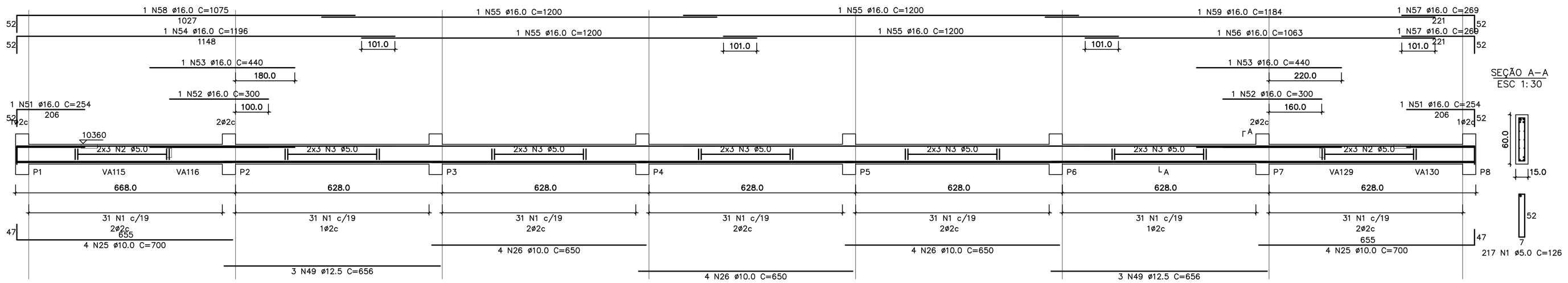
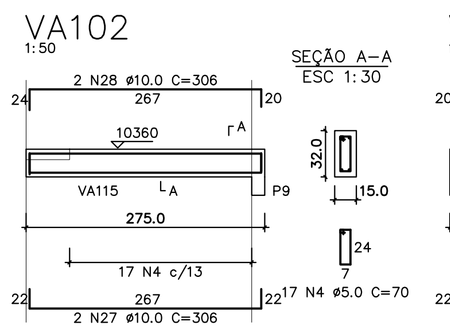
VA101
1:75



VA102
1:50



VA103
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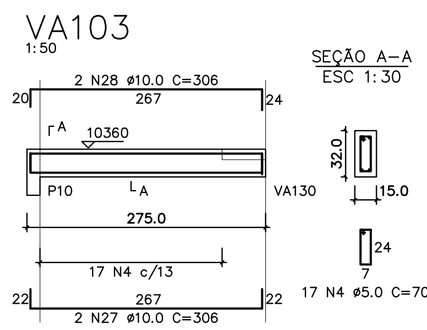

VA104
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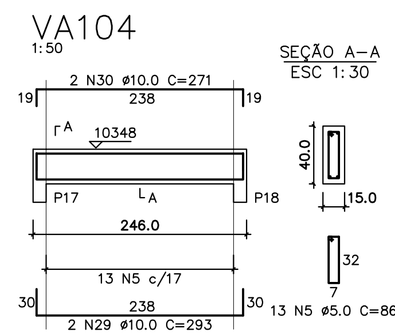

VA105
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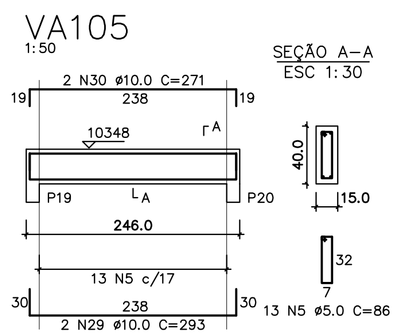

VA107
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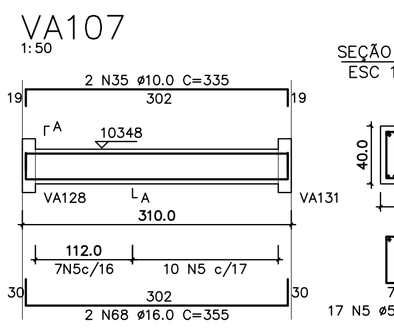

VA108
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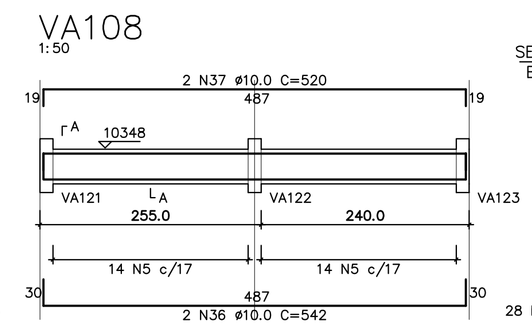
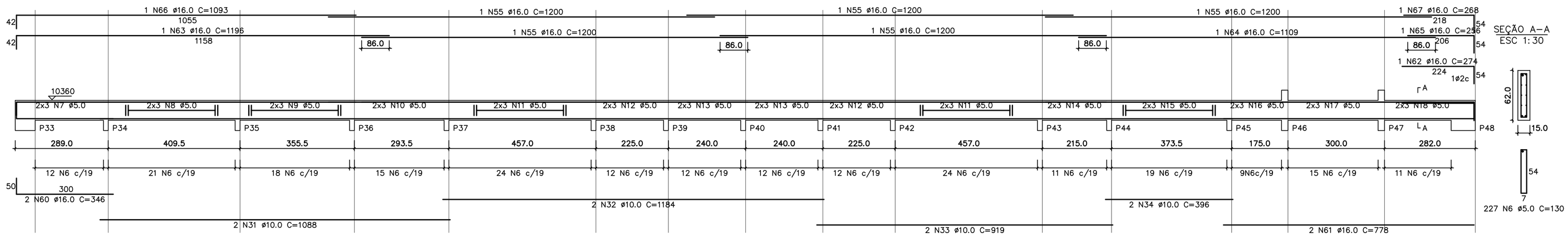


