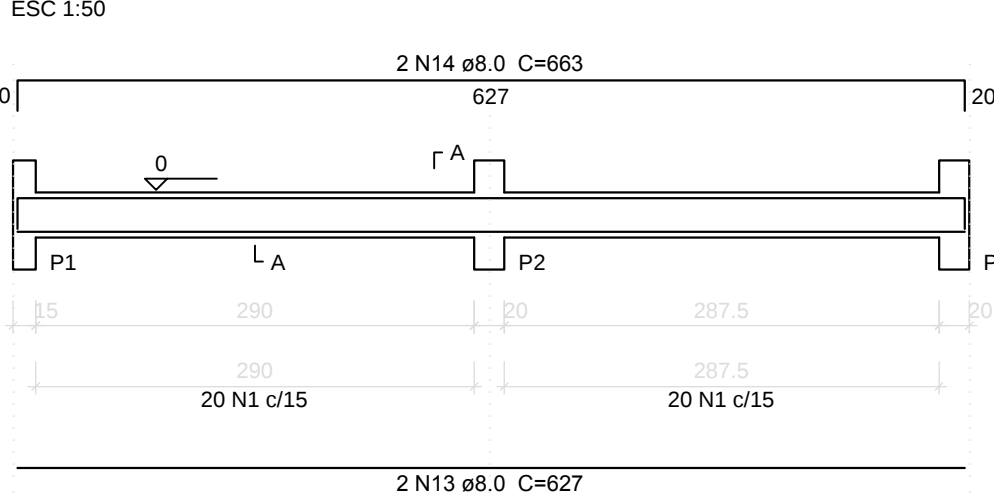
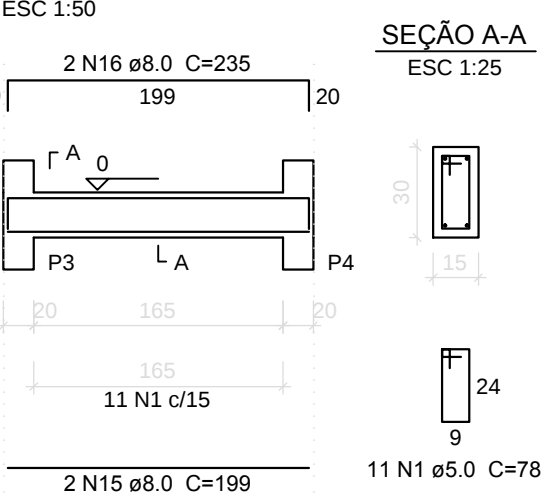


