



Product Evaluation Report
McELROY METAL, INC.

138T Roof Panel 24 Ga. 16" Coverage Plywood

Florida Product Approval # 22330.1 R5

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:

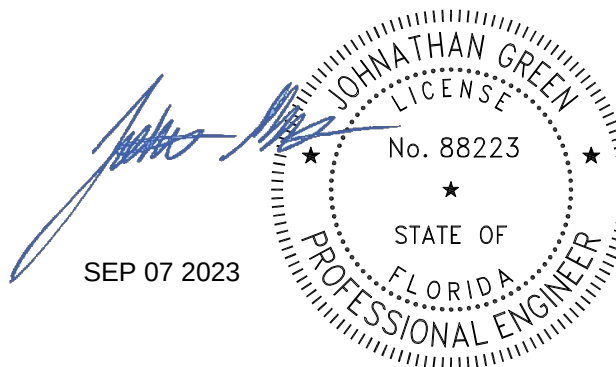
Johnathan Green, P.E. #88223

Florida Evaluation ANE ID: 12901

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

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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: 138T Min. 24 Ga. Steel, 16" Coverage, standing seam roof panel over APA Rated Plywood decking. Non-Structural Application.

Panel Material/Standards: Material: Minimum 24 Ga. Steel, ASTM A792 or ASTM A653 G90 conforming to Florida Building Code 2023 Section 1507.4.3. Paint finish optional
 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: 0.023"
 Width: 16" Maximum Coverage
 Rib: 1 3/8" tall T Rib
 Panel Seam: Mechanically seamed

Panel Clip: Product Name: 8" Shingle Recover Clip
 Type: Fixed, 16 Ga. steel, 8" long
 Corrosion Resistance: Per Florida Building Code 2023 Section 1506.7

Panel Clip Fastener: #14-10 x 1 1/2" HWH Type A (See Table A for number of fasteners per panel clip)
 1/4" minimum penetration through plywood
 Corrosion Resistance: Per Florida Building Code 2023, Section 1507.4.4.

Substrate Description: 1) One layer of asphalt shingles/felt paper (optional) over 15/32" or greater APA Rated plywood. Design of plywood and plywood supports (maximum 24" O.C.) are outside the scope of this evaluation. Substrate must be designed in accordance w/ Florida Building Code.

2) One layer of asphalt shingles/felt paper (optional) over 19/32" or greater APA Rated plywood. Design of plywood and plywood supports (maximum 24" O.C.) are outside the scope of this evaluation. Substrate must be designed in accordance w/ Florida Building Code.

3) See FBC Section 1511 for roof recovering.

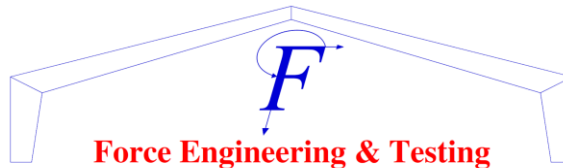
Allowable Design Uplift Pressures:

Table A				
Maximum Total Uplift Design Pressure:	71.0 psf	153.5 psf	71.0 psf	146.0 psf
Substrate Thickness:	15/32" Plywood	15/32" Plywood	19/32" Plywood	19/32" Plywood
Panel Clip Spacing:	4'-0" O.C.	1'-0" O.C.	4'-0" O.C.	1'-0" O.C.
Number of Fasteners per Clip:	4	4	2	2

*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 1897-15 - Uplift Test for Roof Covering Systems
Reference Data:	1. UL 580-06 / 1897-04 Uplift Test Force Engineering & Testing, Inc. (FBC Organization # TST-5328) Report No. 90-0059T-17 2. Certificate of Independence By Johnathan Green, P.E. (No. 88223) @ Force Engineering & Testing (FBC Organization # ANE ID: 12901)
Test Standard Equivalency:	The UL 1897-04 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:	Per Florida Building Code 2023, Section 1507.1.1 and manufacturer's installation guidelines. Section 1511 for roof recovering.
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.

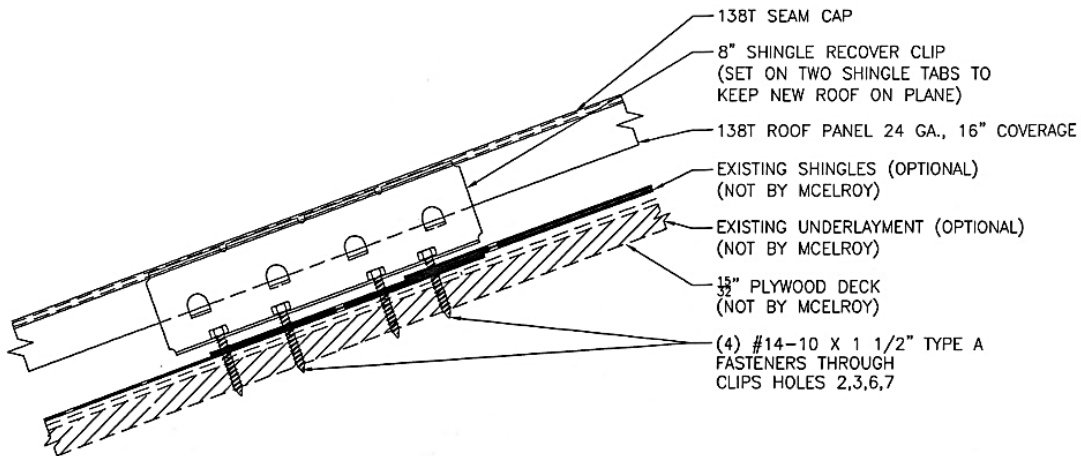


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15/32" PLYWOOD SUBSTRATE



19/32" PLYWOOD SUBSTRATE

