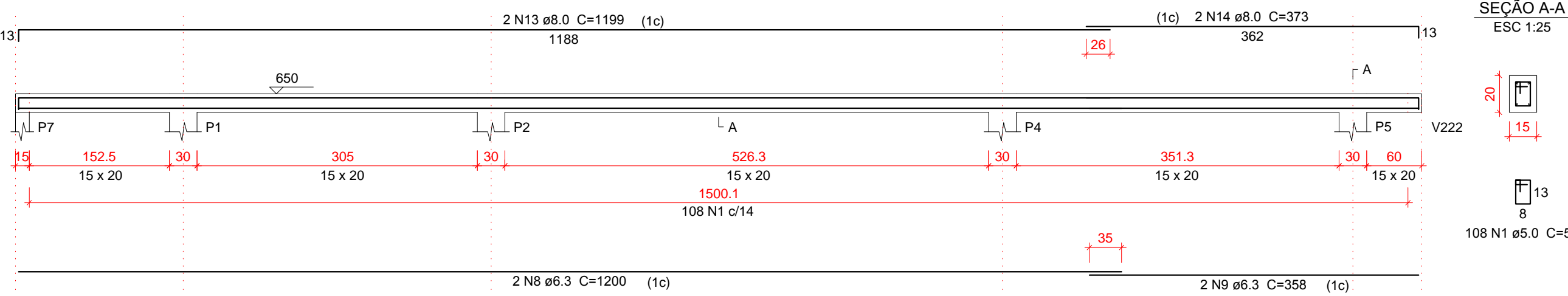


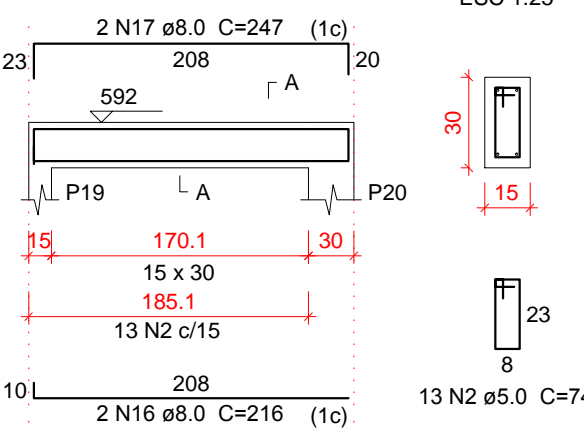
V201

ESC 1:50



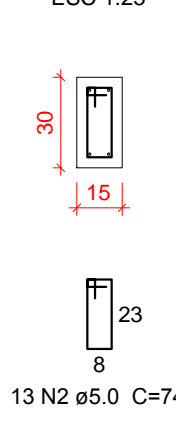
V203

ESC 1:50



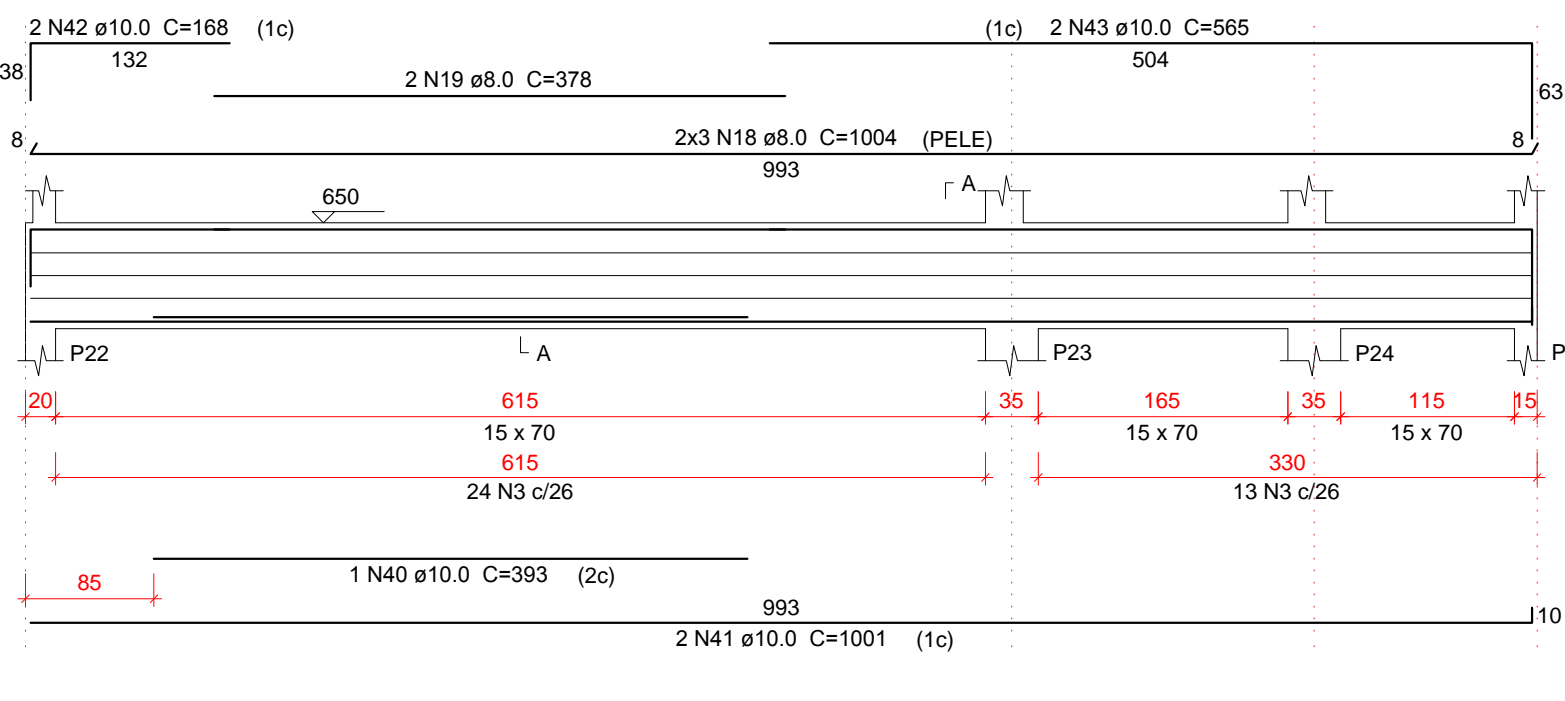
SEÇÃO A-A

ESC 1:25



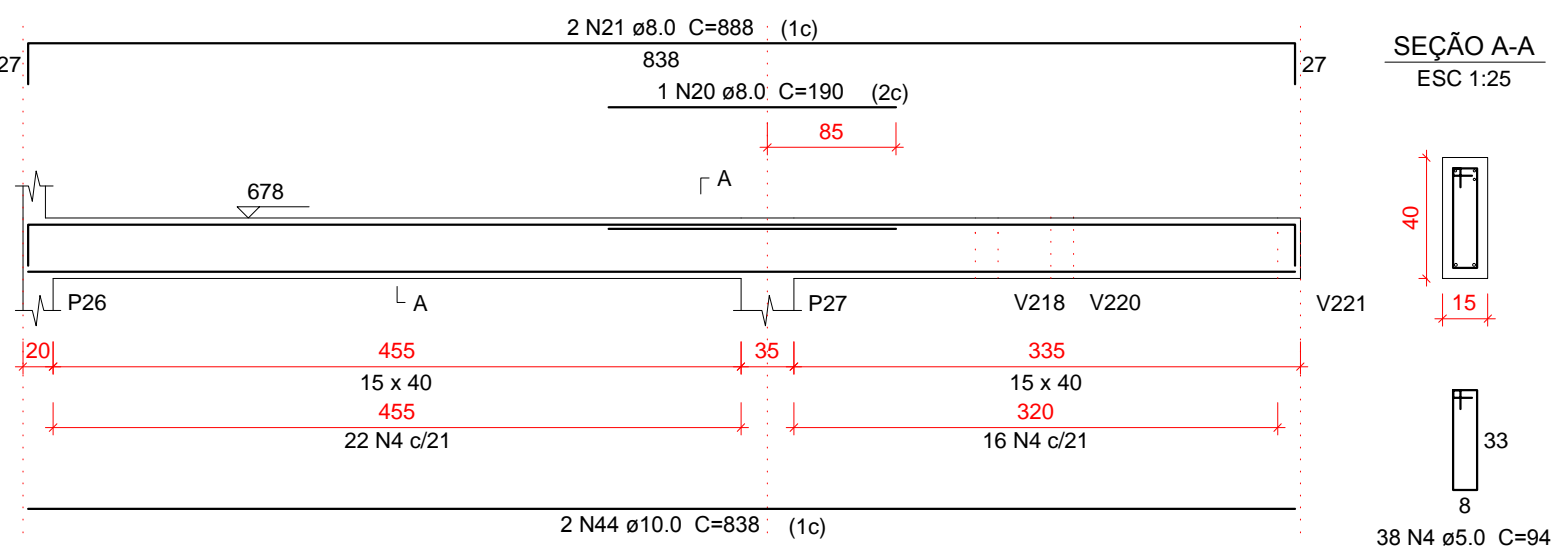
V204

ESC 1:50



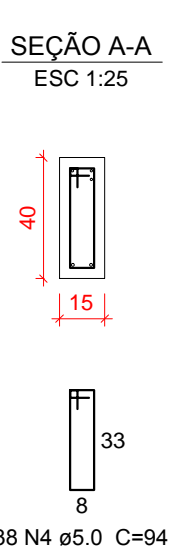
V205

ESC 1:50



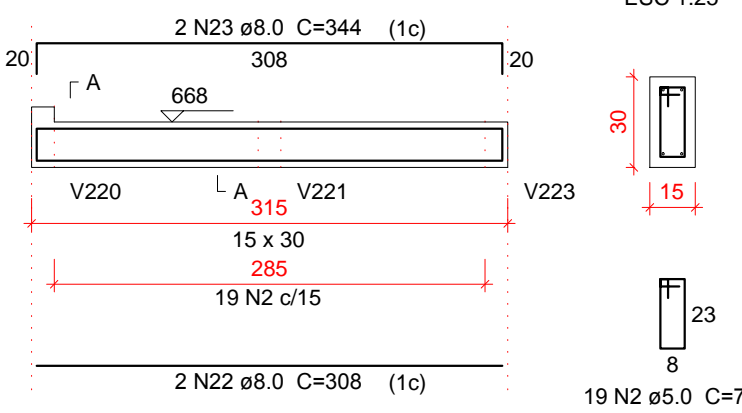
SEÇÃO A-A

ESC 1:25



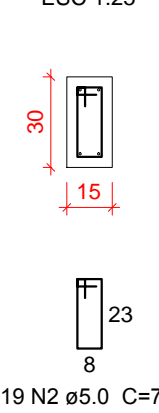
V206

ESC 1:50



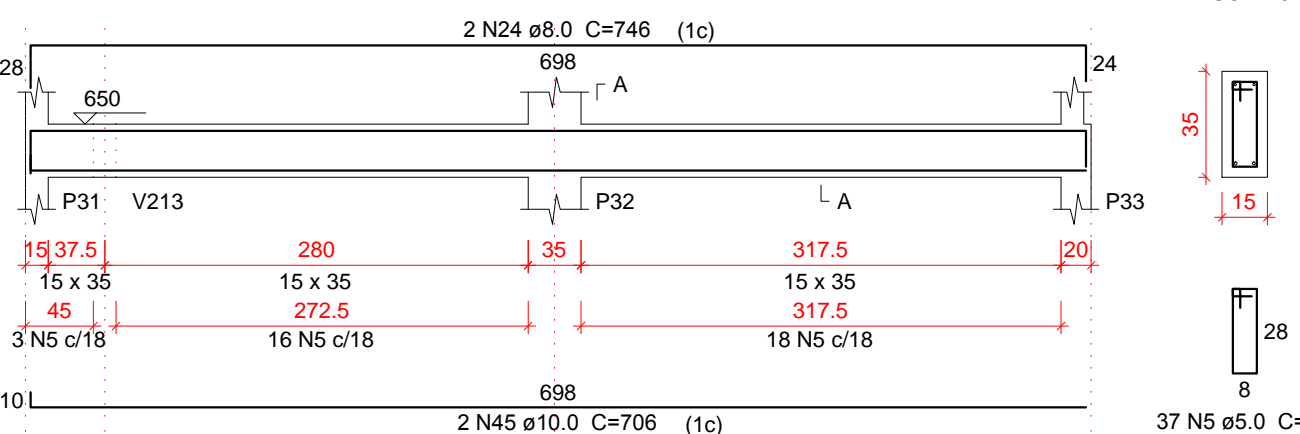
SEÇÃO A-A

ESC 1:25



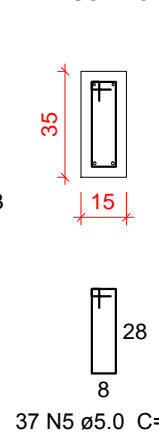
