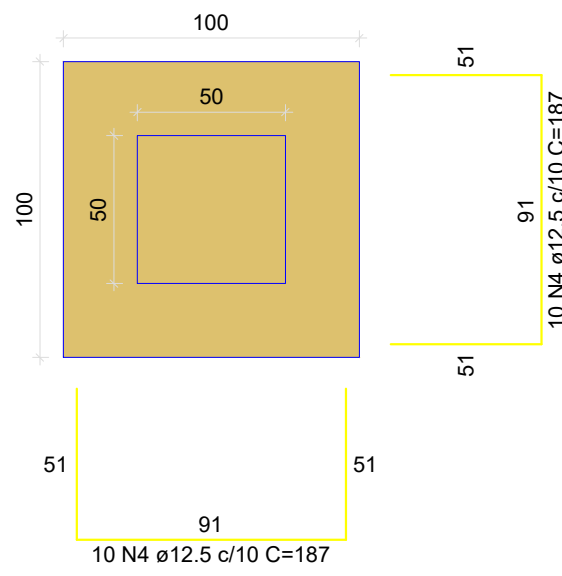
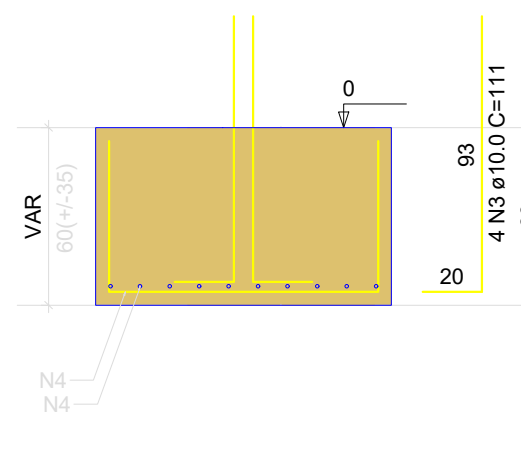


S13  
PLANTA  
ESC 1:25

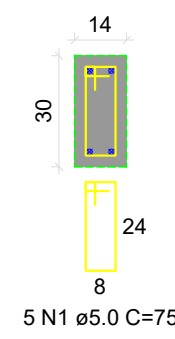


Solo com capacidade de suporte > 2.50 kgf/cm²  
Solo compactado sobre a sapata  
peso específico > 1600.00 kgf/m³

