

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 (in ³) | Support (in ³) | | P _{e1} End (lb) | P _{e2} End (lb) | P _{i1} Interior (lb) | P _{i2} Interior (lb) |
| | | | | 0.018 | 1.01 | | 33 | 0.0732 | 0.0780 | 0.0621 |
| 0.024 | 1.32 | 33 | 0.111 | 0.114 | 0.0951 | 102 | 25.5 | 201 | 34.1 | |
| 0.030 | 1.64 | 33 | 0.142 | 0.153 | 0.128 | 165 | 41.2 | 323 | 54.8 | |
| 0.036 | 1.96 | 33 | 0.174 | 0.186 | 0.160 | 244 | 60.9 | 474 | 80.6 | |
| 0.048 | 2.59 | 33 | 0.238 | 0.245 | 0.221 | 448 | 112 | 868 | 148 | |

Live load factor = 1.4; Importance factor = 0.75; Importance Category = 1.0

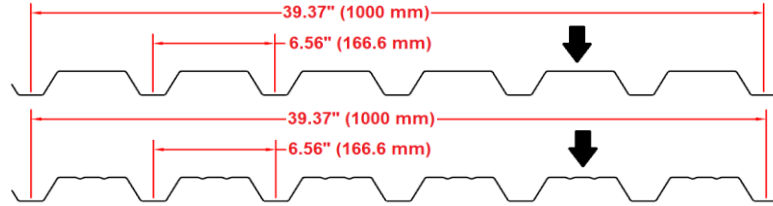
MAXIMUM UNIFORMLY DISTRIBUTED SPECIFIED LOAD (PSF)

