

TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION

DR-622

Effective Date: May 1, 2013
Reevaluation Date: **August 2016**

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.

Ultra Wood Glazed Outswing French Double Entry Doors with Stationary Doors, Non-impact Resistant, manufactured by

Kolbe & Kolbe Millwork Co., Inc.
1323 South Eleventh Avenue
Wausau, WI 54401
(715) 842 - 5666

General Description:

System	Description	Label Rating	Design Pressure Rating (psf)	Hallmark Certification
1	Ultra Wood Outswing French Double Entry Doors with Stationary Doors	LC-PG65 151x99 – SHD	+65/-65	413-H-1222.00 413-H-1222.01 413-H-1222.02 413-H-1222.03

Component Dimensions:

System	Overall Size	Panel Size	Panel Daylight Opening Size
1	151.12" x 98.59"	Four: 35.75" x 96"	27" x 84"

Hardware:

- 5-point lock with 3 strikes on astragal, 1 strike at the head and the sill; One (1) required; Located on the active panel.
- Dead bolt lock (Hoppe HLS9000); Located on the active and passive panel.
- Dead bolt/latch strike plate; One (1) required on astragal; Secured with three (3) No. 7 x $\frac{5}{8}$ " screws
- Strike plates; One (1) required at head and one (1) at sill, both on astragal; Each secured with two (2) No. 7 x $\frac{5}{8}$ " screws.
- 2-point handle activated shoot bolt lock system with 1 strike at the head and the sill frame; One (1) required; Located on the passive panel.

Hardware (continued):

- Shoot bolt strike plates; One (1) required at the head and one (1) at the sill; Each secured with three (3) No. 10 x 2 ½" screws.
- Hinges; Four (4) on each panel; Secured to the door slab with four (4) No. 9 x 1 ¾" screws. Secured to the door side jamb with four (4) No. 9 x ¾" screws.

Product Identification (Certification Agency Label on Door):

System	Certification Agency	WDMA
1	Manufacturer's Name or Code Name	Kolbe & Kolbe Millwork Co., Inc.
	Product Name	Ultra Outswing French Door w/(2) Stationary Doors
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-08

Impact Resistance:

Impact Resistant	Requirement
No	Impact protective system required when product is installed in areas where windborne debris protection is required

Installation:

Option 1: The door assembly shall be fastened to minimum Southern Yellow Pine lumber. The door assembly is secured to the wall framing using Kolbe & Kolbe metal installation clips. The installation clips (1 ⅝" x 10 ⅛" x 0.04") are secured to the door frame side jambs, head, and sill. The clips are secured to the door frame with two (2) No. 8 x ¾" screws. The clips are secured to the wall framing with one (1) No. 8 x 1 ¾" screw. The fasteners shall be long enough to penetrate a minimum of 1 ½ inches into the wall framing. The spacing of the clips is specified in the table below.

Installation Clip Spacing:

System	Distance From Each Corner	Head (on center spacing)	Sill (on center spacing)	Side Jambs (on center spacing)
1	Head – Stationary Doors: 12 ¾" Head- Entry Doors: 12 ¾" Door Side Jambs: 16 ⅛"	12 ¾"	See Below	Door: 16 ⅛"

Sill: The sill is secured to the wall framing with minimum No. 10 x 3" screws. The fasteners are located approximately 6 inches from each door corner and approximately 14 inches on center. The fasteners shall be long enough to penetrate a minimum of 1 ½ inches into the wall framing.

Option 2: The door assembly shall be fastened to minimum Southern Yellow Pine lumber. The door assembly is secured to the wall framing using the door frame with minimum No. 10 x 2 ½" screws. The fasteners shall be long enough to penetrate a minimum of 1 ½ inches into the wall framing. The spacing of the fasteners is specified in the table below.

Fastener Spacing:

System	Distance From Each Corner	Head (on center spacing)	Sill (on center spacing)	Side Jambs (on center spacing)
1	Head: 12 $\frac{3}{4}$ " Door Side Jambs: 10 $\frac{5}{16}$ "	12 $\frac{3}{4}$ "	See Below	Door: 10 $\frac{5}{16}$ "

Sill: The sill is secured to the wall framing with minimum No. 10 x 3" screws. The fasteners are located approximately 5 inches from each corner and approximately 14 inches on center. The fasteners shall be long enough to penetrate a minimum of 1 $\frac{1}{2}$ inches into the wall framing.

Hinges (Options 1 and 2): At the top and bottom hinge for each door, two (2) No. 10 x 2 $\frac{1}{2}$ " screws are required. At the two middle hinges for each door, one (1) No. 10 x 2 $\frac{1}{2}$ " screw is required.

Vertical Mullion (Options 1 and 2): The vertical mullion consists of the fixed and operable door side jambs sealed and secured together with No. 10 x 3" screws driven through behind the hinge plates of the operable door and into the fixed door frame.

Gemini Clips (Options 1 and 2): Two (2) Kolbe & Kolbe metal Gemini clips are required at the head above the astragal and at each mullion end. The Gemini clips (1 $\frac{5}{8}$ " x 10 $\frac{1}{16}$ " x 0.04") are secured to the door frame with two (2) No. 8 x $\frac{3}{4}$ " screws. The clips are secured to the wall framing with one (1) No. 8 x 1 $\frac{3}{4}$ " screw. The fasteners shall be long enough to penetrate a minimum of 1 $\frac{1}{2}$ inches into the wall framing.

Nailing Fin (Options 1 and 2): The nailing fin is secured to the wall framing with minimum 11 gauge smooth shank roofing nails spaced approximately 7 inches on center along the head and side jambs.

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.