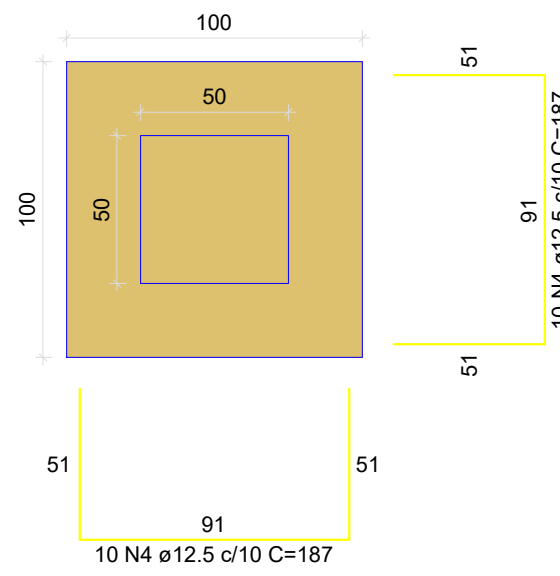
CORTE  
ESC 1:25



DETALHE DO PILAR  
ESC 1:20

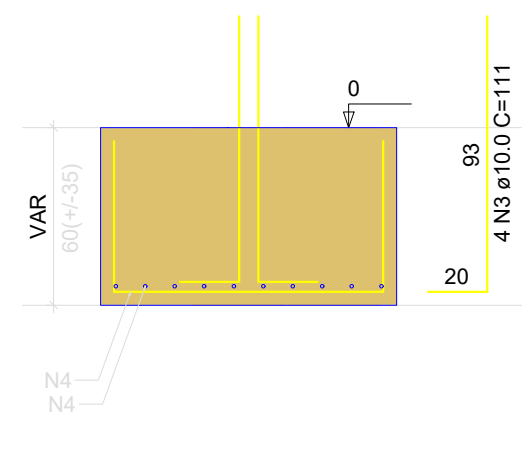


S14  
PLANTA  
ESC 1:25

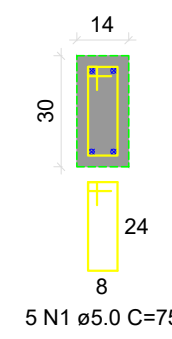


Solo com capacidade de suporte > 2.50 kgf/cm²  
Solo compactado sobre a sapata  
peso específico > 1600.00 kgf/m³

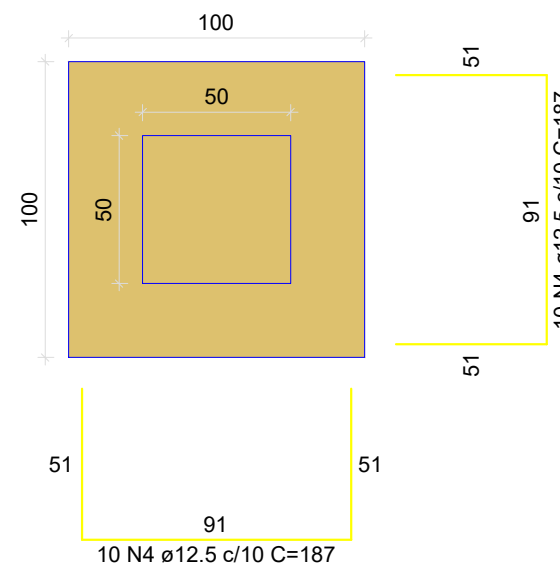
CORTE  
ESC 1:25



DETALHE DO PILAR  
ESC 1:20

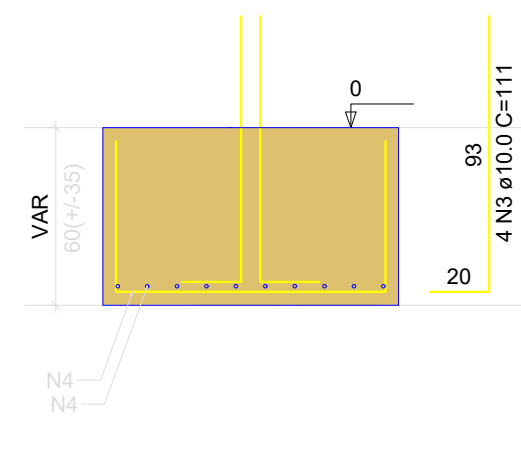


S15  
PLANTA  
ESC 1:25

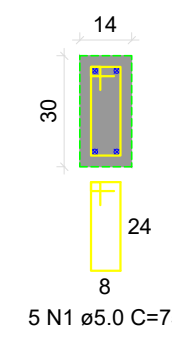


Solo com capacidade de suporte > 2.50 kgf/cm²  
Solo compactado sobre a sapata  
peso específico > 1600.00 kgf/m³

