## EVALUATION REPORT OF UNION CORRUGATING COMPANY ' '26 GA. MASTERRIB PANEL'

## FLORIDA BUILDING CODE 7TH EDITION (2020) FLORIDA PRODUCT APPROVAL FL 38458.2 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. C2464-2 Date: 4.16.2021



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- Manufacturer: Union Corrugating Company
- Product Name: MasterRib Panel

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

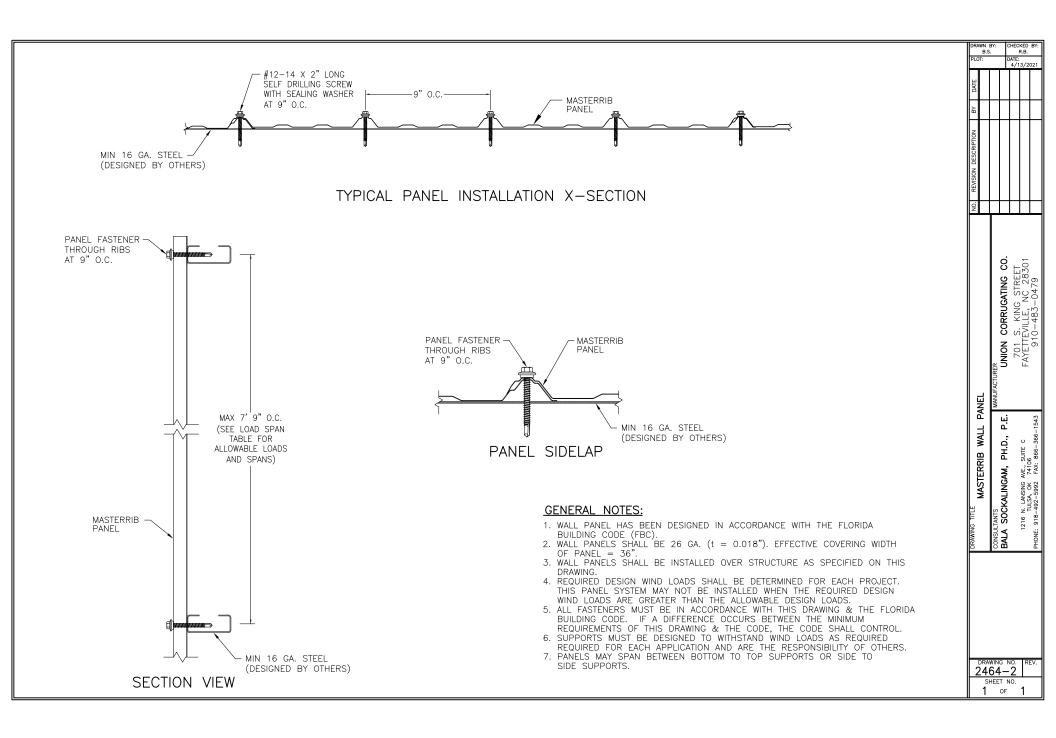
Materials: Minimum 26 ga., 80 ksi steel. Galvanized coated steel (ASTM A653) or Galvalume coated steel (ASTM A792) or painted steel (ASTM A755) as per FBC 2020 Section 1405.2.

Support Description: Min 16 ga., min 50 ksi steel supports. Must be designed by others

- Design Pressures: Inward and outward loads are shown in the load span table. The allowable loads for strength and deflection limits of L/120 were developed from test data. The allowable loads were calculated with safety factor of 2. Maximum span is 7' 9".
- Panel Attachment: #12-14 x 2" long self-drilling screws with washers at max. 9" o.c. across panel width. The panels are fastened through the panel ribs. Corrosion resistant as per FBC 2020 Section 1405.17.

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

- Test Standards: Wall assembly tested in accordance with ASTM E1592-05(2017) '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 E1592-05(2017) comply with test procedures prescribed in ASTM E1592-05(2012).
- 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. C2461-1, Reporting Date 4/16/2021



## UNION CORRUGATION COMPANY MASTERRIB PANEL

36" wide, 26 ga. Steel Panel Fasteners through Panel Ribs

Span	Loading	Allowable Load (psf)											
Condition	Туре	Support Spacing (ft)											
		2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.75
Two Span	Inward	101.9	81.5	67.9	53.6	41.0	32.4	26.3	21.7	18.2	15.5	13.4	10.9
	Outward	101.9	81.5	67.9	56.4	43.2	34.1	27.6	22.8	19.2	16.3	14.1	11.5
Three Span	Inward	112.5	91.9	63.8	46.9	35.9	28.4	23.0	19.0	16.0	13.6	11.7	9.6
	Outward	112.5	92.6	67.2	49.3	37.8	29.8	24.2	20.0	16.8	14.3	12.3	10.1
Four or More	Inward	111.4	89.1	66.3	48.7	37.3	29.5	23.9	19.7	16.6	14.1	12.2	9.9
Spans	Outward	111.4	89.1	69.8	51.3	39. <mark>2</mark>	31.0	25.1	20.8	17.4	14.9	12.8	10.5

## 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 26 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.

4. The panel fasteners are #12-14 x 2" long self drilling fastener with washer and installed through panel ribs.

5. Steel supports are minimum 16 ga.. All supports must be designed to resist all loads imposed on the panel.

6. Panels must be installed as per Evaluation Report FL FL 38458.2 and Union current installation procedure.



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