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# **Product Evaluation**

GDR14 | 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-14 **Effective Date:** April 1, 2022

**Re-evaluation Date:** August 2025

Product Name: Models 4600, 4650, 6600, 8300, 8500, 8650, 5150, 5200, TM515, and TM525 Steel

Sectional Garage Doors, Impact and Non-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:**

The Models 4600, 4650, 6600, 8300, 8500, 8650, 5150, 5200, TM515, and TM525 are insulated sectional overhead doors constructed from galvanized steel sections with foamed in place polyurethane insulation.

The Models 4600, 8300, 5150, and TM515 doors have 1-5/16" thick panels. The doors are available in heights up to 24'-0".

The Models 4650, 8500, 5200, and TM525 doors have 1-13/16" thick panels. The doors are available in heights up to 24'-0".

The Model 6600 and 8650 doors have 1-5/16" thick panels with a decorative overlay. The doors are available in heights up to 14'-0".

The door may require a windload post or posts to achieve the design pressure rating specified in this report.

Tables denoted as "All Glazed Option" permit the fully glazed sections in every section of the doors. Alternately, glazing may be omitted from any position in any section.

**Product Identification**: The door has a wind load label, applied by the installer, which includes the manufacturer's name (Wayne-Dalton), the drawing number; the design pressure rating for the door; and the test standards (ANS/DASMA 108 or TAS 202, ANSI/DASMA 115 or TAS 201 and TAS 203).

#### **Limitations:**

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

The non-impact resistant doors include the option for glazing.

Some of the impact resistant doors include the option for glazing.

All non-impact resistant doors include the option for louvers in the bottom section.

The maximum height of each door section shall not exceed 24".

The maximum door height must not exceed 24'-0". Refer to the tables in this evaluation report for allowable door heights for specific doors.

The doors have a maximum door width of 22'-2".

The exterior door steel is constructed of 27-gauge steel. The interior door steel is constructed of 29-gauge steel.

The doors are reinforced with either 16-gauge, 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.

**Windload Post**: Doors may require the installation of a windload post in order to achieve their design pressure rating. Those doors requiring the use of the windload post are noted in this evaluation report.

### **Non-Impact Resistant Doors**

**Design Drawings:** Specified in Table 1

**Allowable Dimensions:** Specified in Table 1.

**Glazing (Optional):** Glass type, allowable dimensions, and the attachment of the glass to the door panels is specified on the design drawings.

**Louvers (Optional):** The minimum required thickness, the allowable dimensions, and the attachment of the louvers to the door panels is specified on the design drawings.

**Design Pressure and Height Limitations:** Specified in Table 1A and Table 1B.

**Windload Posts:** Specified in Table 1A and Table 1B.

**Impact Protection:** These doors have not been tested for windborne debris resistance. Doors that contain glazing may not be installed without protection from an impact protective system in areas where windborne debris protection is required.

**Table 1A**Non-Impact Resistant Doors

Windload Specification Option Code Drawing Number	Maximum Door Width	Maximum Door Height	Glass	Windload Posts Required	Design Pressure (psf)
2201; Drawing No. 352064; 6-12-13 Revision F; 8-25-20	9'-2"	24'-0"	Yes	No	+19.10; -20.60
2202; Drawing No. 352065; 6-12-13 Revision F; 8-25-20	9'-2"	24'-0"	Yes	No	+22.90; -26.30
2203 Drawing No. 352318; 6-12-13 Revision F; 8-25-20	9'-2"	24'-0"	Yes	No	+26.90; -30.80
2204; Drawing No. 352066; 6-12-13 Revision H; 8-25-20	9'-2"	24'-0"	Yes	No	+35.70; -41.00
2205; Drawing No. 352319; 6-12-13 Revision F; 8-25-20	9'-2"	24'-0"	Yes	No	+41.00; -46.30

