



Product Evaluation

DR132 | 0116

Engineering Services Program

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 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.

For more information, contact TDI Engineering Services Program at (800) 248-6032.

Evaluation ID: DR-132 **Effective Date:** January 1, 2016
Re-evaluation Date: January 2020

Product Name: 6'-8" Height, "New Century", NC-58, Mahogany, Glazed, Inswing and Outswing Double Doors with NC51S Sidelites, Non-Impact Resistant

Manufacturer: Distinctive Doors, Inc. (dba Pella Corporation)
933 Hensley Lane
Wylie, Texas 75098
(800) 394-6680

General Description:

System	Description	Design Pressure Rating
1	Mahogany (Wood), Glazed, Inswing Double Doors with Sidelites; OXXO; the door panels incorporate a single, elliptical lite. The NC51S sidelites incorporate a single, rectangular lite.	+47/-47 psf Maximum Size Tested: 107" x 82-1/4"
2	Mahogany (Wood), Glazed, Outswing Double Doors with Sidelites; OXXO; the door panels incorporate a single, elliptical lite. The NC51S sidelites incorporate a single, rectangular lite.	+47/-47 psf Maximum Size Tested: 106-3/4" x 81-1/4"

Product Dimensions - Doors:

System	Overall Frame Size	Active Door Panel Size	Passive Door Panel Size with Astragal	Ellipse-Shaped Lite Size
1	6' 4" x 6' 10-1/4"	36" x 80"	37-1/8" x 80"	15-1/8" x 53-1/8"
2	6' 3-3/4" x 6' 9-1/4"	36" x 80"	37-1/8" x 80"	15-1/8" x 53-1/8"

Product Dimensions - Sidelites:

System	Overall Frame Size	Sidelite Panel Size	Rectangular-Shaped Lite Size
1	1' 3-1/2" x 6' 10-1/4"	14" x 81"	5-1/2" x 60"
2	1' 3-1/2" x 6' 9-1/4"	14" x 80"	5-1/2" x 60"

Hardware:**Hinges:**

- Active and Inactive Door Panel: Three Hager P/N RCBB1279 4" x 5/8" radius butt hinges set at 9-3/4", 38-3/4", 67-1/4" o.c. from the top of the jambs; secured to the door panel with four #10 x 1-1/4" Phillips flat head wood screws. The hinges are secured to the jamb with three #10 x 1-1/4" Phillips flat head wood screws and one #10 x 2" Phillips flat head wood screw.

Handset and Lock Assemblies:

- Active Door Panel: Schlage Maximum Security F 360 Deadbolt and Handset or Emtek Model Sandcast Bronze P/N 451211 Deadbolt and Handset. The deadbolt is 38-1/2" from the top rail. The handset is 44" from the top rail.

Other Hardware:

- **Surface Bolts:** Inactive Door Panel; Ives No. 454 Surface Bolts (2 per door panel), located at the top and bottom of the inactive door panel, 2-1/4" o.c. from the lock stiles.
- **Surface Bolt Strike Plates:** The surface bolts are secured to the panel with four #10-24 hex bolts provided by the manufacturer. The surface bolt strike plates are secured with two #10 x 2-1/2" Phillips flat head wood screws.
- **Deadbolt and Handset Strike Plates:** The deadbolt strike plates are secured with four #10 x 1-1/4" Phillips flat head wood screws. The handset strike plates are secured with #8 x 3/4" Phillips flat head wood screws.

Threshold:

- **System 1 (In-swing):** Schlegel Hydro-Sill Aluminum Threshold
- **System 2 (Out-swing):** Imperial Bump-Face Aluminum Threshold

Product Identification (Manufacturer Label on Door):

System		
1, 2	Manufacturer	Distinctive Doors, Inc.
	Product Name	System 1: New Century, New Dimension & Ambassador Mahogany In-Swing Double Doors with Sidelites, Non-Impact Resistant System 2: New Century, New Dimension & Ambassador Mahogany Out-Swing Double Doors with Sidelites, Non-Impact Resistant
	Test Standards	TAS 202

Impact Resistance:

System	Impact Resistant	Requirement
1, 2	No	Provide an impact protective system when installing the product in the Inland I and Seaward zones.

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

Sidelites: Only use sidelites with doors. Do not install sidelites individually.

Installation:

General: Install the door assemblies according to the manufacturer's installation instructions and this product evaluation report. The wood-framing members must be minimum No. 2 Southern Pine lumber. All fasteners must be corrosion resistant.

- **Sidelite Jamb:** The jamb legs must be fastened to the wood-framing members of the rough opening with #8 x 2-1/2" Phillips flat head wood screws in each jamb spaced no further than 3" from each corner and spaced 17" (maximum) thereafter (total: five screws per jamb).
- **Sidelite Head and Sill:** The head and sill must be fastened to the wood-framing members of the rough opening with #8 x 2-1/2" Phillips flat head wood screws located 3" and 6" from the outside jamb (total: two screws per member). For System #2, one additional #10 x 3" Phillips flat head wood screw must be located 3" on either side of the sidelite head and sill interior jamb (total: one screw per member).
- **Mullion:** The door and sidelite frames are joined using laminated veneer lumber (LVL) reinforcing between them. The LVL is attached to the sidelite frames using adhesive and secured using two #8 x 1-3/4" screws located 1-1/2" from each end and spaced 12" on center. The door frame is secured to the LVL both interior and exterior using 2" x 1/2" corrugated steel fasteners, five in each end, one 3" from each end and 12" on center thereafter. The mullion is covered on the interior and exterior by a mullion cover, secured using adhesive and brad nails.
- **Door Head and Sill:** The head and sill must be fastened to the wood-framing members of the rough opening with #8 x 2-1/2" Phillips flat head wood screws located 6" from each jamb, at the midpoint of the panels, and 6" from the frame centerline (total: 6 screws per member). One additional #10 x 3" Phillips flat head wood screw must be located 3" on either side of the door head and sill centerline (total: two screws per member).

If the frame is attached to concrete rather than wood framing members, a 3/16" diameter flat head Tapcon concrete anchor may be substituted for the #8 x 2-1/2" screws noted above. The Tapcon anchor must have a minimum embedment of 1-1/4" into the concrete.

Note: Keep the manufacturer's installation instructions on the job site during installation. Use corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.