

RELAÇÃO DO AÇO - PILARES

ELEMENTO	AÇO	N	DIAM (mm)	QUANT	C UNIT (cm)	C TOTAL (cm)
P1-L2	CA60	1	5.0	62	111	10212
P1-L1	CA50	2	10.0	8	457	3656
P1-L1	CA60	1	5.0	62	111	1110
P2-L2	CA50	2	10.0	8	114	912
P2-L2	CA60	2	5.0	46	131	1380
P2-L1	CA60	2	5.0	46	131	6028
P2-L1	CA50	1	5.0	5	30	150
P2-L1	CA60	1	5.0	62	111	10212
P3-L2	CA50	3	10.0	6	114	684
P3-L1	CA50	2	10.0	8	457	3656
P3-L1	CA60	1	5.0	62	111	1110
P4-L2	CA50	2	10.0	8	114	912
P4-L2	CA60	2	5.0	46	131	1380
P4-L1	CA50	2	10.0	8	457	3656
P4-L1	CA60	1	5.0	62	111	1110
P5-L2	CA50	2	10.0	8	114	912
P5-L2	CA60	2	5.0	46	131	6028
P5-L1	CA60	3	10.0	6	457	2142
P5-L1	CA50	2	5.0	5	30	150
P6-L2	CA50	2	10.0	8	114	684
P6-L2	CA60	1	5.0	62	111	10212
P6-L1	CA50	2	10.0	8	457	3656
P6-L1	CA60	1	5.0	62	111	1110

RESUMO DO AÇO

AÇO	DIAM (mm)	C TOTAL (m)	QUANT + 10% (Barras)	PESO + 10% (kg)
CA50	10.0	251.2	24	170.4
CA60	5.0	617.1	57	104.6
<b>PESO TOTAL (kg)</b>				<b>275.0</b>
CA50				170.4
CA60				104.6

Volume de concreto (C-30) = 3.13 m³  
Área de forma = 42.30 m²

RELAÇÃO DO AÇO - VIGAS FUNDO

ELEMENTO	AÇO	N	DIAM (mm)	QUANT	C UNIT (cm)	C TOTAL (cm)
VF1	CA60	1	5.0	28	111	3108
VF2	CA60	2	10.0	4	530	2120
VF2	CA50	1	5.0	28	111	3108
VF3	CA60	1	5.0	11	111	1221
VF3	CA50	4	10.0	4	235	840
VF4	CA60	1	5.0	11	111	1221
VF4	CA50	2	10.0	4	235	840

RESUMO DO AÇO

AÇO	DIAM (mm)	C TOTAL (m)	QUANT + 10% (Barras)	PESO + 10% (kg)
CA50	10.0	81.2	8	41.5
CA60	5.0	86.6	8	14.7
<b>PESO TOTAL (kg)</b>				<b>56.2</b>
CA50				41.5
CA60				14.7