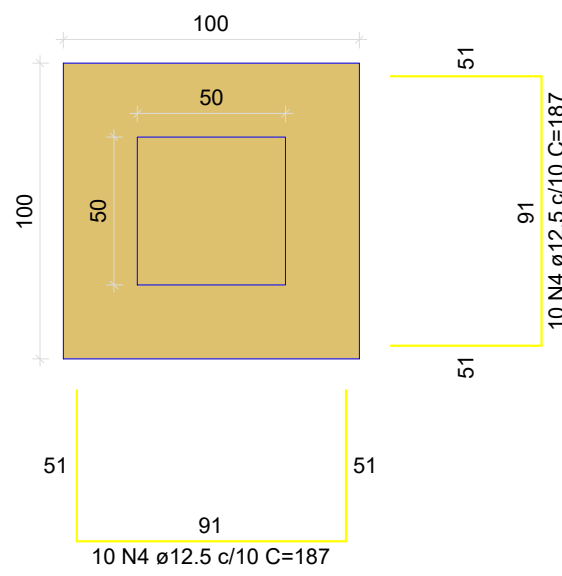
CORTE  
ESC 1:25



DETALHE DO PILAR  
ESC 1:20

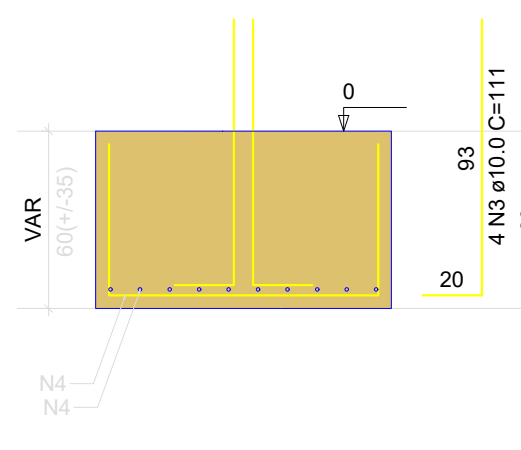


S16  
PLANTA  
ESC 1:25

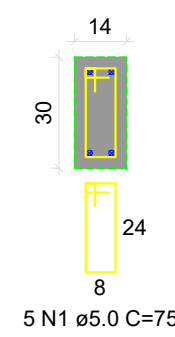


Solo com capacidade de suporte > 2.50 kgf/cm²  
Solo compactado sobre a sapata  
peso específico > 1600.00 kgf/m³

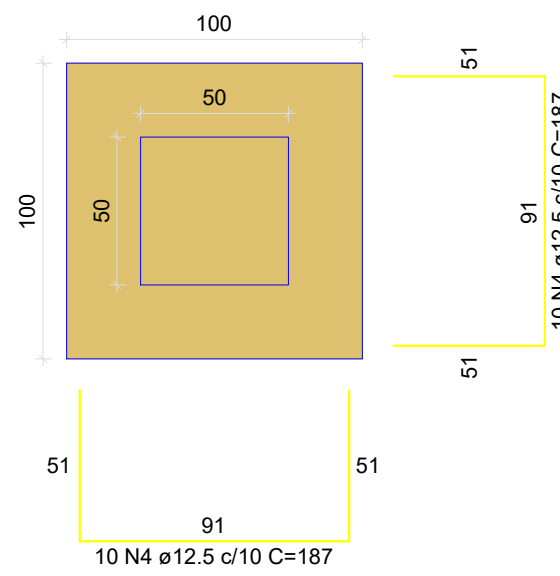
CORTE  
ESC 1:25



DETALHE DO PILAR  
ESC 1:20

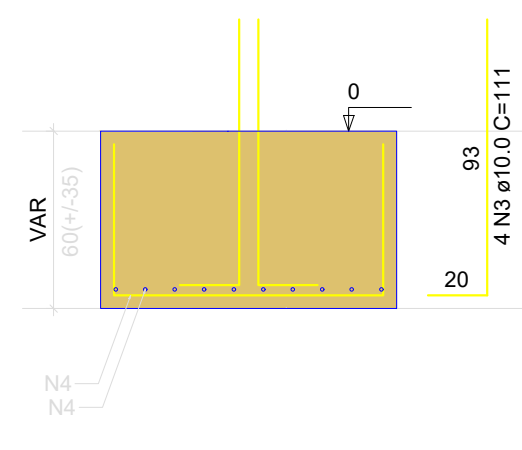


S17  
PLANTA  
ESC 1:25

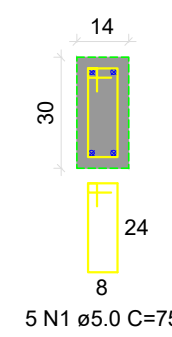


Solo com capacidade de suporte > 2.50 kgf/cm²  
Solo compactado sobre a sapata  
peso específico > 1600.00 kgf/m³

