# EXPOSED FASTENING SYSTEMS

### **PBR**



The PBR panel is commonly used for a wide variety of architectural, agricultural, commercial and industrial applications. PBR is a structural panel and an exposed fastener panel that can be used for both roof and wall applications. The minimum roof slope for PBR is 1/2:12.

#### **FEATURES AND BENEFITS:**

- Numerous UL 580 ratings are available, as well as UL 790, Class A for external fire, roof assembly for UL 263 for internal fire and the UL 2218 Class 4 impact rating.
- PBR carries Florida approval, Dade county ratings and FM 4471 approval standard for Class 1 panel roofs.

#### **PRODUCT SPECIFICATIONS**

**Applications:** Roof and Wall Coverage Widths: 36" Rib Spacing: 12" on center

Rib Height: 11/4" Minimum Slope: 1/2:12

Panel Attachment: Exposed Fastening System Gauges: 26 (Standard); 29, 24, 22 (Optional) Finishes: Smooth (standard); Embossed (optional)

Coatings: Galvalume Plus®, Signature® 200, Signature® 300





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CATEGORY	CHARACTERISTIC	TEST METHOD	PURPOSE	RESULT
ENVIRONMENTAL	Air leakage Through Roof Panel Joints	ASTM E1680	Determines the air leakage characteristics of metal roof panels under specified air pressure differences at ambient conditions	0.005 cfm/ft² at 1.57 psf static pressure 0.006 cfm/ft² at 6.24 psf static pressure
	Water Penetration Through Roof Panel Joints	ASTM E1646	Determines the resistance to water penetration of metal roof panels under uniform static air pressure difference	No uncontrolled water penetration through the panel joints at a static pressure of 20.00 psf
	Impact Resistance	UL 2218	Determines Impact Resistance of prepared Roof Covering Materials	Class 4 Rating
FIRE RESISTANCE	Room Fire Performance	UL 790	Standard for Standard Test Methods for Fire Tests of Roof Coverings	See Class A Fire Rating Data Sheet
	Room Fire Performance	UL 263	Standard for Fire Tests of Building Construction and Materials	For use in Design Nos. P225, P227, P230, P237, P265, P268, P508, P510, P512, P701, P711, P720, P722, P726, P731, P734, P801, P815, P819.
STRUCTURAL	Uplift Resistance	AISI S100	Provides a standard procedure to evaluate or confirm structural performance under uniform static air pressure difference	See Section Properties and Allowable Load Table Section
	Gravity Loads	AISI S100	North American Specification for the Design of Cold-Formed Steel Structural Members	See Section Properties and Allowable Load Table Section
ROOF LISTINGS	Roof Performance - FM Global	FM 4471	Sets performance standards for panel roofs including uplift resistance	See FM Engineering Tech Bulletin
	Roof Performance -Underwriters Laboratories	UL 580	Determines the uplift resistance of roof assemblies consisting of the roof and roof coverings materials	Class 90 Rating - Construction Number 30, 54, 79, 104, 112, 161, 167, 184, and 542.
	Roof Performance - Miami-Dade County	TAS 125 TAS 201 TAS 100 FM 4471 App. G	The Product Control Approval System establishes a protocol to evaluate the standards of products used in construction in Miami-Dade County. Miami-Dade County, with its inclusion in the High Velocity Hurricane Zone (HVHZ) has the most stringent code requirements of the Florida Building Code. Therefore, all products that comprise the structure's building envelope — doors, shutters, windows, prefabricated buildings and truss plates — require the issuance of an approval in order to be used for construction in Miami-Dade County	See NOA # 12-0123.07
	Roof Performance - Florida Approval	ASTM E 1592 FM 4471 UL 790	Florida product approval is the approval of products and systems, which comprise the building envelope and structural frame, for compliance with the structural requirements of the Florida Building Code.	See FL# 11868.1
	Roof Performance - Texas Department of Insurance	ASTM E 1592	TWIA provides windstorm and hail insurance in areas exposed to hurricanes and currently provides windstorm and hail coverage in the following 14 "first tier" Texas coastal counties: Aransas, Brazoria, Calhoun, Cameron, Chambers, Galveston, Jefferson, Kenedy, Kleberg, Matagorda, Nueces, Refugio, San Patricio and Willacy.	See RC-358 and RC-393