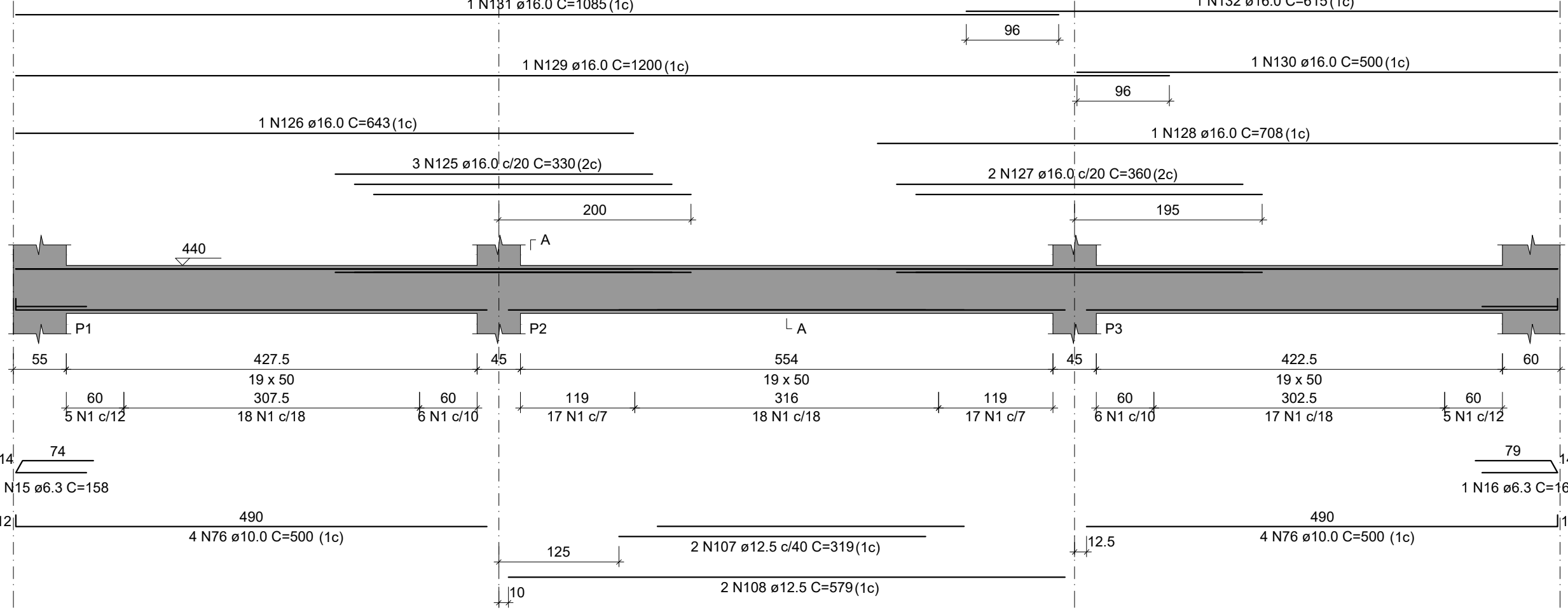


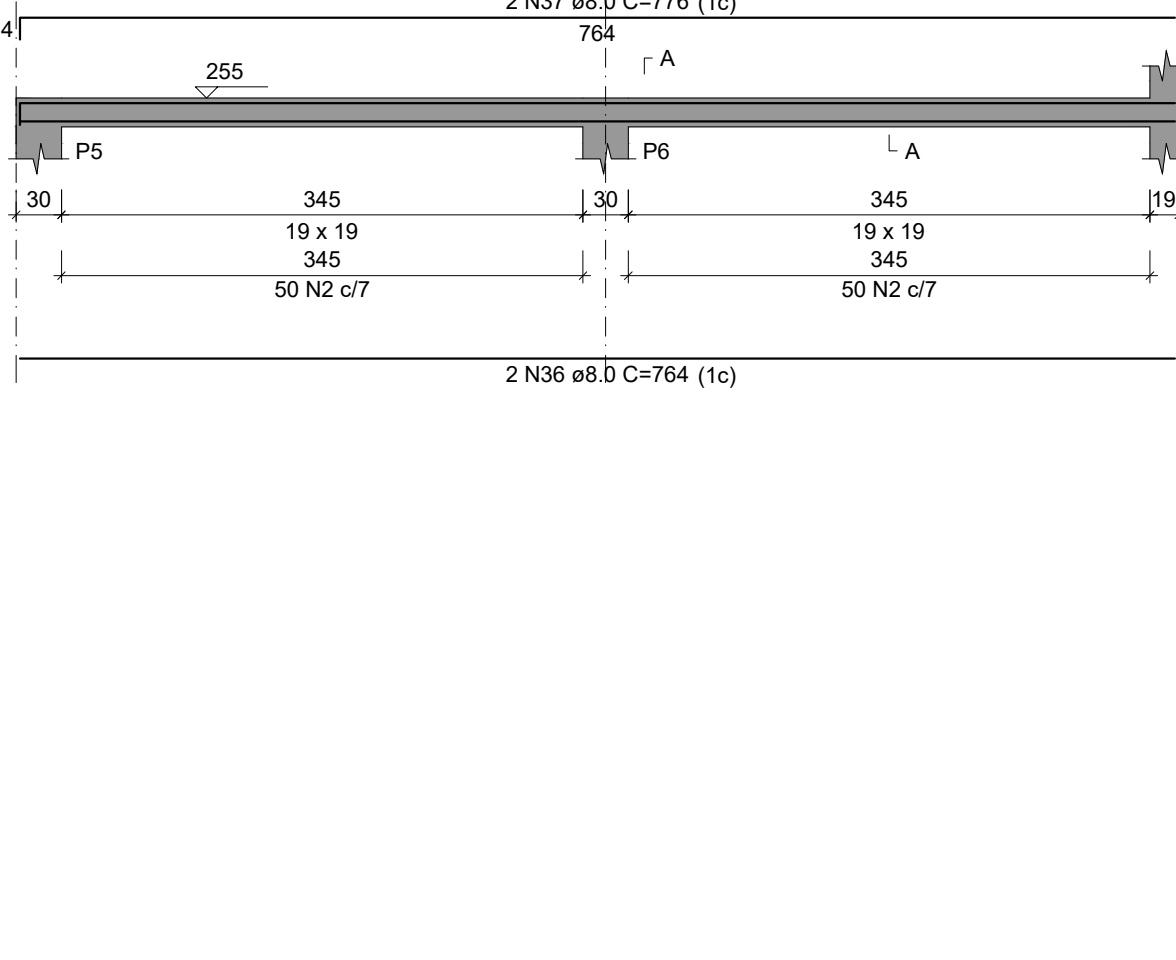
V201

ESC 1:50



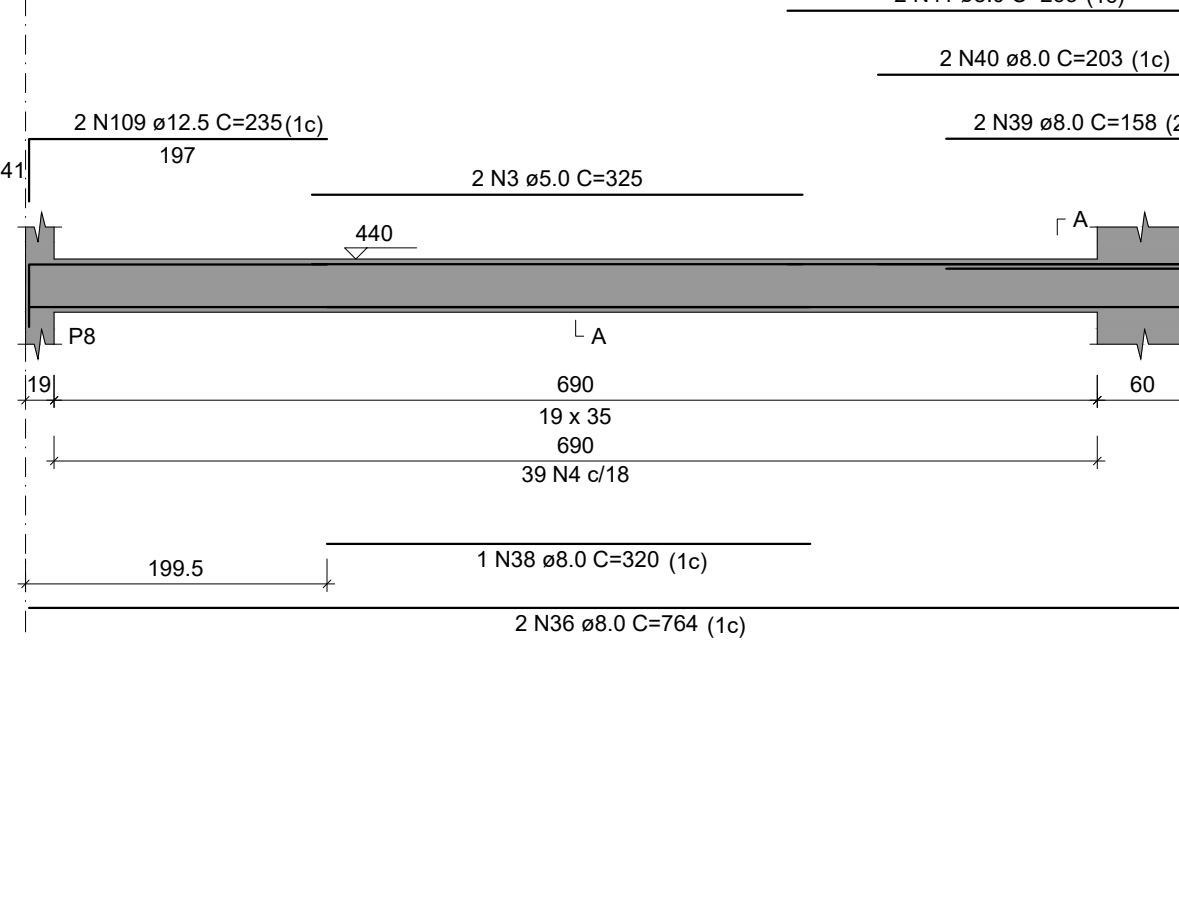
V202

ESC 1:50



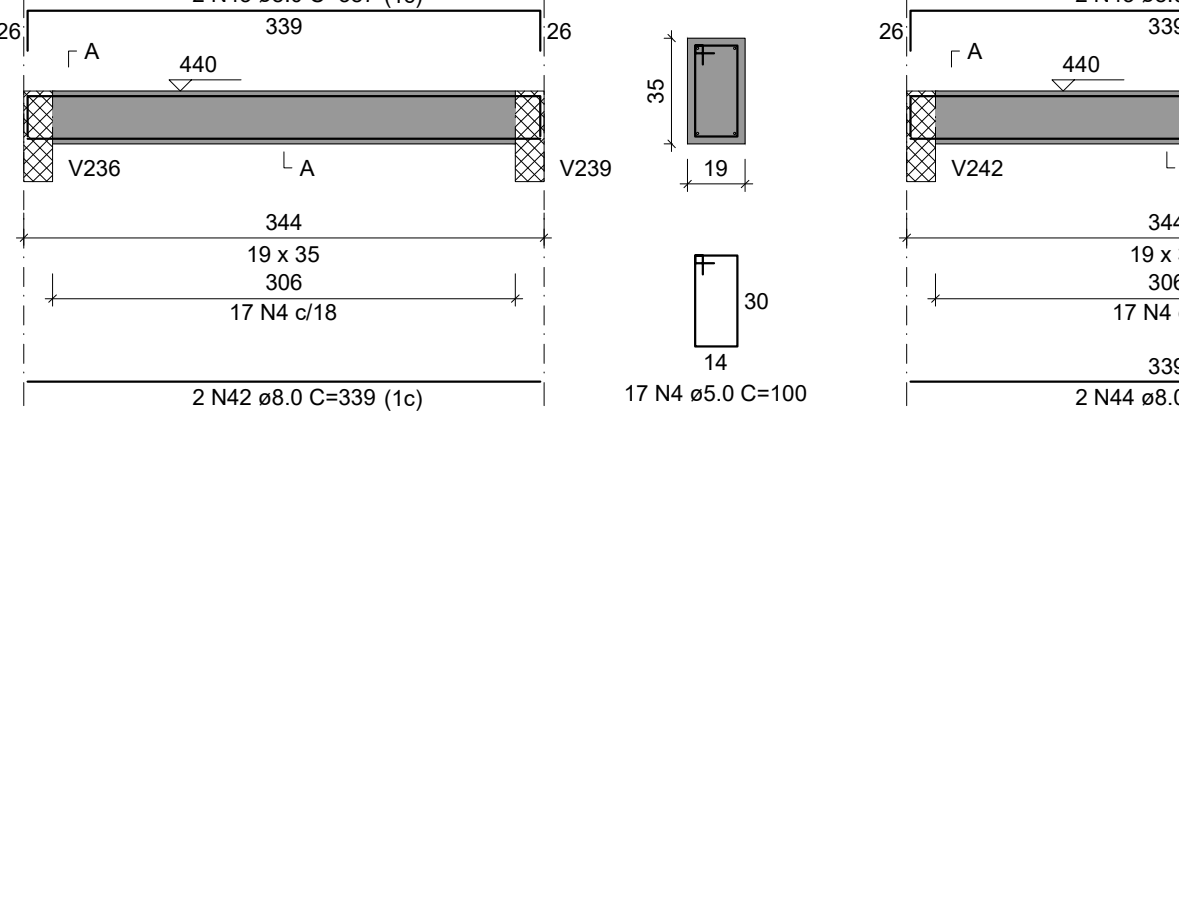
V203

ESC 1:50



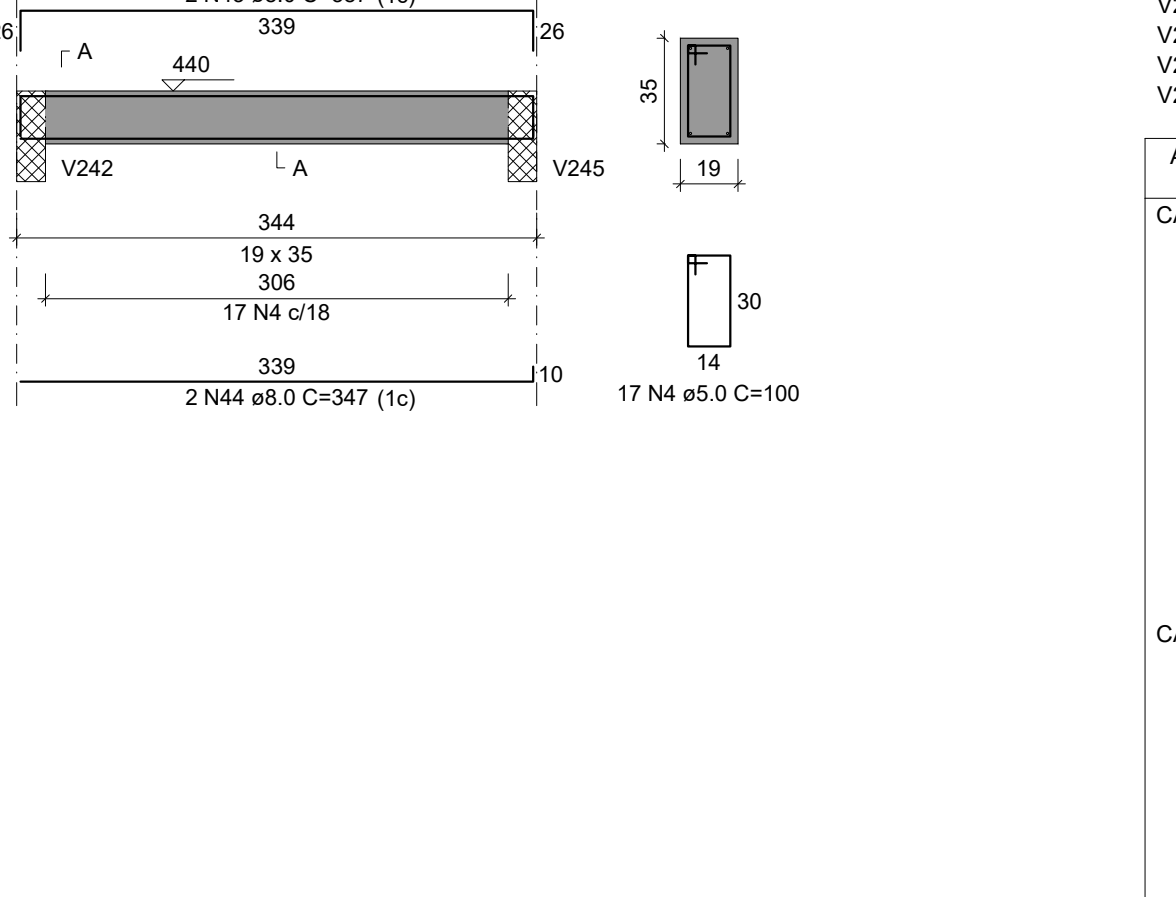
V204

ESC 1:50



V205

ESC 1:50



Relação do aço

| ACO | N | DIAM (mm) | QUANT | C.UNIT (kg) | C. TOTAL (kg) |
|------|-----|-----------|-------|-------------|---------------|
| CA50 | 1 | 5.0 | 121 | 130 | 15730 |
| | 2 | 5.0 | 68 | 680 | 46240 |
| | 3 | 5.0 | 325 | 850 | 276250 |
| | 4 | 5.0 | 195 | 100 | 19500 |
| | 5 | 5.0 | 140 | 980 | 137200 |
| | 6 | 5.0 | 565 | 150 | 84750 |
| | 7 | 5.0 | 2 | 221 | 442 |
| | 8 | 5.0 | 80 | 242 | 19360 |
| | 9 | 5.0 | 30 | 31 | 930 |
| | 10 | 5.0 | 2 | 240 | 480 |
| | 11 | 5.0 | 24 | 180 | 4320 |
| | 12 | 5.0 | 2 | 355 | 710 |
| | 13 | 5.0 | 45 | 170 | 7650 |
