GulfCoast SUPPLY & MANUFACTURING

GULFLOK™

0.032" ALUMINUM GULFLOK™ 16" WIDE ROOF PANEL OVER 15/32" PLYWOOD

FLORIDA PRODUCT APPROVAL **NO. 11651.2 R2**

Product Evaluation Report

GULF COAST SUPPLY & MANUFACTURING, LLC.

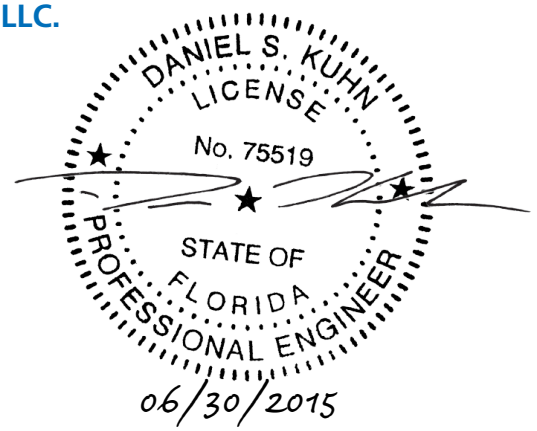
0.032" Aluminum GulfLok™ 16" Wide Roof Panel over 15/32" Plywood

Florida Product Approval #11651.2 R2
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 Alysbury Place
Montgomery, AL 36117

Contents:

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

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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: GulfLok™, ⅞" Nailstrip Roof Panel, Minimum 0.028" Aluminum, Maximum 16" Coverage, Roof panel restrained with fasteners into minimum 15/32" plywood decking. Non Structural application.

Panel Material/Standards: Material: Minimum 0.028" Aluminum 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:	0.028" Minimum
Width:	16" Coverage Maximum
Female Rib:	⅞" Tall
Male Rib:	¾" Tall Rib with Slotted Strip
Panel Seam:	Snap Lock

Panel Seam Sealant: Titebond Weathermaster Metal Roof Sealant apply ¼"-5/16" diameter continuous bead on the male rib for Assembly B only.

Panel Fastener: Through Panel Slot: (1) #10-12x1" Pancake Type A
¼" 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.

Design Uplift Pressures:

Table "A"		
Panel Assembly	A	B
Maximum Total Uplift Design Pressure	52.5 psf	116.0 psf
Panel Slot Fastener Spacing	5 3/16" O.C.	5 3/16" O.C.
Sealant on Male Rib	NOT USED	USED
*Design Pressure includes a Safety Factor = 2.0.		

PRODUCT EVALUATION REPORT

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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. UL 580-94 / 1897-98 Uplift Test Force Engineering & Testing, Inc. (FBC Organization # TST-5328) Report No. 117-0337T-10 Dated 03/07/2011 2. Certificate of Independence By Dan Kuhn, P.E. (FL# 75519) @ Kuhn Engineering, LLC (FBC Organization # ANE ID: 10743)
Test Standard Equivalence:	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 1897-04 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 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.

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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 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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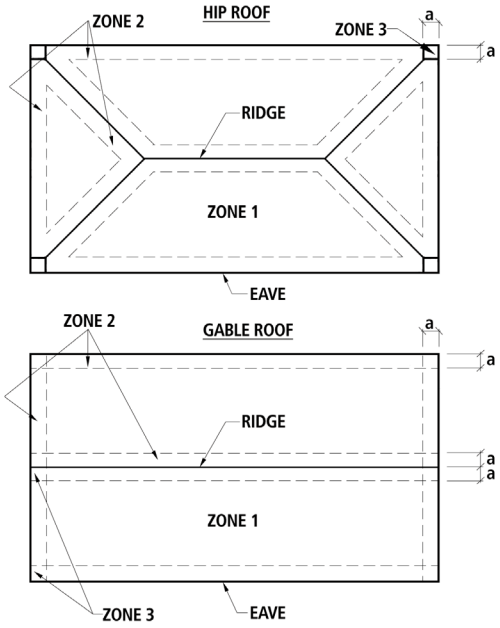
ENGINEER LOAD TABLE: 0.032" Aluminum GulfLok™ 16" Wide Roof Panel over 15/32" Plywood

