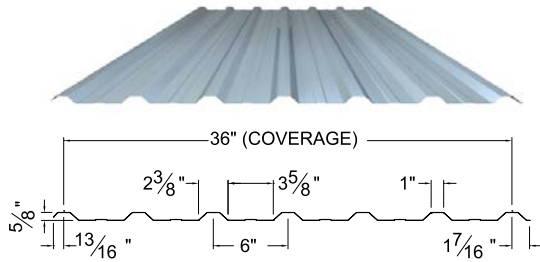


NARROW RIB



SECTION PROPERTIES (Per Foot of Width)

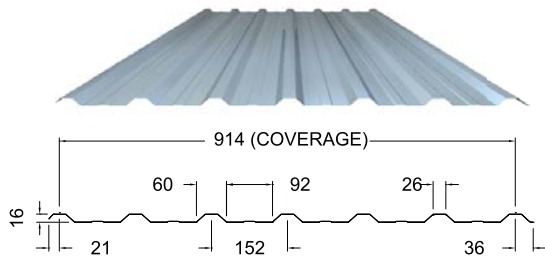
IMPERIAL

| THICKNESS | | Yield Strength (ksi) | Coated Steel Thickness (AZ50) (in) | Coated Mass (psf) | Section Modulus | | Deflection Moment of Inertia (in ⁴) | Specified Web Crippling Data | | | |
|-----------|-----------|----------------------|------------------------------------|-------------------|----------------------------|----------------------------|---|------------------------------|--------------|-------------------|-------------------|
| Gauge | Base (in) | | | | Midspan (in ³) | Support (in ³) | | Pe1 End (lb) | Pe2 End (lb) | Pi1 Interior (lb) | Pi2 Interior (lb) |
| 29 | 0.0135 | 80 | 0.0151 | 0.699 | 0.0174 | 0.159 | 0.0103 | 59.8 | 15.0 | 111 | 18.9 |
| 28 | 0.0150 | 50 | 0.0166 | 0.769 | 0.0207 | 0.0192 | 0.0115 | 47.0 | 11.8 | 88.0 | 14.9 |
| 26 | 0.0180 | 50 | 0.0196 | 0.907 | 0.0263 | 0.0250 | 0.0136 | 69.8 | 17.4 | 130.0 | 22.1 |
| 24 | 0.0240 | 33 | 0.0256 | 1.185 | 0.0406 | 0.0371 | 0.0177 | 85.4 | 21.3 | 159. | 27.1 |

MAXIMUM UNIFORMLY DISTRIBUTED SPECIFIED LOAD (psf)

