

Force Engineering & Testing

19530 Ramblewood Drive
Humble, Texas 77338
Phone: (281) 540-6603 FAX: (281) 540-9966
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Product Evaluation Report
SUNSHINE METAL SUPPLY, INC.

26 Ga. Sun-Rib Roof Panel over 2x4 Wood Purlins

Florida Product Approval # 25616.2 R3

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:

Sunshine Metal Supply, Inc.
719 Cattlemen Road
Sarasota, FL 34232
Telephone: (941) 600-2521

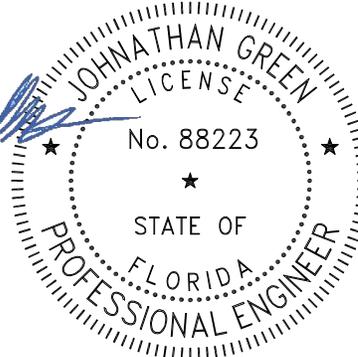
Engineer Evaluator:

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

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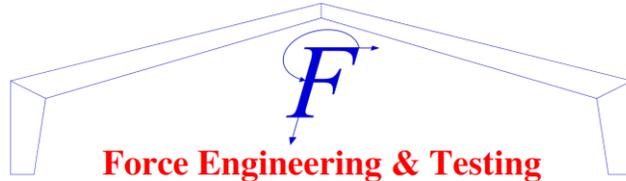
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AUG 19 2024



JOHNATHAN GREEN
LICENSE
No. 88223
★
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

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.
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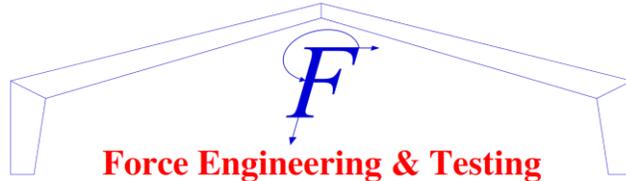
- Compliance Statement:** The product as described in this report has demonstrated compliance with the Florida Building Code 2023, Sections 1504.3.2, 1504.7.
- Product Description:** Sun-Rib Panel 26 Ga. Steel, 36" coverage, through fastened roof panel fastened into 2x4 wood purlins. Structural Application.
- Panel Material/Standards:** Material: 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: 0.018" (Nominal)
Width: 36" maximum coverage
Rib Height: ¾" major rib at 9" O.C.
- Panel Fastener:** #10 x 1 ½" WoodZAC HILO MTW with washer or approved equal.
Corrosion Resistance: Per Florida Building Code 2023, Section 1507.4.4.
- Substrate Description:** Min. 2x4 #2 SYP wood purlins laid flat over open wood framing at 24" O.C. max. (3) 10d x 3" Galvanized Ring Shank nails into wood framing at 24" O.C. Max. Design of 2x4 and wood framing supports are outside the scope of this evaluation. Substrate must be designed in accordance w/ Florida Building Code.

Allowable Design Uplift Pressures:

Table "A"

Maximum Allowable Design Uplift Pressure:	78.5 psf	119.8 psf	161.0 psf
Fastener Pattern:	9"-9"-9"-9"	9"-9"-9"-9"	9"-9"-9"-9"
2x4 Wood Purlin/Fastener Pattern Spacing:	24" O.C.	18" O.C.	12" O.C.

*Design Pressure includes a Safety Factor = 2.0.



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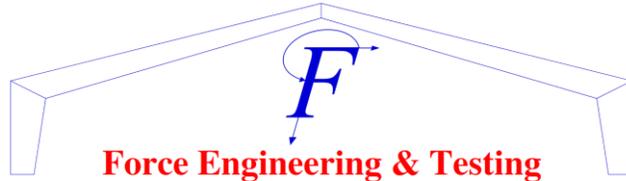
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Code Compliance:	The product described herein has demonstrated compliance with The Florida Building Code 2023, Section 1504.3.2, 1504.7.
Evaluation Report Scope:	The product evaluation is limited to compliance with the structural wind load requirements of the Florida Building Code 2023, as relates to Rule 61G20-3.
Performance Standards:	The product described herein has demonstrated compliance with: <ul style="list-style-type: none">▪ UL 580-06 - Test for Uplift Resistance of Roof Assemblies▪ UL 1897-2015 - Uplift Test for Roof Covering Systems▪ FM 4471-92 - Foot Traffic Resistance Test
Reference Data:	<ol style="list-style-type: none">1. UL 580-06 / 1897-2015 Uplift Test Force Engineering & Testing (FBC Organization # TST-5328) Report No. 596-0076T-24.2. FM 4471-10, Section 4.4 Foot Traffic Resistance Test Force Engineering & Testing (FBC Organization # TST-5328) Report No. 596-0076T-24.3. Certificate of Independence By Johnathan Green, P.E. #88223
Test Standard Equivalency:	FM 4471-10 test standard is equivalent to the FM 4471-92 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.
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 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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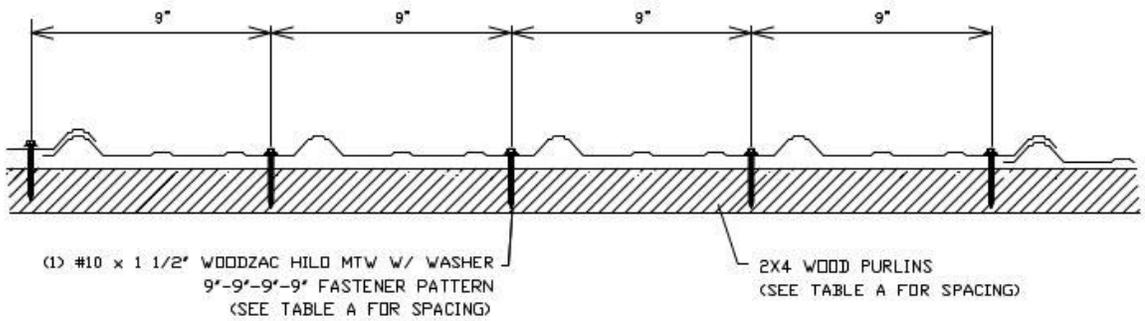
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FASTENER PATTERN AT PANEL INTERIOR



FASTENER PATTERN AT PANEL ENDS

