

# Product Evaluation Report CAPITAL METAL SUPPLY

## 26 Ga. Capital PBR Roof Panel over open framing

## Florida Product Approval # 20147.1 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:
Capital Metal Supply
3845 S. US HWY 441
Lake City, Florida 32025

Capital Metal Supply 629 SE Industrial Circle Lake City, Florida 32025

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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19530 Ramblewood Drive 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:** Capital PBR Roof Panel, 26 Ga. Steel, 36" Wide, through fastened structural roof

panel. Structural Application.

Panel Material/Standards: Material: 26 Ga. Steel, ASTM A792 or ASTM A653 G90 conforming to Florida

Building Code 2023 Section 1507.4.3.

Yield Strength: Min. 80.0 ksi

Corrosion Resistance: Panel Material shall comply with Florida Building Code

2023, Section 1507.4.3.

Panel Dimension(s): Thickness: 0.0185" min.

Width: 36" maximum coverage Rib Height: 1 1/4" major rib at 12" O.C.

Panel Fastener: #12-14 x 1-1/4" Steelbinder HWH SD with sealing washing or approved equal.

1/4-14 x 7/8" Steelbinder HWH Stitch with sealing washer through panel side laps

at 20" O.C.

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

Substrate Description: Min. 16 Ga. Grade 50 Steel Framing. Framing must be designed in accordance w/

Florida Building Code 2023.

### **Allowable Design Pressures:**

Table "A"

Maximum Design Pressure:	-41.7 psf	+52.1 psf	-124.9 psf	+156.1 psf
Fastener Pattern:	12"-12"-12"	12"-12"-12"	12"-12"-12"	12"-12"-12"
Fastener Spacing:	5'-0" O.C.	5'-0" O.C.	2'-0" O.C.	2'-0" O.C.

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



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

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 (2012)

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

Report No. 587-0012T-20

 FM 4471-10, Section 4.4 Foot Traffic Resistance Test Force Engineering & Testing (FBC Organization # TST-5328)

Report No. 587-0012T-20

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

(FBC Organization # ANE ID: 12901)

**Test Standard Equivalency:** The FM 4471-10, Foot Traffic Resistance test standard is equivalent to

FM 4471-92.

The ASTM E 1592-05(2012) test standard is equivalent to the ASTM E 1592-05

(2017) 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.



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**Installation:** Install per manufacturer's recommended details.

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.

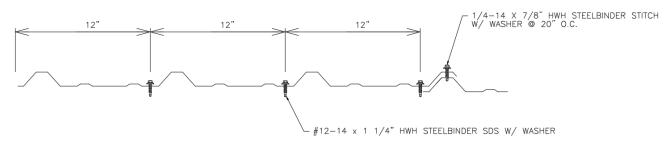
**Design Procedure**: Based on the dimensions of the structure, appropriate wind loads are

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.



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