Detalhamento das Vigas
Nível Baldrame

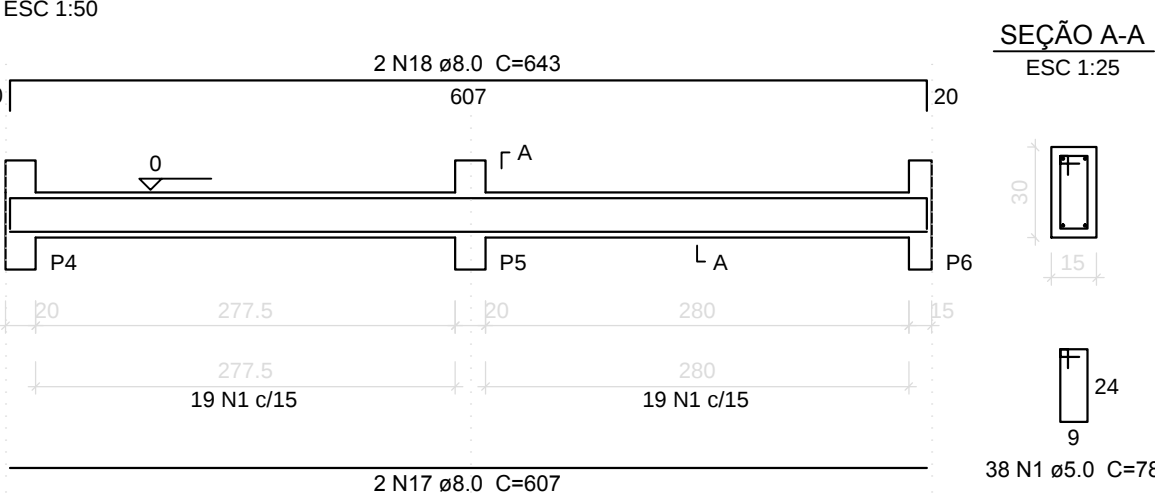
V1=V13



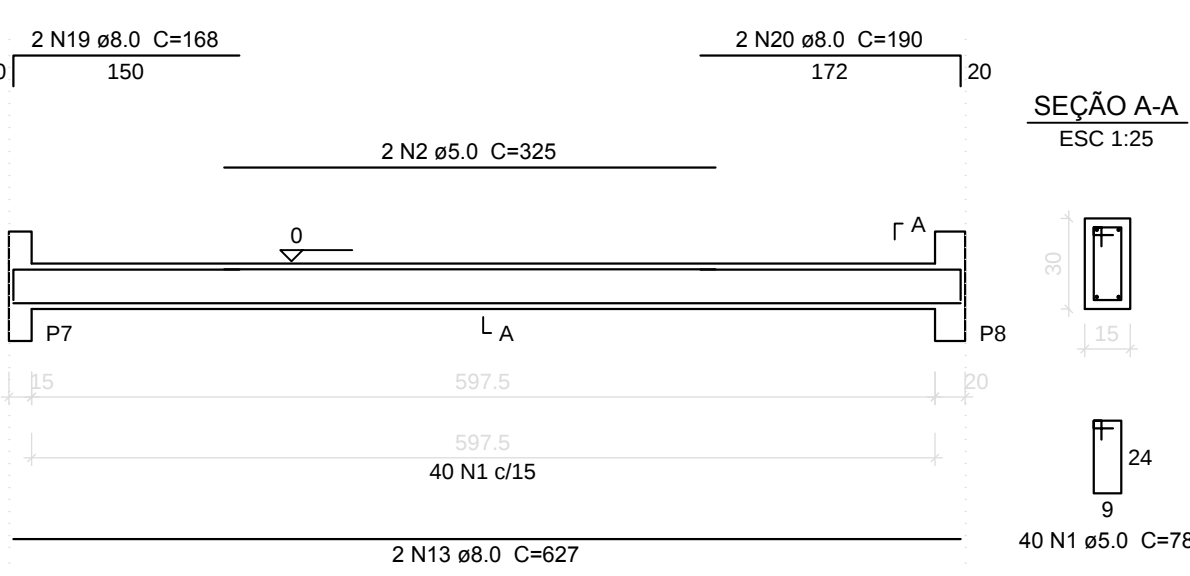
V2



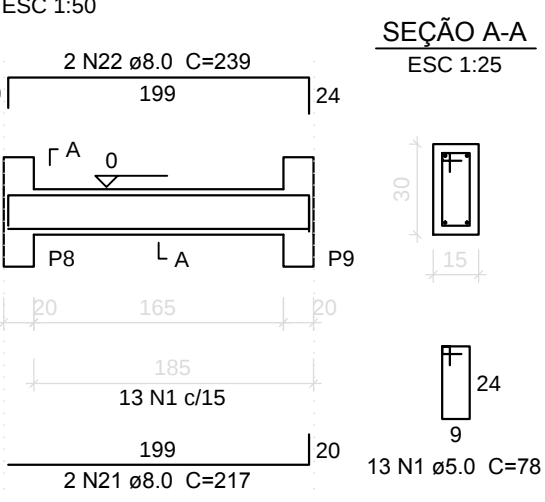
V3=V15



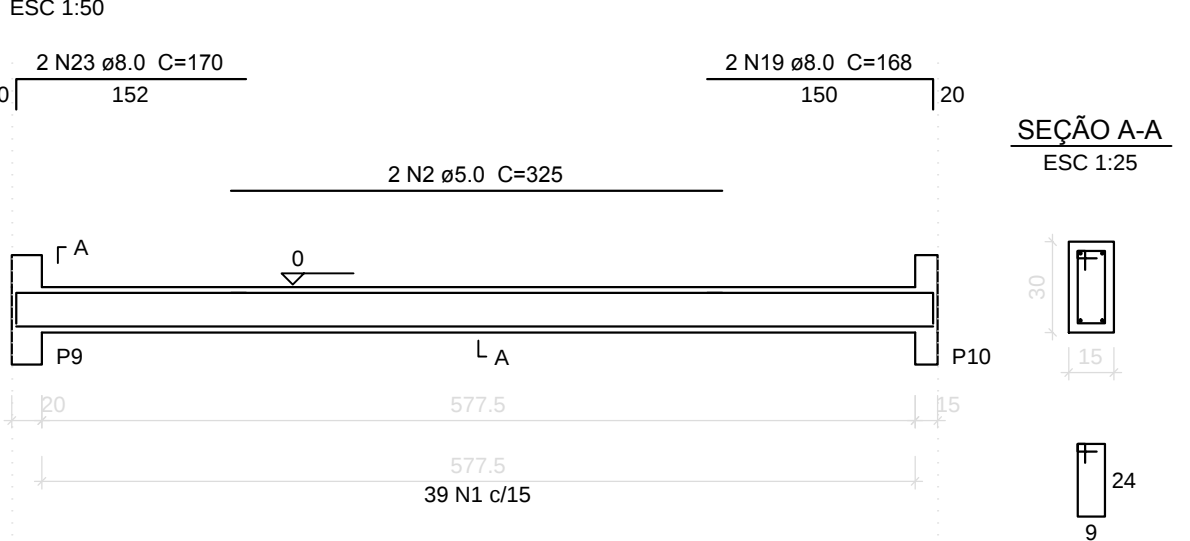
V4=V7



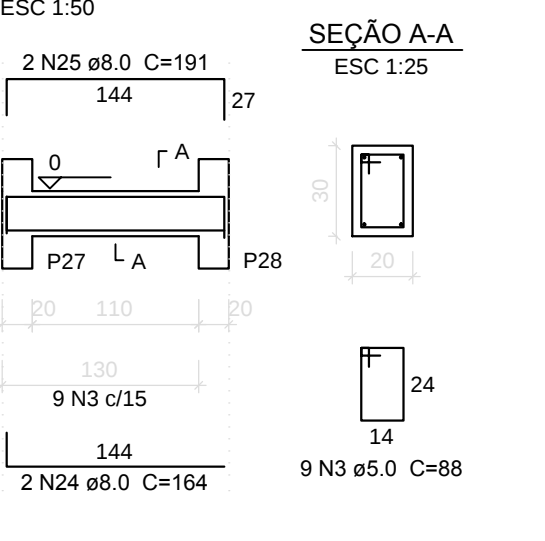
V5=V8



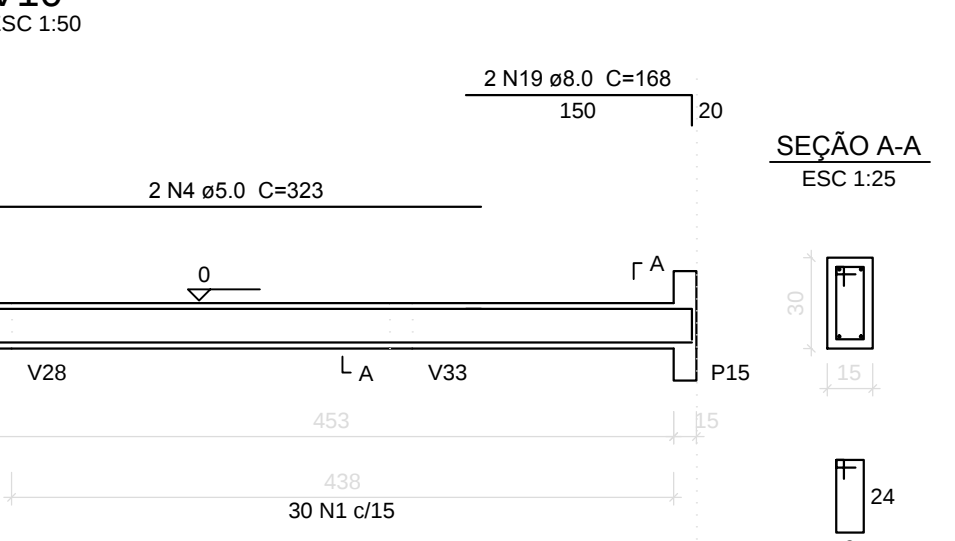
V6=V9



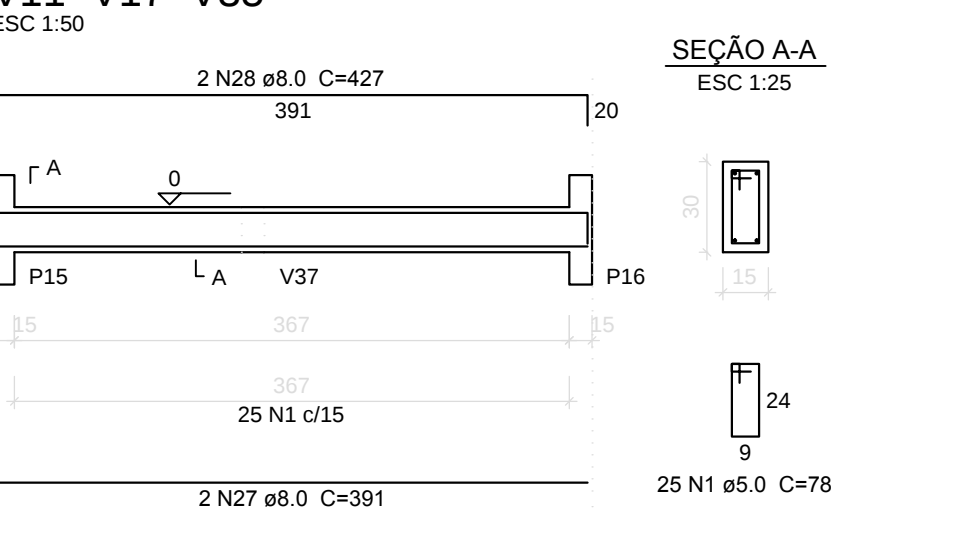
V19



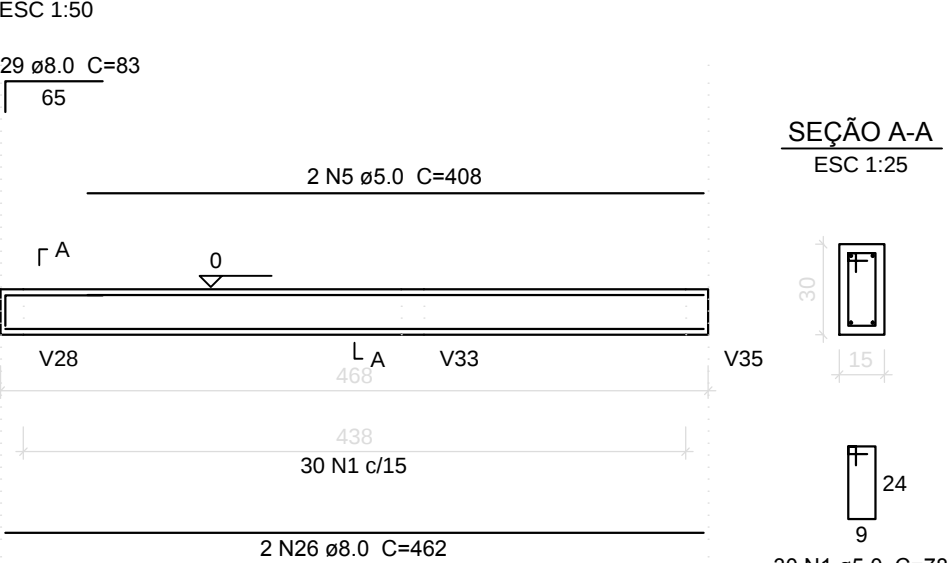
V10



