| | GRADE 300 STEEL Design Load Capacities for Axial Compression ø N (kN) for Effective Length (L) in metres Percent holes to | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|-------|---|-------|-------|------|------|-------|------|------------|-------------|--------------|----------|--------------------------|---------------|---------------|--------------|------|-----------------------------|------|------|------|------|------|-----------------------------|
| Designa | ation | ø N, | | | | | | | | Design Loa | ad Capaciti | es for Axial | Compress | ion ø N _. (kľ | l) for Effect | ive Length (L | .) in metres | | | | | | | | Percent holes to affect net |
| | kg/m | 0 | 0.5 | 1 | 1.5 | 2 | 2.25 | 2.5 | 2.75 | 3 | 3.2 | 5 3 | .5 | 3.75 | 4 | 4.25 | 4.5 | 4.75 | 5 | 6 | 7 | 8 | 9 | 10 | Area, A |
| 310UC | 137 | 4410 | 4410 | 4410 | 4310 | 4210 | 4150 | 4100 | 4040 | 3980 | 392 | 20 38 | 350 | 3780 | 3700 | 3630 | 3540 | 3460 | 3370 | 2960 | 2540 | 2150 | 1810 | 1540 | 25% |
| 310UC | 96.8 | 3320 | 3320 | 3310 | 3230 | 3150 | 3110 | 3060 | 3020 | 2970 | 291 | 0 28 | 360 2 | 2800 | 2740 | 2670 | 2600 | 2530 | 2460 | 2130 | 1800 | 1500 | 1260 | 1060 | 20% |
| 250UC | 89.5 | 2870 | 2870 | 2850 | 2770 | 2680 | 2640 | 2590 | 2540 | 2490 | 243 | 30 23 | 370 2 | 2310 | 2240 | 2170 | 2090 | 2020 | 1930 | 1610 | 1310 | 1070 | 884 | 738 | 25% |
| 250UC | 72.9 | 2510 | 2510 | 2480 | 2410 | 2330 | 2290 | 2250 | 2200 | 2150 | 210 | 00 20 |)40 | 1980 | 1910 | 1840 | 1770 | 1700 | 1620 | 1330 | 1070 | 871 | 715 | 595 | 20% |
| 200UC | 59.5 | 2060 | 2060 | 2010 | 1930 | 1850 | 1800 | 1750 | 1690 | 1630 | 156 | 60 14 | 190 | 1410 | 1330 | 1260 | 1180 | 1110 | 1040 | 794 | 617 | 489 | 396 | 327 | 20% |
| 200UC | 52.2 | 1810 | 1810 | 1760 | 1690 | 1620 | 1570 | 1530 | 1480 | 1420 | 136 | 30 13 | 300 | 1230 | 1160 | 1100 | 1030 | 965 | 903 | 691 | 537 | 426 | 345 | 284 | 20% |
| 200UC | 46.2 | 1600 | 1600 | 1560 | 1500 | 1430 | 1390 | 1350 | 1300 | 1250 | 120 | 00 11 | 40 | 1080 | 1020 | 960 | 900 | 842 | 787 | 601 | 466 | 370 | 299 | 246 | 20% |
| 150UC | 37.2 | 1290 | 1280 | 1220 | 1150 | 1060 | 1010 | 951 | 889 | 824 | 75 | 9 6 | 96 | 637 | 582 | 532 | 487 | 447 | 411 | 300 | 227 | 177 | 142 | 117 | 20% |
| 150UC | 30.0 | 1110 | 1110 | 1050 | 986 | 904 | 855 | 801 | 744 | 685 | 62 | 7 5 | 72 | 521 | 474 | 432 | 395 | 361 | 331 | 241 | 182 | 142 | 114 | 93.2 | 14% |
| 150UC | 23.4 | 867 | 861 | 815 | 760 | 691 | 650 | 605 | 558 | 511 | 46 | 5 4 | 22 | 382 | 347 | 315 | 287 | 263 | 241 | 174 | 131 | 102 | 82.1 | 67.2 | 14% |
| 100UC | 14.8 | 544 | 527 | 478 | 410 | 323 | 280 | 242 | 210 | 182 | 16 | 0 1 | 40 | 124 | 111 | 99.3 | 89.4 | 80.9 | 73.5 | 52.2 | 38.9 | 30.1 | 24.0 | 19.6 | 14% |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| GRADE 350 STEEL | | | | | | | | | | | | | | | | | | | | | | | | | |