Volume de concreto (C-30) = 0.90 m³  
Área de forma = 8.48 m²

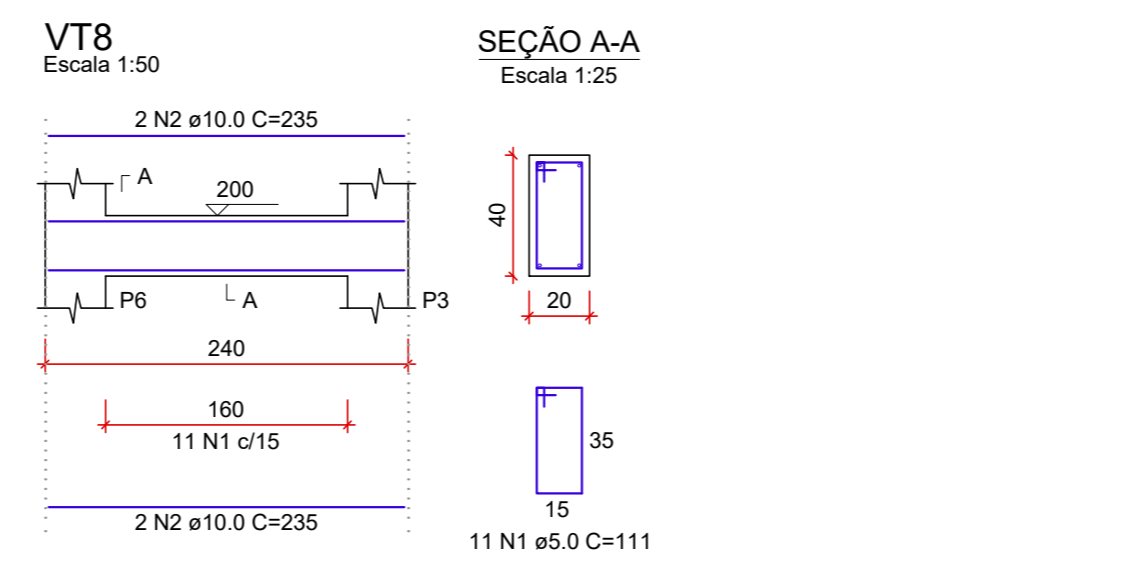