**Table 1A**Non-Impact Resistant Doors

Windload Specification	N4	N4		Maria de Danta	
Option Code	Maximum Door Width	Maximum Door Height	Glass	Windload Posts Required	Design Pressure (psf)
Drawing Number	Door width	Door Height		Required	
2206; Drawing No. 352067; 6-12-13 Revision F; 8-25-20	9'-2"	24'-0"	Yes	No	+46.00; -52.00
2207; Drawing No. 352068; 6-12-13 Revision F; 8-25-20	9'-2"	24'-0"	Yes	No	+64.00; -72.00
2211 Drawing No. 365122; 9-18-18 Revision C; 8-25-20	12'-2"	24'-0"	Yes	No	+19.30; -21.60
2212 Drawing No. 365123; 9-25-18 Revision D; 8-25-20	12'-2"	24'-0"	Yes	No	+22.40; -25.10
2213 Drawing No. 365124; 9-25-18 Revision D; 8-25-20	12'-2"	24'-0"	Yes	No	+25.70; -28.80
2214 Drawing No. 365125; 9-25-18 Revision D; 8-25-20	12'-2"	24'-0"	Yes	No	+33.10; -37.00
2311 Drawing No. 363474; 8-28-18 Revision A; 8-26-20	12'-2"	24'-0"	Yes	No	+46.00; -52.00
2241; Drawing No. 352070; 6-12-13 Revision F; 8-25-20	16'-2"	24'-0"	Yes	No	+23.00; -25.00
2242; Drawing No. 352071; 6-12-13 Revision F; 8-25-20	16'-2"	24-0"	Yes	No	+30.00; -33.50
2243; Drawing No. 352072; 6-12-13 Revision F; 8-25-20	16'-2"	24'-0"	Yes	No	+34.40; -38.30
2244; Drawing No. 352073; 6-12-13 Revision F; 8-25-20	16'-2"	8'-0"	Yes	Yes <sup>1</sup>	+46.00; -52.00
2341 Drawing No. 363475; 8-28-18 Revision A; 8-20-20	16'-2"	24'-0"	Yes	No	+46.00; -52.00

**Table 1A**Non-Impact Resistant Doors

Windload Specification Option Code Drawing Number	Maximum Door Width	Maximum Door Height	Glass	Windload Posts Required	Design Pressure (psf)
2251; Drawing No. 352073; 6-12-13 Revision F; 8-25-20	18'-2"	24'-0"	Yes	No	+23.00; -25.00
2252; Drawing No. 352076; 6-12-13 Revision F; 8-25-20	18'-2"	24'-0"	No	No	+30.00; -33.50
2254; Drawing No. 365141; 2-27-20 Revision C; 8-25-20	18'-2"	24'-0"	Yes	No	+30.00; -33.50
2253; Drawing No. 352077; 6-12-13 Revision F; 8-25-20	18'-2"	8'-0"	Yes	Yes <sup>1</sup>	+46.00; -52.00
2351 Drawing No. 363476; 8-28-18 Revision A; 8-26-20	18'-2"	24'-0"	Yes	No	+46.00; -52.00
2261; Drawing No. 352405; 6-12-13 Revision F; 8-25-20	22'-2"	24'-0"	Yes	No	+20.15; -22.50

Note: <sup>1</sup>Installation of windload posts are specified on the design drawings.

**Table 1B**Non-Impact Resistant Doors
All Glazed Option

Windload Specification Option Code Drawing Number	Maximum Door Width	Maximum Door Height	Glass	Windload Posts Required	Design Pressure (psf)
2601 Drawing No. 365534; 3-09-21 Sealed 4-27-2021	9'-2"	24'-0"	Yes	No	+18.40; -20.80
2602 Drawing No. 365535; 3-09-21 Sealed 4-27-2021	9'-2"	24'-0"	Yes	No	+25.00; -28.20
2603 Drawing No. 365436 3-09-21 Sealed 4-27-21	9'-2"	24'-0"	Yes	No	+32.60; -36.90
2604 Drawing No. 365437 3-09-21 Sealed 4-27-21	9'-2"	24'-0"	Yes	No	+36.80; -41.60
2605 Drawing No. 365438 3-09-21 Sealed 4-27-21	9'-2"	24'-0"	Yes	No	+41.30; -46.70
2608 Drawing No. 365441 3-09-21 Sealed 4-27-21	16'-2"	24'-0"	Yes	No	+18.40; -20.80
2609 Drawing No. 365442 3-09-21 Sealed 4-27-21	16'-2"	24'-0"	Yes	No	+25.00; -28.20
2610 Drawing No. 365443 3-09-21 Sealed 4-27-21	16'-2"	24'-0"	Yes	No	+32.60; -36.90
2611 Drawing No. 365444 3-09-21 Sealed 4-27-21	16'-2"	24'-0"	Yes	No	+36.60; -41.60
2612 Drawing No. 365445 Sealed 4-27-21	16'-2"	24'-0"	Yes	No	+41.30; -46.70
2615 Drawing No. 365448 3-09-21 Sealed 4-27-21	18'-2"	24'-0"	Yes	No	+18.40; -20.80
2616 Drawing No. 365449 3-09-21 Sealed 4-27-21	18'-2"	24'-0"	Yes	No	+25.00; -28.20

