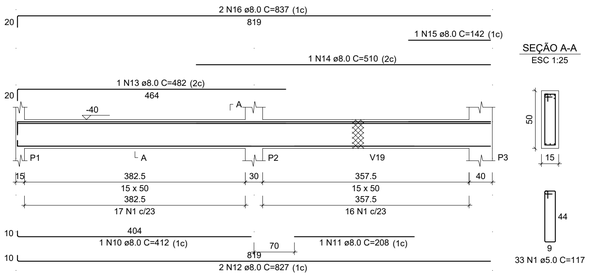
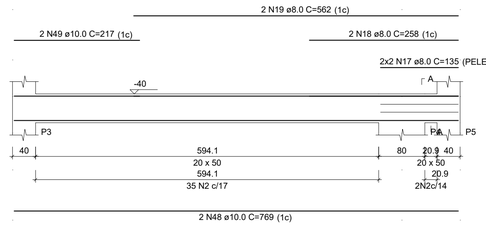
V1
ESC 1:50

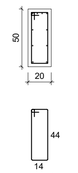


SEÇÃO A-A
ESC 1:25

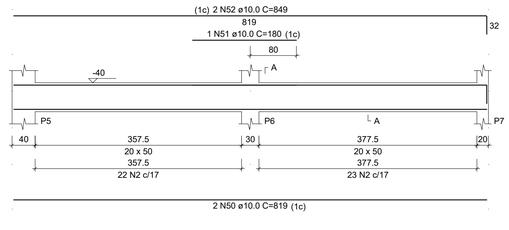
V2
ESC 1:50



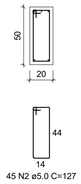
SEÇÃO A-A
ESC 1:25



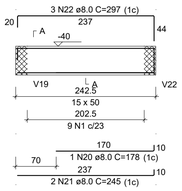
V3
ESC 1:50



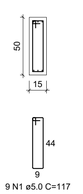
SEÇÃO A-A
ESC 1:25



V4
ESC 1:50



SEÇÃO A-A
ESC 1:25



RELAÇÃO DO AÇO

V1	V2	V3
V4	V5	V6
V7	V8	V9
V10	V11	V12
V13	V14	V15
V16		

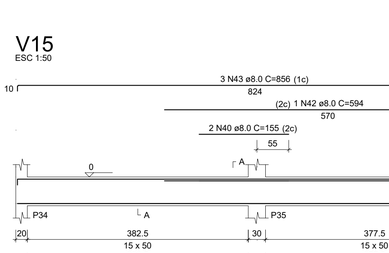
AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	117	117	13689
	2	5.0	460	127	58420
	3	5.0	2	378	756
	4	5.0	88	137	12056
	5	5.0	4	242	968
	6	5.0	2	289	578
	7	5.0	2	255	510
	8	5.0	2	230	460
CA50	9	6.3	6	427	2562
	10	8.0	1	412	412
	11	8.0	1	208	208
	12	8.0	2	827	1654
	13	8.0	1	482	482
	14	8.0	1	510	510
	15	8.0	1	142	142
	16	8.0	2	837	1674
	17	8.0	4	135	540
	18	8.0	2	258	516
	19	8.0	2	562	1124
	20	8.0	1	178	178
	21	8.0	2	245	490
	22	8.0	3	297	891
	23	8.0	1	103	103
	24	8.0	3	163	489
	25	8.0	4	422	1688
	26	8.0	1	178	178
	27	8.0	3	443	1329
	28	8.0	8	819	6552
	29	8.0	2	127	254
	30	8.0	1	487	487
	31	8.0	2	507	1014
	32	8.0	4	427	1708
	33	8.0	1	190	190
	34	8.0	3	445	1335
	35	8.0	1	325	325
	36	8.0	1	183	183
	37	8.0	2	829	1658
	38	8.0	1	692	692
	39	8.0	2	824	1648
	40	8.0	2	155	310
	41	8.0	1	171	171
	42	8.0	1	594	594
	43	8.0	3	856	2568
	44	8.0	4	220	880
	45	8.0	2	410	820
	46	8.0	3	135	405
	47	8.0	3	220	660
	48	10.0	2	769	1538
	49	10.0	2	217	434
	50	10.0	16	819	13104
	51	10.0	2	180	360
	52	10.0	2	849	1698
	53	10.0	2	127	254
	54	10.0	2	247	494
	55	10.0	2	296	592
	56	10.0	1	152	152
	57	10.0	2	520	1040
	58	10.0	1	172	172
	59	10.0	1	515	515
	60	10.0	2	137	274
	61	10.0	2	443	886
	62	10.0	2	440	880
	63	10.0	2	741	1482
	64	10.0	2	147	294
	65	10.0	1	215	215
	66	10.0	2	380	760
	67	10.0	1	190	190
	68	10.0	1	540	540
	69	10.0	2	829	1658
	70	10.0	2	1120	2240
	71	10.0	2	627	1254
	72	10.0	2	210	420
	73	10.0	2	717	1434
	74	12.5	2	597	1194
	75	12.5	1	490	490
	76	12.5	1	117	117
	77	12.5	2	819	1638
	78	16.0	2	833	1666