V207

ESC 1:50



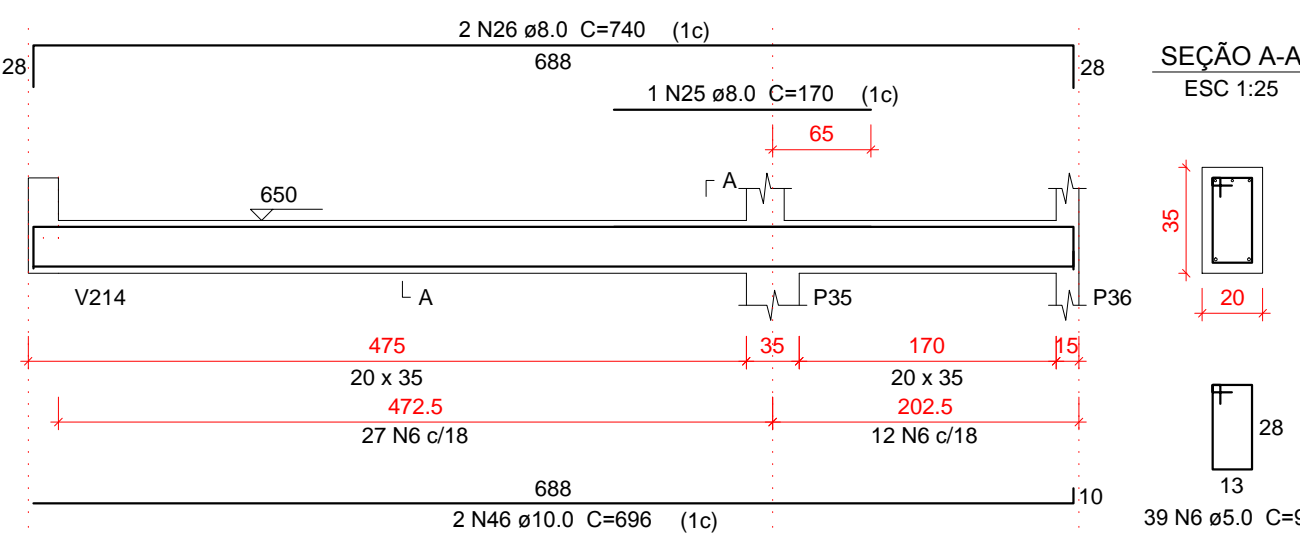
SEÇÃO A-A

ESC 1:25



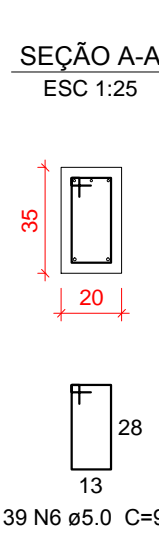
V208

ESC 1:50



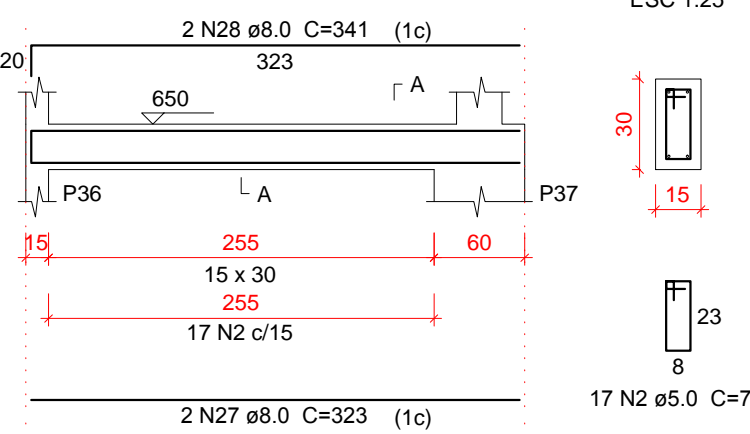
SEÇÃO A-A

ESC 1:25



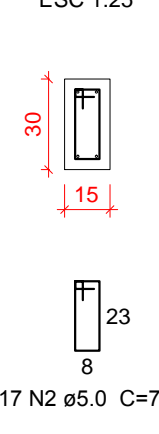
V209

ESC 1:50



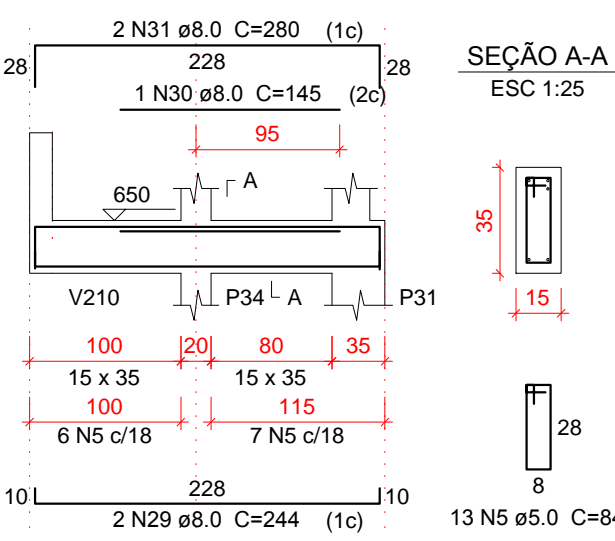
SEÇÃO A-A

ESC 1:25



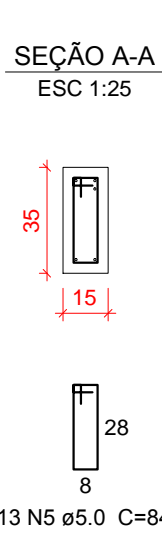
V211

ESC 1:50



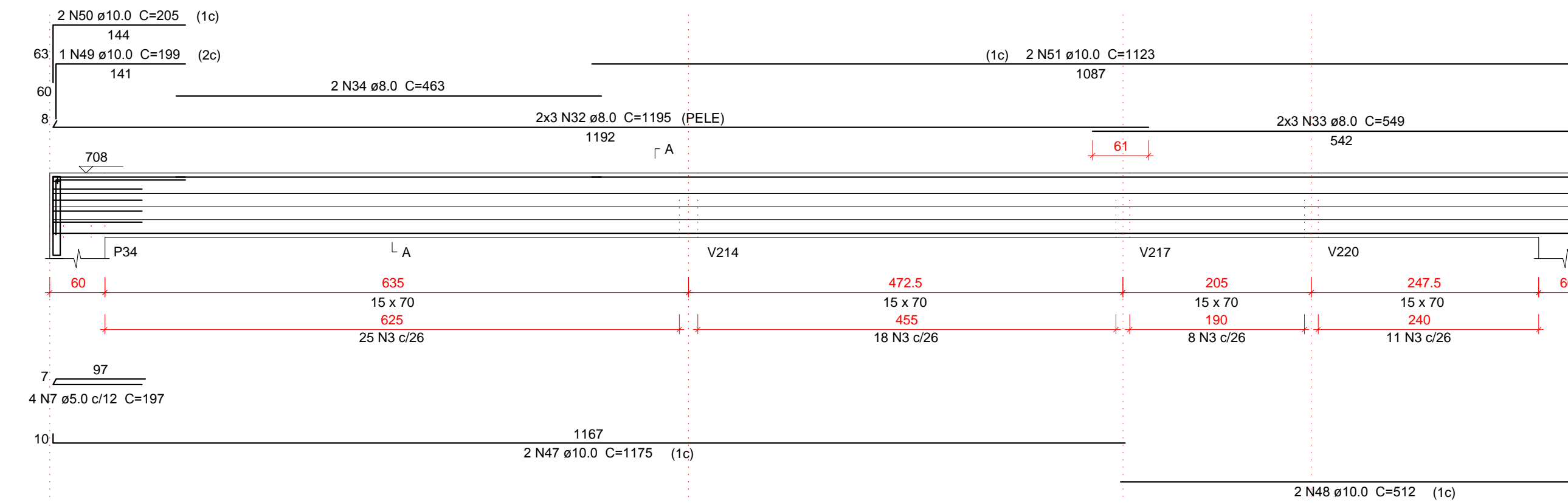
SEÇÃO A-A

ESC 1:25



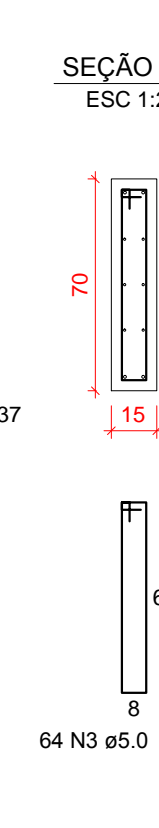
V210

ESC 1:50



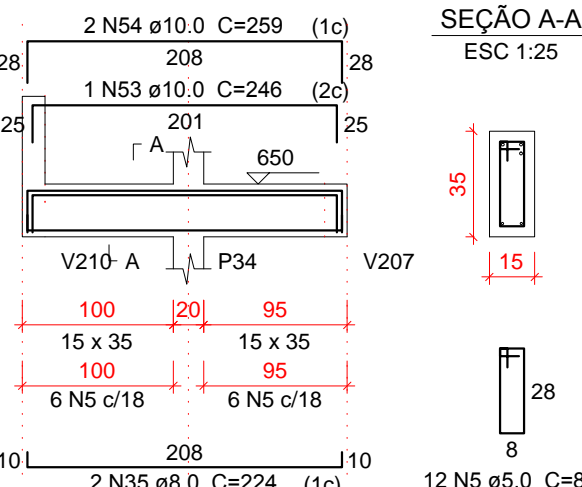
SEÇÃO A-A

