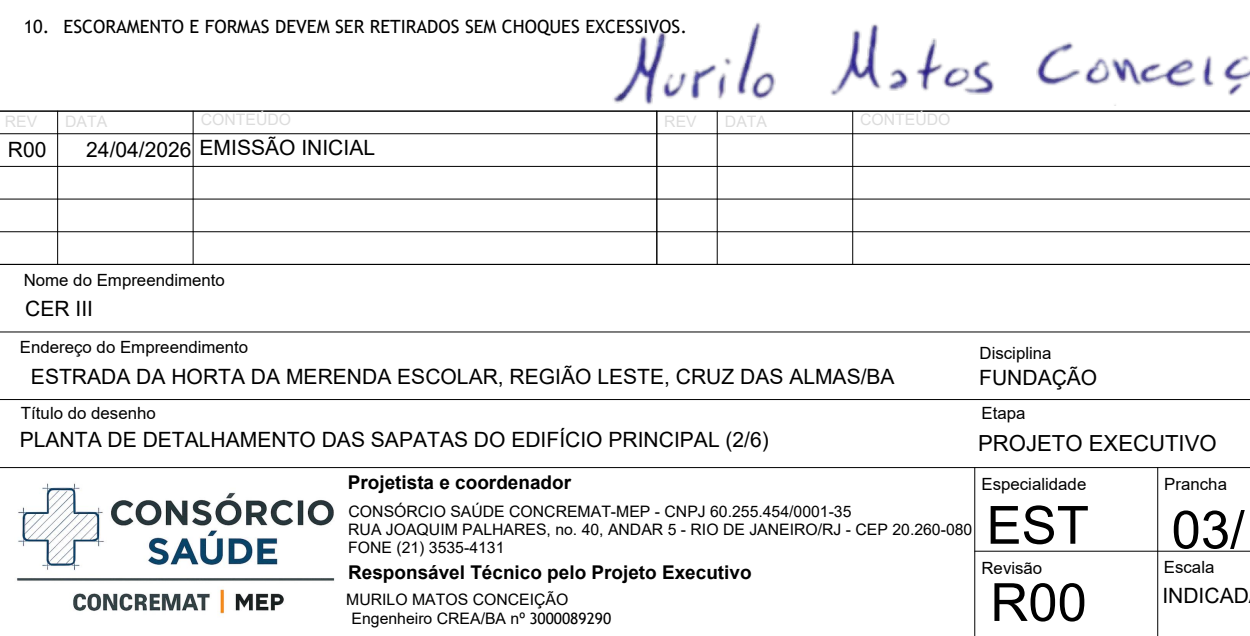
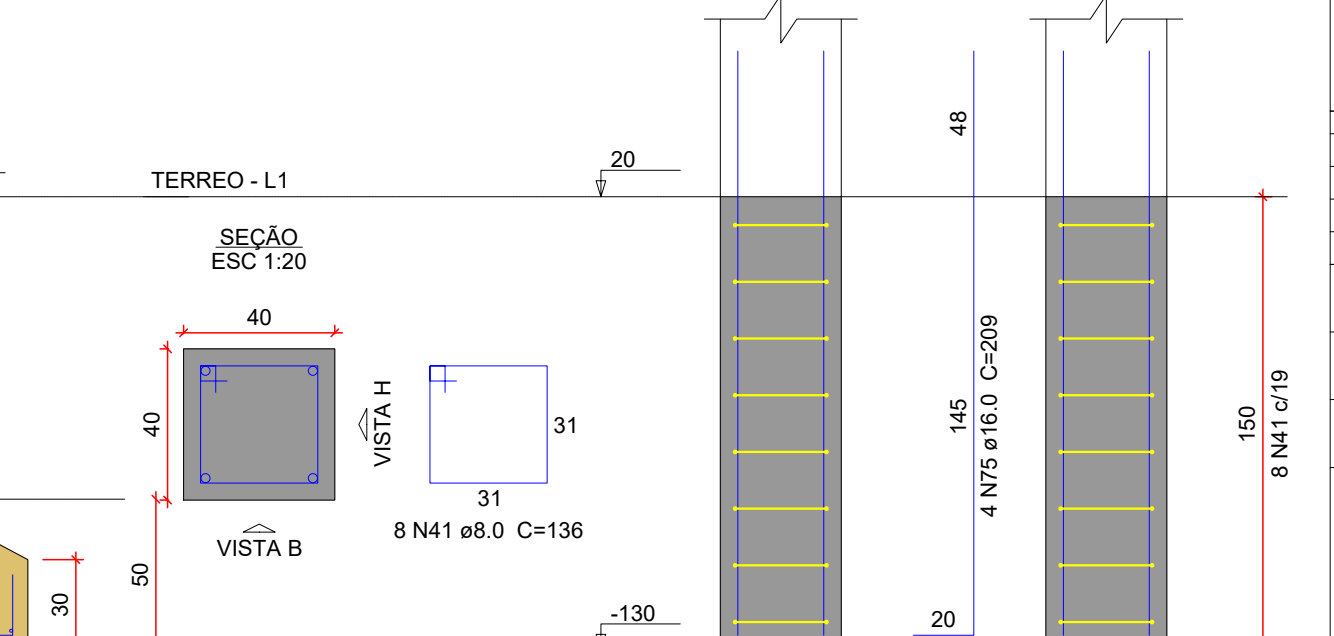
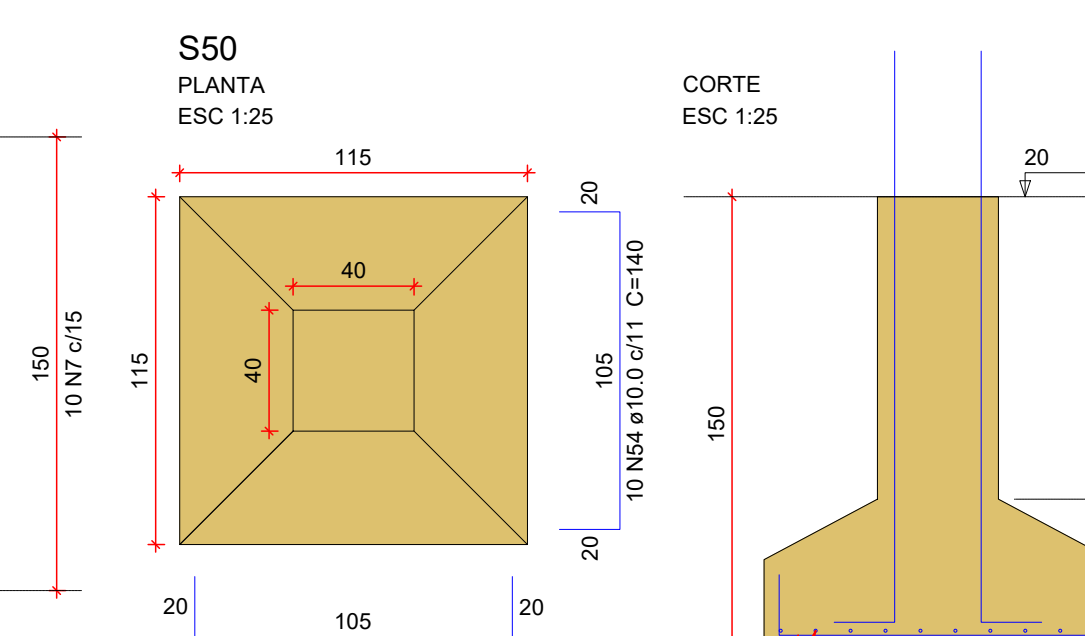
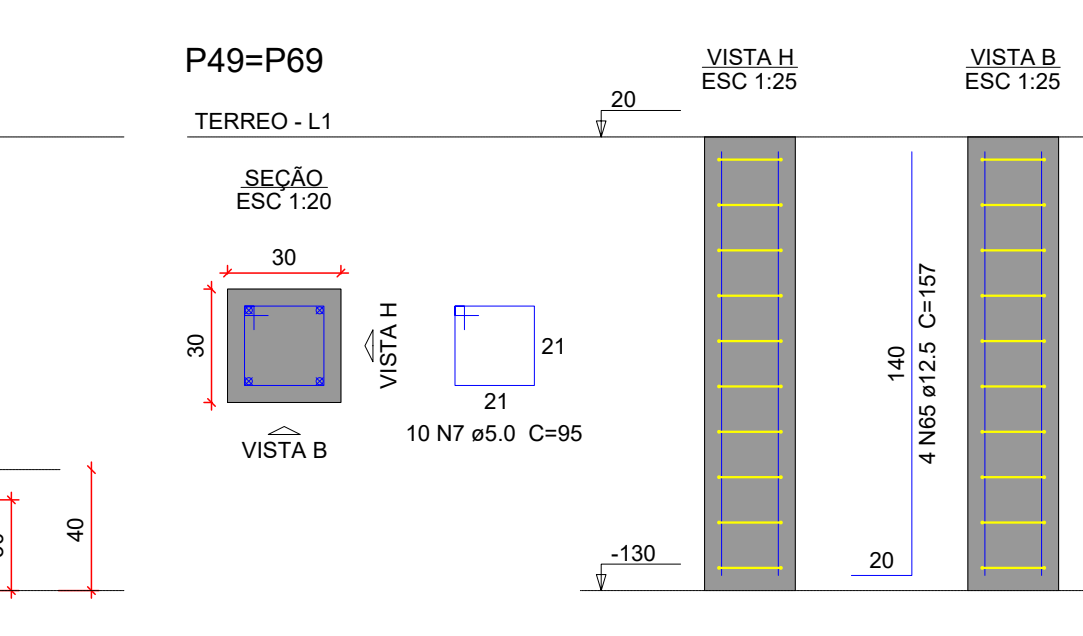
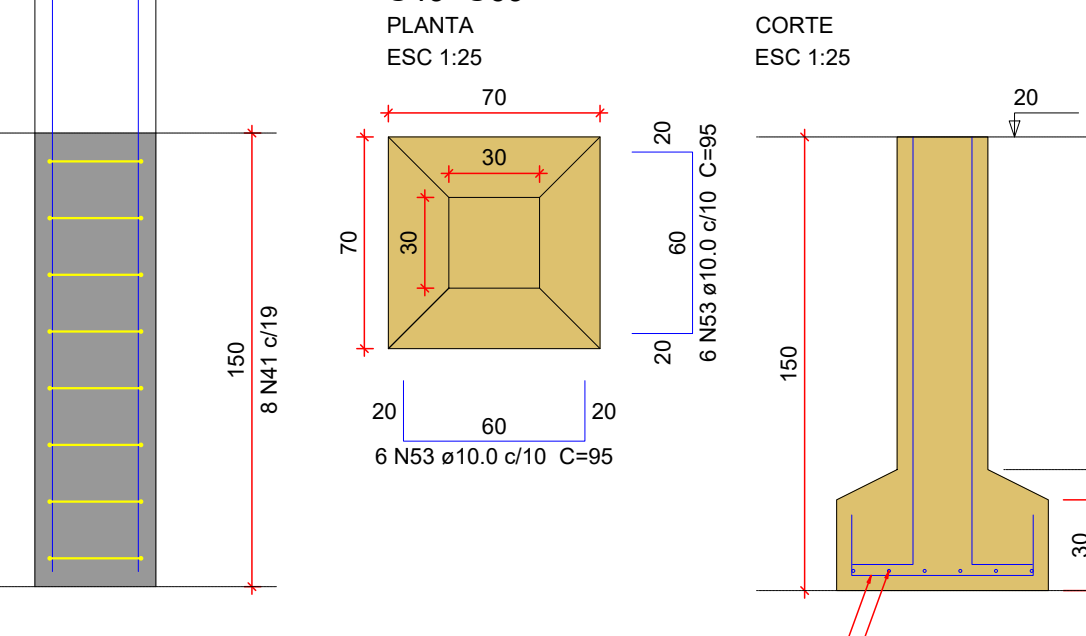
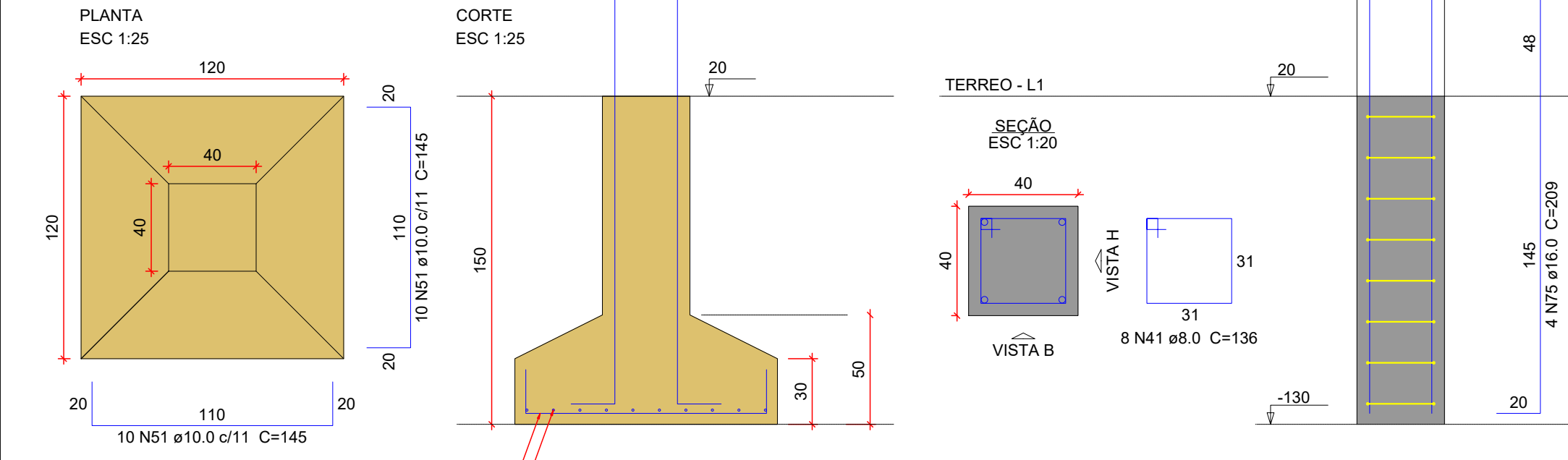
