



FLORIDA PRODUCT APPROVAL



GULFSEAM™

0.032" ALUM. GULFSEAM™ 16" WIDE ROOF PANEL OVER 15/32" PLYWOOD
FLORIDA PRODUCT APPROVAL **NO. 16646.3**

Product Evaluation Report
GULF COAST SUPPLY & MANUFACTURING, LLC.

0.032" Aluminum GulfSeam™ 16" Wide Roof Panel over 15/32" Plywood

Florida Product Approval #16646.3

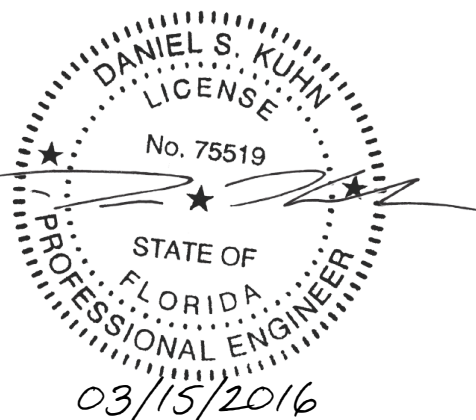
Florida Building Code 2014
Per Rule 61G20-3
Method: 1 –D

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

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 Alysbery Place
Montgomery, AL 36117



Contents:
Evaluation Report Pages 1 – 5

FL# 16646.3 • DECEMBER 7, 2015

PRODUCT EVALUATION REPORT



KUHN ENGINEERING, LLC
11670 ISLAND LAKES LANE, BOCA RATON, FL 33498 • FL COA #30464



GULFSEAM™

0.032" ALUM. GULFSEAM™ 16" WIDE ROOF PANEL OVER 15/32" PLYWOOD
 FLORIDA PRODUCT APPROVAL **NO. 16646.3**

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, 1 3/4" Snap Lock, Minimum nominal thickness 0.032" Aluminum, Maximum 16" Wide, Roof Panel restrained with 304 stainless steel fixed clips into minimum 15/32" Plywood decking. Non-Structural Application.
Panel Material/Standards:	Material: Minimum nominal thickness 0.032" Aluminum, 3105 H-24 Conforming to Florida Building Code 2014 Section 1507.4.3. Paint Finish Optional. Corrosion Resistance: Panel Material shall comply with Florida Building Code 2014, Section 1507.4.3.
Panel Dimension(s):	Thickness: Minimum nominal thickness 0.032" Width: 16" Coverage Maximum Rib Height: 1 3/4" Panel Seam: Snap Lock
Roof Panel Clip:	Type: Fixed, 18Ga., 304 stainless steel 3 1/2" Long Corrosion Resistance: Per Florida Building Code 2014 Section 1506.7
Clip Fastener:	(2) #10x1" Pancake Type A 1/4" Minimum penetration through Plywood Corrosion Resistance: Per Florida Building Code 2014, Section 1506.6, 1507.4.4
Substrate Description:	Minimum 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 2014.



GULFSEAM™

0.032" ALUM. GULFSEAM™ 16" WIDE ROOF PANEL OVER 15/32" PLYWOOD
 FLORIDA PRODUCT APPROVAL **NO. 16646.3**

Design Uplift Pressures:

Table "A"	Assembly 'A'	Assembly 'B'
Maximum Total Uplift Design Pressure	86 psf	138.5 psf
Clip Spacing	18" O.C.	6" 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

Reference Data:

1. UL 580-06 Uplift Test
Architectural Testing, Inc. (FBC Organization # TST-1527)
Report No. D0818.01-450-18, Dated 08/21/2013-06/12/2015
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.





GULFSEAMTM

0.032" ALUM. GULFSEAMTM 16" WIDE ROOF PANEL OVER 15/32" PLYWOOD
FLORIDA PRODUCT APPROVAL **NO. 16646.3**

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.



GULFSEAM™

0.032" ALUM. GULFSEAM™ 16" WIDE ROOF PANEL OVER 15/32" PLYWOOD
FLORIDA PRODUCT APPROVAL **NO. 16646.3**

ENGINEER LOAD TABLE: 0.032" Alum. GulfSeam™ 16" Wide Roof Panel 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.