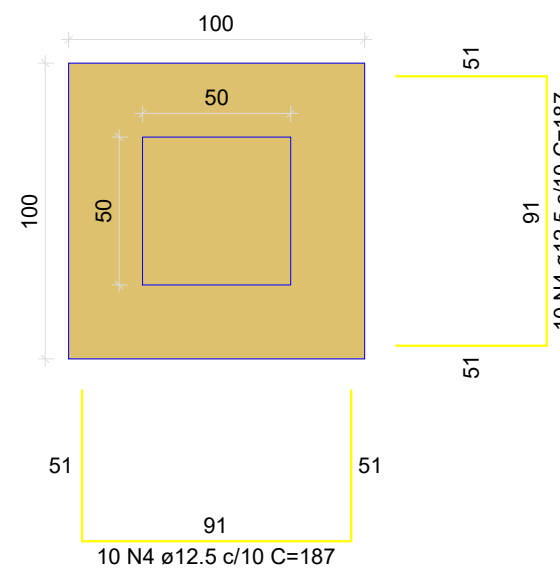
CORTE  
ESC 1:25



DETALHE DO PILAR  
ESC 1:20

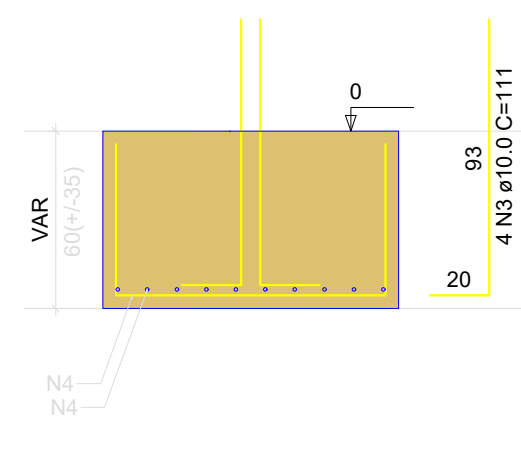


S18  
PLANTA  
ESC 1:25

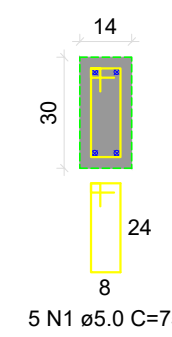


Solo com capacidade de suporte > 2.50 kgf/cm²  
Solo compactado sobre a sapata  
peso específico > 1600.00 kgf/m³

