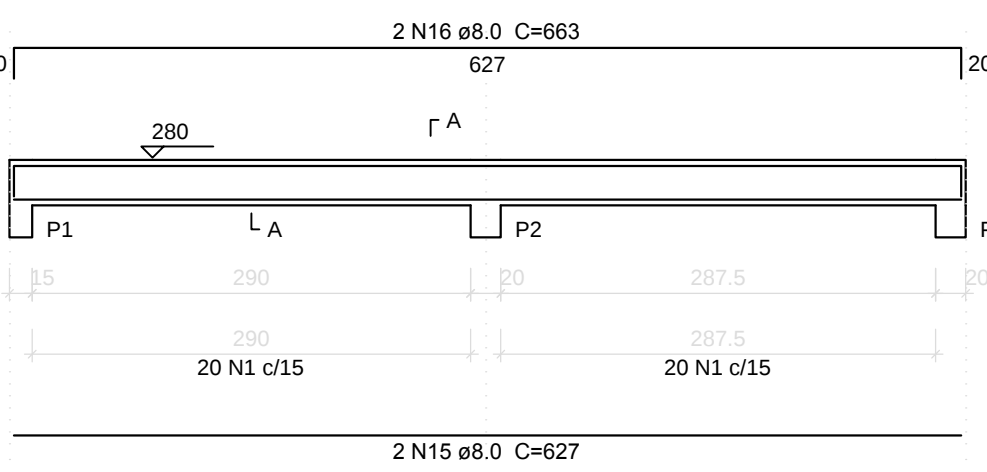


Detalhamento das Vigas
Nível Cobertura

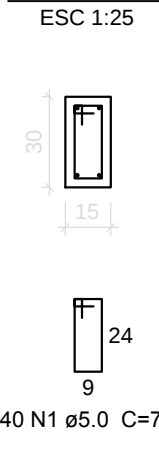
V1

ESC 1:50



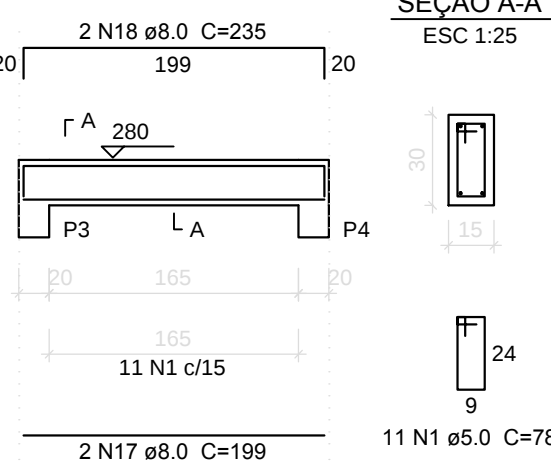
SEÇÃO A-A

ESC 1:25



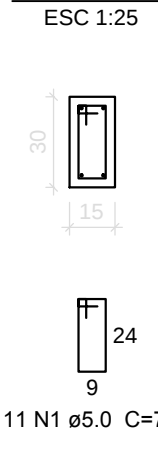
V2

ESC 1:50



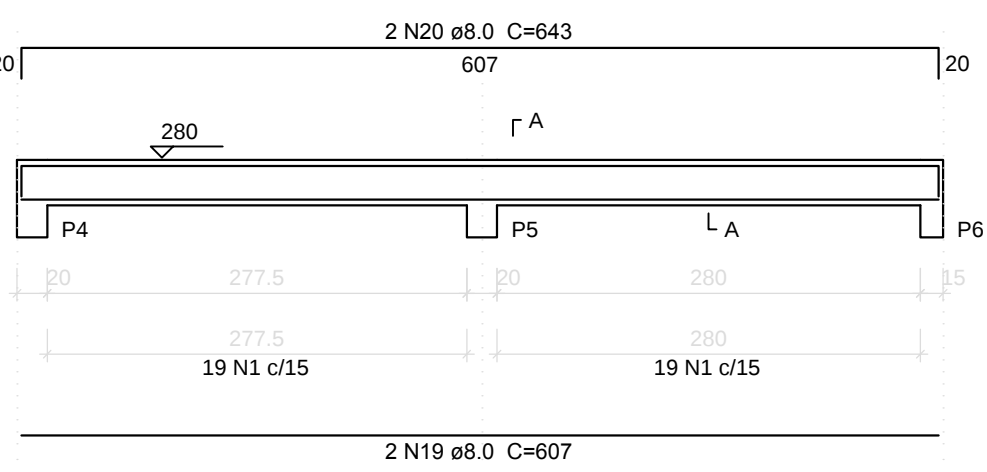
SEÇÃO A-A

ESC 1:25



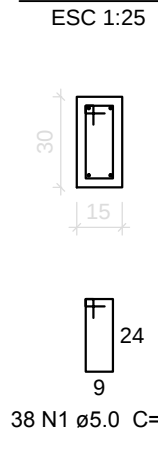
V3=V12

ESC 1:50



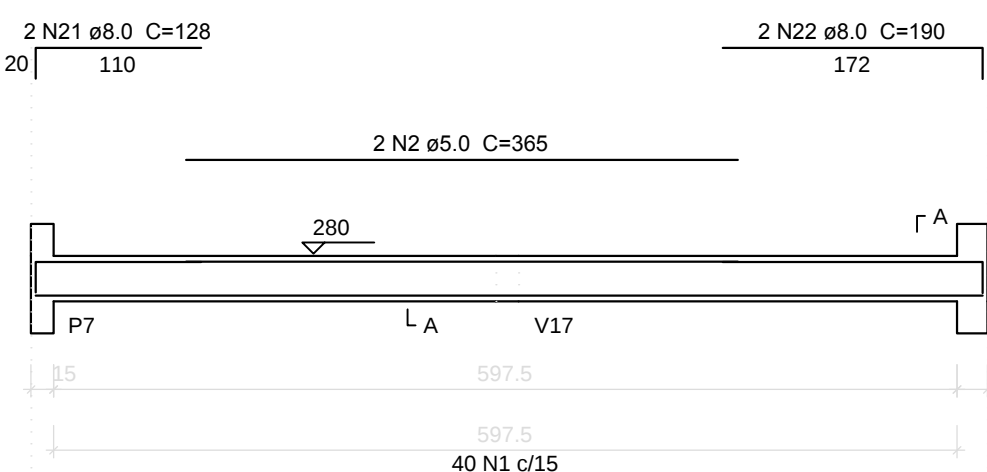
SEÇÃO A-A

ESC 1:25



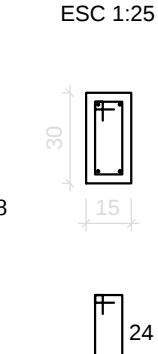
V4

ESC 1:50



