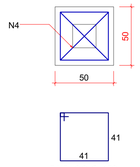
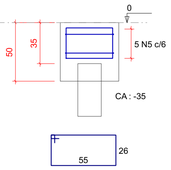
B1=B2=B3=B4=B5=B6=B7=B8=B9=B10=B13=B15
=B16=B17=B18=B20=B21=B22=B23=B24=B25
=B26=B27=B28=B29=B30
1xRET-8m

PLANTA
ESC 1:25

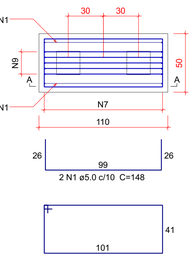


CORTE
ESC 1:25

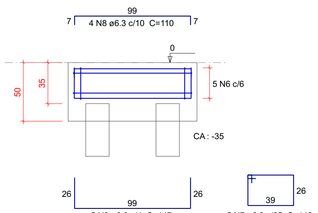


B11=B19
2xRET - 8m

PLANTA
ESC 1:25

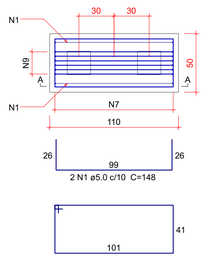


CORTE A-A
ESC 1:25

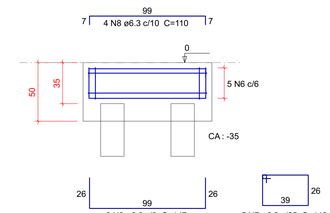


B12
2xRET - 8m

PLANTA
ESC 1:25

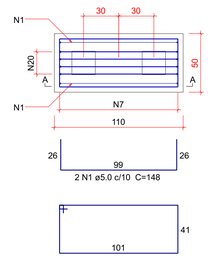


CORTE A-A
ESC 1:25

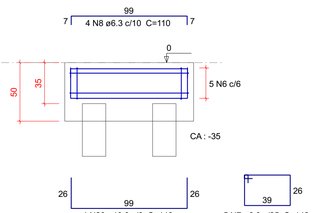


B14
2xRET - 8m

PLANTA
ESC 1:25



CORTE A-A
ESC 1:25



Relação do aço

B12
26xB30
V115

B14
V113
V116

2xB19
V114

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	8	148	1184
	2	5.0	90	75	6750
	3	5.0	115	85	9775
CA50	4	6.3	52	174	9048
	5	6.3	130	176	22880
	6	6.3	20	296	5920
	7	6.3	20	142	2840
	8	6.3	16	110	1760
	9	8.0	16	147	2352
	10	8.0	1	94	94
	11	8.0	1	97	97
	12	8.0	2	211	422
	13	8.0	2	590	1180
	14	8.0	2	199	398
	15	8.0	2	215	430
	16	8.0	6	824	4944
	17	8.0	3	75	225
	18	8.0	2	130	260
	19	8.0	2	832	1664
	20	10.0	4	146	584
	21	10.0	1	249	249
	22	12.5	1	405	405
	23	12.5	2	844	1688
	24	16.0	1	210	210
	25	16.0	1	270	270
	26	16.0	2	444	888

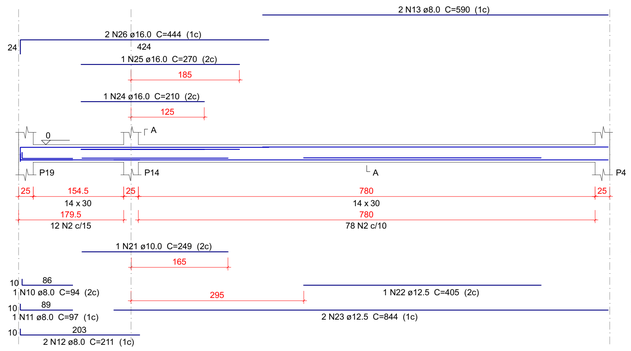
Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	PESO (kg)
CA50	6.3	424.5	103.9
	8.0	120.7	47.6
	10.0	8.4	5.1
	12.5	21	20.2
	16.0	13.7	21.6
CA60	5.0	177.1	27.3