| Designati | ion | ø N, | Design Load Capacities for Axial Compression Ø N _c (kN) for Effective Length (L _c) in metres | | | | | | | | | | | | | | | | Percent holes to affect net | | | | | | |
| | kg/m | 0 | 0.5 | 1 | 1.5 | 2 | 2.: | 25 | 2.5 | 2.75 | 3 | 3.25 | 3.5 | 3.75 | 4 | 4.25 | 4.5 | 4.75 | 5 | 6 | 7 | 8 | 9 | 10 | Area, A |
| 310UC | 283 | 10700 | 10700 | 10700 | 10500 | 1020 | 0 10 | 100 | 9920 | 9780 | 9620 | 9460 | 9290 | 9110 | 8920 | 0 8720 | 8510 | 8290 | 8050 | 7040 | 5990 | 5030 | 4230 | 3570 | 19% |
| 310UC | 198 | 7740 | 7740 | 7710 | 7520 | 7330 | 72 | 20 | 7120 | 7000 | 6880 | 6760 | 6630 | 6490 | 634 | 0 6180 | 6010 | 5830 | 5650 | 4870 | 4090 | 3400 | 2840 | 2390 | 17% |
| 310UC | 137 | 5360 | 5350 | 5330 | 5200 | 5050 |) 49 | 80 4 | 4900 | 4820 | 4740 | 4650 | 4550 | 4450 | 434 | 0 4230 | 4100 | 3980 | 3850 | 3290 | 2740 | 2270 | 1890 | 1590 | 17% |
| 310UC | 96.8 | 3760 | 3760 | 3740 | 3650 | 3550 | 34 | .90 : | 3440 | 3380 | 3320 | 3250 | 3180 | 3110 | 303 | 0 2940 | 2860 | 2760 | 2670 | 2270 | 1880 | 1550 | 1290 | 1080 | 17% |
| 250UC | 89.5 | 3490 | 3490 | 3440 | 3330 | 3220 | 31 | 50 3 | 3090 | 3020 | 2940 | 2860 | 2770 | 2680 | 258 | 0 2470 | 2370 | 2260 | 2150 | 1730 | 1380 | 1110 | 909 | 754 | 17% |
| 250UC | 72.9 | 2850 | 2850 | 2800 | 2710 | 2620 |) 25 | 70 2 | 2510 | 2450 | 2390 | 2320 | 2250 | 2170 | | 0 2000 | 1910 | 1820 | 1730 | 1390 | 1110 | 890 | 728 | 604 | 17% |
| 200UC | 59.5 | 2340 | 2340 | 2270 | 2170 | 2060 |) 20 | 000 | | | 1780 | 1700 | 1610 | 1520 | | | 1240 | 1160 | 1080 | 814 | 628 | 496 | 401 | 330 | 17% |
| 200UC | 52.2 | 2050 | 2050 | 1980 | 1900 | 1810 |) 17 | '50 | 1690 | 1630 | 1560 | 1480 | 1400 | 1320 | 124 | 0 1160 | 1080 | 1010 | 938 | 709 | 546 | 432 | 348 | 287 | 17% |
| 200UC | 46.2 | 1920 | 1920 | 1860 | 1770 | 1680 | 0 16 | 20 | 1570 | 1500 | 1430 | 1350 | 1270 | 1190 | 1111 | 0 1040 | 963 | 894 | 830 | 622 | 478 | 377 | 304 | 250 | 12% |
| 150UC | 37.2 | 1460 | 1450 | 1370 | 1280 | 1170 | 0 11 | 10 | 1030 | 955 | 877 | 801 | 728 | 662 | 602 | 548 | 499 | 457 | 419 | 304 | 229 | 179 | 143 | 117 | 17% |
| 150UC | 30.0 | 1250 | 1240 | 1180 | 1090 | 991 | 93 | 30 | 863 | 793 | 723 | 656 | 594 | 538 | 488 | 3 443 | 403 | 368 | 337 | 244 | 184 | 143 | 115 | 93.7 | 12% |
| 150UC | 23.4 | 975 | 966 | 910 | 842 | 756 | 70 | 04 | 649 | 592 | 536 | 484 | 437 | 394 | 356 | 322 | 293 | 267 | 244 | 176 | 133 | 103 | 82.5 | 67.5 | 12% |
| 100UC | 14.8 | 612 | 590 | 530 | 444 | 340 | 29 | 91 | 250 | 215 | 186 | 162 | 142 | 126 | 112 | 2 100 | 90.2 | 81.6 | 74.1 | 52.5 | 39.1 | 30.2 | 24.1 | 19.6 | 12% |