

**Product Evaluation Report**  
**GULF COAST SUPPLY & MANUFACTURING, LLC.**

**29 Ga. Tuff Rib Roof Panel over 15/32" Plywood**

**Florida Product Approval # 11651.26 R1**

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

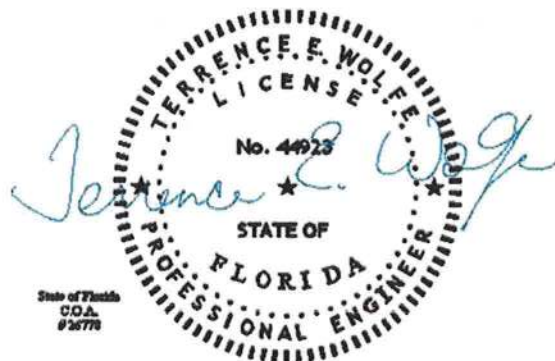
Category: Roofing  
Subcategory: Metal Roofing  
Compliance Method: 9N-3.005(1)(d)  
NON HVHZ

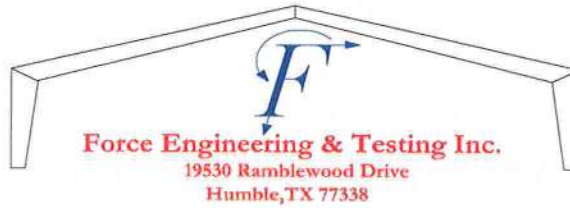
Product Manufacturer:  
GULF COAST SUPPLY & MANUFACTURING, LLC.  
4020 S.W. 449<sup>th</sup> Street  
Horseshoe Beach, Florida 32648

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

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

Contents:  
Evaluation Report    Pages 1 - 4





**Compliance Statement:** The product as described in this report has demonstrated compliance with the Florida Building Code 2010, Sections 1504.3.2.

**Product Description:** Tuff Rib, 3/4" Rib Roof Panel, Min. 29 Ga. Steel, 36" Wide, through fastened roof panel over 15/32" Plywood decking. Non-Structural Application.

**Panel Material/Standards:** Material: Minimum 29 Ga. Steel, ASTM A792 or ASTM A653 G90 conforming to Florida Building Code 2010 Section 1507.4.3. Paint finish optional  
Yield Strength: Min. 80.0 ksi  
Corrosion Resistance: Panel Material shall comply with Florida Building Code 2010, Section 1507.4.3.

**Panel Dimension(s):** Thickness: 0.0145" min.  
Width: 36"  
Rib Height: 3/4" major rib at 9" O.C.  
Panel Rollformer: MRS Metal Rollforming Systems

**Panel Fastener:** #9-15 x 1-1/2" HWH Woodgrip with sealing washing or approved equal 1/4" minimum penetration through plywood  
Corrosion Resistance: Per Florida Building Code 2010, Section 1506.6, 1507.4.4

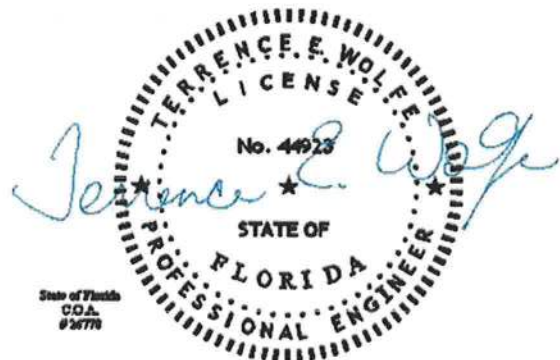
**Substrate Description:** Min. 15/32" thick, APA Rated plywood over supports at maximum 24" O.C.  
Design of plywood and plywood supports are outside the scope of this evaluation. Must be designed in accordance w/ Florida Building Code 2010.

**Design Uplift Pressures:**

Table "A"

Maximum Total Uplift Design Pressure:	71.75 psf	146.0 psf
Fastener Pattern:	9"-9"-9"-9"	6.5"-2.5"-6.5"-2.5"-6.5"-2.5"-6.5"
Fastener Spacing:	24" O.C.	12" O.C.

\*Design Pressure includes a Safety Factor = 2.0.

