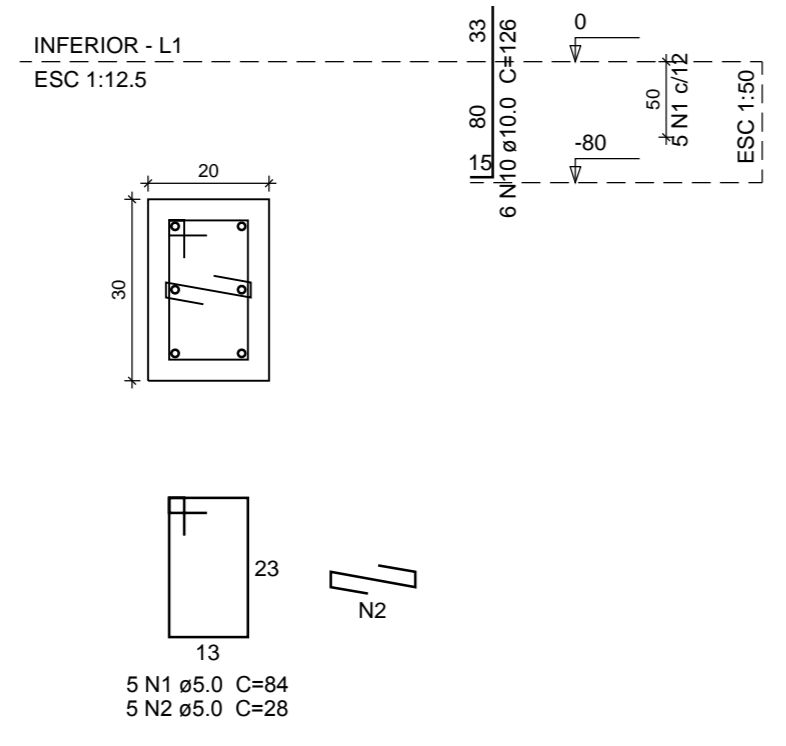
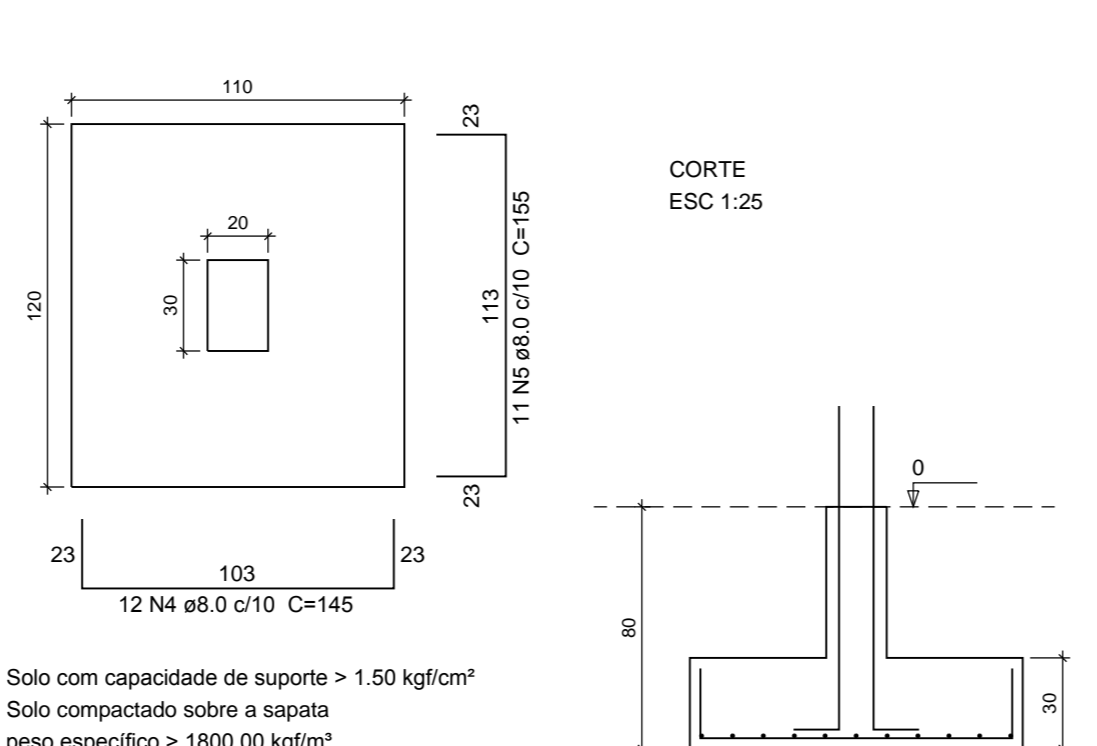