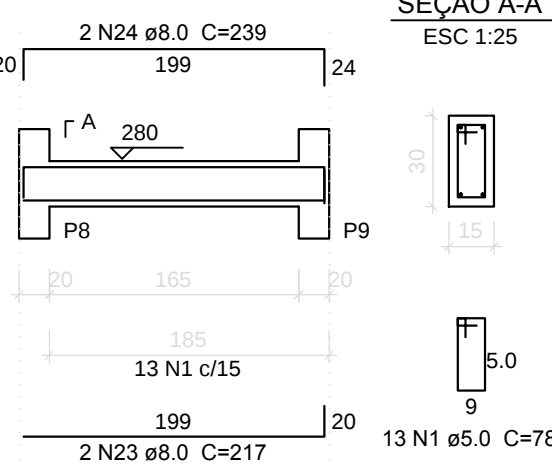
SEÇÃO A-A

ESC 1:25



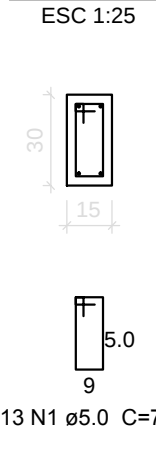
V5=V8=V11

ESC 1:50



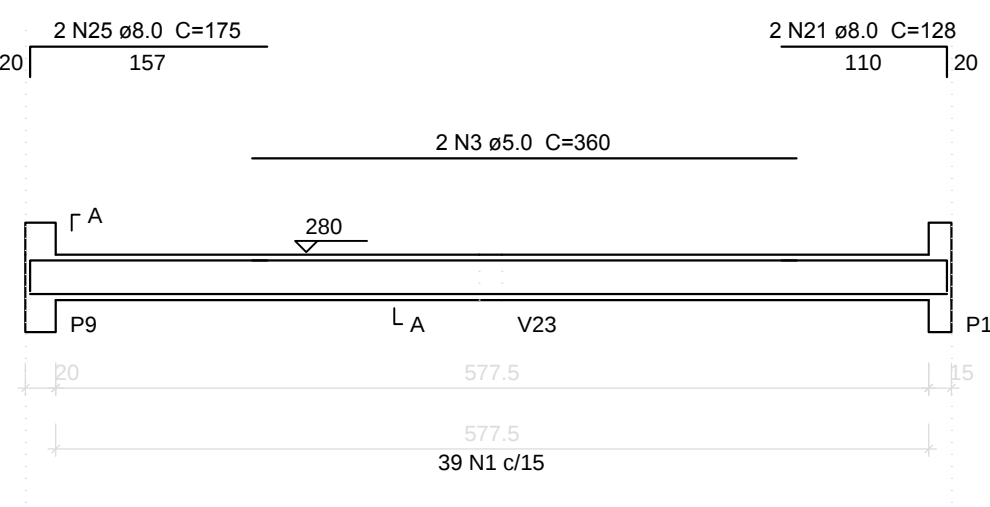
SEÇÃO A-A

ESC 1:25



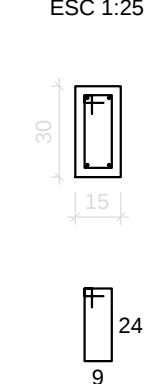
V6

ESC 1:50



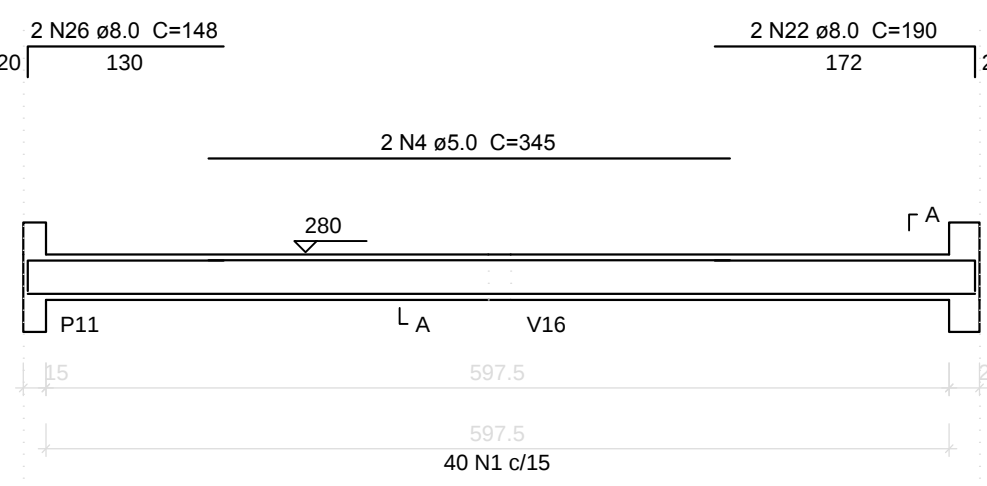
SEÇÃO A-A

ESC 1:25



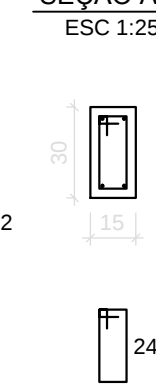
V7

ESC 1:50



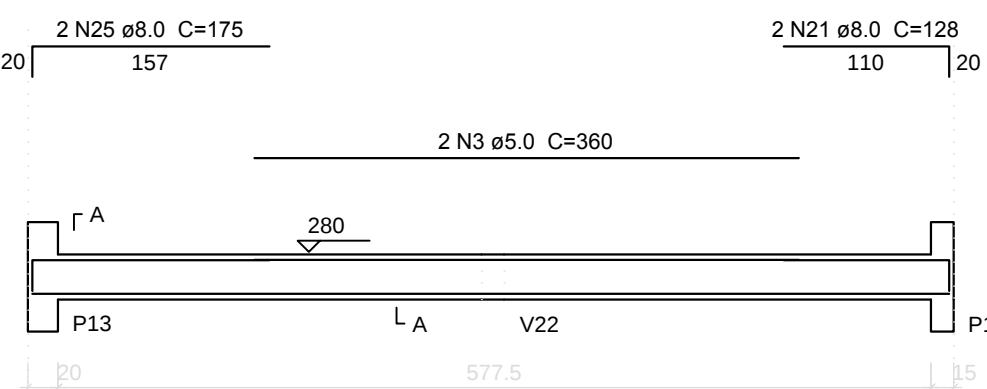
SEÇÃO A-A

ESC 1:25



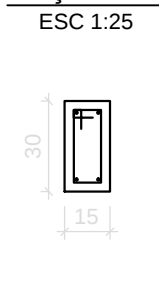
V9

ESC 1:50



