

Product Evaluation Report
REED'S METALS, INC.

Mech-Seam Standing Seam Roof Panel over open framing

Florida Product Approval # 22226.1 R1

Florida Building Code 2017

Per Rule 61G20-3

Method: 1 -D

Category: Structural Components

Subcategory: Roof Deck

Compliance Method: 61G20-3.005(1)(d)

NON HVHZ

Product Manufacturer:

Reed's Metals, Inc.

19 E. Lincoln Drive NE

Brookhaven, MS 39601

Engineer Evaluator:

Terrence E. Wolfe, P.E. # 44923

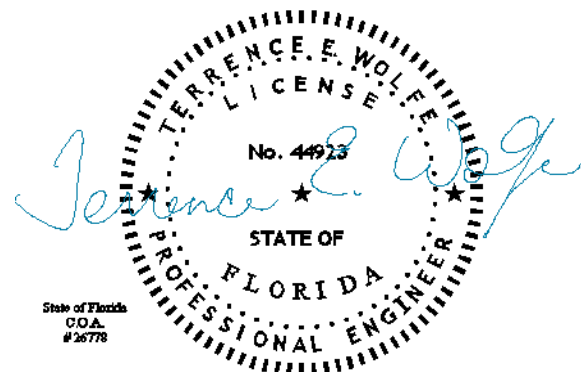
Florida Evaluation ANE ID: 1920

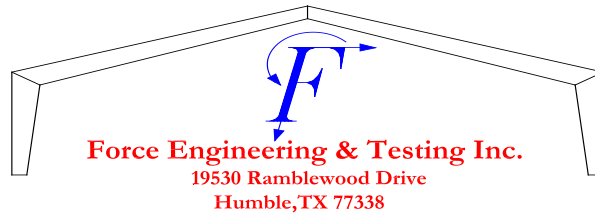
Validator:

Brian Jaks P.E. #70159

Contents:

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Compliance Statement: The product as described in this report has demonstrated compliance with the Florida Building Code 2017, Sections 1504.3.2, 1504.7.

Product Description: Mech-Seam 2" Mechanical Lock Standing Seam Roof Panel. Structural Application.

Panel Material/Standards: Material: Grade 50
 ASTM A792 AZ50 – Aluminum-zinc coated steel
 ASTM A653 G-90 – Galvanized steel
 ASTM A755 – Prepainted steel
 Panel Material shall comply with Florida Building Code 2017, Section 1507.4.3.

Panel Dimension(s):

Panel A
 Thickness: 26 Ga., 0.0185" min.
 Width: 14" Maximum Coverage
 Rib Height: 2" Tall Standing Seam Rib
 Panel Seam: Double Lock Seam w/ mechanical seamer

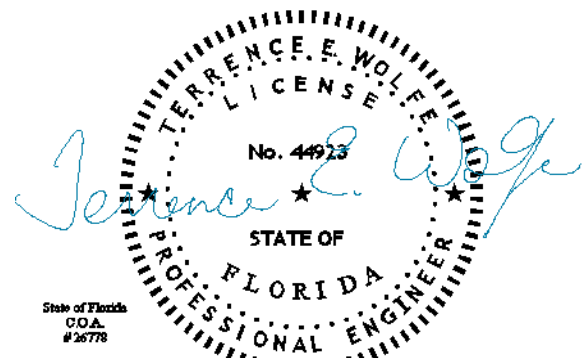
Panel B
 Thickness: 24 Ga., 0.0235" min.
 Width: 18" Maximum Coverage
 Rib Height: 2" Tall Standing Seam Rib
 Panel Seam: Double Lock Seam w/ mechanical seamer

Panel Rollformer: SS210A Panel Profile by New Tech Machinery Corp

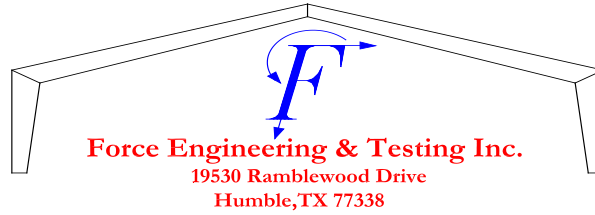
Roof Panel Clips: Product Name: MC120310 Sliding Clip Assembly,
 22 Ga. top and 16 Ga. base
 Corrosion Resistance: Per Florida Building Code 2017 Section 1506.7

Clip Fastener: (2) #12-14 x 1 ¼" HWH Self Driller per clip.
 Corrosion Resistance: Per Florida Building Code 2017, Section 1507.4.4.

Substrate Description: Min. 16 Ga. Steel Framing. Framing must be designed in accordance w/ Florida Building Code 2017.



