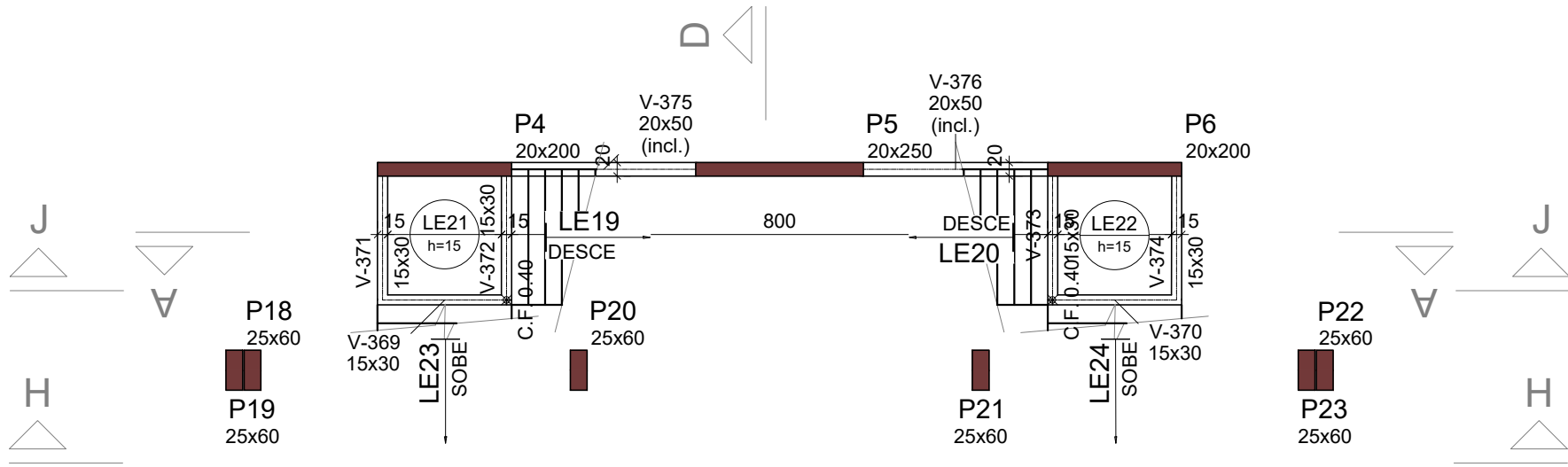
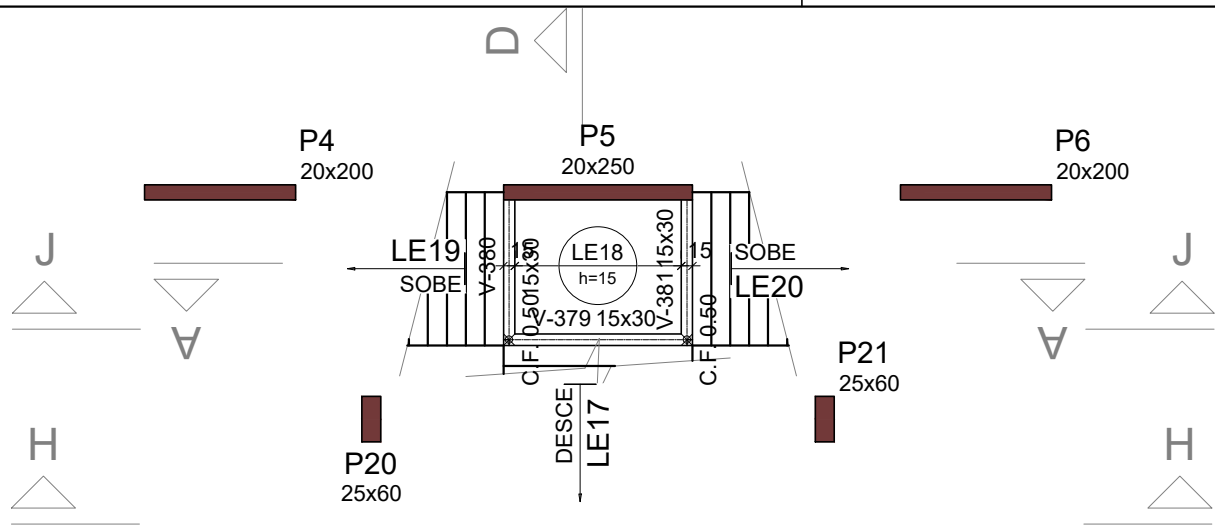
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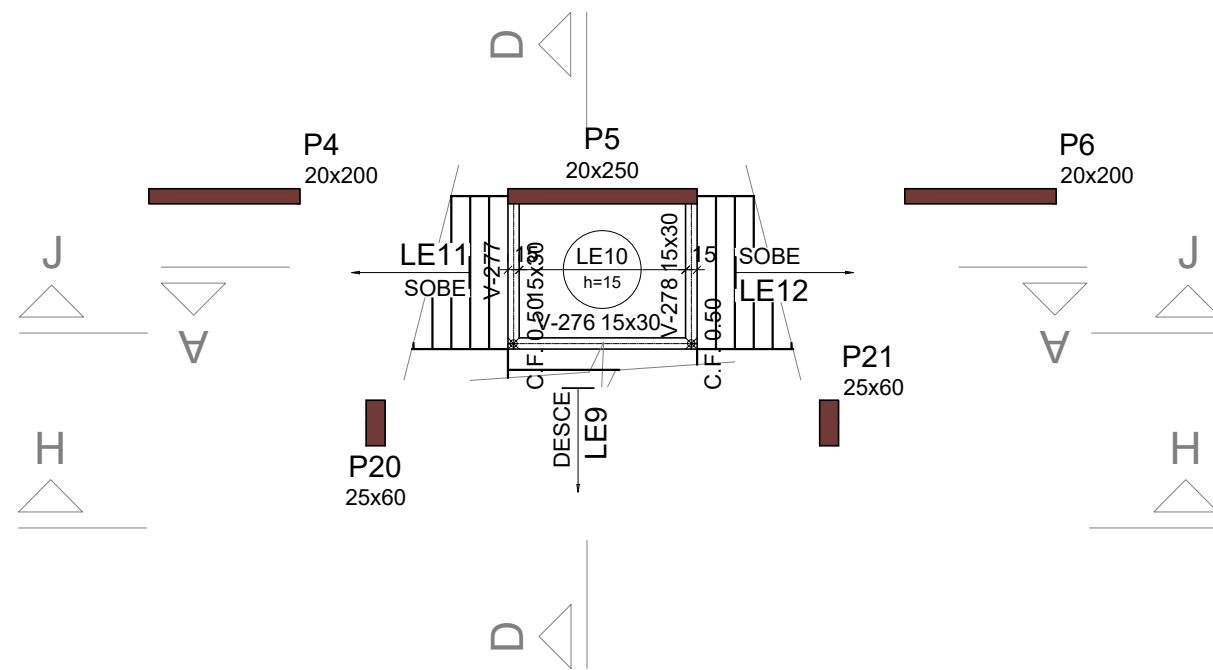
Lajes								
Nome	Tipo	Dados				Sobrecarga (kgf/m²)		
		Altura (cm)	Elevação (cm)	Nível (cm)	Peso próprio (kgf/m²)	Adicional	Acidental	Localizada
LE19	Maciça	15	0	2059.5	586	155	300	-
LE20	Maciça	15	0	2059.5	586	155	300	-
LE21	Maciça	15	0	2059.5	375	155	300	-
LE22	Maciça	15	0	2059.5	375	155	300	-

Forma intermediária do 3º PAVIMENTO 3 (Nível 2059.50)
escala 1:100



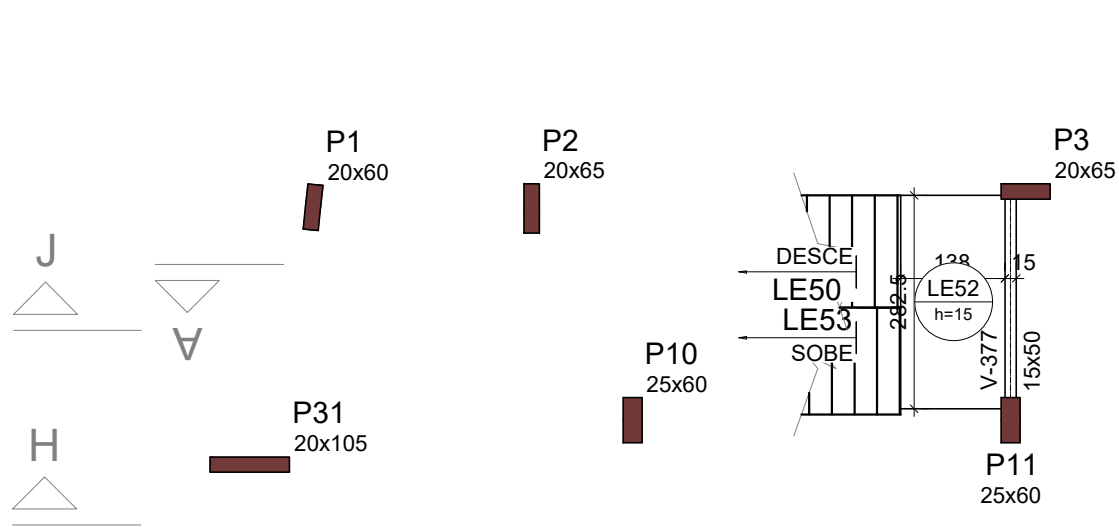
Lajes								
Dados						Sobrecarga (kgf/m²)		
Nome	Tipo	Altura (cm)	Elevação (cm)	Nível (cm)	Peso próprio (kgf/m²)	Adicional	Acidental	Localizada
LE17	Maciça	15	0	1830.5	692	155	300	-
LE18	Maciça	15	0	1830.5	375	155	300	-

Forma intermediária do 3º PAVIMENTO 1 (Nível 1830.50)
escala 1:100



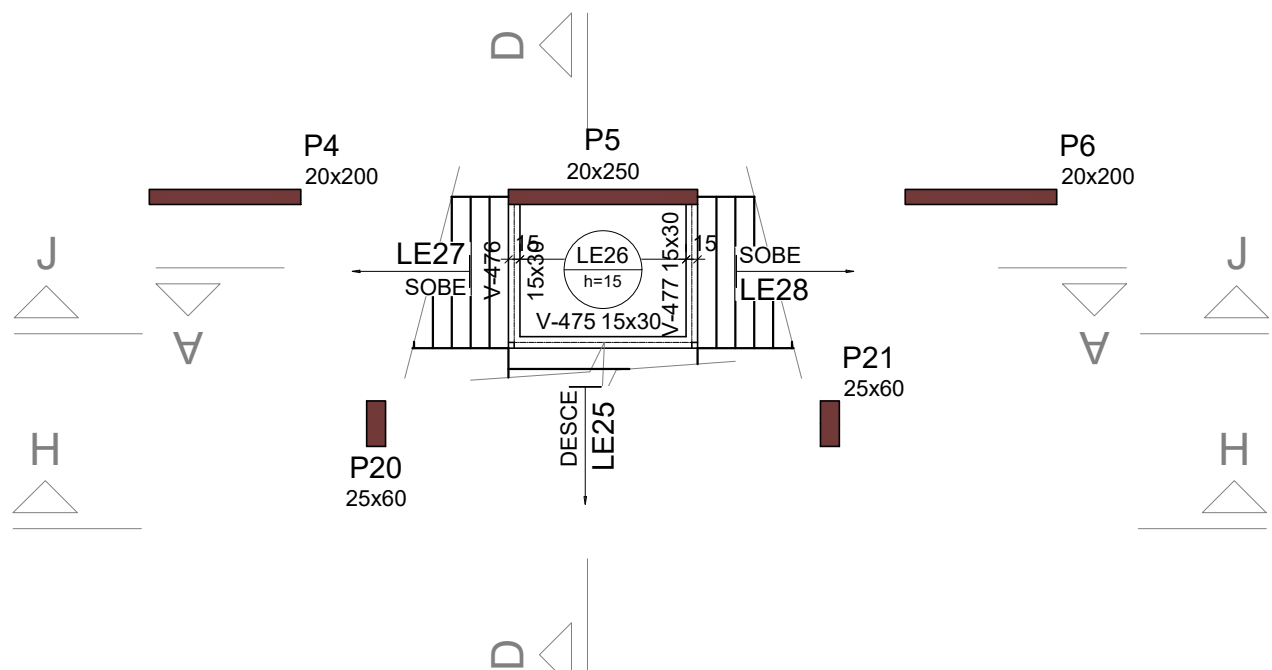
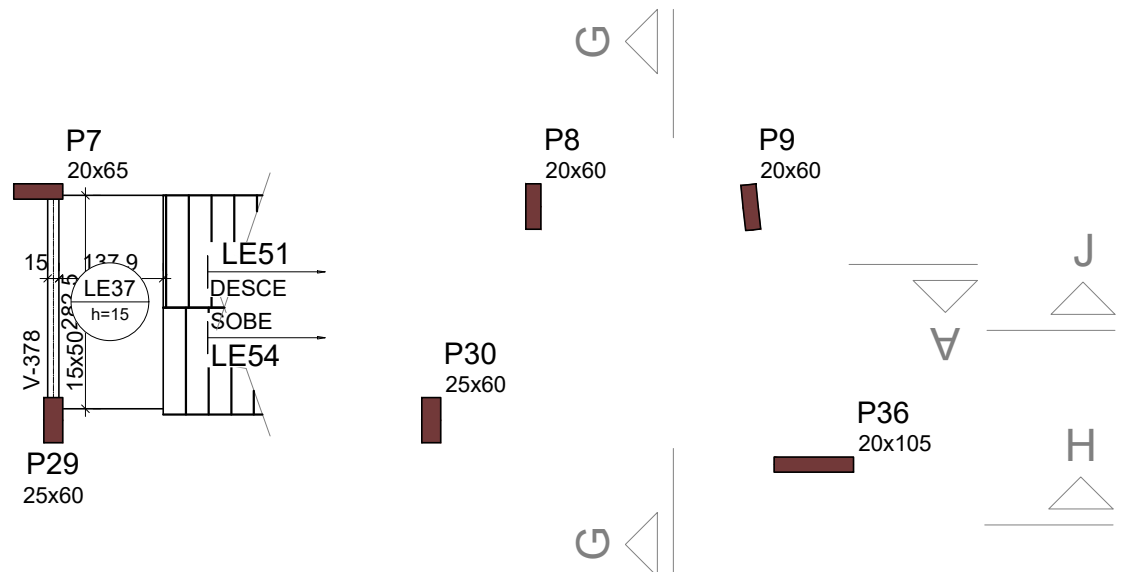
Forma intermediária do 2º PAVIMENTO 1 (Nível 1460.50)
escala 1:100

Lajes								
Dados						Sobrecarga (kgf/m²)		
Nome	Tipo	Altura (cm)	Elevação (cm)	Nível (cm)	Peso próprio (kgf/m²)	Adicional	Acidental	Localizada
LE9	Maciça	15	0	1460.5	692	155	300	-
LE10	Maciça	15	0	1460.5	375	155	300	-



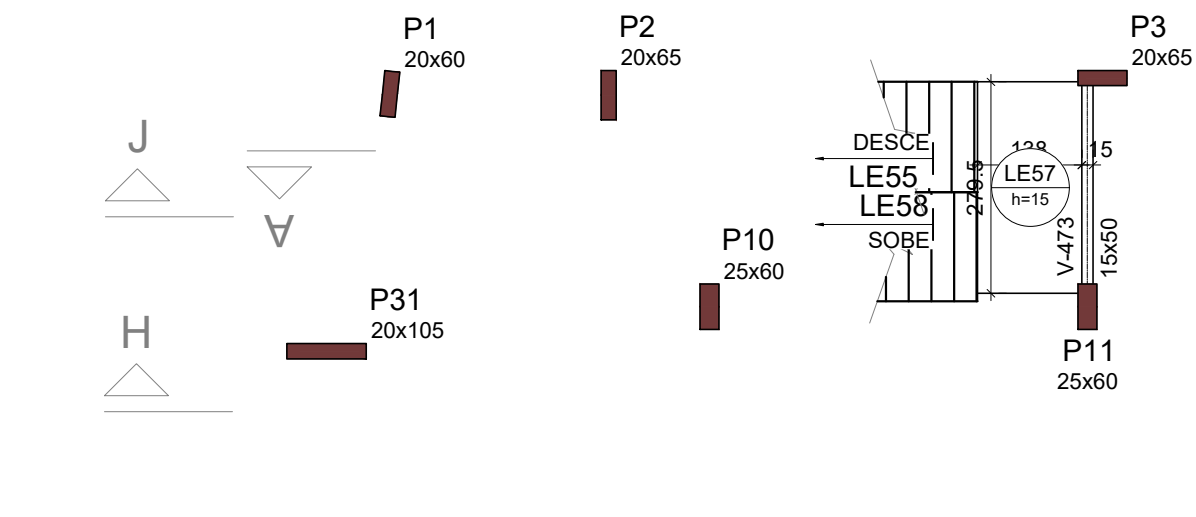
Lajes								
Nome	Tipo	Dados			Peso próprio (kgf/m²)	Sobrecarga (kgf/m²)		
		Altura (cm)	Elevação (cm)	Nível (cm)		Adicional	Acidental	Localizada
LE37	Maciça	15	0	1945	375	155	300	-
LE50	Maciça	15	0	1945	604	155	300	-
LE51	Maciça	15	0	1945	604	155	300	-
LE52	Maciça	15	0	1945	375	155	300	-

Forma intermediária do 3º PAVIMENTO 2 (Nível 1945)
escala 1:100



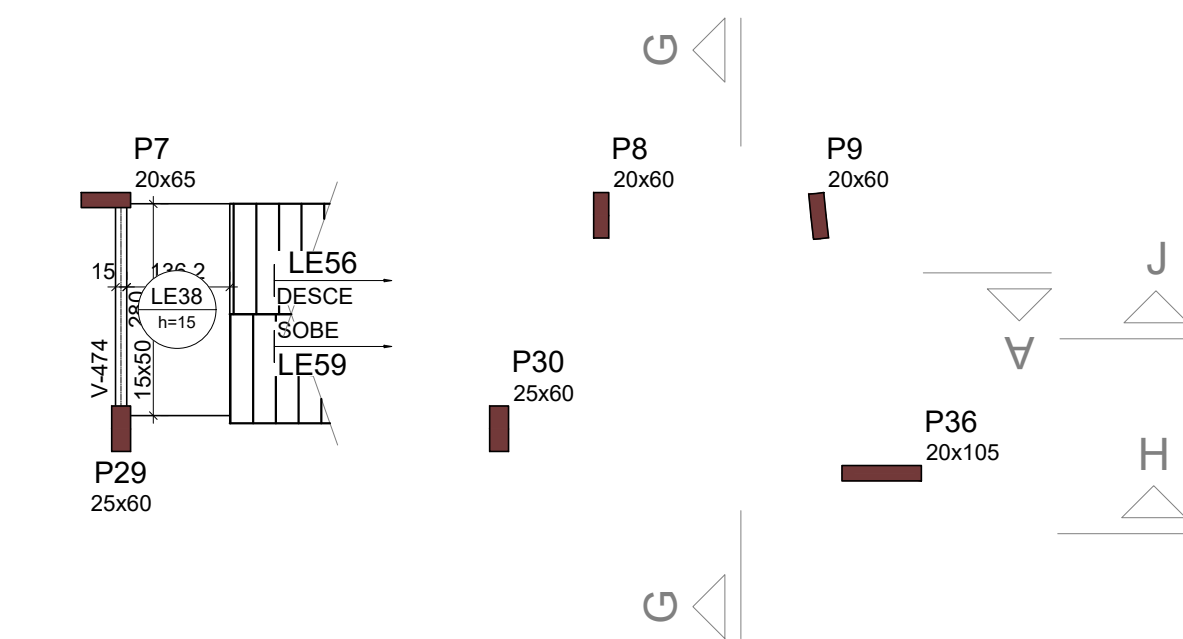
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Nome	Tipo	Altura (cm)	Dados			Sobrecarga (kgf/m²)		
			Elevação (cm)	Nível (cm)	Peso próprio (kgf/m²)	Adicional	Acidental	Localizada
LE25	Maciça	15	0	2200.5	686	155	300	-
LE26	Maciça	15	0	2200.5	375	155	300	-

Forma intermediária do 4º PAVIMENTO 1 (Nível 2200.50)
escala 1:100



Lajes								
Nome	Tipo	Altura (cm)	Dados		Peso próprio (kgf/m²)	Sobrecarga (kgf/m²)		
			Elevação (cm)	Nível (cm)		Adicional	Acidental	Localizada
LE38	Maciça	15	0	2315	375	155	300	-
LE55	Maciça	15	0	2315	604	155	300	-
LE56	Maciça	15	0	2315	603	155	300	-
LE57	Maciça	15	0	2315	375	155	300	-

Forma intermediária do 4º PAVIMENTO 2 (Nível 2315)
escala 1:100



Legenda dos pilares

Pilar que morre

Pilar que passa

Pilar que nasce

Pilar com mudança de seção

Legenda das vigas e paredes

Viga

Parede de concreto

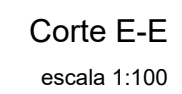
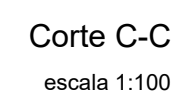
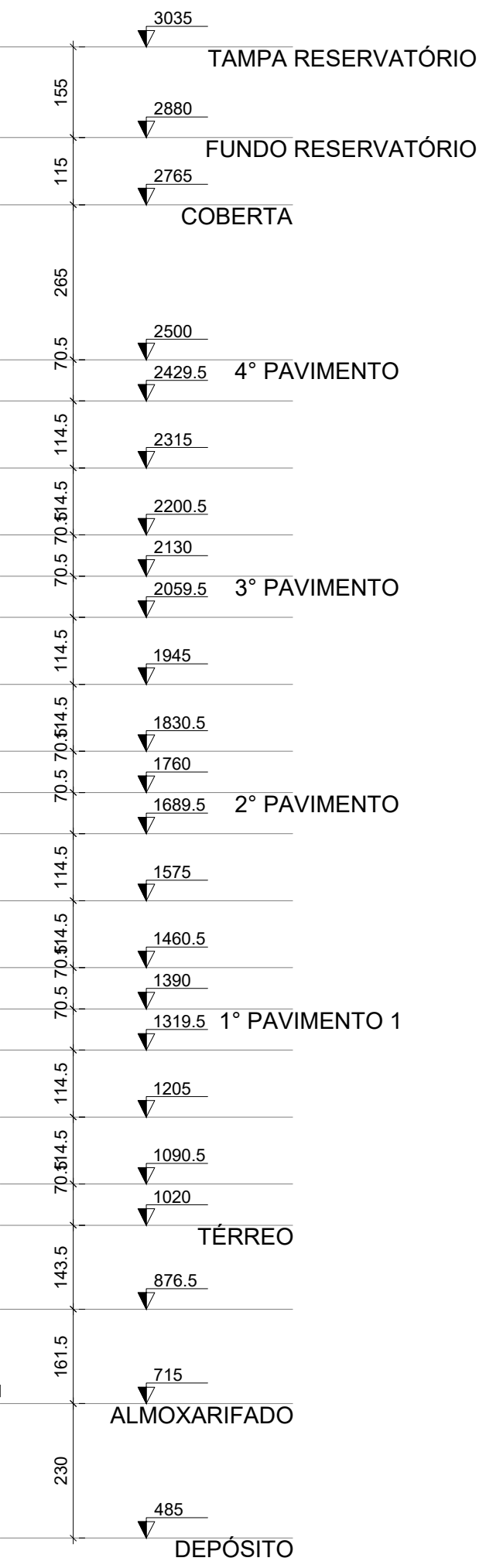
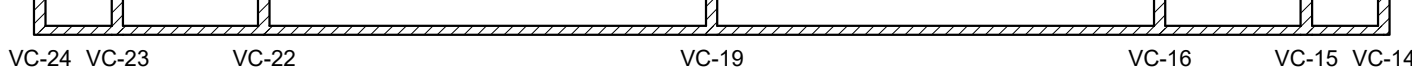
Características dos materiais

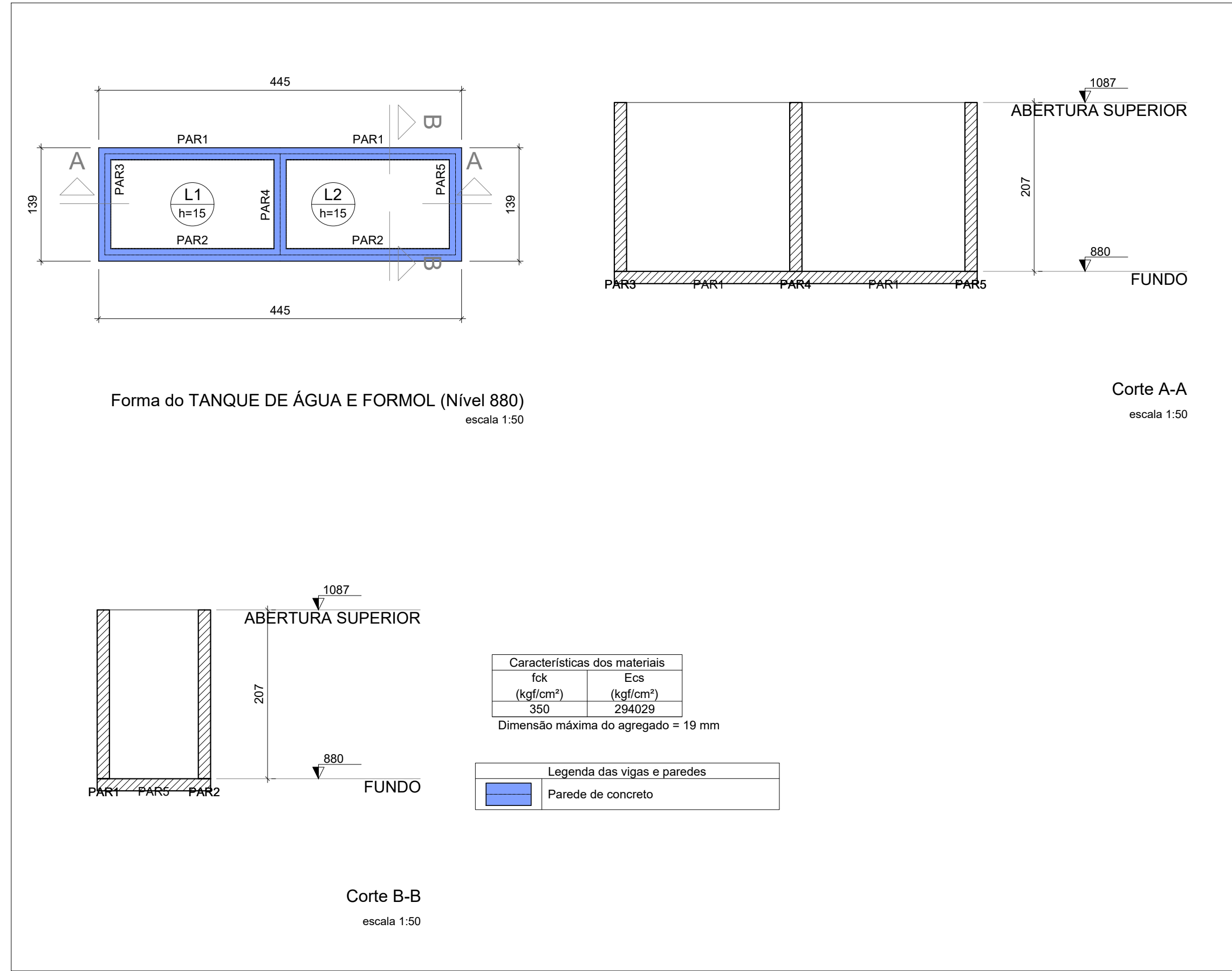
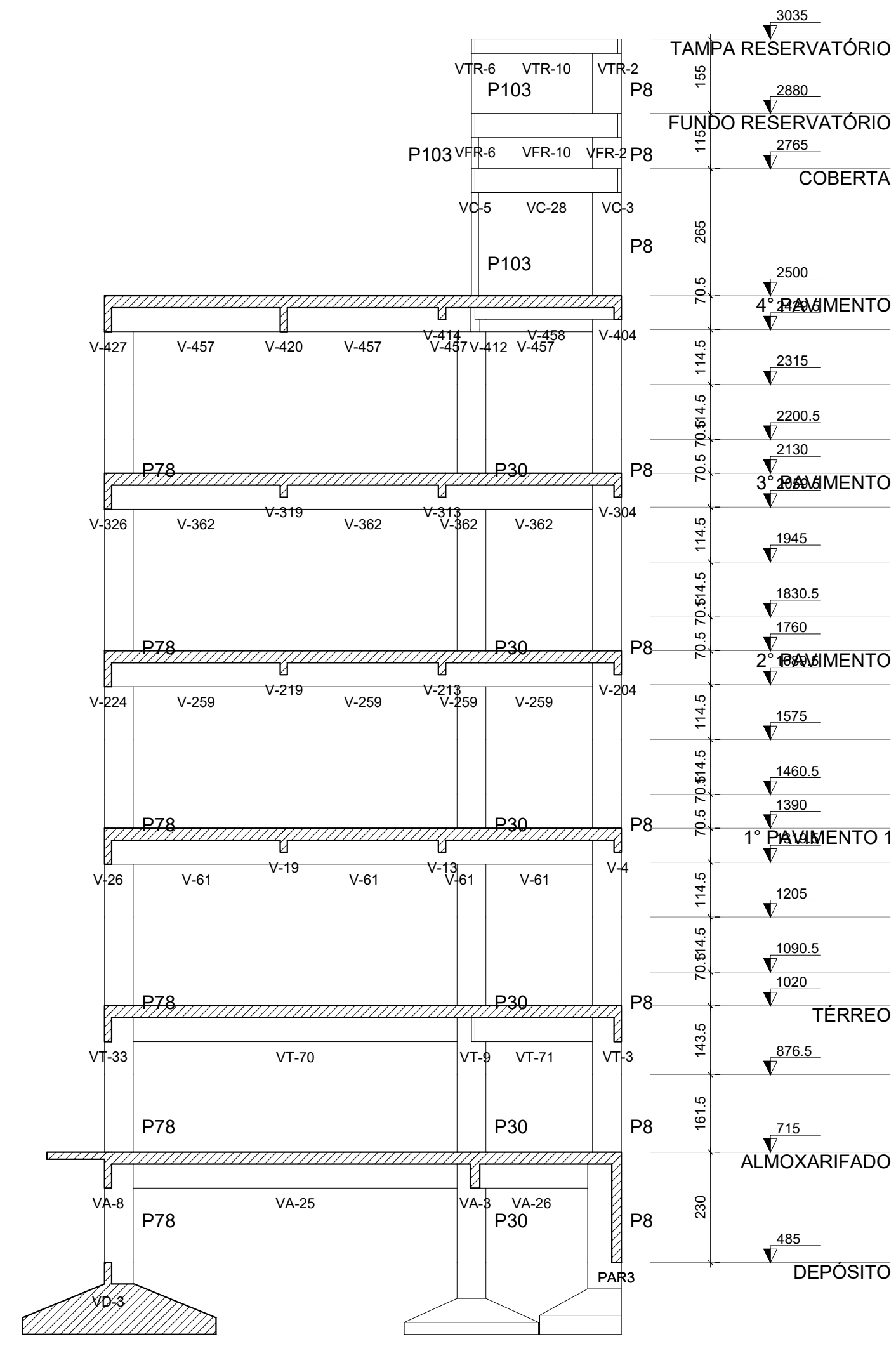
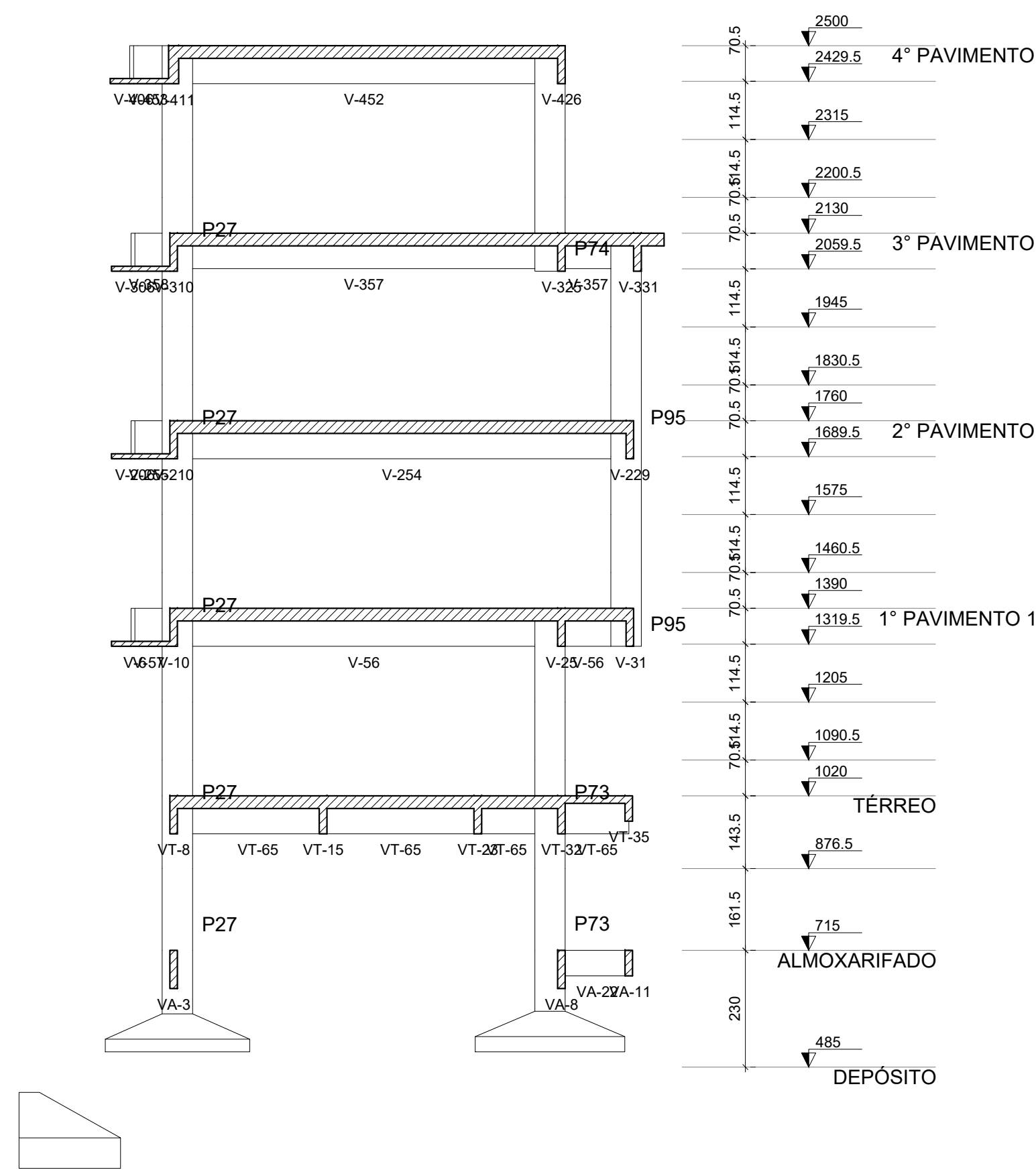
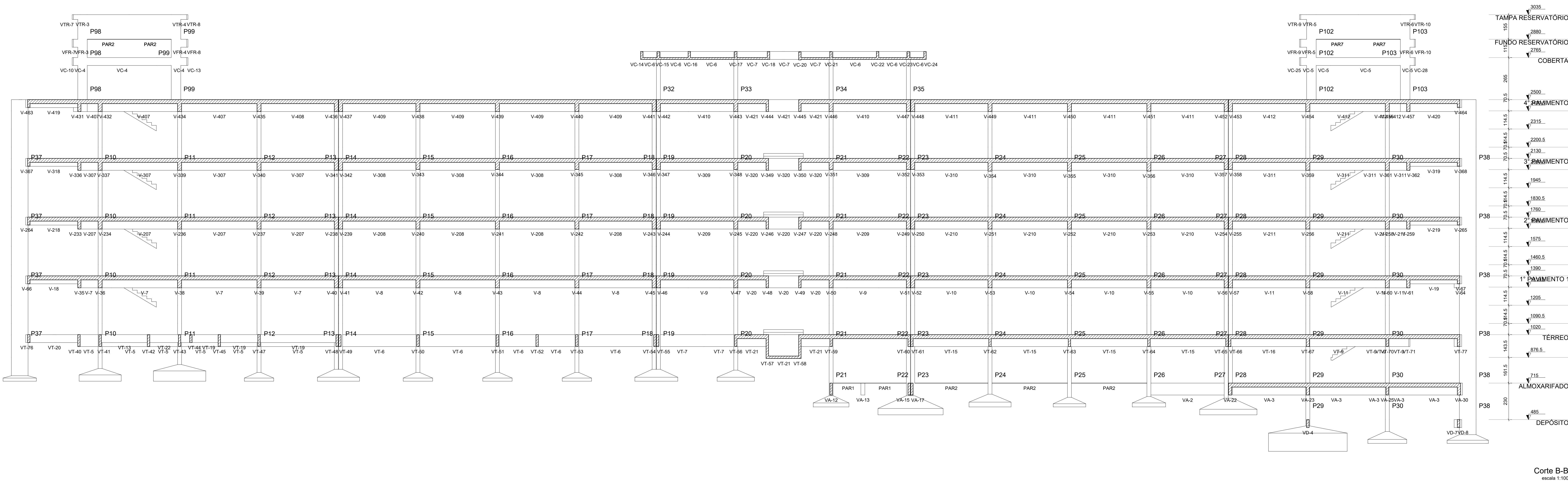
fck (kgf/cm²)	Ecs (kgf/cm²)
450	342789



Dimensão máxima do agregado = 19 mm

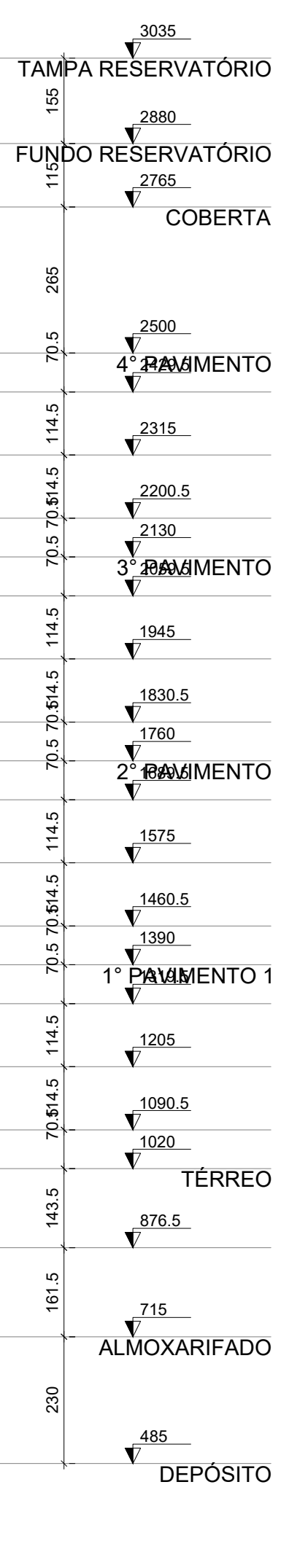
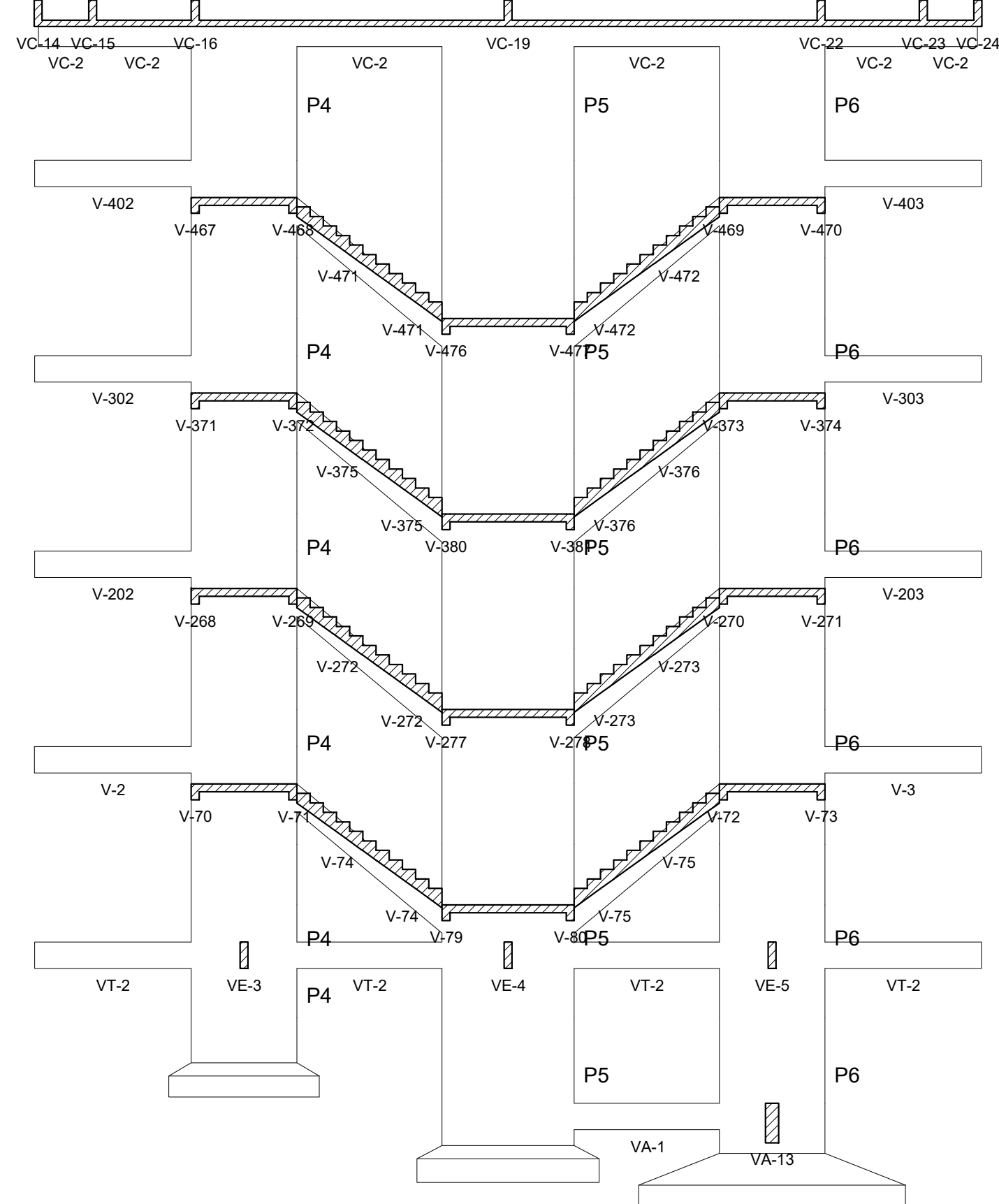
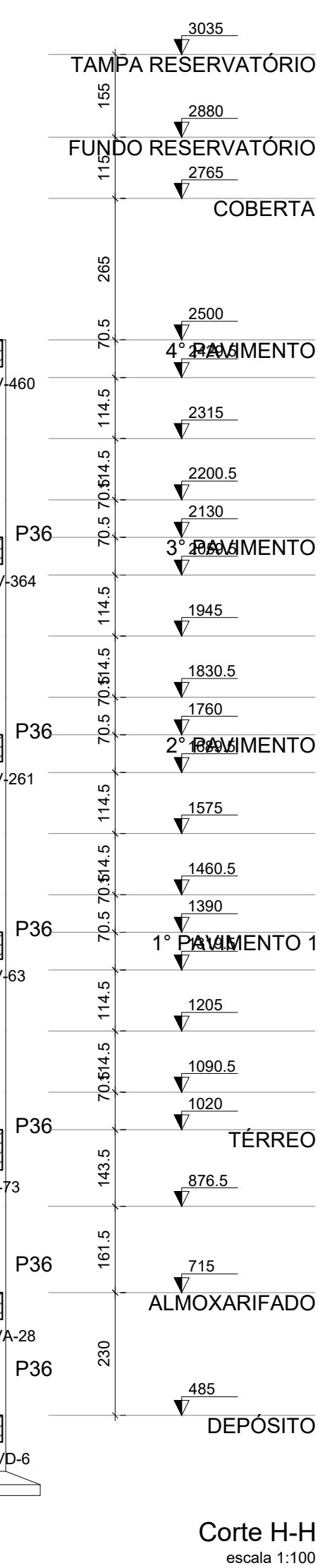
Detalhe 1 (esc. 1:30)

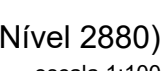
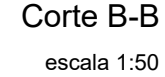
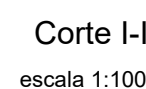
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REV.	DATA	OBSERVAÇÕES	DESENHO	REVISÃO	APROVAÇÃO
			UNIVERSIDADE FEDERAL DE PERNAMBUCO SUPERINTENDÊNCIA DE INFRAESTRUTURA DIRETORIA DE PLANOS E PROJETOS		
Projeto: AMPLIAÇÃO DO CENTRO ACADÊMICO DE VITÓRIA - 4ª ETAPA - CAMPUS 1 E INSTALAÇÃO DE SISTEMA DE GASES DOS BLOCOS B E C.					
Título do documento: FORMAS DOS NÍVEIS INTERMEDIÁRIOS DO TÉRREO AO 4º PAVIMENTO 0202.			Área técnica: ESTRUTURA		
quadro de áreas:			prancha: 04 / 56		
PAVIMENTO TÉRREO 818,57 M²			PAV. SEMI ENTERRADO 299,51 M²		
1º PAVIMENTO 954,02 M²			PAVIMENTO ENTERRADO 95,92 M²		
2º PAVIMENTO 954,02 M²			COBERTA 1050,68 M²		
3º PAVIMENTO 954,02 M²			TOTAL CONSTRUÇÃO 3.980,14 M²		
responsáveis técnicos:			data: SETEMBRO/2024		
elaboração: SMC MARCOS ANDRÉ SANTOS ENGENHEIRO - RNP: 180427703-7			aprovação: D.P.P. ISABEL PINTO S.P.O. SILMARA MELO U.F.P.E. ANÍSIO B. F. DOURADO		
			DIRETORA SUPERINTENDENTE REITOR		

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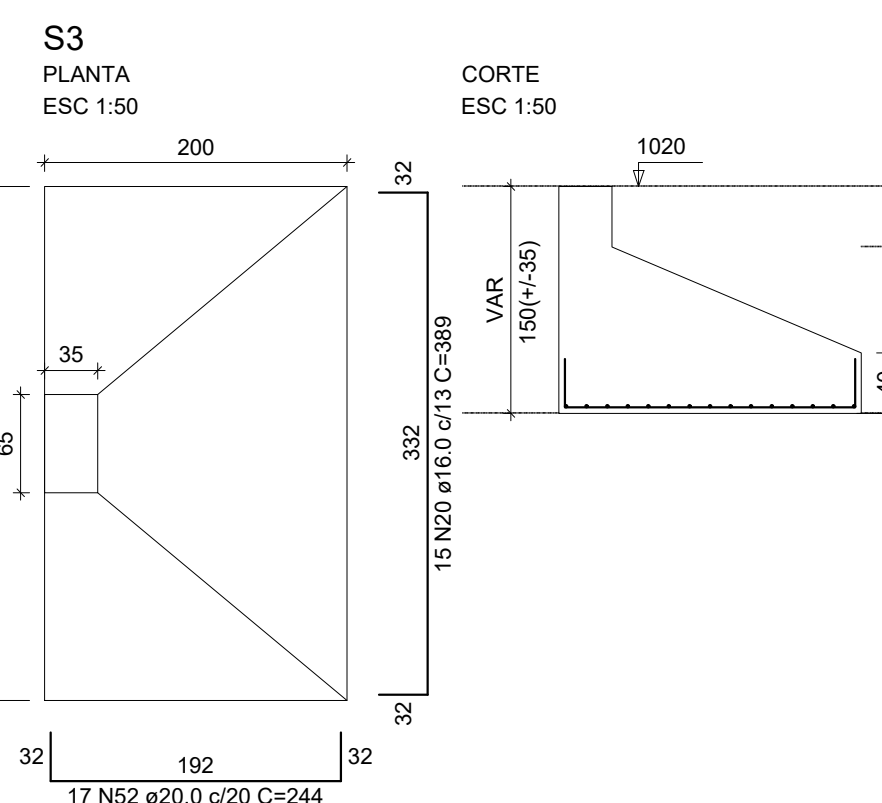
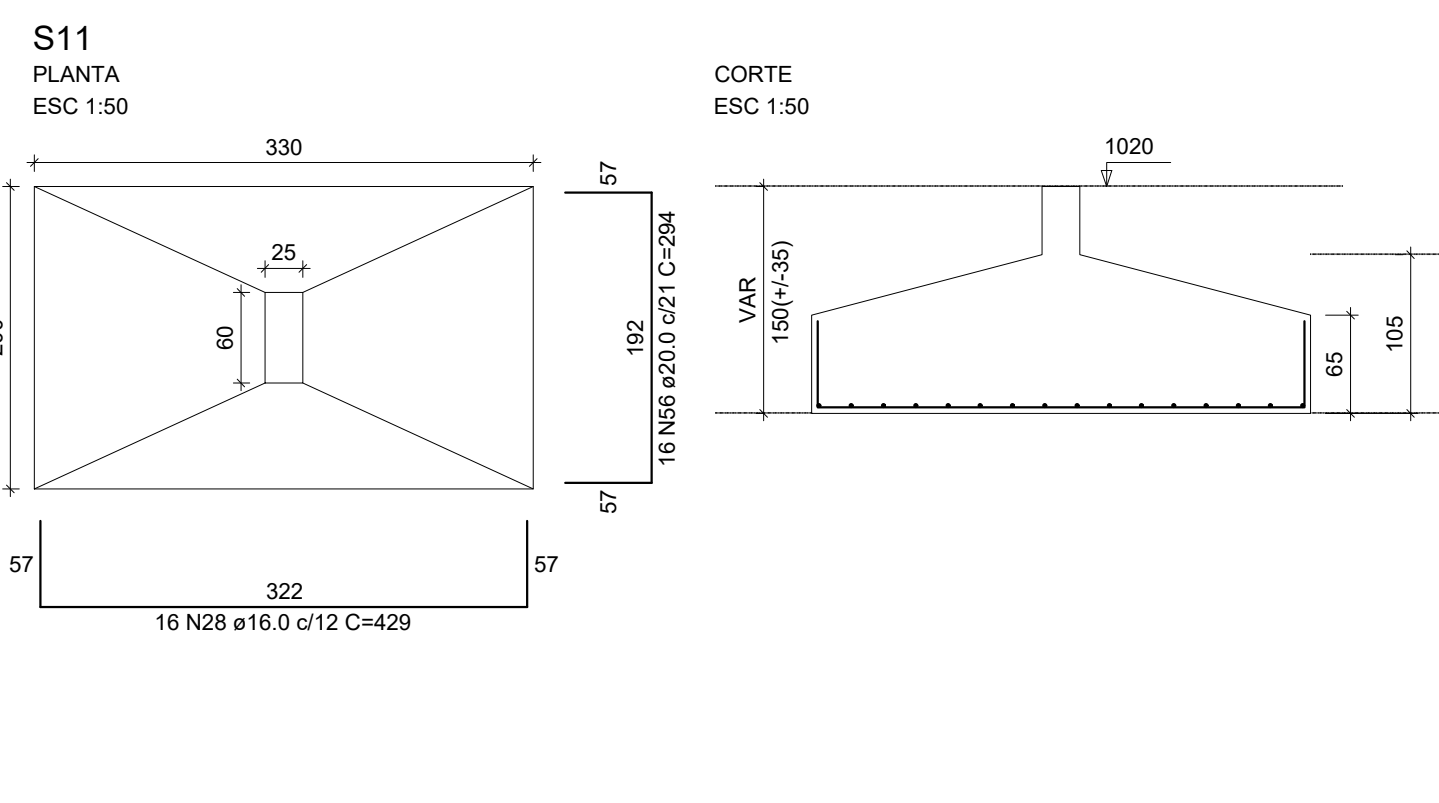
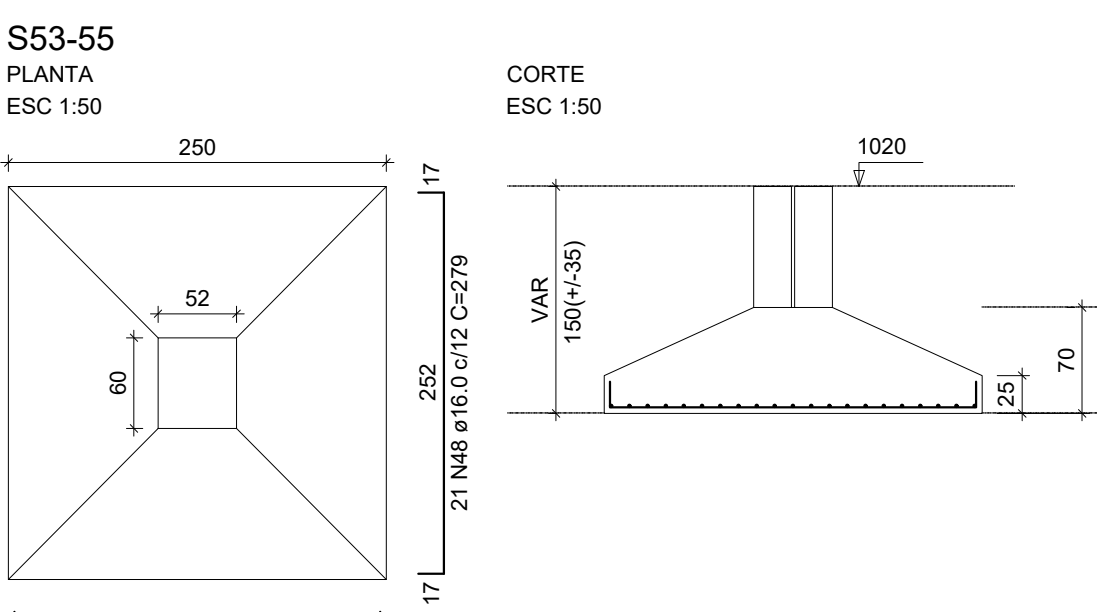
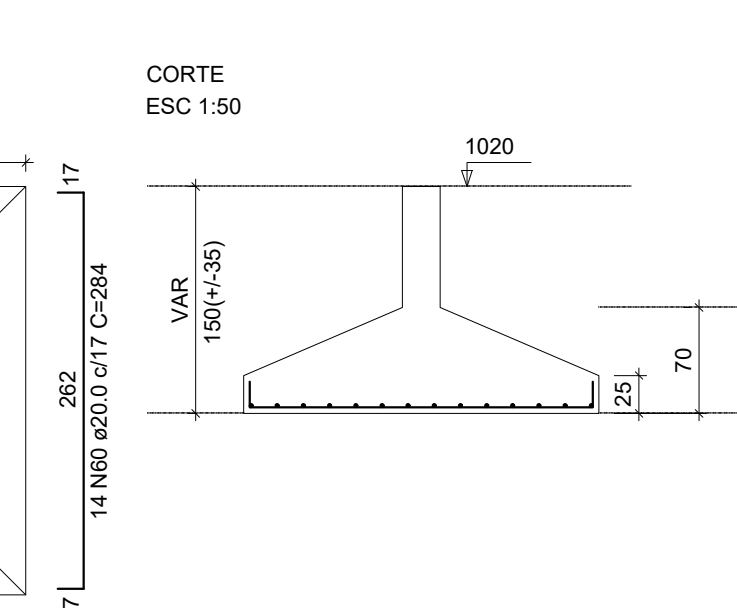
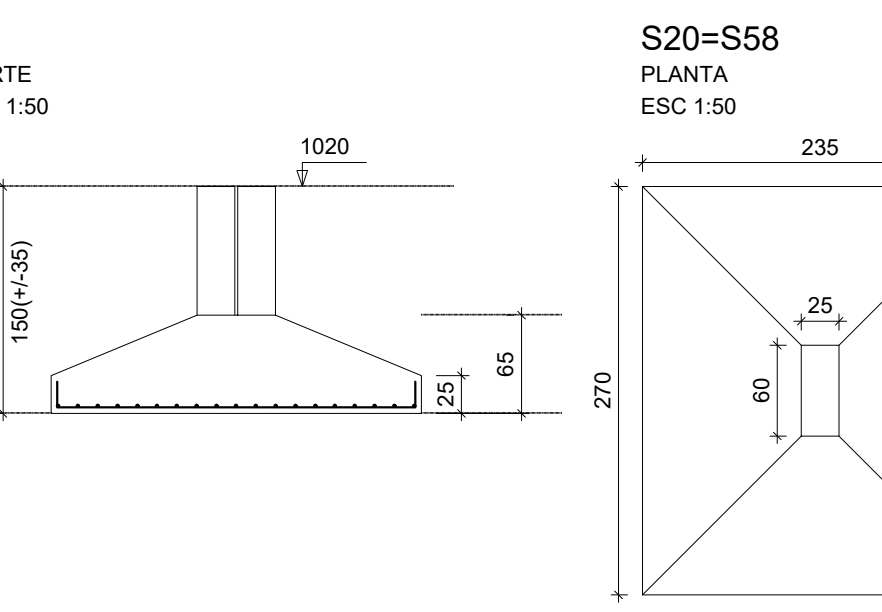
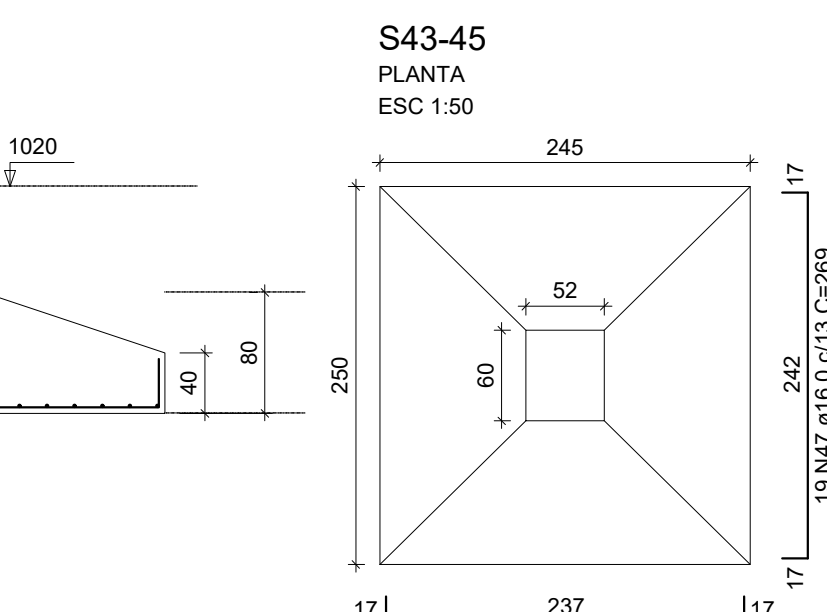
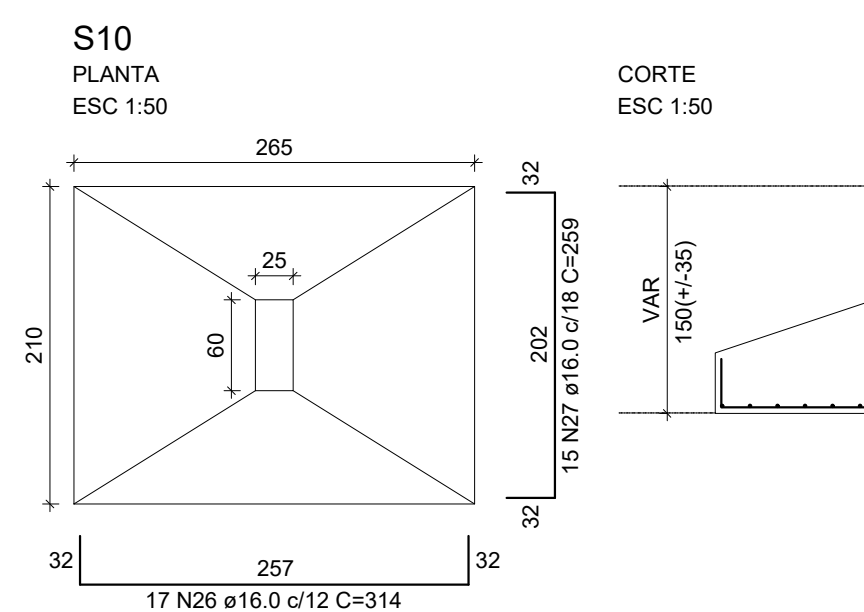
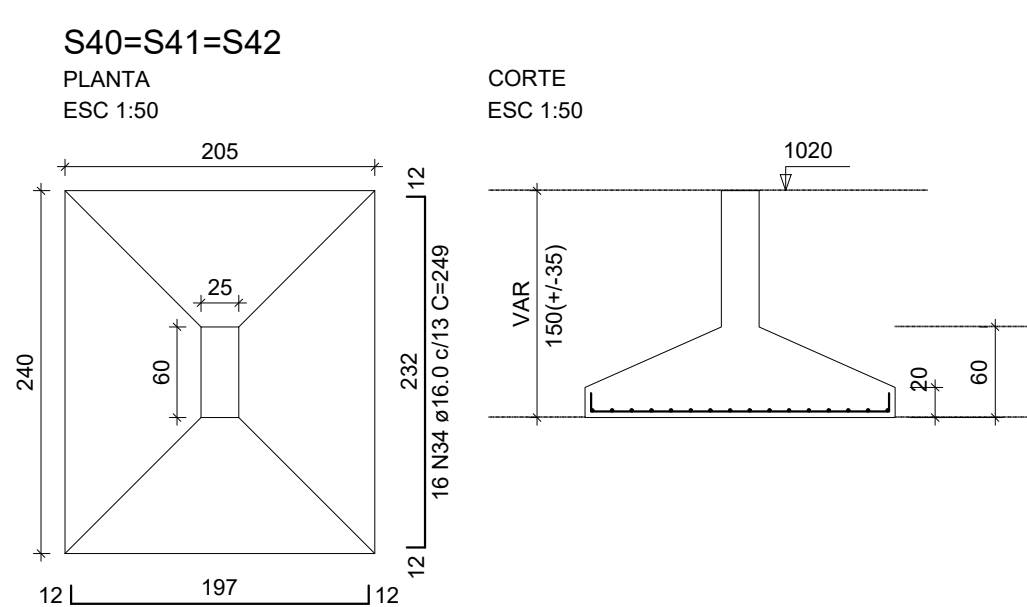
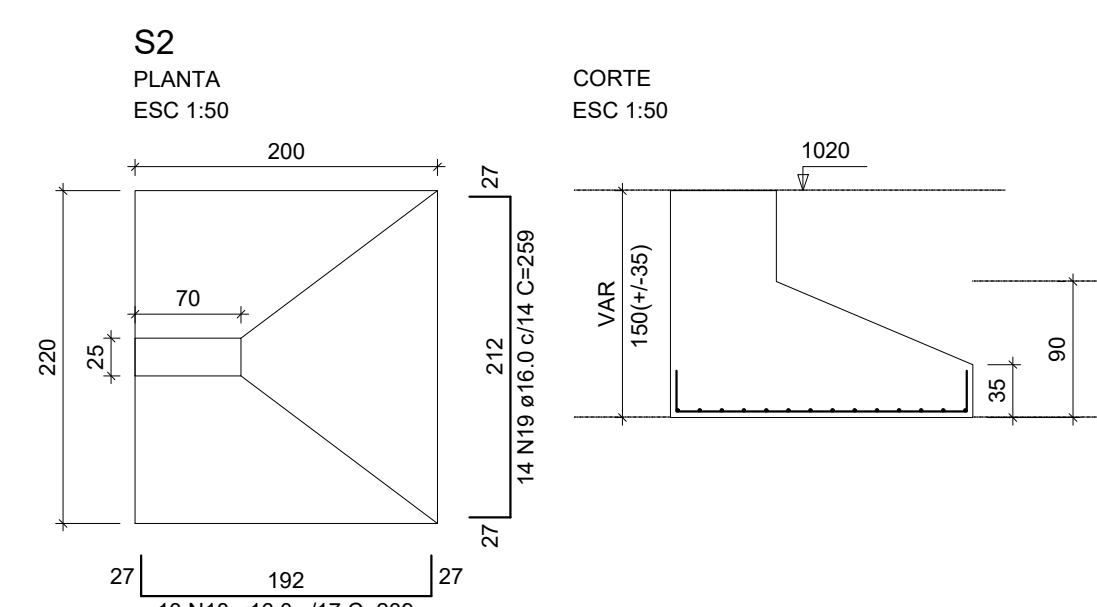
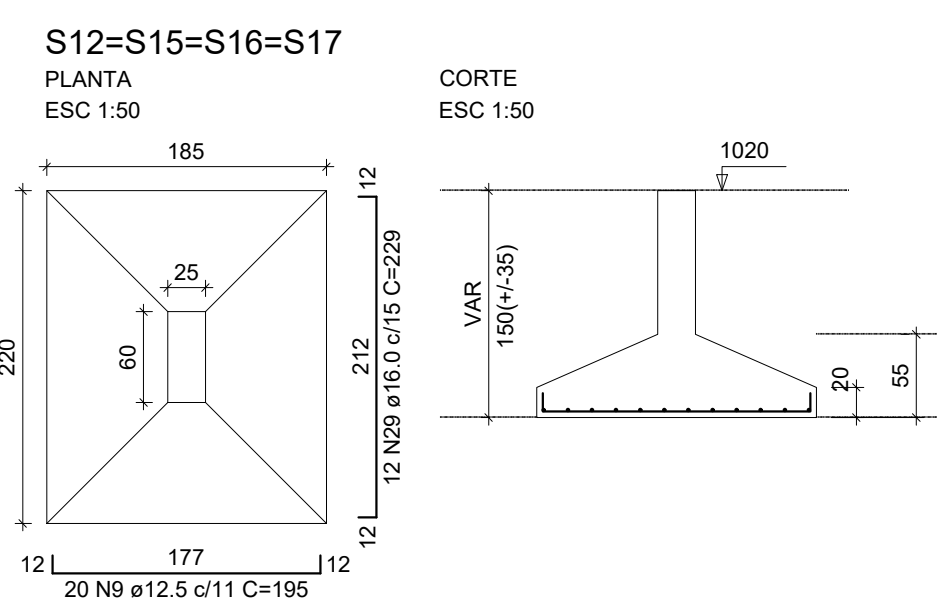
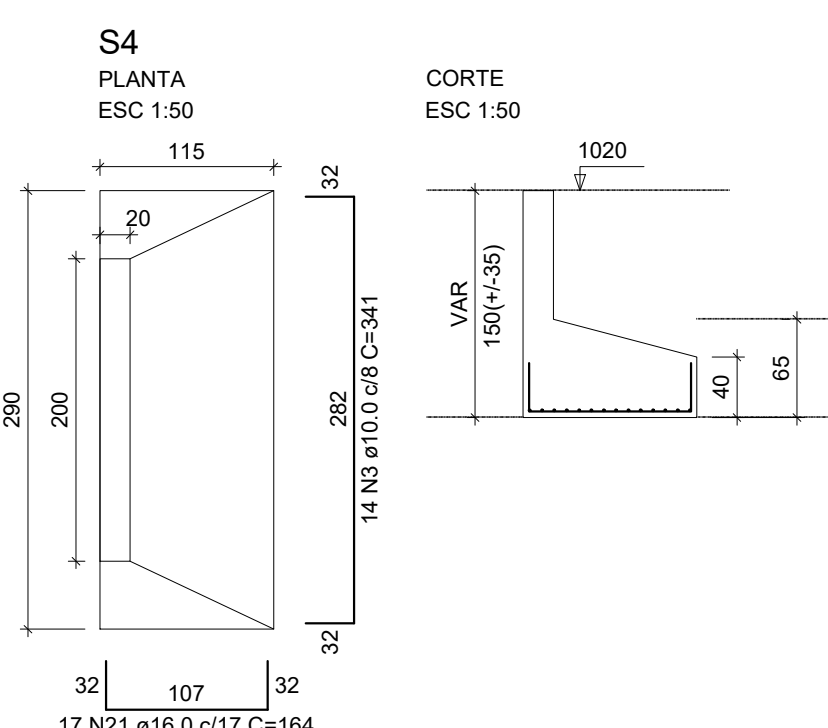
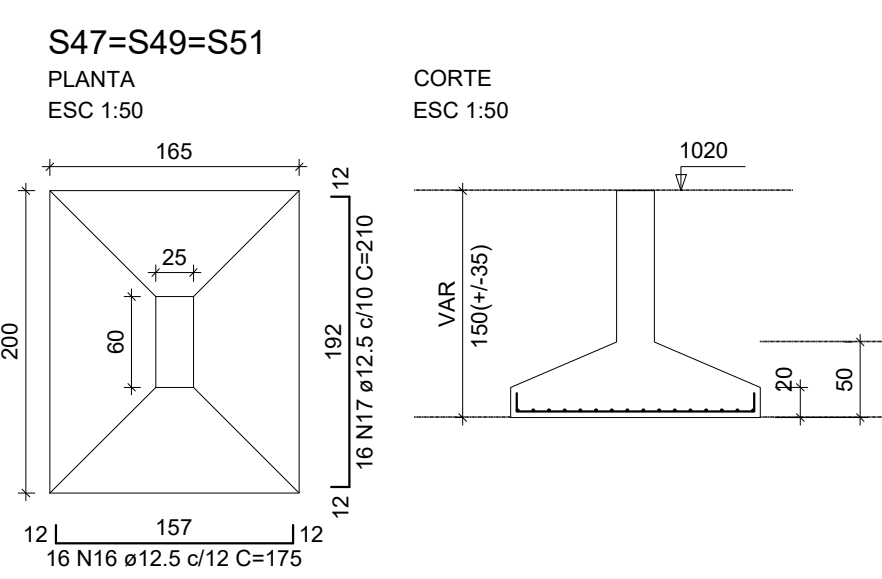
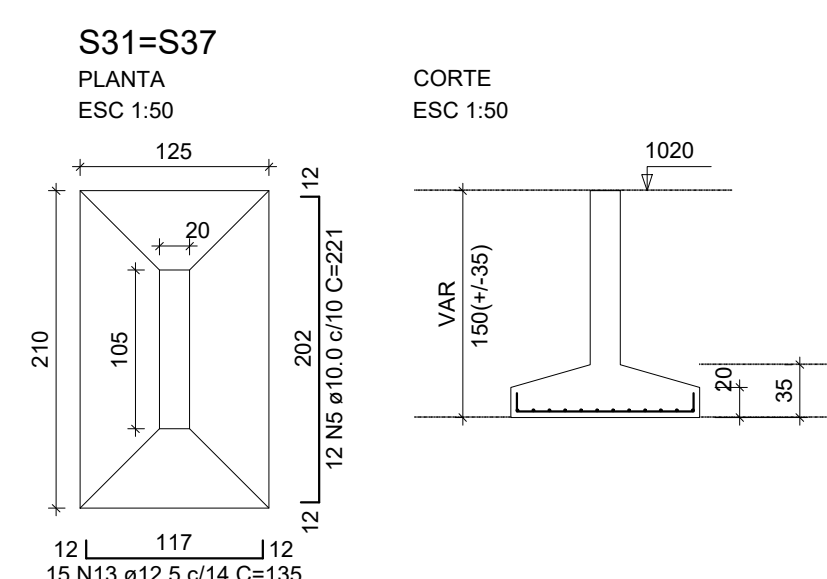
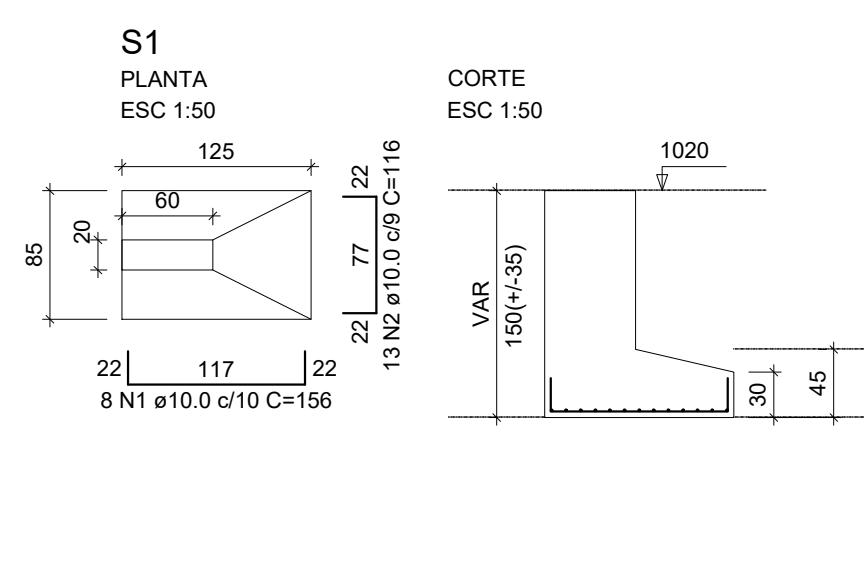
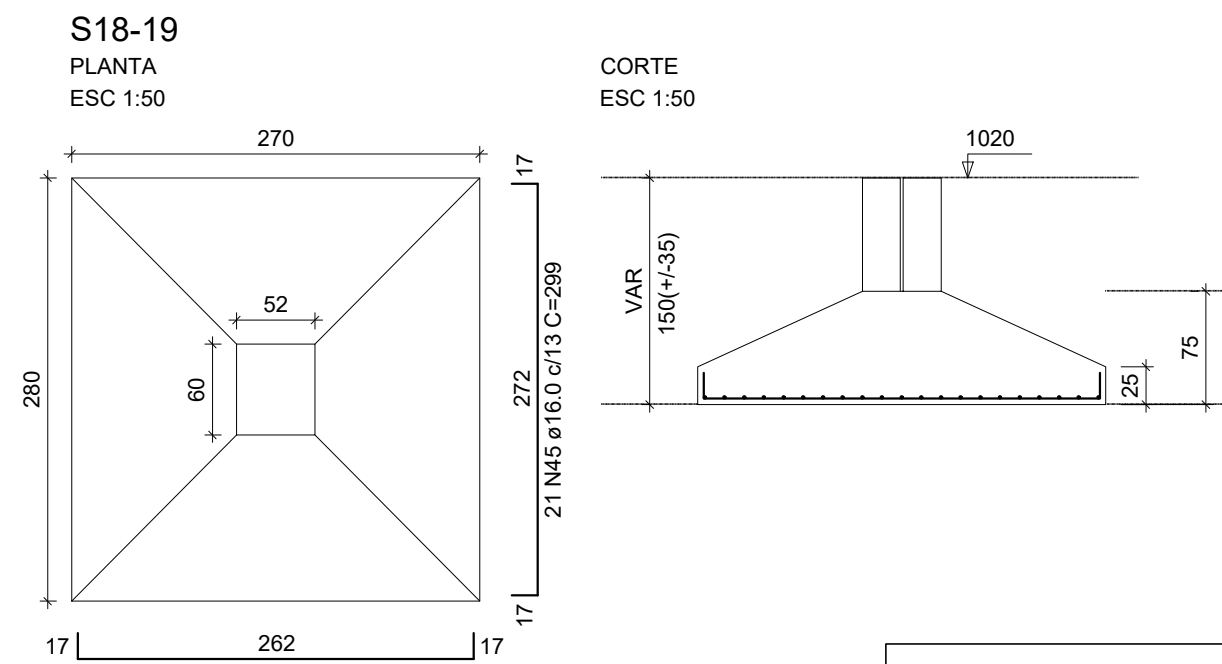
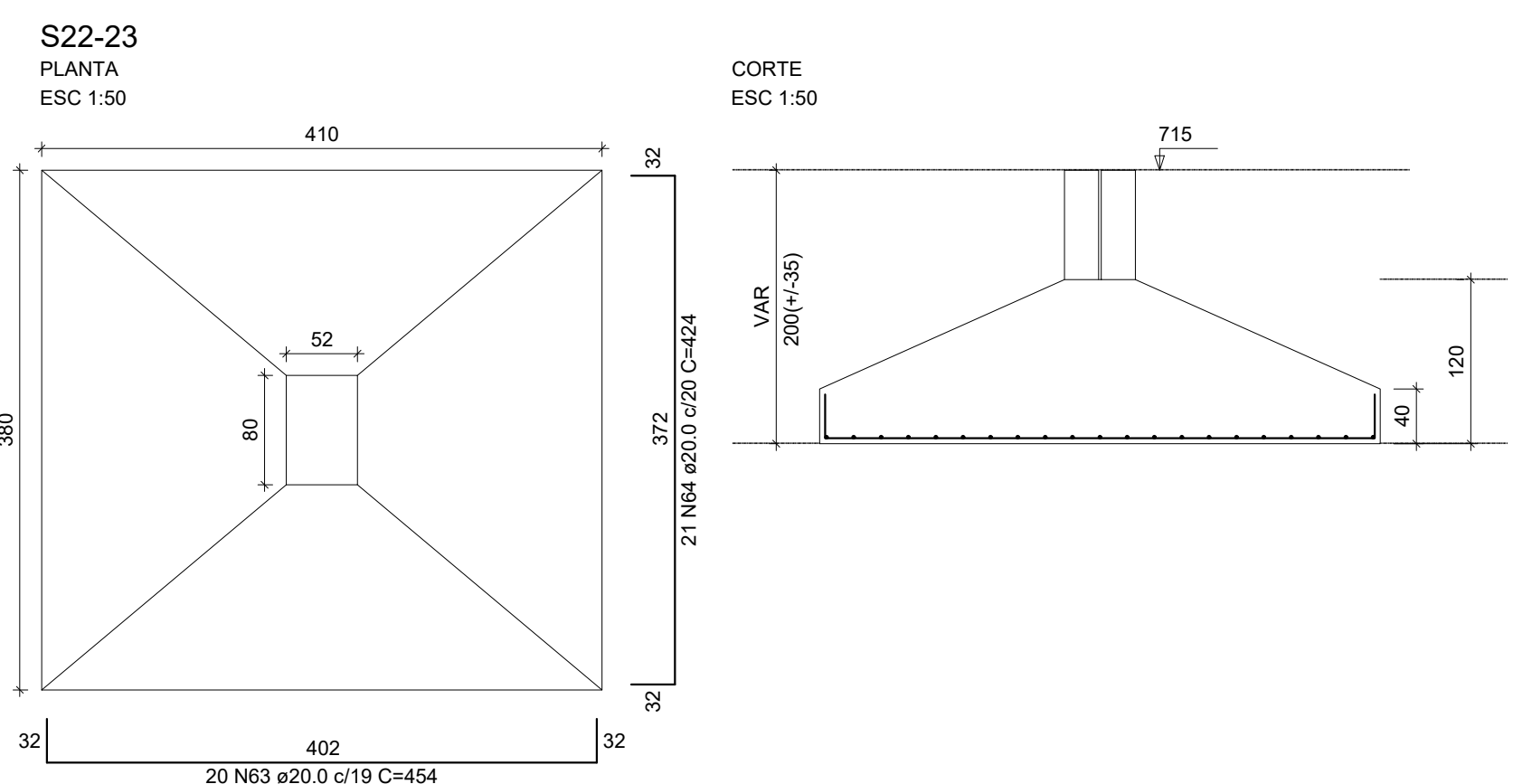
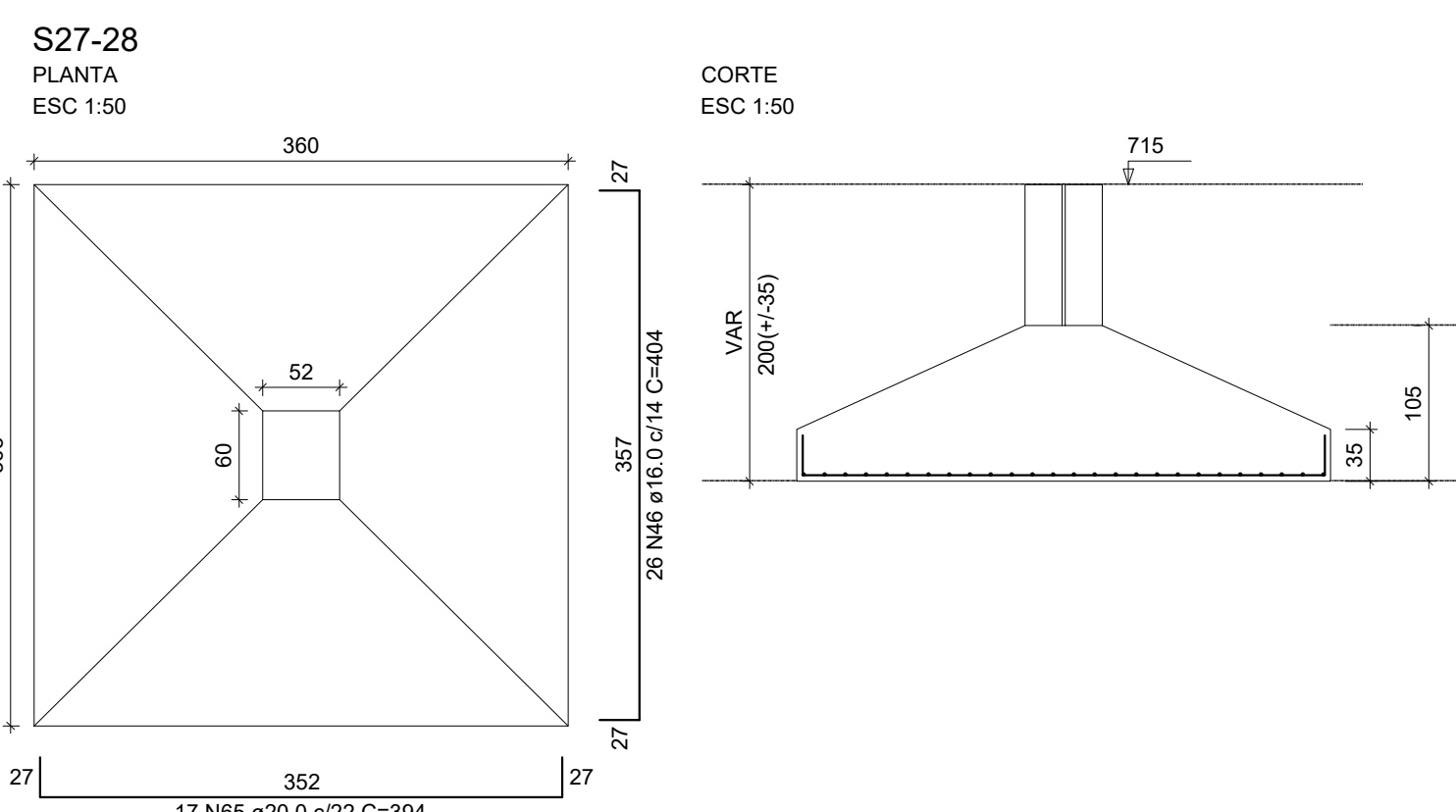
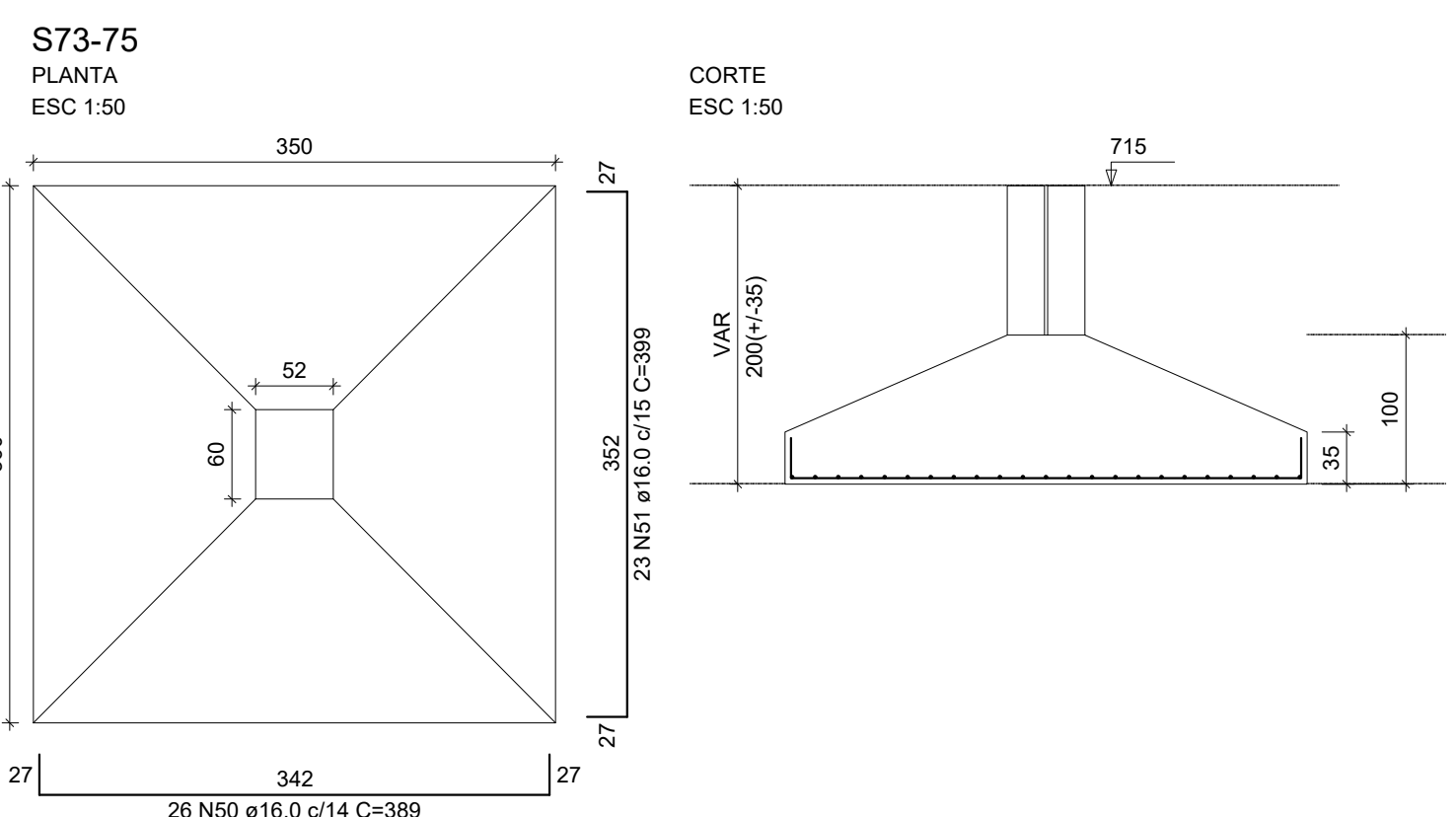
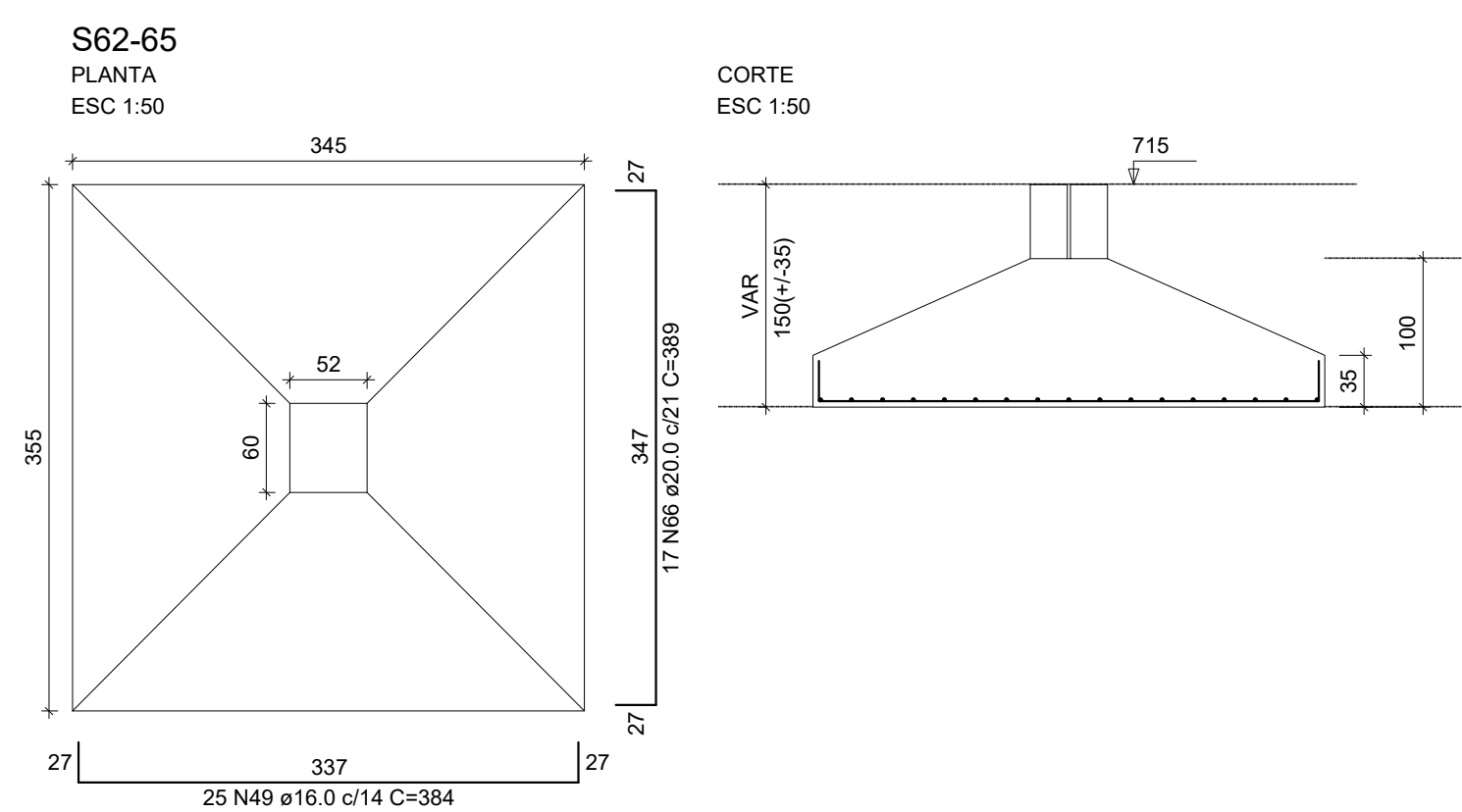
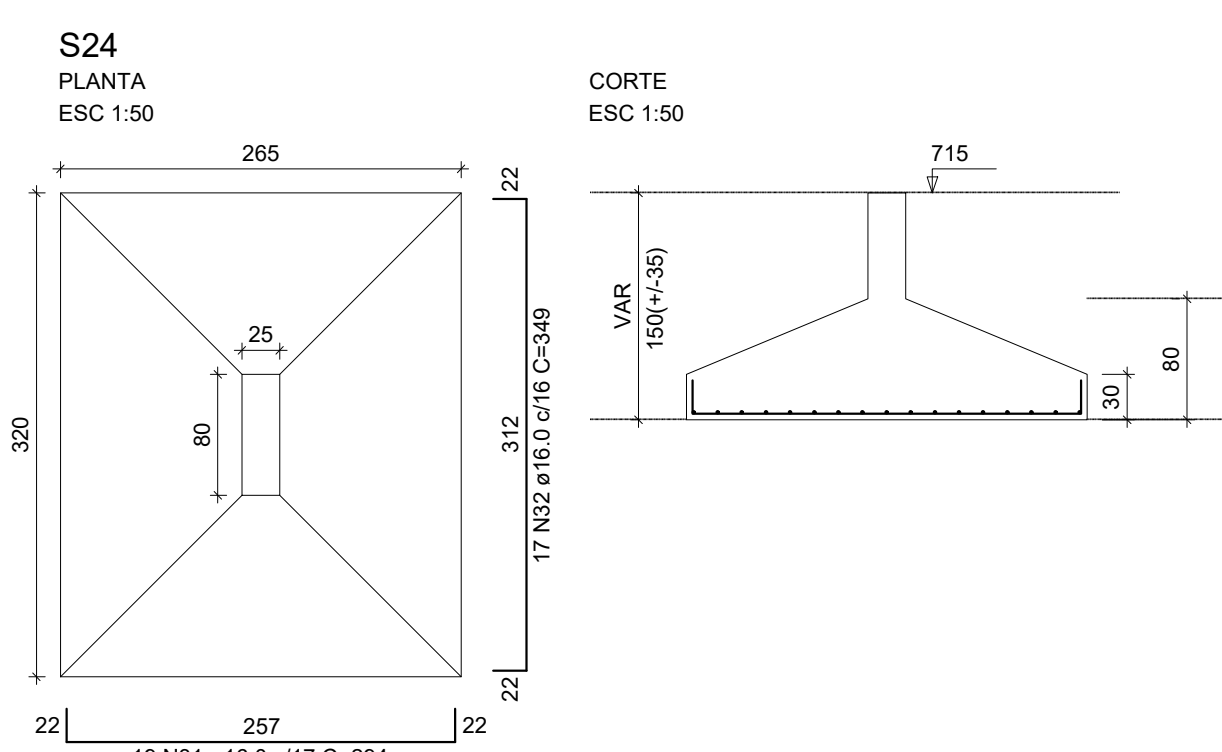
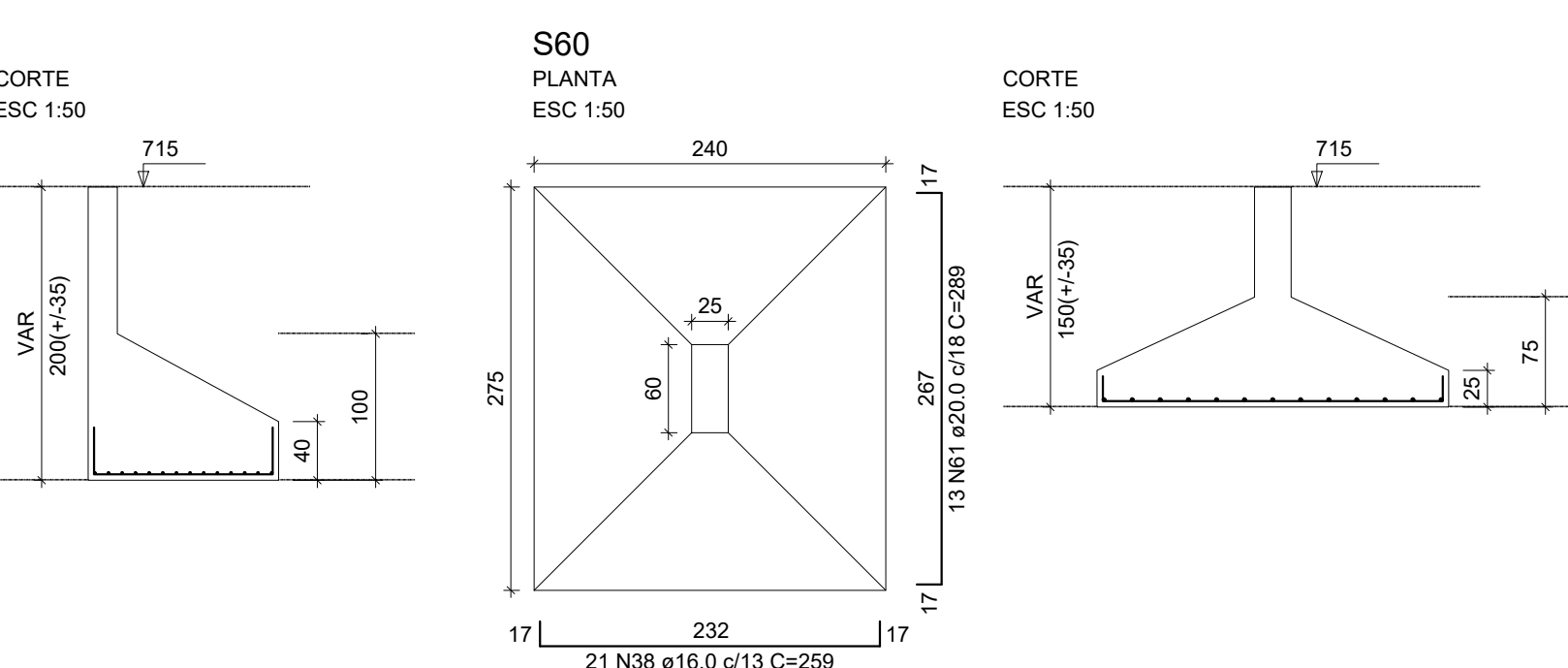
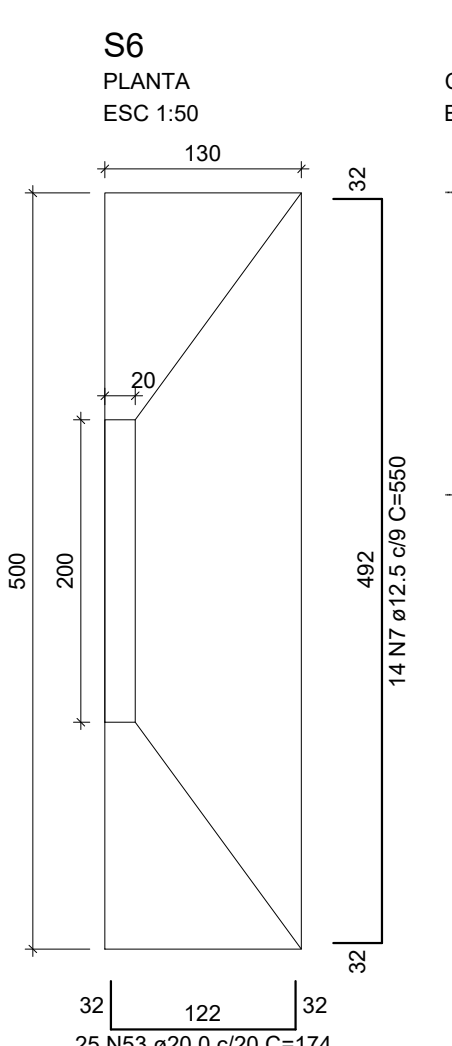
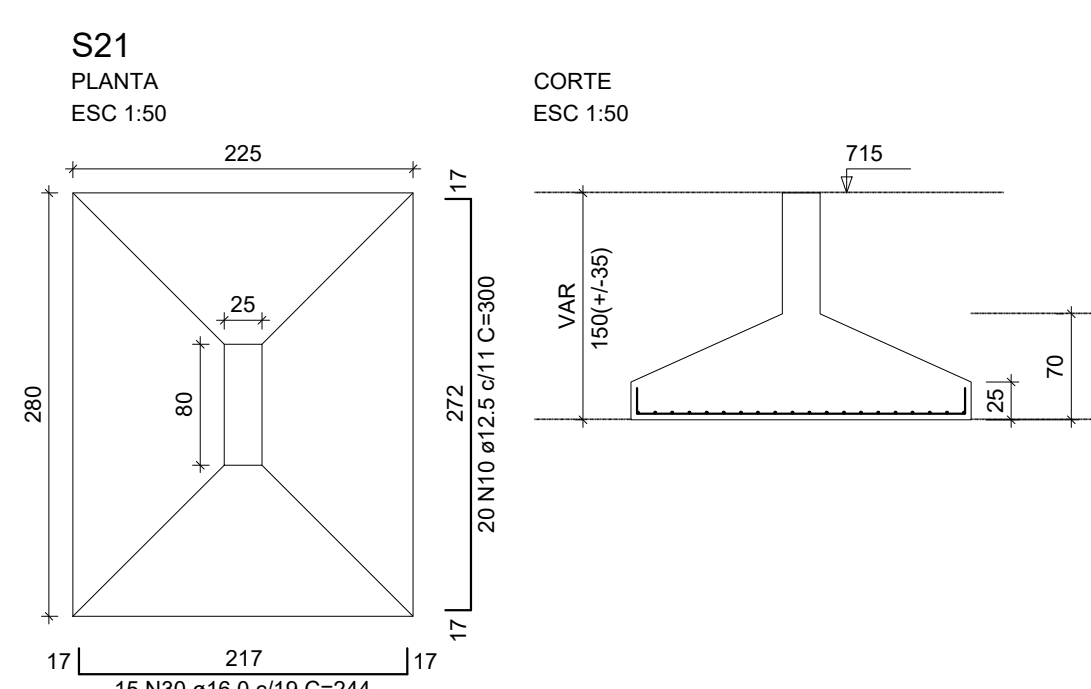
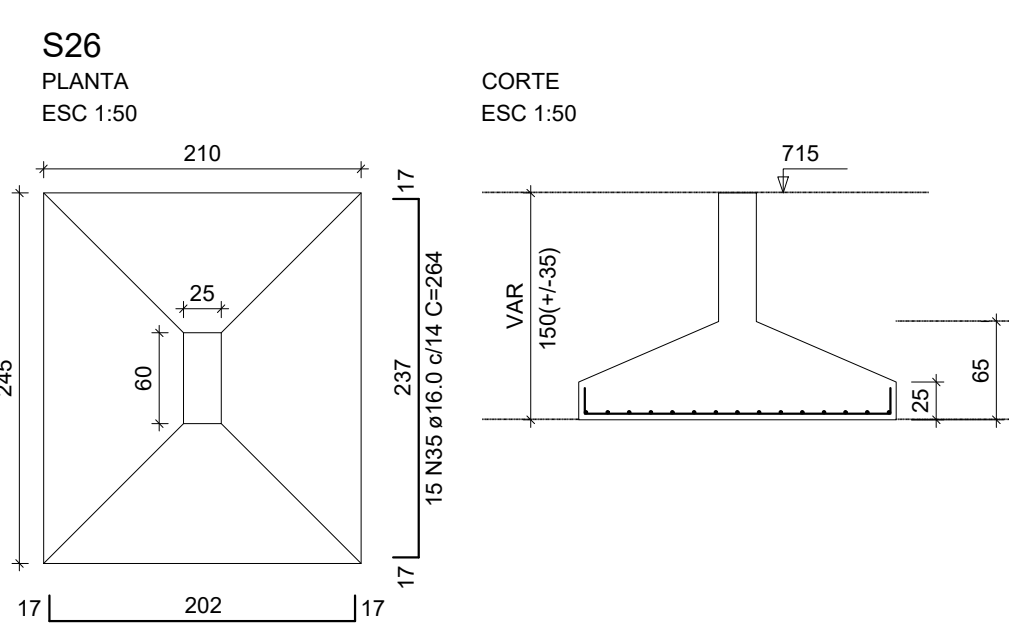
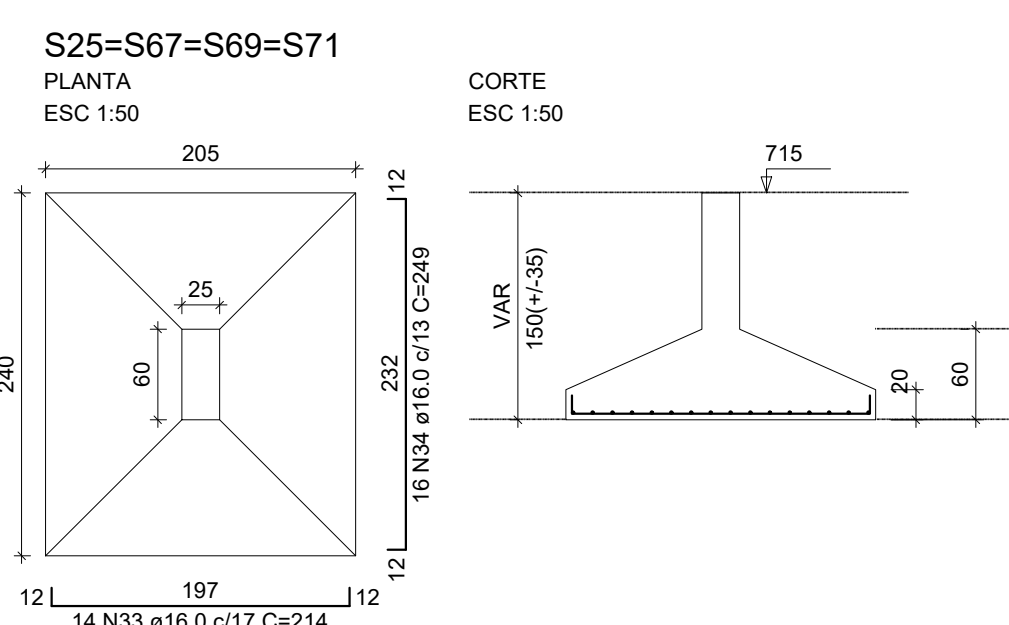
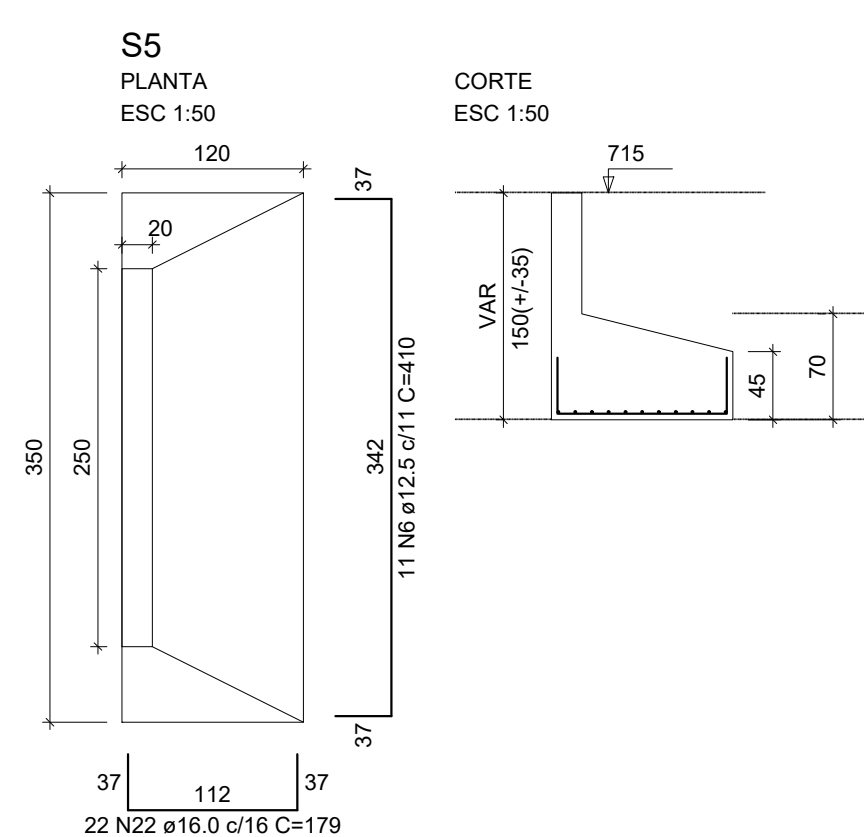
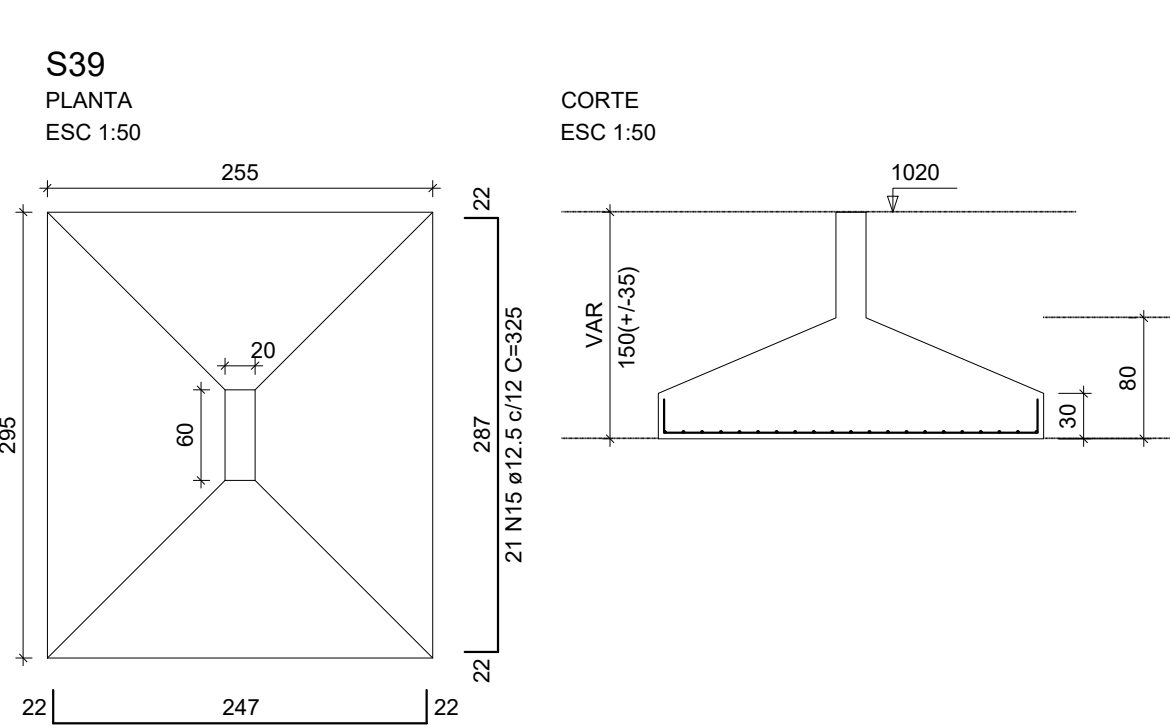
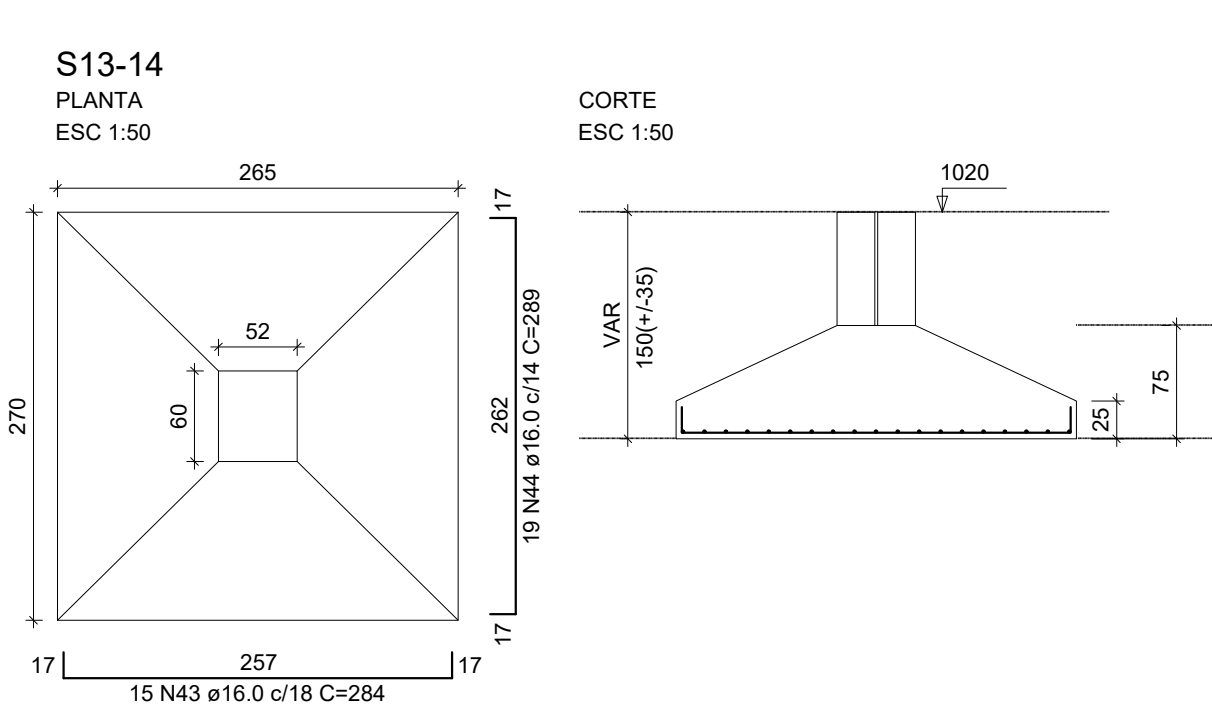
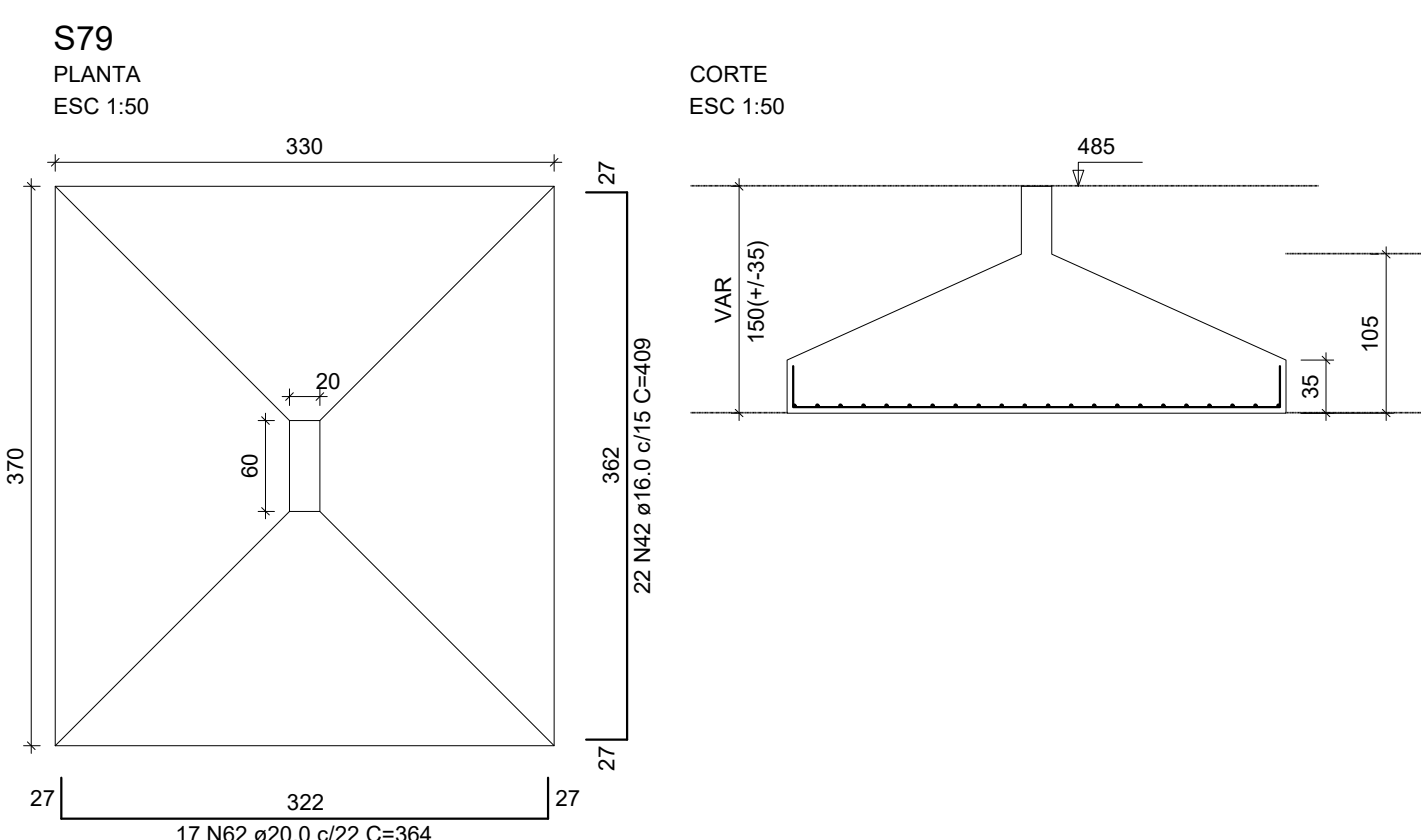
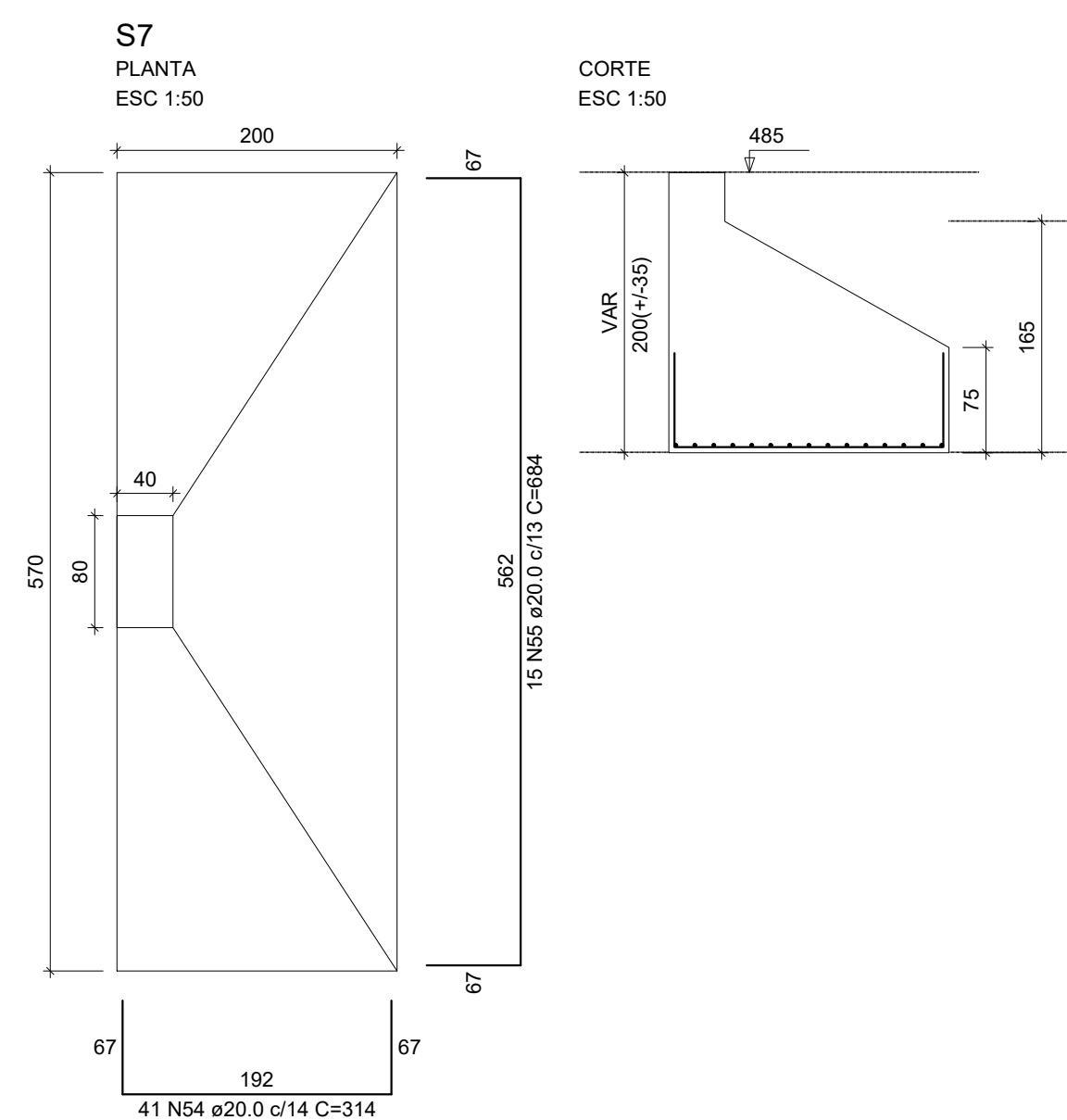
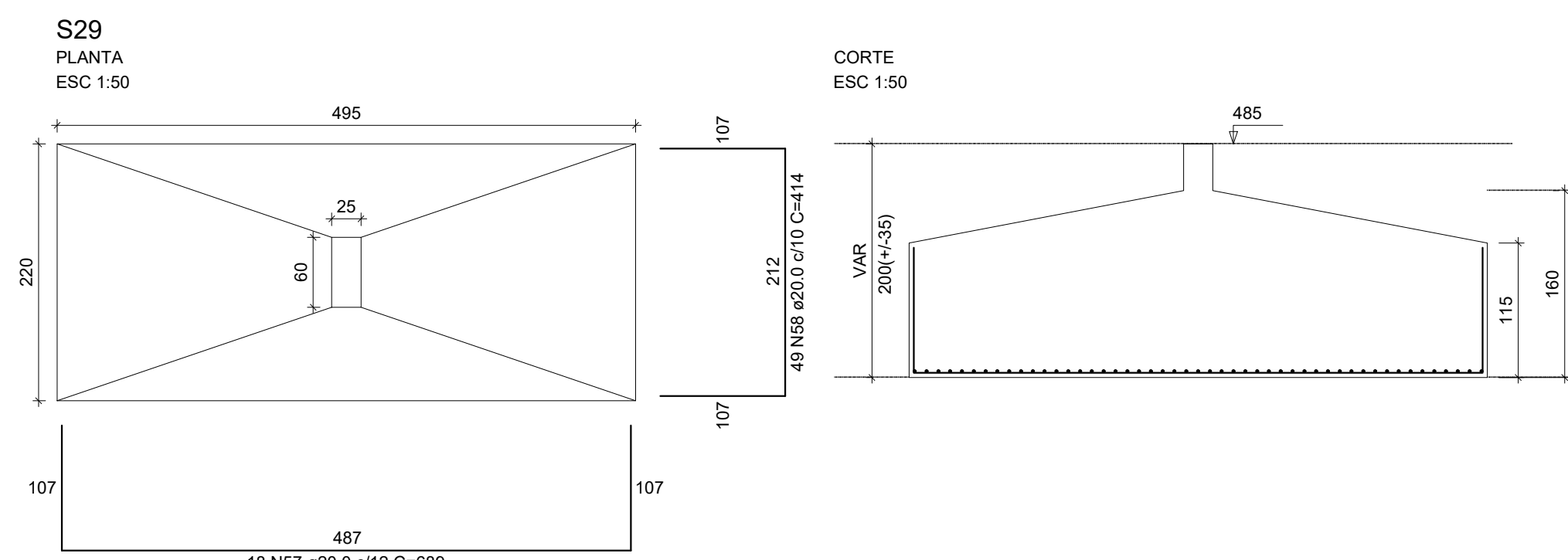
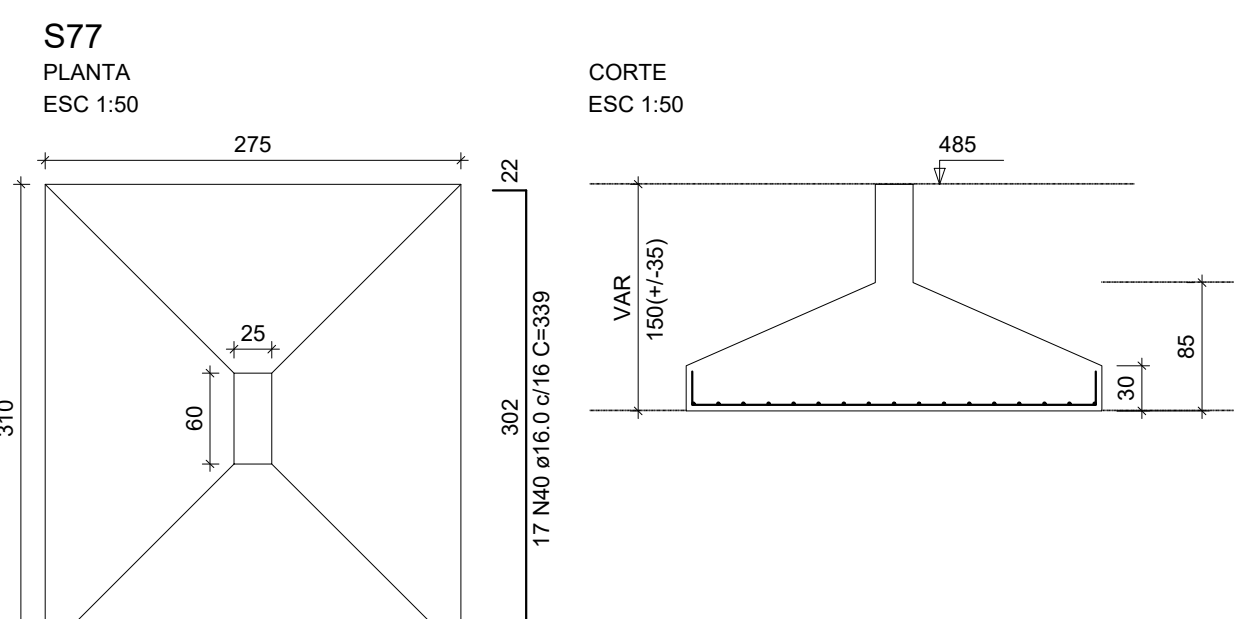
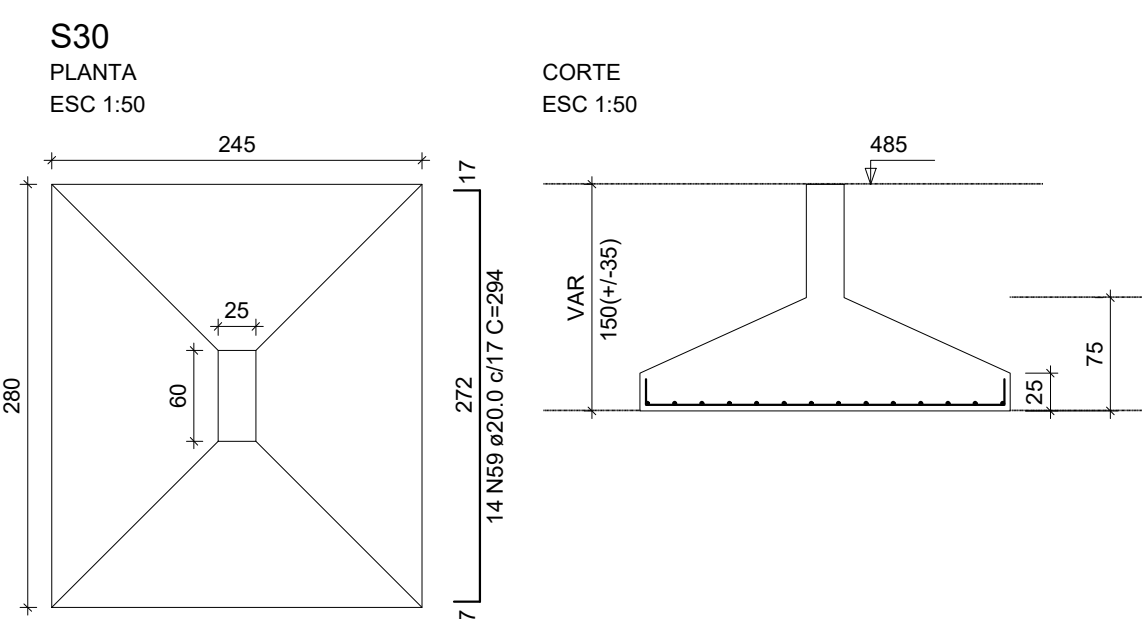
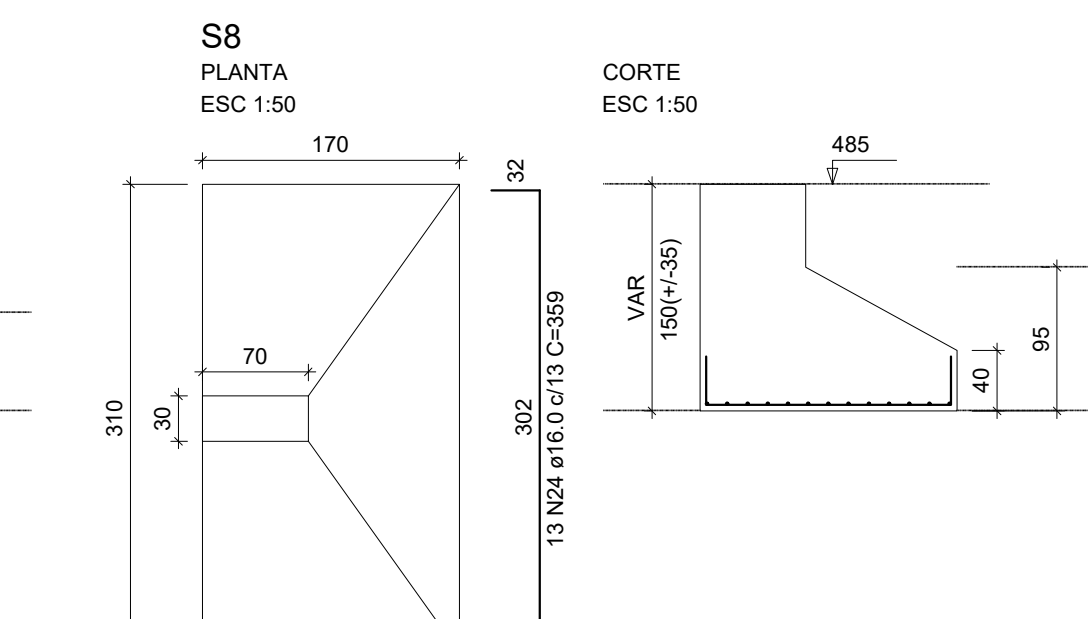
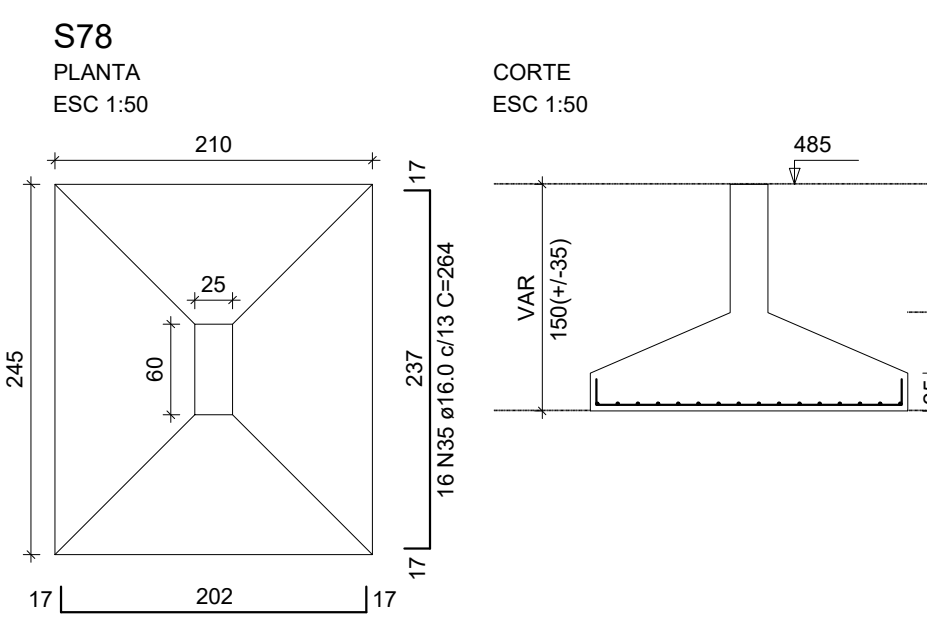
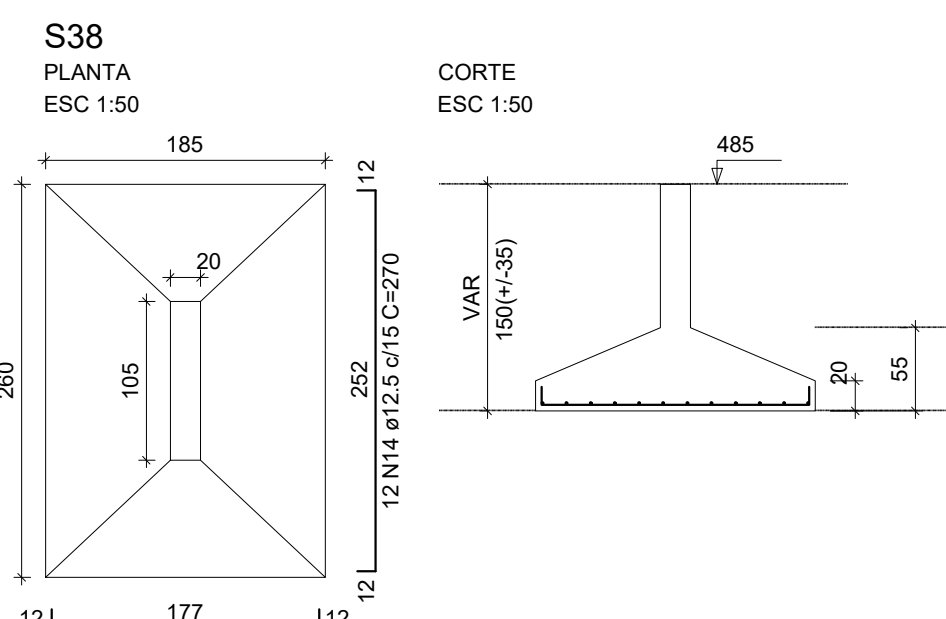
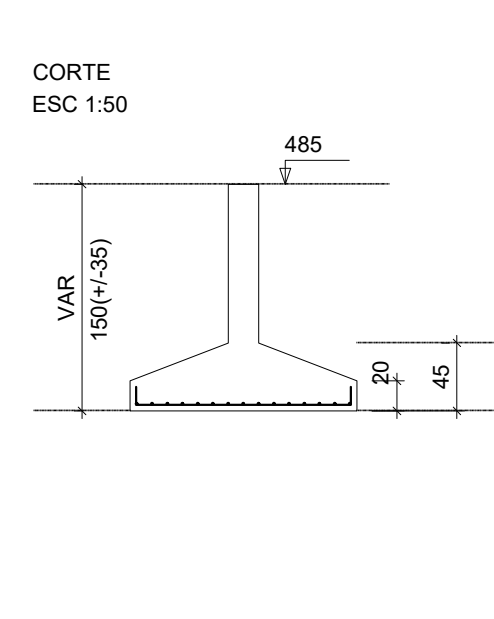
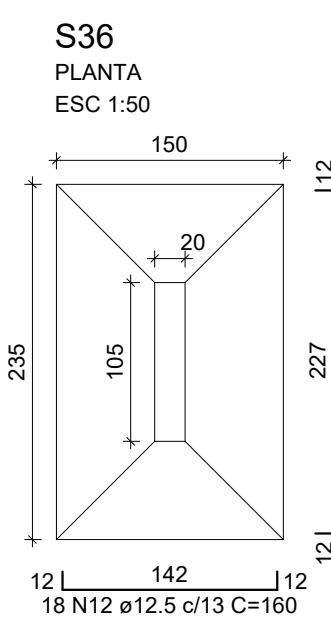
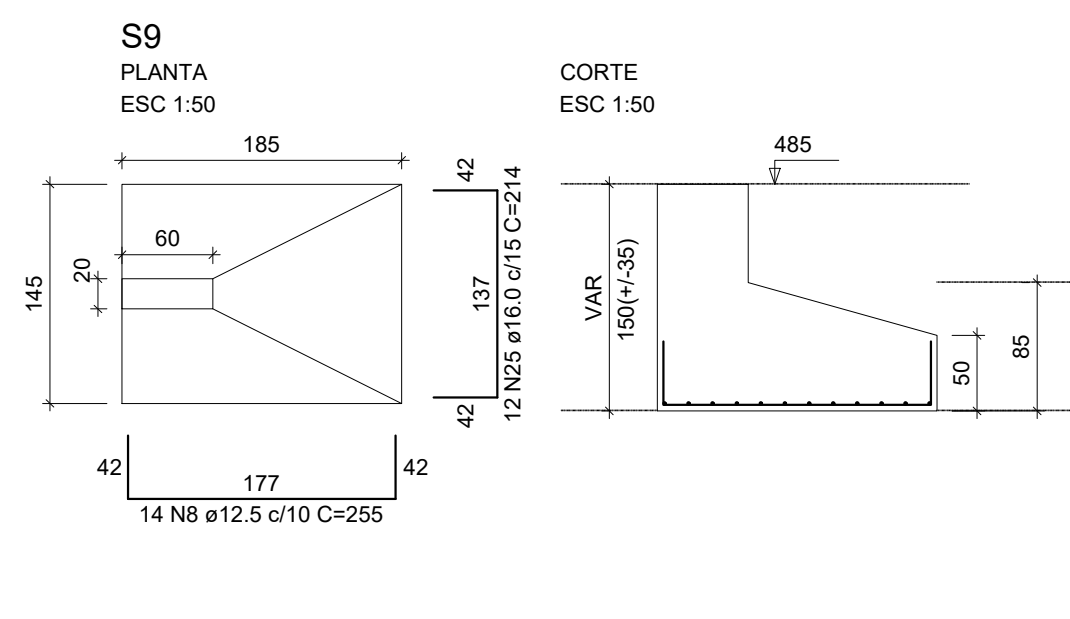
DE	OUT/2017	EMISSION INICIAL					
REV.	DATA	OBSERVAÇÕES	DESENHO	REVISÃO	APPROVAÇÃO	AUTORIZAÇÃO	
<div> UNIVERSIDADE FEDERAL DE PERNAMBUCO SUPERINTENDÊNCIA DE PROJETOS E OBRAS DIRETORIA DE PLANOS E PROJETOS</div>					<div> SMC PROJETO EXECUTIVO</div>		
OBJETO: CONSTRUÇÃO DA 4ª ETAPA DO CENTRO ACADÊMICO DE VITÓRIA INSTALAÇÃO DE SISTEMA DE GASES DOS BLOCOS B E C.					PRIMEIRA INDICADA		
TÍTULO: FORMAS DO TANQUE DE ÁGUA E FORMOL E DOS CORTES B, F, F, G, G.					PRIMEIRA INDICADA		
Área de Área		PAV. SEMI ENTERRADO		260,51 M²		06 / 56	
PAVIMENTO TERREO		PAVIMENTO ENTERRADO		95,92 M²		INDICADA	
1º PAVIMENTO		COBERTA		1050,66 M²		PRIMEIRA INDICADA	
2º PAVIMENTO		TOTAL CONSTRUÇÃO		3.380,14 M²		SETEMBRO/2024	
3º PAVIMENTO							
Elaborado por: SMC MARCOS ANDRÉ SANTOS					D.P.P. ISABEL RYTO		
Engenheiro - RPA 18047157					S.P.O. CARLOS FALCÃO		
					U.F.P.E. ALFREDO GOMES		
					DIRETORA SUPERINTENDENTE		
					REITOR		