| SPAN LENGTH (in) | | 1 - SPAN | | | | 2- SPAN | | | | 3 - SPAN | | | |
|------------------|---|---------------------------|--------|--------|--------|---------------------------|--------|--------|--------|---------------------------|--------|--------|--------|
| | | BASE STEEL THICKNESS (in) | | | | BASE STEEL THICKNESS (in) | | | | BASE STEEL THICKNESS (in) | | | |
| | | 0.0135 | 0.0150 | 0.0180 | 0.0240 | 0.0135 | 0.0150 | 0.0180 | 0.0240 | 0.0135 | 0.0150 | 0.0180 | 0.0240 |
| 16 | S | 233 | 233 | 296 | 302 | 213 | 216 | 282 | 276 | 266 | 270 | 352 | 345 |
| | D | 378 | 422 | 501 | 652 | 908 | 1014 | 1202 | 1566 | 715 | 798 | 947 | 1233 |
| 20 | S | 149 | 149 | 189 | 193 | 136 | 138 | 180 | 176 | 170 | 173 | 225 | 221 |
| | D | 194 | 216 | 257 | 334 | 465 | 519 | 616 | 802 | 366 | 409 | 485 | 631 |
| 24 | S | 104 | 103 | 132 | 134 | 94 | 96 | 125 | 123 | 118 | 120 | 157 | 153 |
| | D | 112 | 125 | 148 | 193 | 269 | 300 | 356 | 464 | 212 | 237 | 281 | 365 |
| 30 | S | 66 | 66 | 84 | 86 | 60 | 62 | 80 | 78 | 76 | 77 | 100 | 98 |
| | D | 57 | 64 | 76 | 99 | 138 | 154 | 182 | 238 | 109 | 121 | 144 | 187 |
| 36 | S | 46 | 46 | 58 | 60 | 42 | 43 | 56 | 54 | 52 | 53 | 70 | 68 |
| | D | 33 | 37 | 44 | 57 | 80 | 89 | 106 | 137 | 63 | 70 | 83 | 108 |
| 42 | S | 34 | 34 | 43 | 44 | 31 | 31 | 41 | 40 | 39 | 39 | 51 | 50 |
| | D | 21 | 23 | 28 | 36 | 50 | 56 | 66 | 87 | 40 | 44 | 52 | 68 |
| 48 | S | 26 | 26 | 33 | 34 | 24 | 24 | 31 | 31 | 30 | 30 | 39 | 38 |
| | D | 14 | 16 | 19 | 24 | 34 | 38 | 45 | 58 | 26 | 30 | 35 | 46 |
| 54 | S | 20 | 20 | 26 | 26 | 19 | 19 | 25 | 24 | 23 | 24 | 31 | 30 |
| | D | 10 | 11 | 13 | 17 | 24 | 26 | 31 | 41 | 19 | 21 | 25 | 32 |
| 60 | S | 17 | 17 | 21 | 21 | 15 | 15 | 20 | 20 | 19 | 19 | 25 | 25 |
| | D | 7 | 8 | 10 | 12 | 17 | 19 | 23 | 30 | 14 | 15 | 18 | 23 |
| 66 | S | 14 | 14 | 17 | 18 | 12 | 13 | 17 | 16 | 16 | 16 | 21 | 20 |
| | D | 5 | 6 | 7 | 9 | 13 | 14 | 17 | 22 | 10 | 11 | 13 | 18 |
| 72 | S | 12 | 11 | 15 | 15 | 10 | 11 | 14 | 14 | 13 | 13 | 17 | 17 |
| | D | 4 | 5 | 5 | 7 | 10 | 11 | 13 | 17 | 8 | 9 | 10 | 14 |

1. Based on ASTM A 792M 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. Limit States Design principles were used in accordance with CSA Standard S136-01 Load table prepared by Dr. R.M.Schuster P.Eng University of Waterloo, Ontario, Canada.



DIAMOND SEAL

ROOF, WALL & LINER

NARROW RIB

SECTION PROPERTIES (Per Metre of Width)

METRIC

| THICKNESS | | Yield Strength (MPa) | Coated Steel Thickness AZM150 (mm) | Coated Mass (kg/m ²) | Section Modulus | | Deflection Moment of Inertia (10 ⁶ mm ⁴) | Specified Web Crippling Data | | | |
|-----------|-----------|----------------------|------------------------------------|----------------------------------|--|--|---|------------------------------|--------------|-------------------|-------------------|
| Gauge | Base (mm) | | | | Midspan (10 ³ mm ³) | Support (10 ³ mm ³) | | Pe1 End (kN) | Pe2 End (kN) | Pi1 Interior (kN) | Pi2 Interior (kN) |
| 29 | 0.343 | 550 | 0.384 | 3.413 | 0.94 | 0.85 | 0.0129 | 0.649 | 0.162 | 1.207 | 0.205 |
| 28 | 0.381 | 345 | .0422 | 3.755 | 1.11 | 1.03 | 0.0149 | 0.687 | 0.172 | 1.279 | 0.217 |
| 26 | 0.457 | 345 | 0.498 | 4.428 | 1.41 | 1.35 | 0.0183 | 1.019 | 0.255 | 1.901 | 0.323 |
| 24 | 0.610 | 230 | 0.650 | 5.786 | 2.18 | 1.99 | 0.0242 | 1.259 | 0.315 | 2.352 | 0.400 |