VA106
1:75



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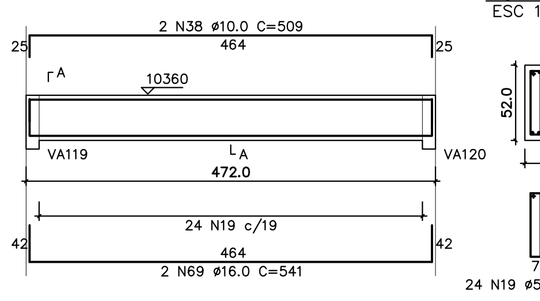
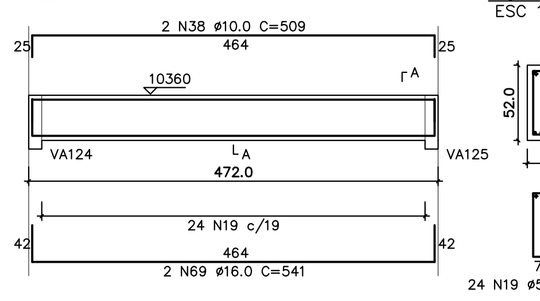
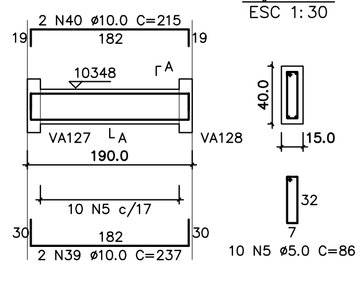


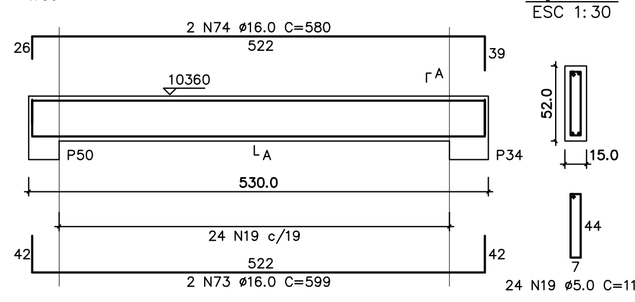
VA110
1:50



VA111
1:50



VA114
1:50



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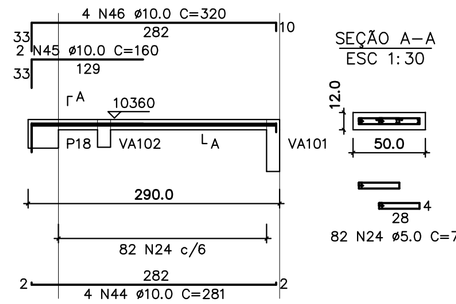
1:50



VA113
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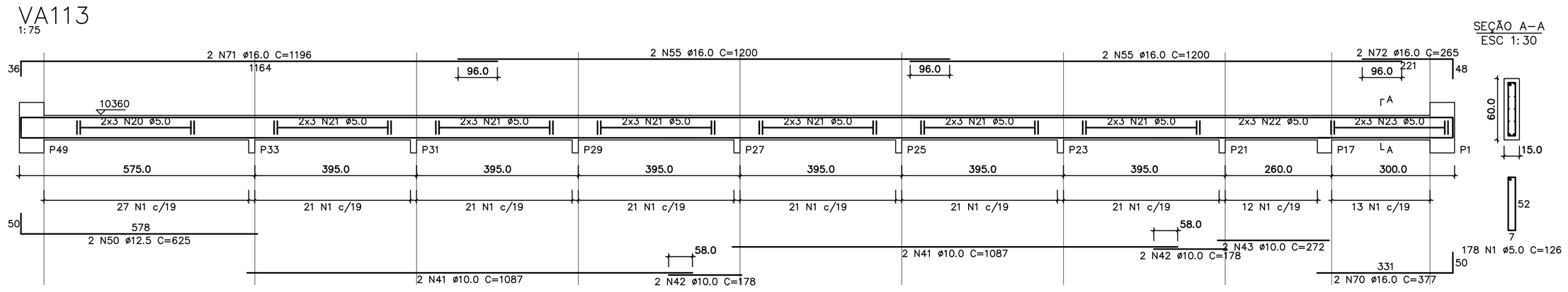
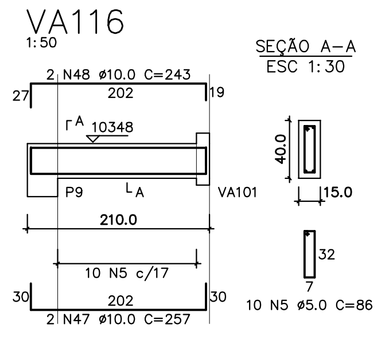