OCTOBER 27
 2017



Allowable Design Uplift Pressures:

PANEL A: 26 Ga. 14" wide

| | | | | | | | | | |
|--|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| Maximum Design Pressure (PSF) : | -109.3 | -98.9 | -88.4 | -78.0 | -67.6 | -57.2 | -46.8 | -36.4 | -26.0 |
| Clip Spacing (O.C.) : | 1'-0" | 1'-6" | 2'-0" | 2'-6" | 3'-0" | 3'-6" | 4'-0" | 4'-6" | 5'-0" |

*Design Pressure includes a Safety Factor.

PANEL B: 24 Ga. 18" wide

| | | | | | | | | | |
|--|--------|--------|--------|-------|-------|-------|-------|-------|-------|
| Maximum Design Pressure (PSF) : | -135.3 | -122.9 | -110.6 | -98.2 | -85.9 | -73.5 | -61.1 | -48.8 | -36.4 |
| Clip Spacing (O.C.) : | 1'-0" | 1'-6" | 2'-0" | 2'-6" | 3'-0" | 3'-6" | 4'-0" | 4'-6" | 5'-0" |

*Design Pressure includes a Safety Factor.

Code Compliance:

The product described herein has demonstrated compliance with The Florida Building Code 2017, 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 2017, as relates to Rule 61G20-3.

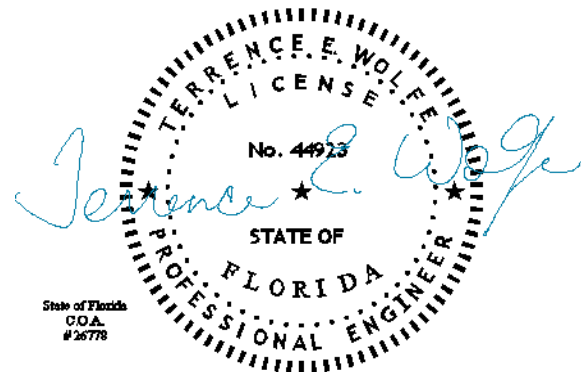
Performance Standards:

The product described herein has demonstrated compliance with:

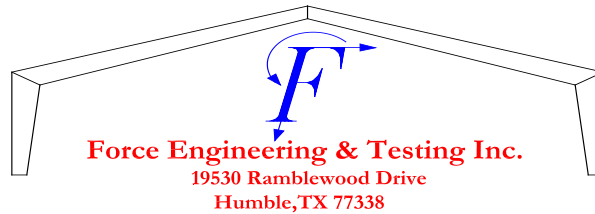
- ASTM E 1592-05(2012) Test method for structural performance of sheet metal roof and siding systems by uniform static air pressure difference.
- FM 4471-92, Foot Traffic Resistance Test.

Reference Data:

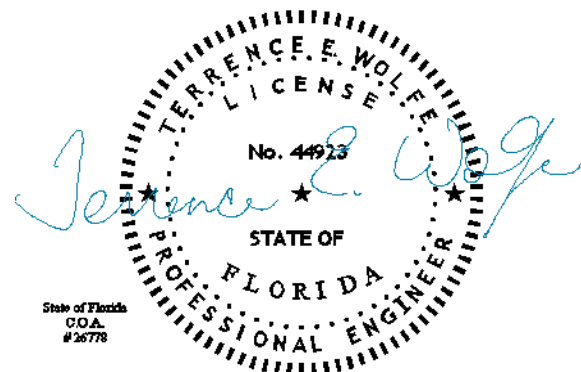
1. ASTM E 1592-05
Force Engineering & Testing, Inc. (FBC Organization # TST-5328)
Report No. 101-0051T-17A-D
2. FM 4471-10, Foot Traffic Resistance Test
Force Engineering & Testing, Inc. (FBC Organization # TST-5328)
Report No. 101-0051T-17E
3. Certificate of Independence
By Terrence E. Wolfe, P.E. (No. 44923) @ Force Engineering & Testing, Inc.
(FBC Organization # ANE ID: 1920)