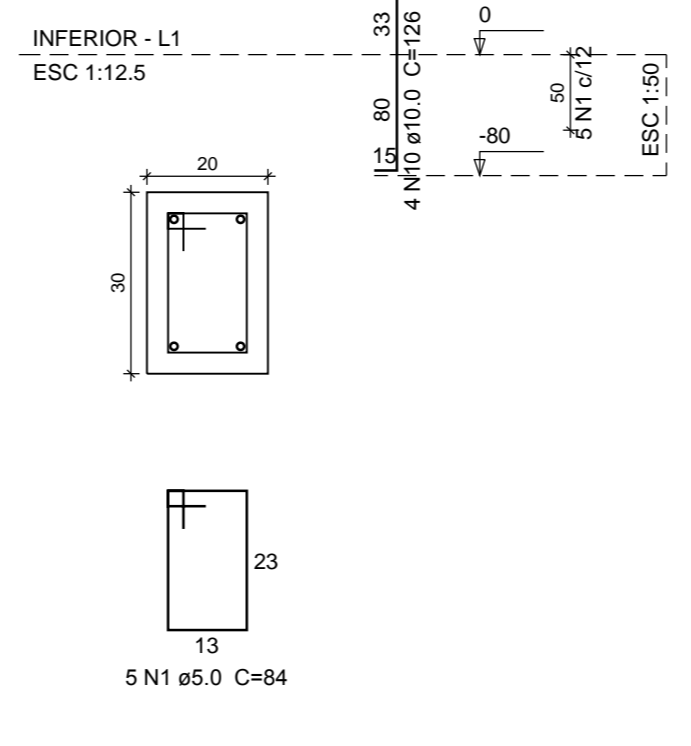
P42



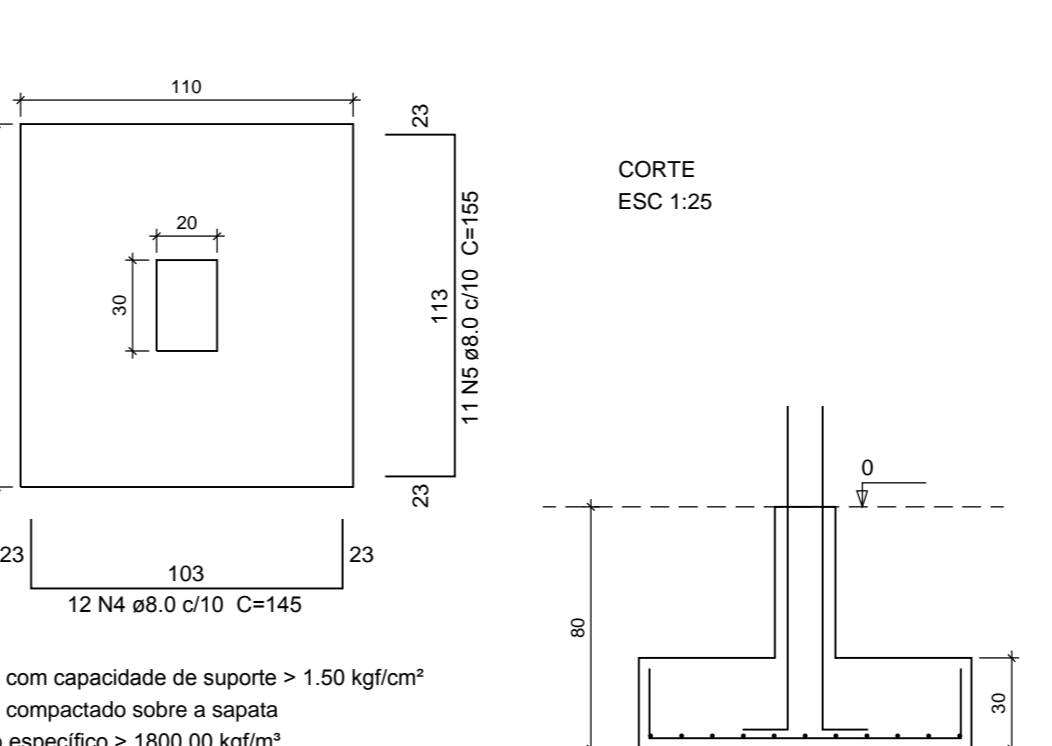
S42



P26=P36



S26=S36



Relação do aço

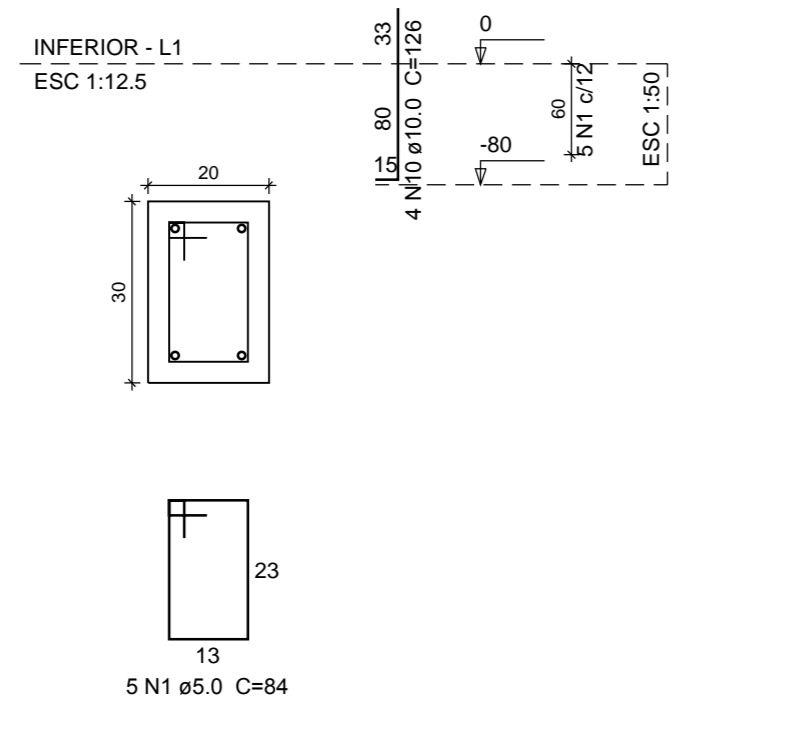
| CAÇO | N | DIAM (mm) | QUANT (Barras) | UNIT (cm) | C.TOTAL (cm) |
|------|----|-----------|----------------|-----------|--------------|
| CA60 | 1 | 5.0 | 25 | 84 | 2100 |
| CA60 | 2 | 5.0 | 10 | 28 | 280 |
| CA60 | 3 | 5.0 | 5 | 74 | 370 |
| CA60 | 4 | 8.0 | 36 | 145 | 5220 |
| CA60 | 5 | 8.0 | 33 | 155 | 5115 |
| CA60 | 6 | 8.0 | 26 | 135 | 3510 |
| CA60 | 7 | 8.0 | 20 | 145 | 2900 |
| CA60 | 8 | 8.0 | 6 | 155 | 930 |
| CA60 | 9 | 8.0 | 6 | 165 | 990 |
| CA60 | 10 | 10.0 | 28 | 126 | 3528 |

