



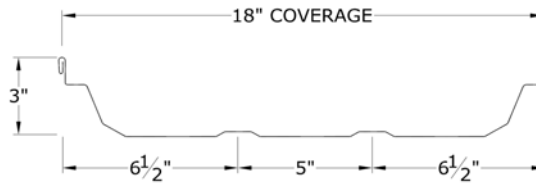
TECHNICAL BULLETIN

Issue Date : January 24, 2007

No. 07-297-07

MasterLok-FS 18"

Bare Galvalume & Painted Galvalume



| SECTION PROPERTIES | | | | TOP IN COMPRESSION | | | BOTTOM IN COMPRESSION | | |
|--------------------|----------|--------------|------------------------|--|--|----------------------------|--|--|----------------------------|
| GAUGE | FY (KSI) | WEIGHT (PSF) | V _a kip/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 | 1.63 | 1.6680 | 0.4790 | 0.2062 | 6.1740 | 0.2750 | 0.1965 | 4.8820 |

- Section properties are calculated with the 2001 AISI North American Specification for the Design of Cold-Formed Steel Structural Members.
- V_a is the allowable shear.
- I_x is for deflection determination.
- S_e is for bending.
- M_a is the allowable bending moment.
- All values are for one foot of panel width.

Allowable Uniform Loads (PSF)

| Span Type | Load Type | Span in Feet | | | | | | | | | | | | | | | |
|--------------------------------|--------------------|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 1.00 | 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 |
| Single | Positive Wind | 500 | 500 | 500 | 500 | 457 | 336 | 257 | 203 | 164 | 136 | 114 | 97 | 84 | 73 | 64 | 56 |
| | Live | 500 | 500 | 500 | 500 | 457 | 336 | 257 | 203 | 164 | 136 | 114 | 97 | 84 | 73 | 64 | 56 |
| | Deflection (L/180) | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 459 | 334 | 251 | 193 | 152 | 122 | 99 | 81 | 68 |
| | Deflection (L/240) | 500 | 500 | 500 | 500 | 500 | 500 | 490 | 344 | 251 | 188 | 145 | 114 | 91 | 74 | 61 | 51 |
| 2 Span | Positive Wind | 500 | 500 | 500 | 468 | 335 | 250 | 194 | 155 | 126 | 105 | 88 | 75 | 65 | 57 | 50 | 44 |
| | Live | 500 | 500 | 500 | 468 | 335 | 250 | 194 | 155 | 126 | 105 | 88 | 75 | 65 | 57 | 50 | 44 |
| | Deflection (L/180) | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 477 | 367 | 289 | 231 | 188 | 155 | 129 |
| | Deflection (L/240) | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 476 | 357 | 275 | 216 | 173 | 141 | 116 | 96 |
| 3 Span | Positive Wind | 500 | 500 | 500 | 500 | 406 | 306 | 238 | 191 | 156 | 129 | 109 | 93 | 81 | 70 | 62 | 55 |
| | Live | 500 | 500 | 500 | 500 | 406 | 306 | 238 | 191 | 156 | 129 | 109 | 93 | 81 | 70 | 62 | 55 |
| | Deflection (L/180) | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 497 | 373 | 287 | 226 | 181 | 147 | 121 | 101 |
| | Deflection (L/240) | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 373 | 280 | 215 | 169 | 135 | 110 | 91 | 75 |
| 4 Span | Positive Wind | 500 | 500 | 500 | 500 | 383 | 288 | 224 | 179 | 146 | 121 | 102 | 87 | 76 | 66 | 58 | 51 |
| | Live | 500 | 500 | 500 | 500 | 383 | 288 | 224 | 179 | 146 | 121 | 102 | 87 | 76 | 66 | 58 | 51 |
| | Deflection (L/180) | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 396 | 305 | 240 | 192 | 156 | 128 | 107 |
| | Deflection (L/240) | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 396 | 297 | 229 | 180 | 144 | 117 | 96 | 80 |
| ASTM E1592 Wind Uplift Testing | | NO TEST DATA AVAILABLE | | | | | | | | | | | | | | | |

Notes:

- Allowable uniform loads are based upon equal span lengths.
- Positive Wind is wind pressure and is **NOT** increased by 33 1/3 %.
- Live is the allowable live or snow load.
- Deflection (L/180) is the allowable load that limits the panel's deflection to L/180 while under positive or live load.
- Deflection (L/240) is the allowable load that limits the panel's deflection to L/240 while under positive or live load.
- The weight of the panel has **NOT** been deducted from the allowable loads.
- Positive wind and Live load values are limited to combined shear & bending using Eq. C3.3.1-1 of the AISI Specification.
- Values of ASTM E1592 Wind Uplift Testing include a factor of safety of 2.0. Shaded areas are outside of test range. Contact McElroy Metal for more information.
- Web Crippling has **NOT** been checked for this panel.
- Load Tables are limited to a maximum allowable load of 500 psf.

CORPORATE OFFICE
SHREVEPORT, LOUISIANA