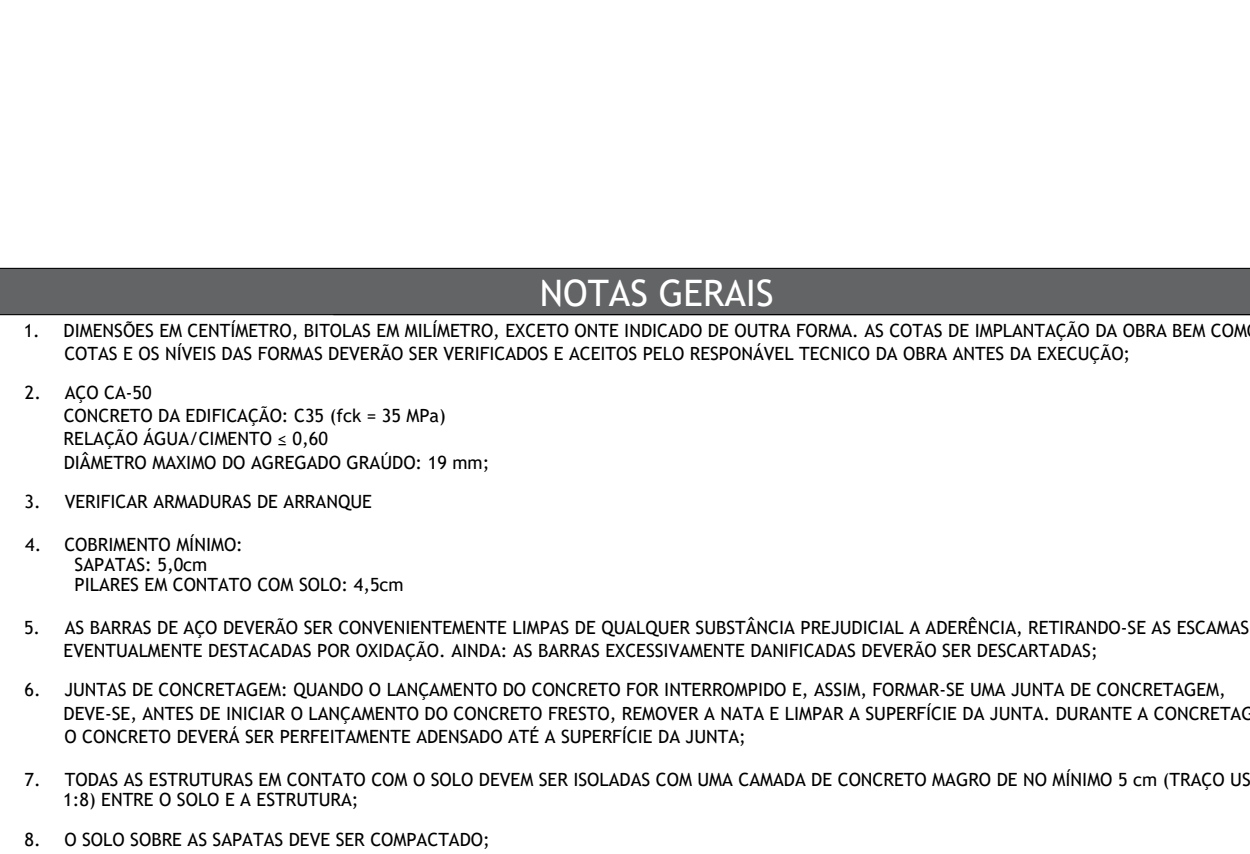
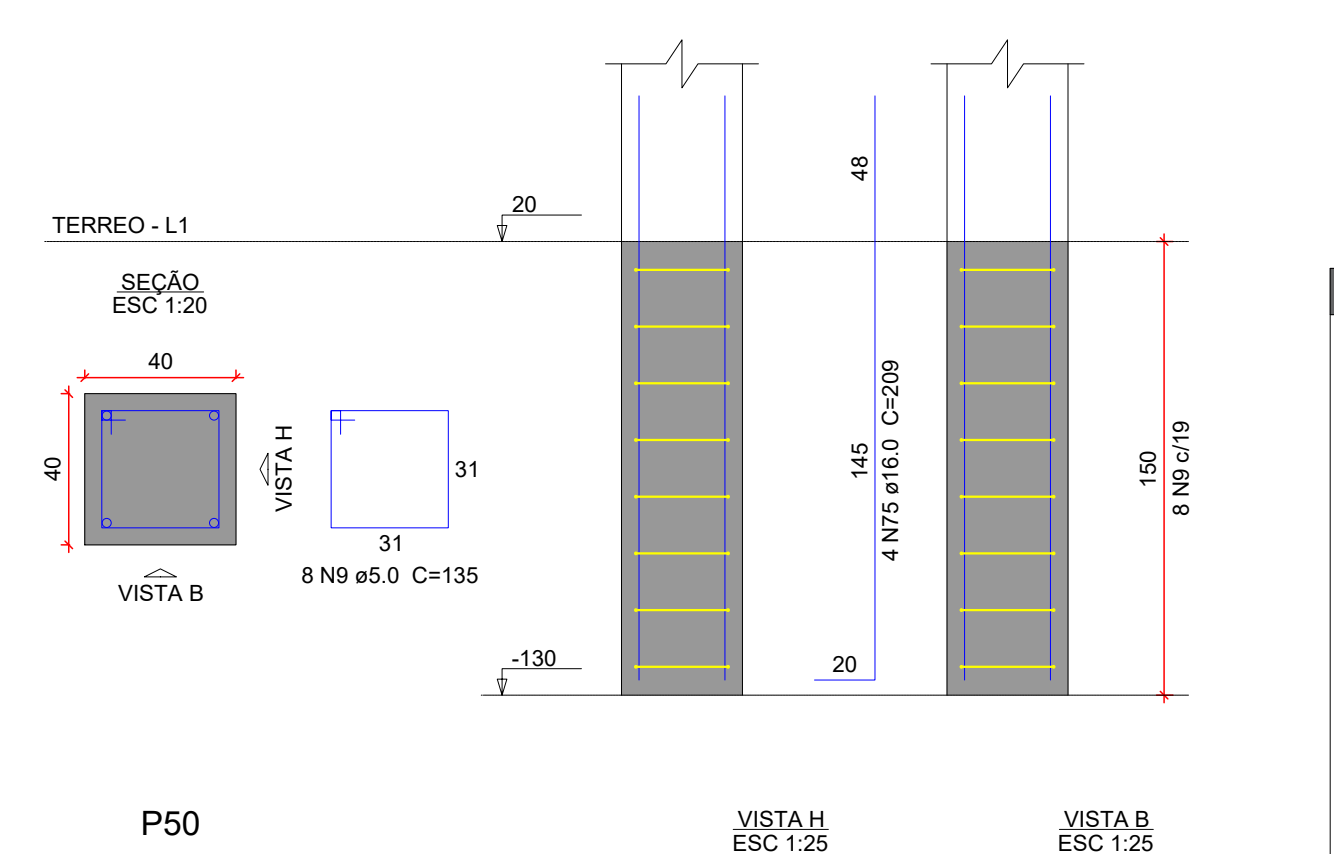
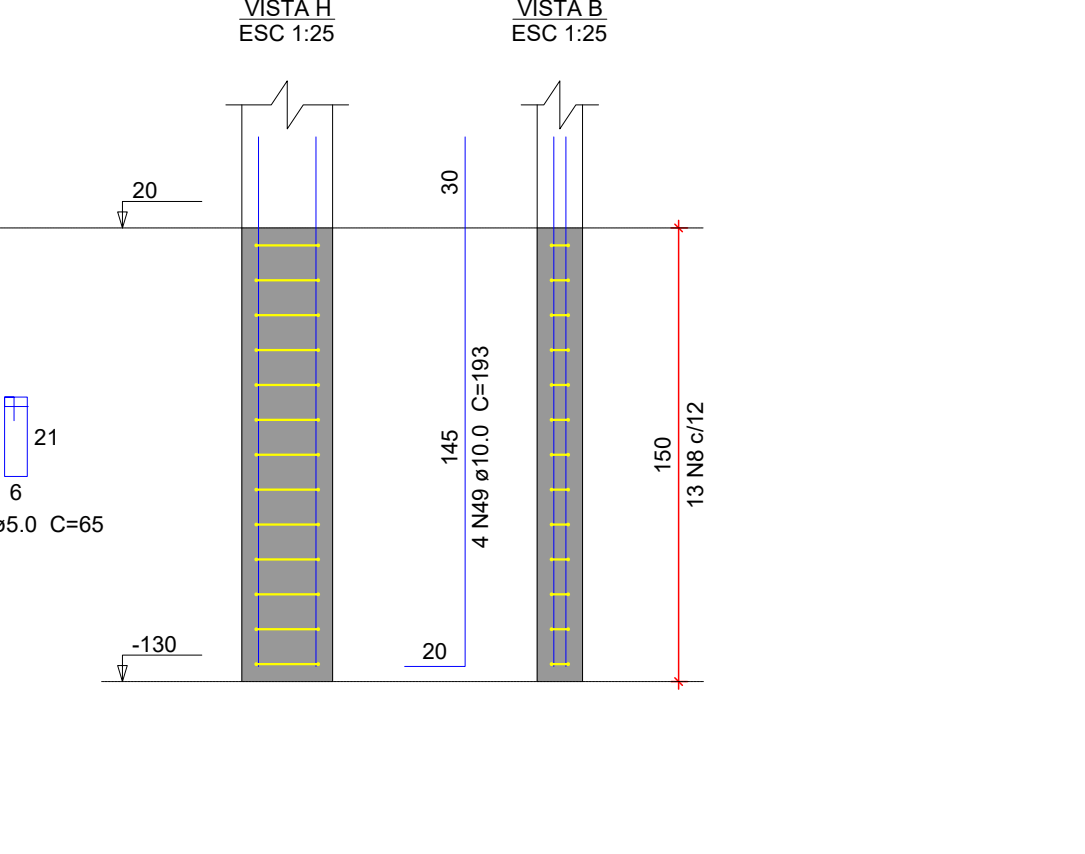
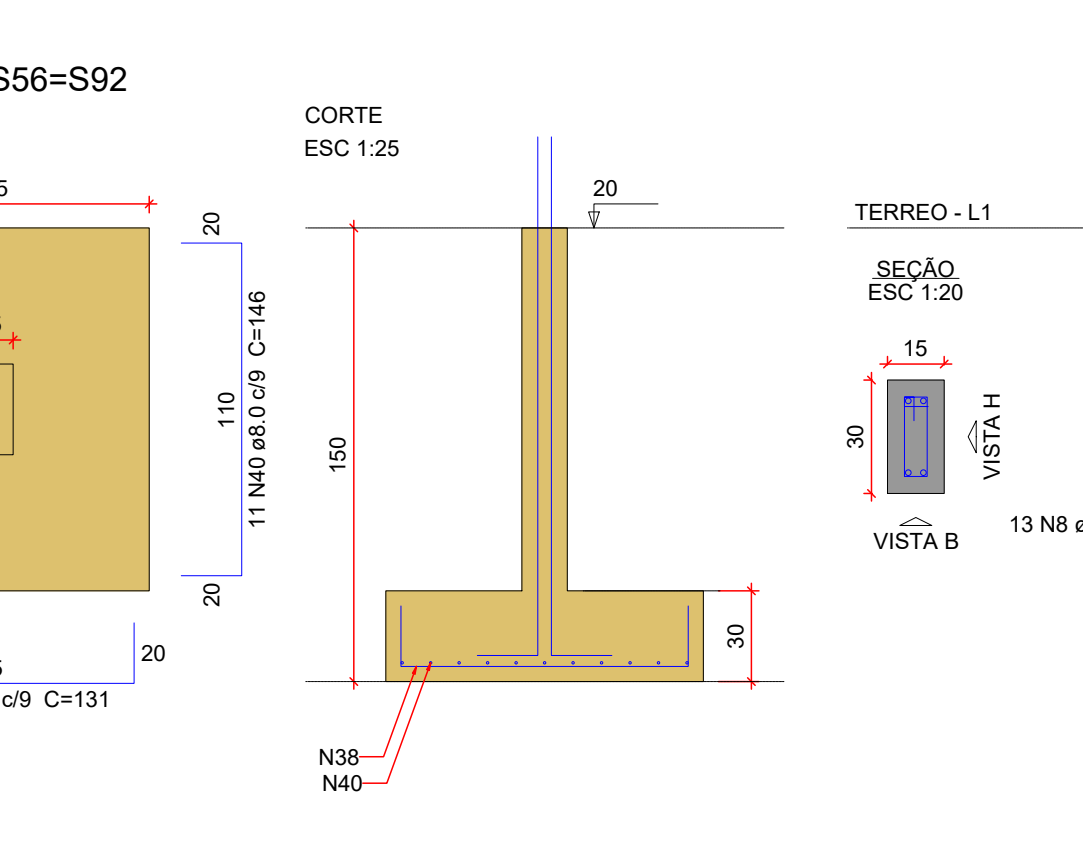
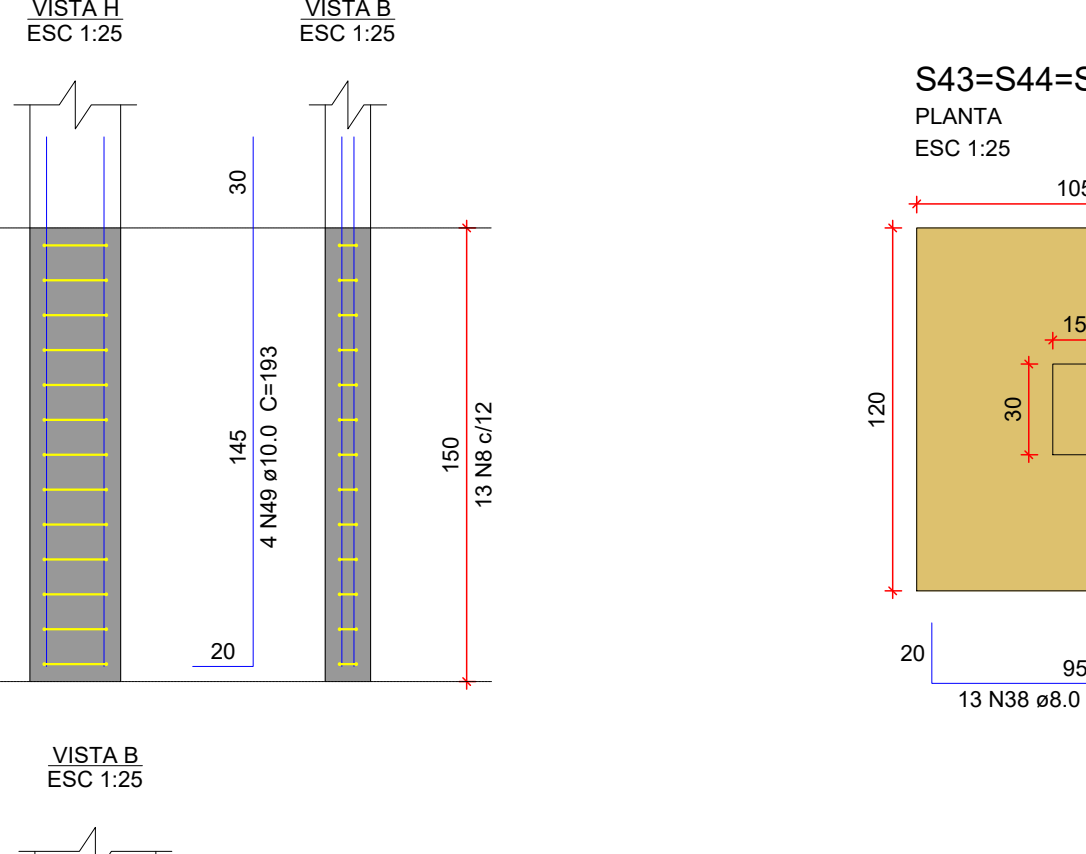
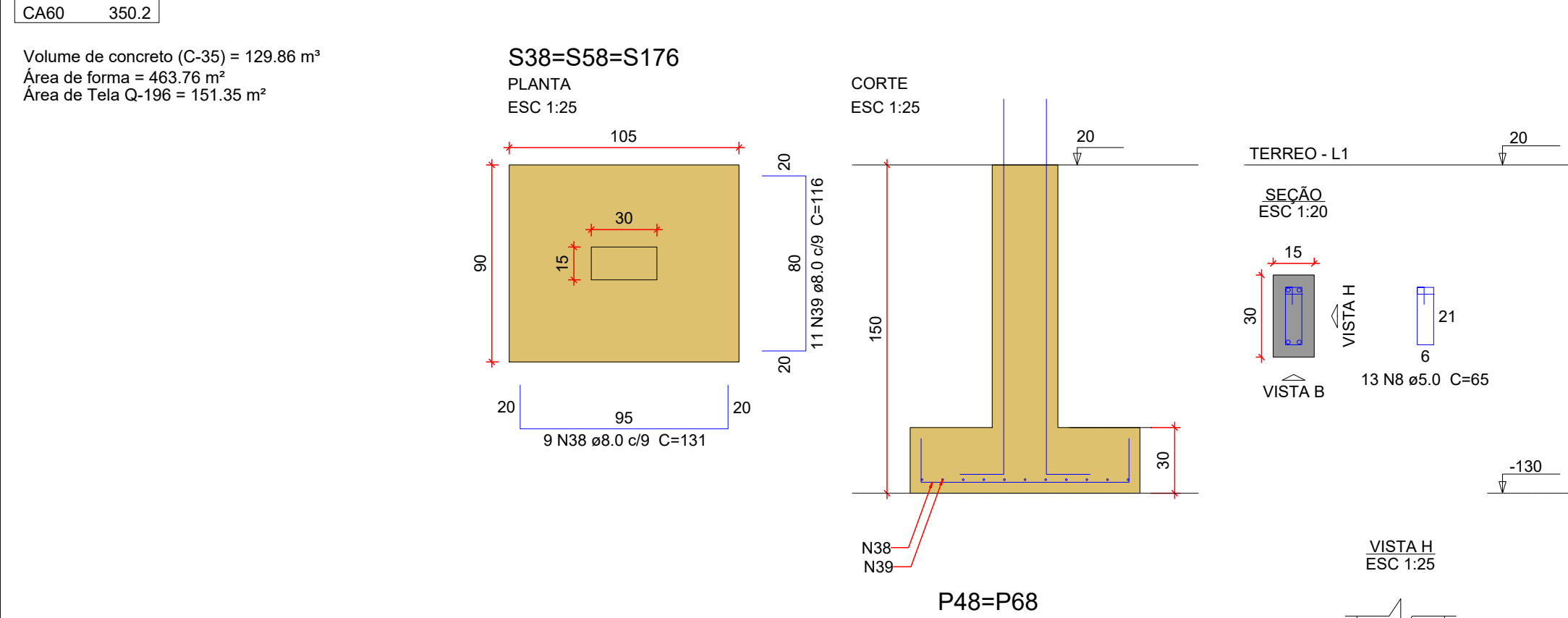
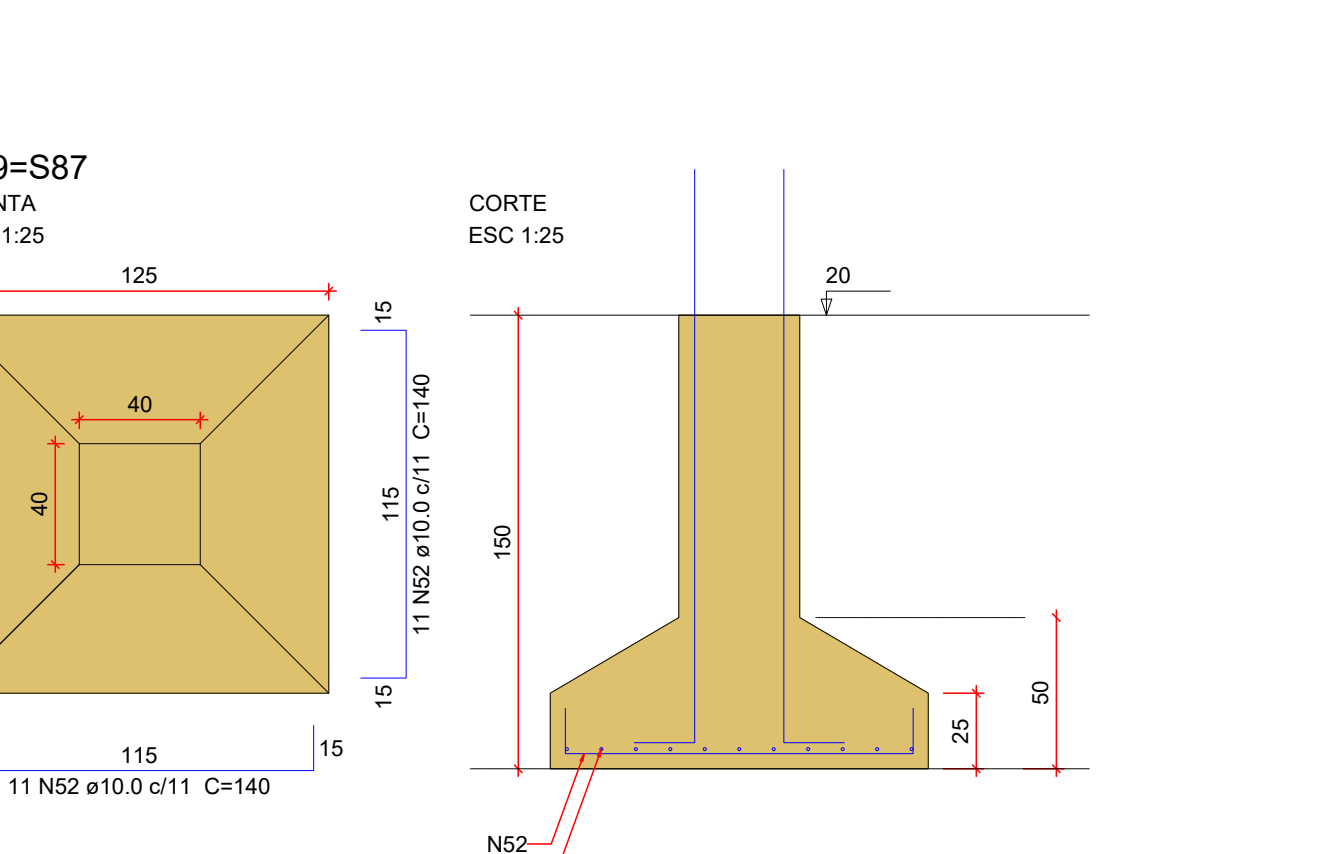
