

# TEXAS DEPARTMENT OF INSURANCE

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## PRODUCT EVALUATION DR-501

Effective October 1, 2011

The following product has been evaluated for compliance with the wind loads specified in the **International Residential Code (IRC)** and the **International Building Code (IBC)**. This product shall be subject to reevaluation **March 2015**.

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

**Mira Premium Series Aluminum Clad Wood Outswing French Hinged Door, Non-impact Resistant,**  
manufactured by

**Ply Gem Windows**  
433 N. Main Street  
Rocky Mount, Virginia 24151-0559  
(800) 999-8400  
www.plygem.com

will be acceptable in designated catastrophe areas along the Texas Gulf Coast when installed in accordance with the manufacturer's installation instructions and this product evaluation.

## PRODUCT DESCRIPTION

The Mira aluminum clad outswing French hinged door is a wood hinged door. The aluminum clad wood outswing French hinged doors evaluated in this report are individual, non-impact resistant doors. This product evaluation report is for aluminum clad wood outswing French hinged doors based on the following tested constructions:

### General Description:

System	Description	Label Rating
1	Mira Premium Series Aluminum Clad Wood Outswing French Hinged Doors; (XX)	SHD-LC50 75 x 98

### Product Dimensions:

System	Overall Size	Panel Size	Panel Daylight Opening Size
1	74 1/2" x 97 7/8"	Two: 36" x 96"	25" x 82 1/8"

### Glazing Description:

System	Glass Construction <sup>1</sup>	Glazing Method <sup>2</sup>
1	IG-1	GM-1

Note: <sup>1</sup> See the "Glass Construction Key" for the glazing construction.

<sup>2</sup> See the "Glazing Method Key" for the glazing method description.

**Glass Construction Key:**

IG-1: Both panels contain a sealed insulating glass unit. The sealed insulating glass units are comprised two double strength ( $\frac{1}{8}$ " ) fully tempered glass lites separated by a desiccant-filled U-shaped spacer system. The glass thickness used in the insulating glass unit of the tested assembly and in smaller assemblies shall comply with ASTM E 1300-04.

**Glazing Method Key:**

GM-1: The insulating glass units are wet glazed on the interior. Wood glazing beads secure the insulating glass units in place.

**Frame Construction:** The frame head, sill, and side jambs consist of wood members. The aluminum sloped sill is secured to the side jambs using screws.

**Aluminum Cladding:** The exterior extruded aluminum cladding corners are miter cut and secured to each other with an injection molded corner key and screws. The aluminum cladding is secured to the wood profiles with staples.

**Panel Construction:** The panel stiles and rails consist of wood members. The stiles and rails are doweled and glued together.

**Aluminum Cladding:** The exterior extruded aluminum cladding corners are miter cut and secured to each other with an injection molded corner key and screws. The aluminum cladding is secured to the wood profiles with staples.

**Hardware:**

- Butt hinges; Four (4) required per door panel; The top hinge is secured to the door frame jamb with two (2) No. 9 x  $2\frac{1}{4}$ " screws and two (2) No. 9 x  $\frac{3}{4}$ " screws. The remaining hinges are secured to the door frame jamb with one (1) No. 9 x  $2\frac{1}{4}$ " screw and three (3) No. 9 x  $\frac{3}{4}$ " screws. All hinges are secured to the door panels with four (4) No. 9 x  $\frac{3}{4}$ " screws.
- Concealed multi-point lock system; Located on the active panel; Locking points include shoot bolts at the top and bottom of the panel, with a latch and deadbolt on the side. The passive panel utilized an aluminum astragal with integral flush bolts at the top and bottom of the astragal.
- Metallic strike plate; One (1) required; Secured to the astragal with two (2) No. 8 x 3" screws.
- Metallic strike plate; One (1) required; Located at the center of the head jamb and secured with two (2) No. 8 x 3" screws.

**Reinforcement:** None.

**Product Identification:** A certification program label (NAMI) will be affixed to the door. The certification program label includes the manufacturer's code name (**PWG-M-163**); product name: **Mira OS French Hinged Door**; performance characteristics; the approved inspection agency (NAMI); and the applicable standard: AAMA/WDMA/CSA 101/I.S.2/A440-05.

**LIMITATIONS**

**Design pressures (DP):**

System	Maximum Width (in.)	Maximum Height (in.)	Design Pressure (psf)
1	$74\frac{1}{2}$	$97\frac{7}{8}$	$\pm 50$

**Impact Resistance:** These door assemblies do not satisfy the Texas Department of Insurance's criteria for protection from windborne debris. These door assemblies will need to be protected with an impact protective system when installed in areas where windborne debris protection is required.

**Acceptance of Smaller Assemblies:** Doors assemblies with dimensions equal to or smaller than those specified above are acceptable within the limitations specified in this report.

### INSTALLATION INSTRUCTIONS

**General:** The door assembly shall be prepared and installed in accordance with the manufacturers recommended installation instructions. Detailed installation instructions and drawings are available from the manufacturer.

**Installation:** The door shall be fastened to minimum Southern Yellow Pine dimension lumber. The door is secured to the wall framing using the integral nailing fin at the head and side jambs of the door. The nailing fin shall be secured to the wall framing with minimum No. 8 screws. The fasteners shall be spaced approximately 4 inches from each corner and approximately 6 inches on center. In addition, the door is secured to the wall framing using the side jambs and the head of the door with minimum No. 8 x 3" screws. Along each side jamb, the fasteners are located 7  $\frac{1}{4}$  inches, 31  $\frac{1}{4}$  inches, and 49  $\frac{1}{4}$  inches from the head and the fasteners are located 6 inches and 30 inches up from the sill. Along the head, the fasteners are located 6 inches from each end and 6 inches from each meeting stile. The fasteners shall be long enough to penetrate a minimum of 1  $\frac{1}{2}$  inches into the wall framing members.

**Note:** The manufacturer's installation instructions shall be available on the job site during installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC), the International Building Code (IBC), and the Texas Revisions.