

# Product Evaluation Report MID FLORIDA METAL ROOFING SUPPLY, INC.

### Minimum 29 Ga. MFMRS Multi-Rib Roof Panel over 2x4 Wood Purlins

## Florida Product Approval # 23490.1 R4

Florida Building Code 2023 Per Rule 61G20-3 Method: 1 –D

Category: Structural Components
Subcategory: Roof Deck
Compliance Method: 61G20-3.005(1)(d)
NON HVHZ

### **Product Manufacturer:**

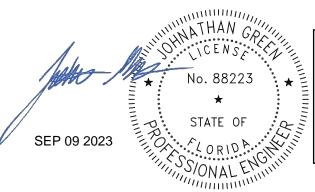
Mid Florida Metal Roofing Supply, Inc. 28328 County Road 561 Tavares, Florida 32778

#### **Engineer Evaluator:**

Johnathan Green, P.E. #88223 Florida Evaluation ANE ID: 12901

### **Contents:**

**Evaluation Report: Page 1 - 3 Installation Detail: Page 4** 



THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY JOHNATHAN GREEN ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.



**Compliance Statement:** The product as described in this report has demonstrated compliance with the Florida Building Code

2023, Sections 1504.3.2, 1504.7.

Product Description: MFMRS Multi-Rib Roof Panel, 29 Ga. Steel, 36" Wide, through fastened structural roof panel over 2x4

wood purlins. Structural Application.

Panel Material/Standards: Material: Minimum 29 Ga. Steel, ASTM A792 or ASTM A653 G90 conforming to Florida Building Code

2023 Section 1507.4.3. Yield Strength: Min. 80.0 ksi

Corrosion Resistance: Panel Material shall comply with Florida Building Code 2023, Section 1507.4.3.

Panel Dimension(s): Thickness: 0.0145" min.

Width: 36" maximum coverage Rib Height: ¾" major rib at 9" O.C.

**Panel Fastener:** #12 x 1 1/2" WoodZac or WoodZip w/ sealing washer or approved equal.

%-14 x 7/8" HWH SD1 w/ EPDM washer through panel side laps at 12" O.C. Corrosion Resistance: Per Florida Building Code 2023, Section 1507.4.4.

Substrate Description: Min. 2x4 No. 2 SYP wood purlins at 24" O.C. complying with 2023 Florida Building Code. Framing must

be designed in accordance w/ Florida Building Code 2023.

**Allowable Design Uplift Pressures:** 

Table "A"

Maximum Design Uplift Pressure:	-105.0 psf
Fastener Pattern:	9"-9"-9"-6"-3"
Fastener Pattern Spacing:	24" O.C.

<sup>\*</sup>Design Pressure includes a Safety Factor = 2.0



Code Compliance: The product described herein has demonstrated compliance with

The Florida Building Code 2023, Section 1504.3.2, 1504.7.

**Evaluation Report Scope:** The product evaluation is limited to compliance with the structural wind load requirements of the

Florida Building Code 2023, as relates to Rule 61G20-3.

**Performance Standards:** The product described herein has demonstrated compliance with:

ASTM E 1592-05 (2017) Test method for structural performance of sheet metal roof and

siding systems by uniform static air pressure difference.

■ FM 4471-92, Foot Traffic Resistance Test for Roof Panels.

Reference Data: 1. ASTM E 1592-01

PRI Construction Materials technologies LLC

Report No. FAE-008-02-01

2. FM 4471-92, Section 5.4 Foot Traffic Resistance Test

Force Engineering & Testing, Inc.
Report No. 194-0134T-11A

3. Certificate of Independence

By Johnathan Green, P.E. #88223

**Test Standard Equivalency:** The ASTM E 1592-01 test standard is equivalent to the ASTM E 1592-05 (2017) test standard.

**Quality Assurance Entity:**The manufacturer has established compliance of roof panel products in accordance with the Florida

Building Code and Rule 61G20-3.005 (3) for manufacturing under a quality assurance program audited

by an approved quality assurance entity.

Minimum Slope Range: Minimum Slope shall comply with Florida Building Code 2023, including Section 1507.4.2 and in

accordance with Manufacturers recommendations. For slopes less than 3:12, lap sealant must be

used in the panel side laps.

**Installation:** Install per manufacturers recommended details.

**Insulation:** Manufacturer's approved product (Optional)

**Roof Panel Fire Classification:** Fire classification is not part of this acceptance.

**Shear Diaphragm:** Shear diaphragm values are outside the scope of this report.

**Design Procedure**: Based on the dimensions of the structure, appropriate wind loads are determined using Chapter 16 of

the Florida Building Code 2023 for roof cladding wind loads. These component wind loads for roof cladding are compared to the allowable pressure listed above. The design professional shall select the appropriate erection details to reference in his drawings for proper fastener attachment to his

structure and analyze the panel fasteners for pullout and pullover. Support framing must be in compliance with Florida Building Code 2023 Chapter 23 for wood, and Chapter 16 for structural

loading.