WIND SPEED	FASTENER (MIN. 1/4" Penetration)	SUBSTRATE (MIN. 15/32")	120	130	140	150	160	170	180
			ON CENTER SPACING	ON CENTER SPACING	ON CENTER SPACING	ON CENTER SPACING	ON CENTER SPACING	ON CENTER SPACING	ON CENTER SPACING
ZONE 1	(2) #10x1"	PLYWOOD	18"	18"	18"	18"	18"	18"	18"
ZONE 2	(2) #10x1"	PLYWOOD	18"	18"	18"	18"	18"	18"	18"
ZONE 3	(2) #10x1"	PLYWOOD	18"	18"	18"	18"	18"	6"	6"

1.) **PANEL DESCRIPTION:** GULFSEAM™, MIN. 0.032" ALUM., 16" MAX WIDTH, 13/4" TALL RIB SNAP LOCK

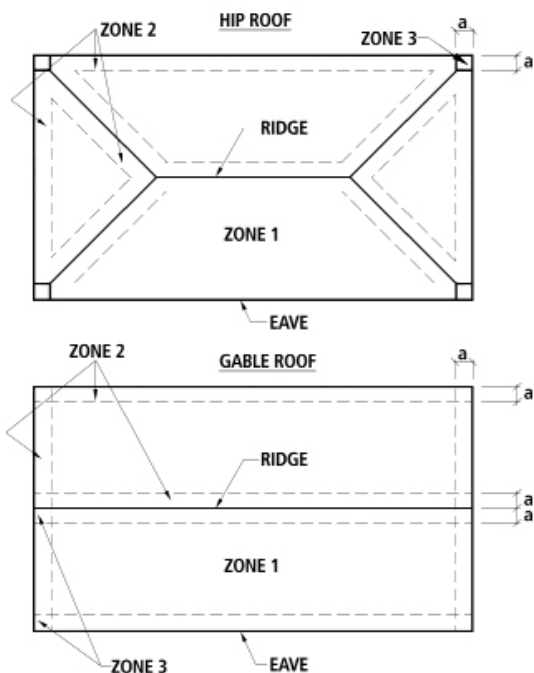
2.) **CLIP FASTENER:** (2) #10X1" PANCAKE TYPE A PER CLIP.

3.) **PANEL CLIP:** 18 GA. 304 STAINLESS STEEL 3 1/2" LONG FIXED CLIP

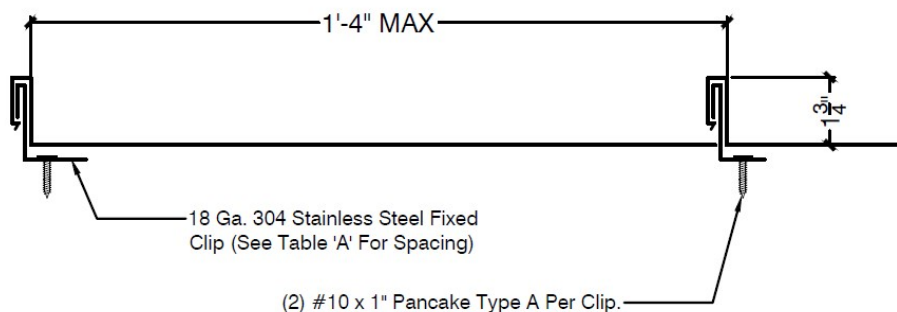
4.) **MAXIMUM ALLOWABLE PANEL UPLIFT PRESSURE:** ASSEMBLY 'A' = 86 PSF @ 18" O.C., ASSEMBLY 'B' = 138.5 PSF AT 6" O.C. PRESSURE BASED ON UL 580 TESTING BY ARCHITECTURAL TESTING, INC.

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.



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.



FL# 16646.3 • DECEMBER 7, 2015

PRODUCT EVALUATION REPORT



KUHN ENGINEERING, LLC

11670 ISLAND LAKES LANE, BOCA RATON, FL 33498 • FL COA #30464