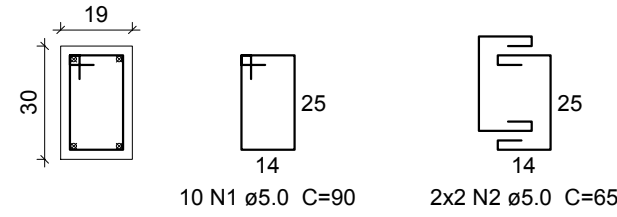
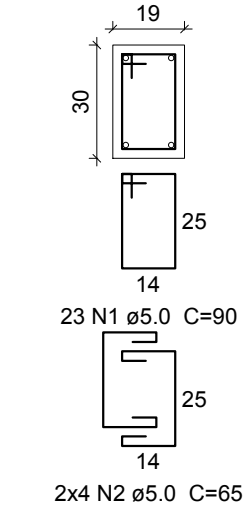


P30

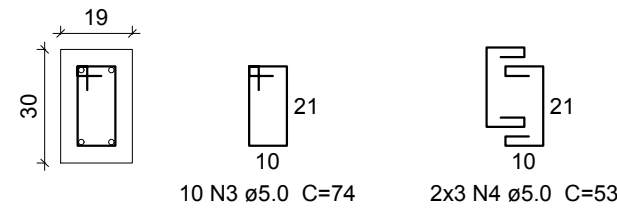
COBERTURA - L3
ESC 1:20



NÍVEL LAJE - L2
ESC 1:20

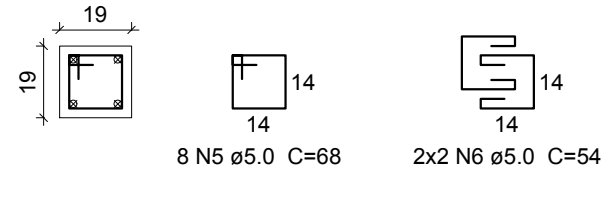


FUNDAÇÕES - L1
ESC 1:20

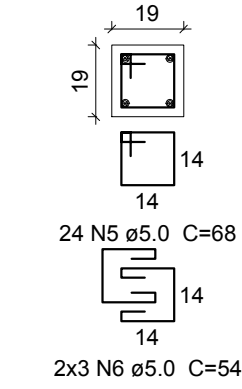


P31

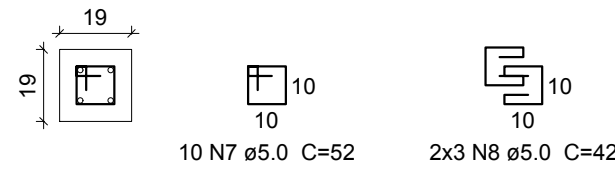
COBERTURA - L3
ESC 1:20



NÍVEL LAJE - L2
ESC 1:20

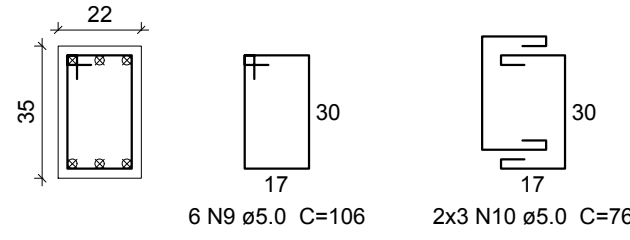


FUNDAÇÕES - L1
ESC 1:20

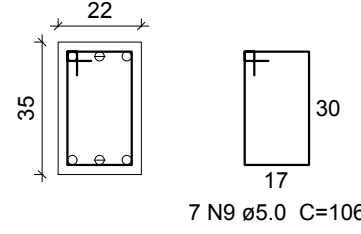


P15

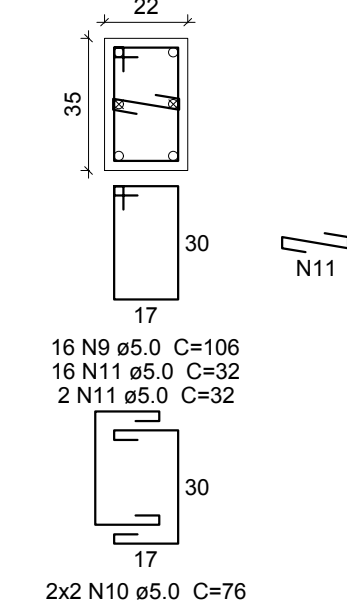
RESERVATÓRIO - L4
ESC 1:20



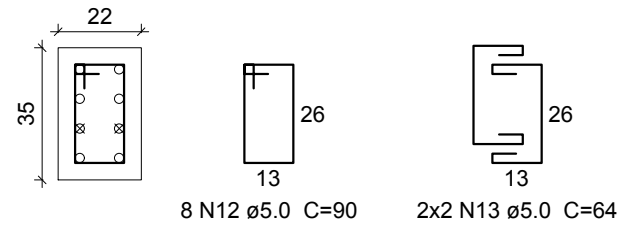
COBERTURA - L3
ESC 1:20



NÍVEL LAJE - L2
ESC 1:20

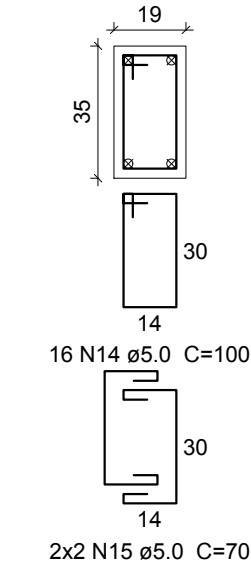


FUNDAÇÕES - L1
ESC 1:20

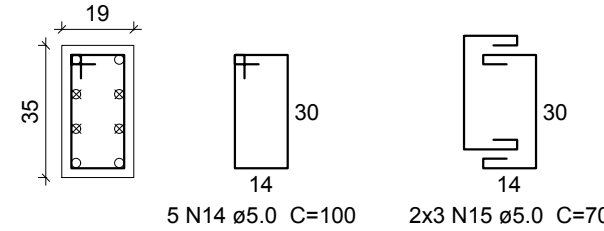


P9

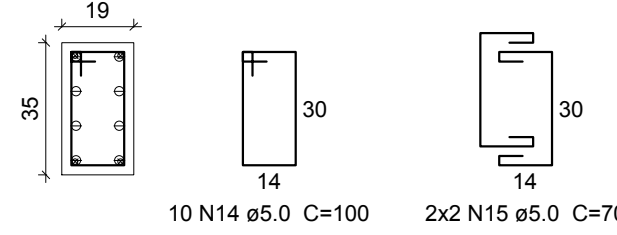
VIGA FINAL - L5
ESC 1:20



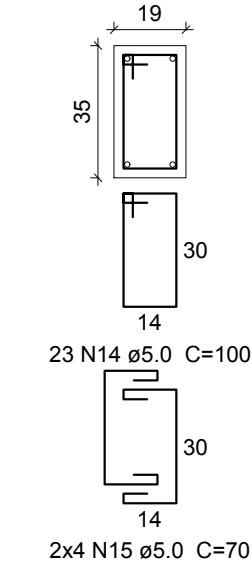
RESERVATÓRIO - L4
ESC 1:20



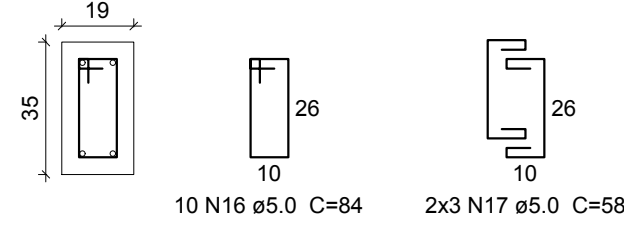
COBERTURA - L3
ESC 1:20



NÍVEL LAJE - L2
ESC 1:20



FUNDAÇÕES - L1
ESC 1:20



Relação do aço

| AÇO | N | DIAM (mm) | QUANT | C.UNIT (cm) | C.TOTAL (cm) |
|------|----|-----------|-------|-------------|--------------|
| CA60 | 1 | 5.0 | 33 | 90 | 2970 |
| | 2 | 5.0 | 12 | 65 | 780 |
| | 3 | 5.0 | 10 | 74 | 740 |
| | 4 | 5.0 | 6 | 53 | 318 |
| | 5 | 5.0 | 32 | 68 | 2176 |
| | 6 | 5.0 | 10 | 54 | 540 |
| | 7 | 5.0 | 10 | 52 | 520 |