RESUMO DO AÇO

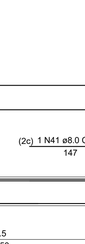
AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	6.3	25.6	6.9
	8.0	350.6	152.2
	10.0	328.8	223
	12.5	34.4	36.4
	16.0	16.7	28.9
CA60	5.0	874.4	148.2
PESO TOTAL (kg)			
CA50	447.4		
CA60	148.2		

Volume de concreto (C-30) = 12.11 m³
Área de forma = 151.79 m²

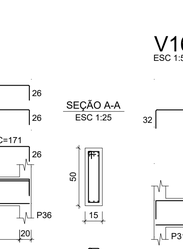
V5
ESC 1:50



SEÇÃO A-A
ESC 1:25

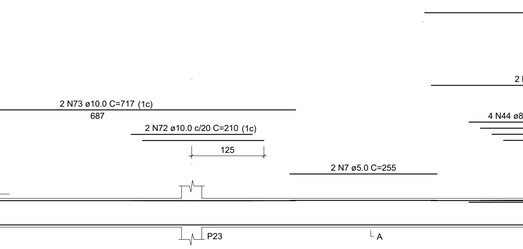


V6
ESC 1:50

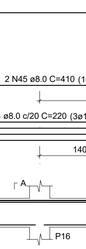


SEÇÃO A-A
ESC 1:25

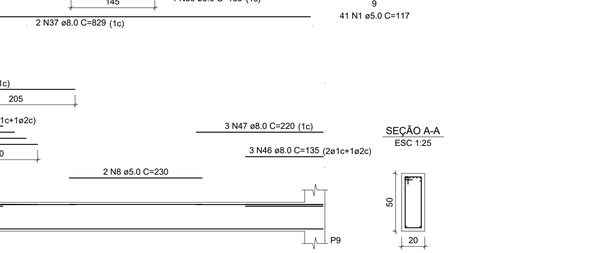
V7
ESC 1:50



SEÇÃO A-A
ESC 1:25



V8
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

V11
ESC 1:50

SEÇÃO A-A
ESC 1:25

V12
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
ESC 1:50

SEÇÃO A-A
ESC 1:25

V16
ESC 1:50

SEÇÃO A-A
ESC 1:25

REVISÃO	DATA	DESCRIÇÃO	REVISADO POR:
A	08/11/21	INSERIDO_VIGAS_BALDRAME	
0	29/09/21	EMISSÃO INICIAL	

AYRES
ENGENHARIA ESTRUTURAL
Rua General Rondon 1612 - Sala 106 - Porto Alegre/RS - Brasil - everton@ayresestrutural.com

OBRA: ESCOLA DE EDUCAÇÃO AMB E TECNOLÓGICA
LOCAL: TRÊS COROAS - RS
REGISTRO: 108
PROPRIETÁRIO:
PROJETO: EVERTON RIGO AYRES ENG. CIVIL EVERTON RIGO AYRES CREA RS 161042
EXECUÇÃO:
DATA: 29/09/21
ESCALA: INDICADA
DESENHO: AYRES ENG. EST.
PROJETO: ESTR DE CONCRETO ARM
PRANCHA: 05
ESPECIFICAÇÃO: DETALHAMENTO DAS VIGAS NIVEL 0.0 m

DIREITOS AUTORAIS RESERVADOS - LEI Nº 5194/661

A1(841x594)