

## ENGINEER'S PRODUCT EVALUATION REPORT FLORIDA BUILDING CODE COMPLIANCE (HVHZ)

Product Category	Windows	
Product Name	Series 4500 Vinyl Fixed Window	
Design Pressure	+65 psf, -65 psf	
Impact Resistance	Large Missile Impact Resistant	
Product Manufacturer	Eurostyle Impact Windows and Doors, LLC. 217 NW 4 <sup>th</sup> Ave., Hallandale Beach, FL 33009	
Report No.	ESWD4500FXD-Eval	Rev No: 1
Report Date	04/22/2013	Rev Date: 04/28/2015
Code Reference	Florida Building Code, Including HVHZ (Current Edition)	
Evaluating Engineer	Emma T. Mellinger, P.E. Category 5 Engineering Services, Inc.	

### SCOPE OF EVALUATION AND STATEMENT OF CODE COMPLIANCE

This Product Evaluation Report is issued in accordance with the requirements of Florida Administrative Code Rule 61G20-3 for Optional Statewide Product Approval. The above-referenced product has been tested and evaluated as described herein, and found to be **in compliance with the current edition of the Florida Building Code, including HVHZ**. The above-referenced product is, for the purpose intended, at least equivalent to that required by the Code.

### PRODUCT DESCRIPTION

Product is a vinyl fixed window made from white and non-white PVC with steel reinforcements and thermally welded frame corners. Units are dry-glazed with an EPDM gasket, and have a 1.00" overall thickness double (i.e. insulating) lite consisting of: 0.1875" clear tempered glass, 0.348" airspace created by an aluminum spacer, 0.1875" clear annealed glass/0.090" DuPont SGP interlayer/0.1875" clear annealed glass. The frame may be oriented with the laminated layer to the exterior, or the interior. Product is shown in detail in the Approval and Installation Drawing "ESWD4500FXD-Install."

### SUBSTANTIATING DATA

The following documents substantiate the evaluation contained in this report:

- **Notice of Product Certification** (National Accreditation and Management Institute Certification No. NI011503-R1)
- **Test Reports** (National Certified Testing Laboratories, Inc. Report No. NCTL 210-3741-2, for tests TAS 201, 202, 203).
- **Anchor Calculations** (technical report "ESWD4500FXD-Anchors," prepared, signed and sealed by Emma T. Mellinger, P.E.)
- **Approval and Installation Drawing** (drawing "ESWD4500FXD-Install" prepared, signed and sealed by Emma T. Mellinger, P.E.)

- **Glass Load Analysis per ASTM E1300** (technical report “ESWD4500FXD-Glass,” prepared, signed and sealed by Emma T Mellinger, P.E.)
- **Plastics Certification** (Current Miami-Dade County NOA for Vinyl Extrusions manufactured by Rehau, LLC; current Miami-Dade County NOA for SGP Glazing Laminate manufactured by E.I. DuPont De Nemours & Co.; and Architectural Testing Inc., laboratory test report no. B1348.01-106-31 showing compliance with ASTM C864 for EPDM glazing gasket)

### **INSTALLATION**

- Product shall be installed in accordance with the Approval and Installation Drawing “ESWD4500FXD-Install” prepared, signed and sealed by Emma T Mellinger, P.E.

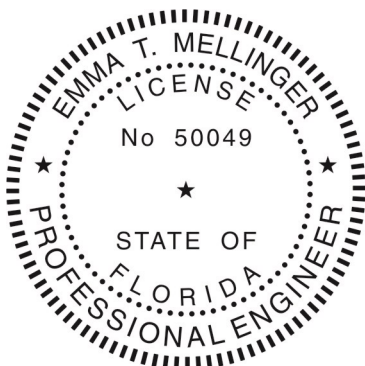
### **LIMITATIONS AND CONDITIONS OF USE**

Use of the above-referenced product shall be in strict accordance with this Evaluation Report and the Approval and Installation Drawing “ESWD4500FXD-Install.” For all other conditions, a site specific design shall be prepared by a Florida-registered Professional Engineer.

- Product meets requirements for the High Velocity Hurricane Zone (HVHZ).
- Product shall be glazed in accordance with ASTM E1300.
- Maximum Tested Frame Size: 48” x 98”
- Maximum Glass Size: 42.5” x 93”
- Maximum Design Pressures: +65 psf, -65 psf
- Product is rated Large Missile Impact Resistant (HVHZ, Wind Zone 4, Missile Level D).

### **ENGINEER’S STATEMENT OF FINANCIAL INDEPENDENCE**

This statement certifies that Emma T. Mellinger, P.E. does not have nor will acquire a financial interest in any company manufacturing or distributing the product(s) for which this report is being issued. Emma T. Mellinger, P.E. does not have nor will acquire a financial interest in any other entity involved in the approval process of the referenced product(s).



Emma T. Mellinger, P.E.  
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