



## ENGINEERING EXPRESS® PRODUCT EVALUATION REPORT

July 27, 2020

Application Number: FL 13783.1 – R3  
EX Project Number: 20-29443

Product Manufacturer: Four Seasons Solar Products LLC  
Manufacturer Address: 5005 Veterans Memorial Highway  
Holbrook, NY 11741

Product Name & Description: Weatherlock II Patio Roof Panels  
Laminated Foam Roof Panels

### ***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 #20-29443 titled “Weatherlock II Patio Roof Panels”, sheets 1-7, prepared by Engineering Express, signed & sealed by Frank L. Bennardo, P.E. is an integral part of this Evaluation Report.

- **TEST REPORTS**

Uniform static structural performance has been tested in accordance with ICC-ES AC04 test standard per test report #TT 504026A - F by Terrapin Testing signed by Rick Cavanagh.

Thermoplastic structural performance for surface burning characteristics have been tested in accordance with ASTM E108-07a per test report #08066a.1 and UL 1715-97 per test report #08066b.1 by Western Fire Center, Inc. signed by Howard Stacy. The roof assembly was tested as a 7” thick panel with an aluminum skin and an approved smoke developed index not greater than 450 and a flame spread index of 75 or less as required per FBC Section 2603.9.

- **STRUCTURAL ENGINEERING CALCULATIONS**

Structural engineering calculations have been prepared by TJC and Associates, Inc. per reports #TJCAA 504026A – F signed by Terence J. Cavanagh, P.E. which establish allowable panel span and fastener spacing.

Four Seasons Solar Products LLC – Weatherlock II Patio Roof Panels

### **Impact Resistance:**

Impact Resistance has not been demonstrated.

### **Wind Load Resistance**

Each product has been designed to resist wind loads as indicated in the respective Product Evaluation Document (i.e. engineering drawing) and ICC-ES Report ESR-2444. This report shall be referred to for allowable span tables, fastener spacing, and other pertinent data.

### **Installation**

Each product listed above shall be installed in accordance with the Product Evaluation Document (i.e. engineering drawing). Any alterations to the engineering drawing shall be performed by others on a site-specific basis.

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) and ICC-ES Report ESR-2444 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 **outside** of the High Velocity Hurricane Zone (HVHZ) only, under specific conditions as noted on the engineering drawing.

Respectfully,



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Frank Bennardo, PE  
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