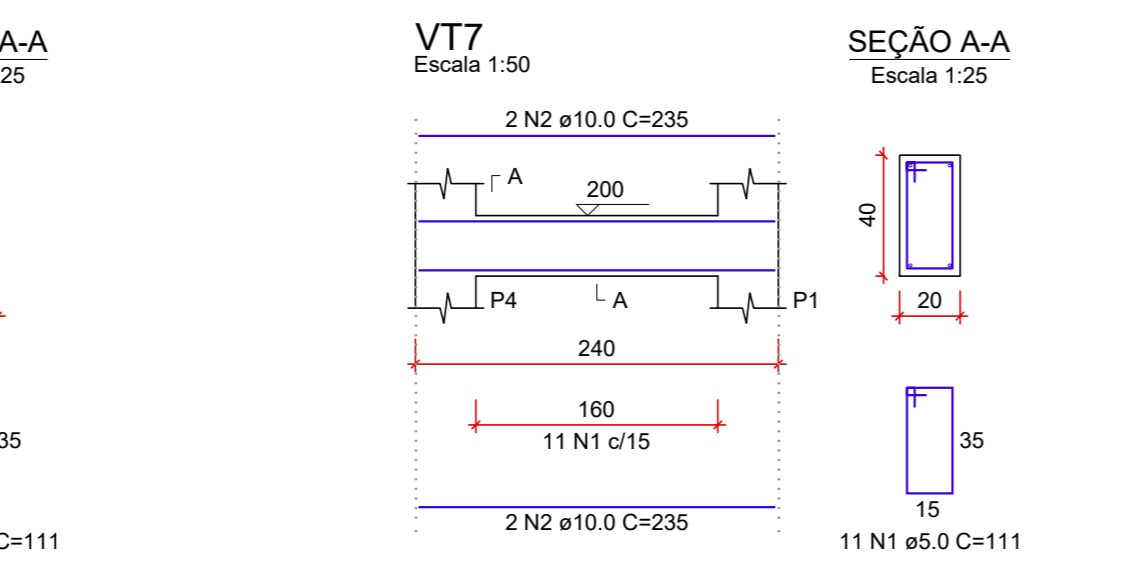
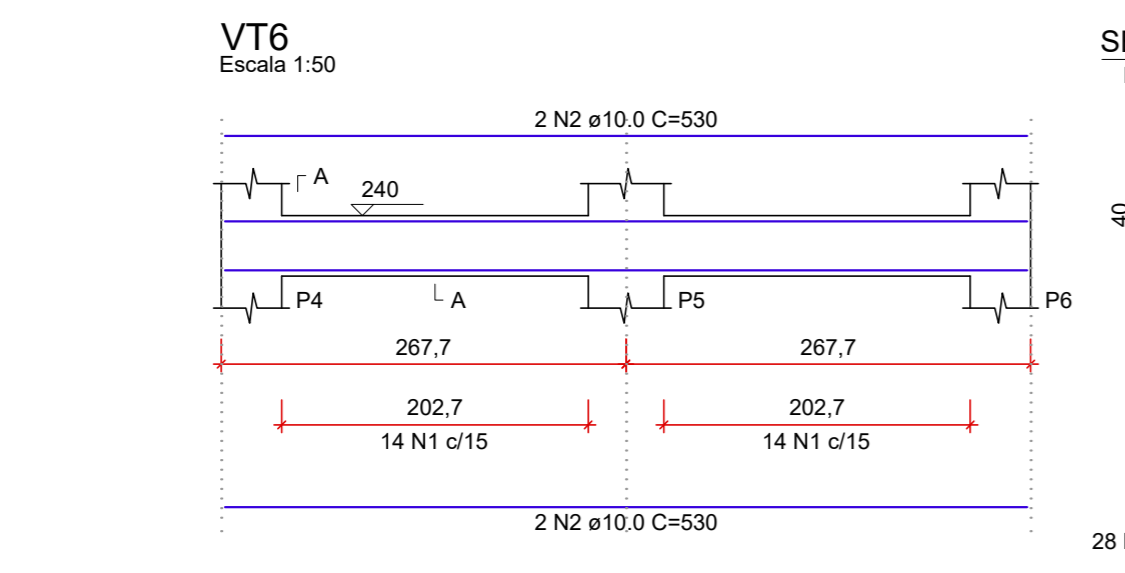
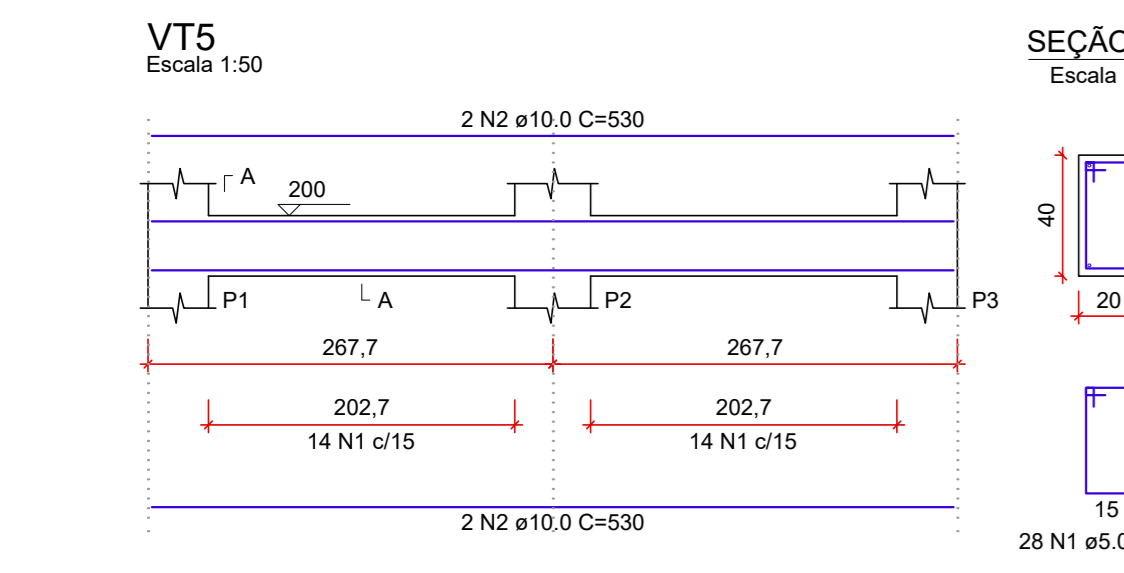
