

ENGINEERING EXPRESS® (EX) PRODUCT EVALUATION REPORT

September 26, 2023

Application Number: FL 13783.1
EX Project Number: 23-60784

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 standard ASCE 7-22 (ASD) and the Florida Building Code Eighth Edition (2023) and is, for the purpose intended, at least equivalent to that required by the Standard and Code. Re-evaluation of this product shall be required following pertinent Florida Building Code or ASCE Standard modifications or revisions.

Substantiating Data:

- **PRODUCT EVALUATION DOCUMENTS**

EX Performance Evaluation document # 23-60784 titled "Weatherlock II Patio Roof Panels", prepared by Engineering Express, Inc., signed & sealed by Frank Bennardo, P.E. is an integral part of this Evaluation Report, pages 1 through 8.

- **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.

Four Seasons Solar Products, LLC – Weatherlock II Patio Roof Panels

- **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.

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:

The product listed above shall be installed in strict compliance with the Performance Evaluation document (i.e. engineering document), along with all components noted therein.

The product components shall be of the material specified in the Performance Evaluation document (i.e. engineering document).

Limitations & Conditions of Use:

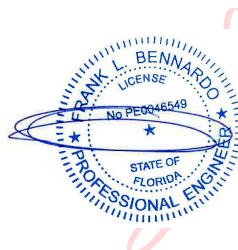
Use of each product shall be in strict accordance with its respective Performance Evaluation document (i.e. engineering document) as noted herein.

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. Any alteration to the respective Performance Evaluation document will invalidate it. Valid for use outside of the High-Velocity Hurricane Zone only (non-HVHZ only). Not permitted for use within the HVHZ (Miami-Dade and Broward Counties)

Respectfully,

Frank Bennardo, P.E.
ENGINEERING EXPRESS®
#PE0046549 | Cert. Auth. 9885



Digitally signed
by Frank
Bennardo
Date: 2023.10.03
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