



Modern Rib

Bare & Painted



| SECTION PROPERTIES | | | | | | TOP IN COMPRESSION | | | BOTTOM IN COMPRESSION | | |
|--------------------|-------------|-----------------|-----------------------------|---------------------------------|---------------------------------|---|---|------------------------------------|---|---|------------------------------------|
| GAUGE | FY (ksi) | WEIGHT (psf) | V _a (kip/ft.) | P _{a_end} (lbs/ft.) | P _{a_int} (lbs/ft.) | I _x (in. ⁴ /ft.) | S _e (in. ³ /ft.) | M _a (kip-in/ ft.) | I _x (in. ⁴ /ft.) | S _e (in. ³ /ft.) | M _a (kip-in/ ft.) |
| 29 | 80.0 | 0.66 | 0.3863 | 130.90 | 186.20 | 0.0063 | 0.0097 | 0.2900 | 0.0063 | 0.0605 | 0.3567 |

1. Section properties are calculated in accordance with the 2016 AISI North American Specification for the Design of Cold-Formed Steel Structural Members.
2. V_a is the allowable shear.
3. P_a is the allowable load for web crippling on end & interior supports.
4. I_x is for deflection determination.
5. S_e is for bending.
6. M_a is the allowable bending moment.
7. All values are for one foot of panel width.

Allowable Uniform Loads (PSF)

| | | Span in Feet | | | | | | | | | | | | | | | |
|-----------|--------------------|--------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Span Type | Load Type | 0.25 | 0.50 | 0.75 | 1.00 | 1.25 | 1.50 | 1.75 | 2.00 | 2.25 | 2.50 | 2.75 | 3.00 | 3.25 | 3.50 | 3.75 | 4.00 |
| Single | Positive Wind | 500 | 500 | 343 | 193 | 123 | 85 | 63 | 48 | 38 | 30 | 25 | 21 | 18 | 15 | 13 | 12 |
| | Negative Wind | 500 | 500 | 422 | 237 | 152 | 105 | 77 | 59 | 46 | 38 | 31 | 26 | 22 | 19 | 16 | 14 |
| | Live | 500 | 500 | 343 | 193 | 123 | 85 | 63 | 48 | 38 | 30 | 25 | 21 | 18 | 15 | 13 | 12 |
| | Deflection (L/180) | 500 | 500 | 500 | 500 | 283 | 164 | 103 | 69 | 48 | 35 | 26 | 20 | 16 | 12 | 10 | 8 |
| | Deflection (L/240) | 500 | 500 | 500 | 415 | 212 | 123 | 77 | 51 | 36 | 26 | 19 | 15 | 12 | 9 | 7 | 6 |
| 2 Span | Positive Wind | 500 | 500 | 376 | 221 | 145 | 102 | 75 | 58 | 46 | 37 | 31 | 26 | 22 | 19 | 16 | 14 |
| | Negative Wind | 500 | 500 | 317 | 184 | 120 | 84 | 62 | 47 | 37 | 30 | 25 | 21 | 18 | 15 | 13 | 12 |
| | Live | 500 | 500 | 376 | 221 | 145 | 102 | 75 | 58 | 46 | 37 | 31 | 26 | 22 | 19 | 16 | 14 |
| | Deflection (L/180) | 500 | 500 | 500 | 500 | 395 | 248 | 166 | 117 | 85 | 64 | 49 | 38 | 31 | 25 | 20 | 20 |
| | Deflection (L/240) | 500 | 500 | 500 | 500 | 500 | 296 | 186 | 125 | 87 | 64 | 48 | 37 | 29 | 23 | 18 | 15 |
| 3 Span | Positive Wind | 500 | 500 | 449 | 269 | 178 | 126 | 93 | 72 | 57 | 46 | 38 | 32 | 27 | 24 | 20 | 18 |
| | Negative Wind | 500 | 500 | 384 | 226 | 148 | 104 | 77 | 59 | 47 | 38 | 31 | 26 | 22 | 19 | 17 | 15 |
| | Live | 500 | 500 | 449 | 269 | 178 | 126 | 93 | 72 | 57 | 46 | 38 | 32 | 27 | 24 | 20 | 18 |
| | Deflection (L/180) | 500 | 500 | 500 | 500 | 500 | 309 | 194 | 130 | 91 | 66 | 50 | 38 | 30 | 24 | 19 | 16 |
| | Deflection (L/240) | 500 | 500 | 500 | 500 | 401 | 232 | 146 | 97 | 68 | 50 | 37 | 29 | 22 | 18 | 14 | 12 |
| 4 Span | Positive Wind | 500 | 500 | 426 | 254 | 167 | 118 | 87 | 67 | 53 | 43 | 36 | 30 | 26 | 22 | 19 | 17 |
| | Negative Wind | 500 | 500 | 362 | 212 | 138 | 97 | 72 | 55 | 44 | 35 | 29 | 24 | 21 | 18 | 15 | 14 |
| | Live | 500 | 500 | 426 | 254 | 167 | 118 | 87 | 67 | 53 | 43 | 36 | 30 | 26 | 22 | 19 | 17 |
| | Deflection (L/180) | 500 | 500 | 500 | 500 | 500 | 328 | 206 | 138 | 97 | 70 | 53 | 41 | 32 | 25 | 21 | 17 |
| | Deflection (L/240) | 500 | 500 | 500 | 500 | 425 | 246 | 155 | 103 | 73 | 53 | 39 | 30 | 24 | 19 | 15 | 12 |

Notes:

1. Allowable uniform loads are based upon equal span lengths.
2. Live is the allowable live or snow load.
3. Deflection (L/180) is the allowable load that limits the panel's deflection to L/180 while under positive or live load.
4. Deflection (L/240) is the allowable load that limits the panel's deflection to L/240 while under positive or live load.
5. The weight of the panel has **NOT** been deducted from the allowable loads.
6. Positive Wind, Negative Wind, and Live Load values are limited to combined shear & bending using Eq. H2-1 of the AISI Specification.
7. Positive Wind and Live Load values are limited by web crippling using a bearing length of 2".
8. Web crippling values are determined using a ratio of the uniform load **actually** supported by the top flanges of the section.
9. Load Tables are limited to a maximum allowable load of 500 psf.