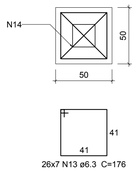
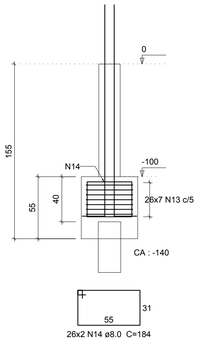
B1=B2=B3=B4=B5=B6=B7=B8=B9=B11=B12=B13
=B17=B18=B19=B21=B22=B23=B24=B25=B26
=B27=B28=B29=B30=B31
1xPRE20

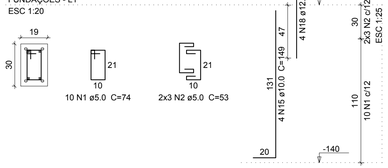
PLANTA
ESC 1:25



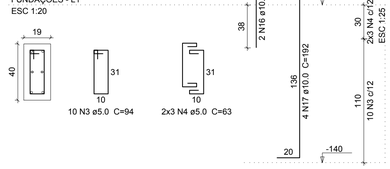

CORTE
ESC 1:25



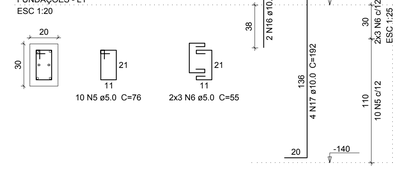

P1
FUNDAÇÕES - L1
ESC 1:20



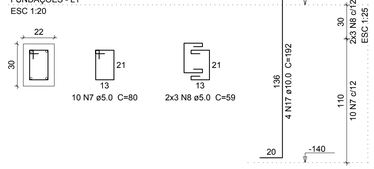

P17
FUNDAÇÕES - L1
ESC 1:20



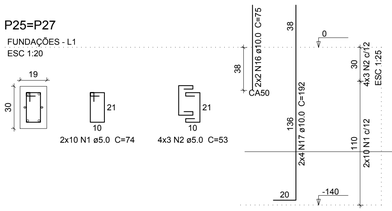

P2
FUNDAÇÕES - L1
ESC 1:20



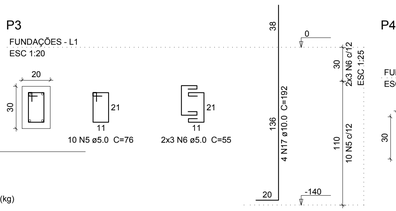

P21
FUNDAÇÕES - L1
ESC 1:20




P25=P27
FUNDAÇÕES - L1
ESC 1:20

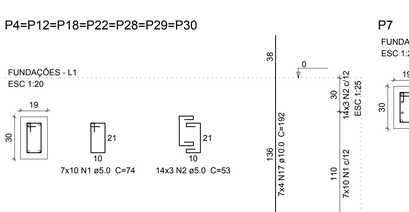



P3
FUNDAÇÕES - L1
ESC 1:20

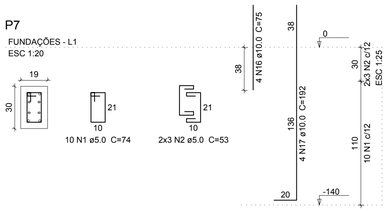



(kg)

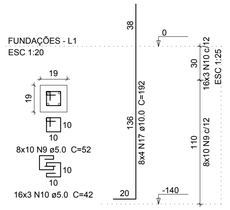
P4=P12=P18=P22=P28=P29=P30
FUNDAÇÕES - L1
ESC 1:20



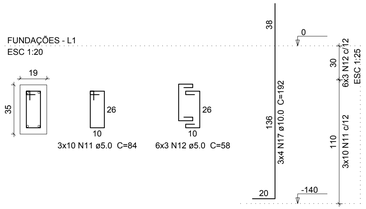

P7
FUNDAÇÕES - L1
ESC 1:20




P5=P6=P8=P13=P23=P24=P26=
=P31
FUNDAÇÕES - L1
ESC 1:20




P9=P11=P19
FUNDAÇÕES - L1
ESC 1:20




## Relação do aço

B19

| AÇO | N | DIAM (mm) | QUANT | C.UNIT (cm) | C.TOTAL (cm) |
|---|---|---|---|---|---|
| CA60 | 1 | 5.0 | 110 | 74 | 8140 |
| | 2 | 5.0 | 66 | 53 | 3498 |
| | 3 | 5.0 | 10 | 94 | 940 |
| | 4 | 5.0 | 6 | 63 | 378 |
| | 5 | 5.0 | 20 | 76 | 1520 |
| | 6 | 5.0 | 12 | 55 | 660 |
| | 7 | 5.0 | 10 | 80 | 800 |
| | 8 | 5.0 | 6 | 59 | 354 |
| | 9 | 5.0 | 80 | 52 | 4160 |
| | 10 | 5.0 | 48 | 42 | 2016 |
| | 11 | 5.0 | 30 | 84 | 2520 |
| | 12 | 5.0 | 18 | 58 | 1044 |
| CA50 | 13 | 6.3 | 182 | 176 | 32032 |
| | 14 | 8.0 | 52 | 184 | 9568 |
| | 15 | 10.0 | 4 | 149 | 596 |
| | 16 | 10.0 | 12 | 75 | 900 |
| | 17 | 10.0 | 100 | 192 | 19200 |
| | 18 | 12.5 | 4 | 94 | 376 |

## Resumo do aço

| AÇO | DIAM (mm) | C.TOTAL (m) | PESO + 10 % (kg) |
|---|---|---|---|
| CA50 | 6.3 | 320.4 | 86.2 |
| | 8.0 | 95.7 | 41.5 |
| | 10.0 | 207 | 140.4 |
| | 12.5 | 3.8 | 4 |
| CA60 | 5.0 | 260.3 | 44.1 |

| PESO TOTAL (kg) | |
|---|---|
| CA50 | 272.1 |
| CA60 | 44.1 |

Volume de concreto (C-25) = 5.35 m³
Área de forma = 62.65 m²

INSTITUTO FEDERAL
FARROUPILHA

PRÓ-REITORIA DE ADMINISTRAÇÃO
COORDENAÇÃO DE ENGENHARIA E ARQUITETURA
Rua Esmeralda, 430 - Faixa Nova - Camobi - CEP 97110-767 - Santa Maria - Rio Grande do Sul.
Telefone: (55) 3226-6630

OBRA: **SALAS DE AULA E SANITÁRIOS/VESTIÁRIOS**

LOCAL: **IF FARROUPILHA - CAMPUS SANTO ÂNGELO**

PROJETO: **ESTRUTURAL PRÉDIO SANITÁRIOS**

ÁREA: **662,73 m²**

CONTEÚDO: **FUNDAÇÕES**

ESCALA: **1/50**

PROPRIETÁRIO:
INSTITUTO FEDERAL FARROUPILHA

DATA: **Março/2017**

DESENHO: **Cristina**

RESPONSÁVEL:
ENG. CIVIL CRISTINA SILVA FELTRIN

PRANCHA: **DET EST 02/19**