| | 14 | 5.0 | 2 | 431 | 862 |
| | 15 | 6.3 | 1 | 158 | 158 |
| | 16 | 6.3 | 3 | 165 | 504 |
| | 17 | 6.3 | 6 | 204 | 1224 |
| | 18 | 6.3 | 7 | 142 | 994 |
| | 19 | 6.3 | 16 | 522 | 8352 |
| | 20 | 6.3 | 12 | 652 | 7824 |
| | 21 | 6.3 | 118 | 182 | 21476 |
| | 22 | 6.3 | 36 | 638 | 22968 |
| | 23 | 6.3 | 3 | 254 | 762 |
| | 24 | 6.3 | 10 | 469 | 4690 |
| | 25 | 6.3 | 8 | 610 | 4880 |
| | 26 | 6.3 | 8 | 1200 | 9600 |
| | 27 | 6.3 | 8 | 579 | 4632 |
| | 28 | 6.3 | 8 | 857 | 6856 |
| | 29 | 6.3 | 3 | 86 | 258 |
| | 30 | 6.3 | 8 | 599 | 4792 |
| | 31 | 6.3 | 8 | 289 | 2312 |
| | 32 | 6.3 | 10 | 564 | 5640 |
| | 33 | 6.3 | 8 | 1041 | 8328 |
| | 34 | 6.3 | 1050 | 8400 | 88200 |
| | 35 | 6.3 | 8 | 767 | 6136 |
| | 36 | 8.0 | 4 | 754 | 3016 |
| | 37 | 8.0 | 3 | 776 | 2328 |
| | 38 | 8.0 | 1 | 320 | 320 |
| | 39 | 8.0 | 1 | 158 | 158 |
| | 40 | 8.0 | 2 | 203 | 406 |