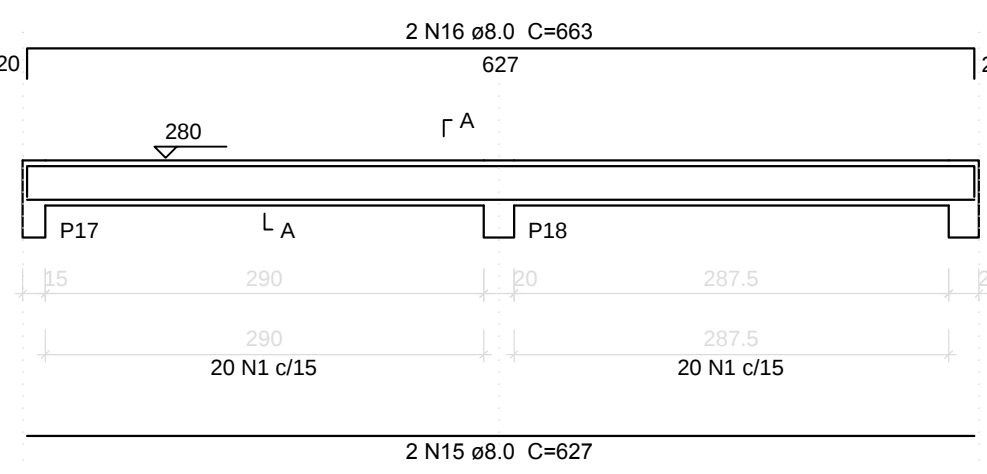
SEÇÃO A-A

ESC 1:25



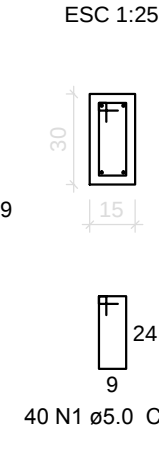
V10

ESC 1:50



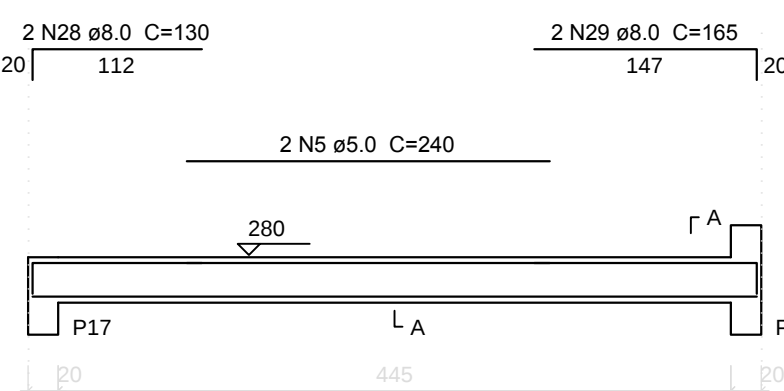
SEÇÃO A-A

ESC 1:25



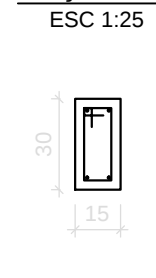
V13

ESC 1:50



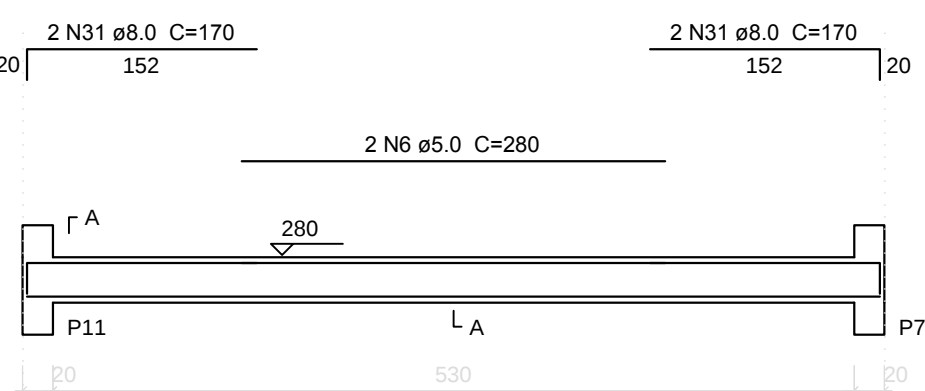
SEÇÃO A-A

ESC 1:25



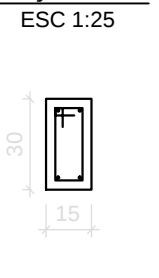
V14

ESC 1:50



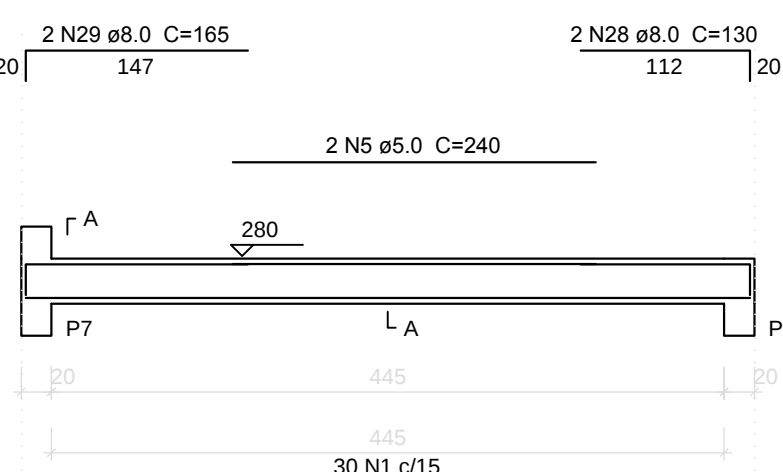
SEÇÃO A-A

ESC 1:25



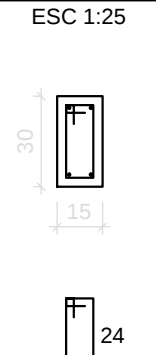
V15=V26

ESC 1:50



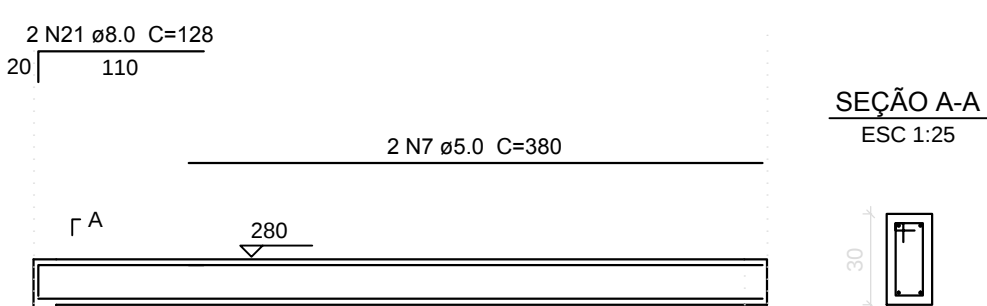