Resumo do aço

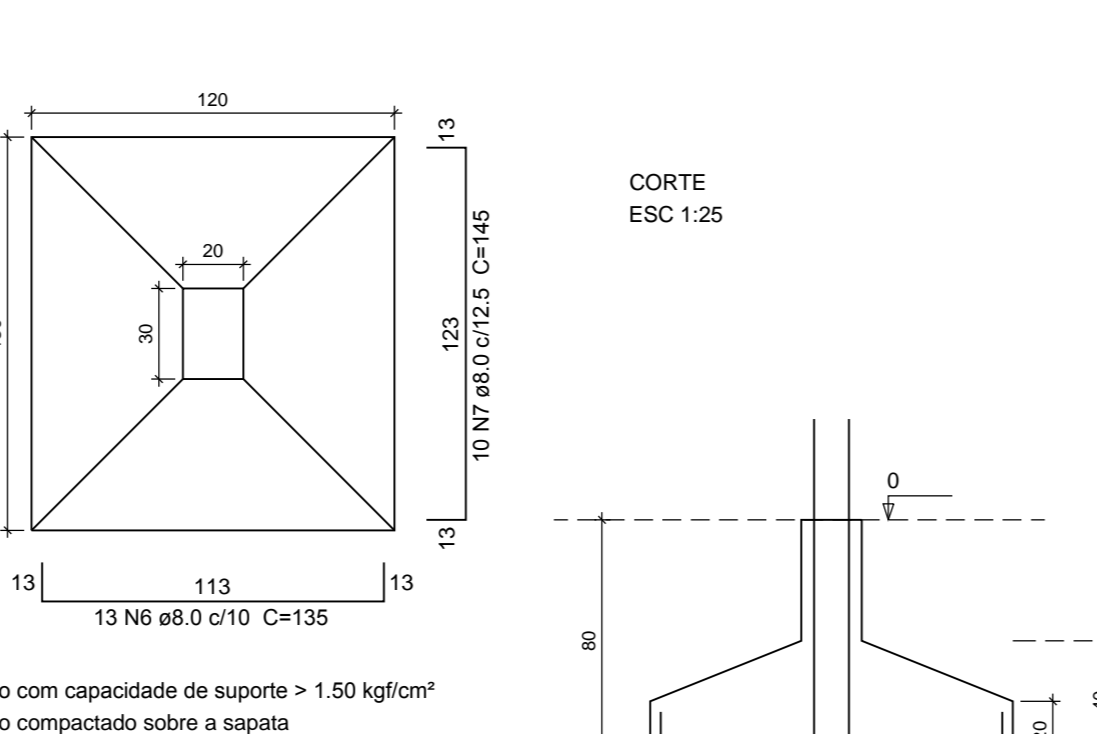
| CAÇO | DIAM (mm) | C.TOTAL (m) | PESO + 10% (kg) |
|------|-----------|-------------|-----------------|
| CA50 | 8.0 | 186.3 | 81 |
| CA50 | 10.0 | 35.3 | 23.9 |
| CA60 | 5.0 | 27.5 | 4.7 |
| CA50 | | 104.9 | |
| CA60 | | 4.7 | |

