

Product Evaluation

DR422 | 0420

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-422

Effective Date: April 1, 2020

Re-evaluation Date: April 2024

Product Name: 8'0" Glazed or Opaque Fiberglass Side Hinged Doors, Inswing, Singles and Doubles, with or without Sidelites, Non-Impact Resistant

Manufacturer: MasterGrain
16566 Highway 12
Midland, Ontario, Canada
(707) 527-2973

General Description: Glazed

System	Description	Design Pressure Rating	Drawing Number
1	3'-0" x 8'-0" Single Door (X)	+40 / -45 psf	TX-4044
2	3'-0" x 8'-0" Single Door w/ Boxed Sidelite & Integral Mullion (OX, XO)	+40 / -45 psf	TX-4044
3	3'-0" x 8'-0" Single Door w/ Boxed Sidelites & Integral Mullion (OXO)	+40 / -45 psf	TX-4044
4	6'-0" x 8'-0" Double Door (XX)	+45 / -45 psf	TX-4045
5	6'-0" x 8'-0" Double Door w/ Boxed Sidelites & Integral Mullions (OXXO)	+45 / -45 psf	TX-4045

General Description: Opaque

System	Description	Design Pressure Rating	Drawing Number
6	3'-0" x 8'-0" Single Door (X)	+55 / -60 psf	TX-4046
7	3'-0" x 8'-0" Single Door w/ Boxed Sidelite & Integral Mullion (OX, XO)	+55 / -60 psf	TX-4046
8	3'-0" x 8'-0" Single Door w/ Boxed Sidelites & Integral Mullion (OXO)	+55 / -60 psf	TX-4046
9	6'-0" x 8'-0" Double Door (XX)	+45 / -45 psf	TX-4047
10	6'-0" x 8'-0" Double Door w/ Boxed Sidelites & Integral Mullions (OXXO)	+45 / -45 psf	TX-4047

Product Dimensions:

System	Overall Size	Panel Size	Panel Daylight Opening Size
1, 6	37.50" x 98"	35.75" x 95.25"	21.12" x 63.12" (System 1) N/A (System 6)
2, 7	58.07" x 98"	Door: 35.75" x 95.25" Sidelite: 17.56" x 95.25"	Door: 21.12" x 63.12" (System 2) Door: N/A (System 7) Sidelite: 7" x 63.12"
3, 8	78.63" x 98"	Door: 35.75" x 95.25" Sidelite: 17.56" x 95.25"	Door: 21.12" x 63.12" (System 3) Door: N/A (System 8) Sidelite: 7" x 63.12"
4, 9	74" x 98"	35.75" x 95.25"	21.12" x 63.12" (System 4) N/A (System 9)
5, 10	115.13" x 98"	Door: 35.75" x 95.25" Sidelite: 17.56" x 95.25"	Door: 21.12" x 63.12" (System 5) Door: N/A (System 10) Sidelite: 7" x 63.12"

Components and Hardware:

System	Component	Quantity	Attachment Method
1-10	Hinges	4	Install hardware in accordance with MasterGrain drawing Nos. TX-4044, TX-4045, TX-4046, and TX-4047, dated January 4, 2010, Revision 1 dated March 3, 2020. Signed and sealed by Lyndon F. Schmidt, P.E. on March 4, 2020.
	Kwikset Lock Series 690 CP OR Copper Creek BK2040 SC #8379 Passage	1	
	Kwikset Series 690 CP Deadbolt OR Copper Creek BK2410 SC #8003 Deadbolt	1	
	Latch and Deadbolt strike plate	1 each	

Product Identification (Manufacturer Label on Door):

System		
1-3	Certification agency	Self-labeled
	Manufacturer's name or code name	MasterGrain
	Product name	Glazed Fiberglass Doors, Inswing, Non-Impact Resistant Door Panels, Singles w/ or w/out Sidelites
	Test standards	ASTM E330-14
4-5	Certification agency	Self-labeled
	Manufacturer's name or code name	MasterGrain
	Product name	Glazed Fiberglass Doors, Inswing, Non-Impact Resistant Door Panels, Doubles w/ or w/out Sidelites
	Test standards	ASTM E330-14
6-8	Certification agency	Self-labeled
	Manufacturer's name or code name	MasterGrain
	Product name	Opaque Fiberglass Doors, Inswing, Non-Impact Resistant Door Panels, Singles w/ or w/out Sidelites
	Test standards	ASTM E330-14
9-10	Certification agency	Self-labeled
	Manufacturer's name or code name	MasterGrain
	Product name	Opaque Fiberglass Doors, Inswing, Non-Impact Resistant Door Panels, Doubles w/ or w/out Sidelites
	Test standards	ASTM E330-14

Impact Resistance:

System	Impact Resistant	Requirement
1-10	No	Provide an impact protective system when installing the product in areas that require windborne debris.

Installation:

System		
1-10	Type of installation	Install in accordance with MasterGrain drawing Nos. TX-4044, TX-4045, TX-4046, and TX-4047, dated January 4, 2010, Revision 1 dated March 3, 2020. Signed and sealed by Lyndon F. Schmidt, P.E. on March 4, 2020.
	Wall framing	
	Fasteners	
	Fastener location/spacing	
	Fastener penetration	

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