

Product Evaluation

WIN2327 | 0323

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: WIN-2327

Effective Date: March 1, 2023

Re-evaluation Date: March 2027

Product Name: Forgent Series Composite Fixed Windows, Fin and Frame Installation, Impact Resistant

Manufacturer: Kolbe & Kolbe Millwork Co., Inc.
1211 Depot Street
Manawa, WI, 54949
(920) 596-2501

General Description:

System	Description	Label Rating	Design Pressure Rating
1	Forgent Series Composite Double Hung Studio Sash Set; O	LC-PG65 60 x 80 – FW Missile Level D	+65 / -65 psf
2	Forgent Series Composite Double Hung Direct Set; O	LC-PG65 60 x 86 – FW Missile Level D	+65 / -65 psf
3	Forgent Series Composite Double Hung Direct Set; O	LC-PG65 29 x 72 – FW Missile Level D	+65 / -65 psf
4	Forgent Series Composite Casement Picture Sash Set; O	LC-PG65 72 x 72 – FW Missile Level D	+65 / -65 psf
5	Forgent Series Composite Casement Picture Direct Set; O	LC-PG65 56 x 86 – FW Missile Level D	+65 / -65 psf

General Description (continued):

System	Description	Label Rating	Design Pressure Rating
6	Forgent Series Composite Casement Direct Set; O	LC-PG50 29 x 72 – FW Missile Level D	+65 / -65 psf

Product Dimensions:

System	Overall Size	Sash Size	Glass Daylight Opening Size
1	60" x 80"	56-1/2" x 76-1/2"	53" x 73"
2	59-1/2" x 85-1/2"	N/A	54-13/16" x 80-13/16"
3	28-1/2" x 71-1/2"	N/A	23-13/16" x 66-13/16"
4	71-1/2" x 71-1/2"	70-1/8" x 70-1/8"	66-1/8" x 66-1/8"
5	55-1/2" x 85-1/2"	N/A	51-13/16" x 81-13/16"
6	28-1/2" x 71-1/2"	N/A	24-13/16" x 67-13/16"

Product Identification (Certification Label on Window):

System		
1	Certification Agency	WDMA
	Manufacturer's Name or Code Name	Kolbe & Kolbe Millwork Co., Inc.
	Product Name	Forgent Double Hung Sash Set Studio
	Test Standards	AAMA/WDAA/CSA 101/I.S.2/A440-11 AAMA/WDAA/CSA 101/I.S.2/A440-08 ASTM E 1886-13a; ASTM E 1996-12; Missile Level D
2	Certification Agency	WDMA
	Manufacturer's Name or Code Name	Kolbe & Kolbe Millwork Co., Inc.
	Product Name	Forgent Double Hung Direct Set
	Test Standards	AAMA/WDAA/CSA 101/I.S.2/A440-11 AAMA/WDAA/CSA 101/I.S.2/A440-08 ASTM E 1886-13a; ASTM E 1996-12; Missile Level D
3	Certification Agency	WDMA
	Manufacturer's Name or Code Name	Kolbe & Kolbe Millwork Co., Inc.
	Product Name	Forgent Double Hung Direct Set
	Test Standards	AAMA/WDAA/CSA 101/I.S.2/A440-11 AAMA/WDAA/CSA 101/I.S.2/A440-08 ASTM E 1886-13a; ASTM E 1996-12; Missile Level D

Product Identification (Certification Label on Window) - continued:

System		
4	Certification Agency	WDMA
	Manufacturer's Name or Code Name	Kolbe & Kolbe Millwork Co., Inc.
	Product Name	Forgent Casement Picture Sash Set
	Test Standards	AAMA/WDAA/CSA 101/I.S.2/A440-11 AAMA/WDAA/CSA 101/I.S.2/A440-08 ASTM E 1886-13a; ASTM E 1996-12; Missile Level D
5	Certification Agency	WDMA
	Manufacturer's Name or Code Name	Kolbe & Kolbe Millwork Co., Inc.
	Product Name	Forgent Casement Direct Set
	Test Standards	AAMA/WDAA/CSA 101/I.S.2/A440-11 AAMA/WDAA/CSA 101/I.S.2/A440-08 ASTM E 1886-13a; ASTM E 1996-12; Missile Level D
6	Certification Agency	WDMA
	Manufacturer's Name or Code Name	Kolbe & Kolbe Millwork Co., Inc.
	Product Name	Forgent Casement Direct Set
	Test Standards	AAMA/WDAA/CSA 101/I.S.2/A440-11 AAMA/WDAA/CSA 101/I.S.2/A440-08 ASTM E 1886-13a; ASTM E 1996-12; Missile Level D

Impact Resistance:

System	Impact Resistant	Requirement
1-6	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 (one of the following):

Systems 1, 2, 3, 4, 5, 6 (Nail Fin): The wall framing must be minimum Southern Yellow Pine dimension lumber. The assembly must be secured to the wall framing using the nail fin. At the head, sill, and side jambs, secure the nail fin to the wall framing with smooth shank roofing nails (minimum 0.120" shank diameter, 3/8" diameter head). Locate the fasteners approximately 4" from each corner and 4" on center. All fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing.

