

Product Evaluation

GDR42 | 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-42

Effective Date: April 1, 2022

Re-evaluation Date: June 2025

Product Name: Model 8000/8100/8200 Steel Sectional Garage Doors, Non-Impact and Impact Resistant

Manufacturer: Wayne-Dalton, a division of Overhead Door Corp
2501 S State Hwy 121 Busn, Suite 200
Lewisville, TX 75067
(800) 929-3667

General Description:

Wayne-Dalton Model 8000 family are residential pan garage doors. This evaluation report includes these models:

- Model 8000: pan-style, sectional doors
 - Steel exterior skin, 25 gauge.
 - 2" thick door sections.
 - Tongue-and-groove joints.
 - 2-inch track and rollers standard.
 - Wood-grain finish with a variety of panel patterns to choose from.

- Model 8100: pan-style, sectional doors
 - Steel exterior skin, 25 gauge.
 - 2" thick door sections.
 - Tongue-and-groove joints.
 - 2-inch track and rollers standard.
 - Wood-grain finish with a variety of panel patterns to choose from.
 - 9/16-inch polystyrene insulation

- Model 8200: pan-style, sectional doors
 - Steel exterior skin, 25 gauge.
 - 2" thick door sections.
 - Tongue-and-groove joints.
 - 2-inch track and rollers standard.
 - Wood-grain finish with a variety of panel patterns to choose from.
 - 1-5/8-inch polystyrene insulation

Hardware: The following applies to all doors.

- Horizontal reinforcement of the door must comply with the requirements on each drawing.
- End Hinges: Typically, 14-gauge and 13-gauge galvanized steel, as shown on the drawing.
- Intermediate Hinges: Typically, 14-gauge galvanized steel, as shown on the drawing.
- Locks: Slide locks required if not attached to a drawbar (residential) door operator.
- End Caps: 20-gauge minimum galvanized steel.
- Tracks: Vertical tracks are 2" x 16-gauge minimum galvanized steel. See drawing for specifics.
- Tracks: Horizontal tracks may vary by door, and based on door weight and height, as determined by the manufacturer.
- Jamb Brackets: 15-gauge galvanized steel. Refer to the drawing for bracket quantity and locations.
- Rollers: 2" diameter 10-ball steel rollers, long stem and short stem rollers, per drawings. Locking "push nuts" added to some roller stems as shown on the drawing. 11-ball rollers with white nylon-covered tires optional where specified on the drawing.

Glazing: Windows (or "lites") are available on some door sizes if specified in the drawing notes. Glass material and clear opening size of the window also vary by drawing. Some products also include impact-tested window options.

Product Identification: The door will have a wind load label, applied by the installer that includes the manufacturer's name (Wayne Dalton); the model numbers (8000/8100/8200); the option code and the drawing number; the design pressure rating; the test standards (ANSI/DASMA 108, ANSI/DASMA 115, TAS 201/202/203); and the TDI product evaluation number (GDR-42).

Limitations:

This evaluation report includes both non-impact resistant and impact resistant doors.

All non-impact resistant doors have the option to include glazing.

All impact resistant doors have the option to include glazing.

All non-impact resistant doors have the option to include louvers at the end panels of the bottom section.

All impact resistant doors do not include louvers.

The maximum height of each door section must not exceed 21 inches.

The doors have a maximum width of 18 feet.

The doors have a maximum height of 14 feet. Refer to the tables in this evaluation report for allowable door heights for specific doors.

On some doors, a vertical wind load post is required to obtain the design pressure rating. The placement and installation of the wind load post is shown on the design drawings.

Non-Impact Resistant Doors

Design Drawings (Windload Specification Option Code): Specified in Table 1.

Allowable Dimensions: Specified in Table 1.

Design Pressures: Table 1.

Glazing (Optional): Glazing requirements specified on the drawings.

Louvers (Optional): Louver vents are permitted if indicated on the drawings. The louver vents are minimum 0.032" steel in molded frames, maximum size of 18-5/8" x 12-1/2". The louvers are secured to the door panel with a minimum of ten (10) No. 8 x 1" screws (3 along each horizontal leg and 2 along each vertical leg).

