

EM 7.2 Insul-Rib™ Panel 24 Gauge

ALLOWABLE UNIFORM LOADS IN POUNDS PER SQUARE FOOT

| Panel Depth | Span Type | Load Type | SPAN IN FEET | | | | | | | | | |
|-------------|---------------------|-----------------|--------------|--------|--------|--------|--------|--------|--------|-------|-------|-------|
| | | | 4' | 5' | 6' | 7' | 8' | 9' | 10' | 11' | 12' | 13' |
| 3" | Two Spans | Bending & Shear | 129.40 | 87.60 | 64.00 | 49.30 | 39.30 | 32.20 | 27.00 | 23.00 | 19.80 | 17.30 |
| | | (L/180) | 534.10 | 304.90 | 196.90 | 137.80 | 102.00 | 78.60 | 62.40 | 50.60 | 41.80 | 35.10 |
| | | Pattern FP1 | 42.50 | 35.80 | 31.40 | 28.10 | 25.70 | 23.70 | 22.20 | 20.90 | 19.80 | 17.30 |
| | | Pattern FP11 | 129.40 | 87.60 | 64.00 | 49.30 | 39.30 | 32.20 | 27.00 | 23.00 | 19.80 | 17.30 |
| | Three or More Spans | Bending & Shear | 153.20 | 102.40 | 74.20 | 56.80 | 45.20 | 37.10 | 31.10 | 26.50 | 22.90 | 20.00 |
| | | (L/180) | 467.00 | 272.60 | 178.60 | 126.00 | 93.60 | 72.20 | 57.10 | 46.20 | 38.00 | 31.70 |
| | | Pattern FP1 | 47.40 | 39.90 | 34.90 | 31.30 | 28.60 | 26.50 | 24.80 | 23.40 | 22.20 | 20.00 |
| | | Pattern FP11 | 153.20 | 102.40 | 74.20 | 56.80 | 45.20 | 37.10 | 31.10 | 26.50 | 22.90 | 20.00 |
| 4" | Two Spans | Bending & Shear | 135.60 | 93.50 | 69.60 | 54.50 | 44.20 | 36.70 | 31.10 | 26.80 | 23.30 | 20.50 |
| | | (L/180) | 568.70 | 333.10 | 220.60 | 158.40 | 120.10 | 94.80 | 76.90 | 63.80 | 53.80 | 46.00 |
| | | Pattern FP1 | 47.80 | 39.80 | 34.30 | 30.30 | 27.30 | 24.90 | 23.00 | 21.50 | 20.10 | 18.60 |
| | | Pattern FP11 | 135.60 | 93.50 | 69.60 | 54.50 | 44.20 | 36.70 | 31.10 | 26.80 | 23.30 | 20.50 |
| | Three or More Spans | Bending & Shear | 158.80 | 107.70 | 79.20 | 61.40 | 49.50 | 41.10 | 34.80 | 30.00 | 26.20 | 23.10 |
| | | (L/180) | 506.60 | 304.30 | 205.20 | 148.90 | 113.70 | 89.90 | 73.00 | 60.50 | 50.90 | 43.40 |
| | | Pattern FP1 | 53.10 | 43.90 | 37.80 | 33.40 | 30.00 | 27.50 | 25.40 | 23.70 | 22.30 | 20.60 |
| | | Pattern FP11 | 158.80 | 107.70 | 79.20 | 61.40 | 49.50 | 41.10 | 34.80 | 30.00 | 26.20 | 23.10 |
| 5" | Two Spans | Bending & Shear | 143.10 | 100.40 | 75.90 | 60.10 | 49.30 | 41.30 | 35.30 | 30.60 | 26.80 | 23.80 |
| | | (L/180) | 616.60 | 371.10 | 252.00 | 184.90 | 143.00 | 114.80 | 94.70 | 79.70 | 68.10 | 59.00 |
| | | Pattern FP1 | 48.20 | 40.20 | 34.70 | 30.70 | 27.70 | 25.30 | 23.30 | 21.70 | 20.40 | 18.70 |
| | | Pattern FP11 | 143.10 | 100.40 | 75.90 | 60.10 | 49.30 | 41.30 | 35.30 | 30.60 | 26.80 | 23.80 |
| | Three or More Spans | Bending & Shear | 165.50 | 113.90 | 84.80 | 66.60 | 54.20 | 45.40 | 38.70 | 33.60 | 29.50 | 26.20 |
| | | (L/180) | 559.50 | 345.40 | 238.50 | 176.90 | 137.80 | 111.00 | 91.60 | 77.10 | 65.80 | 56.80 |
| | | Pattern FP1 | 53.20 | 44.10 | 37.90 | 33.50 | 30.20 | 27.60 | 25.50 | 23.80 | 22.40 | 20.60 |
| | | Pattern FP11 | 162.80 | 113.90 | 84.80 | 66.60 | 54.20 | 45.40 | 38.70 | 33.60 | 29.50 | 26.20 |
| 6" | Two Spans | Bending & Shear | 149.80 | 106.50 | 81.40 | 65.20 | 53.80 | 45.40 | 39.00 | 34.00 | 30.00 | 26.60 |
| | | (L/180) | 662.00 | 407.20 | 281.90 | 210.30 | 165.00 | 134.10 | 111.90 | 95.10 | 82.10 | 71.70 |
| | | Pattern FP1 | 48.60 | 40.50 | 35.10 | 31.00 | 28.00 | 25.50 | 23.60 | 21.90 | 20.60 | 18.90 |
| | | Pattern FP11 | 148.60 | 106.50 | 81.40 | 65.20 | 53.80 | 45.40 | 39.00 | 34.00 | 30.00 | 26.60 |
| | Three or More Spans | Bending & Shear | 171.60 | 119.50 | 89.90 | 71.20 | 58.40 | 49.20 | 42.20 | 36.80 | 32.40 | 28.90 |
| | | (L/180) | 608.80 | 383.80 | 269.90 | 203.40 | 160.60 | 131.00 | 109.40 | 93.10 | 80.20 | 69.90 |
| | | Pattern FP1 | 53.40 | 44.20 | 38.00 | 33.60 | 30.30 | 27.60 | 25.60 | 23.80 | 22.40 | 20.70 |
| | | Pattern FP11 | 163.20 | 119.50 | 89.90 | 71.20 | 58.40 | 49.20 | 42.20 | 36.80 | 32.40 | 28.90 |

