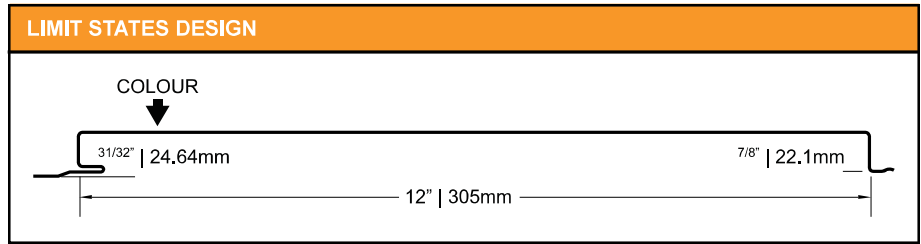


1. Based on ASTM A 653 structural steel.
2. Values in row "S" are based on strength.
3. Values in row "D" are based on deflection of 1/180th span.
4. Web crippling not included in strength calculation. See example.
5. Limit States Design principles were used in accordance with CSA Standard S136-12.



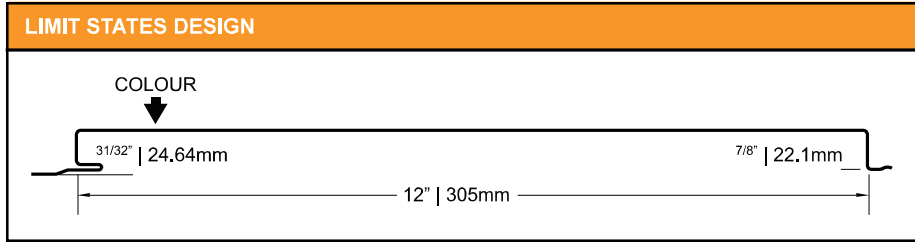
| SECTION PROPERTIES Per Foot of Width | | | | | | | | | |
|----------------------------------------|--------------------|--------------------|----------------------------|----------------------------|-------------------------------------------------|------------------------------|--------------|-------------------|-------------------|
| Base Steel Thickness (inches) | Weight [G90] (psf) | Yield Stress (ksi) | Section Modulus | | Deflection Moment of Inertia (in ⁴) | Specified Web Crippling Data | | | |
| | | | Midspan (in ³) | Support (in ³) | | Pe1 End (lb) | Pe2 End (lb) | Pi1 Interior (lb) | Pi1 Interior (lb) |
| 0.0240 | 1.36 | 33 | 0.0354 | 0.0585 | 0.0202 | 139 | 34.8 | 257 | 43.7 |
| 0.0300 | 1.69 | 33 | 0.0509 | 0.0727 | 0.0274 | 223 | 55.8 | 413 | 70.2 |
| 0.0360 | 2.02 | 33 | 0.0686 | 0.0867 | 0.0356 | 327 | 81.8 | 607 | 103 |
| 0.0480 | 2.67 | 33 | 0.105 | 0.114 | 0.0548 | 597 | 149 | 1109 | 188 |

LLF = 1.40; IMPF = 0.75; NORMAL OCCUPANCY = 1.0

| LOAD TABLE Maximum Uniformly Distributed Specified Loads (psf). | | | | | | | | | | | | | | |
|-------------------------------------------------------------------|---|--------------------------------------|--------|--------|--------|--------------------------------------|--------|--------|--------|--------------------------------------|--------|--------|--------|--|
| Span Length (ft) | | 1-Span Base Steel Thickness (inches) | | | | 2-Span Base Steel Thickness (inches) | | | | 3-Span Base Steel Thickness (inches) | | | | |
| | | 0.0240 | 0.0300 | 0.0360 | 0.0480 | 0.0240 | 0.0300 | 0.0360 | 0.0480 | 0.0240 | 0.0300 | 0.0360 | 0.0480 | |
| Y.S.* (ksi) | | 33 | 33 | 33 | 33 | | | | | | | | | |
| 4.0 | S | 31 | 45 | 61 | 93 | | | | | | | | | |
| 4.0 | D | 37 | 50 | 65 | 100 | | | | | | | | | |
| 4.5 | S | 25 | 36 | 48 | 73 | | | | | | | | | |
| 4.5 | D | 26 | 35 | 45 | 70 | | | | | | | | | |
| 5.0 | S | 20 | 29 | 39 | 59 | | | | | | | | | |
| 5.0 | D | 19 | 26 | 33 | 51 | | | | | | | | | |
| 5.5 | S | 17 | 24 | 32 | 49 | | | | | | | | | |
| 5.5 | D | 14 | 19 | 25 | 38 | | | | | | | | | |
| 6.0 | S | 14 | 20 | 27 | 41 | | | | | | | | | |
| 6.0 | D | 11 | 15 | 19 | 30 | | | | | | | | | |
| 6.5 | S | | 17 | 23 | 35 | | | | | | | | | |
| 6.5 | D | | 12 | 15 | 23 | | | | | | | | | |
| 7.0 | S | | | 20 | 30 | | | | | | | | | |
| 7.0 | D | | | 12 | 19 | | | | | | | | | |
| 7.5 | S | | | | 26 | | | | | | | | | |
| 7.5 | D | | | | 15 | | | | | | | | | |
| 8.0 | S | | | | 23 | | | | | | | | | |
| 8.0 | D | | | | 12 | | | | | | | | | |

