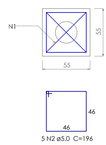
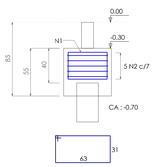
## B1=B2=B4=B6=B7=B8=B9=B10
1xC25

PLANTA ESC 1:25

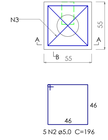



CORTE ESC 1:25

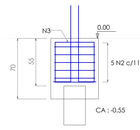



## B3
1xC25

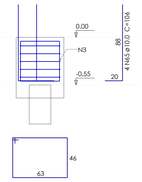
PLANTA ESC 1:25




CORTE A-A ESC 1:25



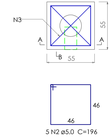

CORTE B-B ESC 1:25



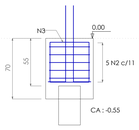

DETALHE DO PILAR ESC 1:20

## B5
1xC25

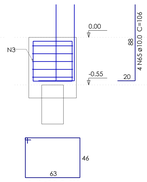
PLANTA ESC 1:25




CORTE A-A ESC 1:25



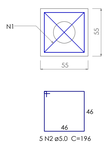

CORTE B-B ESC 1:25



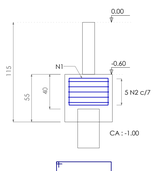

DETALHE DO PILAR ESC 1:20

## B11=B12=B13=B14
1xC25

PLANTA ESC 1:25

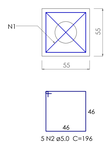



CORTE ESC 1:25

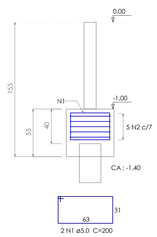



## B15=B16=B17=B18
1xC25

PLANTA ESC 1:25

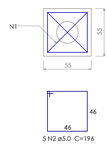



CORTE ESC 1:25

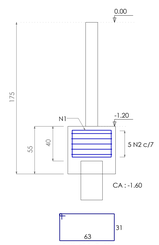



## B19=B20=B21
1xC25

PLANTA ESC 1:25




CORTE ESC 1:25




## Relação do aço

| | | |
|---|---|---|
| Baldrame: | B3 | B5 |
| | 8x810 | 4x814 |
| | 4x818 | 3x821 |
| | 6xP1 | 2xP2 |
| | 4xP11 | 4xP15 |
| | 3xP19 | V1 |
| | V2 | V3 |
| | V4 | V5 |
| | V6 | V7 |
| | V8 | V9 |
| | V10 | V11 |
| | V12 | V13 |
| | V14 | V15 |
| | V16 | V17 |
| | V18 | |
| Respaldo: | 19xP1 | 2xP2 |
| | V100 | V101 |
| | V102 | V103 |
| | V104 | V105 |
| | V106 | |

