

## Product Evaluation

GDR152 | 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-152

**Effective Date:** April 1, 2022

**Re-evaluation Date:** April 2026

**Product Name:** Models 2127, 2128, 2147, 2148, 2157, 2158, 2327, 2328, 2347, 2348, 2357, 2358, and 2518 Residential Sectional Steel Garage Doors, Impact Resistant

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

### General Description:

Models 2127, 2147, 2157, 2327, 2347, and 2357 are 2" thick sectional sandwich garage doors constructed from galvanized 27-gauge steel front and back panels with a baked on polyester finish and polystyrene insulation. Models 2128, 2148, 2158, 2328, 2348, 2358 and 2518 are 2" thick sectional sandwich garage doors constructed from galvanized 27-gauge steel front and back panels with baked on polyester finish an expanded polyurethane insulation. The doors use 3" U-bars for horizontal reinforcement. Door width, horizontal reinforcement, design pressures and drawing numbers 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 20'-00". 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 3" steel U-bars. 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 (Optional):** Glass options are specified on the design drawings. Models ending in 27 or 28 utilize "short panel" windows, models ending in 47, 48, 57, or 58 utilize "long panel" windows. Model 2518 can utilize either "short panel" or "long panel" windows.

**Impact Protection:** These garage door assemblies have been tested for windborne debris resistance. These garage door assemblies will not need to be protected with an impact protective system when installed in areas where windborne debris protection is required.

### **Installation Instructions:**

**Design Drawings:** Install the doors as specified on the design drawings and other accompanying installation instructions. The design drawing must be provided with the door. The drawings are dated March 24, 2022. Each page of the design drawings is signed, sealed, and dated March 25, 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 2127, 2128, 2147, 2148, 2157, 2158, 2327, 2328, 2347, 2348, 2357, 2358, and 2518**

Door Width	Horizontal Reinforcement	Design Pressure (psf)	Drawing Number
14'-08"	17 gauge, 3" U-bars	+43.0 / -48.3	Z7i-20-12533
15'-00"		+43.0 / -48.3	
16'-00"		+43.0 / -48.3	
16'-06"		+42.9 / -48.3	
17'-00"		+41.7 / -47.0	
18'-00"		+39.4 / -44.4	
18'-06"		+37.6 / -42.4	
19'-00"		+35.7 / -40.2	
20'-00"		+32.2 / -36.3	
12'-00"	17 gauge, 3" U-bars	+43.0 / -48.3	Z9i-16-12533
13'-00"		+43.0 / -48.3	
14'-00"		+43.0 / -48.3	
15'-00"		+42.9 / -46.8	
16'-00"		+40.2 / -43.9	
16'-06"		+38.2 / -41.7	
<9'-00"	17 gauge, 3" U-bars	+49.9 / -56.7	Z11i-09-12533
9'-06"		+47.7 / -55.1	
9'-10"		+44.5 / -51.4	
10'-00"	17 gauge, 3" U-bars	+46.7 / -48.5	Z11i-10-12533
10'-02"		+46.7 / -48.5	
9'-04"	17 gauge, 3" U-bars	+49.9 / -56.7	Z12i-10-12533
10'-02"		+49.9 / -56.7	