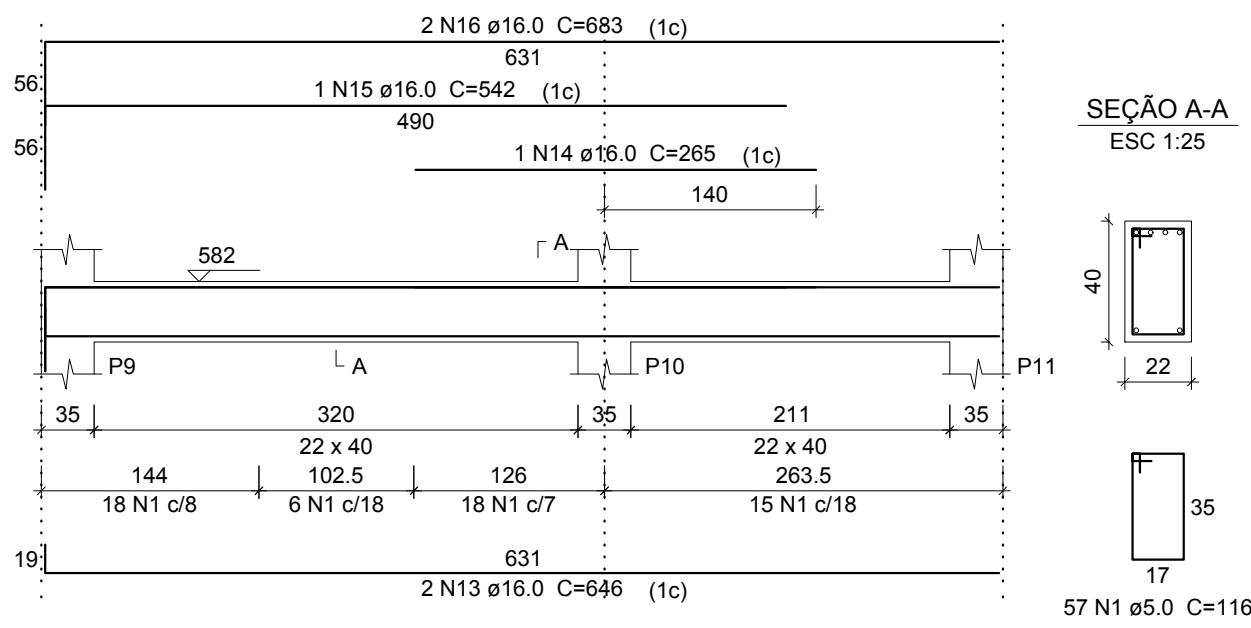
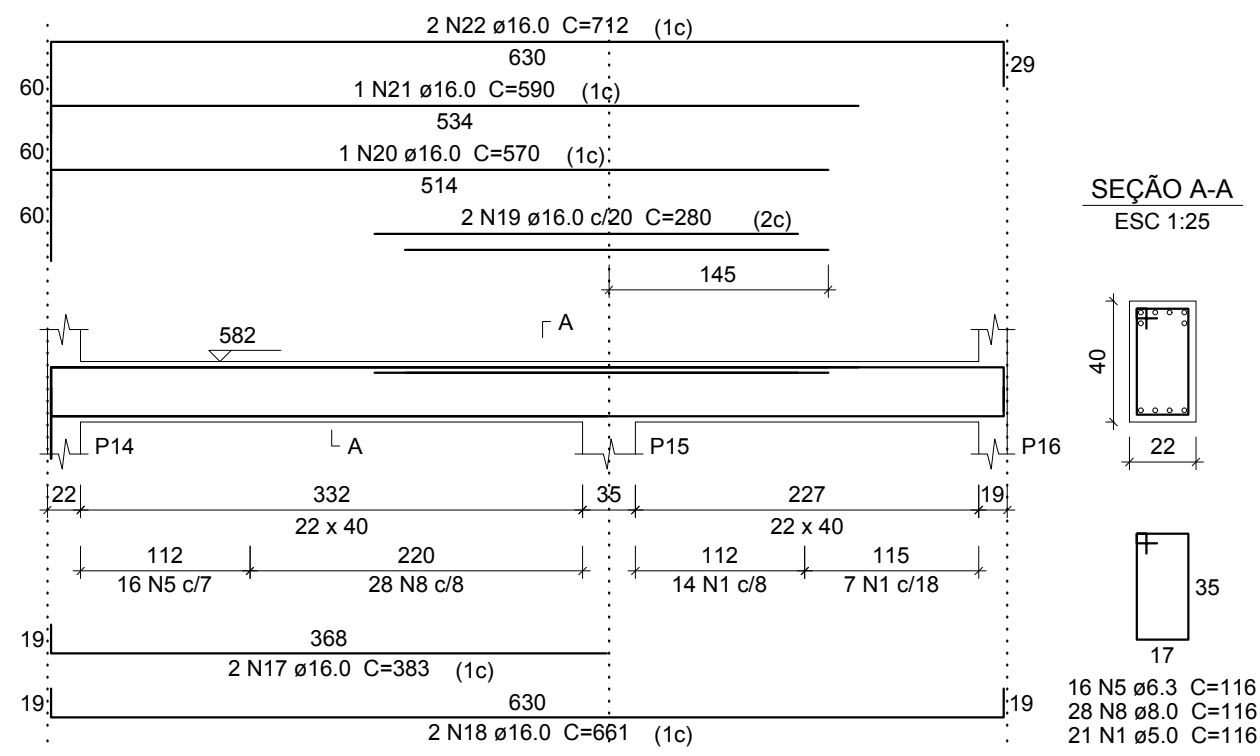