SEÇÃO A-A

ESC 1:25



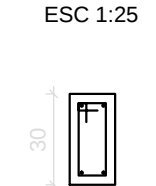
V16

ESC 1:50



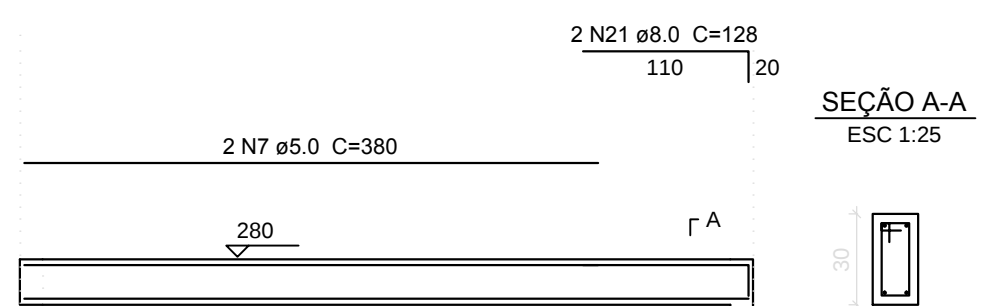
SEÇÃO A-A

ESC 1:25



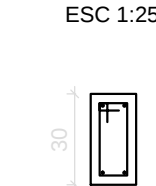
V17

ESC 1:50



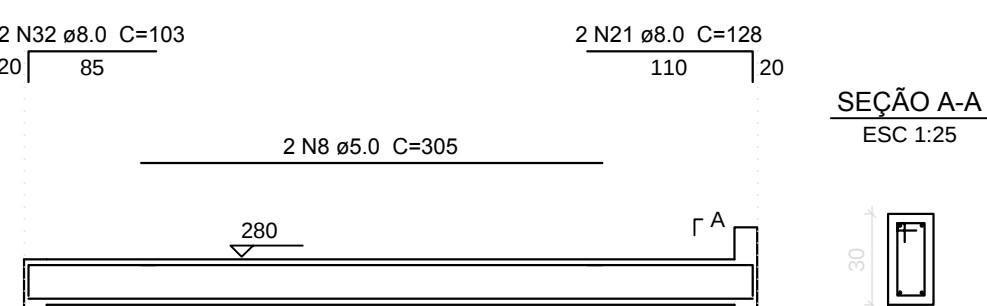
SEÇÃO A-A

ESC 1:25



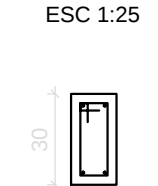
V18=V19=V20=V21

ESC 1:50



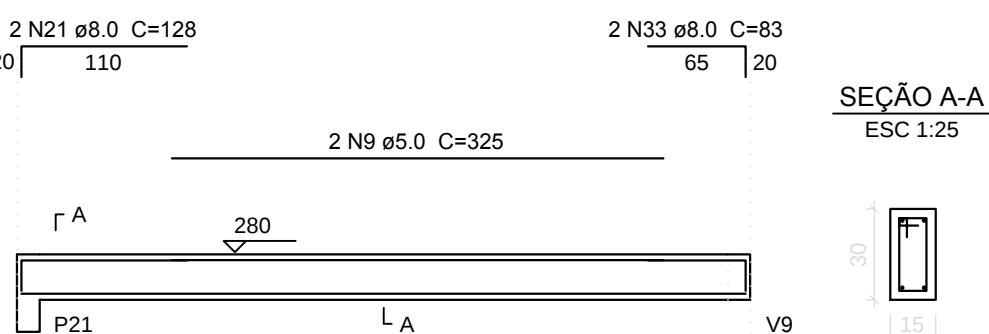
SEÇÃO A-A

ESC 1:25



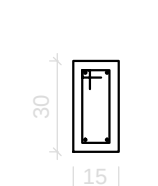
V22

ESC 1:50



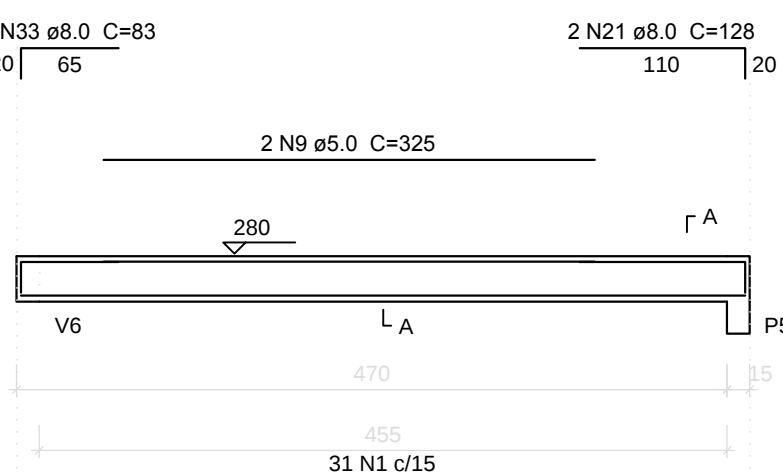