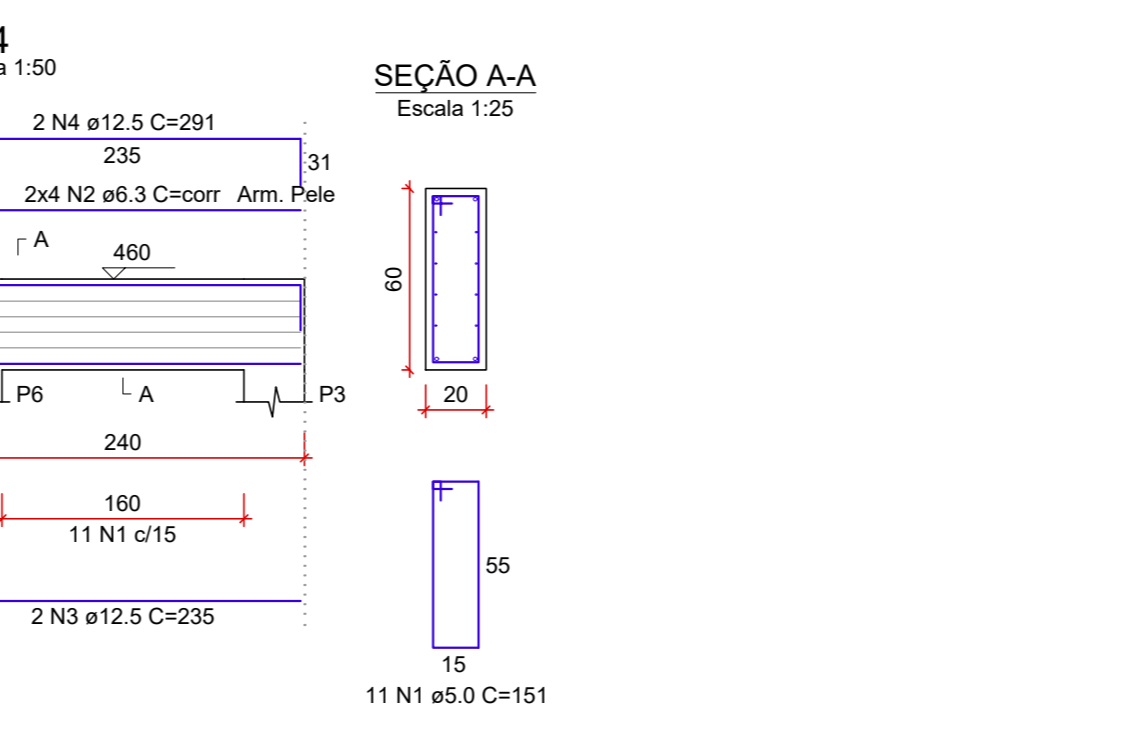
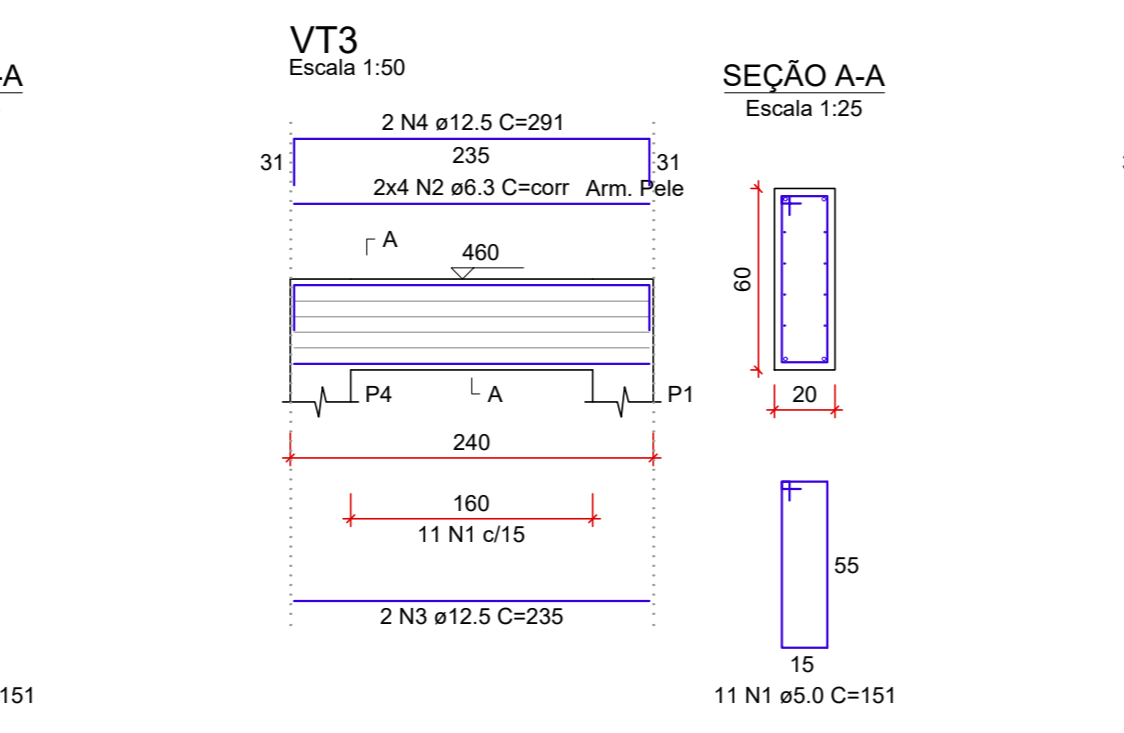
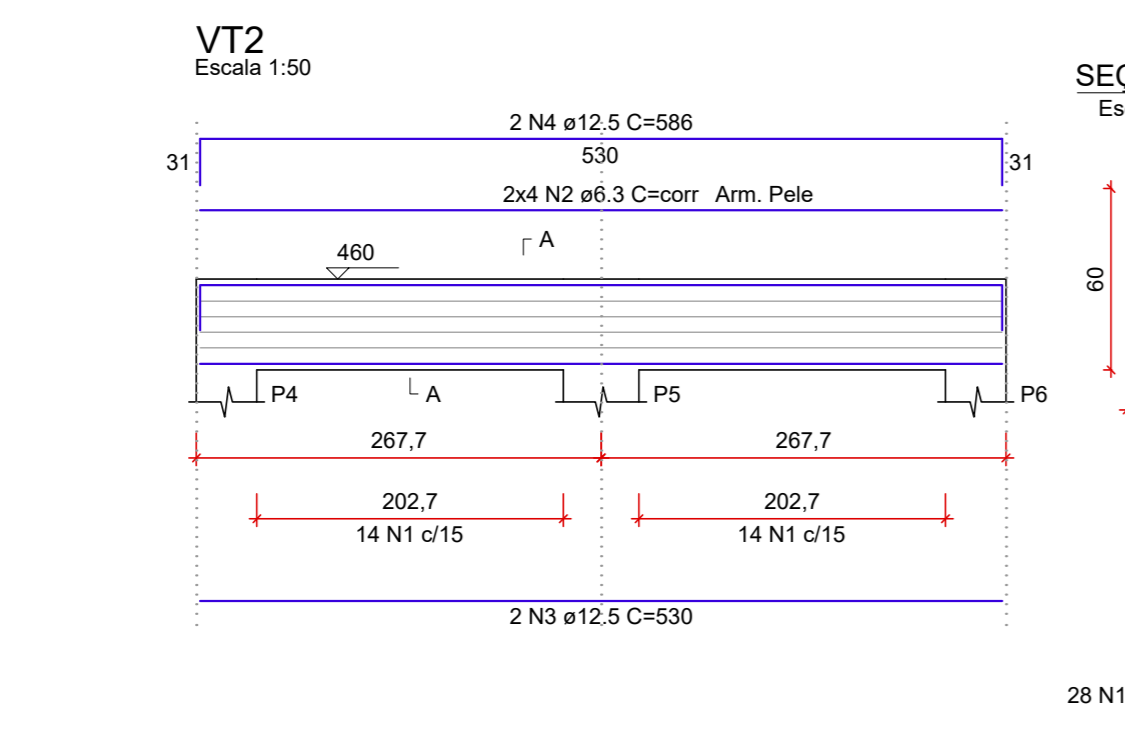