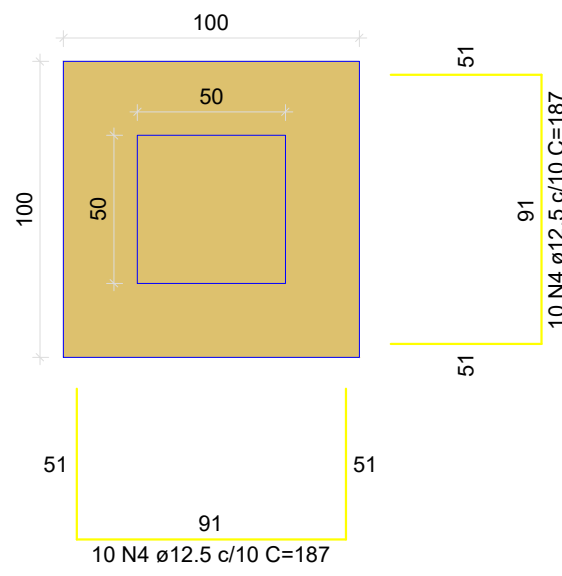
CORTE  
ESC 1:25



DETALHE DO PILAR  
ESC 1:20

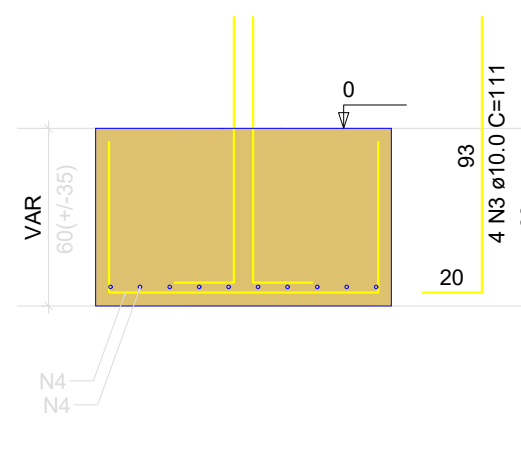


S19  
PLANTA  
ESC 1:25

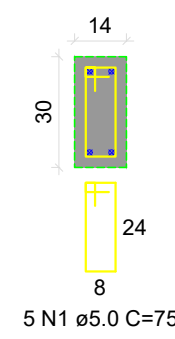


Solo com capacidade de suporte > 2.50 kgf/cm²  
Solo compactado sobre a sapata  
peso específico > 1600.00 kgf/m³

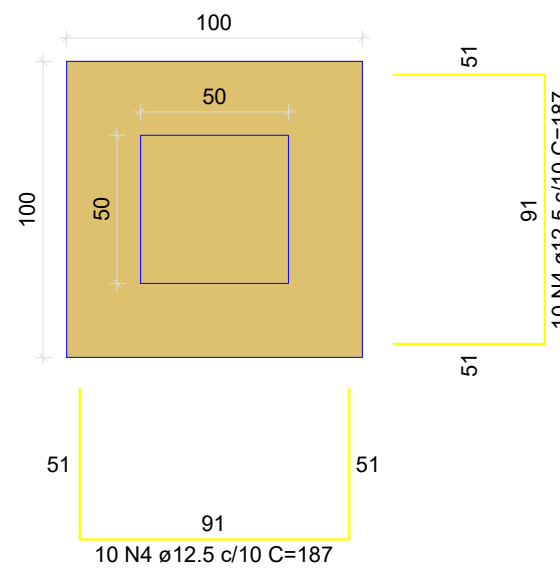
CORTE  
ESC 1:25



DETALHE DO PILAR  
ESC 1:20

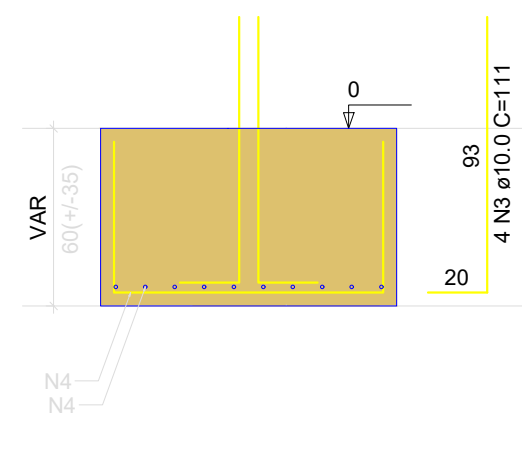


S20  
PLANTA  
ESC 1:25

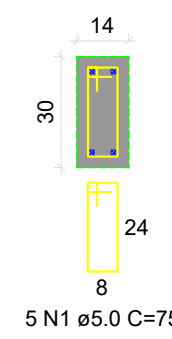


Solo com capacidade de suporte > 2.50 kgf/cm²  
Solo compactado sobre a sapata  
peso específico > 1600.00 kgf/m³

