



The load tables mentioned above do not necessarily represent the product availability. Please refer to the product catalogue.

SECTION PROPERTIES (PER FOOT OF WIDTH)

| IMPERIAL | Base Steel Thickness (in.) | Weight G90 (psf) | Yield Stress (ksi) | Sec. Modulus | | Deflection Moment of Inertia (in ⁴) | Specified Web Crippling Data | | | |
|----------|----------------------------|------------------|--------------------|--------------------|--------------------|---|------------------------------|--------------------------|-------------------------------|-------------------------------|
| | | | | Midspan | Support | | P _{e1} End (lb) | P _{e2} End (lb) | P _{i1} Interior (lb) | P _{i2} Interior (lb) |
| | | | | (in ³) | (in ³) | | | | | |
| | 0.012 | 0.64 | 33 | 0.0051 | 0.0045 | 0.0021 | 20.6 | 5.14 | 36.1 | 6.14 |
| | 0.015 | 0.79 | 33 | 0.0064 | 0.0057 | 0.0026 | 33.2 | 8.30 | 58.9 | 10.0 |
| | 0.018 | 0.94 | 33 | 0.0076 | 0.0070 | 0.0032 | 48.9 | 12.2 | 87.4 | 14.9 |
| | 0.024 | 1.23 | 33 | 0.0100 | 0.0095 | 0.0042 | 89.9 | 22.5 | 162 | 27.5 |
| | 0.030 | 1.53 | 33 | 0.0124 | 0.0119 | 0.0052 | 144 | 35.9 | 260 | 44.2 |

Live load factor = 1.5; Importance factor = 0.90; Importance Category = 1.0

MAXIMUM UNIFORMLY DISTRIBUTED SPECIFIED LOAD (PSF)

| SPAN LENGTH (in.) | | 1-SPAN | | | | | 2-SPAN | | | | | 3-SPAN | | | | |
|-------------------|---|-------------------------------|-------|-------|-------|-------|-------------------------------|-------|-------|-------|-------|-------------------------------|-------|-------|-------|-------|
| | | BASE STEEL THICKNESS (inches) | | | | | BASE STEEL THICKNESS (inches) | | | | | BASE STEEL THICKNESS (inches) | | | | |
| | | 0.012 | 0.015 | 0.018 | 0.024 | 0.030 | 0.012 | 0.015 | 0.018 | 0.024 | 0.030 | 0.012 | 0.015 | 0.018 | 0.024 | 0.030 |
| 12 | S | 68 | 84 | 101 | 132 | 163 | 59 | 76 | 92 | 125 | 157 | 74 | 95 | 115 | 157 | 197 |
| | D | 205 | 256 | 306 | 406 | 504 | 493 | 614 | 735 | 974 | 1210 | 388 | 484 | 579 | 767 | 953 |
| 16 | S | 38 | 47 | 57 | 74 | 92 | 33 | 43 | 52 | 70 | 89 | 42 | 53 | 65 | 88 | 111 |
| | D | 87 | 108 | 129 | 171 | 213 | 208 | 259 | 310 | 411 | 510 | 164 | 204 | 244 | 324 | 402 |
| 24 | S | 17 | 21 | 25 | 33 | 41 | 15 | 19 | 23 | 31 | 39 | 18 | 24 | 29 | 39 | 49 |
| | D | 26 | 32 | 38 | 51 | 63 | 62 | 77 | 92 | 122 | 151 | 48 | 60 | 72 | 96 | 119 |
| 30 | S | 11 | 14 | 16 | 21 | 26 | 9 | 12 | 15 | 20 | 25 | 12 | 15 | 18 | 25 | 31 |
| | D | 13 | 16 | 20 | 26 | 32 | 32 | 39 | 47 | 62 | 77 | 25 | 31 | 37 | 49 | 61 |
| 36 | S | 8 | 9 | 11 | 15 | 18 | 7 | 8 | 10 | 14 | 17 | 8 | 11 | 13 | 17 | 22 |
| | D | 8 | 9 | 11 | 15 | 19 | 18 | 23 | 27 | 36 | 45 | 14 | 18 | 21 | 28 | 35 |
| 42 | S | | 7 | 8 | 11 | 13 | | 6 | 8 | 10 | 13 | 6 | 8 | 9 | 13 | 16 |
| | D | | 6 | 7 | 9 | 12 | | 14 | 17 | 23 | 28 | 9 | 11 | 13 | 18 | 22 |
| 48 | S | | | | 8 | 10 | | | 6 | 8 | 10 | | 6 | 7 | 10 | 12 |
| | D | | | | 6 | 8 | | | 11 | 15 | 19 | | 8 | 9 | 12 | 15 |
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Notes:
 1 Based on ASTM A 653 Grade 33 structural steel.
 2 Values in row "S" are based on strength.
 3 Values in row "D" are based on deflection of 1/180th span.
 4 Web crippling not included in strength calculations. See Example.
 Limit States Design principles were used in accordance with CSA Standard S136-07





