# UNION CORRUGATING COMPANY

## MasterRib Roof Panel

36" wide, 29 ga. (min) Steel Panel over Wood Supports

| Span Condition | Loading Type | Allowable Load (psf) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Support Spacing (ft) | | | | | | | | |
| | | 1.50 | 1.75 | 2.00 | 2.25 | 2.50 | 2.75 | 3.00 | 3.50 | 4.00 |
| Two Span | Positive | 106.4 | 91.2 | 79.8 | 70.9 | 63.9 | 58.0 | 53.2 | 45.6 | 34.7 |
| | Negative | 84.9 | 72.8 | 63.7 | 56.6 | 51.0 | 46.3 | 42.5 | 36.4 | 29.0 |
| Three Span | Positive | 120.9 | 103.7 | 90.7 | 80.6 | 72.6 | 66.0 | 60.5 | 40.5 | 27.1 |
| | Negative | 96.5 | 82.7 | 72.4 | 64.4 | 57.9 | 52.7 | 48.3 | 41.4 | 36.2 |
| Four or More Spans | Positive | 116.4 | 99.8 | 87.3 | 77.6 | 69.8 | 63.5 | 58.2 | 43.0 | 28.8 |
| | Negative | 92.9 | 79.6 | 69.7 | 61.9 | 55.7 | 50.7 | 46.5 | 39.8 | 33.8 |

**Notes:**

1. Allowable load for each condition is the smallest load calculated based on fastener capacity, panel strength and and deflection limit of L/180. Allowable loads are calculated for minimum 29 ga. panel.
2. The wind load is taken as 0.7 times the "component and cladding" loads for the purpose of determining deflection limit.
3. The panel allowable properties are determined from full scale ASTM E1592-01 test at 4' 0" span
4. The panel fasteners are #9-16 or 10-14 x 1-1/2" long wood screws with washers. Fastener spacing across panel width is 9.0" o.c. in the interior supports and 3.5"-5.5"-3.5" o.c. at panel ends.
5. Sidelap fasteners are 1/4"-14 x 7/8" long self drilling screws with washers at 24"o.c.
6. Wood supports are minimum 2" x 2" lumber. All supports must be designed to resist all loads imposed on the panel.
7. Minimum bearing width of support is 1.5".
8. The panels may span from eave to ridge or rake to rake.
9. Panels must be installed as per Evaluation Report FL 9555.4 and Union current installation procedure.


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