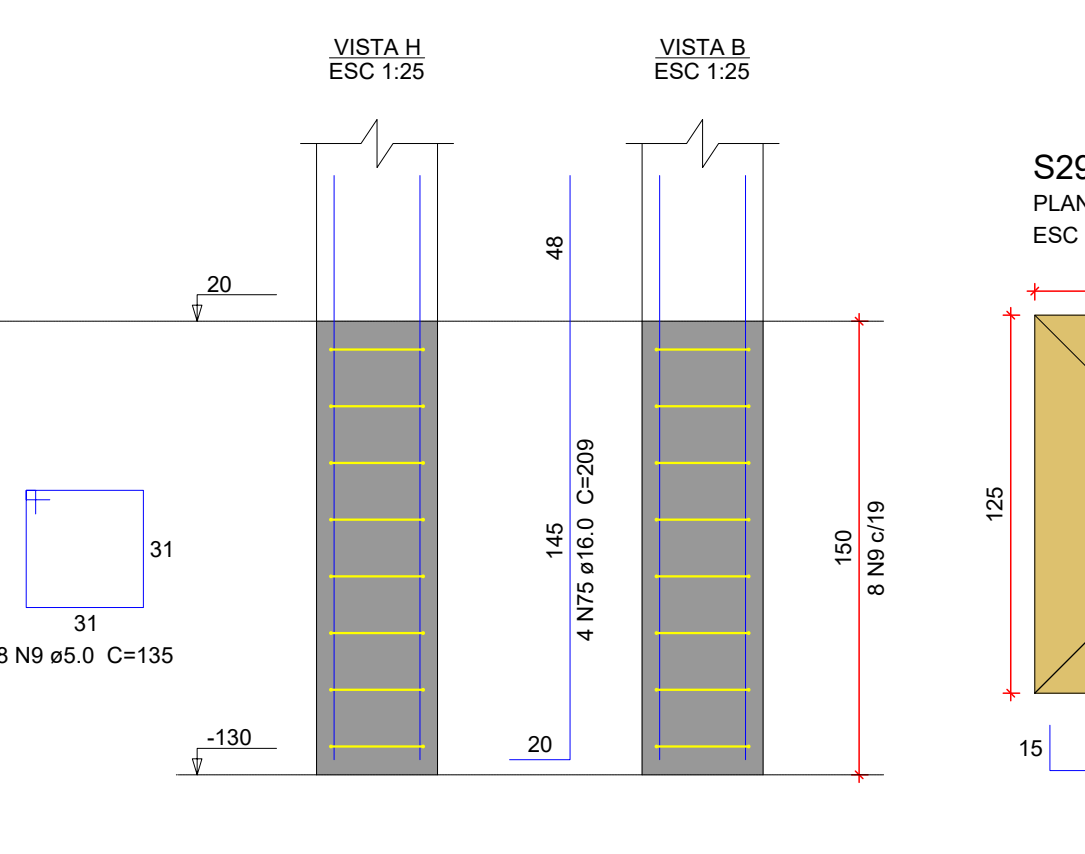
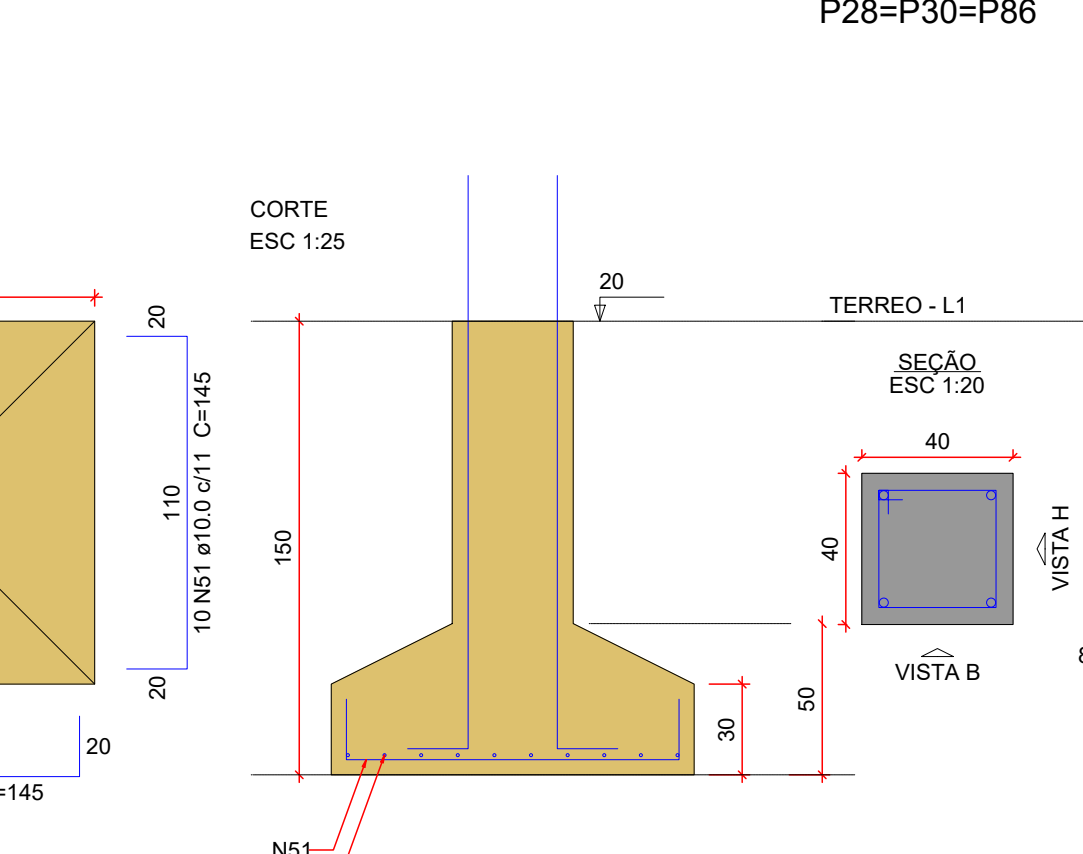
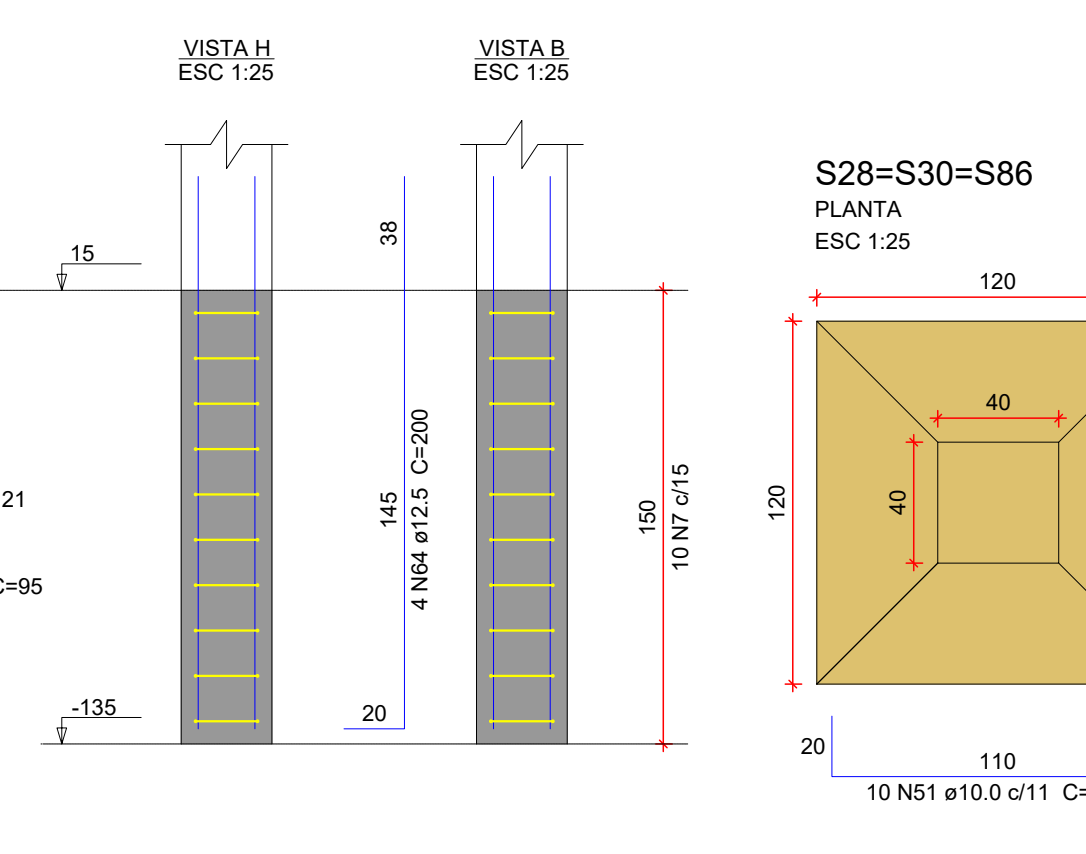
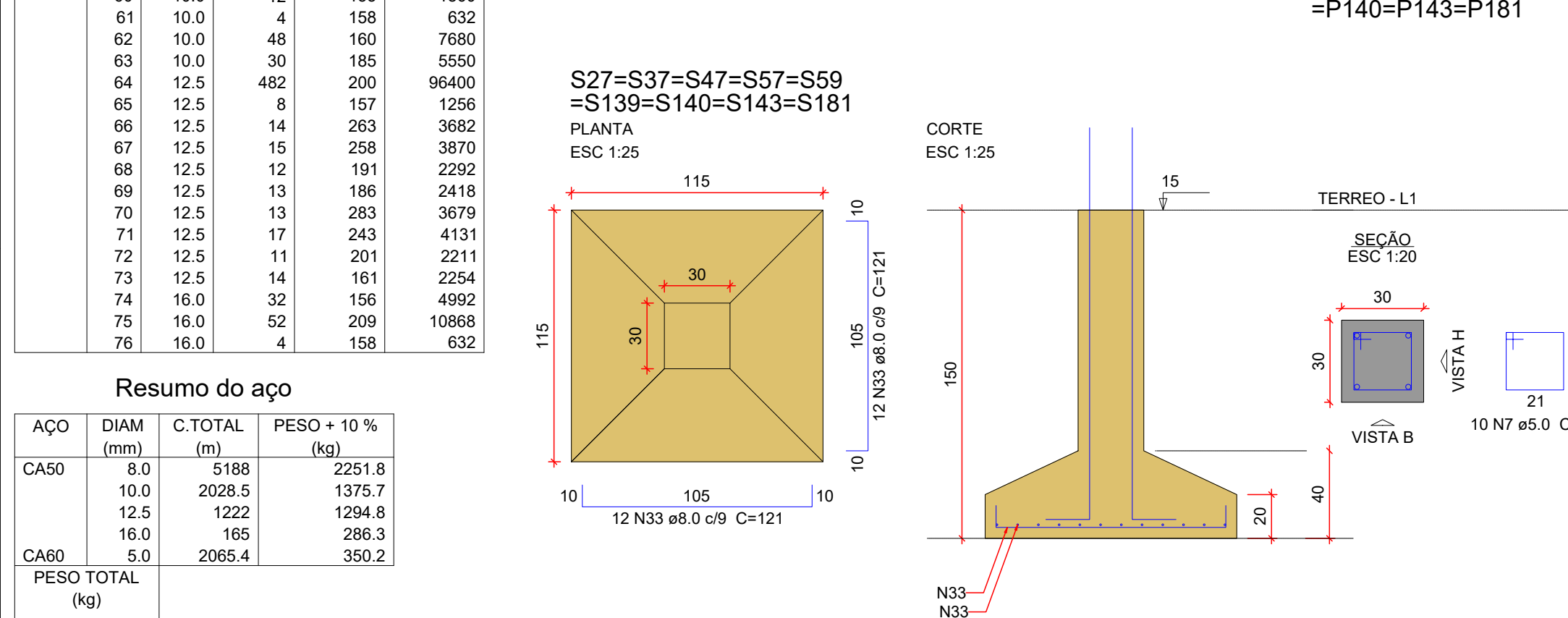
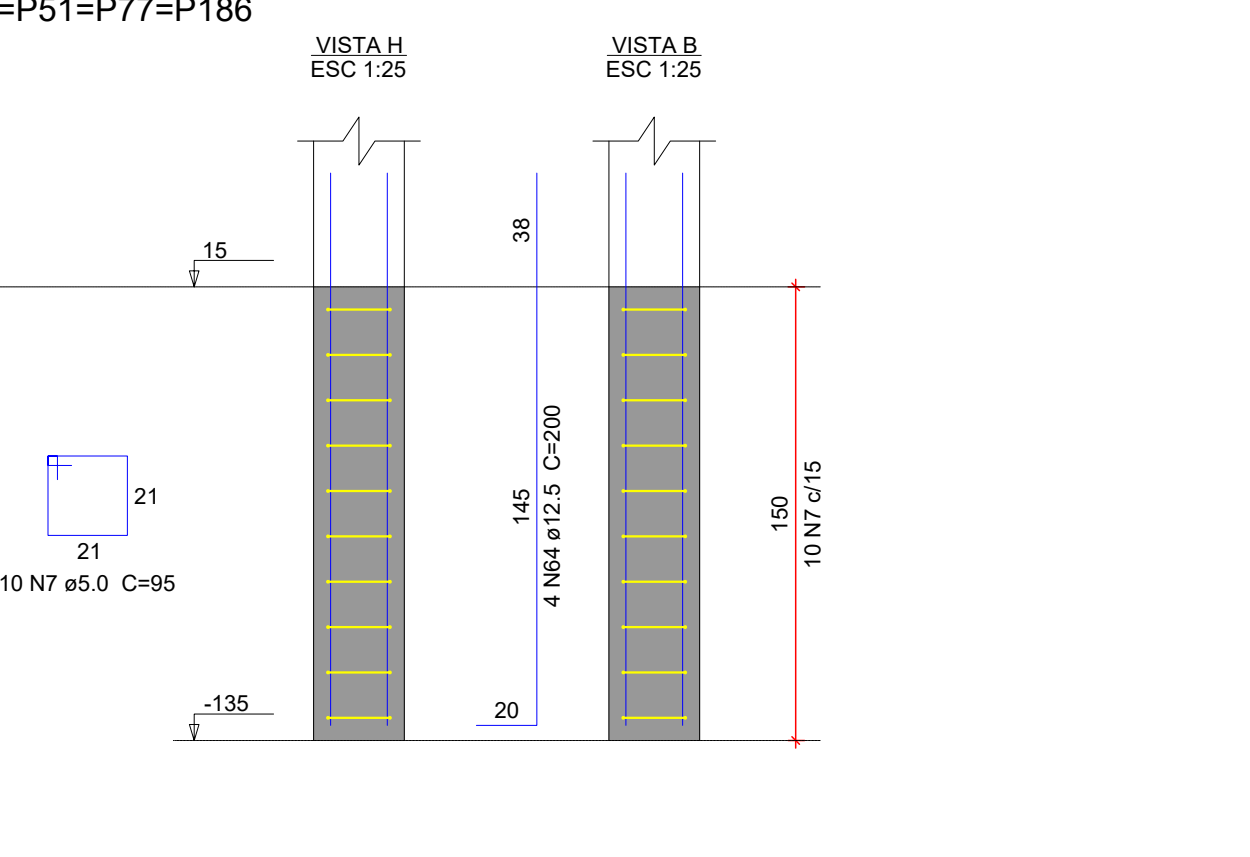
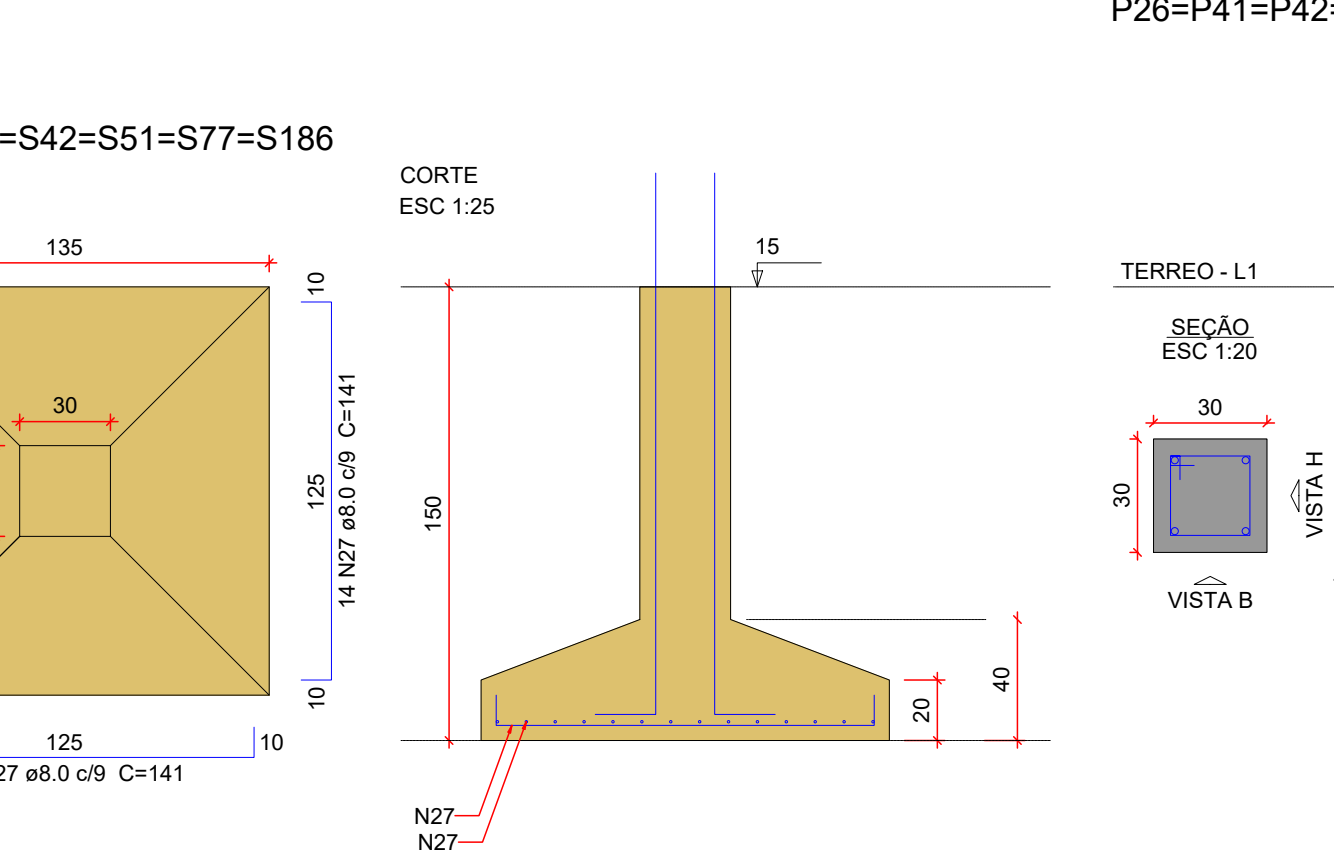
