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October 12, 2020

Alachua County Growth Management Dep't.
10 SW 2nd Avenue
Gainesville, FL 32601

Subject: New Roof on Residence
765 SW 133rd Way
Newberry, FL 32669
Permit No. 2018-010-409

Gentlemen:

Pursuant to comments received from the Department on October 6, and a request from Dibros Design and Construction, the writer has reviewed the installation of a new metal roof at the subject project. The new installation consists of new 26 gauge standing seam "PermaLok" metal roofing as manufactured by Reed Metals, over synthetic underlayment, over 15/32" plywood sheathing corresponding to Florida Product Approval FL12725.1 R3.

On October 7, 2020, under my direction and instructions, an inspection was performed by my authorized representative. Inspection of the installation indicated that there is a roof slope of 2:12+/- . The inspection was performed by removal of a portion of the metal roofing to disclose the installation of the synthetic underlayment. Photographs were taken of the presence and attachment method of the underlayment and are attached to this report. At this same time, the attachment of the metal roof panels was noted. Screw fasteners were noted at a spacing of 6"+/- . In addition to the field inspection, the writer reviewed the manufacturer's Florida Product Approval document and Chapter 15 of the Florida Building Code 6th Edition (2017). A copy of the manufacturer's Product Evaluation Report is attached to this report. A review of Chapter 16, Section 1609 load conditions for Category II Buildings in Alachua County indicate wind loads of 130 mph, *Vult*, for the particular project with a maximum uplift load for the roof of 33.1 psf. Based on this uplift and reference to the manufacturer's design uplift attachment spacing, it is the writer's opinion that metal roof panel attachment spacing could be approximately 9", which is greater than the 6"+/- spacing noted in this installation.

As a result of the review and inspection procedures described, it is the opinion of the writer that the installation of the metal roof panels in this project conforms to the intent of requirements of the 6th Edition (2017) Florida Building Code. The writer submits this report as a request for the Alachua Growth Management Department to concur and consider the report to be in accordance with FBC Section 104.11.

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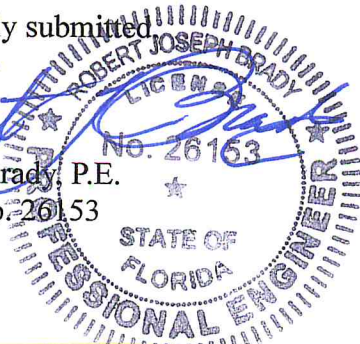
Oct. 12, 2020

Alachua County Growth Management Dep't.

I trust this is a proper response to the requests for information. If there are any questions, or further information is needed, kindly advise.

Respectfully submitted,

Robert J. Brady, P.E.
Fl. Reg. No. 26153



cc: Dibros Design & Construction
Keeler Roofing, LLC
File

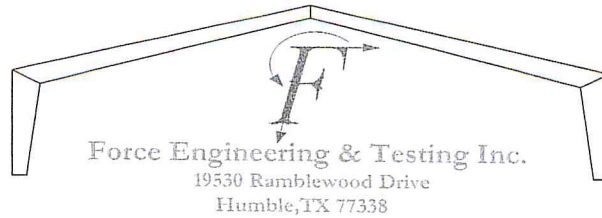
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UNDERLAYMENT INSTALLATION



UNDERLAYMENT INSTALLATION



Product Evaluation Report
REED'S METALS, INC.

Perma-Lok, 26 Ga. 16" Coverage Roof Panel over 15/32" Plywood

Florida Product Approval # 12725.1 R3

Florida Building Code 2017

Per Rule 61G20-3

Method: 1 -D

Category: Roofing

Subcategory: Metal Roofing

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

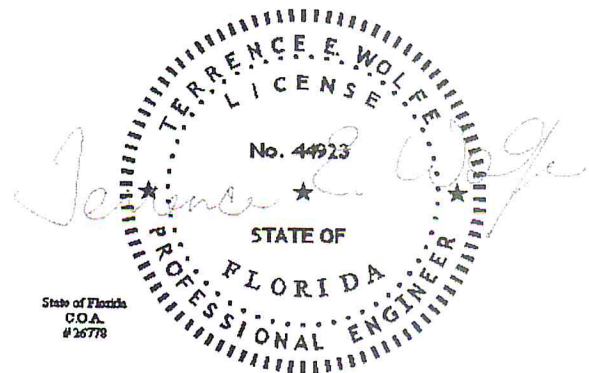
Florida Evaluation ANE ID: 1920

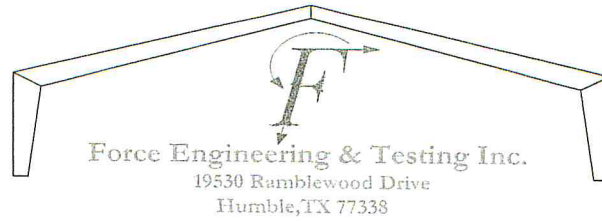
Validator:

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.