| | 41 | 8.0 | 2 | 263 | 526 |
| | 42 | 8.0 | 4 | 339 | 1356 |
| | 43 | 8.0 | 4 | 387 | 1548 |
| | 44 | 8.0 | 4 | 347 | 1388 |
| | 45 | 8.0 | 3 | 210 | 840 |
| | 46 | 8.0 | 3 | 267 | 801 |
| | 47 | 8.0 | 1 | 564 | 564 |
| | 48 | 8.0 | 1 | 234 | 234 |
| | 49 | 8.0 | 4 | 939 | 3756 |
| | 50 | 8.0 | 2 | 163 | 326 |
| | 51 | 8.0 | 1 | 140 | 140 |
| | 52 | 8.0 | 1 | 126 | 126 |
| | 53 | 8.0 | 2 | 847 | 1694 |
| | 54 | 8.0 | 1 | 285 | 285 |
| | 55 | 8.0 | 1 | 611 | 611 |
| | 56 | 8.0 | 2 | 662 | 1324 |
| | 57 | 8.0 | 2 | 495 | 990 |
| | 58 | 8.0 | 2 | 286 | 572 |
| | 59 | 8.0 | 2 | 987 | 1974 |
| | 60 | 8.0 | 2 | 188 | 376 |
| | 61 | 8.0 | 1 | 564 | 564 |
| | 62 | 8.0 | 1 | 488 | 488 |
| | 63 | 8.0 | 4 | 1200 | 4800 |
| | 64 | 8.0 | 4 | 609 | 2436 |
| | 65 | 8.0 | 8 | 148 | 1184 |
| | 66 | 8.0 | 2 | 363 | 726 |
| | 67 | 8.0 | 2 | 426 | 852 |
| | 68 | 8.0 | 2 | 1041 | 2082 |