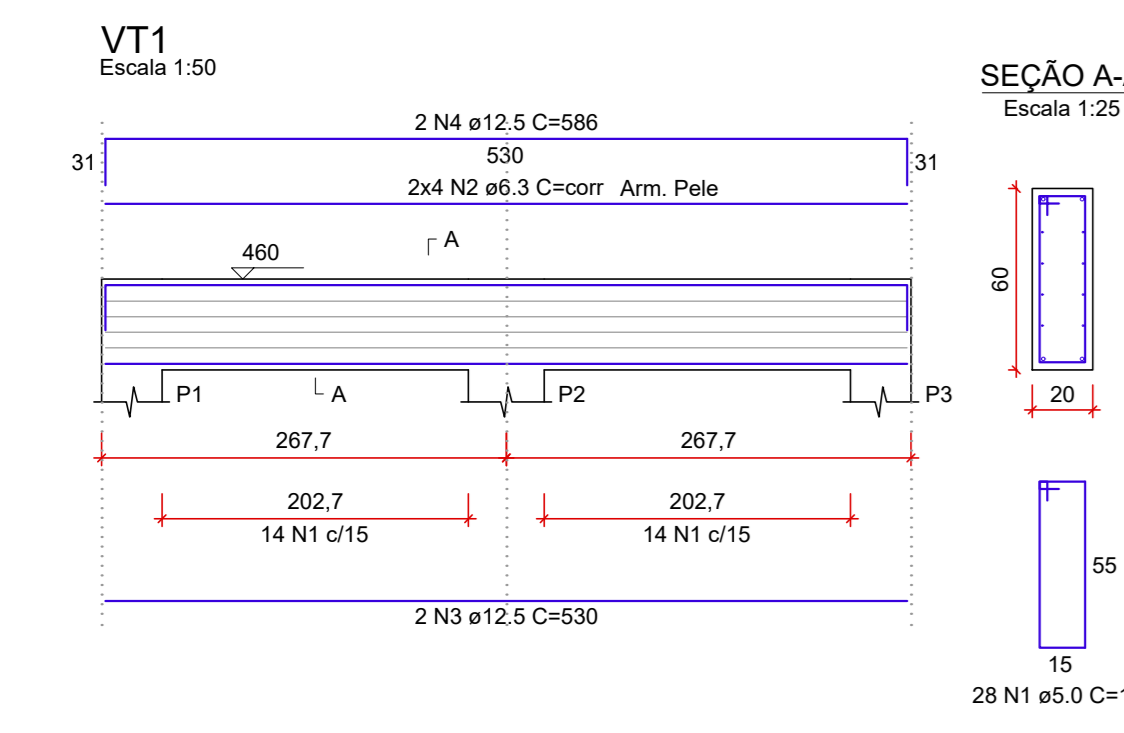
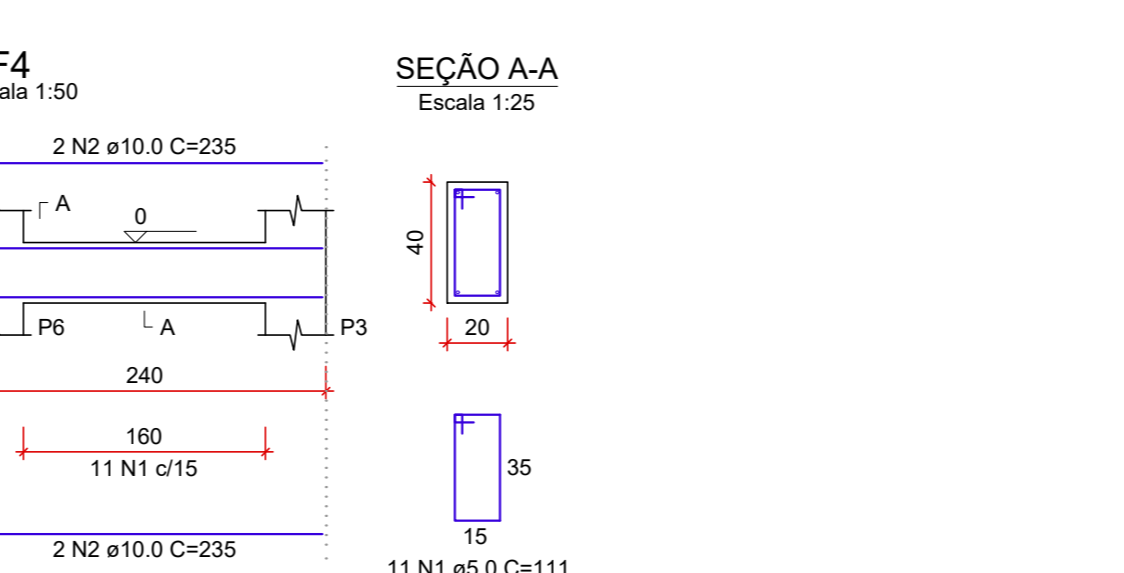
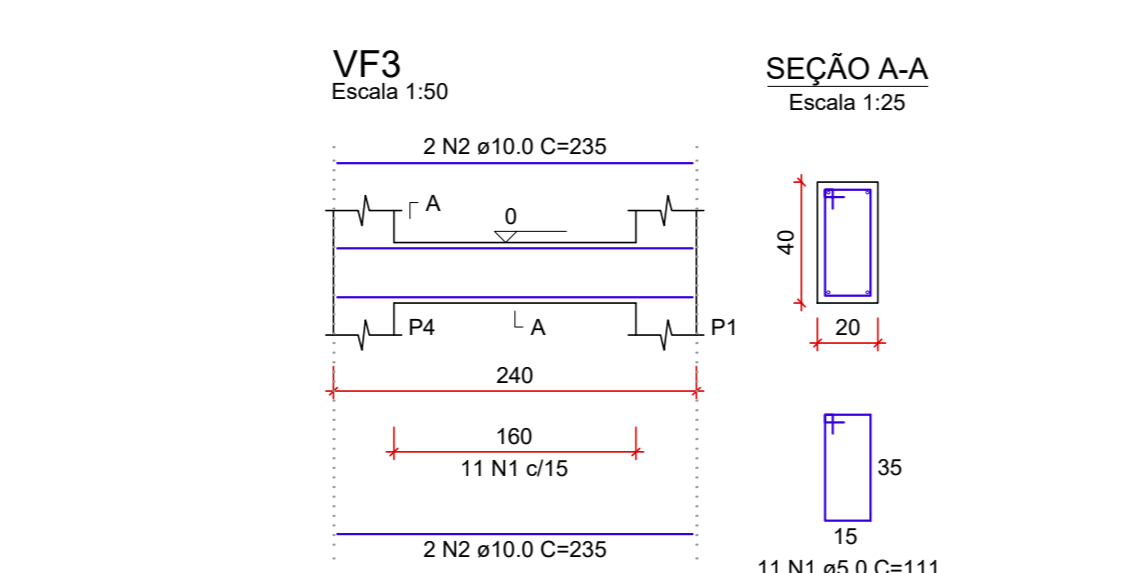
