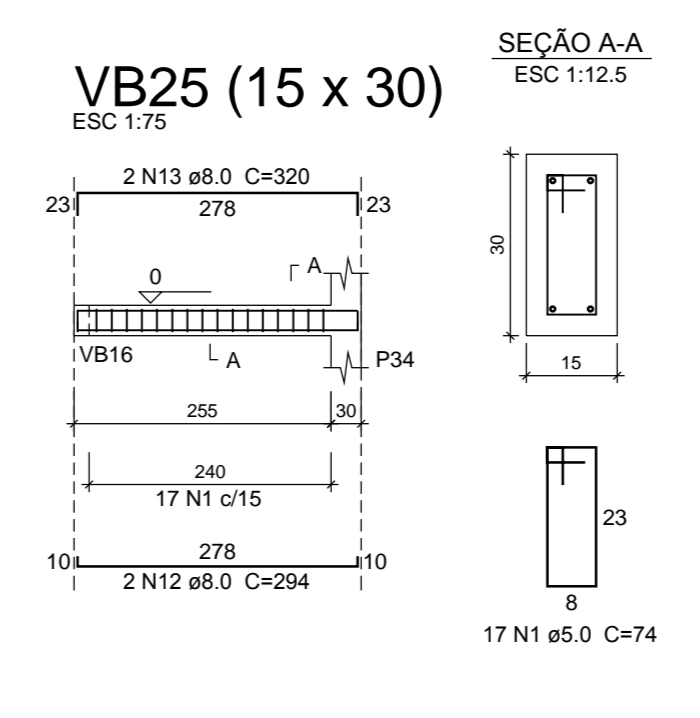
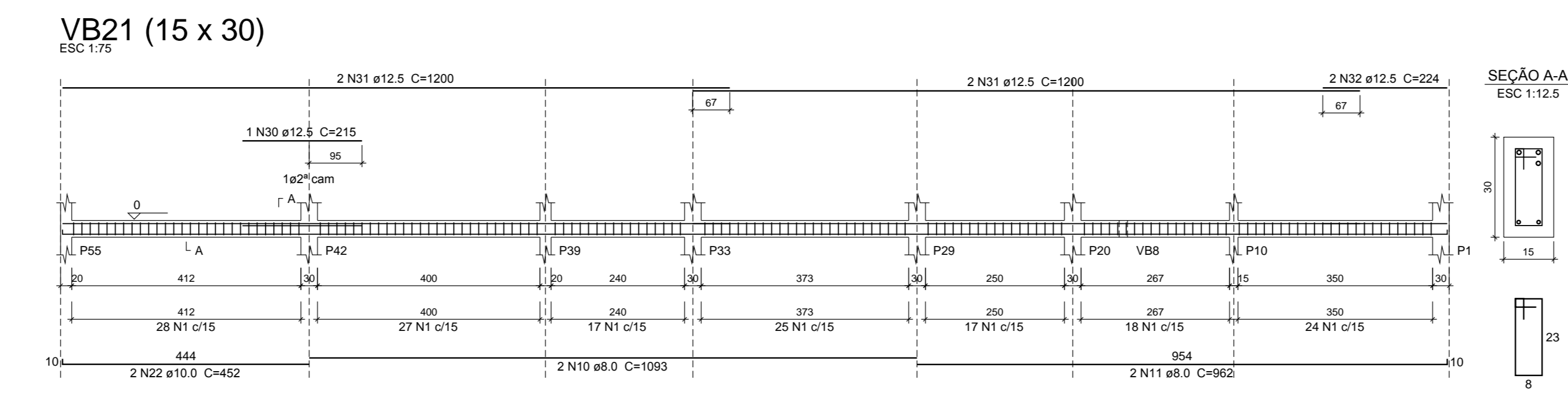
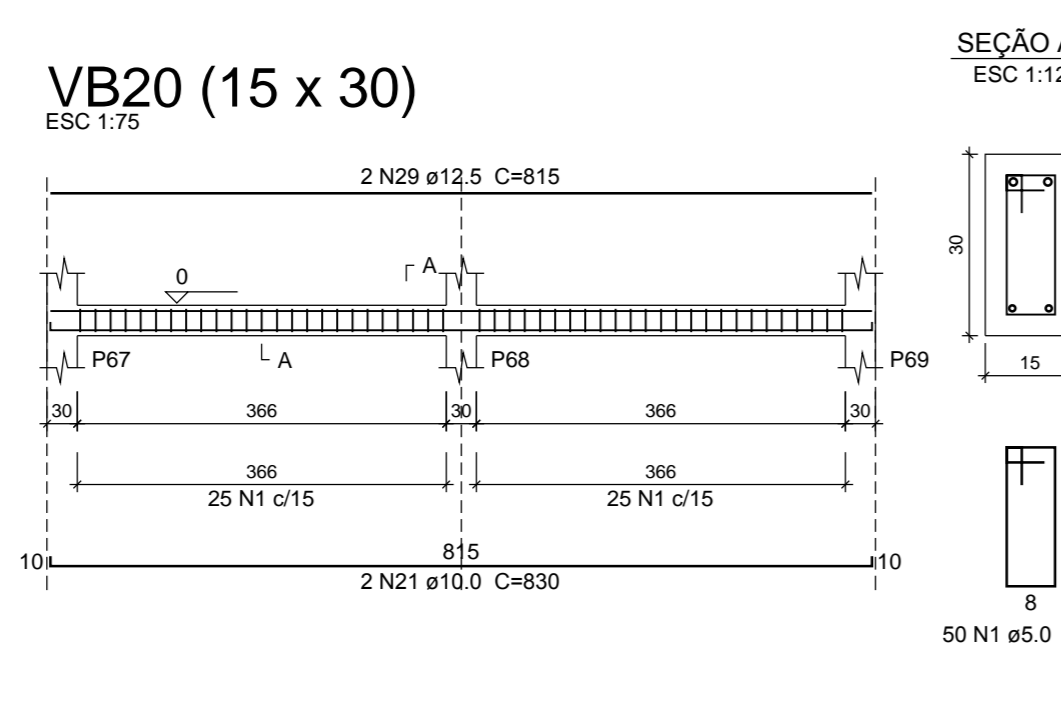


