

TEXAS DEPARTMENT OF INSURANCE

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Product Evaluation
DR-267

Effective July 1, 2007

*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 3 years after the effective date.*

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.

Neuma Outswing Hinged French Patio Door, Impact Resistant, manufactured by

Nan-Ya Plastics Corporation USA
8989 North Loop East
Houston, TX 77029
(713) 674-7822

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 hinged glass doors are configured as double French doors. The hinged glass doors evaluated in this report are impact resistant. This evaluation report includes the following configuration: OXXO.

Overall Dimensions: 12'-1 1/4" wide x 7'-11 1/2" high x 5 3/4" thick

Panel Descriptions: Active and passive panels: 35 3/4" wide x 93 5/16" high x 1 3/4" thick
Stationary panels: 35 5/8" wide x 93 5/16" high x 1 3/4" thick

Frame and Panel Construction: The frame members consist of foam core PVC, with the corners mitered, coped and butted, and secured with #10 x 2 1/2" long flat head screws. The panel members are foam cored with wood, PVC foam, and steel reinforcement. Panel member top and bottom rails run full width of the panel, with stiles terminating at the rails. Both the frame and panels have fiberglass cladding.

Glazing: Applies to the operable and fixed panels.

Glazing Material (Impact Resistant): All panels are glazed with nominal 1" thick insulating glass. The impact resistant glazing insert is constructed of one (1) laminated interior lite consisting of a 1/8" thick annealed sheet, a Solutia 0.090" PVB interlayer, and a 1/8" thick annealed sheet; a 1/2" aluminum spacer; and a 1/8" thick tempered exterior light.

Glazing Method:

Each panel is glazed with a structural silicone back bedding compound at the exterior heel of the glass around the perimeter and a rigid PVC glazing bead at the interior of the glass.

Maximum Daylight Opening: 21" wide x 79" high

Reinforcement: The stiles of each panel are reinforced with a 1/8" thick x 1 17/32" wide flat steel bar that extends the full height of the stile. The stile reinforcement is attached to the integral wood blocking with

PRODUCT DESCRIPTION (Continued)

$1\frac{1}{32}$ " x $1\frac{19}{32}$ " nylon screws spaced 2" from each end and 16" o.c. Aluminum reinforcement is located at the exterior face of the passive panel lock stile, the interior face of the active panel lock stile, and the interior side of the fixed panel hinge stile.

Hardware:

Hinges: Four (4) 4" five-knuckle steel butt hinges on each door panel, located $8\frac{1}{2}$ " and 34" from the panel bottom rail and 8" and $33\frac{1}{4}$ " from the top panel rail. The hinges are secured to the door stile and astragal with four (4) #10 x $2\frac{5}{8}$ " long screws per hinge leaf.

Locks: Active Door Panel: Nan Ya Tiffany or Royal series 4-point lock set with deadbolt. The lock points are located $5\frac{1}{2}$ " and 36" from the door panel bottom rail, and $9\frac{1}{2}$ " from the door panel top rail, with a deadbolt located 38" from the door panel bottom rail.

Passive Door Panel: Nan Ya Tiffany or Royal series 2-point lock set actuates two (2) $\frac{3}{8}$ " diameter stainless steel bars located in the door panel stile to engage keepers in the frame head and sill. =

Multi-Point Lock Keeper: Attached to the passive panel stile edge with two (2) #10 x 1" screws.

Active Panel Hook Keeper (2): Attached to the passive panel stile edge with two (2) #8 x 1" screws per keeper.

Top/Bottom Bar Keeper (2): Attached to the frame head and sill with two (2) #8 x 3" screws per keeper.

Product Identification: A label will be affixed to the hinged glass door units. The label shall include the manufacturer's name, performance characteristics, and approved inspection agency to indicate compliance with AAMA/NWWDA 101/I.S.2 (HGD-R70 145 x 96) and AAMA 506-2000 (ASTM E 1886-04, DP=50 psf, and ASTM E 1996-03 (Type D missile) or ASTM E 1996-97 (Type C missile)).

LIMITATIONS

Product Designation	Configuration	Maximum Overall Width ¹ (in.)	Maximum Overall Height ¹ (in.)	Design Pressures (psf)
HGD-R70	OXXO	145	96	±50

¹The active, inactive, and stationary panels are limited to the width and height indicated in the product description and panel descriptions sections of this report.

Impact Resistance: Door assemblies constructed with impact resistant glazing do satisfy the Texas Department of Insurance's criteria for protection from windborne debris. These door assemblies will not need to be protected with an impact protective system.

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 installed in accordance with the manufacturer's installation instructions and this product evaluation report. The wood-framing members shall be a minimum Southern Yellow Pine (G≥0.55) lumber.

INSTALLATION INSTRUCTIONS (continued)

The door assembly shall be fastened through the frame into the wood framing members with a minimum of thirty-two (32) drywall screws located as follows:

Frame Head (12 total): #10 x 3" long drywall screws, one (1) located 4" from each frame jamb, one (1) located 4" from each side of the hinge and lock stiles, and one (1) centered midspan of each panel.

Frame Sill (12 total): #10 x 3" long drywall screws, one (1) located 5" from each frame jamb, one (1) located 5" from each side of the hinge and lock stiles, and one (1) centered midspan of each panel..

Frame Jambs (5 each): #10 x 3" long drywall screws, one (1) located 3" from the head, one (1) located 3 ½" from the sill, and three (3) evenly spaced along the jamb between the top and bottom jamb screws.

The perimeter of the frame shall be sealed with silicone sealant.

If the frame is attached to concrete rather than wood framing members, a ⅜" diameter flat head Tapcon concrete anchor may be substituted for the drywall screws noted above. The Tapcon anchor must have a minimum embedment of 1 ¼" into the concrete.

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