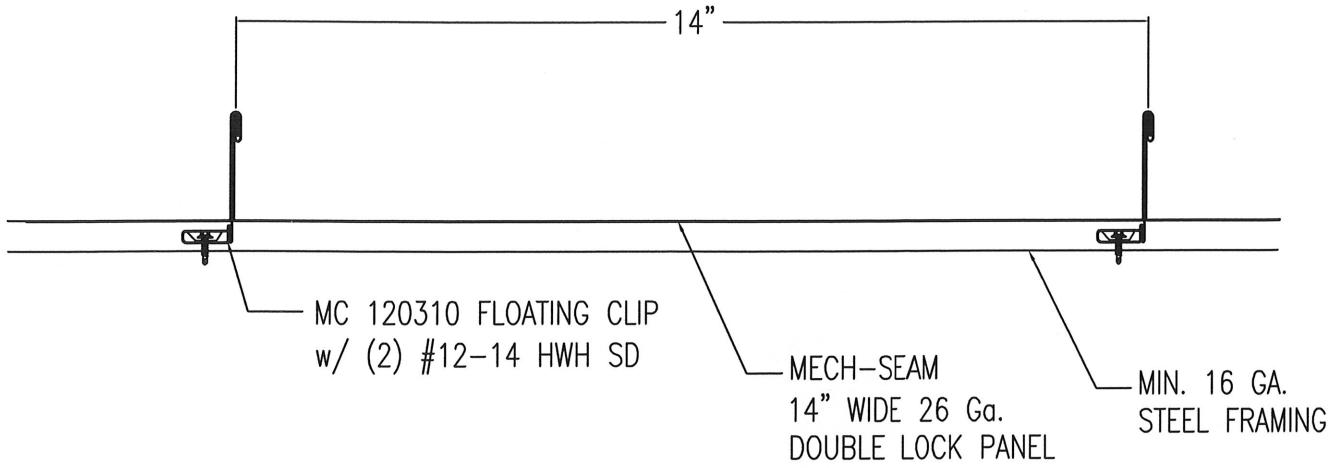
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C.O.A.
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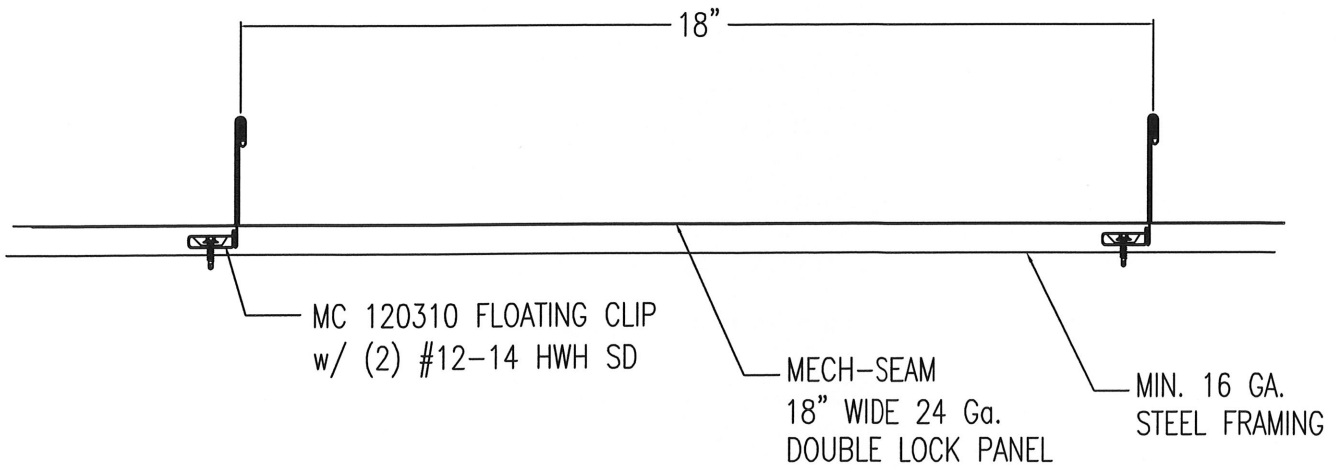
- Test Standard Equivalency:** The ASTM E 1592-05 test standard is equivalent to the ASTM E 1592-05 (2012) test standard.
- The FM 4471-10, Foot Traffic Resistance test standard is equivalent to the FM 4471-92, Foot Traffic Resistance test standard
- Quality Assurance Entity:** The manufacturer has established 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 2017, including Section 1507.4.2 and in accordance with Manufacturers recommendations.
- Installation:** Install per manufacturer's recommended details.
- Insulation:** Manufacturer's approved product (Optional)
- Roof Panel Fire Classification:** Fire classification is not part of this evaluation.
- 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 2017 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. Support framing must be in compliance with Florida Building Code 2017 Chapter 22 for steel, and Chapter 16 for structural loading.



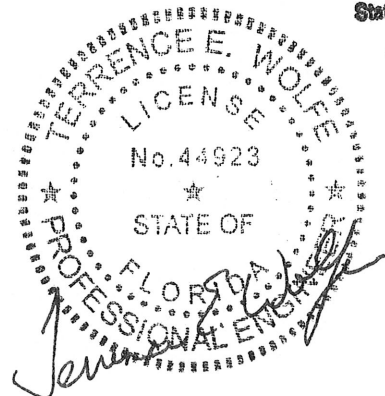
PANEL A



PANEL B



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OCTOBER 21,
2017