| SPAN LENGTH (ft) | | 1-SPAN | | | | | 2-SPAN | | | | | 3-SPAN | | | | |
|------------------|---|-------------------------------|-------|-------|-------|-------|-------------------------------|-------|-------|-------|-------|-------------------------------|-------|-------|-------|-------|
| | | BASE STEEL THICKNESS (inches) | | | | | BASE STEEL THICKNESS (inches) | | | | | BASE STEEL THICKNESS (inches) | | | | |
| | | 0.018 | 0.024 | 0.030 | 0.036 | 0.048 | 0.018 | 0.024 | 0.030 | 0.036 | 0.048 | 0.018 | 0.024 | 0.030 | 0.036 | 0.048 |
| 4.0 | S | 65 | 98 | 126 | 154 | 210 | 69 | 101 | 135 | 164 | 217 | 86 | 126 | 169 | 205 | 271 |
| | D | 113 | 173 | 232 | 291 | 402 | 271 | 415 | 556 | 697 | 966 | 213 | 327 | 438 | 549 | 761 |
| 4.5 | S | 51 | 78 | 99 | 122 | 166 | 54 | 80 | 107 | 130 | 171 | 68 | 100 | 133 | 162 | 214 |
| | D | 79 | 121 | 163 | 204 | 283 | 190 | 291 | 390 | 490 | 678 | 150 | 230 | 307 | 386 | 534 |
| 5.0 | S | 41 | 63 | 80 | 98 | 134 | 44 | 65 | 86 | 105 | 139 | 55 | 81 | 108 | 131 | 173 |
| | D | 58 | 89 | 119 | 149 | 206 | 139 | 212 | 285 | 357 | 495 | 109 | 167 | 224 | 281 | 389 |
| 5.5 | S | 34 | 52 | 67 | 81 | 111 | 36 | 53 | 71 | 87 | 115 | 46 | 67 | 89 | 109 | 143 |
| | D | 43 | 67 | 89 | 112 | 155 | 104 | 160 | 214 | 268 | 372 | 82 | 126 | 168 | 211 | 293 |
| 6.0 | S | 29 | 44 | 56 | 68 | 93 | 31 | 45 | 60 | 73 | 96 | 38 | 56 | 75 | 91 | 120 |
| | D | 33 | 51 | 69 | 86 | 119 | 80 | 123 | 165 | 207 | 286 | 63 | 97 | 130 | 163 | 225 |
| 6.5 | S | 25 | 37 | 48 | 58 | 80 | 26 | 38 | 51 | 62 | 82 | 33 | 48 | 64 | 78 | 103 |
| | D | 26 | 40 | 54 | 68 | 94 | 63 | 97 | 130 | 163 | 225 | 50 | 76 | 102 | 128 | 177 |
| 7.0 | S | 21 | 32 | 41 | 50 | 69 | 23 | 33 | 44 | 54 | 71 | 28 | 41 | 55 | 67 | 88 |
| | D | 21 | 32 | 43 | 54 | 75 | 51 | 77 | 104 | 130 | 180 | 40 | 61 | 82 | 102 | 142 |
| 7.5 | S | 18 | 28 | 36 | 44 | 60 | 20 | 29 | 38 | 47 | 62 | 25 | 36 | 48 | 58 | 77 |
| | D | 17 | 26 | 35 | 44 | 61 | 41 | 63 | 84 | 106 | 147 | 32 | 50 | 66 | 83 | 115 |
| 8.0 | S | 16 | 25 | 31 | 38 | 52 | 17 | 25 | 34 | 41 | 54 | 22 | 32 | 42 | 51 | 68 |
| | D | 14 | 22 | 29 | 36 | 50 | 34 | 52 | 69 | 87 | 121 | 27 | 41 | 55 | 69 | 95 |
| 8.5 | S | 14 | 22 | 28 | 34 | 46 | 15 | 22 | 30 | 36 | 48 | 19 | 28 | 37 | 45 | 60 |
| | D | 12 | 18 | 24 | 30 | 42 | 28 | 43 | 58 | 73 | 101 | 22 | 34 | 46 | 57 | 79 |
| 9.0 | S | 13 | 19 | 25 | 30 | 41 | 14 | 20 | 27 | 32 | 43 | 17 | 25 | 33 | 41 | 53 |
| | D | 10 | 15 | 20 | 26 | 35 | 24 | 36 | 49 | 61 | 85 | 19 | 29 | 38 | 48 | 67 |
| 9.5 | S | 11 | 17 | 22 | 27 | 37 | 12 | 18 | 24 | 29 | 38 | 15 | 22 | 30 | 36 | 48 |
| | D | 8 | 13 | 17 | 22 | 30 | 20 | 31 | 42 | 52 | 72 | 16 | 24 | 33 | 41 | 57 |
| 10.0 | S | 10 | 16 | 20 | 25 | 34 | 11 | 16 | 22 | 26 | 35 | 14 | 20 | 27 | 33 | 43 |
| | D | 7 | 11 | 15 | 19 | 26 | 17 | 27 | 36 | 45 | 62 | 14 | 21 | 28 | 35 | 49 |
| 10.5 | S | 9 | 14 | 18 | 22 | 30 | 10 | 15 | 20 | 24 | 31 | 13 | 18 | 24 | 30 | 39 |
| | D | 6 | 10 | 13 | 16 | 22 | 15 | 23 | 31 | 39 | 53 | 12 | 18 | 24 | 30 | 42 |
| 11.0 | S | 9 | 13 | 17 | 20 | 28 | 9 | 13 | 18 | 22 | 29 | 11 | 17 | 22 | 27 | 36 |
| | D | 5 | 8 | 11 | 14 | 19 | 13 | 20 | 27 | 34 | 46 | 10 | 16 | 21 | 26 | 37 |

- 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) | | | | | |
| | 0.457 | 4.91 | 230 | 3.93 | 4.19 | 0.0847 | 0.803 | 0.201 | 1.59 | 0.271 |
| | 0.610 | 6.46 | 230 | 5.96 | 6.13 | 0.130 | 1.50 | 0.376 | 2.96 | 0.503 |
| | 0.762 | 8.00 | 230 | 7.64 | 8.19 | 0.174 | 2.43 | 0.608 | 4.76 | 0.809 |
| | 0.914 | 9.55 | 230 | 9.35 | 10.0 | 0.218 | 3.59 | 0.898 | 7.00 | 1.19 |
| | 1.22 | 12.6 | 230 | 12.8 | 13.2 | 0.302 | 6.61 | 1.65 | 12.8 | 2.18 |

