Force Engineering & Testing Inc.
19530 Ramblewood Drive
Humble,TX 77338

Product Evaluation Report

TRI COUNTY METALS

26 Ga. PBR Roof Panel over open framing

Florida Product Approval # 9903.1 R2

Florida Building Code 2010
Per Rule 9N-3
Method: 1 –D

Category: Structural Components
Subcategory: Roof Deck
Compliance Method: 9N-3.005(1)(d)
NON HVHZ

Product Manufacturer:
Tri County Metals
301 SE 16th Street
Trenton, Florida 32693

Engineer Evaluator:
Terrence E. Wolfe, P.E. # 44923
Florida Evaluation ANE ID: 1920

Validator:
Locke Bowden, P.E., FL #49704
9450 Alysbury Place
Montgomery, AL 36117

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TERRENCE E. WOLFE LICENSE No. 44923 STATE OF FLORIDA PROFESSIONAL ENGINEER

State of Florida C.O.A. #26778

August 22, 2012

Force Engineering & Testing Inc.
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Compliance Statement: The product as described in this report has demonstrated compliance with the Florida Building Code 2010, Sections 1504.3.2, 1504.7.

Product Description: PBR Roof Panel, 26 Ga. Steel, 36" Wide, through fastened structural roof panel. Structural Application.

Panel Material/Standards: Material: Min. 26 Ga. Steel, conforming to Florida Building Code 2010 Section 1507.4.3. Paint finish optional.
Yield Strength: Min. 50.0 ksi
Corrosion Resistance: Panel Material shall comply with Florida Building Code 2010, Section 1507.4.3.

Panel Dimension(s):

Thickness:	0.0185" min.
Width:	36"
Rib Height:	1-1/4" major rib at 12" O.C.
Panel Rollformer:	MRS Metal Rollforming Systems

Panel Fastener: #12-14 x 1-1/4" HWH SD with sealing washing or approved equal at 12"-12"-12" fastener pattern. Panel side laps fastened together w/ ¼-14 x 7/8" HWH SD w/ sealer washer at 20" O.C.
Corrosion Resistance: Per Florida Building Code 2010, Section 1506.6, 1507.4.4

Substrate Description: Min. 16 Ga. Steel Framing. Must be designed in accordance w/ Florida Building Code 2010.

Design Pressures:

Table "A"

Maximum Design Pressure:	-45.0 psf	+55.0 psf
Fastener Pattern:	12"-12"-12"	12"-12"-12"
Fastener Spacing:	5'-0" O.C.	5'-0" O.C.

*Design Pressure includes a Safety Factor = 2.0.
*See Load Table for additional design pressures.

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Code Compliance:

The product described herein has demonstrated compliance with The Florida Building Code 2010, 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 2010, as relates to Rule 9N-3.

Performance Standards:

The product described herein has demonstrated compliance with:

- ASTM E 1592-01 Test method for structural performance of sheet metal roof and siding systems by uniform static air pressure difference.
- FM 4471, Section 4.4 - Foot Traffic Resistance Test.

Reference Data:

1. ASTM E 1592-01
   Force Engineering & Testing, Inc. (FBC Organization # TST-5328)
   Report No. 136-0393T-07A,B
2. FM 4471-10, Section 4.4 Foot Traffic Resistance Test
   Force Engineering & Testing, Inc. (FBC Organization # TST-5328)
   Report No. 136-0173T-12E
3. Certificate of Independence
   By Terrence E. Wolfe, P.E. (No. 44923) @ Force Engineering & Testing, Inc.
   (FBC Organization # ANE ID: 1920)

Quality Assurance Entity:

The manufacturer has established compliance of roof panel products in accordance with the Florida Building Code and Rule 9N-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 2010, 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.

Insulation:

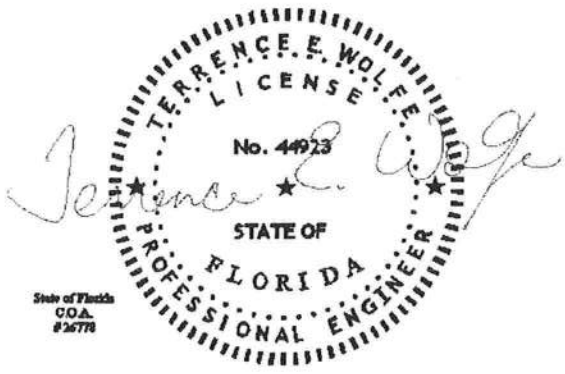
Manufacturer's approved product (Optional)

Roof Panel Fire Classification:

Fire classification is not part of this acceptance.

Shear Diaphragm:

Shear diaphragm values are outside the scope of this report.



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Design Procedure:

Based on the dimensions of the structure, appropriate wind loads are determined using Chapter 16 of the Florida Building Code 2010 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 2010 Chapter 22 for steel, and Chapter 16 for structural loading.

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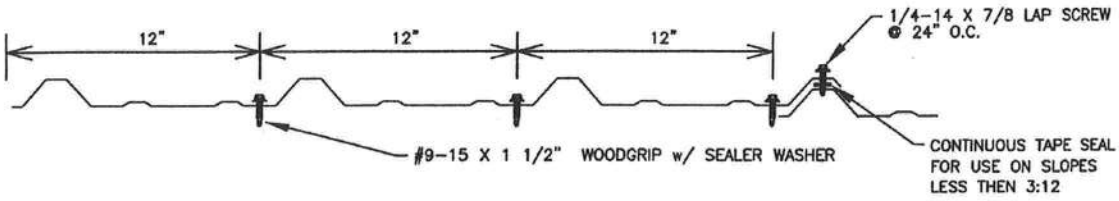
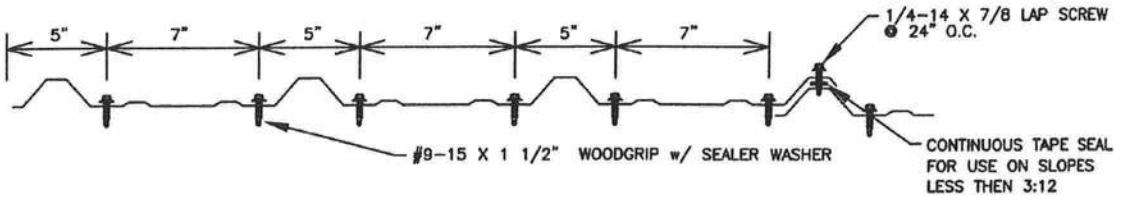
MIN. 26 GA. PBR PANEL OVER 1x4 WOOD PURLINS

TYPE 1 FASTENER PATTERN AT 24" O.C.



TYPE 2 FASTENER PATTERN AT 24" O.C. AND AT PANEL ENDS



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