Volume de concreto (C-30) = 3.01 m³
Area de forma = 12.02 m²

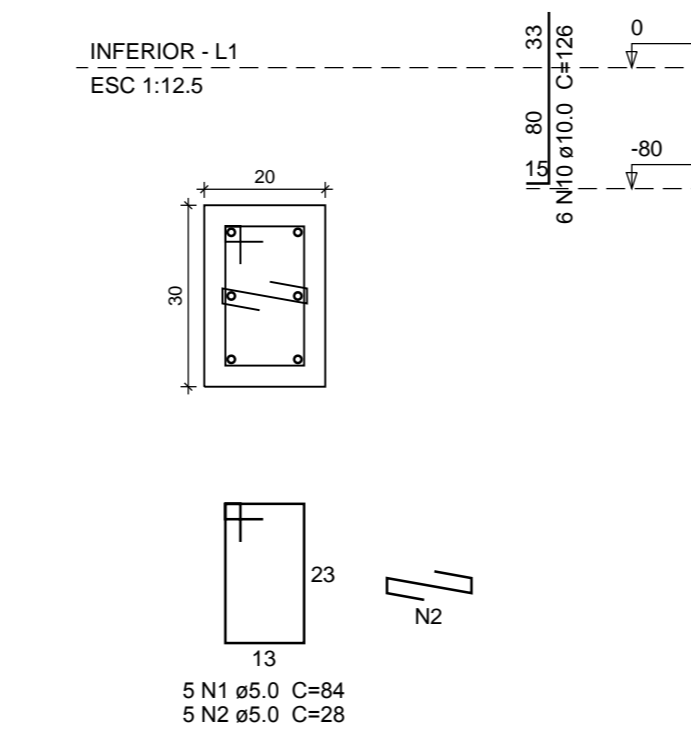
P37



