TDI | Texas Department of Insurance

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Product Evaluation

GDR151 | 0422 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-151

Effective Date: April 1, 2022
Re-evaluation Date: April 2026

Product Name: Models 53xx, 54xx, 55xx, 56xx, 57xx, 58xx Steel Residential Sectional Garage Doors, Non-Impact Resistant

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

General 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 overly 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 steel sectional overhead door. The label must include the manufacturer's name (CHI Overhead Doors); series/model number of door; the allowable design pressure rating; the design drawing number; and the test standards (ANSI/DASMA 108). 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
Maximum Section Height: The maximum height of each door section must not exceed 24".

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

Maximum Height: The doors have a maximum height of 20'. Refer to the design drawings for allowable door heights for specific doors.

Design Drawings: Specified in Table 1.

Design Pressures: Specified in Table 1.

Glazing (Optional): Glass options are specified on the design drawings. Glass is secured to the panels using a molded frame with 2 fasteners per vertical side and 5 fasteners per horizontal side; 14 total

Louvers: Not permitted.

Impact protection: These doors have not been tested for windborne debris resistance. Doors that contain glazing will need windborne debris protection if installed in areas where windborne debris protection is required.

Installation Instructions:
Design Drawings: The doors are to be installed as specified on the design drawings. The manufacturer will provide the design drawings with the door. The drawing numbers are specified in Table 1. Each page of the design drawing is dated March 24, 2022. Each page of the drawing is sealed by John E. Scates, P.E. and the first page is digitally signed and dated March 28, 2022, by John E. Scates, P.E.

Attachment of Doors to the Building: Doors are secured to the wall structure as specified in the Jamb Attachment details. The Jamb Attachment details include the following drawings:

BJA-101R8
BJA-102R7
BJA-103R8
BJA-104R8
BJA-105R7
BJA-105R5
BJA-106R5

Each drawing is dated March 26, 2020 and sealed by John E. Scates. Drawing BJA-101R8 is digitally signed and dated January 7, 2021.

Note: The conditions and construction of the building structure must comply with the specifications on the Jamb Attachment drawings to ensure that the fasteners/anchors will deliver their intended design performance. The building construction shown in the door and jamb attachment drawings are only illustrative to locate fasteners. The manufacturer does not design the building nor ensure that the building can carry the imposed loads from the door system.

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

Table 1
Model 53xx, 54xx, 55xx, 56xx, 57xx, and 58xx

Door Width	Horizontal Reinforcement	Design Pressure (psf)	Drawing Number
6′-00″	19 gauge, 3" U-bars	+34.8 / -39.3	Z4-09-04307
8′-00″		+26.1 / -29.5	
9′-00″		+23.2 / -26.2	
10′-00″		+18.9 / -21.2	
6′-00″	17 gauge, 3" U-bars	+38.7 / -43.7	Z4-10-04307
8′-00″		+29.0 / -32.8	
9′-00″		+25.8 / -29.1	
10′-00″		+23.2 / -26.2	
10′-06″		+21.0 / -23.8	
12′-00″		+16.1 / -18.2	
11′-06″	17 gauge, 3" U-bars	+30.9 / -34.4	Z4-16-04307
12′-00″		+29.6 / -32.9	
13′-00″		+27.3 / -30.4	
14′-00″		+25.4 / -28.2	
15′-00″		+23.7 / -26.3	
16′-00″		+22.2 / -24.7	
18′-00″		+17.5 / -19.5	
12′-00″	17 gauge, 3" U-bars	+33.3 / -37.1	Z4-18-04307
14′-00″		+28.5 / -31.8	
15′-00″		+26.6 / -29.6	
16′-00″		+25.0 / -27.8	
18′-00″		+22.2 / -24.7	
20′-00″		+18.0 / -20.0	
10′-00″	17 gauge, 3" U-bars	+49.0 / -54.6	Z6-16-04307
12′-00″		+40.8 / -45.5	
14′-00″		+35.0 / -39.0	
16′-00″		+30.6 / -34.1	
18′-00″		+24.2 / -26.9	
20′-00″		+19.6 / -21.8	
6′-00″	19 gauge, 3" U-bars	+54.0 / -60.9	Z7-09-04307
8′-00″		+40.5 / -45.7	
9′-00″		+36.0 / -40.6	
10′-00″		+29.2 / -32.9	
12′-00″		+20.3 / -22.8	
14′-00″		+14.9 / -16.8	

Table 1
Model 53xx, 54xx, 55xx, 56xx, 57xx, and 58xx

Door Width	Horizontal Reinforcement	Design Pressure (psf)	Drawing Number
6′-00″	19 gauge, 3" U-bars	+60.0 / -67.7	Z7-10-04307
8′-00″		+45.0 / -50.8	
9′-00″		+40.0 / -45.1	
10′-00″		+36.0 / -40.6	
12′-00″		+25.0 / -28.2	
14′-00″		+18.4 / -20.7	
15′-00″		+16.0 / -18.0	
9′-00″	17 gauge, 3" U-bars	+49.2 / -57.2	Z9-10-04307
10′-00″		+44.3 / -51.5	
10′-00″	17 gauge, 3" U-bars	+67.4 / -75.0	Z9-16-04307
12′-00″		+56.1 / -62.5	
13′-00″		+51.8 / -57.7	
14′-00″		+48.1 / -53.6	
15′-00″		+44.9 / -50.0	
16′-00″		+42.1 / -46.9	
17′-00″		+37.3 / -41.5	
18′-00″		+33.3 / -37.1	
20′-00″		+26.9 / -30.0	
18′-00″	17 gauge, 3" U-bars; 6" Cee Strut	+42.1 / -46.9	Z9-18-04307
20′-00″		+34.1 / -38.0	
9′-00″	19 gauge, 3" U-bars	+50.7 / -57.5	Z10-09-04307
10′-00″		+41.1 / -46.6	
9′-00″	17 gauge, 3" U-bars	+56.3 / -63.9	Z10-10-04307
10′-00″		+50.7 / -57.5	
16′-00″	17 gauge, 3" U-bars	+48.2 / -53.7	Z10-16-04307
17′-00″		+42.7 / -47.6	
18′-00″		+38.1 / -42.4	
20′-00″		+30.8 / -34.4	