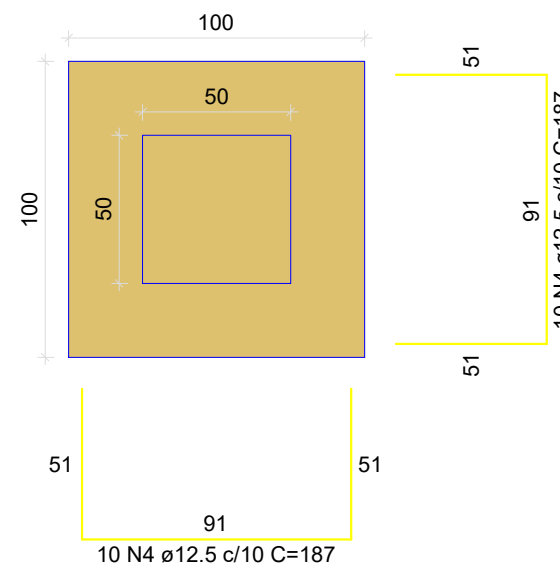
CORTE  
ESC 1:25



DETALHE DO PILAR  
ESC 1:20

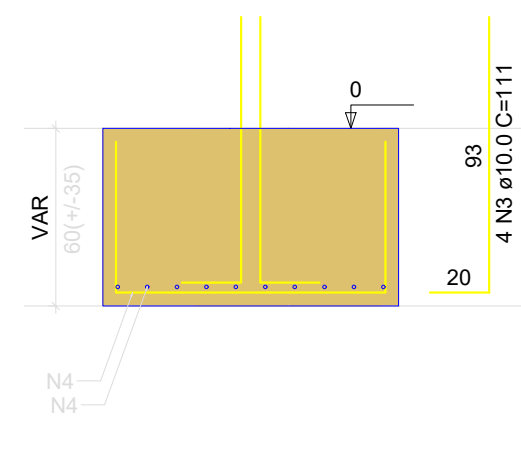


S21  
PLANTA  
ESC 1:25

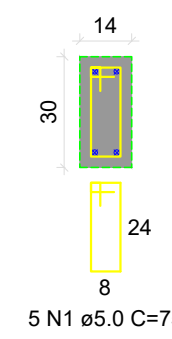


Solo com capacidade de suporte > 2.50 kgf/cm²  
Solo compactado sobre a sapata  
peso específico > 1600.00 kgf/m³