| | 8 | 5.0 | 6 | 42 | 252 |
| | 9 | 5.0 | 29 | 106 | 3074 |
| | 10 | 5.0 | 10 | 76 | 760 |
| | 11 | 5.0 | 18 | 32 | 576 |
| | 12 | 5.0 | 8 | 90 | 720 |
| | 13 | 5.0 | 4 | 64 | 256 |
| | 14 | 5.0 | 54 | 100 | 5400 |
| | 15 | 5.0 | 22 | 70 | 1540 |
| | 16 | 5.0 | 10 | 84 | 840 |
| | 17 | 5.0 | 6 | 58 | 348 |
| CA50 | 18 | 10.0 | 8 | 127 | 1016 |
| | 19 | 10.0 | 8 | 355 | 2840 |
| | 20 | 10.0 | 12 | 192 | 2304 |
| | 21 | 10.0 | 4 | 314 | 1256 |
| | 22 | 12.5 | 4 | 127 | 508 |
| | 23 | 12.5 | 4 | 94 | 376 |
| | 24 | 16.0 | 10 | 132 | 1320 |
| | 25 | 16.0 | 10 | 121 | 1210 |
| | 26 | 16.0 | 4 | 190 | 760 |
| | 27 | 16.0 | 2 | 314 | 628 |
| | 28 | 16.0 | 4 | 377 | 1508 |
| | 29 | 16.0 | 2 | 177 | 354 |
| | 30 | 16.0 | 6 | 242 | 1452 |
| | 31 | 16.0 | 4 | 312 | 1248 |
| | 32 | 16.0 | 4 | 195 | 780 |

Resumo do aço

| AÇO | DIAM (mm) | C.TOTAL (m) | PESO + 10 % (kg) |
|------|-----------|-------------|------------------|
| CA50 | 10.0 | 74.2 | 50.3 |
| | 12.5 | 8.9 | 9.4 |
| | 16.0 | 92.6 | 160.8 |
| CA60 | 5.0 | 218.1 | 37 |

PESO TOTAL (kg)

| | |
|------|-------|
| CA50 | 220.4 |
| CA60 | 37 |

Volume de concreto (C-25) = 1.82 m³

Área de forma = 29.99 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: PILARES 05

ESCALA: 1/50

PROPRIETÁRIO:

INSTITUTO FEDERAL FARROUPILHA

DATA: Março/2017

RESPONSÁVEL:

ENG. CIVIL CRISTINA SILVA FELTRIM

DESENHO: Cristina

PRANCHA: DET EST 12/19