ENGINEERING, DRAFTING, CONSULTING

# **PRODUCT EVALUATION**

(Florida Product Approval)





DM Class 2000

FL# 41724.20-R3 2" Mechanical Seam (18" Wide)

# 24ga and 22ga Galvalume Approved

Approved for installation inside and outside of the HVHZ (Miami-Dade & Broward counties)

#### **Panel Material**

24ga Galvalume (min) Corrosion resistant per FBC 1507.4.3 (non-HVHZ) or 1518.9 (HVHZ)

# **Panel Description**

Non-Structural steel roof panel with 2" tall rib (nominal) and 18" (max) coverage

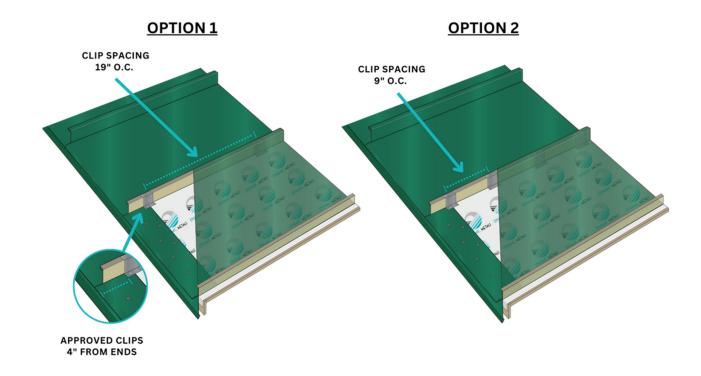
# **Deck/Substrate**

15/32" (min) 4-ply CDX plywood or  $\frac{3}{4}$ " (min) thick wood plank (min S.G. of 0.42). nailed to 2x rafters spaced 24" O.C. with 8d ring-shank nails spaced 6" (max) O.C.

## **Available Options**

22ga galvalume also available and acceptable. 16", 14" and 12" widths also available and acceptable.





	Option #1 Installation	<b>Option #2</b> Installation
Max. Design Pressure	-173.75 psf	-221.5 psf
Clip Anchor Spacing	4" From Ends, 19" Max O.C.	4" From Ends, 9" Max O.C.
Min Panel Fasteners	#10x1" Panclip Fasteners, two (2) per clip	#10x1" Panclip Fasteners, two (2) per clip
Panel Seam	Panels are Seamed to 90°	Panels are Seamed to 90°
Panel Sealant	Not Required <sup>1</sup>	Not Required <sup>1</sup>

## Notes:

- 1) Panel sealant is required for installation in the HVHZ with roof slopes below 2:12
- 2) Option #1 and Option #2 may be referred to as "field" and "corner" conditions, respectively
- 3) Compare *allowable* pressures required for the project to the maximum allowable design pressure above and select any option which meets or exceeds the pressures required for the project
- 4) Installation graphics on this page are provided as a generic visual representation; specific written text in this product approval & applicable building code shall take precedence
- 5) A factor of safety of 2.0 has been applied.



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## Non-High Velocity Hurricane Zone (Non-HVHZ)

This product is approved for installation outside the HVHZ (Miami-Dade & Broward counties). References to HVHZ sections of the FBC (e.g. Fire Barrier) generally do not apply when the product is installed outside of the **HVHZ** 

## **High Velocity Hurricane Zone (HVHZ):**

This product is approved for installation inside the HVHZ (Miami-Dade & Broward counties), and other jurisdictions which require HVHZ or NOA approvals. Comply with HVHZ elements of the FBC where required.

#### **Underlayment:**

Comply with FBC 1507.1.1 (non-HVHZ) or 1518.2 (HVHZ), and per local codes

#### Slope:

Comply with FBC 1507.4.2 (non-HVHZ) or 1515.2 (HVHZ), and per local codes OUTSIDE the HVHZ, FBC 1507.4.2 minimum slope is 1/4:12 INSIDE the HVHZ, FBC 1515.2 minimum slope is 1:12 This product has passed the requirements of ASTM E2140

# **Trim and Flashing Details:**

Comply with manufacturer's recommendations and RAS 133.