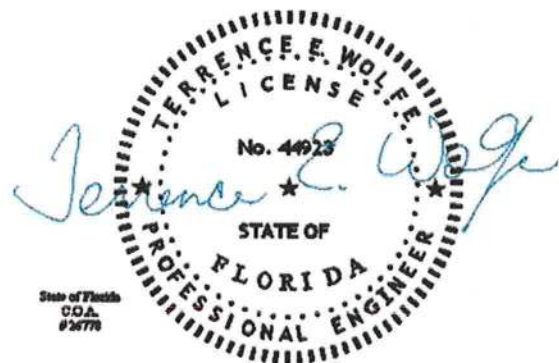


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February 22, 2012



<b>Code Compliance:</b>	The product described herein has demonstrated compliance with The Florida Building Code 2010, Section 1504.3.2.
<b>Evaluation Report Scope:</b>	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.
<b>Performance Standards:</b>	The product described herein has demonstrated compliance with: <ul style="list-style-type: none"><li>▪ UL 580-06 - Test for Uplift Resistance of Roof Assemblies</li><li>▪ UL 1897-04 - Uplift Test for Roof Covering Systems</li><li>▪ FM 4471, Section 5.4 - Foot Traffic Resistance Test</li></ul>
<b>Reference Data:</b>	<ol style="list-style-type: none"><li>1. UL 580-94 / 1897-98 Uplift Test Force Engineering &amp; Testing, Inc. (FBC Organization # TST-5328) Report No. 117-0033T-05 &amp; 117-0331T-08D, Dated 05/05/05 &amp; 07/09/08</li><li>2. FM 4471-95, Section 5.4 Foot Traffic Resistance Test Force Engineering &amp; Testing, Inc. (FBC Organization # TST-5328) Report No. 117-0238T-09E, Dated 07/21/2009</li><li>3. Certificate of Independence By Terrence E. Wolfe, P.E. (No. 44923) @ Force Engineering &amp; Testing, Inc. (FBC Organization # ANE ID: 1920)</li></ol>
<b>Test Standard Equivalency:</b>	<ol style="list-style-type: none"><li>1. The UL 580-94 test standard is equivalent to the UL 580-06 test standard.</li><li>2. The UL 1897-98 test standard is equivalent to the UL 1897-04 test standard.</li></ol>
<b>Quality Assurance Entity:</b>	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.
<b>Minimum Slope Range:</b>	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.
<b>Installation:</b>	Install per manufacturer's recommended details.
<b>Underlayment:</b>	Per Manufacturer's installation guidelines per Florida Building Code 2010 Section 1507.4.5.

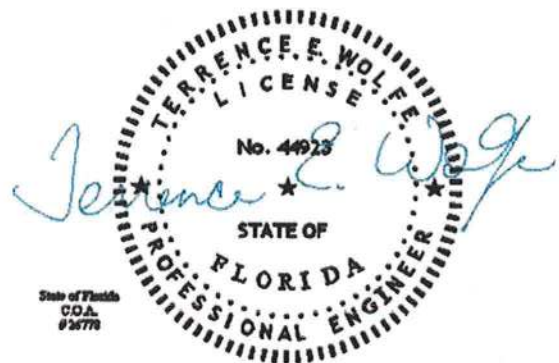


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- Roof Panel Fire Classification:** Fire classification is not part of this acceptance.
- Shear Diaphragm:** Shear diaphragm values are outside the scope of this report.
- Design Procedure:** Based on the dimensions of the structure, appropriate wind loads are determined using Chapter 16 of the Florida Building Code 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, Chapter 23 for wood and Chapter 16 for structural loading.



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**Product Approval**  
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OFFICE OF THE SECRETARY

FL #

**FL11827-R8**

Application Type

Affirmation

Code Version

2010

Application Status

Approved

Comments

Archived

Product Manufacturer

MI Windows and Doors

Address/Phone/Email

650 West Market Street  
Gratz, PA 17030  
(717) 365-3300 Ext 2560  
bsitlinger@miwd.com

Authorized Signature

Brent Sitlinger  
bsitlinger@miwd.com

Technical Representative

Address/Phone/Email

Quality Assurance Representative

Address/Phone/Email

Category

**Windows**

Subcategory

**Single Hung**

Compliance Method

Certification Mark or Listing

Certification Agency

American Architectural Manufacturers Association

Validated By

Steven M. Urich, PE

Validation Checklist - Hardcopy Received

Referenced Standard and Year (of Standard)

**Standard**

**Year**

AAMA/WDMA/CSA 101/I.S.2/A440

2005

ASTM E1300

2004

Equivalence of Product Standards

Certified By

I affirm that there are no changes in the new Florida Building Code which affect my product(s) and my product(s) are in compliance with the new Florida Building Code.