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Forma da TAMPA RESERVATÓRIO SUPERIOR (Nível 3035)
escala 1:100

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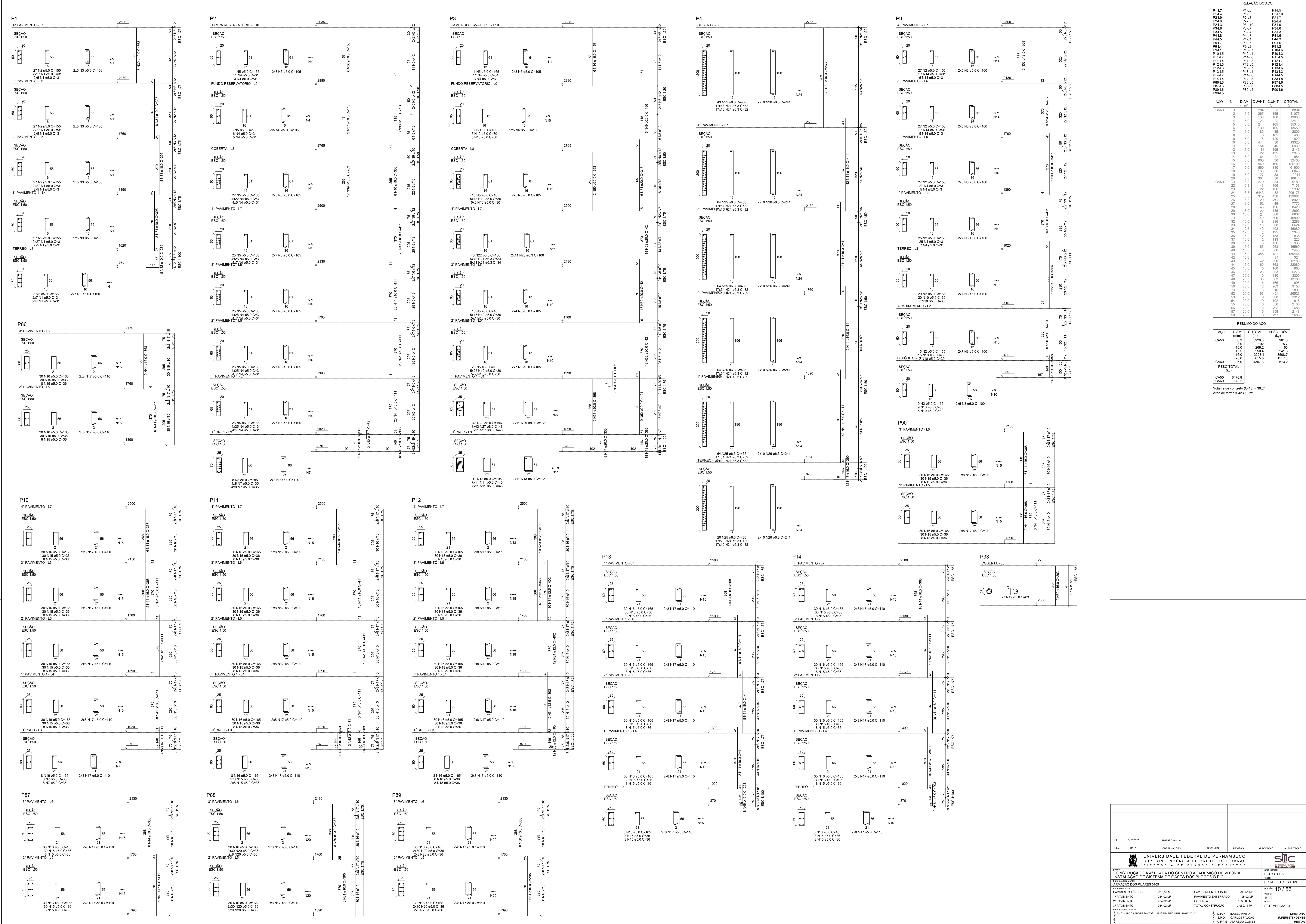


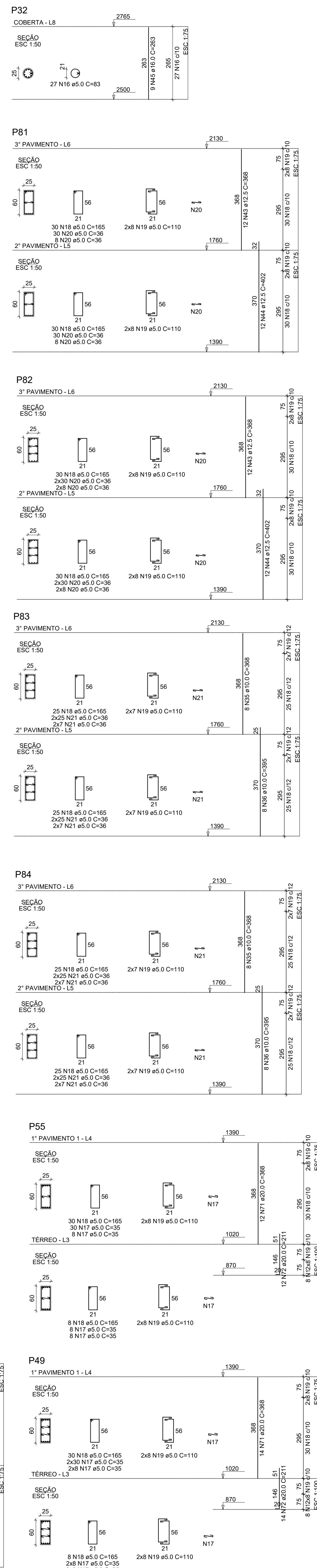
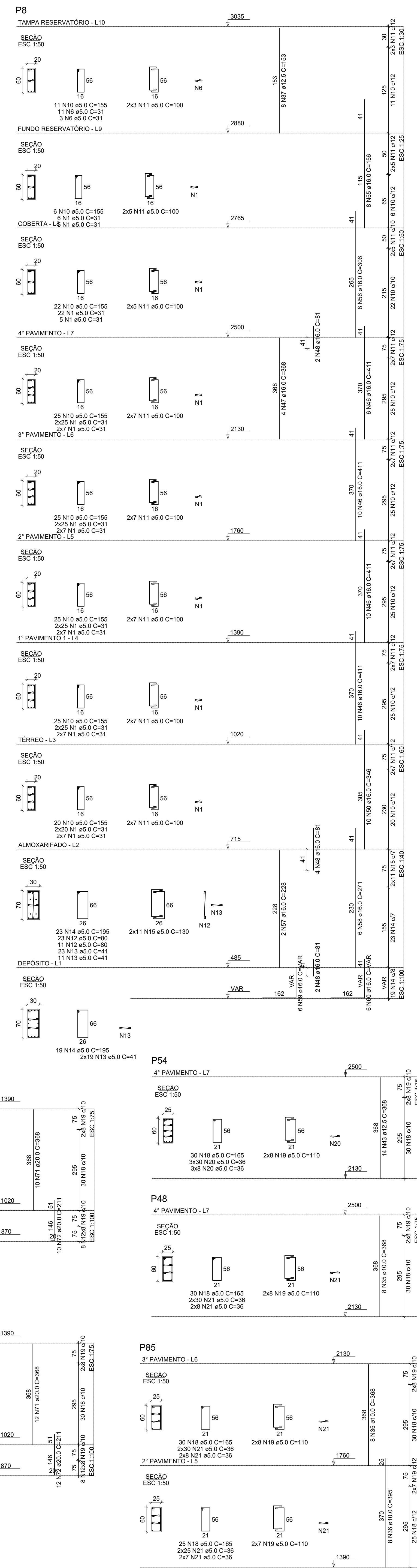
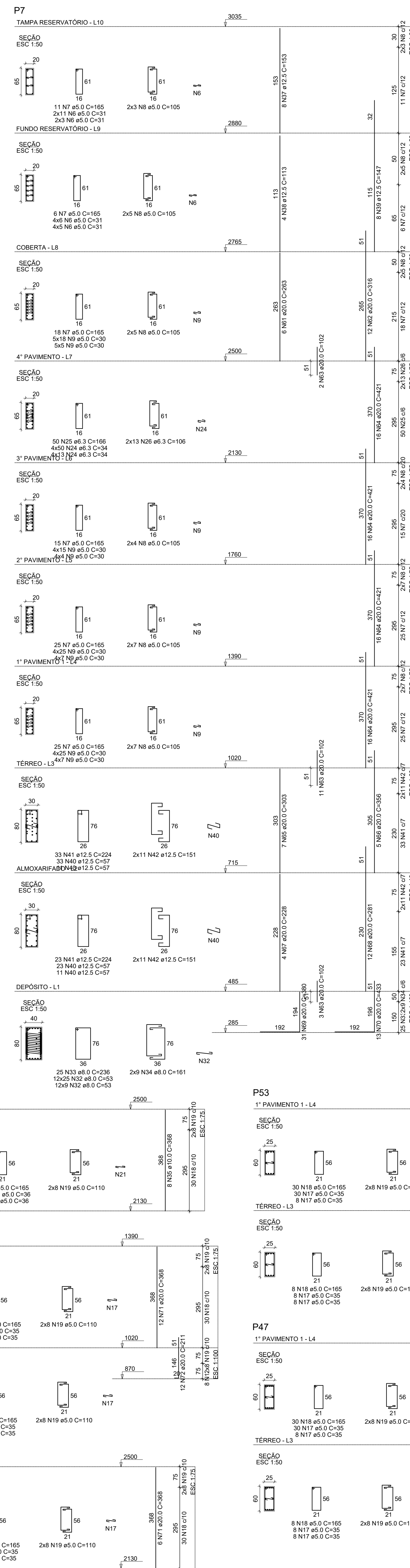
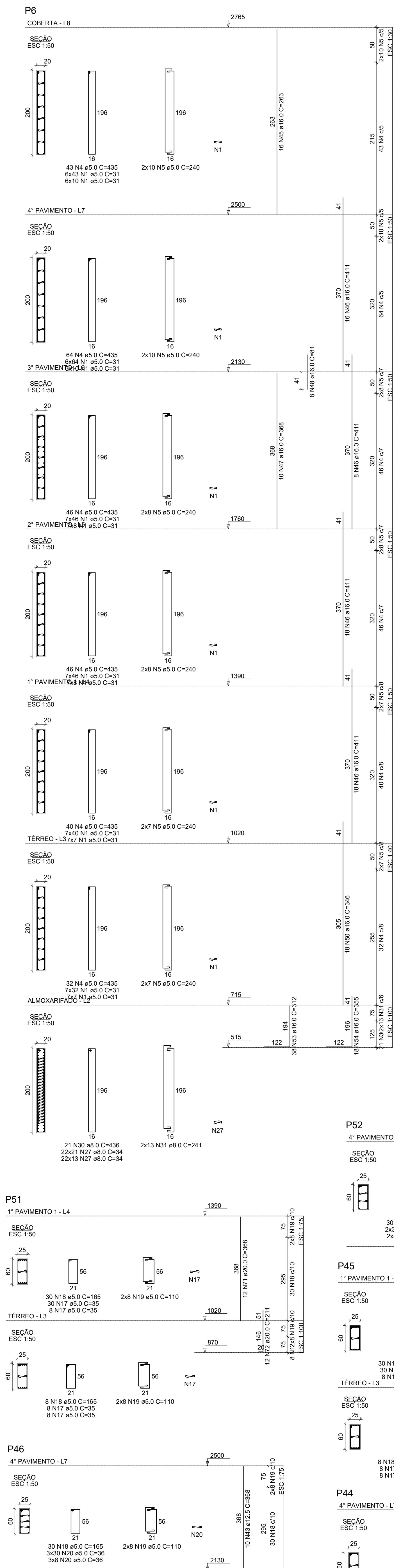
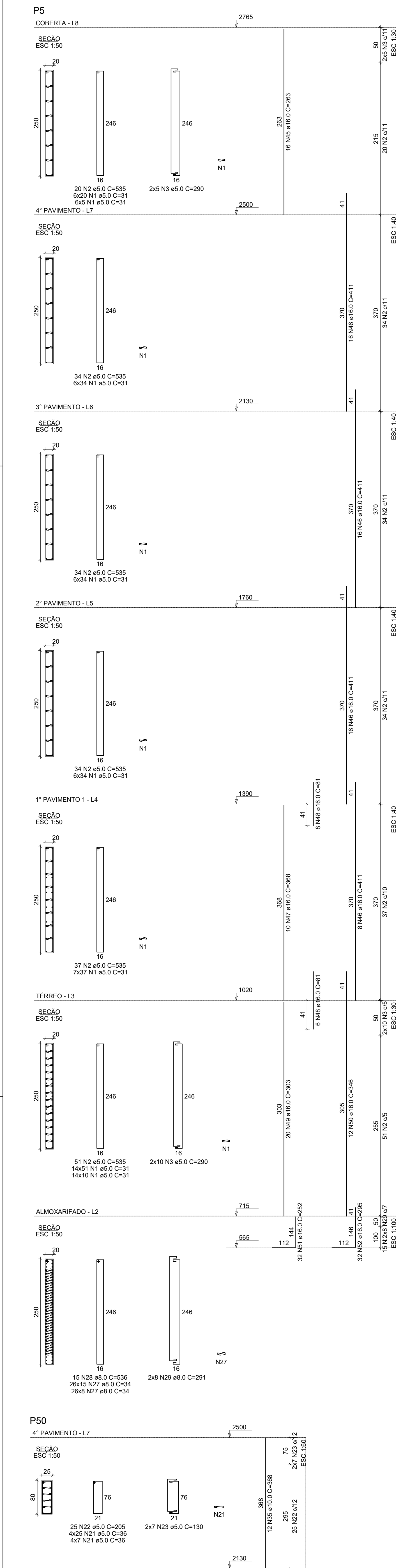
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S143	S2-13				
S143	S2-13				
S741	S841				
S741	S841				
S21-2	S842				
S21-2	S842				
S841	2453-7				
S943-1	S943-1				
S2583-13	S8642				
S943-1	S943-1				
S18-10-3	S22-242				
S42-43-13	S35-55-3				
S7519-12					
CAQO	N	DIAM	QUANT	C	U
	2	10,0	13		
	3	10,0	14		
	5	10,0	24		
	6	12,5	14		
	7	12,5	11		
	8	12,5	20		
	9	12,5	20		
	10	12,5	20		
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	60	16,0	15		
	61	20,0	13		
	62	20,0	13		
	63	20,0	20		
	64	20,0	21		
	65	16,0	17		
	66	16,0	17		

RESUMO DO AÇO			
AÇO	DIAM. (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	10.0	165.2	101.9
	12.5	818.1	788.2
	16.0	2579.2	4070.9
	20.0	1223.3	3016.9
PESO TOTAL (kg)			
CA50		7977.8	

Volume de concreto (C-45) = 166.57 m³
 Área de forma = 176.09 m²

05	OUT/07	EMISSÃO INICIAL						
REV	DATA	OBSERVAÇÕES	DESENHO	REVISÃO	APPROVAÇÃO	AUTORIZAÇÃO		
<p align="center">UNIVERSIDADE FEDERAL DE PERNAMBUCO SUPERINTENDÊNCIA DE PROJETOS E OBRAS DIRETORIA DE CENTROS E PROJETOS</p>								
<p>CONSTRUÇÃO DA 4ª ETAPA DO CENTRO ACADÊMICO DE VITÓRIA INSTALAÇÃO DE SISTEMA DE GASES DOS BLOCOS B E C.</p>							<p>PRIMEIRO ESTRUTURA</p>	
<p>ARMADA DE SAPATAS</p>							<p>PROJETO EXECUTIVO</p>	
<p>REVISÃO Nº 01</p>			<p>DATA DE EMISSÃO</p>			<p>PRazo 09 / 56</p>		
<p>1º PAVIMENTO 818,52 MP</p>			<p>PAVI. SEM ENTERRADO 295,51 MP</p>			<p>REVISOR</p>		
<p>2º PAVIMENTO 954,02 MP</p>			<p>POBIMENTO ENTERRADO 95,52 MP</p>			<p>ITEM</p>		
<p>3º PAVIMENTO 954,02 MP</p>			<p>COBERTA 100,58 MP</p>			<p>REVISÃO</p>		
<p>TOTAL 2.726,56 MP</p>			<p>TOTAL CONSTRUÇÃO 3.060,14 MP</p>			<p>SETEMBRO/2004</p>		
<p>APPROVAÇÃO DE PROJETOS</p>			<p>APPROVAÇÃO DE PROJETOS</p>			<p>DIRETORIA</p>		
<p>DR. SMC MARCOS ANDRÉ SANTOS</p>			<p>ENGENHEIRO - PROJ. 10047270-7</p>			<p>SUPERINTENDENTE</p>		
<p></p>			<p>D.P.P. ISABEL PINTO</p>			<p>REVISOR</p>		
<p></p>			<p>S.P.O. CARLOS FALCÃO</p>			<p></p>		
<p></p>			<p>L.U.P. ALBERTO DE MENDONÇA</p>			<p></p>		





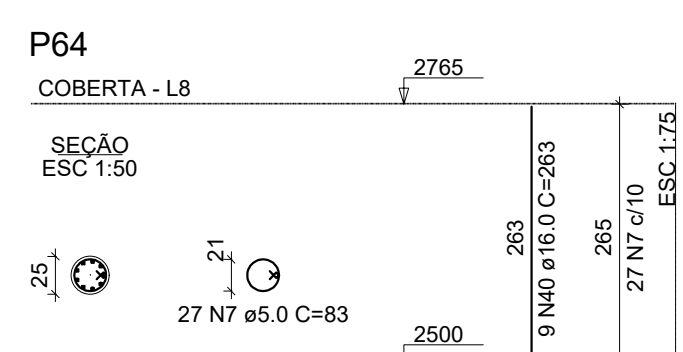
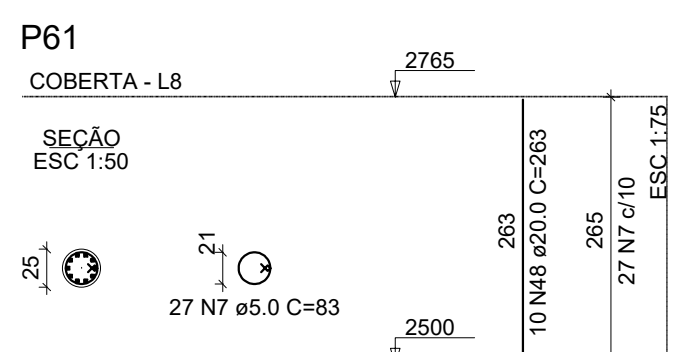
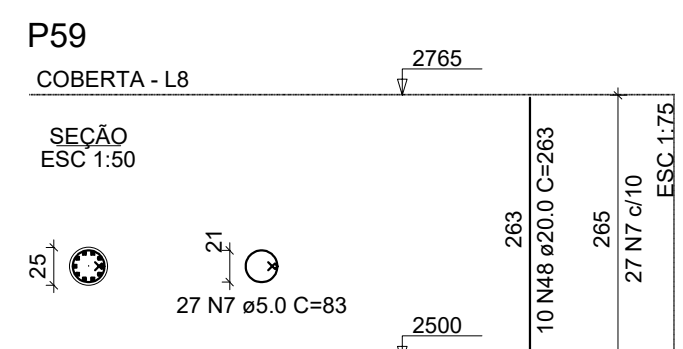
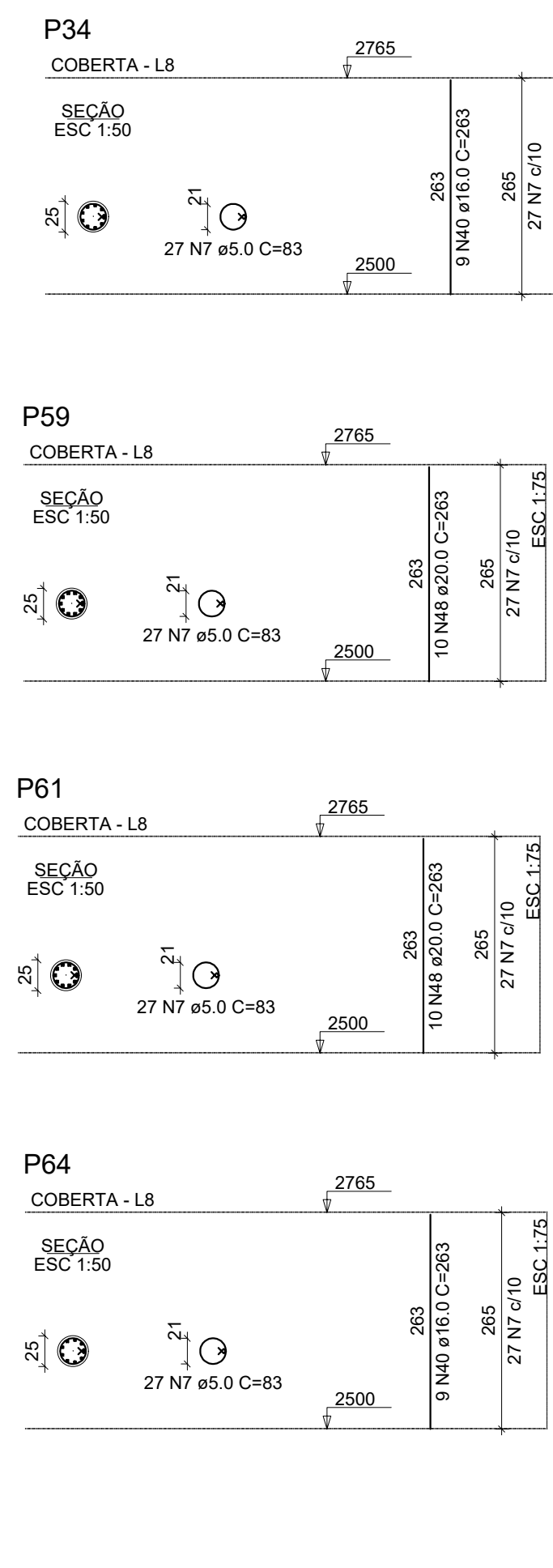
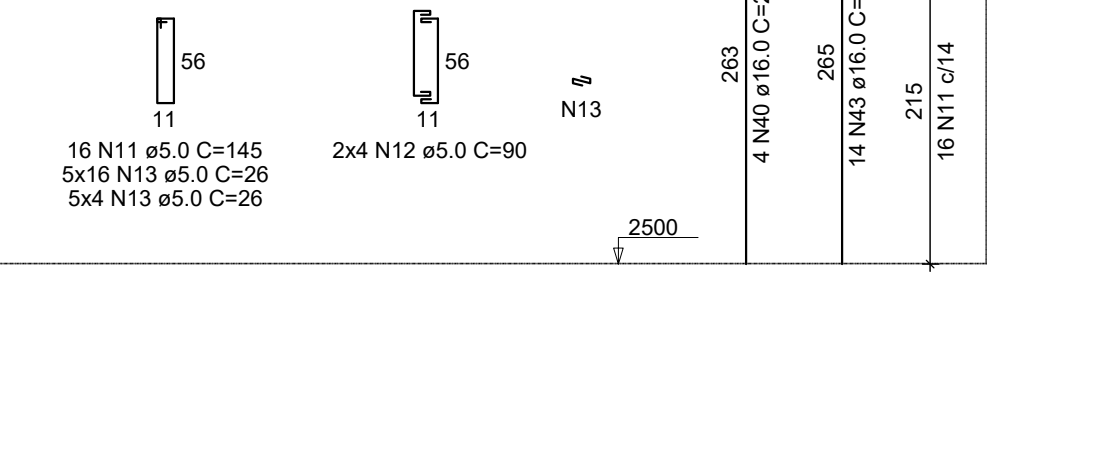
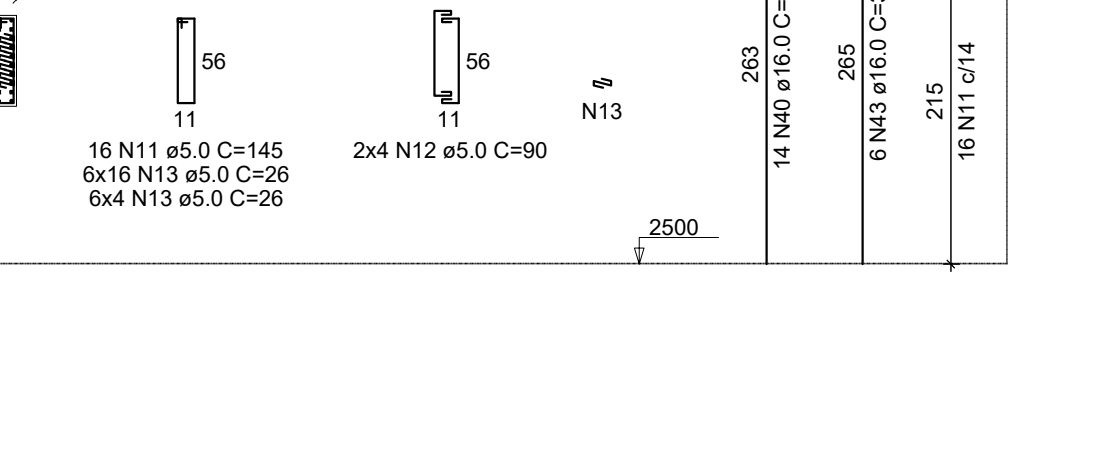
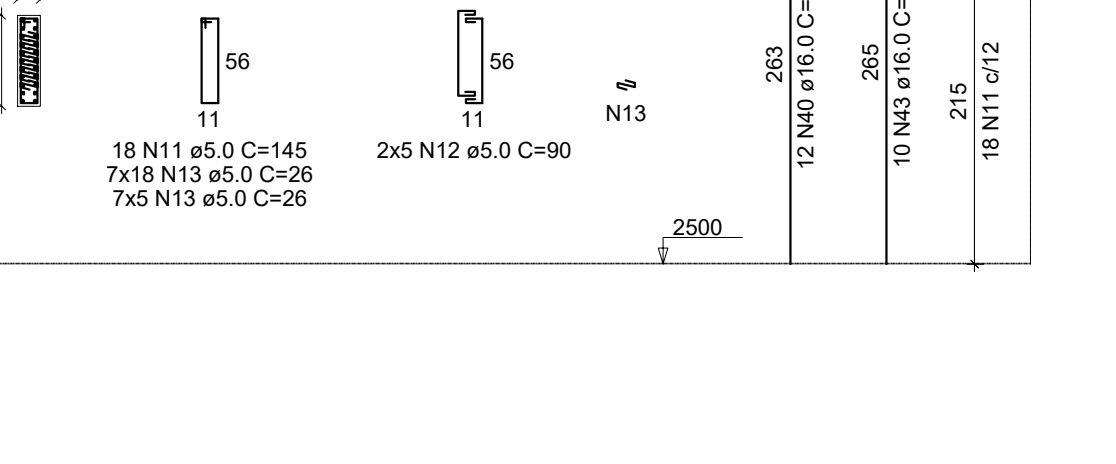
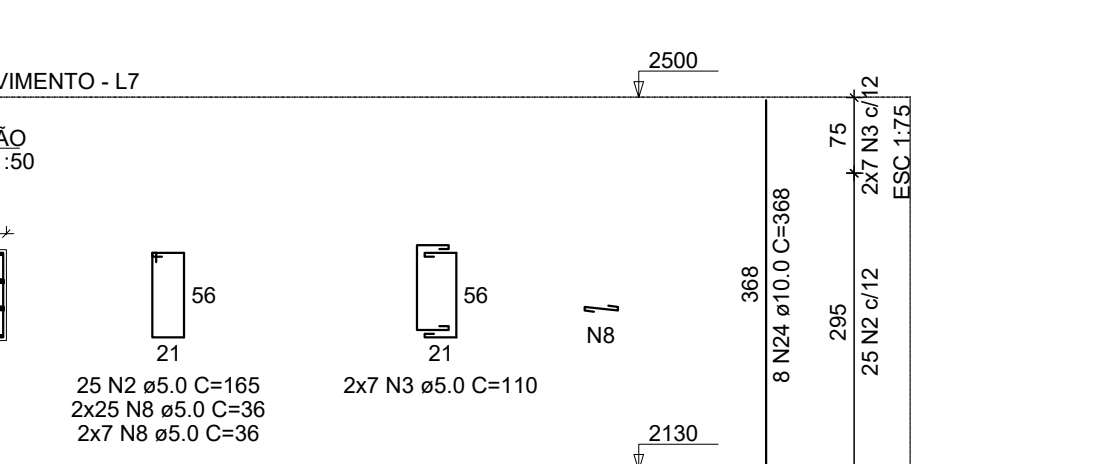
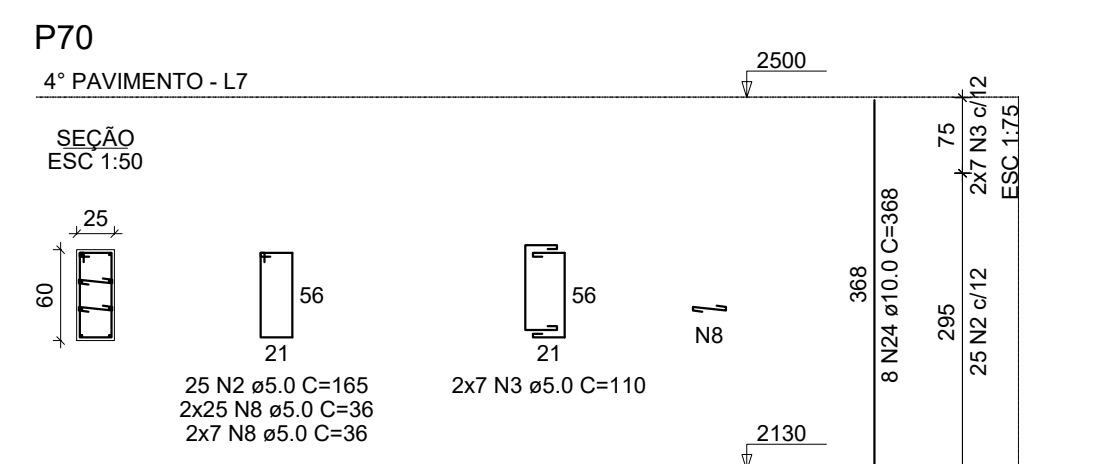
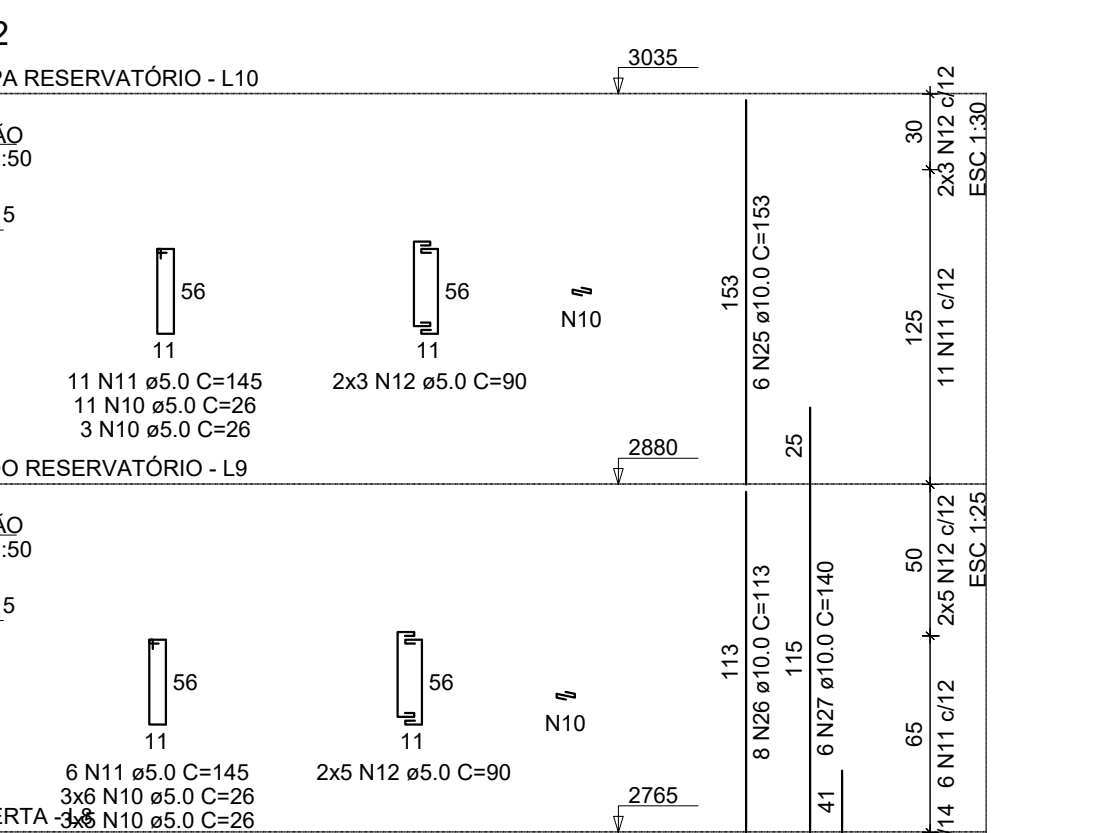
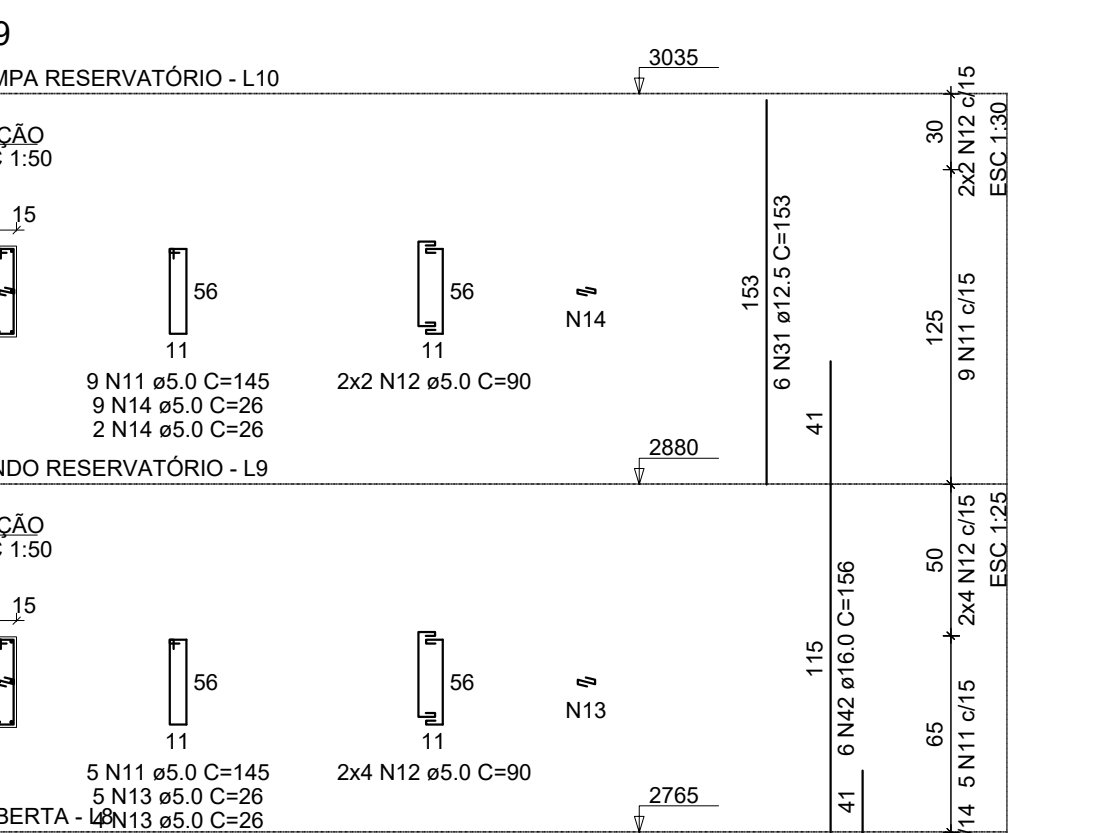
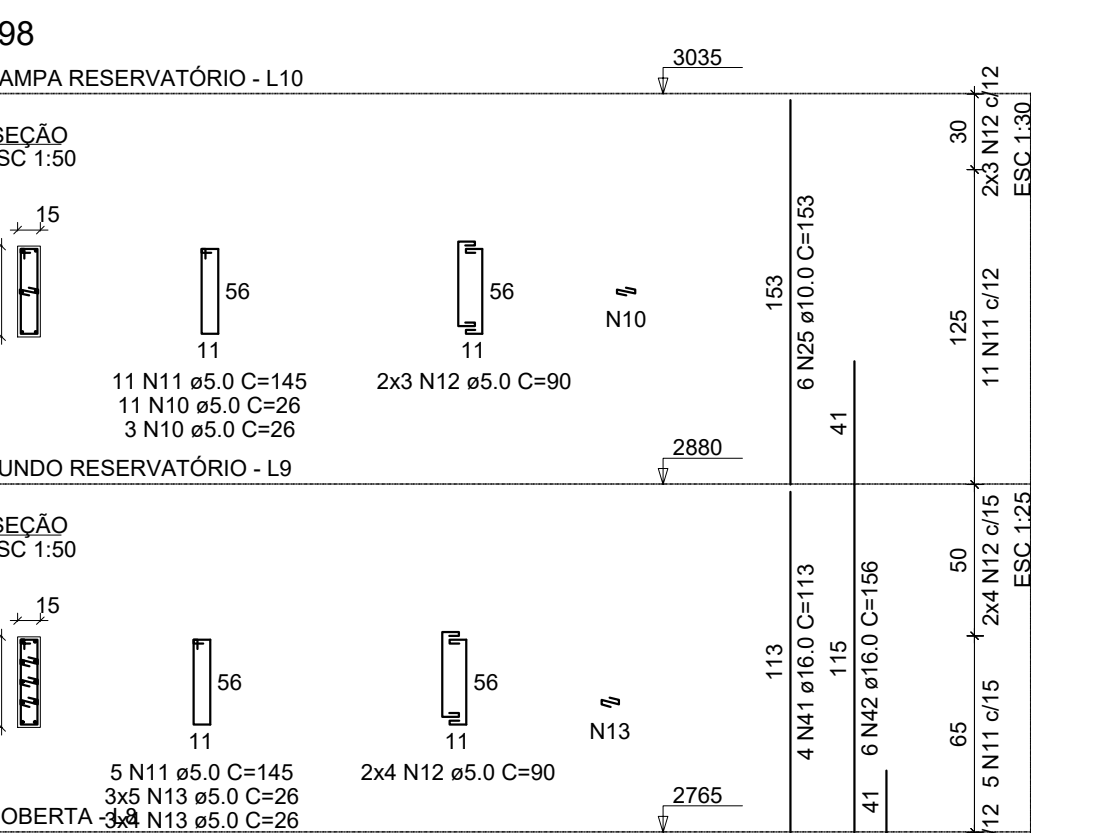
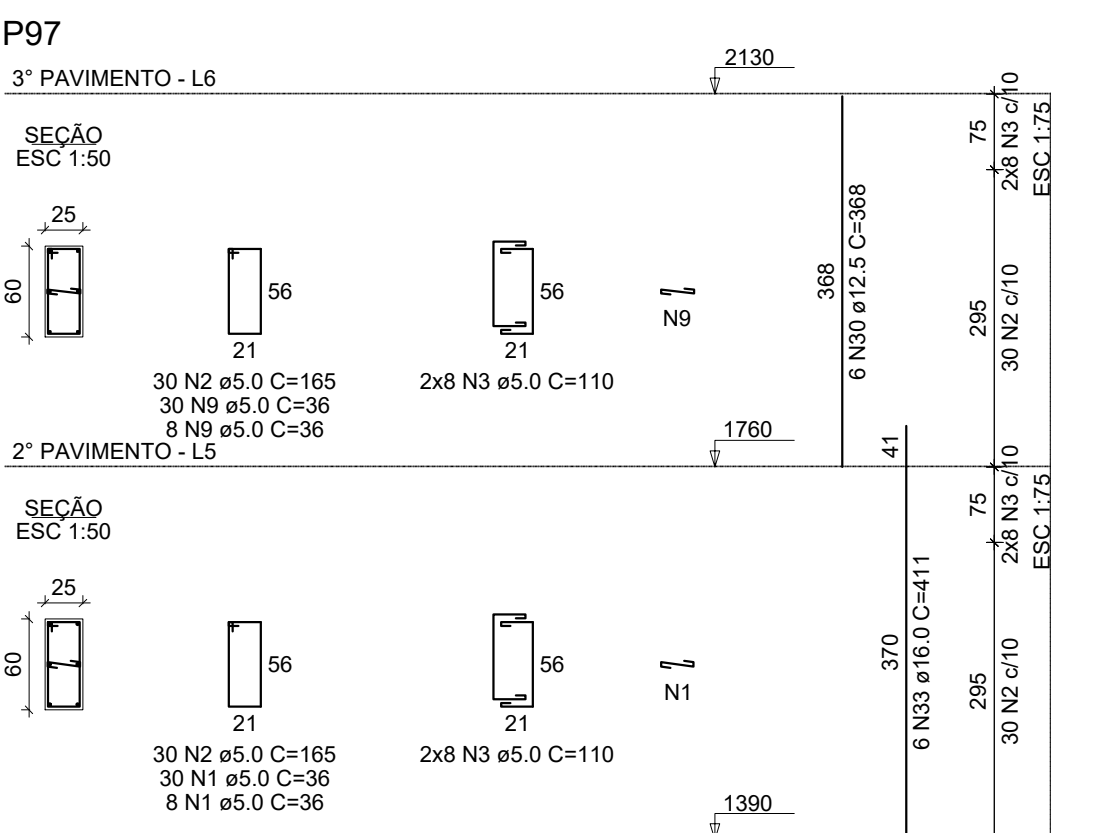
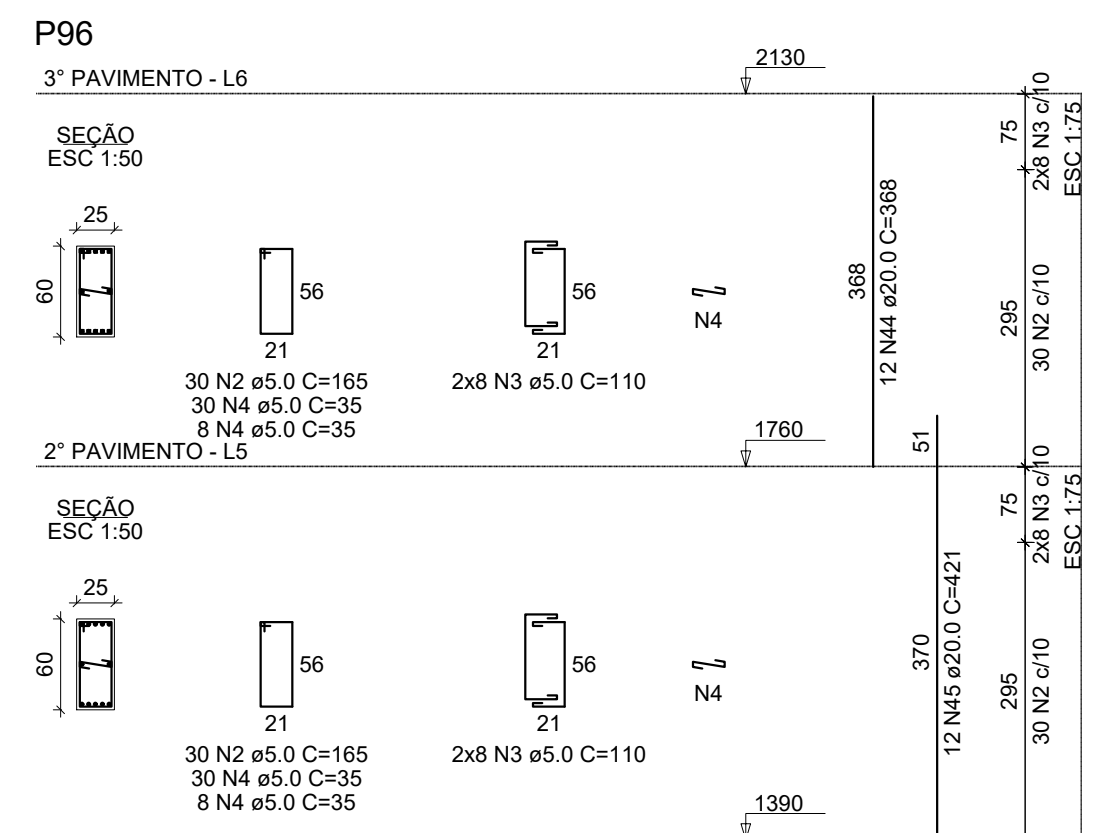
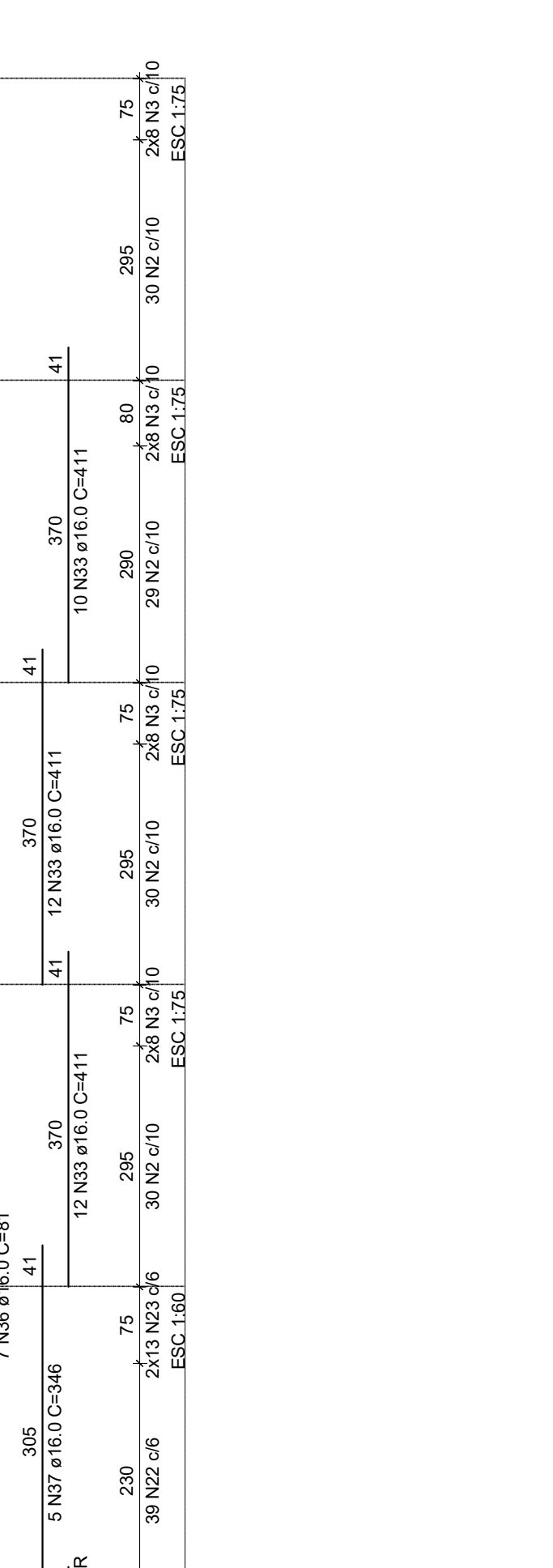
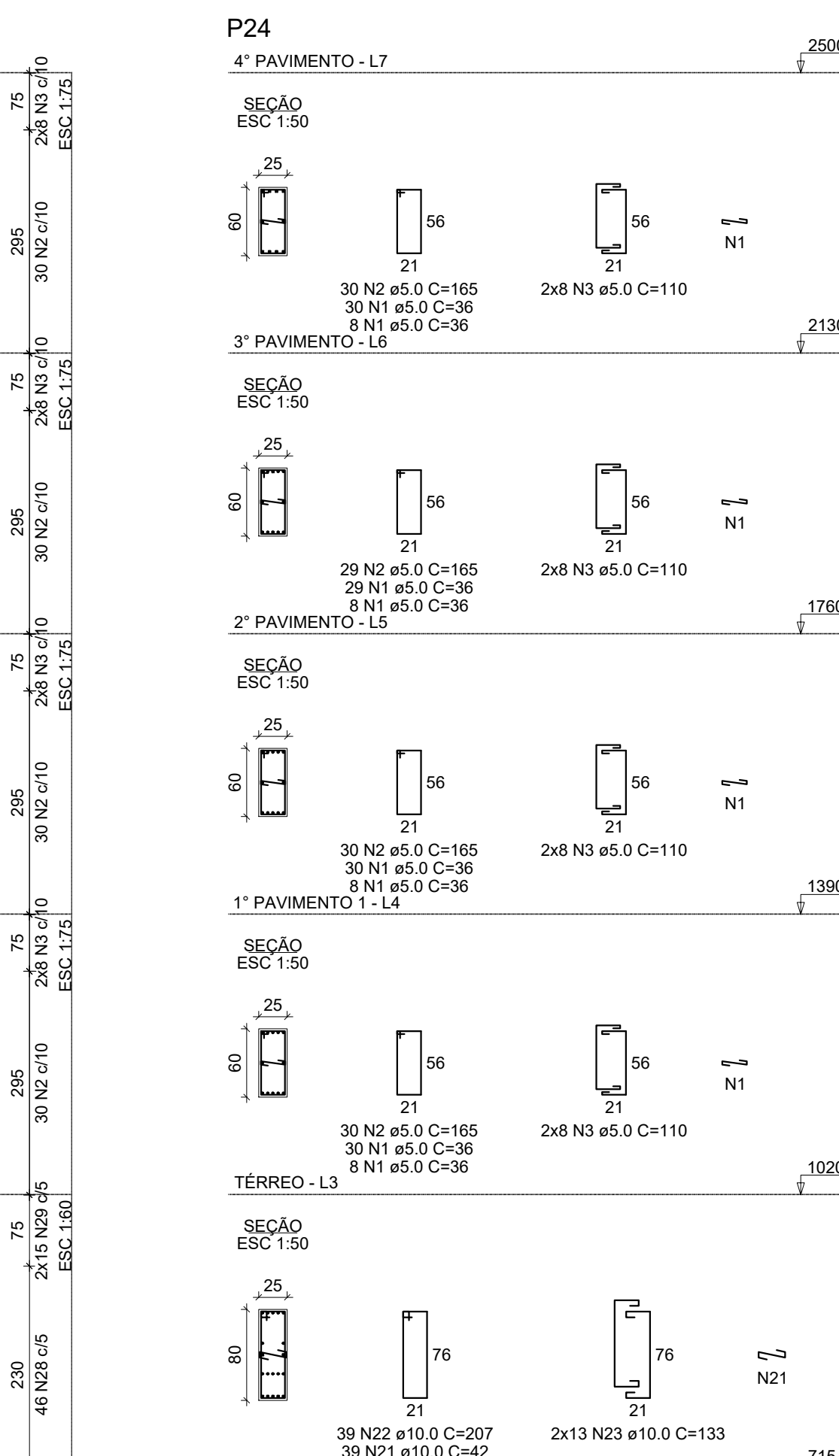
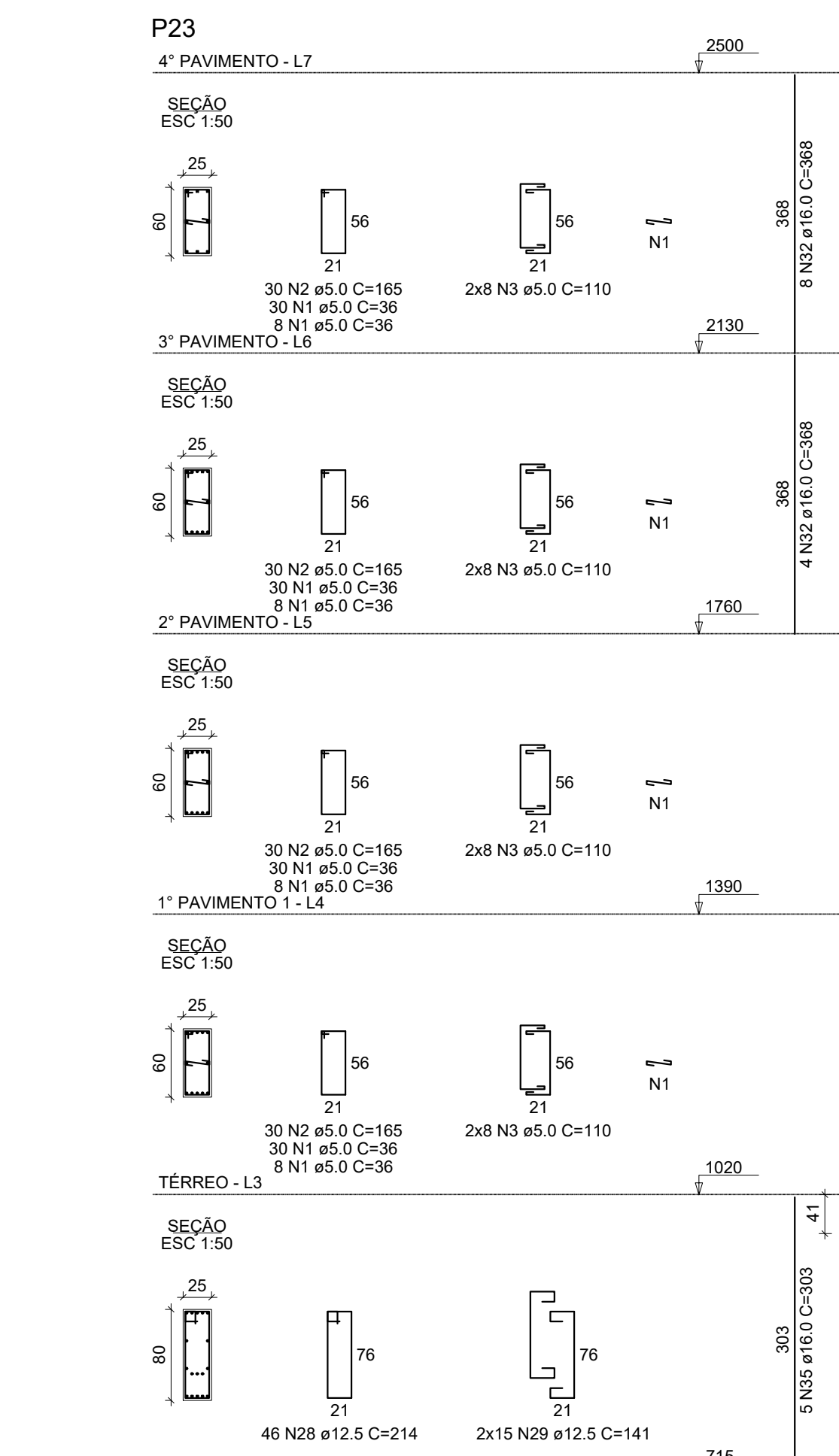
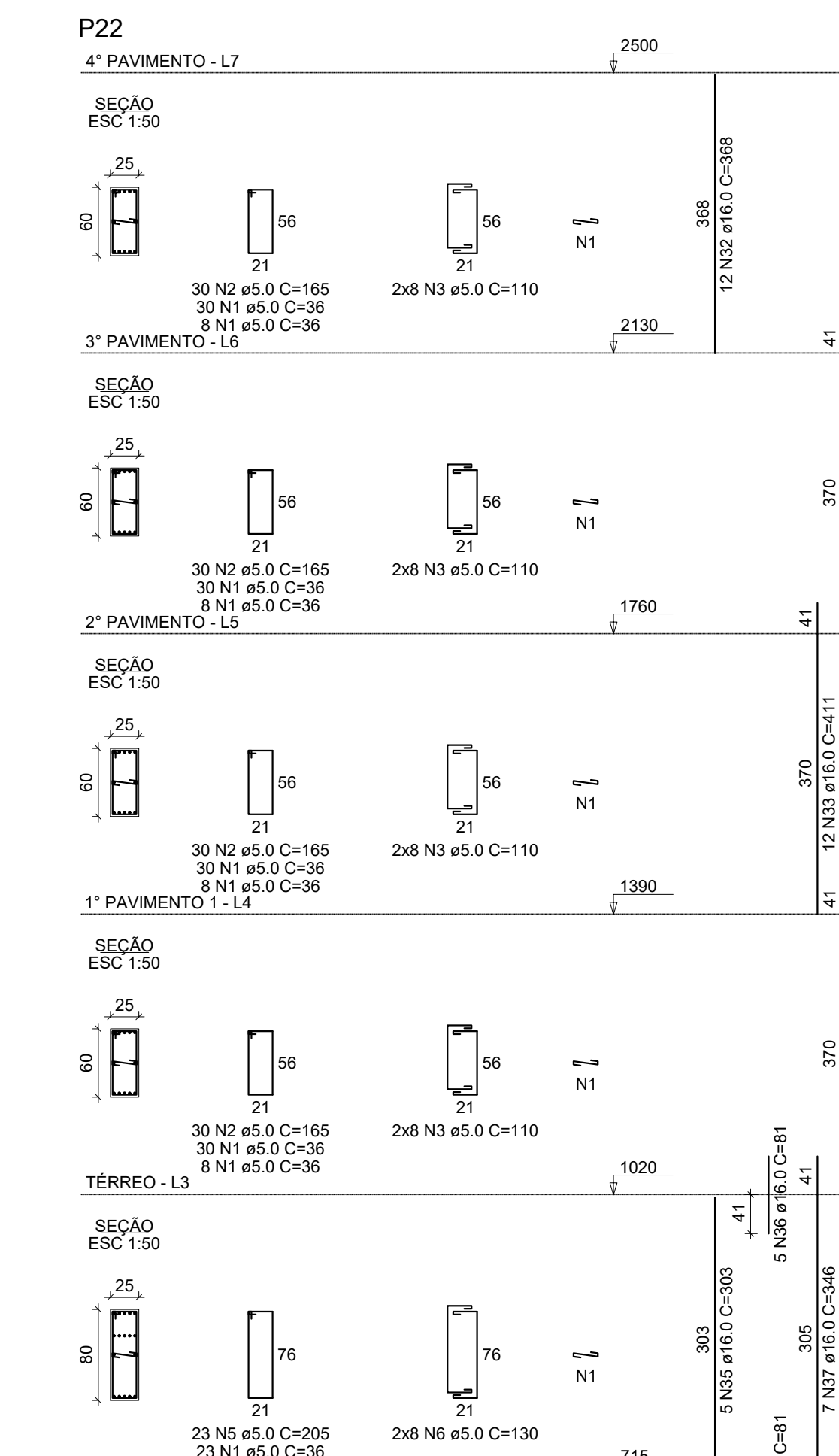
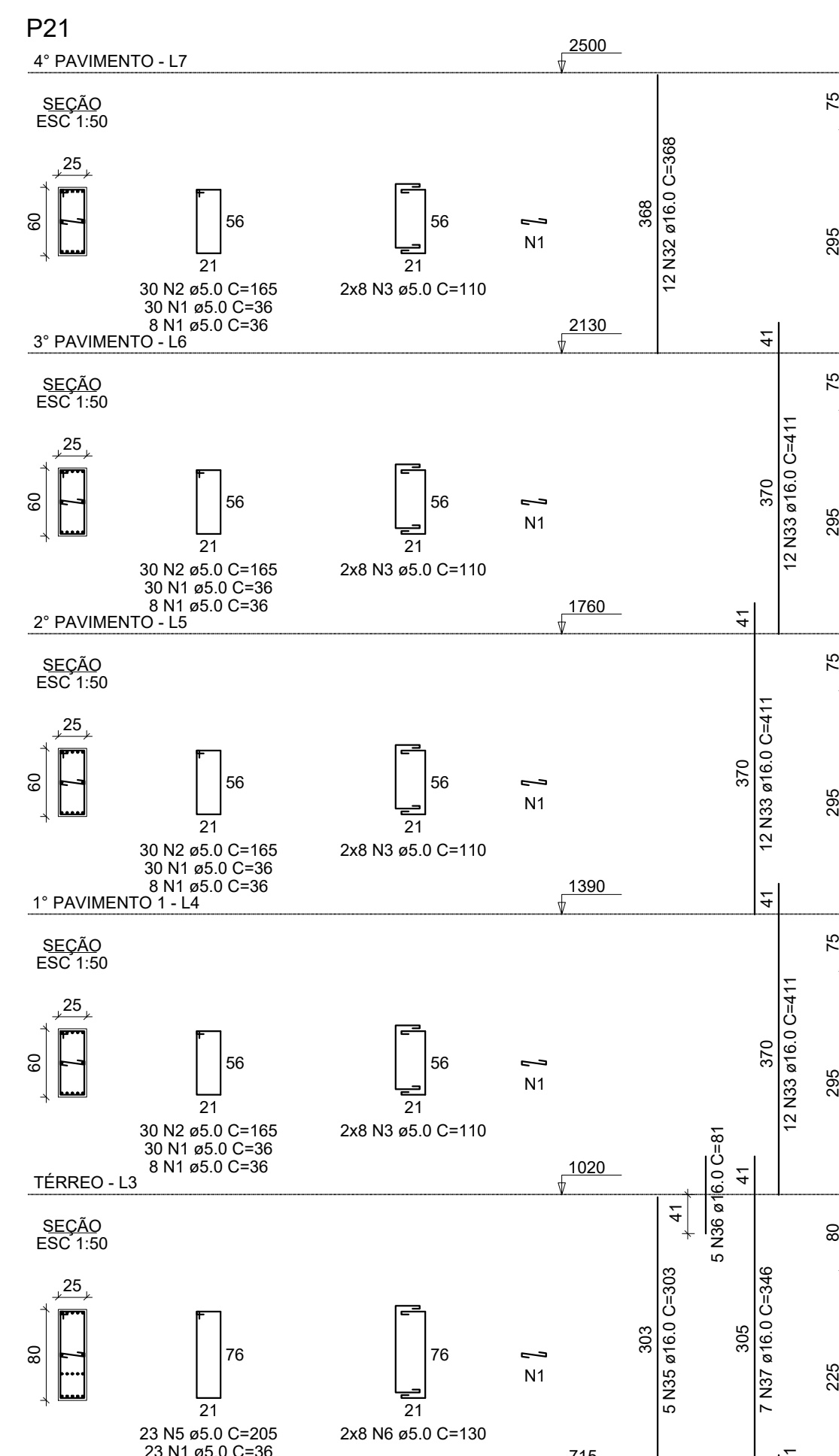
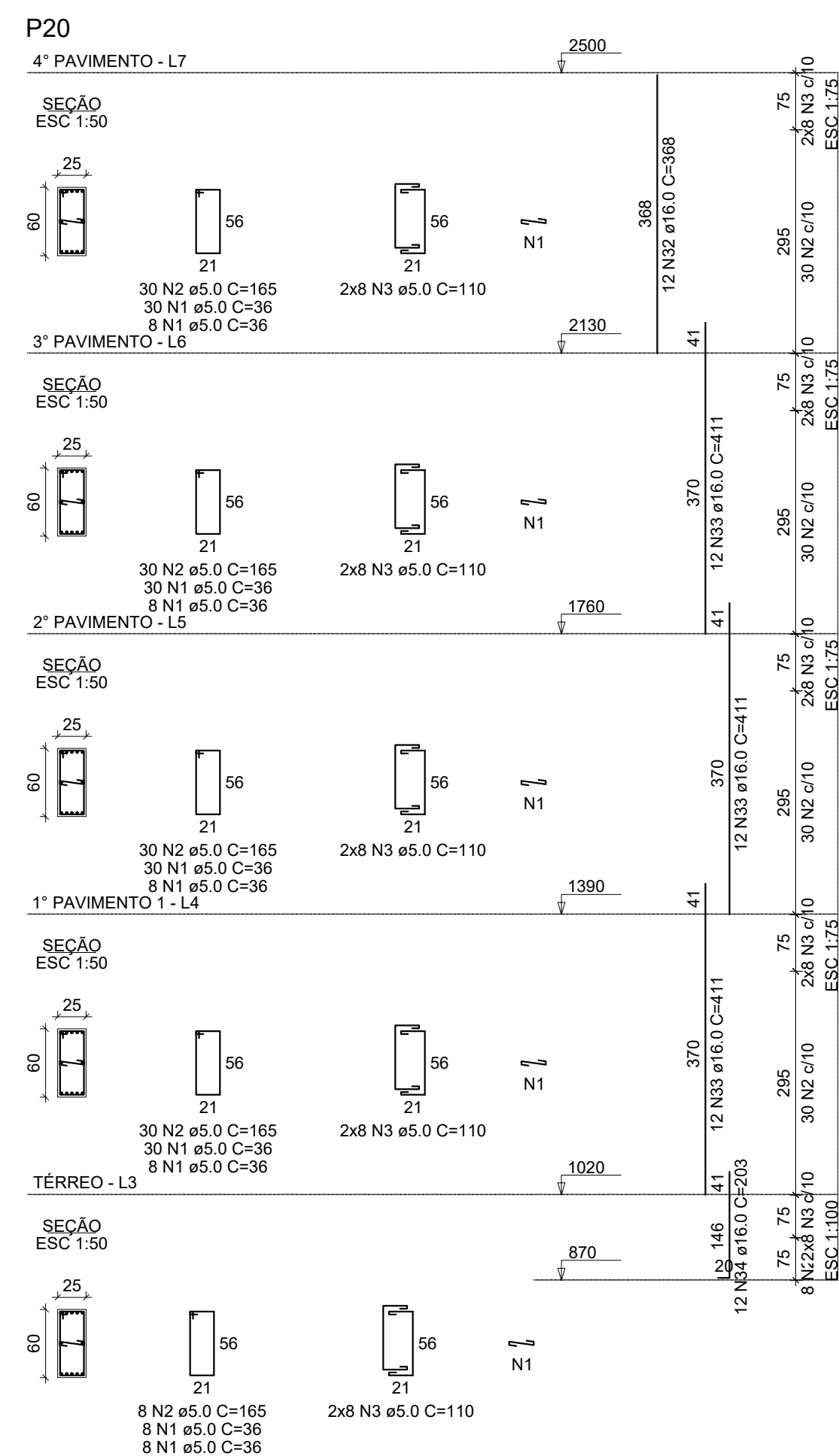
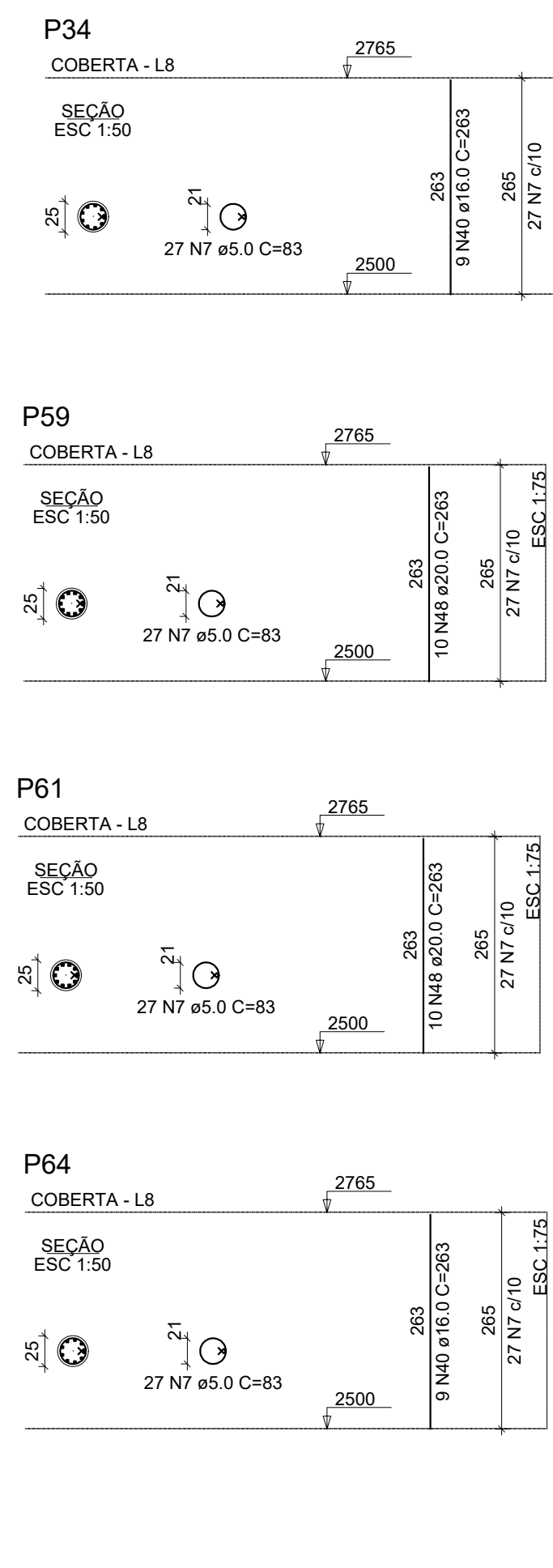
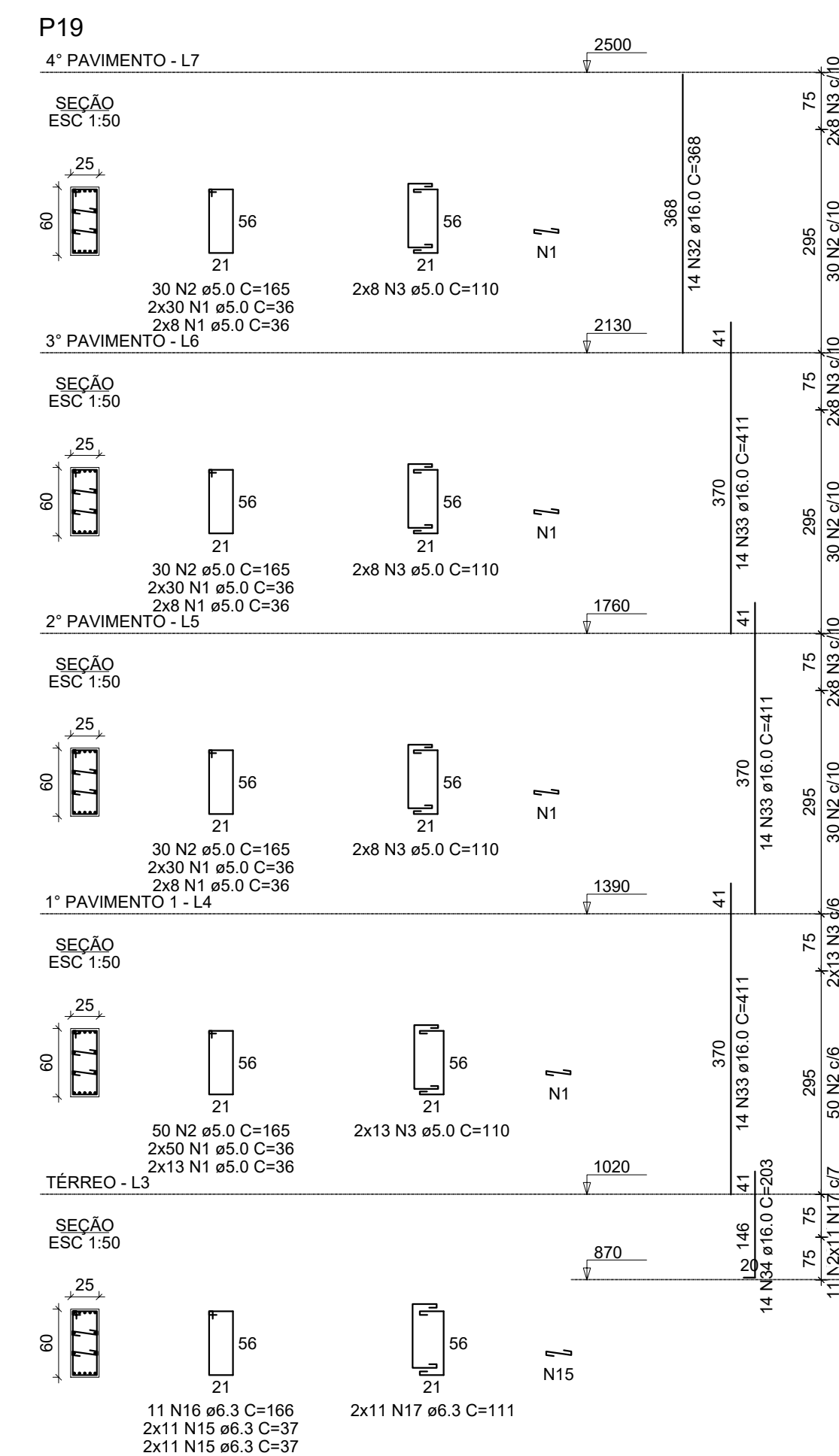
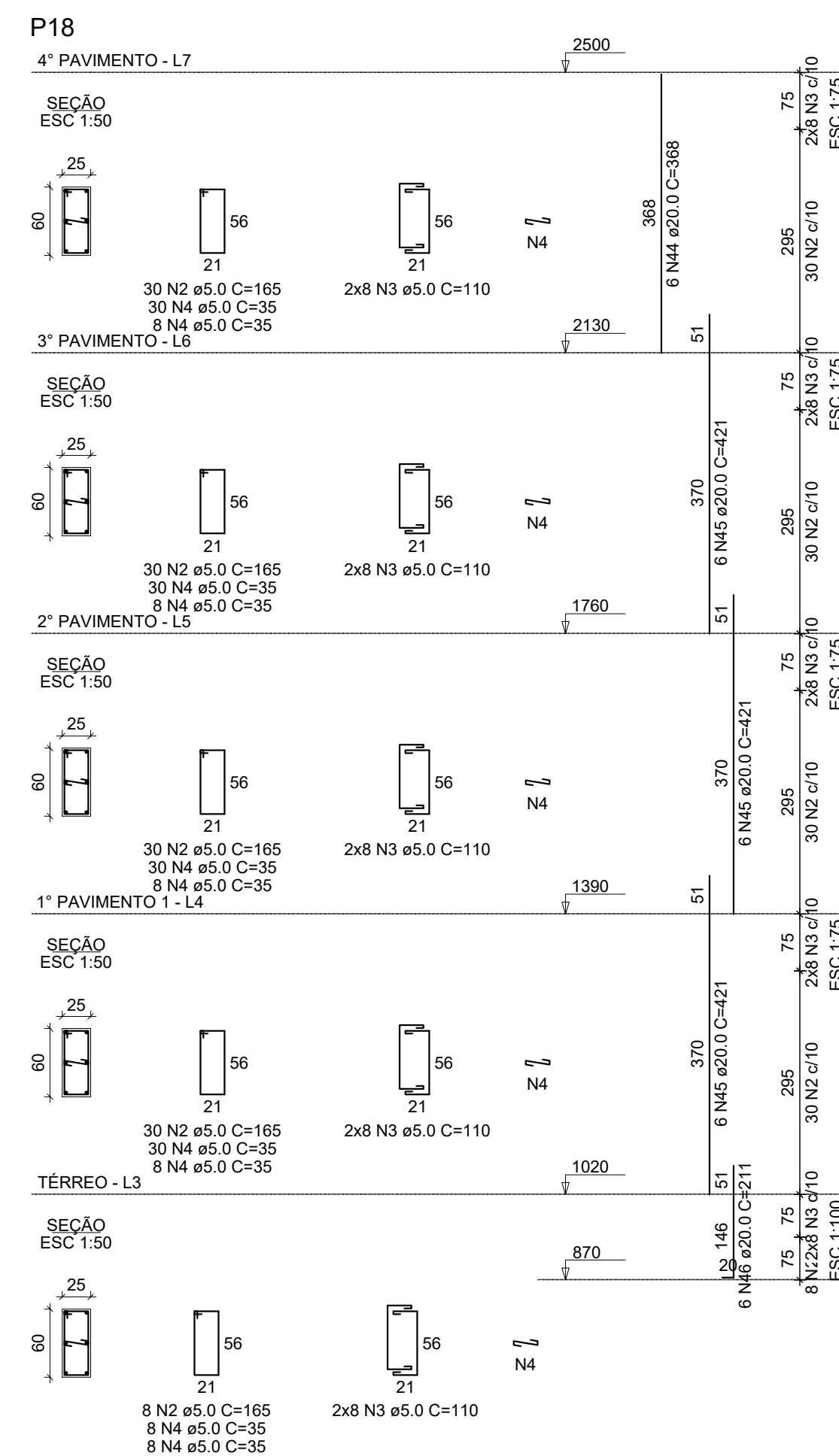
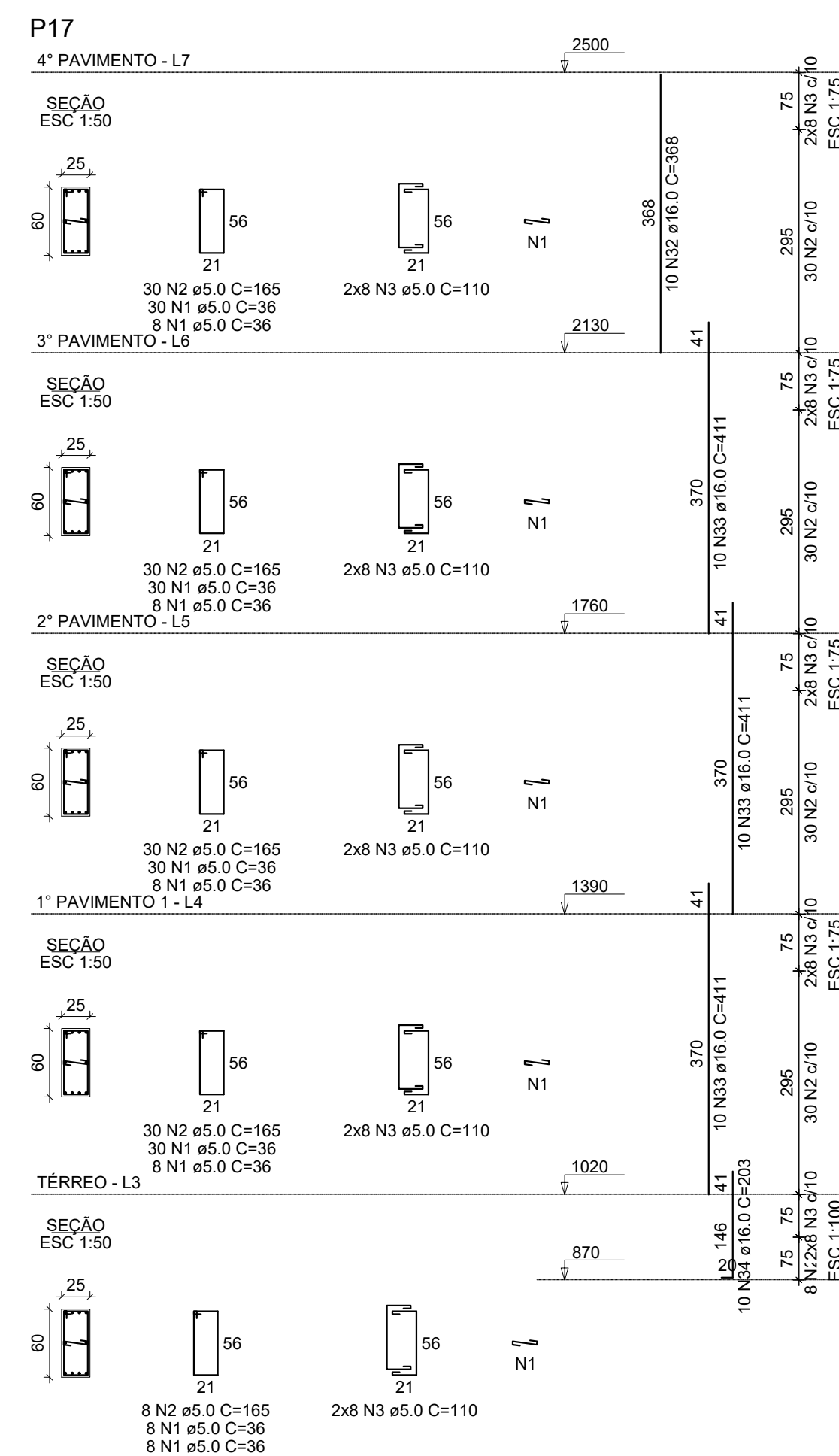
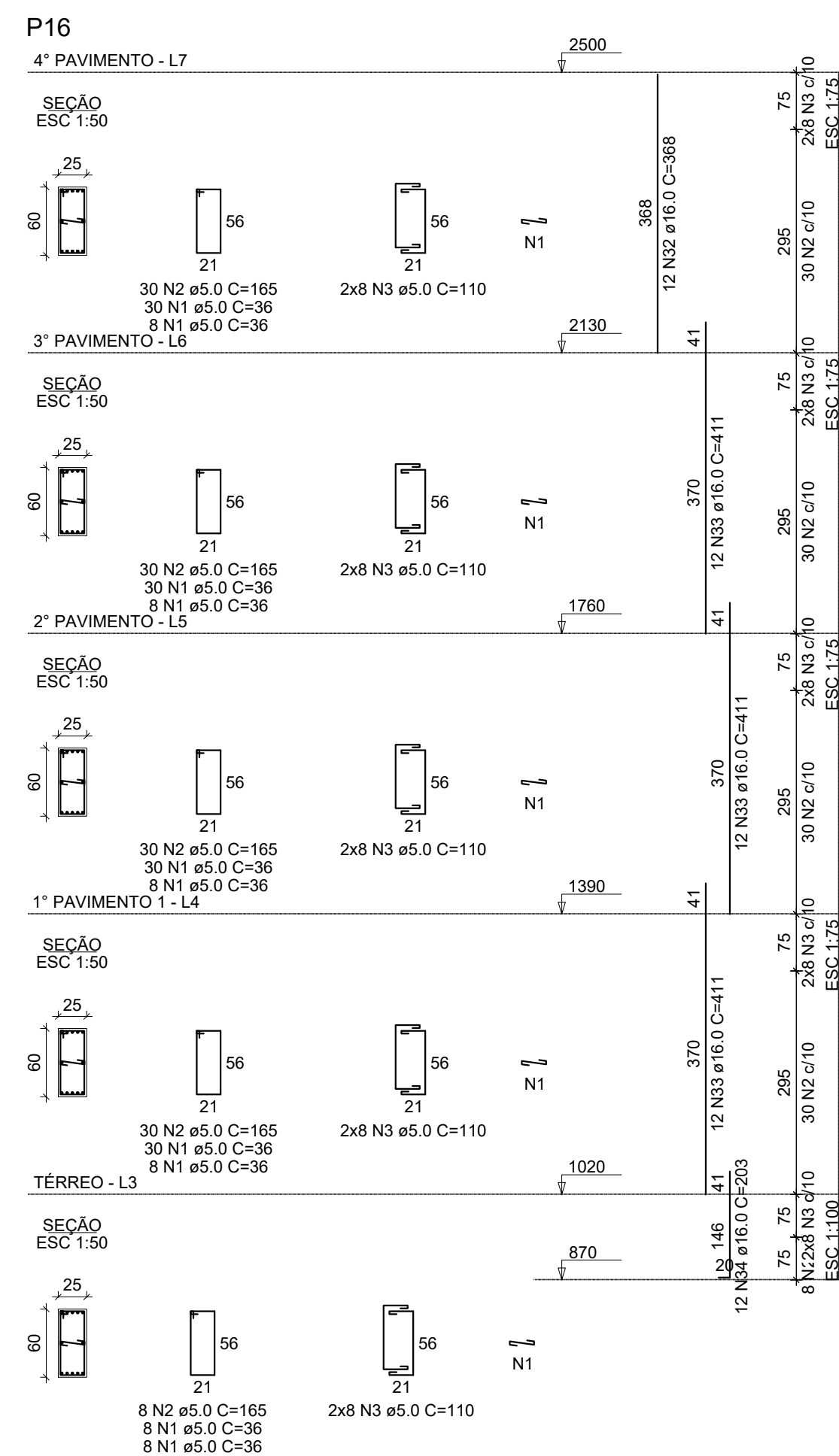
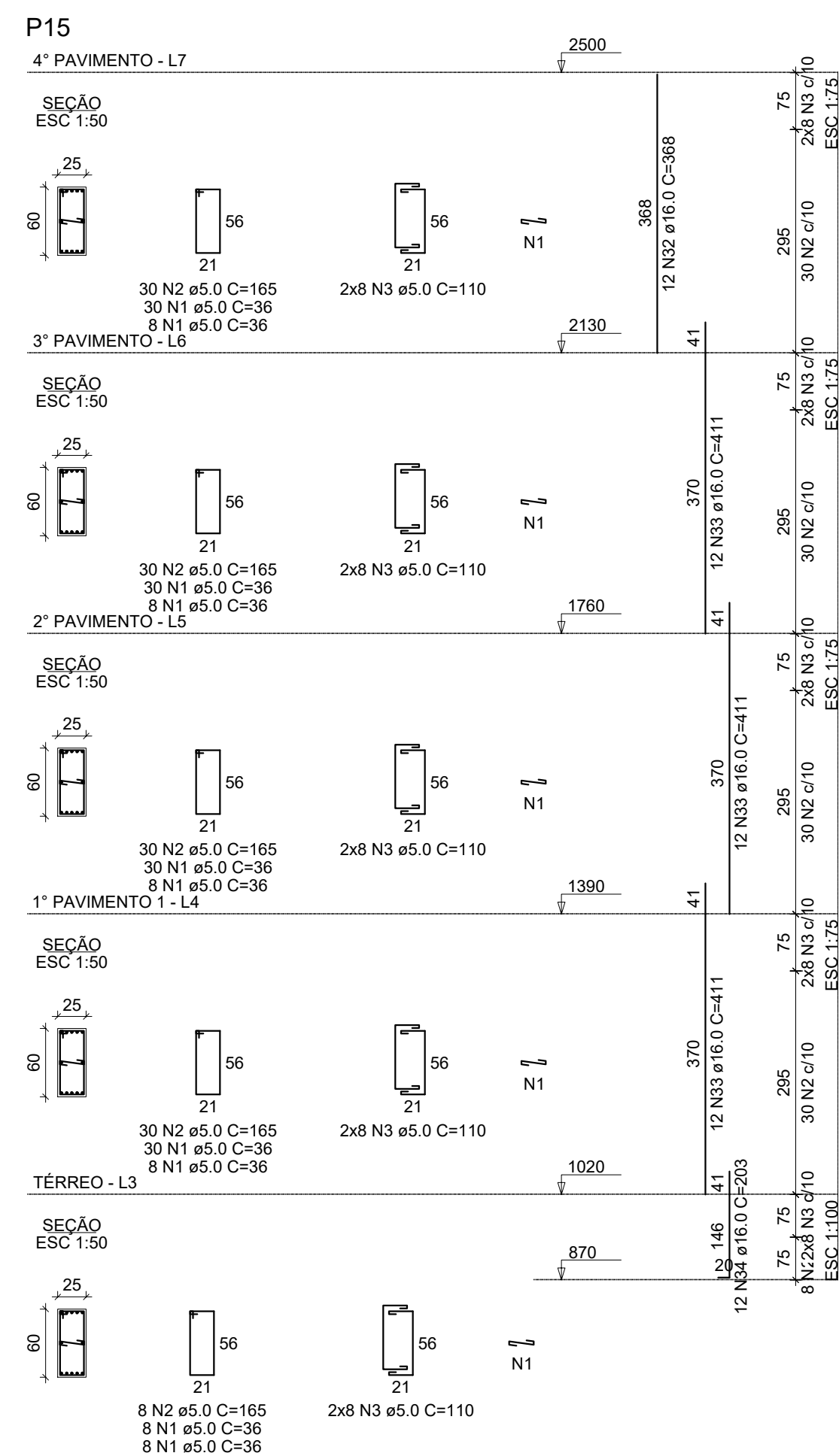
RELAÇÃO DO AÇO				
CÁD.	N	DIAM	QUANT	C. UNIT
CÁD. 1	1	5,0	4.243,31	31
	2	5,0	2.711,45	31
	3	5,0	30,290	29
	4	5,0	100,240	31
	5	5,0	100,240	31
	6	5,0	100,105	31
	7	5,0	100,105	31
	8	5,0	447,30	31
	9	5,0	159,155	31
	10	5,0	96,900	31
	11	5,0	72,41	31
	12	4,2	105,877	31
	13	5,0	22,130	31
	14	5,0	22,130	31
	15	5,0	418,35	31
	16	5,0	418,35	31
	17	5,0	422,110	31
	18	5,0	422,110	31
	19	5,0	678,36	31
	20	5,0	282,133	31
CÁD. 2	1	5,0	282,133	31
	2	5,0	282,133	31
	3	6,3	26,106	31
	4	6,3	26,106	31
	5	6,3	26,106	31
	6	6,3	26,106	31
	7	6,3	26,106	31
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	9	6,3	26,106	31
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	11	6,3	26,106	31
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	18	6,3	26,106	31
	19	6,3	26,106	31
	20	6,3	26,106	31
CÁD. 3	1	5,0	18,181	31
	2	5,0	18,181	31
	3	5,0	18,181	31
	4	5,0	18,181	31
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	17	5,0	18,181	31
	18	5,0	18,181	31
	19	5,0	18,181	31
	20	5,0	18,181	31
CÁD. 4	1	5,0	18,181	31
	2	5,0	18,181	31
	3	5,0	18,181	31
	4	5,0	18,181	31
	5	5,0	18,181	31
	6	5,0	18,181	31
	7	5,0	18,181	31
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	16	5,0	18,181	31
	17	5,0	18,181	31
	18	5,0	18,181	31
	19	5,0	18,181	31
	20	5,0	18,181	31
CÁD. 5	1	5,0	18,181	31
	2	5,0	18,181	31