Product Description: Perma-Lok, 7/8" Nailstrip Roof Panel, 26 Ga. Steel, 16" Coverage, Roof Panel restrained with fasteners into 15/32" APA Plywood decking. Non-structural Application.

Panel Material/Standards: Material: Minimum 26 Ga. Steel, ASTM A792 or ASTM A653 G90 conforming to Florida Building Code 2017 Section 1507.4.3. Paint finish optional.
Yield Strength: Min. 50.0 ksi
Corrosion Resistance: Panel Material shall comply with Florida Building Code 2017, Section 1507.4.3

Panel Dimension(s):
Thickness: 0.020"
Width: 16" maximum Coverage
Female Rib: 7/8" tall
Male Rib: 3/4" tall rib w/ slotted strip
Panel Seam: Snap Lock
Panel Rollformer: New Tech Machinery Corp.

Panel Fastener: Through Panel Slot: (1) #10-12 x 1" Pancake Type A
1/4" minimum penetration through plywood
Corrosion Resistance: Per Florida Building Code 2017, Section 1507.4.4.

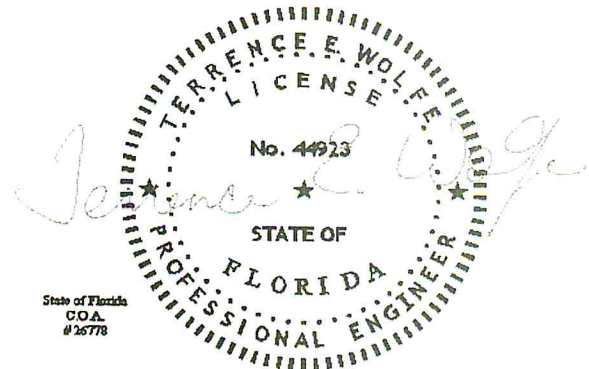
Substrate Description: 15/32" thick, APA Rated plywood. Plywood supports at maximum 24" O.C. Design of plywood and plywood supports are outside the scope of this evaluation. Substrate must be designed in accordance w/ Florida Building Code 2017.

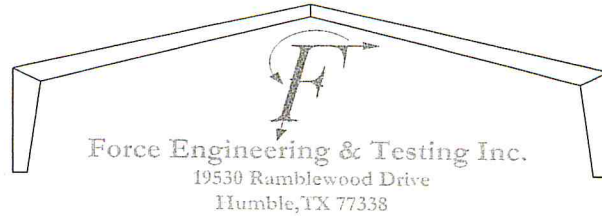
Allowable Design Uplift Pressure:

Table "A"

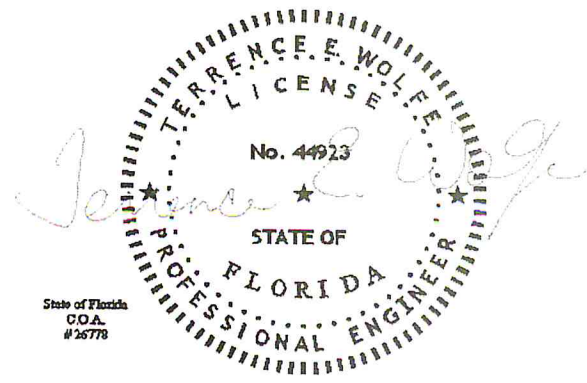
Maximum Total Uplift Design Pressure:	63.5 psf
Panel Slot Fastener Spacing:	5 3/16" O.C.

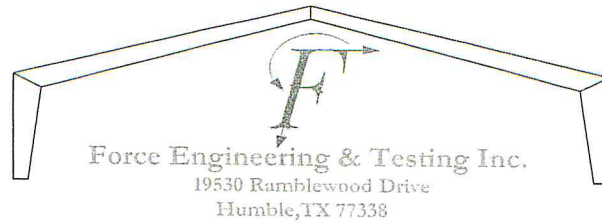
*Design Pressure includes a Safety Factor = 2.0.