The load tables mentioned above do not necessarily represent the product availability. Please refer to the product catalogue.

SECTION PROPERTIES (PER METRE OF WIDTH)

| METRIC | Base Steel Thickness (mm) | Mass Z275 (kg/m ²) | Yield Stress (MPa) | Sec. Modulus | | Deflection Moment of Inertia (x10 ⁶ mm ⁴) | Specified Web Crippling Data | | | |
|--------|---------------------------|--------------------------------|--------------------|-------------------------------------|-------------------------------------|--|------------------------------|--------------------------|-------------------------------|-------------------------------|
| | | | | Midspan | Support | | P _{e1} End (kN) | P _{e2} End (kN) | P _{i1} Interior (kN) | P _{i2} Interior (kN) |
| | | | | (x10 ³ mm ³) | (x10 ³ mm ³) | | | | | |
| | 0.305 | 3.15 | 230 | 0.277 | 0.240 | 0.0029 | 0.303 | 0.076 | 0.533 | 0.091 |
| | 0.381 | 3.86 | 230 | 0.344 | 0.308 | 0.0036 | 0.490 | 0.122 | 0.868 | 0.148 |
| | 0.457 | 4.58 | 230 | 0.410 | 0.376 | 0.0043 | 0.722 | 0.180 | 1.29 | 0.219 |
| | 0.610 | 6.02 | 230 | 0.539 | 0.510 | 0.0057 | 1.33 | 0.331 | 2.39 | 0.406 |
| | 0.762 | 7.45 | 230 | 0.665 | 0.641 | 0.0071 | 2.12 | 0.530 | 3.84 | 0.652 |

Live load factor = 1.5; Importance factor = 0.90; Importance Category = 1.0

MAXIMUM UNIFORMLY DISTRIBUTED SPECIFIED LOAD (kPa)