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	6.3	196.2	48
	8.0	1043	411.6
	10.0	286.2	176.4
	12.5	550.2	530
	16.0	1493.3	2364.8
CA60	20.0	1034.4	2550.9
	5.0	7062.8	1088.6

Volume de concreto (C-45) = 42.00 m³
Área de forma = 470.59 m²

Area de forma = 470.59 m²

[illegible]





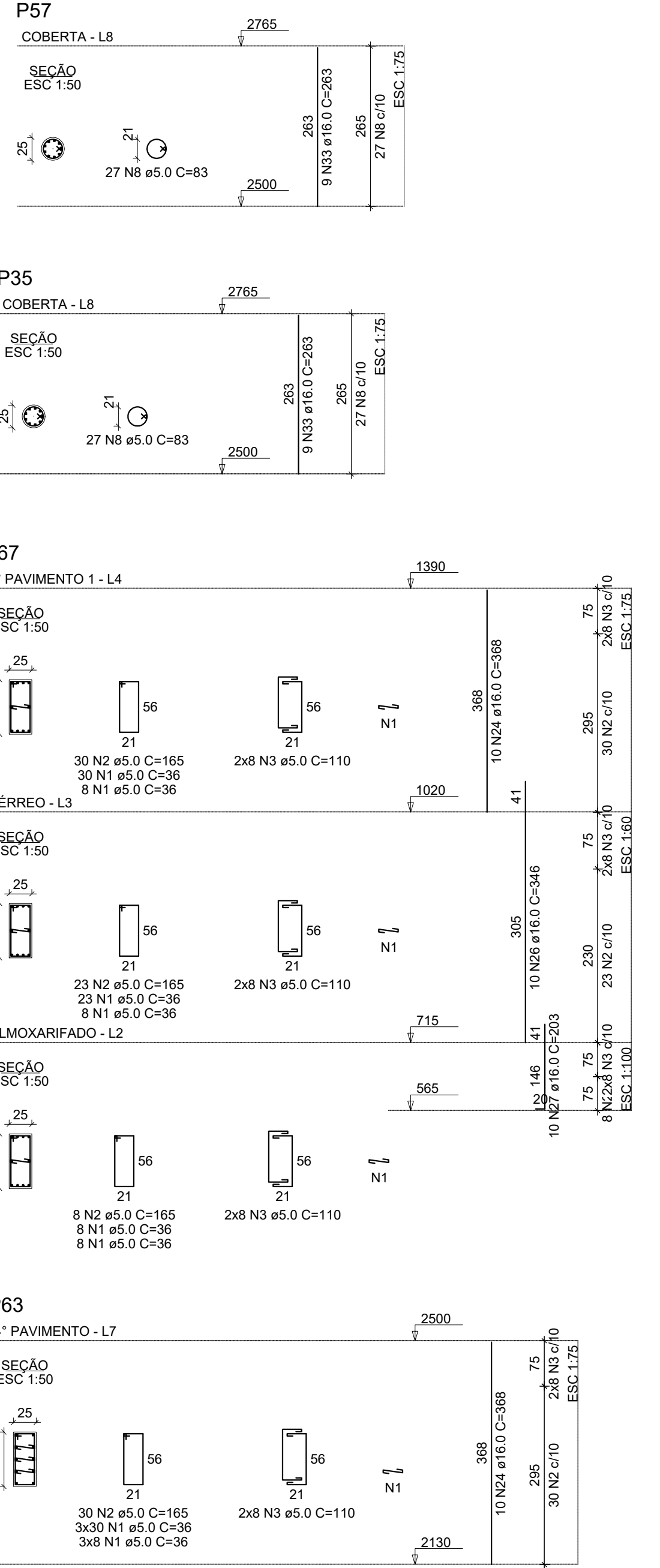
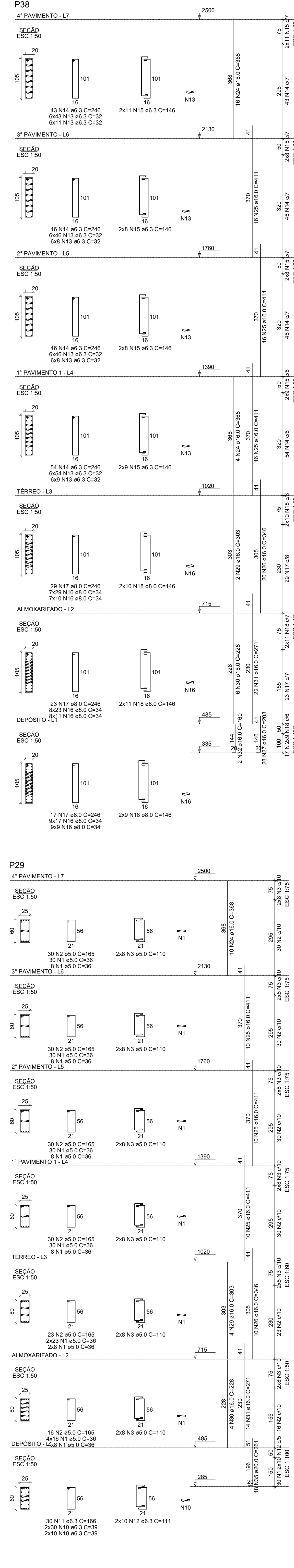
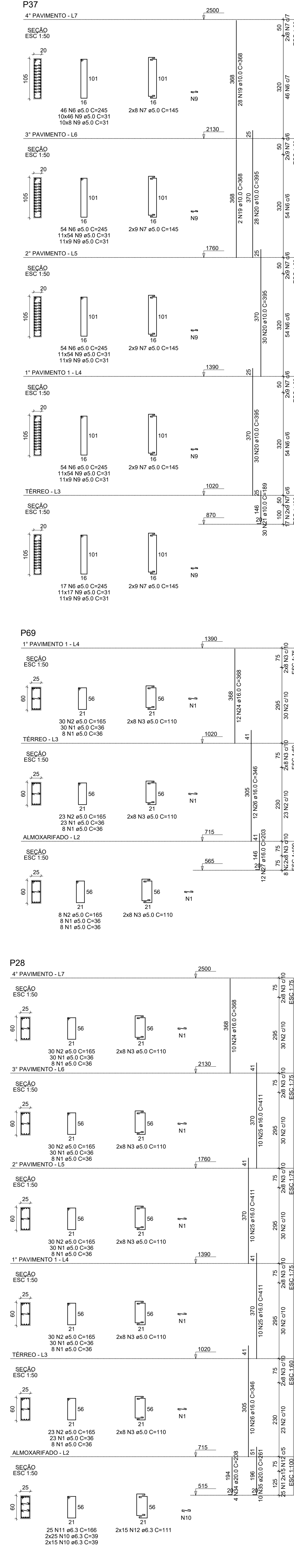
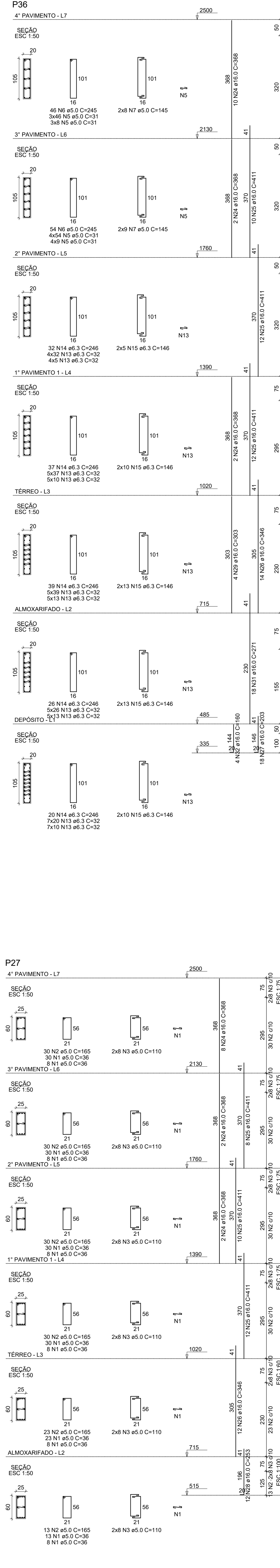
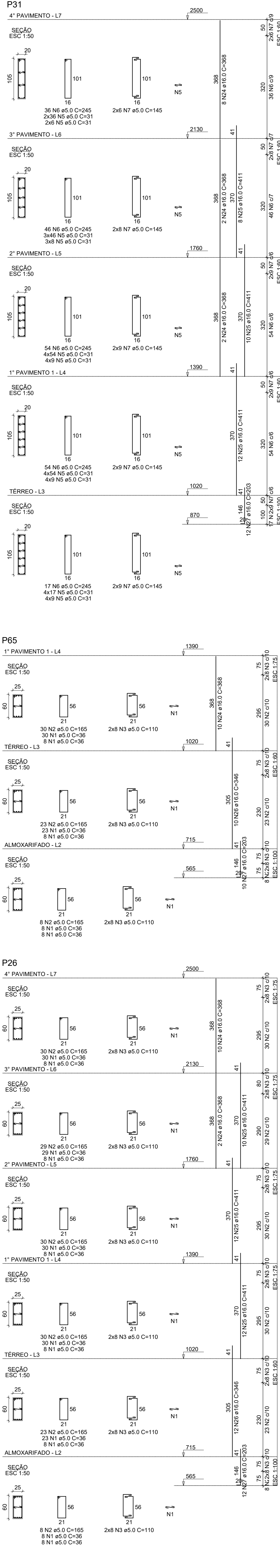
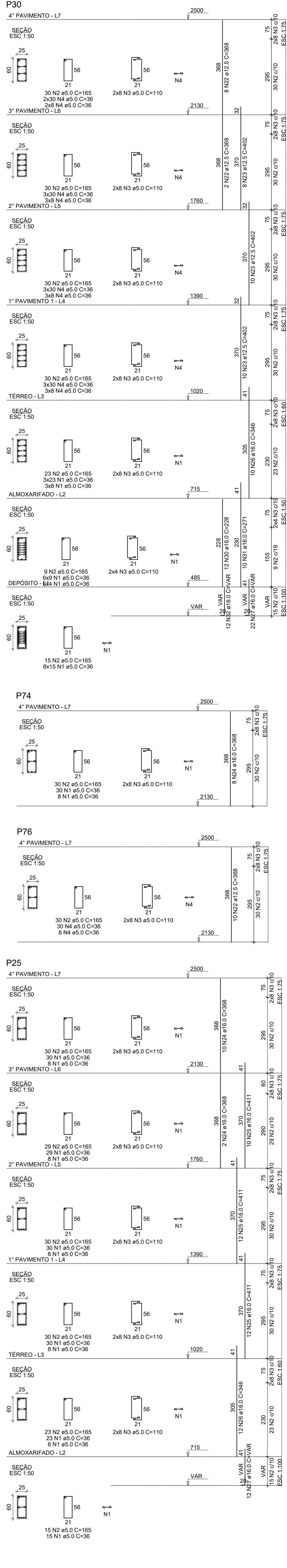
RELACIÓN ADO						
PILAS	N	PILAS			PILAS	
		RENO			RENO	
P15-L7	1	5.0	1775	38	6300	0
P15-L8	2	5.0	1400	39	2100	800
P15-L9	3	5.0	822	110	1940	0
P15-L10	4	5.0	260	39	1030	0
P15-L11	5	5.0	67	200	1370	0
P15-L12	6	5.0	108	83	884	84
P15-L13	7	5.0	128	36	864	0
P15-L14	8	5.0	101	28	864	0
P15-L15	9	5.0	101	28	864	0
P15-L16	10	5.0	101	28	864	0
P15-L17	11	5.0	68	90	8120	0
P15-L18	12	5.0	68	90	8120	0
P15-L19	13	5.0	68	90	1092	0
P15-L20	14	5.0	11	28	286	0
P15-L21	15	5.0	11	28	286	0
P15-L22	16	6.3	11	166	126	0
P15-L23	17	6.3	11	166	126	0
P15-L24	18	6.3	98	39	322	322
P15-L25	19	6.3	98	39	322	322
P15-L26	20	6.3	26	131	3408	0
P15-L27	21	13.0	30	207	673	0
P15-L28	22	13.0	30	207	673	0
P15-L29	23	10.0	16	368	5888	0
P15-L30	24	10.0	16	368	5888	0
P15-L31	25	10.0	8	113	304	0
P15-L32	26	10.0	8	113	304	0
P15-L33	27	12.5	46	214	9844	0
P15-L34	28	12.5	46	214	9844	0
P15-L35	29	12.5	6	368	2208	0
P15-L36	30	12.5	6	368	2208	0
P15-L37	31	16.0	324	411	131164	0
P15-L38	32	16.0	324	411	131164	0
P15-L39	33	16.0	22	303	666	0
P15-L40	34	16.0	22	303	666	0
P15-L41	35	16.0	26	346	9838	0
P15-L42	36	16.0	26	346	9838	0
P15-L43	37	16.0	10	253	2320	0
P15-L44	38	16.0	10	253	2320	0
P15-L45	39	16.0	4	113	482	0
P15-L46	40	16.0	4	113	482	0
P15-L47	41	20.0	30	156	1776	0
P15-L48	42	20.0	30	156	1776	0
P15-L49	43	20.0	14	201	12630	0
P15-L50	44	20.0	14	201	12630	0
P15-L51	45	20.0	14	201	12630	0
P15-L52	46	20.0	14	201	12630	0
P15-L53	47	20.0	14	201	12630	0
P15-L54	48	20.0	14	201	12630	0
P15-L55	49	20.0	14	201	12630	0
P15-L56	50	20.0	14	201	12630	0
P15-L57	51	20.0	14	201	12630	0
P15-L58	52	20.0	14	201	12630	0
P15-L59	53	20.0	14	201	12630	0
P15-L60	54	20.0	14	201	12630	0
P15-L61	55	20.0	14	201	12630	0
P15-L62	56	20.0	14	201	12630	0
P15-L63	57	20.0	14	201	12630	0
P15-L64	58	20.0	14	201	12630	0
P15-L65	59	20.0	14	201	12630	0
P15-L66	60	20.0	14	201	12630	0
P15-L67	61	20.0	14	201	12630	0
P15-L68	62	20.0	14	201	12630	0

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	8.3	238.3	57.8
	10.0	231.8	142.9
	12.5	172	165.7
	16.0	2307.2	3641.6
	20.0	345	850.8
CA60	5.0	4691	723
PESO TOTAL (kg)			
CA50	4858.8		
CA60	723		

Volume de concreto (C-45) = 32.68 m³

Area de forma = 377.36 m²

00	OUT0817	EMISSIONAL INICIAL					
REV.	DATA	OBSERVAÇÕES	DESENHO	REVISÃO	APROVAÇÃO	AUTORIZAÇÃO	
<div>UNIVERSIDADE FEDERAL DE PERNAMBUCO SUPERINTENDÊNCIA DE PROJETOS E OBRAS DIRETORIA DE PLANOS E PROJETOS</div>						<div></div>	
Projeto nº: CONSTRUÇÃO DA 4ª ETAPA DO CENTRO ACADÊMICO DE VITÓRIA Instalação DE SISTEMA DE GASES DOS BLOCOS B E C. Tipo de Serviço: ARMAZÉM DOS PILARES 0305						Área Monitorada: ESTRUTURA tipo: PROJETO EXECUTIVO	
RUBRO DE RENO PAVIMENTO TERREJO 818,27 M² PAV. SEMI ENTERRADO 299,51 M²						período: 12 / 56	
1º PAVIMENTO 954,02 M² PAVIMENTO ENTERRADO 95,92 M²						estudo:	
2º PAVIMENTO 954,02 M² COBERTA 1050,68 M²						11/00	
3º PAVIMENTO 954,02 M² TOTAL CONSTRUÇÃO 3.980,14 M²						fase:	
PROPOSTORES MONITOR						SETEMBRO/2024	
PROPOSTORES SMC MARCOS ANDRÉ SANTOS ENGENHEIRO - RP#- 180427753-7			APROVADOS D.P.P. ISABEL PINTO S.F.O. CARLOS FALCAO U.T.E. ALFREDO GOMES				
						DIRETORA SUPERINTENDENTE RECTOR	



RELAÇÃO DO AÇO					
AÇO	N	DIAM (mm)	QUANT	C UNIT (cm)	C TOTAL (cm)
CA50	1	5,0	1780	36	64440
	2	5,0	1205	165	198825
	3	5,0	728	110	80080
	4	5,0	456	36	16416
	5	5,0	1265	31	39335
	6	5,0	532	245	130440
	7	5,0	204	145	29580
	8	5,0	54	83	4482
	9	5,0	2855	31	90055
	10	5,0	160	39	6240
CA50	11	6,3	50	166	8330
	12	6,3	80	111	8820
	13	6,3	2385	32	76336
	14	6,3	343	246	84378
	15	6,3	174	146	25404
	16	8,0	775	34	26465
	17	8,0	69	246	16974
	18	8,0	146	146	21316
	19	10,0	30	368	11040
	20	10,0	85	395	33670
CA50	21	12,5	29	402	11856
	22	12,5	29	389	11265
	23	12,5	28	402	11265
	24	16,0	270	411	110970
	25	16,0	132	346	45672
	26	16,0	132	346	45672
	27	16,0	132	346	45672
	28	16,0	10	303	3030
	29	16,0	64	271	17344
	30	16,0	15	VAR	VAR
CA60	31	16,0	15	263	4734
	32	20,0	4	239	832
CA60	33	20,0	28	261	7308
	34	20,0	28	261	7308

RESUMO DO AÇO			
AÇO	DIAM (mm)	C TOTAL (m)	PESO + 0% (kg)
CA50	5,0	2074,4	507,6
	6,3	522,2	206,1
	8,0	214,3	37,3
	10,0	218,2	179,3
	12,5	218,2	459,8
CA60	16,0	81,4	200,7
	20,0	63,3	1007,3

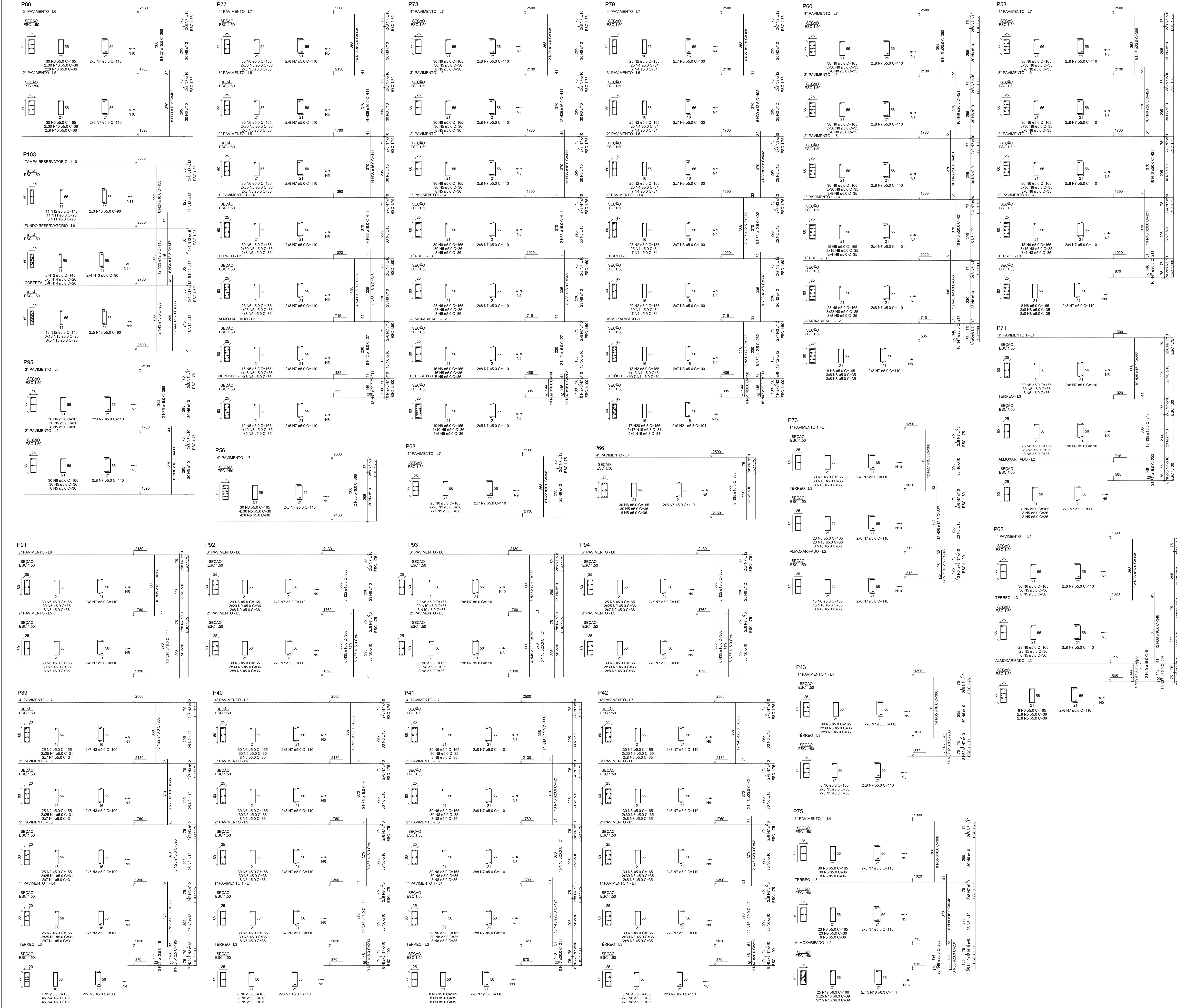
PESO TOTAL

CA50 5770,8

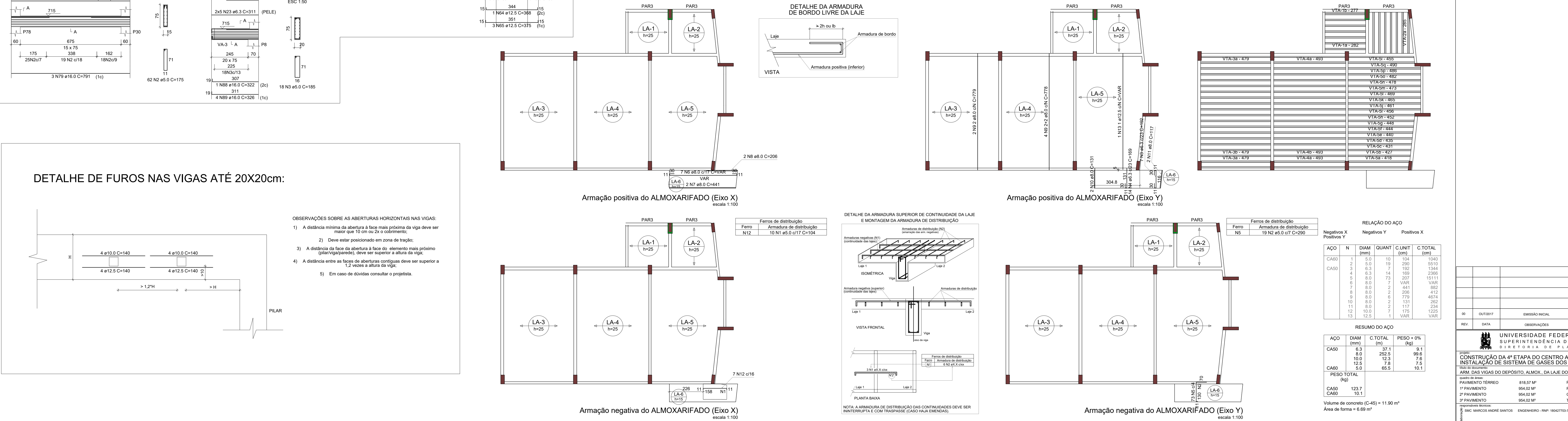
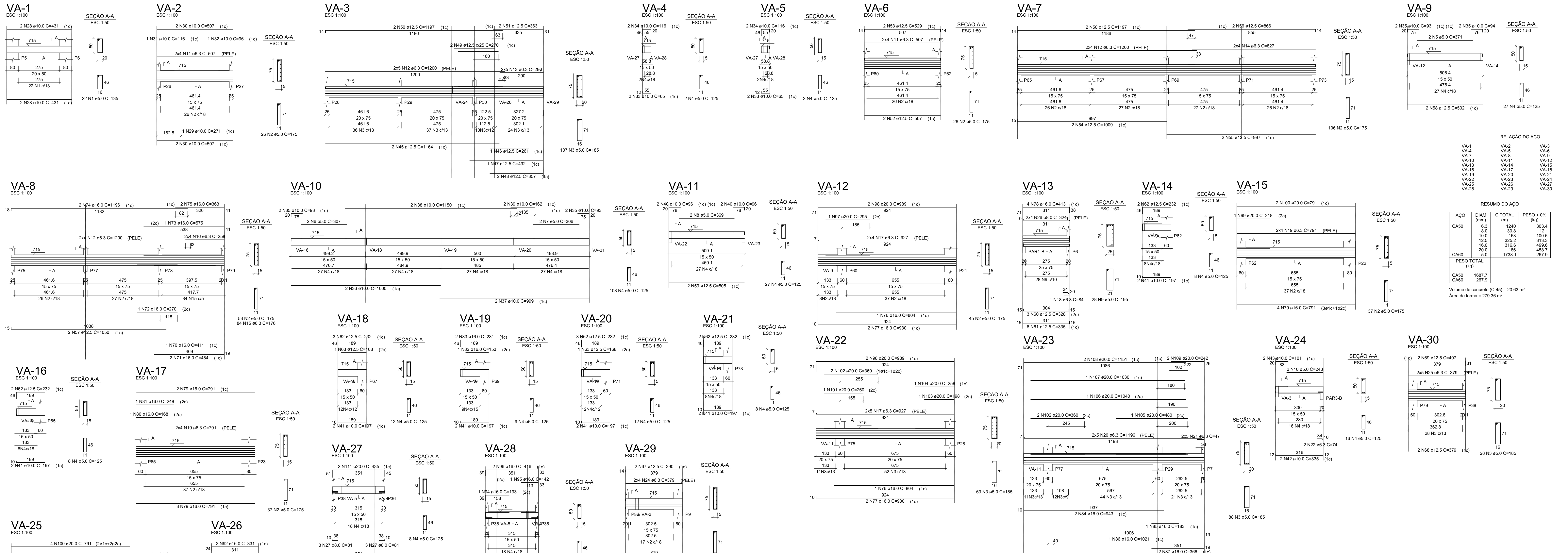
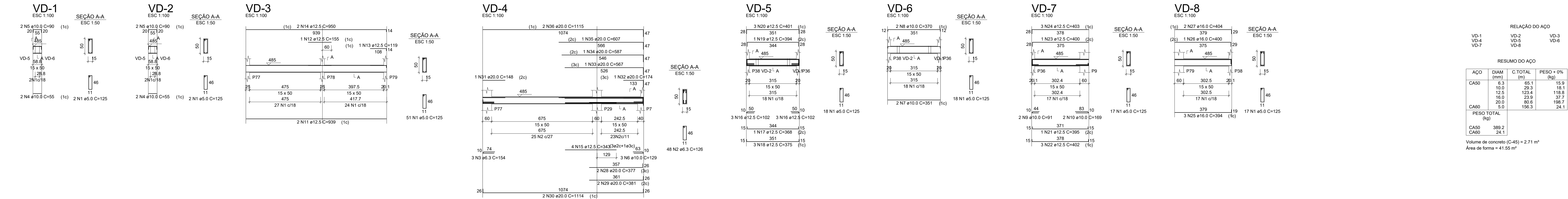
CA60 1007,3

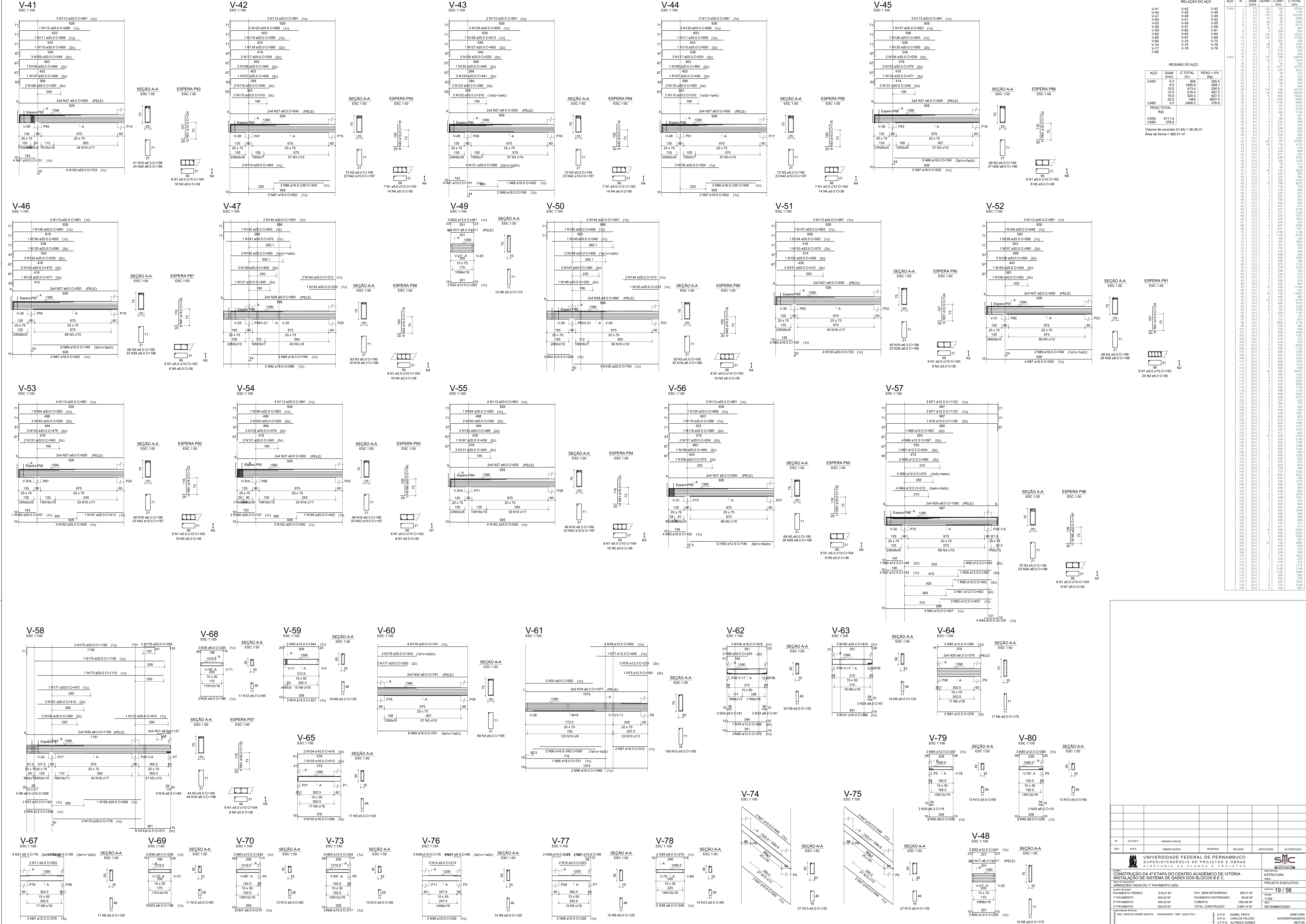
Volume de concreto (C-45) = 39,91 m³

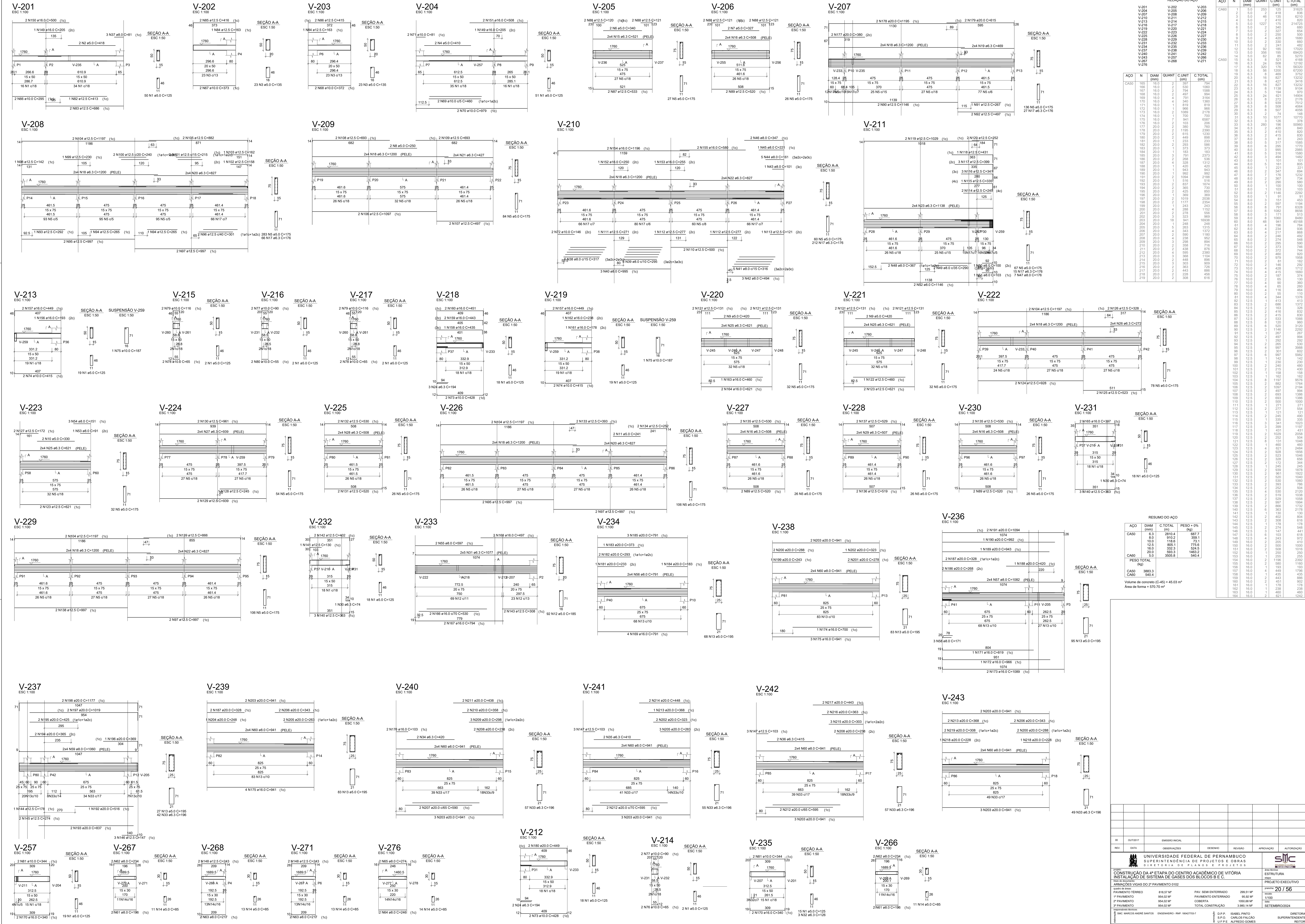
Área de forma = 452,90 m²

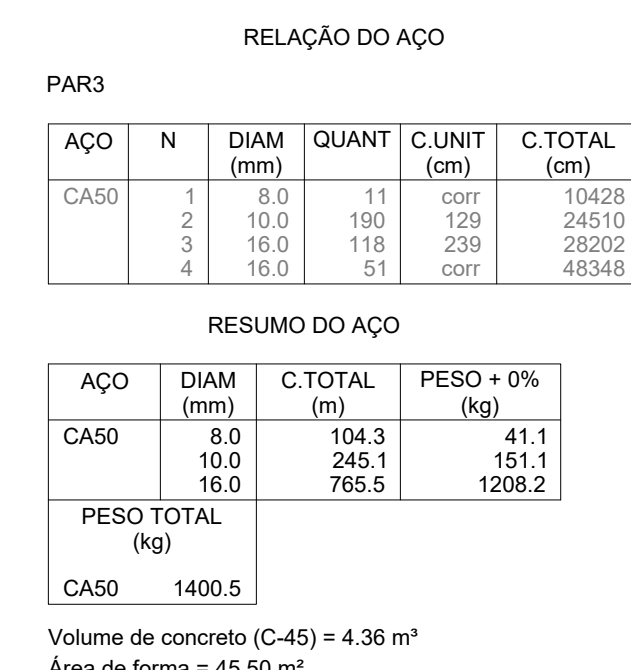
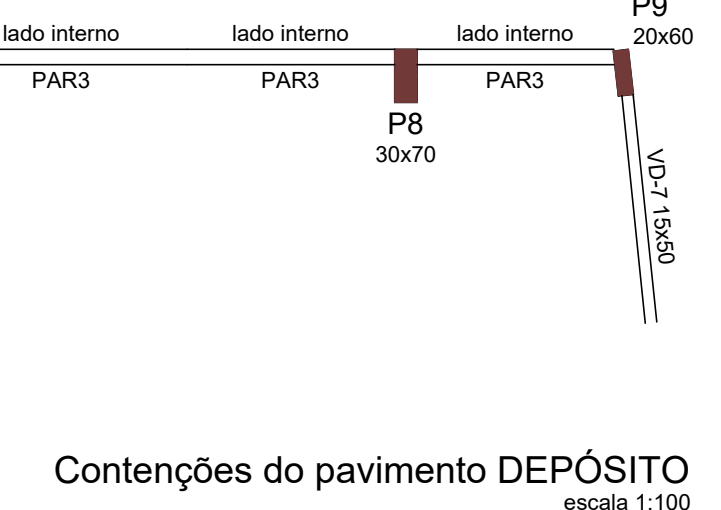
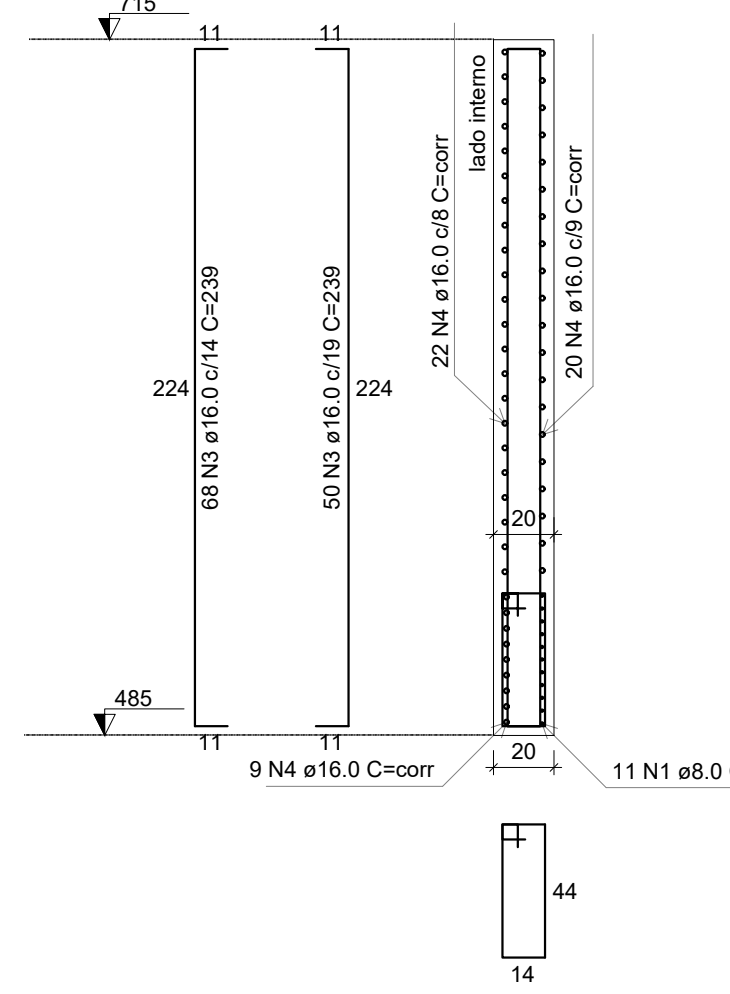
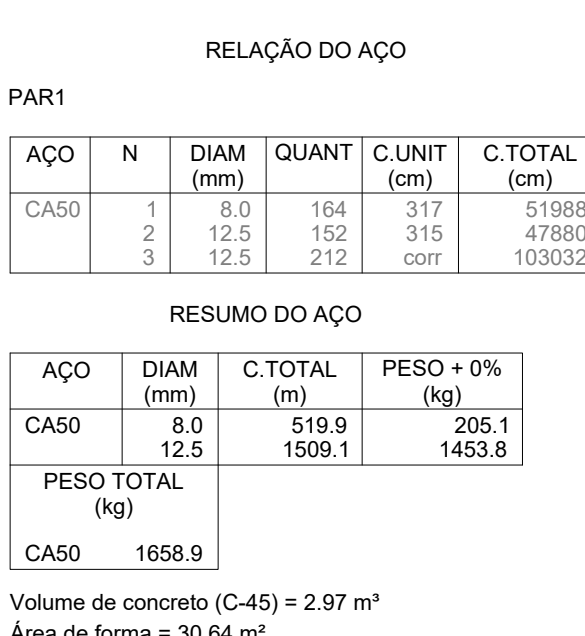
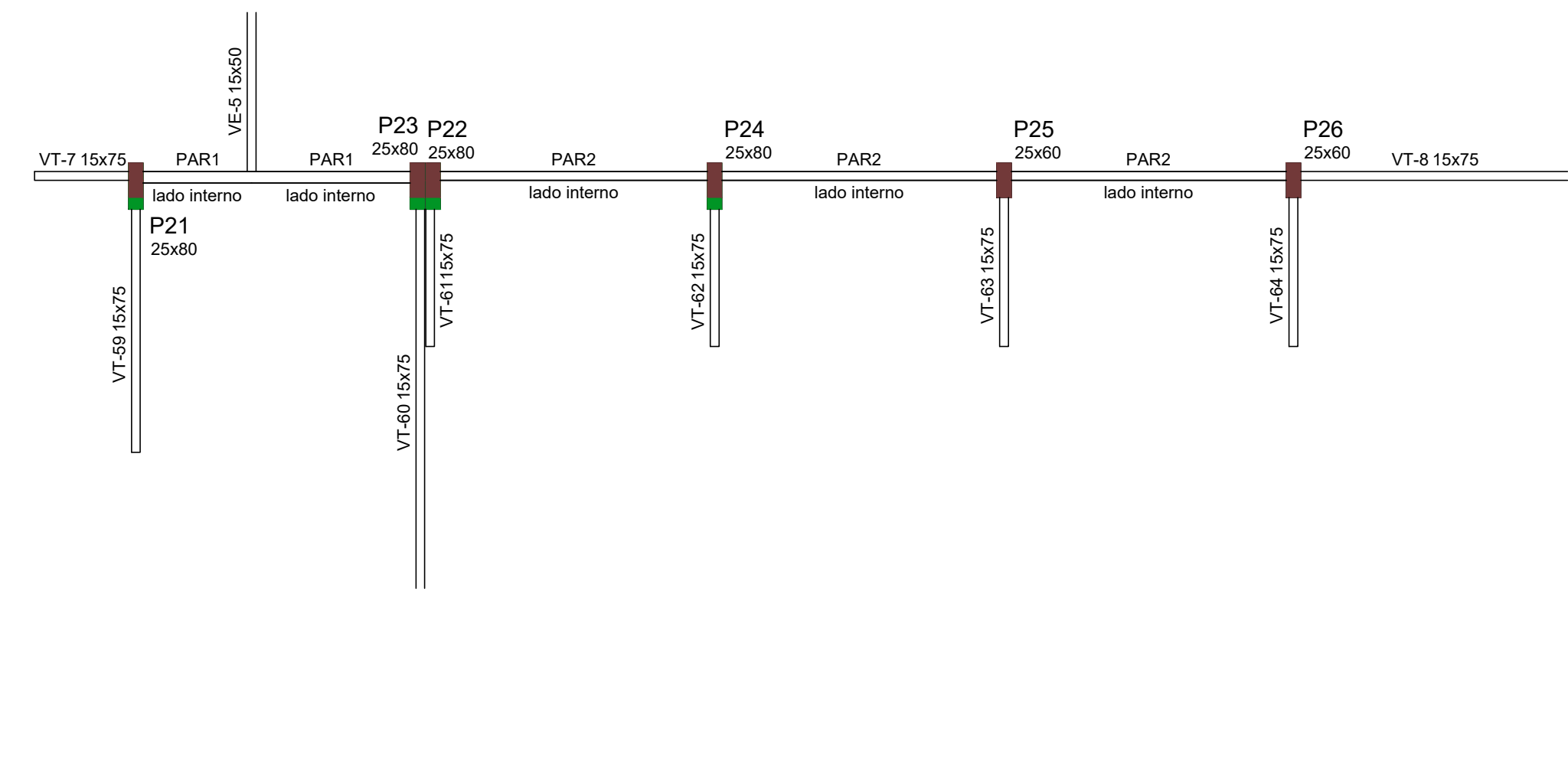
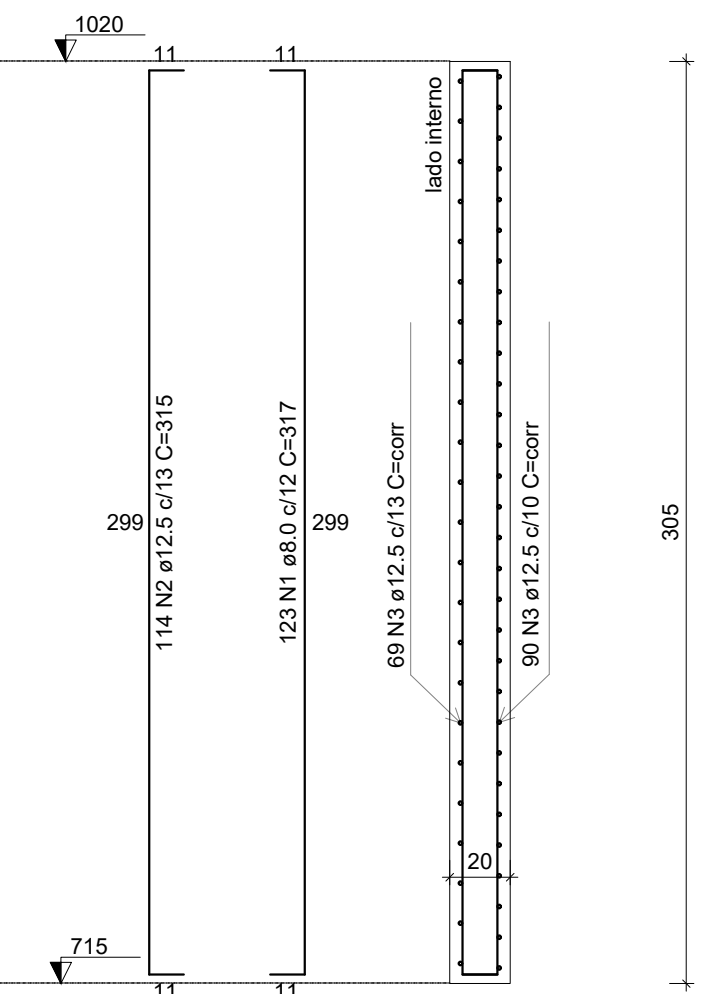
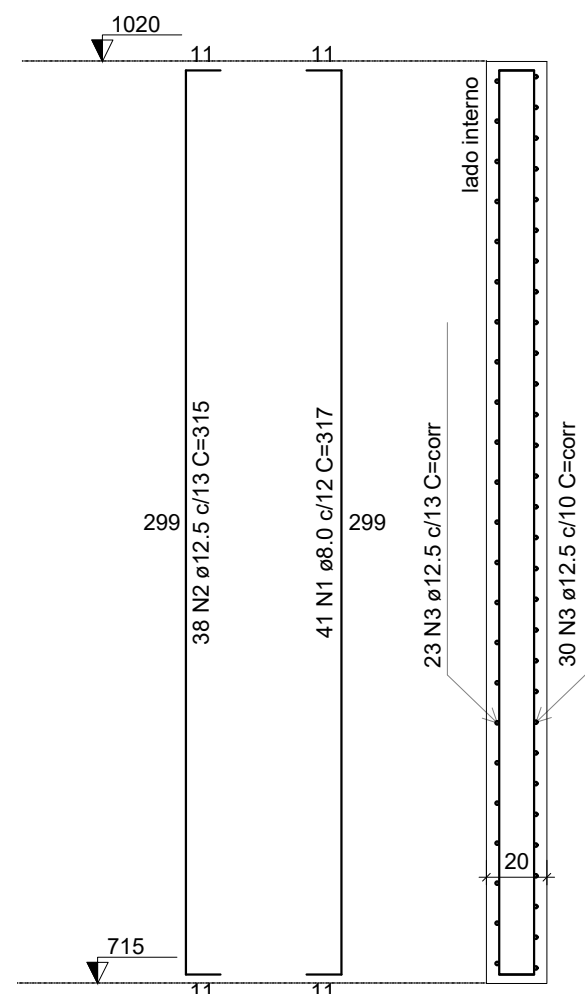
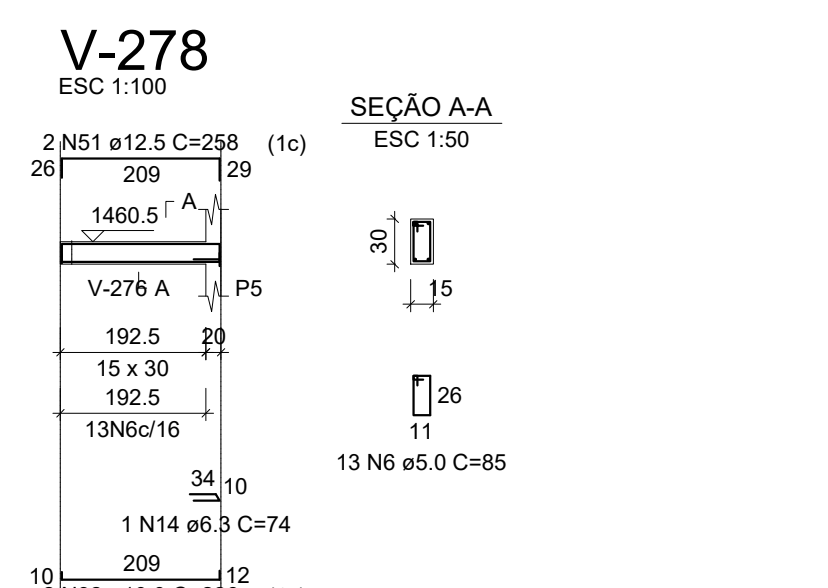
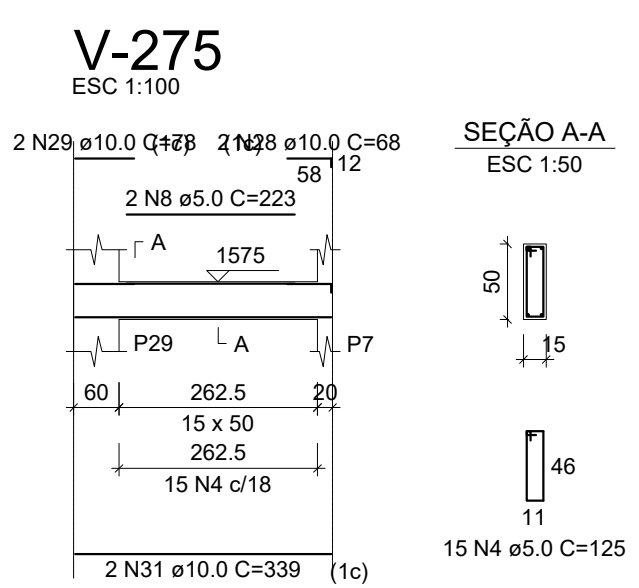
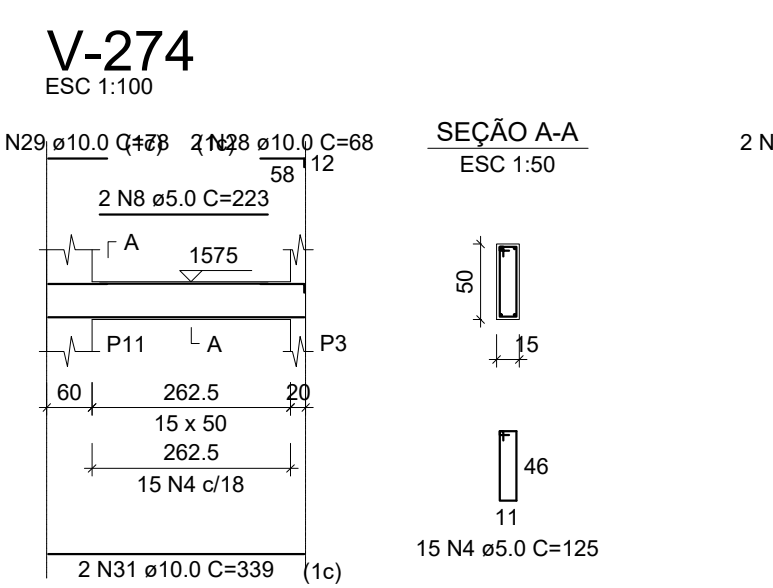
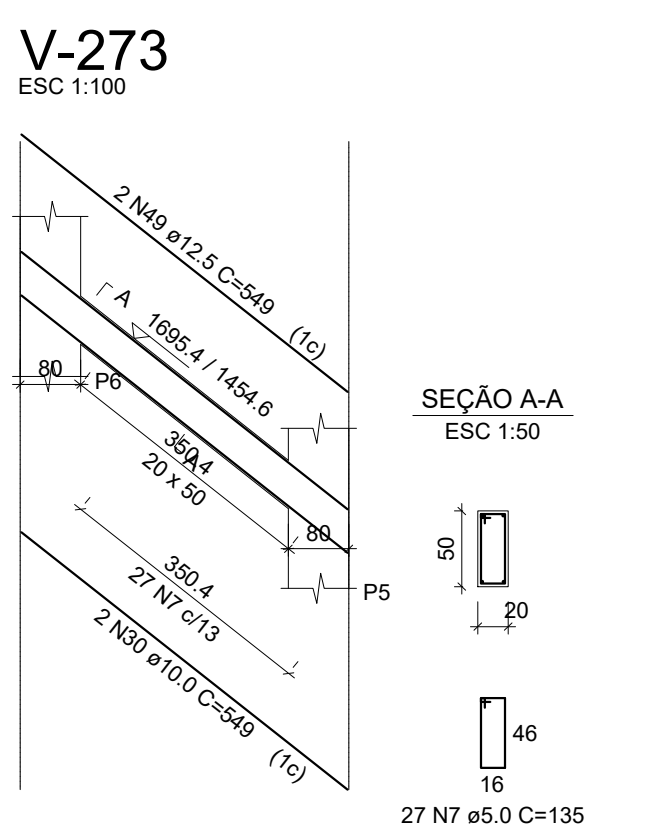
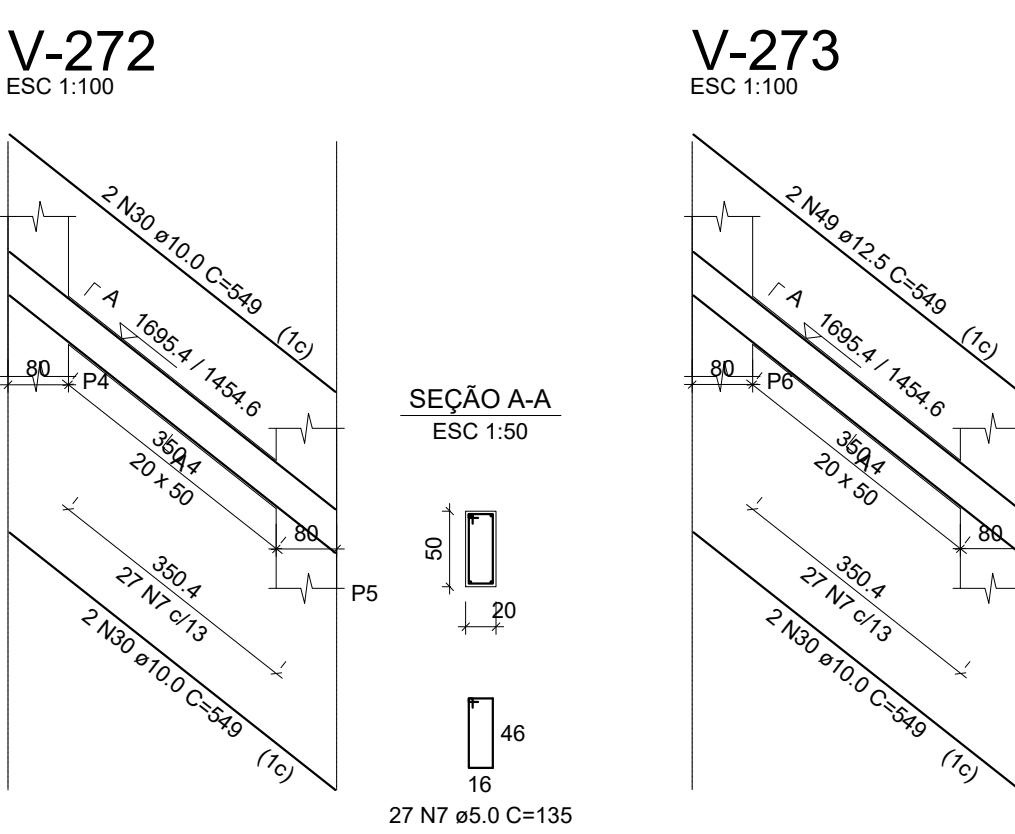
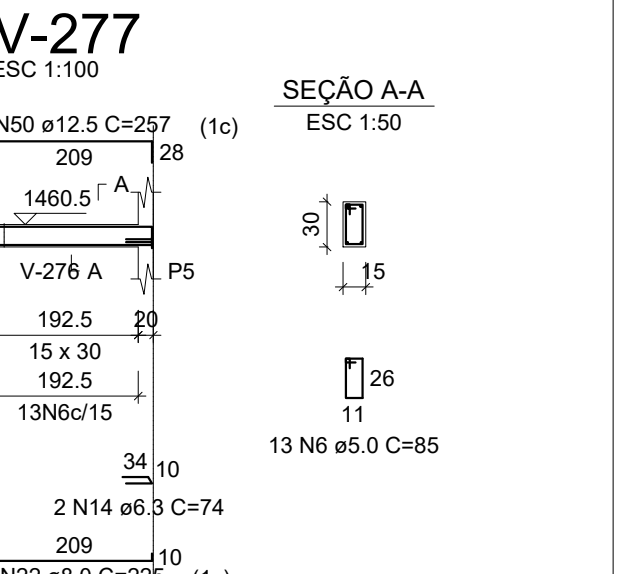
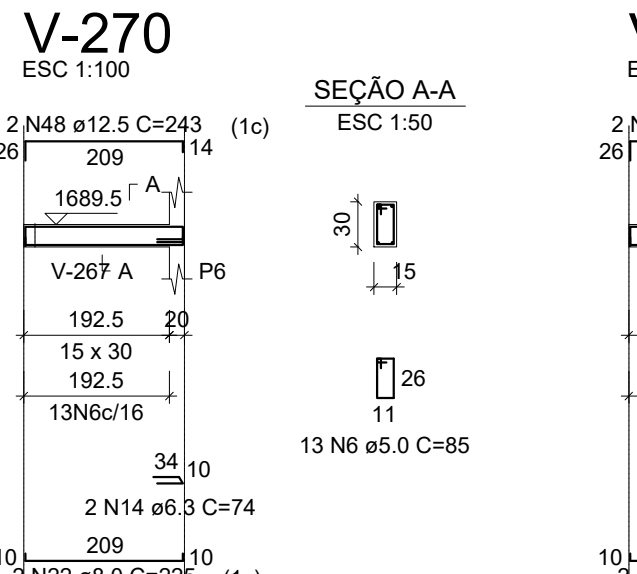
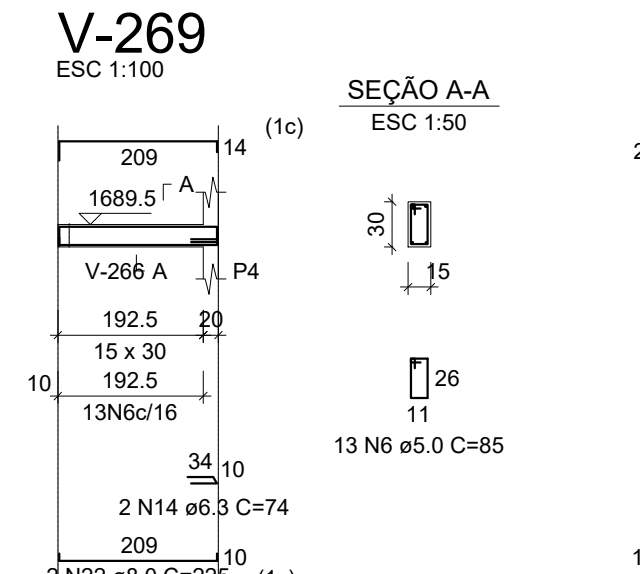
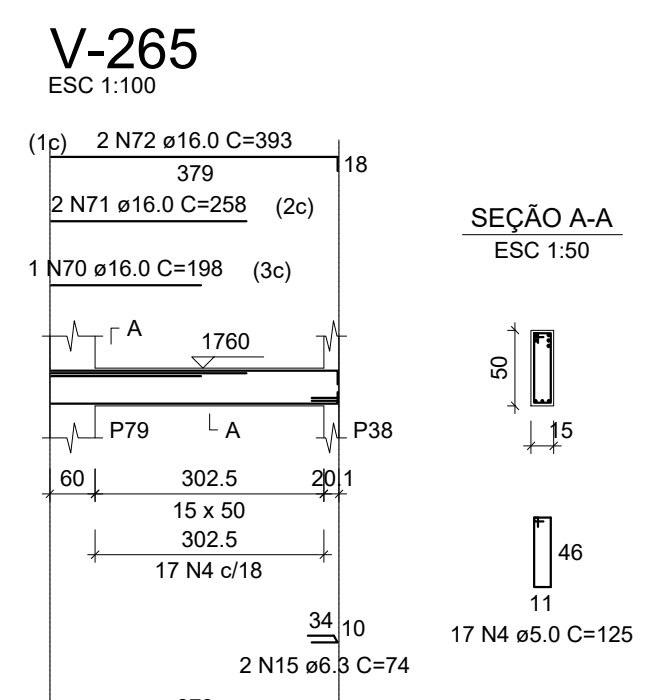
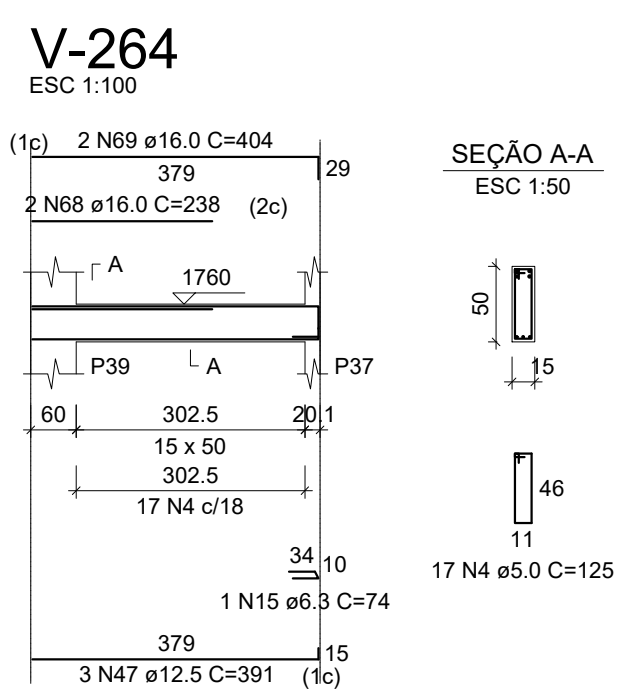
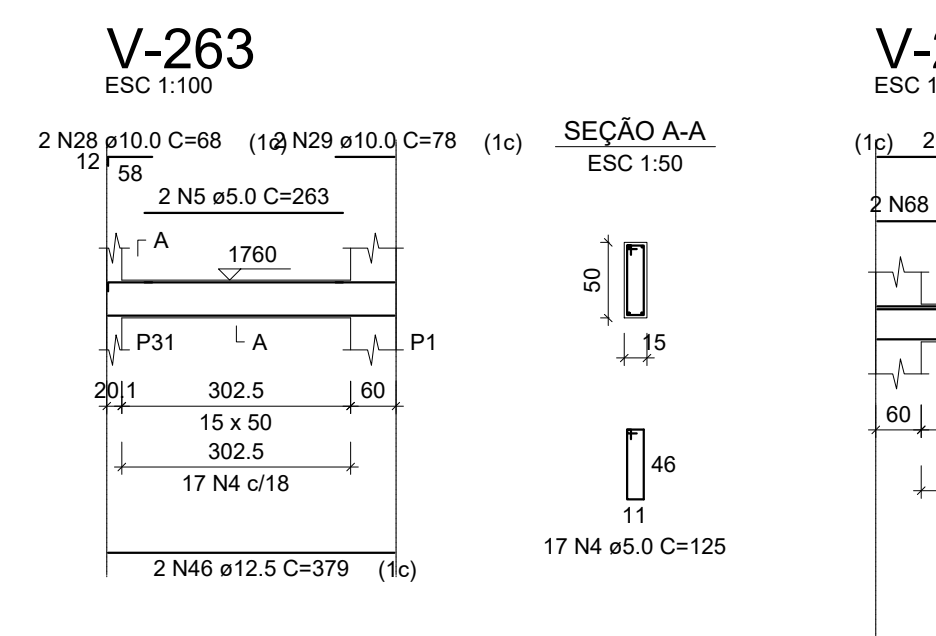
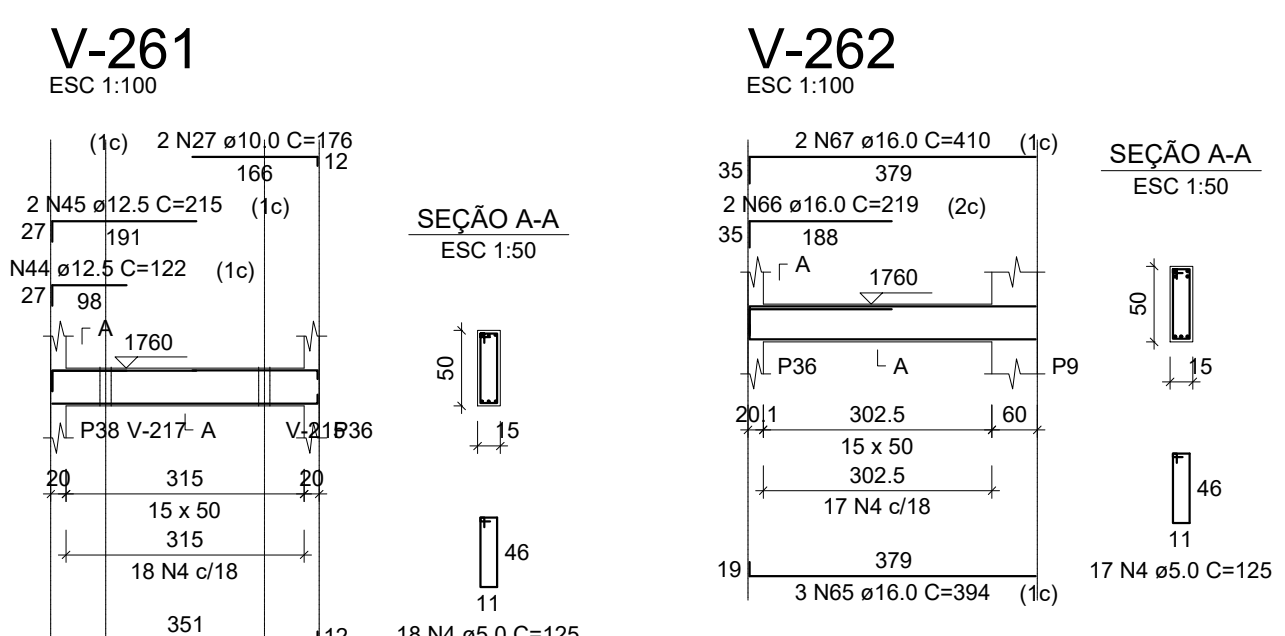
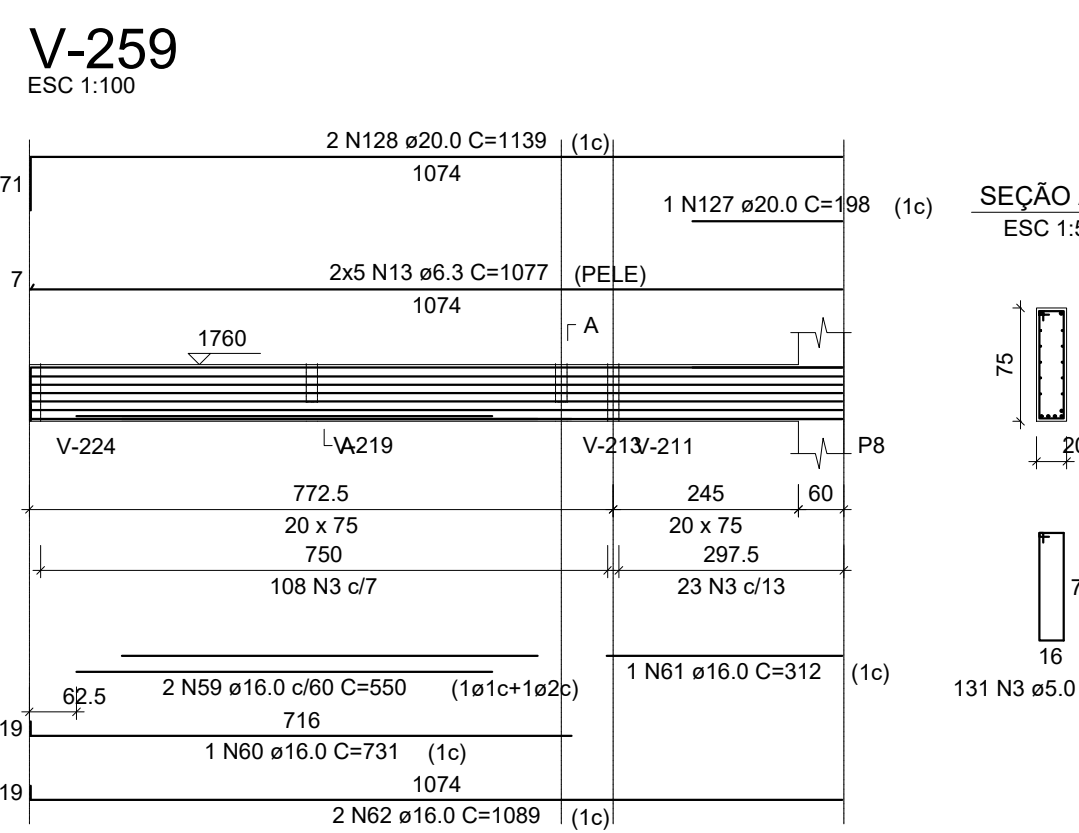
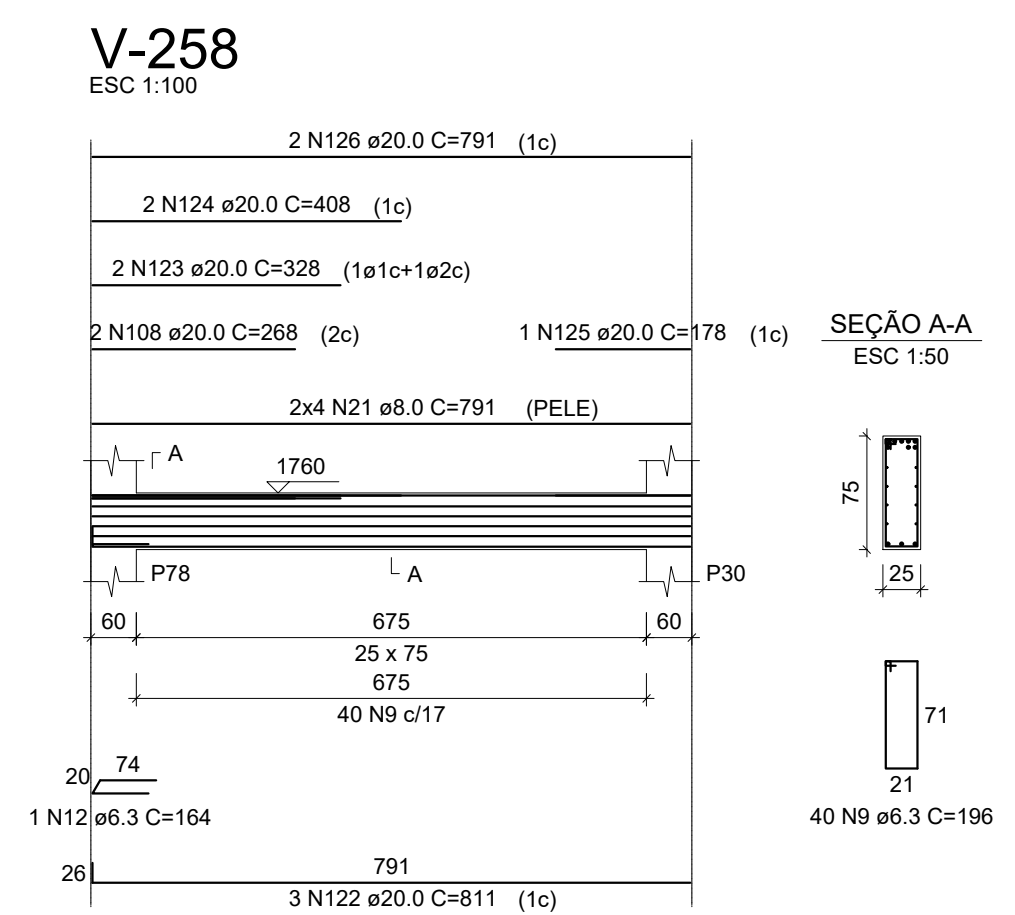
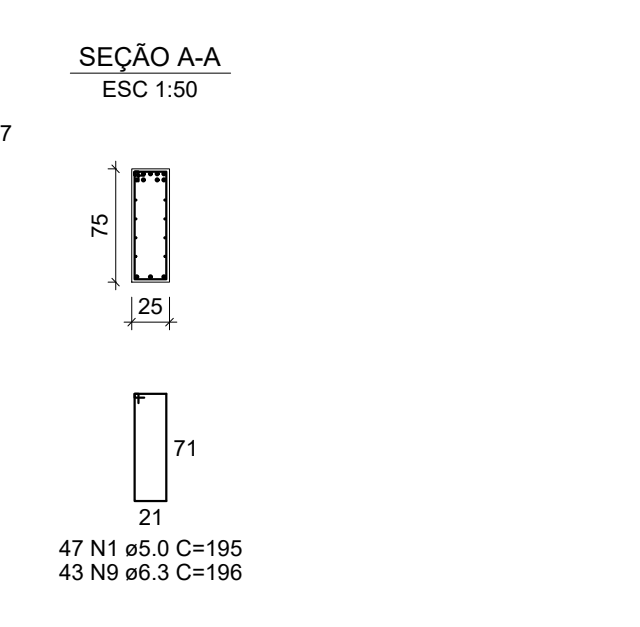
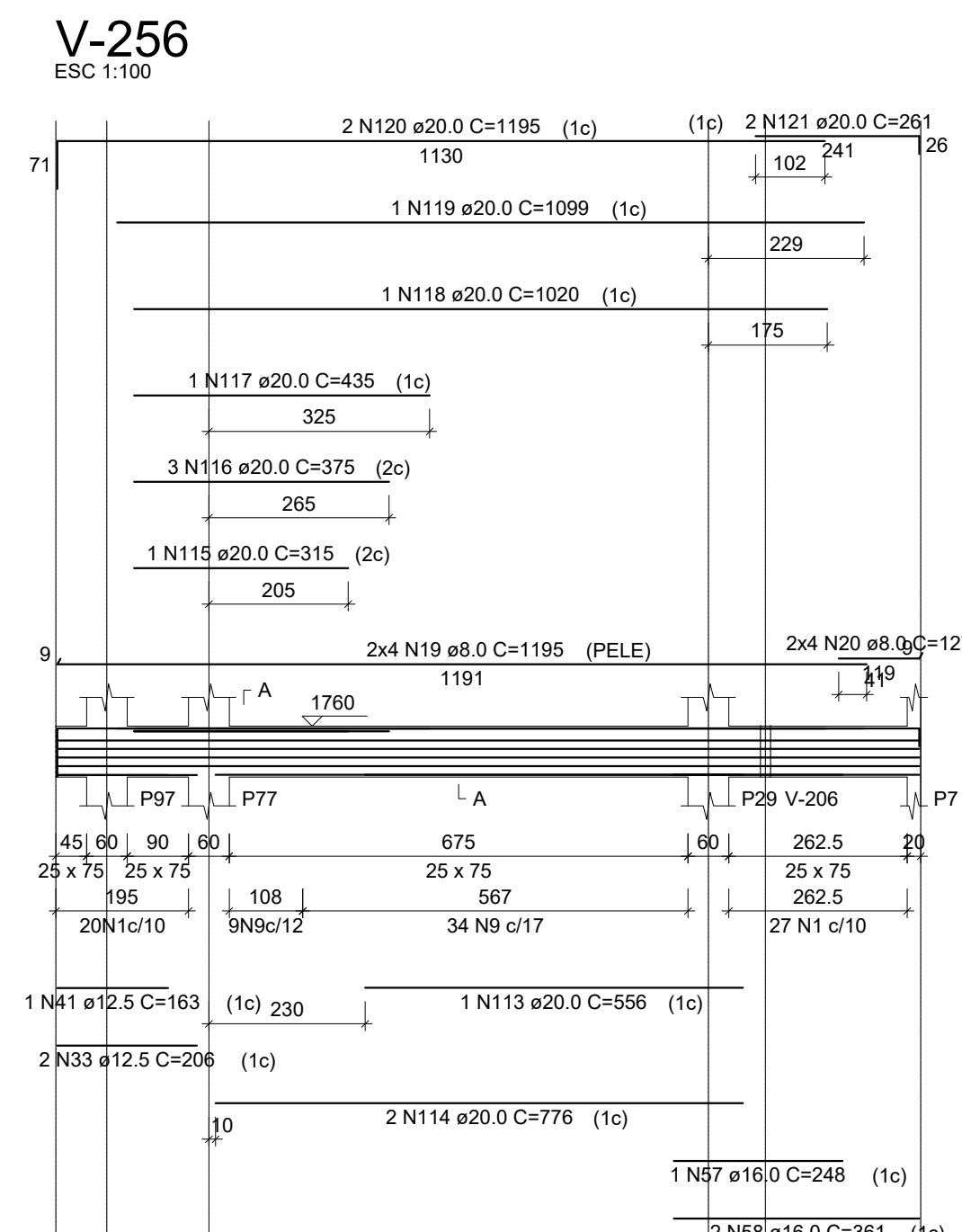
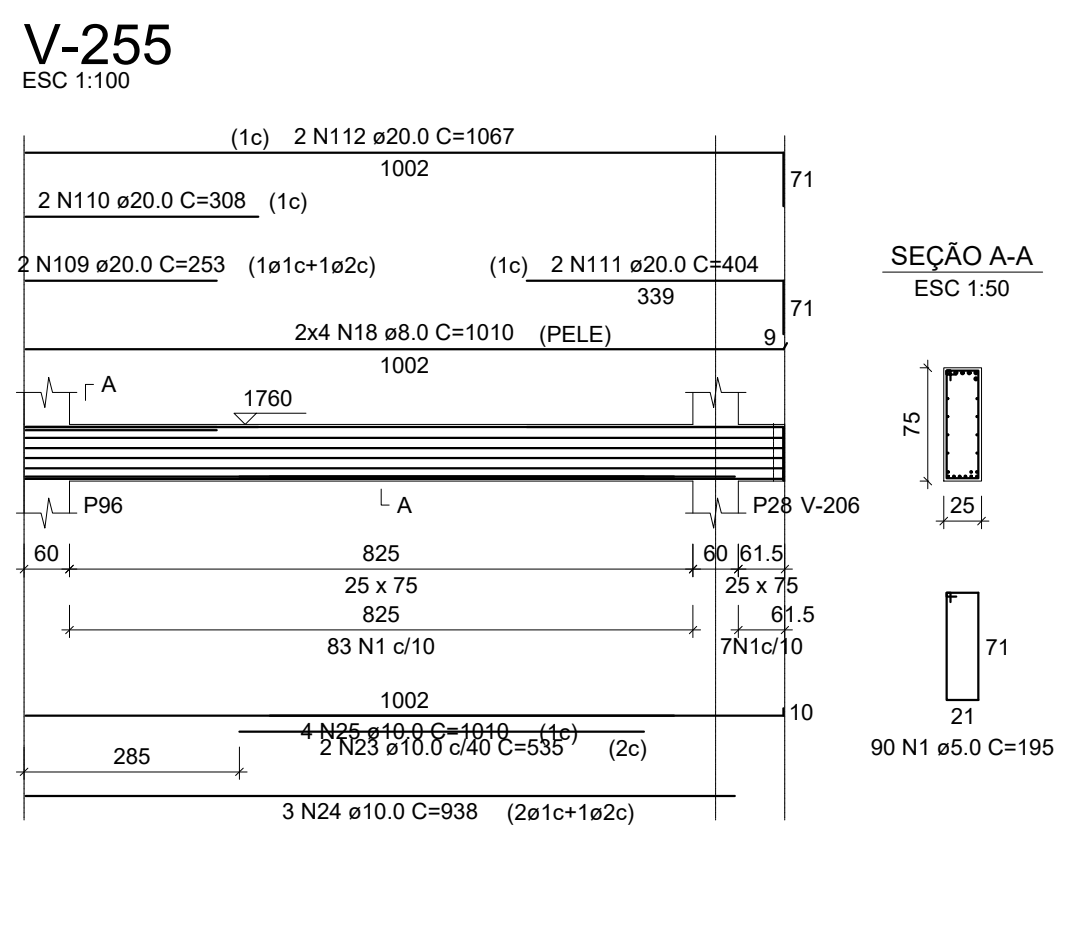
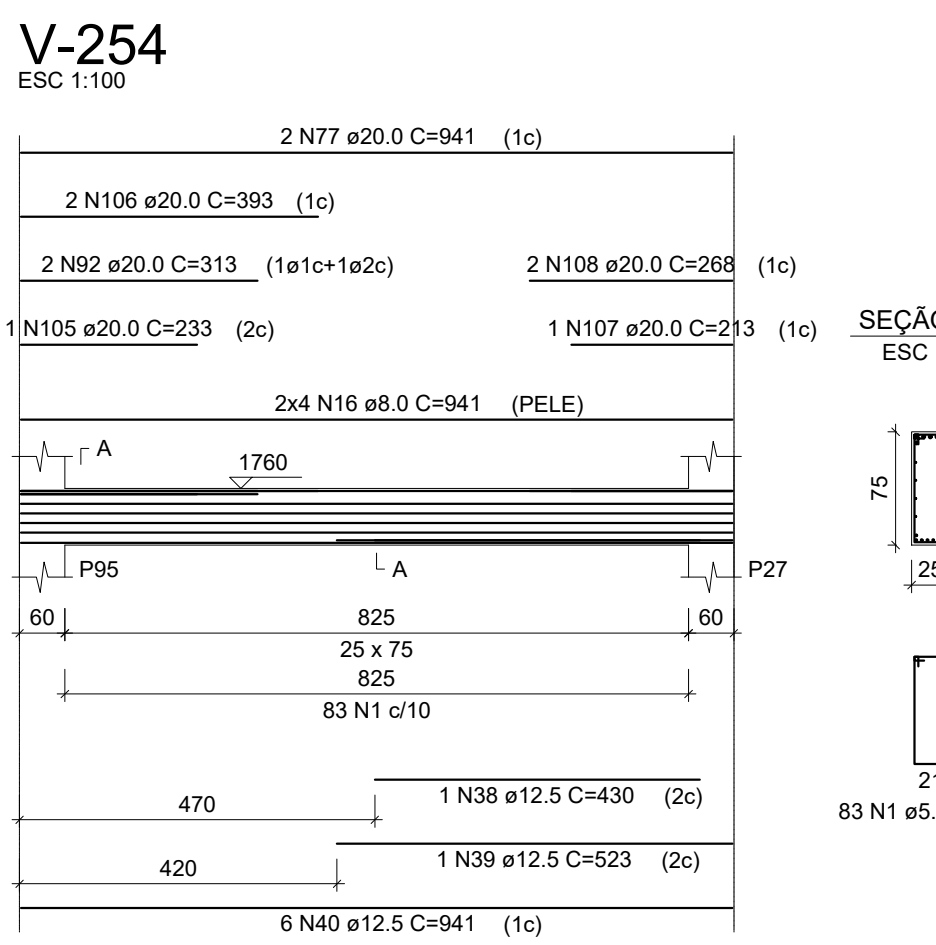
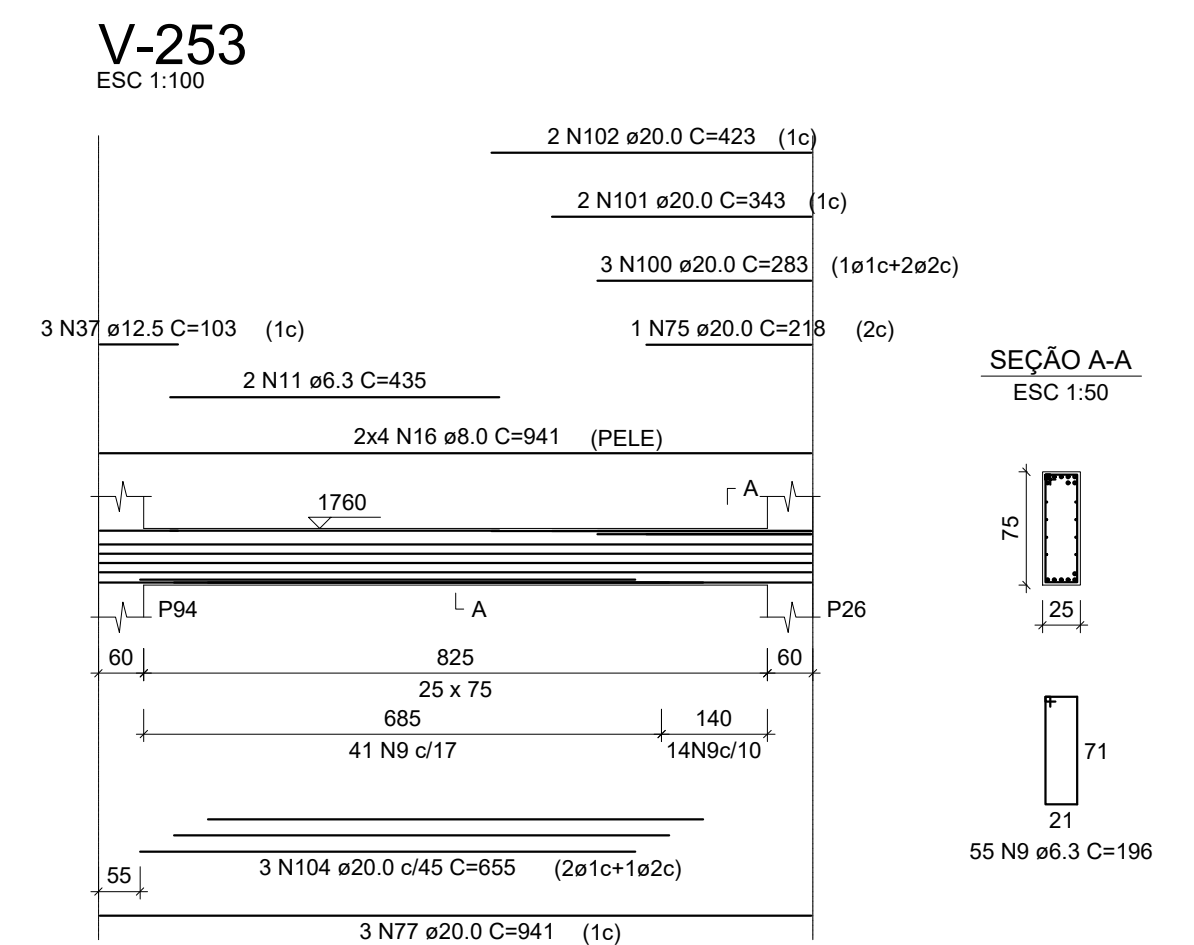
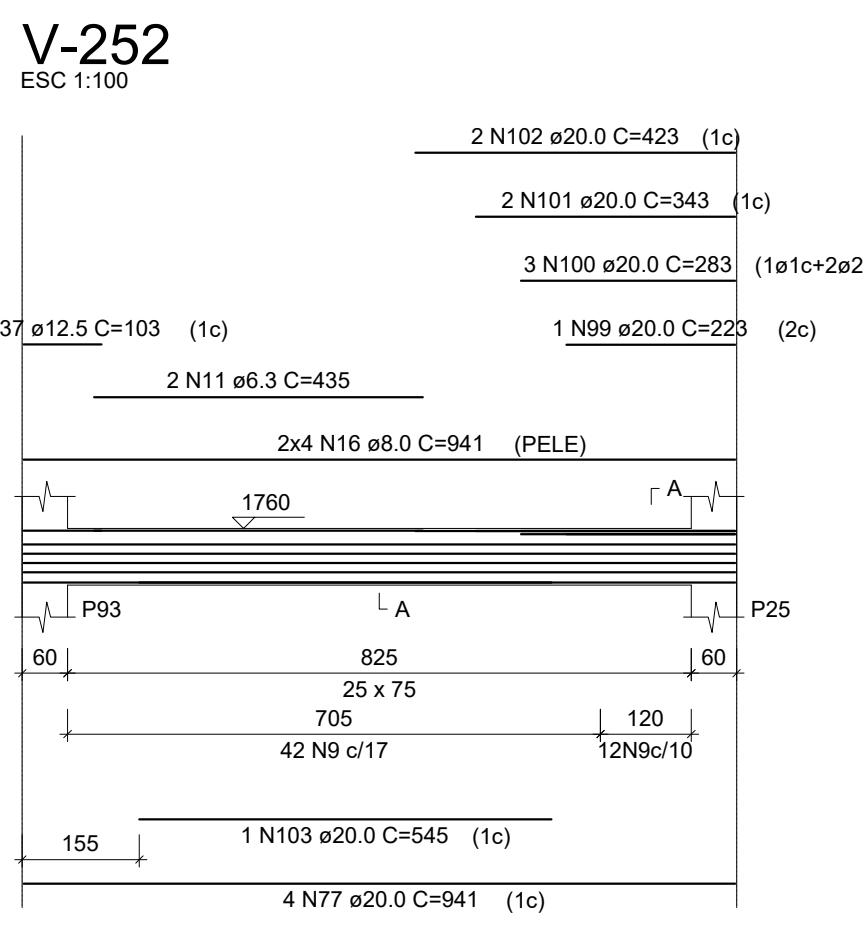
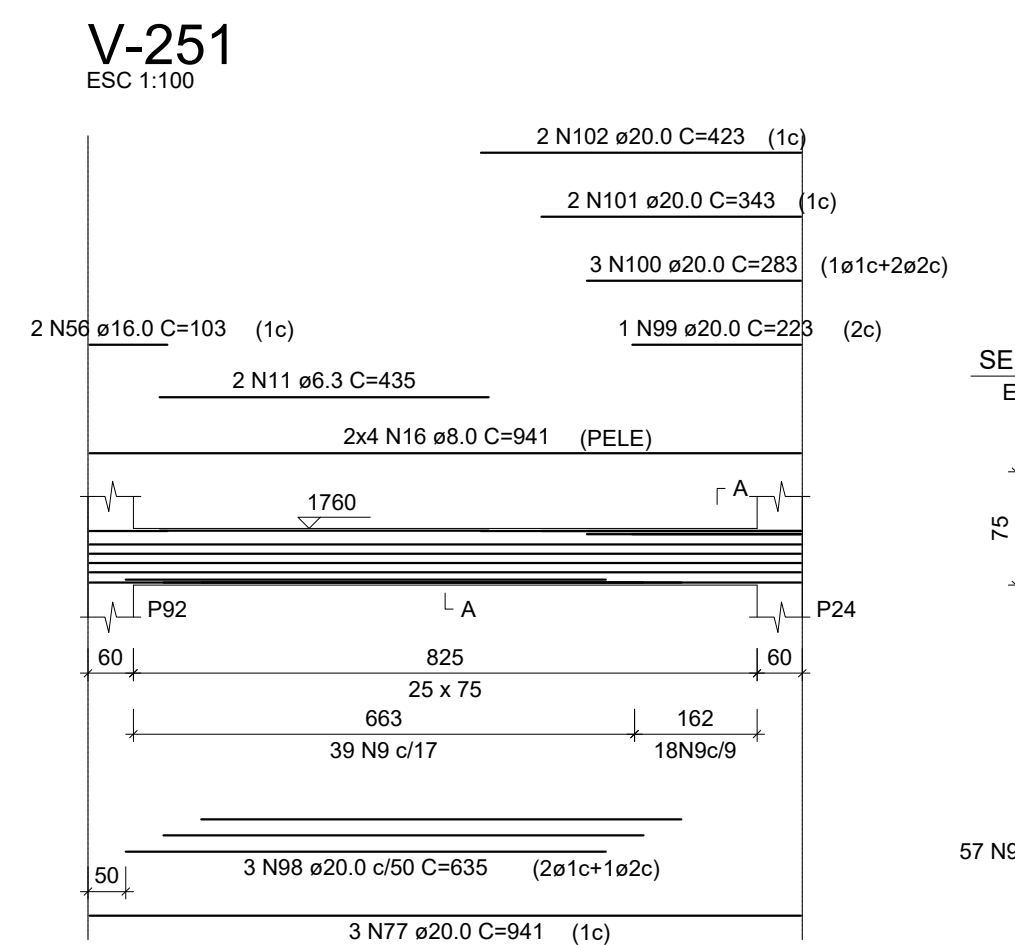
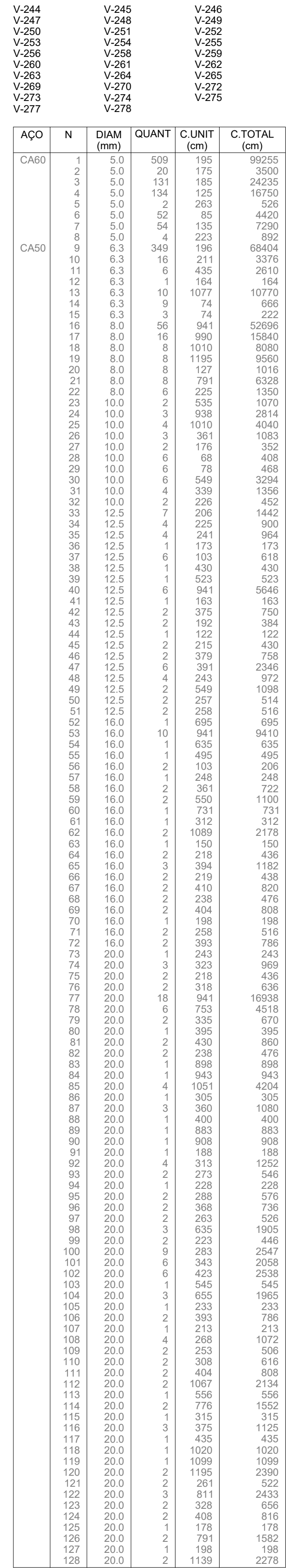
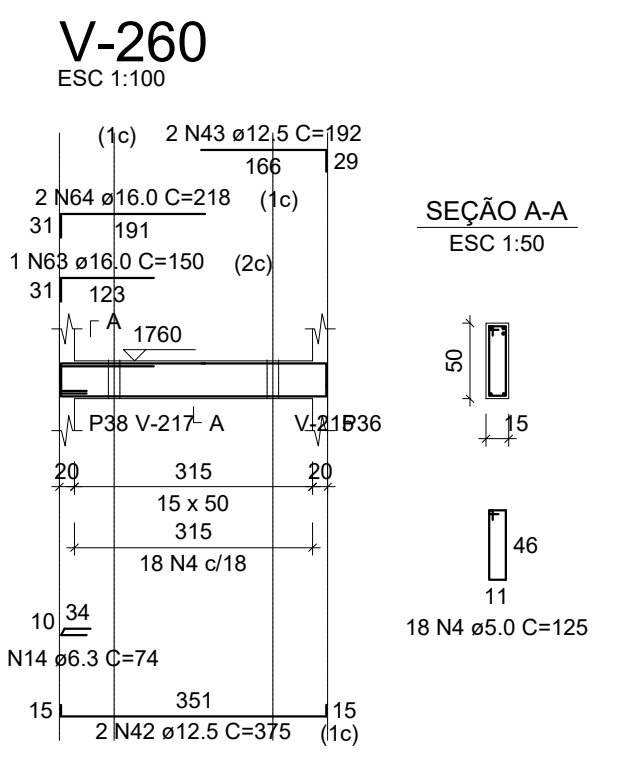
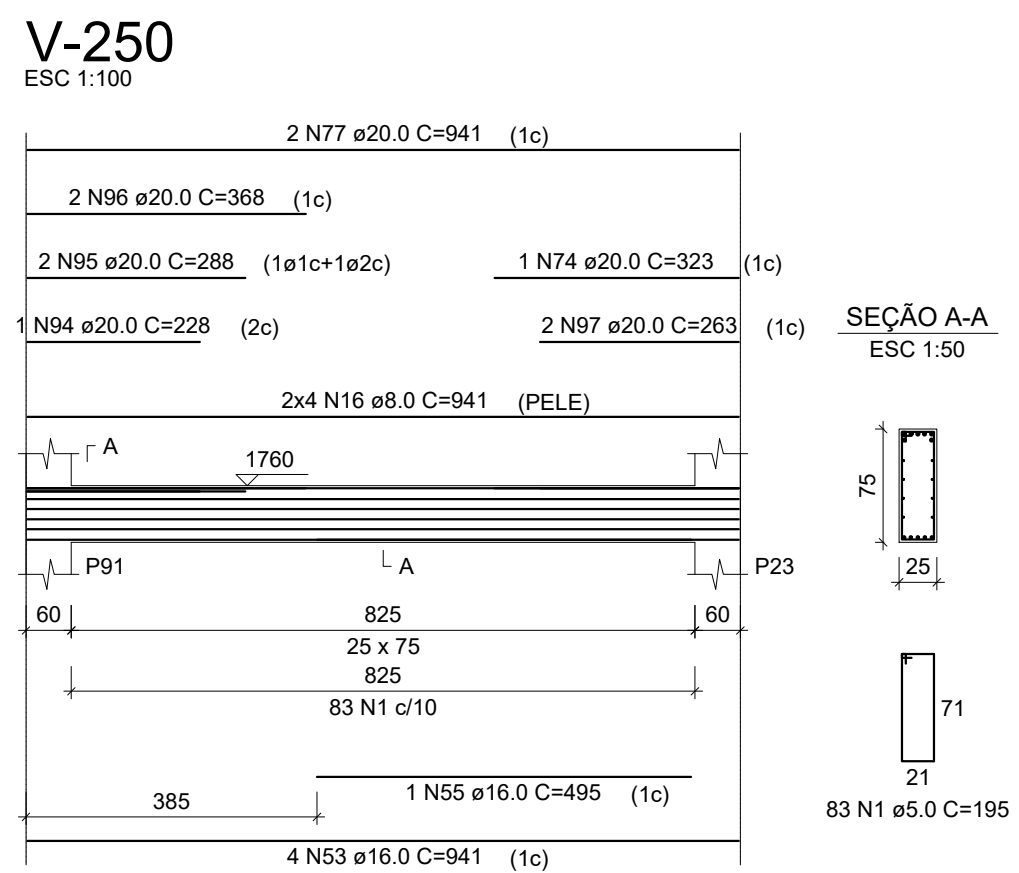
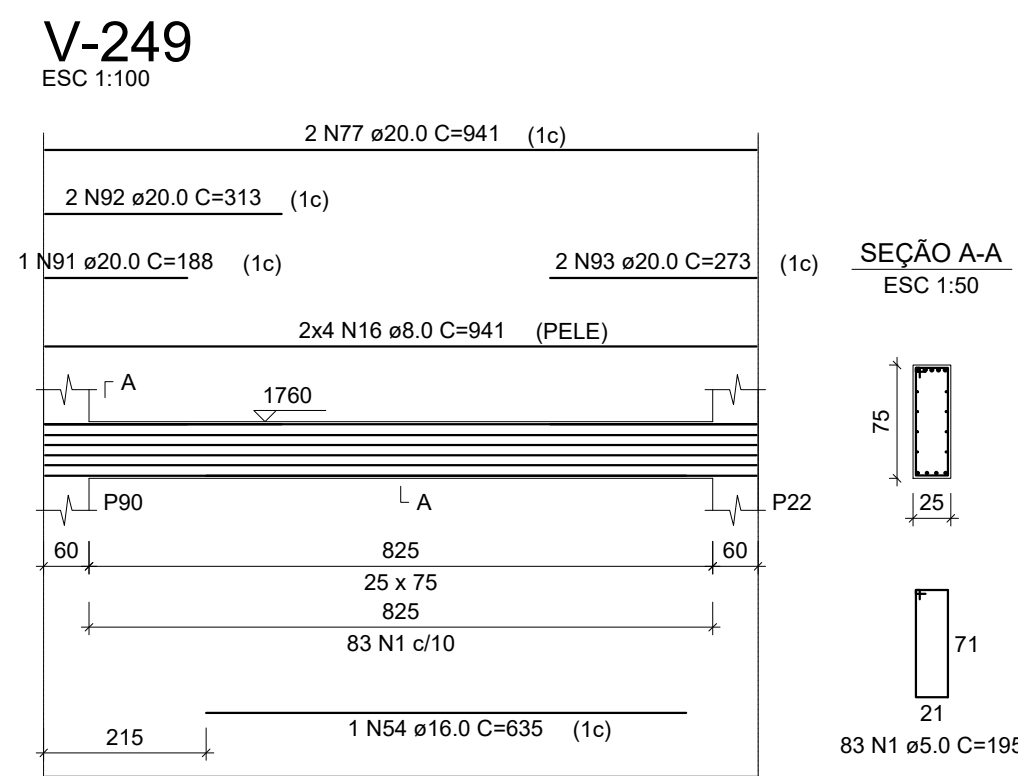
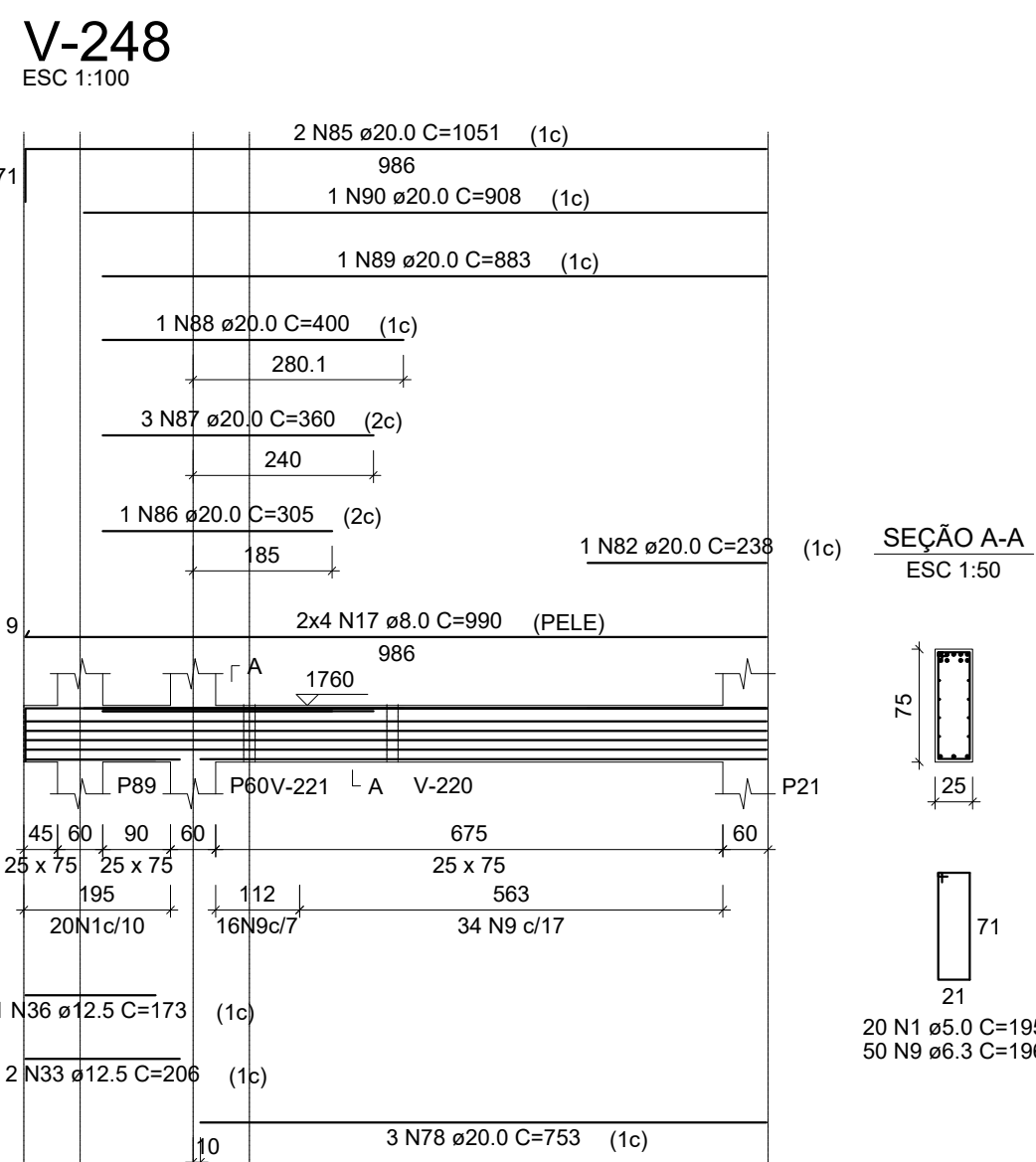
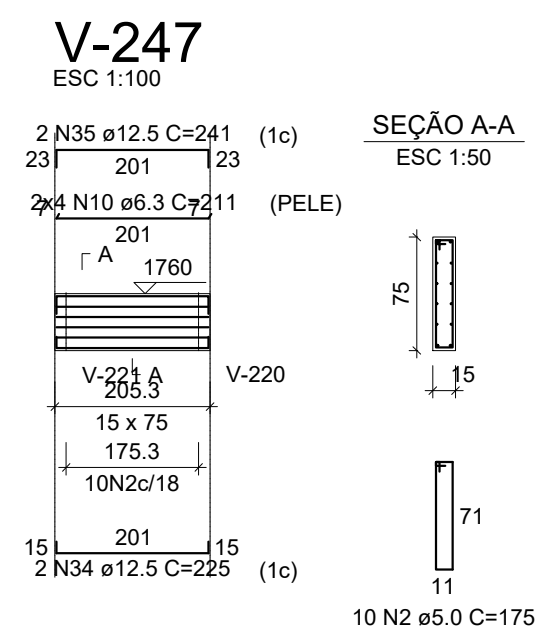
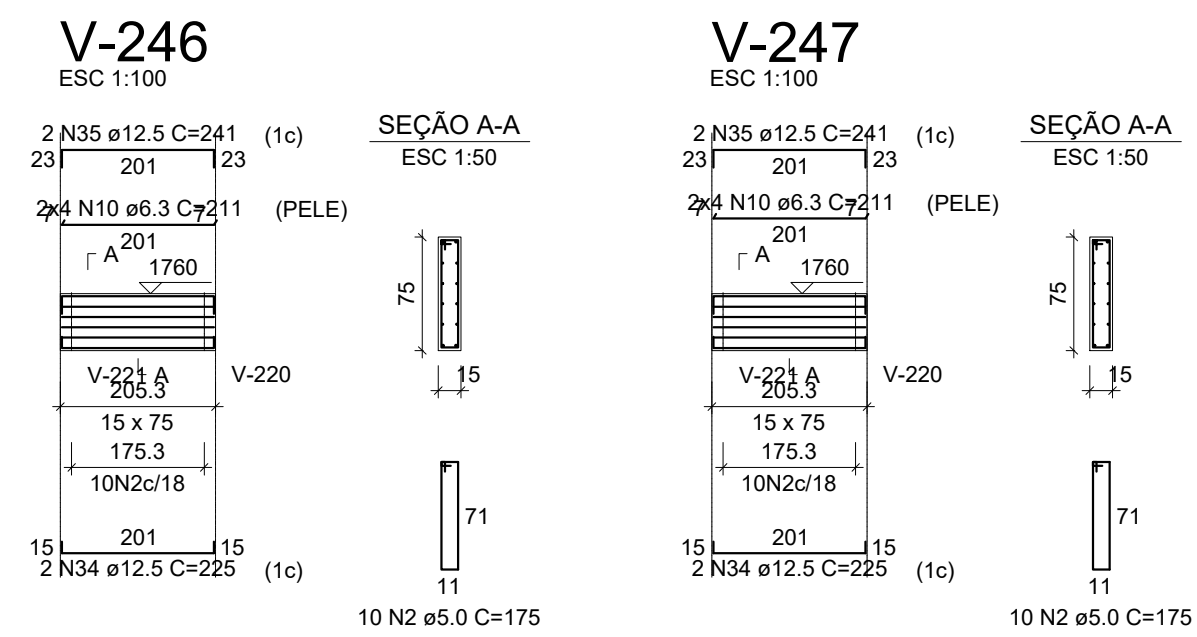
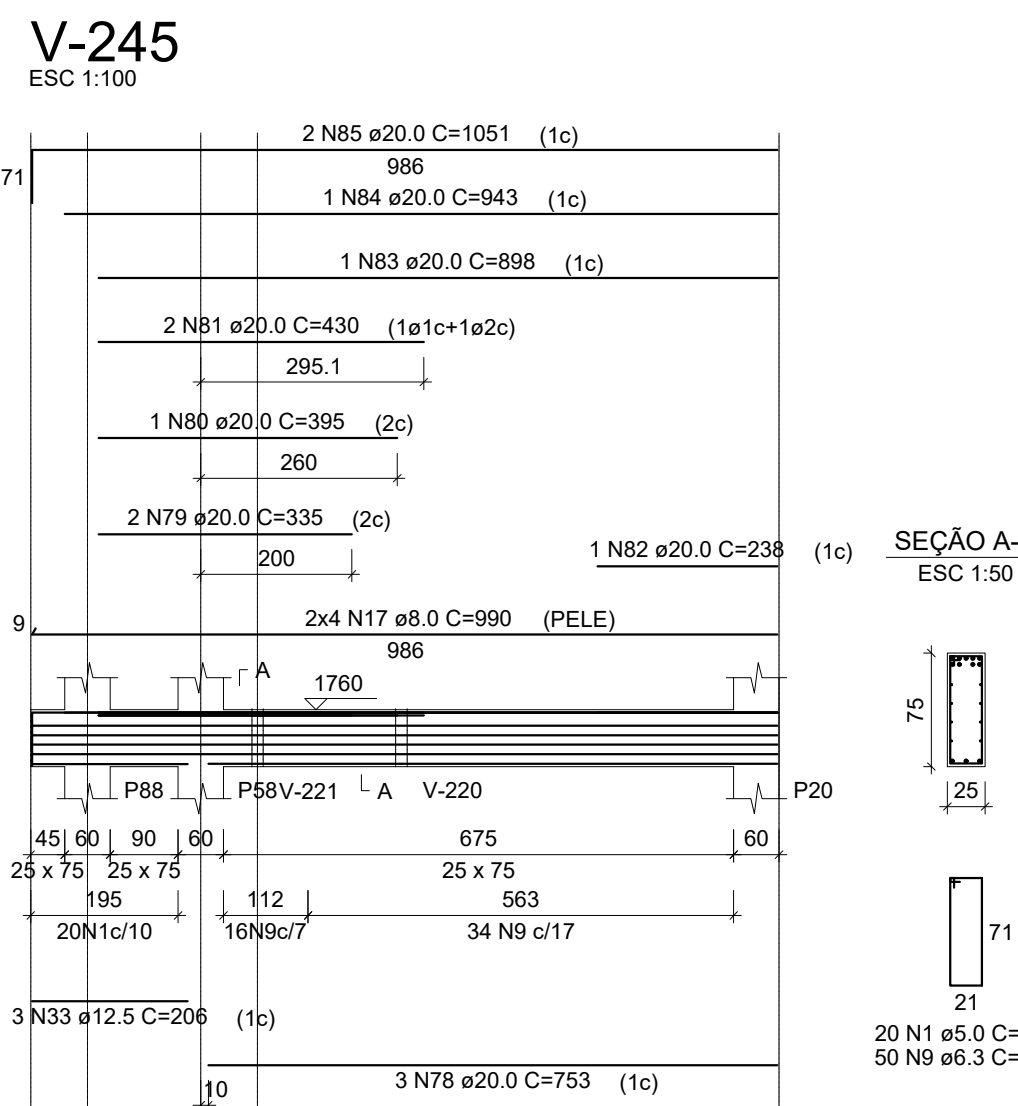
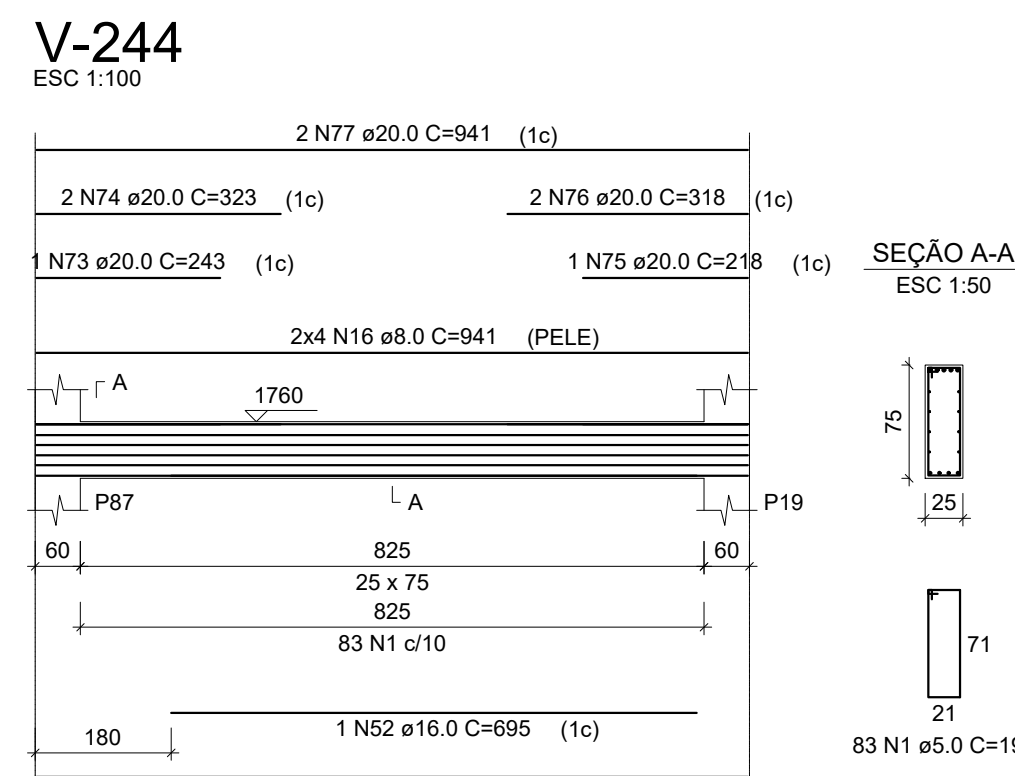


