

## PRODUCT EVALUATION REPORT PBR PANEL

## FLORIDA BUILDING CODE 7TH EDITION (2020) FLORIDA PRODUCT APPROVAL FL 11819.5-R4 STRUCTURAL COMPONENTS ROOF DECK

Prepared For:
MBCI, part of the Cornerstone Building Brands family.
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This report consists of Evaluation Report (3 Pages including cover) Installation Details (1 Page)

> Report No. C2422-5 Date: 12.16.2020



Manufacturer: MBCI, part of the Cornerstone Building Brands family.

Manufacturing Houston: 14031 West Hardy, Houston, TX 77064 Locations:

Atlanta: 2280 Monier Ave., Lithia Springs, GA 30122

Adel: 1600 Rogers Road, Adel, GA 31620

Product Name: PBR Panel

36" wide coverage with (4) 1-1/4" high ribs Panel Description:

Materials: Min. 29 ga., 80 ksi steel or min. 24 ga., 50 ksi steel. Galvanized coated

> steel (ASTM A653) or Galvalume coated steel (ASTM A792) or painted steel (ASTM A755). Corrosion resistant as per FBC 2020 Section

1507.4.3.

Support Description: Min. 16 ga., 50 ksi steel section. (Must be designed by others)

1/2:12 or greater in accordance with FBC 2020 Section 1507.4.2. Slope:

Requires applied lap sealant for roof slopes less than 3:12.

Uplift Pressure: 29 ga.: -55 psf at panel span of 48 o.c. with one fastener at each rib.

(Factor of Safety = 2) 26 ga.: -80 psf at panel span of 48 o.c. with one fastener at each rib.

> 24 ga.: -90 psf at panel span of 48 o.c. with one fastener at each rib. 22 ga.: -142.5 psf at panel span of 48 o.c. with two fasteners at each rib.

1/4"-14 x 1-1/4" long self-drilling screws with washer. Fasteners are Panel Attachment:

corrosion resistant as per FBC 2020 Section 1507.4.4.

7"-5"-7" o.c. across panel width At panel ends

12" o.c. across panel width for 29, 26 and 24 ga. panels At intermediate

7"-5"-7" o.c. across panel width for 22 ga. panels

Sidelap Attachment: <sup>1</sup>/<sub>4</sub>"-14 x 7/8" long self-drilling screws with washer at 20" o.c. Fasteners

are corrosion resistant as per FBC 2020 Section 1507.4.4.

Test Standards: Roof assembly tested in accordance with ASTM E1592-01 'Test

> Method for Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure Difference' and FM 4471

Section 5.4 'Resistance to Foot Traffic'.

Test Equivalency: The test procedure in ASTM E1592-01 comply with test procedure

prescribed in ASTM E1592-05(2012).

Code Compliance: The product described herein has demonstrated compliance with FBC

2020 Section 1507.4.

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**Product Limitations:** 

Design wind loads shall be determined for each project in accordance with FBC 2020 Section 1609 or ASCE 7-16 using allowable stress design. The maximum panel span listed herein shall not be exceeded. The design pressure for reduced panel span may be computed using rational analysis prepared by a Florida Professional Engineer or based on MBCI load span table. This evaluation report is not applicable in High Velocity Hurricane Zone. Fire classification is not within scope of this Evaluation Report. Refer to FBC 2020 Section 1505 and current approved roofing materials directory or ASTM E108/UL790 report from an accredited laboratory for fire ratings of this product.

Supporting Documents: ASTM E1592 Test Reports

Force Engineering & Testing, Inc.

07-0045T-07 A, B, E, F, Reporting Date 4/3/2007

FM 4471 Test Report

Force Engineering & Testing, Inc.

07-0172T-17, Reporting Date 9/21/2017

