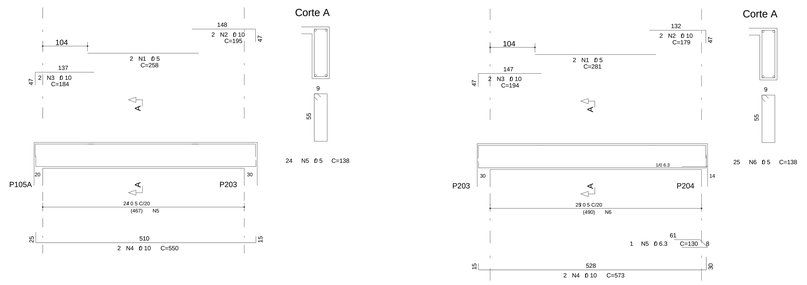
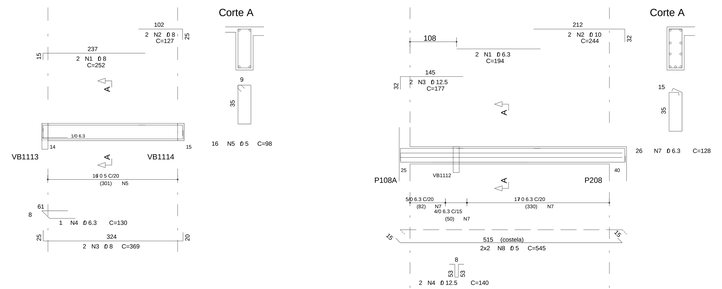
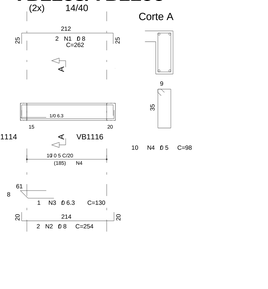


