TDI | Texas Department of Insurance

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Product Evaluation

GDR50 | 0521

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-50

Effective Date: May 1, 2021

Re-evaluation Date: May 2025

Product Name: Model TS-150, TS-200, and TS-200-20 Steel Sectional Garage Doors, Impact Resistant and Non-Impact Resistant

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

Wayne-Dalton Corporation
3395 Addison Drive
Pensacola, FL 32514
(850) 474-9890

General Description:

Model TS-150, TS-200, and TS-200-20 doors are sectional overhead garage doors and are constructed of steel/polyurethane/steel sandwich type tongue and groove sections with a baked-on polyester primer and polyester finish equal to ASTM A525.

Each model is insulated with a high-density polyurethane core and reinforced with 1-3/4" roll formed steel integral ribs sealed with polypropylene rib caps. Each model has a standard astragal and retainer.

The Model TS-150 has 1-3/8" thick panels with a minimum 29-gauge exterior skin and 29-gauge interior skin.

The Model TS-200 has 2" thick panels with a minimum 26-gauge exterior skin and 26-gauge interior skin.

The Model TS-200-20 has 2" thick panels with a minimum 20-gauge exterior skin and 26-gauge interior skin.

All steel skin is constructed of ASTM A653-00 CS Type B steel and finished with a minimum ASTM A525 G-40 galvanized coating.

Aluminum full view section are constructed of 6063-T6 extruded aluminum. Each section is comprised of vertical and horizontal aluminum extrusions and have a 3-5/8" integral fin across the section.

Product Identification: The door has a warranty/warning label applied during manufacturing that includes the manufacturers name (Wayne Dalton) and the model numbers (TS 150, TS 200, TS 200-20) for the garage door. The door will also have a second label, applied by the installer, that includes the manufacturers name (Wayne Dalton Garage Doors); the model numbers (TS 150, TS 200, TS 200-20); the Windload Specification Option Code (marked by the installer); the design pressure rating; the test standards (ANSI/DASMA 108; ANSI/DASMA 115); and the TDI product evaluation report number (TDI-GDR-50).

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

The doors may include the option for glazing.

The maximum width of each door panel section dies not exceed 24"

The maximum door height shall not exceed 24'-1". Refer to the tables in this evaluation report for allowable door heights for specific doors.

The doors shall have a maximum door width of 24'-2".

Some doors are reinforced with either 18-gauge or 20-gauge steel U-bars for horizontal reinforcement. The placement and installation of the horizontal reinforcement are shown on the design drawings.

Design Drawings: The doors must be installed as specified on the design drawings. The design drawings must be provided with the door. Each page must be sealed by J. C. Voelkel, PE. The drawing revision date and the dated sealed by the engineer are specified in the tables in this evaluation report. The following information, as a minimum, must be included on the design drawing:

- Drawing Part No.
- Windload Specification Code
- Model TS 150/200/200-20
- Design Pressure Rating
- Maximum Width and Maximum Height
- Maximum Section Height

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): Glass is double strength (0.125" thick) annealed monolithic. The dimensions of the glass do not exceed 24" wide by 6.70" high. Glass is not permitted in impact resistant assemblies.

Aluminum Full View (Optional): Aluminum full view sections may replace any section except top and bottom panels. Aluminum full sections have stiles and rails constructed of extruded aluminum alloy 6063-T6 with a 3-5/8" integral fin. Glazing is double strength (0.125" thick) annealed monolithic glass installed with aluminum retainers. The dimensions of the glass do not exceed 46" wide by 22" high Glass is not permitted in impact resistant assemblies.

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

Table 1
Windload Specification Option Code, Allowable Door Dimensions, Glazing Options and Design Pressure Rating

Windload Specification Option Code	Maximum Door Width	Maximum Door Height	Glass Option	Aluminum Full View Available	Design Pressure (psf)
2111 Rev F; 3/11/2021 Sealed: 3/21/2021	10'-2"	24'-1"	Yes	Yes	+24.50, -27.70
2112 Rev F; 3/11/2021 Sealed: 3/21/2021	10'-2"	24'-1"	Yes	Yes	+28.40, -32.20
2113 Rev F; 3/11/2021 Sealed: 3/21/2021	10'-2"	24'-1"	Yes	Yes	+32.60, -36.90
2122 Rev B; 3/12/2021 Sealed: 3/21/2021	12'-2"	24'-1"	Yes	Yes	+28.40, -32.20
2131 Rev F; 3/11/2021 Sealed: 3/21/2021	14'-2"	24'-1"	Yes	Yes	+23.70, -26.60
2143 Rev B; 3/12/2021 Sealed: 3/21/2021	16'-2'	24'-1"	Yes	Yes	+20.90, -23.60
2150 Rev F; 3/11/2021 Sealed: 3/21/2021	24'-2"	24'-1"	Yes	No	+14.00, -15.70
2151 Rev B; 3/12/2021 Sealed: 3/21/2021	24'-2"	24'-1"	Yes	No	+20.90, -23.60

Impact Resistant Doors

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

Allowable dimensions: Specified in Table 2.

Design pressures: Table 2.

Glazing: Glass is not permitted.

Impact protection: These door assemblies satisfy the Texas Department of Insurance criteria for protection from windborne debris. The door assembly passed Missile Level D as specified in ANSI/DASMA 115-17. The door assembly may be installed on the structure as long as the design pressure rating for the assembly is not exceeded. These doors may not be installed on essential facilities as defined in ASCE 7-16.

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

Windload Specification Option Code	Maximum Door Width	Maximum Door Height	Glass Option	Aluminum Full View Available	Design Pressure (psf)
2112 Rev F; 3/11/2021 Sealed: 3/21/2021	10'-2"	24'-1"	No	No	+28.40, -32.20
2113 Rev F; 3/11/2021 Sealed: 3/21/2021	10'-2"	24'-1"	No	No	+32.60, -36.90
2122 Rev B; 3/12/2021 Sealed: 3/21/2021	12'-2"	24'-1"	No	No	+28.40, -32.20
2131 Rev F; 3/11/2021 Sealed: 3/21/2021	14'-2"	24'-1"	No	No	+23.70, -26.60
2142 Rev F; 3/11/2021 Sealed: 3/21/2021	16'-2"	24'-1"	No	No	+27.50, -31.00

Installation:

Design Drawings: The doors must be installed as specified on the design drawings. Refer to the Limitations section of this evaluation report for specific requirements for the design drawings.

Attachment of Doors to Wall (Use One of the Following Methods):

Attachment of Door Components to Concrete Walls: The vertical mounting wall angles must be attached directly to concrete walls (minimum 2,000 psi compressive strength) with minimum 3/8" Simpson Titen HD as specified on the design drawings. The fasteners must penetrate a minimum of 2-3/4" into the concrete. The fasteners must be located in each hole of the vertical mounting wall angles and not to exceed 14 inches on center spacing.

Attachment of Door Components to Steel Wall Framing: The vertical mounting wall angles must be attached directly to minimum 3/16" thick, A36 steel wall framing with either fillet welds or (1) 1/4-20 x 7/8" self-drilling screw with a 1" O.D. washer. The fillet welds must be minimum 2" in length and must be minimum 60,000 psi tensile strength as specified on the design drawings. The fillet welds must be located a maximum of 24" on center. The self-drilling screws must be located in each hole.

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

Note: Keep the manufacturer's installation instructions, the appropriate approved 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.