

# TEXAS DEPARTMENT OF INSURANCE

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## PRODUCT EVALUATION DR-407

Effective June 1, 2010

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 June 2014.

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.

**8-0 Outswing Opaque Fiberglass Hinged Doors with Sidelites, Non-Impact Resistant**, manufactured by:

**Plastpro, Inc.**  
4737 Kister Court  
Ashtabula, OH 44004  
(440) 969-9773

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 fiberglass hinged doors specified in this evaluation report are non-impact resistant doors. This evaluation report is for fiberglass hinged doors based on the following tested configurations:

### General Description:

| System | Description  | Label Rating (psf) |
|--------|--|--------------------|
| 1      | Opaque Fiberglass Outswing Side-Hinged Doors with Sidelites; 3'-0" x 8'-0"; (OXXO) | ±40                |

### Product Dimensions:

| System | Overall Frame Size | Active Panel Size | Operable Passive Panel Size | Daylight Opening Size |
|--------|--------------------|-------------------|-----------------------------|-----------------------|
| 1      | 149" x 97 1/8"     | 35 3/4" x 95 1/4" | 35 3/4" x 95 1/4"           | 21" x 79"             |

### 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: Sealed insulating glass unit. The sealed insulating glass unit is comprised of two double strength ( $\frac{1}{8}$ " ) fully tempered glass lites separated by an aluminum 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 Polypropylene ODL lite frame with mitered and welded corners, affixed to exterior of all panels with redi-seal glazing compound, the insulating glass unit is dropped in from interior and lite frame set in place and secured with #8 x 1-1/2" screws; [4] ea. at top and bottom with [8] screws on either side

**Frame Construction:** The frame head and jambs are constructed of poly fiber. The sill is constructed of aluminum and PVC composite.

**Panel Construction:** The main frame door panels are opaque style, comprised of PVC composite rails, stiles made up of engineered wood, steel and PVC composite, surrounding a polyurethane foam core with 0.075" thick fiberglass skins.

**Sidelite Construction:** The fixed door sidelites are full view style constructed of PVC composite rails, stiles made up of engineered wood, steel and PVC composite, surrounding a polyurethane foam core with 0.075" thick fiberglass skins.

**Reinforcement:** LVL, 3-5/8" wide by 1-19/32" deep and 1/8" wide by 1-3/8" deep steel in lock and keeper stiles, also in stile of both fixed panels that mate with mulled jambs. LVL, 1" wide by 1-19/32" deep in hinge stiles and fixed panel stiles that mate with exterior jamb stiles.

**Hardware:**

|                        |  |
|------------------------|--|
| Locks:                 | Option 1 - Schlage F series handleset with deadbolt, model F60, ANSI grade 1, centered 59-11/16" from top edge of panel with a 2-3/8" backset.<br><br>Option 2 - Schlage F series Knob and Lever, model F10, ANSI grade 2, centered 59-11/16" from top edge of panel with a 2-3/8" backset.<br><br>Option 3 - Kwikset Signature 740-741 series handleset, Ultramax model, ANSI grade 2, centered 59-11/16" from top edge of panel with a 2-3/8" backset. |
| Lock latch plate:      | Steel, secured with two (2) #9 x 3/4" long screws  |
| Lock strike plate:     | Steel, centered 59-11/16" from top edge of panel, set into edge of astragal and held with (2) #8 x 3" long screws  |
| Deadbolt:              | Option 1 - Schlage F series deadbolt, model F60/62, ANSI grade 1, centered 54-3/16" from top edge of panel with a 2-3/8" backset.<br>Option 2 - Schlage B series deadbolt, model B60/62, ANSI grade 1, centered 54-3/16" from top edge of panel with a 2-3/8" backset<br>Option 3 - Kwikset Signature 780 series deadbolt, Ultramax model, ANSI grade 2, centered 54-3/16" from top edge of panel with a 2-3/8" backset.                                 |
| Deadbolt latch plate:  | Steel, secured with (2) #8 x 1-1/2" screws   |
| Deadbolt strike plate: | Steel, centered 54-3/16" from top edge of panel, set into edge of astragal and fastened with [2] #8 x 3" screws  |

Hinges: 4 x 4 butt hinge, 6-7/16", 32-9/16", 58-5/8" and 84-13/16" from top edge of panel. Top (2) hinges of either panel fastened with (2) #10 x 2-1/2" screws and (2) #9 x 3.4" screws to jamb. Lower (2) hinges fastened with (1) #10 x 2-1/2" screw and (3) #9 x 3/4" screws, (4) #9 x 3/4" screws fasten hinges to stile.

Astragal: DLP industries, (part # AST80RISW) fastened to edge of passive panel with #8 x 2" screws. Steel shoot bolt, 20" by 5/16" diameter inserted into both ends of astragal, housed in a 3" tall metal stiffener. Bolt is inserted into 3/8" diameter hole drilled through sill, fully engaging sill. Same size hole drilled into head where a steel retainer plate is fastened with (2) #8 x 3" screws to head, bolt fully engages head.

**Product Identification:** A label will be affixed to the door. The label includes the manufacturer's name (**Plastpro, Inc.**); product name; performance characteristics; and the applicable standard: ASTM E-330-02.

### LIMITATIONS

#### Design pressures (DP):

| System | Overall Width<br>(in.) | Overall Height<br>(in.) | Design Pressure<br>(psf) |
|--------|------------------------|-------------------------|--------------------------|
| 1      | 149                    | 98                      | ±40                      |

**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:** Door assemblies with dimensions equal to or smaller than those specified above are acceptable within the limitations specified in this report.

### INSTALLATION INSTRUCTIONS

**Installation:** The door assembly may be fastened to wood framing (minimum  $G \geq 0.42$ ), concrete (minimum compressive strength 3000 psi), CMU or steel studs (minimum 18 gauge,  $F_y = 33,000$  psi). The anchors shall be as follows:

Wood: #10 x 2 1/2" Phillips flathead screws

Hollow CMU or Concrete: 3/16" diameter x 3 1/2" long Tapcon anchor

Steel Stud: #10 x 2" Tek screws

#### Anchorage Locations:

Jambs:

Outside of fixed sidelites: The fasteners for each jamb of the fixed frames are located 6" from the head and sill and spaced approximately 23" o.c. thereafter.

Sidelite to Door: The sidelites are anchored to the double doors along the jambs with #10 x 2" long Phillips flathead screws located at 6" from the head and sill and spaced approximately 23" o.c.

Head and Sill:

Fixed Lites: The fasteners are located 6" from each end of the sidelite frame and 6" from the mullion. One fastener is located at midspan.

Doors: The fasteners are located at 3" and 6" from each end and 3" and 6" on either side of the astragal. One fastener is located at the midspan of each door.

**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.