

PLATES

| | |
|--|----|
| Main Specifications for Steel Plates | 64 |
| Plate Weight | 65 |
| Chequered (Floor) Plates | 65 |

PLATES

MAIN SPECIFICATIONS FOR STEEL PLATES

| Specifications | Yield strength N/mm ² | | | Tensile strength N/mm ² | Elongation min. % $L_0=5.65\sqrt{S_0}$ | Charpy V-notch Temp. (°C) Energy (J) | | | | |
|----------------------------------|-------------------------------------|-----------|--------|--|--|---|----|-----|-----|-----|
| | t<16mm | 16<t<40mm | t>40mm | | | 20 | 0 | -20 | -40 | -50 |
| GENERAL STRUCTURES | | | | | | | | | | |
| ASTM A36 | min. 250 | | | 400-550 | 50mm-200mm 23-20 | - | - | - | - | - |
| ASTM A283 | min. 165 | | | 310-415 | 50mm-200mm 30-27 | - | - | - | - | - |
| Grade A | min. 185 | | | 345-450 | 28-25 | - | - | - | - | - |
| Grade B | min. 205 | | | 380-515 | 25-22 | - | - | - | - | - |
| Grade C | min. 230 | | | 415-550 | 23-20 | - | - | - | - | - |
| Grade D | | | | | | - | - | - | - | - |
| ASTM A572 | min. 290 | | | 415 | 50mm-200mm 24-20 | - | - | - | - | - |
| Grade 42 | min. 345 | | | 450 | 21-18 | - | - | - | - | - |
| Grade 50 | min. 415 | | | 520 | 18-16 | - | - | - | - | - |
| Grade 60 | min. 450 | | | 550 | 17-15 | - | - | - | - | - |
| Grade 65 | | | | | | - | - | - | - | - |
| EN 10025-2 : 2004 | min. 275 | | | 410/560 | 18-23 | 27 | - | - | - | - |
| S275JR | min. 275 | | | 410/560 | 18-23 | - | 27 | - | - | - |
| S275J0 | min. 275 | | | 410/560 | 18-21 | - | - | 27 | - | - |
| S275J2 | min. 355 | | | 470/630 | 18-22 | 27 | - | - | - | - |
| S355JR | min. 355 | | | 470/630 | 18-22 | - | 27 | - | - | - |
| S355J0 | min. 355 | | | 470/630 | 18-22 | - | - | 27 | - | - |
| S355J2 | min. 355 | | | 470/630 | 17-20 | - | - | 40 | - | - |
| S355K2 | | | | | | - | - | 40 | - | - |
| EN 10025-3 : 2004 | min. 275 | | | 370-510 | 23-24 | - | - | 40 | - | 27 |
| S275N/NL | min. 355 | | | 470-630 | 21-22 | - | - | 40 | - | 27 |
| S355N/NL | min. 420 | | | 520-680 | 18-19 | - | - | 40 | - | 27 |
| S420N/NL | min. 460 | | | 550-720 | 17 | - | - | 40 | - | 27 |
| S460N/NL | | | | | | - | - | 40 | - | 27 |
| EN 10025-4 : 2004 | min. 275 | | | 360-510 | 24 | - | - | 40 | - | 27 |
| S275M/ML | min. 355 | | | 450-610 | 22 | - | - | 40 | - | 27 |
| S355M/ML | min. 420 | | | 500-660 | 19 | - | - | 40 | - | 27 |
| S420M/ML | min. 460 | | | 530-720 | 17 | - | - | 40 | - | 27 |
| S460M/ML | | | | | | - | - | 40 | - | 27 |
| JIS G 3101 | 205 | 195 | 175 | 330-430 | 28-21 | - | - | - | - | - |
| SS330 | 245 | 235 | 215 | 400-510 | 17-23 | - | - | - | - | - |
| SS400 | 285 | 275 | 255 | 490-610 | 15-21 | - | - | - | - | - |
| SS490 | 400 | 390 | - | min.540 | 13-17 | - | - | - | - | - |
| SS540 | | | | | | - | - | - | - | - |
| JIS G 3106 | 245 | 235 | 215 | 400-510 | 18-24 | 0°C B/C 27/47 | | - | - | - |
| SM400A, B, C | 325 | 315 | 295 | 490-610 | 17-23 | B/C 27/47 | | - | - | - |
| SM490A, B, C | 365 | 355 | 335 | 490-610 | 15-21 | YB 27 | | - | - | - |
| SM490YA, YB | 365 | 355 | 335 | 520-640 | 15-21 | B/C 27/47 | | - | - | - |
| SM520B, C | 460 | 450 | 430 | 570-720 | 16-26 | - | - | 47 | - | - |
| SM570 | | | | | | - | - | 47 | - | - |
| HULL STRUCTURES | | | | | | | | | | |
| ABS / LR / BV / DNV | min. 235 | | | 400-550 | 22 | For thickness t ≤ 50mm | | | | |
| Grade A, B, D, E | min. 315 | | | 440-590 | 22 | - | 27 | 27 | 27 | - |
| Gr. AH, DH, EH, FH 32 | min. 355 | | | 490-620 | 21 | - | 31 | 31 | 31 | - |
| Gr. AH, DH, EH, FH 36 | min. 390 | | | 510-650 | 20 | - | 34 | 34 | 34 | - |
| Gr. AH, DH, EH, FH 40 | | | | | | - | 41 | 41 | 41 | - |
| PRESSURE VESSELS, GENERAL | | | | | | | | | | |
| ASTM A285 | min. 165 | | | 310-450 | 50mm-200mm 30-27 | - | - | - | - | - |
| Grade A | min. 185 | | | 345-485 | 28-25 | - | - | - | - | - |
| Grade B | min. 205 | | | 380-515 | 27-23 | - | - | - | - | - |
| Grade C | | | | | | - | - | - | - | - |
| ASTM A516 | min. 220 | | | 415-550 | 50mm-200mm 25-21 | - | - | - | - | - |
| Grade 60 | min. 240 | | | 450-585 | 23-19 | - | - | - | - | - |
| Grade 65 | min. 260 | | | 485-620 | 21-17 | - | - | - | - | - |
| Grade 70 | | | | | | - | - | - | - | - |