RELAÇÃO DO AÇO						
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	2	12,5	100	125	12500	
	3	16,0	240	105	25200	
	4	20,0	154	100	15400	
	5	25,0	277	31	8587	
	6	32,0	1816	36	65376	
	7	36,0	1688	105	177240	
	8	40,0	1589	35	55615	
	9	45,0	279	36	10044	
	10	50,0	34	145	4930	
CA50	11	12,5	138	80	11040	
	12	16,0	34	145	4930	
	13	20,0	138	80	11040	
	14	25,0	45	26	1170	
	15	32,0	200	39	7800	
	16	40,0	111	111	12321	
	17	45,0	106	106	11236	
	18	50,0	30	111	3330	
	19	55,0	13	136	1768	
	20	60,0	6	154	924	
CA50	21	10,0	10	10	100	
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	85	25,0	10	10	100	
	86	32,0	10	10	100	
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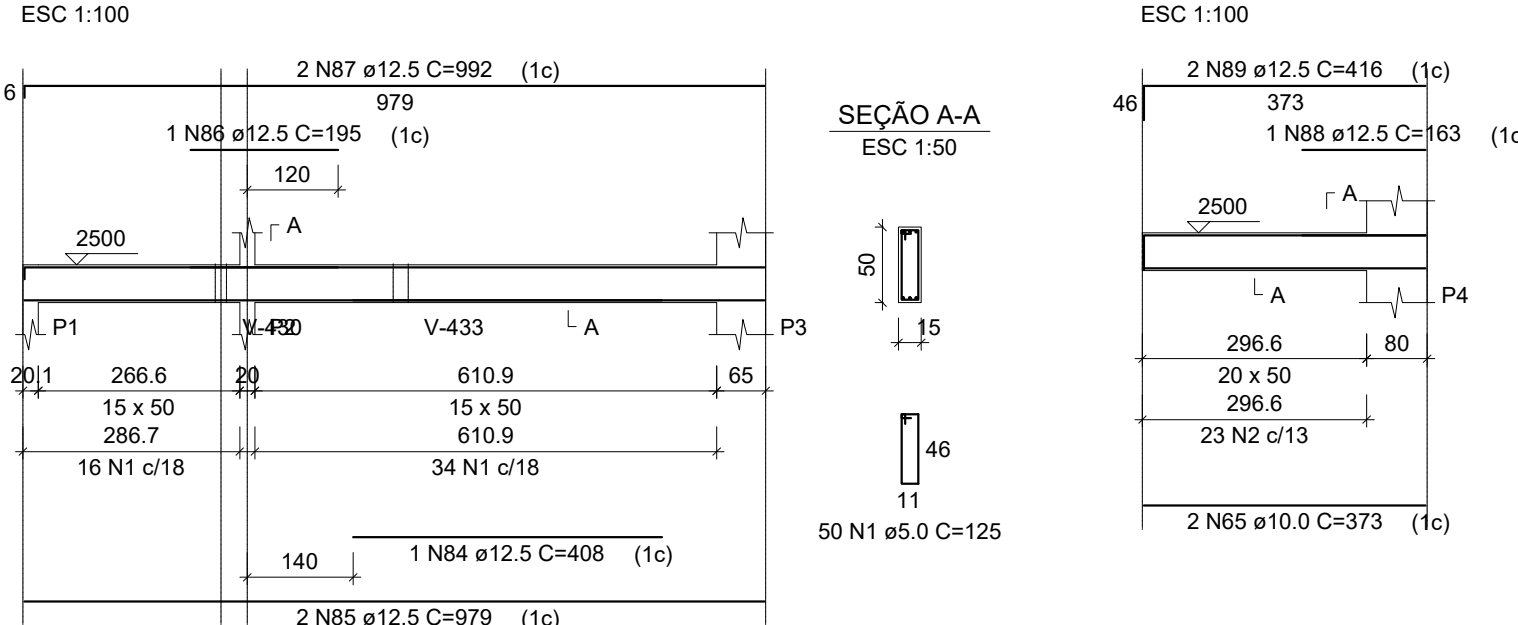




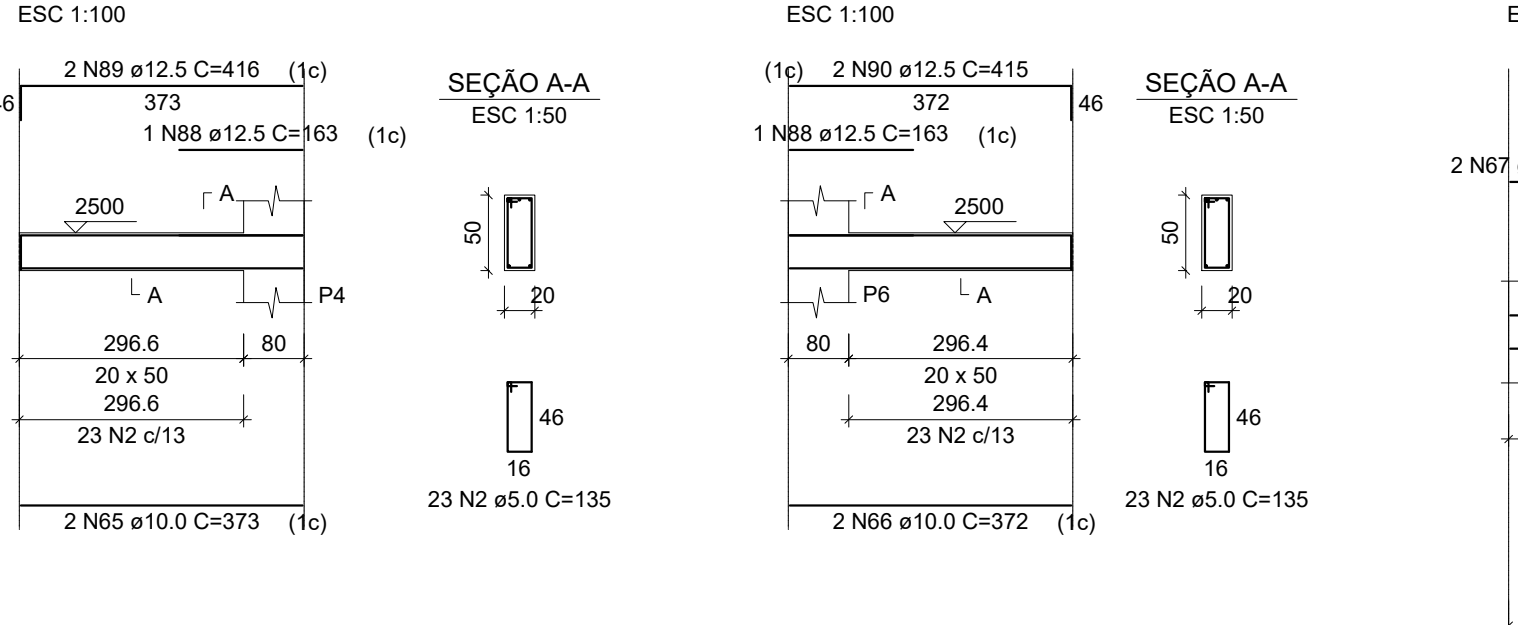


00	OUT/2017	EMISSÃO INICIAL					
REV.	DATA	OBSERVAÇÕES	DESENHO	REVISÃO	APPROVAÇÃO	AUTORIZAÇÃO	
		UNIVERSIDADE FEDERAL DE PERNAMBUCO SUPERINTENDÊNCIA DE PROJETOS E OBRAS DIRETORIA DE PLANOS E PROJETOS					
(projeto) CONSTRUÇÃO DA 4ª ETAPA DO CENTRO ACADÊMICO DE VITÓRIA INSTALAÇÃO DE SISTEMA DE GASES DOS BLOCOS E E C (REMOÇÃO DE VIGAS DO 2º PAVIMENTO 0202 E CONTEIÇÕES DO ALMOXARAFADO E DEPOSITO)						área do projeto ESTRUTURA 21 / 56	
(área de projeto) 1º PAVIMENTO TERREO 918,52 M² 1º PAVIMENTO 954,02 M² 2º PAVIMENTO 954,02 M² 3º PAVIMENTO 954,02 M²		PAV. SEM ENTERRADO 295,51 M² PAVIMENTO ENTERRADO 95,92 M² COBERTA 100,68 M² TOTAL CONSTRUÇÃO 3.982,14 M²		11/200 11/200 11/200 11/200		PROJETO EXECUTIVO 21 / 56 11/200 11/200 11/200 11/200	
responsáveis técnicos:		responsáveis de obra:		data de aprovação:		data de emissão:	
ENG.º MARCO ANDRÉ SANTOS ENG.º ENGENHEIRO - RPPR 19047737-7		S.º F.º S.º F.º ALFREDO GOMES		ISABEL PINO CARLOS PALCO S.º F.º ALFREDO GOMES		DIRETORA SUPERINTENDENTE REITOR	

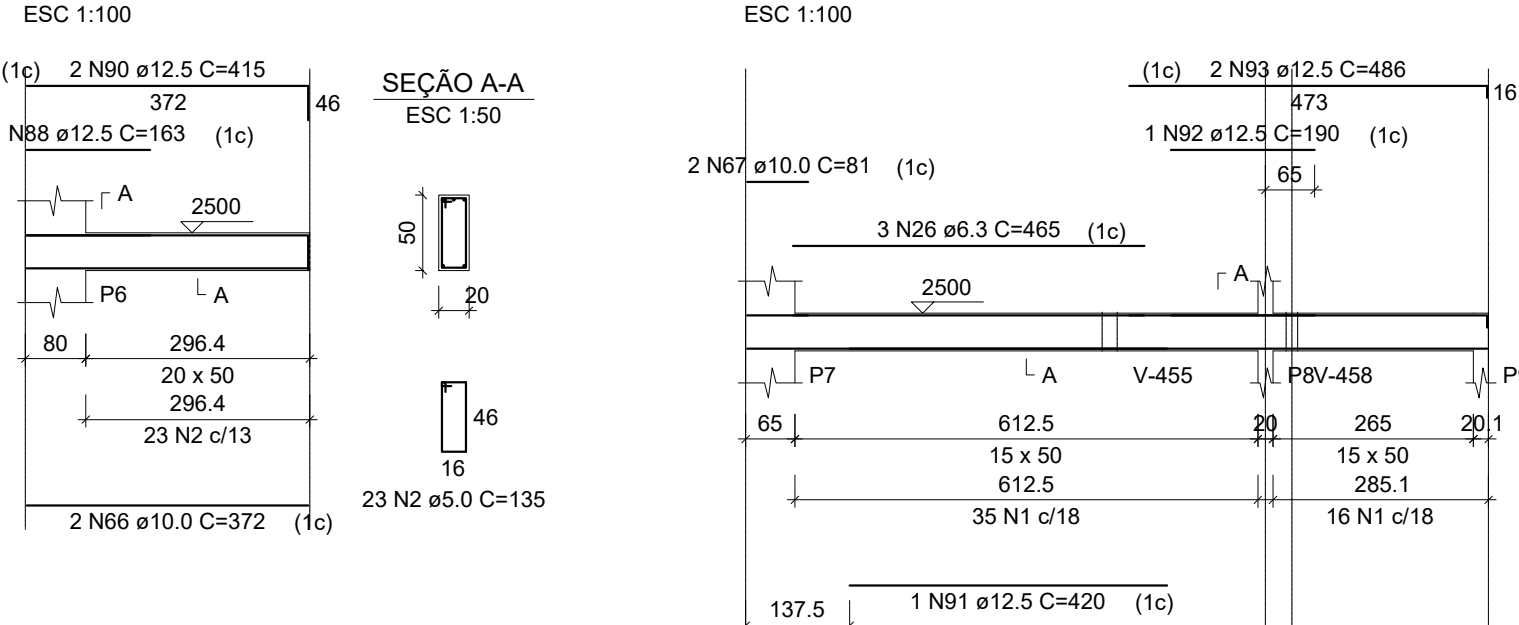
V-401



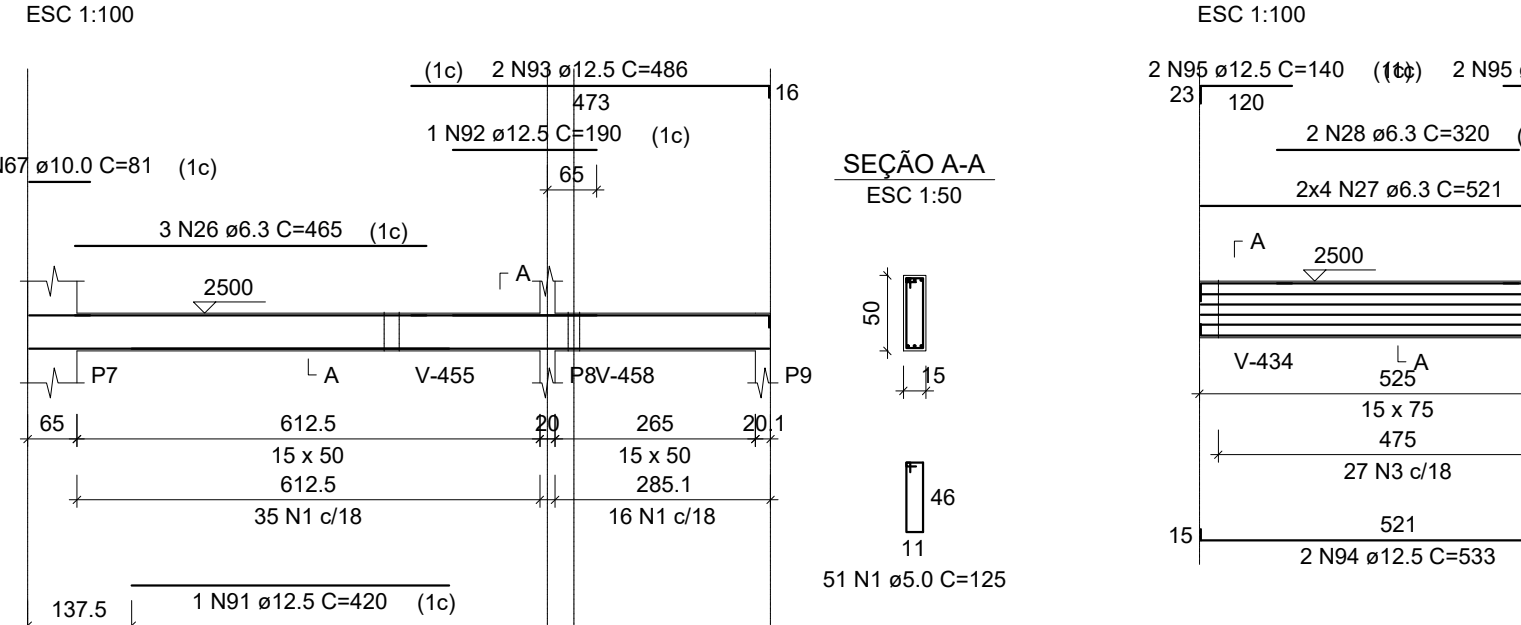
V-402



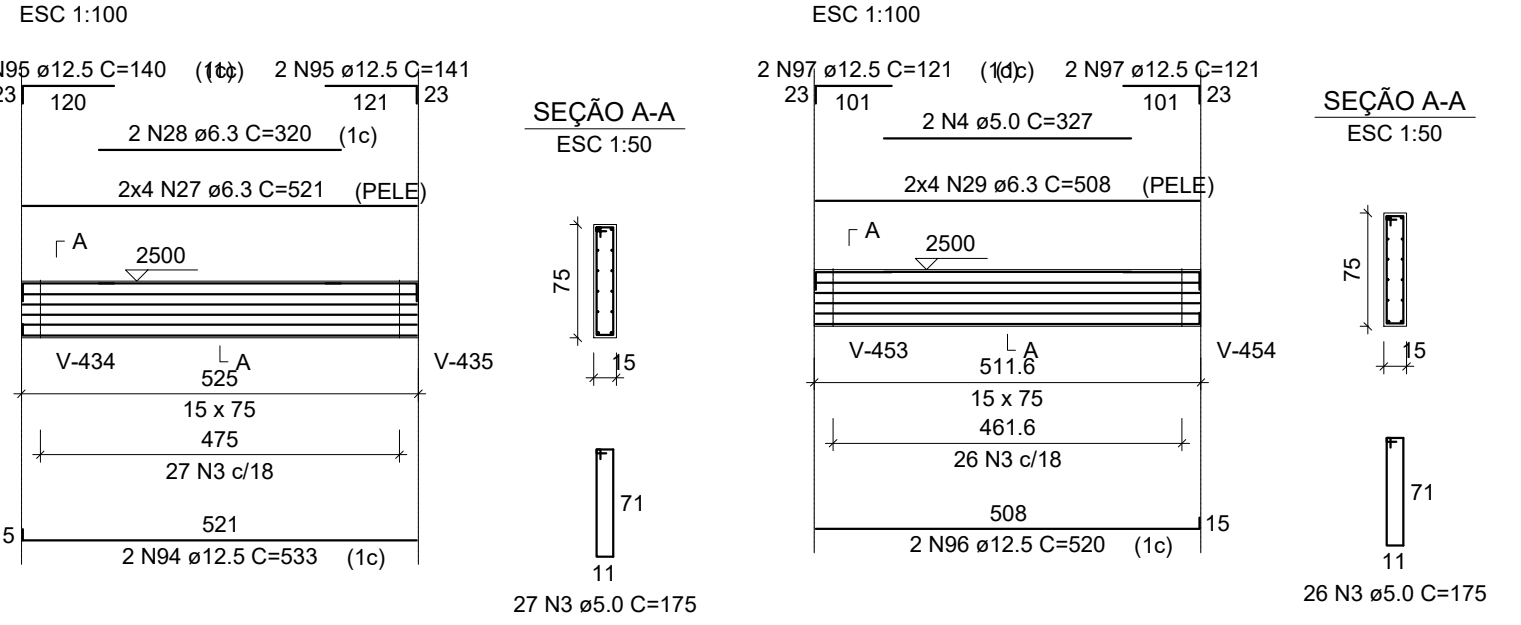
V-403



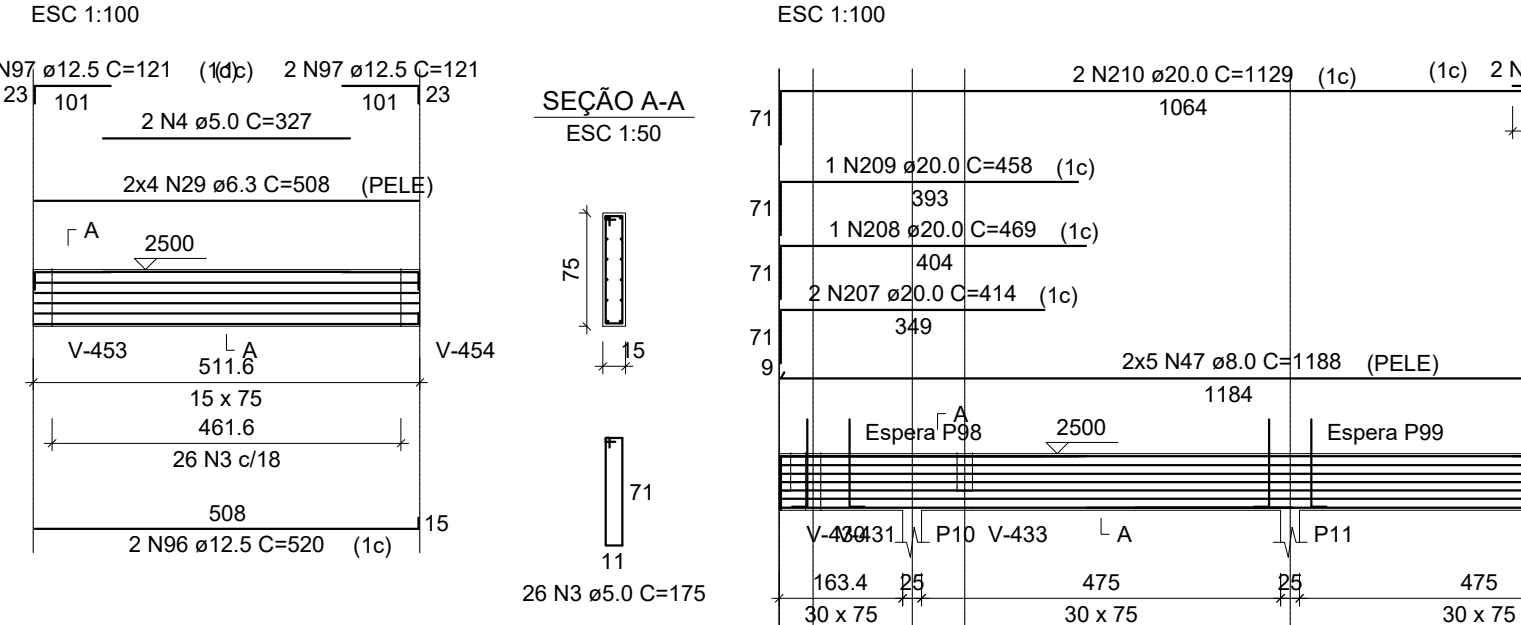
V-404



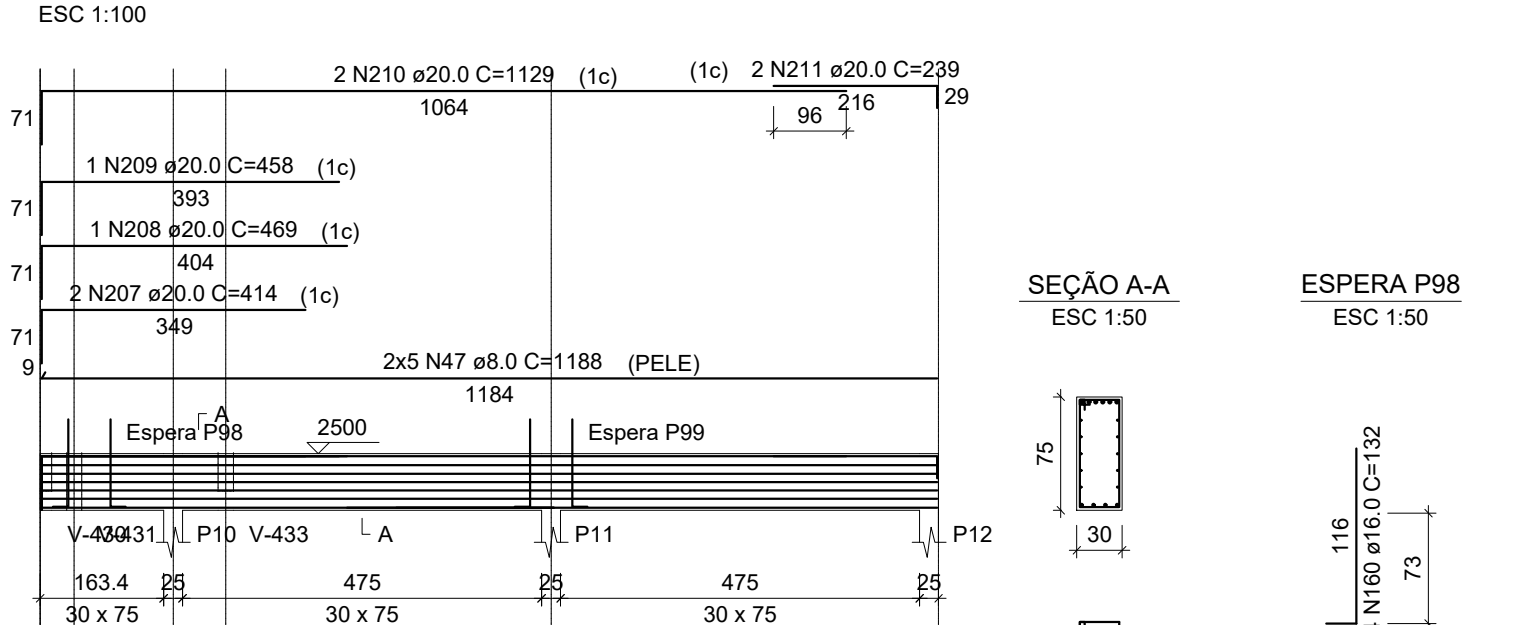
V-405



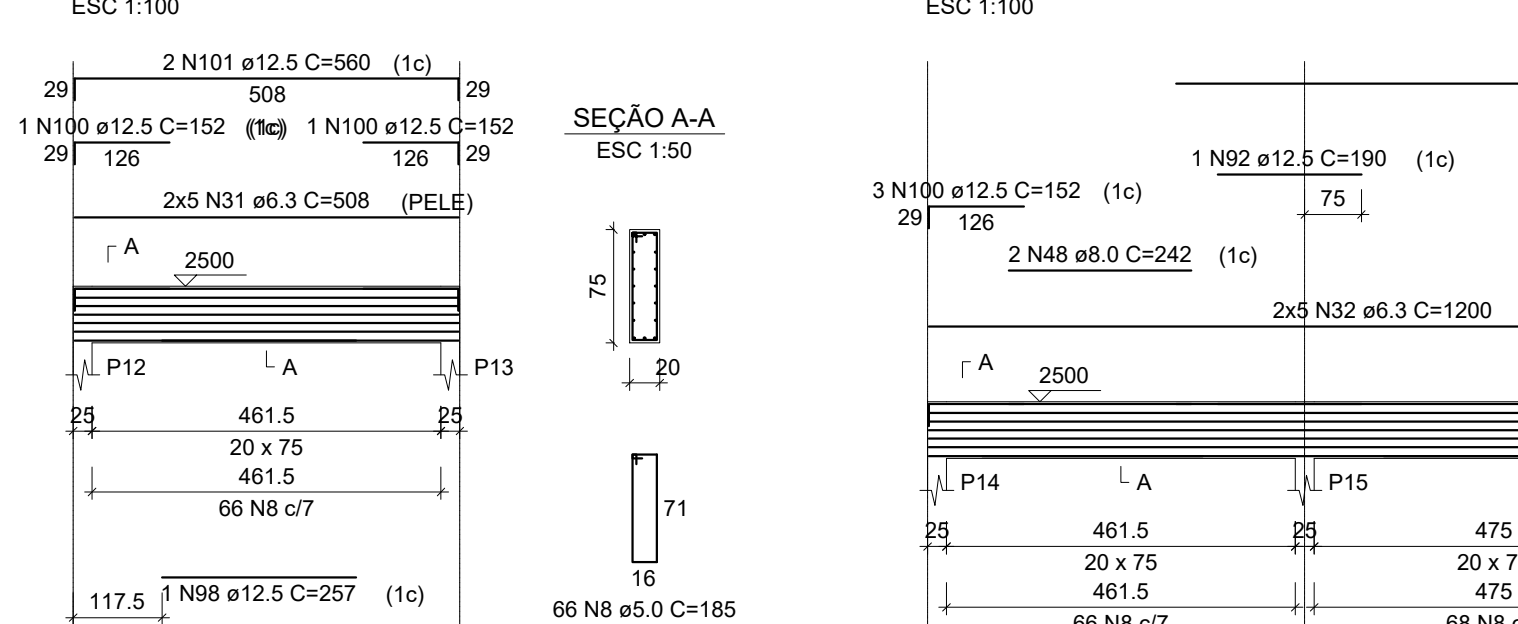
V-406



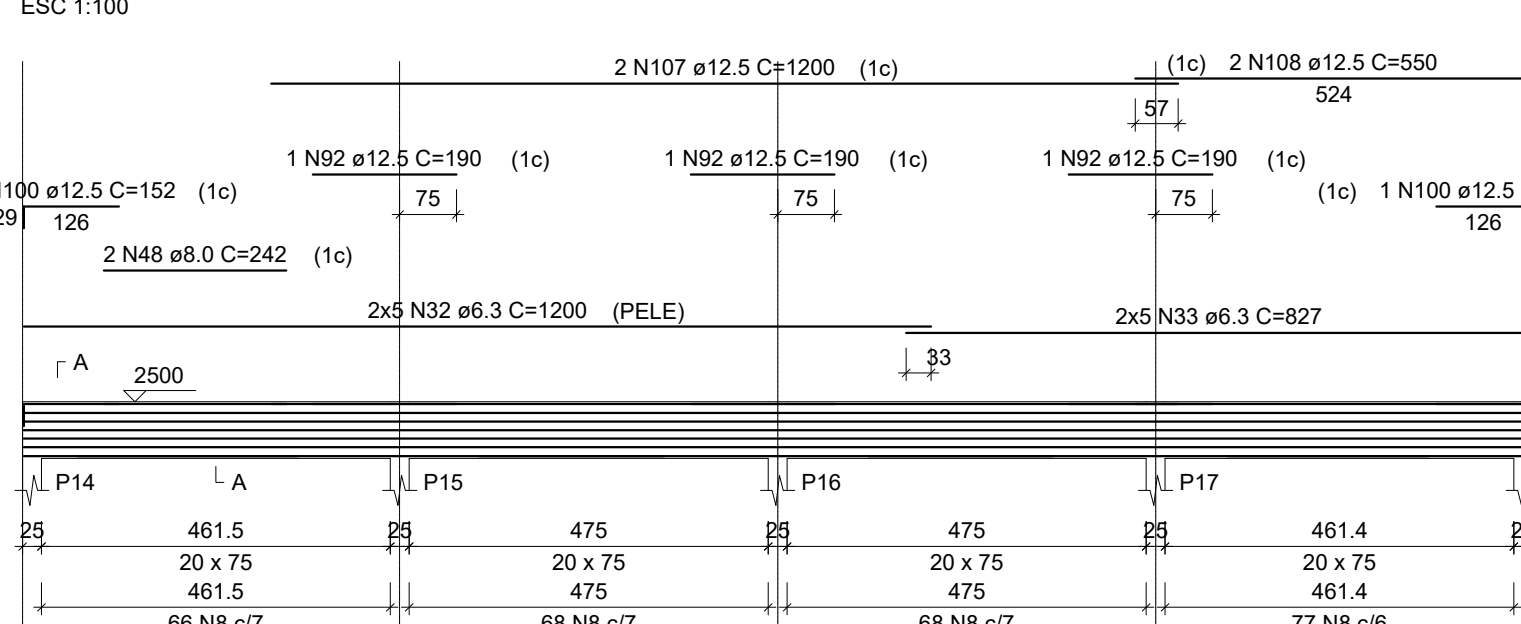
V-407



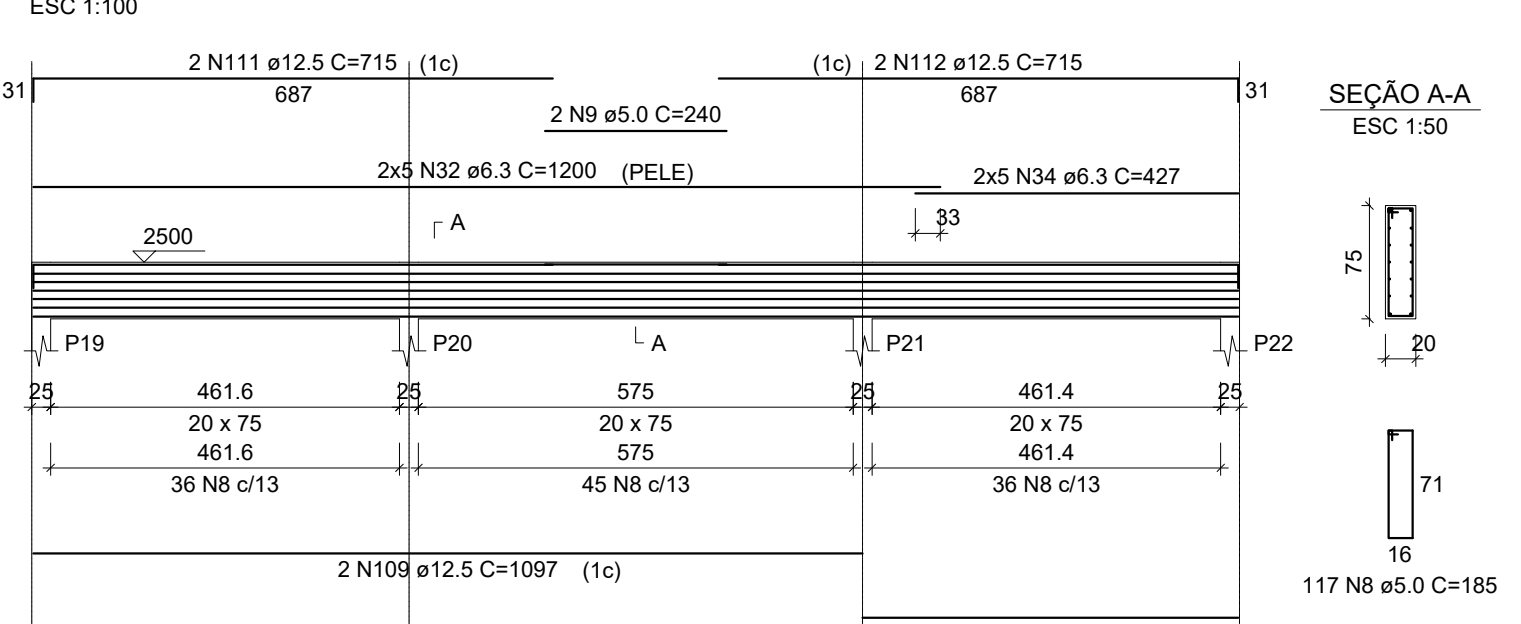
V-408



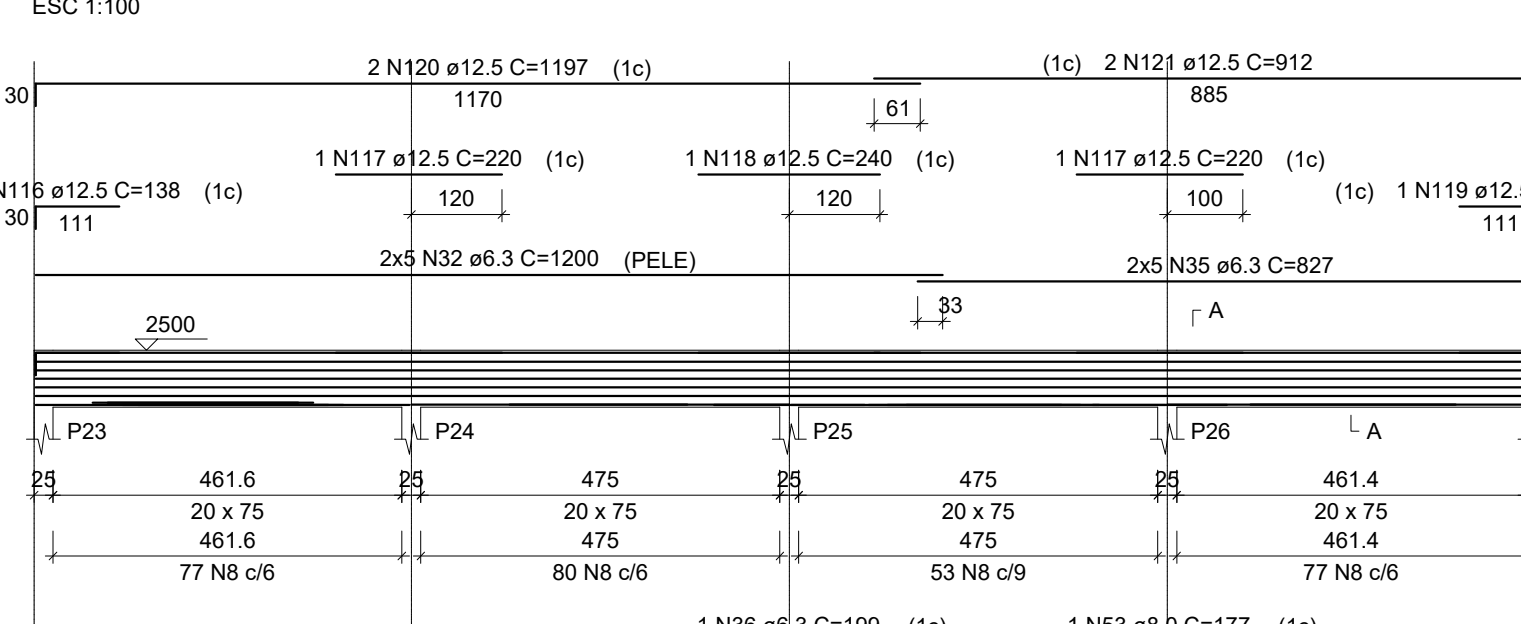
V-409



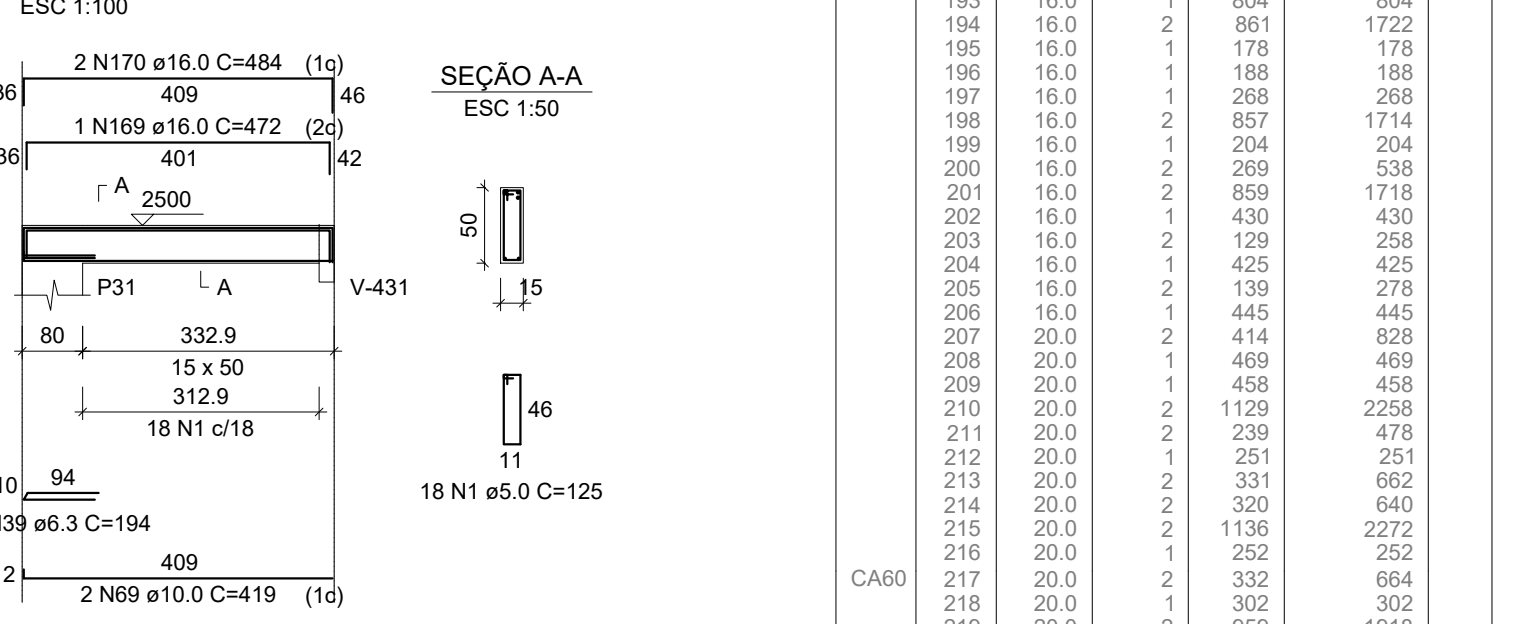
V-410



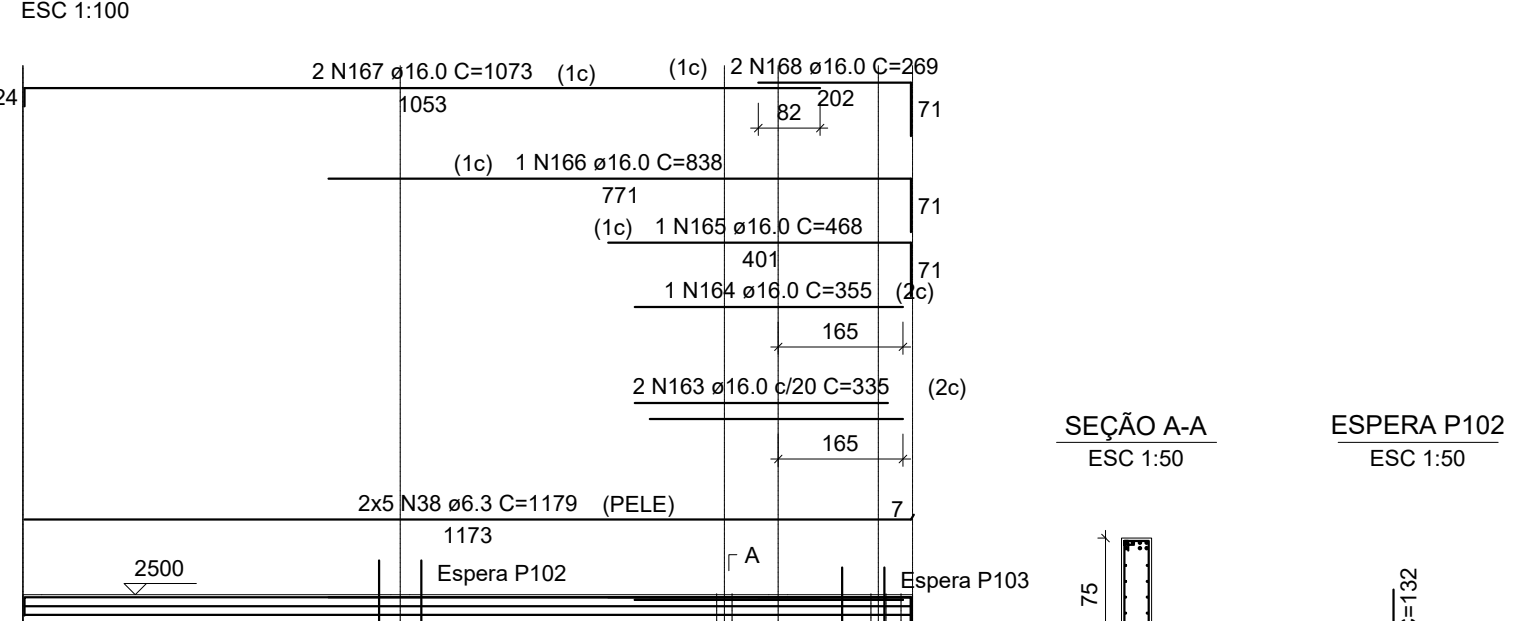
V-411



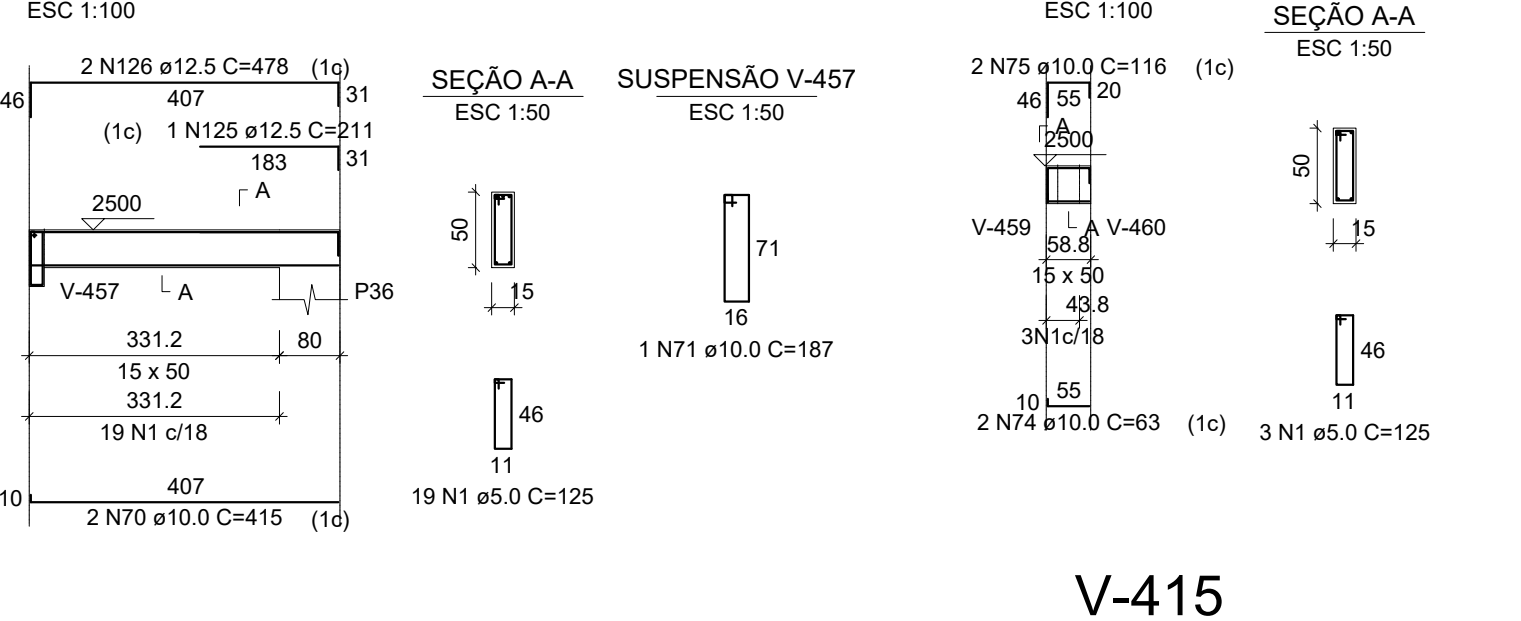
V-413



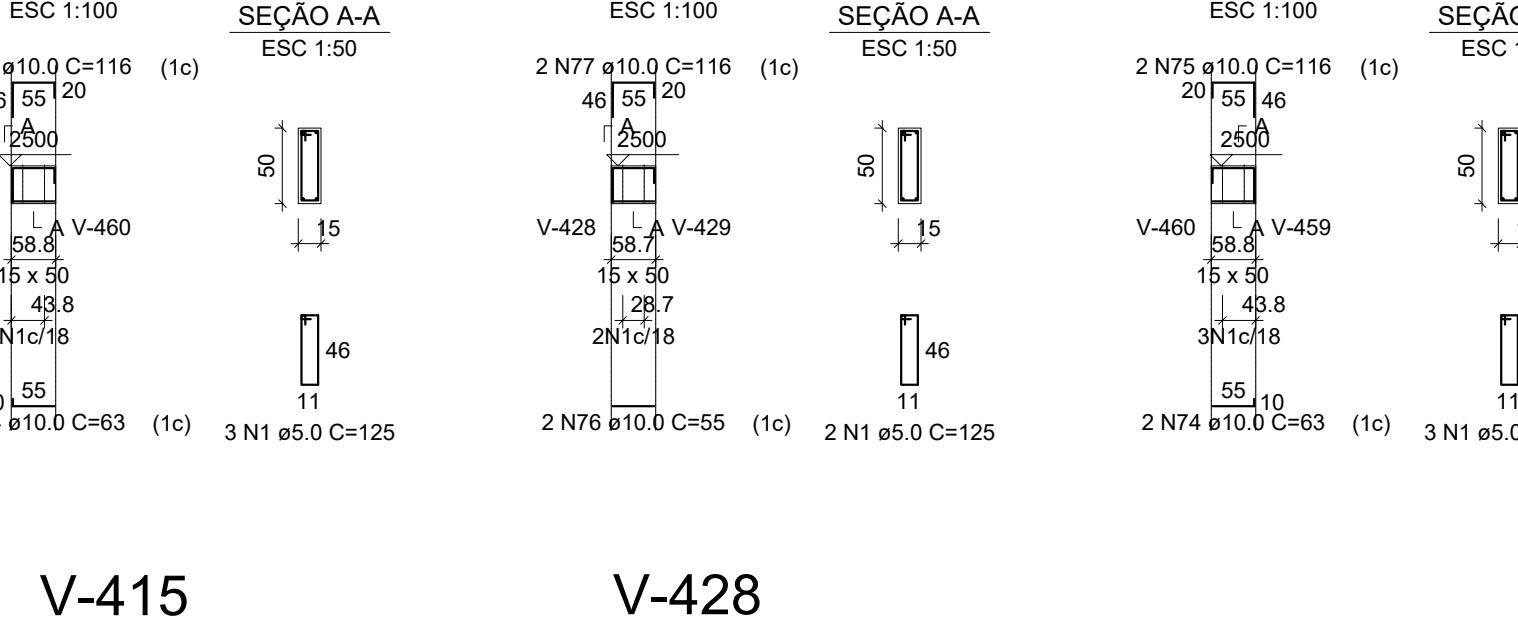
V-412



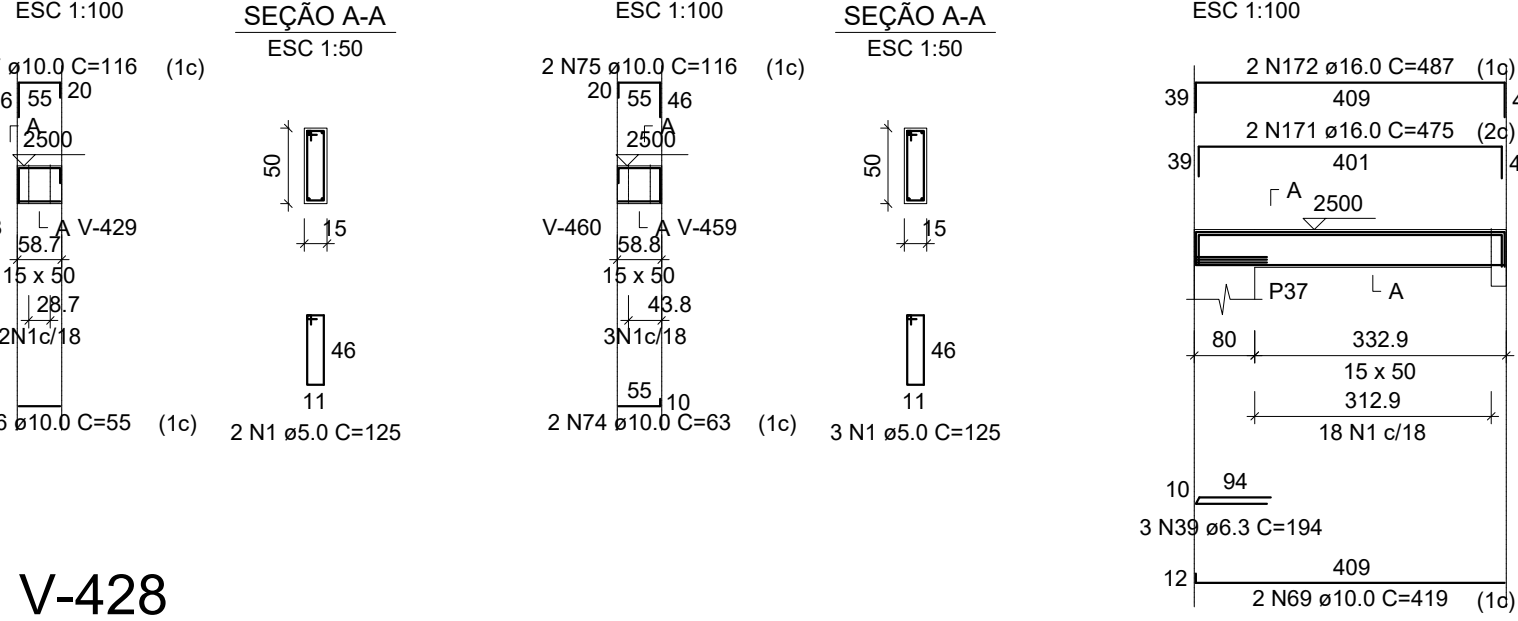
V-414



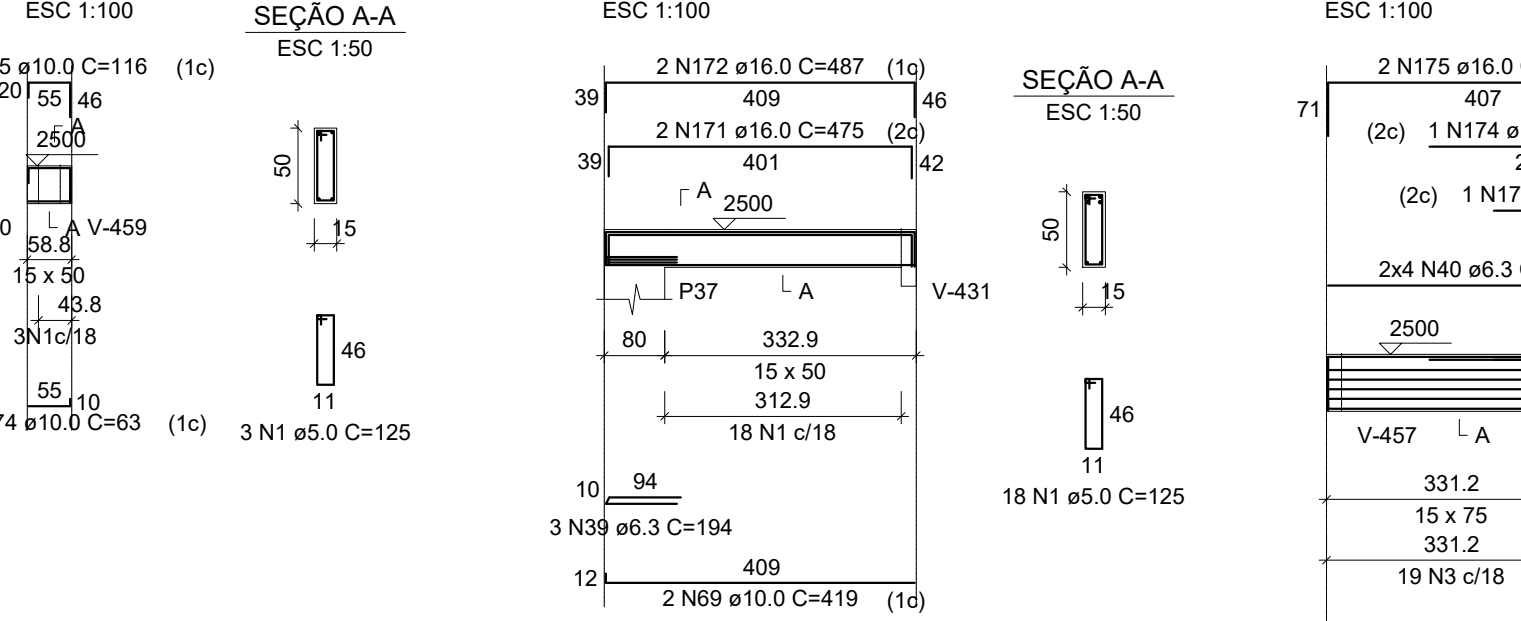
V-416



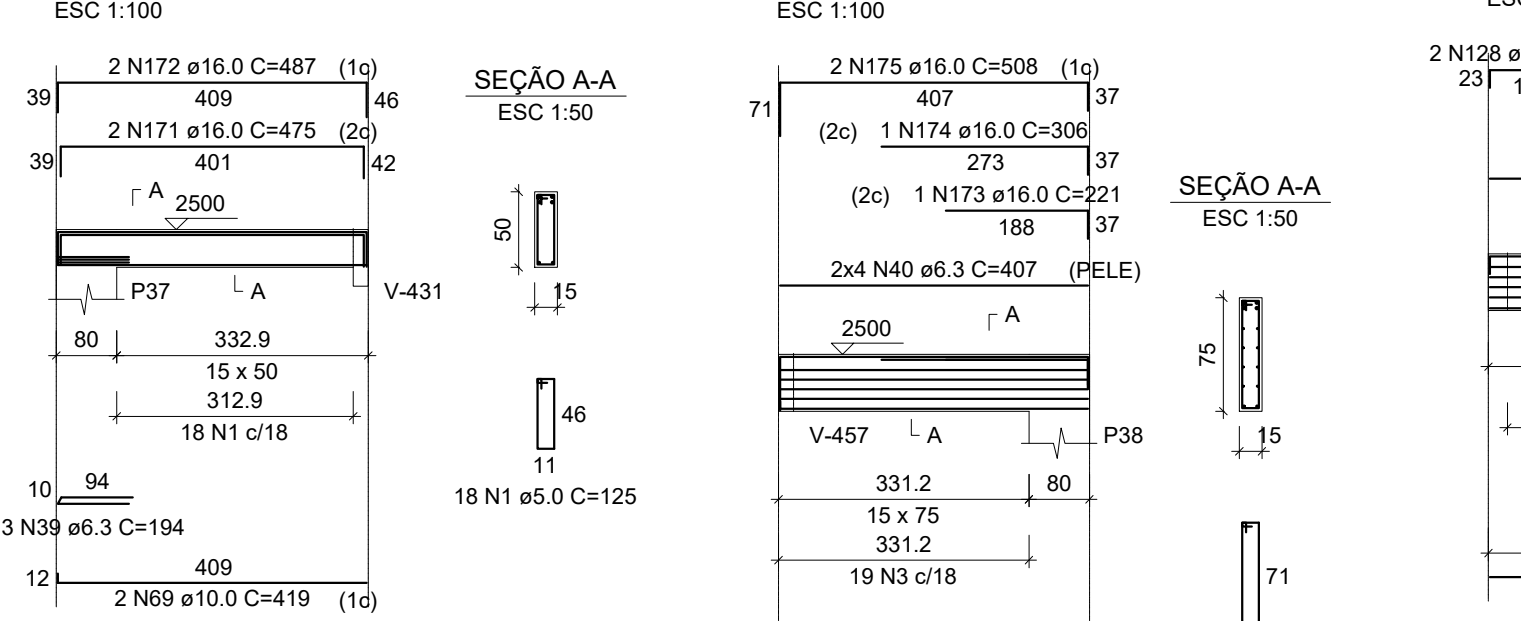
V-417



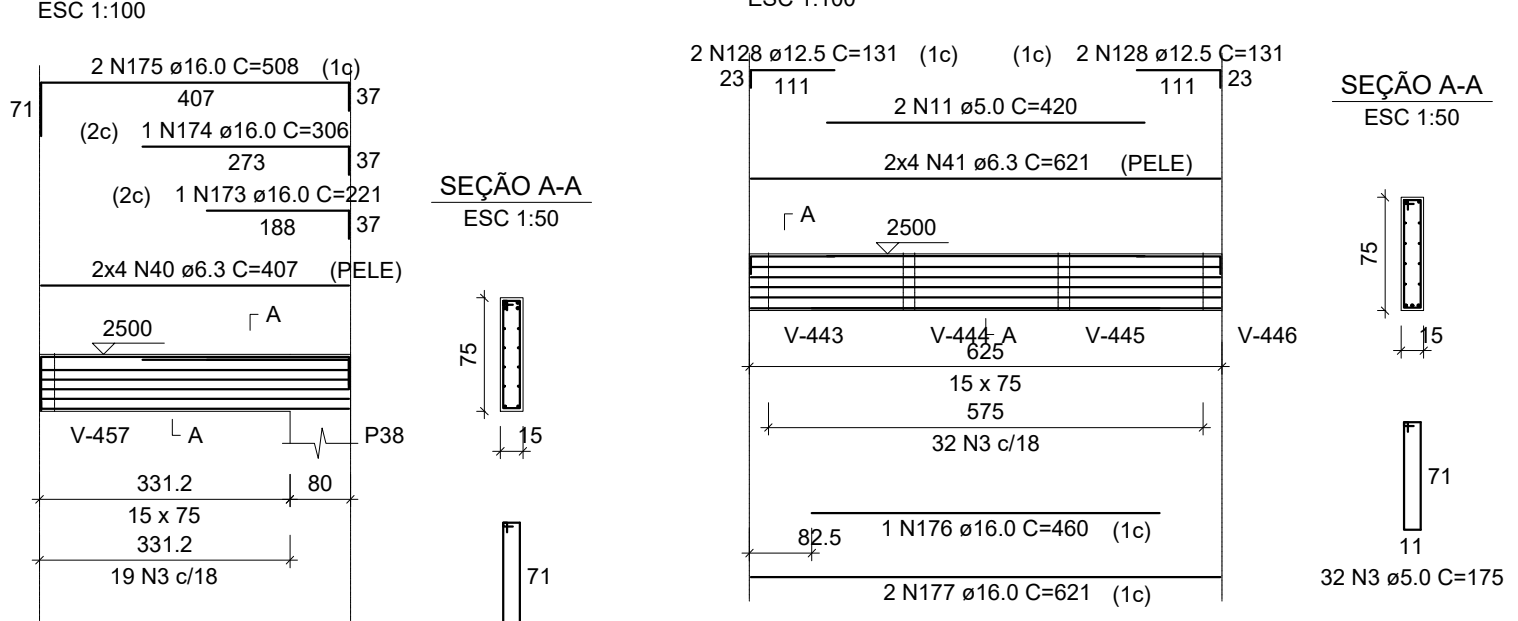
V-418



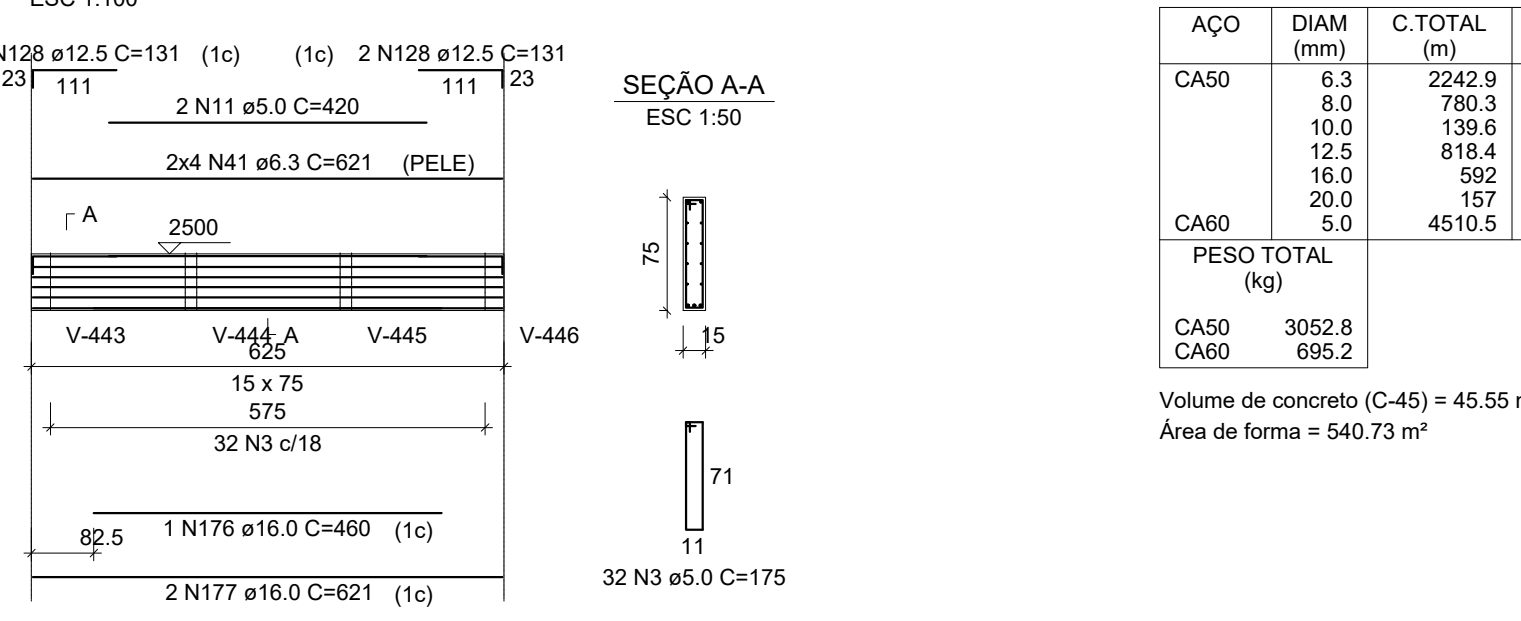
V-419



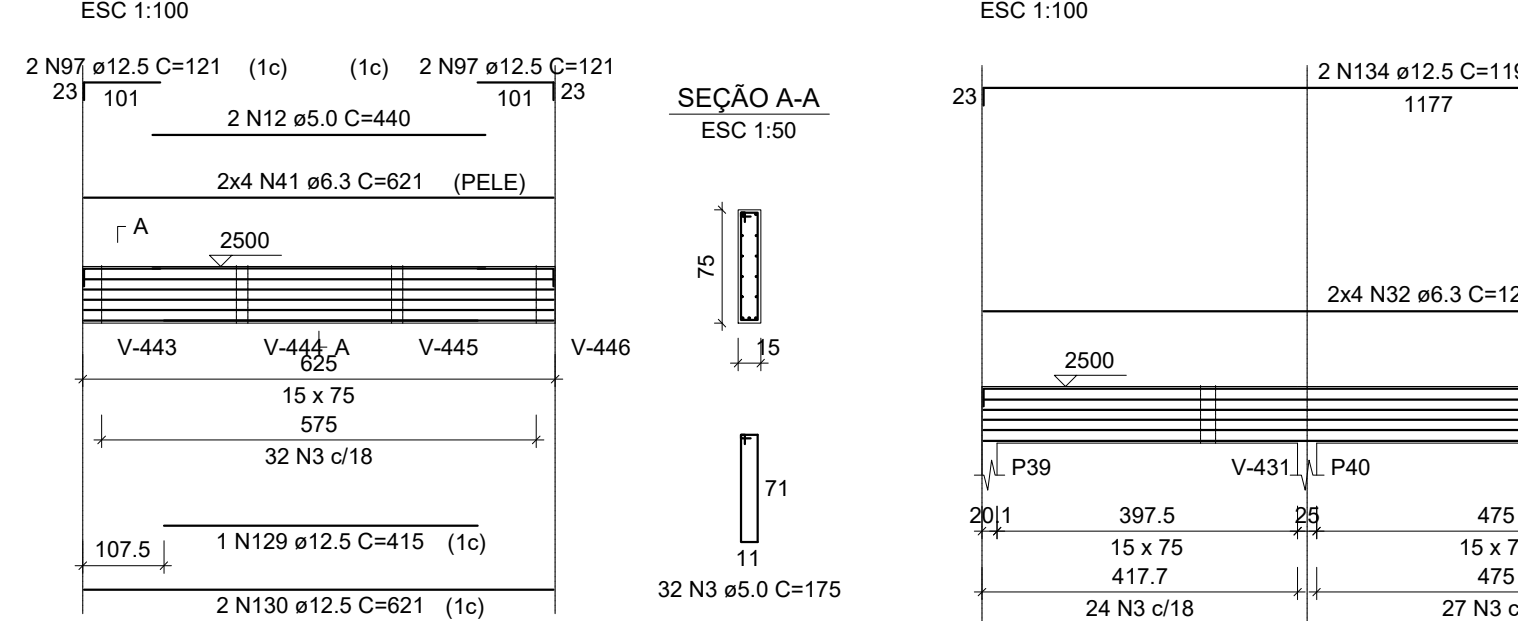
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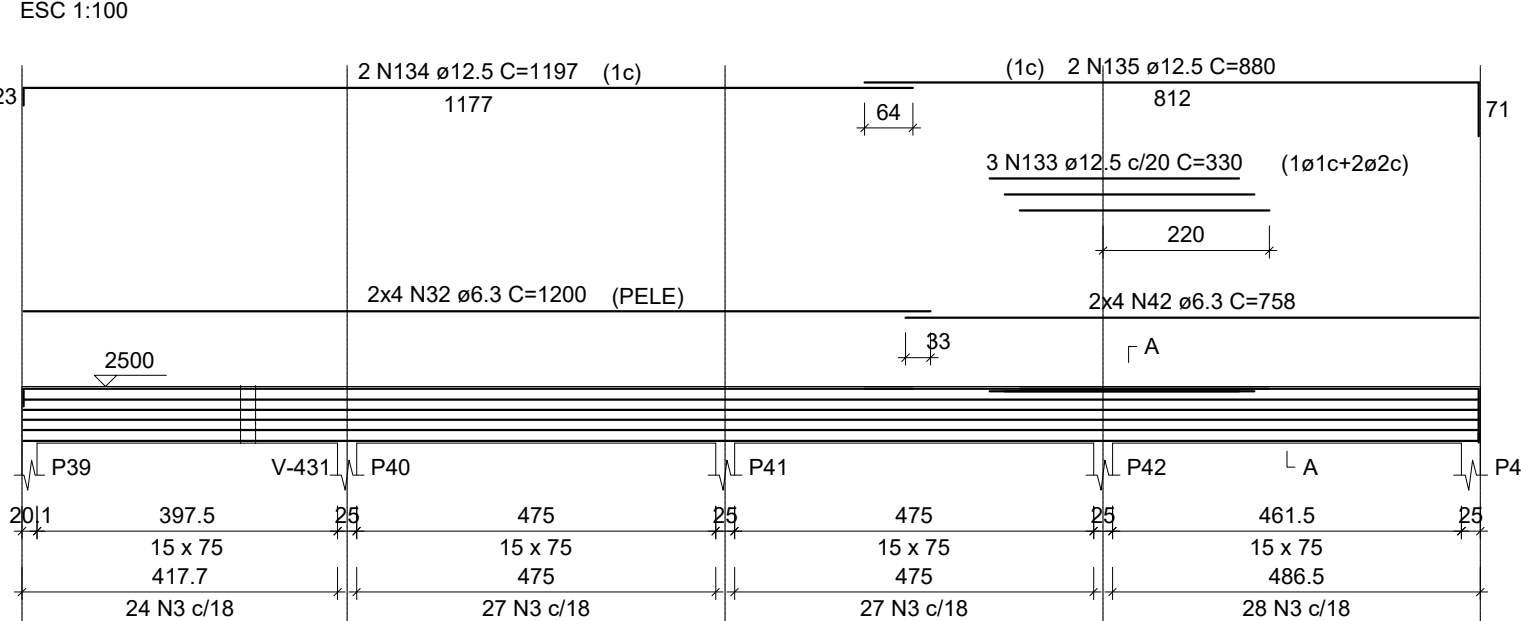
V-421



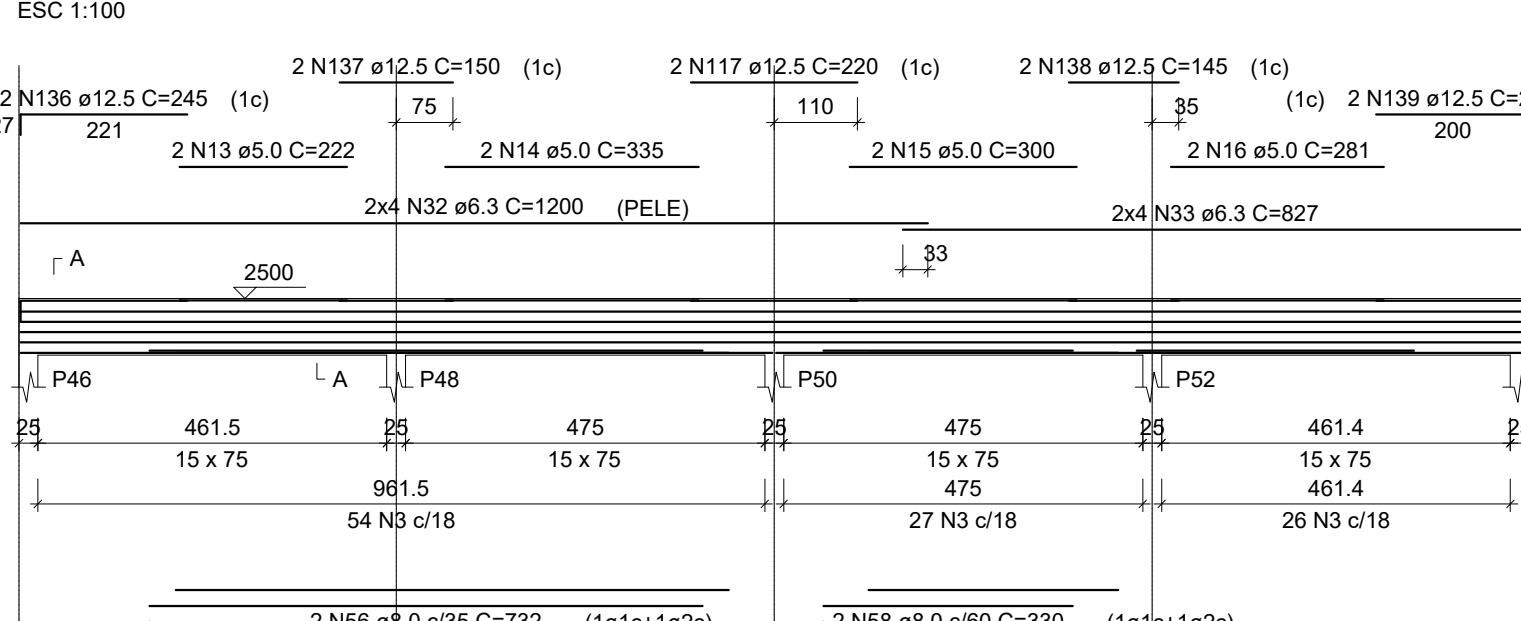
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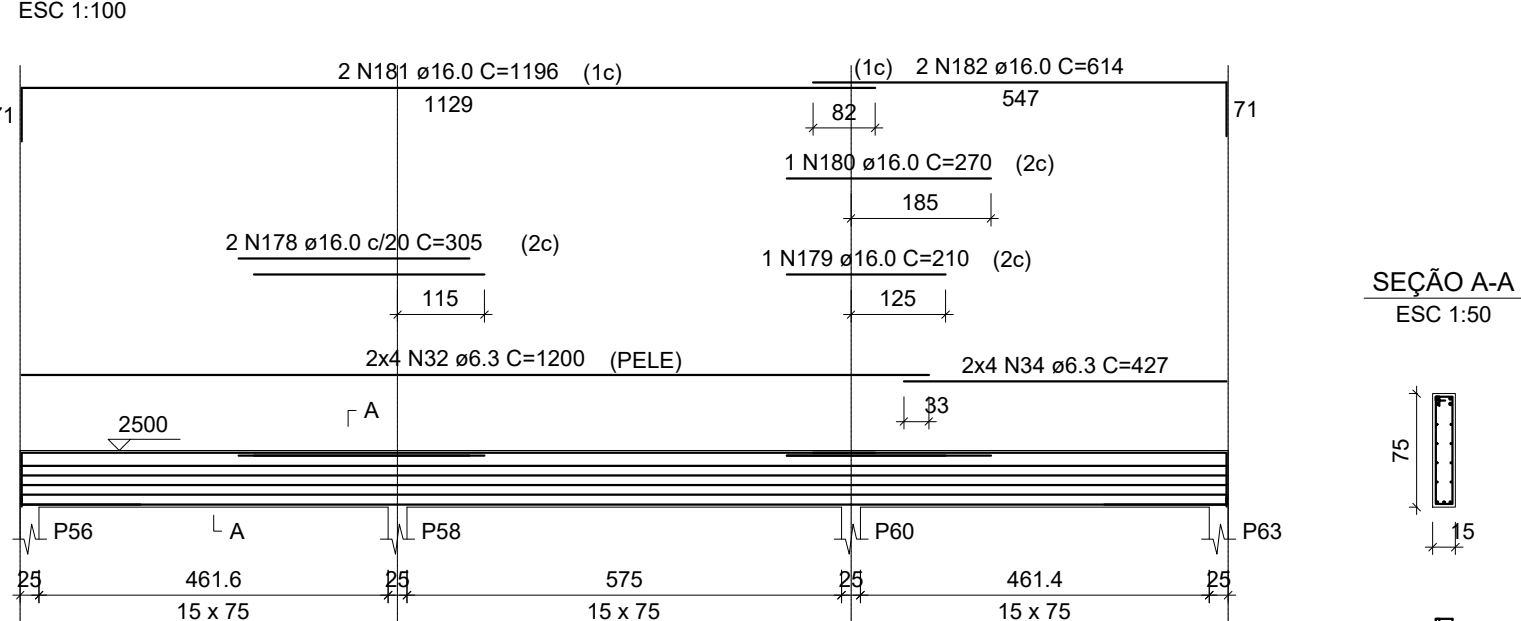
V-423



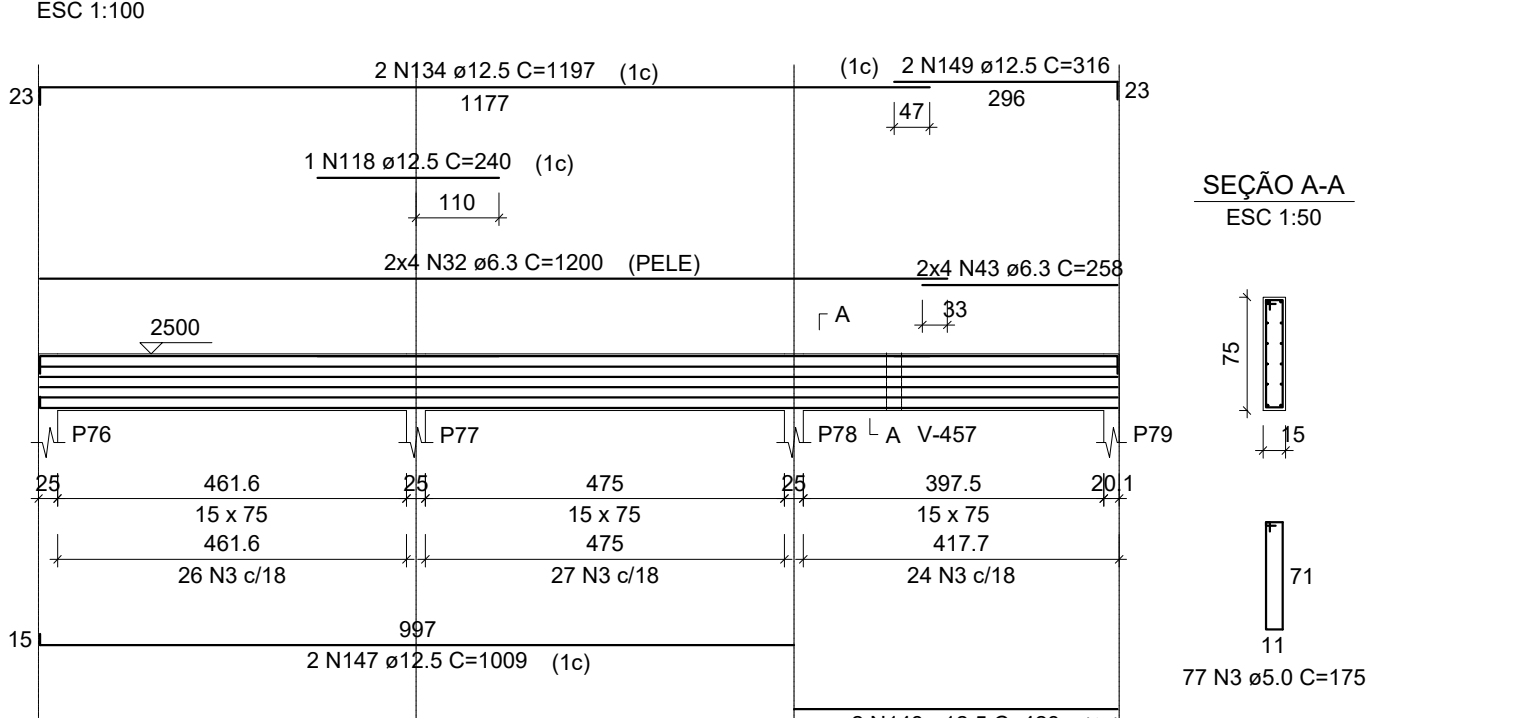
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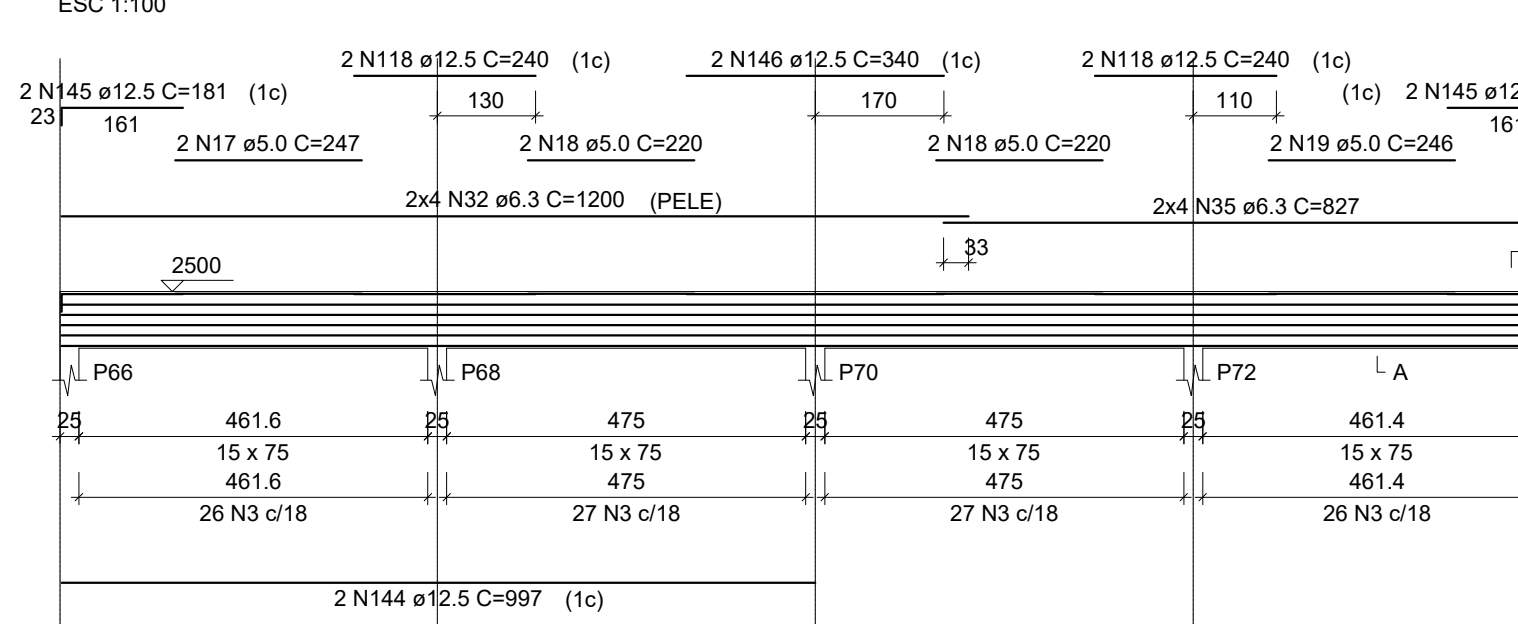
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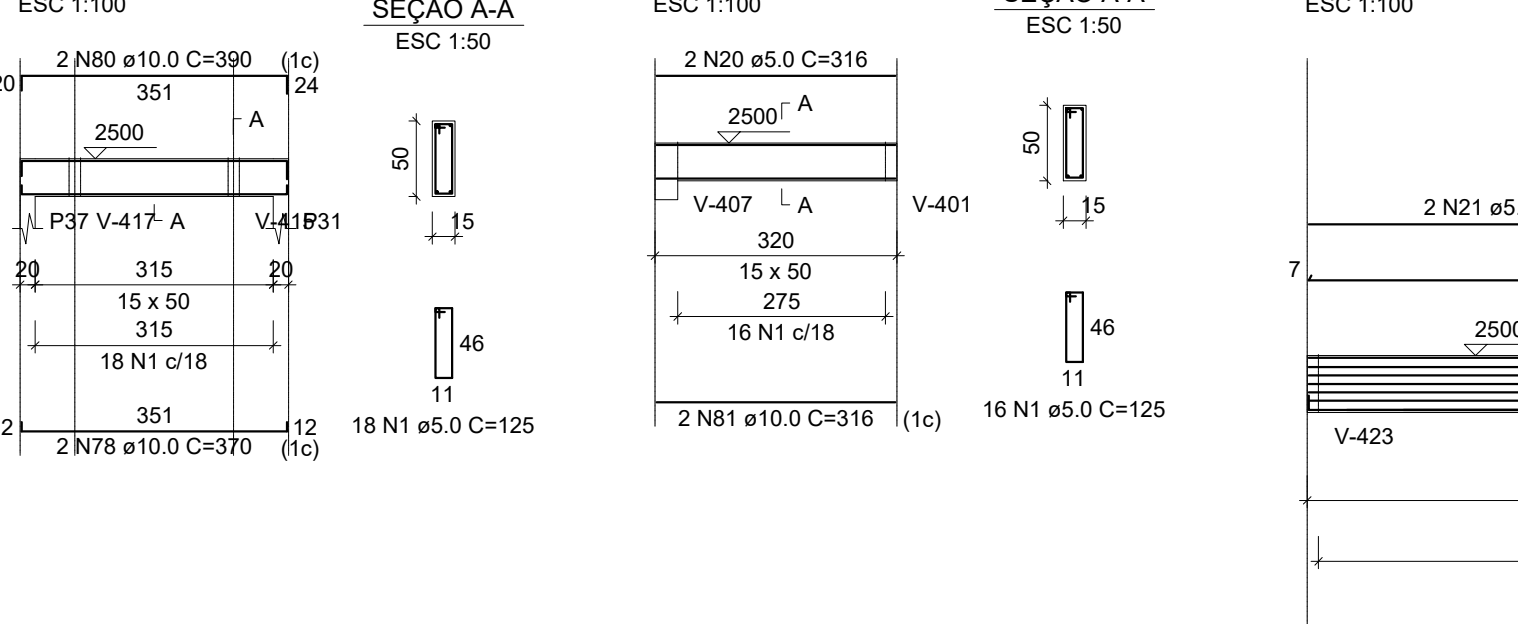
V-427



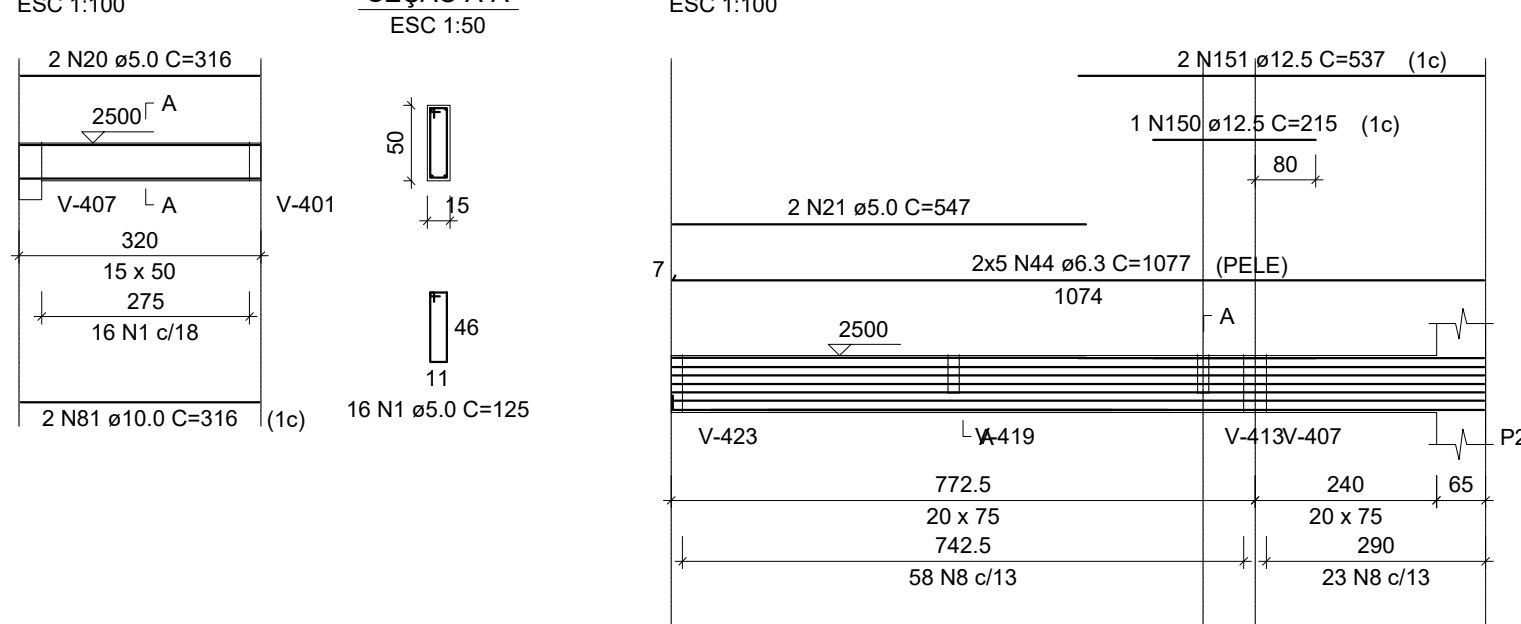
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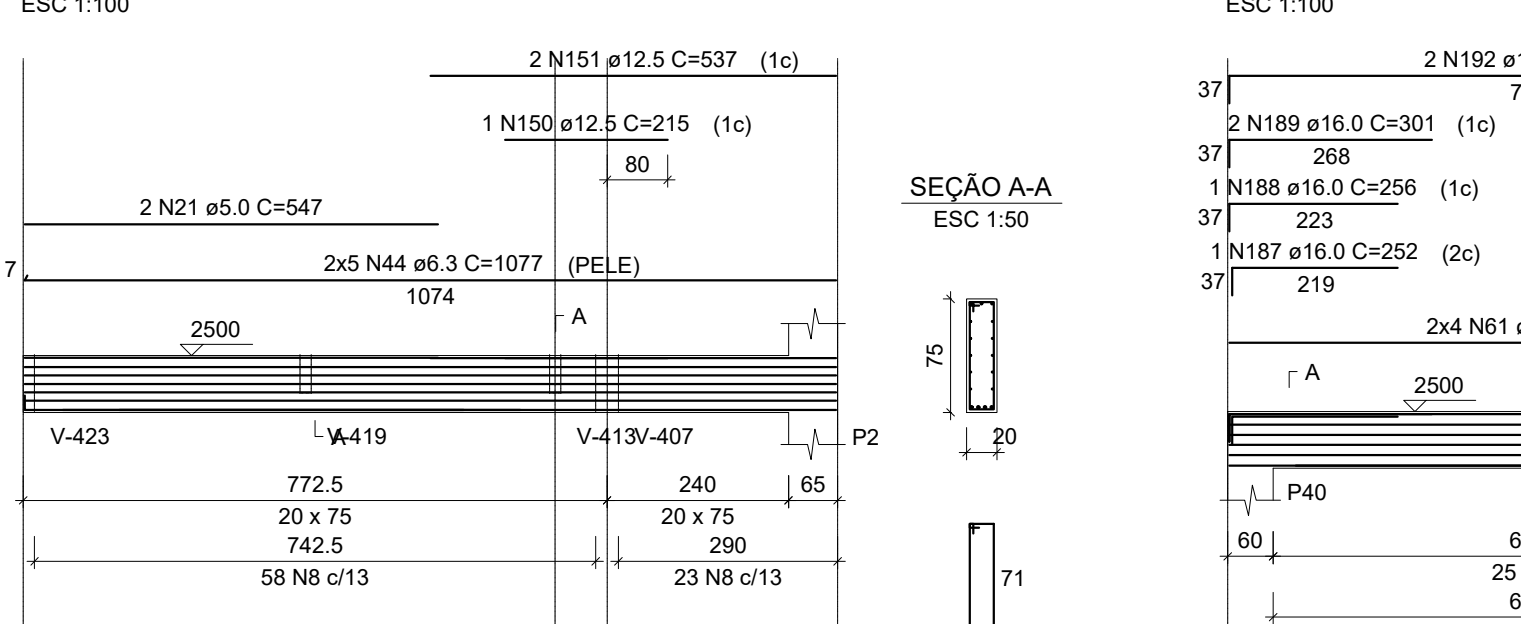
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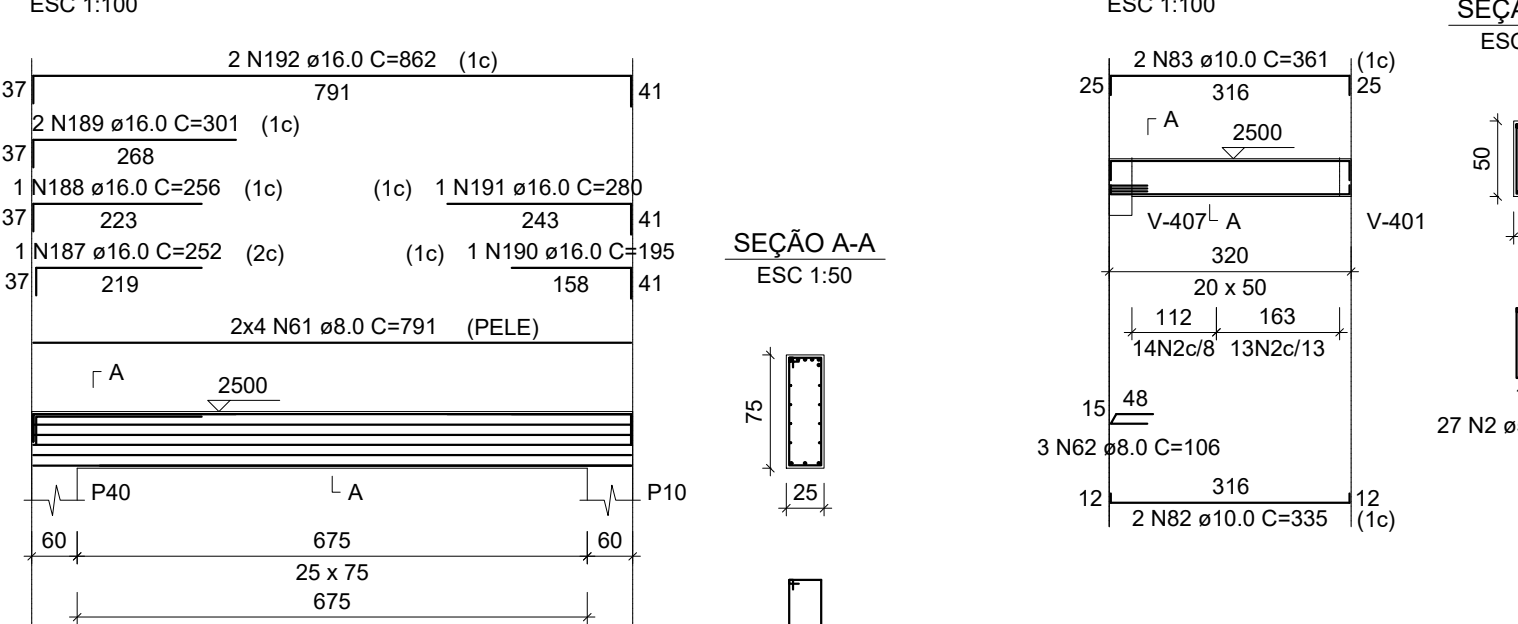
V-430



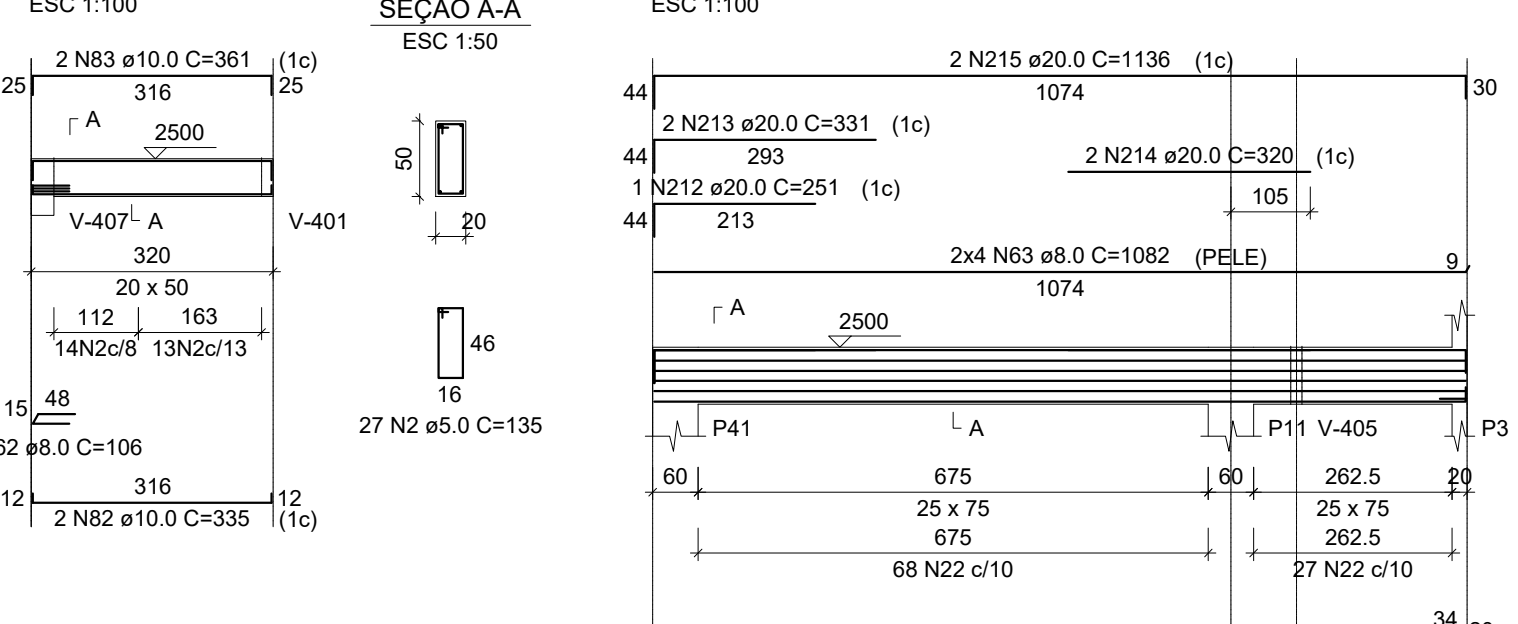
V-431



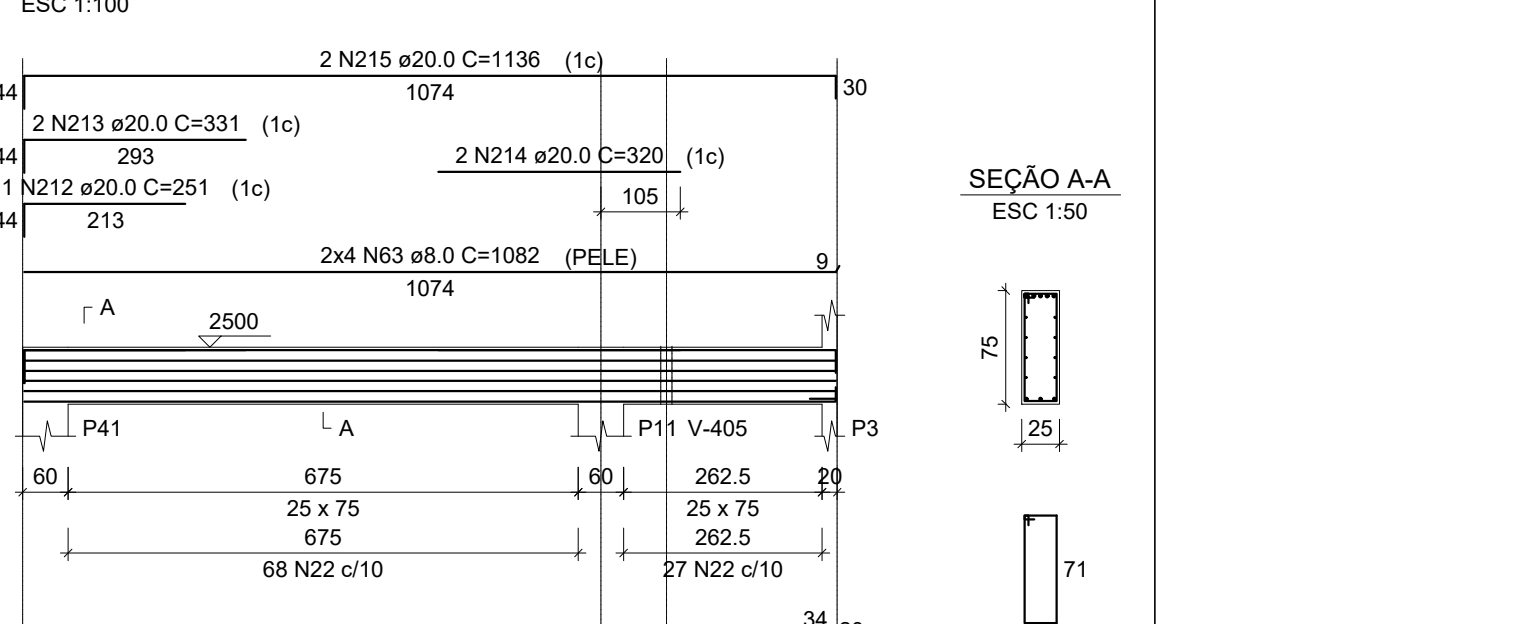
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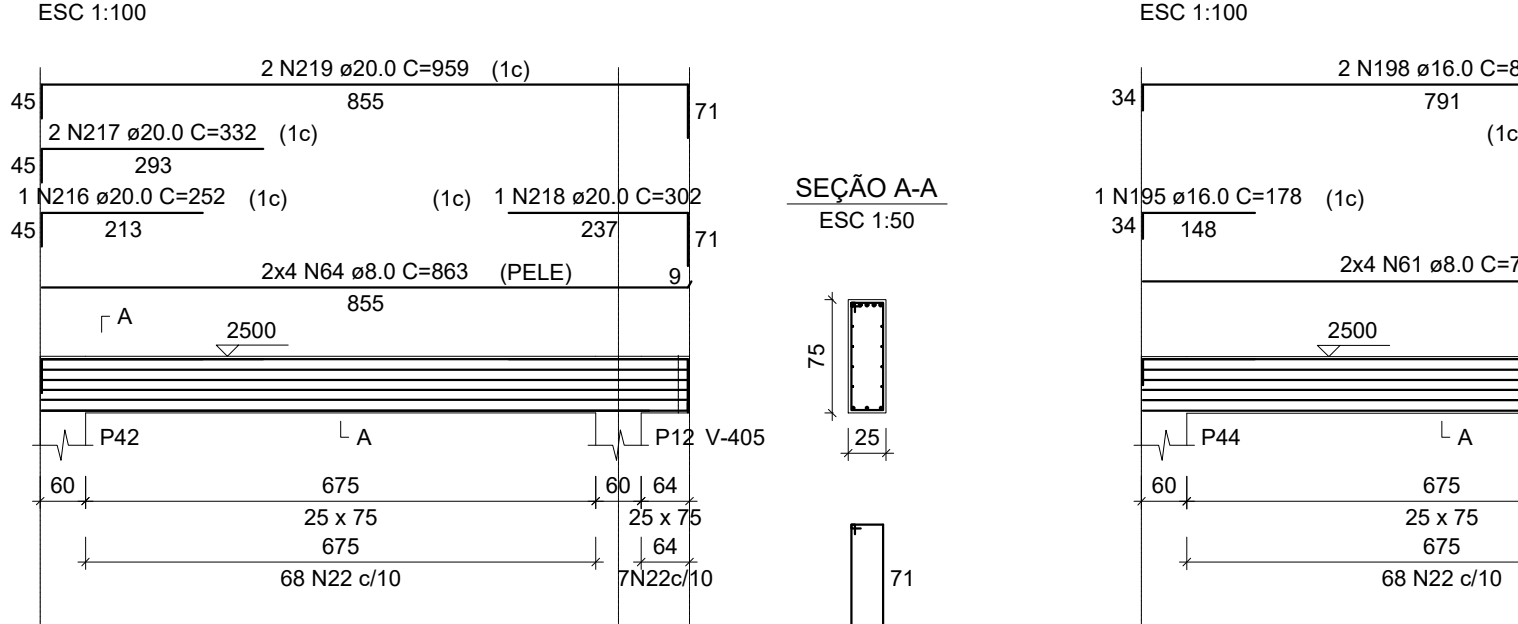
V-433



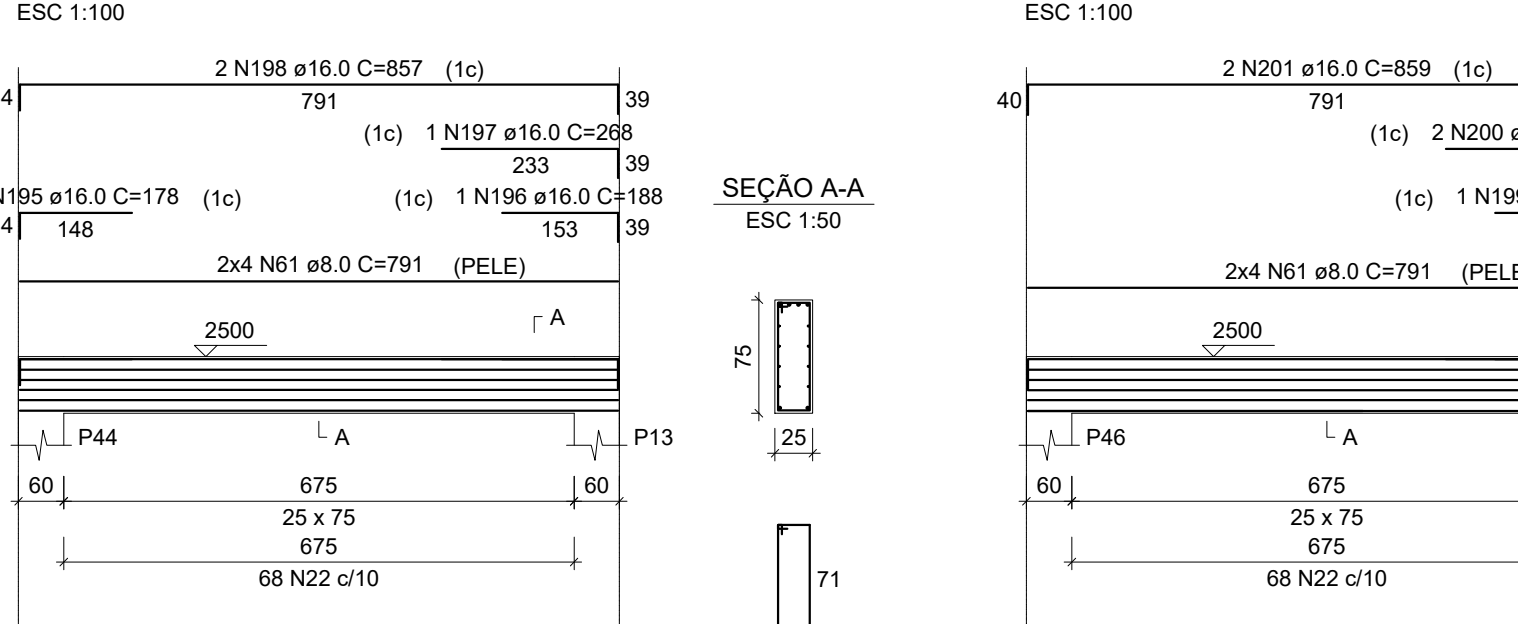
V-434



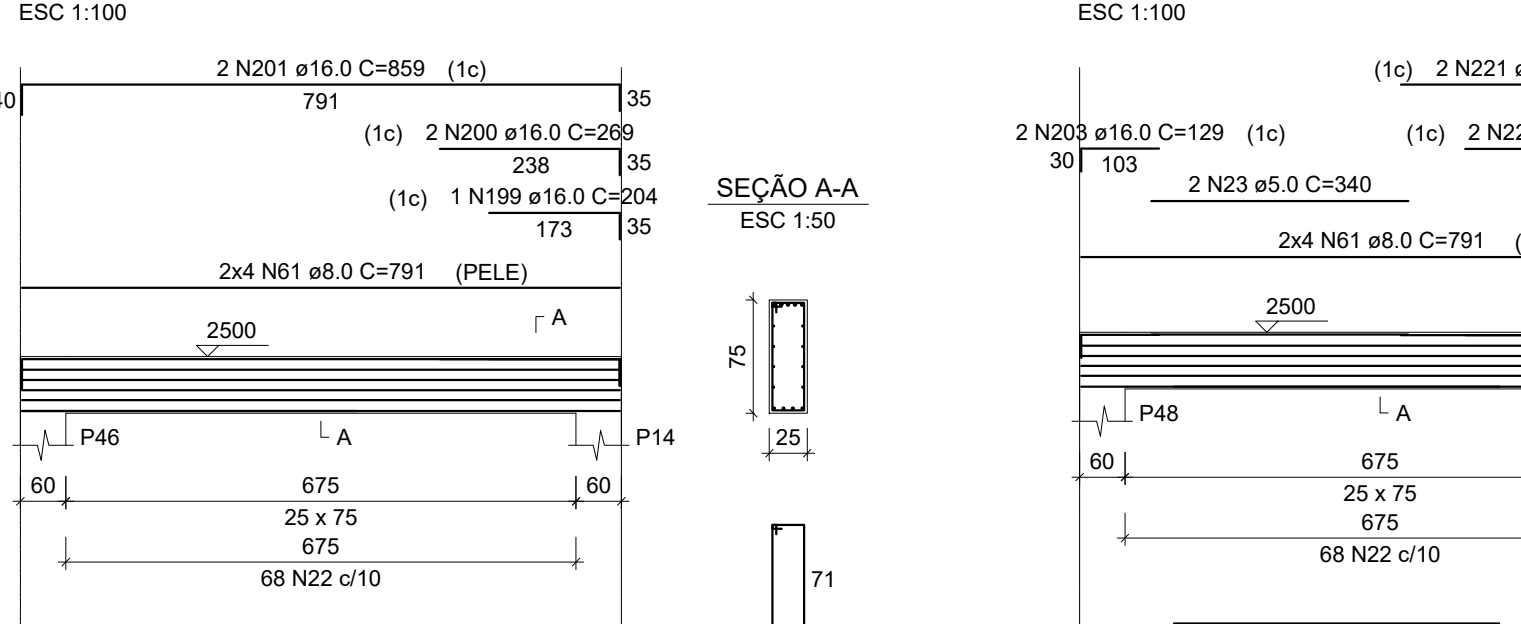
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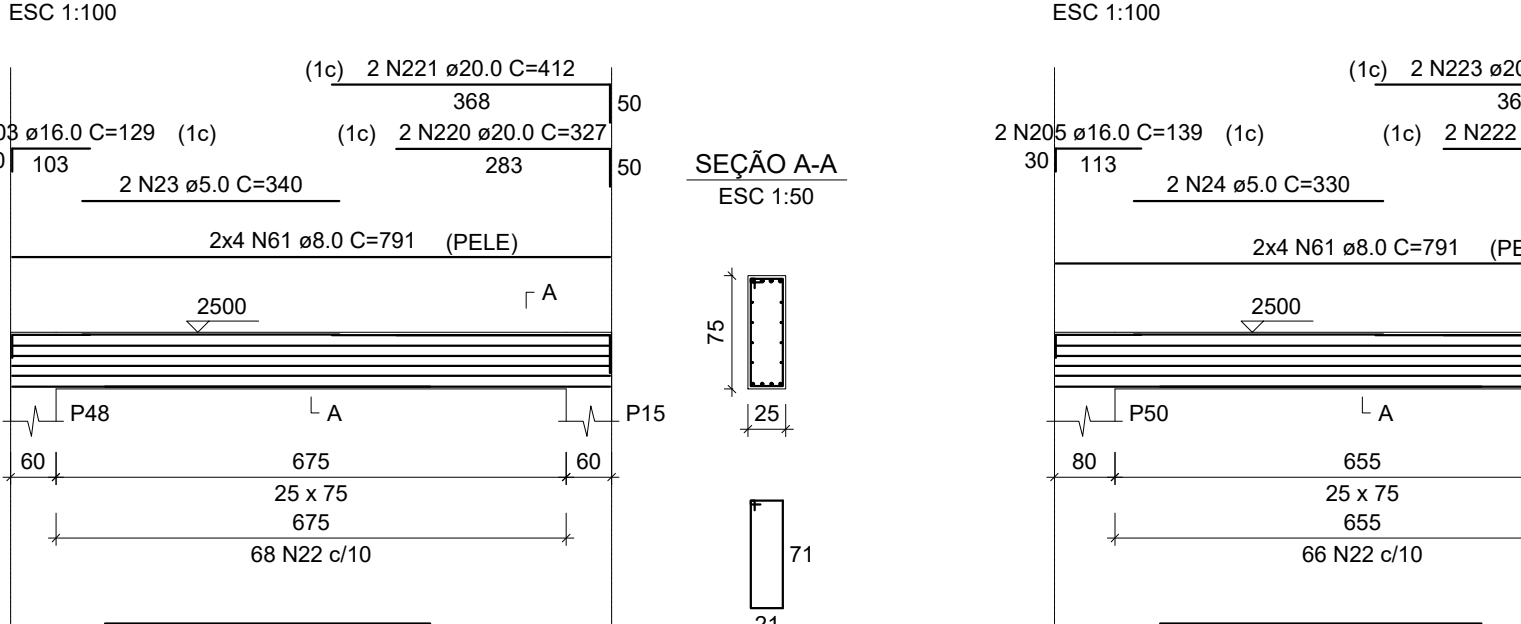
V-436