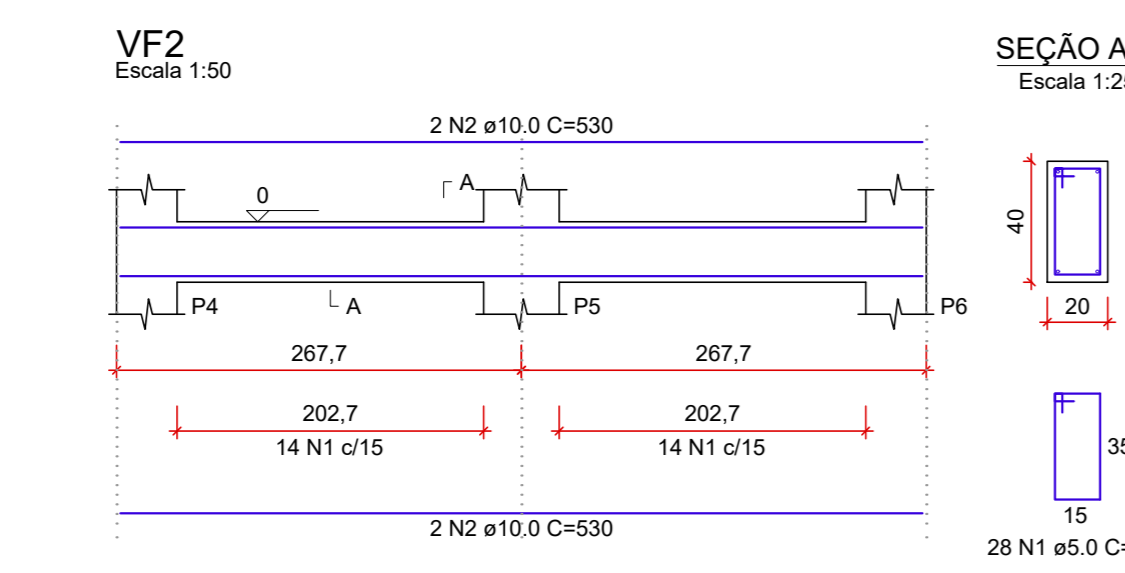
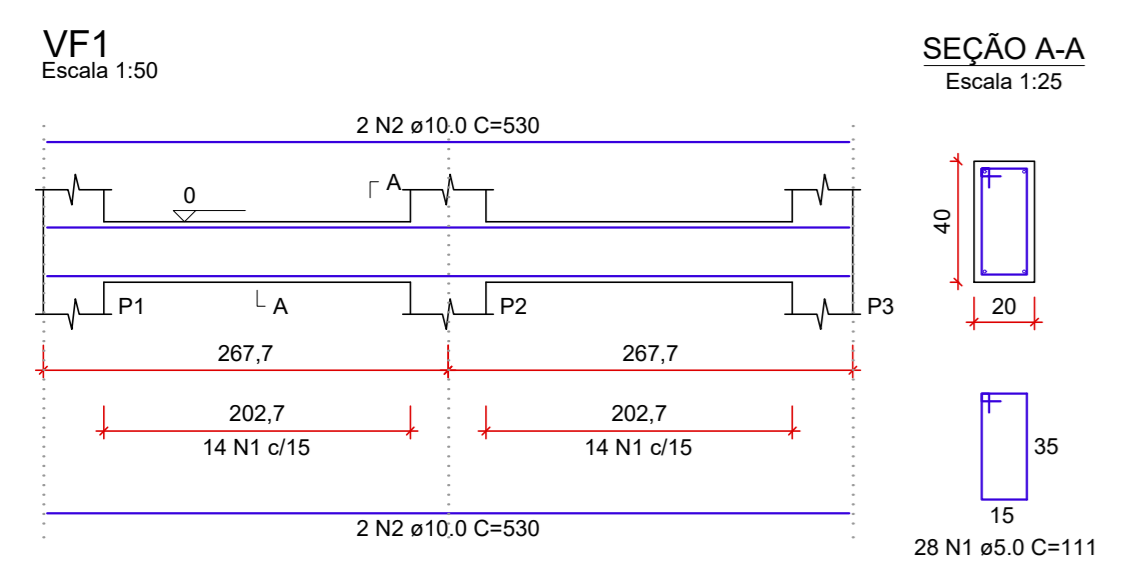
RELAÇÃO DO AÇO - VIGAS TOPO

