

26 GUAGE GULFPBR™ PANEL OVER 15/32" PLYWOOD

FLORIDA PRODUCT APPROVAL NO. 11651.19 R2

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

### 26 Ga. GulfPBR<sup>™</sup> Roof Panel over 15/32" Plywood

### Florida Product Approval #11651.19 R2

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

### **Category: Roofing**

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

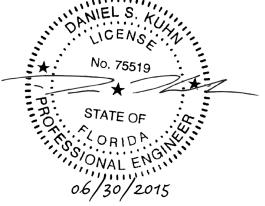
### Validator: Locke Bowden, P.E. #49704

9450 Alysbury Place Montgomery, AL 36117

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**PRODUCT EVALUATION REPORT** 



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





# GULFPBR™

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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, 1518.9, 1523.6.5.2.4.					
Product Description:	GulfPBR™ Roof Panel, Minimum 26 Ga. Steel, 36" Coverage, through fastened roof panel over minimum 15⁄32" Plywood Decking. Non Structural application.					
Panel Material/Standards:	Material: Minimum 26 Ga. Steel, ASTM A792 or ASTM A653 G90 conforming to Florida Building Code 2014 Section 1507.4.3. Paint Finish Optional Yield Strength: Min. 80.0ksi Corrosion Resistance: Panel Material shall comply with Florida Building Code 2014, Section 1507.4.3.					
Panel Dimension(s):	Thickness:0.018" MinimumWidth:36" CoverageRib Height:1¼" Tall Rib at 12" O.C.					
Panel Fastener:	<ul> <li>#9-15x1.5" with sealing washing, ¼-14 x ¾" HWH Lap Screw with sealing washer at 24" O.C. Maximum at the panel side laps or approved equals</li> <li>¼" minimum penetration through plywood.</li> <li>Corrosion Resistance: Per Florida Building Code 2014, Section 1506.6, 1507.4.4</li> </ul>					
Substrate Description:	Minimum <sup>15</sup> / <sub>32</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.					
Design Uplift Pressures:	Table "A"					
	Maximum Total Uplift Design Pressure	60.5 psf	154.75 psf			
	Fastener Pattern	12"-12"-12"	7"-5"-7"-5"-7"			
	Fastener Spacing	12″ O.C.				
	Design Pressure includes a Safety Factor = 2.0.					

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### **GULFPBR<sup>TM</sup>** 26 GUAGE GULFPBR<sup>TM</sup> PANEL OVER 15/32" PLYWOOD

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Code Compliance:	The product described herein has demonstrated compliance with the Florida Building Code 2014, Sections 1504.3.2, 1518.9, 1523.6.5.2.4.			
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>TAS 125-03</li> <li>UL 580-06 - Test for Uplift Resistance of Roof Assemblies</li> <li>UL 1897-04 - Uplift Test for Roof Covering Systems.</li> <li>TAS 100-95 - Test Procedure for Wind and Wind Driven Rain Resistance of Discontinuous Roof Systems</li> <li>TAS 110-00 - Accel. Weathering ASTM G 155 / Salt Spray ASTM B 117.</li> </ul>			
Reference Data:	<ol> <li>TAS 125-03: UL 580-94 / 1897-98 Uplift Test Force Engineering &amp; Testing, Inc. (FBC Organization # TST-5328) Report No. 117-0062T-07G-I, Dated 02/19/2007</li> <li>TAS 100-95 Farabaugh Engineering &amp; Testing, Inc. (FBC Organization # TST-1654) Report No. T132-07, Dated 02/28/2007 Report No. T271-08, Dated 10/13/2008</li> <li>TAS 110-00: Valspar Fluropon coated metal panel testing A) ASTM G 26 by PRI Asphalt Technologies dated 01/19/2004 B) ASTM B 117 by PRI Asphalt Technologies dated 01/19/2004</li> <li>Certificate of Independence By Dan Kuhn, P.E. (FL# 75519) @ Kuhn Engineering, LLC (FBC Organization # ANE ID: 10743)</li> </ol>			
Test Standard Equivalence:	<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 1897-04 test standard.</li> <li>ASTM G 26 is equivalent to ASTM G 155.</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.			

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Minimum Slope Range:	Minimum Slope shall comply with Florida Building Code 2014, including Section 1515.2 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 and RAS 133.
Underlayment:	Shall comply with Florida Building Code 2014 section 1518.2, 1518.3, 1518.4
Fire Barrier:	Any approved fire barrier having a current NOA. Refer to a current fire directory listing for fire ratings of this roofing system assembly as well as the location of the fire barrier within the assembly. 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 fastener spacing listed herein shall not be exceeded.

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### ENGINEER'S LOAD TABLE SPEC



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### ENGINEER LOAD TABLE: 26 Ga. GulfPBR™ 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.

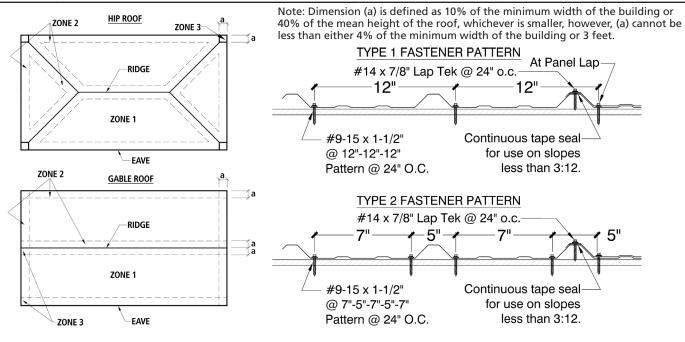
WIIND SPEED FASTENER (MIN. 1/4" Penetration)	SUBSTRATE (MIN. 15/32")	120	130	140	150	160	170	180	
		ON CENTER SPACING							
ZONE 1	#9-15x1.5"	Plywood	24", TYPE 1	24", TYPE 1					
ZONE 2	#9-15x1.5″	Plywood	24", TYPE 1	12", TYPE 2	12", TYPE 2				
ZONE 3	#9-15x1.5″	Plywood	24", TYPE 1	24", TYPE 1	12", TYPE 2	12", TYPE 2	12", TYPE 2	12", TYPE 2	12", TYPE 2

**1.) PANEL DESCRIPTION:** GULFPBR™, MIN. 26 GA., GRADE 80, 36"COVERAGE, 1¼" TALL.

2.) PANEL FASTENER: #9-15X1.5" W/SEALING WASHER OR APPROVED EQ., 1/4-14X7/8" LAP SCREW MAX. 24"O.C. IN PANEL SIDELAP.
3.) MAXIMUM ALLOWABLE PANEL UPLIFT PRESSURE: 60.5 PSF @ 24" O.C. FASTENER SPACING TYPE I FASTENER PATTERN, 154.75
PSF @ 12" O.C. FASTENER SPACING TYPE 2 FASTENER PATTERN BASED ON TAS 125, UL 580/UL 1897 TESTING.

**4.) PLYWOOD DECKING:** MIN. <sup>15</sup>/<sub>2</sub>" THICK PLYWOOD MUST BE DESIGNED IN ACCORDANCE WITH FLORIDA BUILDING CODE 2014. **5.) ROOF SLOPE:** ON ROOF SLOPES LESS THAN 3:12, LAP SEALANT MUST BE USED IN PANEL SIDE LAPS.

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



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