## Re-Roofing:

This panel may be installed over a single layer of existing shingles as permitted by local building code or FBC 1511/1521, provided the existing roof meets the conditions required by the applicable code. Size fasteners to fully penetrate 1/4" (min) through substrate.

## Fire Barrier:

Comply with FBC 1516.1 and 1516.2 where required.

Where not required by code. Fire classification is not a part of this evaluation.

Where required, refer to a current fire directory listing for fire ratings of this roofing system assembly as well as the location of the fire barrier within the assembly.

#### **Technical Documentation**

- 1) This product has been tested to meet the standards listed below by Intertek Testing (TST-152)
- 2) Per reports G3443.46-450-44, H2687.02-450-44, and M1607.03-450-44, signed and sealed by Vinu Abraham, PE, and by PRI Construction Materials Technologies, per test reports VLS-004-02-01 and VLS-005-02-01.
- Tests are owned by Lara's IP & Research, LLC., and used with permission.
- Drawing 2SMS18-HZ, dated 2/17/24 (Rev. 1), signed and sealed by Scott Wolters, PE.
- 5) Supplemental Calculations to support 2SMS18-HZ, signed & sealed by Scott Wolters, PE.

## **Compliance Statement:**

Reviewed per the FAC Product Approval Rule, Chapter 61G20-3.005 (4), this product, as described in this report and drawing 2SMS18-HZ, meets all of the requirements of sections 1504.3.2 (non-HVHZ) and 1518.9/1523.6.5.2.4 (HVHZ) of the 8th Edition (2023) Florida Building Code.

This product as described has been tested and demonstrated compliance with:

UL580 - Test for Uplift Resistance of Roof Assemblies

UL 1897 - Uplift test for roof covering systems

ASTM E2140 - Static Water Leakage Test criteria only

TAS 125 – Standard Requirements for Metal Roofing Systems

TAS 100 - Wind and Wind-Driven Rain

TAS 110 – Physical Properties of Roofing Components



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# Panel Labeling:

Products sold in the HVHZ that require labeling shall bear the following or similar label. Other labeling in accordance with FBC 1523.5 shall also be permitted



City, State
DM Class 2000 FL #41724.20

Approved for Miami-Dade County

# **Design Process:**

Compare the maximum allowable loads to the ASD uplift pressures for the project to determine sufficiency and installation requirements. Determine project uplift pressures using ASCE 7-22, FBC R301, project design documents, guidance from local building department, or other design professionals. Engineering analysis may be completed by other licensed engineers for project specific approval by local authorities having jurisdiction.

## **Exclusions and Limitations:**

Design of deck and roof structure (to include attachment of plywood or wood plank) shall be completed by others. Fire classification and shear diaphragm design are outside the scope of this evaluation.

This report is limited to compliance with structural wind load requirements of FBC 1504.3.2, as required by Rule 61G20-3. Neither Wolters Engineering nor the manufacturer shall be responsible for any conclusions, interpretations, or designs made by others based on this evaluation report. This report is limited solely to documenting compliance with Rule 61G20-3 and makes no express or implied warranty regarding the performance of this product. Installation shall be subject to the local building code and authority having jurisdiction.

## **Panel Forming**

Panels may be formed on the jobsite with the following Dynamic Metals, LLC approved machines, under a quality assurance program audited by an approved 3<sup>rd</sup>· party QA auditor

SSP-10751007, 5VC-0700123, SSQ2U-6470323, SSQ2U-6480323, SSQ-6800617, SSQ-6690517, 5VC-0490718, SSQ-5150216, SSQ-4560615, 5VC-0360516, SSQ-6810617, SSQ2U-4031121, SSQ2U-4041121, SSQU-4051121

If you have any questions or need more information concerning this approval, please contact me

Scott Wolters FLPE# 62354 Wolters Engineering, Inc. (COA# 27194) 15211 97th Road N West Palm Beach, FL 33412 (561) 225-1982



Digitally signed by Scott Wolters Date: 2025.07.04 09:04:13 -04'00'

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