| | 69 | 8.0 | 1 | 130 | 130 |
| | 70 | 8.0 | 1 | 180 | 180 |
| | 71 | 8.0 | 1 | 245 | 245 |
| | 72 | 8.0 | 1 | 337 | 337 |
| | 73 | 8.0 | 2 | 100 | 200 |
| | 74 | 8.0 | 2 | 1052 | 2104 |
| | 75 | 8.0 | 4 | 178 | 712 |
| | 76 | 10.0 | 4 | 500 | 2000 |
| | 77 | 10.0 | 4 | 592 | 2368 |
| | 78 | 10.0 | 4 | 695 | 2780 |
| | 79 | 10.0 | 4 | 177 | 708 |
| | 80 | 10.0 | 1 | 200 | 200 |
| | 81 | 10.0 | 2 | 528 | 1056 |
| | 82 | 10.0 | 1 | 110 | 110 |
| | 83 | 10.0 | 2 | 477 | 954 |
| | 84 | 10.0 | 2 | 322 | 644 |
| | 85 | 10.0 | 1 | 305 | 305 |
| | 86 | 10.0 | 1 | 481 | 481 |
| | 87 | 10.0 | 1 | 857 | 857 |
| | 88 | 10.0 | 2 | 367 | 734 |
| | 89 | 10.0 | 1 | 105 | 105 |
| | 90 | 10.0 | 3 | 297 | 891 |
| | 91 | 10.0 | 1 | 350 | 350 |
| | 92 | 10.0 | 2 | 585 | 1170 |
| | 93 | 10.0 | 4 | 573 | 2292 |
| | 94 | 10.0 | 1 | 162 | 162 |
| | 95 | 10.0 | 2 | 238 | 476 |