Relação do aço

VB16	VB19	VB20
VB21	VB23	VB24
VB25	VB26	VB27
VB29	VB29	VB30
VB31	VB32	VB33
VB34	VB35	VB36

CA50	N	DIAM (mm)	QUANT (Barra)	UNIT (cm)	C.TOTAL (cm)
CA50	1	5.0	643	74	47582
CA50	2	5.0	105	94	9670
CA50	3	6.3	2	366	732
CA50	4	6.3	8	127	1016
CA50	5	6.3	2	112	204
CA50	6	6.3	2	278	556
CA50	7	8.0	4	1103	4412
CA50	8	8.0	2	1200	2400
CA50	9	8.0	2	1014	2028
CA50	10	8.0	2	1003	2006
CA50	11	8.0	2	962	1924
CA50	12	8.0	4	294	1176
CA50	13	8.0	2	320	640
CA50	14	8.0	2	400	800
CA50	15	8.0	8	143	1144
CA50	16	8.0	2	128	256
CA50	17	8.0	2	285	570
CA50	18	10.0	2	785	1570
CA50	19	10.0	1	190	190
CA50	20	10.0	2	790	1580
CA50	21	10.0	2	830	1660
CA50	22	10.0	2	452	904
CA50	23	10.0	2	602	1204
CA50	24	10.0	2	1010	2020
CA50	25	10.0	2	391	782
CA50	26	10.0	2	900	1800
CA50	27	10.0	12	474	5688
CA50	28	12.5	2	420	840
CA50	29	12.5	2	515	1030
CA50	30	12.5	1	215	215
CA50	31	12.5	4	1200	4800
CA50	32	12.5	2	294	448
CA50	33	12.5	2	965	1930
CA50	34	12.5	2	1197	2394
CA50	35	12.5	2	508	1016
CA50	36	12.5	2	875	1750