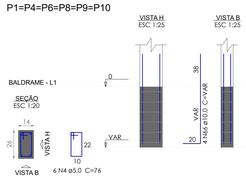
| AÇO | N | DIAM (mm) | QUANT | C.UNIT (cm) | C.TOTAL (cm) |
|---|---|---|---|---|---|
| CA60 | 1 | 5.0 | 38 | 200 | 7600 |
| | 2 | 5.0 | 105 | 196 | 20580 |
| | 3 | 5.0 | 4 | 230 | 920 |
| | 4 | 5.0 | 709 | 76 | 53884 |
| | 5 | 5.0 | 838 | 76 | 63688 |
| | 6 | 5.0 | 8 | 170 | 1360 |
| | 7 | 5.0 | 2 | 415 | 830 |
| | 8 | 5.0 | 181 | 104 | 18824 |
| | 9 | 5.0 | 2 | 305 | 610 |
| | 10 | 5.0 | 2 | 2221 | 4442 |
| | 11 | 5.0 | 2 | 353 | 706 |
| | 12 | 5.0 | 2 | 324 | 648 |
| | 13 | 5.0 | 2 | 303 | 606 |
| | 14 | 5.0 | 2 | 315 | 630 |
| | 15 | 5.0 | 2 | 455 | 910 |
| | 16 | 5.0 | 24 | 114 | 2736 |
| CA50 | 17 | 6.3 | 3 | 78 | 234 |
| | 18 | 8.0 | 8 | 603 | 4824 |
| | 19 | 8.0 | 2 | 380 | 760 |
| | 20 | 8.0 | 2 | 389 | 778 |
| | 21 | 8.0 | 4 | 968 | 3872 |
| | 22 | 8.0 | 4 | 776 | 3104 |
| | 23 | 8.0 | 2 | 785 | 1570 |
| | 24 | 8.0 | 4 | 339 | 1356 |
| | 25 | 8.0 | 4 | 357 | 1428 |
| | 26 | 8.0 | 2 | 331 | 662 |
| | 27 | 8.0 | 2 | 81 | 162 |
| | 28 | 8.0 | 4 | 191 | 764 |
| | 29 | 8.0 | 4 | 221 | 884 |
| | 30 | 8.0 | 2 | 189 | 378 |
| | 31 | 8.0 | 2 | 207 | 414 |
| | 32 | 8.0 | 4 | 214 | 856 |
| | 33 | 8.0 | 2 | 1096 | 2192 |
| | 34 | 8.0 | 2 | 216 | 432 |
| | 35 | 8.0 | 2 | 1198 | 2396 |
| | 36 | 8.0 | 4 | 175 | 700 |
| | 37 | 8.0 | 2 | 151 | 302 |
| | 38 | 8.0 | 2 | 182 | 364 |
| | 39 | 8.0 | 2 | 1130 | 2260 |
| | 40 | 8.0 | 2 | 857 | 1714 |
| | 41 | 8.0 | 2 | 1199 | 2398 |
| | 42 | 8.0 | 2 | 812 | 1624 |
| | 43 | 8.0 | 2 | 806 | 1612 |
| | 44 | 8.0 | 2 | 446 | 892 |
| | 45 | 8.0 | 2 | 1135 | 2270 |
| | 46 | 8.0 | 2 | 623 | 1246 |
| | 47 | 8.0 | 4 | 186 | 744 |
| | 48 | 8.0 | 4 | 478 | 1912 |
| | 49 | 8.0 | 2 | 1200 | 2400 |
| | 50 | 8.0 | 2 | 1059 | 2118 |
| | 51 | 8.0 | 4 | 605 | 2420 |
| | 52 | 8.0 | 4 | 159 | 636 |
| | 53 | 8.0 | 2 | 374 | 748 |
| | 54 | 8.0 | 2 | 420 | 840 |
| | 55 | 8.0 | 2 | 970 | 1940 |
| | 56 | 8.0 | 2 | 543 | 1086 |
| | 57 | 8.0 | 4 | 169 | 676 |
| | 58 | 8.0 | 2 | 778 | 1556 |
| | 59 | 8.0 | 2 | 375 | 750 |
| | 60 | 8.0 | 2 | 1101 | 2202 |
| | 61 | 8.0 | 2 | 354 | 708 |
| | 62 | 8.0 | 2 | 493 | 986 |
| | 63 | 8.0 | 1 | 395 | 395 |
| | 64 | 8.0 | 4 | 111 | 444 |
| | 65 | 10.0 | 8 | 106 | 848 |
| | 66 | 10.0 | 36 | VAR | VAR |
| | 67 | 10.0 | 16 | VAR | VAR |
| | 68 | 10.0 | 16 | VAR | VAR |
| | 69 | 10.0 | 12 | VAR | VAR |
| | 70 | 10.0 | 88 | 338 | 29744 |

## Resumo do aço

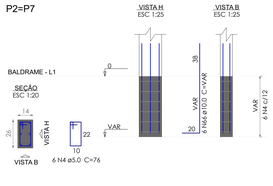
| AÇO | DIAM (mm) | C.TOTAL (m) | QUANT + 10 % (Barras) | PESO + 10 % (kg) |
|---|---|---|---|---|
| CA50 | 6.3 | 2.4 | 1 | 0.6 |
| | 8.0 | 647.8 | 60 | 281.2 |
| | 10.0 | 430.4 | 40 | 291.8 |
| CA60 | 5.0 | 1789.8 | - | 303.4 |
| PESO TOTAL (kg) | | | | |
| CA50 | 573.6 | | | |
| CA60 | 303.4 | | | |

