



Section Properties

(Per Metre of Width)

| Base Steel Thickness (mm) | Mass Z275 (kg/m ²) | Yield Stress (MPa) | Section Modulus | | Deflection Moment of Inertia Mid Span (x 10 ⁶ mm ⁴) | Mr (Nm) | | Specified Web Crippling Data (kN) | | | |
|---------------------------|--------------------------------|--------------------|---|--|--|----------|---------|-----------------------------------|---------|--------------|--------------|
| | | | Mid Span (x 10 ³ mm ³) | Support (x 10 ³ mm ³) | | Mid Span | Support | End Pe1 | End Pe2 | Interior Pi1 | Interior Pi2 |
| 0.381 | 3.56 | 550 | 3.310 | 3.310 | 0.0248 | 1228.8 | 1228.8 | 2.70 | 0.68 | 5.18 | 0.88 |
| 0.457 | 4.45 | 230 | 2.309 | 2.309 | 0.0186 | 477.9 | 477.9 | 2.22 | 0.56 | 4.25 | 0.72 |
| 0.610 | 5.94 | 230 | 3.310 | 3.310 | 0.0248 | 685.2 | 685.2 | 4.10 | 1.02 | 7.82 | 1.33 |
| 0.762 | 7.42 | 230 | 4.077 | 4.077 | 0.0308 | 844.0 | 844.0 | 6.52 | 1.63 | 12.41 | 2.11 |

Notes:

- Steel conforms to ASTM A653M.
- Section properties are in accordance with CSA-S136-07.
- Values in row "S" are based on strength.
- Values in row "D" are based on a deflection limit of 1/180 of the span.
- Web crippling not included in strength values. See example calculation in notes to designer.
- Contact the sales department for stocked colours and gauges.
- The load table contained on this data sheet was prepared by XRS Engineered Solutions Inc., Burlington, Ontario, Canada.

Live Load Factor = 1.4; Importance Factor (I_{W-SLS}) = 0.75; Importance Factor (I_{W-ULS}) = 1.4