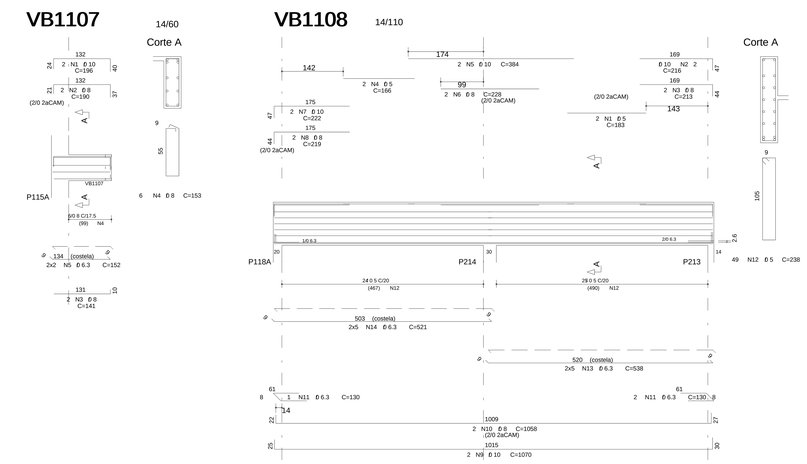


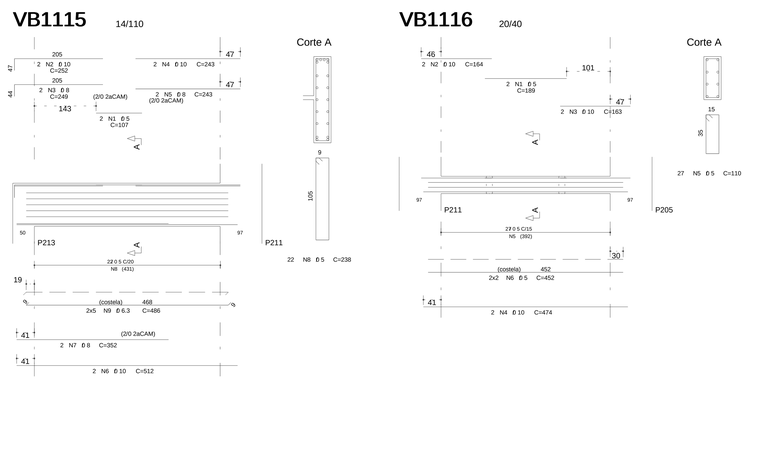


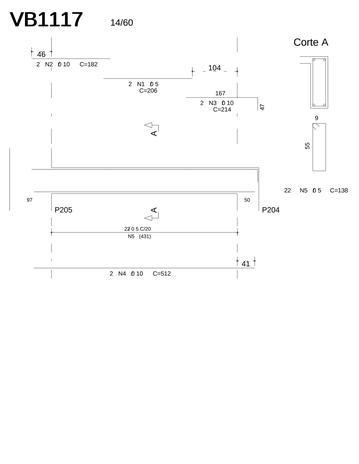
ACO	POS	BIT (mm)	QUANT	COMPRIMENTO UNIT (cm)	COMPRIMENTO TOTAL (cm)
VB1101					
60B	1	5	2	258	516
50A	2	10	2	195	390
50A	3	10	2	184	368
50A	4	10	2	550	1100
60B	5	5	24	138	3312
VB1102					
60B	1	5	2	281	562
50A	2	10	2	179	358
50A	3	10	2	194	388
50A	4	10	2	573	1146
50A	5	6.3	1	130	130
60B	6	5	25	138	3450
VB1103					
50A	1	8	2	252	504
50A	2	8	2	127	254
50A	3	8	2	369	738
50A	4	6.3	1	130	130
60B	5	5	16	98	1568
VB1104					
50A	1	6.3	2	194	388
50A	2	10	2	244	488
50A	3	12.5	2	177	354
50A	4	12.5	2	140	280
50A	5	10	2	556	1112
50A	6	10	1	219	219
50A	7	6.3	26	128	3328
60B	8	5	4	545	2180
VB1105 (X2)					
50A	1	8	4	262	1048
50A	2	8	4	254	1016
50A	3	6.3	2	130	260
60B	4	5	20	98	1960
VB1107					
50A	1	10	2	196	392
50A	2	8	2	190	380
50A	3	8	2	141	282
50A	4	8	6	153	918
50A	5	6.3	4	152	608
VB1108					
60B	1	5	2	183	366
50A	2	10	2	216	432
50A	3	8	2	213	426
60B	4	5	2	166	332
50A	5	10	2	384	768
50A	6	8	2	228	456
50A	7	10	2	222	444
50A	8	8	2	219	438
50A	9	10	2	1070	2140
50A	10	8	2	1058	2116
50A	11	6.3	3	130	390
60B	12	5	49	238	11662
50A	13	6.3	10	538	5380
50A	14	6.3	10	521	5210
VB1115					
60B	1	5	2	107	214
50A	2	10	2	252	504
50A	3	8	2	249	498
50A	4	10	2	243	486
50A	5	8	2	243	486
50A	6	10	2	512	1024
50A	7	8	2	352	704
60B	8	5	22	238	5236
50A	9	6.3	10	486	4860
VB1116					
60B	1	5	2	189	378
50A	2	10	2	164	328
50A	3	10	2	163	326
50A	4	10	2	474	948
60B	5	5	27	110	2970
60B	6	5	4	452	1808

