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# **Product Evaluation**

GDR49 | 1220

**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:** GDR-49 **Effective Date:** December 1, 2020

Re-evaluation Date: December 2024

Product Name: Model 426, 724, 730, 735, 750, 755, and 790 Residential Steel Sectional Garage

Doors, Non-Impact Resistant

Manufacturer: Windsor Door

5800 Scott Hamilton Drive

Little Rock, AR (501) 562-1872

# **General Description:**

These residential garage doors are constructed from galvanized, pre-painted steel sections that are embossed with wood grain texture and other designs. Models 426, 724, 730, 735, 750, and 755 are pan style garage doors. These doors are available with and without insulation. Model 790 is an insulated, sandwich-style garage door. Windows in pan-style and in sandwich-style doors are optional. All doors are reinforced horizontally with roll-formed galvanized steel sections (u-bars). This evaluation report includes garage doors based on the following tested series:

#### Model 426

- Pan-style
- 25-gauge steel exterior skin
- 2" thick door sections
- Optional 1-3/8" polystyrene foam insulation (laid in place)
- Ruff-Tex wood-like finish on the outside steel skin
- Manufactured with an embossed horizontal rib panel design

# **Model 724, Model 730**

- Pan-style
- 25-gauge steel exterior skin
- 2" thick door sections
- Optional 1-3/8" polystyrene foam insulation (laid in place)
- Ruff-Tex wood-like finish on the outside steel skin
- Manufactured with an embossed 'ranch style" or raised panel surface design

## Model 735

- Pan-style
- 25-gauge steel exterior skin
- 2" thick door sections
- Built-in 1/2" thick CFC-free polystyrene insulation with white back liner
- Ruff-Tex wood-like finish on the outside steel skin
- Manufactured with an embossed 'ranch style" or raised panel surface design

# Model 750

- Pan-style
- 24-gauge steel exterior skin
- 2" thick door sections
- Optional 1-3/8" polystyrene foam insulation (laid in place)
- Ruff-Tex wood-like finish on the outside steel skin
- Manufactured with an embossed 'ranch style" or raised panel surface design

#### Model 755

- Pan-style
- 24-gauge steel exterior skin
- 2" thick door sections
- Optional 1-3/8" polystyrene foam insulation (laid in place)
- Ruff-Tex wood-like finish on the outside steel skin
- Manufactured with an embossed raised panel "steel carriage" surface design

## Model 765

- Pan-style
- 24-gauge steel exterior skin
- 2" thick door sections
- Optional 1-3/8" polystyrene foam insulation (laid in place)
- Ruff-Tex wood-like finish on the outside steel skin
- Manufactured with flush profile surface design and decorative overlay additions

#### Model 790

- Sandwich-style
- 0.015" thick steel exterior skin; 0.015" thick steel back skin
- 2" thick door sections
- CFC-free polystyrene foam insulation laminated to the exterior skin and to the back skin
- Ruff-Tex wood-like finish on the outside steel skin
- Manufactured with an embossed 'ranch style" or raised panel surface design

**Product Identification**: The doors have a warranty/warning label applied during manufacturing that includes the manufacturer's name and the Series/Model number for the door. A second label will be applied to the door during installation by the installer. This label includes the manufacturer's name, Series/Model number, the design drawing number, the design pressure rating for the door, and the test standard (ANSI/DASMA 108-17).

# **Limitations:**

**Maximum Section Height:** The maximum height of each door section must not exceed 24". Refer to the design drawings for door section heights for specific doors.

**Maximum Width:** The doors have a maximum width of 20'-0". Refer to Table 1 and Table 2 and the design drawings for the allowable door width dimensions.

**Maximum Height:** The doors have a maximum height of 12'-3". Refer to Table 1 and Table 2 and the design drawings for allowable door heights for specific doors.

**Horizontal Reinforcement:** The doors are reinforced with 2" or 3" deep, 18-gauge or 20-gauge steel U-bars. The quantity, placement, and installation of the reinforcement are shown on the design drawings.

**Design drawings:** Specified in Table 1 and Table 2.

**Design pressures:** Specified in Table 1 and Table 2.

**Glazing:** Glazing specified on the design drawings. The dimensions of the glazing must not exceed 20" x 16".

**Impact protection:** The doors assemblies specified in Table 1 and Table 2 have not been tested for windborne debris resistance. Doors specified in Table 1 and Table 2 that contain glazing may not be installed in areas where windborne debris protection is required unless the entire door is protected with an impact protective system.

