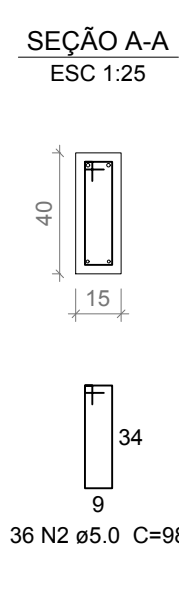
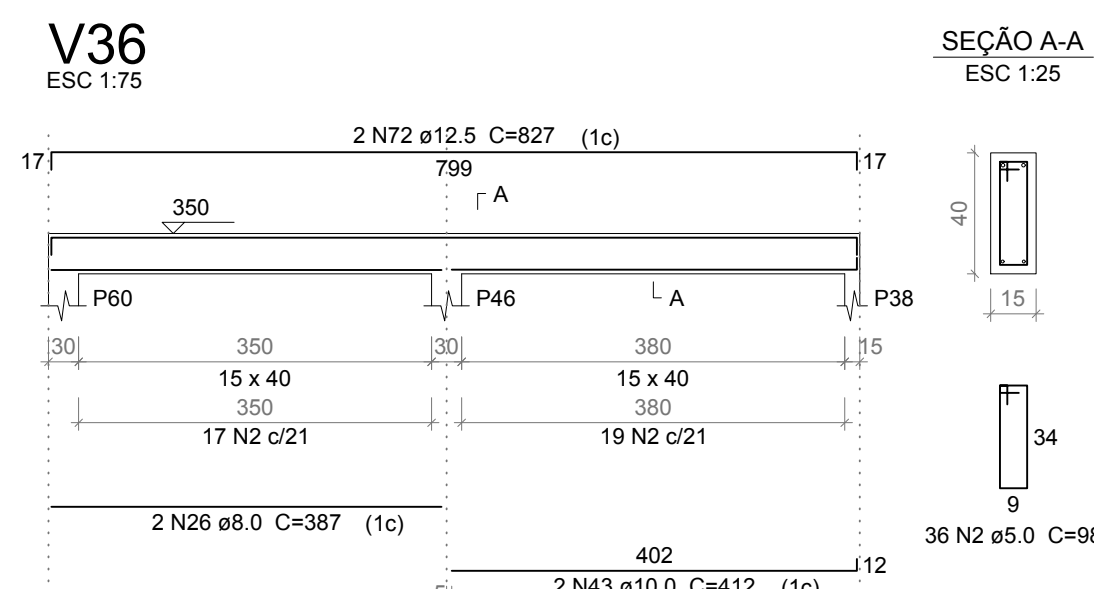
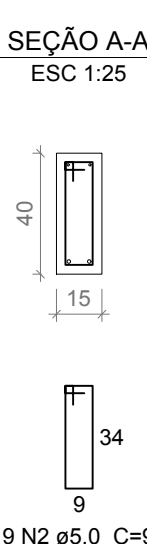
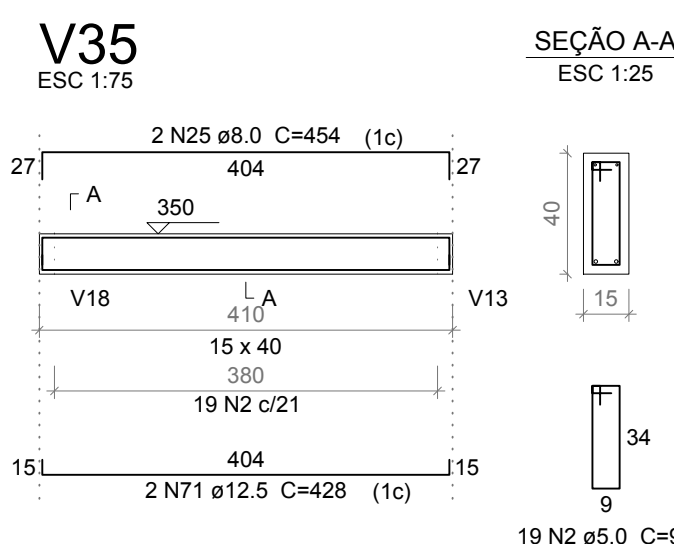
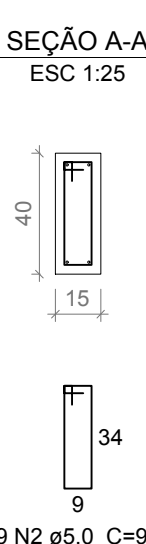
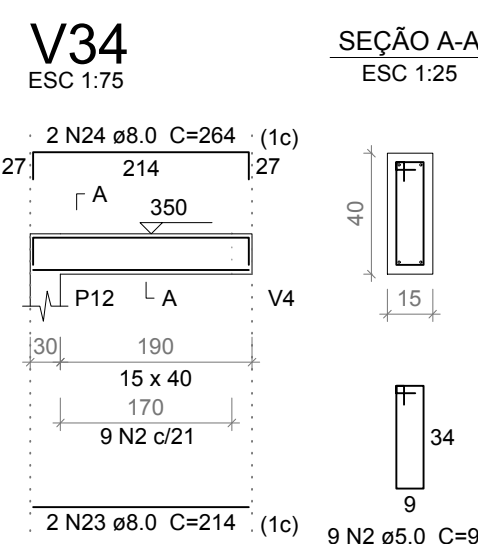
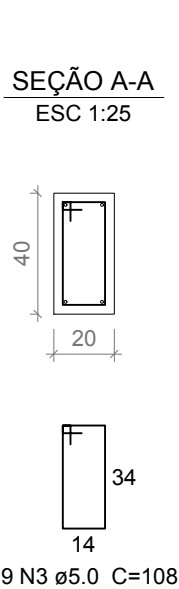
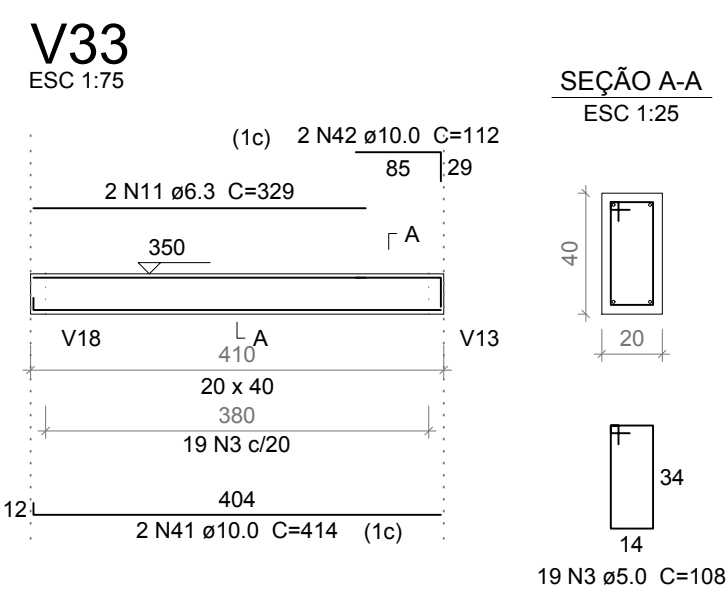
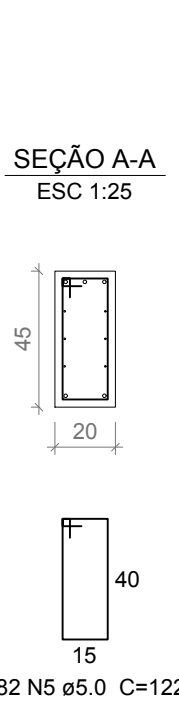
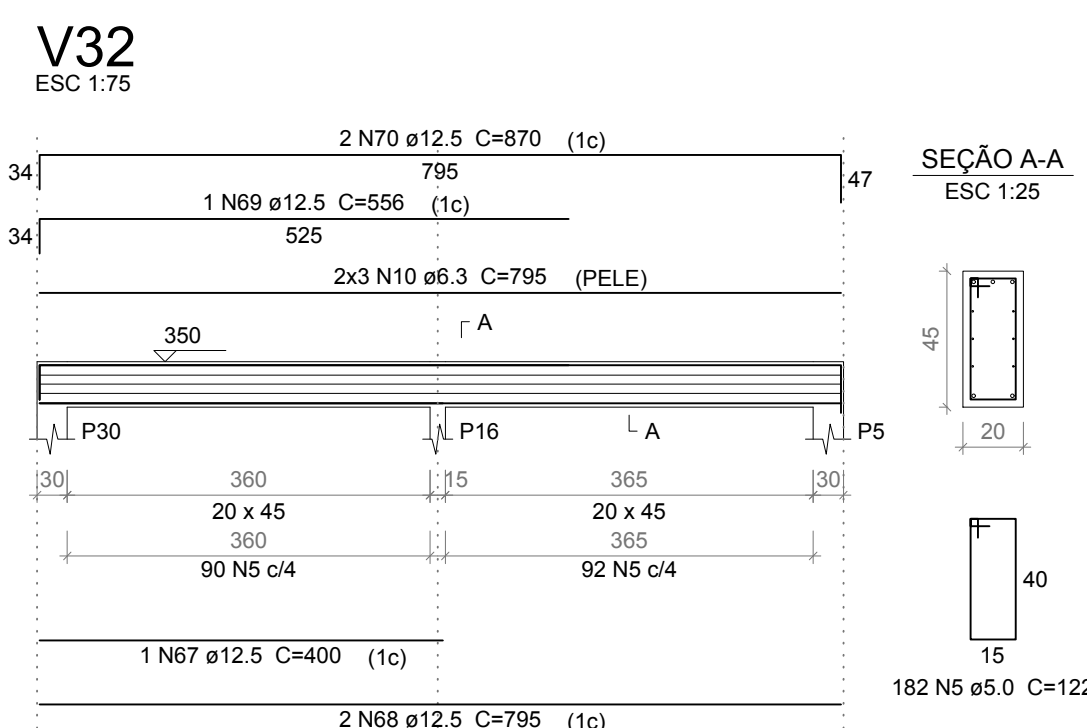
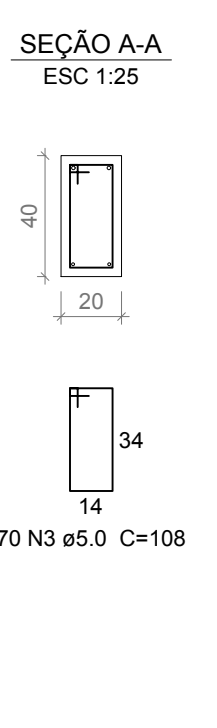
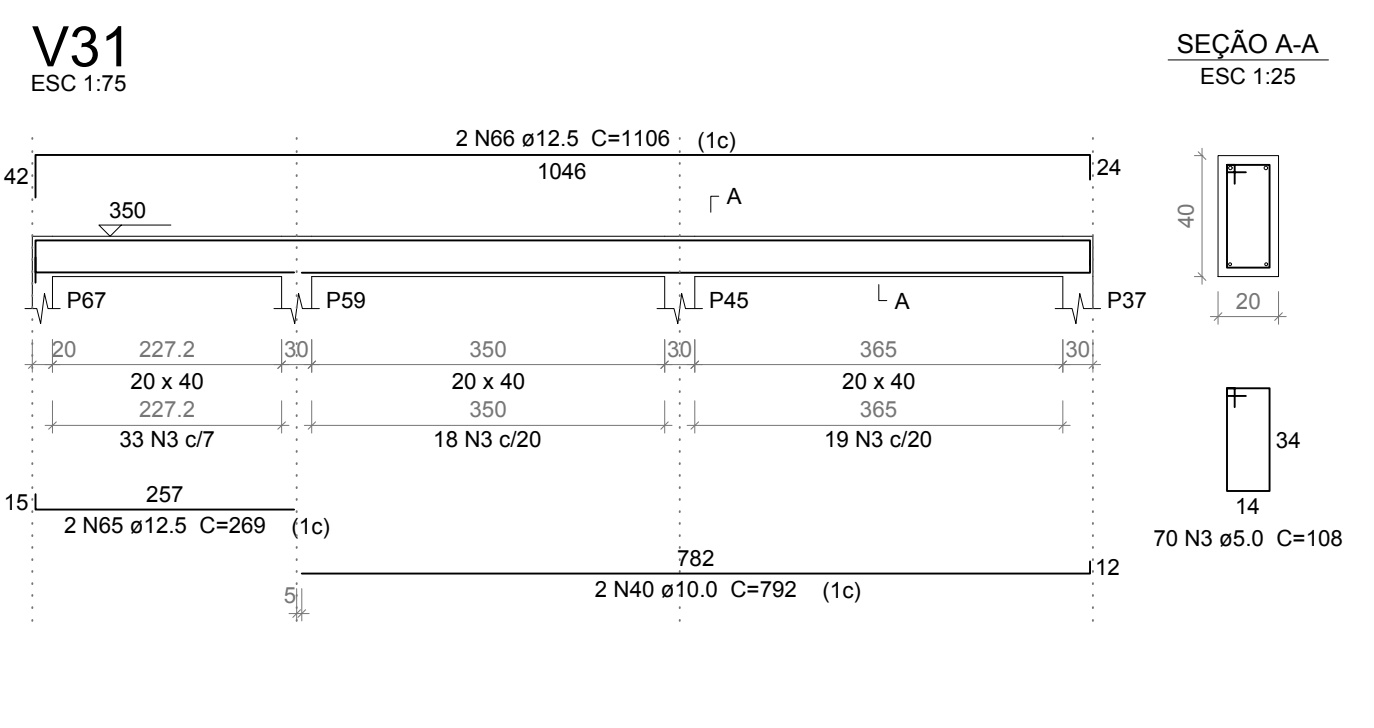
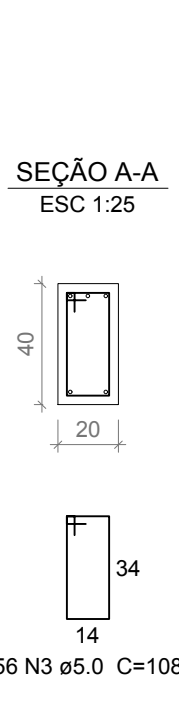
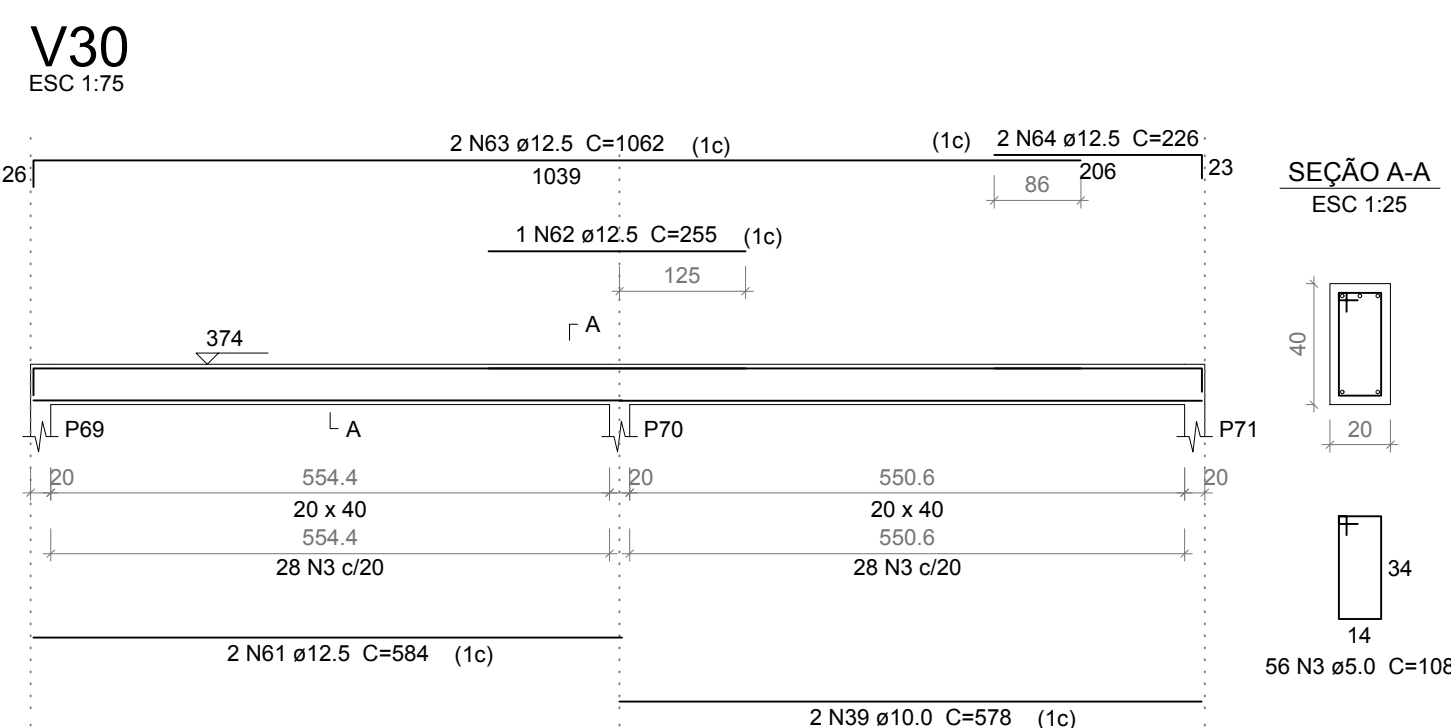


### Resumo do aço


AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10 % (kg)
CA50	6.3	114.7	30.9
	8.0	129.5	56.2
	10.0	183.9	124.7
	12.5	356.8	378
CA60	5.0	954.7	161.9
PESO TOTAL (kg)			