ESC 1:25



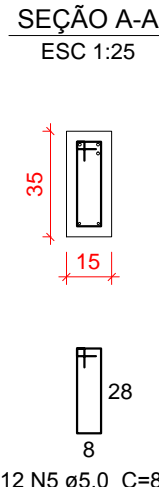
V213

ESC 1:50



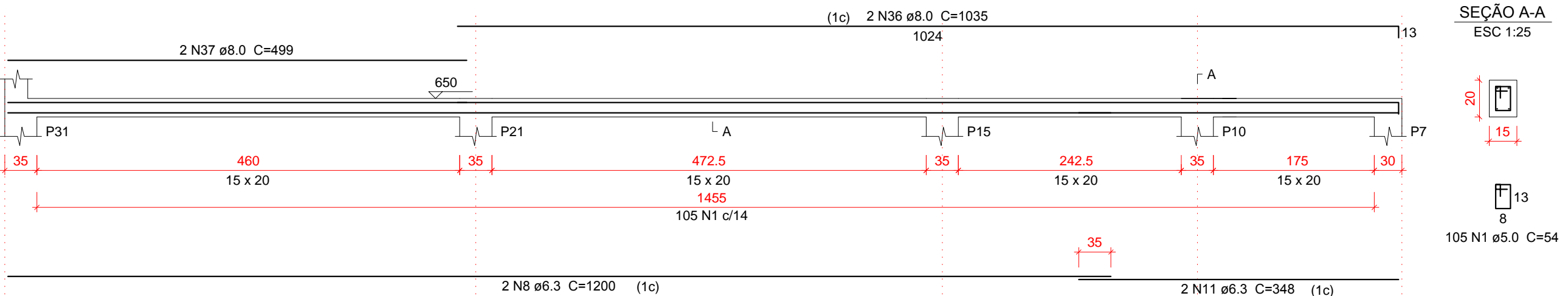
SEÇÃO A-A

ESC 1:25



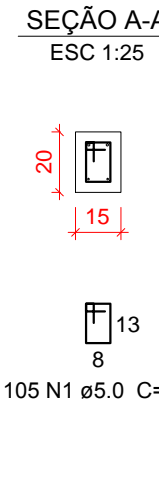
V212

ESC 1:50



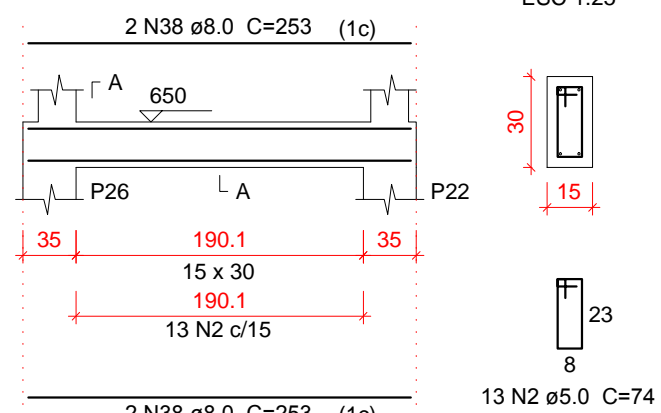
SEÇÃO A-A

ESC 1:25



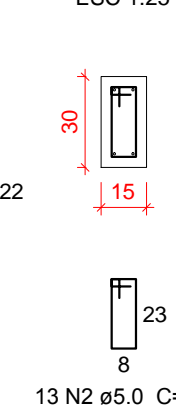
V215

ESC 1:50



SEÇÃO A-A

ESC 1:25



Relação do aço

| ACO | N | DIAM (mm) | QUANT | C.UNIT (cm) | C.TOTAL (cm) |
|------|----|-----------|-------|-------------|--------------|
| CA60 | 1 | 5.0 | 213 | 54 | 14634 |
| | 2 | 5.0 | 62 | 74 | 4588 |
