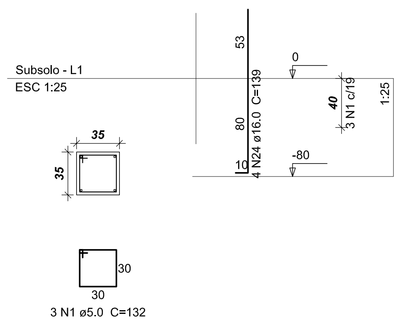
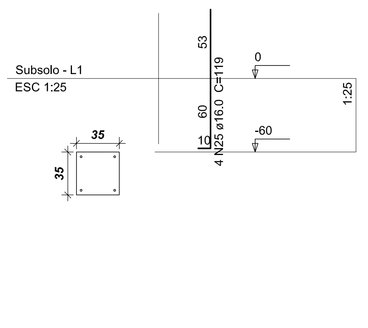
P100

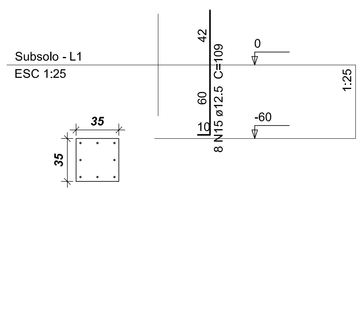


3 N1 ø5.0 C=132

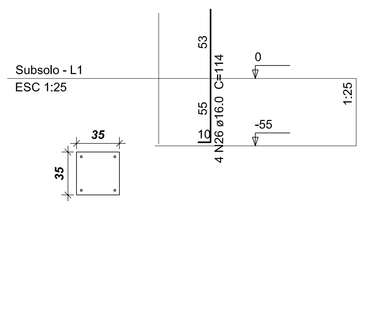
P101



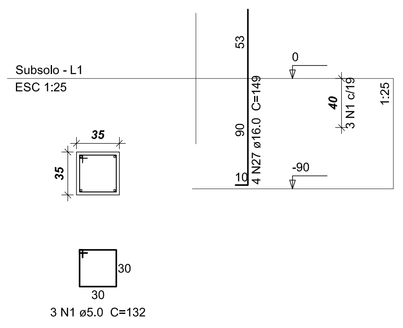
P102=P103



P104=P105

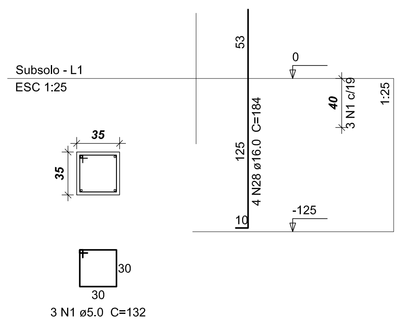


P106



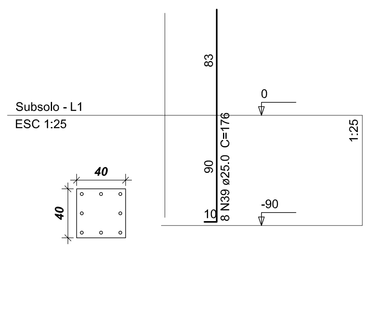
3 N1 ø5.0 C=132

P109=P199

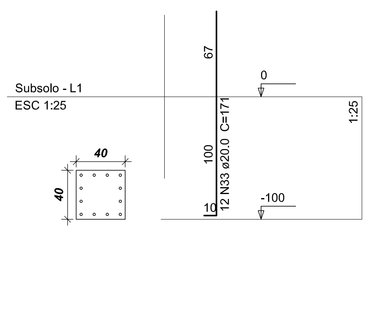


3 N1 ø5.0 C=132

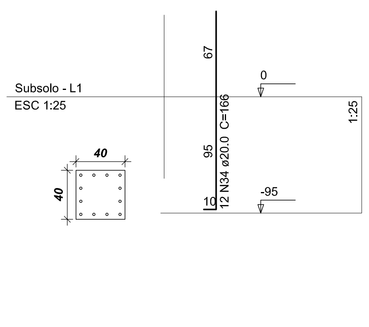
P110



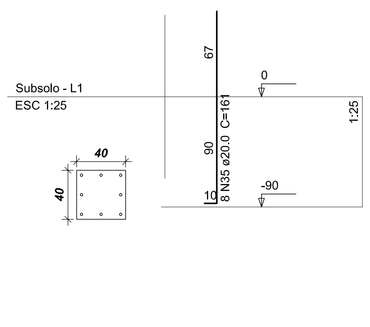
P111=P136=P162



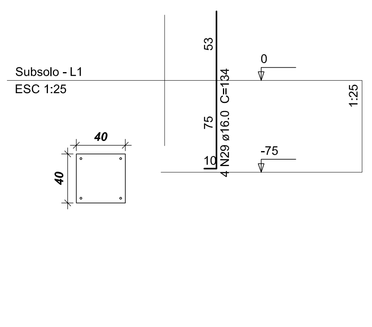
P112



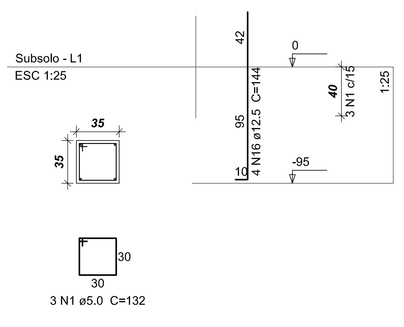
P113



P114

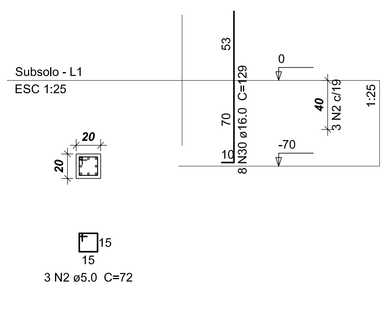


P115



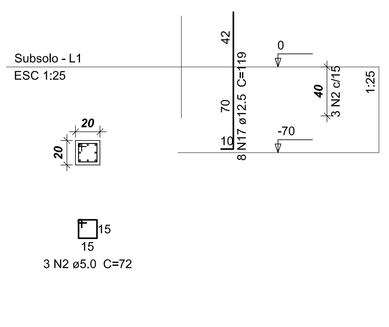
3 N1 ø5.0 C=132

P118=P128



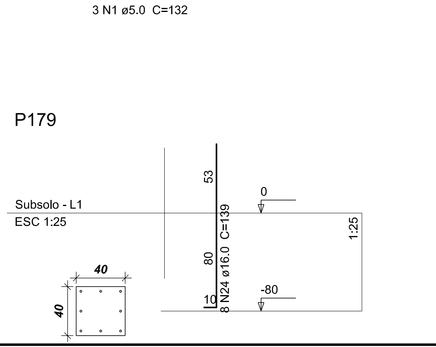
3 N2 ø5.0 C=72

P120=P122=P124=P126



3 N2 ø5.0 C=72

P129



3 N3 ø5.0 C=112

P132=P158

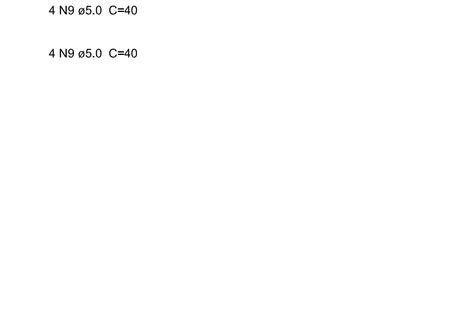
3 N1 ø5.0 C=132

3 N4 ø5.0 C=45

3 N4 ø5.0 C=45

P133=P149=P151=P159

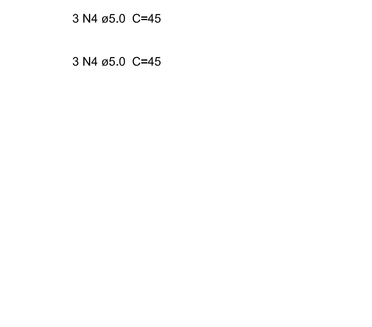