CA50	589.8		
CA60	161.9		

Volume de concreto (C-25) = 10.42 m<sup>3</sup>  
Área de forma = 148.18 m<sup>2</sup>

Área de forma = 148.18 m



Relação do aço						
V17		V18		V19		
V20		V21		V22		
V23		V24		V25		
V26		V27		V28		
V29		V30		V31		
V32		V33		V34		
V35		V36				
AÇO	N	DIAM (mm)	QUANT	C.UNIT (c/m)	C.TOTAL (c/m)	
CA60	1	5.0	42	158	6636	
	2	5.0	397	98	38906	
	3	5.0	225	108	24300	
	4	5.0	29	118	3422	
CA50	5	5.0	182	122	22204	
	6	6.3	8	677	5415	
	7	6.3	3	76	228	
	8	6.3	2	86	172	
	9	6.3	2	111	222	
	10	6.3	6	795	4770	
	11	6.3	1	329	658	
	12	8.0	2	392	784	
	13	8.0	2	389	778	
	14	8.0	2	794	1588	
	15	8.0	2	244	488	
	16	8.0	2	294	588	
	17	8.0	2	1182	2364	
	18	8.0	2	472	944	
	19	8.0	2	454	908	
	20	8.0	2	504	1008	
	21	8.0	2	199	398	
	22	8.0	2	231	462	
