

**EVALUATION REPORT OF  
UNION CORRUGATING COMPANY  
'29 GA. MASTERRIB PANEL'  
OVER WOOD SUPPORTS**

**FLORIDA BUILDING CODE 7TH EDITION (2020)  
FLORIDA PRODUCT APPROVAL  
FL 9557.4-R5  
PANEL WALLS  
SIDING**

**Prepared For:  
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**This report consists of  
Evaluation Report (2 Pages including cover)  
Installation Details (1 Page)  
Load Span Table (1 Page)**

**Report No. C2372-4  
Date: 8.7.2020**



Manufacturer: Union Corrugating Company

Product Name: MasterRib Panel

Panel Description: 36" wide coverage with 3/4" high ribs at 9" o.c.

Materials: Minimum 29 ga., 80 ksi steel. Galvanized coated steel (ASTM A653) or Galvalume coated steel (ASTM A792) or painted steel (ASTM A755) as per FBC 2020 Section 1405.2.

Support Description: Nom. 2" x 2" (min) SPF, SYP or DF lumber  
(Must be designed by others)

Design Pressure: +45.35 and -36.2 psf at support spacing of 48" o.c.  
(Based on testing) (at 3 span condition with FS = 2.0)

Panel Attachment: #9-15 or #10-14 x 1.5" long wood screws with washers. Corrosion resistant as per FBC 2020 Section 1405.17.  
At panel ends at 3.5"-5.5"-3.5" o.c. across panel width  
At intermediate at 9" o.c. across panel width

Sidelap Attachment: 1/4"-14 x 7/8" long SDS with washer at 24" o.c. Corrosion resistant as per FBC 2020 Section 1405.17.

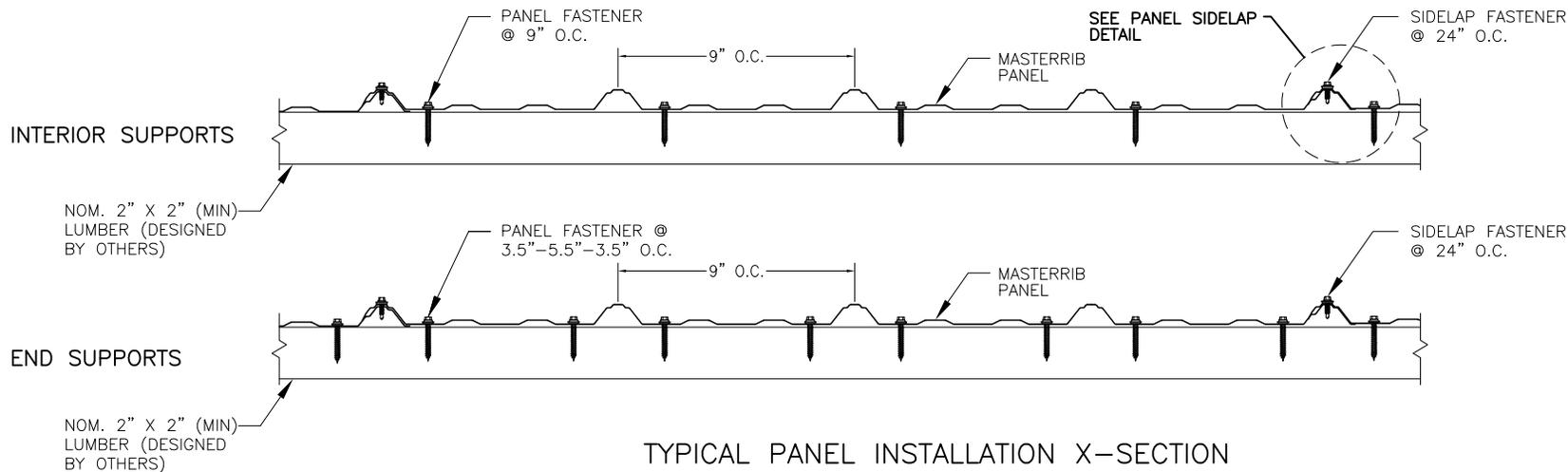
Test Standards: Panel assembly tested in accordance with ASTM E1592-01 'Test Method for Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure Difference'.

Test Equivalency: The test procedures in ASTM E1592-01 comply with test procedures prescribed in ASTM E1592-05(2012).

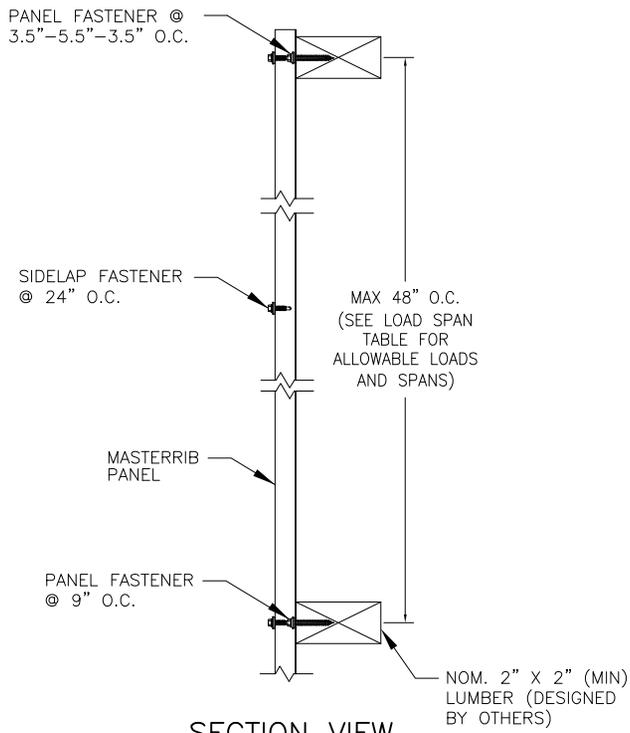
Code Compliance: The product described herein has demonstrated compliance with FBC 2020 Section 1404.5.