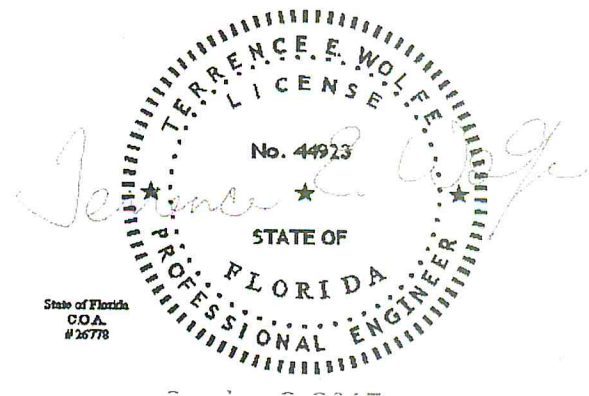


- Code Compliance:** The product described herein has demonstrated compliance with The Florida Building Code 2017, Section 1504.3.2.
- Evaluation Report Scope:** The product evaluation is limited to compliance with the structural wind load requirements of the Florida Building Code 2017, as relates to Rule 61G20-3.
- Performance Standards:** The product described herein has demonstrated compliance with:
- UL 580-06 - Test for Uplift Resistance of Roof Assemblies
 - UL 1897-2012 - Uplift Test for Roof Covering Systems
- Reference Data:**
1. UL 580-94 / 1897-98 Uplift Test
Force Engineering & Testing, Inc. (FBC Organization # TST-5328)
Report No. 101-0193T-09, Dated 03/04/2009
 2. Certificate of Independence
By Terrence E. Wolfe, P.E. (No. 44923) @ Force Engineering & Testing, Inc.
(FBC Organization # ANE ID: 1920)
- Test Standard Equivalency:**
1. The UL 580-94 test standard is equivalent to the UL 580-06 test standard.
 2. The UL 1897-98 test standard is equivalent to the UL 1897-2012 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.



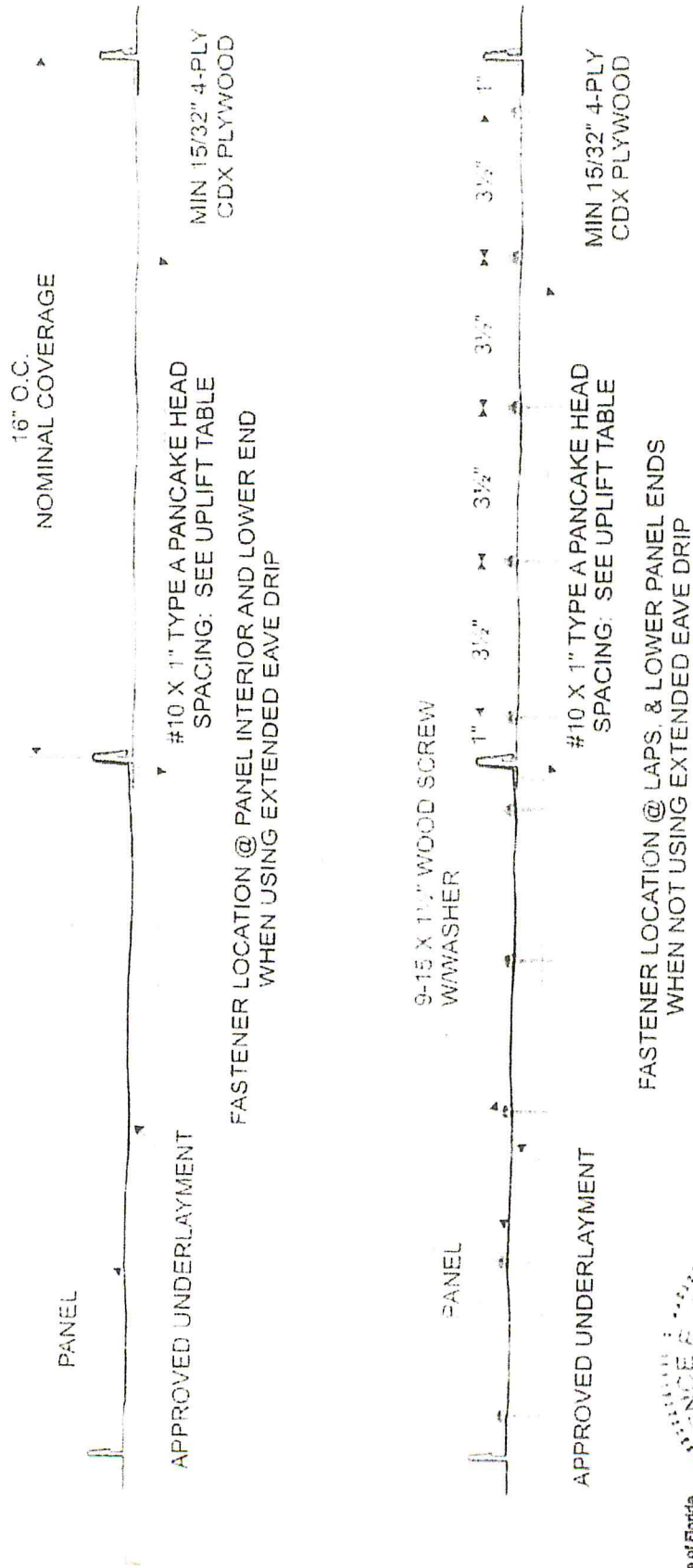


- Minimum Slope Range:** Minimum Slope shall comply with Florida Building Code 2017, including Sections 1507.4.2 and in accordance with Manufacturers recommendations.
- Installation:** Install per manufacturer's recommended details.
- Underlayment:** Per Florida Building Code 2017, Section 1507.1.1 and 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 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 and pullover. Support framing must be in compliance with Florida Building Code 2017 Chapter 22 for steel, Chapter 23 for wood and Chapter 16 for structural loading.



26 Ga. Perma Lok 16" Wide over plywood

**TYPICAL FASTENER PATTERN
PANEL**
16" X 7/8"



State of Florida
C.O.A.
20770



October 2, 2017