| | 3 | 5.0 | 101 | 154 | 15554 |
| | 4 | 5.0 | 38 | 94 | 3572 |
| | 5 | 5.0 | 62 | 84 | 5208 |
| | 6 | 5.0 | 38 | 94 | 3572 |
| | 7 | 5.0 | 4 | 197 | 788 |
| | 8 | 6.3 | 4 | 1200 | 4800 |
| | 9 | 6.3 | 2 | 358 | 716 |
| | 10 | 6.3 | - | - | - |
| | 11 | 6.3 | 2 | 348 | 696 |
| | 12 | 6.3 | 2 | 348 | 696 |
| | 13 | 8.0 | 2 | 1199 | 2398 |
| | 14 | 8.0 | 2 | 373 | 746 |
| | 15 | 8.0 | - | - | - |
| | 16 | 8.0 | 2 | 216 | 432 |
| | 17 | 8.0 | 2 | 347 | 694 |
| | 18 | 8.0 | 6 | 1004 | 6024 |
| | 19 | 8.0 | 2 | 378 | 756 |
| | 20 | 8.0 | 1 | 190 | 190 |
| | 21 | 8.0 | 2 | 888 | 1776 |
| | 22 | 8.0 | 2 | 308 | 616 |
| | 23 | 8.0 | 2 | 344 | 688 |
| | 24 | 8.0 | 2 | 746 | 1492 |
| | 25 | 8.0 | 1 | 170 | 170 |
| | 26 | 8.0 | 2 | 740 | 1480 |
| | 27 | 8.0 | 2 | 323 | 646 |
| | 28 | 8.0 | 2 | 341 | 682 |
| | 29 | 8.0 | 2 | 244 | 488 |
| | 30 | 8.0 | 1 | 145 | 145 |
| | 31 | 8.0 | 2 | 290 | 580 |
| | 32 | 8.0 | 6 | 1195 | 7170 |
| | 33 | 8.0 | 6 | 549 | 3294 |
| | 34 | 8.0 | 2 | 463 | 926 |
| | 35 | 8.0 | 2 | 224 | 448 |
| | 36 | 8.0 | 2 | 1035 | 2070 |
| | 37 | 8.0 | 2 | 499 | 998 |
| | 38 | 8.0 | 4 | 253 | 1012 |
| | 39 | 8.0 | - | - | - |