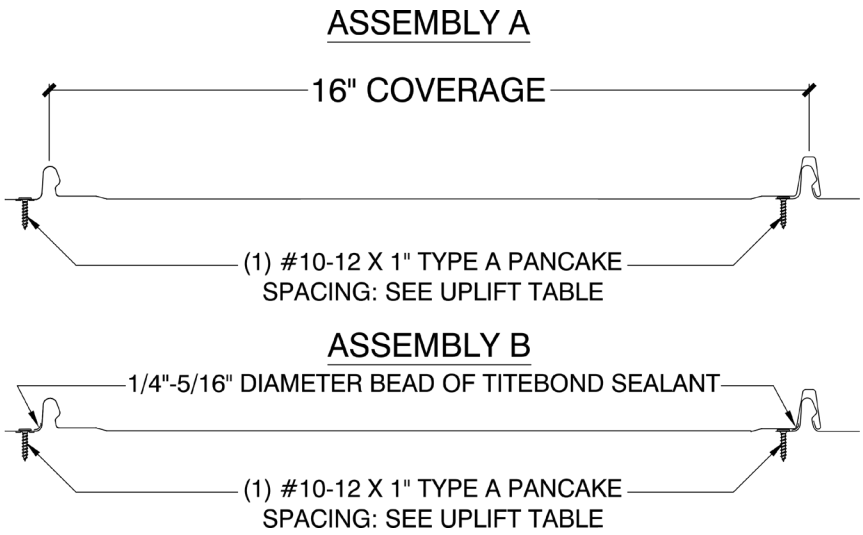
Buildings having a Roof Mean Height ≤ 20'-0"; Roof Slope: 2"/12" - 12"/12" Gable or Hip Roof; Wind Speeds 120-180mph, Exposure C, Risk Category II, Enclosed Building, based on Florida Building Code 2014.

WIIND 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	#10-12x1"	CDX PLYWOOD	Assembly A	Assembly A	Assembly A	Assembly A	Assembly A	Assembly A	Assembly A
ZONE 2	#10-12x1"	CDX PLYWOOD	Assembly A	Assembly A	Assembly A	Assembly A	Assembly B	Assembly B	Assembly B
ZONE 3	#10-12x1"	CDX PLYWOOD	Assembly A	Assembly B	Assembly B	Assembly B	Assembly B	Assembly B	Assembly B

1.) PANEL DESCRIPTION: GULFLOK™, MIN. 0.028" ALUMINUM, 7/8" RIB, 16" MAXIMUM COVERAGE, SNAP SEAM.
2.) PANEL FASTENER: THROUGH PANEL SLOT: (1) #10-12X1"PANCAKE TYPE A, ¼" MIN. PENETRATION THROUGH PLYWOOD.
3.) MAXIMUM ALLOWABLE PANEL UPLIFT PRESSURE: ASSEMBLY A: 52.5 PSF PANEL FASTENERS AT 5⅛" O.C.; ASSEMBLY B:116.0 PSF PANEL FASTENERS AT 5⅛" O.C. WITH ¼"-5⁄16" DIAMETER CONTINUOUS BEAD OF TITEBOND WEATHERMASTER METAL ROOF SEALANT ON THE MALE RIB. PRESSURE BASED ON UL 580/UL 1897 TESTING BY FORCE ENGINEERING & TESTING.
4.) PLYWOOD DECKING: MIN. 15⁄32" THICK, APA RATED PLYWOOD, GRADE C-D. MUST BE DESIGNED IN ACCORDANCE WITH FLORIDA BUILDING CODE 2014.
5.) 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.



FL# 11651.2 R2 • JUNE 15, 2015

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