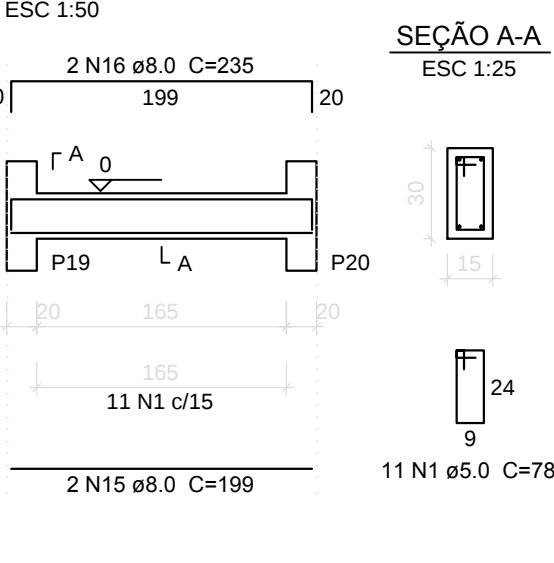
V11=V17=V35



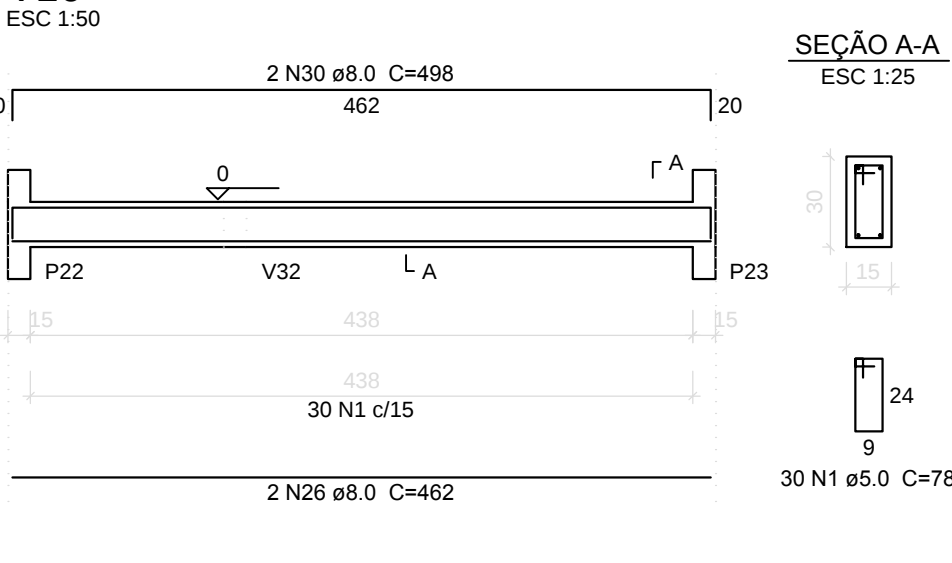
V12



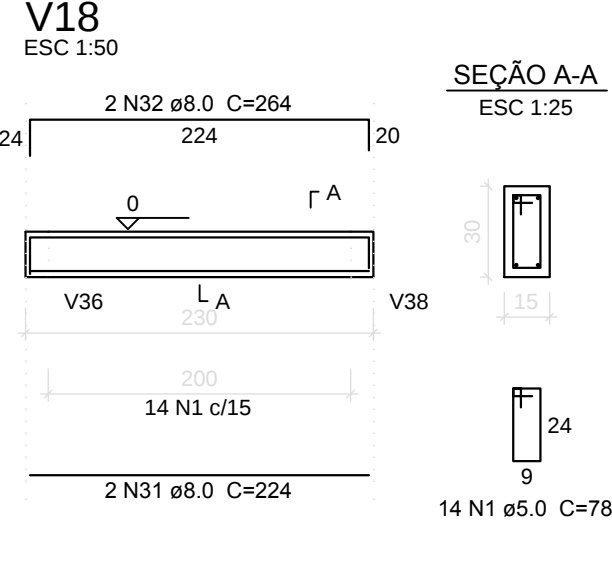
V14



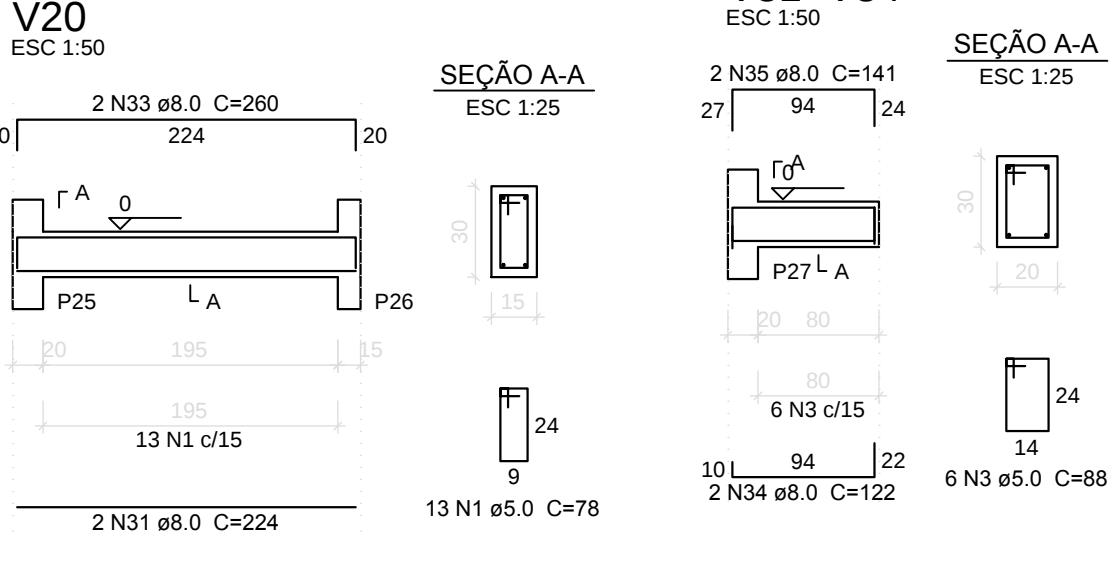
V16



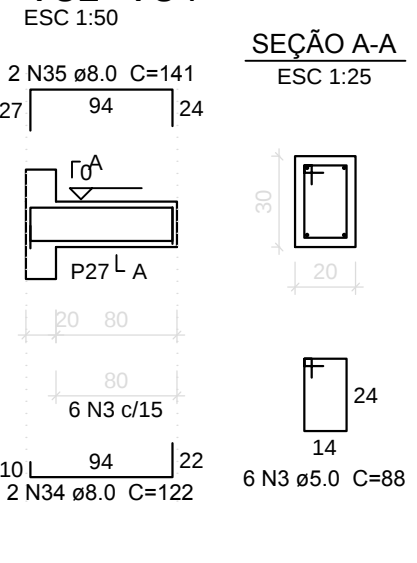
V18



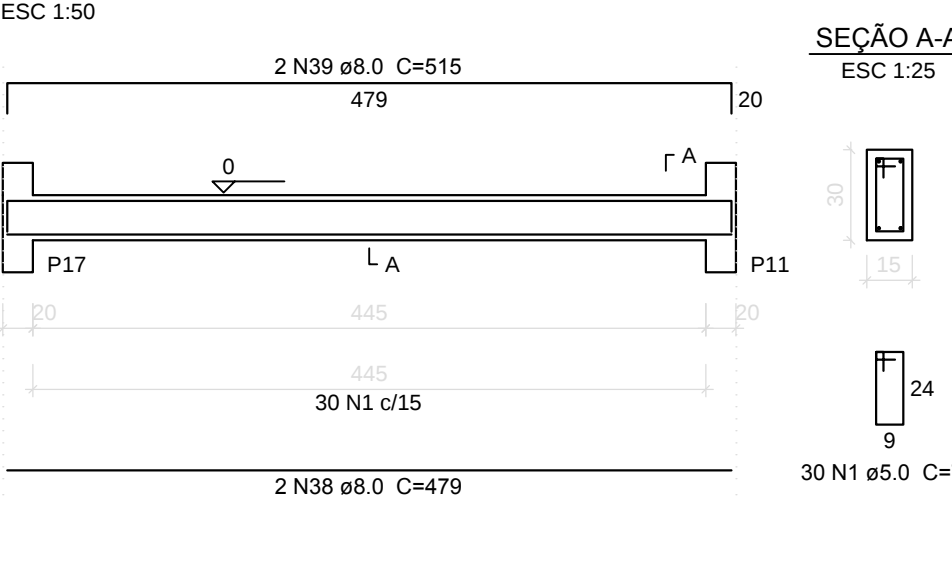
V20



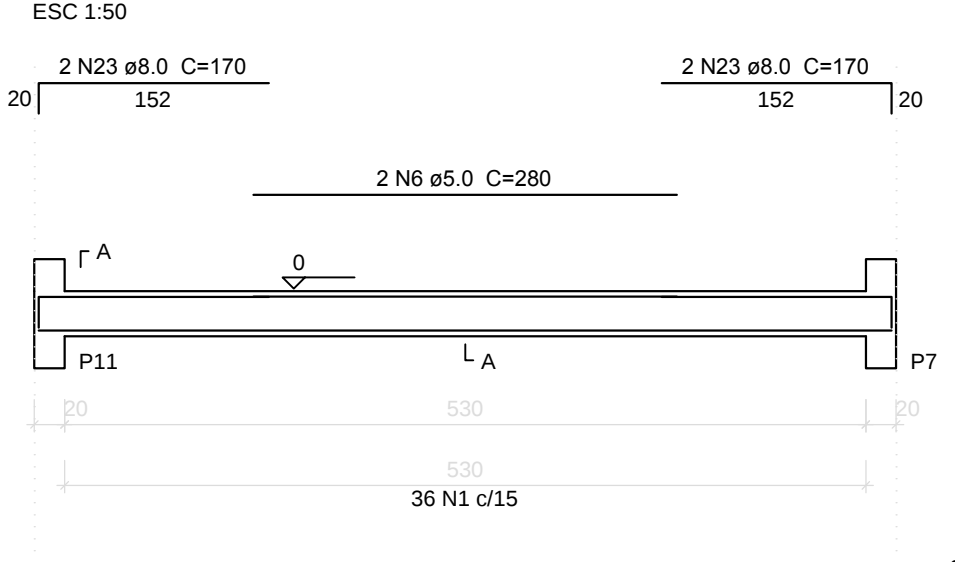
V31=V34



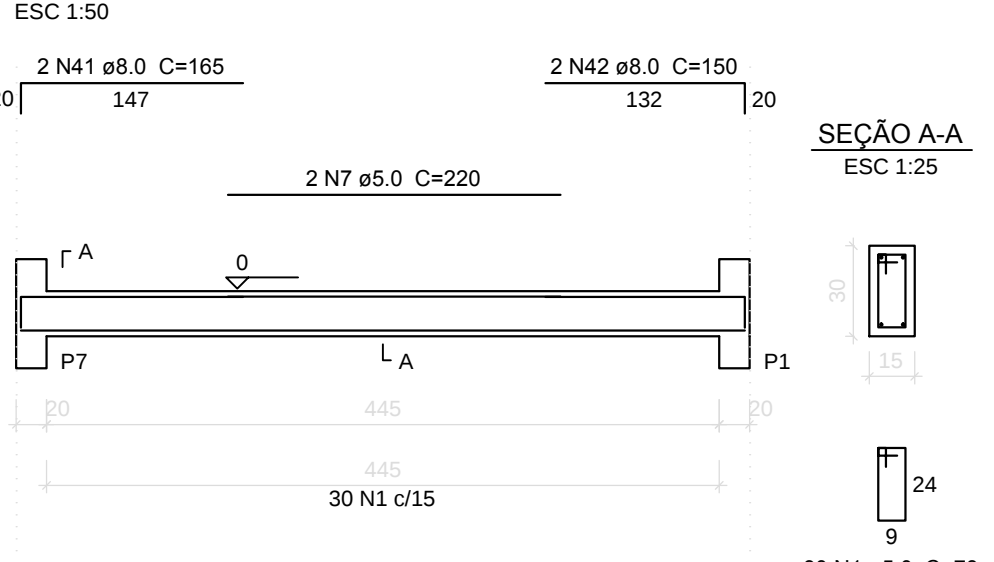
V21



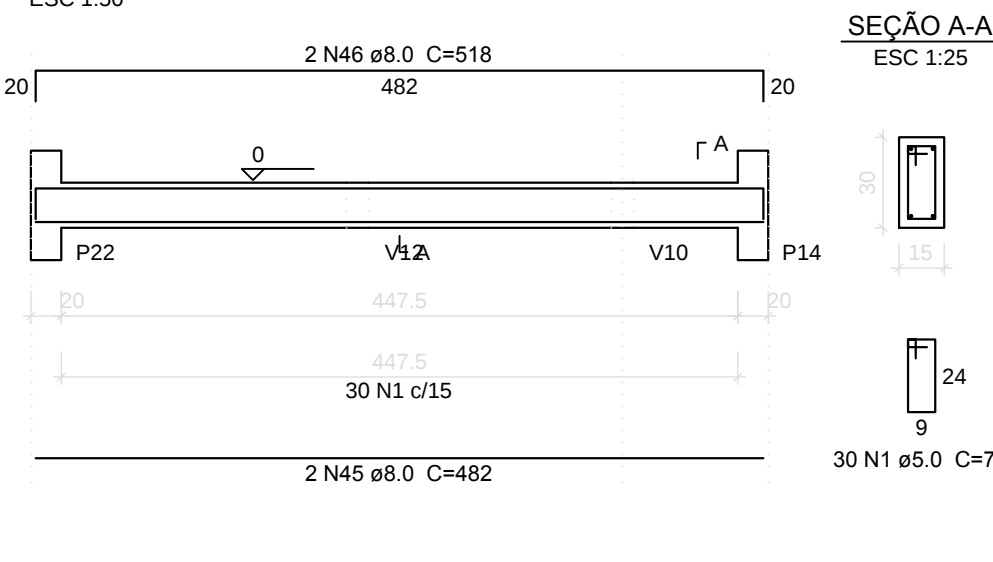