Product Limitations: Design wind loads shall be determined for each project in accordance with FBC 2020 Section 1609 or ASCE 7-16 using allowable stress design. The maximum support spacing listed herein shall not be exceeded. The design pressure for reduced support spacing may be computed using rational analysis prepared by a Florida Professional Engineer or based on Union Corrugating load span table. This product is not approved for use in the High Velocity Hurricane Zone.

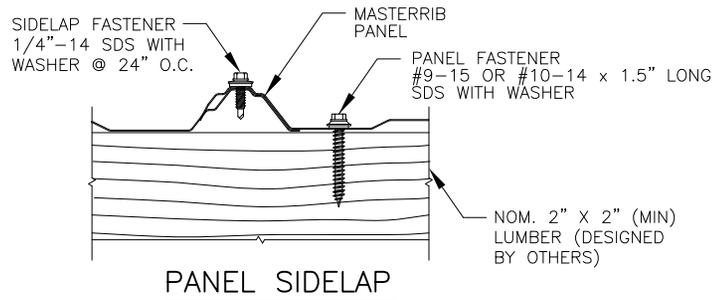
Supporting Documents: ASTM E1592 Test Report  
ENCON Technology Inc.  
C1514-1 (Test #2 & 3), Reporting Date 9/8/07



TYPICAL PANEL INSTALLATION X-SECTION



SECTION VIEW



PANEL SIDELAP

**GENERAL NOTES:**

1. WALL PANEL HAS BEEN DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE (FBC).
2. WALL PANELS SHALL BE 29 GA. (t = 0.013"). EFFECTIVE COVERING WIDTH OF PANEL = 36".
3. WALL PANELS SHALL BE INSTALLED OVER STRUCTURE AS SPECIFIED ON THIS DRAWING.
4. REQUIRED DESIGN WIND LOADS SHALL BE DETERMINED FOR EACH PROJECT. THIS PANEL SYSTEM MAY NOT BE INSTALLED WHEN THE REQUIRED DESIGN WIND LOADS ARE GREATER THAN THE ALLOWABLE DESIGN LOADS.
5. ALL FASTENERS MUST BE IN ACCORDANCE WITH THIS DRAWING & THE FLORIDA BUILDING CODE. IF A DIFFERENCE OCCURS BETWEEN THE MINIMUM REQUIREMENTS OF THIS DRAWING & THE CODE, THE CODE SHALL CONTROL.
6. SUPPORTS MUST BE DESIGNED TO WITHSTAND WIND LOADS AS REQUIRED FOR EACH APPLICATION AND ARE THE RESPONSIBILITY OF OTHERS.
7. PANELS MAY SPAN BETWEEN BOTTOM TO TOP SUPPORTS OR SIDE TO SIDE SUPPORTS.

|                      |      |             |          |
|----------------------|------|-------------|----------|
| DRAWN BY:            | B.S. | CHECKED BY: |          |
| DATE:                |      | DATE:       | 11/21/11 |
| NO.                  |      |             |          |
| REVISION DESCRIPTION |      |             |          |

**DRAWING TITLE**  
MASTERRIB WALL PANEL OVER WOOD SUPPORTS

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|-------------|------|
| DRAWING NO. | REV. |
| 2372-4      |      |
| SHEET NO.   |      |
| 1           | 1    |

# UNION CORRUGATING COMPANY

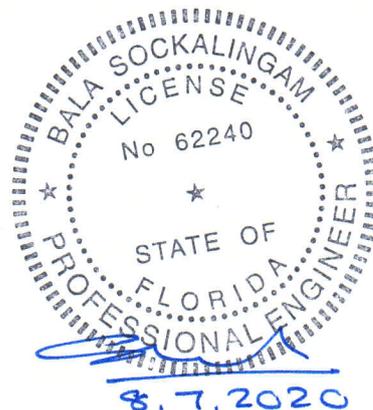
## MasterRib Wall Panel

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 | 36.3 |
|                    | 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 | 51.8 | 45.4 |
|                    | 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 | 49.9 | 42.4 |
|                    | 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 deflection limit of L/120. 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 tests at 4' 0" span
4. The panel fasteners are #9-15 or #10-14 x 1.5" 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 washer 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 bottom to top supports or side to side supports.
9. Panels must be installed as per Evaluation Report FL 9557.4 and Union current installation procedure.



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