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

Product Evaluation Report
CAPITAL METAL SUPPLY, INC.

Min. 29 Ga. Capital Rib Roof Panel over 1x4 Wood Purlins over 7/16" OSB

Florida Product Approval # 17992.1 R4

Florida Building Code 2023
Per Rule 61G20-3
Method: 1 –D

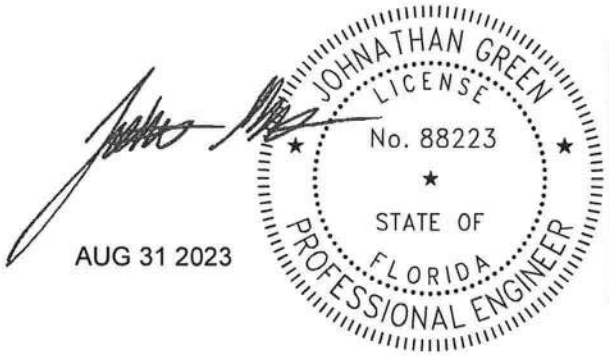
Category: Roofing
Subcategory: Metal Roofing
Compliance Method: 61G20-3.005(1)(d)
NON HVHZ

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

Contents:



AUG 31 2023

THIS DOCUMENT 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 2023, Sections 1504.3.2, 1504.7.

Product Description: Capital Rib Roof Panel, Min. 29 Ga. Steel, 36" Wide, through fastened roof panel over 1x4 wood purlins over minimum 7/16" OSB decking. Non-structural Application.

Panel Material/Standards: Material: Min. 29 Ga. Steel, ASTM A792 or ASTM A653 G90 conforming to Florida Building Code 2023 Section 1507.4.3. Paint finish optional.
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: 0.0140" Min.
Width: 36" Maximum Coverage
Rib Height: ¾" major rib at 9" O.C.
Panel Rollformer: MRS Metal Rollforming Systems

Panel Fastener: #10-15 x 1-1/2" ZAC Head dual thread with sealing washing or approved equal
¼" minimum penetration through plywood
Corrosion Resistance: Per Florida Building Code 2023, Section 1507.4.4.

Substrate Description: Min. 1x4 No. 2 SYP wood purlin over (1) layer of asphalt composition shingles (optional) over (1) layer of 30# felt paper over minimum 7/16" OSB (or 15/32" APA Rated Plywood) over Southern Yellow Pine wood rafters at 24" O.C. Panel System Type 1: 1x4 wood purlins attached to OSB with (1) 8d ring shank nail at 4" O.C. Panel System Type 2: 1x4 wood purlins attached to OSB with (1) 8d ring shank nail at 4" O.C and (2) 9x3" deck screws at 24" O.C. into wood rafters. OSB must be inspected and able to withstand the wind loading induced by the wood purlins. Substrate must be designed in accordance w/ Florida Building Code.

Allowable Design Uplift Pressures:

Table "A"

Panel System	Type 1	Type 2
Maximum Total Uplift Design Pressure:	41.7 psf	123.5 psf
Fastener Pattern:	9"-9"-9"-9"	6"-3"-6"-3"-6"-3"-6"
1x4 Wood Purlin Spacing:	24" O.C.	24" O.C.
1x4 Wood Purlin Nail Spacing:	(1) at 4" O.C.	(1) at 4" O.C.
1x4 Wood Purlin Screw Spacing:	NA	(2) at 24" O.C.

*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:

- 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:

1. UL 580-06 / 1897-04 Uplift Test
   Force Engineering & Testing, Inc. (FBC Organization # TST-5328)
   Report No. 587-0169T-15A, B
2. FM 4471-10, Section 4.4 Foot Traffic Resistance Test
   Force Engineering & Testing, Inc. (FBC Organization # TST-5328)
   Report No. 587-0169T-15C
3. Certificate of Independence
   By Johnathan Green, P.E. (No. 88223) @ Force Engineering & Testing
   (FBC Organization # ANE ID: 12901)

Test Standard Equivalency:

1. The UL 1897-04 test standard is equivalent to the UL 1897-2015 test standard.
2. 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.

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Installation: Install per manufacturer's recommended details.

Underlayment: Per Florida Building Code 2023, Section 1507.1 and manufacturer's installation guidelines.