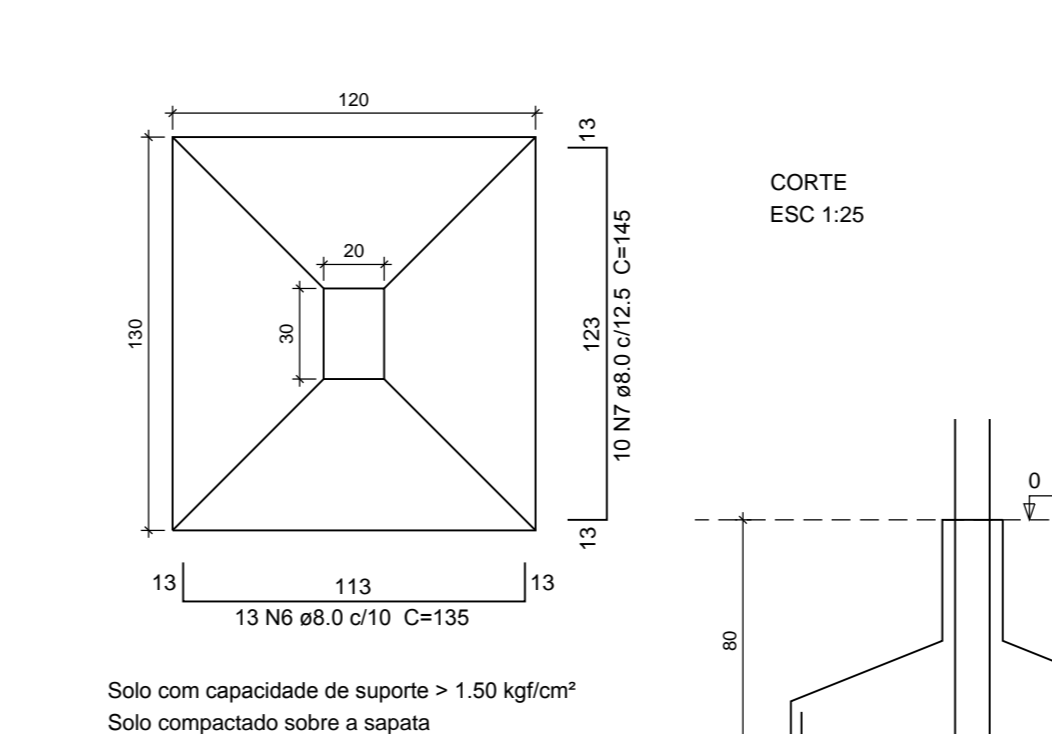
S37



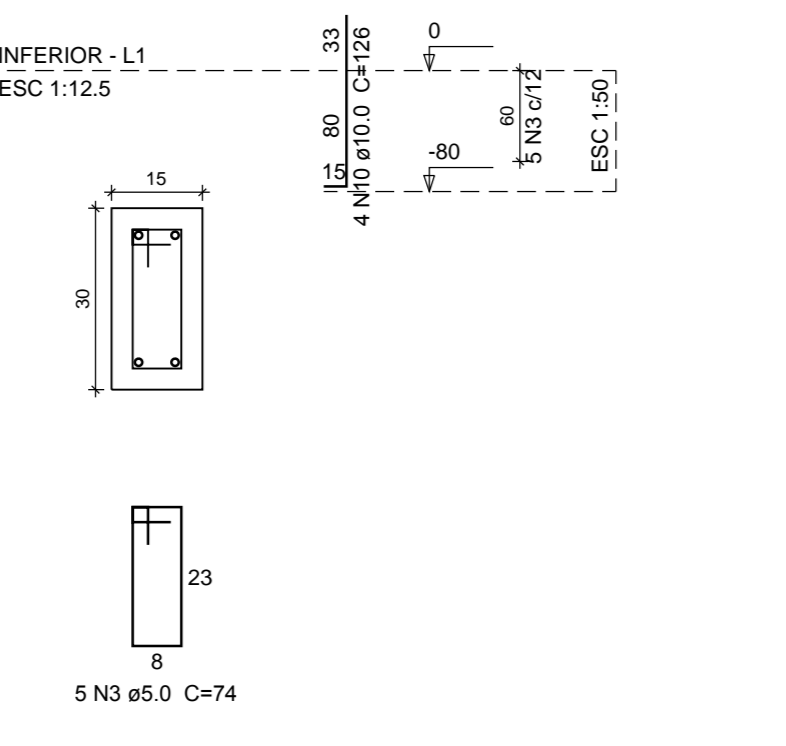
P27



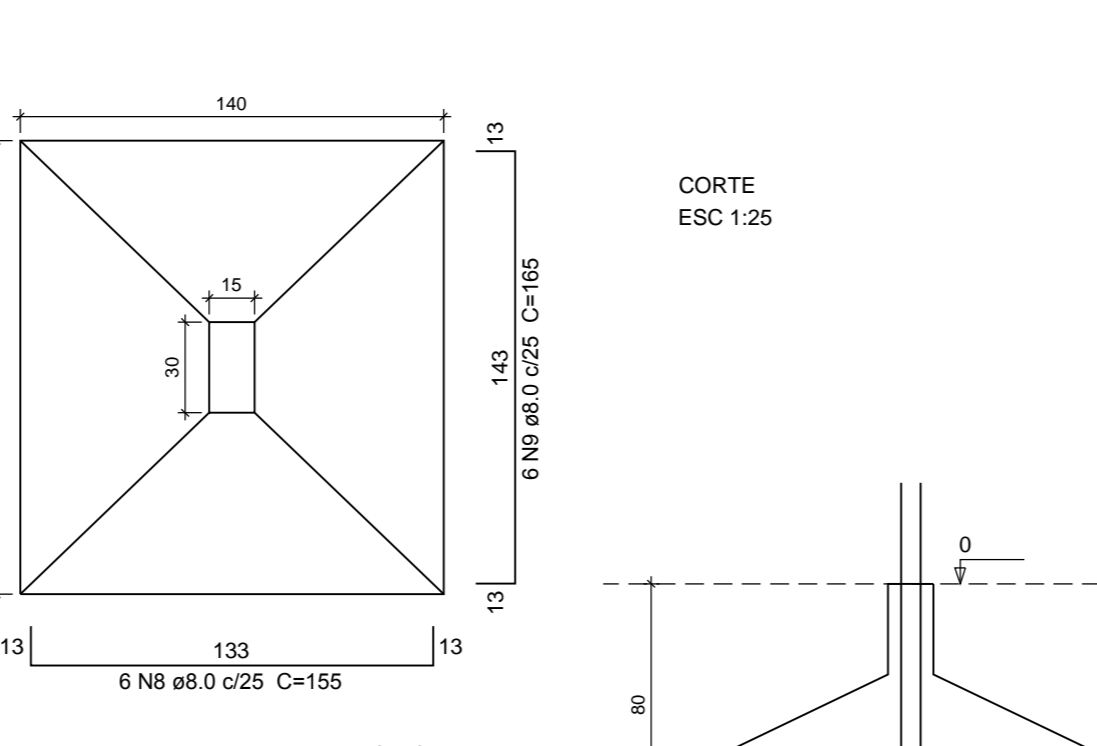