V22



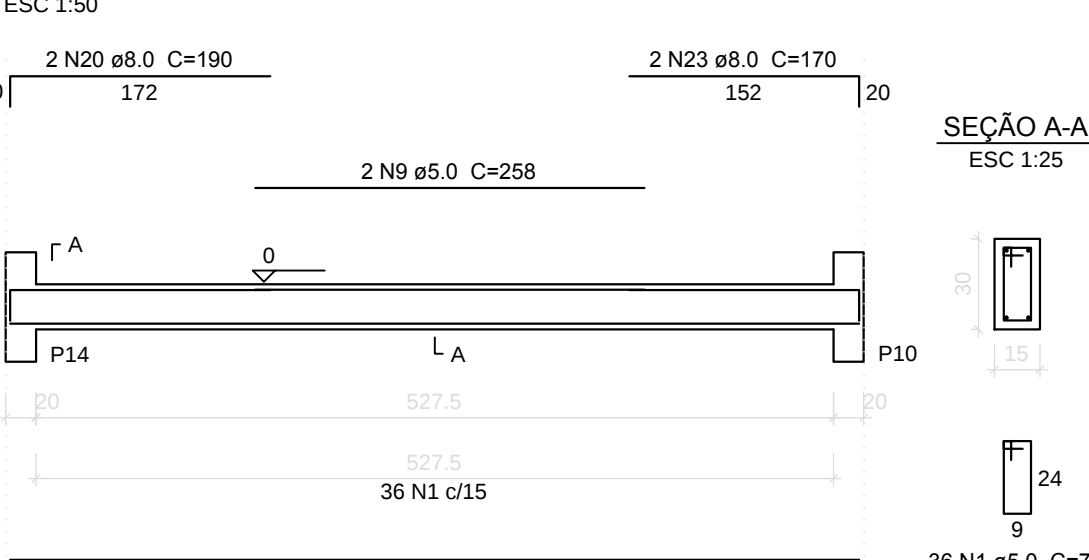
V23=V24=V25=V26=V27=V30



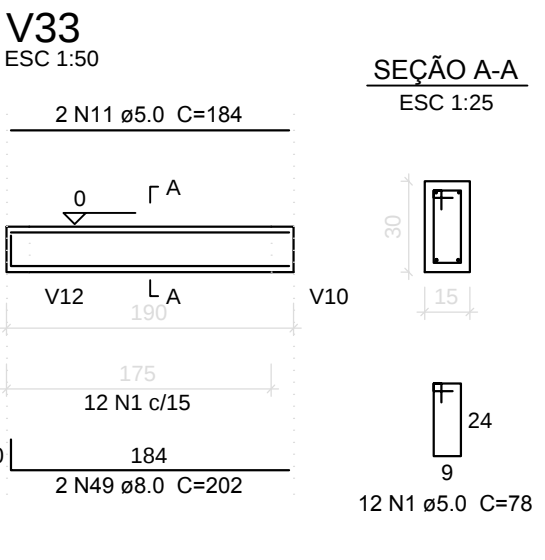
V28



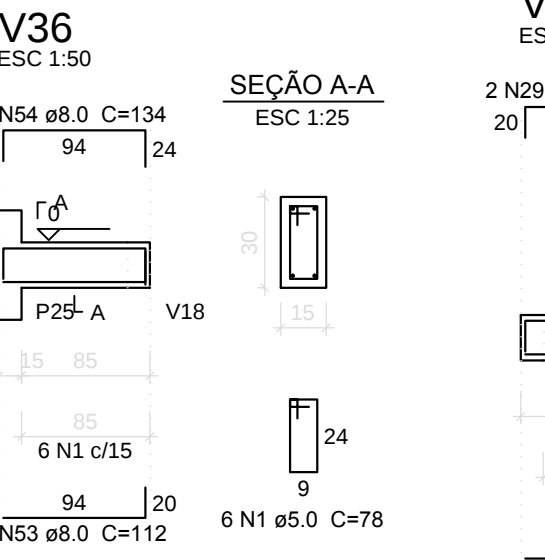
V29



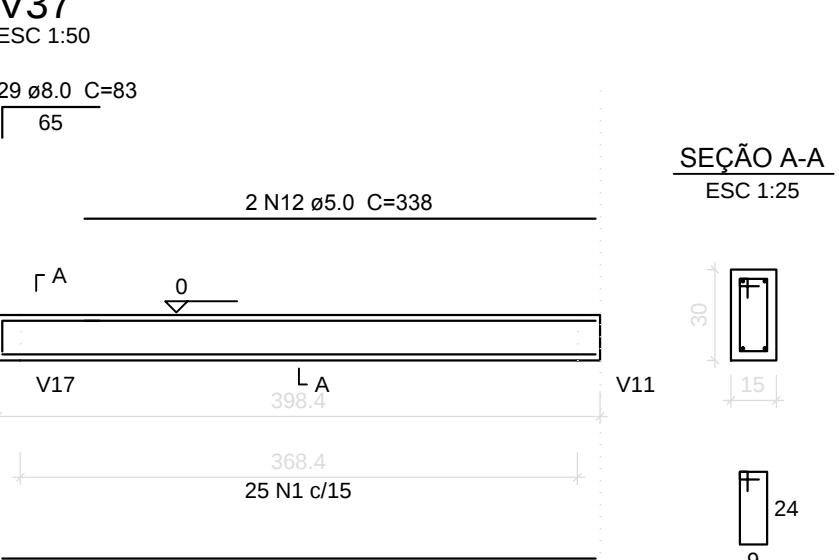
V33



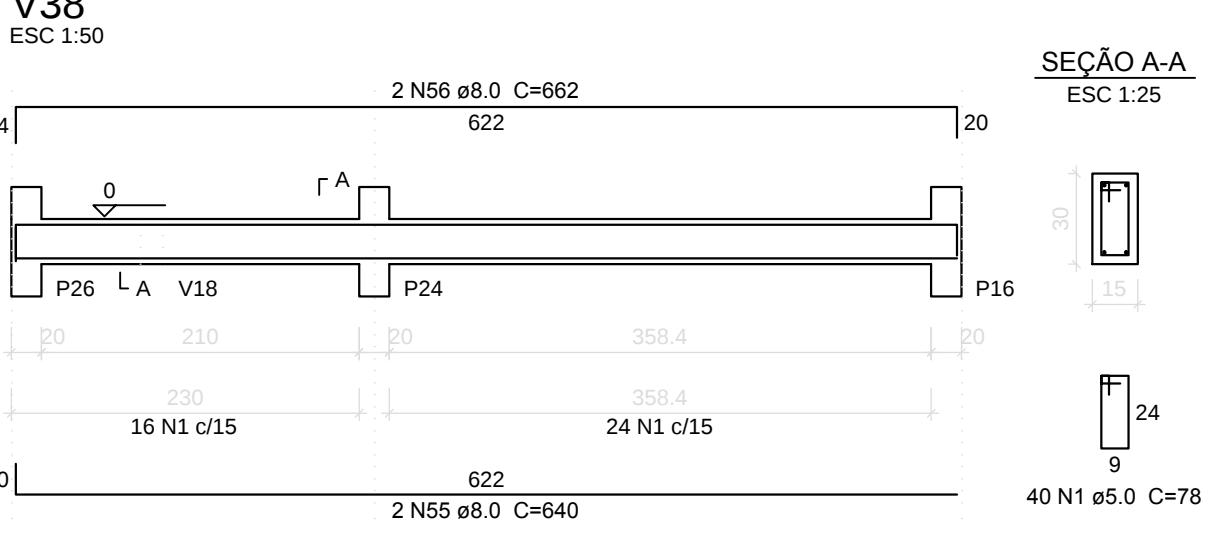
V36



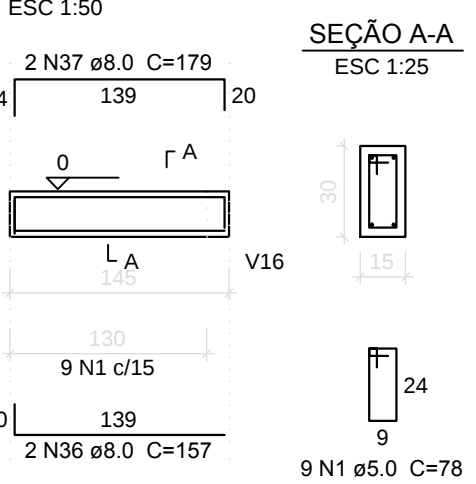
V37



V38



V32



Relação do aço

AÇO	N	DIAM (mm)	QUANT (Barras)	UNIT (cm)	C.TOTAL (cm)
CA80	1	5.0	961	78	74958
