

TEXAS DEPARTMENT OF INSURANCE

Engineering Services Program / MC 103-3A 333 Guadalupe Street P.O. Box 149104 Austin, Texas 78714-9104
Phone No. (512) 322-2212 Fax No. (512) 463-6693

PRODUCT EVALUATION

DR-654

Effective Date: November 1, 2013

Reevaluation Date: **October 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.

Heritage Wood Glazed French Outswing Hinged Entry Doors, 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	Heritage Wood French Outswing Hinged Doors	LC-PG65 75x99 – SHD LC PG65 74.88 x 98.59 - SHD	+65/-70	413-H-1233.00 413-H-1233.01 413-H-1233.02 413-H-1233.03

Component Dimensions:

System	Overall Size	Panel Size	Panel Daylight Opening Size
1	74.88" x 98.59"	Two: 35.75" x 96.00"	27.00" x 84.00"

Hardware:

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

Hardware (continued):

- Shoot bolt strike plates; One required at the head and one at the sill; Each secured with three No. 10 x 2 1/2" screws.
- Hinges; Four on each panel; Secured to the door slab with four No. 9 x 1 3/4" screws. Secured to the door side jamb with four No. 9 x 3/4" 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	Heritage French Outswing Door
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-11 AAMA/WDMA/CSA 101/I.S.2/A440-08

Impact Resistance:

Impact Resistant	Requirement
Yes	These products satisfy the Texas Department of Insurance's criteria for protection from windborne debris in the Inland I and Seaward zone . The assemblies may be installed at any height on the structure as long as the design pressure rating for the assemblies is not exceeded.

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 5/8" x 10 1/16" x 0.04") are secured to the door frame side jambs, head, and sill. The clips are secured to the door frame with two No. 8 x 3/4" screws. The clips are secured to the wall framing with one No. 8 x 1 3/4" screw. The fasteners shall be long enough to penetrate a minimum of 1 1/2 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: 18 3/4" Door Side Jambs: 16 7/16"	N/A	See Below	Door: 16 7/16"

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 door corner and approximately 18 1/2 inches on center. The fasteners shall be long enough to penetrate a minimum of 1 1/2 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 1/2" screws. The fasteners shall be long enough to penetrate a minimum of 1 1/2 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 $\frac{1}{2}$ " Door Side Jambs: 10 $\frac{15}{16}$ "	N/A	See Below	Door: 10 $\frac{15}{16}$ "

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 18 $\frac{1}{2}$ 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 No. 10 x 2 $\frac{1}{2}$ " screws are required. At the two middle hinges for each door, one No. 10 x 2 $\frac{1}{2}$ " screw is required.

Gemini Clips (Options 1 and 2): Two Kolbe & Kolbe metal Gemini clips are required at the head above the astragal. The Gemini clips (1 $\frac{5}{8}$ " x 10 $\frac{1}{16}$ " x 0.04") are secured to the door frame with two No. 8 x $\frac{3}{4}$ " screws. The clips are secured to the wall framing with one 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.

Brickmould (Options 1 and 2): The brickmould is secured to the wall framing with minimum 2" log T nails spaced approximately 12 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.