Volume de concreto (C-25) = 14.71 m³
Área de forma = 235.58 m²

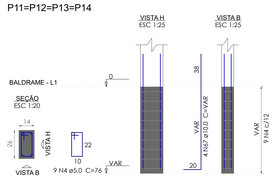
## P1=P4=P6=P8=P9=P10



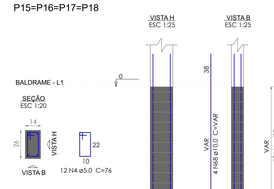

## P2=P7



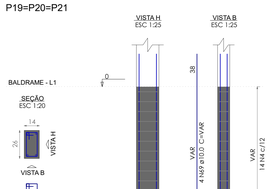

## P11=P12=P13=P14



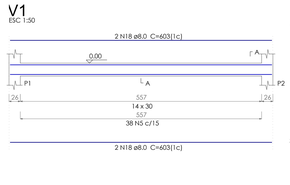

## P15=P16=P17=P18



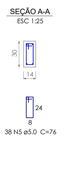

## P19=P20=P21



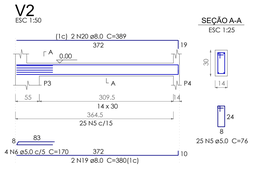

## V1
ESC 1:50



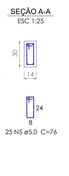

SEÇÃO A-A ESC 1:25



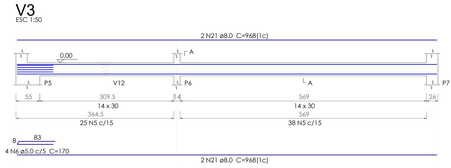

## V2
ESC 1:50



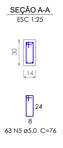

SEÇÃO A-A ESC 1:25



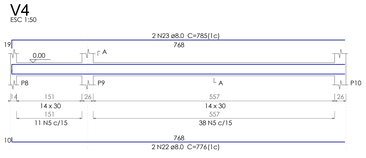

## V3
ESC 1:50




SEÇÃO A-A ESC 1:25

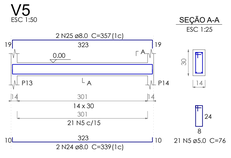



## V4
ESC 1:50




SEÇÃO A-A ESC 1:25

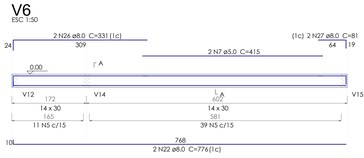
## V5
ESC 1:50




SEÇÃO A-A ESC 1:25

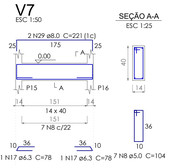



## V6
ESC 1:50



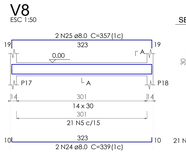

SEÇÃO A-A ESC 1:25

## V7
ESC 1:50



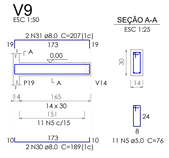

SEÇÃO A-A ESC 1:25

## V8
ESC 1:50




SEÇÃO A-A ESC 1:25

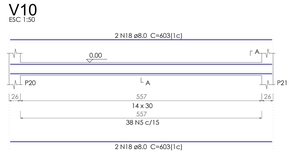
## V9
ESC 1:50




SEÇÃO A-A ESC 1:25

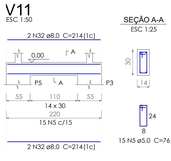



## V10
ESC 1:50




SEÇÃO A-A ESC 1:25

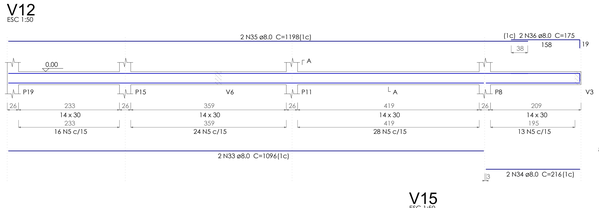
## V11
ESC 1:50




SEÇÃO A-A ESC 1:25

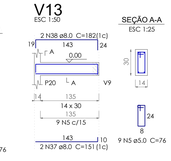



## V12
ESC 1:50

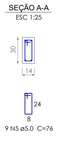



SEÇÃO A-A ESC 1:25

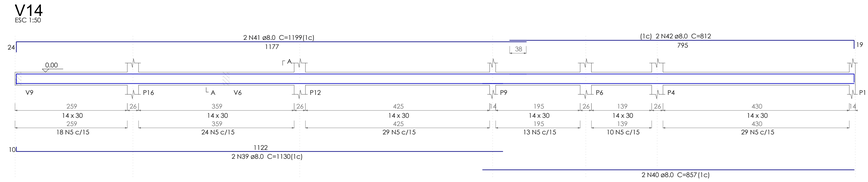
## V13
ESC 1:50




SEÇÃO A-A ESC 1:25

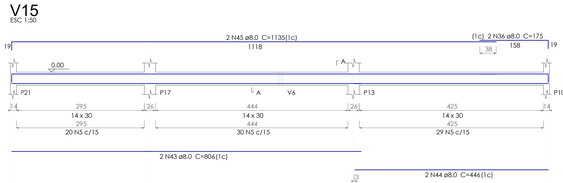



## V14
ESC 1:50

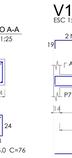



