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# **Product Evaluation**

GDR149 | 1021

**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-149 **Effective Date:** October 1, 2021

**Re-evaluation Date:** October 2025

Product Name: DuraFlex Composite, Insulated, Sectional Garage Doors, Impact Resistant and

Non-Impact Resistant

**Manufacturer:** Duraserv Corp.

11431 Ferrell Drive

Suite 200

Farmers Branch, TX 75234

(330) 204-8893

## **General Description:**

DuraFlex doors are composite sectional garage doors. The door panels are constructed of the following components:

- **Exterior Skin:** Composite consisting of 0.012", 80 ksi steel skin laminated to both sides of a HDPE composite core
- Panel Core: 1-1/2" thick x 21-7/8" high, 1 lb. density EPS foam
- Interior Skin: 0.125" thick coextruded TPO.

## **Product Identification:**

**Drawings 21-18T and 21-19T:** The doors have a label which includes the manufacturer's name (DuraFlex LLC); the model doors (DuraFlex); the maximum door height and door width; the design pressure rating for the door; and the following test standards (ASTM E 330, ANSI/DASMA 108 and TAS 202).

**Drawing 21-17T:** The doors have a label which includes the manufacturer's name (DuraFlex LLC); the model doors (DuraFlex); the maximum door height and door width; the design pressure rating for the door; and the following test standards (ASTM E 330, ANSI/DASMA 108, TAS 201 and TAS 203).

**Drawing 21-57T:** The doors have a label which includes the manufacturer's name (DuraFlex LLC); the model doors (DuraFlex); the maximum door height and door width; the design pressure rating for the door; and the following test standards (TAS 201, TAS 202, and TAS 203).

## **Limitations:**

**Maximum Opening Width:** 12'-2" for impact resistant doors; 18'-2" for non-impact resistant doors. Refer Table 1 and the approved drawings for specific requirements.

**Maximum Opening Height:** 14'-0". Refer to Table 1 and the approved drawings for specific requirements.

**Maximum Section Height:** 24". Refer to the approved drawings for specific requirements.

**Glazing:** Not permitted.

**Allowable Design Pressure Rating:** Refer to Table 1 and the approved drawings the design pressure rating for the doors.

## **Impact Resistance:**

- Sectional doors installed in accordance with drawings 21-17T and 21-57T have been tested for windborne debris resistance. The door assemblies passed the equivalent of Missile Level D as specified in ASTM E 1996-14a. The doors may not be installed on essential facilities as defined in ASCE 7-16.
- Sectional doors installed in accordance with drawings 21-18T and 21-19T have not been tested for windborne debris resistance.

**Acceptance of Smaller Assemblies:** Door assemblies with dimensions equal to or smaller than those specified above are acceptable within the limitations specified in this report.

**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 Jalal Faroog, PE. The

drawing date and the date sealed by the engineer are specified in the tables in this evaluation report.

## **Installation:**

**General:** Install these doors in accordance with the manufacturer's published installation instructions, the approved drawings, and this product evaluation report. A copy of the approved drawings and the manufacturer's installation instructions must be available 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 evaluation report.

**Anchorage:** The doors must be anchored to the structure in accordance with the approved drawings. Anchorage of the doors to concrete, steel, wood, and grout-filled CMU must follow the mounting details on the approved drawings and the fasteners specified in the mounting details. Minimum edge distances and minimum embedment depths for all fasteners that penetrate into the structure must be as specified on the design drawings and the manufacturer's installation instructions.

**Table 1**Impact and Non-Impact resistant Doors

Drawing	Maximum Door Width	Maximum Door Height	Glass	Impact Rated	Design Pressure (psf)
21-17T 3/11/21 Sealed: 4/13/21	8'-2"	14'-0"	No	Yes	+61.5; -69.5
21-18T 3/11/21 Sealed: 5/18/21	12'-2"	14'-0"	No	No	+46.7; -52.9
21-57T 7/09/21 Sealed: 8/25/21	12'-2"	14'-0"	No	Yes	+52.9; -60.3
21-19T 3/11/21 Sealed: 5/18/21	18'-2"	14'-0"	No	No	+15.2; -16.7

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