## Installation

**Design Drawings:** The doors must be installed as specified on the design drawings. The design drawings must be provided with the door. The drawing numbers are specified in Table 1 and Table 2. Each page of the design drawings is sealed by John E. Scates, P.E. The seal date is specified in Tables 1 and 2.

**Attachment of Doors to Wall Framing:** The door track brackets may be attached either directly to the wall framing or must be attached to minimum 2x6 Spruce-Pine-Fir dimension lumber wood jambs that are secured to the wall construction. The allowable methods of attachment are specified below:

**Direct Attachment of Door Track Brackets to Wall Framing:** The wall framing must be minimum Spruce-Pine-Fir dimension lumber. Brackets for the vertical tracks of the door must be attached directly to wall framing with the fasteners specified in the "Attachment of Garage Door Brackets to Wood Wall," document 99-A-061, sheet 2 of 2, signed and sealed on June 22, 2020 by John E. Scates, P.E.

**Attachment of Door Components to Wood-Framed Walls Using a Wood Jamb:** Brackets for the vertical tracks of the door must be attached directly to wood jambs with the fasteners specified on the design drawings. The attachment of the wood jambs to the wood-framed walls must be as specified in the "Jamb Attachment Schedule," document 99-A-061 Rev. G, sheet 1 of 2, signed and sealed on June 22, 2020, by John E. Scates, P.E..

Attachment of Door Components to Concrete/Masonry Block Walls Using a Wood Jamb: Brackets for the vertical tracks of the door must be attached directly to wood jambs with the fasteners specified on the design drawings. The attachment of the wood jambs to the concrete/masonry block walls must be as specified in the "Jamb Attachment Schedule," document 99-A-061 Rev. G, sheet 1 of 2, signed and sealed on June 22, 2020, by John E. Scates, P.E.

**Note**: The manufacturer's installation instructions, the design drawings, and the appropriate drawing for securing the door to the structure, must be available on the job site during installation. All fasteners must be corrosion resistant as specified in the IRC and the IBC.

Table 1 Model 426, 724, 730, 735, 750, 755

Maximum Door Width	Maximum Door Height	Design Pressures (psf)	Glass	Drawing
9'-0"	7'-0"	+22.9 / -26.4	Yes	99-B-079 Rev. D, 5/20/2020 Sealed 11/10/2020
9'-0"	8'-0"	+19.2 / -22.2	Yes	
16'-0"	7'-0"	+18.7 / -20.8	Yes	
16'-0"	8'-0"	+18.7 / -20.8	Yes	
18'-0"	7'-0"	+18.7 / -20.8	Yes	
18'-0"	8'-0"	+18.7 / -20.8	Yes	
9'-0"	7'-0"	+22.9 / -26.4	Yes	
9'-0"	8'-0"	+22.9 / -26.4	Yes	
10'-0"	7'-0"	+27.0 / -30.5	Yes	00 P 000
10'-0"	8'-0"	+27.0 / -30.5	Yes	99-B-080 Rev. E, 5/28/2020
16'-0"	7'-0"	+22.2 / -25.0	Yes	Sealed 11/10/2020
16'-0"	8'-0"	+22.2 / -25.0	Yes	Sealed 11/10/2020
18'-0"	7'-0"	+26.0 / -29.1	Yes	
18'-0"	8'-0"	+26.0 / -29.1	Yes	
9'-0"	7'-0"	+27.0 / -31.2	Yes	99-B-081 Rev. E, 5/28/2020 Sealed 11/10/2020
9'-0"	8'-0"	+27.0 / -30.4	Yes	
10'-0"	7'-0"	+27.0 / -30.5	Yes	
10'-0"	8'-0"	+27.0 / -30.5	Yes	
16'-0"	7'-0"	+26.0 / -29.1	Yes	
16'-0"	8'-0"	+26.0 / -29.0	Yes	Sealed 11/10/2020
18'-0"	7'-0"	+26.0 / -29.1	Yes	
18'-0"	8'-0"	+26.0 / -29.1	Yes	
9'-0"	7'-0"	+31.2 / -35.8	Yes	99-B-082 Rev. E, 5/27/2020 Sealed 11/10/2020
9'-0"	8'-0"	+31.2 / -35.4	Yes	
10'-0"	7'-0"	+31.2 / -35.4	Yes	
10'-0"	8'-0"	+31.2 / -35.4	Yes	
16'-0"	7'-0"	+31.2 / -34.0	Yes	
16'-0"	8'-0"	+31.2 / -34.0	Yes	
18'-0"	7'-0"	+31.2 / -34.0	Yes	
18'-0"	8'-0"	+31.2 / -34.0	Yes	

