

# Product Evaluation Report WHIRLWIND STEEL BUILDINGS, INC.

## 24 Ga. Super Seam II Roof Panel over open framing

## Florida Product Approval # FL 17700.3 R4

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:**

Whirlwind Steel Buildings, Inc. 8234 Hansen Road Houston, TX 77075

#### **Engineer Evaluator:**

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

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

**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: Super Seam II Roof Panel, Minimum 24 Ga. Steel, 24" Wide, standing seam

structural roof panel. Structural Application.

Panel Material/Standards: Material: 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: 0.0235"

Width: 24" Maximum Coverage Rib: 3" tall trapezoidal

Panel Seam: Snap Lock

**Roof Panel Clips:** Product Name: HW-2100 Low Floating Clip

Type: Top: 20 Ga. steel, Base: 14 Ga. steel

Corrosion Resistance: Per Florida Building Code 2023 Section 1506.7

Panel Fastener: (2) ¼-14 x 1-1/4" HWH SD per clip or approved equal.

Corrosion Resistance: Per Florida Building Code 2023, Section 1507.4.4.

**Substrate Description:** Min. 16 Ga. Steel Framing. Framing must be designed in accordance w/ Florida

Building Code 2023.

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

Table "A"

1000		
Maximum Uplift Design Pressure:	-18.2 psf	-46.9 psf
Panel Seam:	Snap Lock	Snap Lock
Clip Spacing:	5'-0" O.C.	1'-0" 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 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:

 ASTM E 1592-05(2017) Test method for structural performance of sheet metal roof and siding systems by uniform static air pressure difference.

■ FM 4471-92 Foot Traffic Resistance Test.

Reference Data: 1. ASTM E 1592-05

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

Report No. 14-0241T-15A, B.

2. FM 4471-10, Section 4.4 Foot Traffic Resistance Test

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

Report No. 14-0241T-15C.
Certificate of Independence

By Johnathan Green, P.E. (No. 88223) @ Force Engineering & Testing

(FBC Organization # ANE ID: 12901)

Test Standard Equivalency: The ASTM E 1592-05 test standard is equivalent to the ASTM E 1592-05 (2017)

test standard.

The FM 4471-10, Foot Traffic Resistance test standard is equivalent to the

FM 4471-92, Foot Traffic Resistance 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

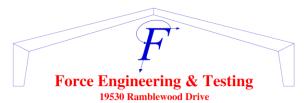
quality assurance entity.

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.



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**Insulation:** Manufacturer's approved product (Optional).

**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, and Chapter 16 for structural loading.



## 24" SUPER SEAM II 24 GA.