P134



2 N5 ø5.0 C=152

8 N6 ø5.0 C=49

P135=P161=P178



P137=P153=P163

P138=P154

3 N1 ø5.0 C=132

P139=P155

4 N7 ø5.0 C=112

4 N8 ø5.0 C=30

P147

3 N3 ø5.0 C=112

P148

3 N1 ø5.0 C=132

P150

5 N10 ø6.3 C=152

10 N11 ø6.3 C=52

P152

P157

4 N7 ø5.0 C=112

4 N8 ø5.0 C=30

P160

P164

3 N1 ø5.0 C=132

P167=P171

3 N3 ø5.0 C=112

P168=P169=P170

3 N3 ø5.0 C=112

P172

4 N3 ø5.0 C=112

4 N9 ø5.0 C=40

4 N9 ø5.0 C=40

P174

3 N1 ø5.0 C=132

3 N4 ø5.0 C=45

3 N4 ø5.0 C=45

P175

P179

Relação do aço

AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	36	132	4752
	2	5.0	18	72	1296
	3	5.0	25	112	2800
	4	5.0	18	45	810
	5	5.0	2	152	304
	6	5.0	8	49	392
	7	5.0	12	112	1344
	8	5.0	12	30	360
	9	5.0	8	40	320
CA50	10	6.3	5	152	760
	11	6.3	10	52	520
	12	10.0	12	146	1752
	13	10.0	6	156	936
	14	10.0	8	111	888
	15	12.5	16	109	1744
	16	12.5	4	144	576
	17	12.5	32	119	3808
	18	12.5	4	174	696
	19	12.5	16	149	2384
	20	12.5	32	129	4128
	21	12.5	8	164	1312
	22	12.5	12	124	1488
	23	12.5	8	154	1232
	24	16.0	12	139	1668
	25	16.0	4	119	476