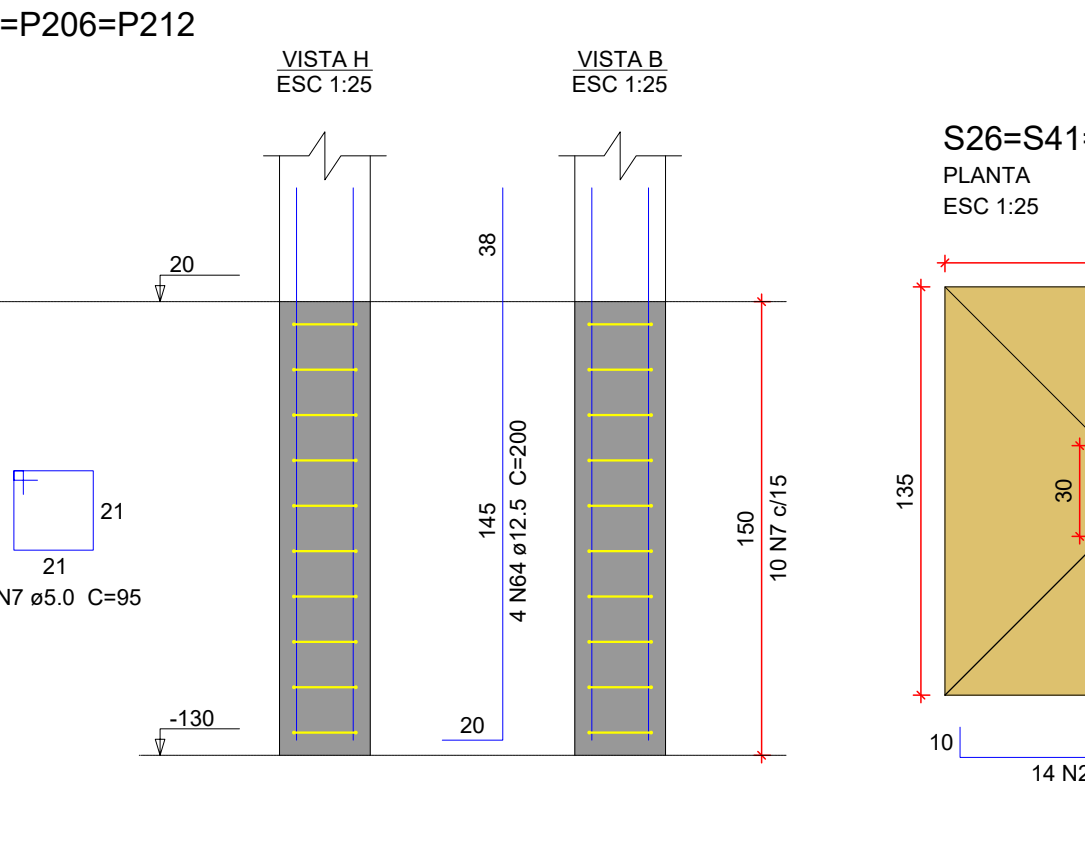
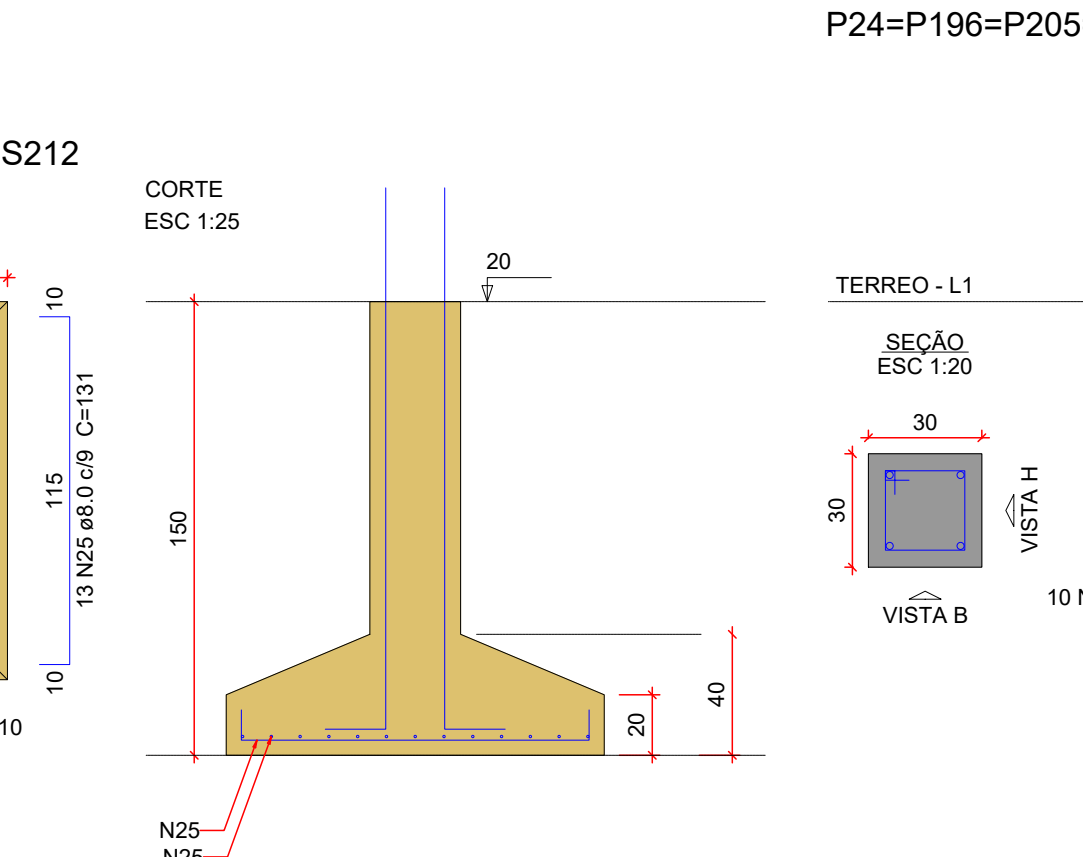
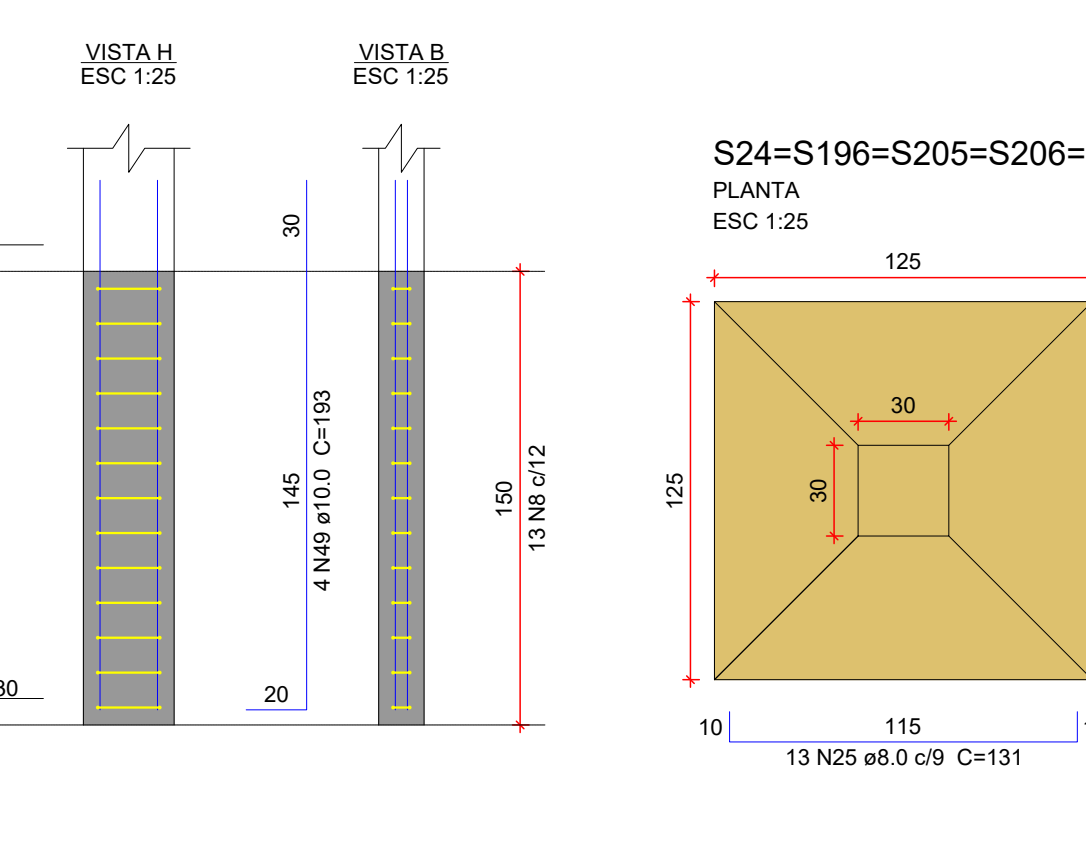
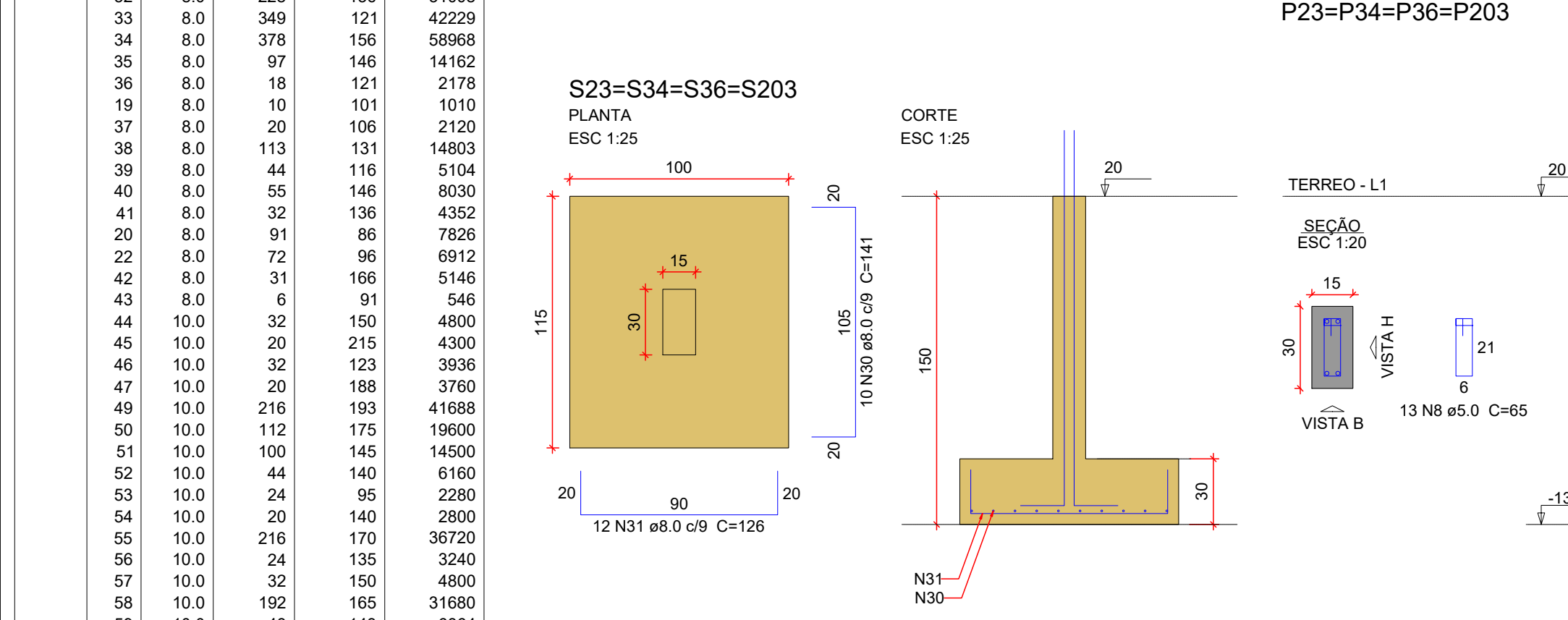
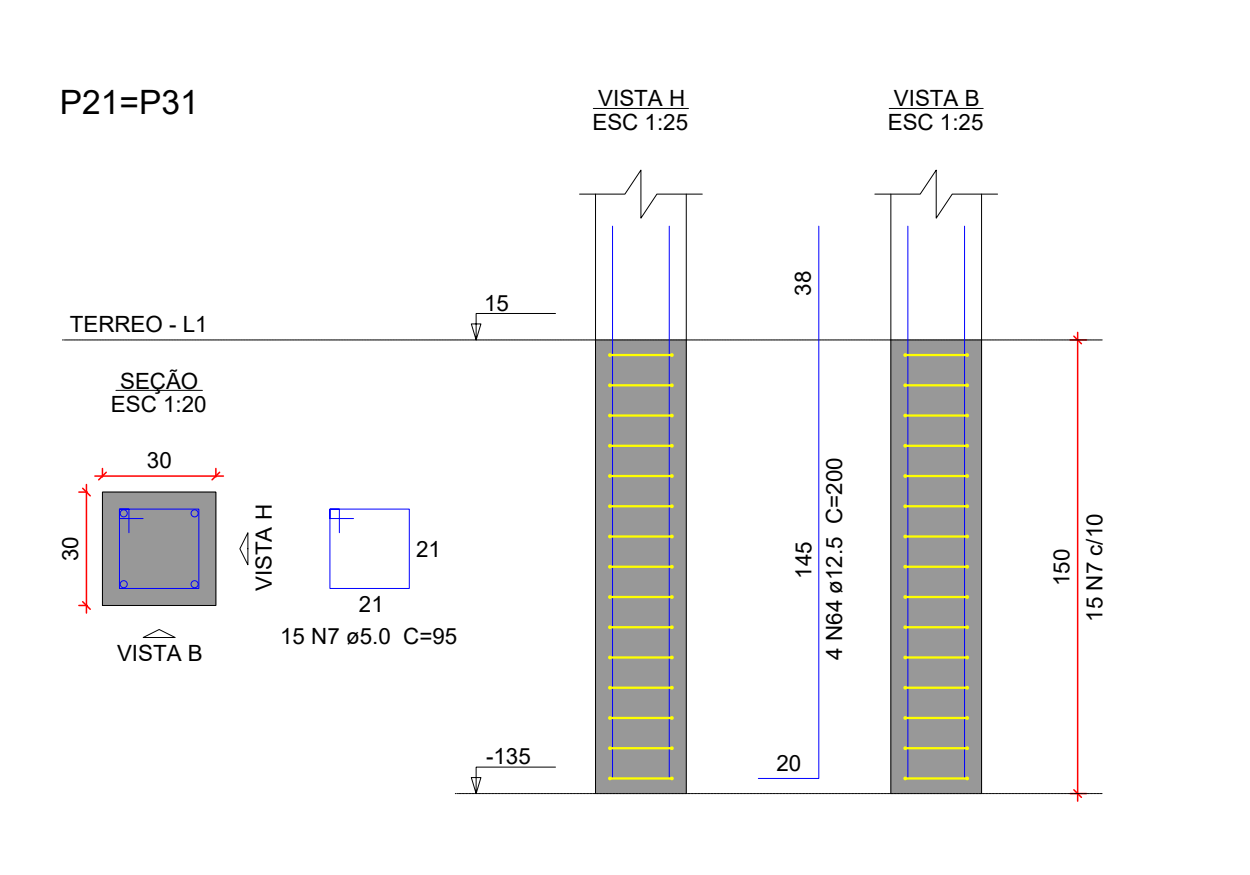
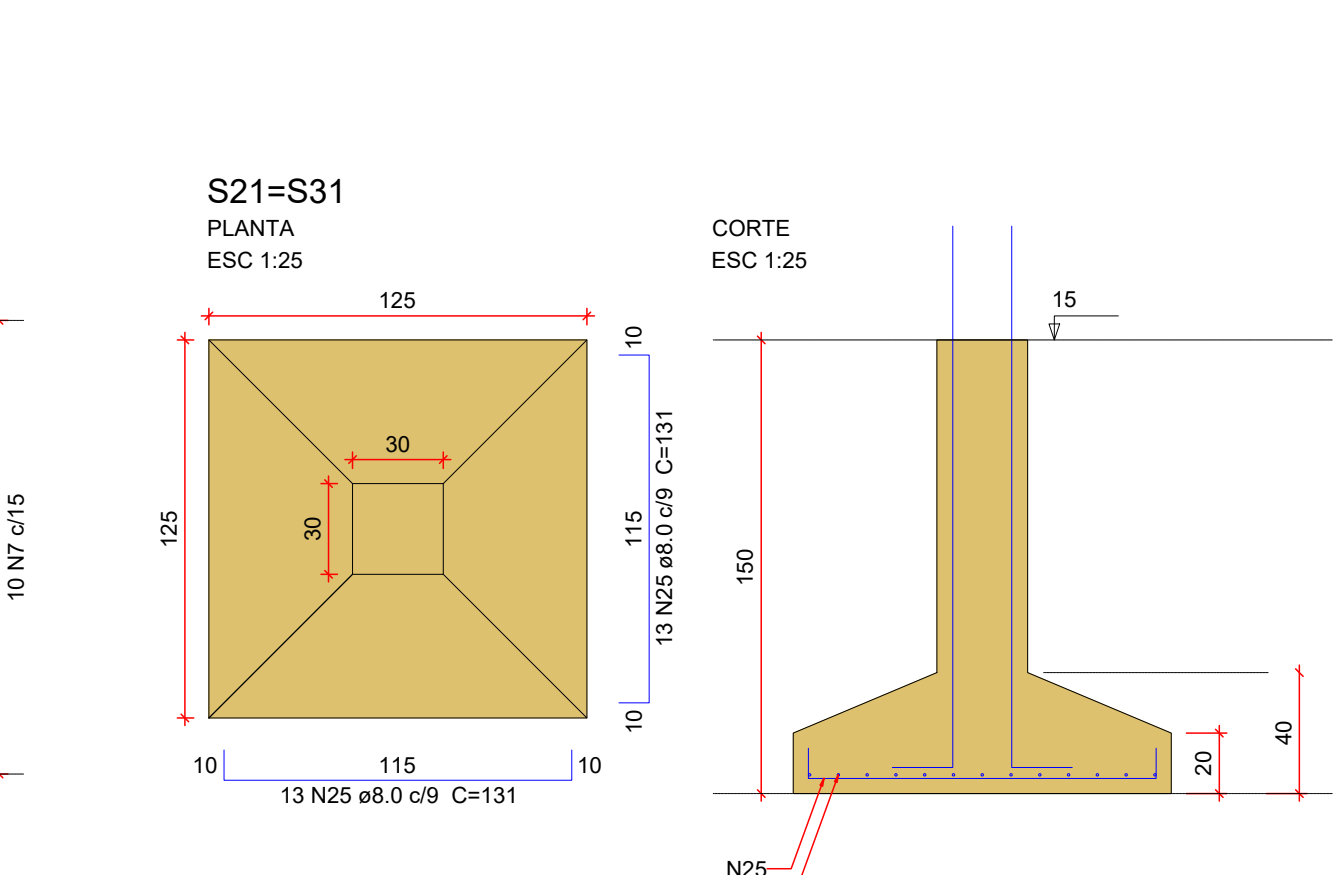