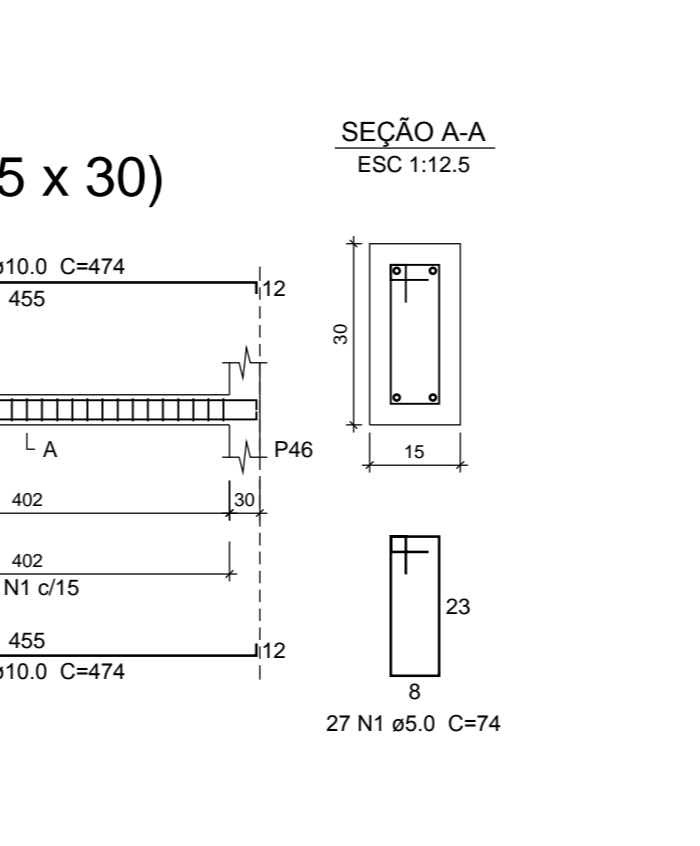
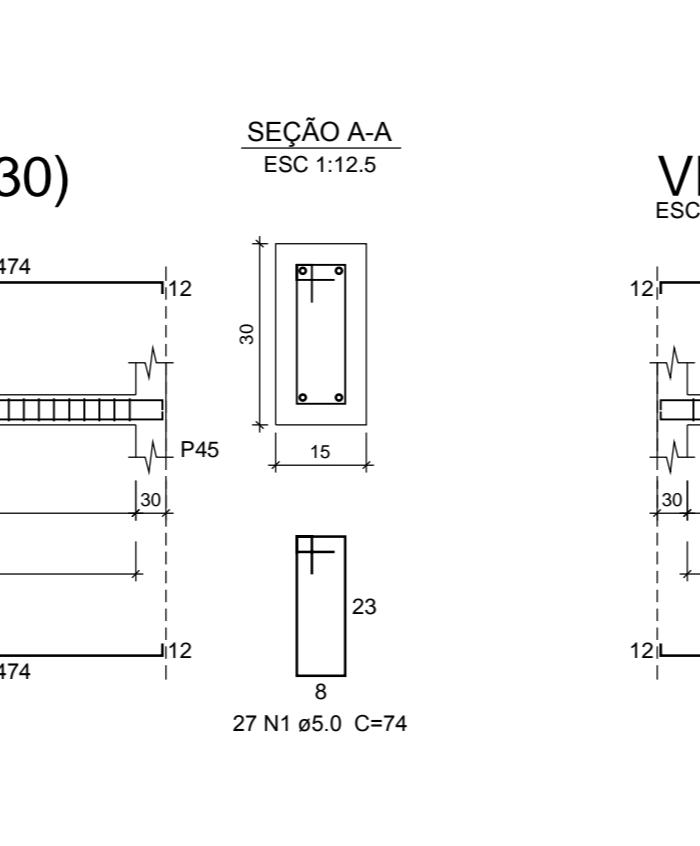
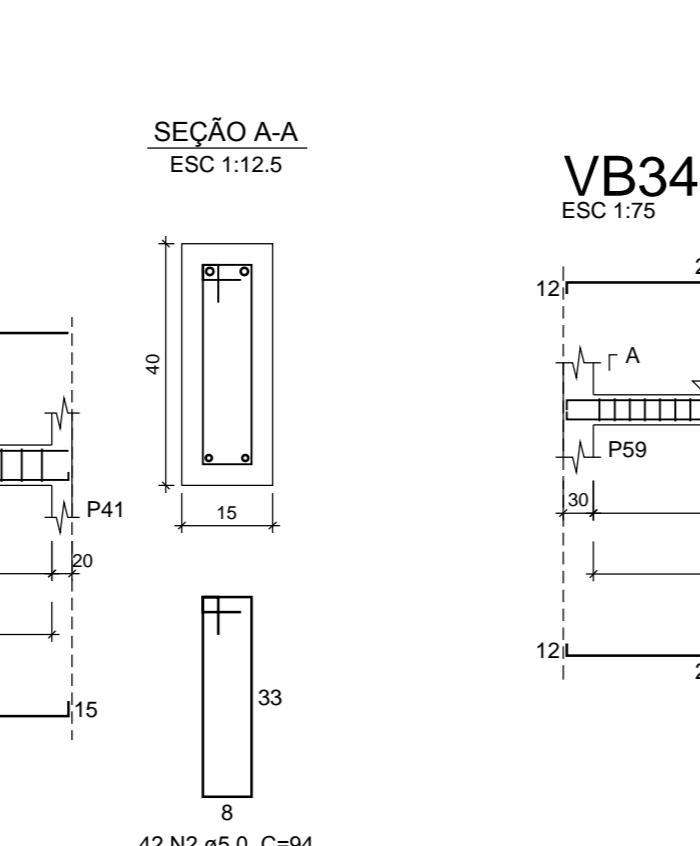
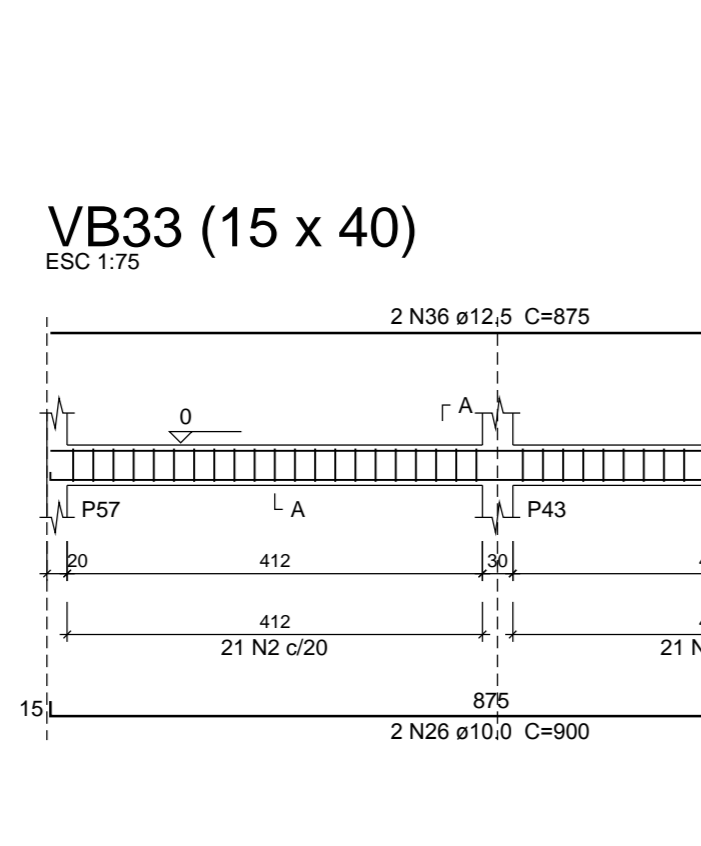
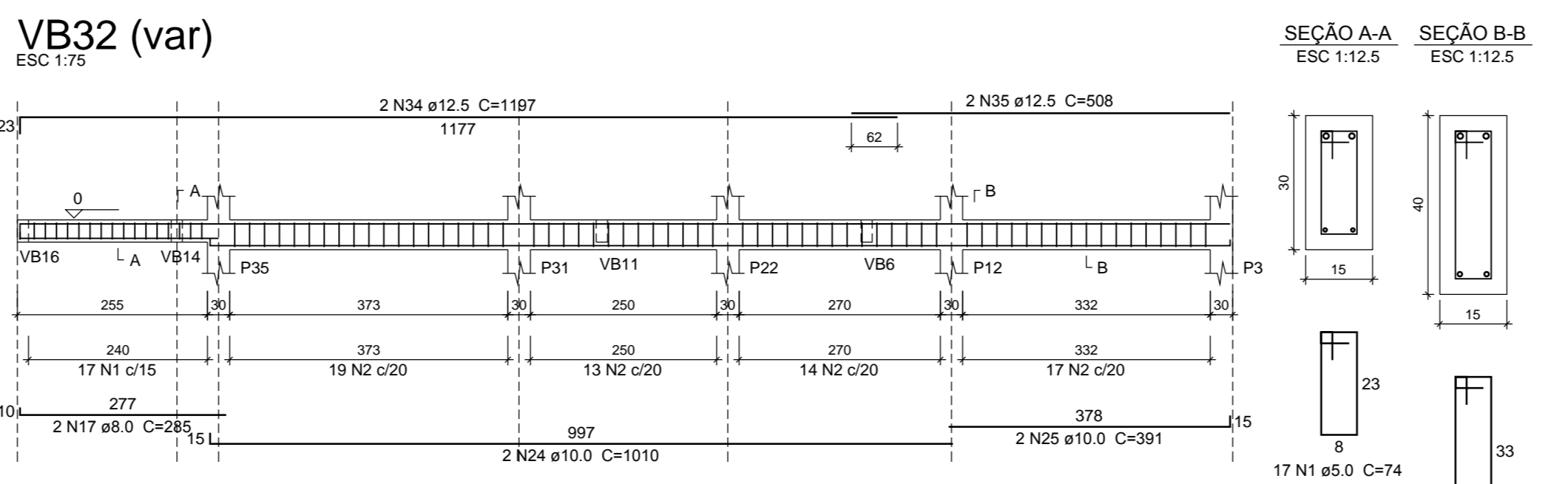
