

TEXAS DEPARTMENT OF INSURANCE

Engineering Services Program / MC 103-3A 333 Guadalupe Street P.O. Box 149104 Austin, Texas 78714-9104
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PRODUCT EVALUATION GDR-85

Effective Date: December 1, 2012

*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 **December 2016**.*

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 53xx, 54xx, 55xx, 56xx, 57xx, and 58xx Steel Residential, Sectional Garage Doors, Impact Resistant, manufactured by:

**C.H.I. Overhead Doors
1485 Sunrise Drive
Arthur, IL 61911
(800) 677-2650**

will be acceptable for use in designated catastrophe areas along the Texas Gulf Coast when installed in accordance with this product evaluation.

PRODUCT DESCRIPTION

Model 53xx, 54xx, 55xx, 56xx, 57xx, and 58xx doors are residential sectional garage doors constructed from galvanized steel with or without various decorative overlay materials. The 53xx, 54xx, and 55xx doors are constructed from 27 gauge steel and insulated with expanded polystyrene insulation with or without various overlay materials. The 56xx, 57xx, and 58xx model doors are constructed from 27 gauge steel and insulated with poured in urethane insulation with or without various overlay materials. The doors use a combination of 3" U-bars and/or 6" C-channels for horizontal reinforcement. Drawing number, design pressures, dimensions, and glazing dimensions are shown in Table 1.

Product Identification: A label will be affixed to the sectional overhead door. The label shall include the manufacturer's name, product name, and the allowable design pressure rating. Glazing is not available. The installer will verify that the label is clearly marked indicating which door assembly is being installed, in addition to verifying that the design pressure rating is clearly marked.

LIMITATIONS

The maximum height of each door section shall not exceed 24 inches.

The doors shall have a maximum width of 20 feet. Refer to Table 1 for the maximum sectional overhead door dimensions.

The doors shall have a maximum height of 20 feet. Refer to the design drawings for allowable door heights for specific doors.

The doors are reinforced with either 14 gauge steel C-channels or 17 gauge steel struts. The quantity, placement, and installation of the struts and the C-channels are shown on the design drawings.

Design drawings: Specified in Table 1.

Allowable door widths: Specified in Table 1.

Design pressures: Specified in Table 1.

Glazing: Glass is not permitted.

Impact protection: These doors have been tested for windborne debris resistance and satisfy the Texas Department of Insurance's criteria protection from windborne debris. The doors do not need to be 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 are dated May 19, 2012. Each page is signed, sealed, and dated July 16, 2012 by John E. Scates, P.E. The following information, as a minimum, shall be provided on the design drawings:

- Drawing Number
- Design Pressures Rating
- Maximum Width and Maximum Height
- Maximum Section Height

Supplemental Instructions: The doors shall also be installed as specified in the following document, which shall be provided with the door:

- "Supplemental Instructions Overlay Carriage House Doors," pages 1 thru 2 of 2. Each page of the Supplemental Instructions shall be signed, sealed, and dated July 17, 2012 by John E. Scates, P.E.

Attachment of Doors to Wall Framing: In addition to providing the design drawings, the following documents shall be provided with the door:

- Back Jamb Attachment Detail Concrete Anchors, Drawing Number BJA-101-02, dated 9-28-2011, signed, sealed, and dated July 17, 2012 by John E. Scates, P.E.
- Back Jamb Attachment detail Lag Screw, Drawing Number BJA-102-01, dated 4-18-2011, signed, sealed, and dated July 17, 2012 by John E. Scates, P.E.
- Steel Attachment Detail, Drawing Number BJA-103-01, dated 4-18-2011, signed, sealed, and dated July 17, 2012 by John E. Scates, P.E.
- CMU Block Wall Detail, Drawing number BJA-104-02, dated 7-11-2011, signed, sealed, and dated July 17, 2012 by John E. Scates, P.E.
- Concrete Wall Attachment Detail, Drawing Number BJA-105-01, dated 7-11-2011, signed, sealed, and dated July 17, 2012 by John E. Scates, P.E.

Note: The manufacturer's installation instructions, the appropriate design drawings, the Supplemental Instructions, and the appropriate attachment detail 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
Models 53xx, 54xx, 55xx, 56xx, 57xx, and 58xx Steel Residential, Sectional Garage Doors

Maximum Door Width	Horizontal Reinforcement	Hinge Columns	Design Pressures (psf)	Drawing Number
20'-0"	17 gauge, 3" U-bars	4	+26.7 / -30.0	TZ5i-20-04503 5-19-2012
18'-0"	17 gauge, 3" U-bars	3	+34.5 / -38.4	TZ7i-18-04503 5-19-2012
20'-0"	17 gauge, 3" U-bars 14 gauge C-Channels	4	+34.1 / -37.9	TZ7i-20-04503 5-19-2012
18'-0"	17 gauge, 3" U-bars 14 gauge C-Channels	3	+41.3 / -46.0	TZ8i-18-04503 5-19-2012
8'-0"	17 gauge, 3" U-bars	1	+49.9 / -56.7	TZ9i-08-04503 5-19-2012
9'-0"	17 gauge, 3" U-bars	1	+49.9 / -56.7	TZ9i-09-04503 5-19-2012
10'-0"	17 gauge, 3" U-bars	2	+44.3 / -51.5	TZ9i-10-04503 5-19-2012
12'-0"	17 gauge, 3" U-bars	2	+43.0 / -48.3	TZ9i-12-04503 5-19-2012
14'-0"	17 gauge, 3" U-bars	4	+43.0 / -48.3	TZ9i-14-04503 5-19-2012
16'-0"	17 gauge, 3" U-bars	3	+42.1 / -46.9	TZ9i-16-04503 5-19-2012
10'-0"	17 gauge, 3" U-bars	2	+49.9 / -56.7	TZ10i-10-04503 5-19-2012