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, Chapter 23 for wood and Chapter 16 for structural loading.

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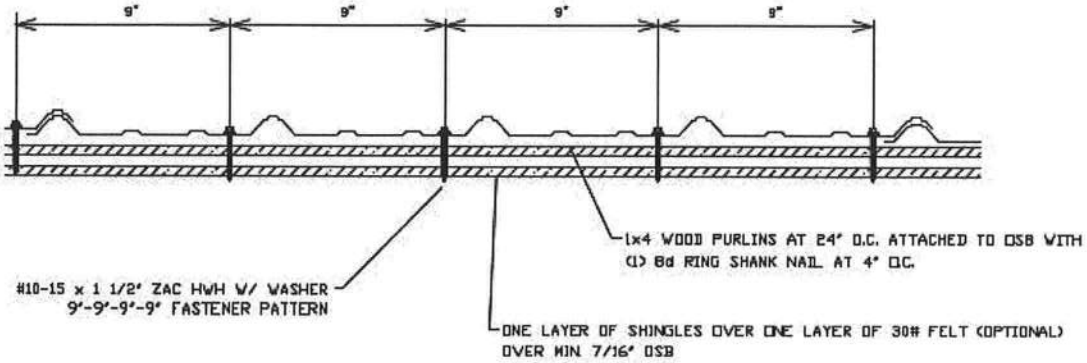
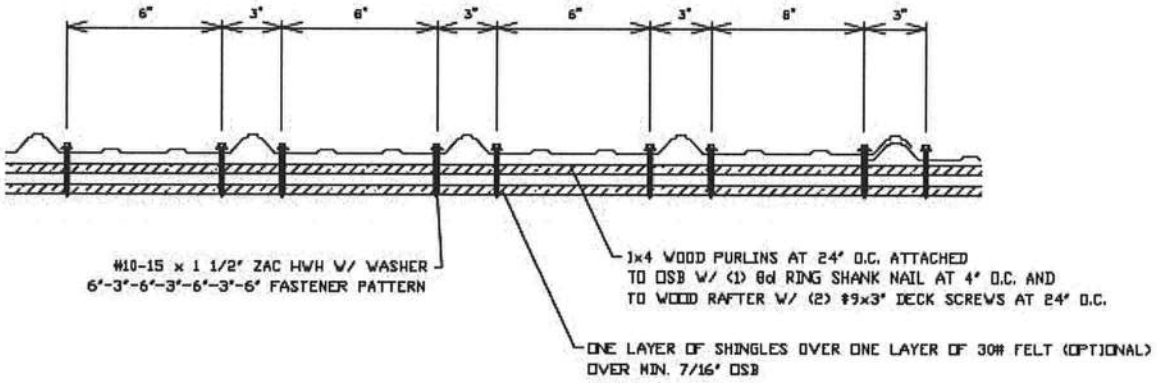
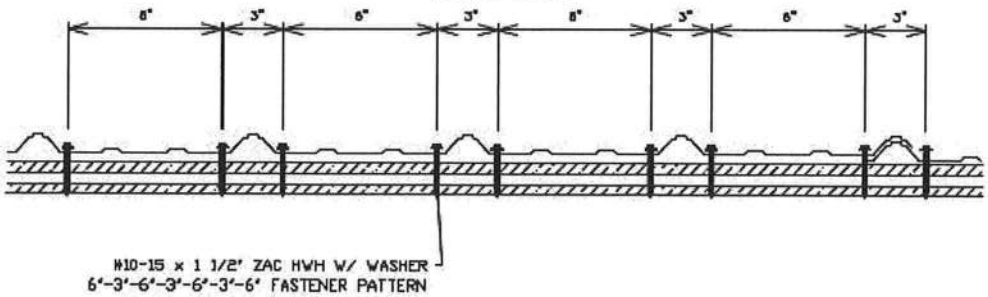
MINIMUM 29 GA. CAPITAL RIB PANEL
PANEL SYSTEM TYPE 1
FASTENER PATTERN AT 24" O.C.



MINIMUM 29 GA. CAPITAL RIB PANEL
PANEL SYSTEM TYPE 2
FASTENER PATTERN AT 24" O.C.



PANEL ENDS



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