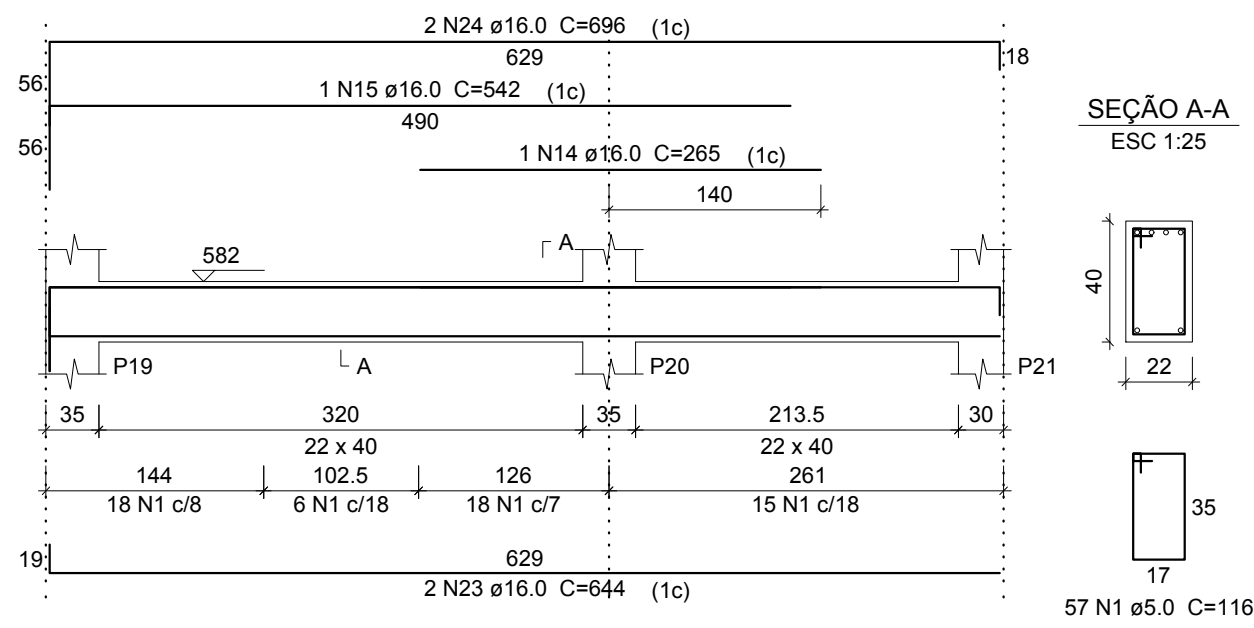
V1  
ESC 1:50



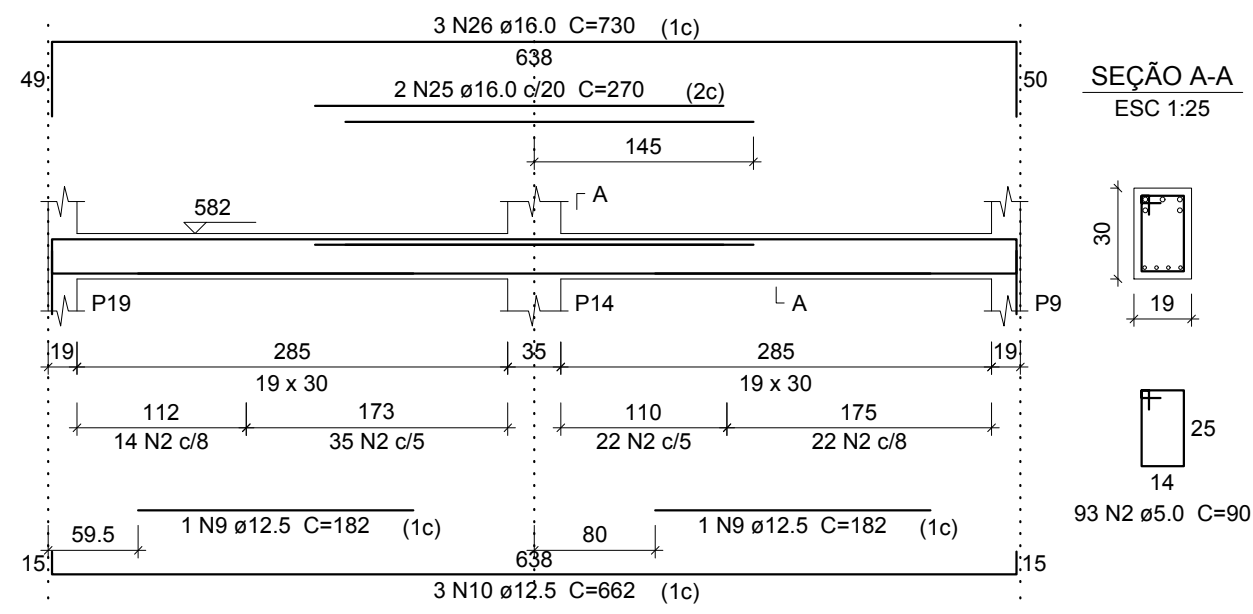
V2  
ESC 1:50



V3  
ESC 1:50

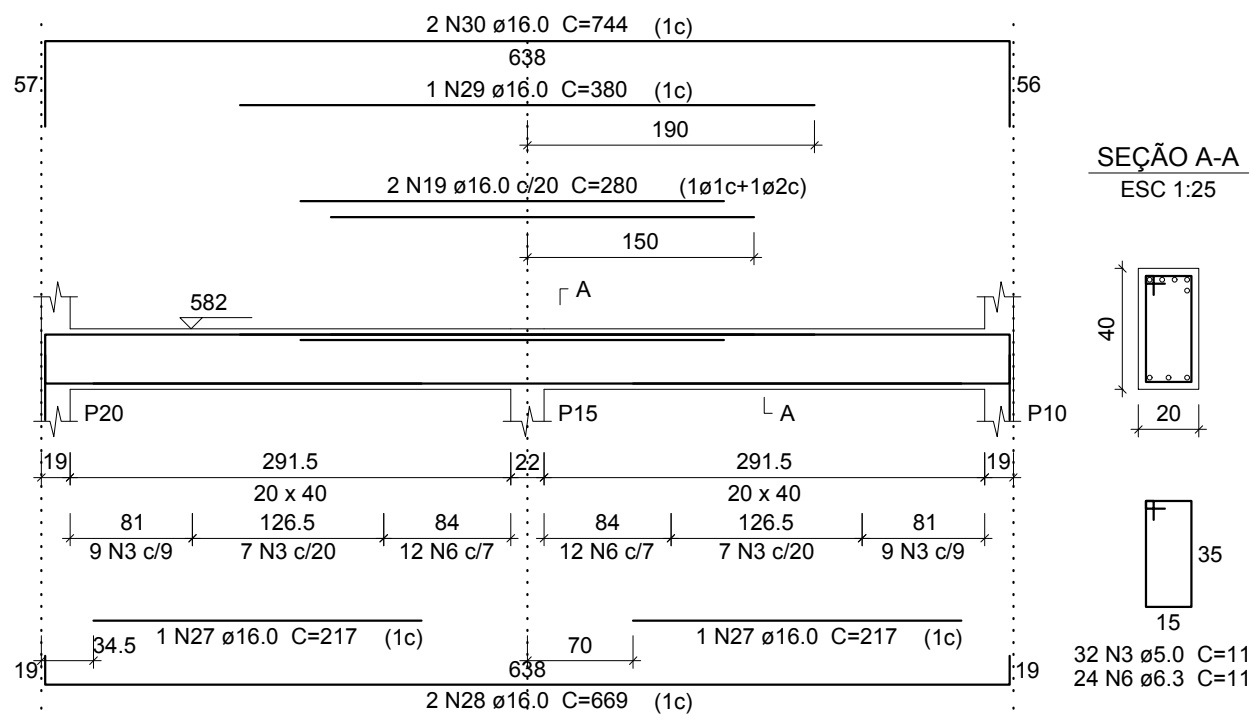


V4  
ESC 1:50

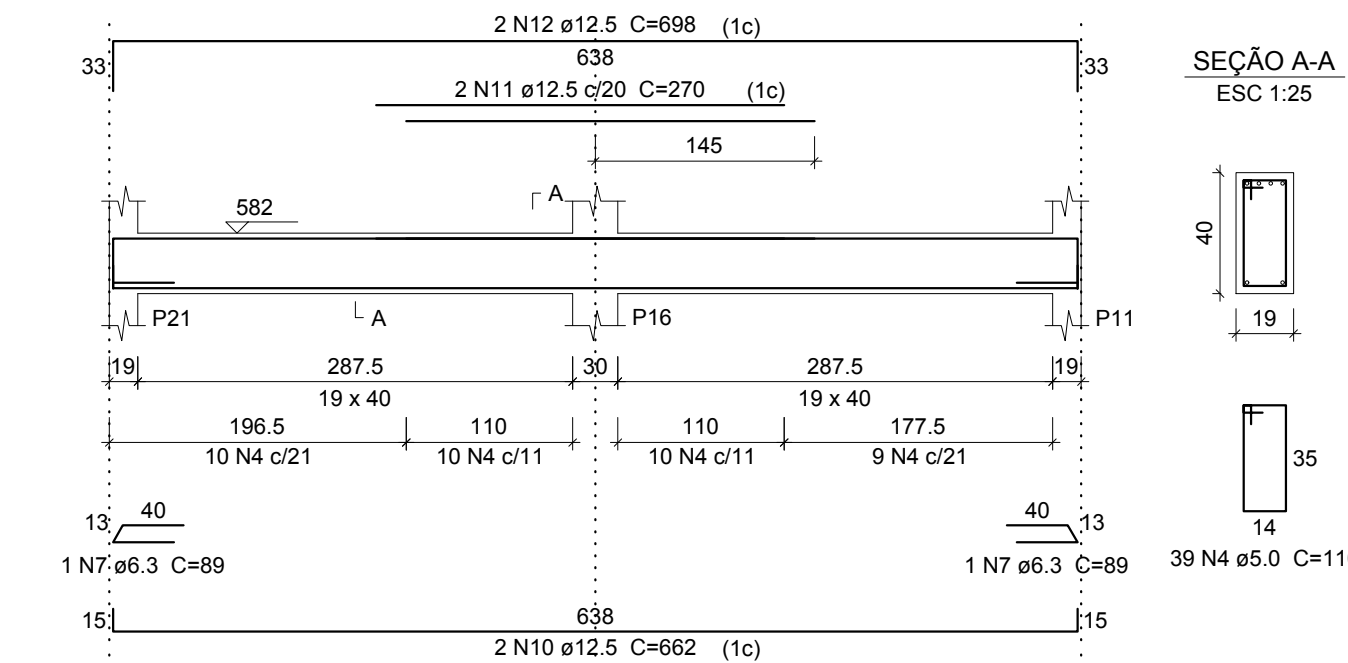


AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	135	116	15660
	2	5.0	93	90	8370
	3	5.0	32	112	3584
	4	5.0	39	110	4290
	5	6.3	16	116	1856
	6	6.3	24	112	2688
	7	6.3	2	89	178
	8	8.0	28	116	3248
	9	12.5	2	182	364
	10	12.5	5	662	3310
	11	12.5	2	270	540
	12	12.5	2	698	1396
	13	16.0	2	646	1292
	14	16.0	2	265	530
	15	16.0	2	542	1084
	16	16.0	2	683	1366
	17	16.0	2	383	766
	18	16.0	2	661	1322
	19	16.0	4	280	1120
	20	16.0	1	570	570
	21	16.0	1	590	590
	22	16.0	2	712	1424
	23	16.0	2	644	1288
	24	16.0	2	696	1392
	25	16.0	2	270	540
	26	16.0	3	730	2190
	27	16.0	2	217	434
	28	16.0	2	669	1338
	29	16.0	1	380	380
	30	16.0	2	744	1488