Table 1 Model 426, 724, 730, 735, 750, 755

Maximum Door Width	Maximum Door Height	Design Pressures (psf)	Glass	Drawing
9'-0"	7'-0"	+42.6 / -48.9	Yes	00 B 003
9'-0"	8'-0"	+42.6 / -48.9	Yes	99-B-083 Rev. E, 5/29/2020 Sealed 11/10/2020
16'-0"	7'-0"	+35.3 / -38.9	Yes	
16'-0"	8'-0"	+35.3 / -38.9	Yes	
9'-0"	7'-0"	+42.6 / -48.9	Yes	99-B-084 Rev. D, 5/29/2020 Sealed 11/10/2020
9'-0"	8'-0"	+42.6 / -48.9	Yes	
12'-0"	12'-3"	+53.2 / -59.3	No	
14'-0"	12'-3"	+45.6 / -50.9	No	99-B-095
16'-0"	12'-3"	+39.9 / -44.5	No	Rev. C, 6/01/2020
18'-0"	12'-3"	+31.5 / -35.2	No	Sealed 11/10/2020
20'-0"	12'-3"	+25.5 / -28.5	No	

Table 2 Model 790

Maximum Door Width	Maximum Door Height	Design Pressures (psf)	Glass	Drawing
9'-0"	7'-0"	+19.8 / -22.2	Yes	
9'-0"	8'-0"	+19.8 / -22.2	Yes	00 P 005
16'-0"	7'-0"	+18.7 / -20.8	Yes	99-B-085 Rev. D, 5/29/2020 Sealed 11/10/2020
16'-0"	8'-0"	+18.7 / -20.8	Yes	
18'-0"	7'-0"	+18.7 / -20.8	Yes	
18'-0"	8'-0"	+18.7 / -20.8	Yes	
9'-0"	7'-0"	+22.9 / -26.4	Yes	
9'-0"	8'-0"	+27.0 / -30.4	Yes	99-B-086
16'-0"	7'-0"	+22.2 / -25.0	Yes	
16'-0"	8'-0"	+22.2 / -25.0	Yes	Rev. D, 5/29/2020
18'-0"	7'-0"	+22.2 / -25.0	Yes	Sealed 11/10/2020
18'-0"	8'-0"	+22.2 / -25.0	Yes	
9'-0"	7'-0"	+31.2 / -35.8	Yes	99-B-087 Rev. D, 5/29/2020 Sealed 11/10/2020
9'-0"	8'-0"	+27.0 / -30.4	Yes	
16'-0"	7'-0"	+26.0 / -29.1	Yes	
16'-0"	8'-0"	+26.0 / -29.1	Yes	
18'-0"	7'-0"	+31.2 / -34.0	Yes	
18'-0"	8'-0"	+31.2 / -34.0	Yes	
9'-0"	7'-0"	+31.2 / -35.8	Yes	99-B-088 Rev. D, 5/29/2020 Sealed 11/10/2020
9'-0"	8'-0"	+31.2 / -35.8	Yes	
16'-0"	7'-0"	+35.3 / -38.9	Yes	
16'-0"	8'-0"	+35.3 / -38.9	Yes	
18'-0"	7'-0"	+31.2 / -34.0	Yes	
18'-0"	8'-0"	+31.2 / -34.0	Yes	
9'-0"	7'-0"	+42.6 / -48.9	Yes	99-B-089 Rev. D, 6/01/2020 Sealed 11/10/2020
9'-0"	8'-0"	+42.6 / -48.9	Yes	
16'-0"	7'-0"	+35.3 / -38.9	Yes	
16'-0"	8'-0"	+35.3 / -38.9	Yes	