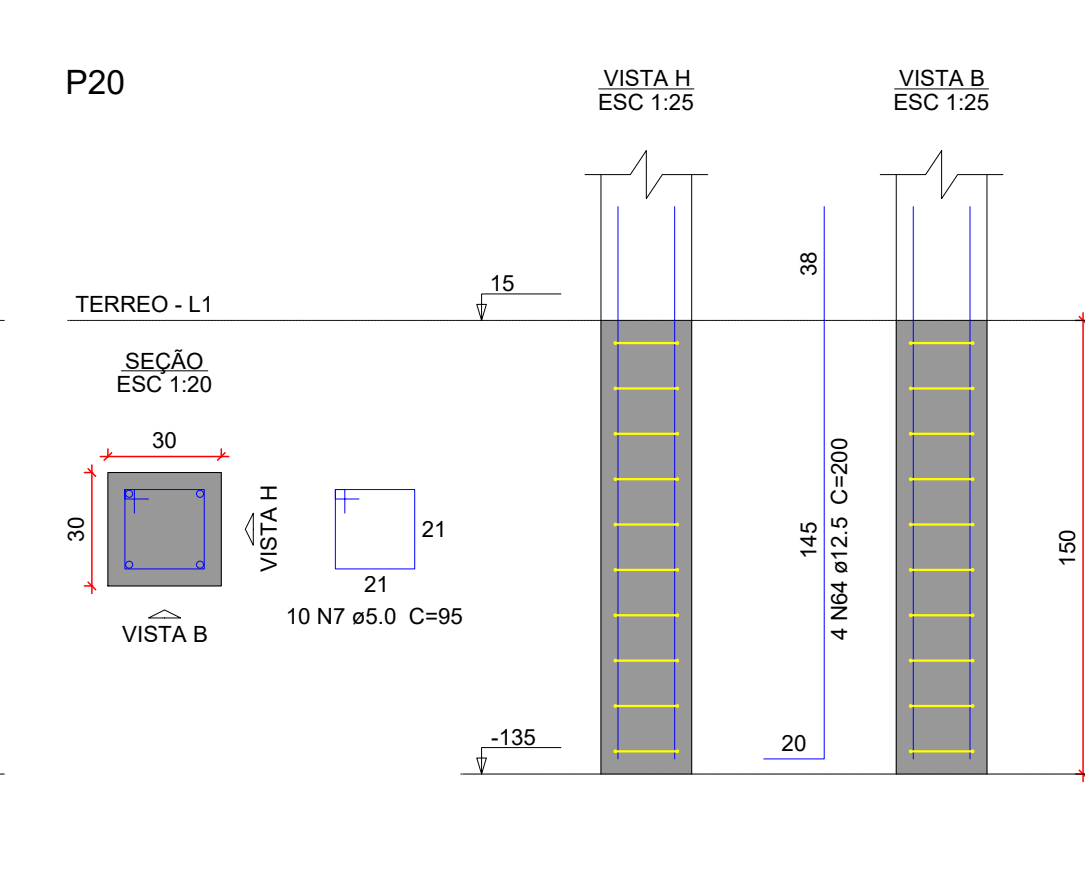
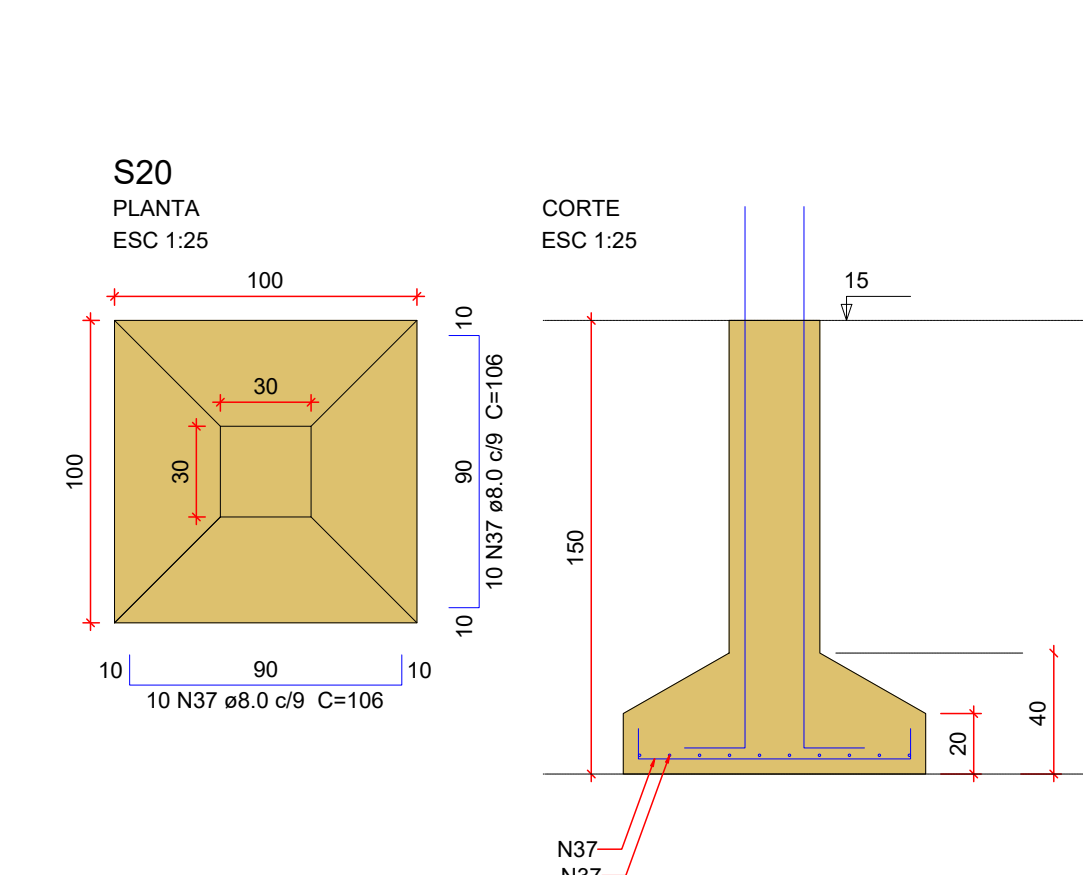
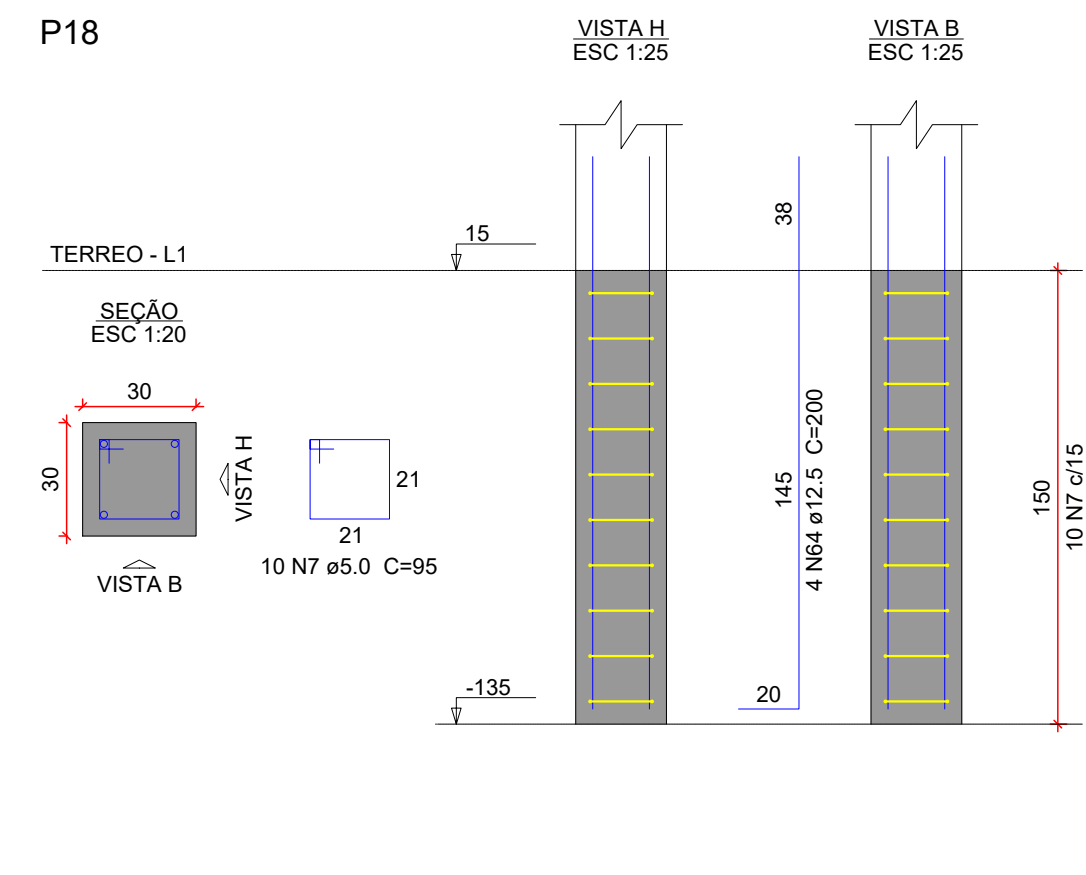
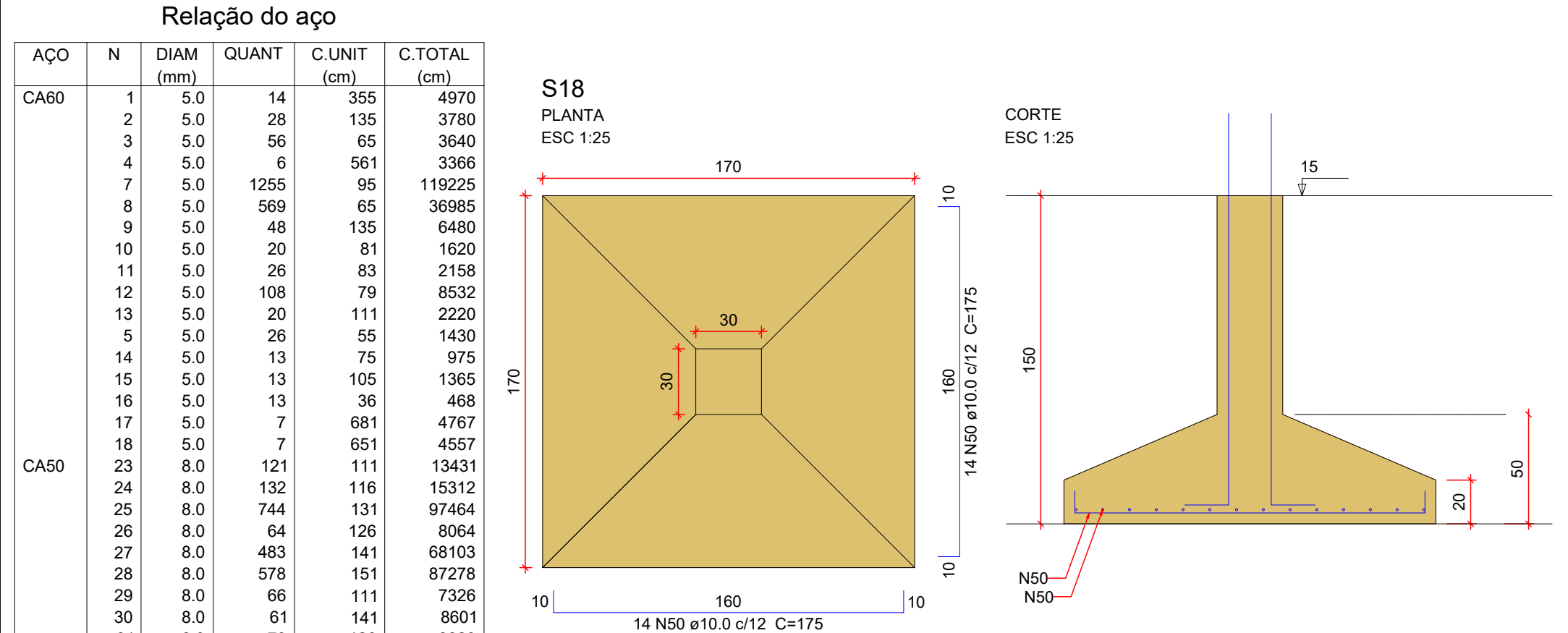
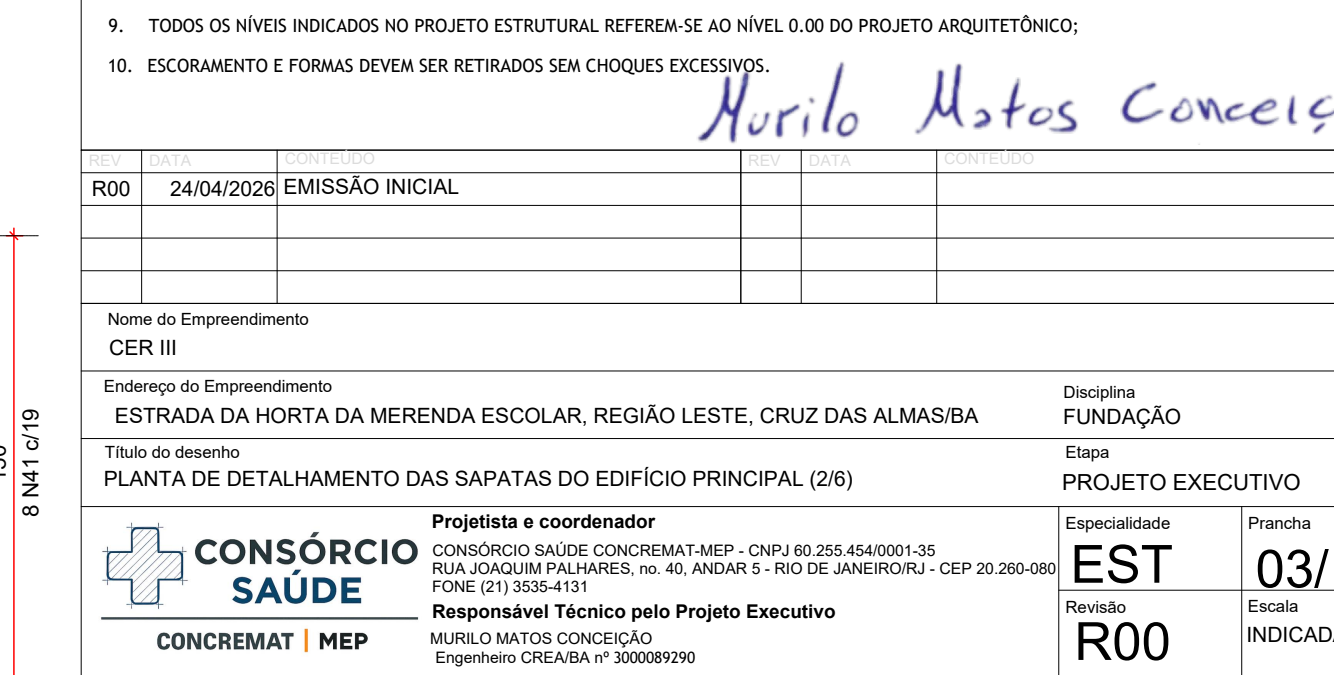
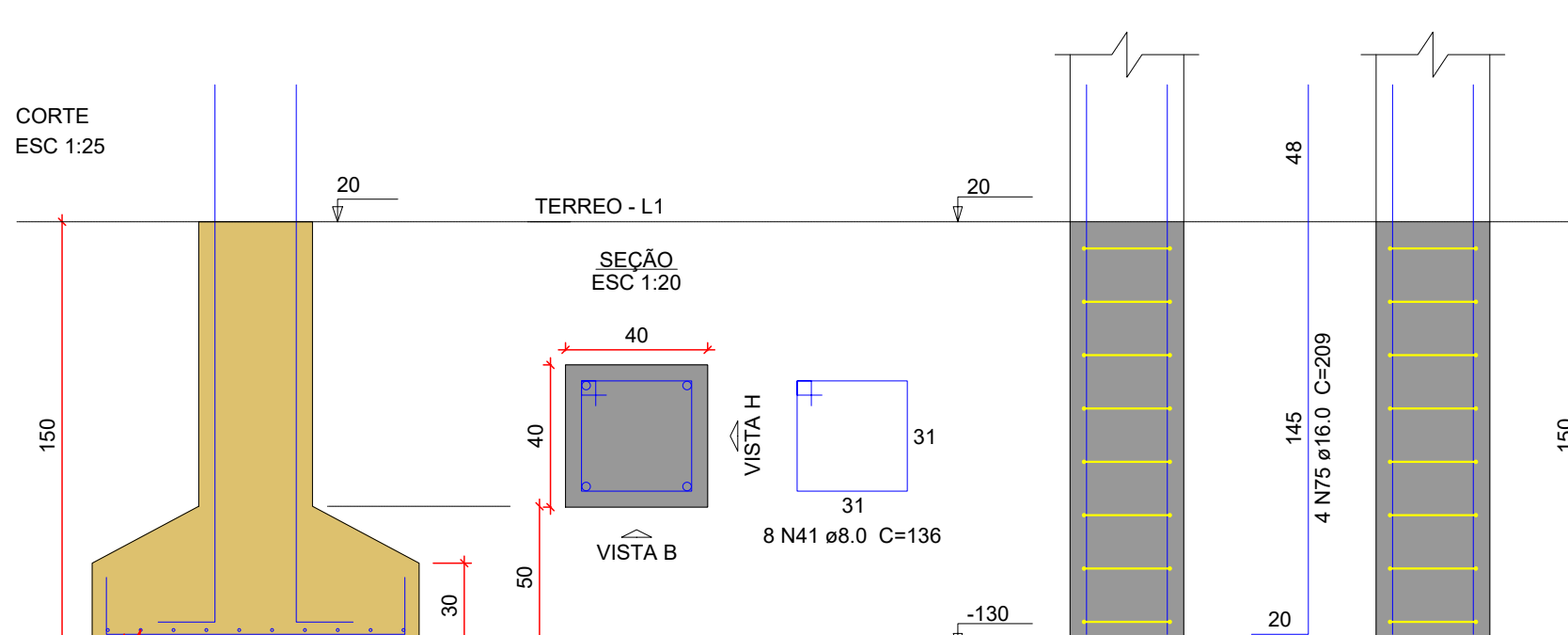
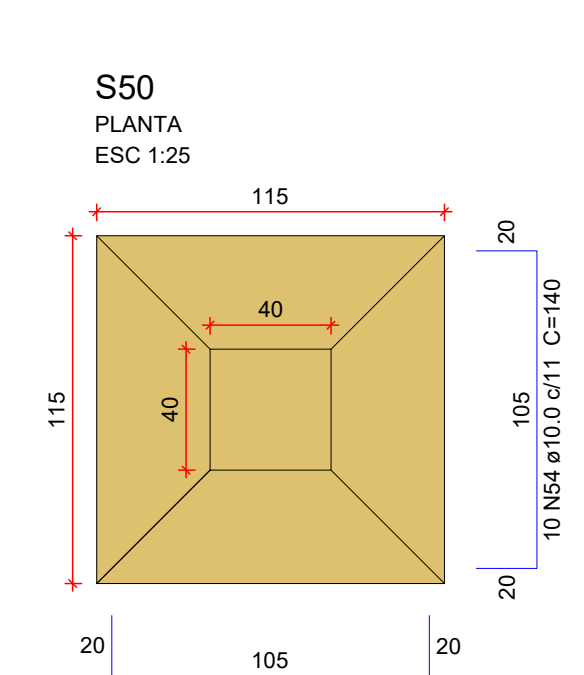
