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

FLORIDA BUILDING CODE 6TH EDITION (2017) FLORIDA PRODUCT APPROVAL FL 9557.1-R4 PANEL WALLS SIDING

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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. C2173-1 Date: 8.18.2017



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).

Support Description: Min 18 ga., min 50 ksi steel supports. Must be designed by others

Design Pressure: +45.35 and -37.7 psf @ support spacing of 48" o.c.

(Based on testing) (@ 3 span condition with FS = 2.0)

Panel Attachment: #12-14 x 1" long self drilling screws with washers

At panel ends @ 3.5"-5.5"-3.5" o.c. across panel width

At intermediate @ 9" o.c. across panel width

Sidelap Attachment: $\frac{1}{4}$ "-14 x 7/8" long SDS with washer @ 24" o.c.

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

2017 Section 1404 5

Product Limitations: Design wind loads shall be determined for each project in accordance

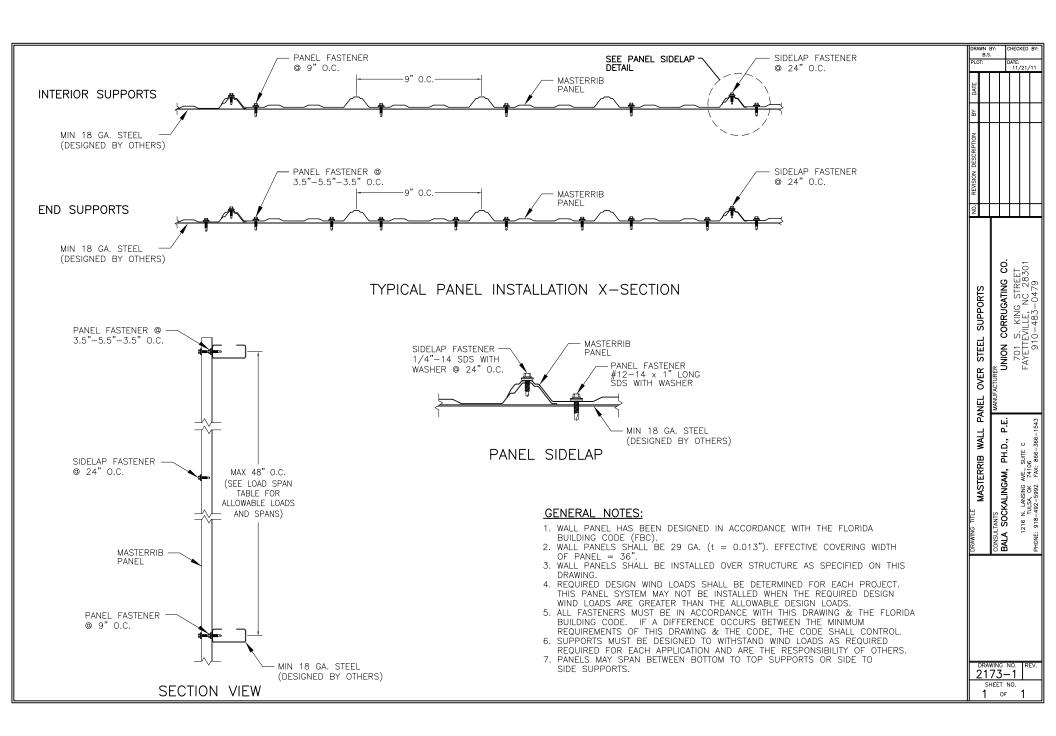
with FBC 2017 Section 1609 or ASCE 7-10 using allowable stress design. The maximum support spacing listed herein shall not be exceeded. The design pressure for reduced support spacing may be computed using rational analysis prepared by a Florida Professional Engineer or based on Union Corrugating load 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 #1 & 3), Reporting Date 9/8/07



UNION CORRUGATING COMPANY

MasterRib Wall Panel

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

Span	Loading	Allowable Load (psf) Support Spacing (ft)								
Condition	Type									
		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	88.5	75.8	66.4	59.0	53.1	48.3	44.2	37.9	30.2
Three Span	Positive	120.9	103.7	90.7	80.6	72.6	66.0	60.5	51.8	45.4
	Negative	100.5	86.2	75.4	67.0	60.3	54.8	50.3	43.1	37.7
Four or More	Positive	116.4	99.8	87.3	77.6	69.8	63.5	58.2	49.9	42.4
Spans	Negative	96.8	82.9	72.6	64.5	58.1	52.8	48.4	41.5	35.2

Notes:

- 1. Allowable load for each condition is the smallest load calculated based on fastener capacity, panel strength and 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 #12-14 x 1" long self drilling 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. Steel supports are minimum 18 ga. 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 9557.1 and Union current installation procedure.

