

# *Union Corrugating Company*

## Product Evaluation Report for

**1.5" Mechanical Lock 24 Ga. 16" Wide over ½" Plywood**

Florida Product Approval # **13486.1**

Category: Roofing

Subcategory: Metal Roofing

Compliance Method: 9B-72.070(1)(d)

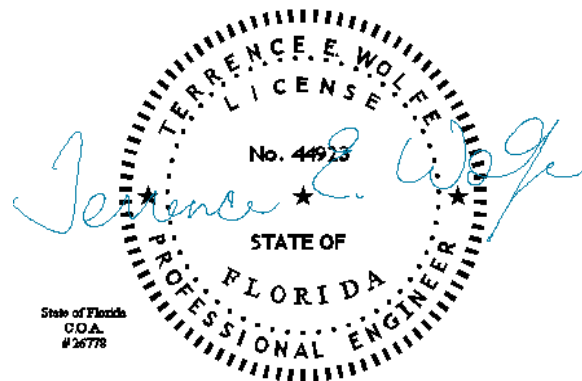
HVHZ

Engineer Evaluator:

Terrence E. Wolfe, P.E. # 44923  
19530 Ramblewood Drive  
Humble, TX 77338

Validator:

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



**Product Manufacturer:**

Union Corrugating Company  
701 S. King Street  
Fayetteville, NC. 28301  
POC: Joson Stieby (910) 483-0479

**Product Description:**

1.5" Mechanical Lock Panel, 24 Ga. (0.024"), 16" Pan Width, 1-1/2" Tall Rib, Double Lock Seam, 1500SC Sliding Clip with (2) #12-11 Type A Pancake per clip fastening to min. 15/32" Plywood.

Panel Rollformer: Schleich Quadro-Plus Rollformer  
Metalforming, Inc.  
100 International Drive  
Peachtree City, GA 30269

**Compliance Statement:**

The product as described in this report has demonstrated compliance with the Florida Building Code 2007, Sections 1504.3.2, 1518.9, 1523.6.5.2.4.

**Documentation Supporting the Compliance Statement:**

The product has been tested in accordance with:

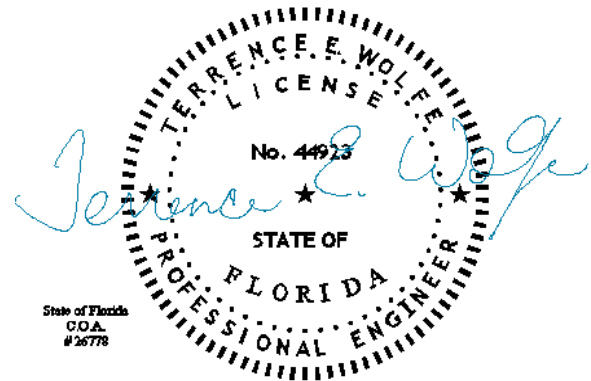
- TAS 125-03 UL 580-94 / 1897-98: Test report 72-0313T-06<sup>(i)</sup> dated 3-24-07 by Force Engineering & Testing per
  - A) Test #1<sup>(ii)</sup>, Tested 1-25-07 Main Field over 15/32" Plywood
  - B) Test #2<sup>(ii)</sup>, Tested 1-30-07 Main Field over 15/32" Plywood
  - C) Test #3<sup>(ii)</sup>, Tested 1-26-07 Edge over 15/32" Plywood
- TAS 100-95: Test report T157-07<sup>(i)</sup> dated 4-5-07 by Farabaugh Engineering & Testing  
Wind Driven Rain Test Results: Passed
- TAS 110-00: Valspar Fluoropon® coated metal panel testing
  - A) ASTM G 26 by PRI Asphalt Technologies dated January 19, 2004 Results: Passed
  - B) ASTM B 117 by PRI Asphalt Technologies dated January 19, 2004 Results: Passed

**Limitations and Conditions of use for HVHZ:**

**Maximum Roof Component Uplift Pressures:** -59.75 psf @ 24" O.C. Clip Spacing  
-123.5 psf @ 6" O.C. Clip Spacing

**Panel Material Standards:** 24 Ga., 0.024" Min, Grade 50, ASTM A792 coated with Valspar Fluoropon® or ASTM A653 G90 Bare. Panel Material shall comply with FBC 2007, Section 1507.4.3

**Panel Clip Fasteners:** (2) 12-11 Type A Pancake per clip. Fasteners must be Corrosion resistance per FBC 2007, Section 1507.4.4



**Minimum Roof Slope:** 2:12. Minimum Slope shall comply with FBC 2007, Section 1507.4.2 and Manufacturers recommendations.

**Substrate Description:** Minimum 15/32" plywood designed in accordance w/ FBC 2007

**Vapor Barrier:** 30# Asphalt Saturated organic felt paper in compliance with ASTM D226, Type I or Type II.

**Fire Barrier:** ¼" Georgia Pacific "Dens Deck" or manufacturer approved equal.

**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 FBC 2007 for roof cladding wind loads. These component wind loads for roof cladding are compared to the allowable pressures 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 FBC Chapter 22 for steel, Chapter 23 for wood and Chapter 16 for structural loading.

**Installation Requirements:**

Install the panel system according to the manufacturer's installation instruction and RAS 133

**Quality Assurance Entity:**

Keystone Certifications, Inc: [FBC #QUA1824](#)

**Certificate of Independence:**

See uploaded attachments

**Authorized Representative:**

Terrence E. Wolfe, P.E. #44923

<sup>(i)</sup> The Test Reports are owned by Metalforming, Inc. Metalforming, Inc. gives the above manufacturer permission to use these test reports.

<sup>(ii)</sup> The TAS 125 tests were not tested with self-adhered underlayments bonded to plywood.