| | 40 | 10.0 | 1 | 393 | 393 |
| | 41 | 10.0 | 2 | 1001 | 2002 |
| | 42 | 10.0 | 2 | 168 | 336 |
| | 43 | 10.0 | 2 | 565 | 1130 |
| | 44 | 10.0 | 2 | 638 | 1276 |
| | 45 | 10.0 | 2 | 706 | 1412 |
| | 46 | 10.0 | 2 | 696 | 1392 |
| | 47 | 10.0 | 2 | 1175 | 2350 |
| | 48 | 10.0 | 2 | 512 | 1024 |
| | 49 | 10.0 | 1 | 199 | 199 |
| | 50 | 10.0 | 2 | 205 | 410 |
| | 51 | 10.0 | 2 | 1123 | 2246 |
| | 52 | 10.0 | 1 | 201 | 201 |
| | 53 | 10.0 | 1 | 246 | 246 |
| | 54 | 10.0 | 2 | 259 | 518 |

Resumo do aço

| ACO | DIAM (mm) | C.TOTAL (m) | QUANT + 10% (Barras) | PESO + 10% (kg) |
|-----------------|-----------|-------------|----------------------|-----------------|
| CA50 | 6.3 | 79.5 | 8 | 21.4 |
| | 8.0 | 374.8 | 36 | 162.7 |
| | 10.0 | 155.4 | 15 | 105.4 |
| CA60 | 5.0 | 480.1 | - | 81.4 |
| PESO TOTAL (kg) | | | | |
| CA50 | | 289.4 | | |
| CA60 | | 81.4 | | |

Volume de concreto (C=30) = 6.1 m³
Área de forma = 95.68 m²

APROVAÇÕES:

A APROVAÇÃO DO PRESENTE PROJETO PELA PREFEITURA, NÃO RECONHECE A PROPRIEDADE DO IMÓVEL.

CLEBER LUIS HAHN
ENGENHEIRO CIVIL - CREA PR 94.916/0

PROJETO E EXECUÇÃO

TÍTULO:

PROJETO ESTRUTURAL

OBRA:

Comercial em Alvenaria

PRETENDENTE:

ACIM - Associação Comercial e Empresarial de Mercedes

ENDEREÇO DA OBRA:

Rua Doutor Flores / Lote 07 / Quadra 32 / Centro / Mercedes / PR

REFERÊNCIA:

Armadura de vigas do pavimento COBERTURA

DADOS ESTATÍSTICOS:

VER PROJETO ARQUITETÔNICO

ASSINATURA DO PRETENDENTE:

Associação Comercial e Empresarial de Mercedes
CNPJ: 72.326.620/0001-89

RESPONSÁVEL PROJETO / DESENHO:

Engº Civil Cleber Luis Hahn
Registro Crea PR - 94.916/0 - CPF: 020.404.019-11

RESPONSÁVEL EXECUÇÃO:

DATA:

01 / 2025

PRANCHA:

EST_018