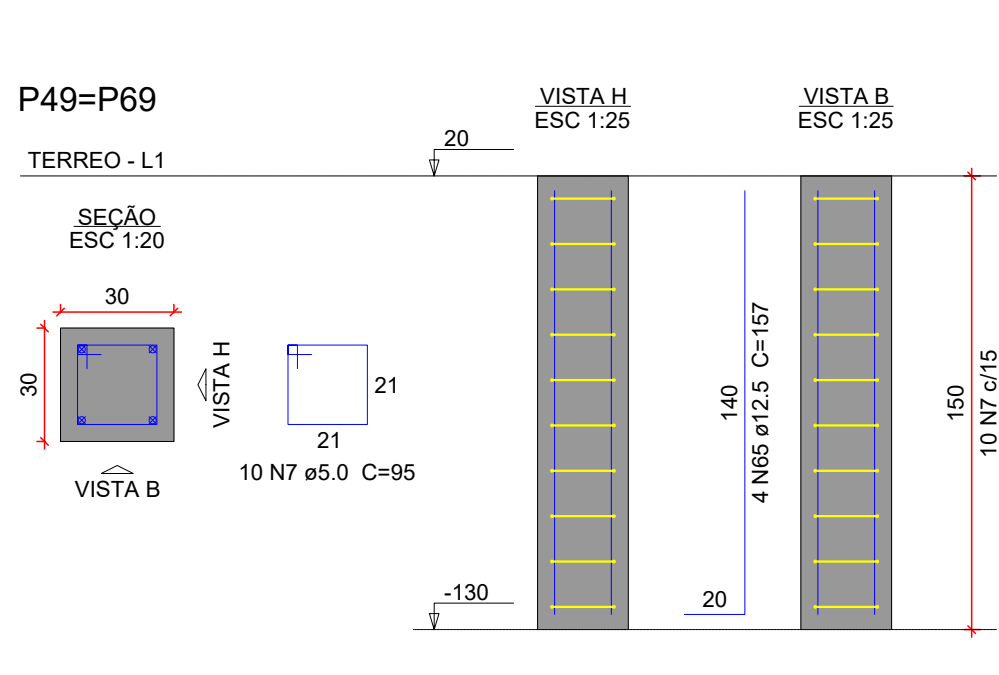
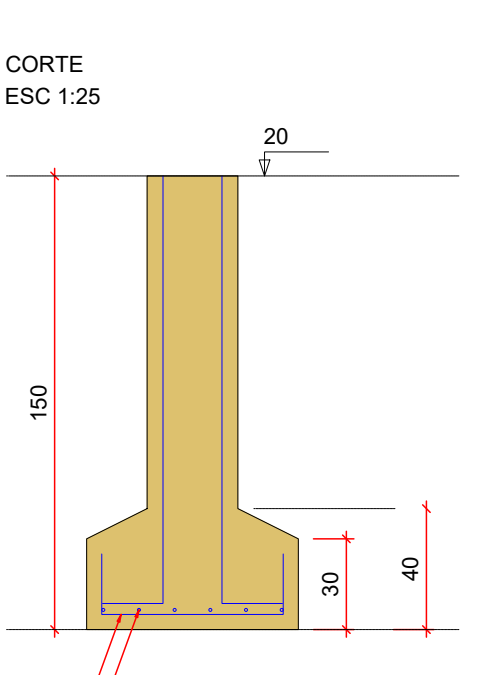
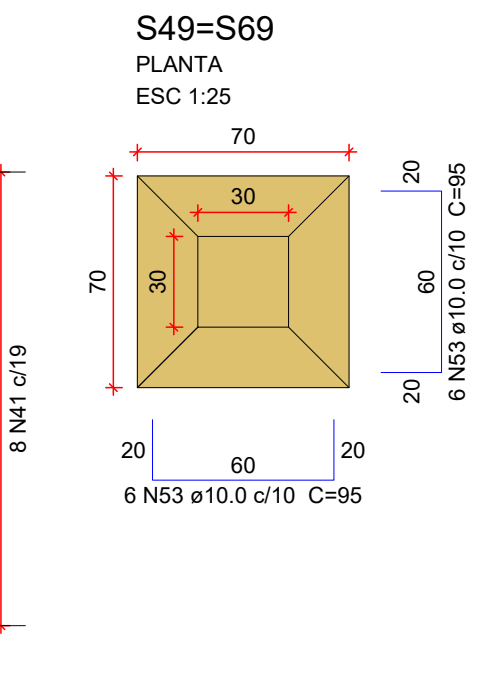
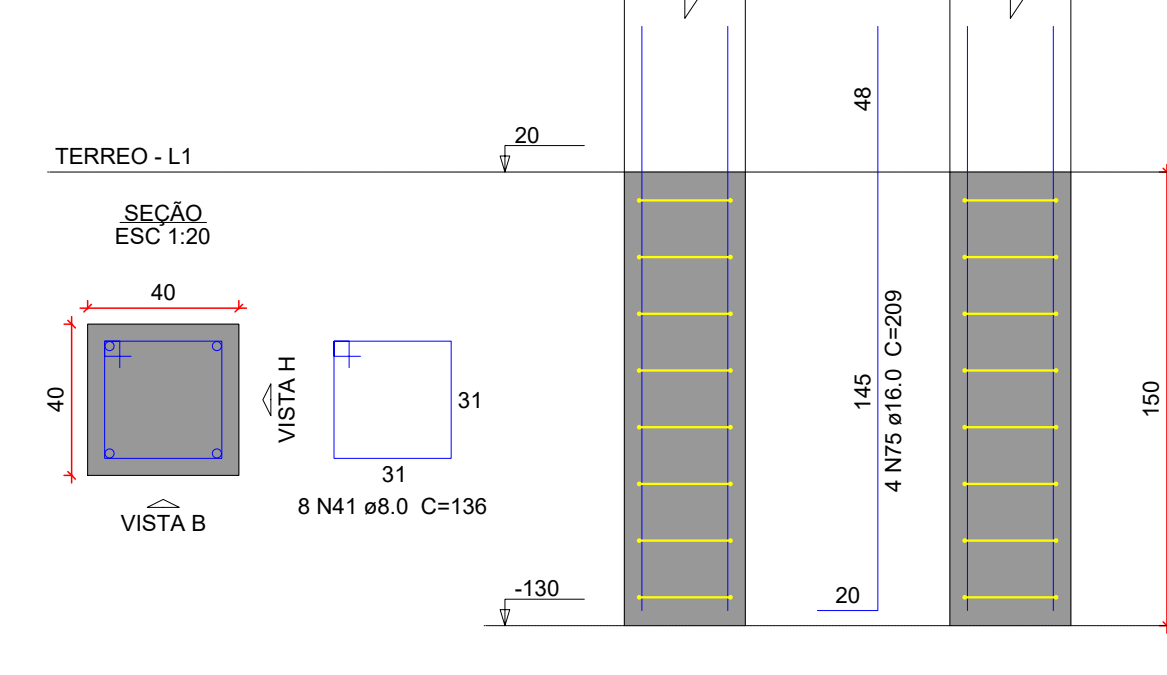
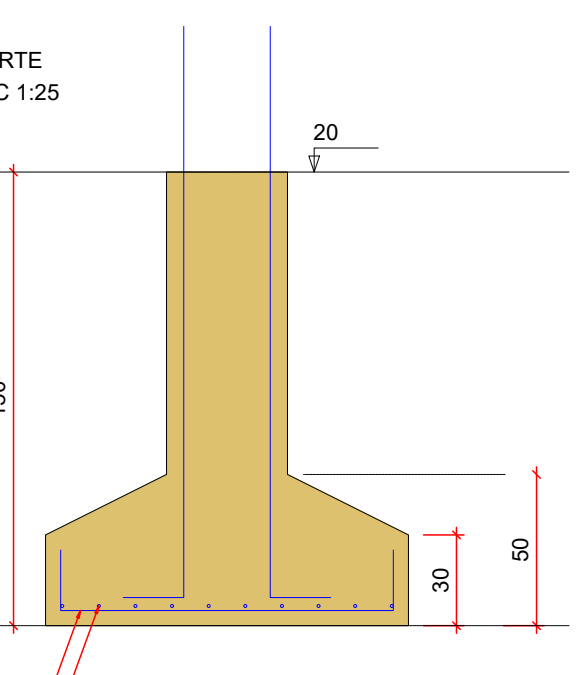
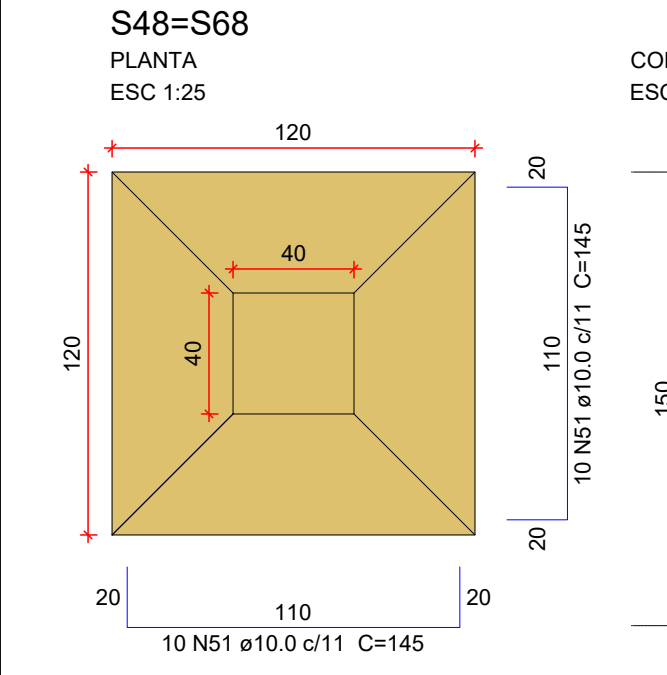