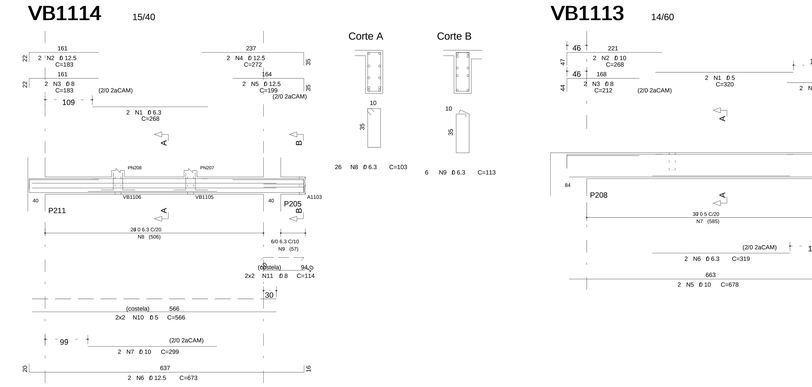
ACO	POS	BIT (mm)	QUANT	COMPRIMENTO UNIT (cm)	COMPRIMENTO TOTAL (cm)
VB1117					
60B	1	5	2	206	412
50A	2	10	2	182	364
50A	3	10	2	214	428
50A	4	10	2	512	1024
60B	5	5	22	138	3036
VB1114					
50A	1	6.3	2	268	536
50A	2	12.5	2	183	366
50A	3	8	2	183	366
50A	4	12.5	2	272	544
50A	5	12.5	2	199	398
50A	6	12.5	2	673	1346
50A	7	10	2	299	598
50A	8	6.3	26	103	2678
50A	9	6.3	6	113	678
60B	10	5	4	566	2264
50A	11	8	4	114	456
VB1113					
60B	1	5	2	320	640
50A	2	10	2	268	536
50A	3	8	2	212	424
50A	4	10	2	205	410
50A	5	10	2	678	1356
50A	6	6.3	2	319	638
60B	7	5	30	138	4140
VB1112					
60B	1	5	2	221	442
50A	2	10	2	168	336
50A	3	10	2	167	334
50A	4	10	2	512	1024
50A	5	10	2	444	888
60B	6	5	22	138	3036
VB1110					
50A	1	10	2	501	1002
50A	2	10	2	389	778
60B	3	5	16	138	2208
VB1111					
60B	1	5	2	269	538
50A	2	10	2	203	406
50A	3	10	2	214	428
50A	4	10	2	596	1192
60B	5	5	26	138	3588
VB1118 (X2)					
50A	1	8	4	275	1100
50A	2	8	4	254	1016
50A	3	6.3	2	130	260
60B	4	5	20	98	1960
VB1122					
60B	1	5	2	175	350
50A	2	12.5	2	183	366
50A	3	12.5	2	182	364
50A	4	10	2	474	948
60B	5	5	27	125	3375
50A	6	6.3	4	482	1928
VB1120					
50A	1	10	2	232	464
50A	2	8	2	226	452
50A	3	8	2	206	412
60B	4	5	8	100	800
VB1121					
60B	1	5	2	235	470
50A	2	8	2	229	458
50A	3	8	2	206	412
60B	4	5	8	100	800
VB1201					
60B	1	5	2	145	290
50A	2	12.5	2	250	500
50A	3	12.5	2	249	498
50A	4	10	2	474	948
50A	5	10	1	241	241
60B	6	5	27	150	4050

RESUMO ACO CA 50-60			
ACO	BIT (mm)	COMPR (m)	PESO (kg)
60B	5	684	110
50A	6.3	274	69
50A	8	154	61
50A	10	275	173
50A	12.5	50	50
Peso Total 60B =			110 kg
Peso Total 50A =			354 kg









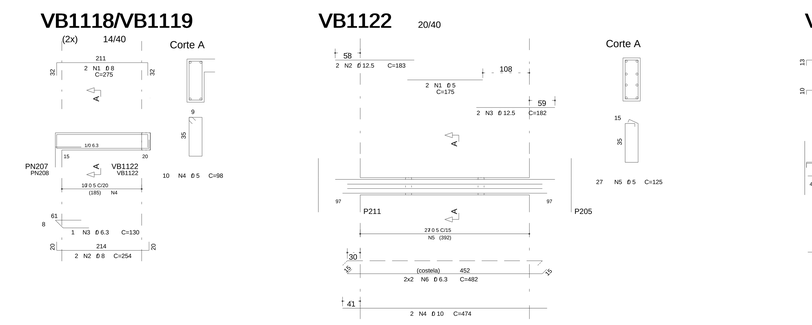
COBRIMENTO DA ARMADURA:

