

Product Evaluation Report
McELROY METAL, INC.

Max-Rib Roof Panel 26 Ga. 36" Coverage 1x4 Wood Purlins over Plywood

Florida Product Approval # 30920.1 R2

Florida Building Code 2023

Per Rule 61G20-3

Method: 1 -D

Category: Roofing

Subcategory: Metal Roofing

Compliance Method: 61G20-3.005(1)(d)

NON HVHZ

Product Manufacturer:

McElroy Metal, Inc.

1500 Hamilton Road

Bossier City, LA 71111

Engineer Evaluator:

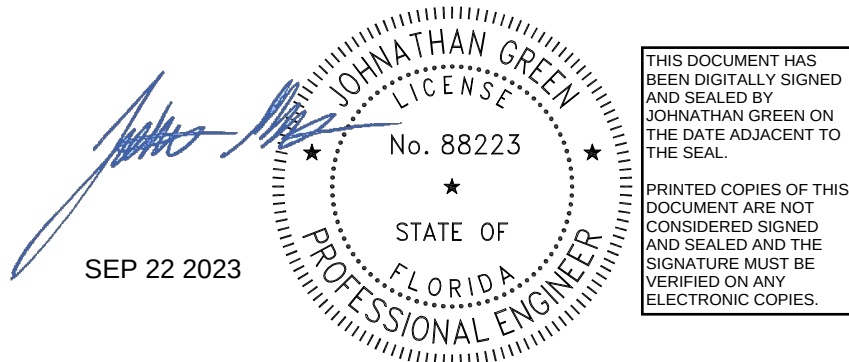
Johnathan Green, P.E. #88223

Florida Evaluation ANE ID: 12901

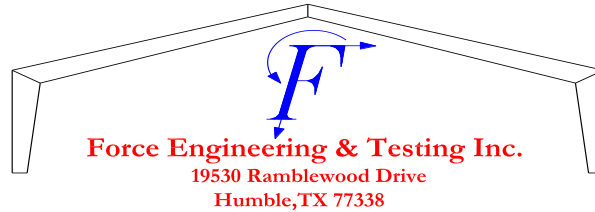
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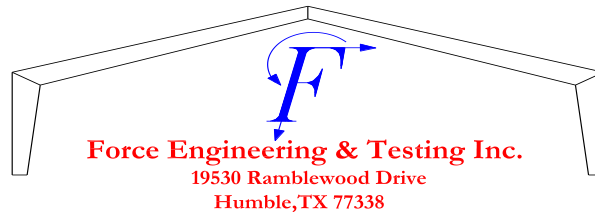
Compliance Statement:	The product as described in this report has demonstrated compliance with the Florida Building Code 2023, Sections 1504.3.2.
Product Description:	Max-Rib 26 Ga. Steel, 36" Coverage, through fastened roof panel over 1x4 wood purlins over minimum 15/32" APA Rated Plywood decking. Non-Structural Application.
Panel Material/Standards:	Material: Minimum 26 Ga. Steel, conforming to Florida Building Code 2023 Section 1507.4.3. Yield Strength: Min. 50.0 ksi Corrosion Resistance: Panel Material shall comply with Florida Building Code 2023, Section 1507.4.3.
Panel Dimension(s):	Thickness: 0.0185" min. Width: 36" maximum coverage Rib Height: ¾" major rib at 9" O.C.
Panel Fastener:	#10-15 x 1 ½" WoodZac HiLo or approved equal (1) ¼-14 x 7/8" HWH SD1 w/ washer at 20" O.C. through panel sidelaps Corrosion Resistance: Per Florida Building Code 2023, Section 1517.6
Substrate Description:	Min. 1x4 No. 2 SYP (or approved equal) wood purlin over (1) layer of 40 mil thick peel and stick self adhered underlayment, Grace Ice and Water Shield HT or equivalent (Optional: (1) layer of asphalt composition shingles over (1) layer of 30# felt paper) over minimum 15/32" APA Rated Plywood over SYP rafters at 24" O.C. 1x4 wood purlins attached through sheathing into rafters with (2) #9 x 3" deck screws (Min. 1 ½" screw penetration into rafters) at 24" O.C. maximum. Substrate must be designed in accordance w/ Florida Building Code.

Allowable Design Uplift Pressures:

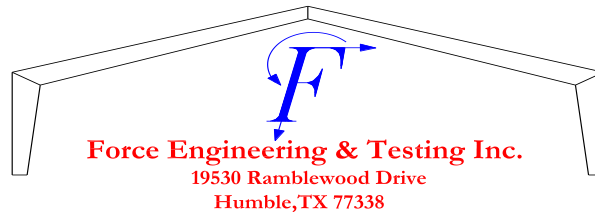
Table "A"

Maximum Total Uplift Design Pressure:	52.5 psf	96.2 psf	139.8 psf	183.5 psf
Fastener Pattern:	9"-9"-9"-9"	9"-9"-9"-9"	9"-9"-9"-9"	9"-9"-9"-9"
Fastener/1x4 wood purlin Spacing:	4'-0" O.C.	3'-0" O.C.	2'-0" O.C.	1'-0" O.C.

*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.
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: ▪ UL 580-06 - Test for Uplift Resistance of Roof Assemblies ▪ UL 1897-2015 - Uplift Test for Roof Covering Systems
Reference Data:	1. UL 580-06 / 1897-2012 Uplift Test Force Engineering & Testing, Inc. (FBC Organization # TST-5328) Report No. 90-0159T-19E, F 2. Certificate of Independence By Johnathan Green, P.E. (No. 88223) @ Force Engineering & Testing (FBC Organization # ANE ID: 12901)
Test Standard Equivalency:	The UL 1897-12 test standard is equivalent to the UL 1897-2015 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 manufacturer's recommended details.
Underlayment:	Min. 40 mil thick peel and stick self adhered underlayment, Grace Ice and Water Shield HT or equivalent conforming to Florida Building Code, Section 1507.1.1 and manufacturer's installation guidelines.
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 22 for steel, Chapter 23 for wood and Chapter 16 for structural loading.



FASTENER PATTERN