*Y.S. = Yield Strength

1. Based on ASTM A 653 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 calculation. See example.
5. Limit States Design principles were used in accordance with CSA Standard S136-12.



| SECTION PROPERTIES Per Metre of Width | | | | | | | | | |
|-----------------------------------------|----------------------------------|--------------------|---------------------------------------------|---------------------------------------------|------------------------------------------------------------------|------------------------------|--------------|-------------------|-------------------|
| Base Steel Thickness (mm) | Mass [Z275] (kg/m ²) | Yield Stress (MPa) | Section Modulus | | Deflection Moment of Inertia (x10 ⁶ mm ⁴) | Specified Web Crippling Data | | | |
| | | | Midspan (x10 ³ mm ³) | Support (x10 ³ mm ³) | | Pe1 End (kN) | Pe2 End (kN) | Pi1 Interior (kN) | Pi1 Interior (kN) |
| 0.610 | 6.38 | 230 | 1.90 | 3.14 | 0.028 | 2.05 | 0.513 | 3.80 | 0.645 |
| 0.762 | 7.98 | 230 | 2.73 | 3.91 | 0.0374 | 3.29 | 0.823 | 6.09 | 1.04 |
| 0.914 | 9.57 | 230 | 3.67 | 4.66 | 0.0485 | 4.83 | 1.21 | 8.95 | 1.52 |
| 1.22 | 12.8 | 230 | 5.63 | 6.13 | 0.0746 | 8.81 | 2.20 | 16.4 | 2.78 |

LLF = 1.40; IMPF = 0.75; NORMAL OCCUPANCY = 1.0

| LOAD TABLE Maximum Uniformly Distributed Specified Loads (kPa). | | | | | | | | | | | | | |
|-------------------------------------------------------------------|---|----------------------------------|-------|-------|------|----------------------------------|-------|-------|------|----------------------------------|-------|-------|------|
| Span Length (m) | | 1-Span Base Steel Thickness (mm) | | | | 2-Span Base Steel Thickness (mm) | | | | 3-Span Base Steel Thickness (mm) | | | |
| | | 0.610 | 0.762 | 0.914 | 1.22 | 0.610 | 0.762 | 0.914 | 1.22 | 0.610 | 0.762 | 0.914 | 1.22 |
| Y.S.* (MPa) | | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 |
| 1.2 | S | 1.56 | 2.24 | 3.02 | 4.63 | 2.58 | 3.21 | 3.83 | 5.04 | 2.44 | 3.50 | 4.72 | 6.30 |
| 1.2 | D | 1.84 | 2.50 | 3.24 | 4.99 | 4.41 | 6.00 | 7.78 | 12.0 | 3.47 | 4.72 | 6.12 | 9.42 |
| 1.4 | S | 1.15 | 1.65 | 2.22 | 3.40 | 1.90 | 2.36 | 2.81 | 3.70 | 1.79 | 2.57 | 3.46 | 4.63 |
| 1.4 | D | 1.16 | 1.57 | 2.04 | 3.14 | 2.77 | 3.78 | 4.90 | 7.53 | 2.18 | 2.97 | 3.86 | 5.93 |
| 1.6 | S | 0.88 | 1.26 | 1.70 | 2.60 | 1.45 | 1.81 | 2.15 | 2.83 | 1.37 | 1.97 | 2.65 | 3.54 |
| 1.6 | D | 0.77 | 1.05 | 1.37 | 2.10 | 1.86 | 2.53 | 3.28 | 5.05 | 1.46 | 1.99 | 2.58 | 3.98 |
| 1.8 | S | 0.69 | 1.00 | 1.34 | 2.06 | 1.15 | 1.43 | 1.70 | 2.24 | 1.08 | 1.55 | 2.10 | 2.80 |
| 1.8 | D | 0.54 | 0.74 | 0.96 | 1.48 | 1.31 | 1.78 | 2.30 | 3.55 | 1.03 | 1.40 | 1.81 | 2.79 |
| 2.0 | S | | 0.81 | 1.09 | 1.67 | 0.93 | 1.16 | 1.38 | 1.81 | 0.88 | 1.26 | 1.70 | 2.27 |
| 2.0 | D | | 0.54 | 0.70 | 1.08 | 0.95 | 1.30 | 1.68 | 2.58 | 0.75 | 1.02 | 1.32 | 2.04 |
| 2.2 | S | | | 0.90 | 1.38 | 0.77 | 0.95 | 1.14 | 1.50 | 0.73 | 1.04 | 1.40 | 1.87 |
| 2.2 | D | | | 0.53 | 0.81 | 0.71 | 0.97 | 1.26 | 1.94 | 0.56 | 0.77 | 0.99 | 1.53 |
| 2.4 | S | | | | 1.16 | 0.65 | 0.80 | 0.96 | 1.26 | | 0.87 | 1.18 | 1.57 |
| 2.4 | D | | | | 0.62 | 0.55 | 0.75 | 0.97 | 1.50 | | 0.59 | 0.77 | 1.18 |
| 2.6 | S | | | | | | 0.68 | 0.82 | 1.07 | | | 1.00 | 1.34 |
| 2.6 | D | | | | | | 0.59 | 0.76 | 1.18 | | | 0.60 | 0.93 |
| 2.8 | S | | | | | | | 0.70 | 0.93 | | | | 1.16 |
| 2.8 | D | | | | | | | 0.61 | 0.94 | | | | 0.74 |

*Y.S. = Yield Strength