EVALUATION REPORT OF
CRANE COMPOSITES INC.
'DURALITE HIGH STRENGTH R-PANEL'

FLORIDA BUILDING CODE 7TH EDITION (2020)
FLORIDA PRODUCT APPROVAL
FL 38459.1
STRUCTURAL COMPONENTS
ROOF DECK

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This report consists of
Evaluation Report (3 Pages including cover)

Report No. C2440-2
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Manufacturer:	Crane Composites Inc.
Product Name:	Duralite High Strength R-Panel
Product Description:	Translucent, glass fiber reinforced plastic (FRP) panels. Nominal thickness 1/16 in. formed to the same configuration as metal R-Panels.
Materials:	Duralite High Strength (8 Oz 162DLW): FRP panel consists of an acrylic modified orthopthalic polyester resin with a combination of bidirectional woven roving and chopped strand glass fiber reinforcement. Self-ignition temperature greater than 650°F (343°C) in accordance with ASTM D1929. Maximum average smoke density rating less than 450 where tested in the thickness intended for use in accordance with ASTM E84. Plastic material Class CC2 with burning rate of less than $2^1/_2$ inches per minute in accordance with ASTM D635.
Support Description:	Min. 16 ga., 50 ksi steel section. (Must be designed by others)
Slope:	1/2:12 or greater in accordance with FBC 2020 Section 1507.4.2
Design Pressure: (Factor of Safety = 2)	±41.6 psf @ maximum support spacing of 60" o.c.
Panel Attachment:	All fasteners are corrosion resistant.
At all supports:	#12-14 x 1" long self-tapping screws with 1-⅛" stainless steel washer backer and EPDM gasket at 3.5"-3.5"-5" o.c. across panel width (9 fasteners per panel).
Sidelap Attachment:	#6 x 1¼" long stainless-steel grommet with hex-head machine screw and neoprene sleeve at 10" o.c.
	Panels will be installed in accordance with FBC 2020 Section 2609 for CC2 class of plastics. Panels shall not be installed in groups H, I-2, I-3.
Test Standards:	Roof assembly tested in accordance with UL580-94 ‘Uplift Resistance of Roof Assemblies’ and FM 4470 (2016) Section 4.6 ‘Resistance to Foot Traffic’.
Test Equivalency:	The test procedures in UL 580-94 comply with test procedures prescribed in UL 580-06.
	ASTM E84-10 procedures utilized in Intertek Testing Services’ Reports 100054347SAT-003 Rev. 1 comply with test procedures prescribed in ASTM E84-16.

ASTM D635-06 procedures utilized in Intertek Testing Services' Report 100054347 comply with test procedures prescribed in ASTM D635-14.

ASTM D1929-96 procedures utilized in Intertek Testing Services' Report 100054347W13-002 comply with test procedures prescribed in ASTM D1929-16.

Code Compliance: The product described herein has demonstrated compliance with FBC 2020 Section 1504.3.2, 1504.7, 1507.4 and 2606.4.

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 maximum support spacing listed herein shall not be exceeded. The design pressure for reduced support spacing 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 and impact resistance is not within the scope of this evaluation. 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. Panels must be installed as per Crane Composite current installation details.

Supporting Documents: UL580 Test Report
Farabaugh Engineering and Testing Inc.
Project No. T214-10, Reporting Date 5/10/2010

FM 4470 Test Report
ENCON Technology Inc.
C2466-1, Reporting Date 4/16/2021

ASTM E84 Test Reports
Intertek Testing Services.
100054347SAT-003 Rev. 1, Reporting Date 4/9/2010

ASTM D635 Test Report
Intertek Testing Services
Report 100054347, Reporting Date 3/30/2010

ASTM D1929 Test Report
Intertek Testing Services
Report 100054347W13-002, Reporting Date 5/3/2010