



**GULFSEAM**<sup>™</sup>

0.032" ALUM. GULFSEAM™ 18" WIDE ROOF PANEL OVER 15/32" PLYWOOD FLORIDA PRODUCT APPROVAL NO. 16646.2

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

#### 0.032" Aluminum GulfSeam™ 18" Wide Roof Panel over 15/32" Plywood

## Florida Product Approval #16646.2 Florida Building Code 2014

Per Rule 61G20-3 Method: 1 –D

#### Category: Roofing

Subcategory: Metal Roofing Compliance Method: 61G20-3.005(1)(d) NON HVH7

#### Product Manufacturer: Gulf Coast Supply & Manufacturing, LLC.

14429 SW 2nd Place, Suite G30 Newberry, FL 32669

#### Engineer Evaluator: Dan Kuhn, P.E. #75519 Florida Evaluation ANE ID: 10743

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



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**PRODUCT EVALUATION REPORT** 



KUHN ENGINEERING, LLC 11670 ISLAND LAKES LANE, BOCA RATON, FL 33498 • FL COA #3



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Compliance Statement:	The product as described in this report has demonstrated compliance with the Florida Building Code 2014, Sections 1504.3.2,				
Product Description:	Aluminum, Ma	aximum 1	, 1¾" Snap Lock, Minimum nominal thickness 0.032" 8" Wide, Roof Panel restrained with 304 stainless steel n 15⁄32" Plywood decking. Non-Structural Application.		
Panel Material/Standards:	Conforming to Paint Finish Op	) Florida E otional. stance: Pa	ninal thickness 0.032" Aluminum, 3105 H-24 Building Code 2014 Section 1507.4.3. anel Material shall comply with Florida Building Code		
Panel Dimension(s):	Thickness:Minimum nominal thickness 0.032"Width:18" Coverage MaximumRib Height:1¾"Panel Seam:Snap Lock				
Roof Panel Clip:	Type: Corrosion Resis	stance:	Fixed, 18Ga., 304 stainless steel 3½" Long Per Florida Building Code 2014 Section 1506.7		
Clip Fastener:	(2) #10x1" Pancake Type A ¼" Minimum penetration through Plywood Corrosion Resistance: Per Florida Building Code 2014, Section 1506.6, 1507.4.4				
Substrate Description:	Minimum <sup>15</sup> / <sub>2</sub> " 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 2014.				

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Design Uplift Pressures:	Table "A"							
	Maximum Total Uplift Design Pressure 86 psf							
	Clip Spacing 18" O.C.							
	# Fasteners per Clip 2							
	*Design Pressure includes a Safety Factor = 2.0.							
Code Compliance:	The product described herein has demonstrated compliance with the Florida Building Code 2014, Sections 1504.3.2.							
Evaluation Report Scope:	The product evaluation is limited to compliance with the structural wind load requirements of the Florida Building Code 2014, 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> </ul>							
Reference Data:	. UL 580 Uplift Test Architectural Testing, Inc. (FBC Organization # TST-1527) Report No. D0818.01-450-18, Dated 08/21/2013-06/12/2015 Certificate of Independence By Dan Kuhn, P.E. (FL# 75519) @ Kuhn Engineering, LLC (FBC Organization # ANE ID: 10743)							
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 qua assurance entity.							

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Minimum Slope Range:	Minimum Slope shall comply with Florida Building Code 2014, including Section 1507.4.2 and in accordance with Manufacturers recommendations. Install per Manufacturer's recommended details. Shall comply with Florida Building Code 2014 section 1507.4.5.1 and 1507.4.5.2.				
Installation:	Install per Manufacturer's recommended details.				
Underlayment:	Shall comply with Florida Building Code 2014 section 1507.4.5.1 and 1507.4.5.2.				
<b>Roof Panel Fire Classification:</b>	Fire classification is not part of this acceptance.				
Shear Diaphragm:	Shear Diaphragm values are outside the scope of this report.				
Design Procedure:	For roofs within the parameters listed on the load table, fastening pattern must at a minimum meet those listed for the applicable wind zone. For all roofs outside the parameters listed on the load table, design wind loads shall be determined for each project in accordance with FBC 2014 Section 1609 or ASCE 7-10 using allowable stress design. The maximum clip/fastener spacing listed herein shall not be exceeded. This evaluation report is not applicable in High Velocity Hurricane Zone. Refer to current NOA or HVHZ evaluation report for use of this product in High Velocity Hurricane Zone.				