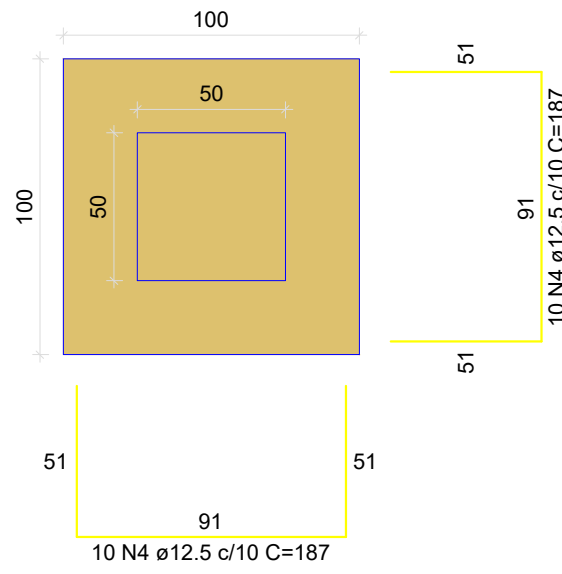
CORTE  
ESC 1:25



DETALHE DO PILAR  
ESC 1:20

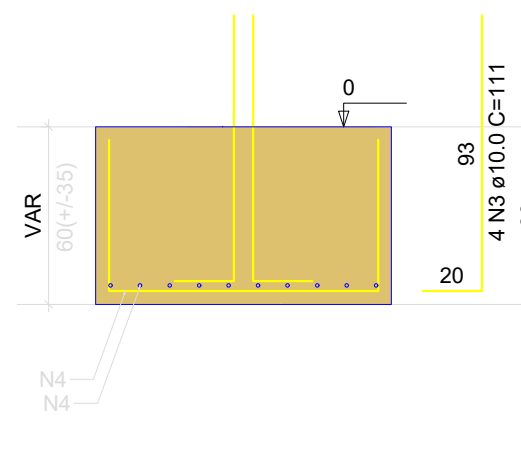


S22  
PLANTA  
ESC 1:25

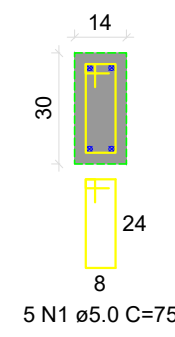


Solo com capacidade de suporte > 2.50 kgf/cm²  
Solo compactado sobre a sapata  
peso específico > 1600.00 kgf/m³

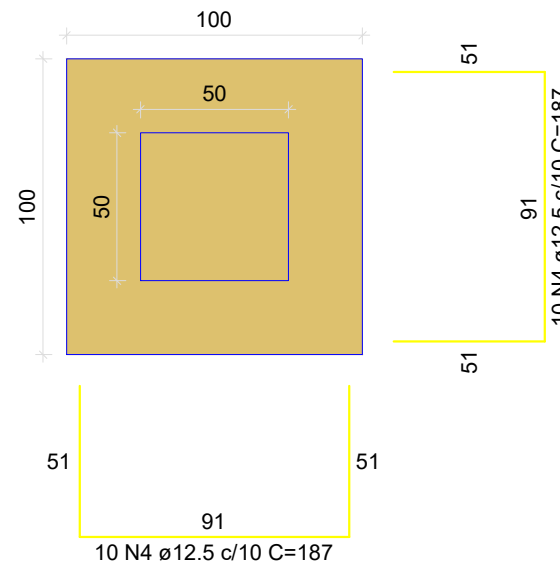
CORTE  
ESC 1:25



DETALHE DO PILAR  
ESC 1:20

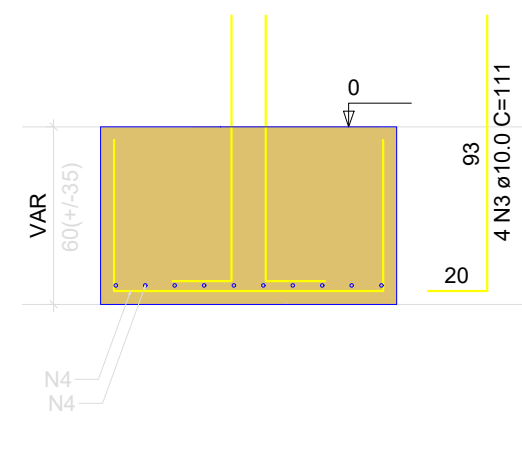


S23  
PLANTA  
ESC 1:25

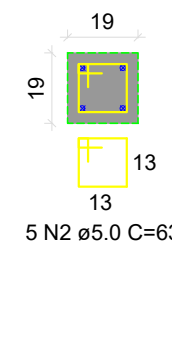


Solo com capacidade de suporte > 2.50 kgf/cm²  
Solo compactado sobre a sapata  
peso específico > 1600.00 kgf/m³

