



Product Evaluation

DR534 | 1115

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-534

Effective Date: November 1, 2015

Re-evaluation Date: August 2016

Product Name: Ultra Aluminum Clad Wood Glazed Outswing French Double Entry Doors, with and without Transom, Impact Resistant

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

General Description:

System	Description	Label Rating	Design Pressure Rating
1	Ultra Aluminum Clad Wood Outswing French Door	LC-PG65 75x99 – SHD Missile Level D	+65/-65 psf
2	Ultra Aluminum Clad Wood Outswing French Door with Transom	LC-PG65 75x159 – SHD SHD-LC65 75 x 159 Missile Level D	+65/-65 psf

Component Dimensions:

System	Overall Size	Panel Size	Panel Glass Daylight Opening Size	Transom Frame Size
1	74-7/8" x 98-19/32"	35-3/4" x 96"	27-11/16" x 84-7/8"	N/A
2	74-7/8" x 158-27/32"	35-13/16" x 96"	27-11/16" x 84-7/8"	74-7/8" x 60"

Hardware:

- **5-point Lock with Three Latches and Shoot Bolts Strikes at Head and Sill:** Located on the active panel.
- **Dead Bolt Lock:** One required. Located on the active panel.
- **Dead Bolt/Latch Strike Plate:** One required. Secure with three, No. 7 x 5/8" screws.
- **2-point Lock with Shoot Bolts at the Head and Sill:** Located on the passive panel.
- **Strike Plates:** One required at head and one at sill, both on side jamb. Secure each with two, No. 7 x 5/8" screws.
- **Shoot Bolt Strike Plates:** Two required, one required at the head and one at the sill. Secure each with two, No. 10 x 3" screws.
- **Hinges:** Four on each panel. Secure each to the door slab with four, No. 9 x 2" screws and to the side jamb with three, No. 9 x 3/4" screws and one, No. 10 x 2-1/2" screw.

Product Identification (Certification Agency Label on Door):

System		
1	Certification Agency	WDMA
	Manufacturer's Name or Code Name	Kolbe & Kolbe Millwork Co., Inc.
	Product Name	Ultra Outswing French Door
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-11 AAMA/WDMA/CSA 101/I.S.2/A440-08 ASTM E 1886, ASTM E 1996, Missile Level D
2	Certification Agency	WDMA
	Manufacturer's Name or Code Name	Kolbe & Kolbe Millwork Co., Inc.
	Product Name	Ultra Outswing French Door w/Transom
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-08 AAMA/WDMA/CSA 101/I.S.2/A440-05 ASTM E 1886, ASTM E 1996, Missile Level D

Impact Resistance:

System	Impact Resistant	Requirement
1, 2	Yes	These products satisfy TDI's criteria for protection from windborne debris in the Inland I and Seaward zone. Install the assemblies at a height on the structure that does not exceed the design pressure rating for the assemblies.

Installation:

- **Option 1 (Installation Clips):** Fasten door assembly to minimum Southern Yellow Pine lumber. Secure door assembly to wall framing using Kolbe & Kolbe metal installation clips. Secure installation clips (1-5/8" x 10-1/16" x 20-gauge) to doorframe side jambs, head, and sill. Secure clips to the doorframe with two, No. 8 x 3/4" screws, and to the wall framing with one, No. 8 x 1-3/4" screw. Fasteners must be long enough to penetrate a minimum of 1-1/2" into the framing. The spacing of the clips is specified in the table below.

System	Distance From Each Corner	Head (on center spacing)	Sill (on center spacing)	Side Jamb (on center spacing)
1	Head: 18-3/4" Side Jamb: 16-7/16"	N/A	See Below	16-7/16"
2	Transom Head: 10-3/4" Transom Side Jamb: 12" Door Side Jamb: 16-7/16"	10-3/4"	See Below	Transom: 12" Door: 16-7/16"

Sill: Secure sill to wall framing with minimum No. 10 x 3" Philips flat head screws. Locate fasteners approximately 13" to 14" on center. Fasteners must be long enough to penetrate a minimum of 1-1/2" into the framing.

- **Option 2 (Screws through Frame):** Fasten door assembly to minimum Southern Yellow Pine lumber. Secure door assembly to the wall framing using the doorframe with minimum No. 10 x 2-1/2" Philips flat head screws. Fasteners shall be long enough to penetrate a minimum of 1-1/2" into the framing. The spacing of the fasteners is specified in the table below.

System	Distance From Each Corner	Head (on center spacing)	Sill (on center spacing)	Side Jamb (on center spacing)
1	Head: 12-1/2" Door Side Jamb: 10-15/16"	12-1/2"	See Below	10-15/16"
2	Transom Head: 8" Transom Side Jamb: 8" Door Side Jamb: 11"	7-3/4"	See Below	Transom: 7-3/4" Door: 11"

Sill: Secure sill is to wall framing with minimum No. 10 x 3" Philips flat head screws. Locate fasteners approximately 13" to 14" on center. Fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing.

- **Nailing Fin (Options 1 and 2):** Secure vinyl nailing fin to wall framing with minimum 12-gauge smooth shank roofing nails spaced approximately 7" on center along the head and side jamb.

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