S27



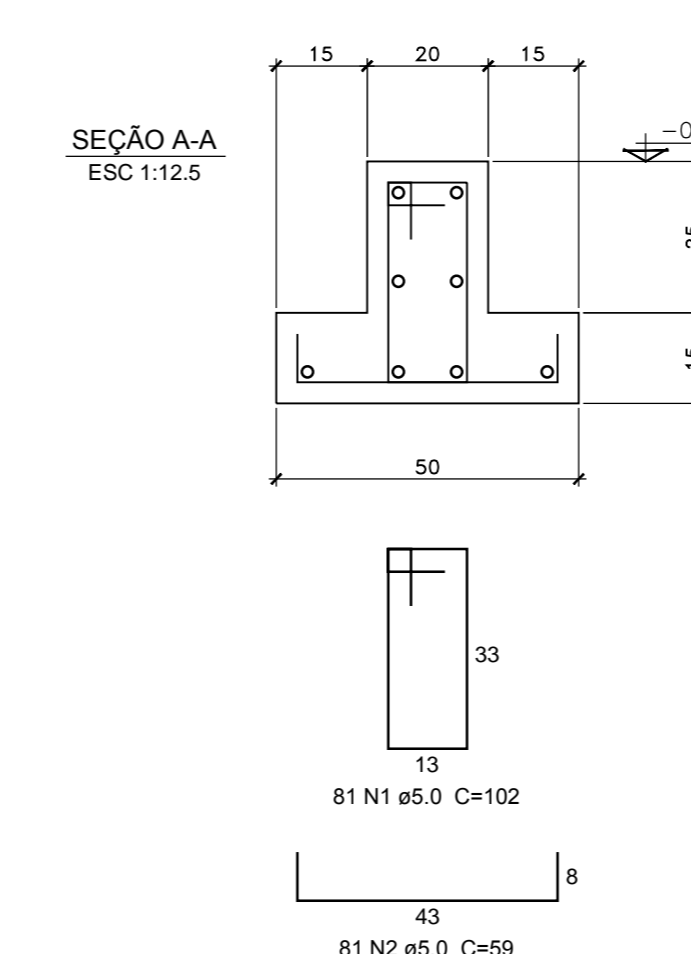
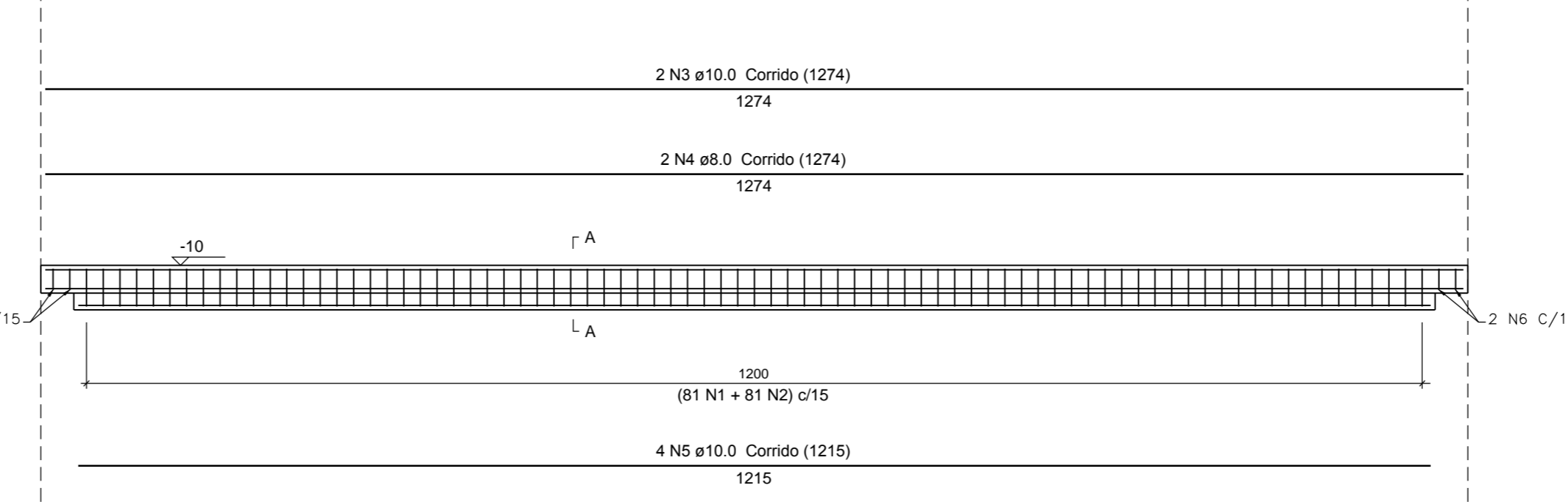
P19