	23	8.0	2	214	428	
	24	8.0	2	264	528	
	25	8.0	2	454	908	
	26	8.0	2	387	774	
	27	10.0	2	719	1438	
	28	10.0	2	464	928	
29	10.0	2	678	1356		
30	10.0	2	606	1212		
31	10.0	2	646	1292		
32	10.0	2	833	1666		
33	10.0	1	335	335		
34	10.0	2	1198	2396		
35	10.0	2	1182	2364		
36	10.0	1	147	147		
37	10.0	2	1089	2178		
38	10.0	2	178	356		
39	10.0	2	788	1576		
40	10.0	2	792	1584		
41	10.0	2	414	828		
42	10.0	2	112	224		
43	12.5	2	763	1526		
44	12.5	2	515	1030		
45	12.5	2	559	1118		
46	12.5	1	375	375		
47	12.5	2	1004	2008		
48	12.5	1	305	305		
49	12.5	2	1171	2342		
50	12.5	1	260	260		
51	12.5	2	862	1724		
52	12.5	2	1073	2146		
53	12.5	2	250	500		
54	12.5	2	475	950		
55	12.5	3	1197	3591		
56	12.5	1	344	344		
58	12.5	2	111	222		
59	12.5	2	643	1286		
60	12.5	2	700	1400		
