

# TEXAS DEPARTMENT OF INSURANCE

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## PRODUCT EVALUATION GDR-49

Effective Date: August 1, 2013

*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 shall be subject to reevaluation **March 2017**.*

*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.*

## **Models 426, 724, 730, 735, 750, 755, and 790 Residential Sectional Steel Garage Doors, Non-impact Resistant, manufactured by:**

**Windsor Door**  
**5800 Scott Hamilton Drive**  
**Little Rock, Arkansas 72209**  
**Telephone: (501) 562-1872**

will be acceptable for use in designated catastrophe areas along the Texas Gulf Coast when installed in accordance with this product evaluation and the appropriate design drawings referenced in this evaluation report.

## PRODUCT DESCRIPTION

These residential garage doors are constructed from galvanized, pre-painted steel sections and 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 struts (u-bars).

### **Model 426**

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

### **Model 724, Model 730**

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

**Model 735**

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

**Model 750**

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

**Model 755**

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

**Model 765**

- Pan-style
- 24 gauge exterior skin
- 2" thick sections
- Ruff-Tex wood-like finish on the outside steel skin
- 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 sections
- CFC-Free polystyrene foam insulation laminated to the exterior skin and to the back skin
- Ruff-Tex wood-like finish on the outside and inside steel skin
- Embossed "ranch style", raised panel, or flush 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, and the design pressure rating for the door.

**LIMITATIONS**

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

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

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

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

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

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

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

**Impact protection:** The doors assemblies specified in Table 1 have not been tested for windborne debris resistance. Doors specified in Table 1 that contain glazing may not be installed in the Inland I zone unless the entire door is protected with an impact protective system. All doors specified in Table 1 may not be installed in the Seaward zone unless the entire door is protected with an impact protective system.

## INSTALLATION INSTRUCTIONS

**Design Drawings:** The doors shall be installed as specified on the design drawings. The design drawings shall be provided with the door. The drawing numbers are specified in Table 1. Each page of the design drawings is signed, sealed, and dated by John E. Scates, P.E. The following information, as a minimum, shall be provided on the design drawings:

- Manufacturer name
- Model Number
- Drawing Number
- Design Pressures Rating
- Maximum Door Width and Maximum Door Height
- Maximum Section Height

**Attachment of Doors to Wall Framing:** The door track brackets may be attached either directly to the wall framing or shall 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 shall be minimum Spruce-Pine-Fir dimension lumber. Brackets for the vertical tracks of the door shall be attached directly to wall framing with the fasteners specified in the "Attachment of Garage Door Brackets to Wood Wall," document 99-A-90, sheet 2 of 2, signed and sealed on February 1, 2013 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 shall 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 shall be as specified in the "Jamb Attachment Schedule," sheet 1 of 2, signed and sealed on February 1, 2013 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 shall 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 shall be as specified in the "Jamb Attachment Schedule," sheet 1 of 2, signed and sealed on February 1, 2013 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, 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.

**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. C, 1/28/2013 Sealed 6/24/2013
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	99-B-080 Rev. D, 1/28/2013 Sealed 2/1/2013
9'-0"	8'-0"	+22.9 / -26.4	Yes	
10'-0"	7'-0"	+27.0 / -30.5	Yes	
10'-0"	8'-0"	+27.0 / -30.5	Yes	
16'-0"	7'-0"	+22.2 / -25.0	Yes	
16'-0"	8'-0"	+22.2 / -25.0	Yes	
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. D, 1/28/2013 Sealed 2/1/2013
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	
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. D, 1/28/2013 Sealed 2/1/2013
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	
9'-0"	7'-0"	+42.6 / -48.9	Yes	99-B-083 Rev. D, 1/28/2013 Sealed 2/1/2013
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	
9'-0"	7'-0"	+42.6 / -48.9	Yes	99-B-084 Rev. C, 1/28/2013 Sealed 2/1/2013
9'-0"	8'-0"	+42.6 / -48.9	Yes	
12'-0"	12'-3"	+53.2 / -59.3	No	99-B-095 Rev. B, 1/28/2013 Sealed 2/1/2013
14'-0"	12'-3"	+45.6 / -50.9	No	
16'-0"	12'-3"	+39.9 / -44.5	No	
18'-0"	12'-3"	+31.5 / -35.2	No	
20'-0"	12'-3"	+25.5 / -28.5	No	

**Table 2**  
**Model 790**

9'-0"	7'-0"	+19.8 / -22.2	Yes	99-B-085 Rev. C, 1/28/2013 Sealed 2/1/2013
9'-0"	8'-0"	+19.8 / -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	99-B-086 Rev. C, 1/28/2013 Sealed 2/1/2013
9'-0"	8'-0"	+27.0 / -30.4	Yes	
16'-0"	7'-0"	+22.2 / -25.0	Yes	
16'-0"	8'-0"	+22.2 / -25.0	Yes	
18'-0"	7'-0"	+22.2 / -25.0	Yes	
18'-0"	8'-0"	+22.2 / -25.0	Yes	
9'-0"	7'-0"	+31.2 / -35.8	Yes	99-B-087 Rev. C, 1/28/2013 Sealed 2/1/2013
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. C, 1/28/2013 Sealed 2/1/2013
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. C, 1/28/2013 Sealed 2/1/2013
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	