

## **ENGINEERING EXPRESS® PRODUCT EVALUATION REPORT**

December 17, 2020

Application Number: 36955.1  
EX Project Number: 20-33492

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

Product Name & Description: Series S-7500 PVC Sliding Patio Door (Non-Impact)

### ***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 1 (d). The product noted above has been tested and/or evaluated as summarized herein to show compliance with standard ASCE 7-16 (ASD) and Florida Building Code Seventh Edition (2020) 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 Installation Drawing #20-33492 titled "Series S-7500 PVC Sliding Patio Door (Non-Impact)", prepared by Engineering Express, Inc., signed & sealed by Frank Bennardo, PE is an integral part of this Evaluation Report, pages 1 through 18.

- **TEST REPORTS**

Test reports(s) #: AI-03810-V1, AI-05147-BI Rev.1 by AIR-INS Inc. Approved by Jean Miller, Eng., have conducted per the following test standards:

- AAMA/WDMA/CSA 101/I.S.2/A440-11 North American Fenestration Standard/Specifications for Windows, Doors and Skylights
- AAMA/WDMA/CSA 101/I.S.2/A440-08 North American Fenestration Standard/Specifications for Windows, Doors and Skylights
- ASTM E283 Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Difference Across the Specimen
- ASTM E330 Test Method for Structural Performance of Exterior Windows, Curtain Walls and Doors by Uniform Static Air Pressure Difference

## Series S-7500 PVC Sliding Patio Door (Non-Impact)

- **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. Minimum Allowable Unit Width
2. Maximum Allowable Unit Height
3. Glass Capacity
4. Anchor Capacity for Various Substrates

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

### ***Impact Resistance:***

Impact Resistance has not been demonstrated.

### ***Wind Load Resistance***

This product has been designed to resist wind loads as indicated on its respective Product Evaluation Document (i.e. engineering document).

### ***Installation***

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

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

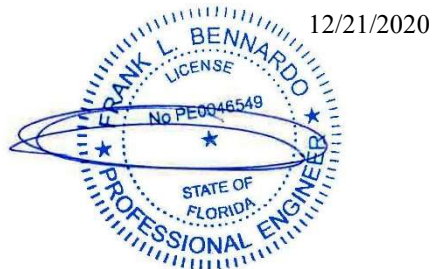
### ***Limitations & Conditions of Use:***

Use of each product shall be in strict accordance with its respective Product 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 Product Evaluation Document will invalidate it. This product has not been designed for use inside the High Velocity Hurricane Zone (NON-HVHZ rated only).

Respectfully,



Frank Bennardo, PE  
**ENGINEERING EXPRESS®**  
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