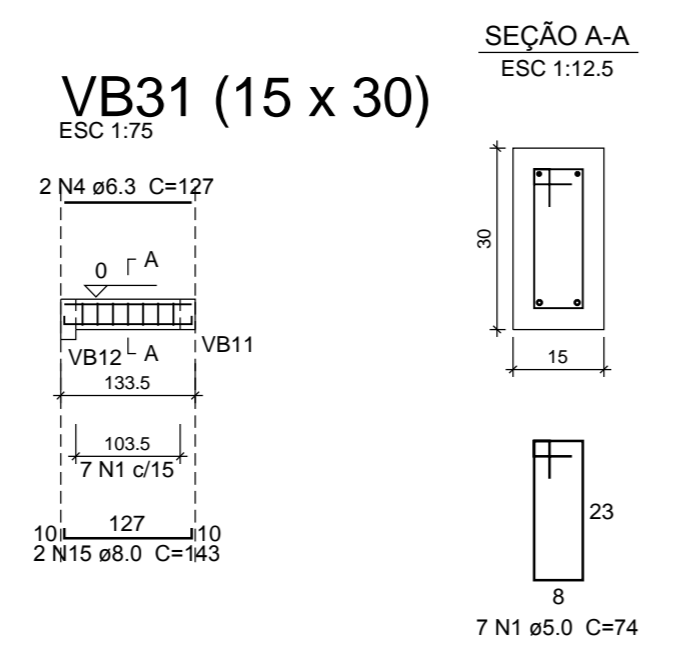
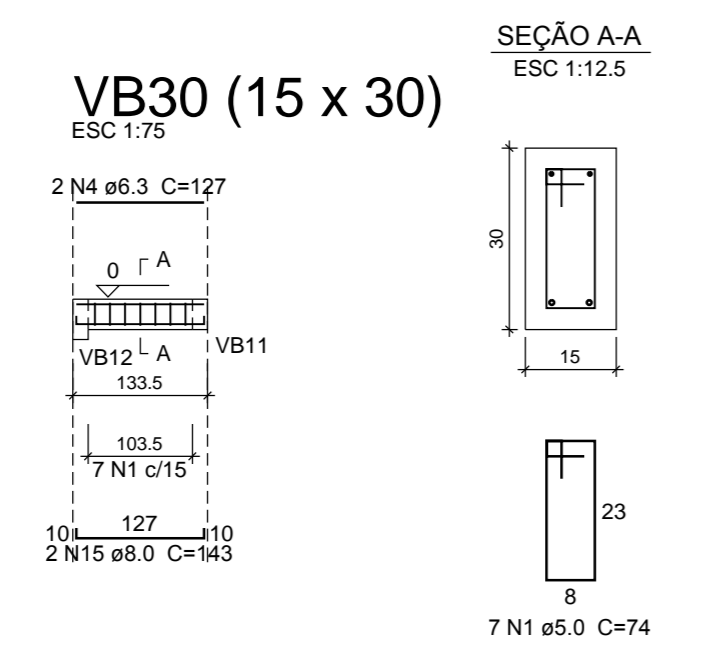
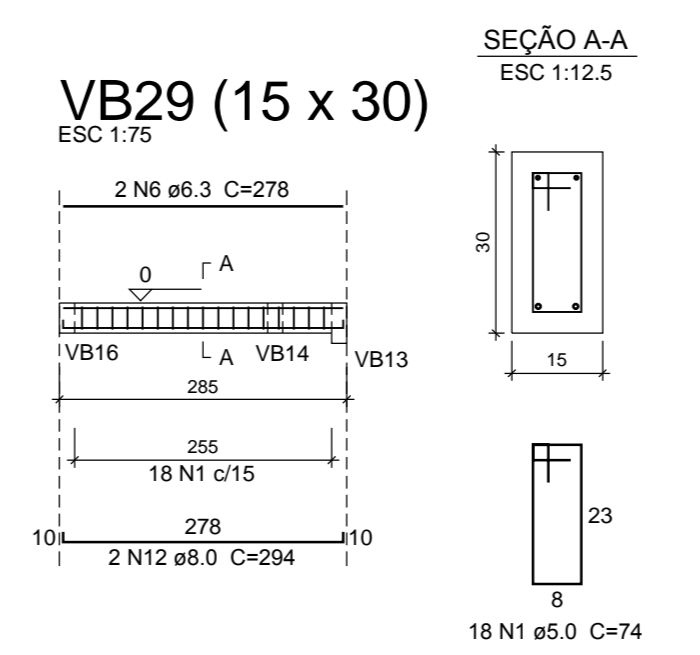
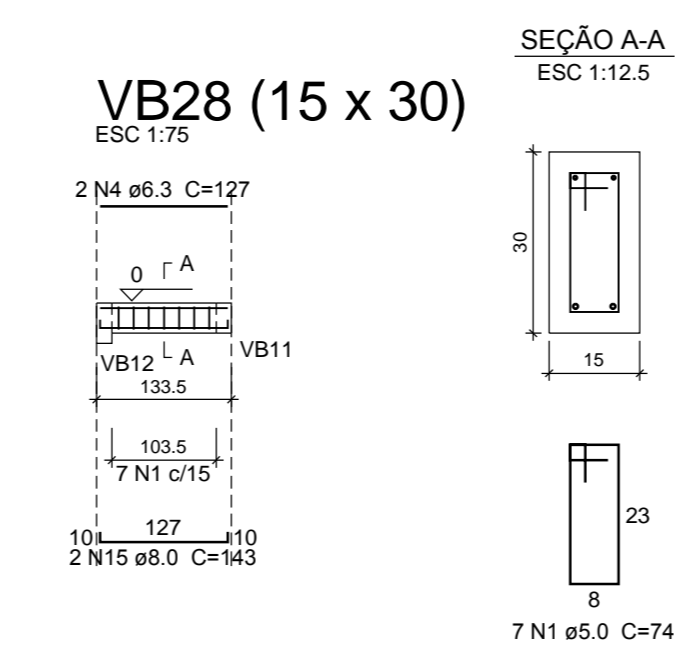
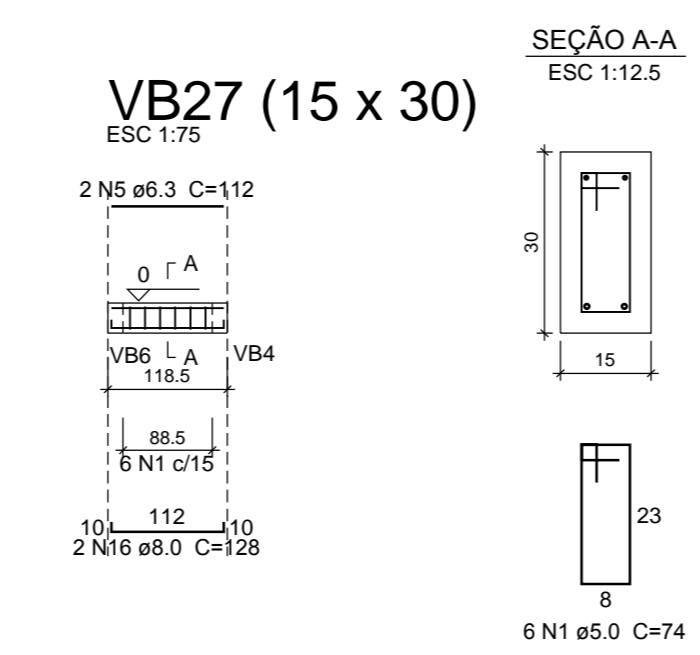