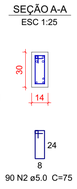
PESO TOTAL (kg)	
CA50	198.4
CA60	27.3

Volume de concreto (C-30) = 5.52 m³
Área de forma = 52.86 m²

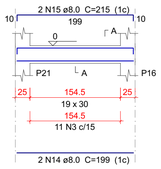
V113
ESC 1:50



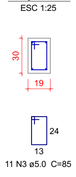
SEÇÃO A-A
ESC 1:25



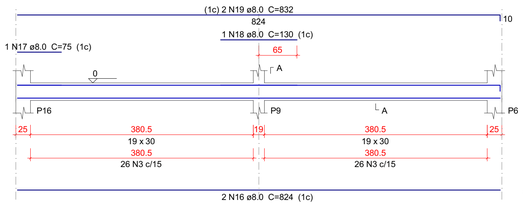
V114
ESC 1:50



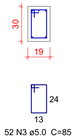
SEÇÃO A-A
ESC 1:25



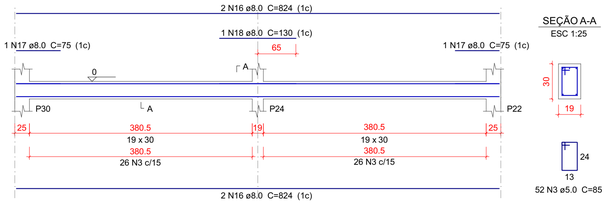
V115
ESC 1:50



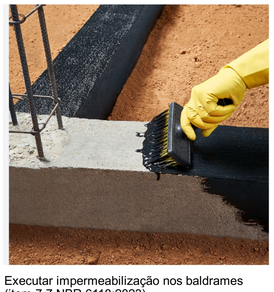
SEÇÃO A-A
ESC 1:25



V116
ESC 1:50

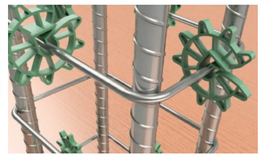


SEÇÃO A-A
ESC 1:25

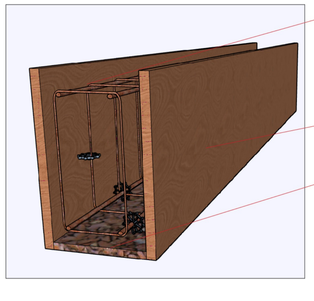


Executar impermeabilização nos baldrames
(item 7.7 NBR 6118:2023)





Obrigatório a utilização de espaçadores para vigas e pilares,
de modo a garantir o cobrimento de projeto.
Para este projeto = 3cm



ESTACAS PRÉ-MOLDADAS SEÇÃO QUADRADA 20x20

Pilar	Cargas Projeto (tf)	nº estacas	Lado	Comprimento Estacas (m)
1	6,37	1	20	8
2	8,23	1	20	8
3	6,51	1	20	8
4	9,13	1	20	8
5	6,61	1	20	8
6	6,31	1	20	8
7	8,39	1	20	8
8	8,72	1	20	6
9	4,02	1	20	8
10	10,18	1	20	8
11	12,69	2	20	8
12	15,06	2	20	8
13	6,53	1	20	8
14	12,64	2	20	8
15	6,62	1	20	8
16	7,61	1	20	8
17	7,58	1	20	8
18	6,61	1	20	8
19	6,22	2	20	8
20	6,5	1	20	8
21	7,85	1	20	8
22	6,35	1	20	8
23	4	1	20	8
24	4	1	20	8
25	6,31	1	20	8
26	6,61	1	20	8
27	6,51	1	20	8
28	6,51	1	20	8
29	6,61	1	20	8
30	6,35	1	20	8
TOTAIS		34		270

PROJETO ESTRUTURAL

EM CASO DE DÚVIDAS CONSULTAR A DIVISÃO DE PROJETOS F. (41) 3888-4850

OBRA:
Bloco Multiuso - Campus União da Vitória

AUTOR(ES) DO PROJETO:
Eng. Civil Tiago Radaskievicz
PR 132.448/D

PROPRIETÁRIO:
INSTITUTO FEDERAL DO PARANÁ - CNPJ: 10.652.179/0001-15

RESPONSÁVEL EXECUÇÃO:
A LICITAR

REFERÊNCIA:
Blocos coroamento | Estacas | Vigas Nível 0,00

DATA: 09/10/2026
ESCALA: INDICADA
DESENHO: Rada
ARQUIVO:
PRANCHA: 4 10
PLOTAGEM: 09/10/2026

DIRETORIA DE INFRAESTRUTURA - DI