NOTES:

- 1) Based on EM 7.2 Insul-Rib™ panel with 24 gauge exterior and 26 gauge interior face (minimum Fy = 33ksi) for loads listed above.
- 2) Allowable positive load is the lowest value of the panel bending and shear strength or deflection limit.
- 3) Allowable suction load is the lowest value of the panel bending and shear strength, deflection limited and connection strength for each fastener pattern. The numbers have been reduced to reflect the lowest value.
- 4) Loads based on panel stress, deflection and connection design criteria are derived from ASTM E-72 testing.
- 5) Allowable loads are calculated with a factor of safety of 2.5 for bending, 3.0 for shear and 2.0 for connection.
- 6) Pattern FP1 is based on clip with (2) ¼"-14 Tek III's in minimum 14 gauge steel.
- 7) Pattern FP11 is based on five (7.2" on center, low cell of product), ¼"-14 Tek III's with 5/8" neoprene bonded washer in minimum 14 gauge steel.
- 8) The structural capacity of the girts are not considered and must be examined independently.
- 9) This material is subject to change without notice. Please contact Exceptional® Metals at 1-800-248-0280 for the most current data.

The Engineering data contained herein is for the expressed use of customers and design professionals. Along with this data, it is recommended that the design professional have a copy of the most current version of the North American Specification for the Design of Cold-Formed Steel Structural Members published by the American Iron and Steel Institute to facilitate design. This Specification contains the design criteria for cold-formed steel components. Along with the Specification, the designer should reference the most current building code applicable to the project jobsite in order to determine environmental loads. If further information or guidance regarding cold-formed design practices is desired, please contact Exceptional Metals.

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