

STATE OF



# GULFSEAN

24GA. GULFSEAM™ 18" WIDE ROOF PANEL OVER 1X4'S OVER 15/32" PLYWOOD FLORIDA PRODUCT APPROVAL NO. 16646.5

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

24 Ga. GulfSeam™ 18" Wide Roof Panel over 1x4 Wood Purlins over 15/32" Plywood

### Florida Product Approval #16646.5

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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## **GULFSEAM**<sup>™</sup>

**24GA.** GULFSEAM™ **18" WIDE ROOF PANEL OVER 1X4'S OVER 15/32" PLYWOOD** FLORIDA PRODUCT APPROVAL **NO. 16646.5** 

**Compliance Statement:** The product as described in this report has demonstrated compliance with the

Florida Building Code 2014, Sections 1504.3.2

**Product Description:** GulfSeam™ Roof Panel, 1¾" Snap Lock, Minimum 24 Ga. Steel, Maximum 18"

Wide, Roof Panel restrained with steel fixed clips into Minimum 1x4 wood purlins

over minimum 15/32" Plywood decking. Non-Structural Application.

**Panel Material/Standards:** Material: Minimum 24 Ga. Steel, ASTM A792 or ASTM A653

G90 conforming to Florida Building Code 2014 Section 1507.4.3.

Paint Finish Optional.

Yield Strength: Minimum 65.0 ksi

Corrosion Resistance: Panel Material shall comply with Florida Building Code

2014, Section 1507.4.3.

**Panel Dimension(s):** Thickness: 0.0230" Minimum

Width: 18" Coverage Maximum

Rib Height: 1¾"

Panel Seam: Snap Lock

**Roof Panel Clip:** Type: Fixed, 18Ga., 3½" Long

Corrosion Resistance: Per Florida Building Code 2014 Section 1506.7

**Clip Fastener:** (2) #10x1" Pancake Type A

Corrosion Resistance: Per Florida Building Code 2014, Section 1506.6, 1507.4.4

**Substrate Description:** Minimum 1x4 No. 2 SYP wood purlins over min. 15/32" thick, APA Rated

plywood over supports at maximum 24" O.C. The 1x4 wood purlins shall be fastened to the plywood with minimum 8D x 2½" Ring Shank Nails at 3" O.C. staggered. Design of 1x4 wood purlins, 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"					
Assembly Type	Туре А	Туре В			
Maximum Total Uplift Design Pressure	114.0 psf	159.0 psf			
Clip Spacing	24" O.C.	12" O.C.			
# Fasteners per Clip	2	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:** The product described herein has demonstrated compliance with:

• UL 580-06 - Test for Uplift Resistance of Roof Assemblies

• UL 1897-04 - Uplift Test for Roof Covering Systems

**Reference Data:** 1. TAS 125-03 (UL 580) Uplift Test

Architectural Testing, Inc. (FBC Organization # TST-1527)

Report No. C0308.01-450-18, Dated 10/18/2012

2. 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 quality

assurance entity.

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## **GULFSEAM**<sup>™</sup>

**24GA.** GULFSEAM™ **18"** WIDE ROOF PANEL OVER **1X4'S OVER 15/32"** PLYWOOD FLORIDA PRODUCT APPROVAL **NO. 16646.5** 

Minimum Slope Range: Minimum Slope shall comply with Florida Building Code 2014, including

Section 1507.4.2 and in accordance with Manufacturers recommendations.

**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.

**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:** 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**





## **GULFSEAM**<sup>™</sup>

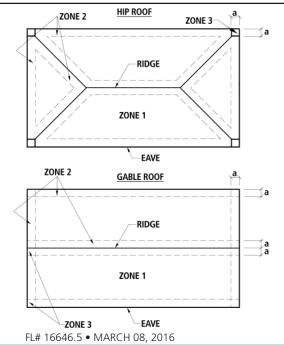
**24GA. GULF**SEAM™ **18" WIDE ROOF PANEL OVER 1X4'S OVER 15/32" PLYWOOD** FLORIDA PRODUCT APPROVAL **NO. 16646.5** 

### ENGINEER LOAD TABLE: 24 Ga. GulfSeam™ 18" Wide Roof Panel over 1X4 Wood Purlins over 15/32" Plywood

Buildings having a Roof Mean Height  $\leq$  20'-0"; Roof Slope: 2"/12" - 12"/12" Gable or Hip Roof; Wind Speeds 120-180mph, Exposure C, Risk Category II, Enclosed Building, based on Florida Building Code 2014.

WIIND SPEED	FASTENER	SUBSTRATE	120	130	140	150	160	170	180
			ASSEMBLY TYPE						
ZONE 1	(2) #10x1"	1x4 Wood Purlins	24" O.C						
ZONE 2	(2) #10x1"	1x4 Wood Purlins	24" O.C						
ZONE 3	(2) #10x1"	1x4 Wood Purlins	24" O.C						

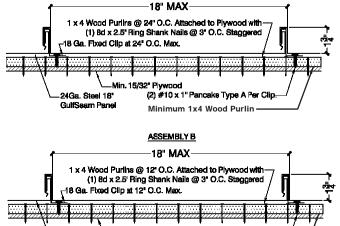
- **1.) PANEL DESCRIPTION:** GULFSEAM™, MIN. 24 GA. STEEL, 18" MAX WIDTH, 1¾" TALL RIB SNAP LOCK
- 2.) CLIP FASTENER: (2) #10X1" PANCAKE TYPE A PER CLIP.
- 3.) PANEL CLIP: 18 GA. 31/2" LONG FIXED CLIP
- **4.) MAXIMUM ALLOWABLE PANEL UPLIFT PRESSURE:** 114.0 PSF @ 24" O.C., 159.0 PSF AT 12"O.C. PRESSURE BASED ON UL 580/UL 1897 TESTING BY ARCHITECTURAL TESTING, INC.
- **5.) SUBSTRATE:** 1X4 WOOD PURLINS OVER MIN. 15/32" THICK PLYWOOD. WOOD PURLINS ATTACHED TO PLYWOOD W/ MIN. 8D X 21/2" RING SHANK NAILS AT 3" O.C. STAGGERED. PURLINS AND PLYWOOD MUST BE DESIGNED IN ACCORDANCE WITH FBC 2014
- **6.) LOAD TABLE** BASED ON WIND PRESSURES CALCULATED PER ASCE 7-10 (KD = 0.85) MULTIPLIED BY 0.6 PER FLORIDA BUILDING CODE 2014.



Note: Dimension (a) is defined as 10% of the minimum width of the building or 40% of the mean height of the roof, whichever is smaller, however, (a) cannot be less than either 4% of the minimum width of the building or 3 feet.

(2) #10 x 1' Pancake Type A Per Clip:

Minimum 1x4 Wood Purlin



-Min. 15/32" Plywood

24Ga. Steel 18'

**ASSEMBLY A** 