Impact Protection: These doors have not been tested for windborne debris resistance.

Impact Resistant Doors

Design Drawings (Windload Specification Option Code): Specified in Table 2.

Allowable Dimensions: Specified in Table 2.

Design Pressures: Table 2.

Glazing (Optional): Glazing requirements specified on the drawings.

Louvers: Not permitted.

Impact Protection: These door assemblies satisfy the Texas Department of Insurance criteria for protection from windborne debris. The doors passed the equivalent of missile level D specified in ASTM E 1996-14a. These door assemblies will not require protection with an impact protective system.

Installation:

General: The door must be installed in accordance with the manufacturer's published installation instructions, engineering drawings and this product evaluation report. A copy of the drawings must be available at all times at the job site during installation. The information within this evaluation report governs if there are any conflicts between the manufacturer's instructions and this report. Interior reinforcement hardware configurations will vary based on the garage door dimensions and wind pressure requirements. Refer to Table 1 and Table 2 for maximum allowable door dimensions, allowable design pressures, and applicable drawings. Required reinforcement configurations are shown on the drawings.

The rated pressures may not be achieved unless the door is held closed during the wind event. The door must be locked closed, or alternately an electric drawbar operator attached to the door prior to the wind event. On doors up to 9' wide, one track must be engaged with a lock. On wider doors, both tracks must be engaged with a lock (right and left side).

Design Drawings: The drawings in Table 1 and Table 2 are signed, sealed, and dated by John E. Scates, P.E. EXCEPTION: Drawings 327022-P4 and 327023-P4 are signed, sealed, and dated by Dwayne J. Kornish, P.E. Table 1 and Table 2 indicate the drawing revision, drawing revision date, and the seal date of the engineer.

Installation:

Design Drawings: The doors must be installed as specified on the design drawings.

Attachment of Doors to Walls: Unless otherwise specified on the design drawings, the doors must be installed using one of the following methods:

Attachment of Door Components to Wood-Framed Walls Using a Wood Jamb: Brackets for the vertical tracks and for the flag angles of the door must be attached directly to wood jambs with the fasteners specified on the design drawings. The wood jambs and the attachment of the wood jambs to the wood framed walls must be as specified in the Jamb Connection Supplement, Drawing Number 363342, Rev. P01, signed and sealed on April 24, 2020 by John Scates, P.E.

Attachment of Door Components to Concrete/Masonry Block Walls Using a Wood Jamb: Brackets for the vertical tracks and for the flag angles of the door shall be attached directly to wood jambs with the fasteners specified on the design drawings. The wood jambs and the attachment of the wood jambs to the concrete/masonry block walls must be as specified in the Jamb Connection Supplement, Drawing Number 363342, Rev. P01, signed and sealed on April 24, 2020 by John Scates, P.E.

Attachment of Door Components to Using Direct Mount Method: Brackets for the vertical tracks and for the flag angles of the door must be attached directly to the wall framing in accordance with the Jamb Connection Supplement, Drawing Number 363342, Rev. P01, signed and sealed on April 24, 2020 by John Scates, P.E.

Commercial Track Supplement (Available for all Doors): Doors may be secured to the wall framing of the structure in accordance with the Track Supplement Chart, Drawing No. 307494, Rev. P12, signed and sealed on December 1, 2020 by Dwayne J. Kornish, P.E. Design pressure rating and maximum door width may be limited by this supplement.

Table 1.
Windload Specification Option Code, Allowable Door Dimensions,
Glazing Options and Design Pressure Rating
Non-Impact Resistant Doors