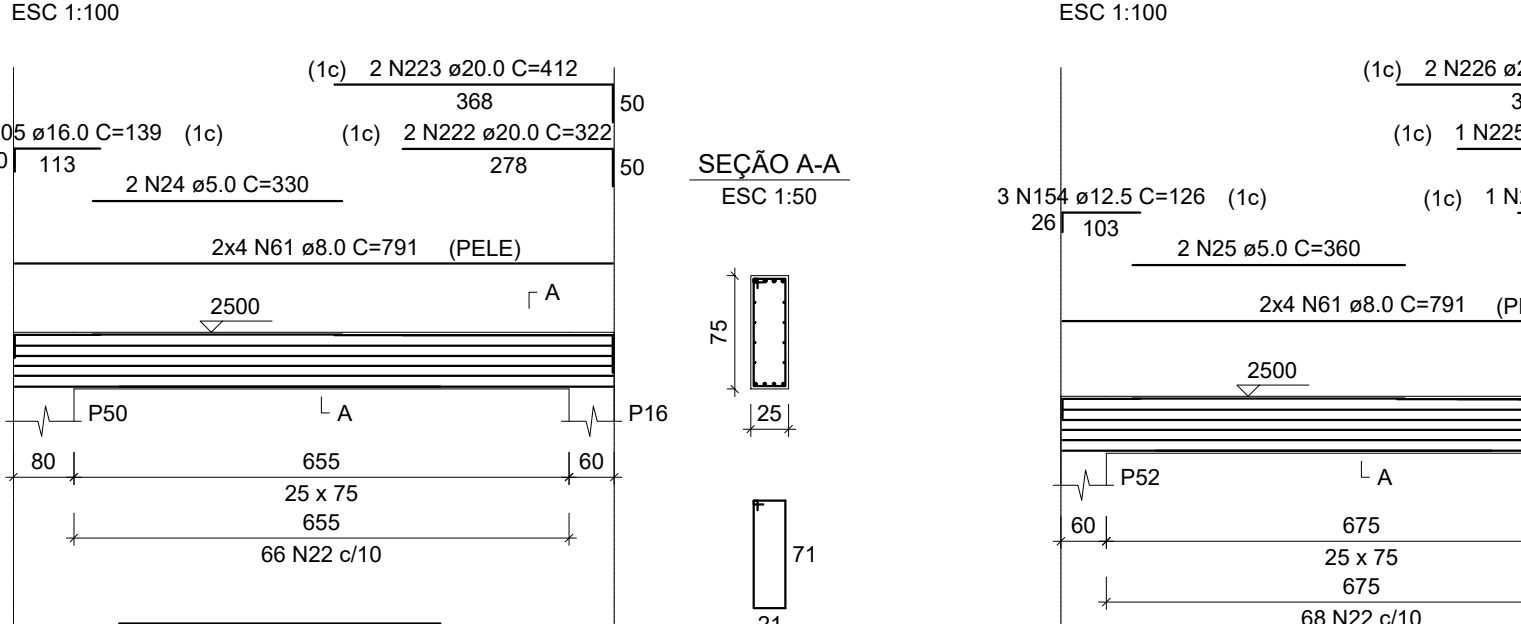
V-437



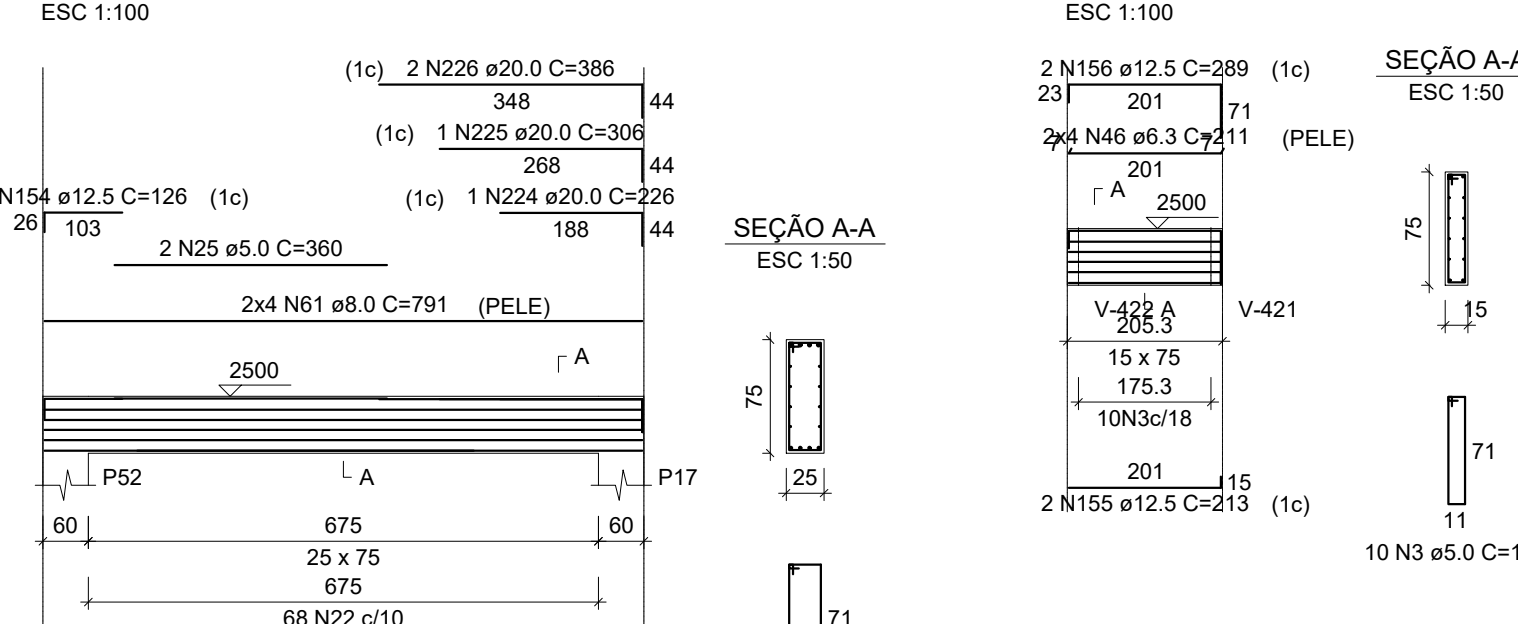
V-438



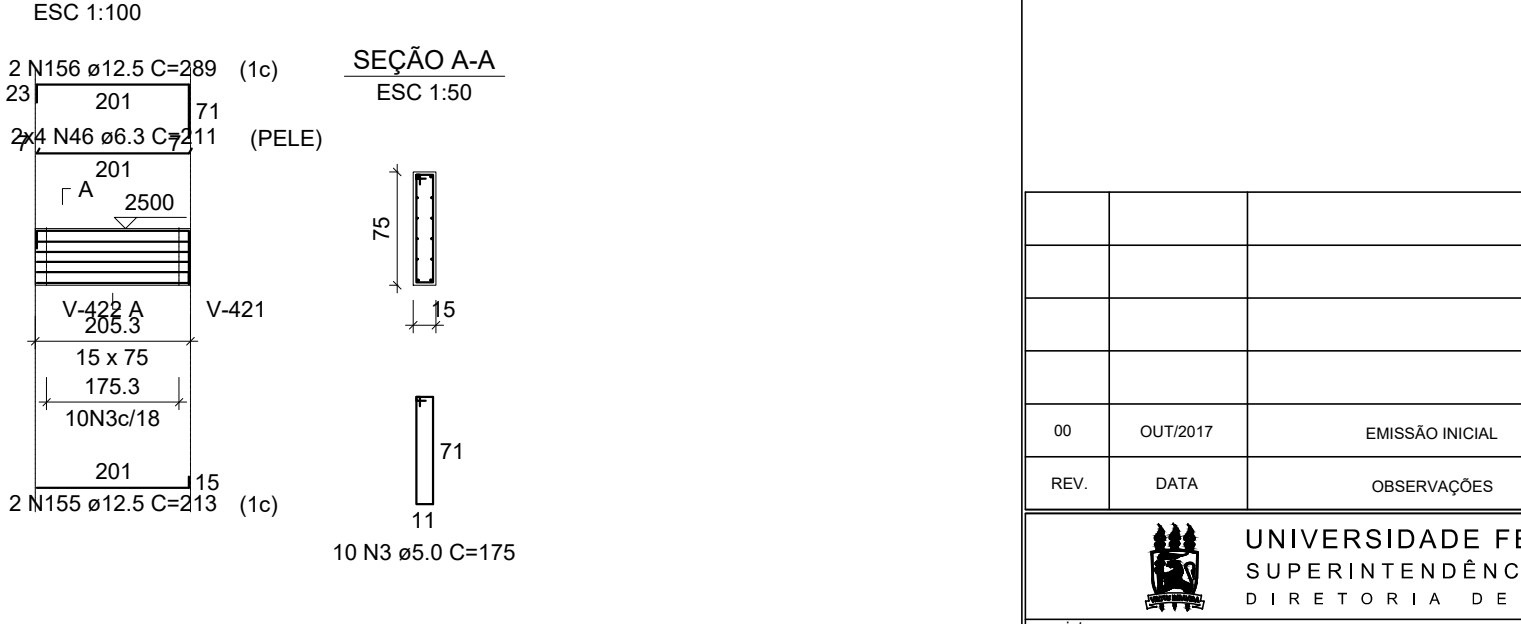
V-439



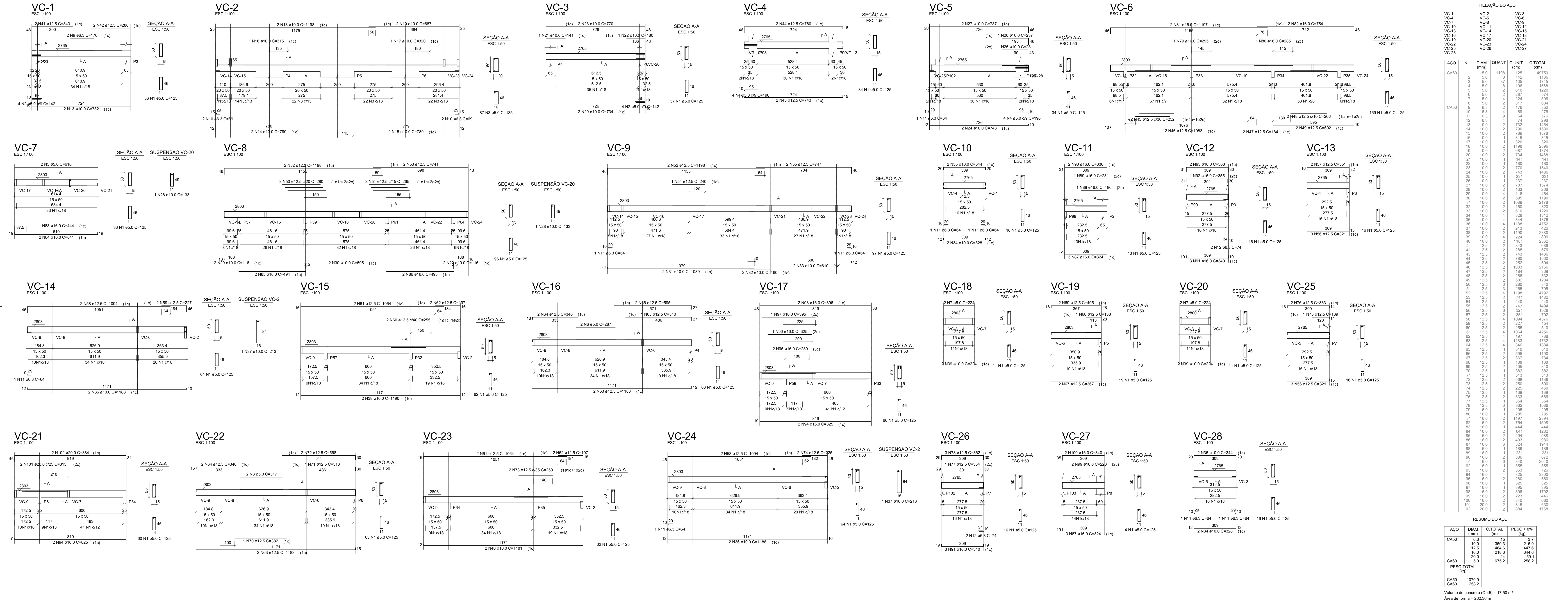
V-440

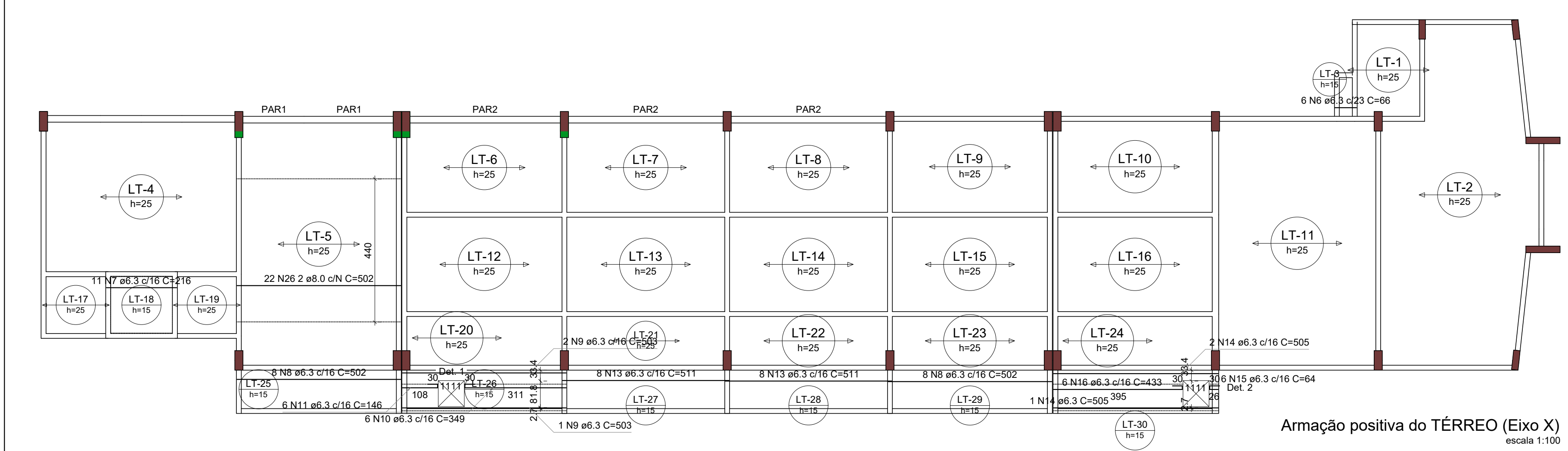


V-444

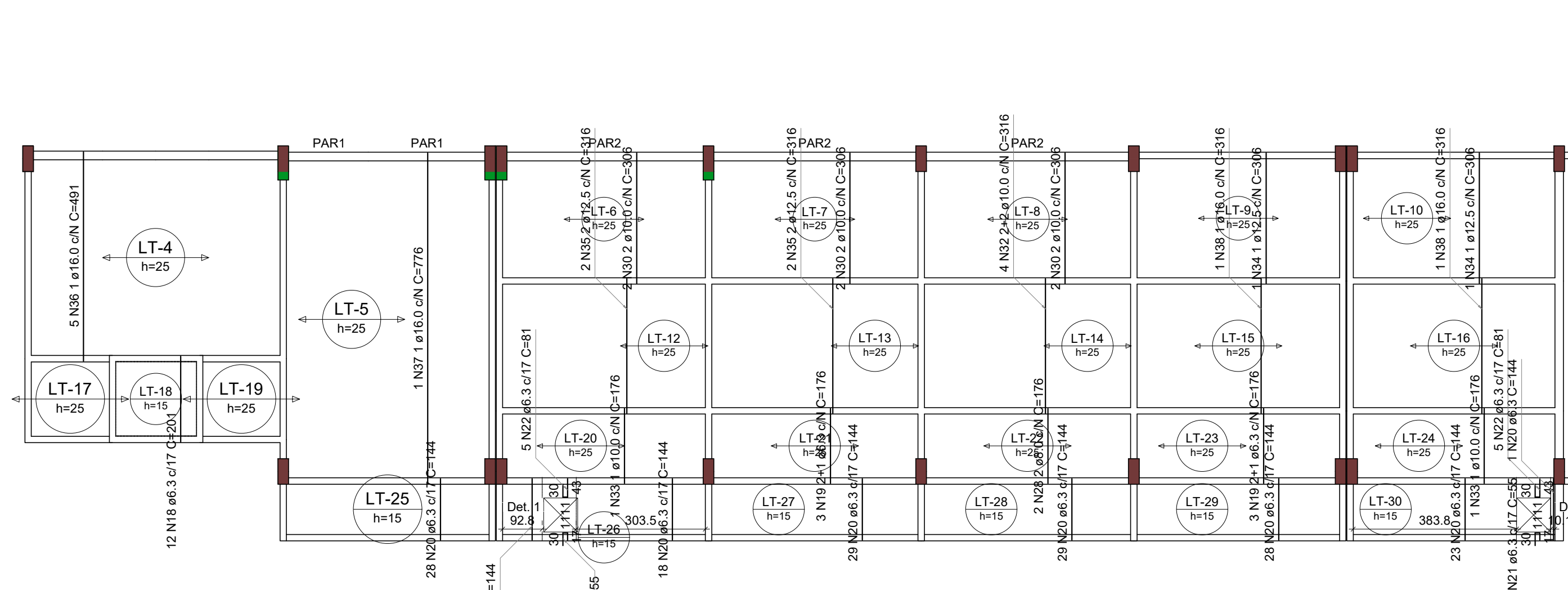
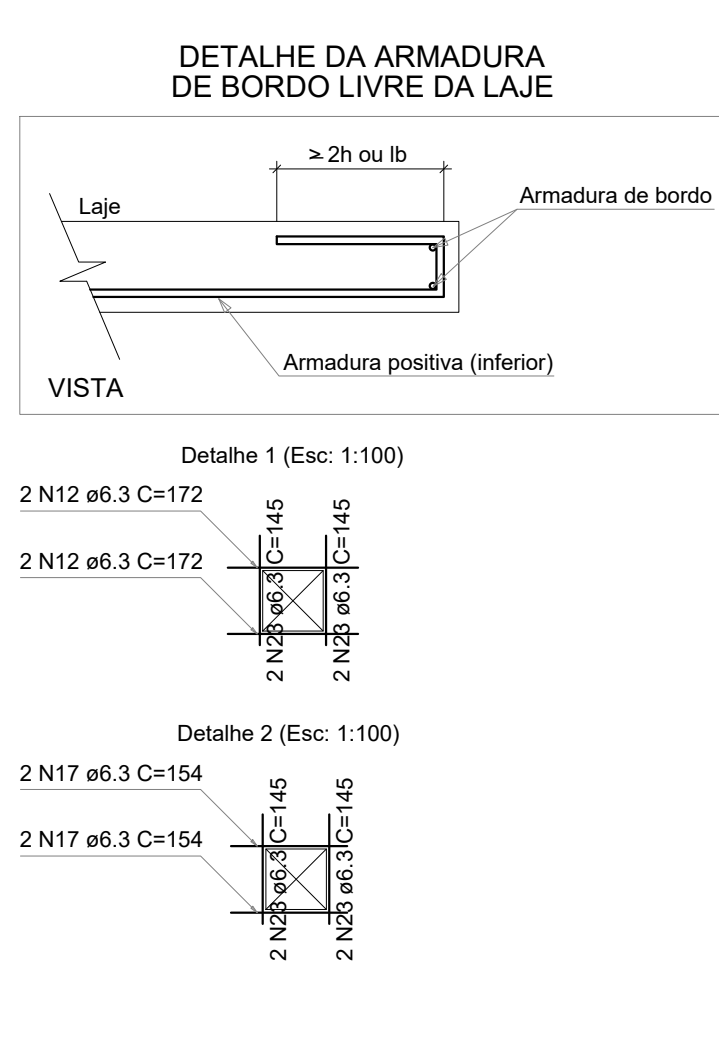


RELAÇÃO DO AÇO					
AÇO	N	DIAM	QUANT	CUNIT	C.TOTAL
V-401	1	5.0	218	2720	5936
V-402	2	5.0	73	135	865
V-403	3	5.0	630	175	110250
V-404	4	5.0	53	327	654
V-405	5	5.0	30	144	4320
V-406	6	5.0	13	290	3670
V-407	7	5.0	866	185	160210
V-408	8	5.0	60	28	1560
V-409	9	5.0	138	80	11040
V-410	10	5.0	60	28	1560
V-411	11	5.0	138	80	11040
V-412	12	5.0	60	28	1560
V-413	13	5.0	138	80	11040
V-414	14	5.0	60	28	1560
V-415	15	5.0	138	80	11040
V-416	16	5.0	60	28	1560
V-417	17	5.0	138	80	11040
V-418	18	5.0	60	28	1560
V-419	19	5.0	138	80	11040
V-420	20	5.0	60	28	1560
V-421	21	5.0	138	80	11040
V-422	22	5.0	60	28	1560
V-423	23	5.0	138	80	11040
V-424	24	5.0	60	28	1560
V-425	25	5.0	138	80	11040
V-426	26	5.0	60	28	1560
V-427	27	5.0	138	80	11040
V-428	28	5.0	60	28	1560
V-429	29	5.0	138	80	11040
V-430	30	5.0	60	28	1560
V-431	31	5.0	138	80	11040
V-432	32	5.0	60	28	1560
V-433	33	5.0	138	80	11040
V-434	34	5.0	60	28	1560
V-435	35	5.0	138	80	11040
V-436	36	5.0	60	28	1560
V-437	37	5.0	138	80	11040
V-438	38	5.0	60	28	1560
V-439	39	5.0	138	80	11040
V-440	40	5.0	60	28	1560
V-441	41	5.0	138	80	11040
V-442	42	5.0	60	28	1560
V-443	43	5.0	138	80	11040
V-444	44	5.0	60	28	1560
V-445	45	5.0	138	80	11040
V-446	46	5.0	60	28	1560
V-447	47	5.0	138	80	11040
V-448	48	5.0	60	28	1560
V-449	49	5.0	138	80	11040
V-450	50	5.0	60	28	1560
V-451	51	5.0	138	80	11040
V-452	52	5.0	60	28	1560
V-453	53	5.0	138	80	11040
V-454	54	5.0	60	28	1560
V-455	55	5.0	138	80	11040
V-456	56	5.0	60	28	1560
V-457	57	5.0	138	80	11040
V-458	58	5.0	60	28	1560
V-459	59	5.0	138	80	11040
V-460	60	5.0	60	28	1560
V-461	61	5.0	138	80	11040
V-462	62	5.0	60	28	1560
V-463	63	5.0	138	80	11040
V-464	64	5.0	60	28	1560
V-465	65	5.0	138	80	11040
V-466	66	5.0	60	28	1560
V-467	67	5.0	138	80	11040
V-468	68	5.0	60	28	1560
V-469	69	5.0	138	80	11040
V-470	70	5.0	60	28	1560
V-471	71	5.0	138	80	11040
V-472	72	5.0	60	28	1560
V-473	73	5.0	138	80	11040
V-474	74	5.0	60	28	1560
V-475	75	5.0	138	80	11040
V-476	76	5.0	60	28	1560
V-477	77	5.0	138	80	11040
V-478	78	5.0	60	28	1560
V-479	79	5.0	138	80	11040
V-480	80	5.0	60	28	1560
V-481	81	5.0	138	80	11040
V-482	82	5.0	60	28	1560
V-483	83	5.0	138	80	11040
V-484	84	5.0	60	28	1560
V-485	85	5.0	138	80	11040
V-486	86	5.0	60	28	1560
V-487	87	5.0	138	80	11040
V-488	88	5.0	60	28	1560
V-489	89	5.0	138	80	11040
V-490	90	5.0	60	28	1560
V-491	91	5.0	138	80	11040
V-492	92	5.0	60	28	1560
V-493	93	5.0	138	80	11040
V-494	94	5.0	60	28	1560
V-495	95	5.0	138	80	11040
V-496	96	5.0	60	28	1560
V-497	97	5.0	138	80	11040
V-498	98	5.0	60	28	1560
V-499	99	5.0	138	80	11040
V-500	100	5.0	60	28	1560
V-501	101	5.0	138	80	11040
V-502	102	5.0	60	28	1560
V-503	103	5.0	138	80	11040
V-504	104	5.0	60	28	1560
V-505	105	5.0	138	80	11040
V-506	106	5.0	60	28	1560
V-507	107	5.0	138	80	11040
V-508	108	5.0	60	28	1560
V-509	109	5.0	138	80	11040
V-510	110	5.0	60	28	1560
V-511	111	5.0	138	80	11040
V-512	112	5.0	60	28	1560
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V-514	114	5.0	60	28	1560
V-515	115	5.0	138	80	11040
V-516	116	5.0	60	28	1560
V-517	117	5.0	138	80	11040
V-518	118	5.0	60	28	1560
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V-520	120	5.0	60	28	1560
V-521	121	5.0	138	80	11040
V-522	122	5.0	60	28	1560
V-523	123	5.0	138	80	11040
V-524	124	5.0	60	28	1560
V-525	125	5.0	138	80	11040
V-526	126	5.0	60	28	1560
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V-528	128	5.0	60	28	1560
V-529	129	5.0	138	80	11040
V-530	130	5.0	60	28	1560
V-531	131	5.0	138	80	11040
V-532	132	5.0	60	28	1560
V-533	133	5.0	138	80	11040
V-534	134	5.0	60	28	1560
V-535	135	5.0	138	80	11040
V-536	136	5.0	60	28	1560
V-537	137	5.0	138	80	11040
V-538	138	5.0	60	28	1560
V-539	139	5.0	138	80	11040
V-540	140	5.0	60	28	1560
V-541	141	5.0	138	80	11040
V-542	142	5.0	60	28	1560
V-543	143	5.0	138	80	11040
V-544	144	5.0	60	28	1560
V-545	145	5.0	138	80	11040
V-546	146	5.0	60	28	1560
V-547	147	5.0	138	80	11040
V-548	148	5.0	60	28	1560
V-549	149	5.0	138	80	11040
V-550	150	5.0	60	28	1560
V-551	151	5.0	138	80	11040
V-552	152	5.0	60	28	1560
V-553	153	5.0	138	80	11040
V-554	154	5.0	60	28	1560
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V-558	158	5.0	60	28	1560
V-559	159	5.0	138	80	11040
V-560	160	5.0	60	28	1560
V-561	161	5.0	138	80	11040
V-562	162	5.0	60	28	1560
V-563	163	5.0	138	80	11040
V-564	164	5.0	60	28	1560
V-565	165	5.0	138	80	11040
V-566	166	5.0	60	28	1560
V-567	167	5.0	138	80	11040
V-568	168	5.0	60	28	1560
V-569	169	5.0	138	80	11040
V-570	170	5.0	60	28	1560
V-571	171	5.0	138	80	11040
V-572	172	5.0	60	28	1560
V-573	173	5.0	138	80	11040
V-574	174	5.0	60	28	1560
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V-576	176	5.0	60	28	1560
V-577	177	5.0	138	80	11040
V-578	178	5.0	60	28	1560
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V-580	180	5.0	60	28	1560
V-581	181	5.0	138	80	11040
V-582	182	5.0	60	28	1560
V-583	183	5.0	138	80	11040
V-584	184	5.0	60	28	1560
V-585	185	5.0	138	80	11040
V-586	186	5.0	60	28	1560
V-587	187	5.0	138	80	11040
V-588	188	5.0	60	28	1560
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V-590	190	5.0	60	28	1560
V-591	191	5.0	138	80	11040
V-592	192	5.0	60	28	1560
V-593	193	5.0	138	80	11040
V-594	194	5.0	60	28	1560
V-595	195	5.0	138	80	11040
V-596	196	5.0	60	28	1560
V-597	197	5.0	138	80	11040
V-598	198	5.0	60	28	1560
V-599	199	5.0	138	80	11040
V-600	200	5.0	60	28	1560
V-601	201	5.0	138	80	11040
V-602	202	5.0	60	28	1560
V-603	203	5.0	138	80	11040
V-604	204	5.0	60	28	1560
V-605	205	5.0	138	80	11040
V-606	206	5.0	60	28	1560
V-607	207	5.0	138	80	11040
V-608	208	5.0	60	28	1560
V-609	209	5.0	138	80	11040
V-610	210	5.0	60	28	1560
V-611	211	5.0	138	80	11040
V-612	212	5.0	60	28	1560
V-613	213	5.0	138	80	11040
V-614	214	5.0	60	28	1560
V-615	215	5.0	138	80	11040
V-616	216	5.0	60	28	1560
V-617	217	5.0	138	80	11040
V-618	218	5.0	60	28	1560
V-619	219	5.0	138	80	11040
V-620	220	5.0	60	28	1560
V-621	221	5.0	138	80	11040
V-622	222	5.0	60	28	1560
V-623	223	5.0	138	80	11040
V-624	224	5.0	60	28	1560
V-625	225	5.0	138	80	11040
V-626	226	5.0	60	28	1560
V-627	227	5.0	138	80	11040
V-628	228	5.0	60	28	1560
V-629	229	5.0	138	80	11040
V-630	230	5.0	60	28	1560
V-631	231	5.0	138	80	11040
V-632	232	5.0	60	28	1560
V-633	233	5.0	138	80	11040
V-634	234	5.0	60	28	1560
V-635	235	5.			



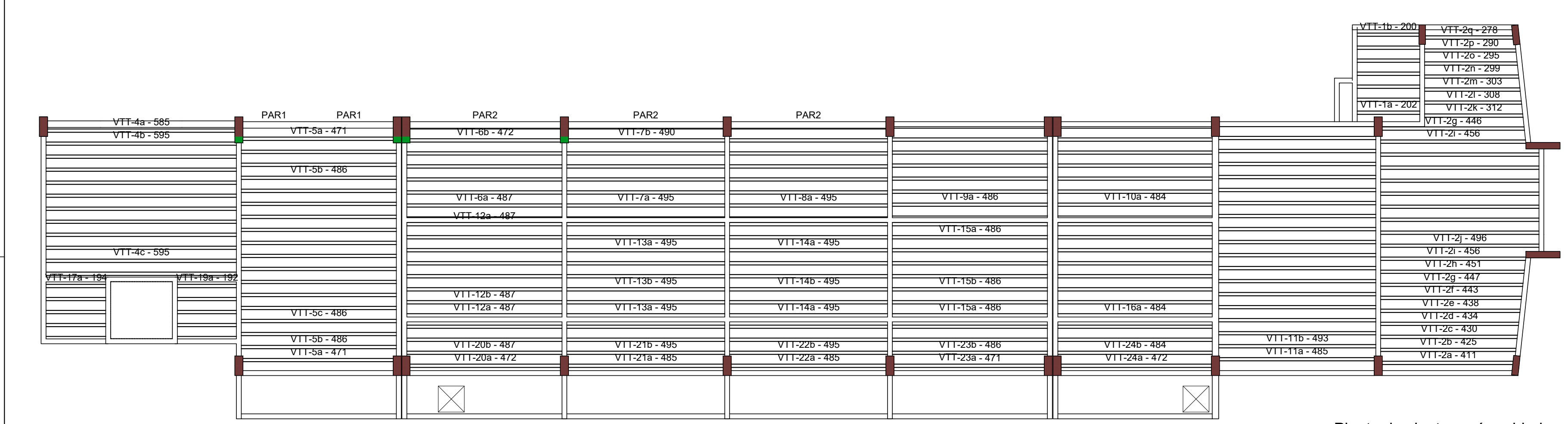


Armação positiva do TÉRREO (Eixo X)
escala 1:100

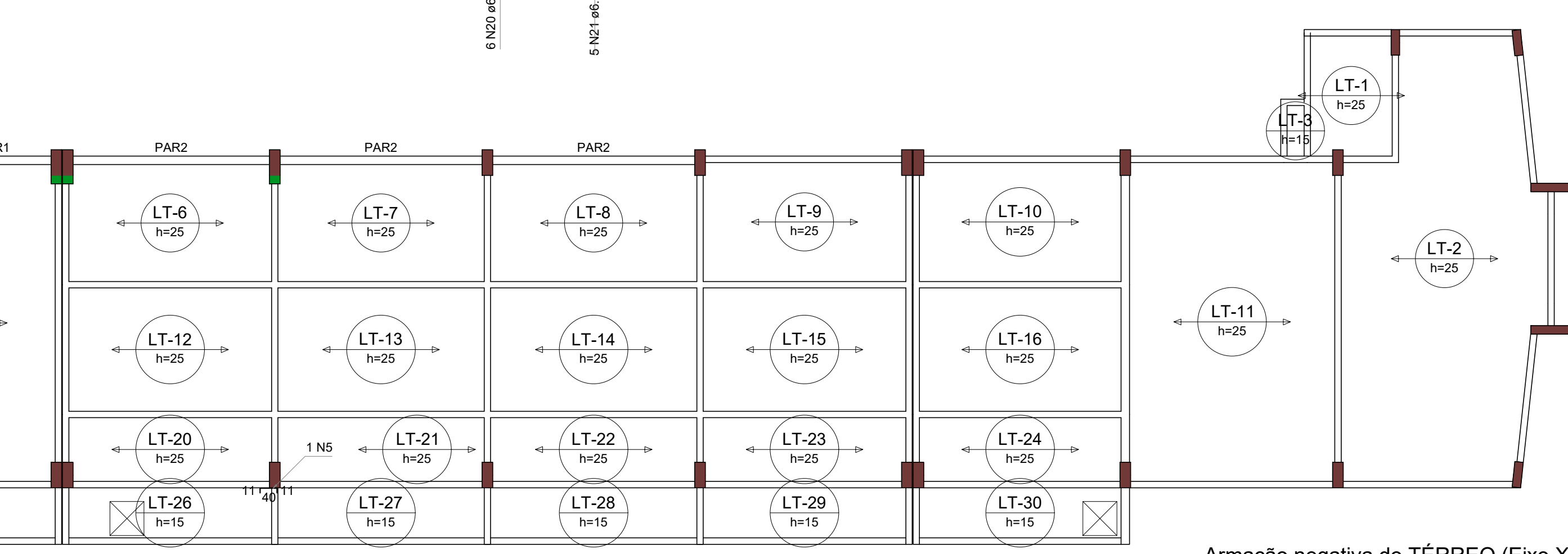
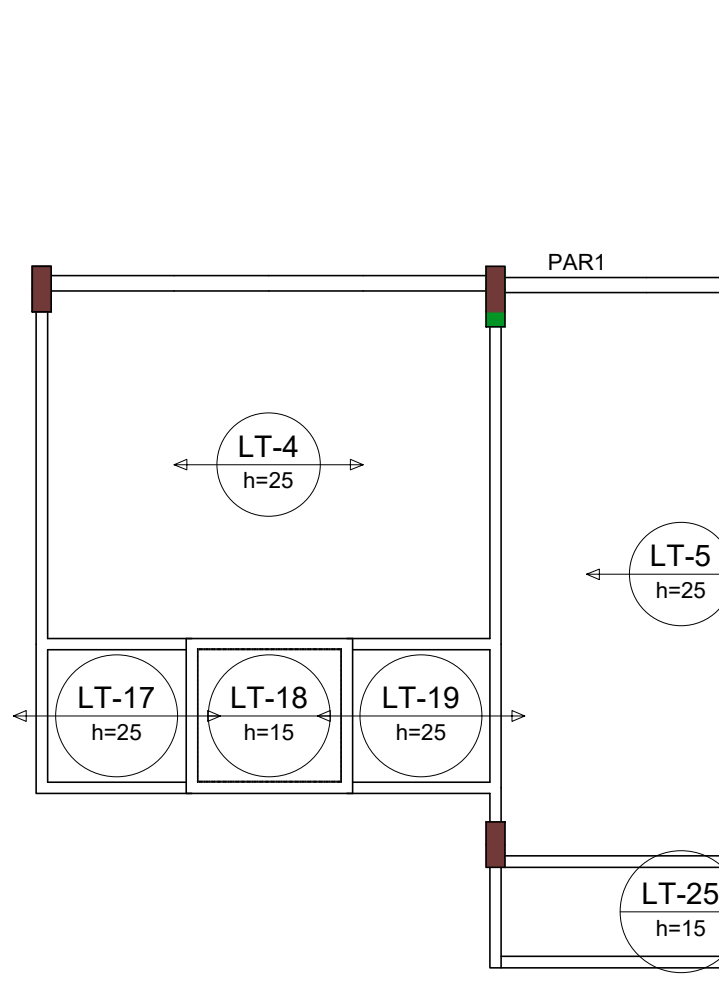


Armação positiva do TÉRREO (Eixo Y)
escala 1:100

RELAÇÃO DO AÇO					
Negativos X			Negativos Y		
ACO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CAS0	1	5.0	20	VAR	VAR
CAS0	2	5.0	7	82	574
CAS0	3	5.0	1	89	89
CAS0	4	5.0	6	96	576
CAS0	5	6.3	11	216	2376
CAS0	6	6.3	3	503	1509
CAS0	7	6.3	6	349	2094
CAS0	8	6.3	6	148	876
CAS0	9	6.3	16	511	8176
CAS0	10	6.3	4	305	1515
CAS0	11	6.3	6	64	384
CAS0	12	6.3	6	433	2598
CAS0	13	6.3	4	154	616
CAS0	14	6.3	12	201	2412
CAS0	15	6.3	6	176	1056
CAS0	16	6.3	8	144	1152
CAS0	17	6.3	10	55	550
CAS0	18	6.3	8	145	1160
CAS0	19	6.3	8	102	510
CAS0	20	6.3	8	102	510
CAS0	21	6.3	8	102	510
CAS0	22	6.3	8	102	510
CAS0	23	6.3	8	102	510
CAS0	24	6.3	8	102	510
CAS0	25	6.3	8	102	510
CAS0	26	6.3	8	102	510
CAS0	27	6.3	8	102	510
CAS0	28	6.3	8	102	510
CAS0	29	6.3	8	102	510
CAS0	30	6.3	8	102	510

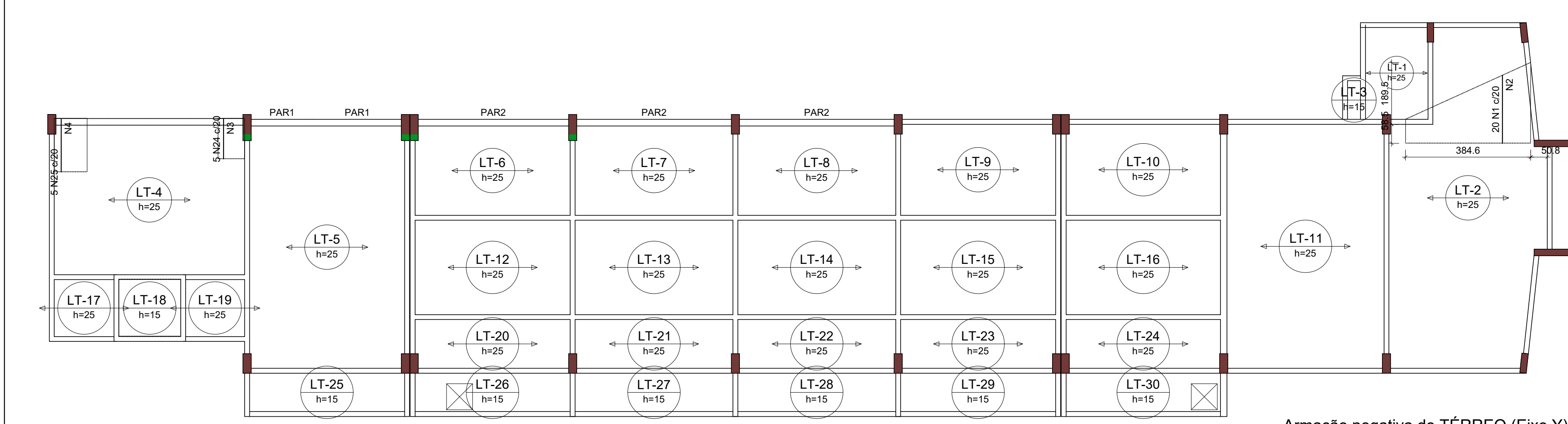


Planta de vigas pré-moldadas
escala 1:100

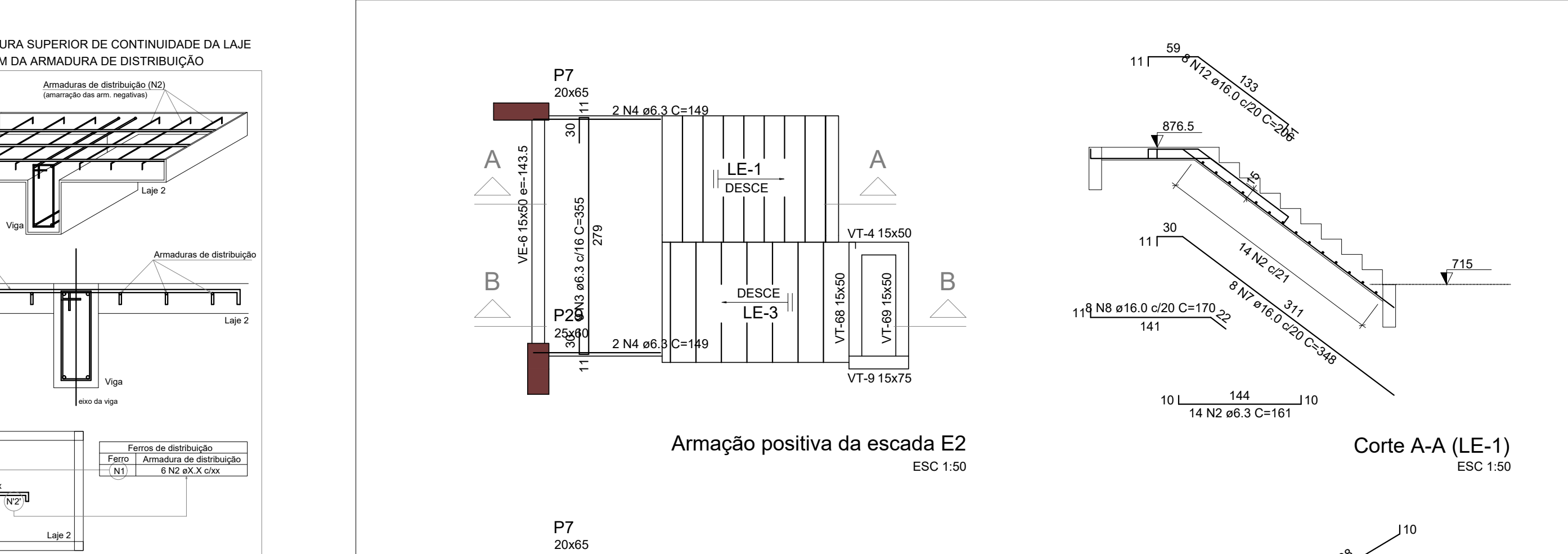
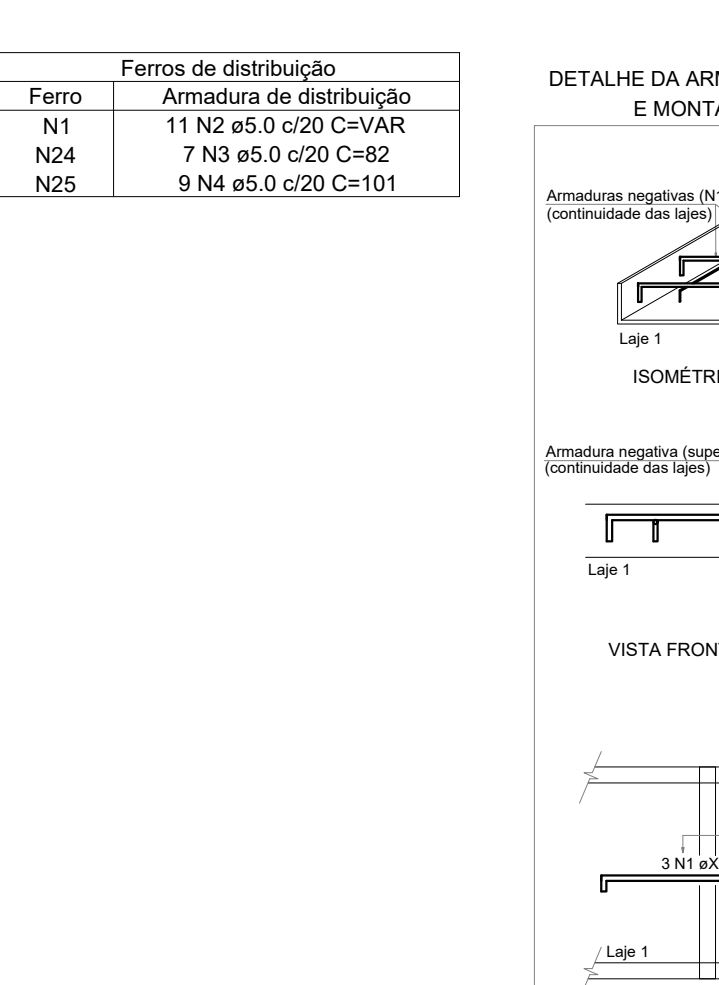


Armação negativa do TÉRREO (Eixo X)
escala 1:100

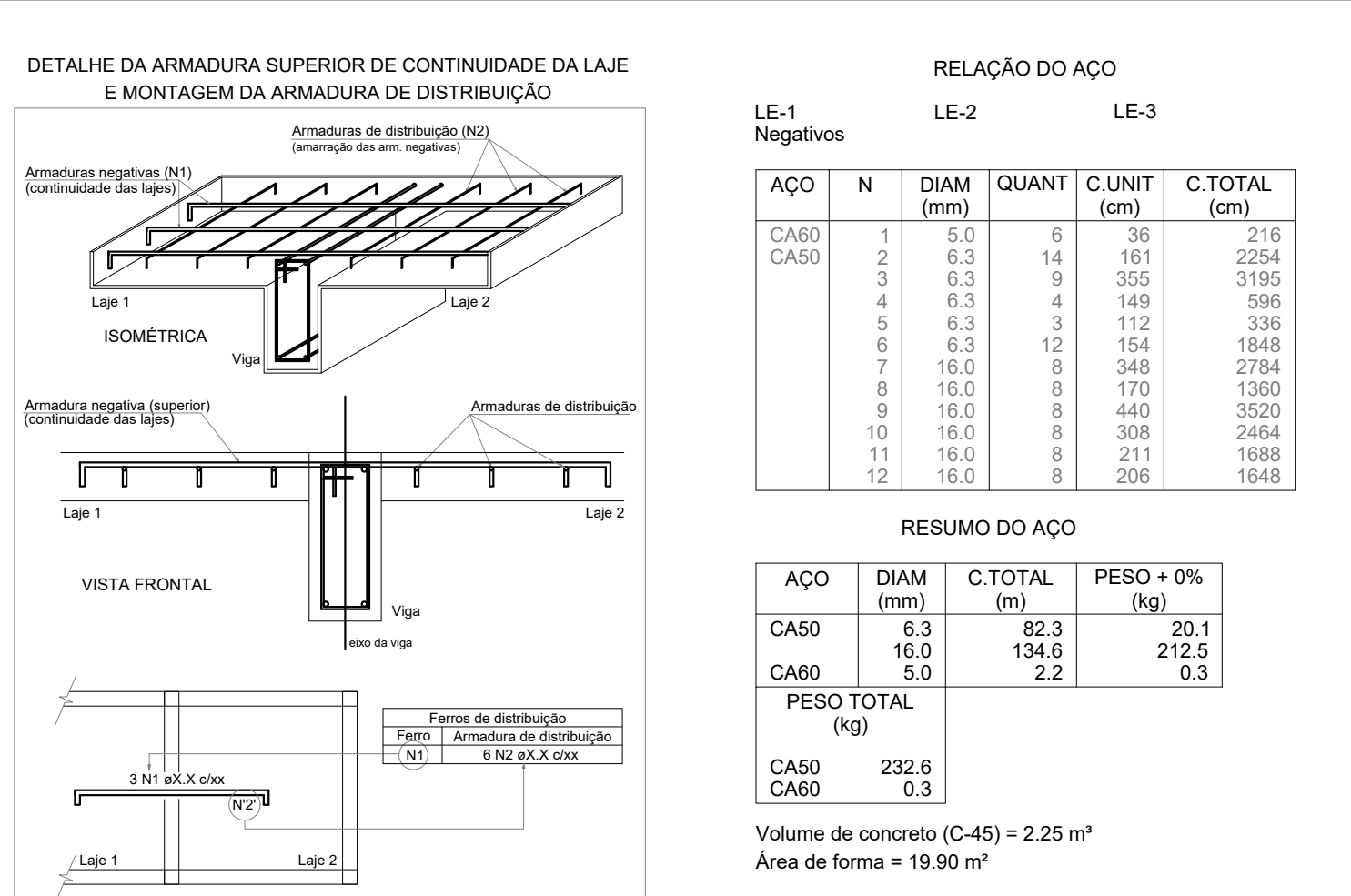
RESUMO DO AÇO					
ACO	N	DIAM (mm)	C.UNIT (cm)	PESO + 0% (kg)	C.TOTAL (kg)
CAS0	1	5.0	20	VAR	VAR
CAS0	2	5.0	7	82	574
CAS0	3	5.0	1	89	89
CAS0	4	5.0	6	96	576
CAS0	5	6.3	11	216	2376
CAS0	6	6.3	3	503	1509
CAS0	7	6.3	6	349	2094
CAS0	8	6.3	6	148	876
CAS0	9	6.3	16	511	8176
CAS0	10	6.3	4	305	1515
CAS0	11	6.3	6	64	384
CAS0	12	6.3	6	433	2598
CAS0	13	6.3	4	154	616
CAS0	14	6.3	12	201	2412
CAS0	15	6.3	6	176	1056
CAS0	16	6.3	8	144	1152
CAS0	17	6.3	10	55	550
CAS0	18	6.3	8	145	1160
CAS0	19	6.3	8	102	510
CAS0	20	6.3	8	102	510
CAS0	21	6.3	8	102	510
CAS0	22	6.3	8	102	510
CAS0	23	6.3	8	102	510
CAS0	24	6.3	8	102	510
CAS0	25	6.3	8	102	510
CAS0	26	6.3	8	102	510
CAS0	27	6.3	8	102	510
CAS0	28	6.3	8	102	510
CAS0	29	6.3	8	102	510
CAS0	30	6.3	8	102	510



Armação negativa do TÉRREO (Eixo Y)
escala 1:100



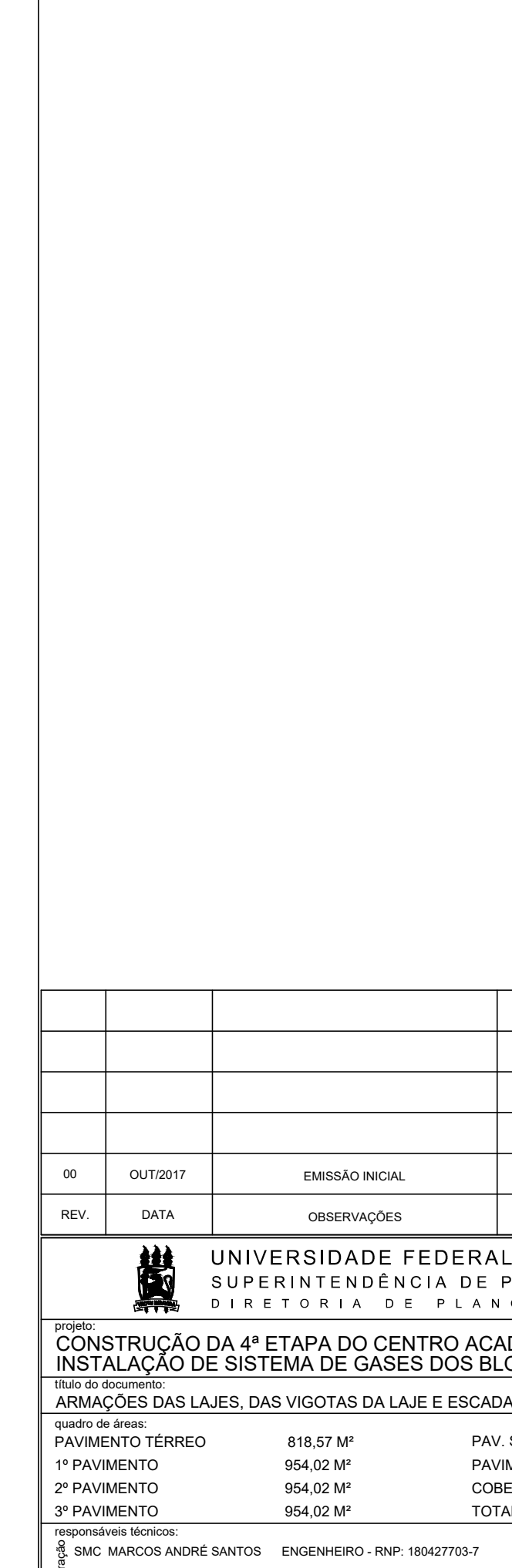
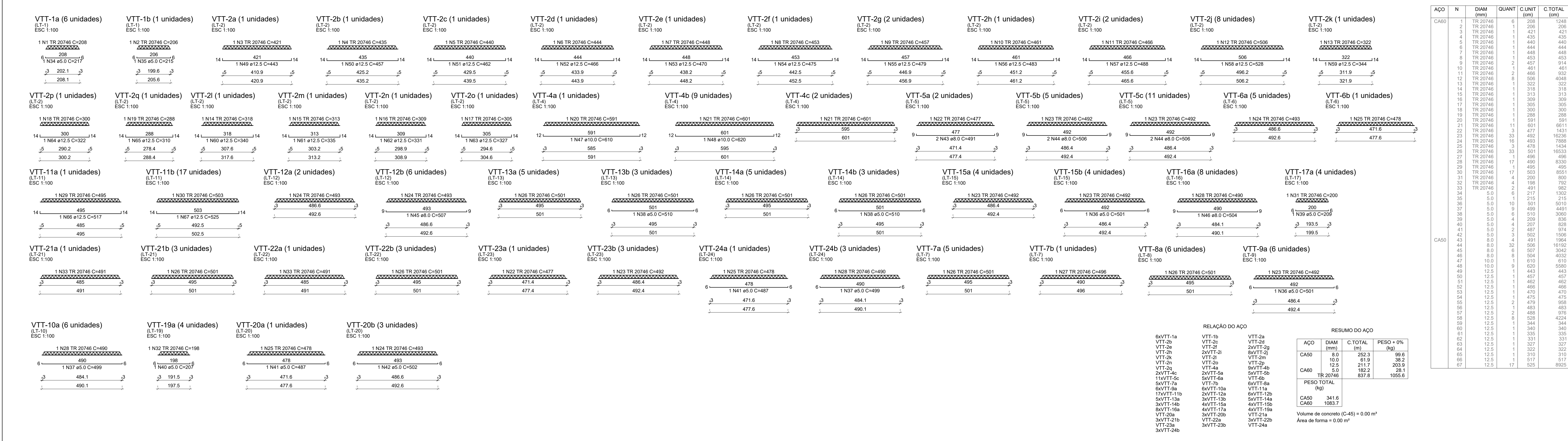
Armação positiva da escada E2
ESC 1:50



Armação negativa da escada E2
ESC 1:50

RELAÇÃO DO AÇO					
LE-1 Negativos			LE-2		
ACO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CAS0	1	5.0	6	38	216
CAS0	2	5.0	14	61	2254
CAS0	3	6.3	9	353	3189
CAS0	4	6.3	4	145	580
CAS0	5	6.3	3	112	336
CAS0	6	6.3	8	170	1360
CAS0	7	10.0	8	348	2784
CAS0	8	10.0	8	300	2400
CAS0	9	10.0	8	440	3520
CAS0	10	10.0	8	300	2400
CAS0	11	10.0	8	211	1688
CAS0	12	10.0	8	206	1648

RESUMO DO AÇO					
ACO	N	DIAM (mm)	C.UNIT (cm)	PESO + 0% (kg)	C.TOTAL (kg)
CAS0	1	5.0	6	38	216
CAS0	2	5.0	14	61	2254
CAS0	3	6.3	9	353	3189
CAS0	4	6.3	4	145	580
CAS0	5	6.3	3	112	336
CAS0	6	6.3	8	170	1360
CAS0	7	10.0	8	348	2784
CAS0	8	10.0	8	300	2400
CAS0	9	10.0	8	440	3520
CAS0	10	10.0	8	300	2400
CAS0	11	10.0	8	211	1688
CAS0	12	10.0	8	206	1648

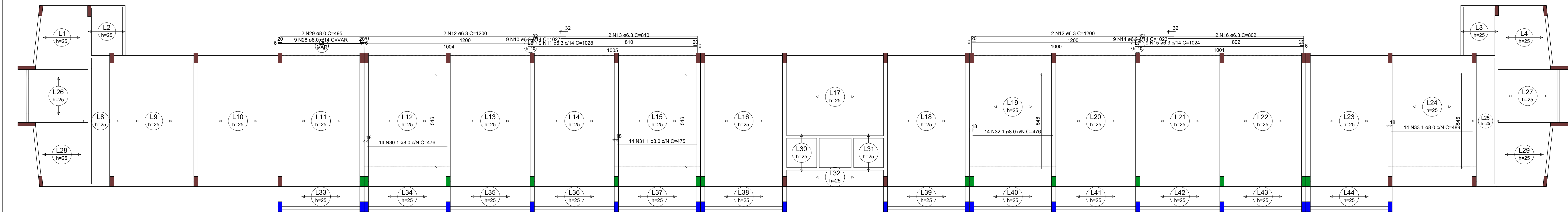


RELAÇÃO DO AÇO					
ACO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CAS0	1	5.0	20	VAR	VAR
CAS0	2	5.0	7	82	574
CAS0	3	5.0	1	89	89
CAS0	4	5.0	6	96	576
CAS0	5	6.3	11	216	2376
CAS0	6	6.3	3	503	1509
CAS0	7	6.3	6	349	2094
CAS0	8	6.3	6	148	876
CAS0	9	6.3	16	511	8176
CAS0	10	6.3	4	305	1515
CAS0	11	6.3	6	64	384
CAS0	12	6.3	6	433	2598
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CAS0	16	6.3	8	144	1152
CAS0	17	6.3	10	55	550
CAS0	18	6.3	8	145	1160
CAS0	19	6.3	8	102	510
CAS0	20	6.3	8	102	510
CAS0	21	6.3	8	102	510
CAS0	22	6.3	8	102	510
CAS0	23	6.3	8	102	510
CAS0	24	6.3	8	102	510
CAS0	25	6.3	8	102	510
CAS0	26	6.3	8	102	510
CAS0	27	6.3	8	102	510
CAS0	28	6.3	8	102	510
CAS0	29	6.3	8	102	510
CAS0	30	6.3	8	102	510

RESUMO DO AÇO					
ACO	N	DIAM (mm)	C.UNIT (cm)	PESO + 0% (kg)	C.TOTAL (kg)
CAS0	1	5.0	20	VAR	VAR
CAS0	2	5.0	7	82	574
CAS0	3	5.0	1	89	89
CAS0	4	5.0	6	96	576
CAS0	5	6.3	11	216	2376
CAS0	6	6.3	3	503	1509
CAS0	7	6.3	6	349	2094
CAS0	8	6.3	6	148	876
CAS0	9	6.3	16	511	8176
CAS0	10	6.3	4	305	1515
CAS0	11	6.3	6	64	384
CAS0	12	6.3	6	433	2598
CAS0	13	6.3	4	154	616
CAS0	14	6.3	12	201	2412
CAS0	15	6.3	6	176	1056
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CAS0	17	6.3	10	55	550
CAS0	18	6.3	8	145	1160
CAS0	19	6.3	8	102	510
CAS0	20	6.3	8	102	510
CAS0	21	6.3	8	102	510
CAS0	22	6.3	8	102	510
CAS0	23	6.3	8	102	510
CAS0	24	6.3	8	102	510
CAS0	25	6.3	8	102	510
CAS0	26	6.3	8	102	510
CAS0	27	6.3	8	102	510
CAS0	28	6.3	8	102	510
CAS0	29	6.3	8	102	510
CAS0	30	6.3	8	102	510

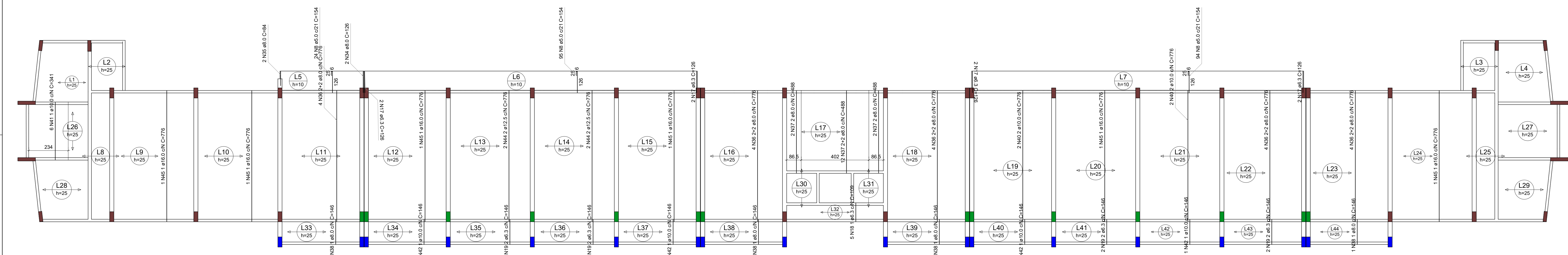
RESUMO DO AÇO					
ACO	N	DIAM (mm)	C.UNIT (cm)	PESO + 0% (kg)	C.TOTAL (kg)
CAS0	1	5.0	20	VAR	VAR
CAS0	2	5.0	7	82	574
CAS0	3	5.0	1	89	89
CAS0	4	5.0	6	96	576
CAS0	5	6.3	11	216	2376
CAS0	6	6.3	3	503	1509
CAS0	7	6.3	6	349	2094
CAS0	8	6.3	6	148	876
CAS0	9	6.3	16	511	8176
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CAS0	12	6.3	6	433	2598
CAS0	13	6.3	4	154	616
CAS0	14	6.3	12	201	2412
CAS0	15	6.3	6	176	1056
CAS0	16	6.3	8	144	1152
CAS0	17	6.3	10	55	550
CAS0	18	6.3	8	145	1160
CAS0	19	6.3	8	102	510
CAS0	20	6.3	8	102	510
CAS0	21	6.3	8	102	510
CAS0	22	6.3	8	102	510
CAS0	23	6.3	8	102	510
CAS0	24	6.3	8	102	510
CAS0	25	6.3	8	102	510
CAS0	26	6.3	8	102	510
CAS0	27	6.3	8	102	510
CAS0	28	6.3	8	102	510
CAS0	29	6.3	8	102	510
CAS0	30	6.3	8	102	510

RESUMO DO AÇO					
ACO	N	DIAM (mm)	C.UNIT (cm)	PESO + 0% (kg)	C.TOTAL (kg)
CAS0	1	5.0	20	VAR	VAR
CAS0	2	5.0	7	82	574
CAS0	3	5.0	1	89	89
CAS0	4	5.0	6	96	576
CAS0	5	6.3	11	216	2376
CAS0	6	6.3	3	503	1509
CAS0	7	6.3	6	349	2094
CAS0	8	6.3	6	148	876
CAS0	9	6.3	16	511	8176
CAS0	10	6.3	4	305	1515
CAS0	11	6.3	6	64	384
CAS0	12	6.3	6	433	2598
CAS0	13	6.3	4	154	616
CAS0	14	6.3	12	201	2412
CAS0	15	6.3	6	176	1056
CAS0	16	6.3	8	144	1152
CAS0	17	6.3	10	55	550
CAS0	18	6.3	8	145	1160
CAS0	19	6.3	8	102	510
CAS0	20	6.3	8	102	510
CAS0	21	6.3	8	102	



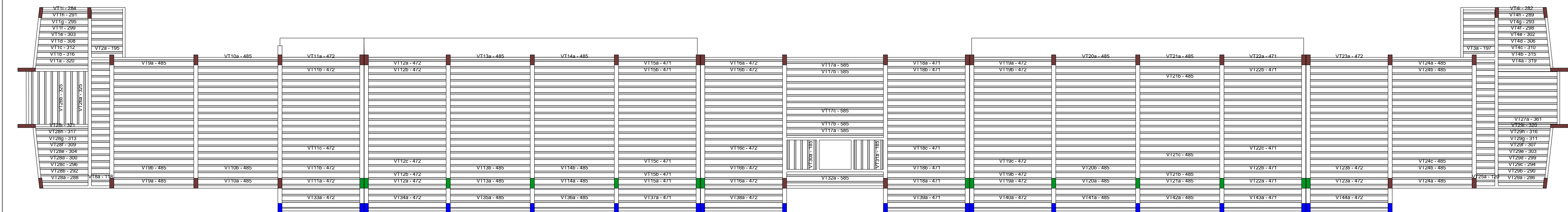
Armação positiva do 1º PAVIMENTO 1 (Eixo X)

escala 1:100



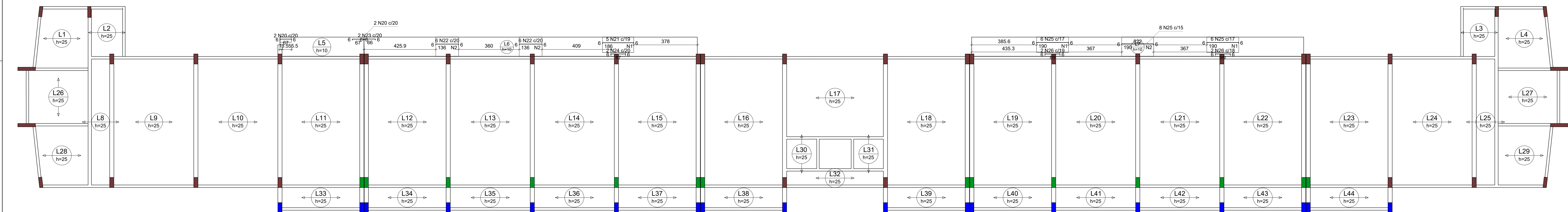
Armação positiva do 1º PAVIMENTO 1 (Eixo Y)

escala 1:100



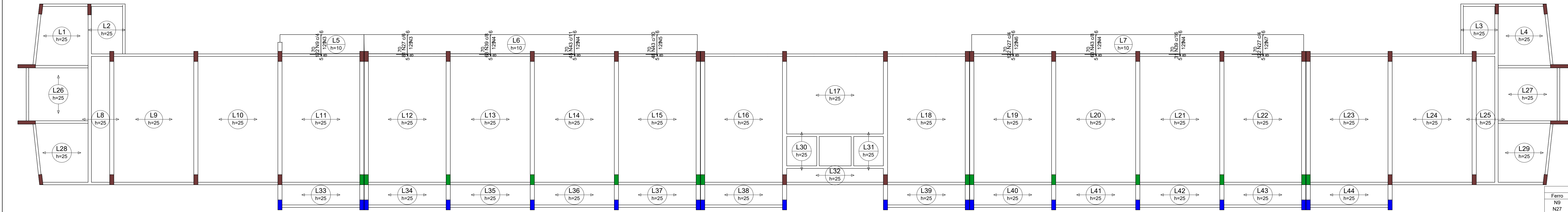
Planta de vigotas pré-moldadas

escala 1:100



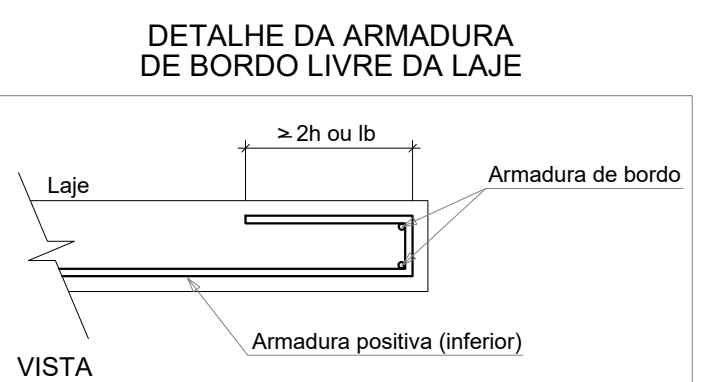
Armação negativa do 1º PAVIMENTO 1 (Eixo X)

escala 1:100

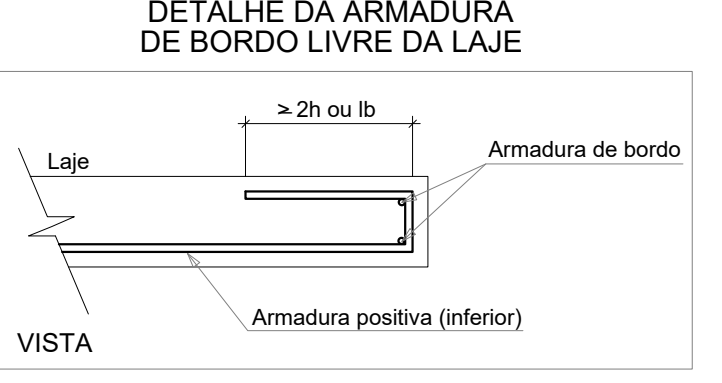


Armação negativa do 1º PAVIMENTO 1 (Eixo Y)

escala 1:100



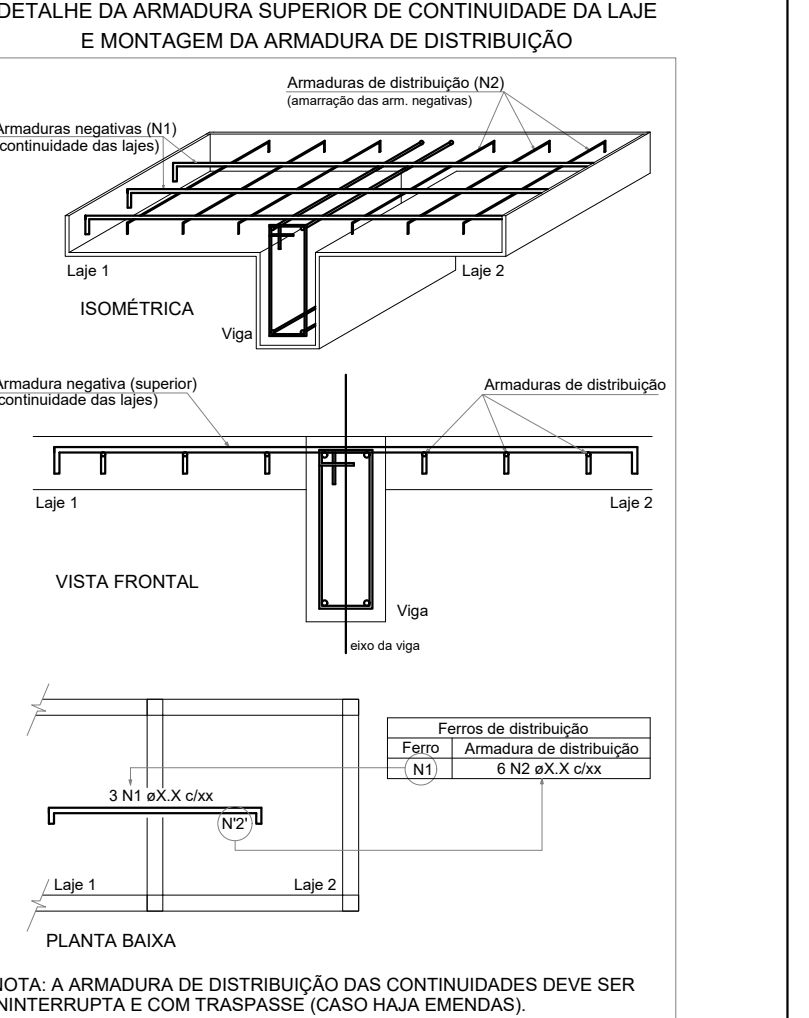
DETALHE DA ARMADURA DE BORDO LIVRE DA LAJE



DETALHE DA ARMADURA DE BORDO LIVRE DA LAJE

RELAÇÃO DO AÇO					
Negativos X			Positivos Y		
ACO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA50	1	1.0	30	252	2130
	2	5.0	24	115	2760
	3	6.0	23	486	11178
	4	8.0	57	500	28500
	5	9.0	16	481	7696
	6	5.0	18	487	8766
	7	6.0	18	486	8748
	8	8.0	213	154	32802
	9	6.3	122	238	23378
	10	6.3	9	1027	9243
CA50	11	6.3	9	1028	9252
	12	6.3	4	1200	4800
	13	6.3	9	1034	9216
	14	6.3	9	1023	9207
	15	6.3	9	1034	9216
	16	6.3	2	802	1604
	17	6.3	1	146	146
	18	6.3	5	109	545
	19	6.3	1	146	146
	20	8.0	4	75	300
CA50	21	6.0	2	74	148
	22	8.0	12	144	1728
	23	6.0	2	74	148
	24	8.0	2	95	190
	25	6.0	20	158	3160
	26	8.0	4	97	388
	27	8.0	325	37	4775
	28	8.0	9	VAR	VAR
	29	8.0	2	465	930
	30	8.0	14	476	6664
CA50	31	6.0	14	475	6650
	32	8.0	14	476	6664
	33	6.0	4	489	1956
	34	8.0	2	128	256
	35	6.0	16	488	7808
	36	8.0	20	776	15520
	37	6.0	16	488	7808
	38	8.0	4	146	584
	39	10.0	34	255	8570
	40	10.0	4	776	3104
CA50	41	10.0	6	246	1476
	42	10.0	4	146	584
	43	12.5	116	253	29348
	44	12.5	4	776	3104
	45	16.0	6	776	4656

RESUMO DO AÇO				
ACO	DIAM (mm)	C.TOTAL (kg)	PESO = 0%	
CA50	6.3	730.4	178.7	
	8.0	1300.6	321.1	
	10.0	290	154.2	
	12.5	347.7	335	
	16.0	48.6	73.5	
CA60		1332.2	158.1	
CA50		1262.5		
CA60		159.1		
Volume de concreto (C-45) = 732.02 m³				
Área de forma = 56.33 m²				



DETALHE DA ARMADURA SUPERIOR DE CONTINUIDADE DA LAJE E MONTAGEM DA ARMADURA DE DISTRIBUIÇÃO

Fios de distribuição	
Fio	Armadura de distribuição
N1	10 N1 ø5.0 C=200 C=92
N2	7 N2 ø5.0 C=200 C=115
N3	10 N3 ø5.0 C=200 C=115
N4	10 N4 ø5.0 C=200 C=92
N5	10 N5 ø5.0 C=200 C=115
N6	10 N6 ø5.0 C=200 C=92

Fios de distribuição	
Fio	Armadura de distribuição
N1	10 N1 ø5.0 C=200 C=92
N2	7 N2 ø5.0 C=200 C=115
N3	10 N3 ø5.0 C=200 C=115
N4	10 N4 ø5.0 C=200 C=92
N5	10 N5 ø5.0 C=200 C=115
N6	10 N6 ø5.0 C=200 C=92

Fios de distribuição	
Fio	Armadura de distribuição
N1	10 N1 ø5.0 C=200 C=92
N2	7 N2 ø5.0 C=200 C=115
N3	10 N3 ø5.0 C=200 C=115
N4	10 N4 ø5.0 C=200 C=92
N5	10 N5 ø5.0 C=200 C=115
N6	10 N6 ø5.0 C=200 C=92

Fios de distribuição	
Fio	Armadura de distribuição
N1	10 N1 ø5.0 C=200 C=92
N2	7 N2 ø5.0 C=200 C=115
N3	10 N3 ø5.0 C=200 C=115
N4	10 N4 ø5.0 C=200 C=92
N5	10 N5 ø5.0 C=200 C=115
N6	10 N6 ø5.0 C=200 C=92

Fios de distribuição	
Fio	Armadura de distribuição
N1	10 N1 ø5.0 C=200 C=92
N2	7 N2 ø5.0 C=200 C=115
N3	10 N3 ø5.0 C=200 C=115
N4	10 N4 ø5.0 C=200 C=92
N5	10 N5 ø5.0 C=200 C=115
N6	10 N6 ø5.0 C=200 C=92

Fios de distribuição	
Fio	Armadura de distribuição
N1	10 N1 ø5.0 C=200 C=92
N2	7 N2 ø5.0 C=200 C=115
N3	10 N3 ø5.0 C=200 C=115
N4	10 N4 ø5.0 C=200 C=92
N5	10 N5 ø5.0 C=200 C=115
N6	10 N6 ø5.0 C=200 C=92

Fios de distribuição	
Fio	Armadura de distribuição
N1	10 N1 ø5.0 C=200 C=92
N2	7 N2 ø5.0 C=200 C=115
N3	10 N3 ø5.0 C=200 C=115
N4	10 N4 ø5.0 C=200 C=92
N5	10 N5 ø5.0 C=200 C=115
N6	10 N6 ø5.0 C=200 C=92

Fios de distribuição	
Fio	Armadura de distribuição
N1	10 N1 ø5.0 C=200 C=92
N2	7 N2 ø5.0 C=200 C=115
N3	10 N3 ø5.0 C=200 C=115
N4	10 N4 ø5.0 C=200 C=92
N5	10 N5 ø5.0 C=200 C=115
N6	10 N6 ø5.0 C=200 C=92

Fios de distribuição	
Fio	Armadura de distribuição
N1	10 N1 ø5.0 C=200 C=92
N2	7 N2 ø5.0 C=200 C=115
N3	10 N3 ø5.0 C=200 C=115
N4	10 N4 ø5.0 C=200 C=92
N5	10 N5 ø5.0 C=200 C=115
N6	10 N6 ø5.0 C=200 C=92

Fios de distribuição	
Fio	Armadura de distribuição
N1	10 N1 ø5.0 C=200 C=92
N2	7 N2 ø5.0 C=200 C=115
N3	10 N3 ø5.0 C=200 C=115
N4	10 N4 ø5.0 C=200 C=92
N5	10 N5 ø5.0 C=200 C=115
N6	10 N6 ø5.0 C=200 C=92

Fios de distribuição	
Fio	Armadura de distribuição
N1	10 N1 ø5.0 C=200 C=92
N2	7 N2 ø5.0 C=200 C=115
N3	10 N3 ø5.0 C=200 C=115
N4	10 N4 ø5.0 C=200 C=92
N5	10 N5 ø5.0 C=200 C=115
N6	10 N6 ø5.0 C=200 C=92

Fios de distribuição	
Fio	Armadura de distribuição
N1	10 N1 ø5.0 C=200 C=92
N2	7 N2 ø5.0 C=200 C=115
N3	10 N3 ø5.0 C=200 C=115
N4	10 N4 ø5.0 C=200 C=92
N5	10 N5 ø5.0 C=200 C=115
N6	10 N6 ø5.0 C=200 C=92

Fios de distribuição	
Fio	Armadura de distribuição
N1	10 N1 ø5.0 C=200 C=92
N2	7 N2 ø5.0 C=200 C=115
N3	10 N3 ø5.0 C=200 C=115
N4	10 N4 ø5.0 C=200 C=92
N5	10 N5 ø5.0 C=200 C=115
N6	10 N6 ø5.0 C=200 C=92

Fios de distribuição	
Fio	Armadura de distribuição
N1	10 N1 ø5.0 C=200 C=92
N2	7 N2 ø5.0 C=200 C=115
N3	10 N3 ø5.0 C=200 C=115
N4	10 N4 ø5.0 C=200 C=92
N5	10 N5 ø5.0 C=200 C=115
N6	10 N6 ø5.0 C=200 C=92

Fios de distribuição	
Fio	Armadura de distribuição
N1	10 N1 ø5.0 C=200 C=92
N2	7 N2 ø5.0 C=200 C=115
N3	10 N3 ø5.0 C=200 C=115
N4	10 N4 ø5.0 C=200 C=92
N5	10 N5 ø5.0 C=200 C=115
N6	10 N6 ø5.0 C=200 C=92

Fios de distribuição	
Fio	Armadura de distribuição
N1	10 N1 ø5.0 C=200 C=92
N2	7 N2 ø5.0 C=200 C=115
N3	10 N3 ø5.0 C=200 C=115
N4	10 N4 ø5.0 C=200 C=92
N5	10 N5 ø5.0 C=200 C=115
N6	10 N6 ø5.0 C=200 C=92

Fios de distribuição	
Fio	Armadura de distribuição
N1	10 N1 ø5.0 C=200 C=92
N2	7 N2 ø5.0 C=200 C=115
N3	10 N3 ø5.0 C=200 C=115
N4	10 N4 ø5.0 C=200 C=92
N5	10 N5 ø5.0 C=200 C=115
N6	10 N6 ø5.0 C=200 C=92

Fios de distribuição	
Fio	Armadura de distribuição
N1	10 N1 ø5.0 C=200 C=92
N2	7 N2 ø5.0 C=200 C=115
N3	10 N3 ø5.0 C=200 C=115
N4	10 N4 ø5.0 C=200 C=92
N5	10 N5 ø5.0 C=200 C=115
N6	10 N6 ø5.0 C=200 C=92

Fios de distribuição	
Fio	Armadura de distribuição
N1	10 N1 ø5.0 C=200 C=92
N2	7 N2 ø5.0 C=200 C=115
N3	10 N3 ø5.0 C=200 C=115
N4	10 N4 ø5.0 C=200 C=92
N5	10 N5 ø5.0 C=200 C=115
N6	10 N6 ø5.0 C=200 C=92

Fios de distribuição	
Fio	Armadura de distribuição
N1	10 N1 ø5.0 C=200 C=92
N2	7 N2 ø5.0 C=200 C=115
N3	10 N3 ø5.0 C=200 C=115
N4	10 N4 ø5.0 C=200 C=92
N5	10 N5 ø5.0 C=200 C=115
N6	10 N6 ø5.0 C=200 C=92

Fios de distribuição	
Fio	Armadura de distribuição
N1	10 N1 ø5.0 C=200 C=92
N2	7 N2 ø5.0 C=200 C=115
N3	10 N3 ø5.0 C=200 C=115
N4	10 N4 ø5.0 C=200 C=92
N5	10 N5 ø5.0 C=200 C=115
N6	10 N6 ø5.0 C=200 C=92

Fios de distribuição	
Fio	Armadura de distribuição
N1	10 N1 ø5.0 C=200 C=92
N2	7 N2 ø5.0 C=200 C=115
N3	10 N3 ø5.0 C=200 C=115
N4	10 N4 ø5.0 C=200 C=92
N5	10 N5 ø5.0 C=200 C=115
N6	10 N6 ø5.0 C=200 C=92

Fios de distribuição	
Fio	Armadura de distribuição
N1	10 N1 ø5.0 C=200 C=92
N2	7 N2 ø5.0 C=200 C=115
N3	10 N3 ø5.0 C=200 C=115
N4	10 N4 ø5.0 C=200 C=92
N5	10 N5 ø5.0 C=200 C=115
N6	10 N6 ø5.0 C=200 C=92

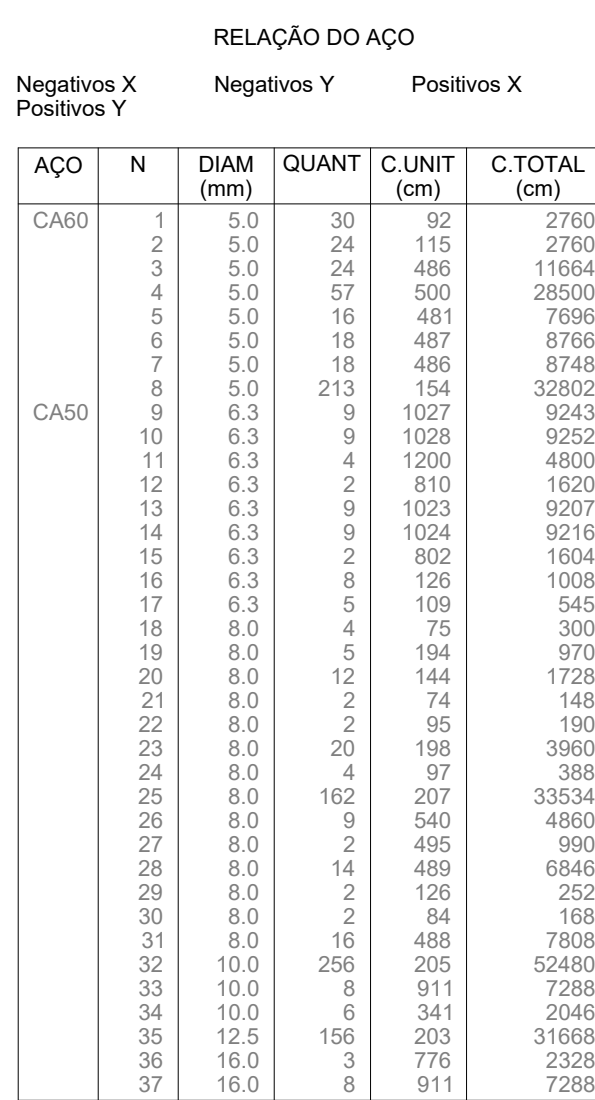
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Fio	Armadura de distribuição
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N2	7 N2 ø5.0 C=200 C=115
N3	10 N3 ø5.0 C=200 C=115
N4	10 N4 ø5.0 C=200 C=92
N5	10 N5 ø5.0 C=200 C=115
N6	10 N6 ø5.0 C=200 C=92

Fios de distribuição	
Fio	Armadura de distribuição
N1	10 N1 ø5.0 C=200 C=92
N2	7 N2 ø5.0 C=200 C=115
N3	10 N3 ø5.0 C=200 C=115
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N5	10 N5 ø5.0 C=200 C=115
N6	10 N6 ø5.0 C=200 C=92

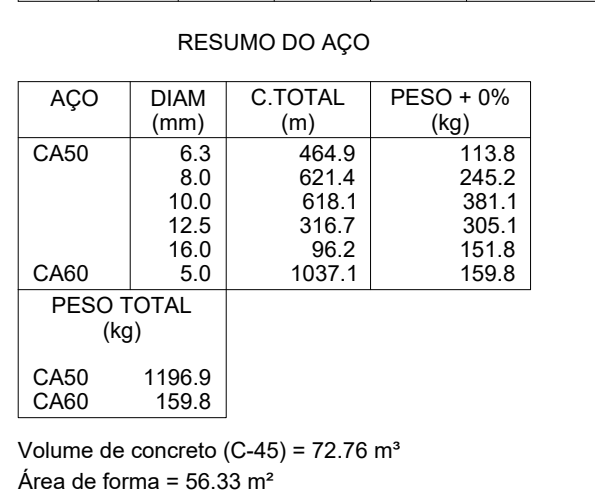
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Fio	Armadura de distribuição
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N2	7 N2 ø5.0 C=200 C=115
N3	10 N3 ø5.0 C=200 C=115
N4	10 N4 ø5.0 C=200 C=92
N5	10 N5 ø5.0 C=200 C=115
N6	10 N6 ø5.0 C=200 C=92

Fios de distribuição	
Fio	Armadura de distribuição
N1	10 N1 ø5.0 C=200 C=92
N2	7 N2 ø5.0 C=200 C=115
N3	10 N3 ø5.0 C=200 C=115
N4	10 N4 ø5.0 C=200 C=92
N5	10 N5 ø5.0 C=200 C=115
N6	10 N6 ø5.0 C=200 C=92

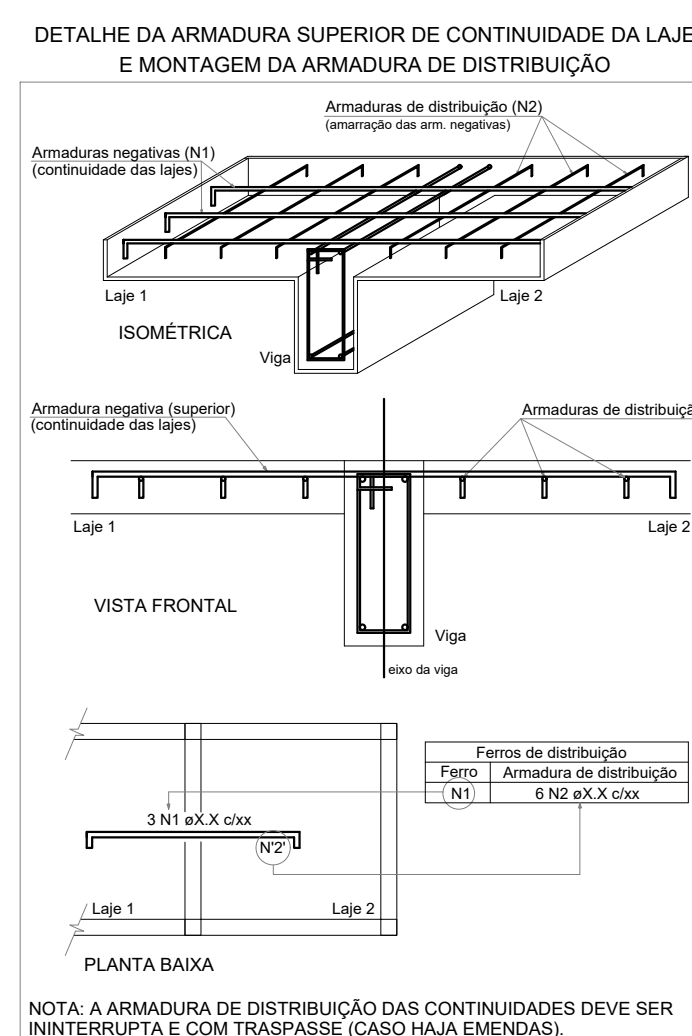
Fios de distribuição	
Fio	Armadura de distribuição
N1	10 N1 ø5.0 C=200 C=92
N2	7 N2 ø5.0 C=200 C=115
N3	10 N3 ø5.0 C=200 C=115
N4	10 N4 ø5.0 C=200 C=92
N5	10 N5 ø5.0 C=200 C=115
N6	10 N6 ø5.0 C=200 C=92



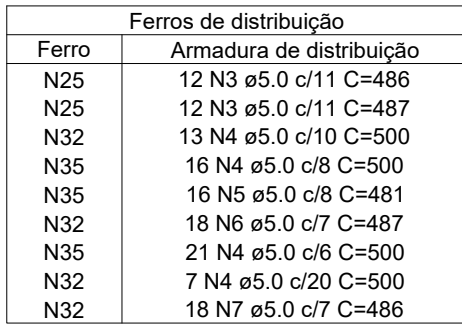
escala 1:100



escala 1:100

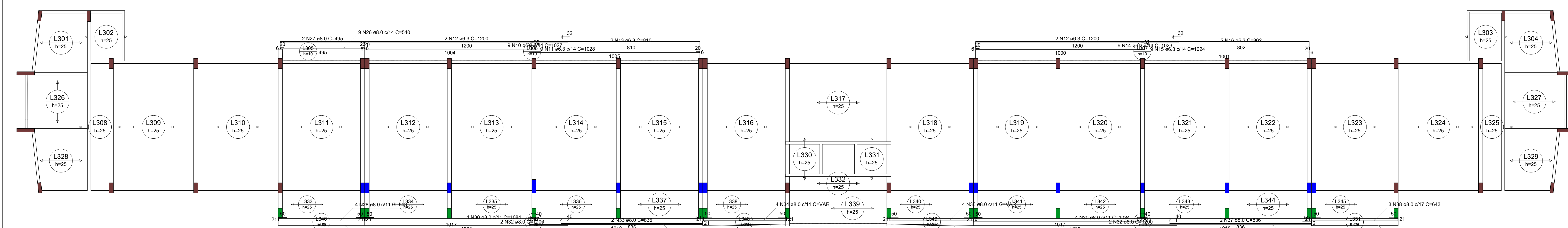


escala 1:100

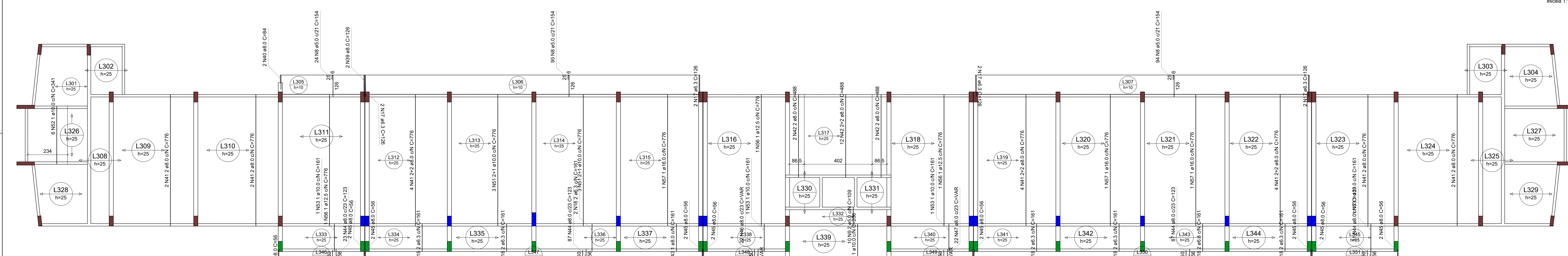


escala 1:100

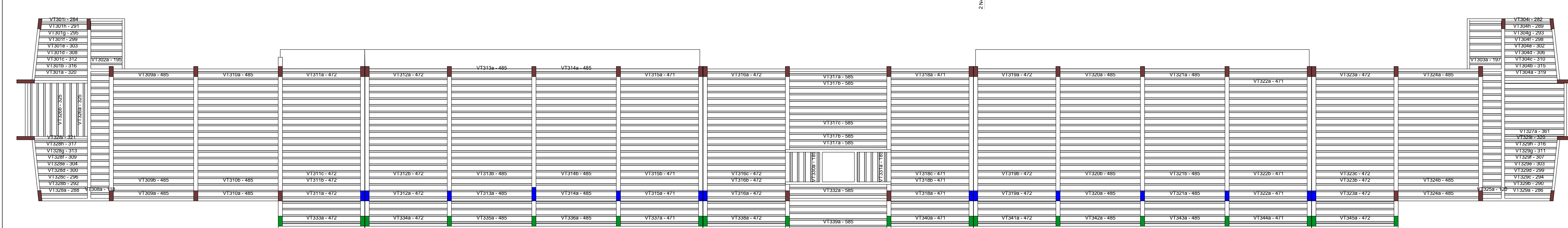
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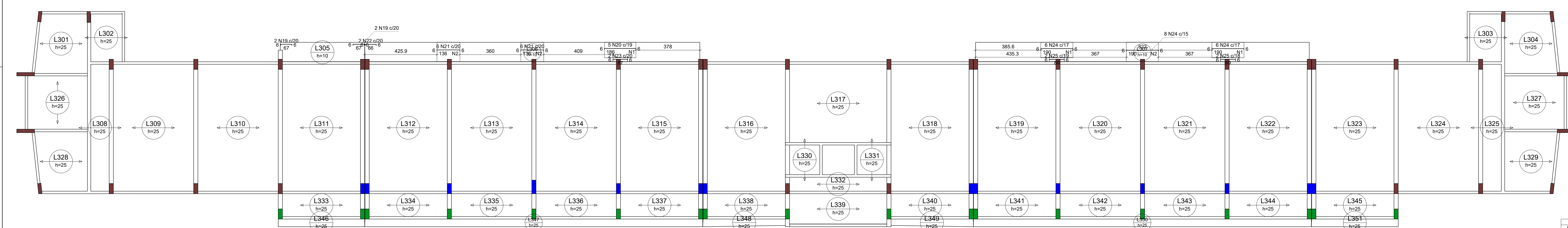
Armação positiva do 3º PAVIMENTO (Eixo X)
escala 1:100



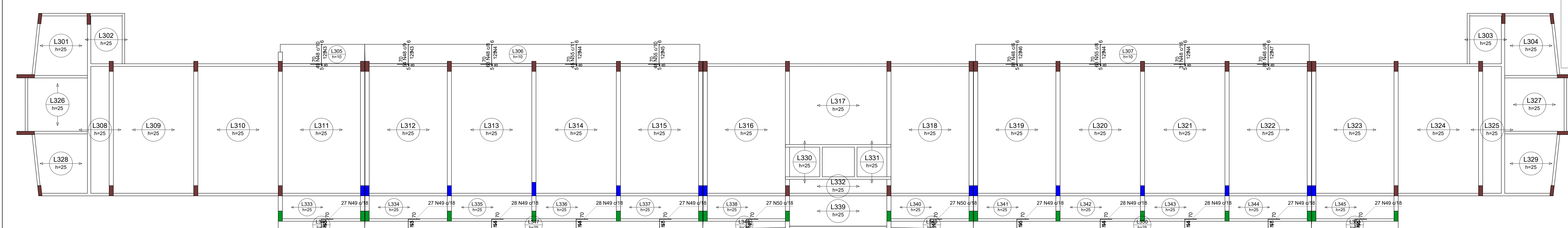
Armação positiva do 3º PAVIMENTO (Eixo Y)
escala 1:100



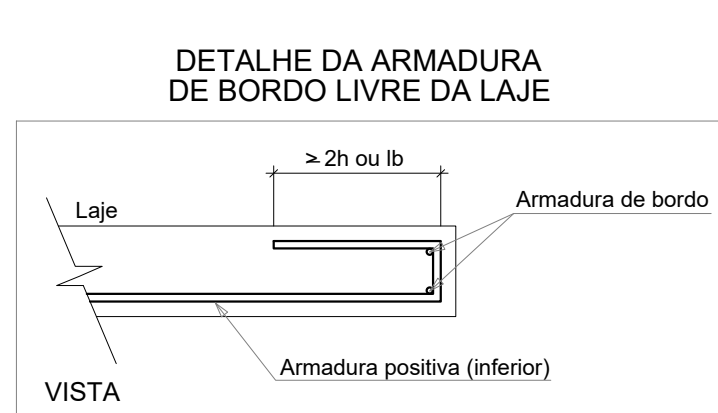
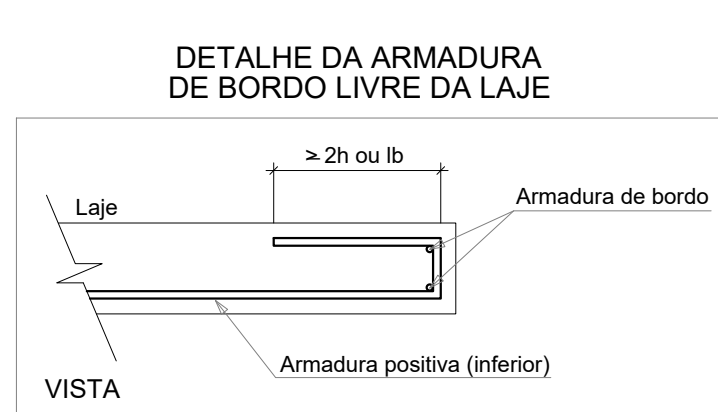
Planta de vigotas pré-moldadas
escala 1:100



Armação negativa do 3º PAVIMENTO (Eixo X)
escala 1:100

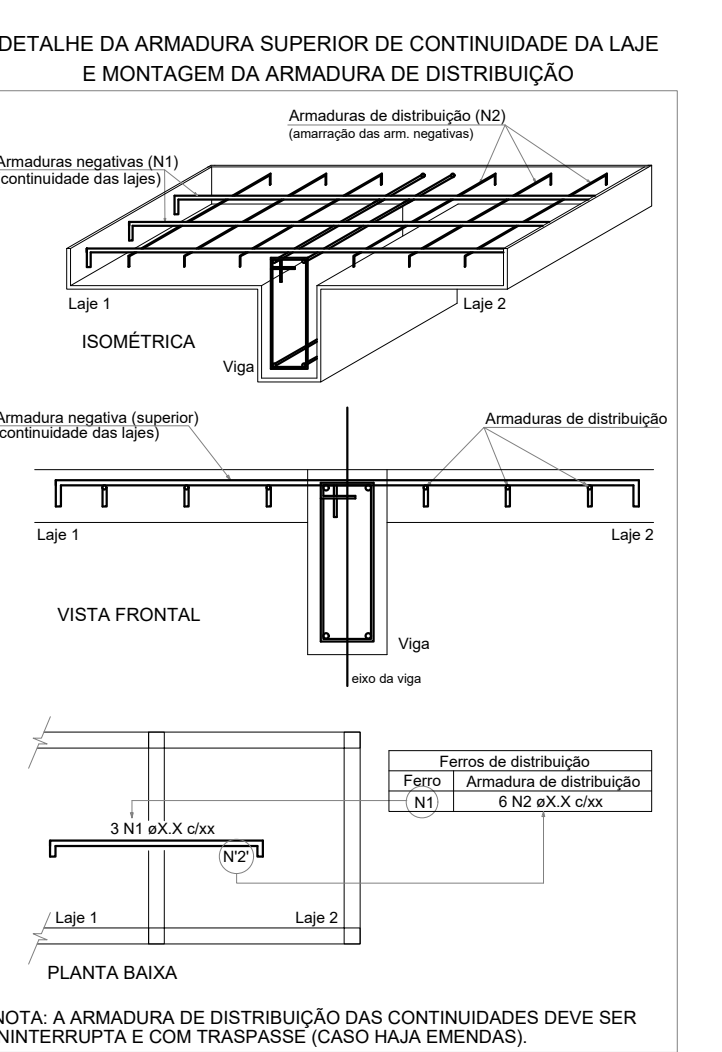


Armação negativa do 3º PAVIMENTO (Eixo Y)
escala 1:100



RELAÇÃO DO AÇO					
Negativos X		Negativos Y		Positivos X	
AÇO	N	DIAM (mm)	QUANT	C UNIT (cm)	C TOTAL (cm)
CA50	1	5.0	30	152	2760
	2	5.0	30	152	2760
	3	5.0	35	486	1710
	4	5.0	35	486	1710
	5	5.0	35	486	1710
	6	5.0	35	486	1710
	7	5.0	35	486	1710
	8	5.0	35	486	1710
	9	5.0	35	486	1710
	10	5.0	35	486	1710
	11	5.0	35	486	1710
	12	5.0	35	486	1710
	13	5.0	35	486	1710
	14	5.0	35	486	1710
	15	5.0	35	486	1710
	16	5.0	35	486	1710
	17	5.0	35	486	1710
	18	5.0	35	486	1710
	19	5.0	35	486	1710
	20	5.0	35	486	1710
	21	5.0	35	486	1710
	22	5.0	35	486	1710
	23	5.0	35	486	1710
	24	5.0	35	486	1710
	25	5.0	35	486	1710
	26	5.0	35	486	1710
	27	5.0	35	486	1710
	28	5.0	35	486	1710
	29	5.0	35	486	1710
	30	5.0	35	486	1710
	31	5.0	35	486	1710
	32	5.0	35	486	1710
	33	5.0	35	486	1710
	34	5.0	35	486	1710
	35	5.0	35	486	1710
	36	5.0	35	486	1710
	37	5.0	35	486	1710
	38	5.0	35	486	1710
	39	5.0	35	486	1710
	40	5.0	35	486	1710
	41	5.0	35	486	1710
	42	5.0	35	486	1710
	43	5.0	35	486	1710
	44	5.0	35	486	1710
	45	5.0	35	486	1710
	46	5.0	35	486	1710
	47	5.0	35	486	1710
	48	5.0	35	486	1710
	49	5.0	35	486	1710
	50	5.0	35	486	1710
	51	5.0	35	486	1710
	52	5.0	35	486	1710
	53	5.0	35	486	1710
	54	5.0	35	486	1710
	55	5.0	35	486	1710
	56	5.0	35	486	1710
	57	5.0	35	486	1710
	58	5.0	35	486	1710
	59	5.0	35	486	1710
	60	5.0	35	486	1710
	61	5.0	35	486	1710
	62	5.0	35	486	1710
	63	5.0	35	486	1710
	64	5.0	35	486	1710
	65	5.0	35	486	1710
	66	5.0	35	486	1710
	67	5.0	35	486	1710
	68	5.0	35	486	1710
	69	5.0	35	486	1710
	70	5.0	35	486	1710
	71	5.0	35	486	1710
	72	5.0	35	486	1710
	73	5.0	35	486	1710
	74	5.0	35	486	1710
	75	5.0	35	486	1710
	76	5.0	35	486	1710
	77	5.0	35	486	1710
	78	5.0	35	486	1710
	79	5.0	35	486	1710
	80	5.0	35	486	1710
	81	5.0	35	486	1710
	82	5.0	35	486	1710
	83	5.0	35	486	1710
	84	5.0	35	486	1710
	85	5.0	35	486	1710
	86	5.0	35	486	1710
	87	5.0	35	486	1710
	88	5.0	35	486	1710
	89	5.0	35	486	1710
	90	5.0	35	486	1710
	91	5.0	35	486	1710
	92	5.0	35	486	1710
	93	5.0	35	486	1710
	94	5.0	35	486	1710
	95	5.0	35	486	1710
	96	5.0	35	486	1710
	97	5.0	35	486	1710
	98	5.0	35	486	1710
	99	5.0	35	486	1710
	100	5.0	35	486	1710

RESUMO DO AÇO			
AÇO	DIAM (mm)	C TOTAL (m)	PESO + 0% (kg)
CA50	5.0	432	118
	8.0	1109.4	437.8
	10.0	1280	789.2
	12.5	340	327.5
	16.0	23.3	36.7
	5.0	1387	213.8
PESO TOTAL (kg)		1709.1	
CA50		213.8	
Volume de concreto (C-45) = 80.55 m³			
Área de forma = 59.99 m²			

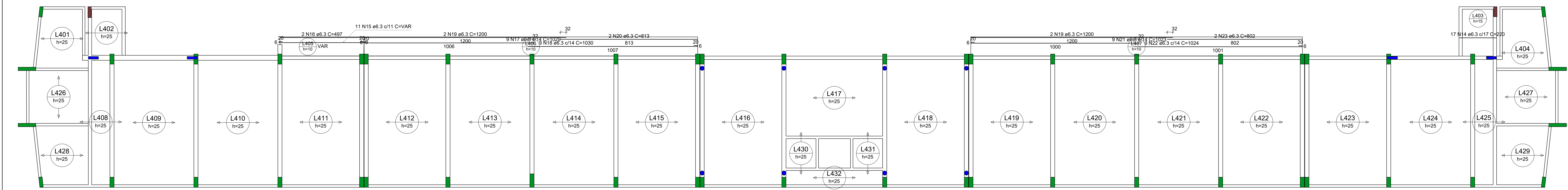


NOTA: A ARMADURA DE DISTRIBUIÇÃO DAS CONTINUIDADES DEVE SER ININTERRUPTA E COM TRASPASSE (CASO HAJA EMENDA).

