



ENGINEERING EXPRESS® PRODUCT EVALUATION REPORT

September 28, 2020

Application Number: FL# 10013.1-R7
EX Project Number: 20-30693

Product Manufacturer: Four Seasons Building Products
Manufacturer Address: 7815 American Way
Groveland, FL 34736

Product Name & Description: Illuma-View Roof Panels
Composite Polycarbonate Roof Panel

Scope of Evaluation:

This Product Evaluation Report is being issued in accordance with the requirements of the Florida Department of Business and Professional Regulation (Florida Building Commission) Rule Chapter 61G20-3.005, F.A.C., for statewide acceptance per Method 2(b). The product noted above has been tested and/or evaluated as summarized herein to show compliance with the Florida Building Code Seventh Edition (2020) and is, for the purpose intended, at least equivalent to that required by the Code. Re-evaluation of this product shall be required following pertinent Florida Building Code modifications or revisions.

Substantiating Data:

- **PRODUCT EVALUATION DOCUMENTS**

EX drawing #20-30693 titled "Illuma-View Roof Panels", sheet 1 of 2, prepared by Engineering Express, signed & sealed by Frank Bennardo, PE is an integral part of this Evaluation Report.

- **TEST REPORTS**

Uniform static structural performance has been tested in accordance with ASTM E72-98 test standard per test report(s) #TT504047 by Terrapin Testing, Inc, signed by Rick Cavanagh.

Samples tested in the above test report had a clear span of either 16 feet or 6 feet long, and measured 48" wide. Each sample tested had a polycarbonate section for the entire length of the panel measuring 12", 16", or 24" wide. The polycarbonate section had equally sized 1 pcf EPS foam core panels with 0.024" aluminum skin on either side.

Thermoplastic structural performance for self-ignition temperature has been tested in accordance with ASTM D1929 per test reports 16289-107799 by Intertek Evaluation Services (in conjunction with Omega Point Laboratories), signed by Rick Curkeet, P.E., with an approved self-ignition temperature greater than 650°F as required per FBC Section 2606.4.

Thermoplastic structural performance for surface burning characteristics have been tested in accordance with ASTM E84 per test reports 14530-12330 Rev 1 by Intertek Evaluation Services, signed by Rick Curkeet, P.E. The roof assembly was tested as a 6" thick panel with an approved smoke-developed index not greater than 450 and a flame spread index of 75 or less as required per FBC Section 2603.3 and 2614.3

Four Seasons Building Products — Illuma-View Roof Panels

- **STRUCTURAL ENGINEERING CALCULATIONS**

Structural engineering calculations have been prepared which evaluate the product based on comparative and/or rational analysis to qualify the following design criteria:

1. Maximum Allowable Spans
2. Maximum Allowable Deflections
3. Anchor Spacing
4. Anchor Capacity

No 33% increase in allowable stress has been used in the design of each product.

Impact Resistance:

Large Missile Impact Resistance has NOT been demonstrated in previously listed test reports.

Wind Load Resistance

Each product has been designed to resist wind loads as indicated in the span schedule(s) on its respective Product Evaluation Document (i.e. engineering drawing).

Installation

Each product listed above shall be installed in strict compliance with its respective Product Evaluation Document (i.e. engineering drawing), along with all components noted therein.

Each product component shall be of the material specified in that product's respective Product Evaluation Document (i.e. engineering drawing).

Limitations & Conditions of Use:

Use of each product shall be in strict accordance with its respective Product Evaluation Document (i.e. engineering drawing) as noted herein.

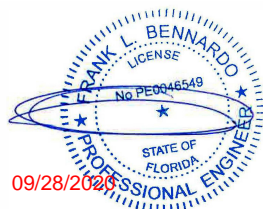
All supporting host structures shall be designed to resist all superimposed loads and shall be of a material listed in each product's respective anchor schedule. Host structure conditions which are not accounted for in each product's respective anchor schedule shall be designed for on a site-specific basis by a registered professional engineer.

All components which are permanently installed shall be protected against corrosion, contamination, and other such damage at all times.

Each product HAS been designed for use within and outside of the High Velocity Hurricane Zone (HVHZ) under specific conditions as noted on the engineering drawing.

Polycarbonate panels shall be Sabic Lexan Thermoclear multi-walled polycarbonate sheets per Miami-Dade NOA #15-0915.08.

Respectfully,



Frank Bennardo, PE
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