



# Product Evaluation

GDR110 | 0116

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-110

**Effective Date:** January 1, 2016

**Re-evaluation Date:** February 2019

**Product Name:** DuraFlex Sectional Garage Door, Non-Impact Resistant

**Manufacturer:** DuraFlex  
2951 Northern Cross Blvd #213  
Fort Worth, TX 76137  
(800) 994-2096

## General Description:

DuraFlex doors are not impact resistant for windborne debris. They are damage resistant for non-storm related impacts. The sandwich sectional doors are constructed with plastic facings inside and outside, with variable section heights up to 24" tall for some widths. Windows are not available, although a peep-hole viewer is optional. These doors do not require conventional horizontal strut reinforcement. This report includes individual, non-impact resistant garage doors based on the following tested series:

**DuraFlex:** sandwich-style, sectional doors

- FRP (Fiberglass Reinforced Plastic) exterior skins
- 1-3/4" thick door sections
- Smooth finish on the inside and outside skins
- 3" track and rollers
- Steel end stiles and end hinges
- Fabric center/intermediate hinges on widths over 10'-2".
- No external reinforcement required.

**Hardware:** The following applies to all doors.

- End Hinges: 11 gauge galvanized steel hinges secured with four 1/4"-14 x 3/4" sheet metal screws.

- Intermediate Hinges: Flexible fabric hinges (as needed) secured with two 1/4"x 2-1/2" carriage bolts. Intermediate hinges are not structural, but for operational purposes.
- Locks: slide locks.
- End Caps: 12 gauge flat galvanized steel plates on the interior of the sections at the outer edges in lieu of end stiles. These plates do not wrap around the edges of the door.
- Tracks: Vertical tracks are 3" x 13 gauge galvanized steel.
- Track Saddles: Track is continuous wall-angle commercial track. Track saddles are 10 gauge galvanized steel. Wall-angle is 13 gauge galvanized steel. Refer to the drawing for saddle quantity and locations.
- Rollers: 3" diameter 10-ball steel long stem rollers. Locking collars added to roller stems as shown on the drawing. Note: Lock collar "slip" location varies with width and pressure: See Tables #1 and #2 on the Drawing.
- The door must overlap the structure by 1" on each side (2" total) for sizes and pressures on Sheet 2 (Table #1) of the approved drawing, and by 2" on each side (4" total) for sizes and pressures on Sheet 3 (Table #2) of the approved drawing. Refer to Tables A and B of this evaluation report.

**Glazing:** Glazing is not available in these doors. A peep hole is available as an option.

**Product Identification:** The doors have a label applied during manufacturing that includes the manufacturer's name. The door will also have a second label, applied by the installer that includes the manufacturer's name and the design pressure rating for the door.

**Limitations:**

**Impact protection:** The DuraFlex door has not been tested for windborne debris resistance. This door is not approved for use in the Seaward Zone. Doors that contain window glass must not be installed in the Inland I zone unless the windows are protected with a TDI-approved shutter device (or another approved impact protective system). Maximum allowable door dimensions, design pressures, and hardware requirements are shown in Table A and Table B herein.

**Installation Instructions**

**General:** The DuraFlex door must be installed in accordance with the manufacturer's published installation instructions, engineering drawings (stamped and signed, sealed, and dated by John E. Scates, P.E., on November 12, 2014, and this product evaluation report. Keep a copy of these instructions available at all times at the job site during installation. The information within this 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 A for maximum allowable door dimensions, allowable design pressures, and applicable drawings. Required reinforcement configurations are shown in the following drawing

**Design Drawing:** The sectional doors must be installed in accordance with the following:

- "Duraflex Sectional Overhead Door, Windload Rating" Sheets 1 thru 3 of 3, dated March 24, 2014, signed, sealed, and dated November 12, 2014, by John E. Scates, P.E. The stated drawings will be referred to as approved drawings in this report. A copy of the approved drawings must be available at the job site.

**Attachment of doors to wall framing:** The door track must be attached directly to the wall. The wall must be concrete or steel. The allowable methods of attachment and illustrations of the allowable methods of attachment are on Sheet 2 (for Table #1 pressures) of the approved drawing and Sheet 3 (for Table #2 pressures) of the approved drawing. Refer to Tables A and B of this evaluation report.

**Table A**  
**DuraFlex Sectional Doors with 1" of Door overlap per side**

Maximum Width	Maximum Door Height	Maximum Section Height	Door Overlap per side	Rollers	Roller Slip	Fabric Center Hinges	Design Pressures (psf)
5'-2"	10'	24"	1"	3" Standard long stem	1/2"	0	+82.9 / -92.7
6'-2"	10'	24"	1"	3" Standard long stem	1/2"	0	+69.5 / -66.8
7'-2"	10'	24"	1"	3" Standard long stem	1/2"	0	+59.8 / -58.6
8'-2"	10'	24"	1"	3" Standard long stem	1/2"	0	+52.5 / -58.6
9'-2"	10'	24"	1"	3" Standard long stem	1/2"	0	+41.6 / -46.5
10'-2"	10'	24"	1"	3" Standard long stem	3/4"	0	+33.8 / -37.8
11'-2"	10'	21"	1"	3" high strength long stem	3/4"	3	+32.8 / -35.8
12'-2"	10'	21"	1"	3" high strength long stem	3/4"	3	+21.3 / -23.9
13'-2"	10'	21"	1"	3" high strength long stem	3/4"	3	+19.7 / -22.1
14'-2"	10'	21"	1"	3" high strength long stem	3/4"	3	+18.3 / -20.5
15'-2"	10'	21"	1"	3" high strength long stem	3/4"	3	+17.1 / -19.2
16'-2"	10'	21"	1"	3" high strength long stem	3/4"	3	+16.0 / -18.0

**Table B**  
**DuraFlex Sectional Doors with 2" of Door overlap per side**

Maximum Width	Maximum Door Height	Maximum Section Height	Door Overlap per side	Rollers	Roller Slip	Fabric Center Hinges	Design Pressures (psf)
12'-2"	10'	21"	2"	3" high strength long stem	1-1/4"	3	+43.3 / -49.8
13'-2"	10'	21"	2"	3" high strength long stem	1-1/4"	3	+40.0 / -46.0
14'-2"	10'	21"	2"	3" high strength long stem	1-1/4"	3	+37.2 / -42.7
15'-2"	10'	21"	2"	3" high strength long stem	1-1/4"	3	+34.7 / -39.9
16'-2"	10'	21"	2"	3" high strength long stem	1-1/4"	3	+32.6 / -37.5
18'-2"	10'	21"	2"	3" high strength long stem	1-1/4"	3	+24.7 / -28.4
19'-10"	10'	21"	2"	3" high strength long stem	1-1/4"	3	+20.2 / -23.3

**Note:** Keep the manufacturer's installation instructions available on the job site during installation. Use corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.