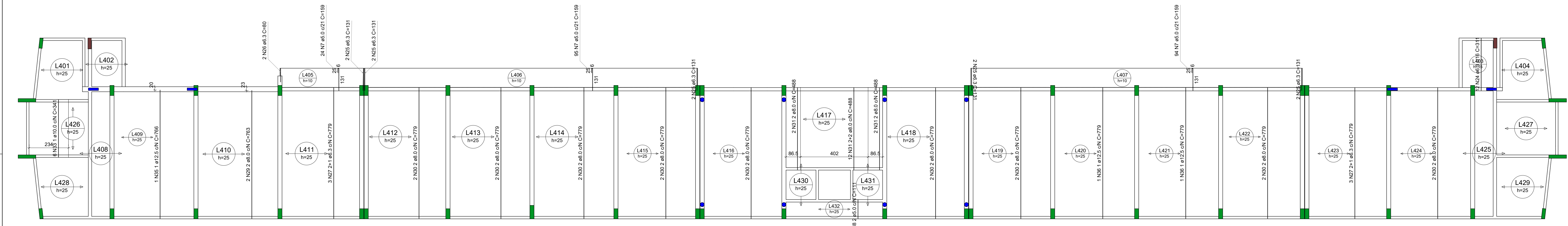
Fios de distribuição	
Fio	Armadura de distribuição
N20	11 N1 a5.0 c20 C=42
N21	7 N2 a5.0 c20 C=115
N22	7 N2 a5.0 c20 C=115
N23	10 N1 a5.0 c20 C=42
N24	10 N2 a5.0 c20 C=115
N25	10 N1 a5.0 c20 C=42

Fios de distribuição	
Fio	Armadura de distribuição
N45	11 N3 a5.0 c11 C=487
N46	12 N3 a5.0 c11 C=487
N47	13 N3 a5.0 c11 C=487
N48	16 N4 a5.0 c11 C=487
N49	16 N4 a5.0 c11 C=487
N50	16 N4 a5.0 c11 C=487
N51	16 N4 a5.0 c11 C=487
N52	16 N4 a5.0 c11 C=487
N53	16 N4 a5.0 c11 C=487
N54	16 N4 a5.0 c11 C=487
N55	16 N4 a5.0 c11 C=487
N56	16 N4 a5.0 c11 C=487
N57	16 N4 a5.0 c11 C=487
N58	16 N4 a5.0 c11 C=487
N59	16 N4 a5.0 c11 C=487
N60	16 N4 a5.0 c11 C=487
N61	16 N4 a5.0 c11 C=487
N62	16 N4 a5.0 c11 C=487
N63	16 N4 a5.0 c11 C=487
N64	16 N4 a5.0 c11 C=487
N65	16 N4 a5.0 c11 C=487
N66	16 N4 a5.0 c11 C=487
N67	16 N4 a5.0 c11 C=487
N68	16 N4 a5.0 c11 C=487
N69	16 N4 a5.0 c11 C=487
N70	16 N4 a5.0 c11 C=487
N71	16 N4 a5.0 c11 C=487
N72	16 N4 a5.0 c11 C=487
N73	16 N4 a5.0 c11 C=487
N74	16 N4 a5.0 c11 C=487
N75	16 N4 a5.0 c11 C=487
N76	16 N4 a5.0 c11 C=487
N77	16 N4 a5.0 c11 C=487
N78	16 N4 a5.0 c11 C=487
N79	16 N4 a5.0 c11 C=487
N80	16 N4 a5.0 c11 C=487
N81	16 N4 a5.0 c11 C=487
N82	16 N4 a5.0 c11 C=487
N83	16 N4 a5.0 c11 C=487
N84	16 N4 a5.0 c11 C=487
N85	16 N4 a5.0 c11 C=487
N86	16 N4 a5.0 c11 C=487
N87	16 N4 a5.0 c11 C=487
N88	16 N4 a5.0 c11 C=487
N89	16 N4 a5.0 c11 C=487
N90	16 N4 a5.0 c11 C=487
N91	16 N4 a5.0 c11 C=487
N92	16 N4 a5.0 c11 C=487
N93	16 N4 a5.0 c11 C=487
N94	16 N4 a5.0 c11 C=487
N95	16 N4 a5.0 c11 C=487
N96	16 N4 a5.0 c11 C=487
N97	16 N4 a5.0 c11 C=487
N98	16 N4 a5.0 c11 C=487
N99	16 N4 a5.0 c11 C=487
N100	16 N4 a5.0 c11 C=487

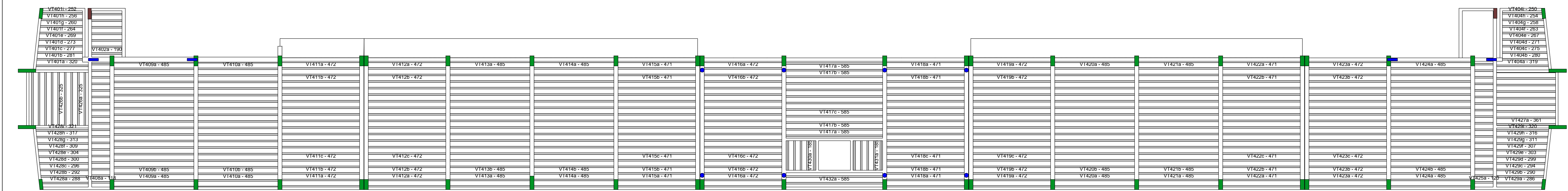
REV	DATA	EMISSÃO INICIAL	DESENHO	REVISÃO	APPROVAÇÃO	AUTORIZAÇÃO
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02	02/07/17					
03	02/07/17					
04	02/07/17					
05	02/07/17					
06	02/07/17					
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59	02/07/17					



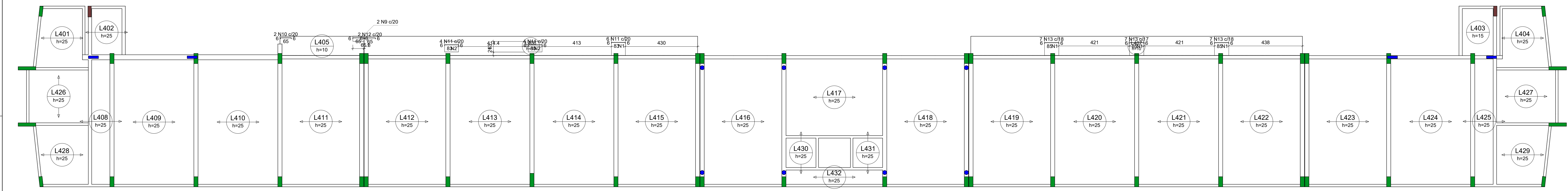
Armação positiva do 4º PAVIMENTO (Eixo X)
escala 1:100



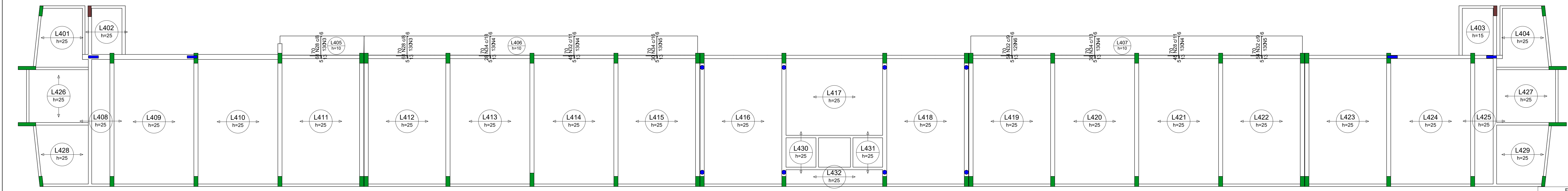
Armação positiva do 4º PAVIMENTO (Eixo Y)
escala 1:100



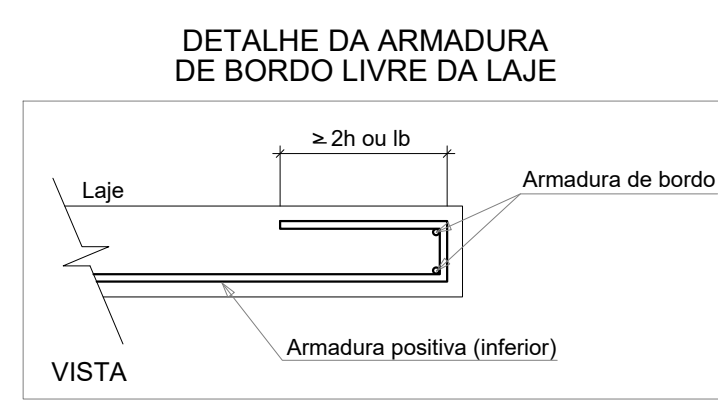
Planta de vigotas pré-moldadas
escala 1:100



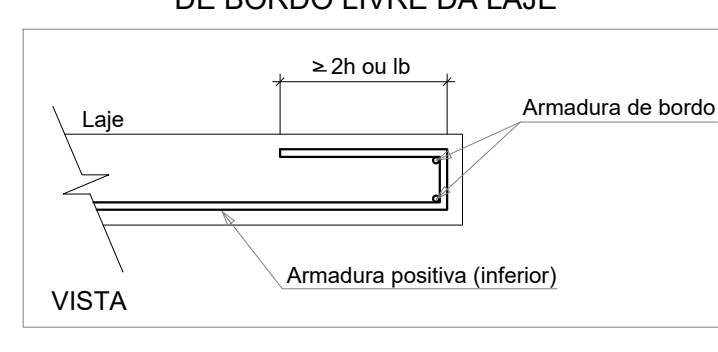
Armação negativa do 4º PAVIMENTO (Eixo X)
escala 1:100



Armação negativa do 4º PAVIMENTO (Eixo Y)
escala 1:100



DETALHE DA ARMADURA DE BORDO LIVRE DA LAJE

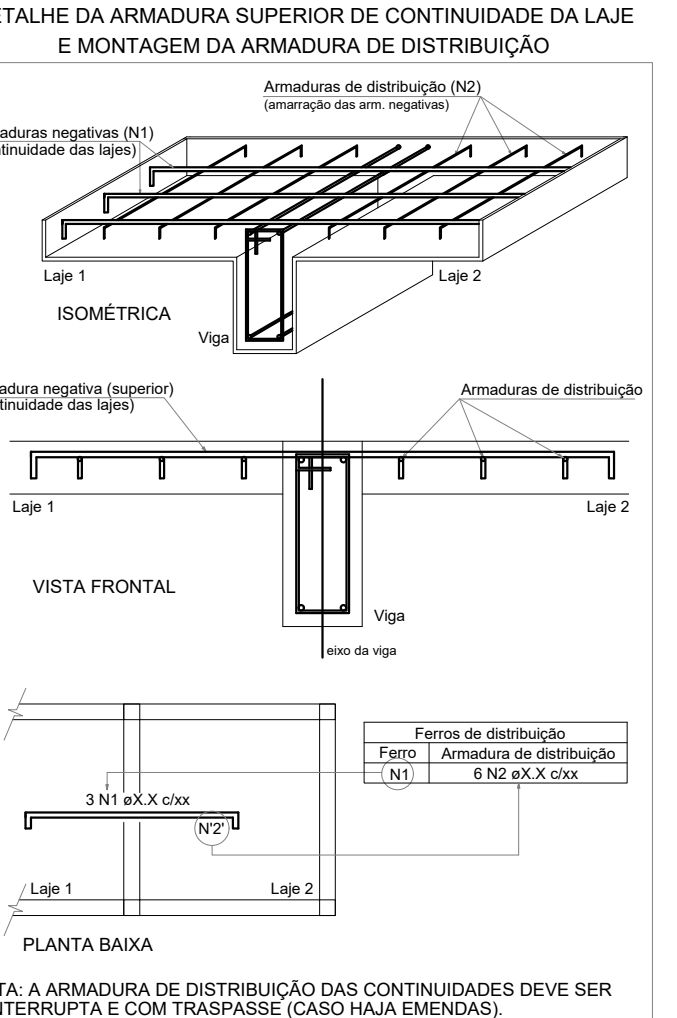


DETALHE DA ARMADURA DE BORDO LIVRE DA LAJE

RELAÇÃO DO AÇO				
AÇO	N	DIAM (mm)	QUANT	C TOTAL (cm)
CA50	1	5,0	20	115
	2	5,0	10	63
	3	5,0	18	406
	4	5,0	40	800
	5	5,0	23	488
	6	5,0	12	487
	7	5,0	213	159
	8	5,0	2	111
	9	6,3	2	74
	10	6,3	2	148
CA50	11	6,3	14	92
	12	6,3	17	220
	13	6,3	21	94
	14	6,3	17	3740
	15	6,3	11	407
	16	6,3	9	1029
	17	6,3	9	1029
	18	6,3	9	1029
	19	6,3	4	1200
	20	6,3	9	813
CA50	21	6,3	9	1023
	22	6,3	9	1024
	23	6,3	12	802
	24	6,3	10	311
	25	6,3	10	1310
	26	6,3	2	80
	27	6,3	6	779
	28	6,3	107	217
	29	6,3	2	763
	30	6,3	2	779
CA50	31	10,0	16	488
	32	10,0	153	5385
	33	10,0	6	341
	34	12,5	86	213
	35	12,5	1	708
	36	12,5	2	779
	37	12,5	2	779
	38	12,5	2	779
	39	12,5	2	779
	40	12,5	2	779

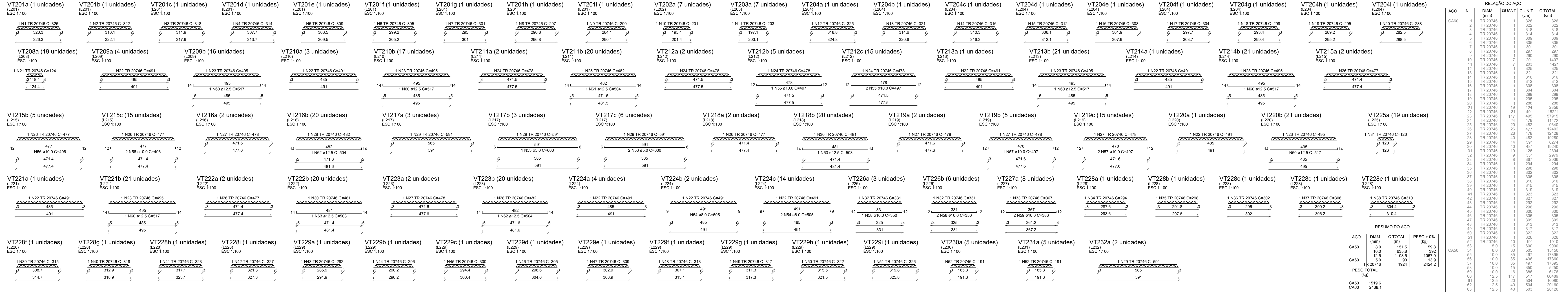
AÇO	DIAM (mm)	C TOTAL (m)	PESO + 0% (kg)
CA50	6,3	693,5	169,7
CA50	8,0	596	235,2
CA50	10,0	348,9	215,1
CA50	12,5	227,7	218,4
CA50	15,0	836,9	129
PESO TOTAL (kg)			839,3
CA50	129		

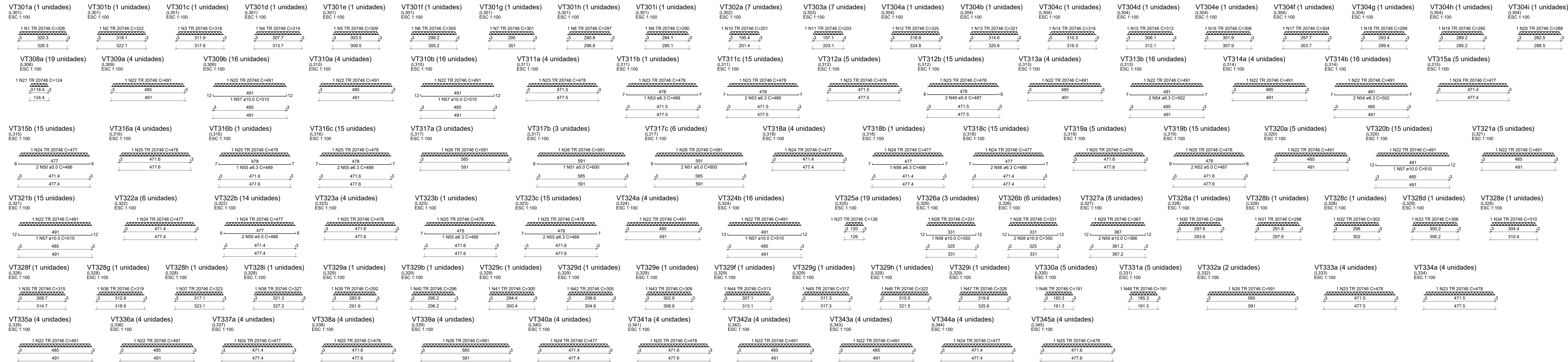
Volume de concreto (C-45) = 65,70 m³
Área de forma = 81,86 m²



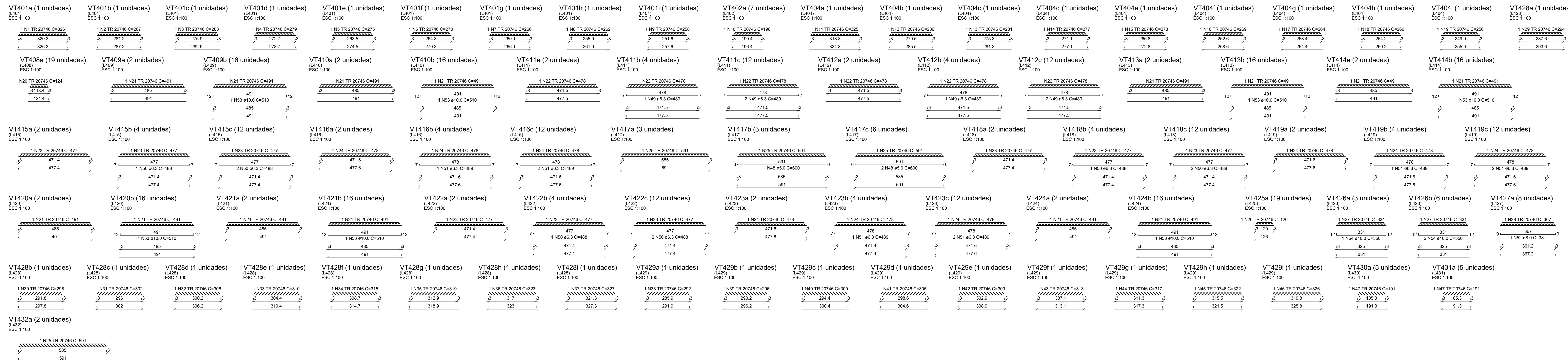
NOTA: A ARMADURA DE DISTRIBUIÇÃO DAS CONTIGUIDADES DEVE SER ININTERROMPIDA E COM TRASPASSE (CASO HAJA EMENDAS).

REV	DATA	EMISSÃO INICIAL	DESENHO	REVISÃO	APPROVAÇÃO	AUTORIZAÇÃO
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01	02/07/17					
02	02/07/17					
03	02/07/17					
04	02/07/17					
05	02/07/17					
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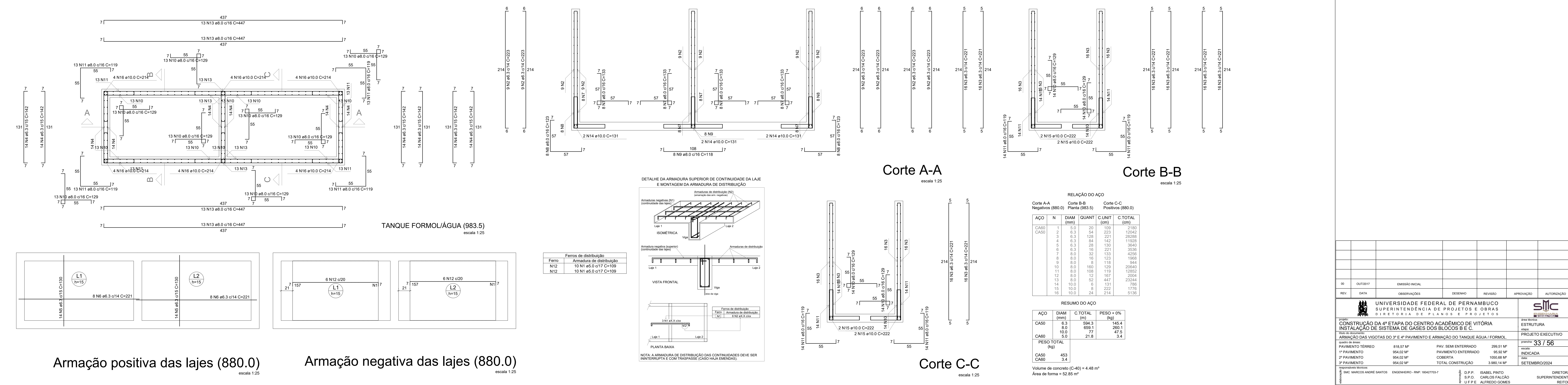




RELAÇÃO DO AÇO						
AÇO	N	DIAM (mm)	QUANT	C UNIT (cm)	C TOTAL (cm)	
CA50	1	TR 20746	3	326	326	
	2	TR 20746	1	322	322	
	3	TR 20746	4	316	316	
	4	TR 20746	1	314	314	
	5	TR 20746	1	305	305	
	6	TR 20746	1	305	305	
	7	TR 20746	1	297	297	
	8	TR 20746	1	297	297	
	9	TR 20746	7	201	1407	
	10	TR 20746	1	203	203	
	11	TR 20746	1	325	325	
	12	TR 20746	1	325	325	
	13	TR 20746	1	316	316	
	14	TR 20746	1	316	316	
	15	TR 20746	1	306	306	
	16	TR 20746	1	306	306	
	17	TR 20746	1	299	299	
	18	TR 20746	1	299	299	
	19	TR 20746	1	295	295	
	20	TR 20746	1	295	295	
CA50	21	TR 20746	15	234	234	
	22	TR 20746	156	491	70596	
	23	TR 20746	48	478	22944	
	24	TR 20746	72	477	34416	
	25	TR 20746	18	591	10638	
	26	TR 20746	1	306	306	
	27	TR 20746	9	331	2979	
	28	TR 20746	1	294	294	
	29	TR 20746	1	294	294	
	30	TR 20746	1	310	310	
	31	TR 20746	1	310	310	
	32	TR 20746	1	302	302	
	33	TR 20746	1	302	302	
	34	TR 20746	1	310	310	
	35	TR 20746	1	310	310	
	36	TR 20746	1	319	319	
	37	TR 20746	1	327	327	
	38	TR 20746	1	327	327	
	39	TR 20746	1	300	300	
CA50	40	TR 20746	1	206	206	
	41	TR 20746	1	305	305	
	42	TR 20746	1	305	305	
	43	TR 20746	1	317	317	
	44	TR 20746	1	313	313	
	45	TR 20746	1	317	317	
	46	TR 20746	1	322	322	
	47	TR 20746	1	467	14610	
	48	TR 20746	10	191	1910	
	49	TR 20746	5	50	250	
	50	TR 20746	5	58	290	
	51	TR 20746	5	64	320	
	52	TR 20746	5	64	320	
	53	TR 20746	5	64	320	
	54	TR 20746	5	64	320	
	55	TR 20746	5	64	320	
	56	TR 20746	5	64	320	
	57	TR 20746	5	64	320	
	58	TR 20746	5	64	320	
	59	TR 20746	5	64	320	
RESUMO DO AÇO						
AÇO	DIAM (mm)	C TOTAL	PESO + 0% (kg)			
CA50	6.3	507.3	226.9			
CA60	10.0	512.1	315.7			
CA60	5.0	664.1	102.4			
TR 20746			2064.7			
PESO TOTAL (kg)						
CA50			542.6			
CA60			2691.2			



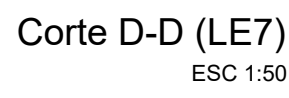
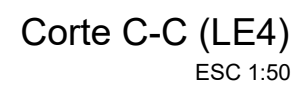
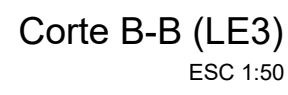
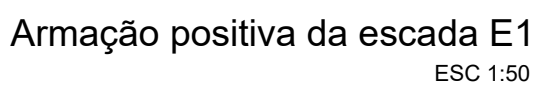
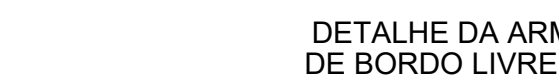
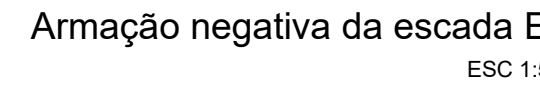
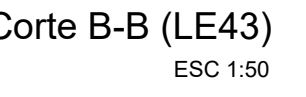
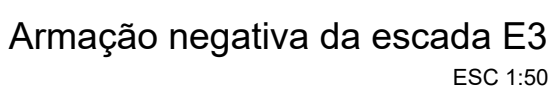
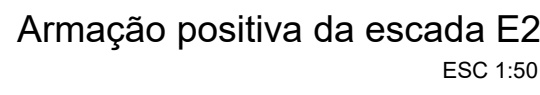
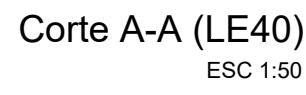
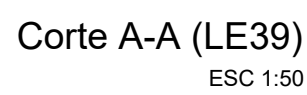
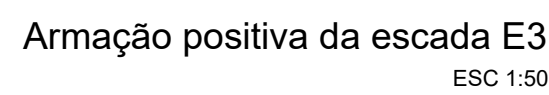
RELAÇÃO DO AÇO						
AÇO	N	DIAM (mm)	QUANT	C UNIT (cm)	C TOTAL (cm)	
CA50	1	TR 20746	1	326	326	
	2	TR 20746	1	326	326	
	3	TR 20746	1	293	293	
	4	TR 20746	1	276	276	
	5	TR 20746	1	276	276	
	6	TR 20746	1	276	276	
	7	TR 20746	1	286	286	
	8	TR 20746	1	286	286	
	9	TR 20746	1	258	258	
	10	TR 20746	1	258	258	
	11	TR 20746	1	196	196	
	12	TR 20746	1	325	325	
	13	TR 20746	1	281	281	
	14	TR 20746	1	277	277	
	15	TR 20746	1	273	273	
	16	TR 20746	1	269	269	
	17	TR 20746	1	264	264	
	18	TR 20746	1	269	269	
	19	TR 20746	1	256	256	
	20	TR 20746	10	154	1540	
CA50	21	TR 20746	126	491	61886	
	22	TR 20746	367	238	87246	
	23	TR 20746	54	477	25758	
	24	TR 20746	54	478	25812	
	25	TR 20746	14	591	8274	
	26	TR 20746	10	126	1260	
	27	TR 20746	9	331	2979	
	28	TR 20746	1	294	294	
	29	TR 20746	1	294	294	
	30	TR 20746	1	302	302	
	31	TR 20746	1	302	302	
	32	TR 20746	1	310	310	
	33	TR 20746	1	310	310	
	34	TR 20746	1	319	319	
	35	TR 20746	1	327	327	
	36	TR 20746	1	327	327	
	37	TR 20746	1	300	300	
	38	TR 20746	1	206	206	
	39	TR 20746	1	305	305	
CA50	40	TR 20746	1	305	305	
	41	TR 20746	1	317	317	
	42	TR 20746	1	313	313	
	43	TR 20746	1	317	317	
	44	TR 20746	1	322	322	
	45	TR 20746	1	326	326	
	46	TR 20746	10	191	1910	
	47	TR 20746	5	50	250	
	48	TR 20746	5	58	290	
	49	TR 20746	5	64	320	
	50	TR 20746	5	64	320	
	51	TR 20746	5	64	320	
	52	TR 20746	5	64	320	
	53	TR 20746	5	64	320	
	54	TR 20746	5	64	320	
	55	TR 20746	5	64	320	
	56	TR 20746	5	64	320	
	57	TR 20746	5	64	320	
	58	TR 20746	5	64	320	
RESUMO DO AÇO						
AÇO	DIAM (mm)	C TOTAL	PESO + 0% (kg)			
CA50	6.3	1064.5	267.8			
CA60	8.0	90.5	12			
CA60	10.0	623.7	384.5			
CA60	5.0	99	13.9			
TR 20746			1634.4			
PESO TOTAL (kg)						
CA50			664.4			
CA60			2073.2			

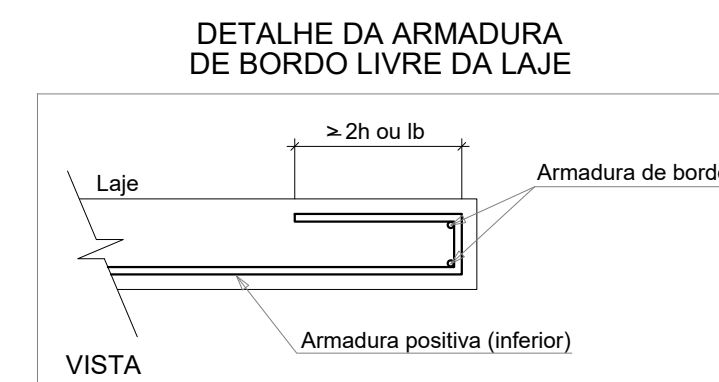
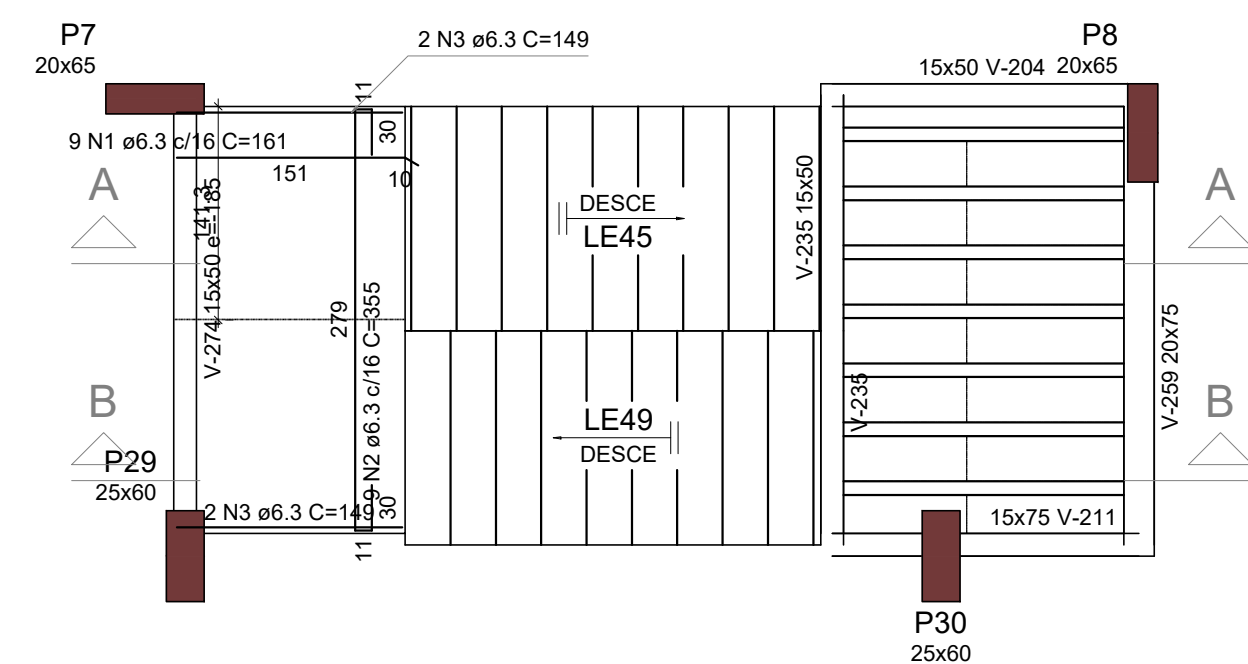
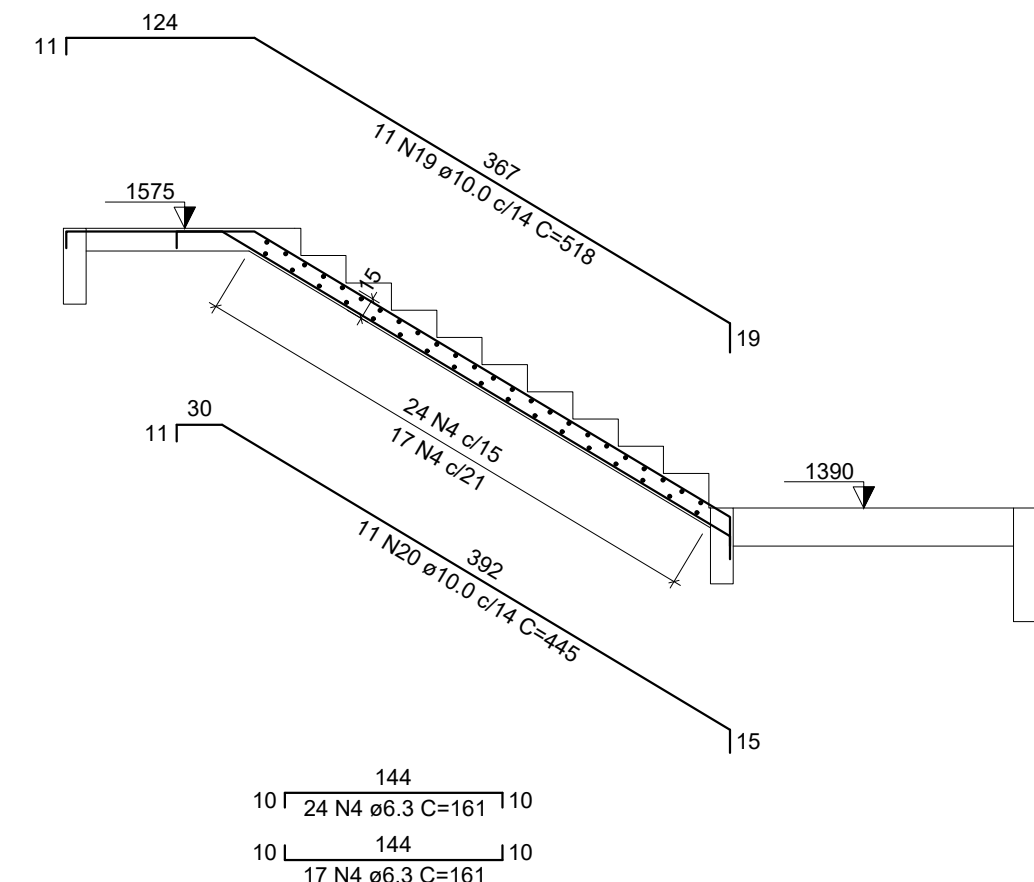
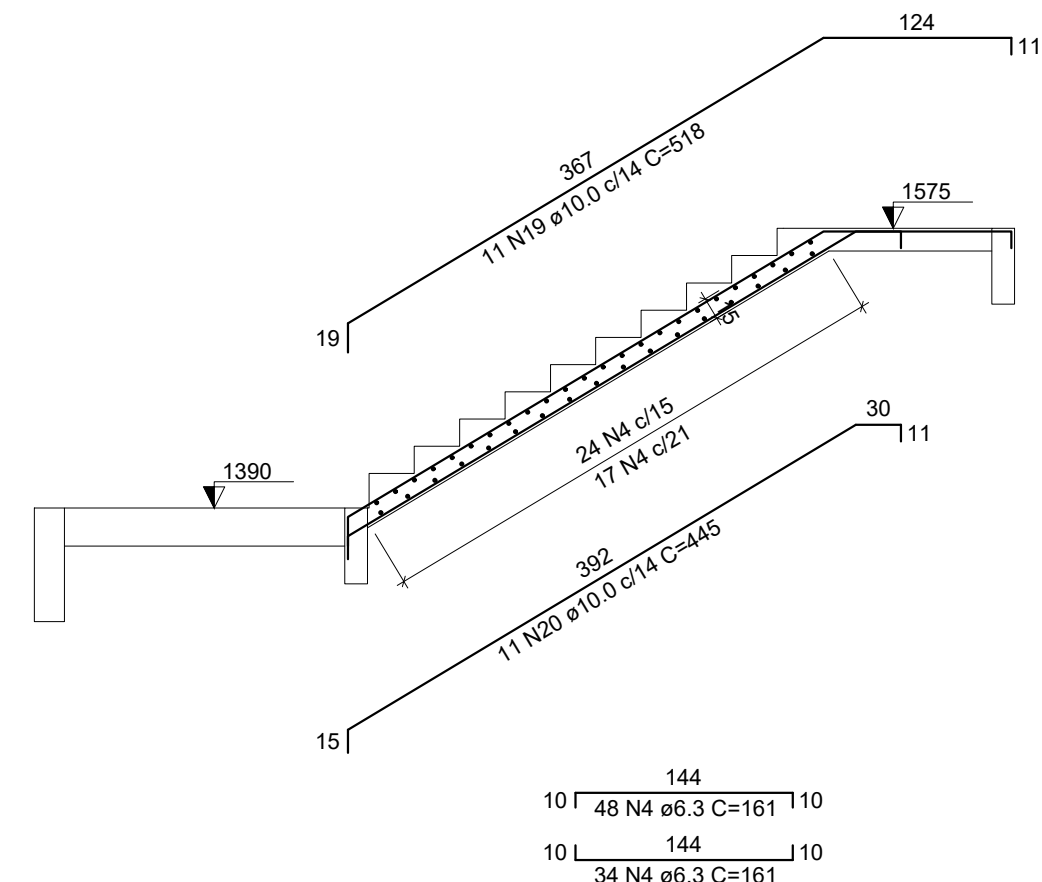
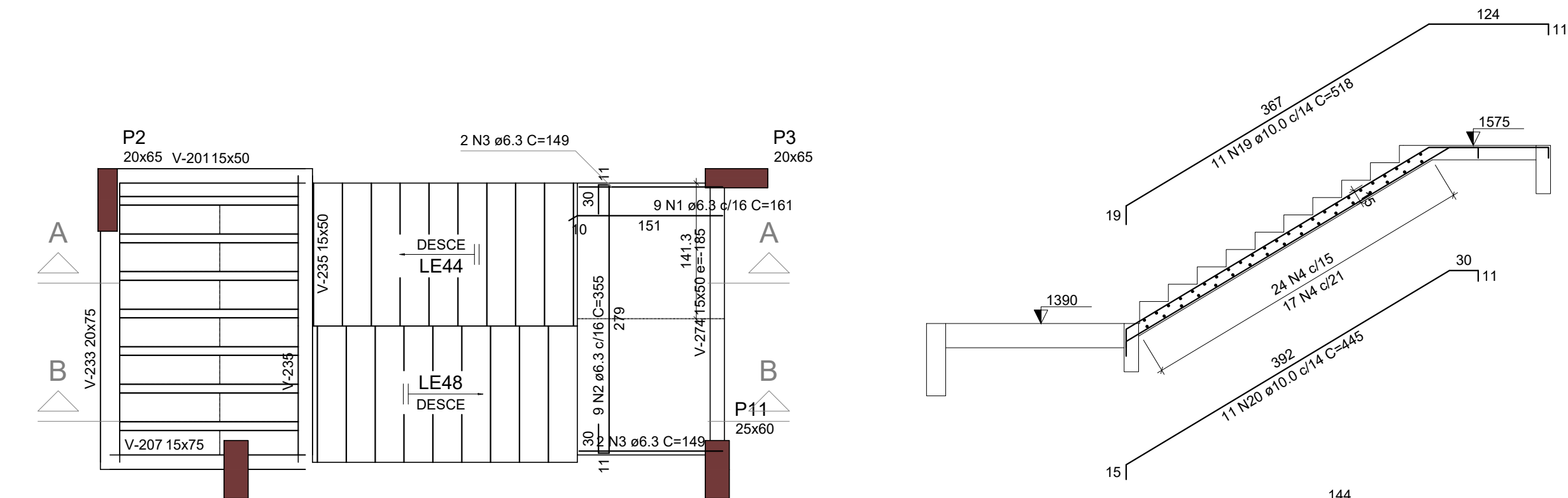


RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	8,3	544,8	133,3
	8,0	176,4	69,6
	10,0	117,9	72,7
	12,5	229,9	221,5
	16,0	182,9	288,6
PESO TOTAL (kg)			
CA50		785,7	

Volume de concreto (j) = 0,00 m³
 Volume de concreto (C-45) = 8,93 m³
 Área de forma = 71,17 m²

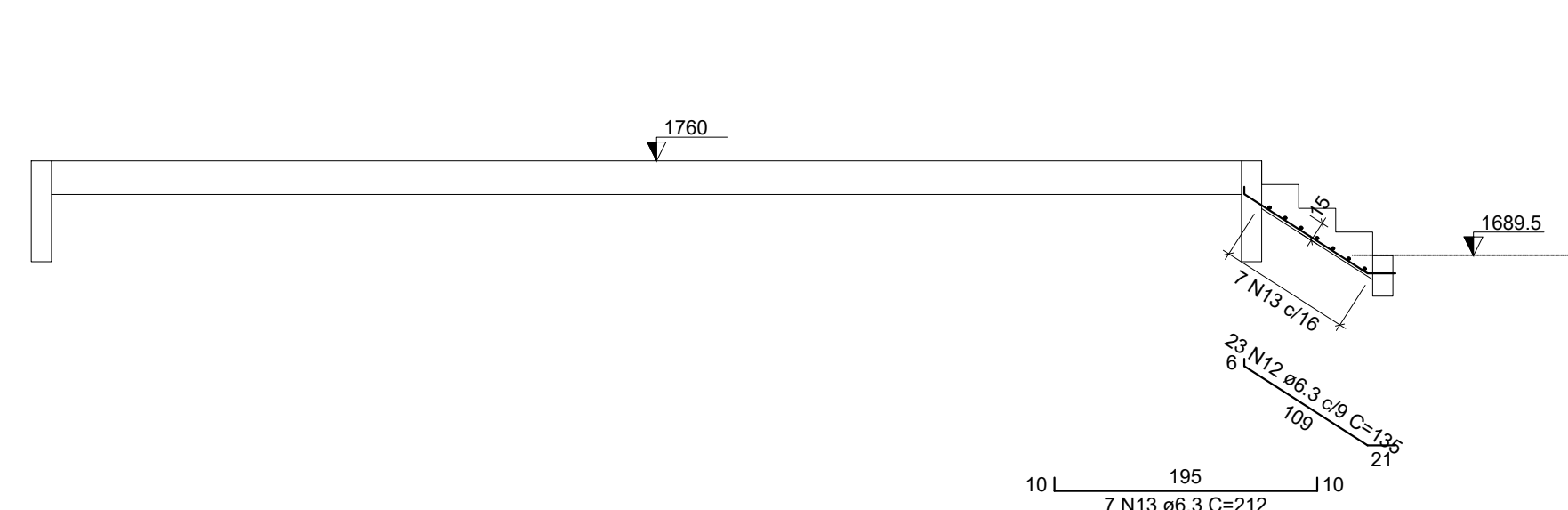
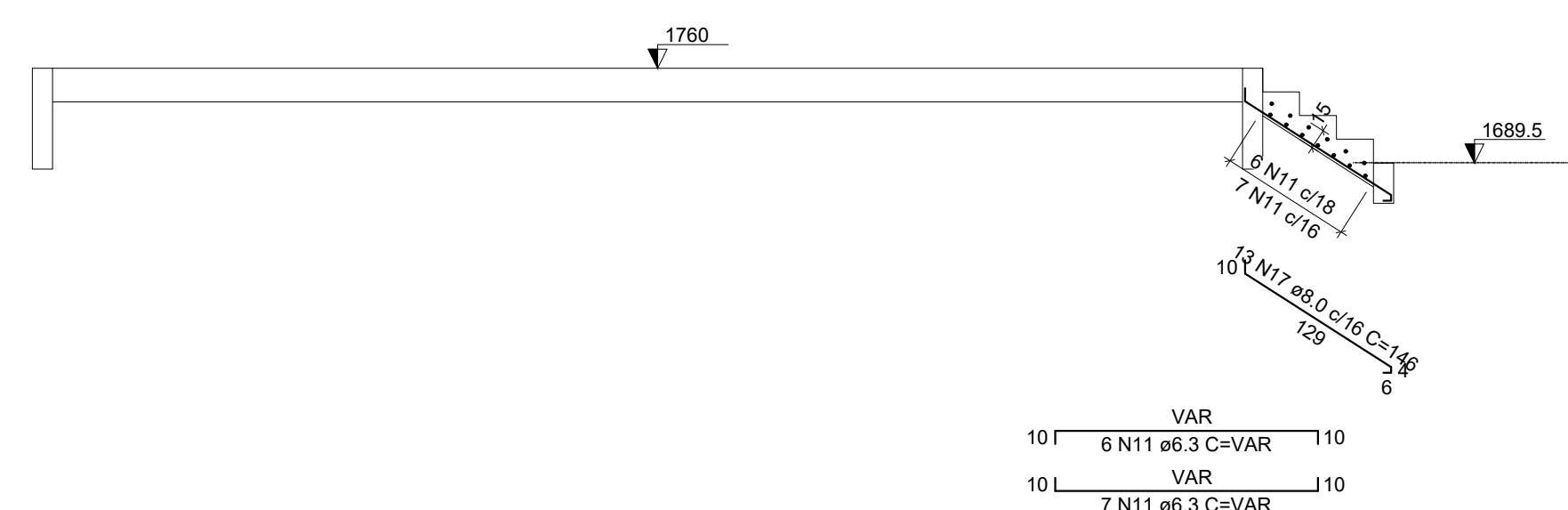
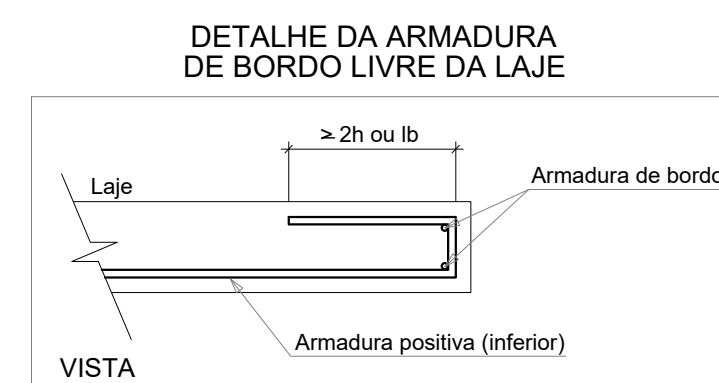
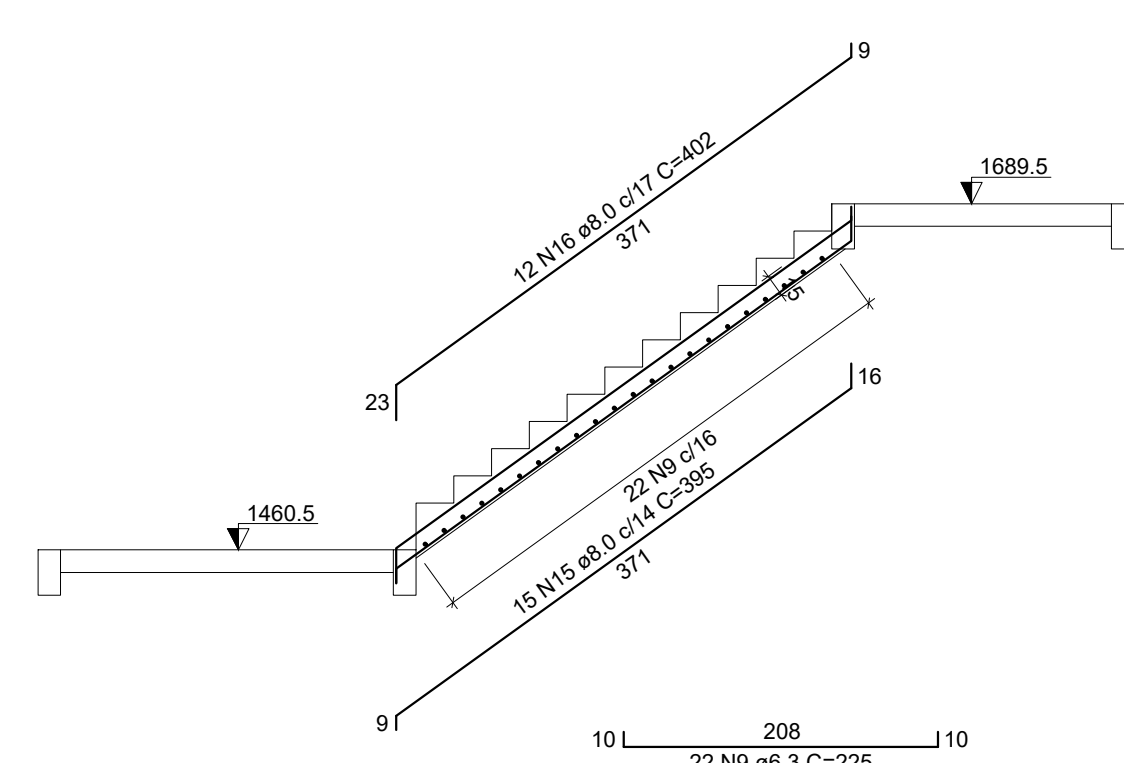
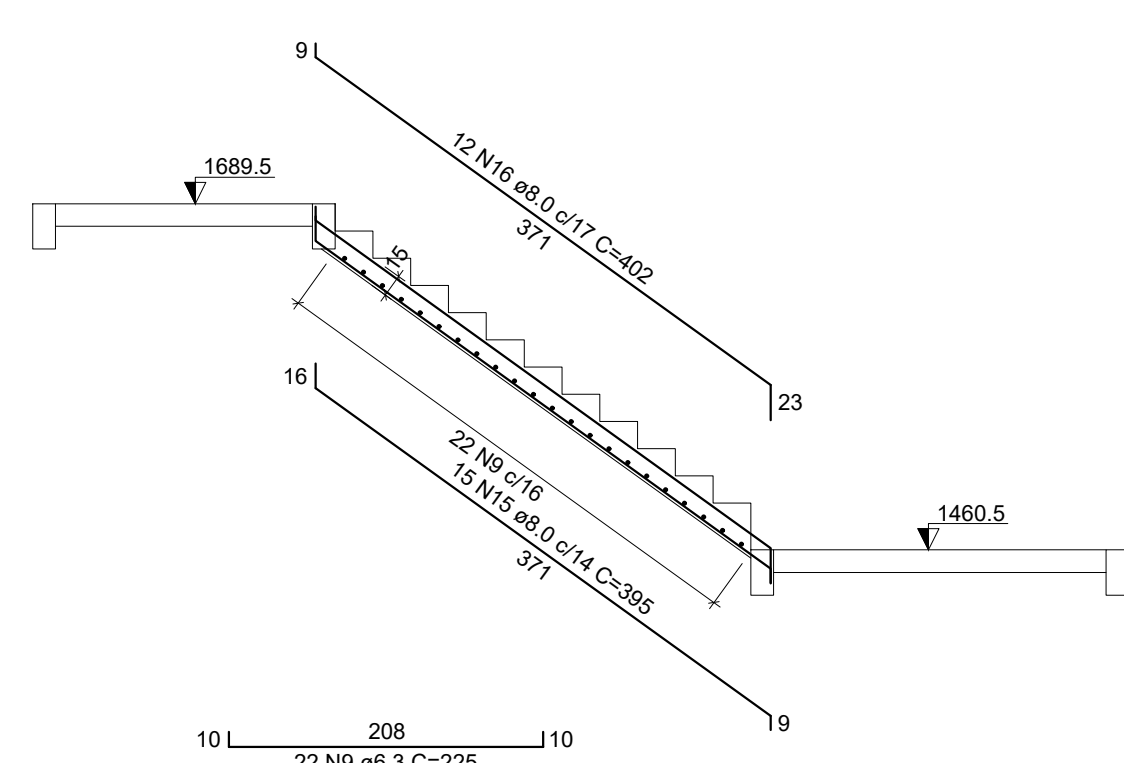
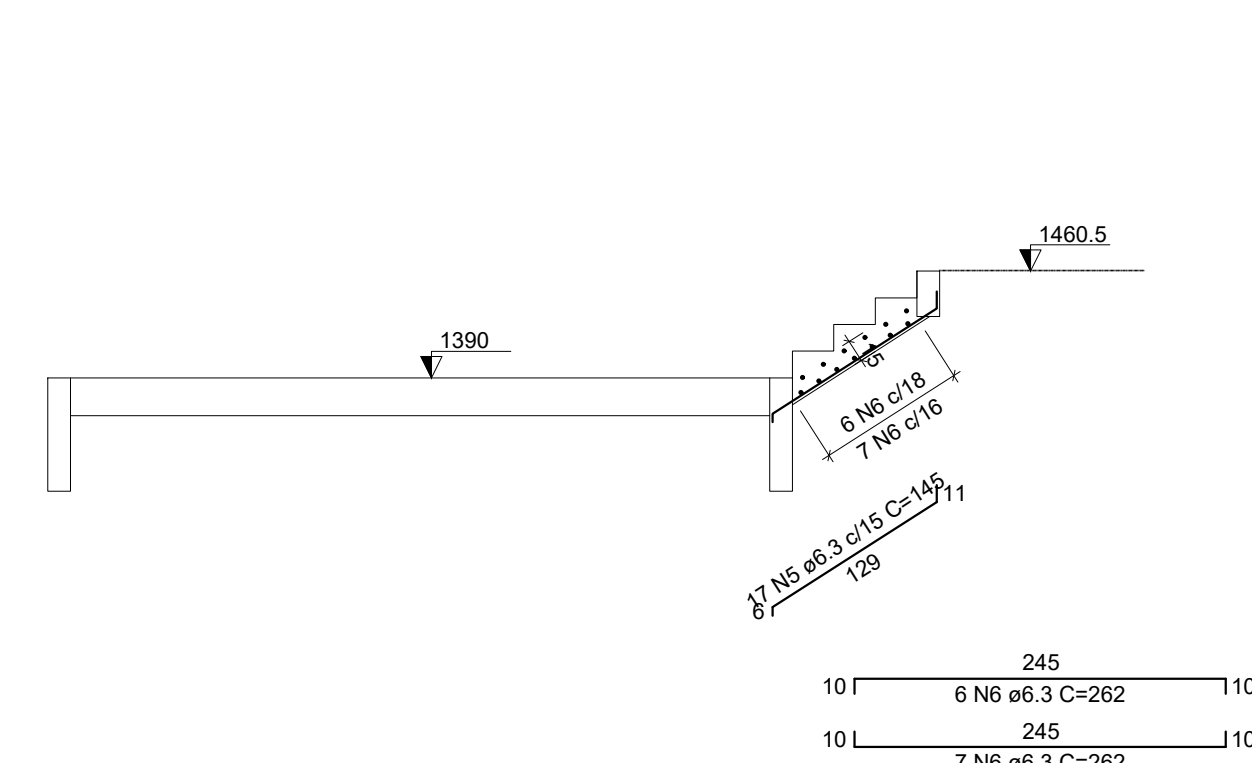
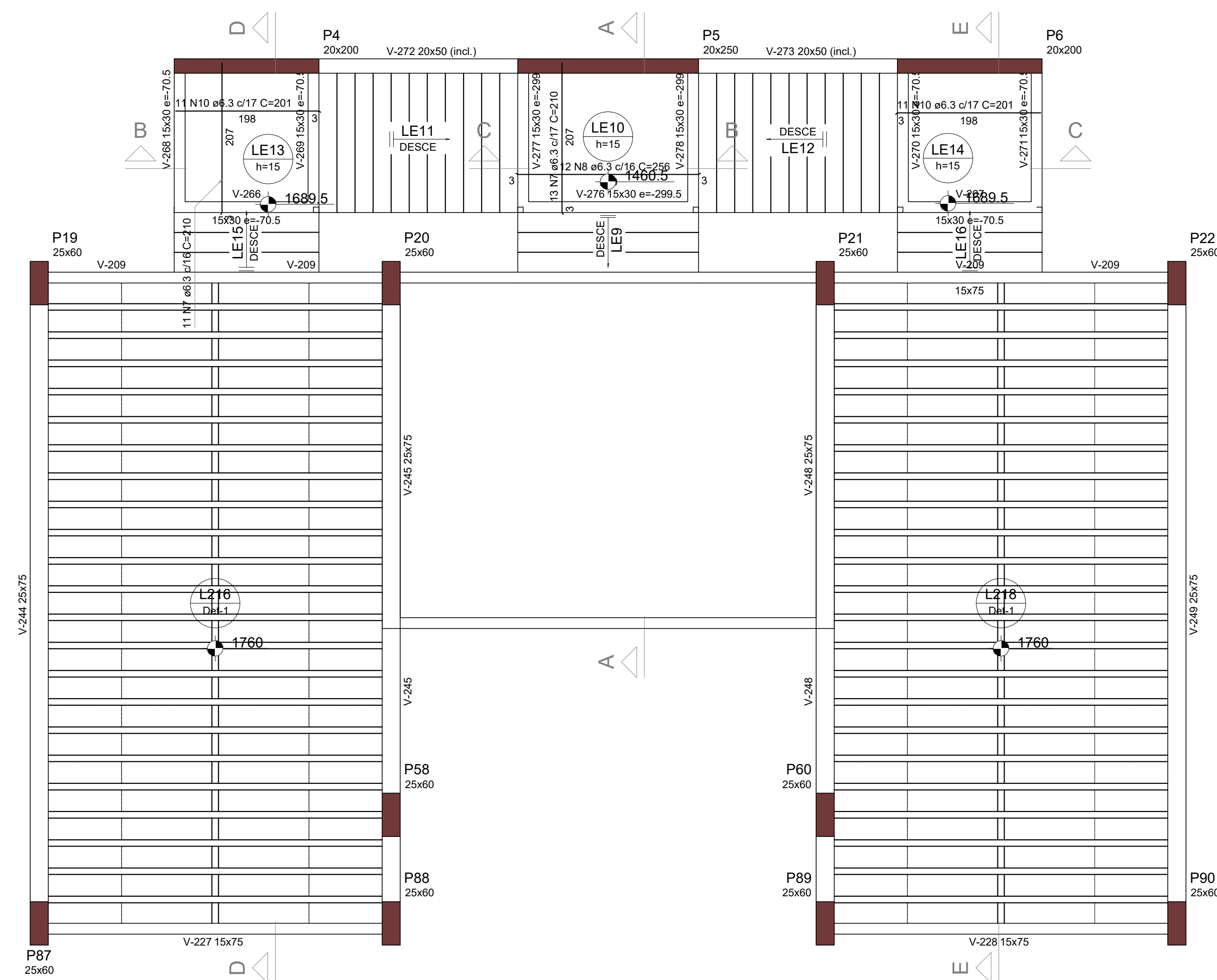
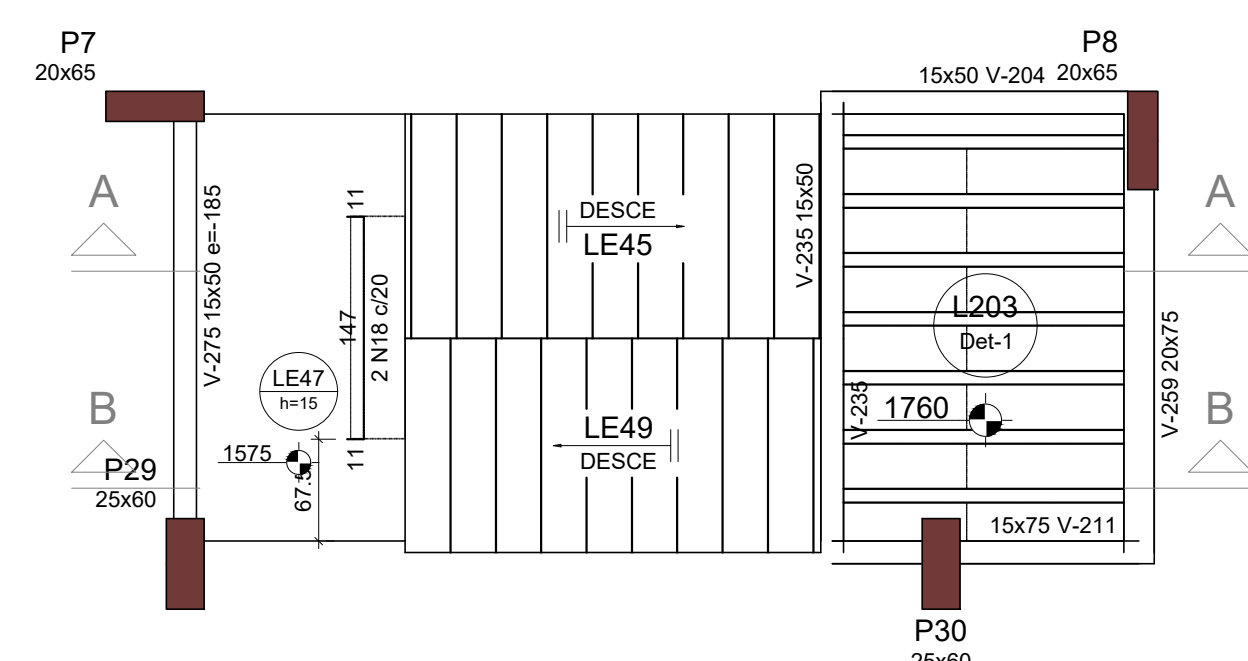
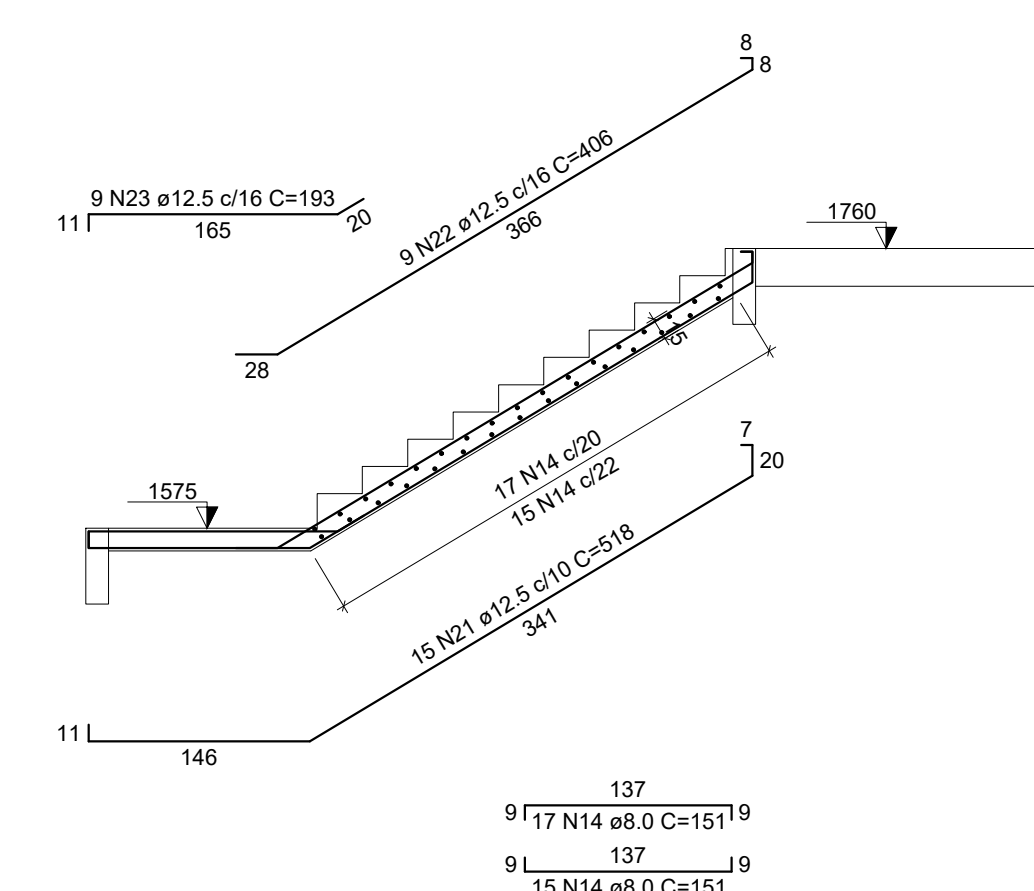
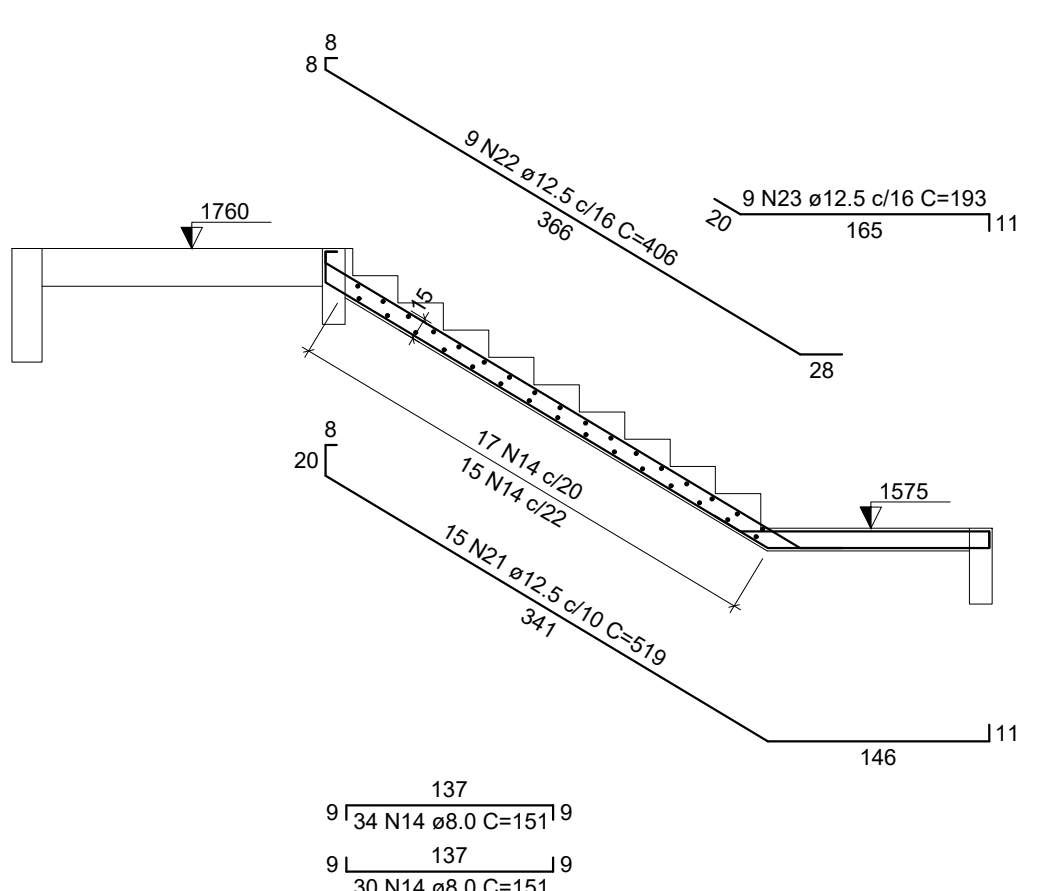
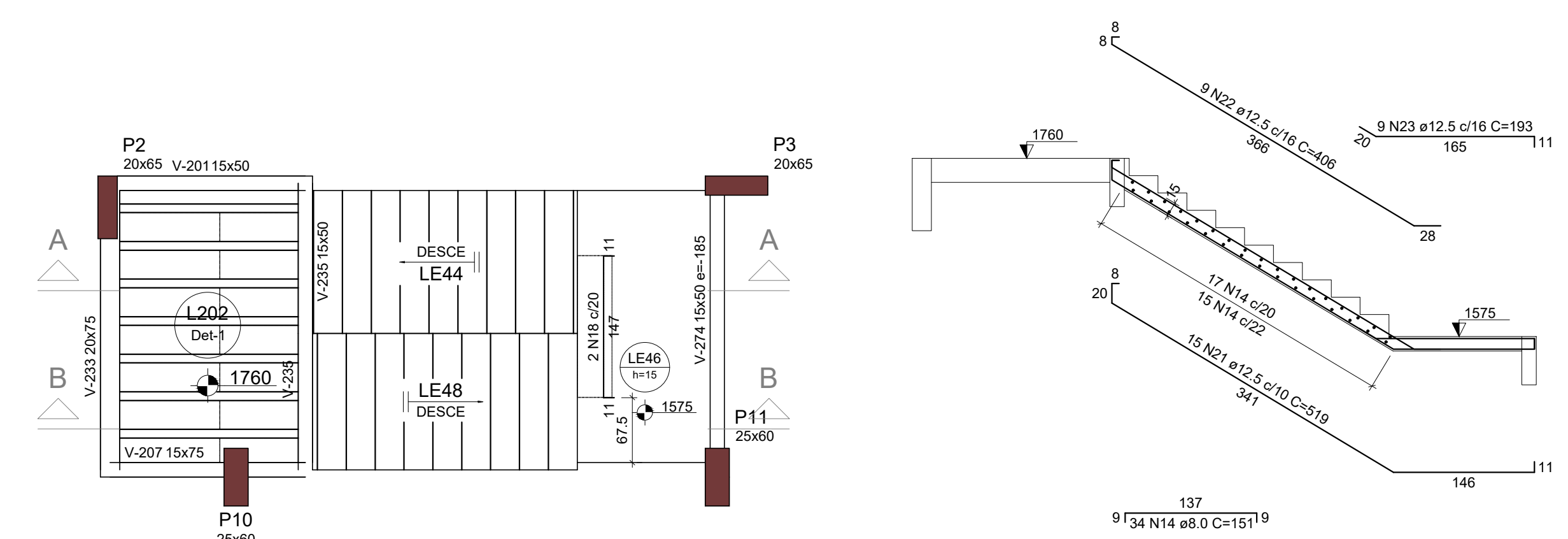
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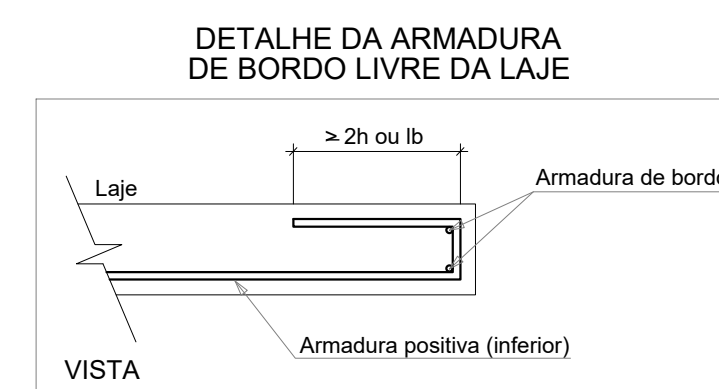
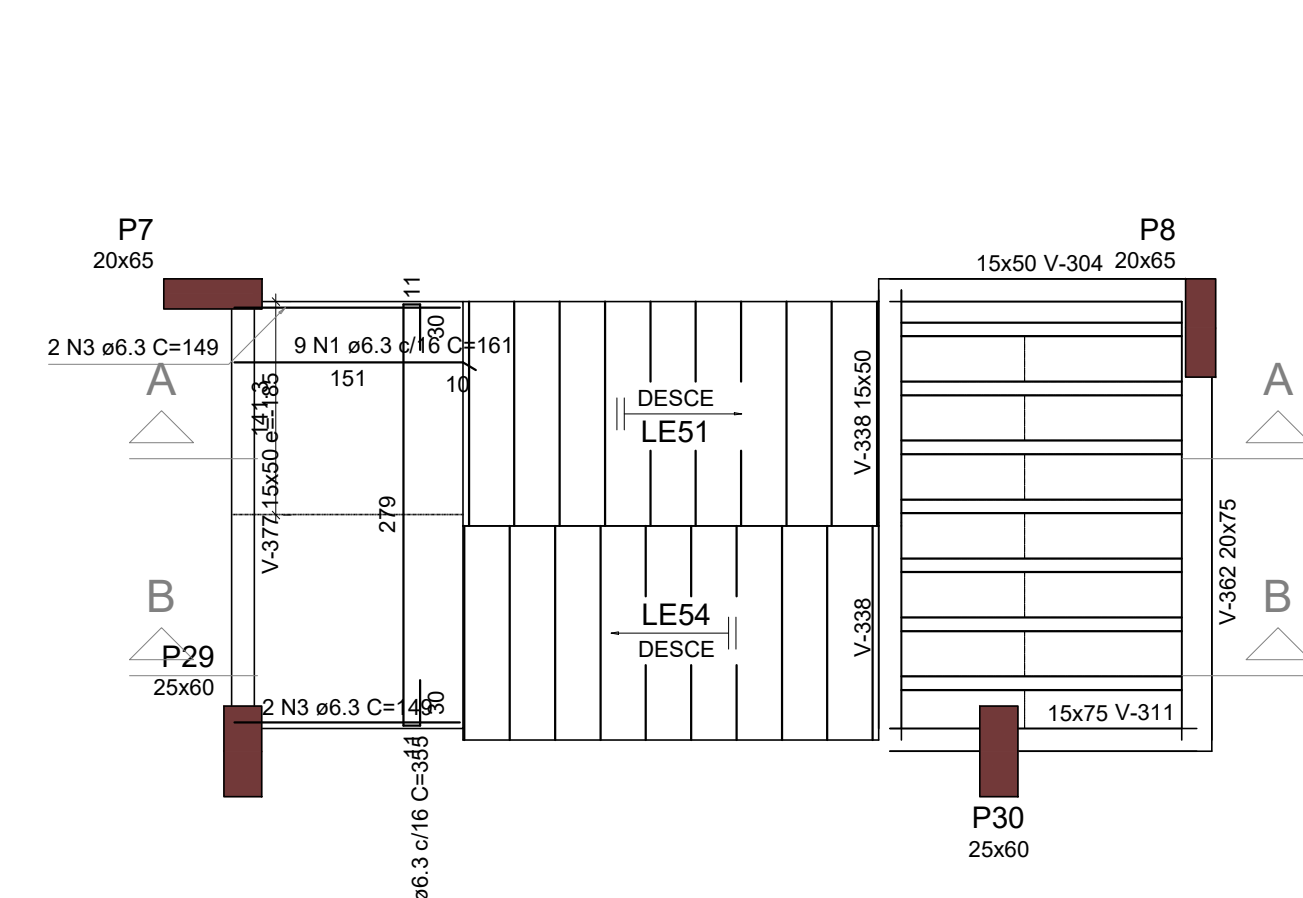
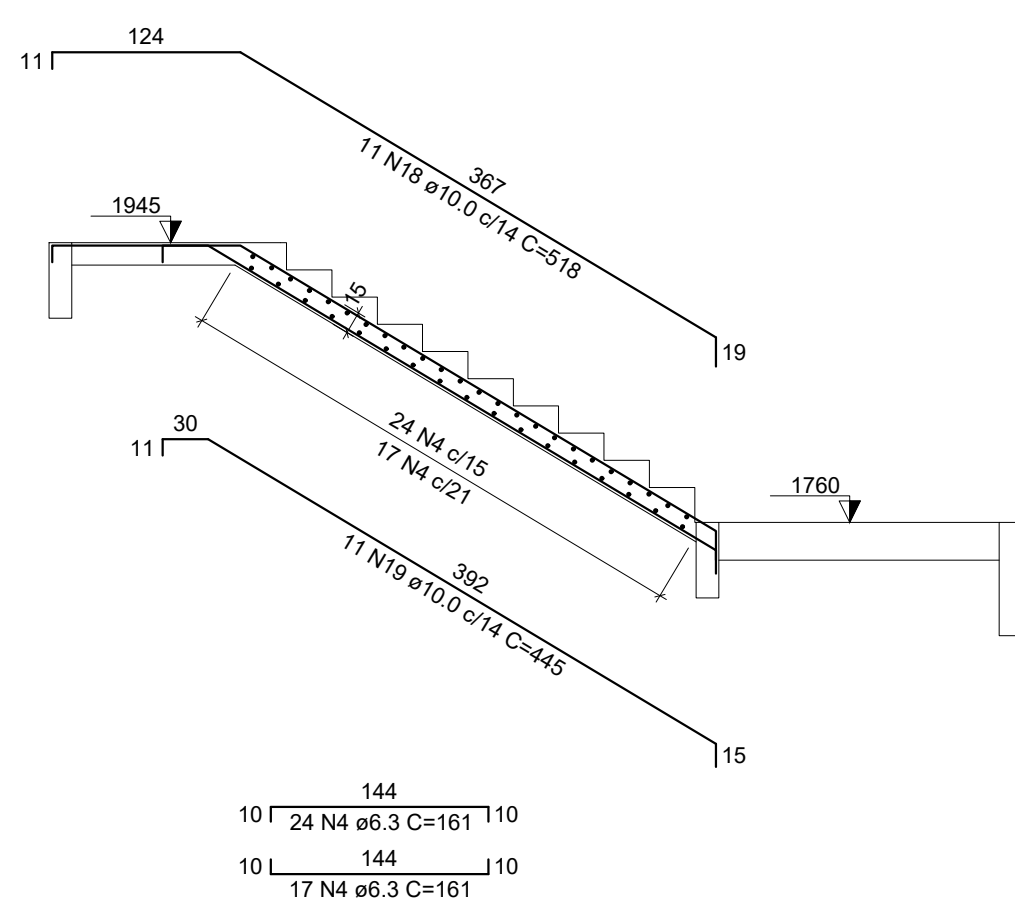
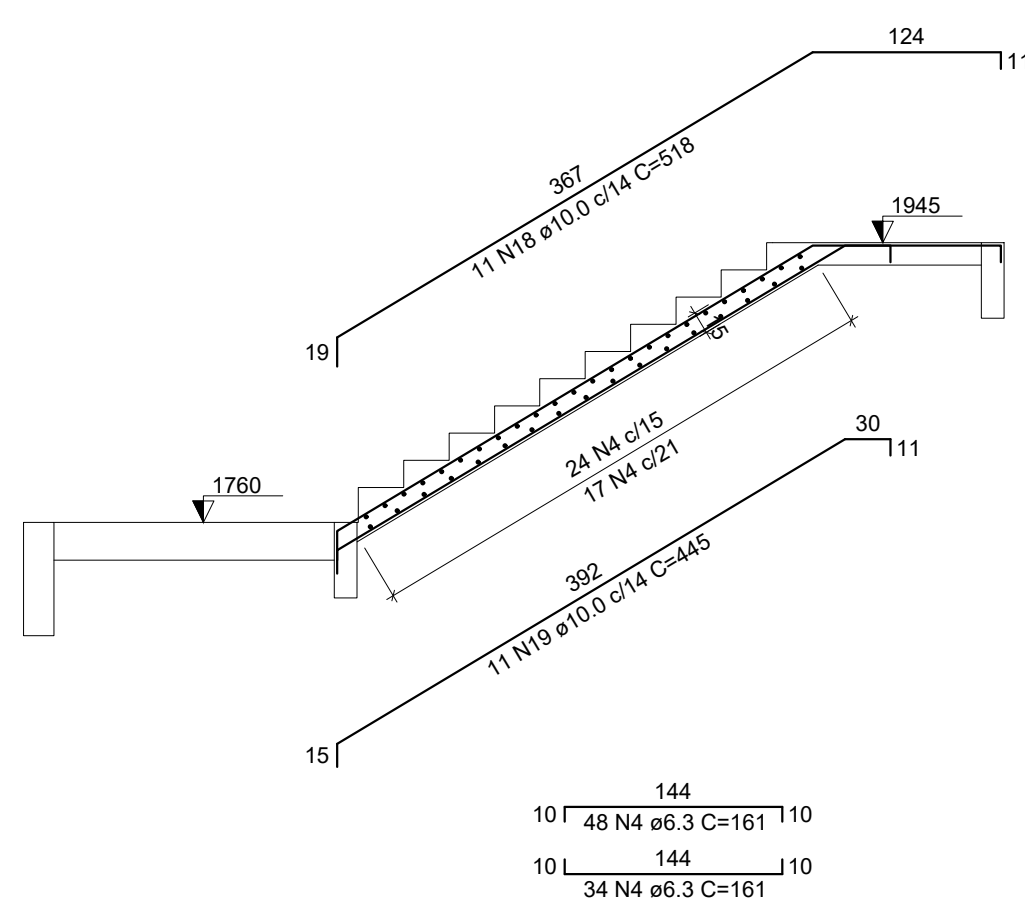
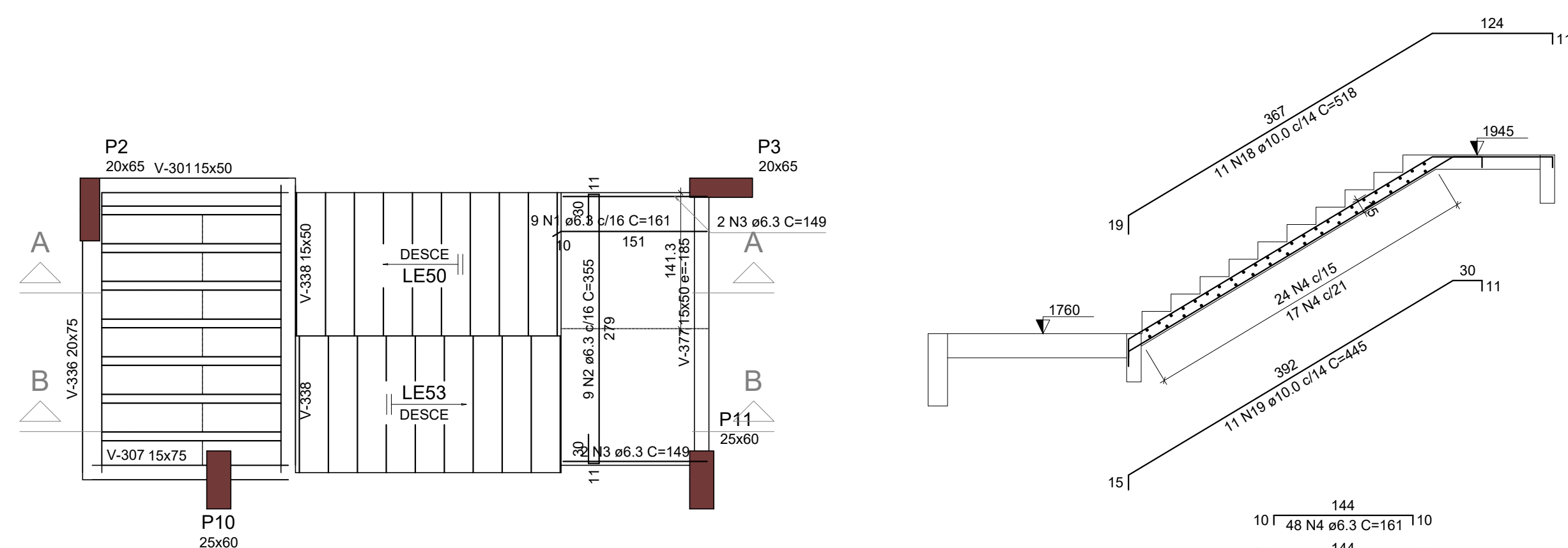


RELACÃO DO AÇO						
E3	LE9	LE10				
LE11	LE12	LE13				
LE14	LE15	LE16				
AÇO	N	DIAM (mm)	QUANT	C.LIMIT (mm)	C.TOTAL (mm)	
CASO 1	1	6.3	18	161	2898	
	2	6.3	18	355	6390	
	3	6.3	8	149	1192	
	4	6.3	123	181	19803	
	5	6.3	17	145	2465	
	6	6.3	13	262	3046	
	7	6.3	24	210	5040	
	8	6.3	12	256	3072	
	9	6.3	44	225	9000	
	10	6.3	30	422	2010	
	11	6.3	13	VAR	VAR	
	12	6.3	23	135	3105	
	13	6.3	7	212	1484	
	14	8.0	96	151	14496	
	15	8.0	39	1130	3051	
	16	8.0	24	402	9648	
	17	8.0	13	146	1898	
	18	10.0	4	164	656	
	19	10.0	22	518	11396	
	20	10.0	42	979	22224	
	21	12.5	30	518	15504	
	22	12.5	18	406	7038	
	23	12.5	3	193	3474	

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	6.3	659.3	161.3
	8.0	378.9	149.5
	10.0	218.4	134.7
	12.5	263.4	253.7
PESO TOTAL (kg)			
CA50	699.2		

Volume de concreto (I) = 0.00 m³
 Volume de concreto (C-45) = 8.93 m³
 Área de forma = 71.15 m²

[illegible]

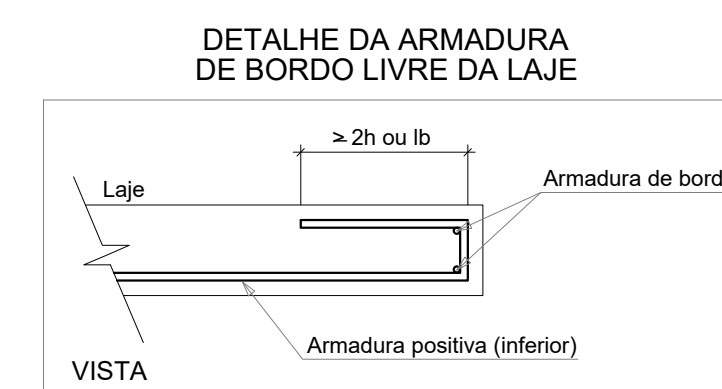
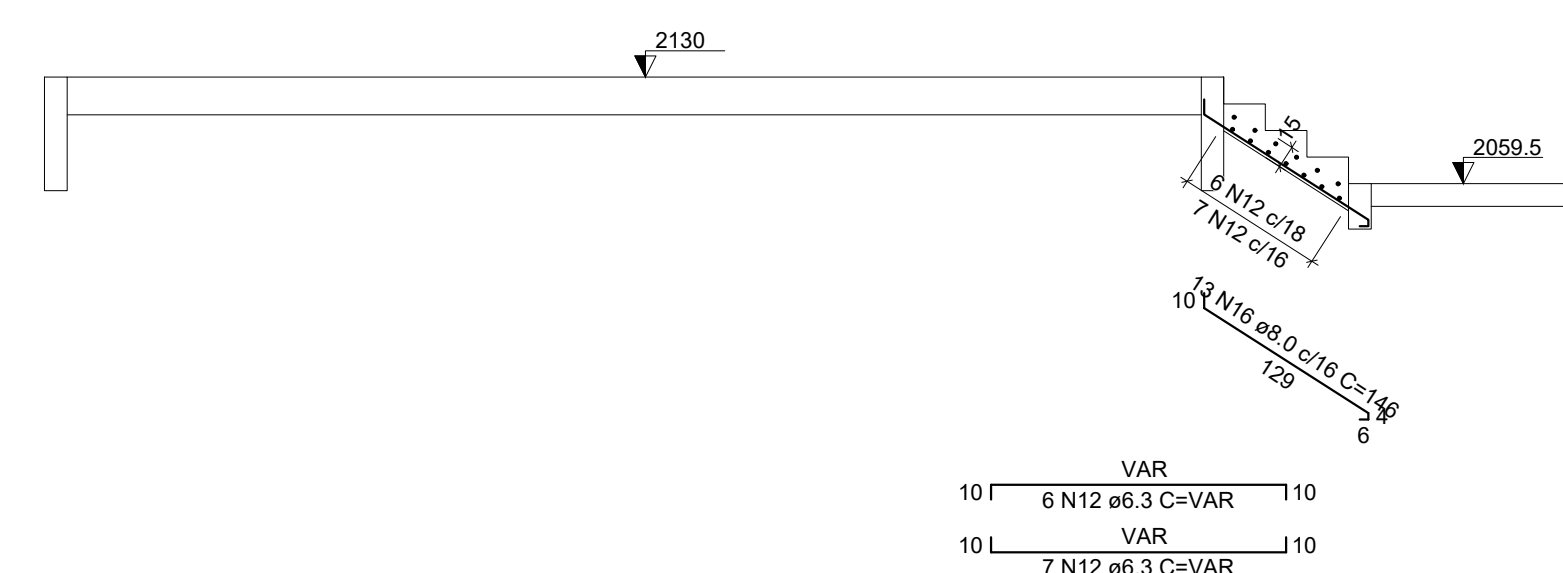
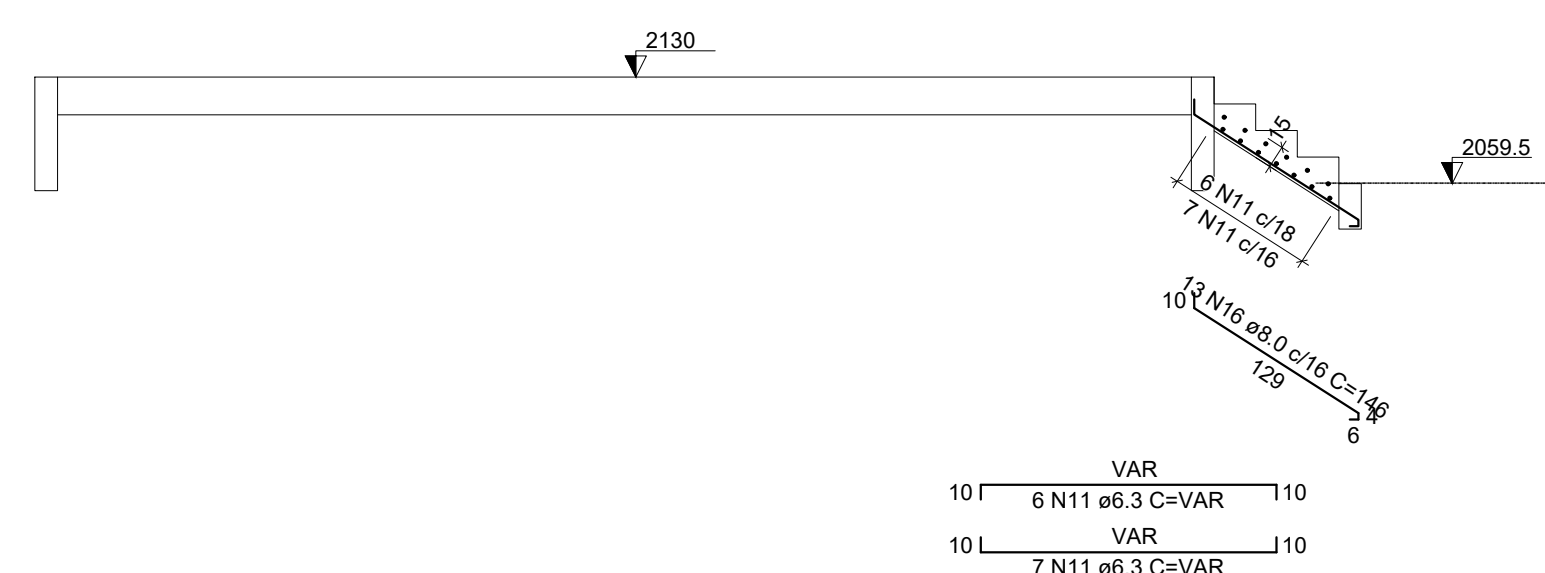
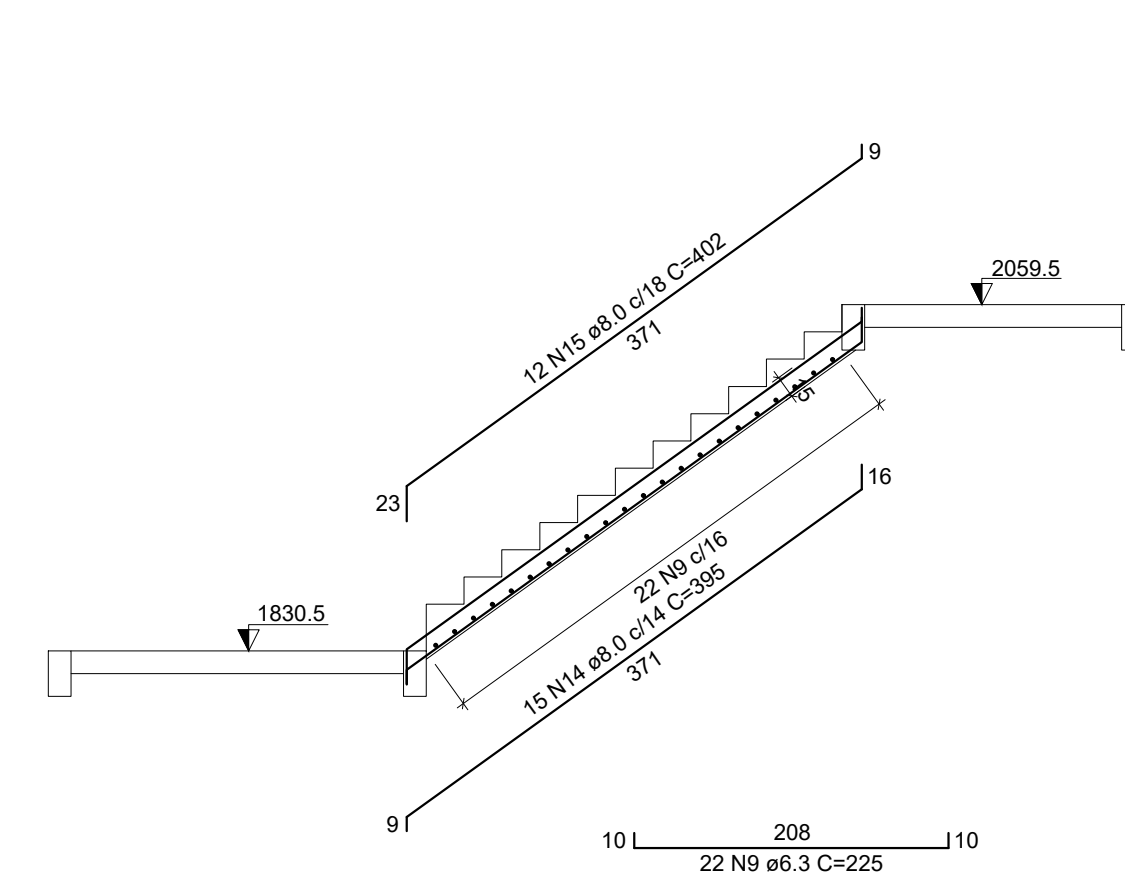
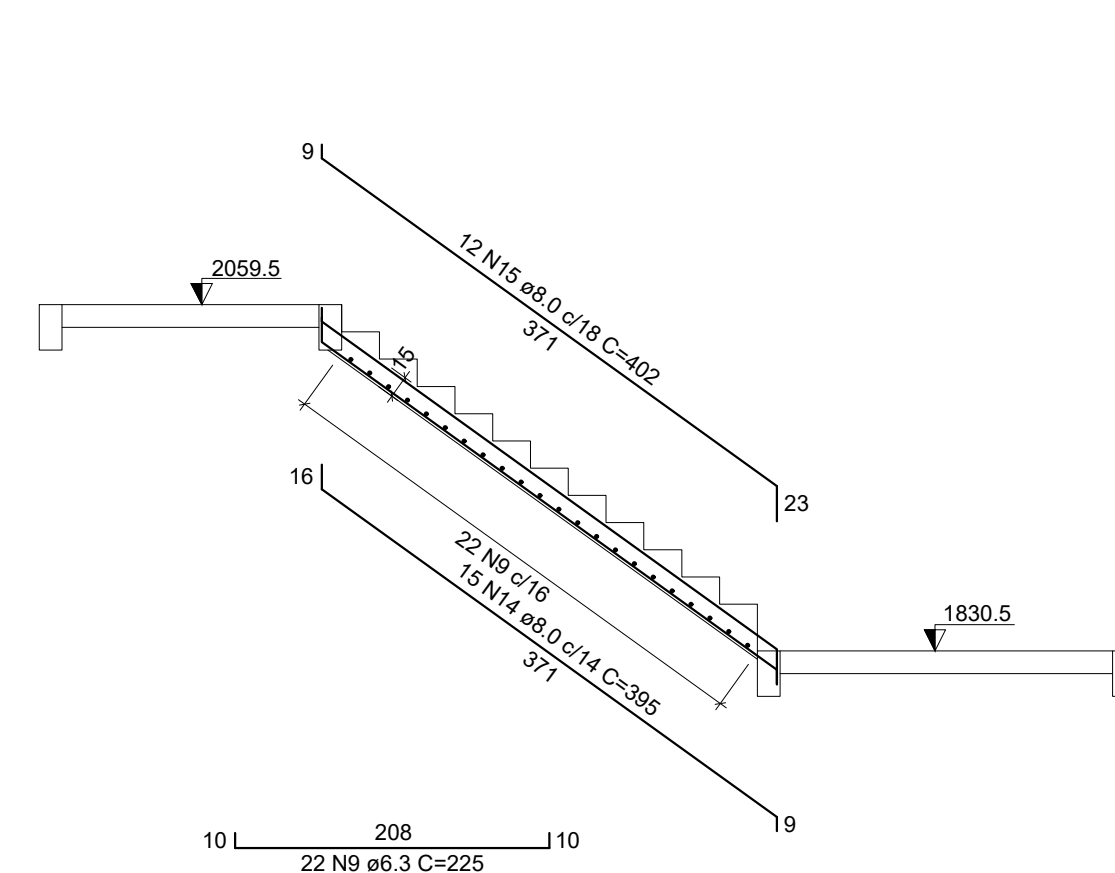
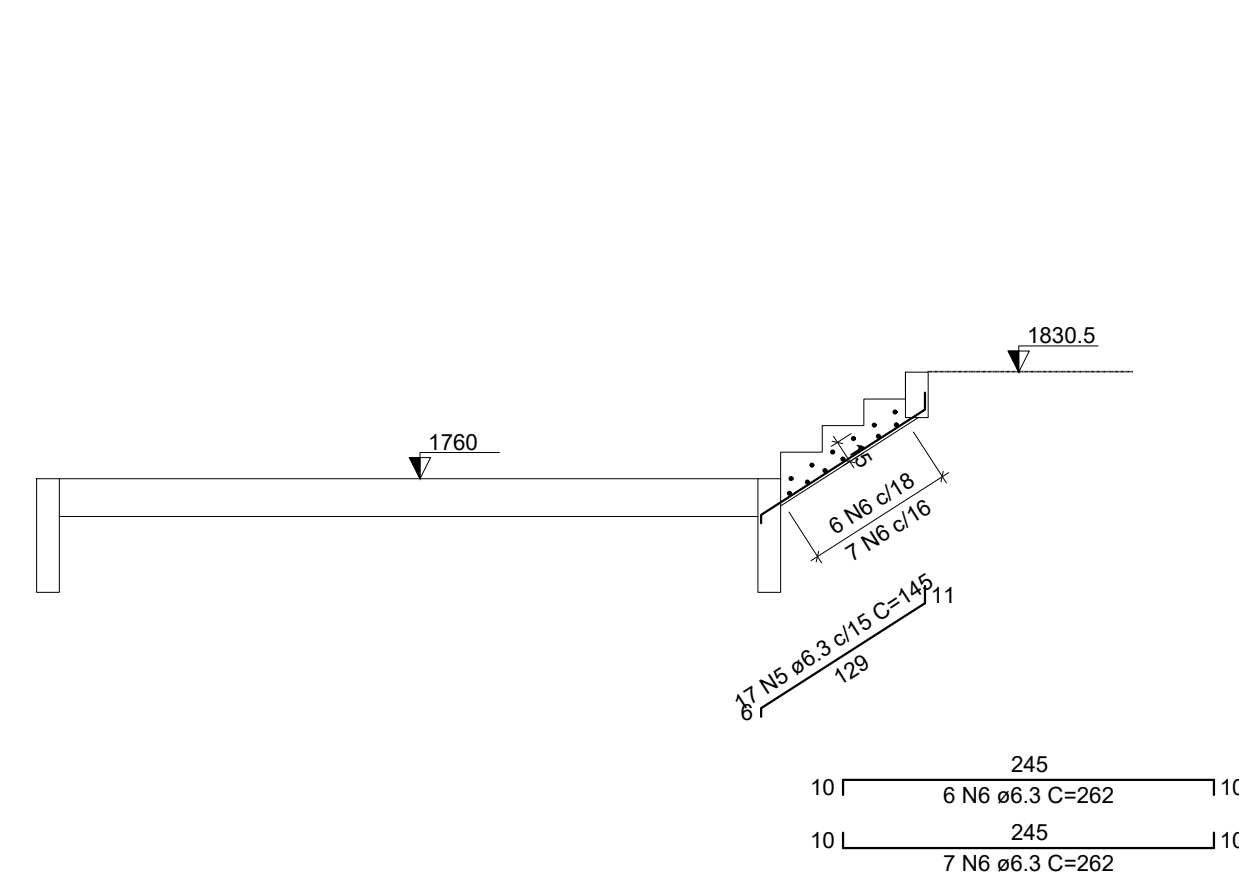
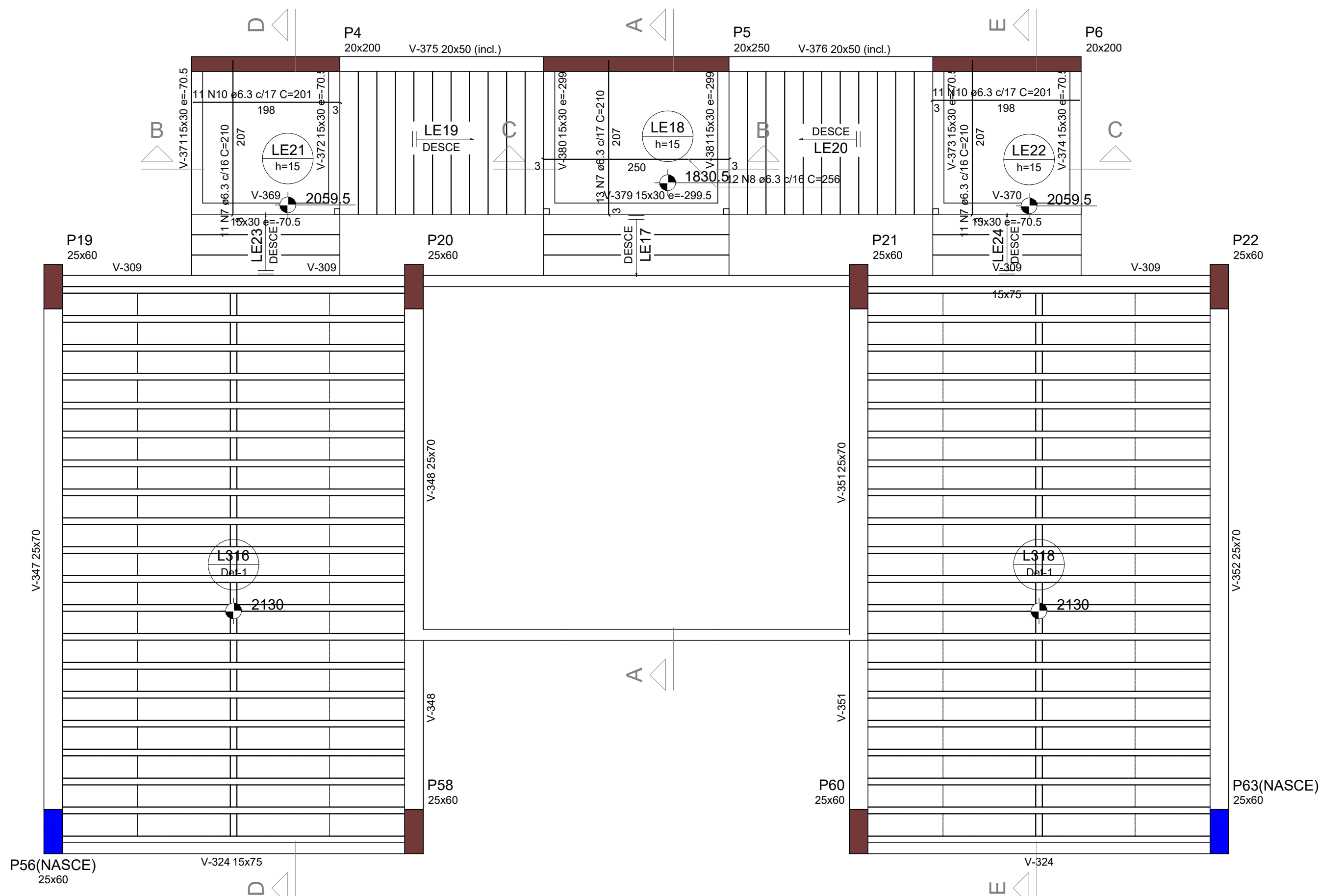
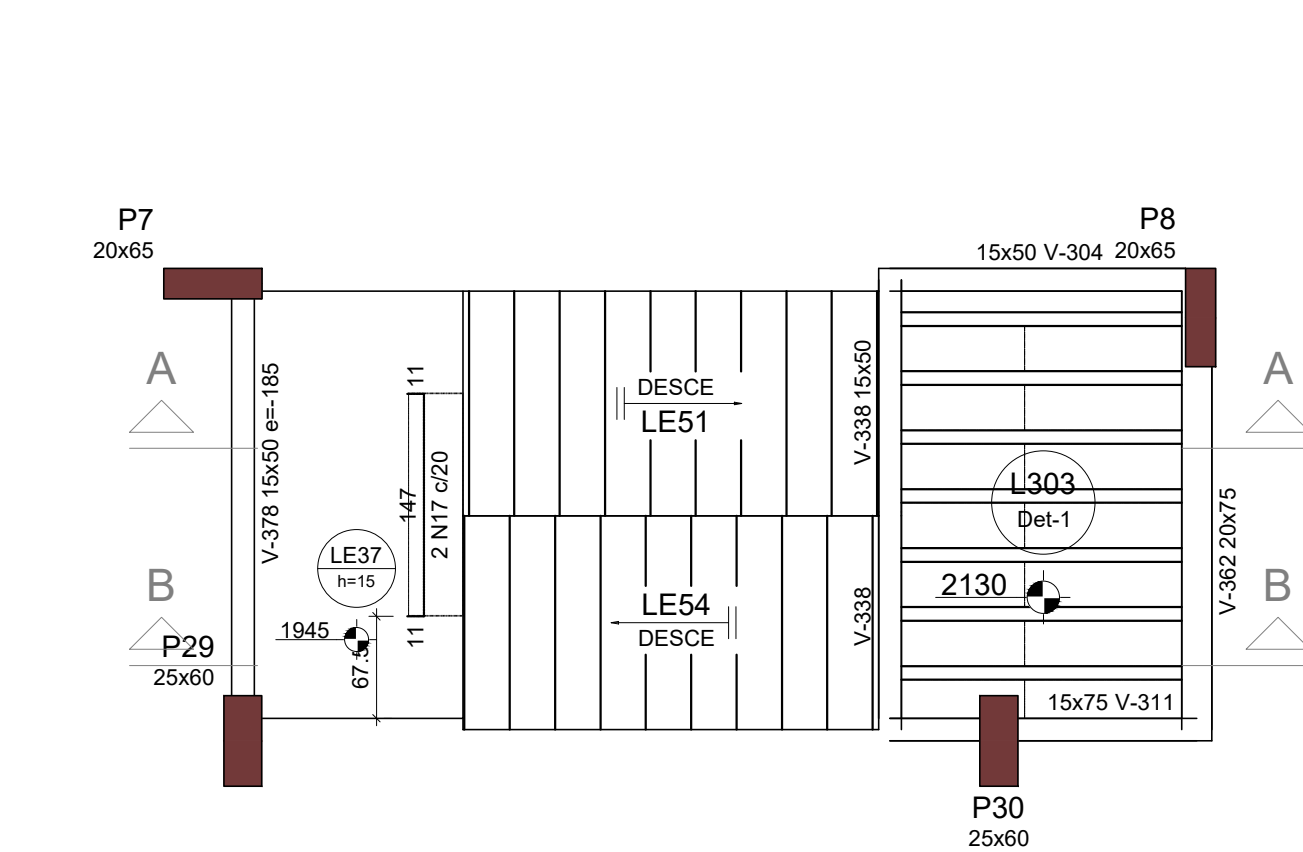
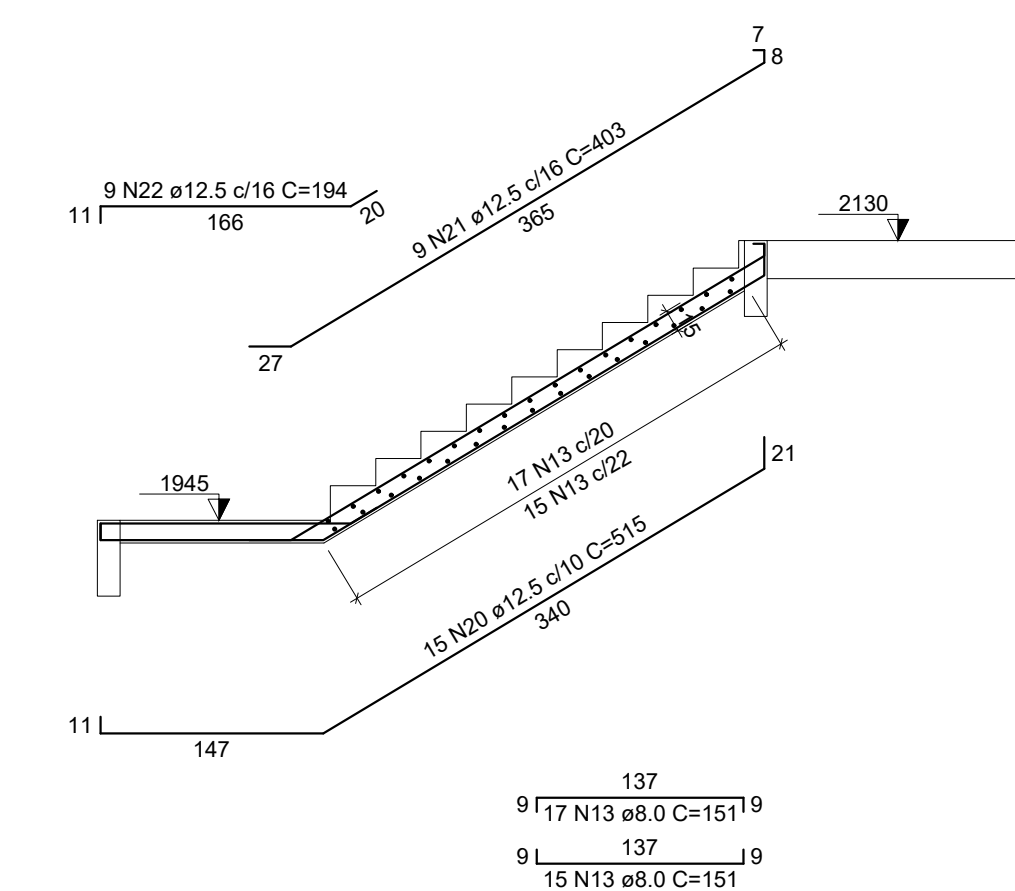
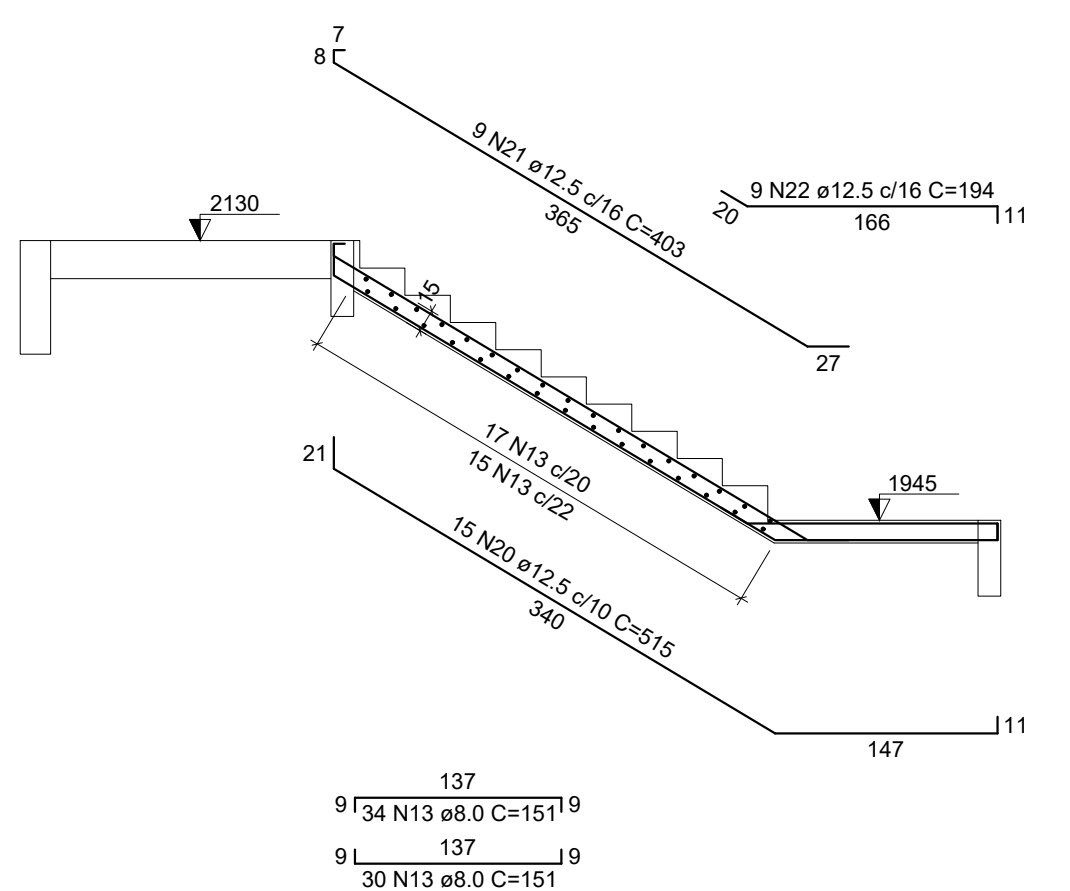
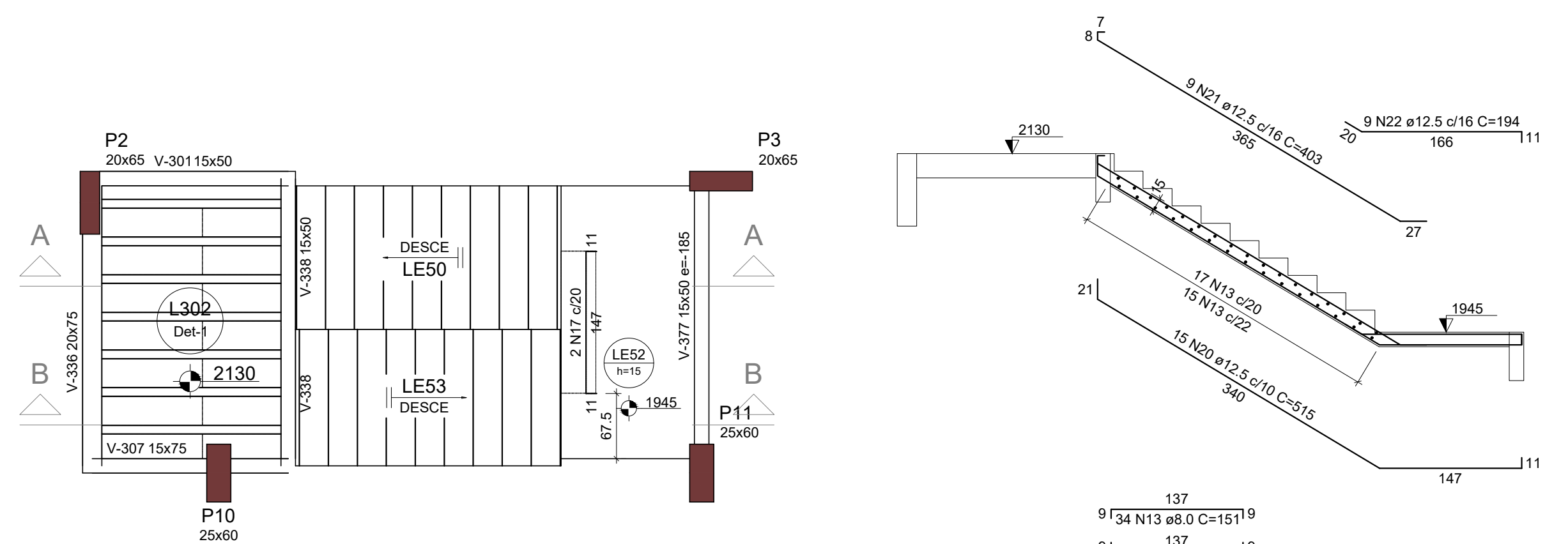



