

Product Evaluation Report GOLDIN METALS, INC.

## Min. 26 Ga. 5V Crimp Roof Panel over 15/32" Plywood

## Florida Product Approval # 27204.1

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: Goldin Metals, Inc. 12440 Seaway Road Gulfport, Mississippi 39503

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

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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:	5V Crimp Roof Panel, Min. 26 Ga. Steel, 24" coverage, through fastened roof panel over Min. 15/32" APA Plywood decking. Non-structural Application.
Panel Material/Standards:	Material: Min. 26 Ga. Steel, ASTM A792 unpainted or painted or ASTM A653 G90 conforming to Florida Building Code 2017, Section 1507.4.3. Yield Strength: Min. 80.0 ksi Corrosion Resistance: Panel Material shall comply with Florida Building Code 2017, Section 1507.4.3.
Panel Dimension(s):	Thickness:0.0185" min.Width:24" maximum coverageRib Height:3/8" tall ribsPanel Rollformer:Bradbury
Panel Fastener:	<ul> <li>#14-10 x 1-1/2" HWH Type A with sealing washing or approved equal</li> <li>%" minimum penetration through plywood</li> <li>Corrosion Resistance: Per Florida Building Code 2017, Section 1507.4.4.</li> </ul>
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. Substrate must be designed in accordance w/ Florida Building Code.

## Allowable Design Uplift Pressures:

Table "A"					
Maximum Total Uplift Design Pressure:	57.5 psf	77.5 psf	97.5 psf	117.5 psf	137.5 psf
Fastener Pattern:	Pattern 1				
Fastener Pattern Spacing (Up roof Slope):	36″ O.C.	30″ O.C.	24" O.C.	18″ O.C.	12″ O.C.

\*Design Pressure includes a Safety Factor = 2.0.



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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:	<ul> <li>The product described herein has demonstrated compliance with:</li> <li>UL 580-06 - Test for Uplift Resistance of Roof Assemblies</li> <li>UL 1897-2012 - Uplift Test for Roof Covering Systems</li> </ul>		
Reference Data:	<ol> <li>UL 580-94 / 1897-98 Uplift Test Farabaugh Engineering &amp; Testing, Inc. Report No. T167-05</li> </ol>		
Test Standard Equivalency:	<ol> <li>The UL 580-94 test standard is equivalent to the UL 580-06 test standard.</li> <li>The UL 1897-98 test standard is equivalent to the UL 1897-12 test standard.</li> </ol>		
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. For slopes less than 3:12, lap sealant must be used in the panel side laps		
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.		



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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 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.

(1) #14 -10 x 1 1/2" HWH TYPE A w/ WASHER 111!//////// 777; 771

PATTERN 1 (TYPICAL)



PATTERN 2 (PANEL ENDS/PANEL LAPS)



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