ELEMENTO	AÇO	N	DIAM (mm)	QUANT	C UNIT (cm)	C TOTAL (cm)
VT1	CA60	1	5.0	28	151	4228
VT1	CA50	2	6.3	8	corr	4240
VT1	CA50	3	12.5	2	530	1060
VT2	CA60	4	12.5	2	506	1172
VT2	CA50	1	5.0	28	151	4228
VT2	CA50	2	6.3	8	corr	4240
VT2	CA50	3	12.5	2	530	1060
VT3	CA60	1	5.0	11	151	1661
VT3	CA50	2	6.3	8	corr	1660
VT3	CA50	3	12.5	2	235	470
VT4	CA60	4	12.5	2	291	862
VT4	CA50	1	5.0	11	151	1661
VT4	CA50	2	6.3	8	corr	1660
VT4	CA50	3	12.5	2	235	470
VT5	CA60	1	5.0	28	111	3108
VT5	CA50	2	10.0	4	530	2120
VT6	CA60	1	5.0	28	111	3108
VT6	CA50	2	10.0	4	530	2120
VT7	CA60	1	5.0	11	111	1221
VT7	CA50	2	10.0	4	235	840
VT8	CA60	2	5.0	11	111	1221
VT8	CA50	2	10.0	4	235	840

RESUMO DO AÇO

AÇO	DIAM (mm)	C TOTAL (m)	QUANT + 10% (Barras)	PESO + 10% (kg)
CA50	6.3	122.4	12	32.9
CA50	10.0	61.2	6	41.5
CA60	5.0	204.4	19	69.6
<b>PESO TOTAL (kg)</b>				<b>144.1</b>
CA50				74.4
CA60				69.6

Volume de concreto (C-30) = 2.28 m³  
Área de forma = 24.88 m²



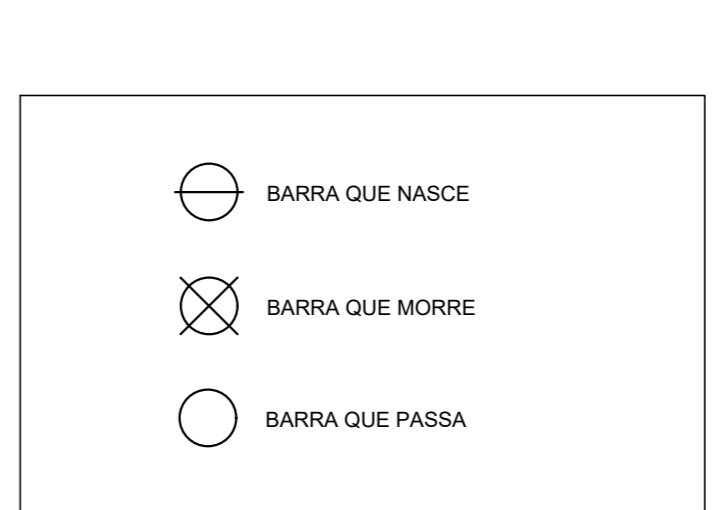
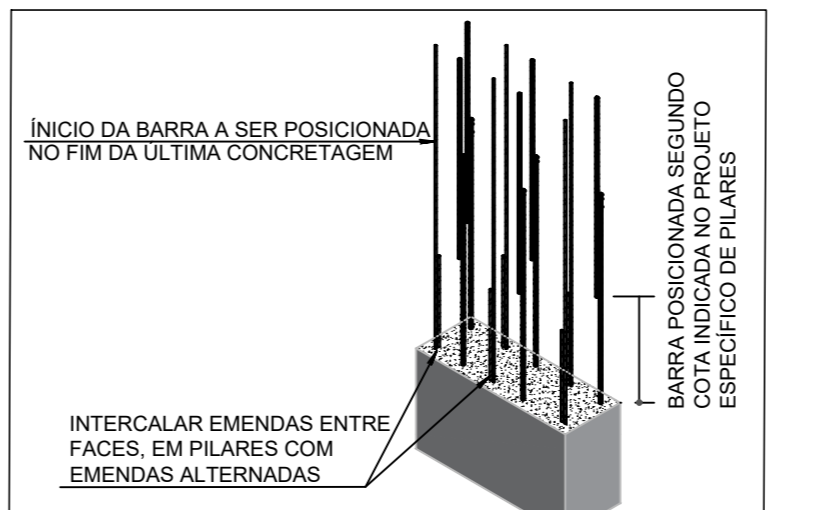
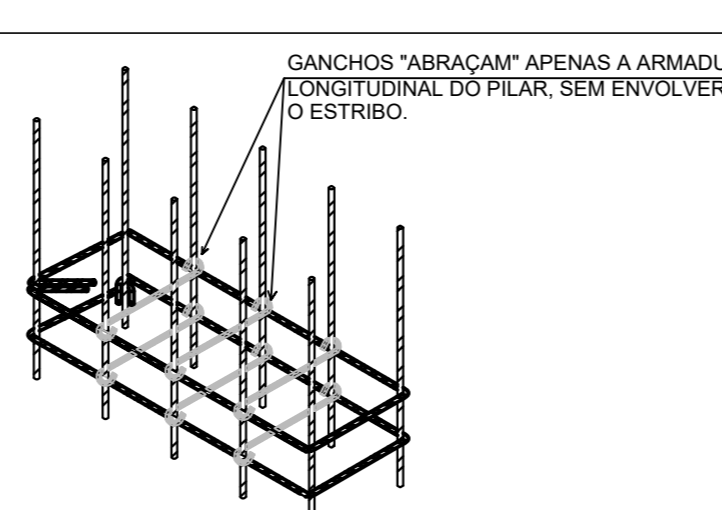
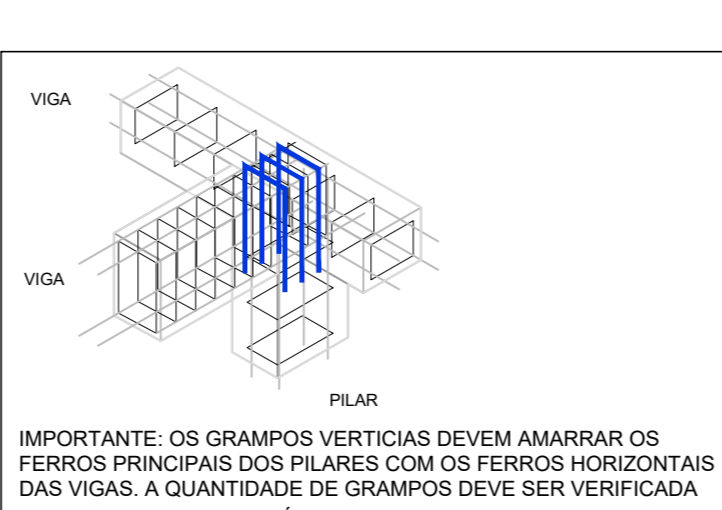
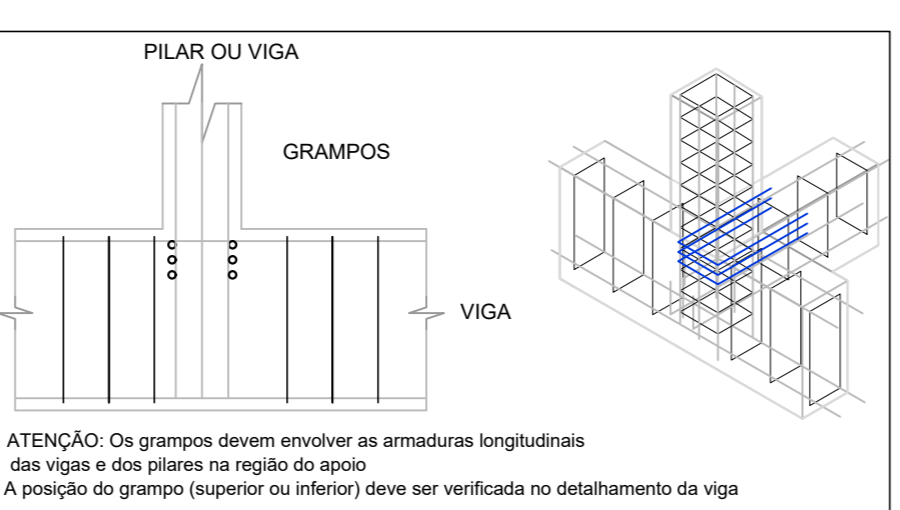
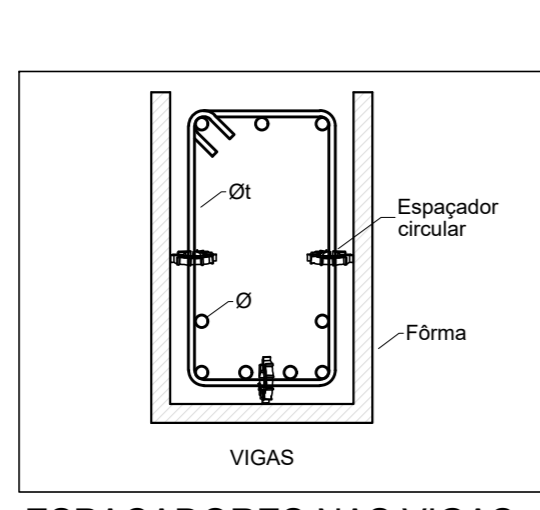
DIÂMETRO MÍNIMO DOS PINOS DE DOBRAMENTO DAS BARRAS

