

**EVALUATION REPORT OF
KIRBY BUILDING SYSTEMS
'R-PANEL'**

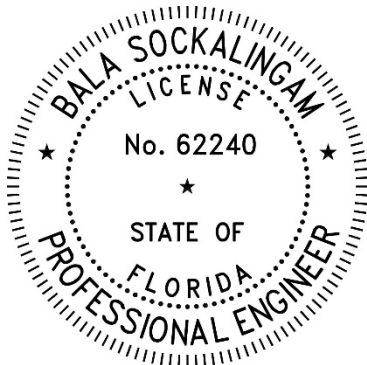
**FLORIDA BUILDING CODE 8TH EDITION (2023)
FLORIDA PRODUCT APPROVAL
FL 47172.1
STRUCTURAL COMPONENTS
ROOF DECK**

**Prepared For:
Kirby Building Systems
124 Kirby Drive
Portland, TN 37148
Telephone: (615) 745-6007**

**Prepared By:
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**This report consists of
Evaluation Report (3 Pages including cover)
Installation Details (1 Page)
Load Span Tables (8 Pages)**

**Report No. C2859-1
Date: 12.20.2024**



This item has been digitally signed and sealed by Bala Sockalingam, PE, on the date indicated.

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Manufacturer:	Kirby Building Systems
Manufacturing Locations:	124 Kirby Drive, Portland, TN 37148 200 Whetstone Road, Swansea, SC 29160 600 Apache Trail, Terrell, TX 75160
Product Name:	R-Panel
Panel Description:	36" wide coverage with (4) 1.25" high ribs
Materials:	Min 24 ga. with galvanized coated steel (ASTM A653) or Galvalume coated steel (ASTM A792) or painted steel (ASTM A755) ($F_y = 80$ ksi). Corrosion resistant as per FBC 2023 Section 1507.4.3.
Support Description:	Min 16 ga., min 50 ksi steel section. (Must be designed by others)
Slope:	1/2:12 or greater in accordance with FBC 2023 Section 1507.4.2. Requires applied lap sealant for roof slopes less than 3:12.
Design Inward Pressure:	85.8 psf at support spacing of 60 o.c.
Design Uplift Pressure:	-63.7 psf at support spacing of 60 o.c.
(Factor of Safety = 2)	-169.0 psf at support spacing of 24 o.c.
Support Attachment:	#12-14 x 1-1/2" long self-drilling hex-head screws with washer. Corrosion resistant as per FBC 2023 Section 1507.4.4.
At interior supports	at 7"-5"-7" o.c. across panel width
At panel ends & endlaps	at 5"-3.5"-3.5"-5" o.c. across panel width
Sidelap Attachment:	1/4"-14 x 7/8" long self-drilling screws with washer at max. 12" o.c. Fasteners are corrosion resistant as per FBC 2023 Section 1507.4.4.
Test Standards:	Roof assembly tested in accordance with TAS 125-03 (ASTM E1592) 'Standard Requirements for Metal Roofing Systems', TAS 100-23 'Test Procedure for Wind and Wind Driven Rain Resistance of Discontinuous Roof Systems', ASTM E2140-01 "Standard Test Method for Water Penetration of Metal Roof Panel Systems by Static Water Pressure Head", TAS 201-94 'Impact Test Procedures', TAS 110-00 'Testing Requirements for Physical Properties of Roof Membrane, Insulation, Coatings and Other Roofing Components' and FM 4471 Section 5.4 'Resistance to Foot Traffic'.
Code Compliance:	The product described herein has demonstrated compliance with FBC 2023 Section 1504.3.2, 1504.7, 1507.4, 1518.9, 1523.6.5.2.4.
Product Limitations:	Design wind loads shall be determined for each project in accordance with FBC 2023 Section 1609, Section 1620 and ASCE 7-22 using allowable stress design. The design pressure for reduced support

spacing may be computed using rational analysis prepared by a Florida Professional Engineer or based on Kirby's load span table. This evaluation report is applicable in High Velocity Hurricane Zone. Fire classification is not within scope of this Evaluation Report. Refer to FBC 2023 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: TAS 125-03 Test Report
Farabaugh Engineering and Testing Inc.
Project No. T332-24, Reporting Date 12/12/2024

TAS 201-94 Test Report
Farabaugh Engineering and Testing Inc.
Project No. T331-24, Reporting Date 12/12/2024

TAS 100-23 Test Report
Farabaugh Engineering and Testing Inc.
Project No. T334-24, Reporting Date 12/12/2024

ASTM E2140-01 Test Report
Farabaugh Engineering and Testing Inc.
Project No. T335-24, Reporting Date 12/12/2024

TAS 110-00 Test Reports
PRI Asphalt Technologies – ASTM G155 report 1050T0001,
Reporting Date 7/1/2020
PPG Industrial Coil Coating – ASTM B117 Certification, Feb 2020

FM 4471 Test Report
FM Approvals
Project ID 3032053, Reporting Date 5/5/2008

(Kirby Building Systems is authorized to use Nucor Building Group's
Test Reports)