S19



SAP1 (20 x 40)



LISTA DE FERRIS SAP1

| N | # | Ø | COMPRIMENTOS (cm) | UNIT | TOTAL |
|---|------|----|-------------------|------|-------|
| 1 | 5.0 | 81 | 102 | 8202 | |
| 2 | 5.0 | 81 | 59 | 4779 | |
| 3 | 10.0 | 2 | 1274 | 2548 | |
| 4 | 8.0 | 2 | 1274 | 2548 | |
| 5 | 10.0 | 4 | 1215 | 4860 | |
| 6 | 5.0 | 4 | 72 | 288 | |

RESUMO CA 50

| Ø | COMP. TOTAL (m) | PESOS (kg/m) | TOTAL + 10% (kg) |
|------------|-----------------|--------------|------------------|
| 5.0 | 25.48 | 0.395 | 11 |
| 10.0 | 74.68 | 0.617 | 23 |
| PESO TOTAL | | | 61 |

RESUMO CA 60

| Ø | COMP. TOTAL (m) | PESOS (kg/m) | TOTAL + 10% (kg) |
|------------|-----------------|--------------|------------------|
| 5.0 | 133.29 | 0.194 | 23 |
| PESO TOTAL | | | 23 |

Volume de concreto (C-30) = 1.56 m³
Area de forma = 10.26 m²

Ciente: **COMPANHIA DOCAS DO RIO DE JANEIRO**
Superintendência do Porto do Rio de Janeiro

Executado por: **Tostes & Medeiros Engenharia Ltda.**

Título: **PROJETO ESTRUTURAL PARA CENTRAL DE RESÍDUOS**
FORMA E ARMAÇÃO 03/03 SAPATAS

Local: **Porto do Rio de Janeiro**

Sector: **Porto do Rio de Janeiro**

Data de Execução: **AGOSTO 2013** | Obra: | Desenho nº: | Folha: **04/17**

Emissão: **Desenhista: ALVANter** | **Resp. Técnico:** | **Verificação:**

ESCALA GRÁFICA
0 10 20 40 60 80 100m