| | 96 | 10.0 | 2 | 193 | 386 |
| | 97 | 10.0 | 2 | 197 | 394 |
| | 98 | 10.0 | 2 | 353 | 706 |
| | 99 | 10.0 | 2 | 213 | 426 |
| | 100 | 10.0 | 2 | 278 | 556 |
| | 101 | 10.0 | 2 | 276 | 552 |
| | 102 | 10.0 | 2 | 276 | 552 |
| | 103 | 10.0 | 2 | 231 | 462 |
| | 104 | 10.0 | 6 | 661 | 3966 |
| | 105 | 10.0 | 2 | 253 | 506 |
| | 106 | 10.0 | 2 | 313 | 626 |
| | 107 | 12.5 | 2 | 319 | 638 |
| | 108 | 12.5 | 2 | 579 | 1158 |
| | 109 | 12.5 | 2 | 235 | 470 |
| | 110 | 12.5 | 1 | 163 | 163 |
| | 111 | 12.5 | 2 | 263 | 526 |
| | 112 | 12.5 | 1 | 215 | 215 |
| | 113 | 12.5 | 2 | 627 | 1254 |
| | 114 | 12.5 | 2 | 196 | 396 |
| | 115 | 12.5 | 2 | 475 | 950 |
| | 116 | 12.5 | 2 | 434 | 868 |
| | 117 | 12.5 | 2 | 320 | 640 |
| | 118 | 12.5 | 2 | 928 | 1856 |
| | 119 | 12.5 | 2 | 435 | 870 |
| | 120 | 12.5 | 4 | 613 | 2452 |
| | 121 | 12.5 | 3 | 341 | 1023 |
