



R-Panel PB

(Bare Galvalume & Painted Galvalume)



| 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. |
| 22 | 50.0 | 1.47 | 1.4740 | 416.80 | 650.00 | 0.0800 | 0.0858 | 2.5700 | 0.0600 | 0.1206 | 2.3900 |

1. Section properties are calculated in accordance with the 2004 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 Type | Load Type | Span in Feet | | | | | | | | | | | | | | | |
|-----------|--------------------|--------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 1.50 | 2.00 | 2.50 | 3.00 | 3.50 | 4.00 | 4.50 | 5.00 | 5.50 | 6.00 | 6.50 | 7.00 | 7.50 | 8.00 | 8.50 | 9.00 |
| Single | Positive Wind | 500 | 428 | 274 | 190 | 139 | 107 | 84 | 68 | 56 | 47 | 40 | 34 | 30 | 26 | 23 | 21 |
| | Negative Wind | 500 | 398 | 254 | 177 | 130 | 99 | 78 | 63 | 52 | 44 | 37 | 32 | 28 | 24 | 22 | 19 |
| | Live | 500 | 428 | 274 | 190 | 139 | 107 | 84 | 68 | 56 | 47 | 40 | 34 | 30 | 26 | 23 | 21 |
| | Deflection (L/180) | 500 | 500 | 447 | 258 | 163 | 109 | 76 | 55 | 42 | 32 | 25 | 20 | 16 | 13 | 11 | 9 |
| | Deflection (L/240) | 500 | 500 | 335 | 194 | 122 | 81 | 57 | 41 | 31 | 24 | 19 | 15 | 12 | 10 | 8 | 7 |
| 2 Span | Positive Wind | 500 | 377 | 246 | 172 | 127 | 98 | 77 | 63 | 52 | 43 | 37 | 32 | 28 | 24 | 21 | 19 |
| | Negative Wind | 500 | 402 | 263 | 185 | 136 | 105 | 83 | 67 | 56 | 47 | 40 | 34 | 30 | 26 | 23 | 21 |
| | Live | 500 | 377 | 246 | 172 | 127 | 98 | 77 | 63 | 52 | 43 | 37 | 32 | 28 | 24 | 21 | 19 |
| | Deflection (L/180) | 500 | 500 | 500 | 500 | 343 | 230 | 161 | 117 | 88 | 68 | 53 | 42 | 34 | 28 | 23 | 20 |
| | Deflection (L/240) | 500 | 500 | 500 | 409 | 257 | 172 | 121 | 88 | 66 | 51 | 40 | 32 | 26 | 21 | 17 | 15 |
| 3 Span | Positive Wind | 500 | 461 | 303 | 213 | 158 | 121 | 96 | 78 | 65 | 54 | 46 | 40 | 35 | 30 | 27 | 24 |
| | Negative Wind | 500 | 490 | 323 | 228 | 169 | 130 | 103 | 84 | 69 | 58 | 50 | 43 | 37 | 33 | 29 | 26 |
| | Live | 500 | 461 | 303 | 213 | 158 | 121 | 96 | 78 | 65 | 54 | 46 | 40 | 35 | 30 | 27 | 24 |
| | Deflection (L/180) | 500 | 500 | 500 | 427 | 269 | 180 | 126 | 92 | 69 | 53 | 42 | 33 | 27 | 22 | 18 | 15 |
| | Deflection (L/240) | 500 | 500 | 500 | 320 | 201 | 135 | 95 | 69 | 52 | 40 | 31 | 25 | 20 | 16 | 14 | 11 |
| 4 Span | Positive Wind | 500 | 434 | 284 | 200 | 148 | 114 | 90 | 73 | 60 | 51 | 43 | 37 | 32 | 28 | 25 | 22 |
| | Negative Wind | 500 | 462 | 303 | 214 | 158 | 122 | 97 | 78 | 65 | 55 | 46 | 40 | 35 | 31 | 27 | 24 |
| | Live | 500 | 434 | 284 | 200 | 148 | 114 | 90 | 73 | 60 | 51 | 43 | 37 | 32 | 28 | 25 | 22 |
| | Deflection (L/180) | 500 | 500 | 500 | 453 | 285 | 191 | 134 | 98 | 73 | 56 | 44 | 35 | 29 | 23 | 19 | 16 |
| | Deflection (L/240) | 500 | 500 | 500 | 340 | 214 | 143 | 100 | 73 | 55 | 42 | 33 | 26 | 21 | 17 | 14 | 12 |

Notes:

1. Allowable uniform loads are based upon equal span lengths.
2. Positive Wind is wind pressure and is **NOT** increased by 33 1/3 %.
3. Negative Wind is wind suction or uplift and is **NOT** increased by 33 1/3%.
4. Live is the allowable live or snow load.
5. Deflection (L/180) is the allowable load that limits the panel's deflection to L/180 while under positive or live load.
6. Deflection (L/240) is the allowable load that limits the panel's deflection to L/240 while under positive or live load.
7. The weight of the panel has **NOT** been deducted from the allowable loads.
8. Positive Wind, Negative Wind, and Live Load values are limited to combined shear & bending using Eq. C3.3.1-1 of the AISI Specification.
9. Positive Wind and Live Load values are limited by web crippling using a bearing length of 2".
10. Web crippling values are determined using a ratio of the uniform load **actually** supported by the top flanges of the section.
11. Load Tables are limited to a maximum allowable load of 500 psf.