System 1 (Frame – screws): The wall framing must be minimum Southern Yellow Pine dimension lumber. The assembly must be secured to the wall framing using the frame. At the head, sill, and side jambs, secure the frame to the wall framing with minimum No. 8 PPH screws. Locate the fasteners approximately 6" from each corner and 12" on center at the head and sill and 6" from each corner and 10" on center at the side jambs. All fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing.

Systems 2, 4 (Frame – screws): The wall framing must be minimum Southern Yellow Pine dimension lumber. The assembly must be secured to the wall framing using the frame. At the head, sill, and side jambs, secure the frame to the wall framing with minimum No. 8 PPH screws. Locate the fasteners approximately 6" from each corner and 12" on center. All fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing.

System 5 (Frame – screws): The wall framing must be minimum Southern Yellow Pine dimension lumber. The assembly must be secured to the wall framing using the frame. At the head, sill, and side jambs, secure the frame to the wall framing with minimum No. 8 PPH screws. Locate the fasteners approximately 4" from each corner and 12" on center. All fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing.

System 3 (Frame – screws): The wall framing must be minimum Southern Yellow Pine dimension lumber. The assembly must be secured to the wall framing using the frame. At the head, sill, and side jambs, secure the frame to the wall framing with minimum No. 8 PPH screws. Locate the fasteners approximately 6" from each corner and 8" on center at the head and sill and 6" from each corner and 12" on center at the side jambs. All fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing.

System 6 (Frame – screws): The wall framing must be minimum Southern Yellow Pine dimension lumber. The assembly must be secured to the wall framing using the frame. At the head, sill, and side jambs, secure the frame to the wall framing with minimum No. 8 PPH screws. Locate the fasteners approximately 5" from each corner and 7" on center at the head and sill and 6" from each corner and 12" on center at the side jambs. All fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing.

System 1 (Frame – installation clips): The wall framing must be minimum Southern Yellow Pine dimension lumber. The assembly must be secured to the wall framing using the frame. At the head, sill, and side jambs, secure the frame to the wall framing with 1.00" wide x 5.875" long x 0.060"galvanized steel installation clips. Locate the fasteners approximately 6" from each corner and 12" on center at the head and sill and 6" from each corner and 10" on center at the side jambs. The clips are secured to the wall framing with one (1) No. 8 PFH screw. The clips are secured to the window frame with one (1) No. 8 x 3/4" PPH screw. All fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing.

Systems 2, 4 (Frame – installation clips): The wall framing must be minimum Southern Yellow Pine dimension lumber. The assembly must be secured to the wall framing using the frame. At the head, sill, and side jambs, secure the frame to the wall framing with 1.00" wide x 5.875" long x 0.060"galvanized steel installation clips. Locate the fasteners approximately 6" from each corner

and 12" on center. The clips are secured to the wall framing with one No. 8 PFH screw. The clips are secured to the window frame with one No. 8 x 3/4" PPH screw. All fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing.

System 5 (Frame – installation clips): The wall framing must be minimum Southern Yellow Pine dimension lumber. The assembly must be secured to the wall framing using the frame. At the head, sill, and side jambs, secure the frame to the wall framing with 1.00" wide x 5.875" long x 0.060"galvanized steel installation clips. Locate the fasteners approximately 4" from each corner and 12" on center. The clips are secured to the wall framing with one No. 8 PFH screw. The clips are secured to the window frame with one No. 8 x 3/4" PPH screw. All fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing.

System 3 (Frame – installation clips): The wall framing must be minimum Southern Yellow Pine dimension lumber. The assembly must be secured to the wall framing using the frame. At the head, sill, and side jambs, secure the frame to the wall framing with 1.00" wide x 5.875" long x 0.060"galvanized steel installation clips. Locate the fasteners approximately 6" from each corner and 8" on center at the head and sill and 6" from each corner and 12" on center at the side jambs. The clips are secured to the wall framing with one No. 8 PFH screw. The clips are secured to the window frame with one No. 8 x 3/4" PPH screw. All fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing.

System 6 (Frame – installation clips): The wall framing must be minimum Southern Yellow Pine dimension lumber. The assembly must be secured to the wall framing using the frame. At the head, sill, and side jambs, secure the frame to the wall framing with 1.00" wide x 5.875" long x 0.060"galvanized steel installation clips. Locate the fasteners approximately 5" from each corner and 7" on center at the head, sill, side and side jambs. The clips are secured to the wall framing with one No. 8 PFH screw. The clips are secured to the window frame with one No. 8 x 3/4" PPH screw. All fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing.

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