| | 122 | 12.5 | 2 | 228 | 456 |
| | 123 | 12.5 | 1 | 299 | 299 |
| | 124 | 12.5 | 2 | 1095 | 2190 |
| | 125 | 16.0 | 3 | 330 | 990 |
| | 126 | 16.0 | 1 | 643 | 643 |
| | 127 | 16.0 | 3 | 360 | 1080 |
| | 128 | 16.0 | 1 | 708 | 708 |
| | 129 | 16.0 | 1 | 1200 | 1200 |
| | 130 | 16.0 | 1 | 500 | 500 |
| | 131 | 16.0 | 1 | 1085 | 1085 |
| | 132 | 16.0 | 1 | 615 | 615 |
| | 133 | 16.0 | 2 | 412 | 824 |
| | 134 | 16.0 | 2 | 665 | 1330 |
| | 135 | 16.0 | 4 | 607 | 2428 |
| | 136 | 20.0 | 1 | 380 | 380 |
| | 137 | 20.0 | 1 | 1007 | 1007 |
| | 138 | 20.0 | 1 | 1027 | 1027 |
| | 139 | 20.0 | 2 | 1194 | 2388 |
| | 140 | 20.0 | 2 | 567 | 1134 |
| | 141 | 20.0 | 1 | 328 | 328 |
| | 142 | 20.0 | 3 | 398 | 1194 |
| | 143 | 20.0 | 3 | 724 | 2172 |
| | 144 | 20.0 | 20 | 181 | 3620 |
| | 145 | 25.0 | 2 | 523 | 1046 |
| | 146 | 25.0 | 3 | 723 | 2169 |
| | 147 | 25.0 | 2 | 480 | 960 |