Documentation from approved Evaluation or Validation Entity  Yes  No  N/A



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**FL #**

**FL14982**

Application Type

New

Code Version

2010

Application Status

Approved

Comments

Archived

Product Manufacturer

Therma-Tru Corporation

Address/Phone/Email

118 Industrial Drive  
 Edgerton, OH 43517  
 (419) 298-1740  
[rickw@rwbldgconsultants.com](mailto:rckw@rwbldgconsultants.com)

Authorized Signature

Vivian Wright  
[rickw@rwbldgconsultants.com](mailto:rckw@rwbldgconsultants.com)

Technical Representative

Address/Phone/Email

Quality Assurance Representative

Address/Phone/Email

Category

**Exterior Doors**

Subcategory

**Swinging Exterior Door Assemblies**

Compliance Method

Evaluation Report from a Florida Registered Architect or a Licensed Florida Professional Engineer

Evaluation Report - Hardcopy Received

Florida Engineer or Architect Name who developed the Evaluation Report

Lyndon F. Schmidt, P.E.

Florida License

PE-43409

Quality Assurance Entity

National Accreditation and Management Institute

Quality Assurance Contract Expiration Date

12/31/2014

Validated By

Ryan J. King, P.E.

Validation Checklist - Hardcopy Received

Certificate of Independence

[FL14982\\_R0\\_COI\\_certificate Of Independence.pdf](#)

Referenced Standard and Year (of Standard)

**Standard**

**Year**

101/I.S.2

1997

TAS 202

1994

Equivalence of Product Standards Certified By

Sections from the Code

1. Loads include a 60% load duration increase on the fasteners for wind or seismic loading.
2. Minimum  $f_c = 2500$  psi. Minimum  $f_m = 1500$  psi.
3. For simultaneous loads in more than one direction, the connector must be evaluated as described in [Instructions to the Designer](#).
4. Install with spoons facing outward and straps spaced no more than 1/8" wider than the truss width.
5. The DETAL20 requires 6-10dx1 1/2" nails in the truss seat and 6-10dx1 1/2" nails into each strap. For all other models, install half of the required fasteners in each strap.
6. Lateral loads for META, HETA and HHETA anchors apply only to 2- or 3-ply applications with anchors spaced a minimum of 3" apart. For single-ply applications use lateral loads from the [Single Embedded Anchor Installation table](#). DETAL lateral loads apply for single-ply application.
7.  $F_1$  lateral loads listed may cause an additional 1/16" deflection beyond the standard 1/8" limit where the straps are installed not wrapped over the heel as shown.
8. Two HHETA anchors may be installed in a concrete tie beam on a 2- or 3- ply truss with 2 fewer nail for an allowable uplift load of 3050 lbs.
9. Noted  $F_1$  lateral loads for the DETAL20 may cause an additional 1/32" deflection beyond the standard 1/8" limit.
10. Single ply trusses may use either 10dx1 1/2" or 16d nails with allowable loads limited to the single ply column. 2- or 3- ply trusses shall use 16d nails.
11. NAILS: 16d = 0.162" dia. x 3 1/2" long, 10dx1 1/2 = 0.148" dia. x 1 1/2" long. See [other nail sizes and information](#).

**Code Reports (PDFs):**

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	LEGACY REPORTS						
	IAPMO UES ER	ICC-ES ESR	CITY OF LOS ANGELES	STATE OF FLORIDA	ICC-ES NER	ICC-ES ER	ICC-ES ES
DETAL				See specific model numbers for code listings.			
DETAL20				<a href="#">FL11473</a>			
HETA				See specific model numbers for code listings.			
HETA12				<a href="#">FL11473</a>			
HETA16				<a href="#">FL11473</a>			
HETA20				<a href="#">FL11473</a>			
HETA20Z							
HETA24				<a href="#">FL11473</a>			
HETA40				<a href="#">FL11473</a>			
HETAL				See specific model numbers for code listings.			
HETAL12				<a href="#">FL11473</a>			
HETAL16				<a href="#">FL11473</a>			
HETAL20				<a href="#">FL11473</a>			
HETAL20Z							
HHETA				See specific model numbers for code listings.			
HHETA16				<a href="#">FL11473</a>			
HHETA20				<a href="#">FL11473</a>			
HHETA24				<a href="#">FL11473</a>			
HHETA40				<a href="#">FL11473</a>			
META				See specific model numbers for code listings.			
META12				<a href="#">FL11473</a>			
META14				<a href="#">FL11473</a>			
META16				<a href="#">FL11473</a>			
META18				<a href="#">FL11473</a>			
META20				<a href="#">FL11473</a>			
META20Z							
META22				<a href="#">FL11473</a>			
META24				<a href="#">FL11473</a>			
META40				<a href="#">FL11473</a>			