SEÇÃO A-A

ESC 1:25



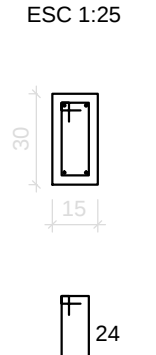
V23

ESC 1:50



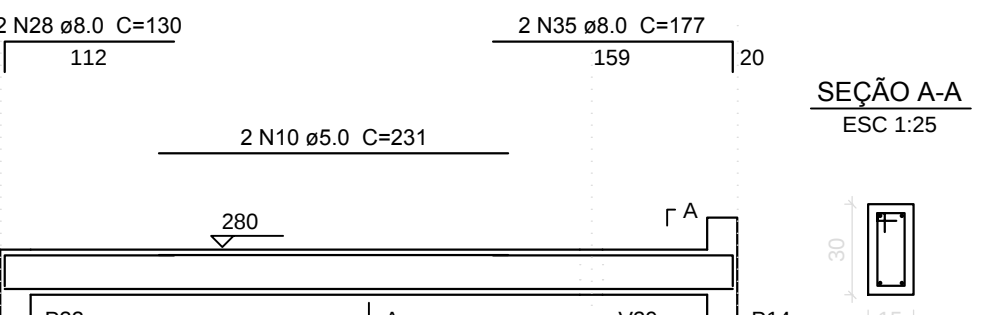
SEÇÃO A-A

ESC 1:25



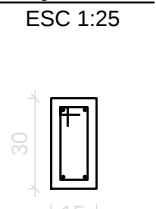
V24

ESC 1:50



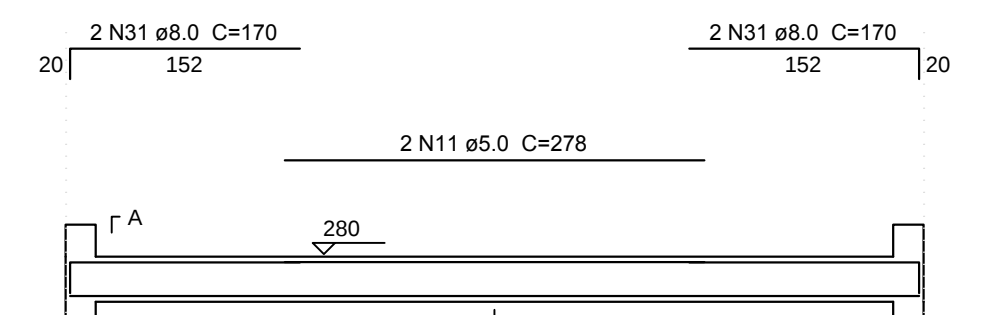
SEÇÃO A-A

ESC 1:25



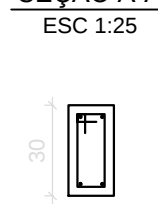
V25

ESC 1:50



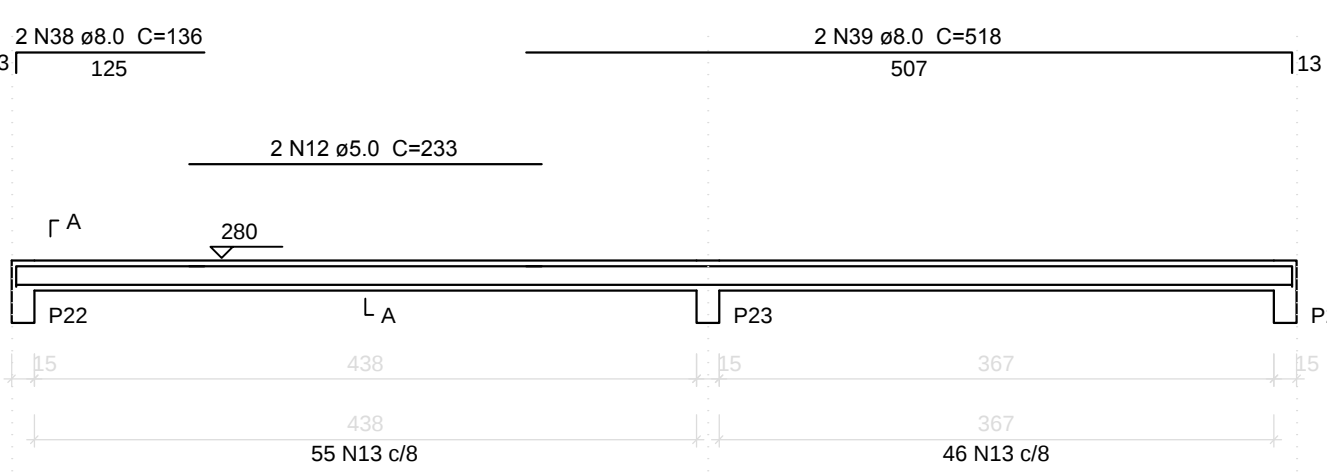
SEÇÃO A-A

ESC 1:25



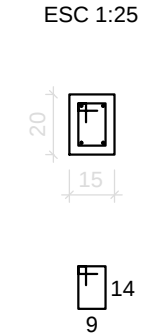
V27=V29

ESC 1:50



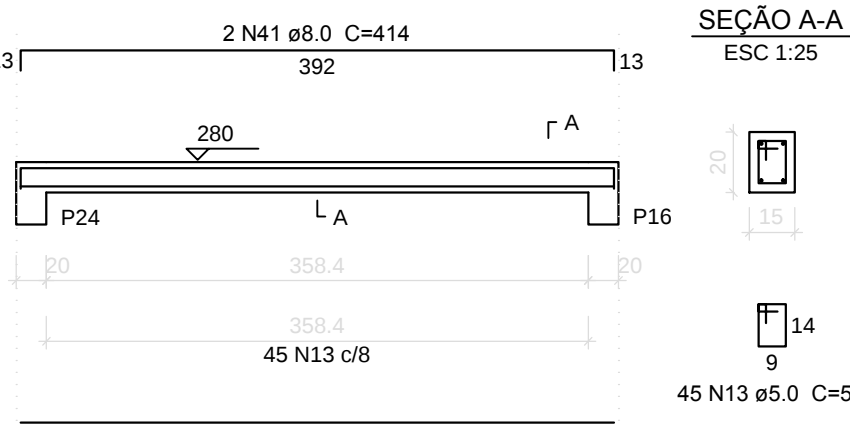