	2	5.0	8	325	2600
	3	5.0	21	88	1848
	4	5.0	2	323	646
	5	5.0	2	408	816
	6	5.0	2	280	560
	7	5.0	2	220	440
	8	5.0	8	265	2120
	9	5.0	2	258	516
	10	5.0	2	225	450
	11	5.0	2	184	368
	12	5.0	2	338	676
	13	8.0	8	627	5016
CA50	14	8.0	4	663	2652
	15	8.0	4	199	796
	16	8.0	4	235	940
	17	8.0	8	607	4856
	18	8.0	4	643	2572
	19	8.0	10	168	1680
	20	8.0	6	190	1140
	21	8.0	4	217	868
	22	8.0	4	239	956
	23	8.0	10	170	1700
	24	8.0	2	164	328
	25	8.0	2	191	382
	26	8.0	6	462	2772
	27	8.0	4	391	1564
	28	8.0	4	427	1708
	29	8.0	4	83	332
	30	8.0	2	498	996
	31	8.0	4	224	896
	32	8.0	2	264	528
	33	8.0	2	260	520
	34	8.0	2	122	244
	35	8.0	4	141	564
	36	8.0	2	157	314
	37	8.0	2	179	358
	38	8.0	14	479	6706
	39	8.0	2	515	1030
	40	8.0	2	564	1128
	41	8.0	4	105	660
	42	8.0	2	150	300
	43	8.0	8	123	984
	44	8.0	8	148	1184
	45	8.0	2	482	964
	46	8.0	2	518	1036
	47	8.0	2	562	1124
	48	8.0	2	145	290