VA116
1:50



RELAÇÃO DO AÇO

VA101 VA102 VA103
VA104 VA105 VA106
VA107 VA108 VA109
VA110 VA111 VA113
VA114 VA115 VA116

AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
60	1	5.0	395	126	49770
	2	5.0	12	corr	7776
	3	5.0	30	corr	18840
	4	5.0	34	70	2380
	5	5.0	91	86	7826
	6	5.0	227	130	29510
	7	5.0	6	corr	1686
	8	5.0	6	corr	2460
	9	5.0	6	corr	2136
	10	5.0	6	corr	1764
	11	5.0	12	corr	5484
	12	5.0	12	corr	2700
	13	5.0	12	corr	2880
	14	5.0	6	corr	1290
	15	5.0	6	corr	2244
	16	5.0	6	corr	1038
	17	5.0	6	corr	1800
	18	5.0	6	corr	1530
	19	5.0	72	110	7920
	20	5.0	6	corr	3408
	21	5.0	36	corr	14220
	22	5.0	6	corr	1500
	23	5.0	6	corr	1908
	24	5.0	82	72	5904
50	25	10.0	8	700	5600
	26	10.0	12	650	7800
	27	10.0	4	306	1224
	28	10.0	4	306	1224
	29	10.0	4	293	1172
	30	10.0	4	271	1084
	31	10.0	2	1088	2176
	32	10.0	2	1184	2368
	33	10.0	2	919	1838
	34	10.0	2	396	792
	35	10.0	2	335	670
	36	10.0	2	542	1084
	37	10.0	2	520	1040
	38	10.0	4	509	2036
	39	10.0	2	237	474
	40	10.0	2	215	430
	41	10.0	4	1087	4348
	42	10.0	4	178	712
	43	10.0	2	272	544
	44	10.0	4	281	1124
	45	10.0	2	160	320
	46	10.0	4	320	1280
	47	10.0	2	257	514
	48	10.0	2	243	486
	49	12.5	6	656	3936
	50	12.5	2	625	1250
	51	16.0	2	254	508
	52	16.0	2	300	600
	53	16.0	2	440	880
	54	16.0	1	1196	1196
	55	16.0	13	1200	15600
	56	16.0	1	1063	1063
	57	16.0	2	269	538
	58	16.0	1	1075	1075
	59	16.0	1	1184	1184
	60	16.0	2	346	692
	61	16.0	2	778	1556
	62	16.0	1	274	274
	63	16.0	1	1196	1196
	64	16.0	1	1109	1109
	65	16.0	1	256	256
	66	16.0	1	1093	1093
	67	16.0	1	268	268
	68	16.0	2	355	710
	69	16.0	4	541	2164
	70	16.0	2	377	754
	71	16.0	2	1196	2392
	72	16.0	2	265	530
	73	16.0	2	599	1198
	74	16.0	2	580	1160

RESUMO DO AÇO

AÇO	DIAM	C.TOTAL (m)	PESO+10% (kg)
CA50	10.0	403.5	273.8
	12.5	51.9	55.0
	16.0	380.0	660.4
CA60	5.0	1784.2	302.2
PESO TOTAL			
CA50	989.1		
CA60	302.2		

Vol. concreto total = 13.97 m³
Área de forma total = 210.42 m²
fck = 300.00 kgf/cm²

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REV.	DATA	RESP.	DESCRIÇÃO	FASE DO PROJETO
1	28/11/2013	PAULO	EMISSÃO INICIAL	ASBUILT
				EXECUTIVO
				COMENTADO
				BÁSICO

TÍTULO:
CIE - CENTRO DE INICIAÇÃO AO ESPORTE

PROJETO:

MODALIDADE:
ESTRUTURA DE CONCRETO - PROJETO EXECUTIVO

ESPECIALIDADE:
GINÁSIO CIE:S40-45 - ARMADURA DAS VIGAS AÉREAS DA 1ª LAJE

AUTOR DO PROJETO:
ENG. PAULO SERGIO BATISTA PEREIRA
CREA: 060085974 9SP - ART: 92221220140569811

VERIFICAÇÃO/DATA	EMISSÃO INICIAL	FOLHA	AREA
CIE-28/11/13	28/11/13	012/016	IMPLANTAÇÃO MÓD. 1,2 e 3
	ESCALA	IDENTIFICAÇÃO/ARQUIVO	
	INDICADA	CIE-S40-45-ESC-EX-4011-R00.dwg	

DIREITOS AUTORAIS RESERVADOS. VETADA A REPRODUÇÃO TOTAL OU PARCIAL.