SEÇÃO A-A

ESC 1:25



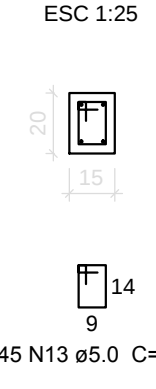
V28=V30

ESC 1:50



SEÇÃO A-A

ESC 1:25



Relação do aço

AÇO	N	DIAM (mm)	QUANT (Barras)	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	804	78	62712
	2	5.0	2	365	730
	3	5.0	4	360	1440
	4	5.0	2	345	690
	5	24	6	240	1440
	6	5.0	2	280	560
	7	5.0	4	380	1520
	8	5.0	8	305	2440
	9	5.0	4	325	1300
	10	5.0	2	231	462
	11	5.0	2	278	556
	12	5.0	2	233	466
	13	5.0	292	58	16936
	14	5.0	2	283	566
	15	8.0	8	627	5016
CA50	16	8.0	4	663	2652
	17	8.0	2	199	398
	18	8.0	2	235	470
	19	8.0	8	607	4856
	20	8.0	4	643	2572
	21	8.0	22	128	2816
	22	8.0	4	190	760
	23	8.0	6	217	1302
	24	8.0	6	239	1434
	25	8.0	4	175	700
	26	8.0	2	148	296
	27	8.0	22	479	10538
	28	8.0	8	130	1040
	29	8.0	6	165	990
	30	8.0	2	564	1128
	31	8.0	8	170	1360
	32	8.0	8	103	824
	33	8.0	4	83	332
	34	8.0	2	482	964
	35	8.0	2	177	354
	36	8.0	2	562	1124
	37	8.0	4	844	3376
	38	8.0	2	136	272
	39	8.0	4	518	2072
	40	8.0	4	392	1568
	41	8.0	4	414	1656
	42	8.0	2	86	172

Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10 % (kg)
CA50	8.0	510.5	221.5
CA60	5.0	918.2	155.7
PESO TOTAL (kg)			
CA50		221.5	
CA60		155.7	

Volume de concreto (C-25) = 6.49 m³
Área de forma = 109.43 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						
CONTEÚDO	- DETALHAMENTO DE VIGAS -						
PROPRIETÁRIO	AUTOR DO PROJETO			DESENHO			
PREFEITURA MUNICIPAL DE PARANAGUÁ			Detora Temporário de Aguiar Ramos			PRINCHA	
C.N.P.J. 76.017.458/0001-15			CREA: 25.647-DPI			09/09	
DATA	Maio/2016	ESCALA	Indicada	DTAR	ÁREA		