Resumo do aço

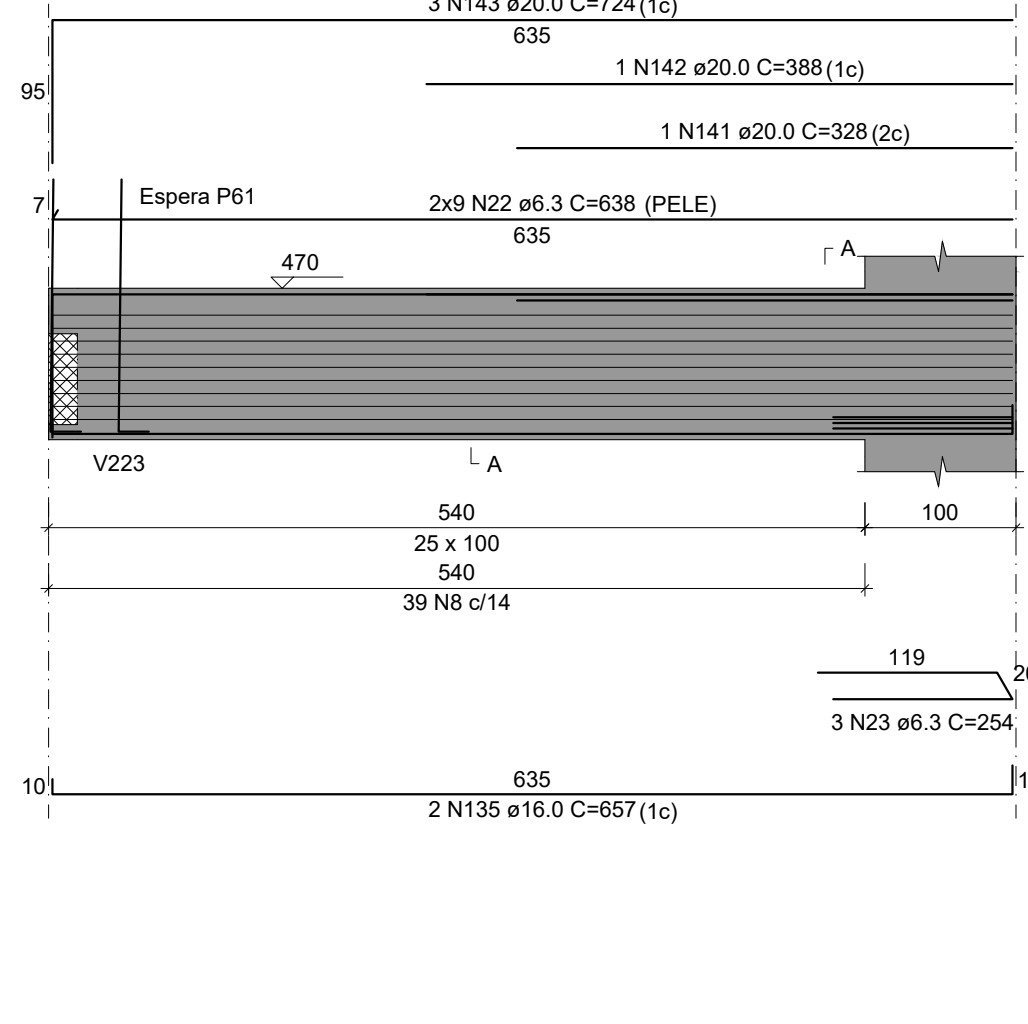
| ACO | DIAM (mm) | C.TOTAL (m) | PESO + 10 % (kg) |
|-----------------|-----------|-------------|------------------|
| CA50 | 6.3 | 1299.4 | 349.7 |
| | 8.0 | 431.1 | 187.1 |
| | 10.0 | 341.2 | 231.4 |
| | 12.5 | 164.3 | 174.1 |
| | 16.0 | 112.5 | 195.2 |
| | 20.0 | 124.5 | 337.6 |
| | 25.0 | 41.8 | 177 |
| CA60 | 6.0 | 1653.5 | 280.3 |
| PESO TOTAL (kg) | | | |
| CA50 | 1652 | | |
| CA60 | 280.3 | | |