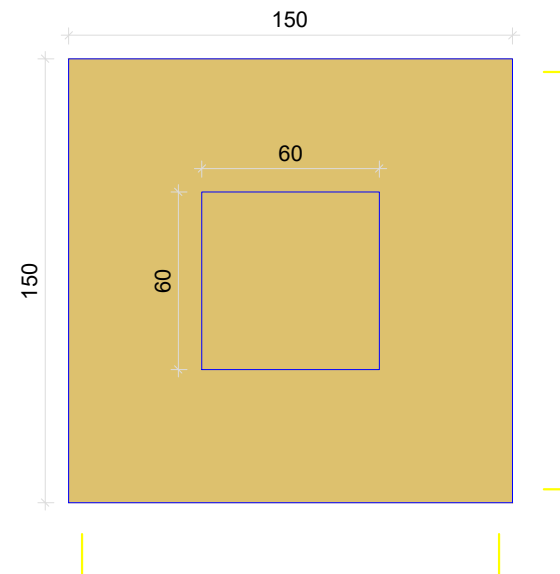
CORTE  
ESC 1:25



DETALHE DO PILAR  
ESC 1:20

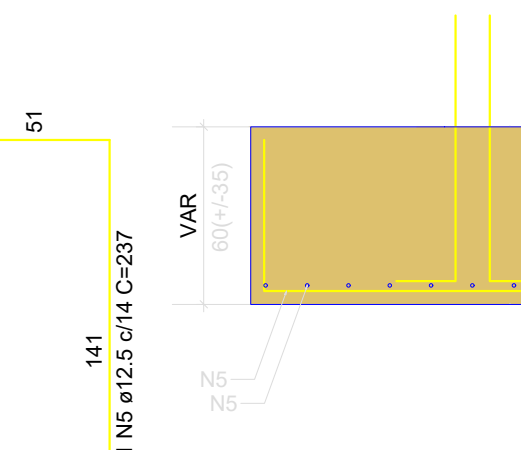


S24  
PLANTA  
ESC 1:25

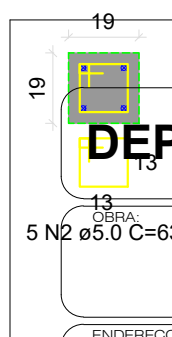


Solo com capacidade de suporte > 2.50 kgf/cm²  
Solo compactado sobre a sapata  
peso específico > 1600.00 kgf/m³

CORTE  
ESC 1:25



DETALHE DO PILAR  
ESC 1:20



| RELAÇÃO DO AÇO |     |     |  |  |  |
|----------------|-----|-----|--|--|--|
| S13            | S14 | S15 |  |  |  |
| S16            | S17 | S18 |  |  |  |
| S19            | S20 | S21 |  |  |  |
| S22            | S23 | S24 |  |  |  |

| AÇO  | N | DIAM (mm) | QUANT | C.UNIT (cm) | C.TOTAL (cm) |
|------|---|-----------|-------|-------------|--------------|
| CA60 | 1 | 5.0       | 50    | 75          | 3750         |
| CA50 | 2 | 5.0       | 10    | 63          | 630          |
|      | 3 | 10.0      | 48    | 111         | 5328         |
|      | 4 | 12.5      | 220   | 187         | 41140        |
|      | 5 | 12.5      | 22    | 237         | 5214         |

#### RESUMO DO AÇO

| AÇO             | DIAM (mm) | C.TOTAL (m) | PESO + 10% (kg) |
|-----------------|-----------|-------------|-----------------|
| CA50            | 10.0      | 53.3        | 36.1            |
| CA60            | 12.5      | 483.6       | 491.2           |
| PESO TOTAL (kg) |           |             | 7.4             |
| CA50            | 527.3     |             |                 |
| CA60            | 7.4       |             |                 |

Volume de concreto (C-30) = 7,95 m³  
Área de forma = 30.00 m²

## DEPARTAMENTO DE ENGENHARIA

### CRECHE INFÂNCIA FELIZ

ENDEREÇO DA OBRA:

RUA CEARÁ, ESQUINA COM A RUA SÃO CAETANO

CONTEÚDO:

PROJETO ESTRUTURAL

PROPRIETÁRIO:

Maycon Lopes Simioni  
Prefeito do Município de Laranjal  
CPF: 95.684.536/0001-80

DESENHO:

PAULO H.

ESCALA:

Indicada

RESPONSÁVEL TÉCNICO PELO PROJETO:

PAULO HENRIQUE RODRIGUES MEDEIROS  
ENGENHEIRO CIVIL-CREA-PR 168.345/D



PRANCHIA

02/06

Laranjal, 21 de maio de 2025.