PLATES

PLATE WEIGHT

| | Plate Size | | | | | | | | | | |
|------|--------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|----------------------------------|-------------------------------|--------------------------------|-------------------------------|-------------------------------|--------------------------------|
| | 1219 x 2438 (4' x 8') | 1219 x 6096 (4' x 20') | 1524 x 3048 (5' x 10') | 1524 x 6096 (5' x 20') | 1524 x 9144 (5' x 30') | 1524 x 12192 (5' x 40') | 1829 x 6096 (6'x20') | 1829 x 12192 (6'x40') | 2438 x 6096 (8'x20') | 2438 x 9144 (8'x30') | 3048 x 9144 (10'x30') |
| 6 | 140 | 350 | 219 | 438 | 656 | 875 | 525 | 1050 | 700 | 1050 | 1313 |
| 8 | 187 | 467 | 292 | 583 | 875 | 1167 | 700 | 1400 | 933 | 1400 | 1750 |
| 9 | 210 | 525 | 328 | 656 | 985 | 1313 | 788 | 1575 | 1050 | 1575 | 1969 |
| 10 | 233 | 583 | 365 | 729 | 1094 | 1459 | 875 | 1750 | 1167 | 1750 | 2188 |
| 12 | 280 | 700 | 438 | 875 | 1313 | 1750 | 1050 | 2100 | 1400 | 2100 | 2625 |
| 12.7 | 296 | 741 | 463 | 926 | 1389 | 1852 | 1112 | 2223 | 1482 | 2223 | 2779 |
| 14 | 327 | 817 | 510 | 1021 | 1532 | 2042 | 1225 | 2450 | 1634 | 2450 | 3063 |
| 15 | 350 | 875 | 547 | 1094 | 1641 | 2187 | 1313 | 2626 | 1750 | 2625 | 3282 |
| 16 | 373 | 933 | 584 | 1167 | 1750 | 2334 | 1400 | 2801 | 1867 | 2800 | 3501 |
| 18 | 420 | 1050 | 656 | 1313 | 1969 | 2625 | 1575 | 3151 | 2100 | 3150 | 3938 |
| 20 | 467 | 1167 | 729 | 1459 | 2188 | 2917 | 1751 | 3501 | 2333 | 3500 | 4376 |
| 22 | 513 | 1283 | 802 | 1604 | 2406 | 3209 | 1926 | 3851 | 2567 | 3850 | 4813 |
| 25 | 583 | 1458 | 912 | 1823 | 2735 | 3646 | 2188 | 4376 | 2917 | 4375 | 5470 |
| 25.4 | 593 | 1482 | 926 | 1852 | 2778 | 3705 | 2223 | 4446 | 2963 | 4445 | 5557 |
| 28 | 653 | 1633 | 1021 | 2042 | 3063 | 4084 | 2450 | 4901 | 3267 | 4900 | 6126 |
| 30 | 700 | 1750 | 1094 | 2188 | 3282 | 4376 | 2626 | 5251 | 3500 | 5250 | 6564 |
| 32 | 747 | 1867 | 1167 | 2334 | 3501 | 4668 | 2801 | 5602 | 3733 | 5600 | 7001 |
| 36 | 840 | 2100 | 1313 | 2625 | 3938 | 5251 | 3151 | 6302 | 4200 | 6300 | 7876 |
