



**PRODUCT EVALUATION REPORT  
RETRO-R PANEL**

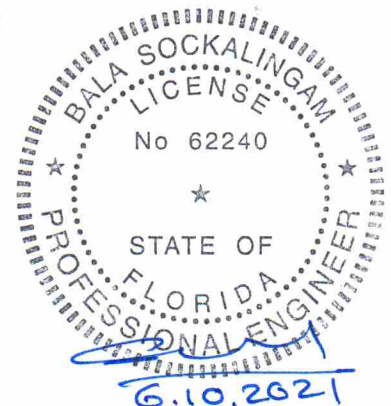
**FLORIDA BUILDING CODE 7TH EDITION (2020)  
FLORIDA PRODUCT APPROVAL  
FL 11819.7-R5  
STRUCTURAL COMPONENTS  
ROOF DECK**

**Prepared For:  
MBCI, part of the Cornerstone Building Brands family.  
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Houston, TX 77064  
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**This report consists of  
Evaluation Report (3 Pages including cover)  
Installation Details (1 Page)**

**Report No. C2481-7  
Date: 6.10.2021**



|                                            |                                                                                                                                                                                                                                       |
|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Manufacturer:                              | MBCI, part of the Cornerstone Building Brands family.                                                                                                                                                                                 |
| Manufacturing Locations:                   | Houston: 14031 West Hardy, Houston, TX 77064<br>Atlanta: 2280 Monier Ave., Lithia Springs, GA 30122<br>Adel: 1600 Rogers Road, Adel, GA 31620                                                                                         |
| Product Name:                              | Retro-R® Panel                                                                                                                                                                                                                        |
| Panel Description:                         | 36" wide coverage with (4) 1-1/6" high ribs. Retro-R® is a non-structural panel that can be installed over an existing PBR or R panel (min 29 ga.) with minimal alterations.                                                          |
| Materials:                                 | Min. 26 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 or FL P.E. designed equal support per FBC 2020.                                                                                                                                                     |
| Slope:                                     | 1/2:12 or greater in accordance with FBC 2020 Section 1507.4.2. Requires applied lap sealant for roof slopes less than 3:12.                                                                                                          |
| Uplift Pressure:<br>(Factor of Safety = 2) | -49.5 psf at panel span of 60" o.c.<br>-130.5 psf at panel span of 24" o.c.                                                                                                                                                           |
| Panel Attachment:                          | ¼"-14 x 1-1/4" long self-drilling screws with washer. Fasteners are installed through existing min 29 ga. R panel into existing supports. Fasteners are corrosion resistant as per FBC 2020 Section 1507.4.4.                         |
| At panel ends<br>At intermediate           | Two fasteners at each rib<br>One fastener at 12" o.c.                                                                                                                                                                                 |
| Sidelap Attachment:                        | ¼"-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 E1592-05 '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'. |
| Code Compliance:                           | The product described herein has demonstrated compliance with FBC 2020 Section 1507.4.                                                                                                                                                |
| 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                                                                                                   |

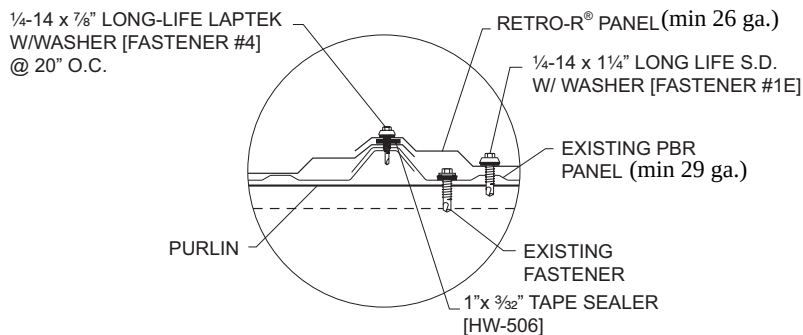
design. The design pressure for other panel span may be computed using rational analysis prepared by a Florida Professional Engineer. This evaluation report is not applicable in High Velocity Hurricane Zone. Fire classification is not within scope of this Evaluation Report. Refer to FBC 2020 Section 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.  
07-0146T-16 A, B, Reporting Date 7/7/2016

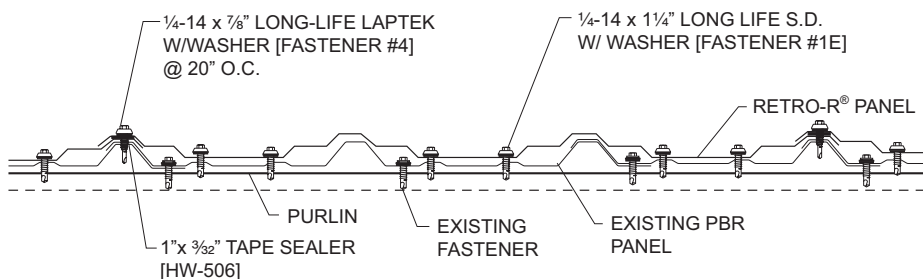
FM 4471 Test Report  
Force Engineering & Testing, Inc.  
07-0172T-17, Reporting Date 9/21/2017

# PRODUCT INFORMATION

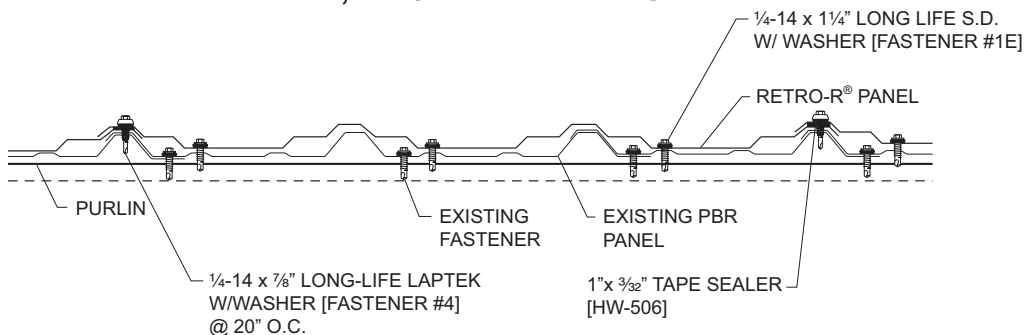
## Retro-R® PANEL FASTENER LOCATIONS



### PANEL ATTACHMENT AT SIDE LAP



### PANEL ATTACHMENT AT EAVE, RIDGE AND ENDLAPS



### PANEL ATTACHMENT AT INTERMEDIATE CONNECTIONS

#### NOTES:

1. The Retro-R® Panel has an unsymmetrical side lap. Panel side lap with widest dimension laps on top of side lap with narrow dimension. However, where possible, the panels should be lapped against prevailing wind.
2. The above are typical fastener spacings. However, they may not be appropriate for all applications. Consult a professional engineer for use on any specific application.
3. Minimum 1" x 3/32" tape sealer required at panel side laps.
4. Side lap fasteners are required. Typical spacing is 20" O.C. However, this spacing may not be appropriate for all applications. Consult a professional engineer for use on any specific application.