SEÇÃO A-A ESC 1:25

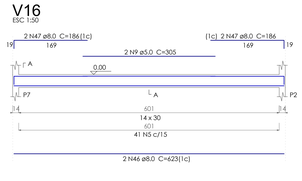
## V15
ESC 1:50




SEÇÃO A-A ESC 1:25

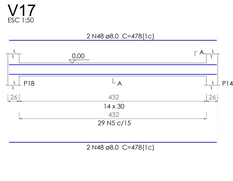



## V16
ESC 1:50

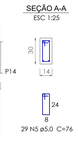



SEÇÃO A-A ESC 1:25

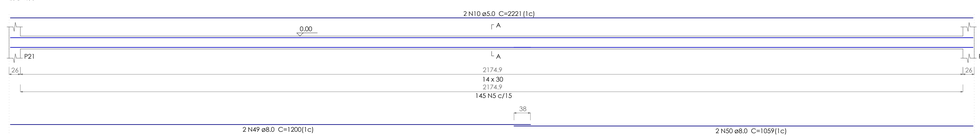
## V17
ESC 1:50



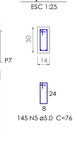

SEÇÃO A-A ESC 1:25



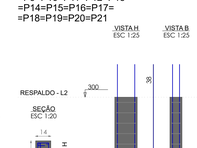

## V18
ESC 1:50



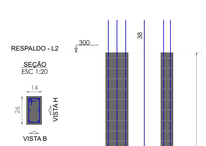

SEÇÃO A-A ESC 1:25



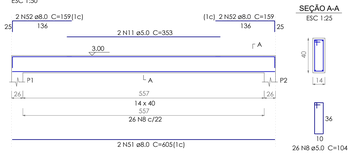

## P1=P3=P4=P5=P6=P8=
## =P9=P10=P11=P12=P13=
## =P14=P15=P16=P17=
## =P18=P19=P20=P21




## P2=P7

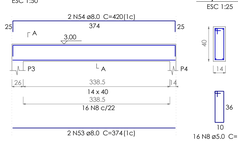



## V100
ESC 1:50



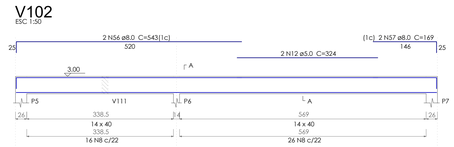

SEÇÃO A-A ESC 1:25

## V101
ESC 1:50



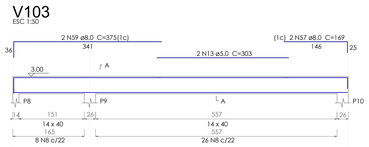

SEÇÃO A-A ESC 1:25

## V102
ESC 1:50

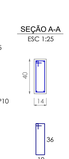



SEÇÃO A-A ESC 1:25

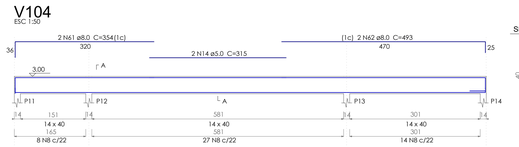
## V103
ESC 1:50




SEÇÃO A-A ESC 1:25

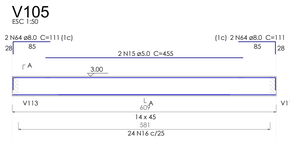



## V104
ESC 1:50

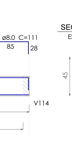



SEÇÃO A-A ESC 1:25

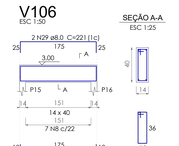
## V105
ESC 1:50




SEÇÃO A-A ESC 1:25




## V106
ESC 1:50




SEÇÃO A-A ESC 1:25

| Nº | DISCRIMINAÇÃO DAS REVISÕES | DATA | APROVAÇÃO |
|---|---|---|---|
| 0 | Emissão inicial | 01/11/2021 | JOSÉ NETO |

Planno
ENGENHARIA E GESTÃO

Obra: Berçário
EMEI Maria Araújo

Projetista: José Neto 5070209247
Proprietário: PMI

Projeto: Projeto Estrutural
Folha: 1
Descriminação: Único Detalhamento
Conj. 1 / Pte./Conj. 2

Data: 01/11/2021 | Escala: Indicada | Desenho: JOSÉ NETO | Conferência: Paulo Osório