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## **Product Evaluation**

GDR87 | 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-87 **Effective Date:** April 1, 2022

**Re-evaluation Date:** April 2026

Product Name: Models 3220, 3221, 3222, 3240, 3241, 3242, 3250, 3251, and 3252 Commercial

Sectional Steel Garage Doors, Impact Resistant

Manufacturer: C.H.I. Overhead Doors

1485 Sunrise Drive Arthur, IL 61911 (800) 677-2650

## **General Description:**

Model 3220, 3221, 3222, 3240, 3241, 3242, 3250, 3251, and 3252 doors are commercial sectional garage doors constructed from galvanized steel with a baked on polyester finish. The 3220, 3221, and 3222 model doors are constructed from 20-gauge steel panels with optional vinyl or steel backed drop in expanded polystyrene insulation. The 3240, 3241, and 3242 model doors are constructed from 24-gauge steel panels with optional vinyl or steel backed drop in expanded polyurethane insulation. The 3250, 3251, and 3252 model doors are constructed from 25-gauge steel panels with optional vinyl or steel backed drop in expanded polystyrene insulation. The doors use either 3" U-bars and 0.073" Cee struts for horizontal reinforcement. Drawing number, design pressures, door width, and horizontal reinforcement 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, ANSI/DASMA 115). 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 24'-02". Refer to Table 1 and the design drawings for the allowable door width dimensions.

**Maximum Height:** The doors have a maximum height of 24'. Refer to the design drawings for allowable door heights for specific doors.

**Horizontal Reinforcement:** The doors are reinforced with either 17-gauge 3" steel U-bars or a combination of 17-gauge 3" steel U-bars with 14-gauge 6" Cee struts. The quantity, placement, and installation of the U-bars are shown on the design drawings.

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

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

**Glazing:** The doors do not contain glazing.

**Impact Protection**: These garage door assemblies have been tested for windborne debris resistance.

## **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 10, 2022. Each page of the drawing is sealed by John E. Scates, P.E. and the first page is digitally signed and dated March 30, 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**: 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 Models 3220, 3221, 3222, 3240, 3241, 3242, 3250, 3251, and 3252

Door	Horizontal		Drawing
Width	Reinforcement	Design Pressure (psf)	Number
6'-00"	17 gauge, 3" U-bars	+50.7 / -57.5	Z11i-09-61517
8'-02"		+50.7 / -57.5	
9'-05"		+50.7 / -57.5	
10'-02"		+46.7 / -56.0	
10'-08"		+42.5 / -50.9	
6'-00"	17 gauge, 3" U-bars	+50.7 / -57.5	Z8i-10-61517
8'-02"		+47.2 / -53.1	
9'-02"		+37.5 / -42.1	
9'-05"		+35.5 / -39.9	
9'-06"		+36.3 / -44.8	
10'-02"		+33.9 / -41.9	
10'-08"		+30.8 / -38.1	
10'-02"	17 gauge, 3" U-bars	+37.3 / -41.9	Z8i-12-61517
12'-02"		+37.3 / -41.9	
14'-02"		+37.3 / -41.9	
14'-06"		+37.1 / -41.9	
15'-02"	17 gauge, 3" U-bars	+37.3 / -41.9	Z8i-18-61517
16'-02"		+37.3 / -37.8	
18'-02"		+37.3 / -37.8	
19'-02"		+34.0 / -34.0	
20'-02"		+30.7 / -30.7	
16'-02"	17 gauge, 3" U-bars; 0.073" Cee Strut	+35.9 / -40.0	Z7i-18-61517
16'-05"		+35.9 / -40.0	
18'-02"		+31.2 / -40.0	
20'-02"		+25.3 / -32.5	
22-02"		+21.0 / -26.9	
24'-02"		+17.6 / -22.6	