

ENGINEERING EXPRESS® (EX) PRODUCT EVALUATION REPORT

June 18, 2024

Application Number: FL# 19927.1
EX Project Number: 24-73857

Product Manufacturer: Special-Lite Inc.
Manufacturer Address: 860 S. Williams Street
Decatur, MI 49045

Product Name & Description: AF-100 FRP Door

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 7-22 (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 # 24-73857 titled "AF-100 FRP Door", prepared by Engineering Express, Inc., signed & sealed by Frank Bennardo, P.E. is an integral part of this Evaluation Report.

- **TEST REPORTS (IF APPLICABLE)**

The product has been tested per the following:

Test Lab	Test Report #	Test Standard	Test Description	Signed & Sealed By:
Architectural Testing	B6848.01-204-44	ASTM E283-04	Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen.	Stephen Warter, P.E.
		ASTM E 330-02	Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference.	
		ASTM E 331-00	Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors and Curtain Walls by Uniform Static Air Pressure Difference.	
		ASTM E 1886-05	Standard Test Method for Performance of Exterior Windows, Curtain Walls, Doors, and Impact Protective Systems Impacted by Missile(s) and Exposed to Cyclic Pressure.	
		ASTM E 1996-06	Standard Specification for Performance of Exterior Windows, Curtain Walls, Doors, and Impact Protective Systems Impacted by Windborne Debris in Hurricanes.	

Special-Lite Inc. - AF-100 FRP Door

- **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 Depth
2. Maximum Allowable Unit Height
3. Minimum Unit Weight
4. Tie-Down Configuration and Anchor Spacing
5. Anchor Capacity for Various Substrates

Impact Resistance:

Impact Resistance has been demonstrated.

Wind Load Resistance:

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

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).

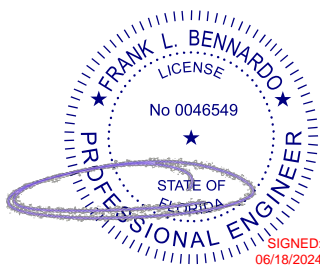
Limitations & Conditions of Use:

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. This product has been designed for use outside of the High Velocity Hurricane Zone (NON-HVHZ).

Respectfully,



Frank Bennardo, P.E.

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