V5  
ESC 1:50

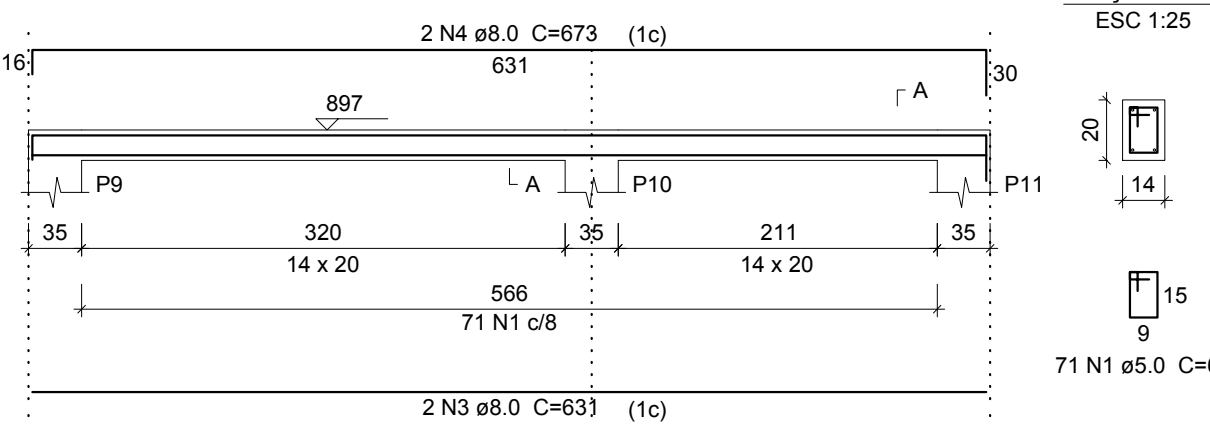


V6  
ESC 1:50

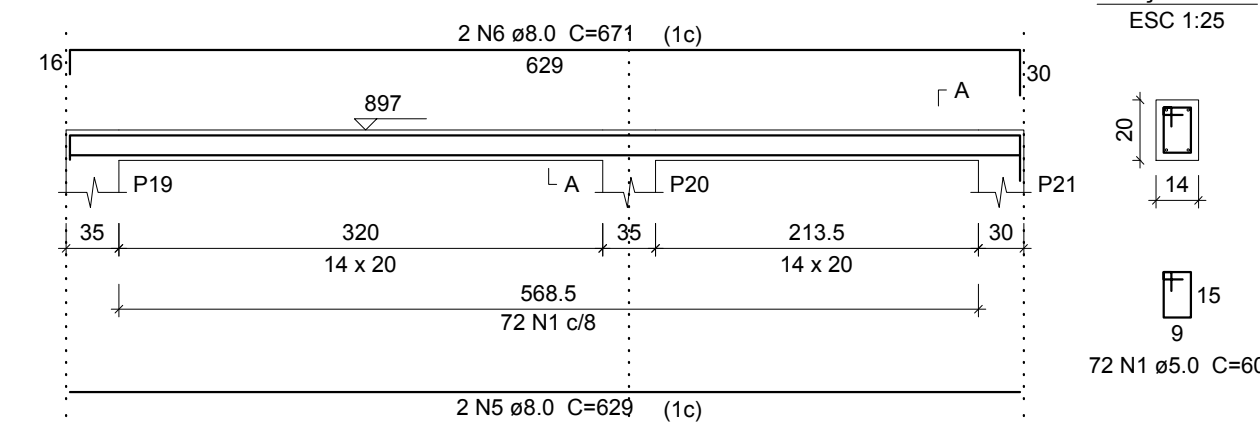


## VIGAS FINAIS

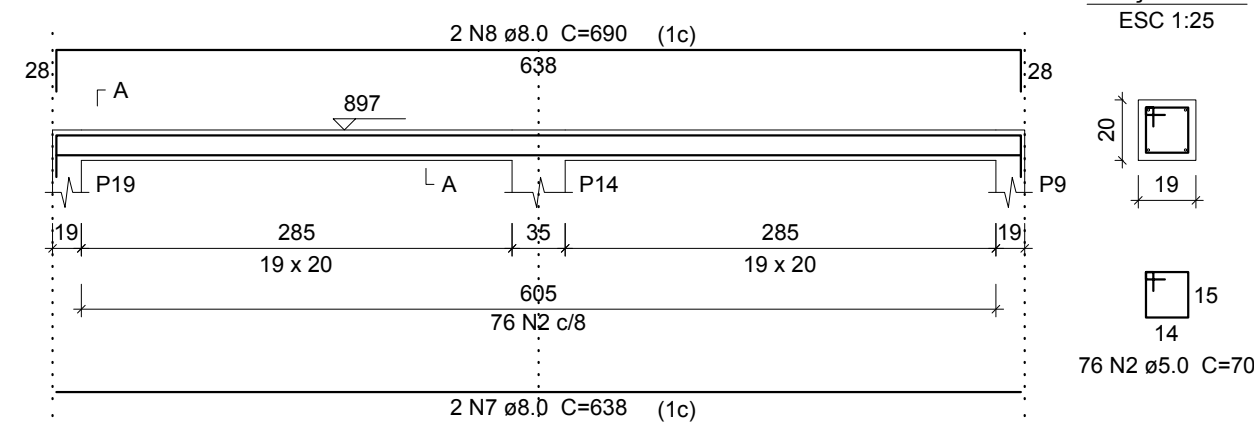
V1  
ESC 1:50



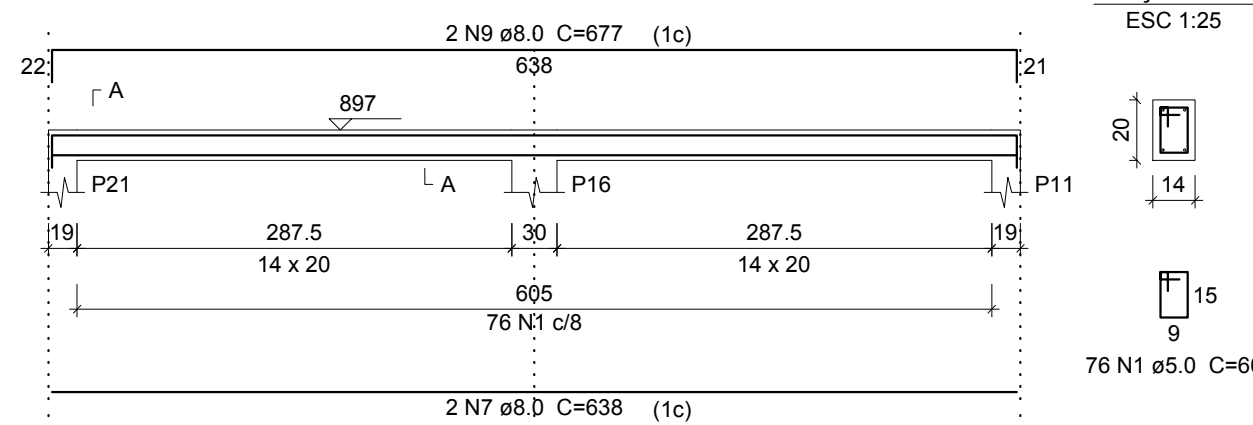
V2  
ESC 1:50



V3  
ESC 1:50



V4  
ESC 1:50



### Relação do aço

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	219	60	13140
	2	5.0	76	70	5320
CA50	3	8.0	2	631	1262
	4	8.0	2	673	1346
	5	8.0	2	629	1258
	6	8.0	2	671	1342
	7	8.0	4	638	2552
	8	8.0	2	690	1380
	9	8.0	2	677	1354

### Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10 % (kg)
CA50	8.0	105	45.5
CA60	5.0	184.6	31.3
PESO TOTAL (kg)			
CA50			45.5
CA60			31.3

Volume de concreto (C-25) = 0.78 m³  
Área de forma = 14.12 m²

**INSTITUTO FEDERAL FARROUPILHA**

**PRÓ-REITORIA DE ADMINISTRAÇÃO**  
**COORDENAÇÃO DE ENGENHARIA E ARQUITETURA**  
Rua Esmeralda, 430 - Feixo Nova - Camobi - CEP 97110-767 - Santa Maria - Rio Grande do Sul.  
Telefone: (55) 3226-6630

**OBRA:** SALAS DE AULA E SANITÁRIOS/VESTIÁRIOS

**LOCAL:** IF FARROUPILHA - CAMPUS SANTO ÂNGELO

**PROJETO:** ESTRUTURAL PRÉDIO SANITÁRIOS

**ÁREA:** 662,73 m²

**CONTEÚDO:** VIGAS NÍVEL RESERVATÓRIO

**ESCALA:** 1/50

**PROPRIETÁRIO:** INSTITUTO FEDERAL FARROUPILHA

**DATA:** Março/2017

**RESPONSÁVEL:** ENG. CIVIL CRISTINA SILVA FELTRIM

**DESENHO:** Cristina

**PRANCHA:** DET EST 07/19