RELAÇÃO DO AÇO						
E3	LE17	LE18				
LE19	LE20	LE21				
LE50	LE52	LE24				
	LE53					
ACO	N	DIAM	QUANT	U.C/UNIT	C.TOTAL (m)	
CA50.1	1	6.3	18	161	2898	
	2	6.3	18	355	6390	
	3	6.3	19	149	2406	
	4	6.3	123	161	19803	
	5	6.3	17	145	2465	
	6	6.3	13	262	3408	
	7	6.3	35	210	7350	
	8	6.3	12	256	3072	
	9	6.3	44	225	9900	
	10	6.3	22	201	4422	
	11	6.3	13	VAR	VAR	
	12	6.3	13	VAR	VAR	
	13	8.0	96	151	14496	
	14	8.0	30	369	11050	
	15	8.0	24	402	9648	
	16	10.0	16	164	3768	
	17	10.0	4	164	656	
	18	10.0	22	518	11396	
	19	10.0	22	441	9702	
	20	12.5	30	155	3540	
	21	12.5	30	183	4146	
	22	12.5	30	194	4354	

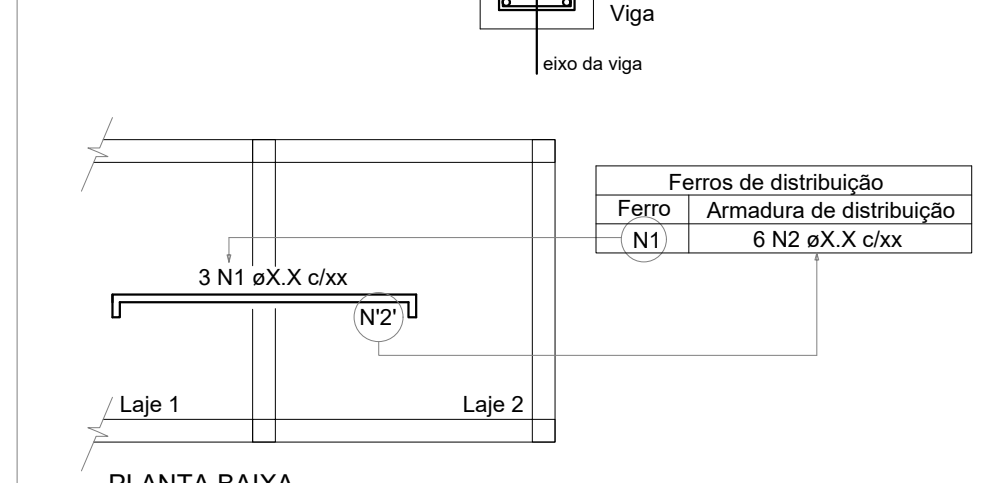
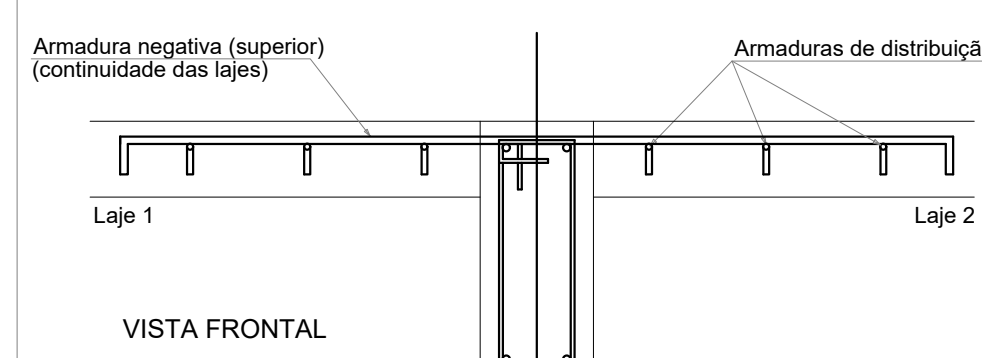
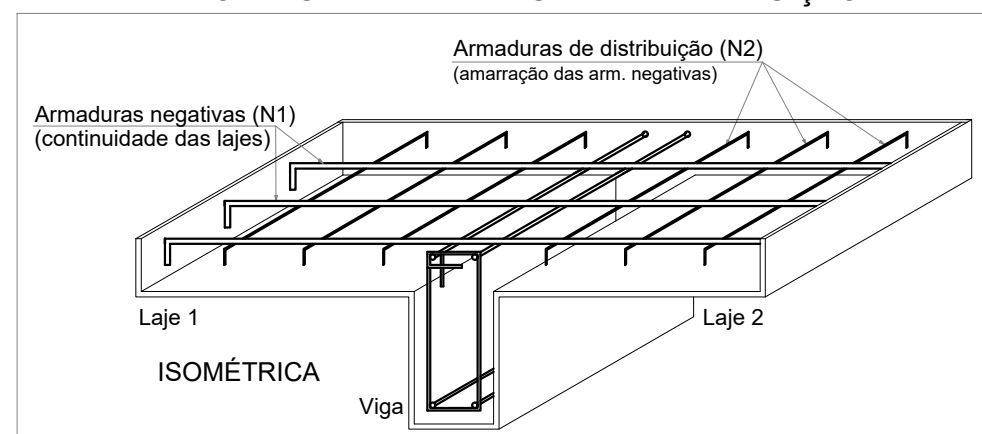
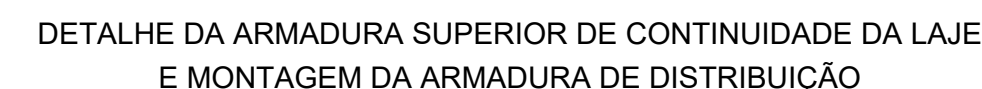
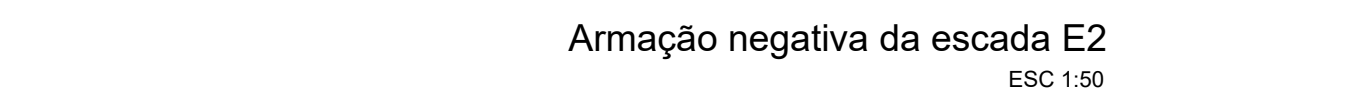
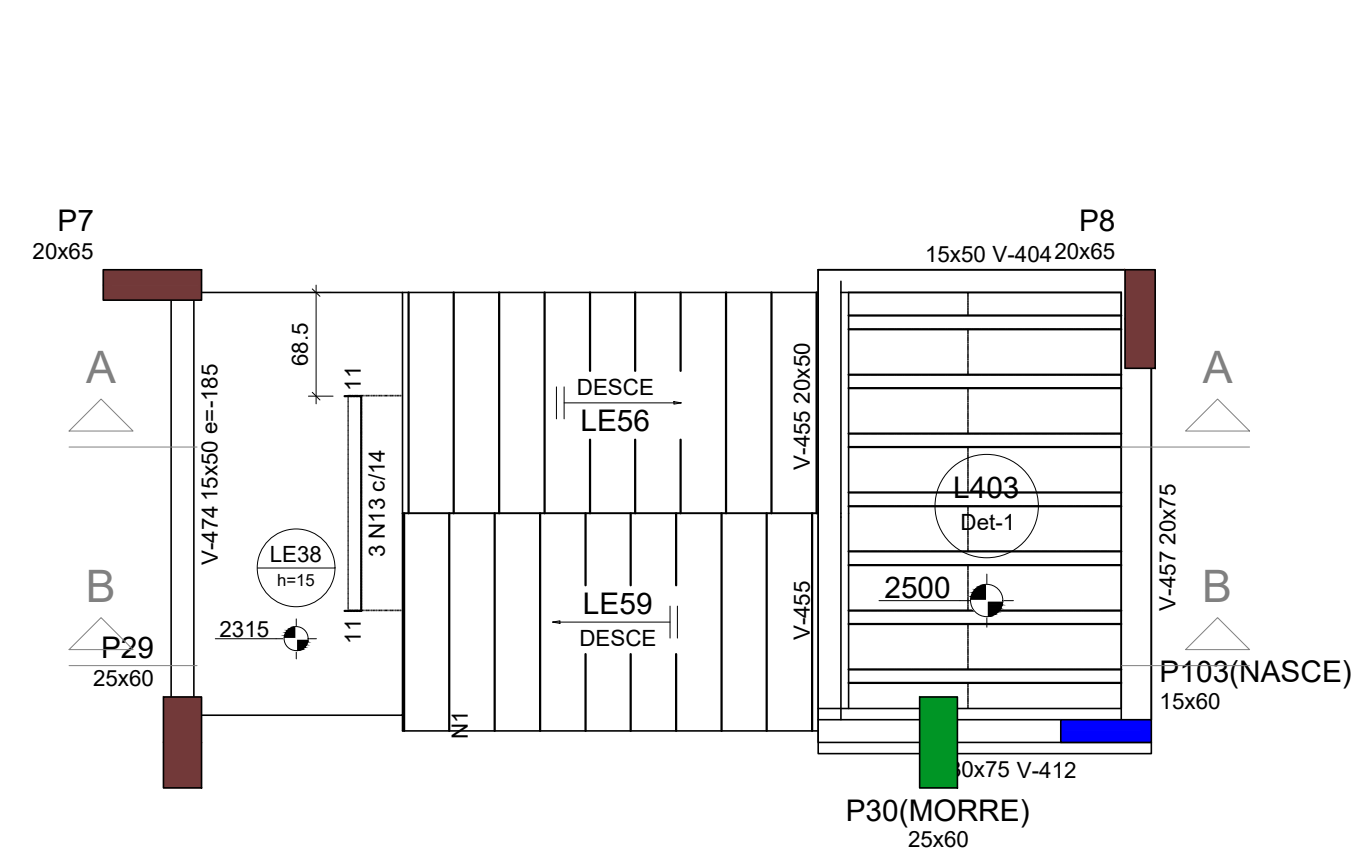
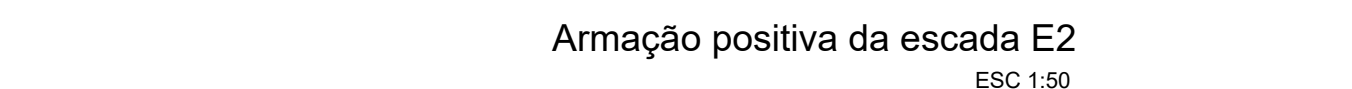
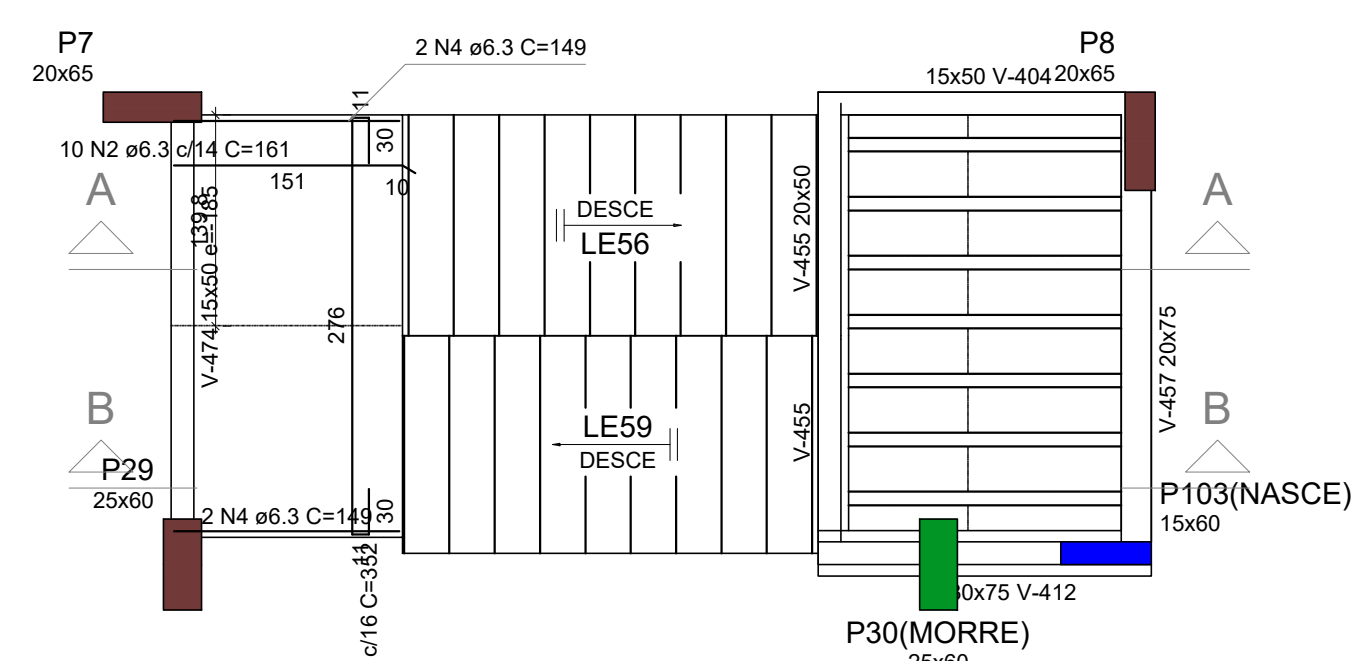
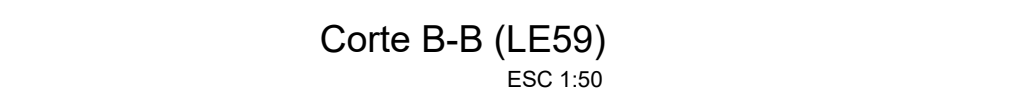
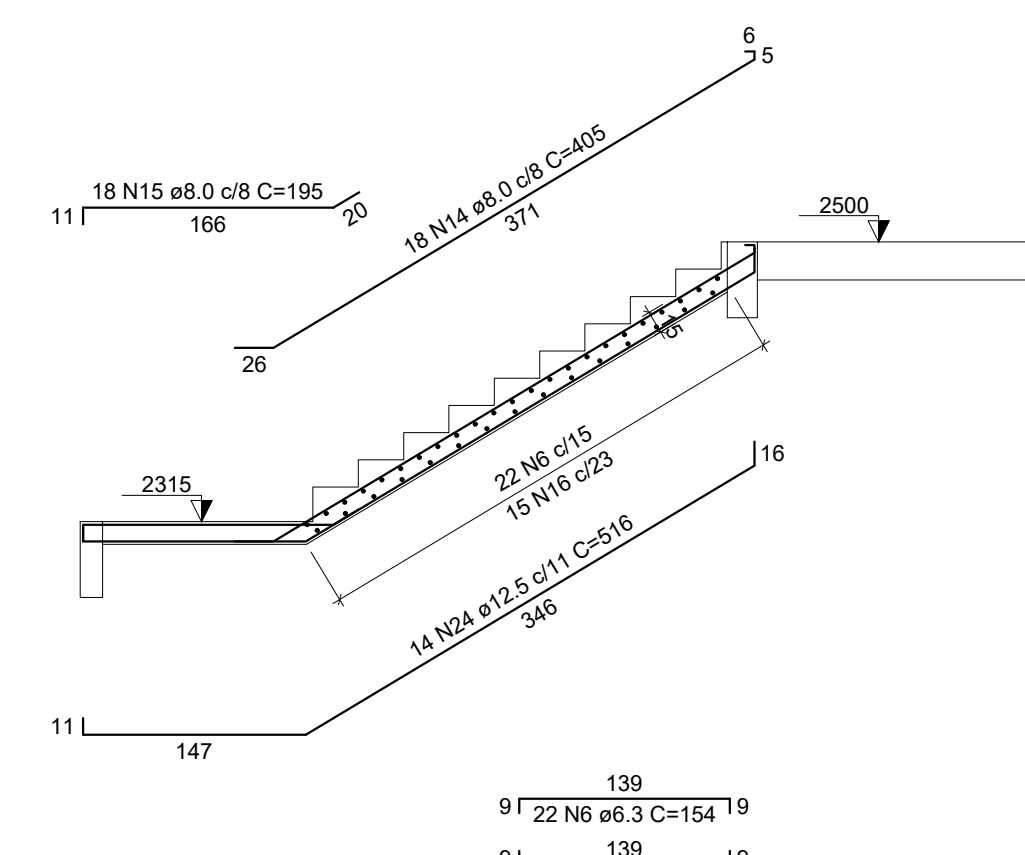
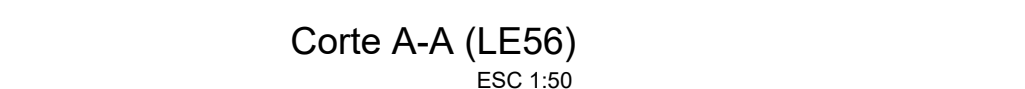
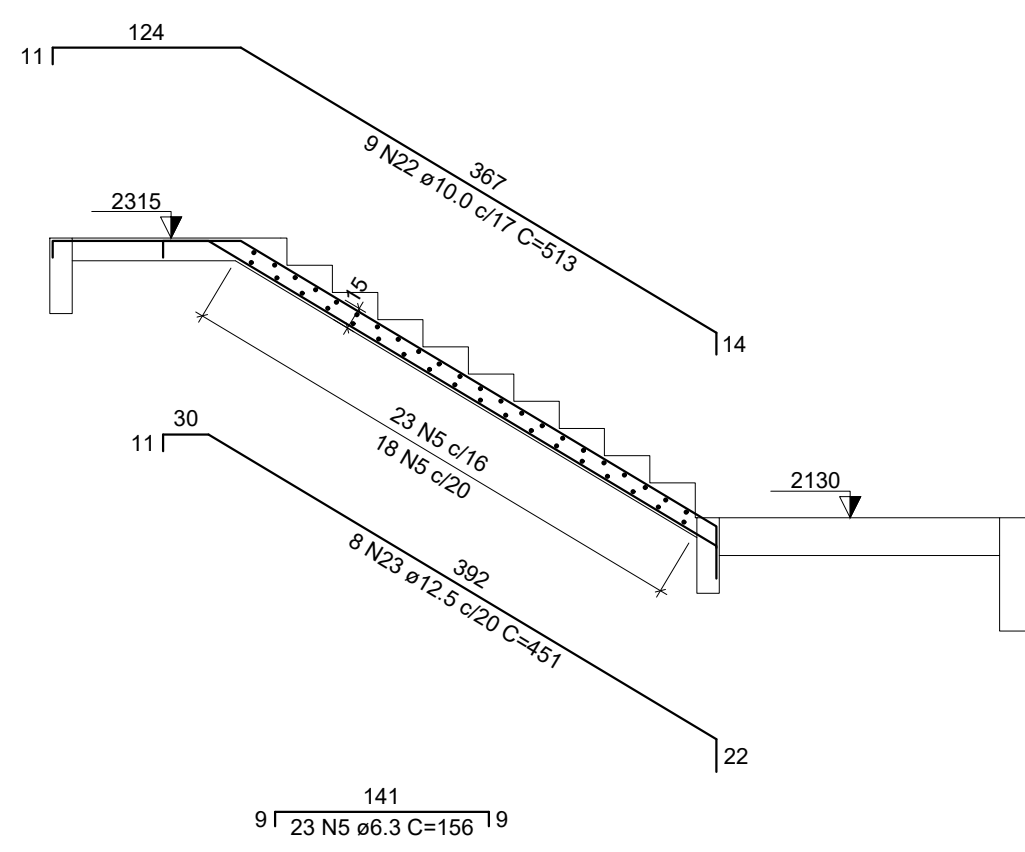
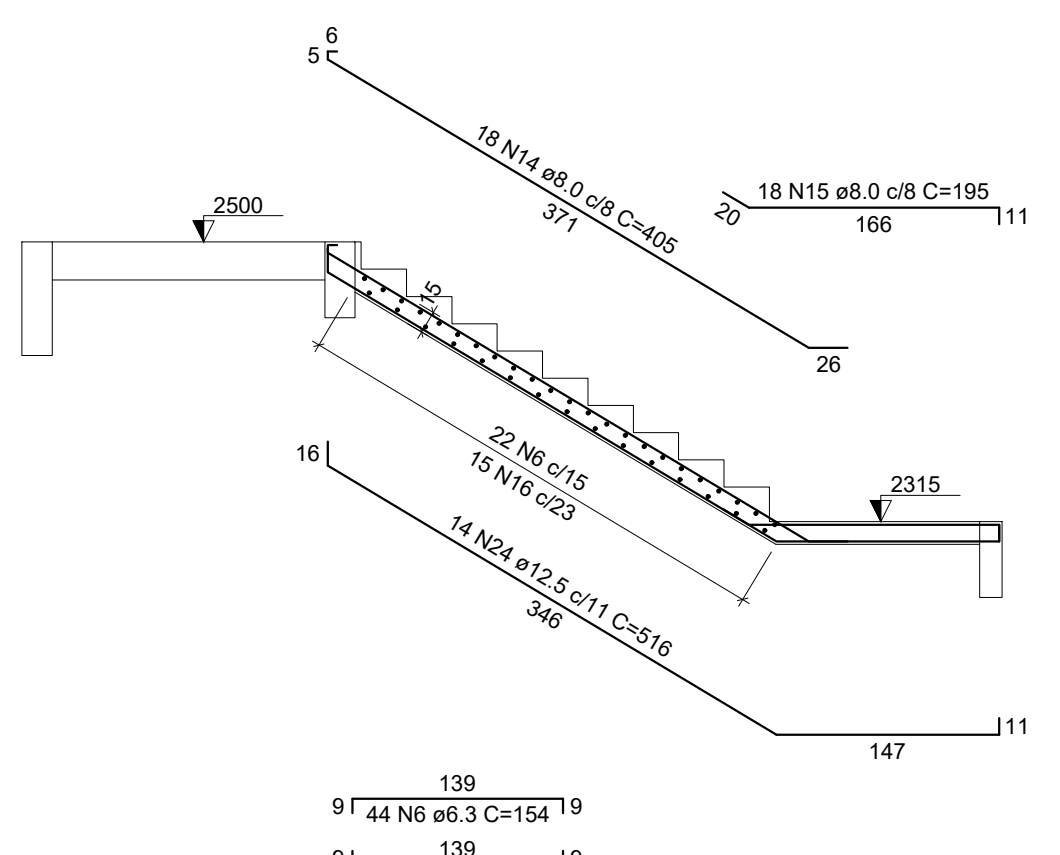
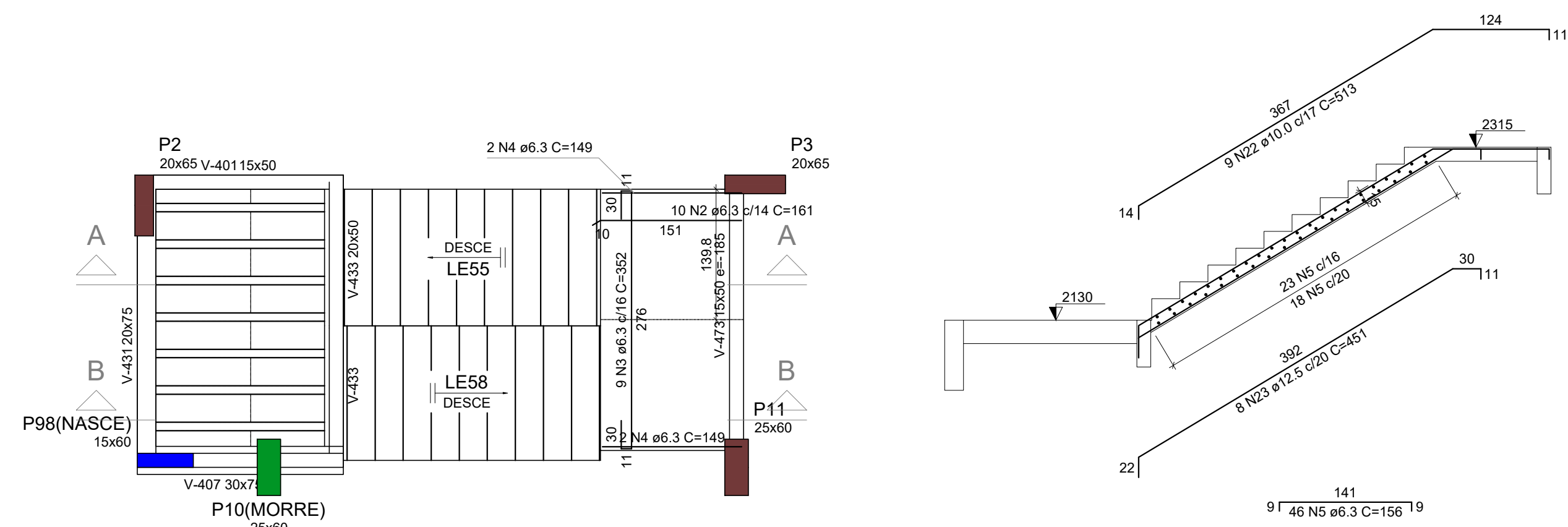
RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	6.3	664.1	162.5
	8.0	397.9	167
	10.0	218.4	134.7
	12.5	262	252.4
PESO TOTAL (kg)			
CA50	706.5		

Volume de concreto (ϕ) = 0.00 m³
 Volume de concreto (C-45) = 8.93 m³
 Área de forms = 71.14 m²

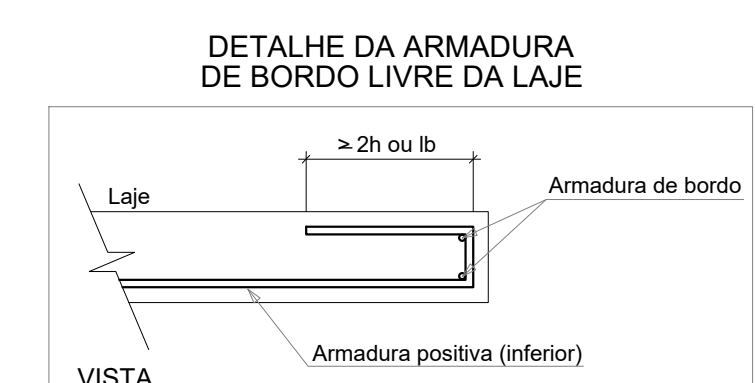
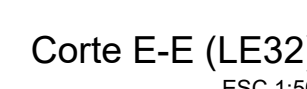
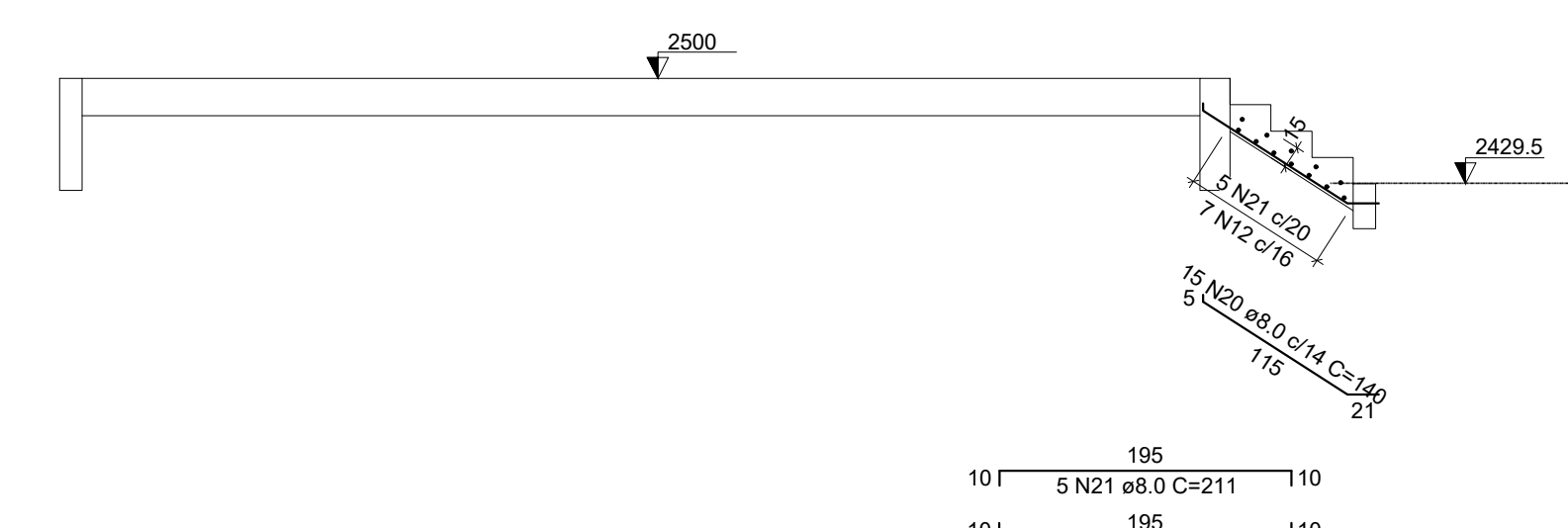
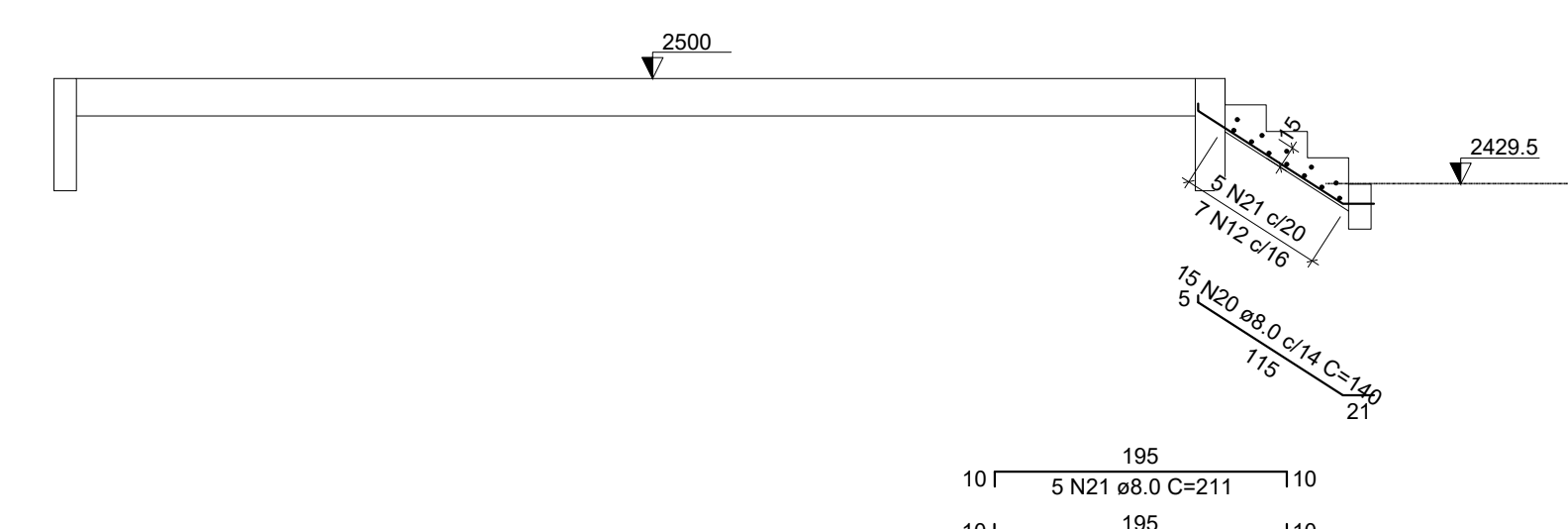
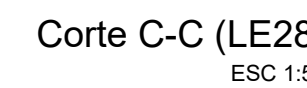
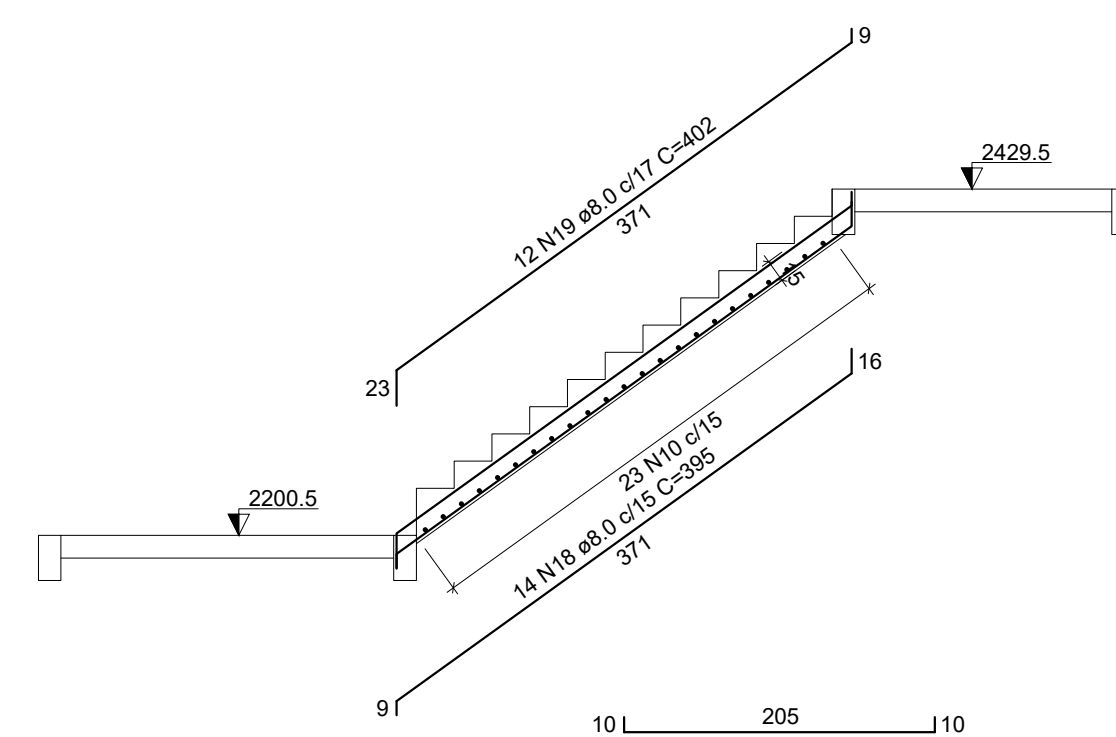
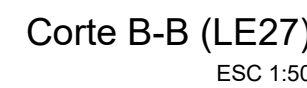
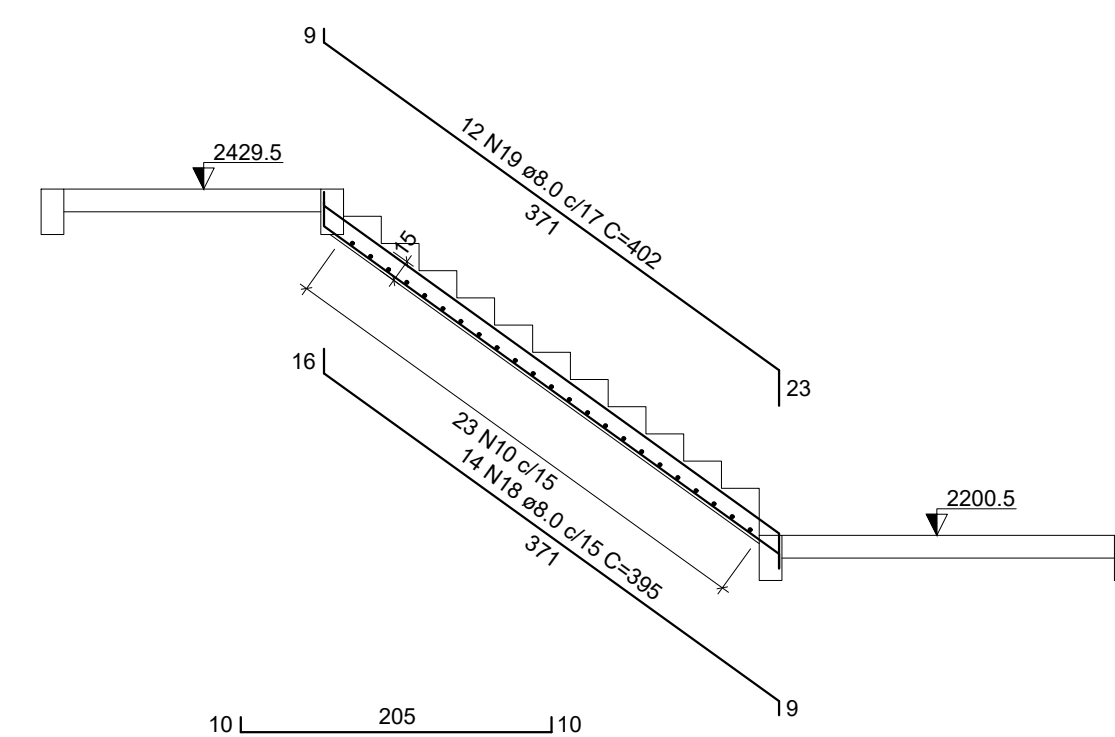
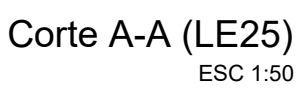
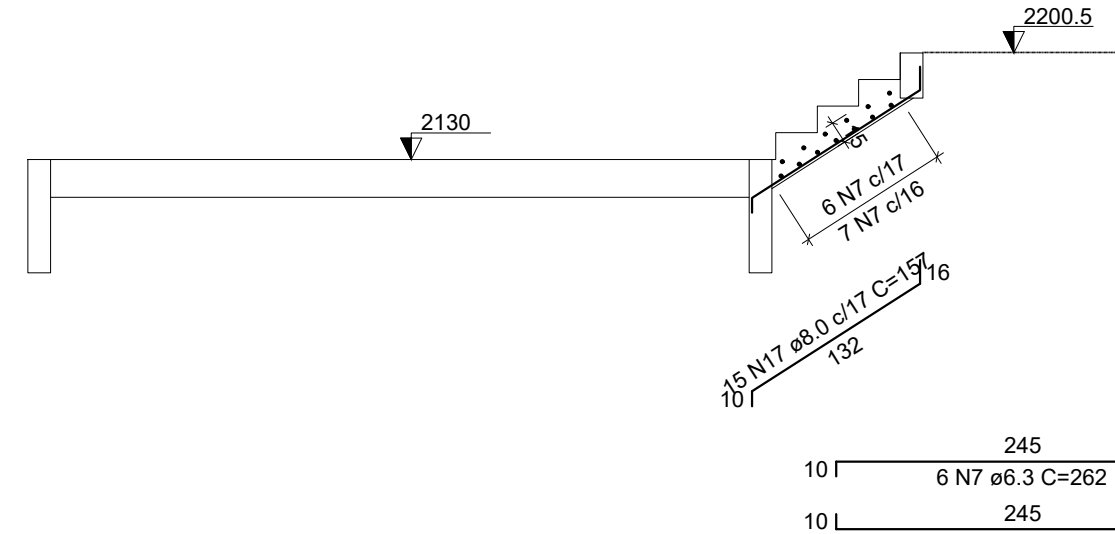
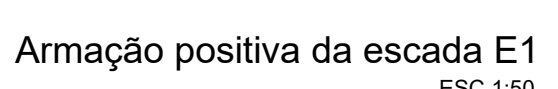
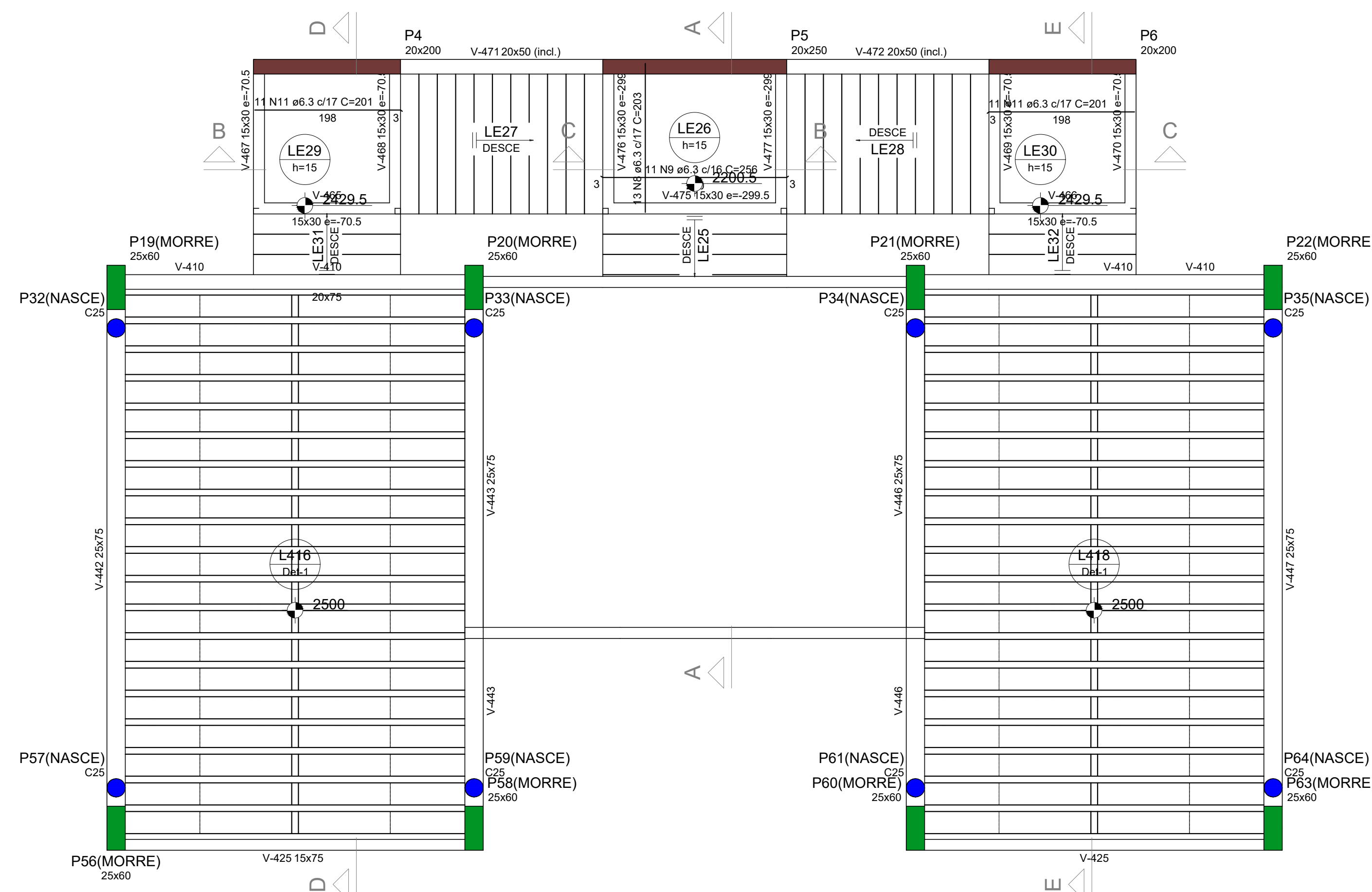
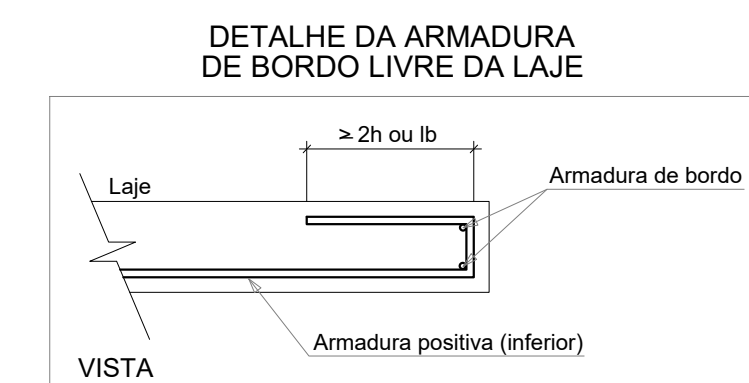


00	OUTS017	EMISSÃO INICIAL				
REV	DATA	OBSERVAÇÕES	DESENHO	NOVABO	APPROVAÇÃO	AUTORIZAÇÃO
 UNIVERSIDADE FEDERAL DE PERNAMBUCO SUPERINTENDÊNCIA DE PROJETOS E OBRAS DIRETORIA DE PLANOS E PROJETOS						
CONSTRUÇÃO DA 4ª ETAPA DO CENTRO ACADÊMICO DE VITÓRIA INSTALAÇÃO DE SISTEMA DE GASES DOS BLOCOS B E C. PROJETO EXECUTIVO			ESTRUTURA PROJETO EXECUTIVO			
ANOTAÇÃO DAS ESCALAS DO 3º PAVIMENTO			36 / 56			
PAVIMENTO TERREO		818,57 M²	PAV. SEMI ENTERRADO		299,51 M²	
1º PAVIMENTO		954,02 M²	PAVIMENTO ENTERRADO		95,92 M²	
2º PAVIMENTO		954,02 M²	COBERTA		1.080,48 M²	
3º PAVIMENTO		954,02 M²	TOTAL CONSTRUÇÃO		3.988,98 M²	
INFORMAÇÕES GERAIS:			36 / 56 INDICAÇÃO DATA SETEMBRO/2024			
ENG. MARCOS ANDRÉ SANTOS ENGENHEIRO - N° 190472/2017			D P P P ISABEL PINTO S P O CARLOS FALCO U F P E ALFREDO GOMES			
DIRETORIA SUPERINTENDENTE REITOR			DIRETORIA SUPERINTENDENTE REITOR			



NOTA: A ARMADURA DE DISTRIBUIÇÃO DAS CONTINUIDADES DEVE SER ININTERRUPTA E COM TRASPASSE (CASO HAJA EMENDAS).



Feros de distribuição	
Ferro	Armadura de distribuição
N13	9 N1 ø5.0 c/17 C=36

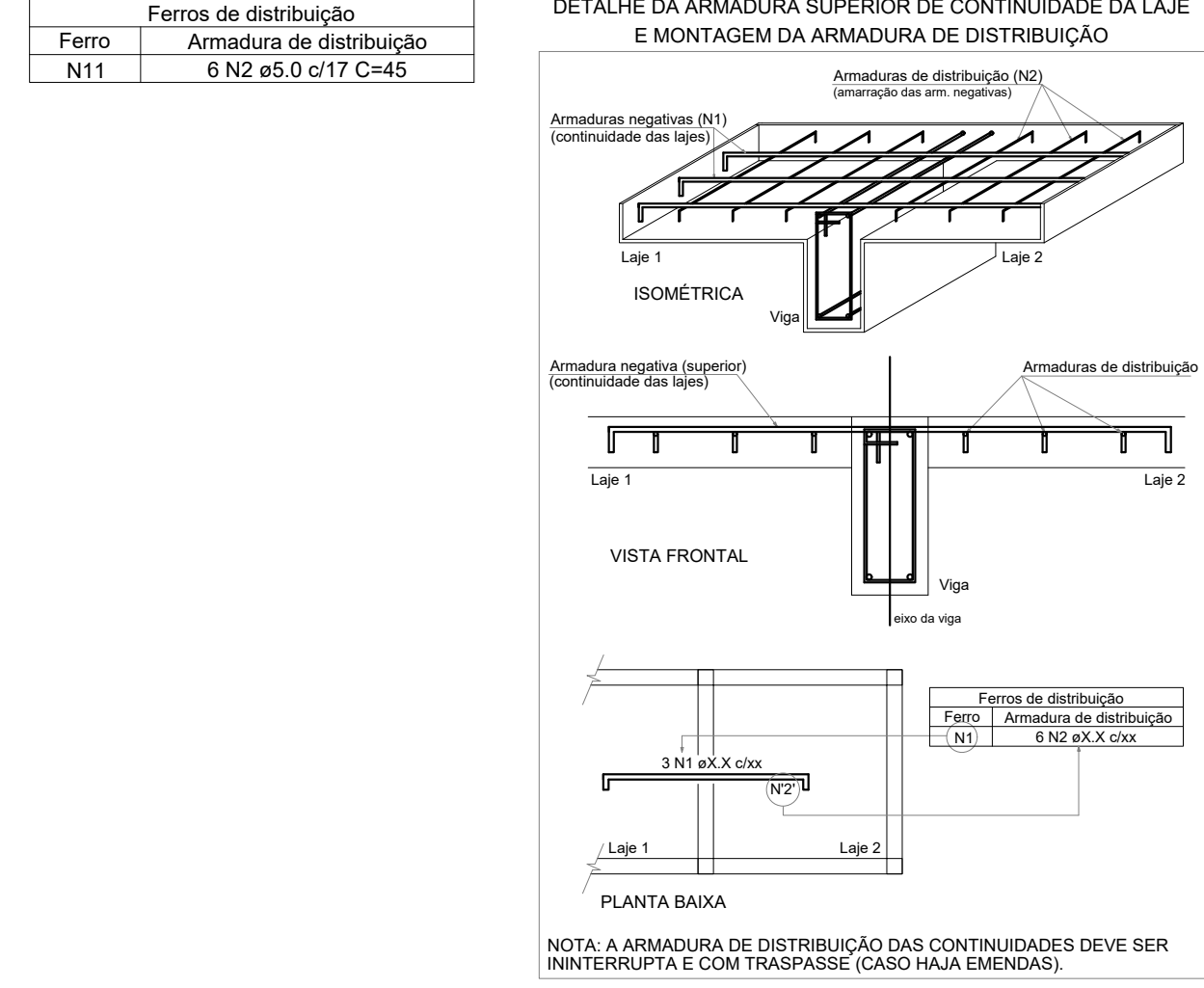
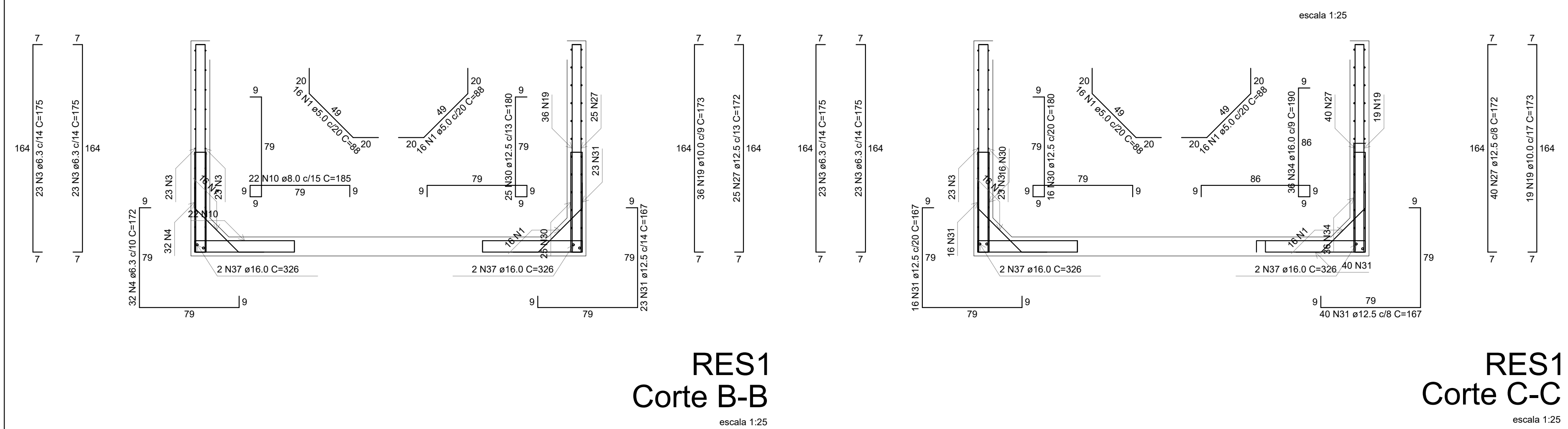
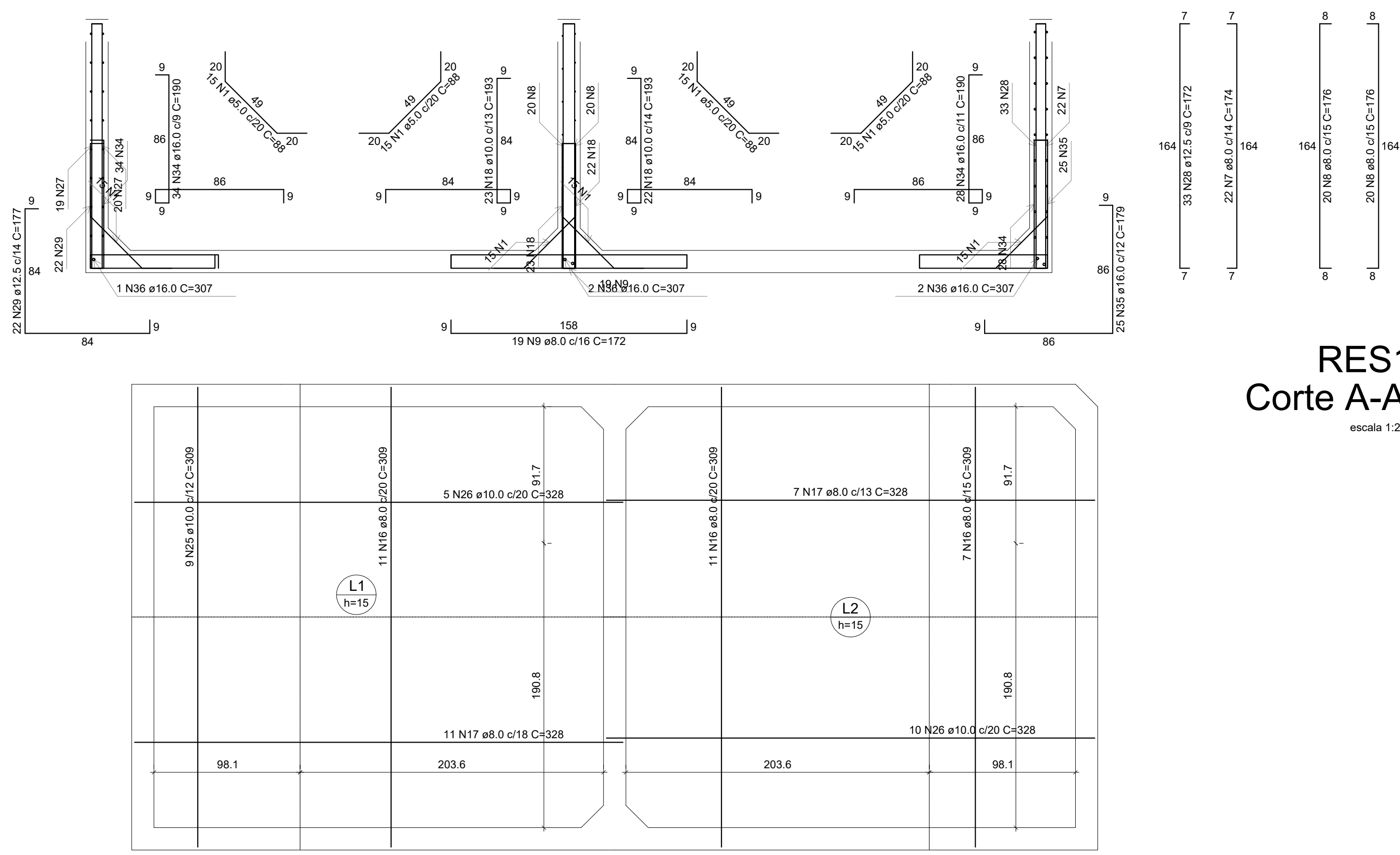
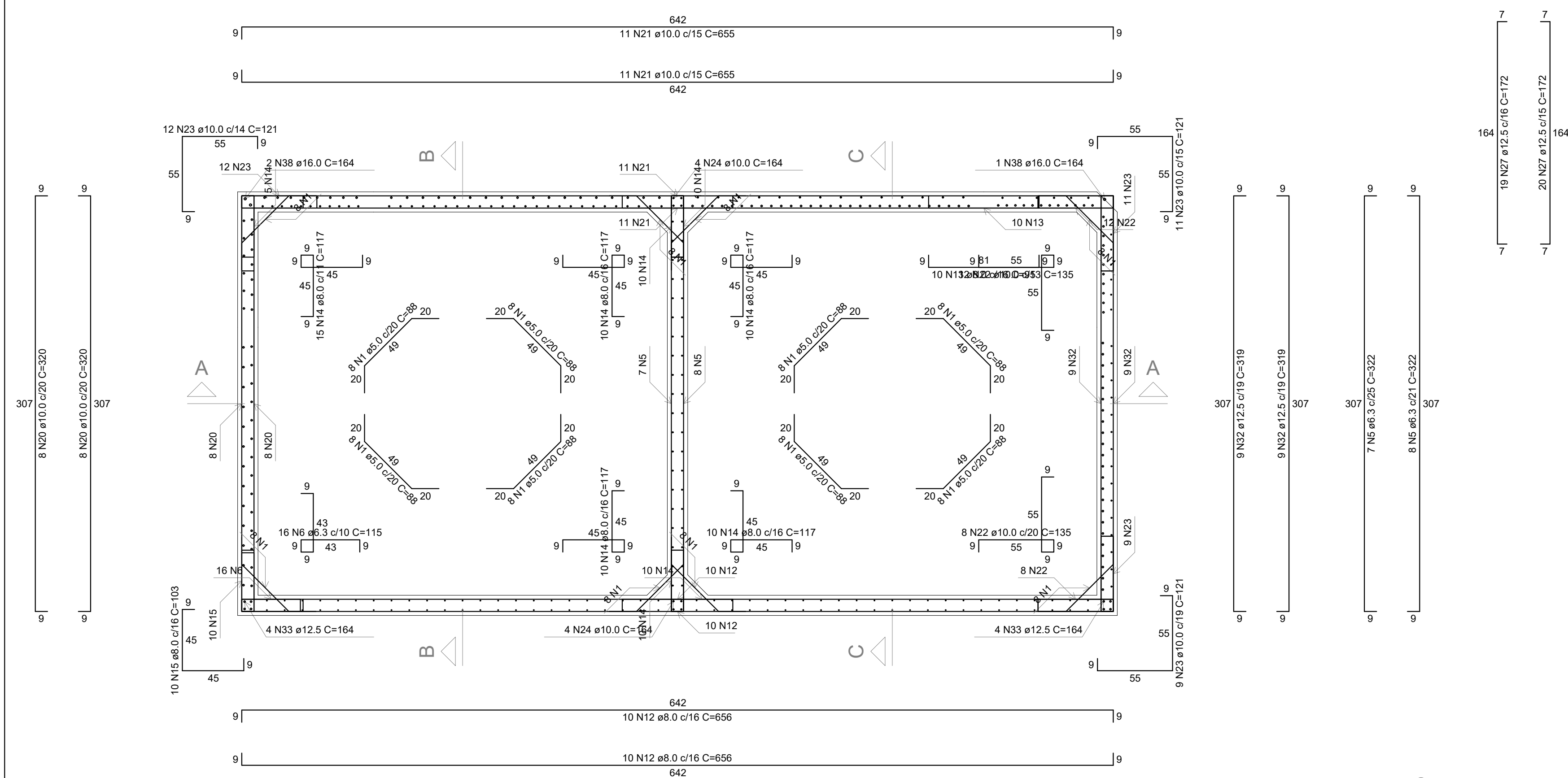


RELAÇÃO DO AÇO						
E3	LE25	LE26				
LE27	LE28	LE29				
LE30	LE31	LE32				
LE35	LE37	LE38				
AÇO	N	DIAM (mm)	QUANT	C.UNIT (m)	C.TOTAL (m)	
CAISO CAPO	1	5,0	18	36	648	
	3	8,0	18	36	636	
	4	6,3	8	149	1192	
	1	12,5	123	36	4428	
	1	16,0	66	154	1014	
	1	13,0	13	286	3718	
	8	6,3	13	203	2639	
	1	10,0	3	256	288	
	1	10,0	40	222	1012	
	1	13,0	22	201	4422	
	1	14,0	12	292	3504	
	1	12,0	6	160	960	
	1	16,0	36	156	5616	
	1	16,0	36	195	7020	
	1	16,0	45	153	6885	
	1	17,0	18	107	2325	
	1	20,0	28	395	11080	
	1	20,0	24	162	3888	
	21	8,0	30	140	4200	
	21	8,0	10	211	2110	
18	10,0	18	513	9234		
23	12,5	16	451	7216		
23	12,5	16	296	4648		

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	6.3	665.6	162.9
	8.0	588.2	232.1
	10.0	92.3	56.9
CA60	12.5	216.6	208.7
	5.0	6.5	1
PESO TOTAL (kg)			
CA50	660.6		
CA60		1	

Volume de concreto [] = 0.00 m³
 Volume de concreto (C-45) = 8.88 m³
 Área de forma = 70.86 m²

DE	OUTUB/21	EMISSÃO INICIAL					
REV	DATA	OBSERVAÇÕES	DESENHO	REVISÃO	APPROVAÇÃO	AUTORIZAÇÃO	
 UNIVERSIDADE FEDERAL DE PERNAMBUCO SUPERINTENDÊNCIA DE PROJETOS E OBRAS DIRETORIA DE PLANOS E PROJETOS			 SMC SUPERINTENDENTE				
CONSTRUÇÃO DA 4ª ETAPA DO CENTRO ACADÊMICO DE VITÓRIA INSTALAÇÃO DE SISTEMA DE GASES DOS BLOCOS B E C. 2º PAVIMENTO			ESTRUTURA etapa PROJETO EXECUTIVO				
ARMADURAS DAS ESCADAS DO 2º PAVIMENTO.			planilha: 97 / 56				
1º PAVIMENTO TERMEIO 81,87 m²			PAV. SEM ENTERRADO 299,51 m²		95,80 m²		
2º PAVIMENTO 95,80 m²			PAVIMENTO ENTERRADO 1060,88 m²		INDICADA		
3º PAVIMENTO 95,82 m²			COBERTA 1060,88 m²		95,81 m²		
			TOTAL CONSTRUÇÃO		2056,97 m²		
Responsável Técnico: SMC MARCO ANDRÉ SANTOS ENGENHEIRO - NRP 190475-7			S.P.P. ISABEL PIETO CARLOS FALCÃO		DIRETOR SUPERINTENDENTE		



RESILIÃO DO AÇO

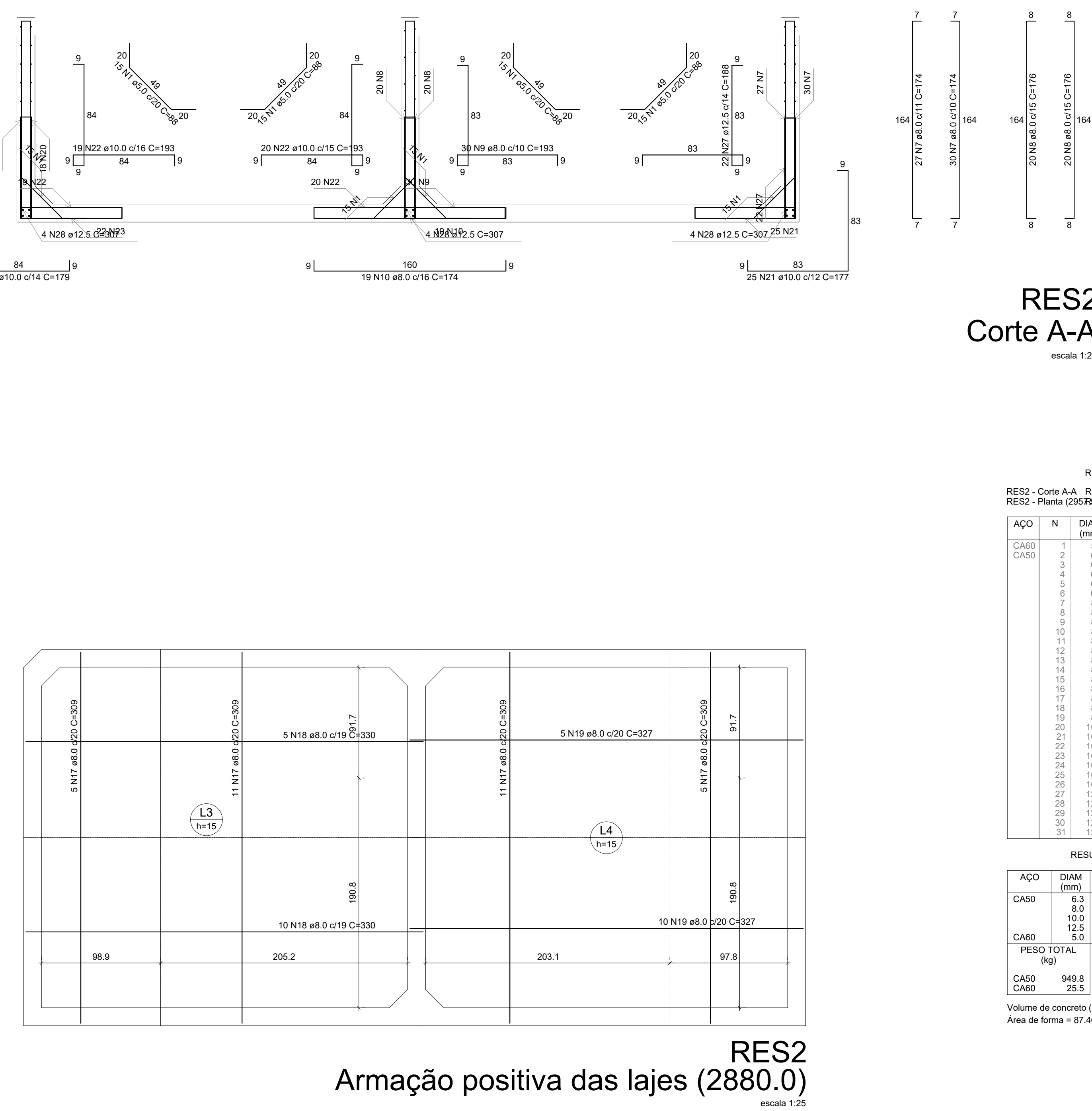
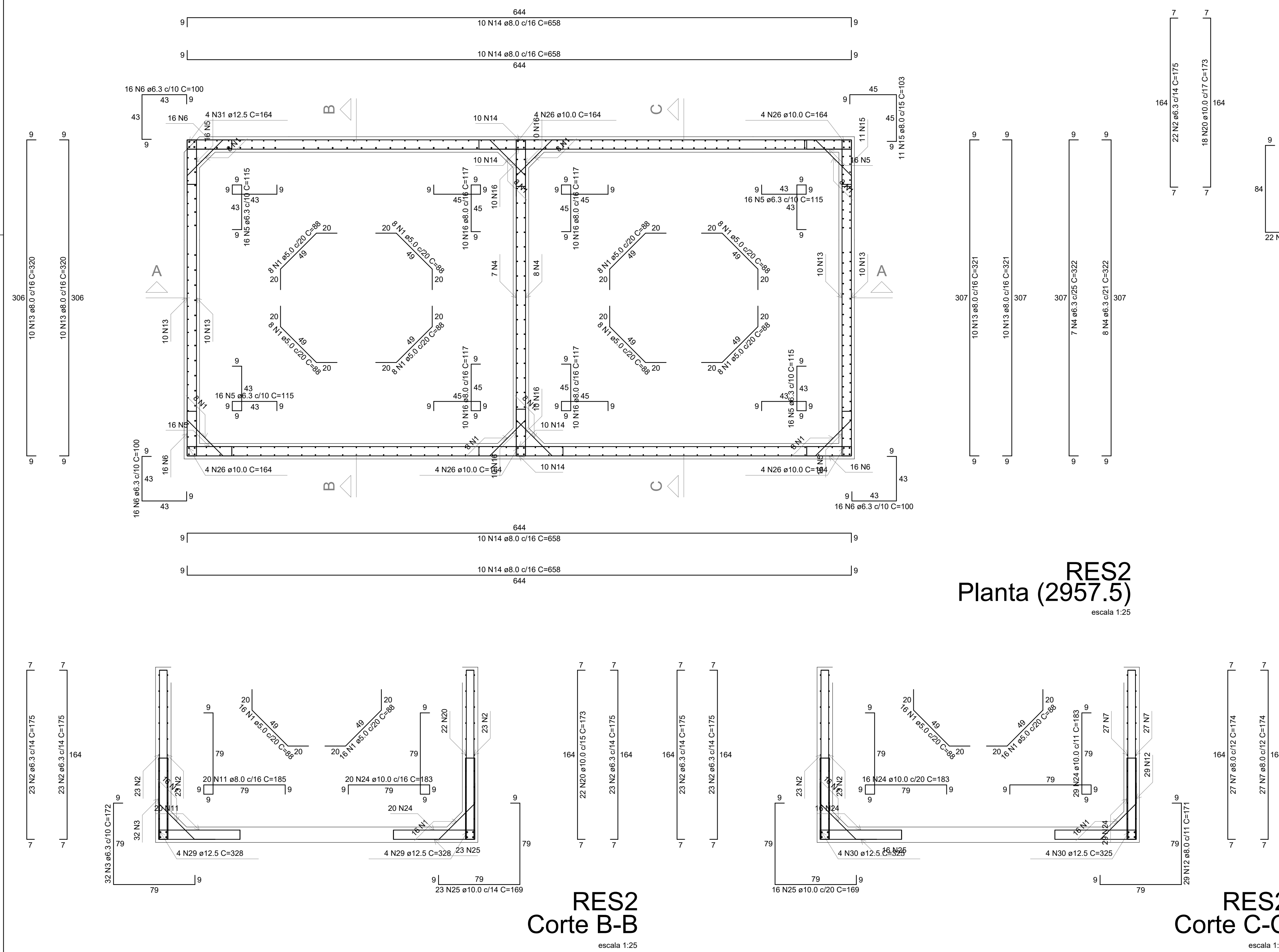
RES1 - Corte A4
RES2 - Corte B-B
RES3 - Corte C-C

RES4 - Negativo
RES5 - Corte D-D
RES6 - Corte E-E
RES7 - Corte F-F

ACÓ	N	DIAM (mm)	QUANT	C (mm)	C TOTAL
CASO 0	1	5,0	188	88	16544
	2	5,0	188	88	16544
	3	6,3	172	172	5504
	4	6,3	172	172	5504
	5	6,3	160	116	1840
	6	6,3	160	116	1840
	7	8,0	144	176	7040
	8	8,0	144	176	7040
	9	10,0	120	196	4070
	10	10,0	120	196	4070
CASO 1	1	5,0	188	88	16544
	2	5,0	188	88	16544
	3	6,3	172	172	5504
	4	6,3	172	172	5504
	5	6,3	160	116	1840
	6	6,3	160	116	1840
	7	8,0	144	176	7040
	8	8,0	144	176	7040
	9	10,0	120	196	4070
	10	10,0	120	196	4070
CASO 2	1	5,0	188	88	16544
	2	5,0	188	88	16544
	3	6,3	172	172	5504
	4	6,3	172	172	5504
	5	6,3	160	116	1840
	6	6,3	160	116	1840
	7	8,0	144	176	7040
	8	8,0	144	176	7040
	9	10,0	120	196	4070
	10	10,0	120	196	4070
CASO 3	1	5,0	188	88	16544
	2	5,0	188	88	16544
	3	6,3	172	172	5504
	4	6,3	172	172	5504
	5	6,3	160	116	1840
	6	6,3	160	116	1840
	7	8,0	144	176	7040
	8	8,0	144	176	7040
	9	10,0	120	196	4070
	10	10,0	120	196	4070
CASO 4	1	5,0	188	88	16544
	2	5,0	188	88	16544
	3	6,3	172	172	5504
	4	6,3	172	172	5504
	5	6,3	160	116	1840
	6	6,3	160	116	1840
	7	8,0	144	176	7040
	8	8,0	144	176	7040
	9	10,0	120	196	4070
	10	10,0	120	196	4070
CASO 5	1	5,0	188	88	16544
	2	5,0	188	88	16544
	3	6,3	172	172	5504
	4	6,3	172	172	5504
	5	6,3	160	116	1840
	6	6,3	160	116	1840
	7	8,0	144	176	7040
	8	8,0	144	176	7040
	9	10,0	120	196	4070
	10	10,0	120	196	4070
CASO 6	1	5,0	188	88	16544
	2	5,0	188	88	16544
	3	6,3	172	172	5504
	4	6,3	172	172	5504
	5	6,3	160	116	1840
	6	6,3	160	116	1840
	7	8,0	144	176	7040
	8	8,0	144	176	7040
	9	10,0	120	196	4070
	10	10,0	120	196	4070
CASO 7	1	5,0	188	88	16544
	2	5,0	188	88	16544
	3	6,3	172	172	5504
	4	6,3	172	172	5504
	5	6,3	160	116	1840
	6	6,3	160	116	1840
	7	8,0	144	176	7040
	8	8,0	144	176	7040
	9	10,0	120	196	4070
	10	10,0	120	196	4070
CASO 8	1	5,0	188	88	16544
	2	5,0	188	88	16544
	3	6,3	172	172	5504
	4	6,3	172	172	5504
	5	6,3	160	116	1840
	6	6,3	160	116	1840
	7	8,0	144	176	7040
	8	8,0	144	176	7040
	9	10,0	120	196	4070
	10	10,0	120	196	4070

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	6.3	282.7	69.2
	8.0	549.5	216.8
	10.0	533.1	328.7
	12.5	550.9	530.7
	16.0	277.3	437.7
CA60	5.0	168.1	25.9

Volume de concreto (C-45) = 7.58 m³
Área de forma = 87.25 m²



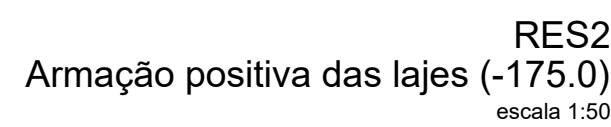
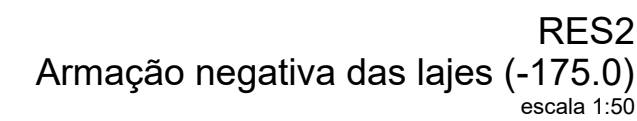
RELAÇÃO DO AÇO					
RES2 - Corte A-A		RES2 - Corte B-B		RES2 - Corte C-C	
RES2 - Planta		RES2 - Positivo		RES2 - C. Total	
AÇO	N	DIA (mm)	Q. (kg)	CUNTI (m)	C. TOTAL (m)
CABO	1	6	188		2.544
1	2	6,3	137	175	2.095
	3	6,3	137	175	2.095
	4	6,3	15	322	483
	5	6,3	48	100	684
	6	6,3	48	100	4800
	7	8,0	111	174	1914
	8	8,0	111	174	7040
	9	8,0	30	193	570
	10	8,0	19	144	570
	11	8,0	20	185	370
	12	8,0	29	171	414
	13	8,0	40	320	12800
	14	8,0	40	658	2632
	15	8,0	40	113	4633
	16	8,0	40	117	680
	17	8,0	32	109	899
	18	8,0	15	330	6920
	19	8,0	15	107	677
	20	10,0	40	173	6950
	21	10,0	25	177	6950
	22	10,0	39	193	7527
	23	10,0	22	174	3608
	24	10,0	65	103	1195
	25	10,0	39	169	6981
	26	10,0	12	164	6880
	27	12,5	22	188	416
	28	12,5	12	107	3684
	29	12,5	8	328	2624
	30	12,5	8	328	2624
	31	12,5	4	164	556

AÇO	DIAM (mm)	C. TOTAL (m)	PESO + 0% (kg)
CA50	6.3	464,7	113,7
	8.0	1088	429,3
	10.0	445,8	274,8
	12.5	137	132
CA60	5.0	165,4	25,5

Volume de concreto (C-45) = 7.69 m³
Área de forma = 87.40 m²

[illegible]





AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	6.3	1741.3	426.1
	8.0	299.9	118.3
	10.0	22.1	13.6
CA60	5.0	305.5	47.1

DETALHE DA ARMADURA SUPERIOR DE CONTINUIDADE DA LAJE E MONTAGEM DA ARMADURA DE DISTRIBUIÇÃO

Armaduras de distribuição (N2)
(armadura das arm. negativas)

Armaduras negativas (N1)
(continuidade das lajes)

Laje 1

Laje 2

Viga

ISOMÉTRICA

Armadura negativa (superior)
(continuidade das lajes)

Armaduras de distribuição

Laje 1

Laje 2

Vista Frontal

Viga

Seção da viga

VISTA FRONTAL

3 N1 10 x 10 cm

N2

Laje 1

Laje 2



Planta Baixa

Fios de distribuição	
Ferro	Armadura de distribuição
N1	3 N2 10 x 10 cm

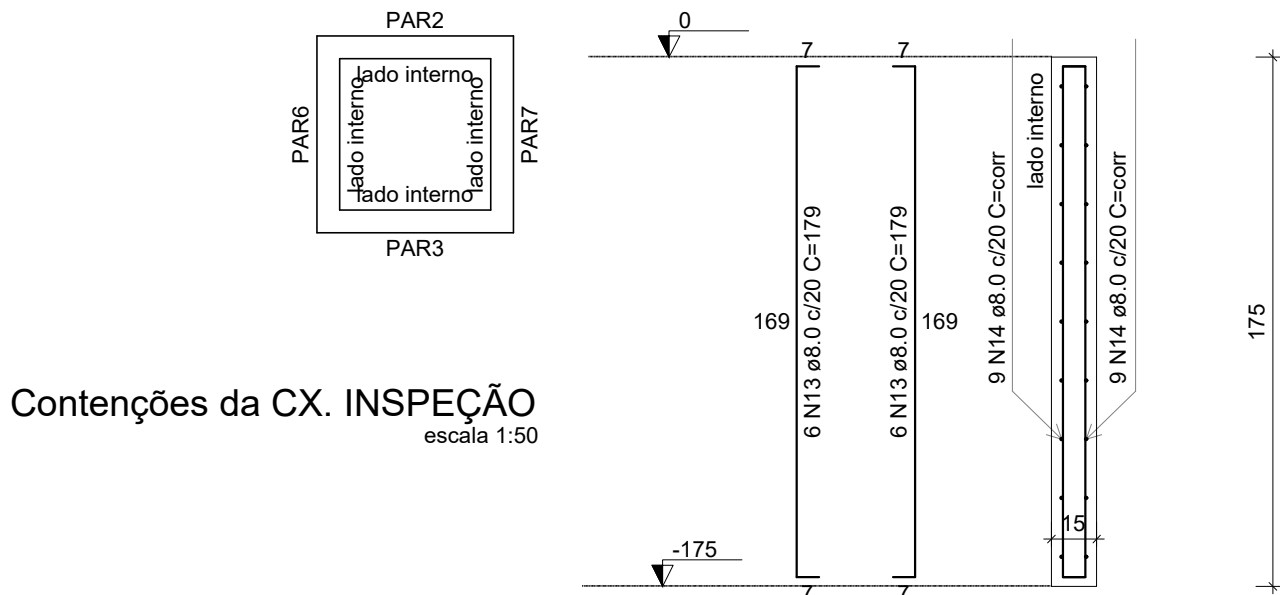
NOTA: A ARMADURA DE DISTRIBUIÇÃO DAS CONTINUIDADES DEVE SER ININTERRUPTA E COM TRASPASSE (CASO HAJA ENCLAVES).

RELAÇÃO DO AÇO					
RES2 - Planta - (87) RES2 - Negativos - (RES2) - Positivos - (175.0)					
AÇO	Nº	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	81	88	7128
	2	5.0	10	610	6100
	3	5.0	23	200	4600
	4	5.0	12	675	8100
CA50	5	5.0	21	200	4620
	6	6.3	28	239	6692
	7	6.3	28	736	20608
	8	6.3	60	714	42840
	9	6.3	28	259	7252
	10	6.3	56	649	36344
	11	6.3	130	133	17290
	12	6.3	10	118	1180
	13	6.3	28	110	3080
	14	6.3	34	226	7684
	15	6.3	15	636	9540
	16	6.3	35	246	8610
17	6.3	13	701	9113	
18	8.0	18	248	4464	
19	8.0	18	238	4284	
20	8.0	16	184	2944	
21	8.0	11	16	5456	
22	8.0	10	398	3980	
23	8.0	34	203	6902	
24	8.0	11	398	3938	
25	10.0	12	184	2208	

00	OUT/2017	MISSÃO INICIAL				
REV.	DATA	OBSERVAÇÕES	DESENHO	REVISÃO	APROVAÇÃO	AUTORIZAÇÃO

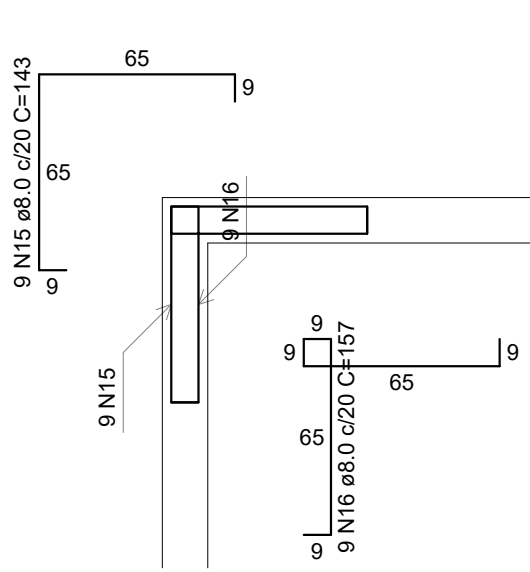
	UNIVERSIDADE FEDERAL DE PERNAMBUCO SUPERINTENDÊNCIA DE INFRAESTRUTURA DIRETORIA DE PLANOS E PROJETOS					
	projeto: AMPLIAÇÃO DO CENTRO ACADÊMICO DE VITÓRIA - 4ª ETAPA - CAMPUS I E INSTALAÇÃO DE SISTEMA DE GASES DOS BLOCOS B E C.					área Monica: ESTRUTURA
	título do documento: FORMA E ARMAÇÃO DO RESERVATÓRIO INTERIO 02 (2ª PARTE)					tipo: PROJETO EXECUTIVO
	quadro de áreas:					prancha: 41 / 56 escala: 1/100 data: SETEMBRO/2014

responsáveis técnicos:			
SMC MARCOS ANDRÉ SANTOS	ENGENHEIRO - RNP: 180427703-7	D.P.P. ISABEL PINTO S.P.O. SILMARIA MELO UFPE ANÍSIO B. F. DOURADO	DIRETORA SUPERINTENDENTE REITOR

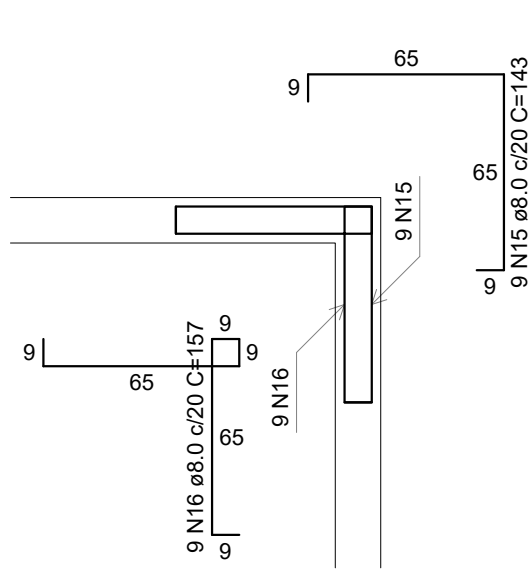


Contenções da CX. INSPEÇÃO
escala 1:50

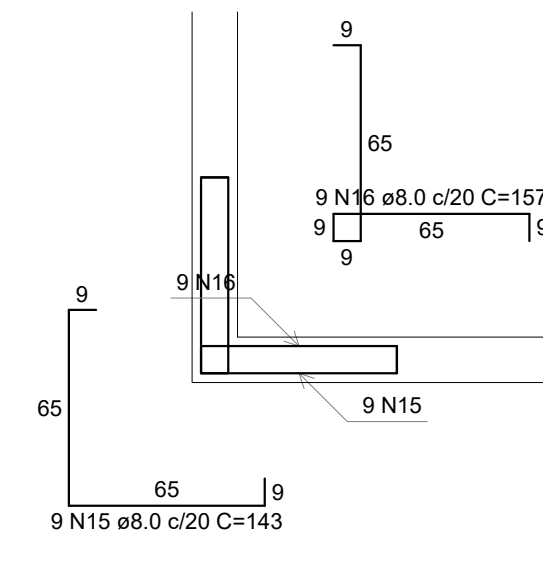
Contenções
PAR2 = PAR3 = PAR6 = PAR7
ESC 1:25



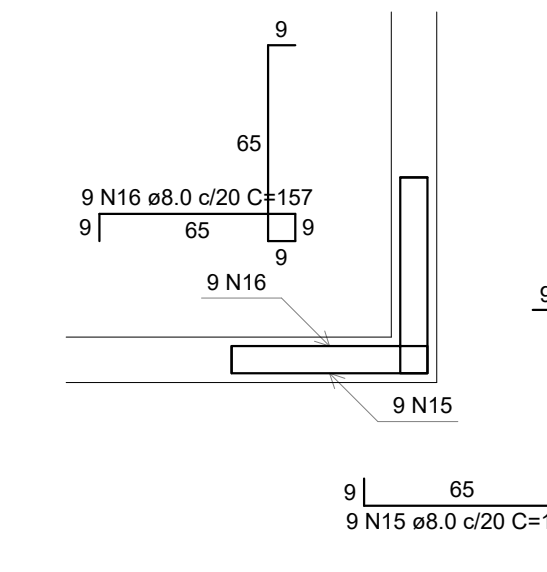
Contenções
PAR2-PAR6
escala 1:25



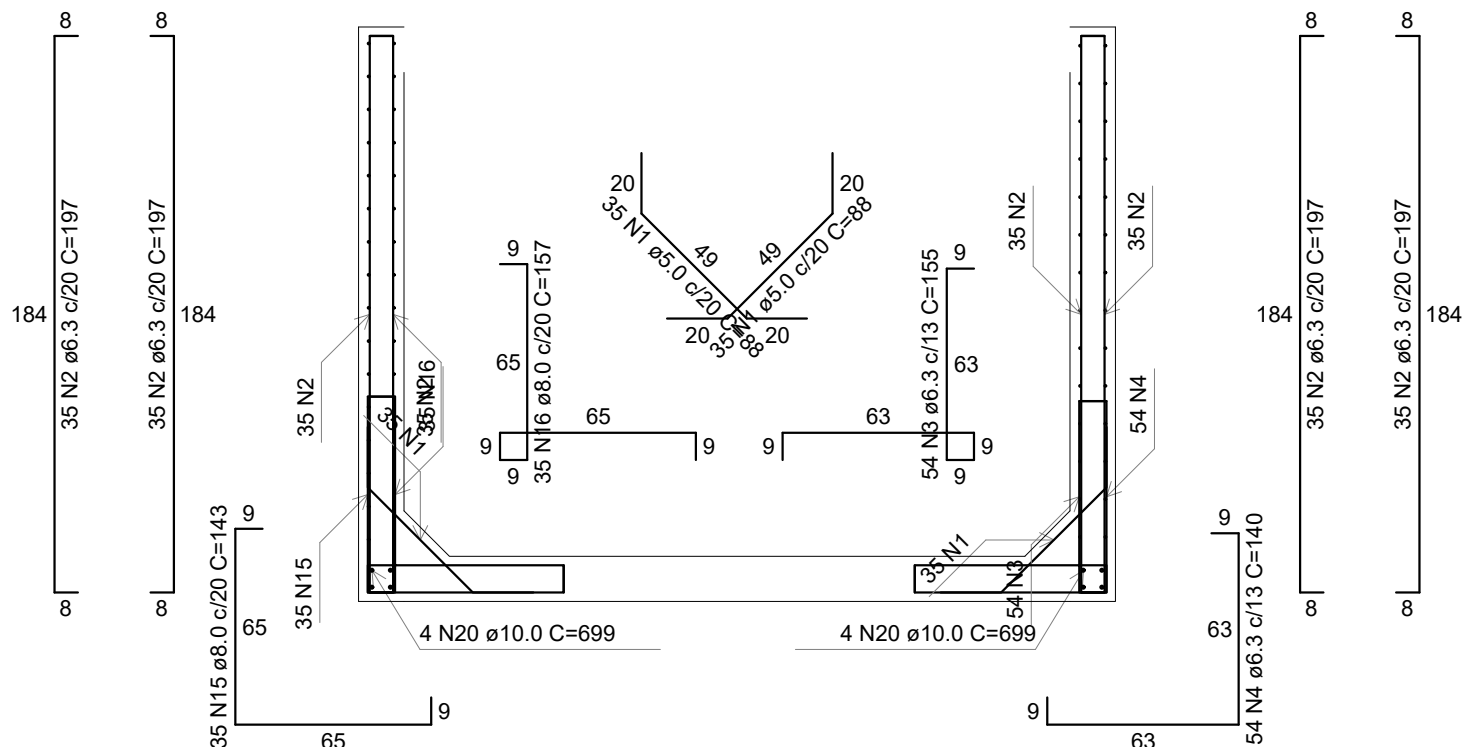
Contenções
PAR2-PAR7
escala 1:25



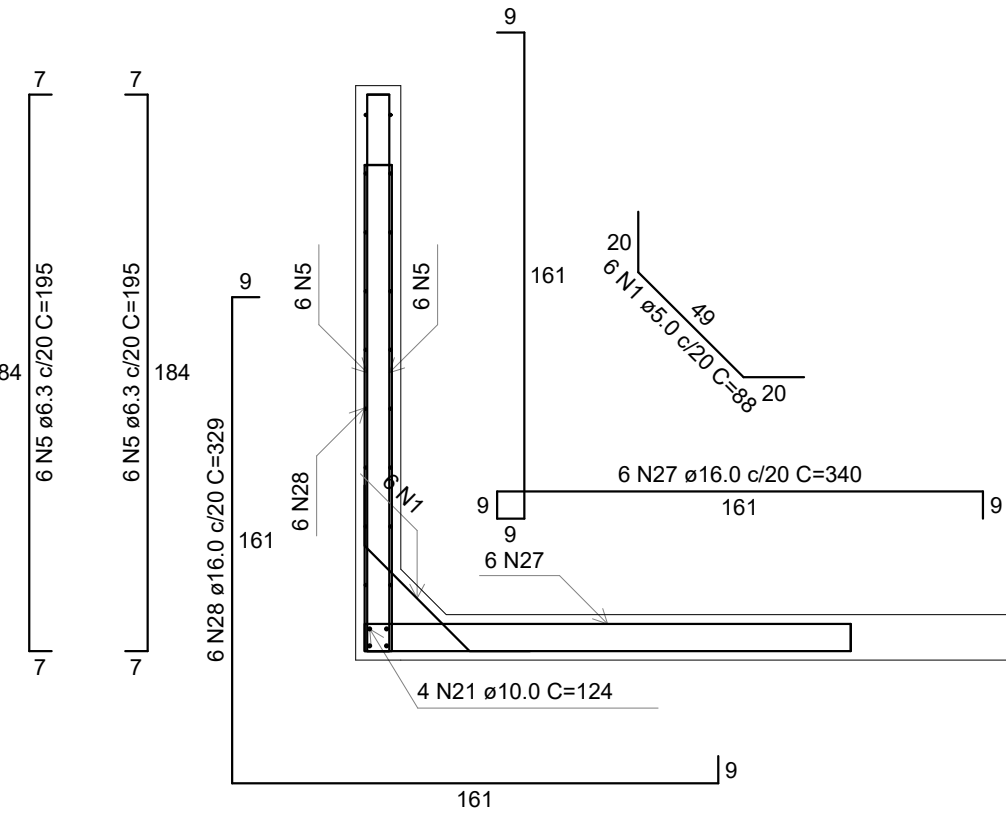
Contenções
PAR3-PAR6
escala 1:25



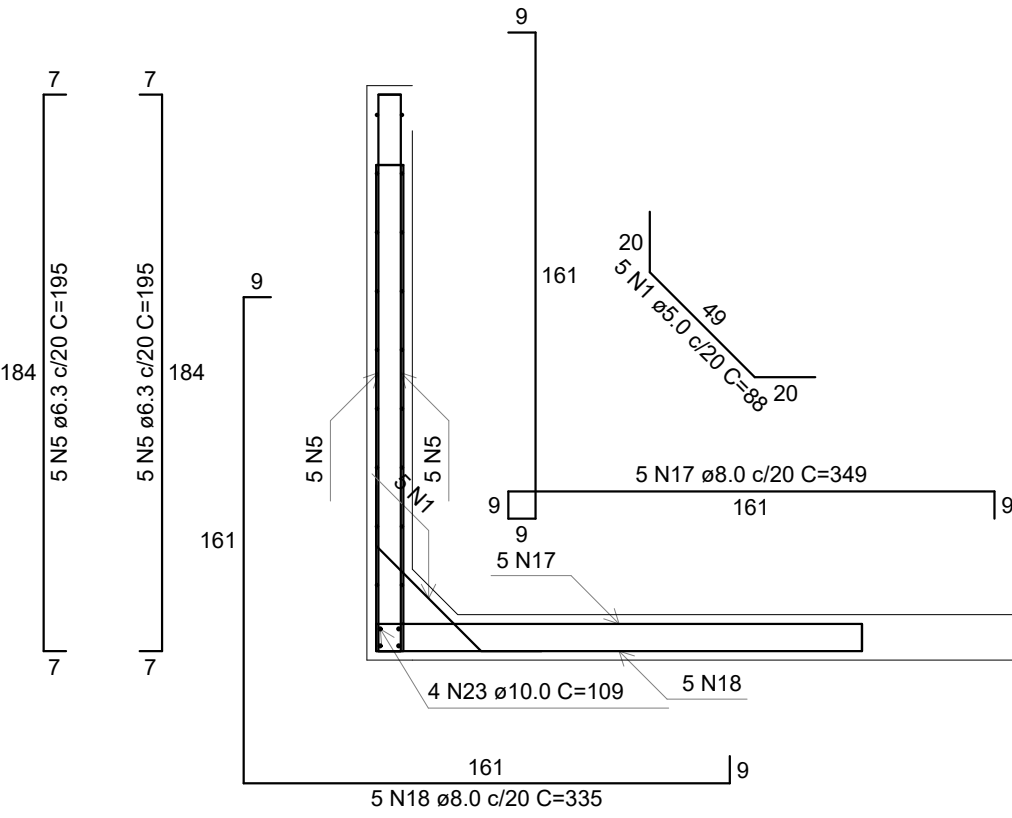
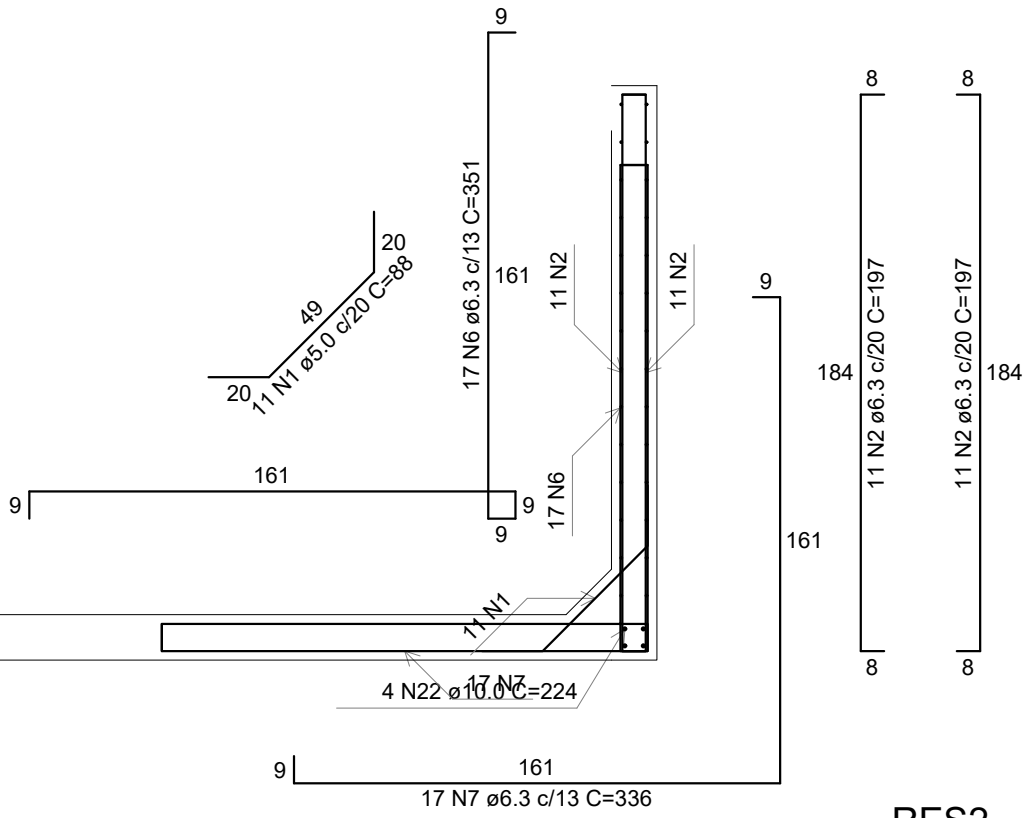
Contenções
PAR3-PAR7
escala 1:25



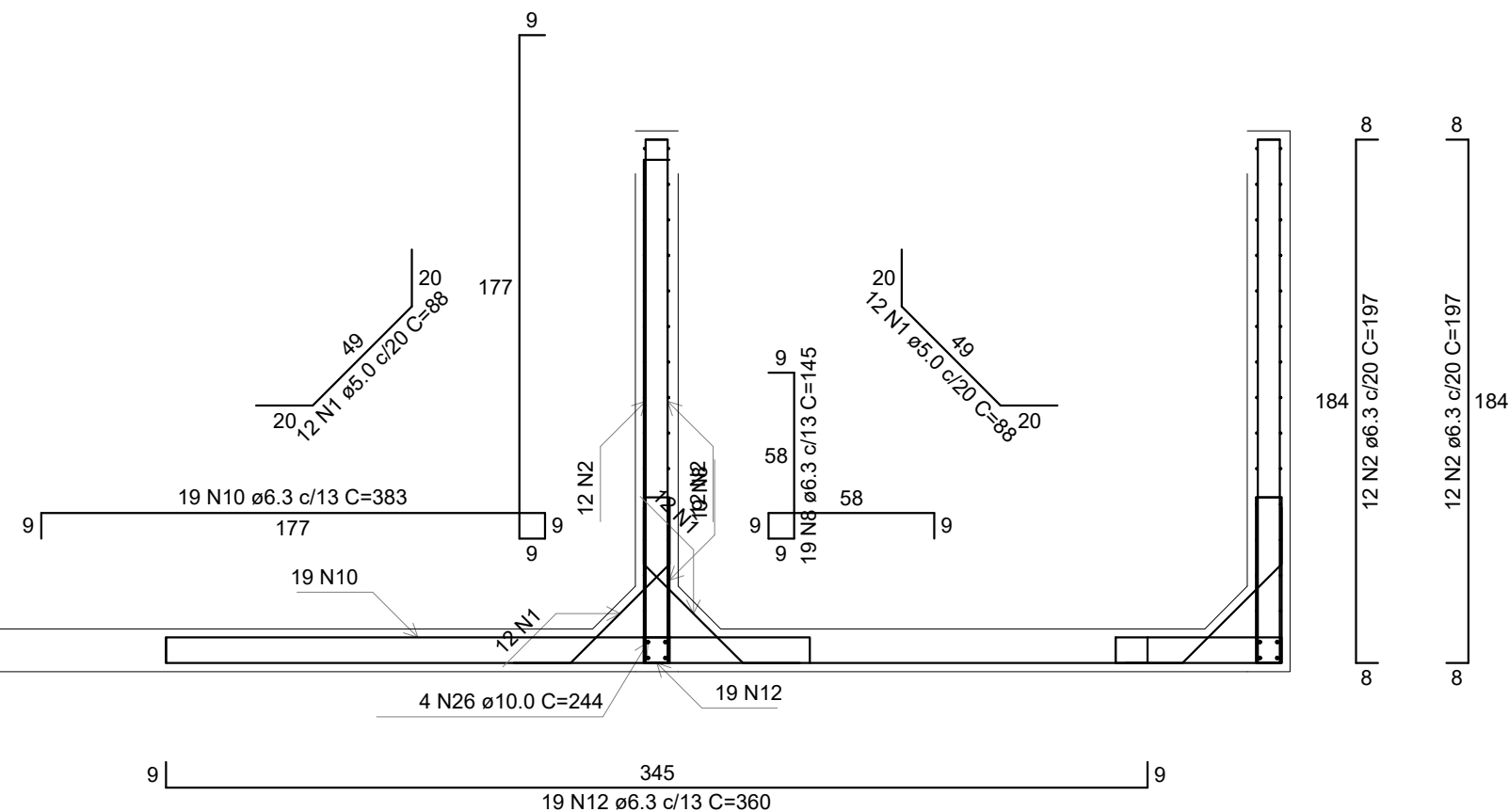
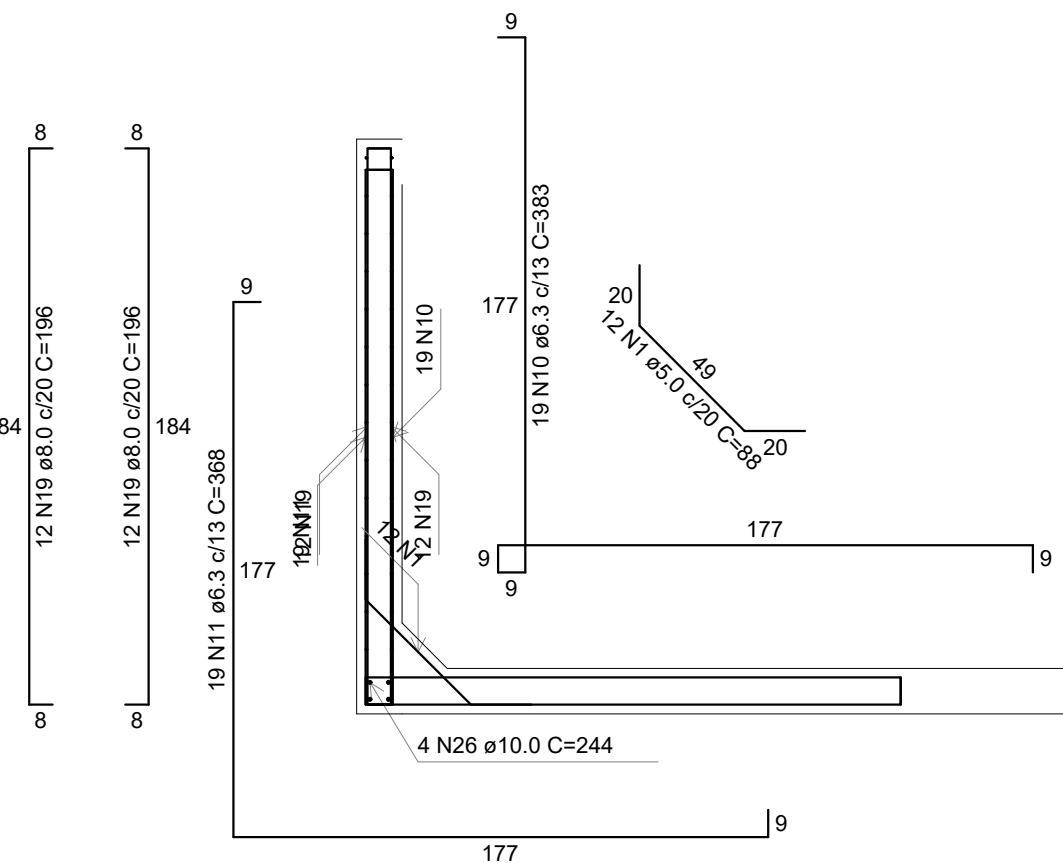
RES2
Corte A-A
escala 1:25



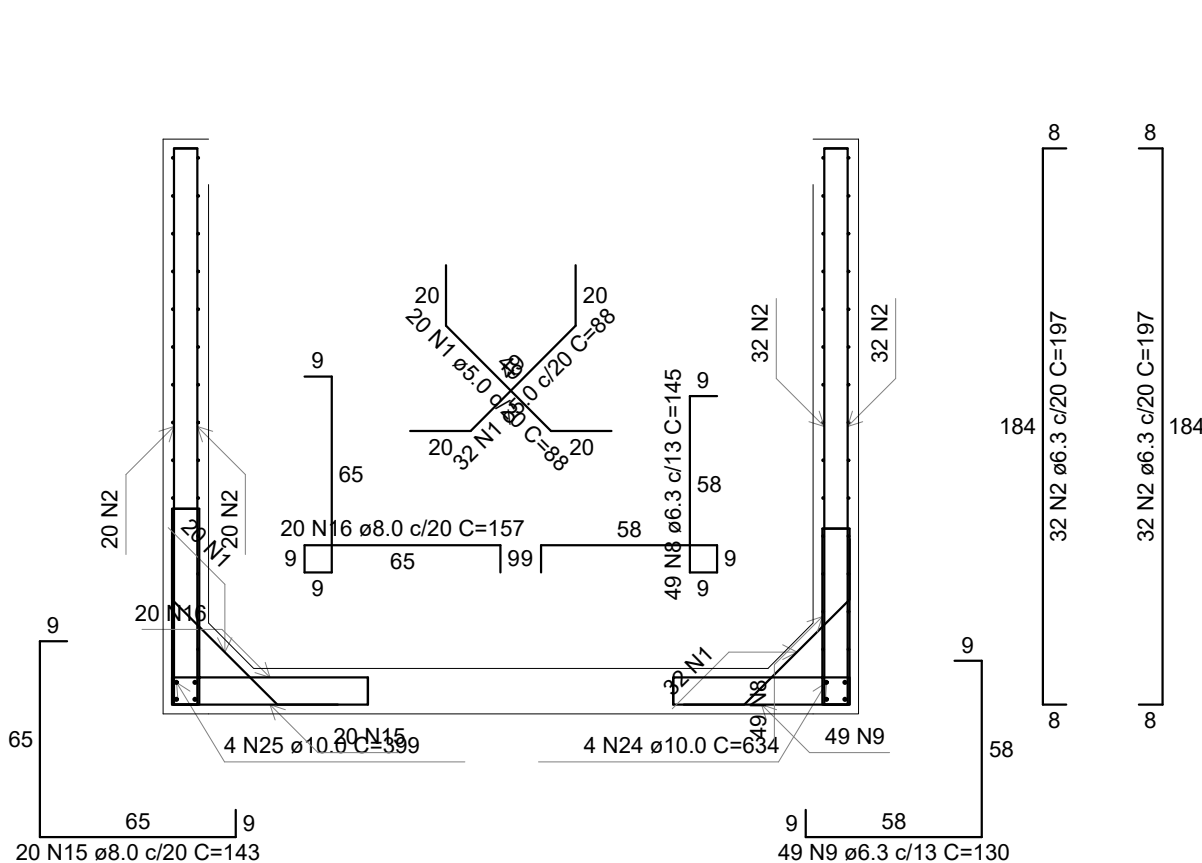
RES2
Corte B-B
escala 1:25



RES2
Corte E-E
escala 1:25



RES2
Corte F-F
escala 1:25



RES2
Corte G-G
escala 1:25

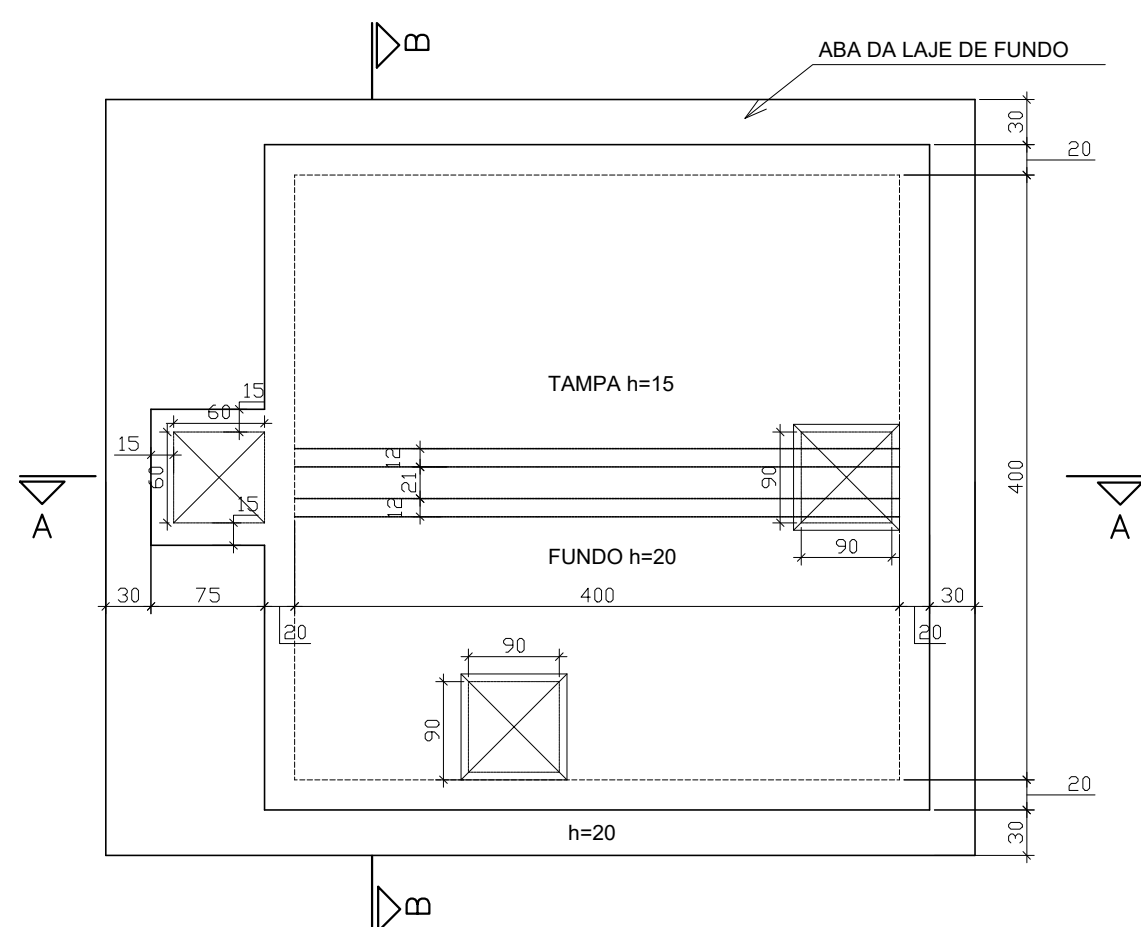
RELAÇÃO DO AÇO					
AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	180	88	15840
CA50	2	6.3	290	197	57130
	3	6.3	54	155	8370
	4	6.3	54	140	7560
	5	6.3	22	195	4290
	6	6.3	17	351	5967
	7	6.3	17	336	5712
	8	6.3	68	145	9860
	9	6.3	49	130	6370
	10	6.3	38	383	14554
	11	6.3	19	368	6992
	12	6.3	19	360	6840
	13	8.0	48	179	8592
	14	8.0	72	corr	8280
	15	8.0	91	143	13013
	16	8.0	91	157	14287
	17	8.0	5	349	1745
	18	8.0	5	335	1675
	19	8.0	24	196	4704
	20	10.0	8	699	5592
	21	10.0	4	124	496
	22	10.0	4	224	896
	23	10.0	4	109	436
	24	10.0	4	634	2536
	25	10.0	4	399	1596
	26	10.0	8	244	1952
	27	16.0	6	340	2040
	28	16.0	6	329	1974

RESUMO DO AÇO			
AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	6.3	1336.5	327
	8.0	523	206.4
	10.0	135	83.3
	16.0	40.1	63.4
	5.0	158.4	24.4
PESO TOTAL (kg)			
CA50	690		
CA60	24.4		

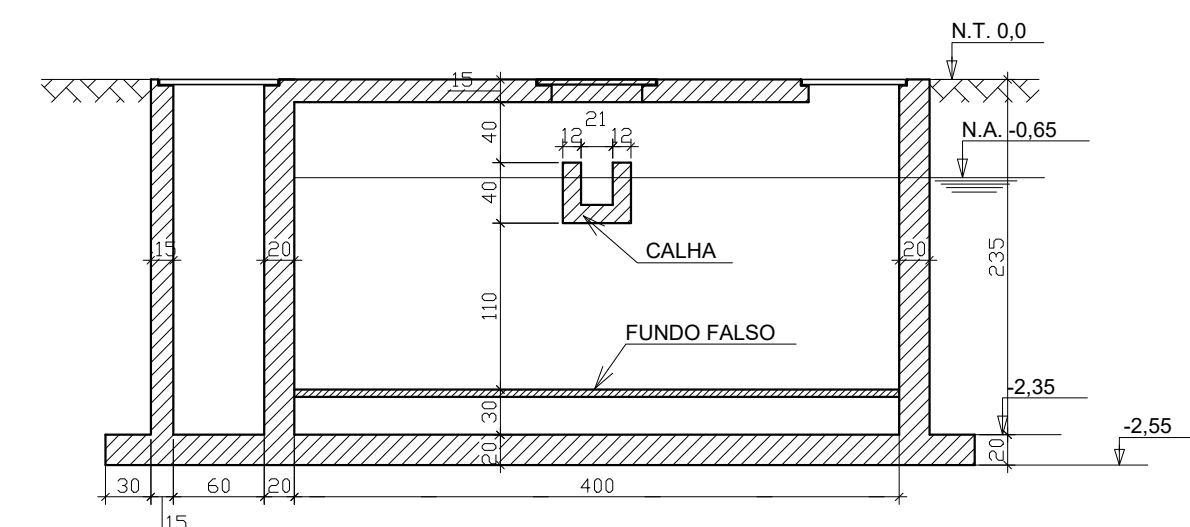
Volume de concreto (C-25) = 1.21 m³
Área de forma = 16.79 m²