Load Table

Maximum Specified Uniformly Distributed Loads in kPa

| Span (mm) | | 1-Span Base Steel Thickness (mm) | | | | 2-Span Base Steel Thickness (mm) | | | | 3-Span Base Steel Thickness (mm) | | | |
|-----------|---|----------------------------------|-------|-------|-------|----------------------------------|-------|-------|-------|----------------------------------|-------|-------|-------|
| | | 0.381 | 0.457 | 0.610 | 0.762 | 0.381 | 0.457 | 0.610 | 0.762 | 0.381 | 0.457 | 0.610 | 0.762 |
| 610 | S | 18.87 | 7.34 | 10.52 | 12.96 | 18.87 | 7.34 | 10.52 | 12.96 | 23.59 | 9.17 | 13.15 | 16.20 |
| | D | 12.6 | 9.4 | 12.6 | 15.7 | 31.6 | 23.7 | 31.6 | 39.3 | 23.8 | 17.8 | 23.8 | 29.6 |
| 686 | S | 14.92 | 5.8 | 8.32 | 10.25 | 14.92 | 5.8 | 8.32 | 10.25 | 18.65 | 7.25 | 10.4 | 12.81 |
| | D | 8.86 | 6.64 | 8.86 | 11.04 | 22.19 | 16.64 | 22.18 | 27.63 | 16.72 | 12.54 | 16.72 | 20.82 |
| 762 | S | 12.09 | 4.7 | 6.74 | 8.31 | 12.09 | 4.7 | 6.74 | 8.31 | 15.12 | 5.88 | 8.43 | 10.38 |
| | D | 6.47 | 4.85 | 6.46 | 8.05 | 16.19 | 12.14 | 16.19 | 20.16 | 12.2 | 9.15 | 12.2 | 15.19 |
| 838 | S | 10.0 | 3.89 | 5.58 | 6.87 | 10.0 | 3.89 | 5.58 | 6.87 | 12.5 | 4.86 | 6.97 | 8.58 |
| | D | 4.86 | 3.64 | 4.86 | 6.05 | 12.17 | 9.13 | 12.17 | 15.16 | 9.17 | 6.88 | 9.17 | 11.42 |
| 914 | S | 8.41 | 3.27 | 4.69 | 5.77 | 8.41 | 3.27 | 4.69 | 5.77 | 10.51 | 4.09 | 5.86 | 7.22 |
| | D | 3.75 | 2.81 | 3.75 | 4.67 | 9.38 | 7.03 | 9.38 | 11.68 | 7.07 | 5.3 | 7.07 | 8.8 |
| 990 | S | 7.16 | 2.79 | 3.99 | 4.92 | 7.16 | 2.79 | 3.99 | 4.92 | 8.96 | 3.48 | 4.99 | 6.15 |
| | D | 2.95 | 2.21 | 2.95 | 3.67 | 7.38 | 5.53 | 7.38 | 9.19 | 5.56 | 4.17 | 5.56 | 6.93 |
| 1066 | S | 6.18 | 2.4 | 3.45 | 4.24 | 6.18 | 2.4 | 3.45 | 4.24 | 7.72 | 3.0 | 4.31 | 5.31 |
| | D | 2.36 | 1.77 | 2.36 | 2.94 | 5.91 | 4.43 | 5.91 | 7.36 | 4.46 | 3.34 | 4.46 | 5.55 |
| 1142 | S | 5.38 | 2.09 | 3.0 | 3.7 | 5.38 | 2.09 | 3.0 | 3.7 | 6.73 | 2.62 | 3.75 | 4.62 |
| | D | 1.92 | 1.44 | 1.92 | 2.39 | 4.81 | 3.61 | 4.81 | 5.99 | 3.62 | 2.72 | 3.62 | 4.51 |
| 1218 | S | 4.73 | 1.84 | 2.64 | 3.25 | 4.73 | 1.84 | 2.64 | 3.25 | 5.92 | 2.3 | 3.3 | 4.06 |
| | D | 1.58 | 1.19 | 1.58 | 1.97 | 3.96 | 2.97 | 3.96 | 4.94 | 2.99 | 2.24 | 2.99 | 3.72 |
| 1294 | S | 4.19 | 1.63 | 2.34 | 2.88 | 4.19 | 1.63 | 2.34 | 2.88 | 5.24 | 2.04 | 2.92 | 3.6 |
| | D | 1.32 | 0.99 | 1.32 | 1.64 | 3.31 | 2.48 | 3.31 | 4.12 | 2.49 | 1.87 | 2.49 | 3.1 |
| 1370 | S | 3.74 | 1.45 | 2.09 | 2.57 | 3.74 | 1.45 | 2.09 | 2.57 | 4.68 | 1.82 | 2.61 | 3.21 |
| | D | 1.11 | 0.83 | 1.11 | 1.39 | 2.79 | 2.09 | 2.79 | 3.47 | 2.1 | 1.57 | 2.1 | 2.61 |
| 1446 | S | 3.36 | 1.31 | 1.87 | 2.31 | 3.36 | 1.31 | 1.87 | 2.31 | 4.2 | 1.63 | 2.34 | 2.88 |
| | D | 0.95 | 0.71 | 0.95 | 1.18 | 2.37 | 1.78 | 2.37 | 2.95 | 1.79 | 1.34 | 1.79 | 2.22 |
| 1522 | S | 3.03 | 1.18 | 1.69 | 2.08 | 3.03 | 1.18 | 1.69 | 2.08 | 3.79 | 1.47 | 2.11 | 2.6 |
| | D | 0.81 | 0.61 | 0.81 | 1.01 | 2.03 | 1.52 | 2.03 | 2.53 | 1.53 | 1.15 | 1.53 | 1.91 |
| 1598 | S | 2.75 | 1.07 | 1.53 | 1.89 | 2.75 | 1.07 | 1.53 | 1.89 | 3.44 | 1.34 | 1.92 | 2.36 |
| | D | 0.70 | 0.53 | 0.70 | 0.87 | 1.76 | 1.32 | 1.75 | 2.19 | 1.32 | 0.99 | 1.32 | 1.65 |
| 1674 | S | 2.51 | 0.97 | 1.40 | 1.72 | 2.51 | 0.97 | 1.40 | 1.72 | 3.13 | 1.22 | 1.75 | 2.15 |
| | D | 0.61 | 0.46 | 0.61 | 0.76 | 1.53 | 1.14 | 1.53 | 1.9 | 1.15 | 0.86 | 1.15 | 1.43 |