**Table 1B**Non-Impact Resistant Doors
All Glazed Option

Windload Specification Option Code Drawing Number	Maximum Door Width	Maximum Door Height	Glacc	Windload Posts Required	Design Pressure (psf)
2617 Drawing No. 365450 3-09-21 Sealed 4-27-21	18'-2"	24'-0"	Yes	No	+32.60; -36.90
2618 Drawing No. 365451 3-09-21 Sealed 4-27-21	18'-2"	24'-0"	Yes	No	+36.80; -41.60
2619 Drawing No. 365452 3-09-21 Sealed 4-27-21	18'-2"	24'-0"	Yes	No	+41.30; -46.70

### **Impact Resistant Doors**

**Design Drawings:** Specified in Table 2A and Table 2B.

**Allowable Dimensions:** Specified in Table 2A and Table 2B.

**Glazing (Optional):** Impact resistant glazed window frame assemblies are shipped to the distributor as assembled units with the polycarbonate glazing installed in the overhead door window section panel under quality assurance guidelines audited by the Intertek Group, PLC. The glazing is minimum 1/4" polycarbonate. The allowable dimensions of the glass and the attachment of the glass to the door panel is specified in the design drawings.

**Louvers:** Not permitted.

**Design Pressure and Height Limitations:** Specified in Table 2A and Table 2B.

**Windload Posts:** Specified in Table 2A and Table 2B.

**Impact Protection:** These door assemblies satisfy the Texas Department of Insurance criteria for protection from windborne debris. These doors would not need to be protected with an impact protective system if they are installed in areas where windborne debris protection is required.

**Table 2A**Impact Resistant Doors

Windload Specification	Maximum	Maximum		Windload	Design
Option Code;	Door Width	Door Height	Glass	Posts	Pressure (psf)
Drawing Number		<u> </u>		Required	
2203 Drawing No. 352318; 6-12-13	9'-2"	24'-0"	Yes	No	+26.90; -30.80
Revision F; 8-25-20 2204;					
Drawing No. 352066; 6-12-13 Revision H; 8-25-20	9'-2"	24'-0"	Yes	No	+35.70; -41.00
2205; Drawing No. 352319; 6-12-13 Revision F; 8-25-20	9'-2"	24'-0"	Yes	No	+41.00; -46.30
2206; Drawing 352067; 6-12-13 Revision F; 8-25-20	9'-2"	24'-0"	Yes	No	+46.00; -52.00
2207; Drawing 352068; 6-12-13 Revision F; 8-25-20	9'-2"	24'-0"	Yes	No	+64.00; -72.00
2212 Drawing 365123; Revision D; 8-25-20	12'-2"	24'-0"	Yes	No	+22.40; -25.10
2213 Drawing 365124; Revision D; 8-25-20	12'-2"	24'-0"	Yes	No	+25.70; -28.80
2214 Drawing 365125; Revision D; 8-25-20	12'-2"	24'-0"	Yes	No	+33.10; -37.00
2311 Drawing No. 363474; Revision A; 8-26-20	12'-2"	24'-0"	Yes	No	+46.00; -52.00
2242; Drawing No. 352071; Revision F; 8-25-20	16'-2"	24'-0"	Yes	No	+30.00; -33.50
2243; Drawing No. 352072; Revision F; 8-25-20	16'-2"	24'-0"	Yes	No	+34.40; -38.30
2244; Drawing No. 352073; Revision F; 8-25-20	16'-2"	8'-0"	Yes	Yes <sup>1</sup>	+46.00; -52.00
2341 Drawing No. 363475; Revision A; 8-20-20	16'-2"	24'-0"	Yes	No	+46.00; -52.00
2251; Drawing No. 352075; Revision F; 8-25-20	18'-2"	24'-0"	Yes	No	+23.00; -25.00
2252; Drawing No. 352076; Revision F; 8-25-20	18'-2"	24'-0"	No	No	+30.00; -33.50

Note: <sup>1</sup>Installation of windload posts are specified on the design drawings.

