

TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION DR-418

Effective August 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 **October 2011**.*

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.

Wood Glazed Inswing Double Entry Doors, Non-impact Resistant, manufactured by

Bevel King Door & Glass Company
5455 Guhn Road
Houston, Texas 77040
Telephone: (713) 460-0045

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 wood glazed inswing double entry doors evaluated in this report are non-impact resistant doors. This product evaluation report is for wood glazed inswing double entry doors based on the following tested construction:

General Description:

System	Description	Label Rating
1	Wood Glazed Inswing Double Entry Door; (XX)	Design Pressure: +50/-50 psf Maximum Size Tested: 6'2" x 8'1"

Component Dimensions:

System	Overall Size	Panel Size	Daylight Opening Size
1	74" x 97"	Two: 36" x 96"	Two: 21" x 66"

Glazing Description:

System	Glass Construction ¹	Glazing Method ²
1	IG-1	GM-1

Note: ¹ See the "Glass Construction Key" for the glass construction.

² See the "Glazing Method Key" for the glazing method description.

Glass Construction Key:

IG-1: Sealed insulating glass units. The sealed insulating glass units are comprised of two double strength ($\frac{1}{8}$ ") fully tempered glass lites separated by a Swiggle spacer system. There is a $\frac{3}{16}$ " beveled annealed glass lite located in the center of the air space that is separated by an aluminum true muntin frame that is held together at each point with tack welds. 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 set from the interior against a bed of silicone sealant backbedding. The insulating glass units are secured in place with wood glazing stops.

Frame Construction: The frame members consist of wood members with an Endura Z-Series aluminum adjustable sill with a wood insert. The sill is secured to the frame with staples and screws. The frame corners at the head are secured together with staples and screws.

Panel Construction: The panel stiles and rails are constructed of wood sections. The stile rails and corners are butted construction, secured together with glue and wood dowels.

Astragal: The astragal is constructed of wood sections. The astragal is secured to the door panel with finish nails.

Hardware:

- 4" butt hinges; Three (3) required; Secured to the door panel with four (4) No. 8 x $\frac{3}{4}$ " screws. Secured to the door frame jamb with two (2) No. 8 x $\frac{3}{4}$ " screws and two (2) No. 10 x 2" screws.
- Lock and deadbolt strike plate; One (1) required per lockset and deadbolt; Secured with two (2) No. 10 x 2" screws in each strike plate.
- Kwikset Series 400 lockset; One (1) required; Secured with two (2) No. 10 x 2" screws.
- Kwikset Series 660 deadbolt; One (1) required; Secured with two (2) No. 10 x 2" screws.
- Surface bolts; Two (2) required on each door panel; An 8" surface bolt at the bottom and a 6" surface bolt at the top; Each is secured to the door panel with four (4) $\frac{1}{4}$ " x 3" slotted machine bolts with washer and nut.
- Surface bolt strike plates; One (1) required for each surface bolt; Located at the door frame head and at the door frame sill; Each secured with two (2) No. 10 x $1\frac{1}{4}$ " screws.

Product Identification: A certification program label (NAMI) will be affixed to the assembly. The certification program label includes the manufacturer's name; the product name: **Glazed Wood Inswing Double Entry Door**; performance characteristics; the approved inspection agency (NAMI); and the following applicable standard: ASTM E 330-02.

LIMITATIONS

Design pressures (DP):

System	Overall Width (in.)	Overall Height (in.)	Design Pressure (psf)
1	74	96	± 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: Door 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 manufacturer's recommended installation instructions. Detailed installation instructions and drawings are available from the manufacturer.

Installation: The wall framing shall be minimum Southern Yellow Pine dimension lumber. The door is secured to the wall framing using the frame of the door with minimum No. 10 x 2 ½" screws. Along the head, a minimum of five (5) fasteners are required, with one (1) located approximately 3 inches from each end, and the remaining three (3) are evenly spaced. Along the sill, a minimum of two (2) fasteners are required, each located approximately at the mid-span of each door panel. Along each side jamb, a minimum of six (6) fasteners are required, with one (1) located approximately 3 inches from each end, and the remaining four (4) are evenly spaced. Two fasteners at each hinge location (see hardware section) shall penetrate into the wall framing. All fasteners shall be long enough to penetrate a minimum of 1 ½" into the 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.