

19530 Ramblewood Drive Humble, Texas 77338 Phone: (281) 540-6603 FAX: (281) 540-9966 Website: www.forceengineeringtesting.com

# Product Evaluation Report SUNSHINE METAL SUPPLY, INC.

# 26 Ga. Sun-Rib Roof Panel over 15/32" Plywood

## Florida Product Approval # 41716.1

Florida Building Code 2020 Per Rule 61G20-3 Method: 1 –D

Category: Roofing
Subcategory: Metal Roofing
Compliance Method: 61G20-3.005(1)(d)
NON HVHZ

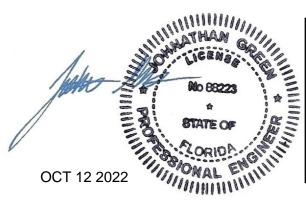
Product Manufacturer:
Sunshine Metal Supply, Inc.
719 Cattleman Road
Sarasota, Florida 34232

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

<u>Validator</u>: Steven Urich, P.E. #57795

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THIS ITEM 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 2020, Sections 1504.3.2.

**Product Description:** Sun-Rib, 26 Ga. Steel, 36" coverage, through fastened roof panel fastened into

minimum 15/32" APA Plywood decking. Non-Structural Application.

Panel Material/Standards: Material: Minimum 26 Ga. Steel conforming to Florida Building Code 2020

Section 1507.4.3.

Yield Strength: Min. 50.0 ksi

Corrosion Resistance: Panel Material shall comply with Florida Building Code

2020, Section 1507.4.3.

Panel Dimension(s): Thickness: 0.018" min.

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

Panel Fastener: Table A: #10x 1 1/2" WoodZAC HILO T17 w/ washing or approved equal.

**Table B:** #12x 1 1/2" WoodZip SCAMP SSC HILO T17 w/ washing or approved equal.

Corrosion Resistance: Per Florida Building Code 2020, Section 1507.4.4.

**Substrate Description:** Min. 15/32" thick, APA Rated plywood over supports at maximum 24" O.C.

Design of plywood and plywood supports are outside the scope of this

evaluation. Substrate must be designed in accordance w/ Florida Building Code.

#### **Allowable Design Uplift Pressures:**

#### Table A: #10 Fastener

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Maximum Allowable Uplift Design Pressure:	131.0 psf	108.5 psf	63.5 psf	
Fastener Pattern:	9"-9"-9"-9"	9"-9"-9"-9"	9"-9"-9"-9"	
Fastener Spacing:	12" O.C.	16" O.C.	24" O.C.	

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

#### Table B: #12 Fastener

Maximum Allowable Uplift Design Pressure:	138.5 psf	116.0 psf	71.0 psf
Fastener Pattern:	9"-9"-9"-9"	9"-9"-9"-9"	9"-9"-9"-9"
Fastener Spacing:	12" O.C.	16" O.C.	24" O.C.

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



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Code Compliance: The product described herein has demonstrated compliance with

The Florida Building Code 2020, 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 2020, 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 1897-2012 - Uplift Test for Roof Covering Systems

**Reference Data:** 1. UL 580-06 / 1897-2012 Uplift Test

Force Engineering & Testing (FBC Organization # TST-5328)

Report No. 596-0073T-22.

2. Certificate of Independence

By Johnathan Green, P.E. #88223

**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 2020, 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 2020, Section 1507.1 and manufacturer's installation

guidelines.



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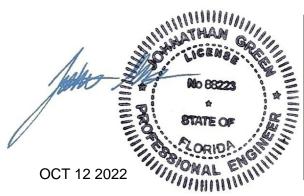
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**Website: www.forceengineeringtesting.com Roof Panel Fire Classification:** Fire classification is not part of this evaluation.

**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 2020 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 2020 Chapter 22 for steel, Chapter 23 for wood and Chapter 16 for structural loading.

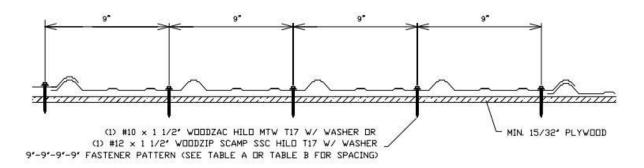


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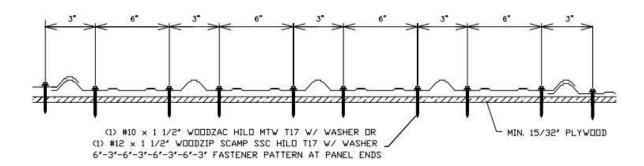


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## FASTENER PATTERN AT PANEL INTERIOR



### FASTENER PATTERN AT PANEL ENDS





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