Volume de concreto (C=30) = 19.31 m³

Área de forma = 227.14 m²

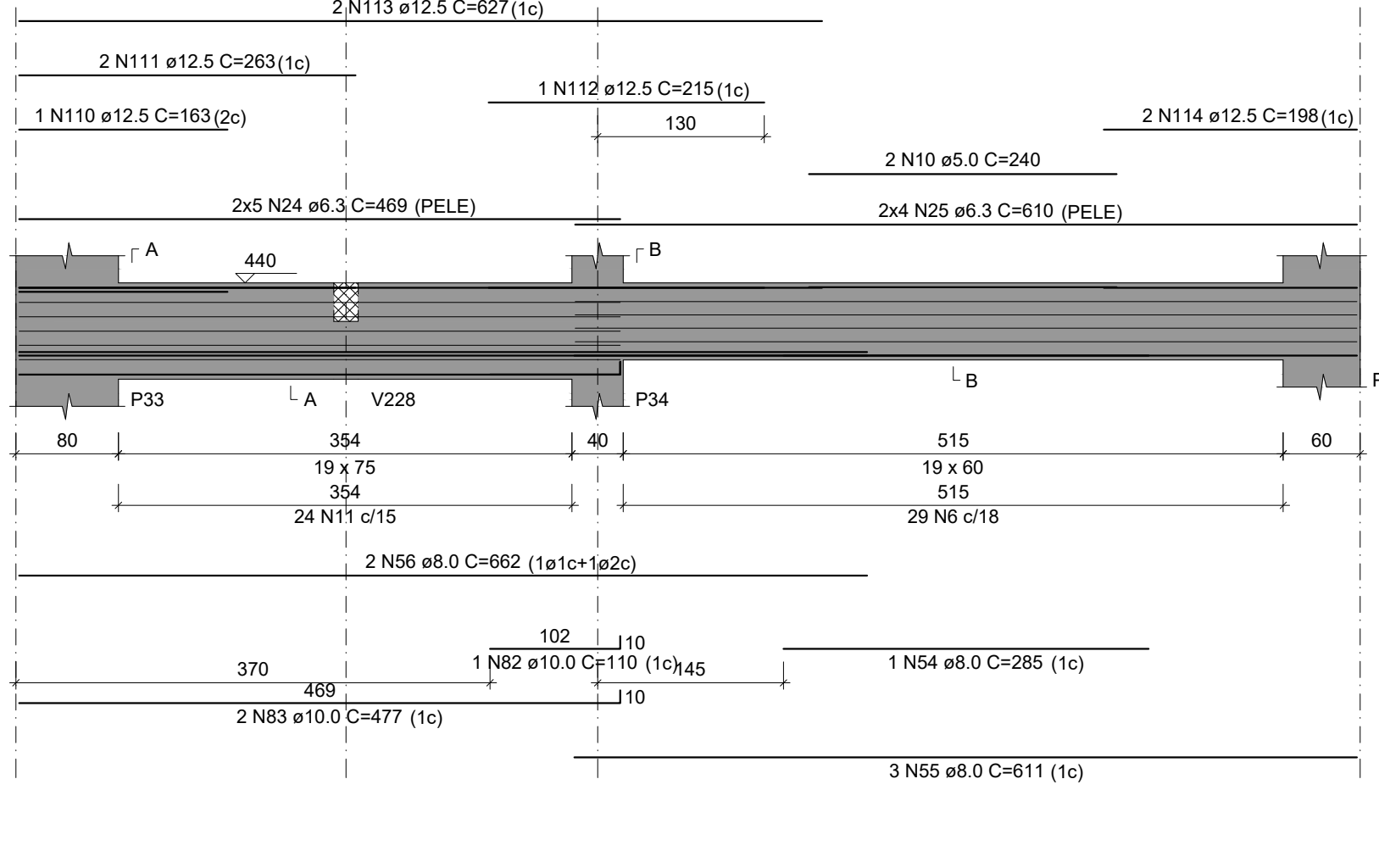
V210

ESC 1:50



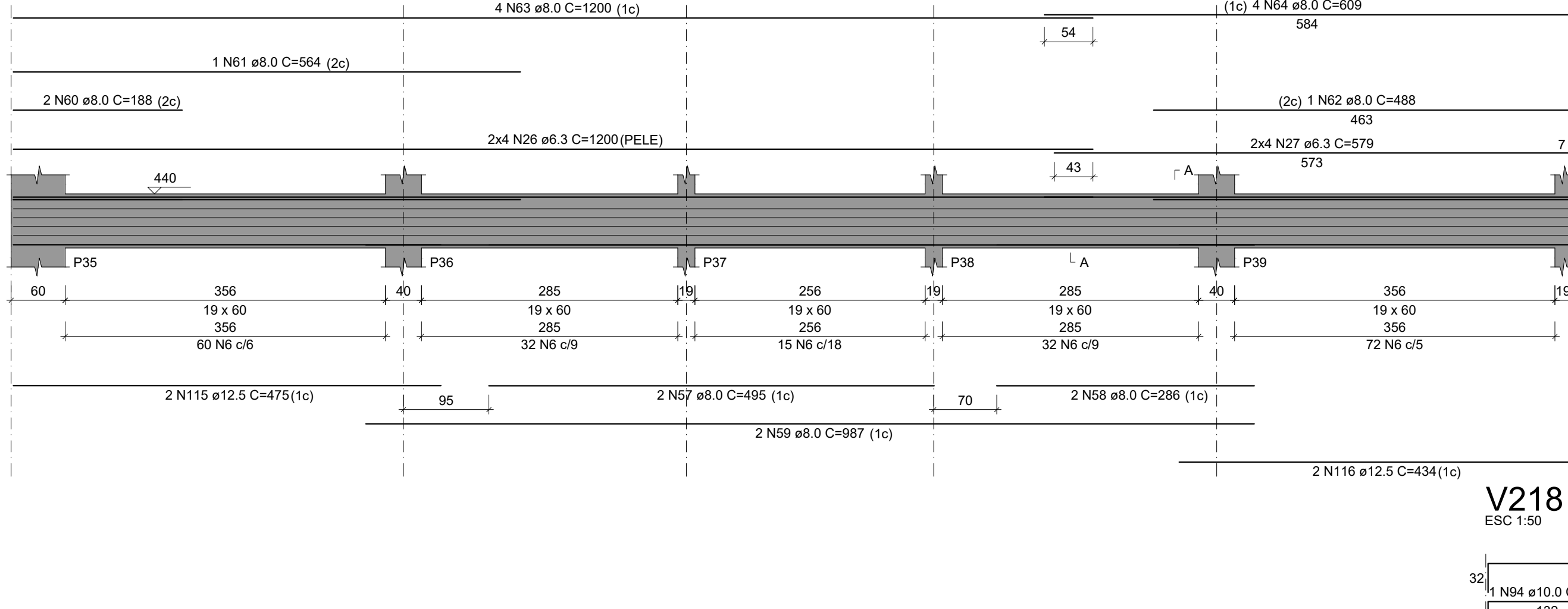
V211

ESC 1:50



V212

ESC 1:50



V218

ESC 1:50