| 38 | 887 | 2217 | 1386 | 2771 | 4157 | 5542 | 3326 | 6652 | 4433 | 6650 | 8314 |
| 40 | 933 | 2333 | 1458 | 2917 | 4376 | 5834 | 3500 | 7001 | 4667 | 7000 | 8752 |
| 45 | 1050 | 2625 | 1641 | 3282 | 4923 | 6564 | 3938 | 7877 | 5250 | 7875 | 9846 |
| 50 | 1167 | 2917 | 1823 | 3646 | 5470 | 7293 | 4376 | 8752 | 5834 | 8750 | 10940 |
| 55 | 1283 | 3209 | 2006 | 4011 | 6017 | 8022 | 4814 | 9628 | 6417 | 9625 | 12033 |
| 60 | 1400 | 3500 | 2188 | 4376 | 6564 | 8752 | 5251 | 10503 | 7000 | 10500 | 13127 |
| 65 | 1516 | 3792 | 2370 | 4740 | 7111 | 9481 | 5689 | 11378 | 7583 | 11375 | 14221 |
| 70 | 1633 | 4083 | 2553 | 5105 | 7658 | 10210 | 6127 | 12253 | 8167 | 12250 | 15315 |
| 75 | 1750 | 4375 | 2735 | 5470 | 8240 | 10939 | 6564 | 13129 | 8752 | 13125 | 16409 |
| 80 | 1867 | 4667 | 2917 | 5834 | 8751 | 11669 | 7002 | 14004 | 9335 | 14000 | 17503 |
| 85 | 1983 | 4958 | 3100 | 6199 | 9298 | 12398 | 7440 | 14879 | 9917 | 14875 | 18597 |
| 90 | 2100 | 5250 | 3282 | 6564 | 9845 | 13127 | 7877 | 15754 | 10502 | 15750 | 19691 |
| 100 | 2334 | 5833 | 3647 | 7293 | 10939 | 14586 | 8752 | 17505 | 11669 | 17500 | 21879 |
| 110 | 2567 | 6417 | 4011 | 8022 | 12033 | 16044 | 9628 | 19255 | 12836 | 19250 | 24067 |
| 120 | 2801 | 7000 | 4367 | 8752 | 13127 | 17503 | 10503 | 21006 | 14003 | 21000 | 26255 |
| 130 | 3034 | 7583 | 4740 | 9481 | 14221 | 18962 | 11378 | 22756 | 15169 | 22750 | 28442 |
| 140 | 3267 | 8167 | 5105 | 10210 | 15315 | 20420 | 12253 | 24507 | 16336 | 24500 | 30631 |
| 150 | 3501 | 8750 | 5470 | 10940 | 16409 | 21879 | 13129 | 26257 | 17503 | 26250 | 32819 |

CHEQUERED (FLOOR) PLATES

WEIGHT TABLE

Merit Units

Unit Weight: kg/m²

| Thickness mm | Unit Weight kg/m ² | Width x Length (mm) | | |
|-----------------|----------------------------------|---------------------|-------------|-------------|
| | | 1219 x 4877 | 1524 x 3048 | 1219 x 2438 |
| 3.0 | 25.26 | 150.2 | 117.3 | 75.1 |
| 4.5 | 36.99 | 220.0 | 172.0 | 110.0 |
| 6.0 | 48.77 | 290.0 | 227.0 | 145.0 |
| 7.5 | 60.55 | 360.2 | 281.4 | 180.0 |
| 9.0 | 72.32 | 430.0 | 336.0 | 215.0 |
| 12.0 | 95.87 | 570.0 | 445.0 | 285.0 |