Drawing	Maximum Width (ft-in)	Design Pressure (psf)		Vertical Windload Post	Glass Option
		Positive	Negative		
364231; 1106 Rev B; 4-12-21 Sealed 4-13-21	9-0	+22.9	-26.3	No	Yes
364232; 1107 Rev B; 4-12-21 Sealed 4-13-21	9-0	+26.9	-30.8	No	Yes
362403; 1105 Rev B; 4-12-21 Sealed 4-13-21	9-0	+31.0	-35.0	No	Yes
364233; 1108 Rev B; 4-12-21 Sealed 4-13-21	9-0	+37.0	-41.0	No	Yes
327016; 1122 Rev J; 4-12-21 Sealed 4-13-21	16-0	+23.0	-25.0	No	Yes
364264; 1126 Rev B; 4-12-21 Sealed 4-13-21	16-0	+26.0	-29.0	No	Yes
327017; 1123 Rev H; 4-12-21 Sealed 4-13-21	16-0	+30.0	-33.5	No	Yes
327018; 1124 Rev H; 4-12-21 Sealed 4-13-21	16-0	+34.4	-38.3	No	Yes
327021; 1141 Rev H; 4-12-21 Sealed 4-13-21	18-0	+18.5	-20.7	No	Yes
327022; 1142 Rev H; 4-12-21 Sealed 4-13-21	18-0	+34.4	-38.3	No	Yes
327023; 1143 Rev F; 4-12-21 Sealed 4-13-21	18-0	+34.4	-38.3	Yes	Yes

Table 1.
Windload Specification Option Code, Allowable Door Dimensions,
Glazing Options and Design Pressure Rating
Non-Impact Resistant Doors

Drawing	Maximum Width (ft-in)	Design Pressure (psf)		Vertical Windload Post	Glass Option
		Positive	Negative		
364240; 1145 Rev C; 4-12-21 Sealed 4-13-21	18-0	+26.3	-29.3	No	Yes
365187; 1147 Rev A; 11-30-20 Sealed 11-30-20	18-0	+34.4	-38.3	No	Yes

Table 2.
Windload Specification Option Code, Allowable Door Dimensions,
Glazing Options and Design Pressure Rating
Impact Resistant Doors

Drawing	Maximum Width (ft-in)	Design Pressure (psf)		Vertical Windload Post	Glass Option
		Positive	Negative		
364232; 1107 Rev B; 4-12-21 Sealed 4-13-21	9-0	+26.9	-30.8	No	Yes
362403; 1105 Rev B; 4-12-21 Sealed 4-13-21	9-0	+31.0	-35.0	No	Yes
364233; 1108 Rev B; 4-12-21 Sealed 4-13-21	9-0	+37.0	-41.0	No	Yes
327013; 1104 Rev H; 4-12-21 Sealed 4-13-21	9-0	+46.0	-52.0	No	Yes
327016; 1122 Rev J; 4-12-21 Sealed 4-13-21	16-0	+23.0	-25.0	No	Yes
364264; 1126 Rev B; 4-12-21 Sealed 4-13-21	16-0	+26.0	-29.0	No	Yes

Table 2.
Windload Specification Option Code, Allowable Door Dimensions,
Glazing Options and Design Pressure Rating
Impact Resistant Doors

Drawing	Maximum Width (ft-in)	Design Pressure (psf)		Vertical Windload Post	Glass Option
		Positive	Negative		
327017; 1123 Rev H; 4-12-21 Sealed 4-13-21	16-0	+30.0	-33.5	No	Yes
327018; 1124 Rev H; 4-12-21 Sealed 4-13-21	16-0	+34.4	-38.3	No	Yes
327019; 1125 Rev H; 4-12-21 Sealed 4-13-21	16-0	+46.0	-52.0	No	Yes
365183; 1128 Rev A; 11-30-20 Sealed 11-30-20	16-2	+46.0	-52.0	No	Yes
364240; 1145 Rev C; 4-12-21 Sealed 4-13-21	18-0	+26.3	-29.3	No	Yes
327022; 1142 Rev H; 4-12-21 Sealed 4-13-21	18-0	+34.4	-38.3	No	Yes
327023; 1143 Rev F; 4-12-21 Sealed 4-13-21	18-0	+34.4	-38.3	Yes	Yes
327024; 1144 Rev G; 4-12-21 Sealed 4-13-21	18-0	+46.0	-52.0	Yes	Yes
365187; 1147 Rev A; 11-30-20 Sealed 11-30-20	18-0	+34.4	-38.3	No	Yes
365184; 1148 Rev A; 11-30-20 Sealed 11-30-20	18-2	+46.0	-52.0	No	Yes

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