Live load factor = 1.4; Importance factor = 0.75; Importance Category = 1.0

MAXIMUM UNIFORMLY DISTRIBUTED SPECIFIED LOAD (kPa)

| SPAN LENGTH (m) | | 1-SPAN | | | | | 2-SPAN | | | | | 3-SPAN | | | | |
|-----------------|---|---------------------------|-------|-------|-------|------|---------------------------|-------|-------|-------|------|---------------------------|-------|-------|-------|------|
| | | BASE STEEL THICKNESS (mm) | | | | | BASE STEEL THICKNESS (mm) | | | | | BASE STEEL THICKNESS (mm) | | | | |
| | | 0.457 | 0.610 | 0.762 | 0.914 | 1.22 | 0.457 | 0.610 | 0.762 | 0.914 | 1.22 | 0.457 | 0.610 | 0.762 | 0.914 | 1.22 |
| 1.2 | S | 3.23 | 4.90 | 6.28 | 7.68 | 10.5 | 3.44 | 5.04 | 6.73 | 8.20 | 10.8 | 4.30 | 6.29 | 8.41 | 10.3 | 13.5 |
| | D | 5.66 | 8.67 | 11.6 | 14.6 | 20.2 | 13.6 | 20.8 | 27.9 | 35.0 | 48.5 | 10.7 | 16.4 | 22.0 | 27.6 | 38.2 |
| 1.4 | S | 2.37 | 3.60 | 4.6 | 5.64 | 7.70 | 2.53 | 3.70 | 4.94 | 6.03 | 7.95 | 3.16 | 4.62 | 6.18 | 7.53 | 9.94 |
| | D | 3.56 | 5.46 | 7.31 | 9.18 | 12.7 | 8.55 | 13.1 | 17.6 | 22.0 | 30.5 | 6.73 | 10.3 | 13.8 | 17.4 | 24.1 |
| 1.5 | S | 2.06 | 3.13 | 4.02 | 4.91 | 6.71 | 2.20 | 3.22 | 4.31 | 5.25 | 6.93 | 2.75 | 4.03 | 5.38 | 6.56 | 8.66 |
| | D | 2.90 | 4.44 | 5.95 | 7.46 | 10.3 | 6.95 | 10.7 | 14.3 | 17.9 | 24.8 | 5.47 | 8.39 | 11.2 | 14.1 | 19.6 |
| 1.6 | S | 1.81 | 2.76 | 3.53 | 4.32 | 5.90 | 1.93 | 2.83 | 3.78 | 4.61 | 6.09 | 2.42 | 3.54 | 4.73 | 5.77 | 7.61 |
| | D | 2.39 | 3.66 | 4.90 | 6.15 | 8.52 | 5.73 | 8.78 | 11.8 | 14.8 | 20.5 | 4.51 | 6.91 | 9.26 | 11.6 | 16.1 |
| 1.8 | S | 1.43 | 2.18 | 2.79 | 3.41 | 4.66 | 1.53 | 2.24 | 2.99 | 3.65 | 4.81 | 1.91 | 2.80 | 3.74 | 4.56 | 6.01 |
| | D | 1.68 | 2.57 | 3.44 | 4.32 | 5.99 | 4.02 | 6.16 | 8.26 | 10.4 | 14.4 | 3.17 | 4.85 | 6.50 | 8.16 | 11.3 |
| 2.0 | S | 1.16 | 1.76 | 2.26 | 2.76 | 3.77 | 1.24 | 1.81 | 2.42 | 2.95 | 3.90 | 1.55 | 2.27 | 3.03 | 3.69 | 4.87 |
