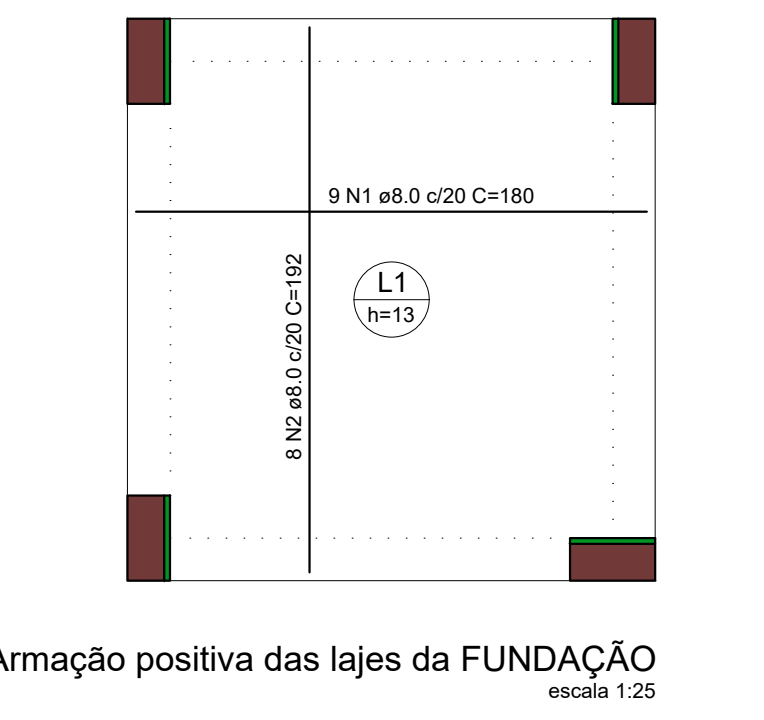
AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
V101-L2	1	5.0	198	73	14454
V104-L2	2	6.3	11	81	671
V203-L3	3	6.3	6	197	1182
V302-L4	4	6.3	10	213	2130
V401-L5	5	6.3	10	189	1890
	6	6.3	6	197	1182
	7	6.3	6	293	1758
	8	6.3	6	316	1896
	9	6.3	8	201	1608
	10	6.3	2	209	1254
	11	6.3	2	302	804
	12	6.3	2	338	676
	13	6.3	2	225	450

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	6.3	153	37.4
CA60	5.0	144.5	22.3

PESO TOTAL (kg)  
CA50 37.4  
CA60 22.3

Volume de concreto (C-35) = 1.09 m³  
Área de forma = 20.35 m²



RELAÇÃO DO AÇO

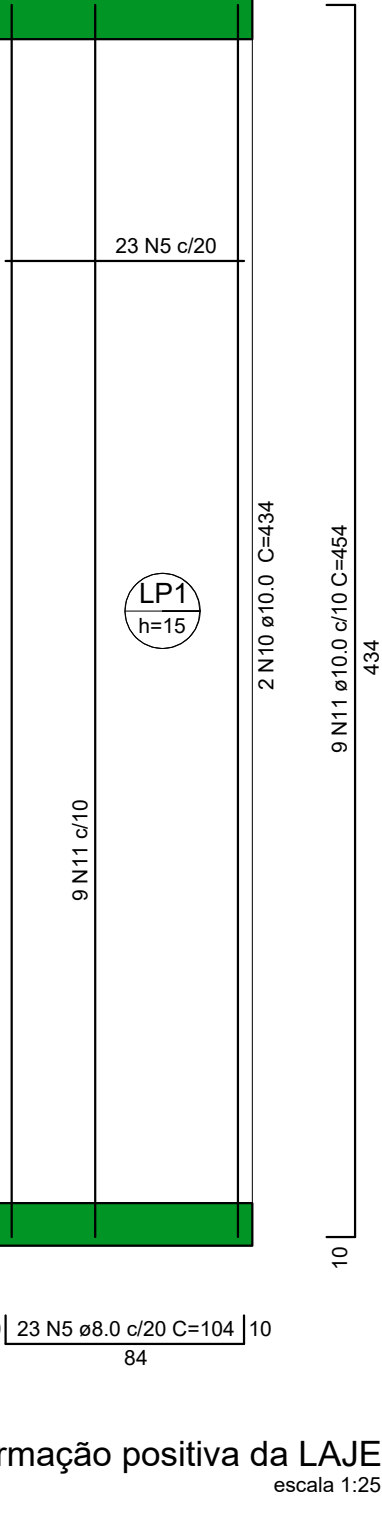
AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA50	1	8.0	9	180	1620
CA50	2	8.0	8	192	1536

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	8.0	31.6	12.5

PESO TOTAL (kg)  
CA50 12.5

Volume de concreto (C-35) = 0.33 m³  
Área de forma = 2.58 m²





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*Emitido em 31/03/2025*

**PROJETO Nº 123/2025 - DPP (11.02.04)**

**(Nº do Protocolo: NÃO PROTOCOLADO)**

*(Assinado digitalmente em 31/03/2025 14:25 )*

MARIA ISABEL PINTO DE OLIVEIRA

DIRETOR

DPP (11.02.04)

Matrícula: ###330#6

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**PROJETO**, data de emissão: **31/03/2025** e o código de verificação: **62f2f9cf45**