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) | | | |
| | | 0.343 | 0.381 | 0.457 | 0.610 | 0.343 | 0.381 | 0.457 | 0.610 | 0.343 | 0.381 | 0.457 | 0.610 |
| 0.4 | S | 11.53 | 11.50 | 14.64 | 15.07 | 10.51 | 10.70 | 13.93 | 13.76 | 13.14 | 13.37 | 17.41 | 17.20 |
| | D | 17.45 | 20.17 | 24.73 | 32.76 | 41.88 | 48.40 | 59.35 | 78.63 | 32.98 | 38.11 | 46.73 | 61.92 |
| 0.5 | S | 7.38 | 7.36 | 9.37 | 9.64 | 6.73 | 6.85 | 8.92 | 8.81 | 8.41 | 8.56 | 11.14 | 11.01 |
| | D | 8.93 | 10.33 | 12.66 | 16.77 | 21.44 | 24.78 | 30.39 | 40.26 | 16.88 | 19.51 | 23.93 | 31.70 |
| 0.6 | S | 5.12 | 5.11 | 6.51 | 6.70 | 4.67 | 4.75 | 6.19 | 6.12 | 5.84 | 5.94 | 7.74 | 7.65 |
| | D | 5.17 | 5.98 | 7.33 | 9.71 | 12.41 | 14.34 | 17.58 | 23.30 | 9.77 | 11.29 | 13.85 | 18.35 |
| 0.8 | S | 2.88 | 2.88 | 3.66 | 3.77 | 2.63 | 2.67 | 3.48 | 3.44 | 3.28 | 3.34 | 4.35 | 4.30 |
| | D | 2.18 | 2.52 | 3.09 | 4.10 | 5.23 | 6.05 | 7.42 | 9.83 | 4.12 | 4.76 | 5.84 | 7.74 |
| 1.0 | S | 1.84 | 1.84 | 2.34 | 2.41 | 1.68 | 1.71 | 2.23 | 2.20 | 2.10 | 2.14 | 2.79 | 2.75 |
| | D | 1.12 | 1.29 | 1.58 | 2.10 | 2.68 | 3.10 | 3.80 | 5.03 | 2.11 | 2.44 | 2.99 | 3.96 |
| 1.2 | S | 1.28 | 1.28 | 1.63 | 1.67 | 1.17 | 1.19 | 1.55 | 1.53 | 1.46 | 1.49 | 1.93 | 1.91 |
| | D | 0.65 | 0.75 | 0.92 | 1.21 | 1.55 | 1.79 | 2.20 | 2.91 | 1.22 | 1.41 | 1.73 | 2.29 |
| 1.4 | S | 0.94 | 0.94 | 1.19 | 1.23 | 0.86 | 0.87 | 1.14 | 1.12 | 1.07 | 1.09 | 1.42 | 1.40 |
| | D | 0.41 | 0.47 | 0.58 | 0.76 | 0.98 | 1.13 | 1.38 | 1.83 | 0.77 | 0.89 | 1.09 | 1.44 |
| 1.5 | S | 0.82 | 0.82 | 1.04 | 1.07 | 0.75 | 0.76 | 0.99 | 0.98 | 0.93 | 0.95 | 1.24 | 1.22 |
| | D | 0.33 | 0.38 | 0.47 | 0.62 | 0.79 | 0.92 | 1.13 | 1.49 | 0.63 | 0.72 | 0.89 | 1.17 |
| 1.6 | S | 0.72 | 0.72 | 0.91 | 0.94 | 0.66 | 0.67 | 0.87 | 0.86 | 0.82 | 0.84 | 1.09 | 1.08 |
| | D | 0.27 | 0.32 | 0.39 | 0.51 | 0.65 | 0.76 | 0.93 | 1.23 | 0.52 | 0.60 | 0.73 | 0.97 |
| 1.8 | S | 0.57 | 0.57 | 0.72 | 0.74 | 0.52 | 0.53 | 0.69 | 0.68 | 0.65 | 0.66 | 0.86 | 0.85 |
| | D | 0.19 | 0.22 | 0.27 | 0.36 | 0.46 | 0.53 | 0.65 | 0.86 | 0.36 | 0.42 | 0.51 | 0.68 |
| 2.0 | S | 0.46 | 0.46 | 0.59 | 0.60 | 0.42 | 0.43 | 0.56 | 0.55 | 0.53 | 0.53 | 0.70 | 0.69 |
| | D | 0.14 | 0.16 | 0.20 | 0.26 | 0.34 | 0.39 | 0.47 | 0.63 | 0.26 | 0.30 | 0.37 | 0.50 |

1. Based on ASTM A 792M 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. Limit States Design principles were used in accordance with CSA Standard S136-01 Load table prepared by Dr. R.M.Schuster P.Eng University of Waterloo, Ontario, Canada.

