TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION

DR-162

Effective February 1, 2006 Revised May 1, 2006

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 Inswing Hinged French Patio Door, Non-Impact Resistant, manufactured by

Nan-Ya Plastics Corporation USA 8909 North Loop East, Suite 800 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 a double French door. The hinged glass doors evaluated in this report are non-impact resistant. This evaluation report includes the following configuration: OXXO.

Overall Dimensions: 11'-9" wide x 8'-0" high x 5 $\frac{3}{4}$ " deep

Panel Descriptions: Fixed and operating panels are $34 \frac{1}{2}$ wide x $92 \frac{5}{8}$ high x $1 \frac{3}{4}$ deep

Frame and Panel Construction: The frame members consist of a foam core PVC. The frame members are mitered, coped and butted, and the corners are secured with #10 x $2\frac{1}{2}$ " long drywall screws. The panel members are constructed of a foam core PVC, and wood and a foam core. Both the frame and panels have fiberglass cladding.

Glazing: Applies to the operable and fixed panels.

Glazing Material (Non-Impact Resistant): All panels are glazed with $\frac{5}{8}$ " thick insulating glass consisting of two pieces of $\frac{1}{8}$ " thick tempered glass separated by a 0.372" wide x 0.296" high stainless steel box spacer system.

Glazing Method:

Each panel is glazed with structural silicone back bedding compound at the exterior heal of glass around the perimeter. A rigid PVC snap-in glazing bead is provided at the interior of the glass.

Maximum Daylight Opening:

22" wide x 80" high

Reinforcement: The stiles of each panel are reinforced full-height with a $\frac{1}{8}$ " wide x 1 $\frac{1}{2}$ " deep steel.

PRODUCT DESCRIPTION (Continued)

Hardware:

Hinges: Four (4) 2" x 2" x 4" steel butt hinges on each door panel. The hinges are secured to the door panels with four (4) #8 x 1" long flathead screws for each hinge. The hinges are secured to the fixed stiles with two (2) #8 x 1" long flathead screws and two (2) #8 x 2 $\frac{1}{2}$ " long drywall screws.

Locks: Nan Ya Tiffany and Royal series 3-point stainless steel lock system with deadbolt. The lock system is secured to the left edge of the right center panel with nine (9) #8 x 2 $\frac{1}{2}$ " long steel drywall screws. The lock points are located 12 $\frac{1}{8}$ ", 55 $\frac{1}{2}$ " and 83 $\frac{5}{8}$ " on center from the top of the stile

Keeper (Brass): $4\frac{7}{8}$ " high x $1\frac{5}{8}$ " deep, located opposite of the top and bottom lock points, secured with four (4) #8 x 1" long flathead screws.

Keeper (Die cast metal): $14\frac{3}{4}$ " high x $\frac{7}{8}$ " deep, located centered $53\frac{1}{2}$ " from the top of the stile, positioned to catch dead bolt and lock, secured with three (3) #8 x 1" long flathead screws. **Shoot Bolt and Keeper:** lever operated, located at the top and bottom of the lock stile of inactive panel.

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-R40 141x96).

LIMITATIONS

Product Designation	Configuration	Maximum Overall Width¹ (in.)	Maximum Overall Height ¹ (in.)	Design Pressures (psf)
HGD-R40	OXXO	141	96	±40

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

Impact Resistance: Door assemblies constructed with non-impact resistant glazing 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.

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.

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:

Head (8 total): #8 x 3" long drywall screws, centered 4", 18" and $32 \frac{1}{2}$ " from either jamb and centered 16 $\frac{1}{2}$ " either direction from the center of the door.

Sill (12 total): #8 x 3" long drywall screws, centered 4", 18", $32 \frac{1}{2}$ ", $5 \frac{1}{2}$ " from either jamb and centered $2 \frac{1}{2}$ ", $16 \frac{1}{2}$ ", and $30 \frac{1}{2}$ " either direction from the center of the sill.

INSTALLATION INSTRUCTIONS (continued)

Both Jambs (6 each): #8 x 3" long, 6", located 23 $\frac{1}{2}$ ", 37 $\frac{1}{2}$ ", 54", 70", and 86" from the head.

In addition, a minimum of thirty-seven (37) #6 x 1" long drywall screws shall be spaced a maximum of 12" o.c. along the head nailing fin, and spaced 12" o.c. along each jamb nailing fin; resulting in 17 drywall screws in the head and 10 drywall screws in each jamb. The perimeter of the frame shall be sealed with silicone sealant.

If the frame is attached to concrete rather than wood framing members, a $\frac{3}{16}$ " 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 $\frac{1}{4}$ " 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).