A1\_est (102 x 594 mm)

| Relação do aço |    |           |       |             |              |
|----------------|----|-----------|-------|-------------|--------------|
| AÇO            | N  | DIAM (mm) | QUANT | C.UNIT (cm) | C.TOTAL (cm) |
| CA60           | 1  | 5.0       | 14    | 355         | 4970         |
|                | 2  | 5.0       | 28    | 135         | 3780         |
|                | 3  | 5.0       | 56    | 65          | 3640         |
|                | 4  | 5.0       | 6     | 561         | 3366         |
|                | 7  | 5.0       | 1255  | 95          | 119225       |
|                | 8  | 5.0       | 569   | 65          | 36985        |
|                | 9  | 5.0       | 48    | 135         | 6480         |
|                | 10 | 5.0       | 20    | 91          | 1820         |
|                | 11 | 5.0       | 26    | 83          | 2158         |
|                | 12 | 5.0       | 108   | 79          | 8532         |
|                | 13 | 5.0       | 20    | 111         | 2220         |
|                | 5  | 5.0       | 26    | 55          | 1430         |
|                | 14 | 5.0       | 13    | 75          | 975          |
|                | 15 | 5.0       | 13    | 105         | 1365         |
|                | 16 | 5.0       | 13    | 36          | 468          |
|                | 17 | 5.0       | 7     | 681         | 4767         |
|                | 18 | 5.0       | 7     | 651         | 4557         |
|                | 23 | 8.0       | 121   | 111         | 13431        |
|                | 24 | 8.0       | 132   | 116         | 15312        |
| CA50           | 25 | 8.0       | 744   | 131         | 97464        |
|                | 26 | 8.0       | 64    | 126         | 8064         |
|                | 27 | 8.0       | 483   | 141         | 68103        |
|                | 28 | 8.0       | 578   | 151         | 87278        |
|                | 29 | 8.0       | 66    | 111         | 7326         |
|                | 30 | 8.0       | 61    | 141         | 8601         |
|                | 31 | 8.0       | 70    | 126         | 8820         |
|                | 32 | 8.0       | 228   | 136         | 31008        |
|                | 33 | 8.0       | 349   | 121         | 42229        |
|                | 34 | 8.0       | 378   | 156         | 58968        |
|                | 35 | 8.0       | 97    | 146         | 14162        |
|                | 36 | 8.0       | 16    | 121         | 2176         |
|                | 19 | 8.0       | 10    | 101         | 1010         |
|                | 37 | 8.0       | 20    | 106         | 2120         |
|                | 38 | 8.0       | 113   | 131         | 14803        |
|                | 39 | 8.0       | 44    | 116         | 5104         |
|                | 40 | 8.0       | 55    | 146         | 8030         |
|                | 41 | 8.0       | 32    | 136         | 4352         |
|                | 20 | 8.0       | 91    | 86          | 7826         |
|                | 22 | 8.0       | 92    | 72          | 6912         |
|                | 42 | 8.0       | 31    | 166         | 5146         |
|                | 43 | 8.0       | 6     | 91          | 546          |
|                | 44 | 10.0      | 32    | 150         | 4800         |
|                | 45 | 10.0      | 20    | 215         | 4300         |
|                | 46 | 10.0      | 32    | 123         | 3936         |
|                | 47 | 10.0      | 20    | 188         | 3760         |
|                | 49 | 10.0      | 216   | 193         | 41688        |
|                | 50 | 10.0      | 112   | 175         | 19600        |
|                | 51 | 10.0      | 100   | 145         | 14500        |
|                | 52 | 10.0      | 44    | 140         | 6160         |
|                | 53 | 10.0      | 24    | 95          | 2280         |
|                | 54 | 10.0      | 20    | 140         | 2800         |
|                | 55 | 10.0      | 216   | 170         | 36720        |
|                | 56 | 10.0      | 24    | 135         | 3240         |
|                | 57 | 10.0      | 32    | 150         | 4800         |
|                | 58 | 10.0      | 192   | 165         | 31680        |
|                | 59 | 10.0      | 48    | 143         | 6864         |
|                | 60 | 10.0      | 12    | 155         | 1860         |
|                | 61 | 10.0      | 4     | 158         | 632          |
|                | 62 | 10.0      | 48    | 160         | 7680         |
|                | 63 | 10.0      | 30    | 185         | 5550         |
|                | 64 | 12.5      | 482   | 200         | 96400        |
|                | 65 | 12.5      | 8     | 157         | 1256         |
|                | 66 | 12.5      | 14    | 263         | 3682         |
|                | 67 | 12.5      | 15    | 258         | 3870         |
|                | 68 | 12.5      | 12    | 191         | 2292         |
|                | 69 | 12.5      | 13    | 186         | 2418         |
|                | 70 | 12.5      | 13    | 283         | 3679         |
|                | 71 | 12.5      | 17    | 243         | 4131         |
|                | 72 | 12.5      | 11    | 201         | 2211         |
|                | 73 | 12.5      | 14    | 2254        | 2254         |
|                | 74 | 16.0      | 32    | 156         | 4992         |
|                | 75 | 16.0      | 52    | 209         | 10868        |
|                | 76 | 16.0      | 4     | 158         | 632          |