ESTRIBOS	DIAM (mm)	DIAM (mm)
5.0	15.0	30.0
6.3	18.9	31.5
8.0	24.0	40.0
10.0	30.0	50.0
12.5	37.5	62.5
16.0	50.0	80.0
19.0	60.0	90.0

BARREAS DE TRACÇÃO

DIAM (mm)	DIAM (mm)
5.0	30.0
6.3	31.5
8.0	40.0
10.0	50.0
12.5	62.5
16.0	80.0
19.0	90.0

GANCHO DOS ESTRIBOS:  $\alpha = 90^\circ$  ou  $45^\circ$



REV. 00 | 16/08/23 | DESIGN INICIAL | DAC

REVISÃO: DATA: | DESCRIÇÃO: | RESP.:

PROJETO: DRENAGEM DO BAIRRO SÃO JUDAS TADEU

COORDENADOR: ALDO CATIANO FERREIRA

RESPONSÁVEL TÉCNICO E AUTOR: ENG. CIVIL FLAVIA BARREIRA - MC-187842/D

PROJETO DE DRENAGEM PLUVIAL  
BAIRRO SÃO JUDAS  
POUSO ALEGRE - MINAS GERAIS

FASE DO PROJETO: DRENAGEM EXECUTIVO

FOLHA Nº: 18/18

DATA: 16/08/2023 | ESCALA: INDICADA | PROJETO: DRENAGEM DO BAIRRO SÃO JUDAS TADEU | ARQUIVO: DAC-PMPA-SÃO-PE-DRG-ROD.DWG