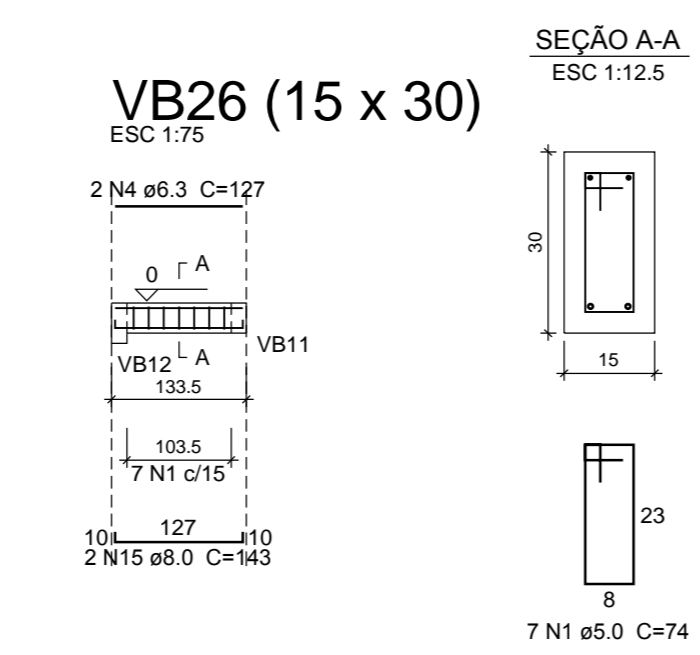
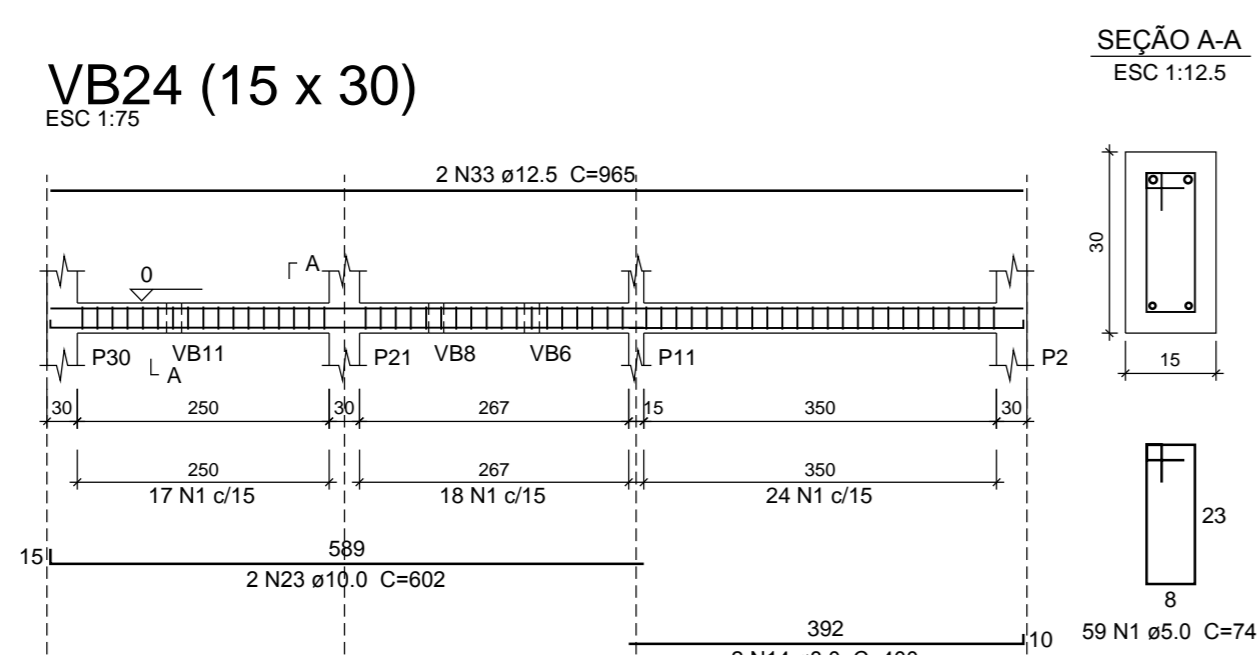


Resumo do aço

CA50	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	6.3	25.9	7
CA50	8.0	175.4	76.1
CA50	10.0	172.4	117.6
CA50	12.5	150.3	159.2
CA50	5.0	574.6	97.4

PESO TOTAL (kg)
CA50 359.9
CA60 97.4

Volume de concreto (C-30) = 6.08 m³
Área de forma = 100.21 m²



Ciente:
COMPANHIA DOCAS DO RIO DE JANEIRO
Superintendência do Porto do Rio de Janeiro

Executado por:
Tostes & Medeiros Engenharia Ltda.

Título:
PROJETO ESTRUTURAL PARA CENTRAL DE RESÍDUOS
ARMAÇÃO 02/03 VIGAS BALDRAMES

Local: Porto do Rio de Janeiro

Sector:

Data de Execução: **AGOSTO 2013** Obra: Desenho nº: Folhas: **11/17**

Emissão: Desenhista: **ALVANTER** Resp. Técnico: Verificação:

ESCALA GRÁFICA
0 10 20 40 60 80 100m