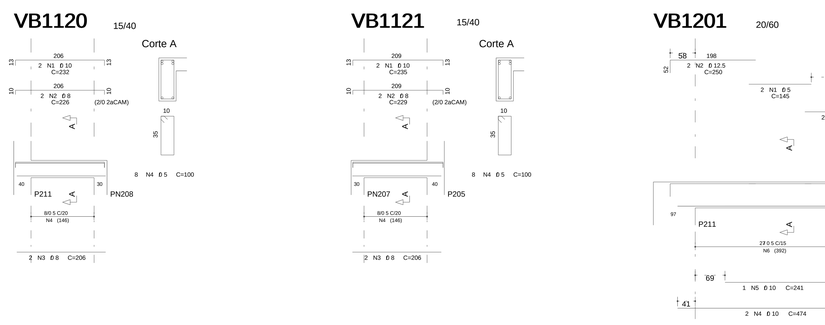
- LAJES = 2,0 cm
- VIGAS E PILARES = 2,5 cm
- BLOCOS,BALDRAMES E CONTENCOES (FACE EM CONTATO COM A TERRA) = 3,0 cm

1. ESSES COBRIMENTOS DEVERAO SER GARANTIDOS COM O USO DE ESPACADORES OU PASTILHAS.
COBRIMENTOS ESPECIFICOS EM CONTRANRO AOS VALORES INDICADOS ACIMA, ESTAO INDICADOS NOS DESENHOS DE FORMAS DOS PAVIMENTOS.

NORMAS UTILIZADAS:

NBR-6118/2003 - PROJETO E EXECUCAO DE OBRAS DE CONCRETO ARMADO
NBR-6120/1980 - CARGAS PARA O CALCULO DE ESTRUTURAS DE EDIFICACOES





FCK= 35 MPa
EC = 28 GPa (MODULO DE ELASTICIDADE SECANTE AOS 28 DIAS).
A/C = 0,65 (FATOR AGUA CIMENTO)

REV	DATA	DESCRICAO
0	22/02/2010	EMISSAO INICIAL

Simetria Engenharia
PROJETOS ESTRUTURAIS
SIA QUADRA AC No 51 SALAS 203 a 205
BRASILIA-DF CEP: 71200-045
FAX: (0XX61) 3036-9610
simetria@simetria.eng.br

PROJETO ESTRUTURAL

CLIENTE:	DISCO INCORPORADORA E IMOBILIARIA LTDA		
OBRA:	EDIFICIO RESIDENCIAL OLYMPIQUE	No OBRA:	001
ENDEREO OBRA:	SRIA AREA ESPECIAL 04 LOTE G/H - GUARA/DF		
DESCRICAO:	ARMACAO DAS VIGAS DA COBERTURA DO 20o PAVIMENTO, MESA MOTOR E RESERVATORIO ELEVADO TORRE A - JUNTA B	DESENHO No:	237-XXX

DESENHISTA:	DATA:	ESCALA:	UNIDADE	No PROJ. SIMETRIA:
TQS/ THIAGO	22/02/2010	1:50	CM	421

ARQUIVO PLT
421 -EST- 237-XXX -R00 .PLT

PROPRIETARIO: RESPONSAVEL TECNICO

RESPONSAVEL TECNICO PELO PROJETO ESTRUTURAL

SIMETRIA ENGENHARIA E PROJETOS S/C LTDA
CREA:2725/RF

SIMETRIA ENGENHARIA E PROJETOS S/C LTDA P:_C:\TQS\WINGS\TMP\CJNXTA.B-TORRE-J\12-COB 20o PAV\VIGAS\VIGAS01.PLT 22/02/2010 09:21:27