	26	16.0	8	114	912
	27	16.0	4	149	596
	28	16.0	8	184	1472
	29	16.0	4	134	536
	30	16.0	16	129	2064
	31	16.0	8	164	1312
	32	16.0	4	174	696
	33	20.0	36	171	6156
	34	20.0	20	166	3320
	35	20.0	8	161	1288
	36	20.0	64	176	11264
	37	20.0	12	221	2652
	38	20.0	36	181	6516
	39	25.0	8	176	1408
	40	25.0	8	286	2288
	41	25.0	12	196	2352

Resumo do aço

AÇO	DIAM	C.TOTAL (m)	PESO (kg)
CA50	6.3	12.8	3.1
	10.0	35.8	22
	12.5	173.7	167.3
	16.0	97.4	153.6
	20.0	312	769.3
	25.0	60.5	233.1
CA60	5.0	123.8	19.1
PESO TOTAL			
CA50	1348.5		
CA60	19.1		

AS BUILT PROJETOS
Rua Jovino do Rosário, 1564 – Boa Vista
CEP 82560-435 – Curitiba – Paraná

OBRA: GALPÃO DE ENGENHARIA – TEÓFILO OTONI

PROPRIETÁRIO: UNIVERSIDADE DOS VALES DO JEQUITINHONHA E MUCURI – UFVJM

ENDEREÇO: AVENIDA DR. LUIS BOALI PORTO SALMAN, S/Nº – BAIRRO IPIRANGA – TEÓFILO OTONI/MG

PROJETO ESTRUTURAL

REFERÊNCIA: ESPERA DOS PILARES (1)

PRANCHA: EST 05 /20

ARQUIVO:

DESENHO: CARLOS

DATA: 27/09/2012

ESCALA: INDICADA

AUTOR DO PROJETO: ENG. CIVIL CARLOS HENRIQUE DE S. GONÇALVES CREA: 7.982-D/PR