61	12.5	2	584	1168		
62	12.5	1	255	255		
63	12.5	2	1062	2124		
64	12.5	2	1226	2452		
65	12.5	2	538	1076		
66	12.5	2	1106	2212		
67	12.5	1	400	400		
68	12.5	2	795	1590		
69	12.5	1	556	556		
70	12.5	2	870	1740		
71	12.5	1	428	428		
72	12.5	2	827	1654		

	<b>Equipe Técnica</b> Eng. Civil Dilnei de Freitas Jacinto Eng. Civil Jacson Jeremias Eng. Eletricista Edenir Vieira Eng. Mecânico e Seg. do Trabalho Mario Cesar Osorio Arq. Urbanista Andrea Patricia Martins de Souza Eng. Civil Evair da Silva Borges Acad. de Arq. e Urbanismo Vinicius Souza				
	E + Plan Engenharia Ltda Me - CNPJ:15.018.870/0001-65 Registro no CREA/SC: 127.622-8 www.emais.eng.br - contato@emais.eng.br - (48)3093-9350 Rua Najla Carone Goedert, nº 1080 - Sala 411 - Ed. City Office Pagani - Palhoça - SC				
Projeto	<b>ESTRUTURAL</b>				
Obra	UBSF COMASA Rua Albano Schmidt S/N - Bairro Comasa - Joinville/SC				
Proprietário	Fundo Municipal de Saúde de Joinville CNPJ:08184821/0001-37				
Responsáveis Técnicos	<table border="0"><tr><td><input type="checkbox"/> Andrea P. Martins de Souza Arquiteta e Urbanista CAU: A30287-2</td><td><input type="checkbox"/> Edenir Vieira Engenheiro Eletricista Crea/SC:118.524-5</td></tr><tr><td><input type="checkbox"/> Dilnei de Freitas Jacinto Engenheiro Civil Crea/SC:122.825-5</td><td><input type="checkbox"/> Jacson Jeremias Engenheiro Civil Crea/SC:125.007-9</td></tr></table>	<input type="checkbox"/> Andrea P. Martins de Souza Arquiteta e Urbanista CAU: A30287-2	<input type="checkbox"/> Edenir Vieira Engenheiro Eletricista Crea/SC:118.524-5	<input type="checkbox"/> Dilnei de Freitas Jacinto Engenheiro Civil Crea/SC:122.825-5	<input type="checkbox"/> Jacson Jeremias Engenheiro Civil Crea/SC:125.007-9
<input type="checkbox"/> Andrea P. Martins de Souza Arquiteta e Urbanista CAU: A30287-2	<input type="checkbox"/> Edenir Vieira Engenheiro Eletricista Crea/SC:118.524-5				
<input type="checkbox"/> Dilnei de Freitas Jacinto Engenheiro Civil Crea/SC:122.825-5	<input type="checkbox"/> Jacson Jeremias Engenheiro Civil Crea/SC:125.007-9				
Conteúdo	Detalhamento das Vigas da Cobertura.				
Ref. JOI-04	Data MAI/2017	Área 845,00 m <sup>2</sup>	Escala INDICADA	Folha 14/2	
PROIBIDO CÓPIA OU REPRODUÇÃO DO PROJETO SEM PRÉVIA AUTORIZAÇÃO. DIREITOS AUTORAIS RESERVADOS PELA LEI Nº 9.610-98					