| Resumo do aço   |           |             |                  |
|-----------------|-----------|-------------|------------------|
| AÇO             | DIAM (mm) | C.TOTAL (m) | PESO + 10 % (kg) |
| CA50            | 8.0       | 5188        | 2251.8           |
|                 | 10.0      | 2028.5      | 1375.7           |
|                 | 12.5      | 1222        | 1294.8           |
|                 | 16.0      | 165         | 286.3            |
| CA60            | 5.0       | 2065.4      | 350.2            |
| PESO TOTAL (kg) |           |             |                  |
| CA50            | 5208.7    |             |                  |
| CA60            | 350.2     |             |                  |

Volume de concreto (C-35) = 129,86 m³  
Área de forma = 463,76 m²  
Área de Tala Q-196 = 151,35 m²



NOTAS GERAIS

- DIMENSÕES EM CENTÍMETRO, BÍTOLAS EM MILÍMETRO, EXCETO ONTE INDICADO DE OUTRA FORMA. AS COTAS DE IMPLANTAÇÃO DA OBRA BEM COMO AS COTAS E OS NÍVEIS DAS FORMAS DEVERÃO SER VERIFICADOS E ACEITOS PELO RESPONSÁVEL TÉCNICO DA OBRA ANTES DA EXECUÇÃO;
- ACO CA-50 CONCRETO DA EMBRACÃO: C-35 (fck = 35 MPa) RELUÇÃO AGÜAMENTO: 0,60 DIÂMETRO MÁXIMO DO AGREGADO GRÁDUO: 19 mm;
- VERIFICAR ARMADURAS DE ABRAQUE
- COBERTURA MÍNIMA: SAPATAS: 5,0cm PILARES EM CONTATO COM SOLO: 4,5cm
- AS BARRAS DE AÇO DEVERÃO SER CONVENIENTEMENTE LIMPAS DE QUALQUER SUBSTÂNCIA PREJUDICIAL A ADERÊNCIA, RETIRANDO-SE AS ESCAMAS EVENTUALMENTE DESTACADAS POR OXIDAÇÃO. ANDA: AS BARRAS EXCESSIVAMENTE DANIFICADAS DEVERÃO SER DESCARTADAS;
- JUNTAS DE CONCRETAGEM: QUANDO O LANÇAMENTO DO CONCRETO FOR INTERROMPIDO, É ASSIM, FORMAR-SE UMA JUNTA DE CONCRETAGEM, DEVE-SE, ANTES DE INICIAR O LANÇAMENTO DO CONCRETO FRESCO, REMOVER A MANTA E LIMPAR A SUPERFÍCIE DA JUNTA. DURANTE A CONCRETAGEM O CONCRETO DEVERÁ SER PERFEITAMENTE ADENSADO ATÉ A SUPERFÍCIE DA JUNTA;
- TODAS AS ESTRUTURAS EM CONTATO COM O SOLO DEVEEM SER ISOLADAS COM UMA CAMADA DE CONCRETO MAGRO DE NO MÍNIMO 5 cm (TRAÇÃO USUAL 1:8) ENTRE O SOLO E A ESTRUTURA;
- O SOLO SOBRE AS SAPATAS DEVE SER COMPACTADO;
- TODOS OS NÍVEIS INDICADOS NO PROJETO ESTRUTURAL REFEREM-SE AO NÍVEL 0,00 DO PROJETO ARQUITETÔNICO;
- ESCORAMENTO E FORMAS DEVEEM SER RETIRADOS SEM CHOQUES EXCESSIVOS.

Projeto e coordenador

CONSORCIO SAÚDE CONCRETAM-MEP - CNPJ: 09.255.454/0001-35 RUA JOAQUIM PALHARES, NO. 40, ANDAR 5 - RIO DE JANEIRO/RJ - CEP 20.260-080 FONE: (21) 3358-4131

Responsável Técnico pelo Projeto Executivo

MARLENE MATOS CONCEIÇÃO Engenheira CREA/RJ nº 300089/20

Disciplina

FUNDAÇÃO

Etapas

PROJETO EXECUTIVO

Escalabilidade

EST

03/10

Revisão

R00

INDICADA