## EVALUATION REPORT OF UNION CORRUGATING COMPANY '29 GA. MASTERRIB PANEL' OVER WOOD SUPPORT AND DECK

## FLORIDA BUILDING CODE 7TH EDITION (2020) FLORIDA PRODUCT APPROVAL FL 7271.5-R5 ROOFING METAL ROOFING

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This report consists of Evaluation Report (3 Pages including cover) Installation Details (1 Page)

> Report No. C2400-5 Date: 10.9.2020



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). Corrosion resistant as per FBC 2020 Section 1507.4.3.

Support Description: Nom. 1" x 4" (min) lumber at max. 24" o.c. (Must be designed by

others)

Support Attachment: (1) #9 x 3" long wood screw into rafters spaced at max 24" o.c.

New Underlayment: Minimum underlayment as per FBC 2020 Section 1507.4.5.1.

Required for new construction and optional for reroofing construction.

Existing Underlayment:

(Optional)

One layer of asphalt shingles over one layer of #30 felt. For reroofing

construction only.

Deck Description: Min 7/16" thick OSB deck or min. 15/32" thick APA rated plywood or

min. 3/4" thick wood plank (min SG of 0.42) for new and existing

constructions. Designed by others and installed as per FBC 2020.

Slope: 1/2:12 or greater in accordance with FBC 2020 Section 1507.4.2

Design Uplift Pressure: 71 psf for Fastener Pattern 1 (Factor of Safety = 2) 114 psf for Fastener Pattern 2

Panel Attachment: #9-15 or #10-14 wood screw with washer. Fasteners are corrosion

resistant as per FBC 2020 Section 1507.4.4. Fastener shall be of sufficient length to penetrate through the support and deck a minimum

of 3/8".

Pattern 1 9" o.c. across panel width

Pattern 2 5.5"-3.5"-5.5" o.c. across panel width

Sidelap Attachment:

(Optional)

 $\frac{1}{4}$ "-14 x 7/8" long SDS with washer at 24" o.c. Recommended for

roof slope less than 3:12. Fasteners are corrosion resistant as per FBC

2020 Section 1507.4.4.

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' and FM 4470

Section 5.5 'Resistance to Foot Traffic'.

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Test Equivalency: The test procedure in ASTM E1592-01 comply with test procedure

prescribed in ASTM E1592-05(2012).

The test procedure in FM 4470 (1992) comply with test procedure prescribed in FM 4470 (2016) Section 4.6 'Resistance to Foot Traffic'

Code Compliance: The product described herein has demonstrated compliance with FBC

2020 Section 1507.4.

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 fastener spacing listed herein shall not be exceeded. This evaluation report is not applicable in High Velocity Hurricane Zone. Fire classification is not within scope of this Evaluation Report. Refer to FBC 2020 Section 1505 and current approved roofing materials directory or ASTM E108/UL790 report

from an accredited laboratory for fire ratings of this product.

Supporting Documents: ASTM E1592 Test Report

ENCON Technology Inc.

C1811-1, Reporting Date 11/30/11

FM 4470 Test Report ENCON Technology Inc.

C1583-2, Reporting Date 7/24/08