00	OUT/2017	EMIÇÃO INICIAL			
REV.	DATA	OBSERVAÇÕES	DESENHO	REVISÃO	APROVAÇÃO
			UNIVERSIDADE FEDERAL DE PERNAMBUCO SUPERINTENDÊNCIA DE INFRAESTRUTURA DIRETORIA DE PLANOS E PROJETOS		
Projeto: AMPLIAÇÃO DO CENTRO ACADÊMICO DE VITÓRIA - 4ª ETAPA - CAMPUS 1 E INSTALAÇÃO DE SISTEMA DE GASES DOS BLOCOS B E C.			Área Monitorada: ESTRUCTURA		
Título do documento: FORMA E ARMAÇÃO DO RESERVATÓRIO INFERIOR 02 (3ª PARTE)			PROJETO EXECUTIVO		
quadro de áreas:			prancha: 42 / 56		
PAVIMENTO TÉRREO 818,57 M²			PAV. SEMI ENTERRADO 299,51 M²		
1º PAVIMENTO 954,02 M²			PAVIMENTO ENTERRADO 95,92 M²		
2º PAVIMENTO 954,02 M²			COBERTA 1050,68 M²		
3º PAVIMENTO 954,02 M²			TOTAL CONSTRUÇÃO 3.980,14 M²		
responsáveis técnicos:			data: SETEMBRO/2024		
elaboração: SMC MARCOS ANDRÉ SANTOS			D.P.P. ISABEL PINTO		
ENGENHEIRO - RNP: 180427703-7			S.P.O. SILMARA MELO		
			DIRETORIA SUPERINTENDENTE		
			U.F.P.E. ANÍSIO B. F. DOURADO		
			REITOR		

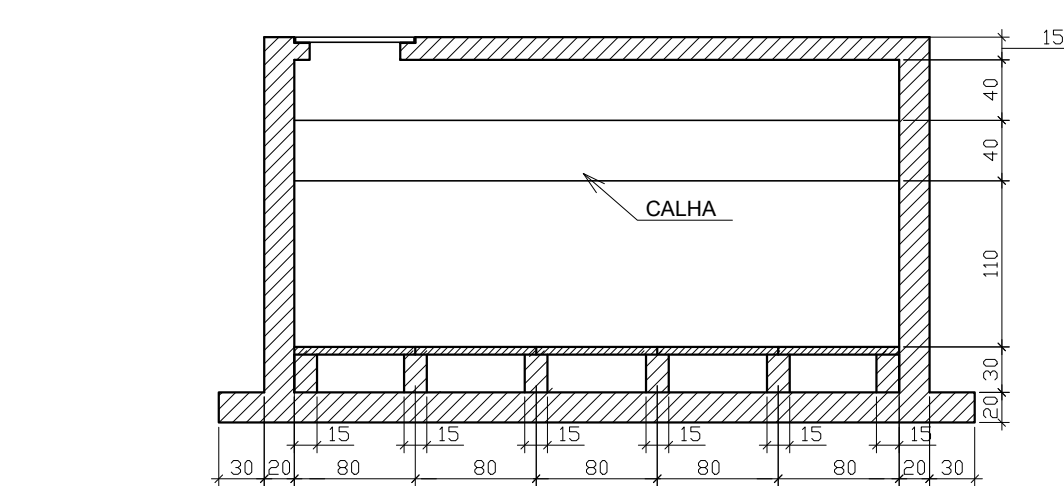
ESC 1:50



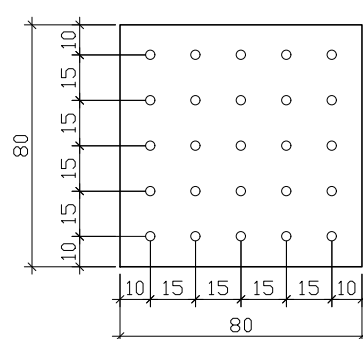
ESC 1:50



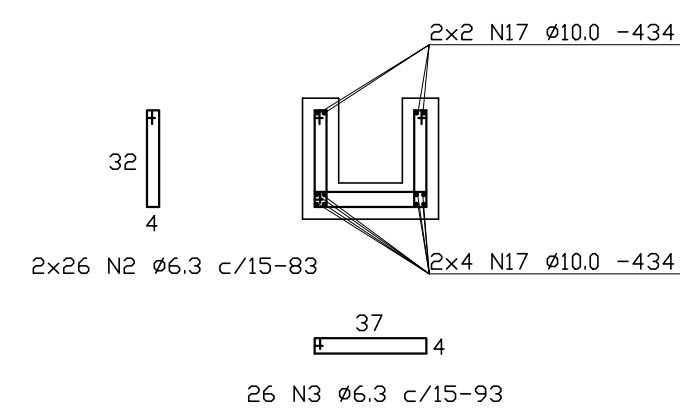
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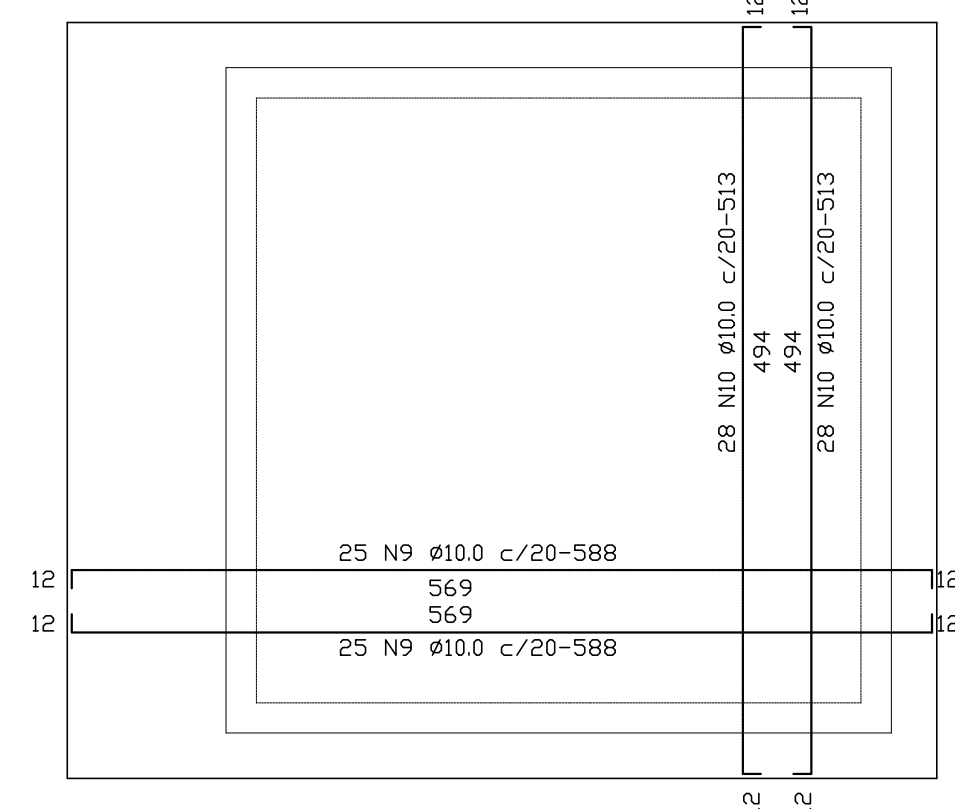
ESC 1:25



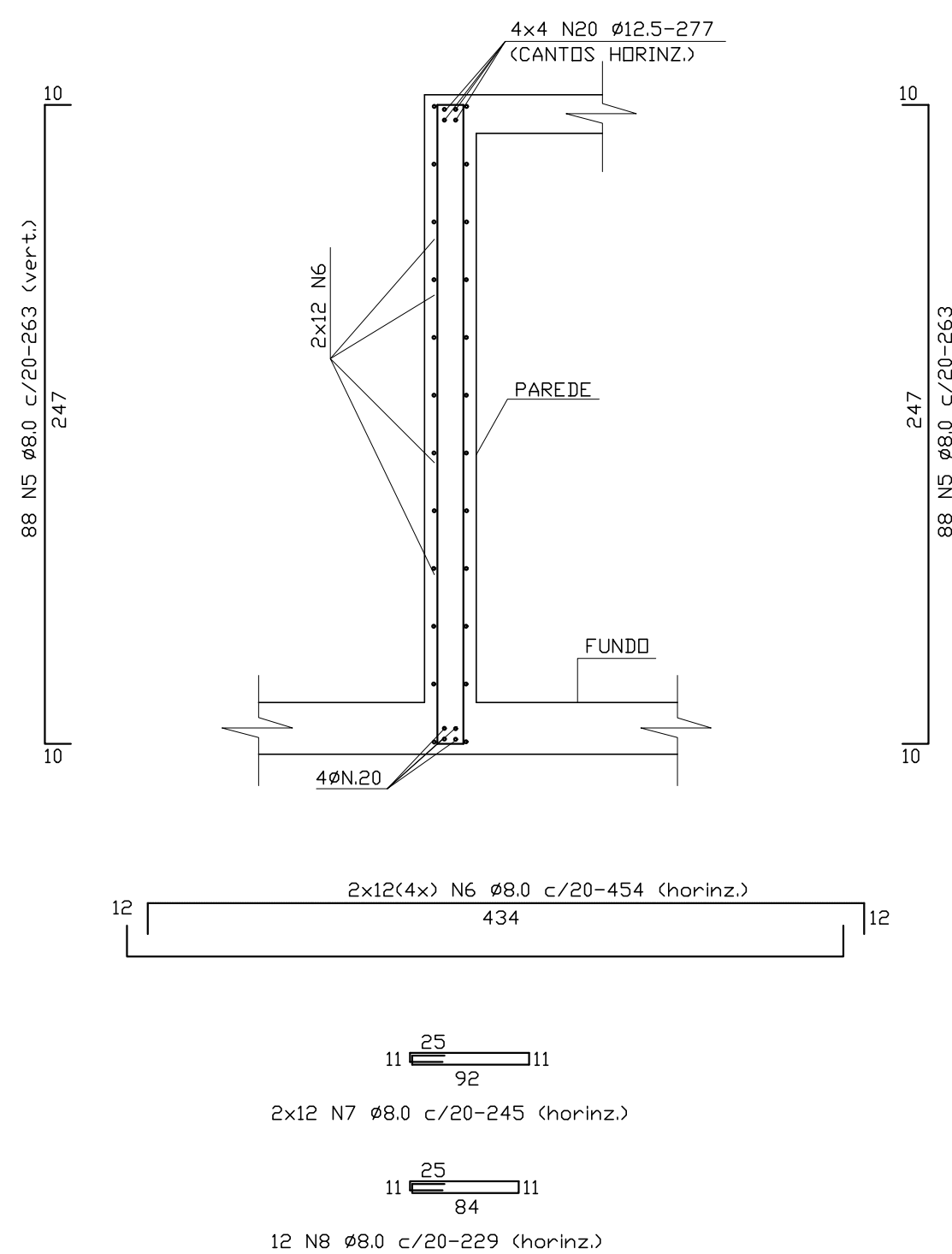
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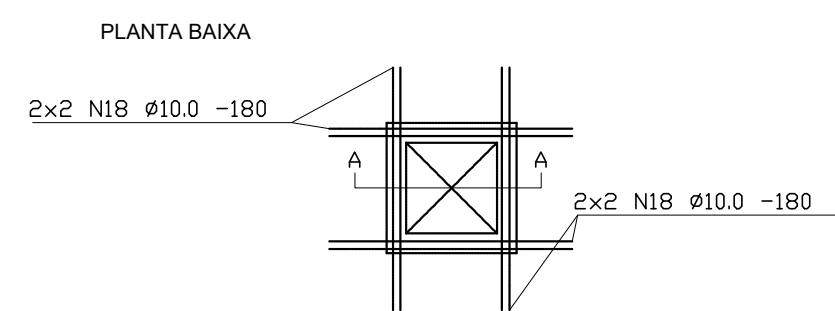
ESC 1:50



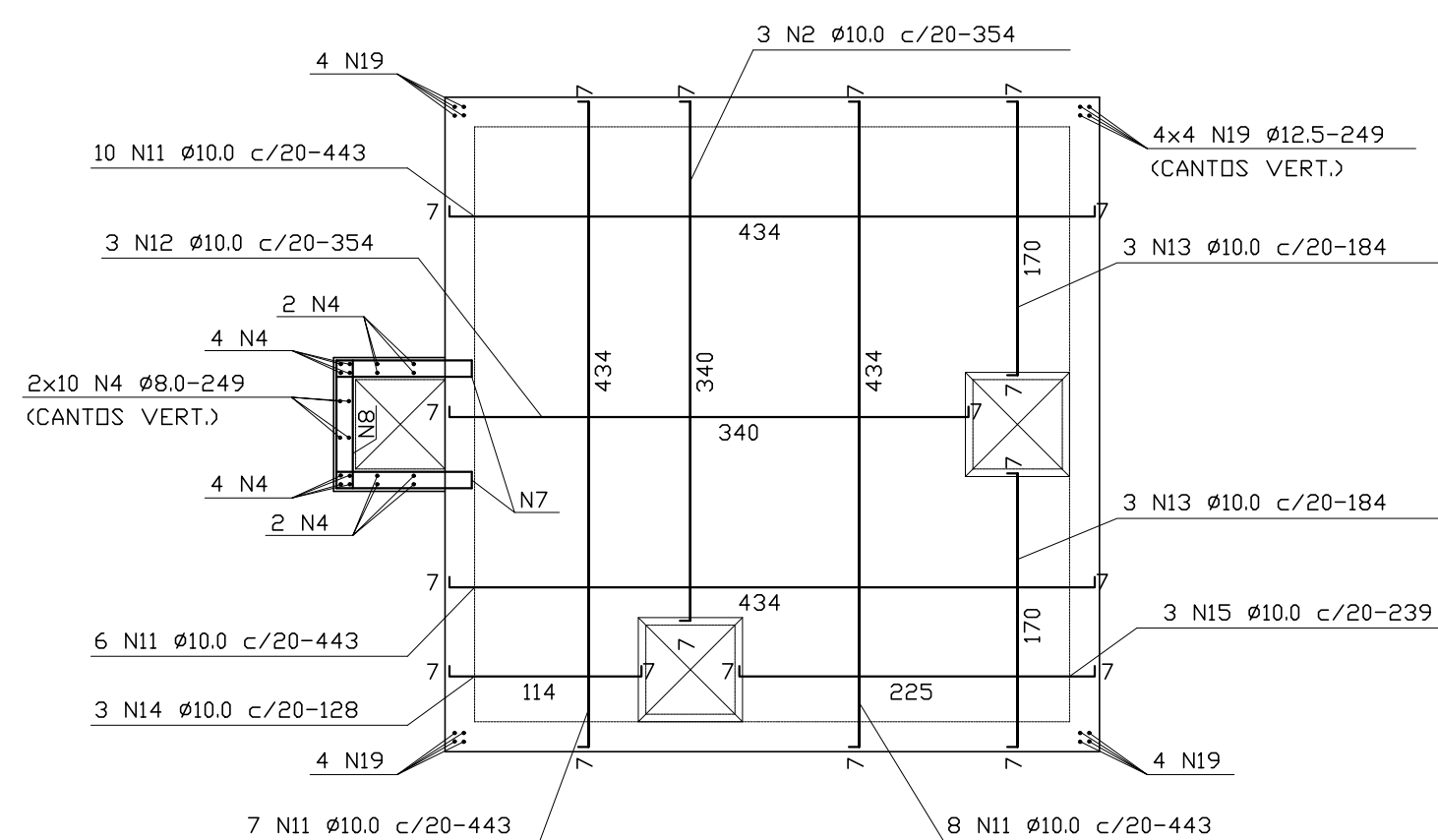
ESC 1:25



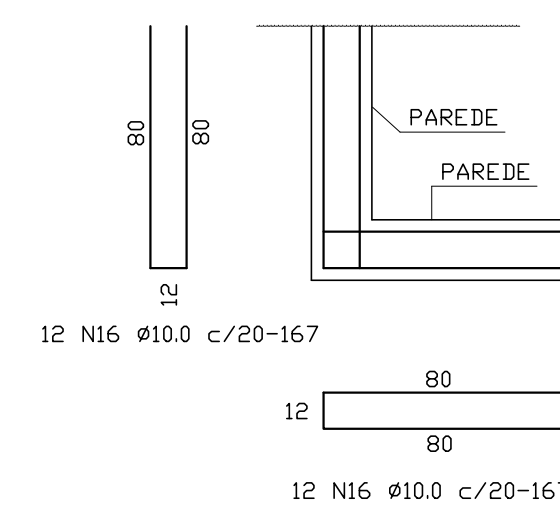
ESC 1:50



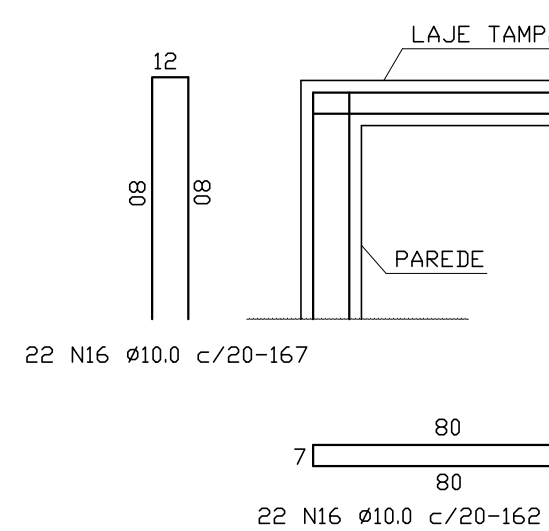
ESC 1:50



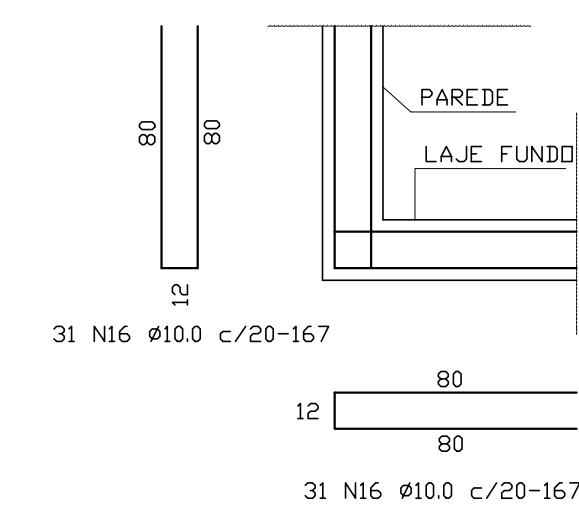
ESC 1:25



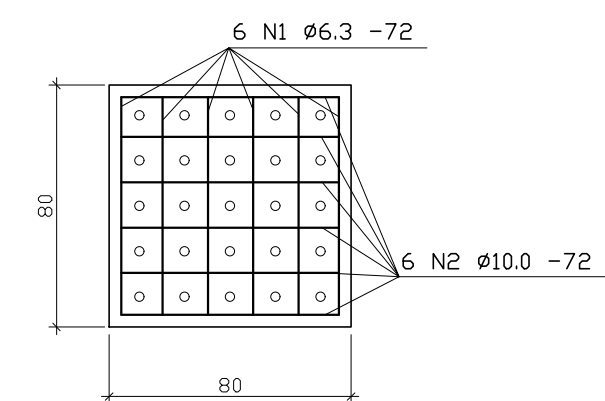
ESC 1:25



ESC 1:25



ESC 1:25



AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
CA50	1	6.3	150	72	10800
	2	10.0	150	72	10800


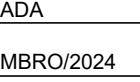
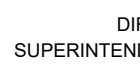
AÇO	DIAM	C.TOTAL (m)	PESO (kg)
CA50	6.3	108.0	27.0
	10.0	108.0	68.0
PESO TOTAL			
CA50	95.0		

COBRIMENTO = 4 cm

AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
60 50	1	5,0	32	39	1248
	2	6,3	52	83	4316
	3	6,3	26	93	2418
	4	8,0	20	249	4980
	5	8,0	18	263	4678
	6	8,0	96	454	43584
	7	8,0	24	245	5880
	8	8,0	12	229	2748
	9	10,0	50	588	29400
	10	10,0	56	513	28728
	11	10,0	31	443	13733
	12	10,0	6	363	2178
	13	10,0	6	193	1158
	14	10,0	3	138	414
	15	10,0	3	248	744
	16	10,0	520	167	86840
17	10,0	12	324	3948	
18	10,0	16	150	2400	
19	12,5	16	249	3984	
20	12,5	16	277	4432	

AÇO	DIAM	C.TOTAL (m)	PESO (kg)
CA50	6.3	67.0	17.0
	8.0	1035.0	414.0
	10.0	1708.0	1076.0
	12.5	84.0	84.0
CA60	5.0	12.0	2.0
PESO TOTAL			
CA50	1591.0		
CA60	2.0		

Concreto (C-35)

00	OUT/2017	MISSÃO INICIAL																					
REV.	DATA	OBSERVAÇÕES	DESENHO	REVISÃO	APROVAÇÃO	AUTORIZAÇÃO																	
<div><div>UNIVERSIDADE FEDERAL DE PERNAMBUCO SUPERINTENDÊNCIA DE INFRAESTRUTURA DIRETORIA DE PLANOS E PROJETOS</div></div>					<div></div>																		
projeto: AMPLIAÇÃO DO CENTRO ACADÊMICO DE VITÓRIA - 4ª ETAPA - CAMPUS I E INSTALAÇÃO DE SISTEMA DE GASES DOS BLOCOS B E C.					área técnica: ESTRUTURA																		
título do documento: FORMA E ARMAÇÃO DO SUMIDURO.					estipos: PROJETO EXECUTIVO																		
quantidade de áreas: <table><tr><td>PAVIMENTO TERREO</td><td>818,57 M²</td><td>PAV. SEMI ENTERRADO</td><td>299,51 M²</td></tr><tr><td>1º PAVIMENTO</td><td>954,02 M²</td><td>PAVIMENTO ENTERRADO</td><td>95,92 M²</td></tr><tr><td>2º PAVIMENTO</td><td>954,02 M²</td><td>COBERTA</td><td>1050,68 M²</td></tr><tr><td>3º PAVIMENTO</td><td>954,02 M²</td><td>TOTAL CONSTRUÇÃO</td><td>3.980,14 M²</td></tr></table>					PAVIMENTO TERREO	818,57 M²	PAV. SEMI ENTERRADO	299,51 M²	1º PAVIMENTO	954,02 M²	PAVIMENTO ENTERRADO	95,92 M²	2º PAVIMENTO	954,02 M²	COBERTA	1050,68 M²	3º PAVIMENTO	954,02 M²	TOTAL CONSTRUÇÃO	3.980,14 M²	escala: <div>43 / 56</div>		
PAVIMENTO TERREO	818,57 M²	PAV. SEMI ENTERRADO	299,51 M²																				
1º PAVIMENTO	954,02 M²	PAVIMENTO ENTERRADO	95,92 M²																				
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3º PAVIMENTO	954,02 M²	TOTAL CONSTRUÇÃO	3.980,14 M²																				
responsáveis técnicos: <table><tr><td>CAIC MARCOS ANDRÉ SANTOS</td><td>ENGENHEIRO - RNP: 18042703-7</td><td>D.P.P.</td><td>ISABEL PINTO</td></tr><tr><td></td><td></td><td>S.P.O.</td><td>SILMARIA MELO</td></tr><tr><td></td><td></td><td>UFPE</td><td>ANÍSIO B. F. DOURADO</td></tr></table>					CAIC MARCOS ANDRÉ SANTOS	ENGENHEIRO - RNP: 18042703-7	D.P.P.	ISABEL PINTO			S.P.O.	SILMARIA MELO			UFPE	ANÍSIO B. F. DOURADO	assinatura: <div></div>						
CAIC MARCOS ANDRÉ SANTOS	ENGENHEIRO - RNP: 18042703-7	D.P.P.	ISABEL PINTO																				
		S.P.O.	SILMARIA MELO																				
		UFPE	ANÍSIO B. F. DOURADO																				
elaboração:					assinatura: <div></div>																		
					DIRETORA SUPERINTENDENTE REITOR																		

Technical drawing of a rectangular table with a top (TAMPA) and a base (FUNDO). The drawing includes dimensions and labels for the components.

Dimensions:

- Overall width: 610
- Overall height: 320
- Top (TAMPA) height: 15
- Base (FUNDO) height: 20
- Top width: 580
- Base width: 580
- Top depth: 60
- Base depth: 60
- Top thickness: 15
- Base thickness: 15

Labels:

- PAR 1 (Top)
- PAR 2 (Base)
- PAR 3 (Left side)
- PAR 4 (Right side)
- CHICANUS (Decorative element on the sides)
- TAMPA h=15
- FUNDO h=20

Technical drawing of a rectangular building footprint. The overall dimensions are 27.5m by 24.0m. The footprint is 6.0m wide and 16.2m deep. The drawing shows the building's outline, internal walls, and a central area labeled 'N.A. 0.28'. The drawing is oriented with the long side horizontal. The right side of the drawing shows a cross-section with levels: -2.05, -2.25, and -2.55. The top right corner is labeled 'N.T. 0.0'. The drawing is oriented with the long side horizontal. The right side of the drawing shows a cross-section with levels: -2.05, -2.25, and -2.55. The top right corner is labeled 'N.T. 0.0'.

[illegible]

Technical drawing of a roof structure, showing a plan view and three cross-sections.

Plan View (Top):

- Top corners: 4øN.21
- Right side: 4x4 N21 ø12.5-604 (horiz.)
- Internal horizontal members: 2x10øN.4
- Central truss: 2x19øN.13
- Bottom corners: 4øN.21
- Right side vertical dimension: 2x(2x30) N5 ø6.0 c/20-237
- Right side vertical dimension: 219

Section 1 (Middle Left):

- Top: 30 N18 ø10.0 c/20-234
- Left side: 16
- Right side: 178
- Bottom: 30

Section 2 (Middle Right):

- Top: 30 N18 ø10.0 c/20-234
- Left side: 30
- Right side: 178
- Bottom: 16

Section 3 (Bottom):

- Top: 30 N19 ø10.0 c/20-350
- Left side: 166
- Right side: 166
- Bottom: 9

Section 4 (Bottom Left):

- Top: 30 N20 ø10.0 c/20-61
- Left side: 16
- Right side: 15
- Bottom: 30

Section 5 (Bottom Right):

- Top: 30 N20 ø10.0 c/20-61
- Left side: 30
- Right side: 16
- Bottom: 15

Section 6 (Bottom Left):

- Top: 2x(2x10) N4 ø6.3 c/20-622 (horiz.)
- Left side: 9
- Right side: 9
- Bottom: 604

Section 7 (Bottom Right):

- Top: 2x19 N13 ø10.0 c/20-622 (horiz.)
- Left side: 9
- Right side: 9
- Bottom: 604

15

80

80

9

88 N10 Ø9.0 c/20-165

PAREDE

FUNDO

20

ADAPTAR ÂNGULO NO LOCAL

80

12

80

88 N11 Ø8.0 c/20-168

Technical drawing of a wall section (PAREDE) showing dimensions and materials. The drawing includes a vertical section on the left with dimensions 80 and 90, and a horizontal section on the right with dimensions 15 and 115. The wall is labeled 'PAREDE' and 'PAREDE'.

Technical drawing of a door frame assembly showing a side view and a top view.

Side View: A vertical door frame with a height of 80 and a width of 9. The door frame is labeled "LAJE" (slab) and "PAREDE" (wall).

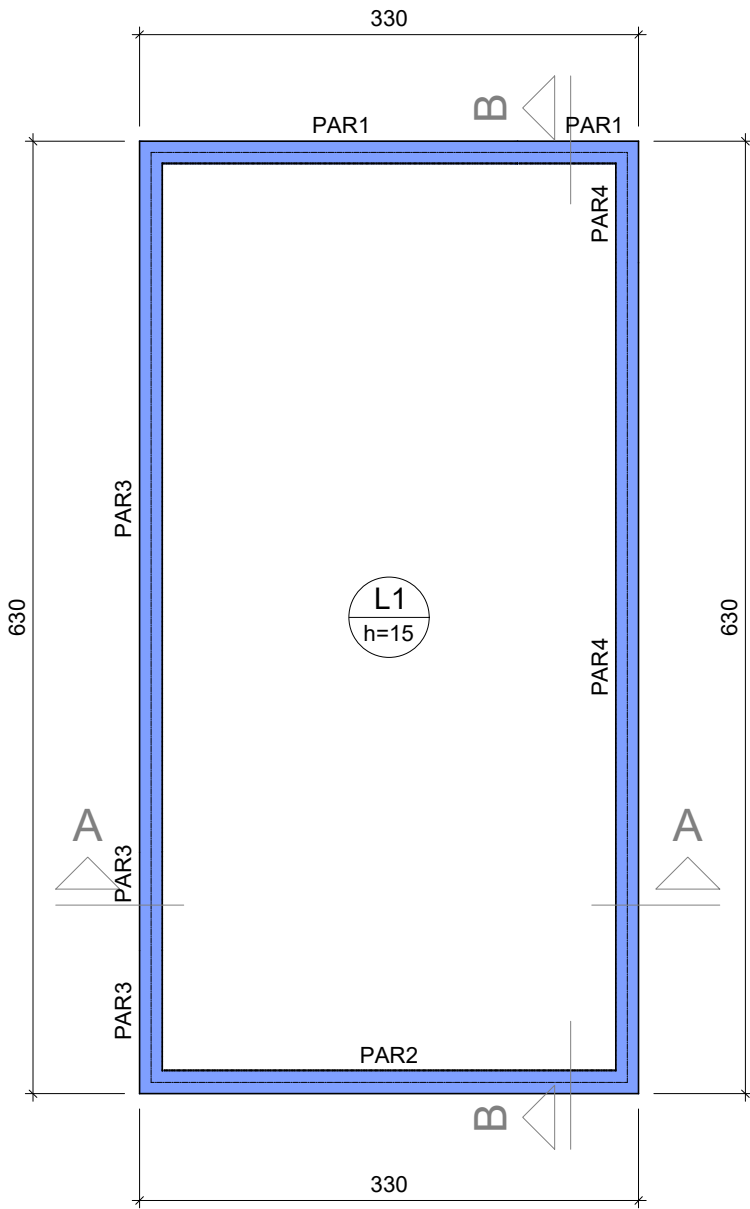
Top View: A horizontal door frame with a width of 80 and a height of 9. The door frame is labeled "LAJE" (slab) and "PAREDE" (wall).

The drawing includes a dimension line indicating a 15mm gap between the door frame and the wall.

AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
60 50	1	5,0	32	123	3936
	2	6,3	40	332	13280
	3	6,3	16	var	
	4	6,3	40	622	24880
	5	8,0	120	237	28440
	6	8,0	68	var	
	7	10,0	12	12	1620
	8	8,0	16	625	10000
	9	8,0	3	415	1245
	10	8,0	264	165	43560
	11	8,0	88	168	14784
	12	8,0	88	165	14752
	13	10,0	38	622	23636
	14	10,0	25	335	8375
	15	10,0	6	150	900
	16	10,0	8	170	1360
	17	10,0	16	220	3520
	18	10,0	60	334	14040
	19	10,0	30	350	10500
	20	10,0	60	61	3660
23	10	16	604	9656	
	8	8	315	2512	
	23	10,0	8	314	2512

AÇO	DIAM	C.TOTAL (m)	PESO (kg)
CA50	6.3	414.0	104.0
	8.0	1321.0	529.0
	10.0	798.0	503.0
CA60	5.0	40.0	7.0

Concreto (C-35)



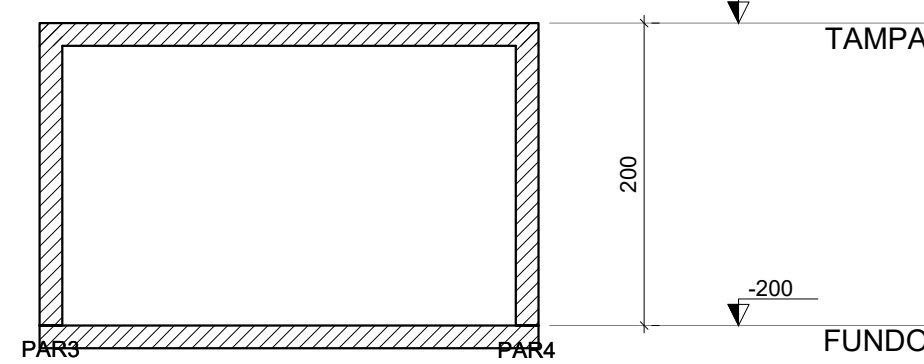
Forma do FUNDO (Nível -200)
escala 1:50

Lajes							
Nome	Tipo	Altura (cm)	Elevação (cm)	Nível (cm)	Peso próprio (kgf/m²)	Sobrecarga (kgf/m²)	Localizada
L1	Maciça	15	0	-200	375	155	150

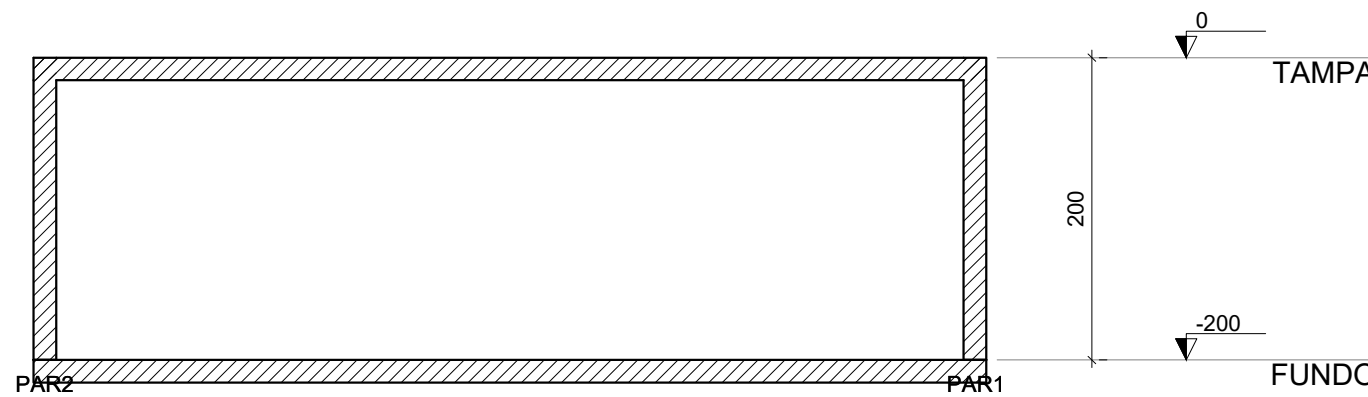
Características dos materiais	
fck (kgf/cm²)	Ecs (kgf/cm²)
350	294029

Dimensão máxima do agregado = 19 mm

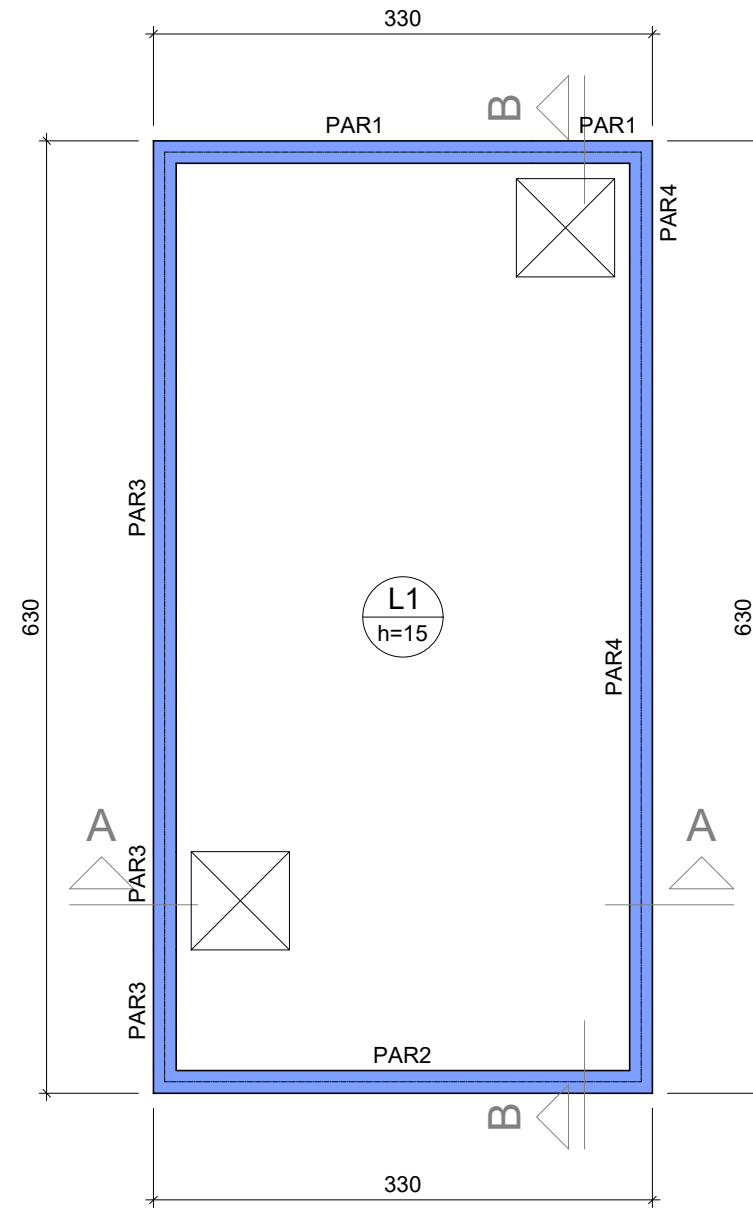
Legenda das vigas e paredes	
	Parede de concreto



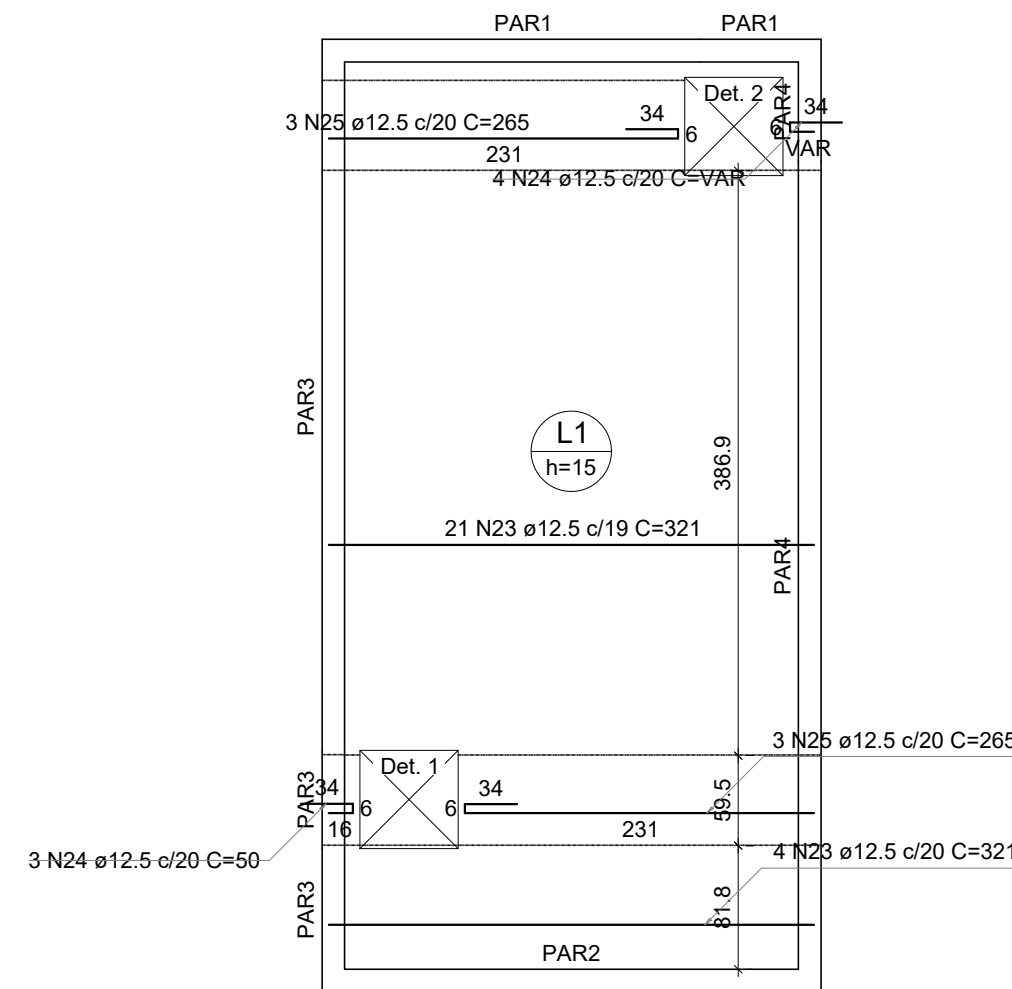
Corte A-A
escala 1:50



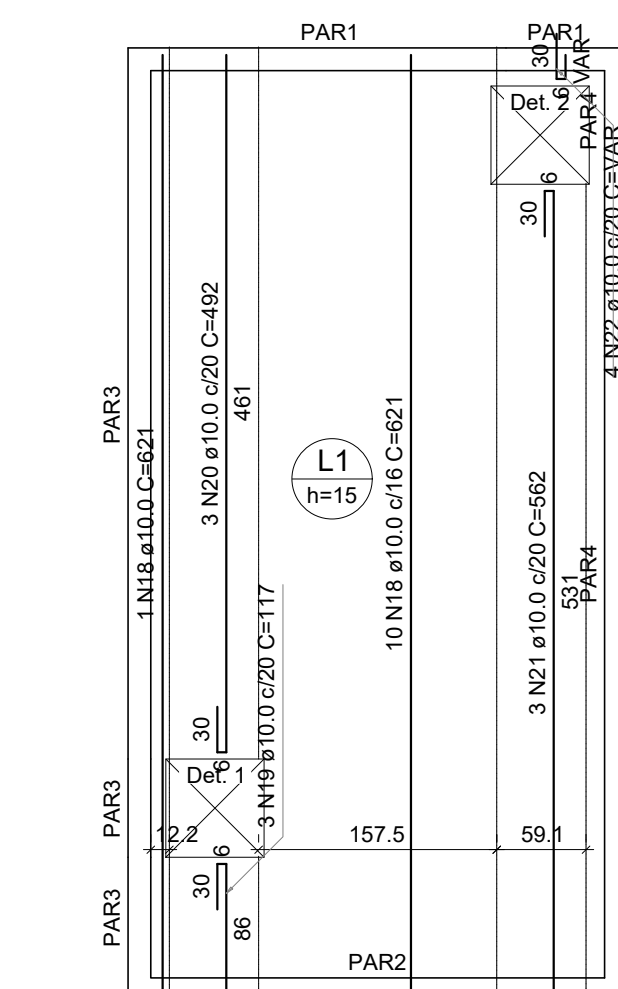
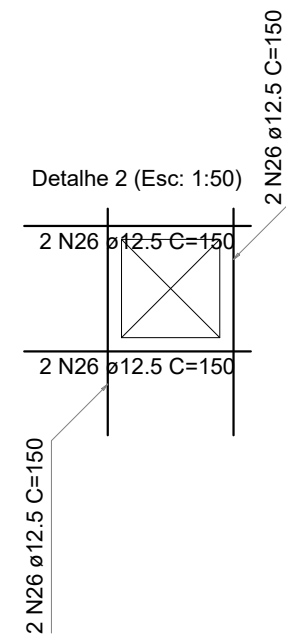
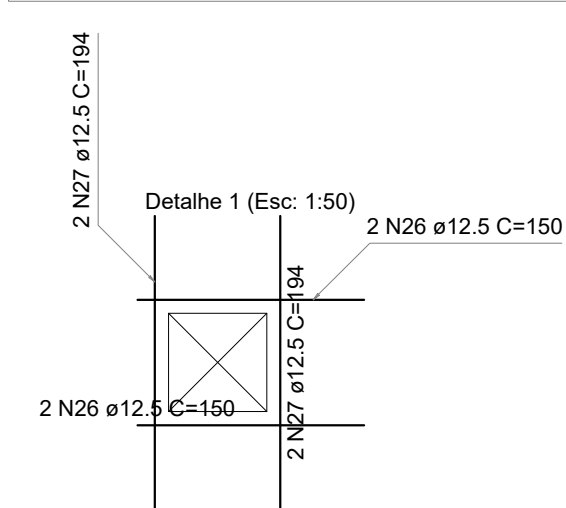
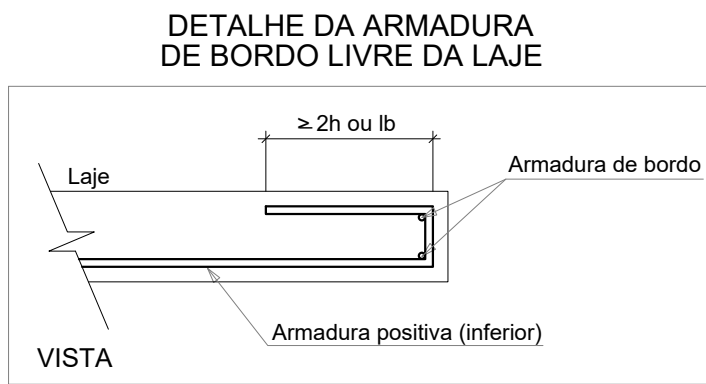
Corte B-B
escala 1:50



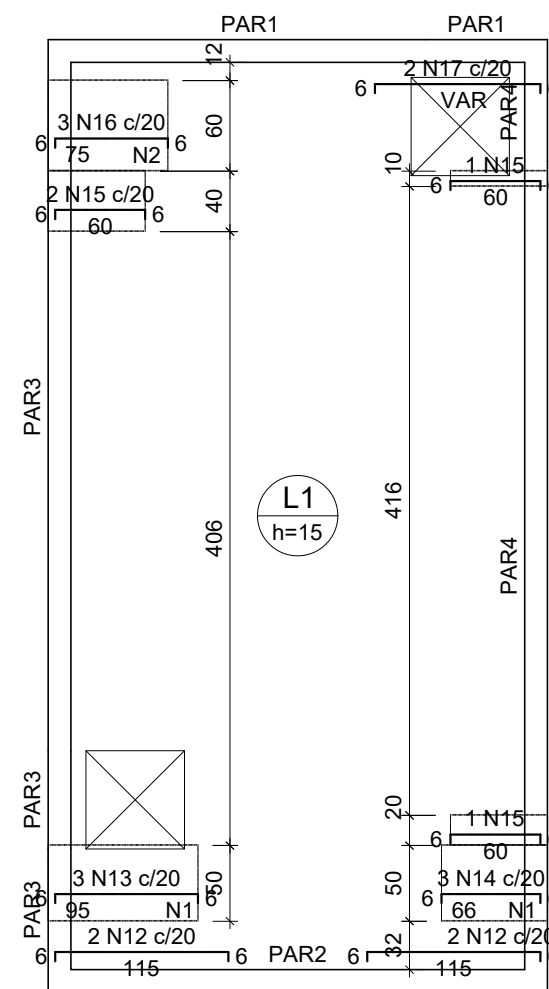
Forma da TAMPA (Nível 0)
escala 1:50



Armação positiva da TAMPA (Eixo X)
escala 1:50

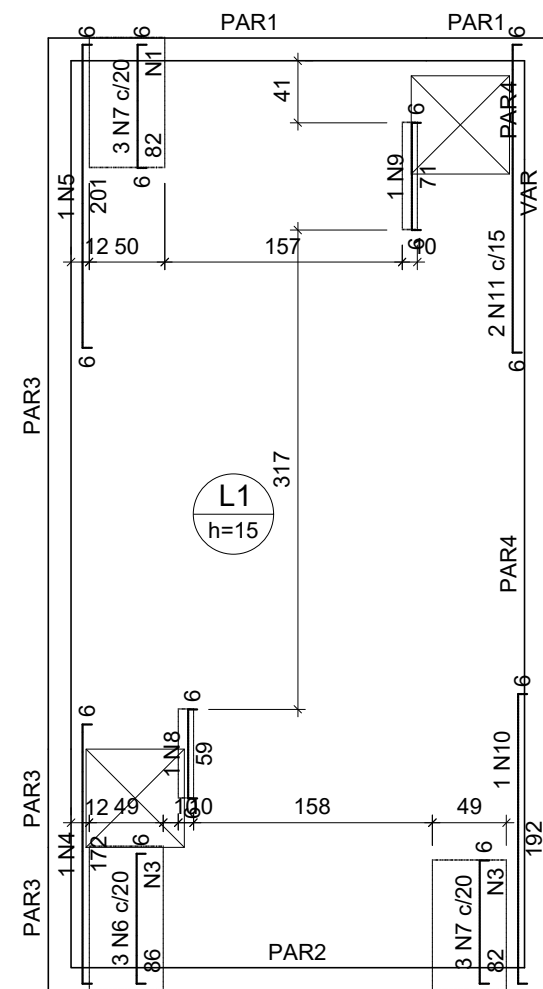


Armação positiva da TAMPA (Eixo Y)
escala 1:50



Armação negativa da TAMPA (Eixo X)
escala 1:50

Feros de distribuição	
Ferro	Armadura de distribuição
N13	6 N1 ø5.0 c/17 C=50
N14	4 N1 ø5.0 c/17 C=50
N16	5 N2 ø5.0 c/17 C=60



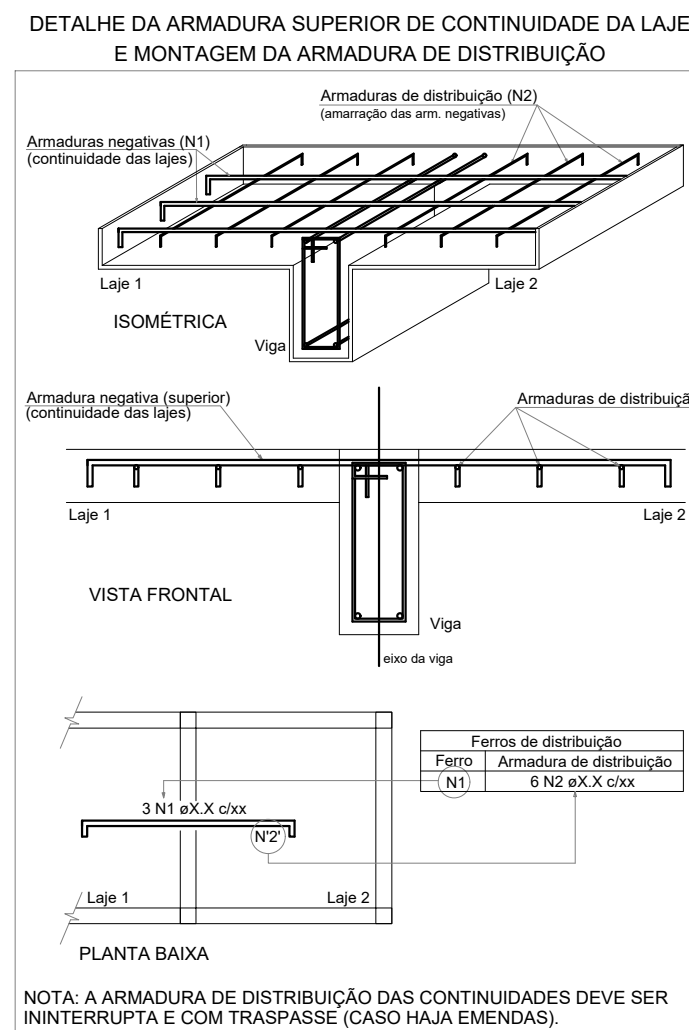
Armação negativa da TAMPA (Eixo Y)
escala 1:50

Feros de distribuição	
Ferro	Armadura de distribuição
N6	5 N3 ø5.0 c/17 C=49
N7	5 N1 ø5.0 c/17 C=50
N7	5 N3 ø5.0 c/17 C=49

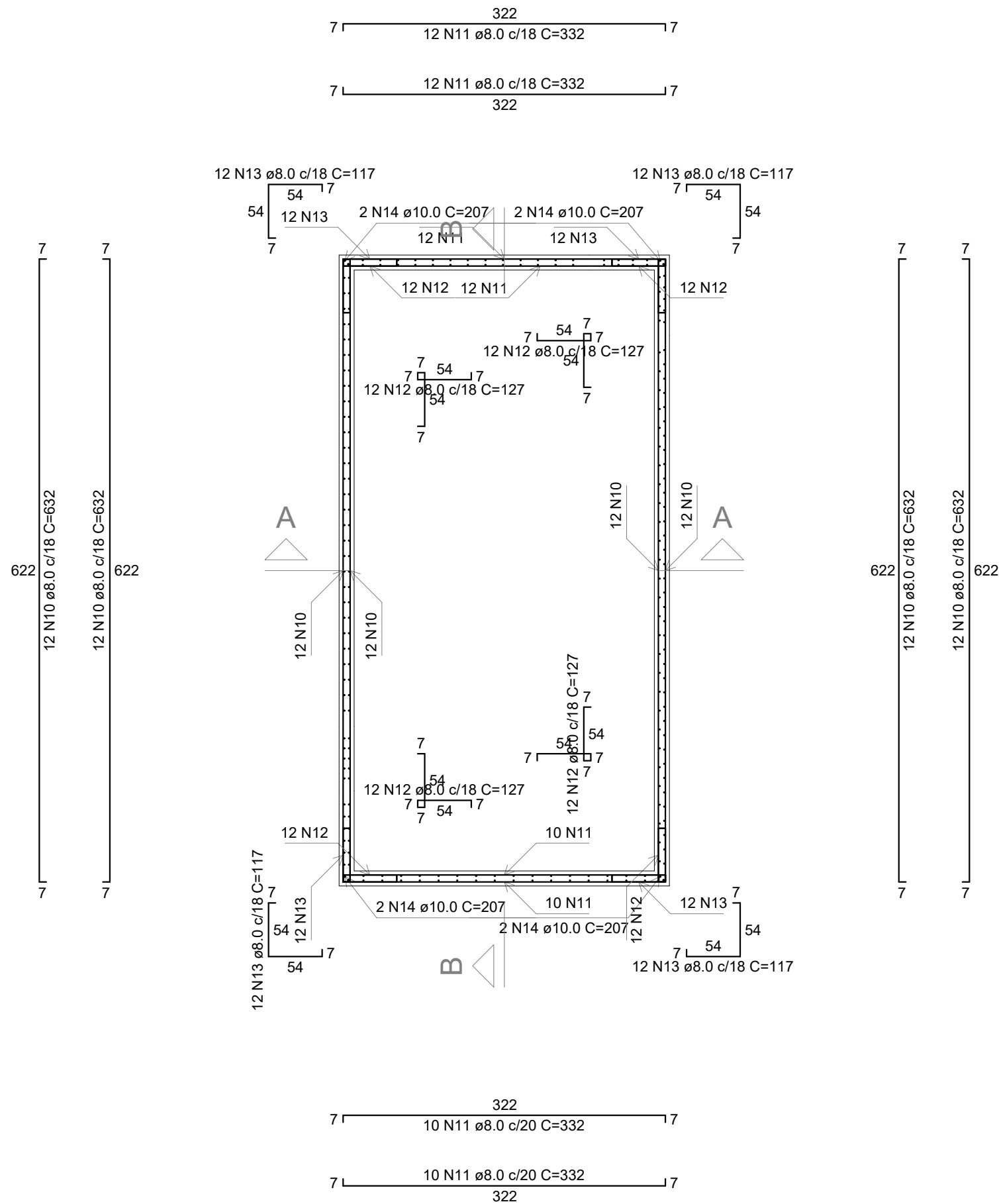
RELAÇÃO DO AÇO					
Negativos X		Negativos Y		Positivos X	
Positivos Y					
AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	15	50	750
	2	5.0	5	60	300
	3	5.0	10	49	490
CA50	4	6.3	1	181	181
	5	6.3	1	210	210
	6	6.3	3	95	285
	7	6.3	6	91	546
	8	6.3	1	68	68
	9	6.3	1	80	80
	10	6.3	1	201	201
	11	6.3	2	VAR	VAR
	12	8.0	4	123	492
	13	8.0	3	103	309
	14	8.0	3	74	222
	15	8.0	4	68	272
	16	8.0	3	83	249
	17	8.0	2	VAR	VAR
	18	10.0	11	621	6831
	19	10.0	3	117	351
	20	10.0	3	492	1476
	21	10.0	3	562	1686
	22	10.0	4	VAR	VAR
	23	12.5	25	321	8025
	24	12.5	7	50	350
	25	12.5	6	265	1590
	26	12.5	12	150	1800
	27	12.5	4	194	776

RESUMO DO AÇO			
AÇO	DIAM (mm)	C. TOTAL (m)	PESO + 0% (kg)
CA50	6.3	20	4.9
	8.0	17.8	7
	10.0	105.3	64.9
	12.5	125.4	120.8
CA60	5.0	15.4	2.4
PESO TOTAL (kg)			
CA50	197.7		
CA60	2.4		

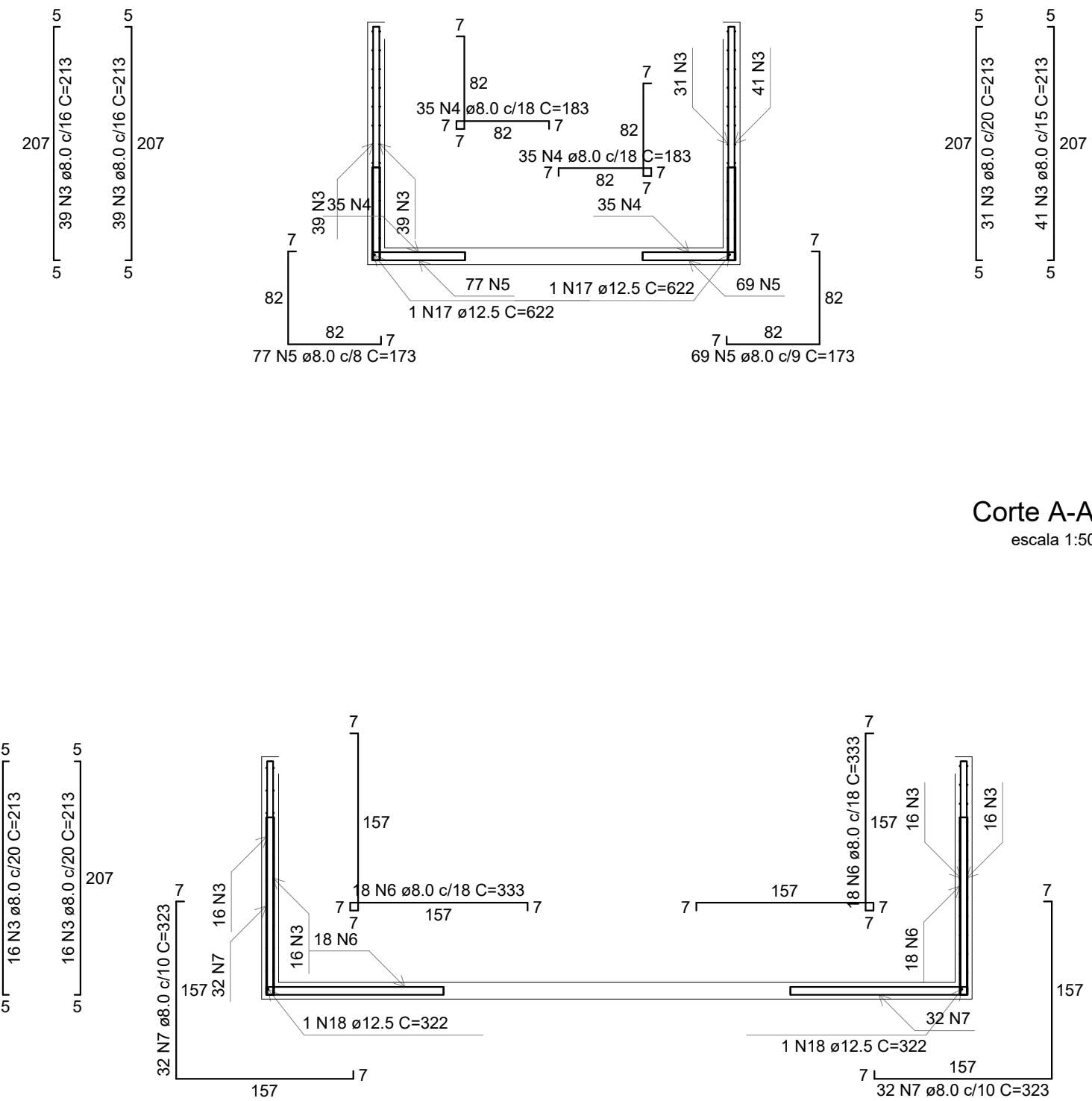
Volume de concreto (C=40) = 2.58 m³
Área de forma = 17.18 m²



00	OUT/2017	EMIÇÃO INICIAL			
REV.	DATA	OBSERVAÇÕES	DESENHO	REVISÃO	APROVAÇÃO
UNIVERSIDADE FEDERAL DE PERNAMBUCO SUPERINTENDÊNCIA DE INFRAESTRUTURA DIRETORIA DE PLANOS E PROJETOS					SMC
Projeto: AMPLIAÇÃO DO CENTRO ACADÊMICO DE VITÓRIA - 4ª ETAPA - CAMPUS 1 E INSTALAÇÃO DE SISTEMA DE GASES DOS BLOCOS B E C.					Área Monitorada: ESTRUTURA
Título do documento: FORMA E ARMADURA DO TANQUE DE FORMOL (1ª PARTE)					etapas: PROJETO EXECUTIVO
quadro de áreas:					prancha: 45 / 56
PAVIMENTO TÉRREO	818,57 M²	PAV. SEMI ENTERRADO	299,51 M²	escala: 1/50	data: SETEMBRO/2024
1º PAVIMENTO	954,02 M²	PAVIMENTO ENTERRADO	95,92 M²		
2º PAVIMENTO	954,02 M²	COBERTA	1050,68 M²		
3º PAVIMENTO	954,02 M²	TOTAL CONSTRUÇÃO	3.980,14 M²		
responsáveis técnicos:					
elaboração: SMC MARCOS ANDRÉ SANTOS	ENGENHEIRO - RNP: 180427703-7	aprovação: D.P.P. ISABEL PINTO	S.P.O. SILMARA MELO	DIRETORA SUPERINTENDENTE	
					REITOR

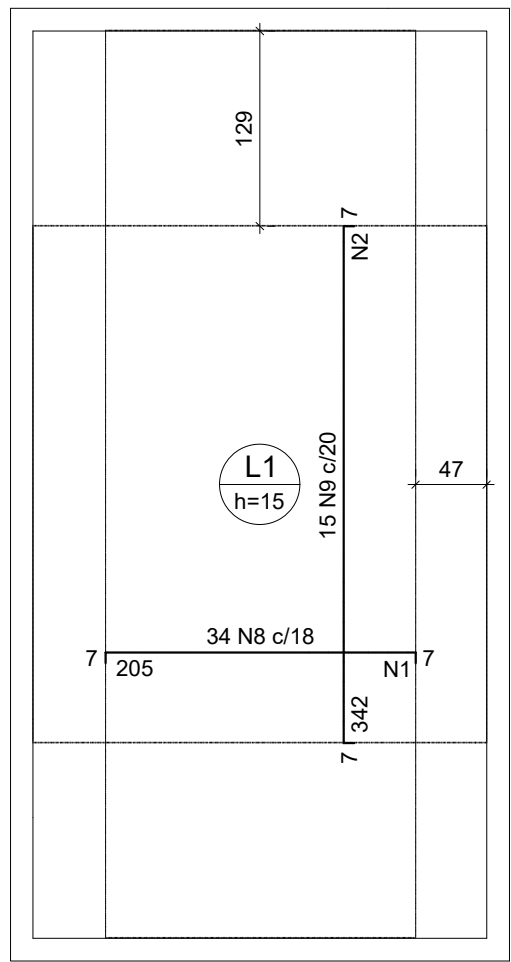


Planta (-100.0)
escala 1:50

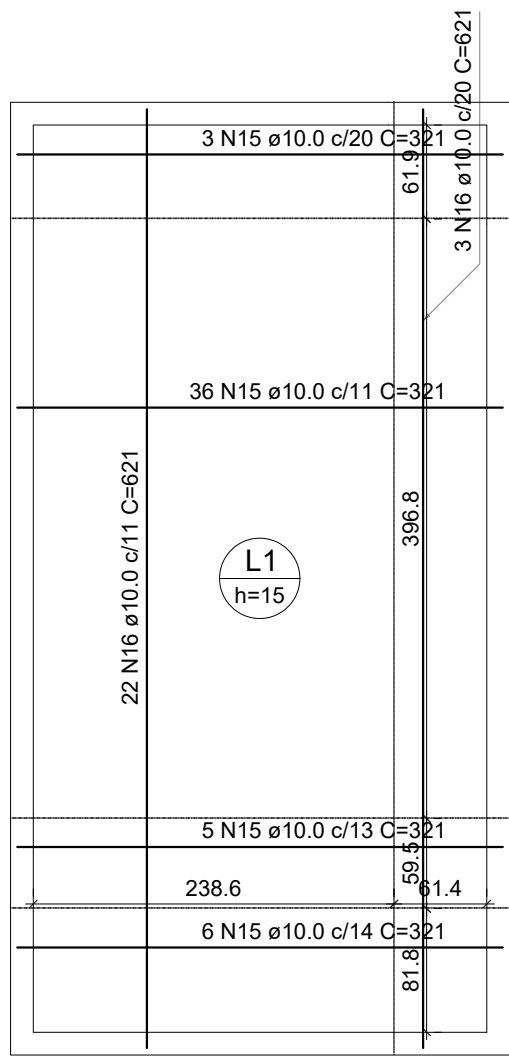
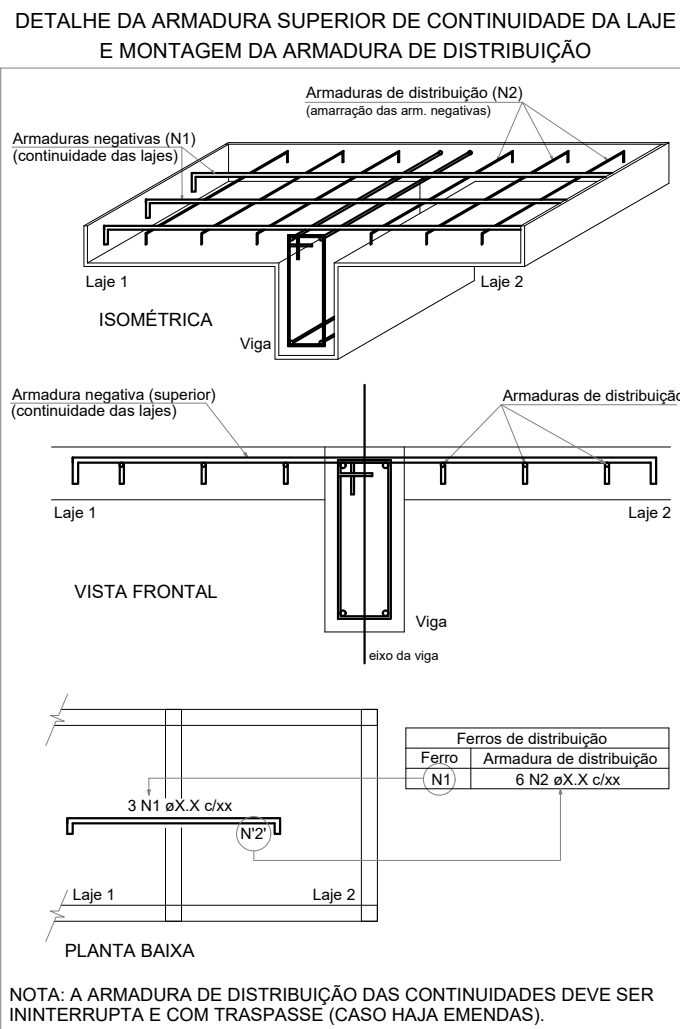


Corte A-A
escala 1:50

Corte B-B
escala 1:50



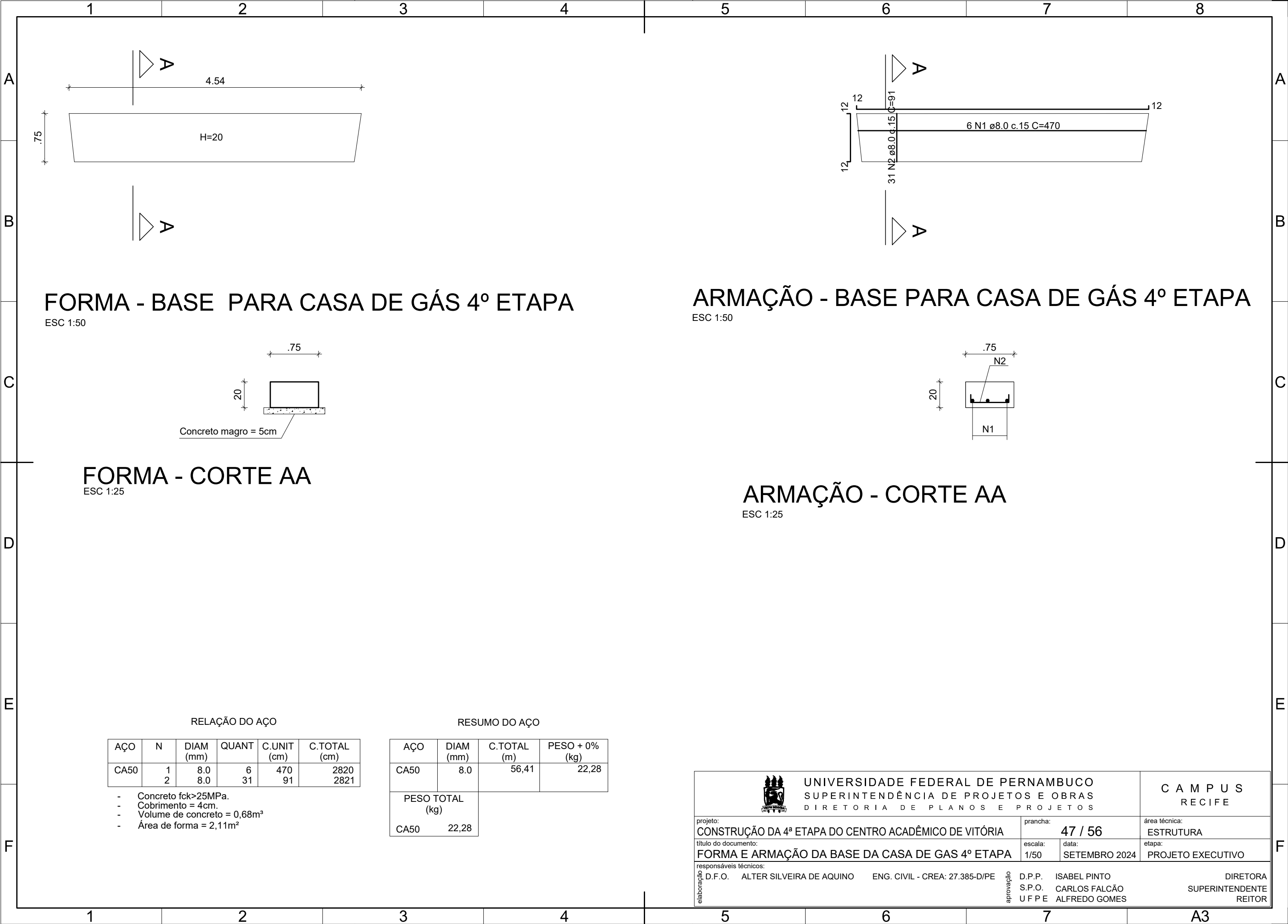
Armação negativa das lajes (-200.0)
escala 1:50

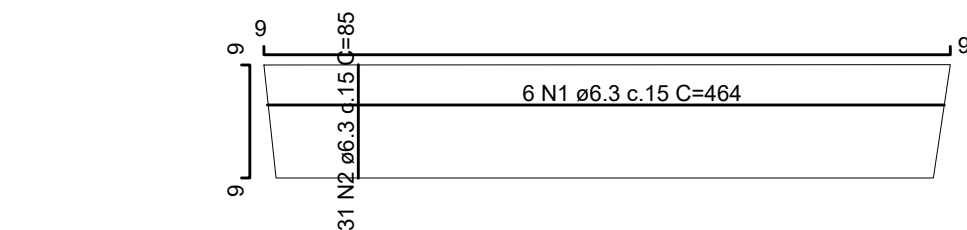


Armação positiva das lajes (-200.0)
escala 1:50

RELAÇÃO DO AÇO					
Corte A-A Planta (-100.0)		Corte B-B Positivos (-200.0)		Negativos (-200.0)	
AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	12	600	7200
CA50	2	5.0	21	300	6300
	3	8.0	214	213	45582
	4	8.0	70	183	12810
	5	8.0	146	173	25258
	6	8.0	36	333	11988
	7	8.0	64	323	20672
	8	8.0	34	215	7310
	9	8.0	15	352	5280
	10	8.0	48	632	30336
	11	8.0	44	332	14608
	12	8.0	48	127	6096
	13	8.0	48	117	5616
	14	10.0	8	207	1656
CA60	15	10.0	50	321	16050
	16	10.0	25	621	15525
	17	12.5	2	622	1244
	18	12.5	2	322	644
RESUMO DO AÇO					
AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)		
CA50	8.0	1855.6	732.2		
CA60	10.0	332.3	204.9		
	12.5	18.9	18.2		
	5.0	135	20.8		
PESO TOTAL (kg)					
CA50	955.2				
CA60	20.8				
Volume de concreto (C-35) = 8.28 m³					
Área de forma = 77.19 m²					

00	OUT/2017	EMIÇÃO INICIAL			
REV.	DATA	OBSERVAÇÕES	DESENHO	REVISÃO	APPROVAÇÃO
					
				SMC	
				DIRETORIA DE PLANOS E PROJETOS	
projeto:				ÁREA MÓDULO	
AMPLIAÇÃO DO CENTRO ACADÊMICO DE VITÓRIA - 4ª ETAPA - CAMPUS 1 E				ESTRUTURA	
INSTALAÇÃO DE SISTEMA DE GASES DOS BLOCOS B E C.				etapas:	
TÍTULO DO DOCUMENTO:				PRATO EXECUTIVO	
FORMA E ARMAÇÃO DO TANQUE DE FORMOL (2ª PARTE)				prancha:	
quadro de áreas:				46 / 56	
PAVIMENTO TERREO		818,57 M²	PAV. SEMI ENTERRADO	299,51 M²	escala:
1º PAVIMENTO		954,02 M²	PAVIMENTO ENTERRADO	95,92 M²	1/50
2º PAVIMENTO		954,02 M²	COBERTA	1050,68 M²	data:
3º PAVIMENTO		954,02 M²	TOTAL CONSTRUÇÃO	3.980,14 M²	SETEMBRO/2024
responsáveis técnicos:					
elaboração: SMC MARCOS ANDRÉ SANTOS		ENGENHEIRO - RNP: 180427703-7		D.P.P. ISABEL PINTO	
				S.P.O. SILMARA MELO	
				U.F.P.E. ANÍSIO B.F. DOURADO	
				DIRETORA SUPERINTENDENTE	
				REITOR	




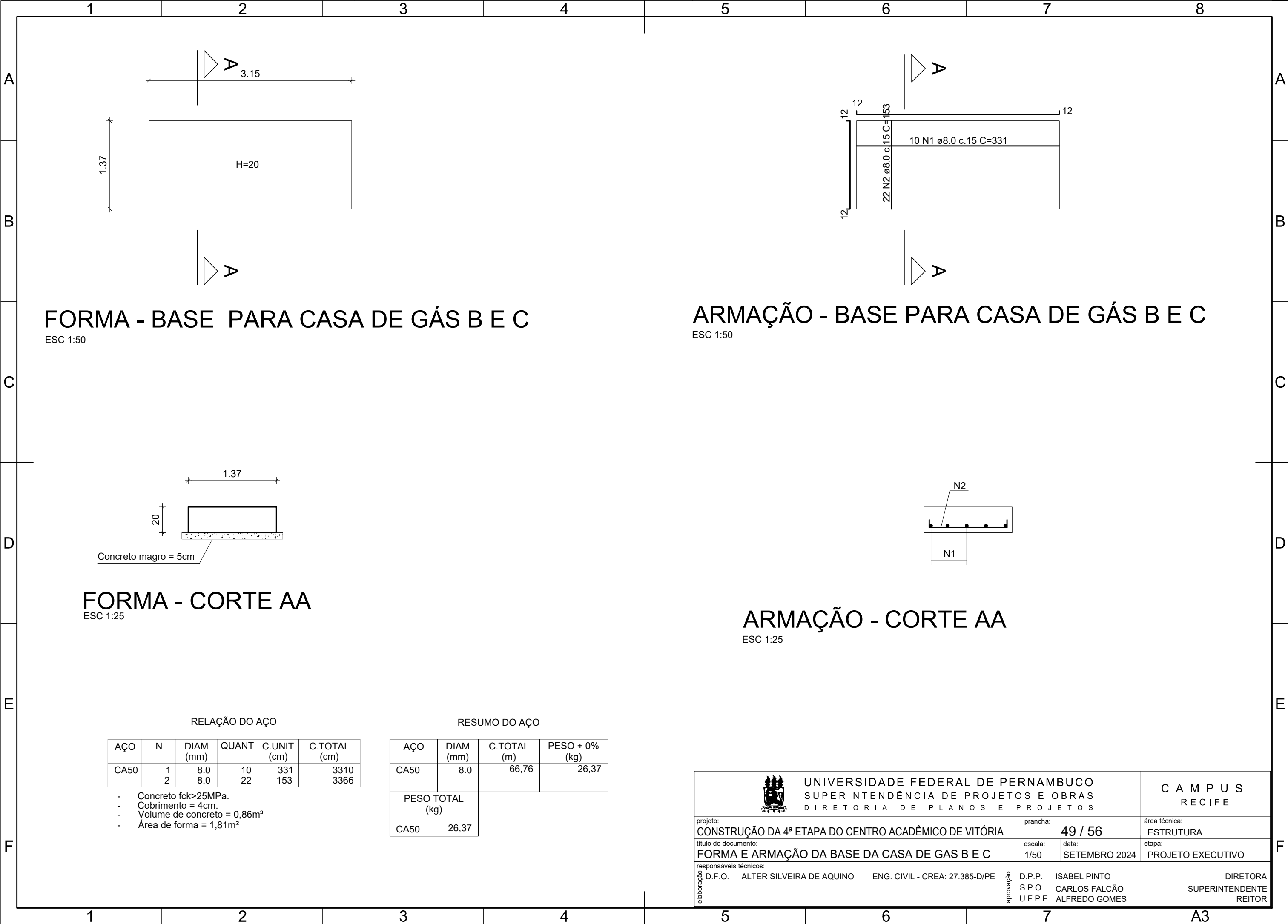


ARMAÇÃO - LAJE PARA CASA DE GÁS 4º ETAPA

ESC 1:50

RESUMO DO AÇO			
AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	6.3	54,19	13,27

	UNIVERSIDADE FEDERAL DE PERNAMBUCO SUPERINTENDÊNCIA DE PROJETOS E OBRAS DIRETORIA DE PLANOS E PROJETOS		C A M P U S R E C I F E	
	projeto: CONSTRUÇÃO DA 4ª ETAPA DO CENTRO ACADÊMICO DE VITÓRIA		prancha: 48 / 56	
	título do documento: FORMA E ARMAÇÃO DA LAJE DA CASA DE GAS 4º ETAPA		escala: 1/50	
	responsáveis técnicos: D.F.O. ALTER SILVEIRA DE AQUINO ENG. CIVIL - CREA: 27.385-D/PE		data: SETEMBRO 2024	
etapa: PROJETO EXECUTIVO		elaboração DIRETORA SUPERINTENDENTE REITOR		
aprovação D.P.P. ISABEL PINTO S.P.O. CARLOS FALCÃO U F P E ALFREDO GOMES				



FORMA - BASE PARA CASA DE GÁS B E C
ESC 1:50

ARMAÇÃO - BASE PARA CASA DE GÁS B E C
ESC 1:50

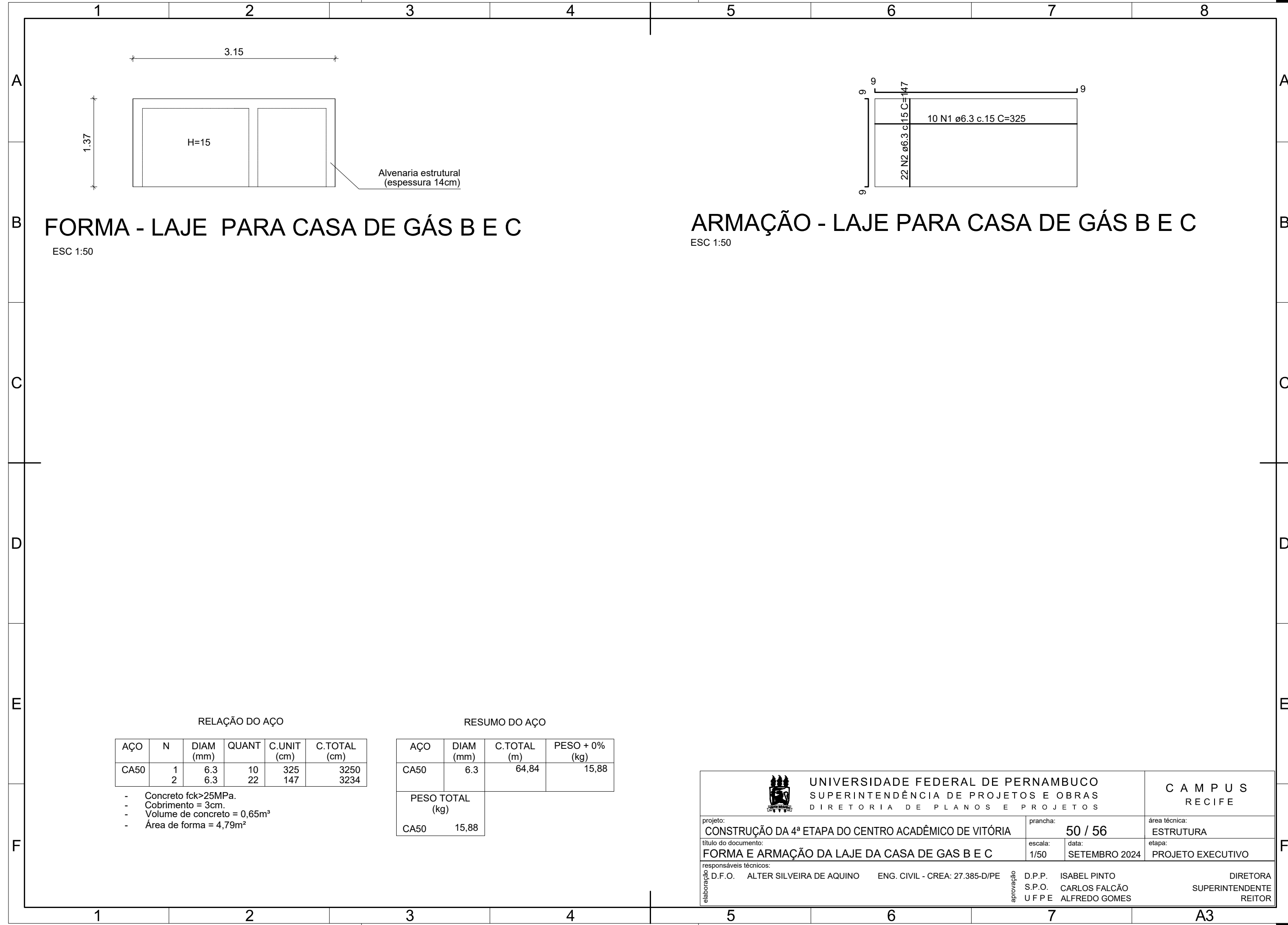
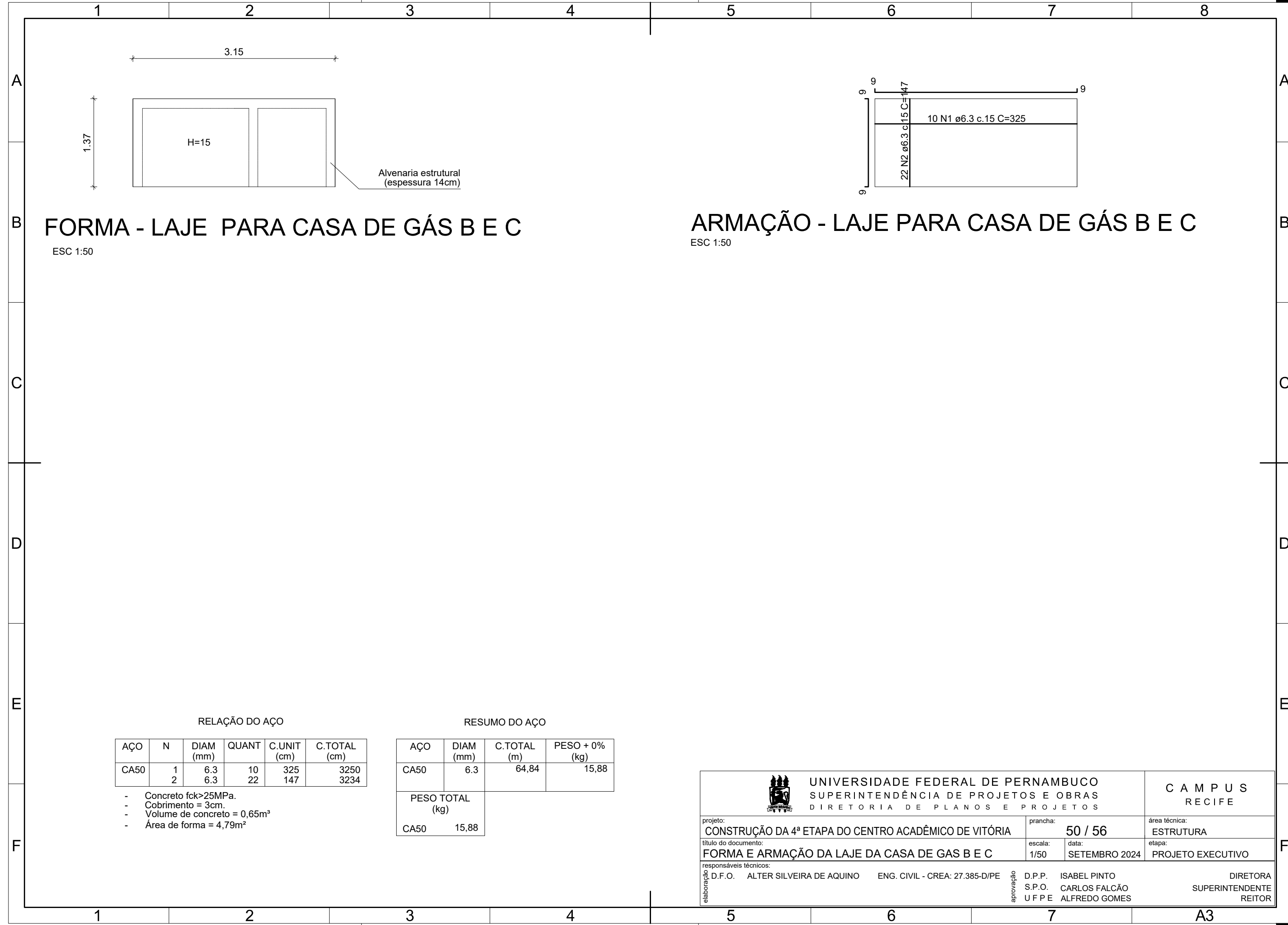
FORMA - CORTE AA
ESC 1:25

ARMAÇÃO - CORTE AA
ESC 1:25

RELAÇÃO DO AÇO					
AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA50	1	8.0	10	331	3310
	2	8.0	22	153	3366
<div><div>-</div><div>Concreto fck>25MPa.</div><div>-</div><div>Cobrimento = 4cm.</div><div>-</div><div>Volume de concreto = 0,86m³</div><div>-</div><div>Área de forma = 1,81m²</div></div>					

RESUMO DO AÇO			
AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	8.0	66,76	26,37
PESO TOTAL (kg)			
CA50	26,37		

<div><div></div><div>UNIVERSIDADE FEDERAL DE PERNAMBUCO</div><div>SUPERINTENDÊNCIA DE PROJETOS E OBRAS</div><div>DIRETORIA DE PLANOS E PROJETOS</div></div>		CAMPUS RECIFE	
projeto: CONSTRUÇÃO DA 4ª ETAPA DO CENTRO ACADÊMICO DE VITÓRIA		prancha: 49 / 56	área técnica: ESTRUTURA
título do documento: FORMA E ARMAÇÃO DA BASE DA CASA DE GAS B E C		escala: 1/50	etapa: PROJETO EXECUTIVO
responsáveis técnicos: D.F.O. ALTER SILVEIRA DE AQUINO ENG. CIVIL - CREA: 27.385-D/PE		D.P.P. ISABEL PINTO DIRETORA S.P.O. CARLOS FALCÃO SUPERINTENDENTE U F P E ALFREDO GOMES REITOR	

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	1	2	3	4	5	6	7	8																																		
A	<div><div><div>3.15</div><div>1.37</div><div>H=15</div><div>Alvenaria estrutural (espessura 14cm)</div></div></div>				<div><div><div>9</div><div>9</div><div>22 N2 ø6.3 c.15 C=147</div><div>10 N1 ø6.3 c.15 C=325</div></div></div>																																					
B	FORMA - LAJE PARA CASA DE GÁS B E C				ARMAÇÃO - LAJE PARA CASA DE GÁS B E C																																					
C	ESC 1:50				ESC 1:50																																					
D																																										
E																																										
F	<div>RELAÇÃO DO AÇO<table><tr><th>AÇO</th><th>N</th><th>DIAM (mm)</th><th>QUANT</th><th>C.UNIT (cm)</th><th>C.TOTAL (cm)</th></tr><tr><td>CA50</td><td>1</td><td>6.3</td><td>10</td><td>325</td><td>3250</td></tr><tr><td></td><td>2</td><td>6.3</td><td>22</td><td>147</td><td>3234</td></tr></table><div>- Concreto fck>25MPa. - Cobrimento = 3cm. - Volume de concreto = 0,65m³ - Área de forma = 4,79m²</div></div>				AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)	CA50	1	6.3	10	325	3250		2	6.3	22	147	3234	<div>RESUMO DO AÇO<table><tr><th>AÇO</th><th>DIAM (mm)</th><th>C.TOTAL (m)</th><th>PESO + 0% (kg)</th></tr><tr><td>CA50</td><td>6.3</td><td>64,84</td><td>15,88</td></tr><tr><td colspan="2">PESO TOTAL (kg)</td><td></td><td></td></tr><tr><td>CA50</td><td>15,88</td><td></td><td></td></tr></table></div>				AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)	CA50	6.3	64,84	15,88	PESO TOTAL (kg)				CA50	15,88		
AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)																																					
CA50	1	6.3	10	325	3250																																					
	2	6.3	22	147	3234																																					
AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)																																							
CA50	6.3	64,84	15,88																																							
PESO TOTAL (kg)																																										
CA50	15,88																																									
	1	2	3	4	5	6	7	A3																																		
					<div><div><div><div><div></div><div>UNIVERSIDADE FEDERAL DE PERNAMBUCO</div><div>SUPERINTENDÊNCIA DE PROJETOS E OBRAS</div><div>DIRETORIA DE PLANOS E PROJETOS</div></div><div>CAMPUS RECIFE</div></div><table><tr><td>projeto:</td><td colspan="2">CONSTRUÇÃO DA 4ª ETAPA DO CENTRO ACADÊMICO DE VITÓRIA</td><td>prancha:</td><td colspan="2">50 / 56</td><td>área técnica:</td><td>ESTRUTURA</td></tr><tr><td>título do documento:</td><td colspan="2">FORMA E ARMAÇÃO DA LAJE DA CASA DE GAS B E C</td><td>escala:</td><td>1/50</td><td>data:</td><td>SETEMBRO 2024</td><td>etapa:</td><td>PROJETO EXECUTIVO</td></tr><tr><td>responsáveis técnicos:</td><td colspan="2">D.F.O. ALTER SILVEIRA DE AQUINO ENG. CIVIL - CREA: 27.385-D/PE</td><td colspan="5">D.P.P. ISABEL PINTO DIRETORA S.P.O. CARLOS FALCÃO SUPERINTENDENTE U F P E ALFREDO GOMES REITOR</td></tr></table><div><div>elaboração</div><div>aprovação</div></div></div></div>				projeto:	CONSTRUÇÃO DA 4ª ETAPA DO CENTRO ACADÊMICO DE VITÓRIA		prancha:	50 / 56		área técnica:	ESTRUTURA	título do documento:	FORMA E ARMAÇÃO DA LAJE DA CASA DE GAS B E C		escala:	1/50	data:	SETEMBRO 2024	etapa:	PROJETO EXECUTIVO	responsáveis técnicos:	D.F.O. ALTER SILVEIRA DE AQUINO ENG. CIVIL - CREA: 27.385-D/PE		D.P.P. ISABEL PINTO DIRETORA S.P.O. CARLOS FALCÃO SUPERINTENDENTE U F P E ALFREDO GOMES REITOR													
projeto:	CONSTRUÇÃO DA 4ª ETAPA DO CENTRO ACADÊMICO DE VITÓRIA		prancha:	50 / 56		área técnica:	ESTRUTURA																																			
título do documento:	FORMA E ARMAÇÃO DA LAJE DA CASA DE GAS B E C		escala:	1/50	data:	SETEMBRO 2024	etapa:	PROJETO EXECUTIVO																																		
responsáveis técnicos:	D.F.O. ALTER SILVEIRA DE AQUINO ENG. CIVIL - CREA: 27.385-D/PE		D.P.P. ISABEL PINTO DIRETORA S.P.O. CARLOS FALCÃO SUPERINTENDENTE U F P E ALFREDO GOMES REITOR																																							

[illegible][illegible][illegible]

A

B

C

D

E

F

1

2

3

4

5

6

7

8

H=15

Alvenaria estrutural
(espessura 14cm)

FORMA - LAJE PARA CASA DE GÁS B E C

ESC 1:50

Armação de concreto para laje

ARMAÇÃO - LAJE PARA CASA DE GÁS B E C

ESC 1:50

RELAÇÃO DO AÇO

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA50	1	6.3	10	325	3250
	2	6.3	22	147	3234

- Concreto fck>25MPa.
- Cobrimento = 3cm.
- Volume de concreto = 0,65m³
- Área de forma = 4,79m²

RESUMO DO AÇOTable border="1">| AÇO | DIAM (mm) | C.TOTAL (m) | PESO + 0% (kg) |
| --- | --- | --- | --- |
| CA50 | 6.3 | 64,84 | 15,88 |
| PESO TOTAL (kg) | | | |
| CA50 | 15,88 | | |

UNIVERSIDADE FEDERAL DE PERNAMBUCO

SUPERINTENDÊNCIA DE PROJETOS E OBRAS

DIRETORIA DE PLANOS E PROJETOS

projeto:

CONSTRUÇÃO DA 4ª ETAPA DO CENTRO ACADÊMICO DE VITÓRIA

título do documento:

FORMA E ARMAÇÃO DA LAJE DA CASA DE GAS B E C

responsáveis técnicos:

D.F.O. ALTER SILVEIRA DE AQUINO ENG. CIVIL - CREA: 27.385-D/PE

prancha:

50 / 56

escala:

1/50

data:

SETEMBRO 2024

etapa:

PROJETO EXECUTIVO

elaboração

D.P.P. ISABEL PINTO
S.P.O. CARLOS FALCÃO
U F P E ALFREDO GOMES

aprovação

DIRECTORA SUPERINTENDENTE REITOR

CAMPUS RECIFE

ESTRUTURA

PROJETO EXECUTIVO

1

2

3

4

5

6

7

A3

- [illegible]

	1	2	3	4	5	6	7	8
A	<div><div><div><div><div></div><div></div></div><div><div></div><div></div></div></div><div><div>3.15</div></div><div><div>1.37</div></div><div>H=15</div><div>Alvenaria estrutural (espessura 14cm)</div></div></div>				<div><div><div><div></div><div></div></div><div><div></div><div></div></div></div><div><div>9</div><div>9</div><div>9</div><div>9</div></div><div>22 N2 ø6.3 c.15 C=147</div><div>10 N1 ø6.3 c.15 C=325</div></div>			

	B	FORMA - LAJE PARA CASA DE GÁS B E C				ARMAÇÃO - LAJE PARA CASA DE GÁS B E C																																																	
C	ESC 1:50				ESC 1:50																																																		
D																																																							
E																																																							
F	RELAÇÃO DO AÇO	AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)		------	---	-----------	-------	-------------	--------------		CA50	1	6.3	10	325	3250			2	6.3	22	147	3234	- Concreto fck>25MPa. - Cobrimento = 3cm. - Volume de concreto = 0,65m³ - Área de forma = 4,79m²				RESUMO DO AÇO	AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)		------	-----------	-------------	----------------		CA50	6.3	64,84	15,88	PESO TOTAL (kg) CA50 15,88				UNIVERSIDADE FEDERAL DE PERNAMBUCO SUPERINTENDÊNCIA DE PROJETOS E OBRAS DIRETORIA DE PLANOS E PROJETOS CAMPUS RECIFE projeto: CONSTRUÇÃO DA 4ª ETAPA DO CENTRO ACADÊMICO DE VITÓRIA título do documento: FORMA E ARMAÇÃO DA LAJE DA CASA DE GAS B E C responsáveis técnicos: D.F.O. ALTER SILVEIRA DE AQUINO ENG. CIVIL - CREA: 27.385-D/PE prancha: 50 / 56 escala: 1/50 data: SETEMBRO 2024 elaboração aprovação ISABEL PINTO S.P.O. CARLOS FALCÃO U F P E ALFREDO GOMES área técnica: ESTRUTURA etapa: PROJETO EXECUTIVO DIRETORA SUPERINTENDENTE REITOR			
	1	2	3	4	5	6	7	A3																																															

A

B

C

D

E

F

1

2

3

4

5

6

7

8

H=15

3.15

1.37

Alvenaria estrutural
(espessura 14cm)

FORMA - LAJE PARA CASA DE GÁS B E C

ESC 1:50

9

9

9

22 N2 ø6.3 c.15 C=147

10 N1 ø6.3 c.15 C=325

ARMAÇÃO - LAJE PARA CASA DE GÁS B E C

ESC 1:50

RELACÃO DO AÇO

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA50	1	6.3	10	325	3250
	2	6.3	22	147	3234

- Concreto fck>25MPa.
- Cobrimento = 3cm.
- Volume de concreto = 0,65m³
- Área de forma = 4,79m²

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	6.3	64,84	15,88

PESO TOTAL
(kg)
CA50 15,88

UNIVERSIDADE FEDERAL DE PERNAMBUCO

SUPERINTENDÊNCIA DE PROJETOS E OBRAS

DIRETORIA DE PLANOS E PROJETOS

projeto:

CONSTRUÇÃO DA 4ª ETAPA DO CENTRO ACADÊMICO DE VITÓRIA

título do documento:

FORMA E ARMAÇÃO DA LAJE DA CASA DE GAS B E C

responsáveis técnicos:

D.F.O. ALTER SILVEIRA DE AQUINOENG. CIVIL - CREA: 27.385-D/PE

elaboração

prancha:

50 / 56

escala:

1/50

data:

SETEMBRO 2024

área técnica:
ESTRUTURA

etapa:
PROJETO EXECUTIVO

D.P.P. ISABEL PINTODIRECTORA

S.P.O. CARLOS FALCÃOSUPERINTENDENTE

UFP E ALFREDO GOMESREITOR

1

2

3

4

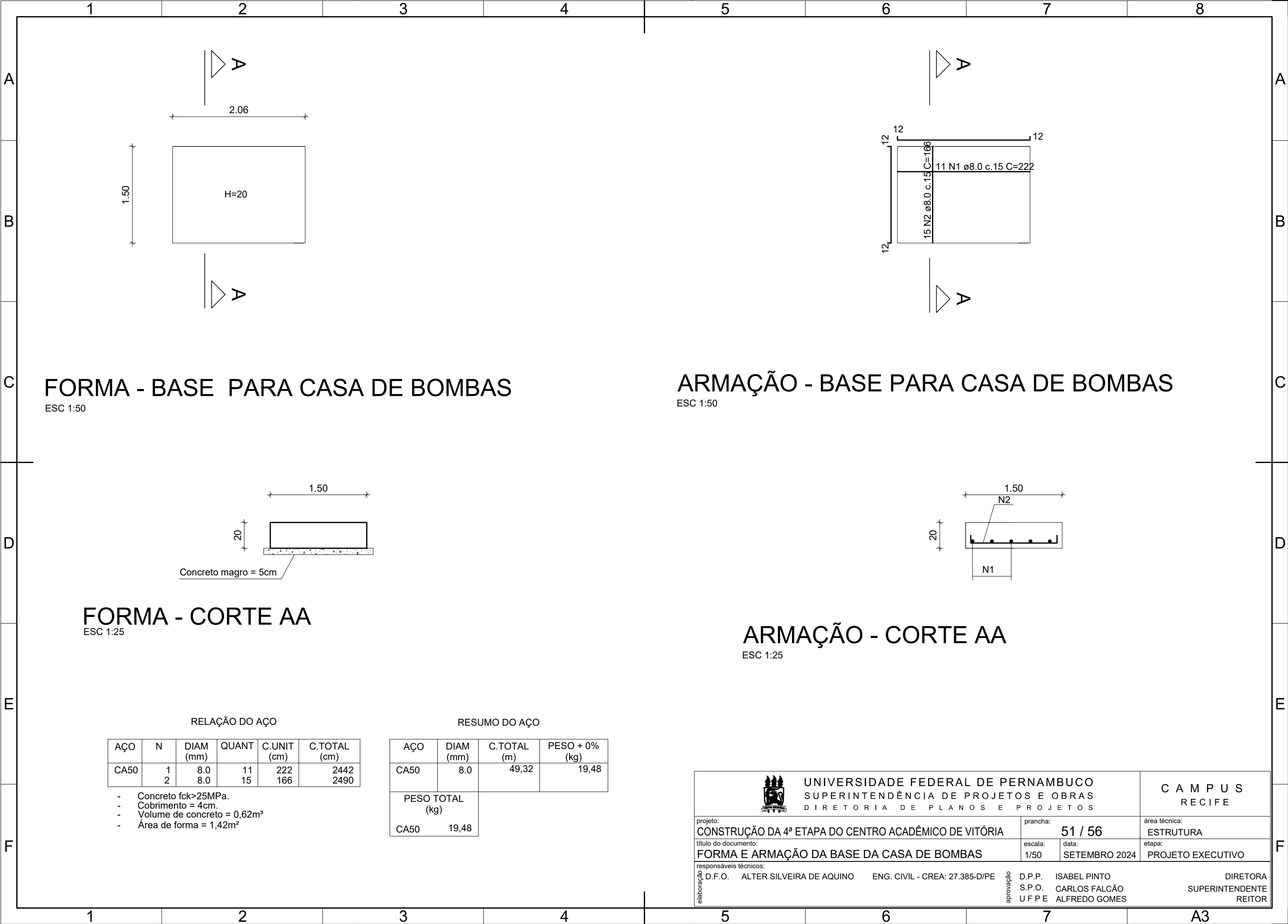
5

6

7

A3

[illegible]



FORMA - BASE PARA CASA DE BOMBAS

ESC 1:50

ARMAÇÃO - BASE PARA CASA DE BOMBAS

ESC 1:50

FORMA - CORTE AA

ESC 1:25

ARMAÇÃO - CORTE AA

ESC 1:25


RELAÇÃO DO AÇO

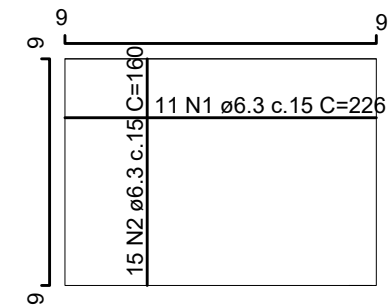
AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA50	1	8.0	11	222	2442
	2	8.0	15	166	2490

- Concreto fck>25MPa.
- Cobrimento = 4cm.
- Volume de concreto = 0,62m³
- Área de forma = 1,42m²

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	8.0	49,32	19,48
PESO TOTAL (kg)			
CA50		19,48	


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projeto: CONSTRUÇÃO DA 4ª ETAPA DO CENTRO ACADÊMICO DE VITÓRIA		prancha: 51 / 56		área técnica: ESTRUTURA
título do documento: FORMA E ARMAÇÃO DA BASE DA CASA DE BOMBAS		escala: 1/50	data: SETEMBRO 2024	etapa: PROJETO EXECUTIVO
responsáveis técnicos: D.F.O. ALTER SILVEIRA DE AQUINO ENG. CIVIL - CREA: 27.385-D/PE		D.P.P. ISABEL PINTO DIRETORA S.P.O. CARLOS FALCÃO SUPERINTENDENTE U F P E ALFREDO GOMES REITOR		



ARMAÇÃO - LAJE PARA CASA DE BOMBAS

ESC 1:50

RESUMO DO AÇO			
AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	6.3	48,86	11,97
PESO TOTAL (kg)			
CA50	11,97		

- | | | | |
|--|-----------|---------------------------------------|------------------------|
|  <div> <div>UNIVERSIDADE FEDERAL DE PERNAMBUCO</div> <div>SUPERINTENDÊNCIA DE PROJETOS E OBRAS</div> <div>DIRETORIA DE PLANOS E PROJETOS</div> </div> | | <div>CAMPUS</div> <div>RECIFE</div> | |
| projeto:
CONSTRUÇÃO DA 4ª ETAPA DO CENTRO ACADÊMICO DE VITÓRIA | | prancha:
<div>52 / 56</div> | |
| título do documento:
FORMA E ARMAÇÃO DA LAJE DA CASA DE BOMBAS | | escala:
1/50 | data:
SETEMBRO 2024 |
| responsáveis técnicos:
D.F.O. ALTER SILVEIRA DE AQUINO ENG. CIVIL - CREA: 27.385-D/PE | | etapa:
PROJETO EXECUTIVO | |
| elaboração | aprovação | | |
| D.P.P. ISABEL PINTO
S.P.O. CARLOS FALCÃO
UFPE ALFREDO GOMES | | DIRETORA
SUPERINTENDENTE
REITOR | |

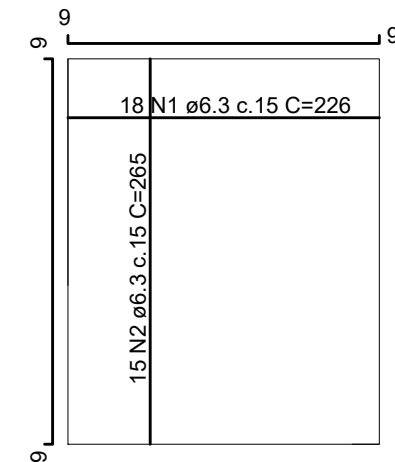


RELAÇÃO DO AÇO					
AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA50	1	8.0	18	222	3996
	2	8.0	15	271	4065

- Concreto fck>25MPa.
- Cobrimento = 4cm.
- Volume de concreto = 1,05m³
- Área de forma = 1,84m²

RESUMO DO AÇO			
AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	8.0	80,61	31,85
PESO TOTAL (kg)			
CA50	31,85		

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projeto: CONSTRUÇÃO DA 4ª ETAPA DO CENTRO ACADÊMICO DE VITÓRIA		prancha: 53 / 56		área técnica: ESTRUTURA	
título do documento: FORMA E ARMAÇÃO DA BASE ABRIGO COMPRESSORES		escala: 1/50	data: SETEMBRO 2024	etapa: PROJETO EXECUTIVO	
responsáveis técnicos: D.F.O. ALTER SILVEIRA DE AQUINO ENG. CIVIL - CREA: 27.385-D/PE		aprovação D.P.P. ISABEL PINTO S.P.O. CARLOS FALCÃO U F P E ALFREDO GOMES		DIRETORA SUPERINTENDENTE REITOR	



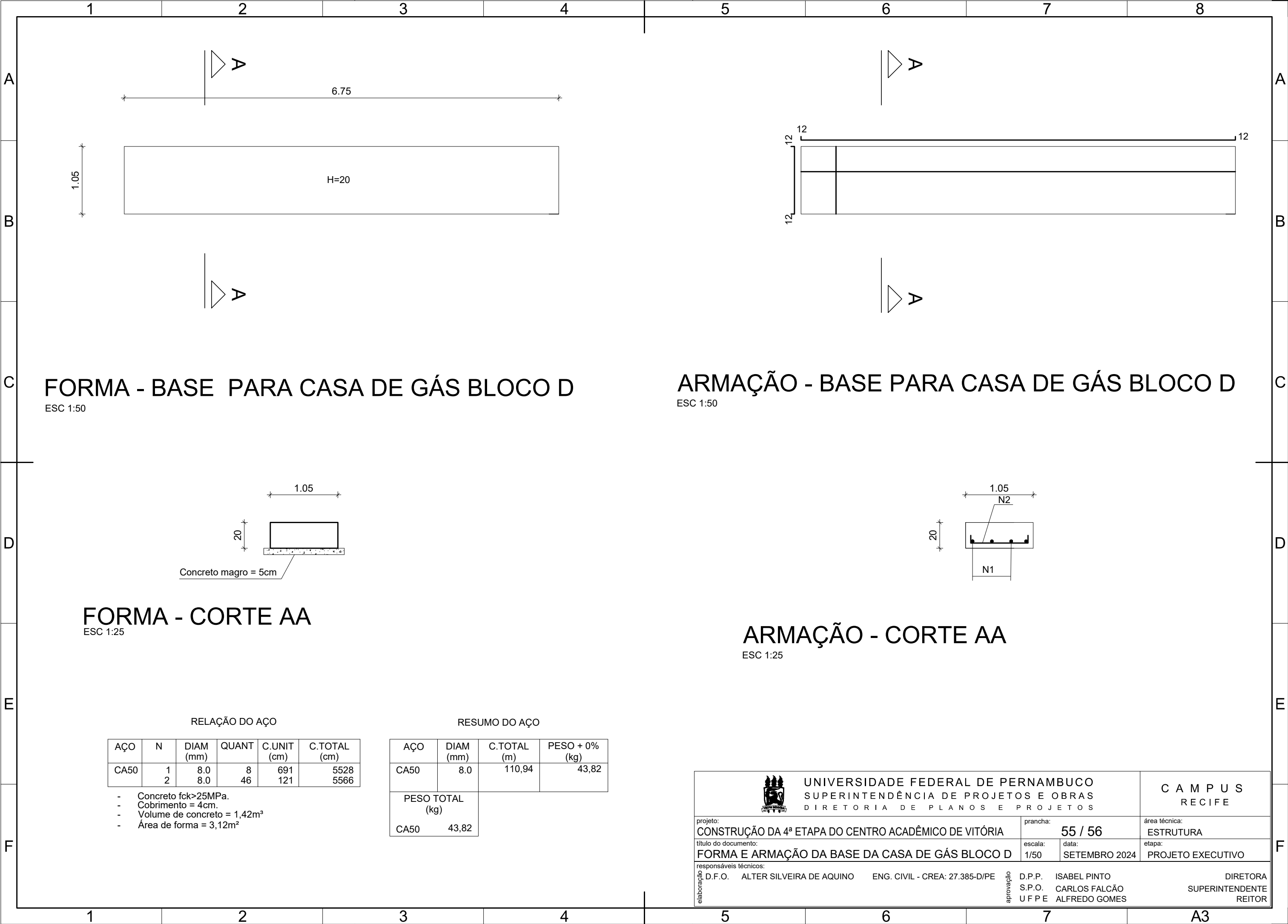
ESC 1:50

ESC 1:50

RESUMO DO AÇO			
AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	6.3	80,43	19,70
PESO TOTAL (kg)			
CA50	19,70		

- Concreto $f_{ck} > 25 \text{ MPa}$.
- Cobrimento = 3cm.
- Volume de concreto = $0,78 \text{ m}^3$
- Área de forma = $5,56 \text{ m}^2$

<div></div> <div>UNIVERSIDADE FEDERAL DE PERNAMBUCO SUPERINTENDÊNCIA DE PROJETOS E OBRAS DIRETORIA DE PLANOS E PROJETOS</div>		CAMPUS RECIFE		
projeto: CONSTRUÇÃO DA 4ª ETAPA DO CENTRO ACADÊMICO DE VITÓRIA		prancha: 54 / 56		área técnica: ESTRUTURA
título do documento: FORMA E ARMAÇÃO DA LAJE ABRIGO COMPRESSORES		escala: 1/50	data: SETEMBRO 2024	etapa: PROJETO EXECUTIVO
responsáveis técnicos:				
D.F.O. ALTER SILVEIRA DE AQUINO ENG. CIVIL - CREA: 27.385-D/PE		D.P.P. ISABEL PINTO DIRETORA S.P.O. CARLOS FALCÃO SUPERINTENDENTE UFPE ALFREDO GOMES REITOR		





Emitido em 30/09/2024

PROJETO Nº 332/2024 - DPP (11.02.04)

(Nº do Protocolo: NÃO PROTOCOLADO)

(Assinado digitalmente em 30/09/2024 11:50)

MARIA ISABEL PINTO DE OLIVEIRA

DIRETOR

DPP (11.02.04)

Matrícula: ###330#6

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