**Table 2A**Impact Resistant Doors

Windload Specification Option Code; Drawing Number	Maximum Door Width	Maximum Door Height	Glass	Windload Posts Required	Design Pressure (psf)
2254; Drawing 365141; Revision C; 8-25-20	18'-2"	24'-0"	Yes	No	+30.00; -33.50
2253; Drawing No. 352077; Revision F; 8-25-20	18'-2"	8'-0"	Yes	Yes <sup>1</sup>	+46.00; -52.00
2351 Drawing No. 363476; Revision A; 8-26-20	18'-2"	24'-0"	Yes	No	+46.00; -52.00

Note: <sup>1</sup>Installation of windload posts are specified on the design drawings.

**Table 2B**Impact Resistant Doors
All Glazed Option

Windload Specification Option Code; Drawing Number	Maximum Door Width	Maximum Door Height	Glass	Windload Posts Required	Design Pressure (psf)
2602 Drawing No. 365435 3-09-21 Sealed 4-27-21	9'-2"	24'-0"	Yes	No	+25.00; -28.20
2603 Drawing No. 365436 3-09-21 Sealed 4-27-21	9'-2"	24'-0"	Yes	No	+32.60; -36.90
2604 Drawing No. 365437 3-09-21 Sealed 4-27-21	9'-2"	24'-0"	Yes	No	+36.80; -41.60
2605 Drawing No. 365438 Sealed 4-27-21	9'-2"	24'-0"	Yes	No	+41.30; -46.70
2609 Drawing No. 365442 3-09-21 Sealed 4-27-21	16'-2"	24'-0"	Yes	No	+25.00; -28.20
2610 Drawing No. 365443 3-09-21 Sealed 4-27-21	16'-2"	24'-0"	Yes	No	+32.60; -36.90
2611 Drawing No. 365444 3-09-21 Sealed 4-27-21	16'-2"	24'-0"	Yes	No	+36.60; -41.60

**Table 2B**Impact Resistant Doors
All Glazed Option

Windload Specification Option Code; Drawing Number	Maximum Door Width	Maximum Door Height	Glass	Windload Posts Required	Design Pressure (psf)
2612 Drawing No. 365445 3-09-21 Sealed 4-27-21	16'-2"	24'-0"	Yes	No	+41.30; -46.70
2616 Drawing No. 365449 Sealed 4-27-21	18'-2"	24'-0"	Yes	No	+25.00; -28.20
2617 Drawing No. 365450 3-09-21 Sealed 4-27-21	18'-2"	24'-0"	Yes	No	+32.60; -36.90
2618 Drawing No. 365451 3-09-21 Sealed 4-27-21	18'-2"	24'-0"	Yes	No	+36.80; -41.60
2619 Drawing No. 365452 Sealed 4-27-21	18'-2"	24'-0"	Yes	No	+41.30; -46.70

#### **Installation:**

#### **Design Drawings:**

The drawings in Table 1A and Table 2A are signed, sealed, and dated by J.C. Voelkel P.E. Table 1A and Table 2A indicate the drawing revision, drawing revision date, and the seal date of the engineer.

The drawings in Table 1B and Table 2B are signed, sealed, and dated by John E. Scates, P.E. Table 1B and Table 2B indicate the drawing revision, drawing revision date, and the seal date of the engineer.

**Windload Post Installation Instructions:** For those doors that require the installation of windload posts, the design drawings will specify the location of the posts and specific installation instructions.

## Attachment of Doors to Walls (Use 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 26, 2021, 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 26, 2021, 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 26, 2021, 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 11, 2020, by Dwayne J. Kornish, P.E. Design pressure rating and maximum door width may be limited by this supplement.

**Note:** The manufacturer's installation instructions, the appropriate Windload Specification Option Code design drawing, the Jamb Connection Supplement, and the Track Supplement must be available on the job site during installation. All fasteners must be corrosion resistant as specified in the IRC and the IBC.