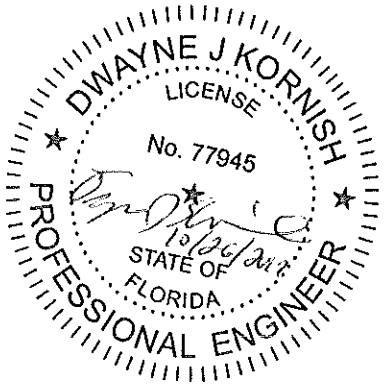
Wayne-Dalton
Division of Overhead
Door Corporation
P.O. Box 67
Mt. Hope, Ohio 44660
Phone 800-827-3667 (DOOR)
Fax 330-763-8042
www.Wayne-Dalton.com

October 26, 2017

Subject: Evaluation Report for Models 8000/8100/8200




To Whom It May Concern:

**SUBMITTED BY:**
Wayne Dalton, A Division of Overhead Door Corporation
3395 Addison Drive
Pensacola, FL 32514

**1. PRODUCT NAME**
Models 8000/8100/8200

**2. SCOPE OF EVALUATION**

Structural Transverse Wind Loads and Large Missile Impact and Cyclic Wind Pressure Resistance. Since every door size cannot be tested, engineering analysis using a comparative analysis, as permitted per the Florida Product approval 9N-3, were used to analyze the doors and make the wind load designs.

**3. USES**

Models 8000/8100/8200 garage doors are used for residential and commercial applications with specified allowable design pressures.

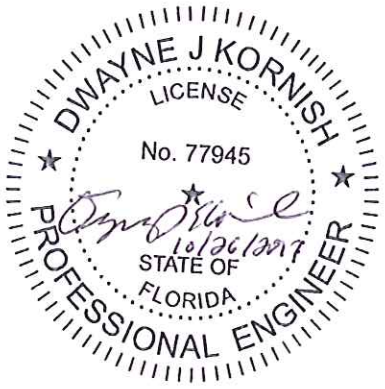
**4. DESCRIPTION**

**General**

Models 8000/8100/8200 doors are sectional overhead garage doors and are constructed of galvanized steel sections with a two coat polyester finish. The doors are two-inch thick raised panel doors with tongue and groove sections. They are the same door with one exception. The Model 8000 is non-insulated, the Model 8100 is insulated with 9/16-inch thick expanded polystyrene and the Model 8200 is insulated with 1-5/8-inch thick expanded polystyrene. They are constructed of 26 gage ASTM A653-00 galvanized FS Type B steel, and finished with an ASTM A525 made up of G-30 coating, covered with two coats of polyester paint. Each section is reinforced with 16 or 20 gage end stiles and 20 gage steel center stiles.

**Door Tracks**

All door assemblies listed in this report have both vertical and horizontal tracks ranging from a minimum 16 gage to minimum 15 gage, 33 ksi steel and finished with an ASTM A525 G-40 galvanized coating. The vertical tracks are attached to the supporting structure with jamb brackets as specified on the most recent manufacturer's installation instructions/drawings.




**Glazed Sections**

Option code assemblies listed in Table 1 of this report with glazed openings that meet the requirements for impact resistance have glazing that is made of ¼" polycarbonate constructed per windload drawings or an equivalent product approved for use in Florida, and can be installed in the top or intermediate sections of the garage door. These assemblies are available for use with the glazing option in wind-borne debris regions and are indicated so in Table 1. The maximum glazing dimensions shall be 18.56" x 12.26."

The drawings that are not indicated for use in wind-borne debris regions with the glazing option are available with a minimum of 0.090-inch thick standard SSB glass windows that are installed in frames and inserted in the top or intermediate section of the door. The glazing is not impact resistant and does not meet the requirements for windborne debris regions. Refer to the most recent manufacturer's installation instructions/drawings for glass size limitations.

**Wind Load Bracing**

All drawings listed in Table 1 of this report are braced on the inside of the doors with three inch horizontal spanning U-bars. Each U-bar is made of either 18-gage or 20-gage ASTM A653-00 steel with a minimum yield strength of 80 ksi and are finished with an ASTM A525 minimum G-40 galvanized coating. The gage and quantity of U-bar braces varies depending on the amount of windload resistance required and the height of the door.

In addition to three-inch horizontal spanning U-bars, some of the assemblies listed in Tables 2 of this report are braced with vertical aluminum posts made up of 0.125-inch thick 6063-T6 aluminum alloy. The post is a telescoping post assembly. The outer member outside diameter is 1.75" wide x 4.00" long. The inner member outside diameter is 1.47" wide x 3.72" long. Reference drawing 312957 for additional information on the installation of the post assembly

**Jamb Attachment**

Method of securing the door to the mounting surface is detailed in the Jamb Connection Supplement, P/N 324620.

## 6. INSTALLATION

All drawings listed in this report are to be installed in accordance with the most recent manufacturer's published installation instructions/drawings and this report.

The most recent manufacturer's installation instructions/drawings shall be strictly adhered to and a copy of these instructions/drawings shall be available at all times on the job site during installation.

