





26 GUAGE GULFPBR™ **PANEL OVER 1X4 WOOD PURLINS OVER 15/32" PLYWOOD** FLORIDA PRODUCT APPROVAL **NO. 11651.20 R2**

Product Evaluation Report GULF COAST SUPPLY & MANUFACTURING, LLC.

26 Ga. GulfPBR™ Roof Panel over 1x4 Wood Purlins over 15/32" Plywood

Florida Product Approval #11651.20 R2

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

Category: Roofing

Subcategory: Metal Roofing

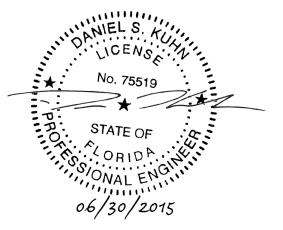
Compliance Method: 61G20-3.005(1)(d) NON HVHZ

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



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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, 1504.7. | | | | | |
|---------------------------|---|--------------------------|-------------|----------------|--|--|
| Product Description: | GulfPBR™, ¾" Rib Roof Panel, Minimum 26 Ga. Steel, 36" Coverage, through fastened roof panel over Minimum 1x4 Wood Purlins 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: | #9-15x1.5" HWH with sealing washing, ¼-14 x %" HWH with sealing washer at 24" O.C. Maximum at the panel side laps or approved equal ¼" minimum penetration through plywood. Corrosion Resistance: Per Florida Building Code 2014, Section 1506.6, 1507.4.4 | | | | | |
| Substrate Description: | Minimum 1x4 No. 2 SYP wood purlins over min. $\frac{15}{32}$ " 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 $2\frac{1}{2}$ " Ring Shank Nails at 4" O.C. 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. | | | | | |
| Design Uplift Pressures: | Table "A" | | | | | |
| | | l Uplift Design Pressure | 94.25 psf | 151.75 psf | | |
| | Fastener Patter | | 12"-12"-12" | 7"-5"-7"-5"-7" | | |
| | Fastener Spacing24" O.C.12" O.C. | | | | | |
| | Design Pressure includes a Safety Factor = 2.0. | | | | | |

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| Code Compliance: | The product described herein has demonstrated compliance with the | | | | |
|----------------------------|---|--|--|--|--|
| code compliance. | Florida Building Code 2014, Sections 1504.3.2, 1504.7. | | | | |
| 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. FM 4471-1992, Section 4.4 Foot Traffic Resistance Test | | | | |
| Reference Data: | UL 580-94 / 1897-98 Uplift Test Force Engineering & Testing, Inc. (FBC Organization # TST-5328) Report No. 117-0062T-07, Dated 02/19/2007 FM 4471-95, Section 4.4 Foot Traffic Resistance Test Force Engineering & Testing, Inc. (FBC Organization # TST-5328) Report No. 117-0238T-09, Dated 07/21/2009 Certificate of Independence By Dan Kuhn, P.E. (FL# 75519) @ Kuhn Engineering, LLC (FBC Organization # ANE ID: 10743) | | | | |
| Test Standard Equivalence: | The UL 580-94 test standard is equivalent to the UL 580-06 test standard. The UL 1897-98 test standard is equivalent to the UL 1897-04 test standard. The FM 4471-95 test standard is equivalent to the FM 4471-1992 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. For slopes less than 3:12, lap sealant must be used in the panel side laps. | | | | |
| 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. | | | | |

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| 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 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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PRODUCT EVALUATION REPORT

ENGINEER'S LOAD TABLE SPEC



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ENGINEER LOAD TABLE: 26 Ga. GulfPBR™ 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 (MIN. 1/4" Penetration) | SUBSTRATE | 120 | 130 | 140 | 150 | 160 | 170 | 180 | |
|---|------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|-------------|
| | | ON CENTER SPACING | |
| ZONE 1 | #9-15x1.5" | 1x4 Wood Purlins | 24", TYPE 1 | 24", TYPE 1 |
| ZONE 2 | #9-15x1.5" | 1x4 Wood Purlins | 24", TYPE 1 | 24", TYPE 1 |
| ZONE 3 | #9-15x1.5" | 1x4 Wood Purlins | 24", TYPE 1 | 12", TYPE 2 | 12", TYPE 2 |

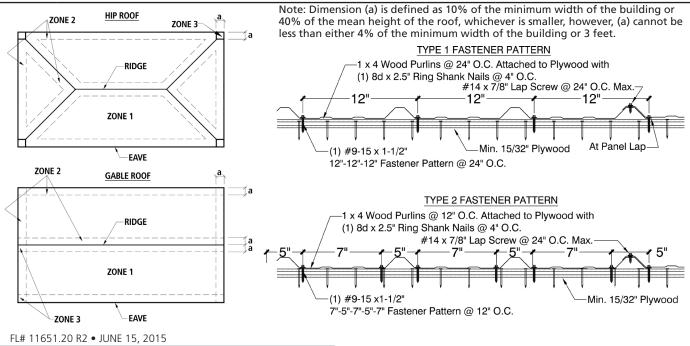
1.) PANEL DESCRIPTION: GULFPBR™, MIN. 26 GA., GRADE 80, 36"COVERAGE, 1¼" TALL.

2.) PANEL FASTENER: #9-15X1.5" W/SEALING WASHER OR APPROVED EQ., ¼-14x%" HWH LAP SCREW AT 24"O.C. IN PANEL SIDELAP.
3.) MAXIMUM ALLOWABLE PANEL UPLIFT PRESSURE: 94.25 PSF @ 24" O.C. FASTENER SPACING TYPE 1 FASTENER PATTERN, 151.75
PSF @ 12" O.C. FASTENER SPACING TYPE 2 FASTENER PATTERN BASED ON TAS 125, UL 580/UL 1897 TESTING.

4.) SUBSTRATE: 1X4 WOOD PURLINS OVER MIN. ¹⁵/₉₂" THICK PLYWOOD. WOOD PURLINS ATTACHED TO PLYWOOD W/ MIN. 8D X 2¹/₂" RING SHANK NAILS AT 4" O.C. PURLINS AND PLYWOOD MUST BE DESIGNED IN ACCORDANCE WITH FBC 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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