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#### ENGINEER'S LOAD TABLE SPEC



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ENGINEER LOAD TABLE: 0.032″ Alum. GulfSeam™ 18″ Wide Roof Panel over 15/32″ Plywood										
Buildings having a Roof Mean Height ≤ 20'-0"; Roof Slope: 2"/12" - 12"/12" Gable or Hip Roof; Wind Speeds 120-160mph, Exposure C, Risk Category II, Enclosed Building, based on Florida Building Code 2014.										
EASTENER	SUBSTRATE (MIN. 15/32")	120	130	140	150	160				
(MIN. 1/4" Penetration)		ON CENTER SPACING	ON CENTER SPACING	ON CENTER SPACING	ON CENTER SPACING	ON CENTER SPACING				
(2) #10x1"	PLYWOOD	18″	18″	18″	18″	18″				
(2) #10x1"	PLYWOOD	18″	18″	18″	18″	18″				
(2) #10x1″	PLYWOOD	18″	18″	18″	18″	18″				
	a Roof Mean Hei xposure C, Risk Ca <b>FASTENER</b> (MIN. 1/4" Penetration) (2) #10x1" (2) #10x1"	a Roof Mean Height $\leq 20'-0"$ ; Rxposure C, Risk Category II, EncloseFASTENER (MIN. 1/4" Penetration)SUBSTRATE (MIN. 15/32")(2) #10x1"PLYWOOD(2) #10x1"PLYWOOD	a Roof Mean Height $\leq 20'-0"$ ; Roof Slope: 2"/ xposure C, Risk Category II, Enclosed Building, bFASTENER (MIN. 1/4" Penetration)120ON CENTER SPACING(2) #10x1"PLYWOOD18"(2) #10x1"PLYWOOD18"	a Roof Mean Height $\leq$ 20'-0"; Roof Slope: 2"/12" - 12"/12xposure C, Risk Category II, Enclosed Building, based on FlorFASTENER (MIN. 1/4" Penetration)120130SUBSTRATE (MIN. 15/32")ON CENTER SPACINGON CENTER SPACING(2) #10x1"PLYWOOD18"18"(2) #10x1"PLYWOOD18"18"	a Roof Mean Height $\leq 20'-0"$ ; Roof Slope: 2"/12" - 12"/12" Gable or Hi xposure C, Risk Category II, Enclosed Building, based on Florida Building CFASTENER (MIN. 1/4" Penetration)120130140CON CENTER SPACINGON CENTER SPACINGON CENTER SPACING(2) #10x1"PLYWOOD18"18"18"(2) #10x1"PLYWOOD18"18"18"	a Roof Mean Height $\leq 20'-0"$ ; Roof Slope: 2"/12" - 12"/12" Gable or Hip Roof; Win xposure C, Risk Category II, Enclosed Building, based on Florida Building Code 2014.FASTENER (MIN. 1/4" Penetration)120130140150ON CENTER SPACINGON CENTER SPAC				

1.) PANEL DESCRIPTION: GULFSEAM™, MIN. 0.032" ALUM., 18" MAX WIDTH, 13/4" TALL RIB SNAP LOCK

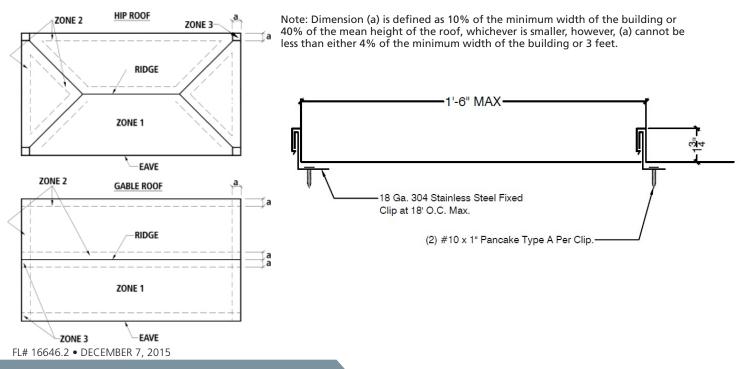
2.) CLIP FASTENER: (2) #10X1" PANCAKE TYPE A PER CLIP.

3.) PANEL CLIP: 18 GA. 304 STAINLESS STEEL 31/2" LONG FIXED CLIP

**4.) MAXIMUM ALLOWABLE PANEL UPLIFT PRESSURE:** 86 PSF @ 18" O.C., PRESSURE BASED ON UL 580/ TESTING BY ARCHITECTURAL TESTING, INC.

5.) PLYWOOD DECKING: MIN. 15/32" THICK, APA RATED PLYWOOD, GRADE C-D. MUST BE DESIGNED PER FBC 2014

6.) LOAD TABLE BASED ON WIND PRESSURES CALCULATED PER ASCE 7-10 (KD = 0.85) MULTIPLIED BY 0.6 PER FBC 2014.



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