	49	8.0	2	202	404
	50	8.0	2	94	188
	51	8.0	4	392	1568
	52	8.0	2	428	856
	53	8.0	2	112	224
	54	8.0	2	134	268
	55	8.0	2	640	1280
	56	8.0	2	662	1324

Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10 % (kg)
CA50	8.0	562	243.9
CA80	5.0	860	145.8
PESO TOTAL (kg)			
CA50		243.9	
CA80		145.8	

Volume de concreto (C-25) = 7.11 m³
Área de forma = 117.84 m²



PREFEITURA MUNICIPAL DE PARANAGUÁ

ADMINISTRAÇÃO DR. EDISON DE OLIVEIRA KERSTEN

SECRETARIA MUNICIPAL DE OBRAS PÚBLICAS

SECRETÁRIO: JULIANO VICENTE VENETE ELIAS

TÍTULO	PROJETO ESTRUTURAL					
OBRA	CMEI - ROSY MATAR DA MAIA					
CONTEUDO	- DETALHAMENTO DE VIGAS -					
PROPRIETÁRIO	AUTOR DO PROJETO			DESENHO		
PREFEITURA MUNICIPAL DE PARANAGUÁ			Detonador Temporário de Aguiar Ramos			
C.N.P.J. 76.017.458/0001-15			CREA: 25.647-DPI			
DATA	Maio/2016	ESCALA	Indicada	DTAR	ÁREA	PRANCHA
						07/09