## 7. ALLOWABLE TRANSVERSE WIND LOADS

Design wind load pressures for garage doors shall be determined in accordance with Florida Building Code and shall not exceed the allowable transverse wind loads shown in the following tables:

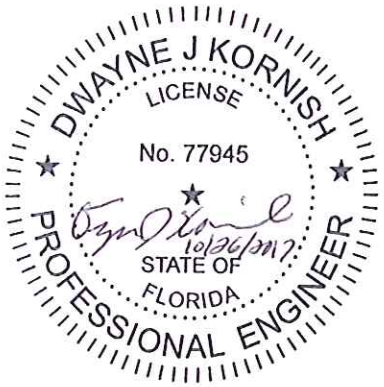



**Table 1: Models 8000/8100/8200 Allowable Transverse Wind Loads and Impact Rating**

| Windload Specification Option Code | Maximum Size | | Positive Design PSF | Negative Design PSF | Reinforcement | Glazing Available (Yes/No) | Door Impact Resistant (Yes/No) |
|---|---|---|---|---|---|---|---|
| | Width | Height | | | | | |
| 1100 | 9'-0" | 14'-0" | 15.90 | 18.20 | 3", 20 gage U-bars | Yes | No |
| 1101 | 9'-0" | 14'-0" | 22.90 | 26.30 | 3", 20 gage U-bars | Yes | No |
| 1102 | 9'-0" | 14'-0" | 26.90 | 30.80 | 3", 20 gage U-bars | Yes | No |
| 1103 | 9'-0" | 14'-0" | 35.70 | 41.00 | 3", 20 gage U-bars | Yes | No |
| 1104(1) | 9'-0" | 14'-0" | 46.00 | 52.00 | 3", 20 gage U-bars | Yes | Yes |
| 1120 | 16'-0" | 14'-0" | 12.40 | 13.80 | 3", 20 gage U-bars | Yes | No |
| 1121 | 16'-0" | 14'-0" | 15.30 | 17.00 | 3", 20 gage U-bars | Yes | No |
| 1122 | 16'-0" | 14'-0" | 23.00 | 25.00 | 3", 20 gage U-bars | Yes | No |
| 1123(1) | 16'-0" | 14'-0" | 30.00 | 33.50 | 3", 18 gage U-bars | Yes | Yes |
| 1124(1) | 16'-0" | 14'-0" | 34.40 | 38.30 | 3", 18 gage U-bars | Yes | Yes |
| 1125(1) | 16'-0" | 14'-0" | 46.00 | 52.00 | 3", 18 gage U-bars | Yes | Yes |
| 1140 | 18'-0" | 14'-0" | 12.40 | 13.80 | 3", 20 gage U-bars | Yes | No |
| 1141 | 18'-0" | 14'-0" | 18.50 | 20.70 | 3", 18 gage U-bars | Yes | No |
| 1142(1) | 18'-0" | 14'-0" | 34.40 | 38.30 | 3", 18 gage U-bars | Yes | Yes |
| 1143(1) | 18'-0" | 8'-0" | 34.40 | 38.30 | 3", 20 gage U-bars + (1) Aluminum Post | Yes | Yes |
| 1144(1) | 18'-0" | 8'-0" | 46.00 | 52.00 | 3", 20 gage U-bars + (1) Aluminum Post | Yes | Yes |

Note 1: The option code assemblies indicated in Table 1 have optional glazing that has been tested for impact resistance, and therefore may be used with optional glazing in the wind borne debris region.

**8. SUBSTANTIATING DATA**

1. Test Report Numbers ETC-06-976-18504.0 and ETC-06-976-18504.1 in accordance with ANSI/DASMA 108-2002 for transverse wind load and ANSI/DASMA 115-2005 for large missile impact resistance by ETC Laboratories, 297 Buell Road, Rochester, N.Y. ANSI/DASMA 108-2002 is forward compatible with ANSI/DASMA 108-2005 and ANSI/DASMA 108-2012, and ANSI/DASMA 115-2005 is forward compatible with ANSI/DASMA 115-2012.
2. Test Reports CTLA 1672W, CTLA 1672W-1, CTLA1672W-3, CTLA1734W, CTLA 1734W-1, and CTLA 1734W-2 tested in accordance with Miami-Dade County Protocol TAS-202 for transverse wind load and TAS-201 and TAS-203 for large missile impact and cyclic resistance by Certified Testing Laboratories, 7252 Narcoossee Rd. Orlando, Fl 32822.
3. Test reports 85948.02-801-18, 85948.04-801-18, and 85948.06-801-18 tested in accordance with ASTM E1886, ASTM E 1996 and ASTM E330 by ATI.
4. Installation instructions and supplemental data sheets prepared by Overhead Door Corporation.

**10. REPORT SUMMARY**

Upon review of the data submitted by Wayne Dalton, a Division of Overhead Door Corporation, it is my opinion that the models as described in this report conform with or are a suitable alternative to the code standards and sections in the Florida Building Code 6th Edition (2017) edition.

**11. LIMITATIONS**

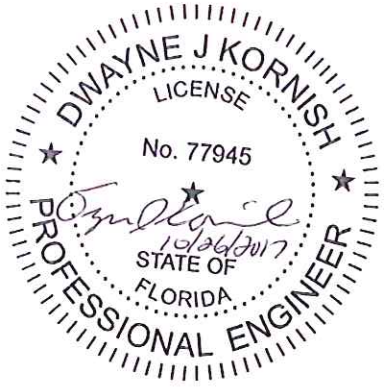
Any reference in this report to the manufacturer's "most recent" information is a direct reference to the most recent information submitted by Wayne Dalton, a Division of Overhead Door Corporation to the Florida Building Commission as part of their Florida Product Approval application for the drawings listed in Table 2 of this report.
This evaluation report and the most recent installation instructions, when required by the building official, shall be submitted at the time of permit application.
The design of the supporting structural elements shall be the responsibility of the design professional for the building structure and in accordance with current building codes for the loads listed in Table 2 of this report.
The doors shall not be located in areas where the transverse wind loads exceed the allowable loads shown in Table 1 of this report.
The garage door assemblies listed in Table 1 of this report are not approved for use in the "High Velocity Hurricane Zone" as defined in the Florida Building Code.

**12. IDENTIFICATION**

Each Model series covered by this report shall be labeled with the manufacturer's name and/or trademark for field identification.

Please feel free to contact me if you need any additional information.

Sincerely,




Dwayne J Kornish
FL PE 77945