| SPAN LENGTH (mm) | | 1-SPAN | | | | | 2-SPAN | | | | | 3-SPAN | | | | |
|------------------|---|---------------------------|-------|-------|-------|-------|---------------------------|-------|-------|-------|-------|---------------------------|-------|-------|-------|-------|
| | | BASE STEEL THICKNESS (mm) | | | | | BASE STEEL THICKNESS (mm) | | | | | BASE STEEL THICKNESS (mm) | | | | |
| | | 0.305 | 0.381 | 0.457 | 0.610 | 0.762 | 0.305 | 0.381 | 0.457 | 0.610 | 0.762 | 0.305 | 0.381 | 0.457 | 0.610 | 0.762 |
| 300 | S | 3.40 | 4.22 | 5.03 | 6.61 | 8.15 | 2.95 | 3.78 | 4.61 | 6.26 | 7.86 | 3.68 | 4.72 | 5.76 | 7.82 | 9.83 |
| | D | 10.3 | 12.9 | 15.4 | 20.4 | 25.3 | 24.7 | 30.8 | 36.9 | 48.9 | 60.8 | 19.5 | 24.3 | 29.1 | 38.5 | 47.9 |
| 400 | S | 1.91 | 2.37 | 2.83 | 3.72 | 4.59 | 1.66 | 2.12 | 2.59 | 3.52 | 4.42 | 2.07 | 2.66 | 3.24 | 4.40 | 5.53 |
| | D | 4.35 | 5.42 | 6.48 | 8.60 | 10.7 | 10.4 | 13.0 | 15.6 | 20.6 | 25.6 | 8.22 | 10.2 | 12.3 | 16.2 | 20.2 |
| 500 | S | 1.22 | 1.52 | 1.81 | 2.38 | 2.94 | 1.06 | 1.36 | 1.66 | 2.25 | 2.83 | 1.33 | 1.70 | 2.07 | 2.81 | 3.54 |
| | D | 2.23 | 2.77 | 3.32 | 4.40 | 5.47 | 5.34 | 6.66 | 7.97 | 10.6 | 13.1 | 4.21 | 5.24 | 6.28 | 8.32 | 10.3 |
| 600 | S | 0.85 | 1.05 | 1.26 | 1.65 | 2.04 | 0.74 | 0.94 | 1.15 | 1.56 | 1.97 | 0.92 | 1.18 | 1.44 | 1.95 | 2.46 |
| | D | 1.29 | 1.61 | 1.92 | 2.55 | 3.16 | 3.09 | 3.85 | 4.61 | 6.11 | 7.59 | 2.44 | 3.04 | 3.63 | 4.81 | 5.98 |
| 700 | S | 0.62 | 0.77 | 0.92 | 1.21 | 1.50 | 0.54 | 0.69 | 0.85 | 1.15 | 1.44 | 0.68 | 0.87 | 1.06 | 1.44 | 1.81 |
| | D | 0.81 | 1.01 | 1.21 | 1.60 | 1.99 | 1.95 | 2.43 | 2.90 | 3.85 | 4.78 | 1.53 | 1.91 | 2.29 | 3.03 | 3.77 |
| 800 | S | 0.48 | 0.59 | 0.71 | 0.93 | 1.15 | 0.41 | 0.53 | 0.65 | 0.88 | 1.11 | 0.52 | 0.66 | 0.81 | 1.10 | 1.38 |
| | D | 0.54 | 0.68 | 0.81 | 1.07 | 1.33 | 1.30 | 1.63 | 1.95 | 2.58 | 3.20 | 1.03 | 1.28 | 1.53 | 2.03 | 2.52 |
| 900 | S | 0.38 | 0.47 | 0.56 | 0.73 | 0.91 | 0.33 | 0.42 | 0.51 | 0.70 | 0.87 | 0.41 | 0.52 | 0.64 | 0.87 | 1.09 |
| | D | 0.38 | 0.48 | 0.57 | 0.75 | 0.94 | 0.92 | 1.14 | 1.37 | 1.81 | 2.25 | 0.72 | 0.90 | 1.08 | 1.43 | 1.77 |
| 1000 | S | 0.31 | 0.38 | 0.45 | 0.60 | 0.73 | 0.27 | 0.34 | 0.41 | 0.56 | 0.71 | 0.33 | 0.42 | 0.52 | 0.70 | 0.88 |
| | D | 0.28 | 0.35 | 0.42 | 0.55 | 0.68 | 0.67 | 0.83 | 1.00 | 1.32 | 1.64 | 0.53 | 0.66 | 0.78 | 1.04 | 1.29 |
| 1100 | S | 0.25 | 0.31 | 0.37 | 0.49 | 0.61 | 0.22 | 0.28 | 0.34 | 0.47 | 0.58 | 0.27 | 0.35 | 0.43 | 0.58 | 0.73 |
| | D | 0.21 | 0.26 | 0.31 | 0.41 | 0.51 | 0.50 | 0.63 | 0.75 | 0.99 | 1.23 | 0.40 | 0.49 | 0.59 | 0.78 | 0.97 |
| 1200 | S | | 0.26 | 0.31 | 0.41 | 0.51 | | 0.24 | 0.29 | 0.39 | 0.49 | 0.23 | 0.30 | 0.36 | 0.49 | 0.61 |
| | D | | 0.20 | 0.24 | 0.32 | 0.40 | | 0.48 | 0.58 | 0.76 | 0.95 | 0.30 | 0.38 | 0.45 | 0.60 | 0.75 |
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- Notes:**
- 1 Based on ASTM A 653M Grade 230 structural steel.
 - 2 Values in row "S" are based on strength.
 - 3 Values in row "D" are based on deflection of 1/180th span.
 - 4 Web crippling not included in strength calculations. See Example.
- Limit States Design principles were used in accordance with CSA Standard S136-07