| | D | 1.22 | 1.87 | 2.51 | 3.15 | 4.36 | 2.93 | 4.49 | 6.02 | 7.56 | 10.5 | 2.31 | 3.54 | 4.74 | 5.95 | 8.25 |
| 2.2 | S | 0.96 | 1.46 | 1.87 | 2.28 | 3.12 | 1.02 | 1.50 | 2.00 | 2.44 | 3.22 | 1.28 | 1.87 | 2.50 | 3.05 | 4.03 |
| | D | 0.92 | 1.41 | 1.88 | 2.37 | 3.28 | 2.20 | 3.38 | 4.52 | 5.68 | 7.87 | 1.74 | 2.66 | 3.56 | 4.47 | 6.20 |
| 2.4 | S | 0.81 | 1.22 | 1.57 | 1.92 | 2.62 | 0.86 | 1.26 | 1.68 | 2.05 | 2.71 | 1.07 | 1.57 | 2.10 | 2.56 | 3.38 |
| | D | 0.71 | 1.08 | 1.45 | 1.82 | 2.53 | 1.70 | 2.60 | 3.48 | 4.37 | 6.06 | 1.34 | 2.05 | 2.74 | 3.44 | 4.77 |
| 2.5 | S | 0.74 | 1.13 | 1.45 | 1.77 | 2.42 | 0.79 | 1.16 | 1.55 | 1.89 | 2.49 | 0.99 | 1.45 | 1.94 | 2.36 | 3.12 |
| | D | 0.63 | 0.96 | 1.28 | 1.61 | 2.23 | 1.50 | 2.30 | 3.08 | 3.87 | 5.36 | 1.18 | 1.81 | 2.43 | 3.05 | 4.22 |
| 2.6 | S | 0.69 | 1.04 | 1.34 | 1.64 | 2.23 | 0.73 | 1.07 | 1.43 | 1.75 | 2.31 | 0.92 | 1.34 | 1.79 | 2.18 | 2.88 |
| | D | 0.56 | 0.85 | 1.14 | 1.43 | 1.99 | 1.33 | 2.04 | 2.74 | 3.44 | 4.77 | 1.05 | 1.61 | 2.16 | 2.71 | 3.75 |
| 2.8 | S | 0.59 | 0.90 | 1.15 | 1.41 | 1.93 | 0.63 | 0.92 | 1.24 | 1.51 | 1.99 | 0.79 | 1.16 | 1.54 | 1.88 | 2.49 |
| | D | 0.45 | 0.68 | 0.91 | 1.15 | 1.59 | 1.07 | 1.64 | 2.19 | 2.75 | 3.82 | 0.84 | 1.29 | 1.73 | 2.17 | 3.01 |
| 3.0 | S | 0.52 | 0.78 | 1.00 | 1.23 | 1.68 | 0.55 | 0.81 | 1.08 | 1.31 | 1.73 | 0.69 | 1.01 | 1.35 | 1.64 | 2.16 |
| | D | 0.36 | 0.55 | 0.74 | 0.93 | 1.29 | 0.87 | 1.33 | 1.78 | 2.24 | 3.10 | 0.68 | 1.05 | 1.40 | 1.76 | 2.44 |
| 3.2 | S | 0.45 | 0.69 | 0.88 | 1.08 | 1.47 | 0.48 | 0.71 | 0.95 | 1.15 | 1.52 | 0.60 | 0.89 | 1.18 | 1.44 | 1.90 |
| | D | 0.30 | 0.46 | 0.61 | 0.77 | 1.07 | 0.72 | 1.10 | 1.47 | 1.84 | 2.56 | 0.56 | 0.86 | 1.16 | 1.45 | 2.01 |
| 3.4 | S | 0.40 | 0.61 | 0.78 | 0.96 | 1.31 | 0.43 | 0.63 | 0.84 | 1.02 | 1.35 | 0.54 | 0.78 | 1.05 | 1.28 | 1.69 |
| | D | 0.25 | 0.38 | 0.51 | 0.64 | 0.89 | 0.60 | 0.91 | 1.23 | 1.54 | 2.13 | 0.47 | 0.72 | 0.97 | 1.21 | 1.68 |

- 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

