

Product Evaluation

CWSF79 | 0623

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: CWSF-79

Effective Date: June 1, 2023

Re-evaluation Date: June 2027

Product Name: FG-5750 StormMax® Aluminum Storefront Systems, Impact Resistant

Manufacturer: Oldcastle BuildingEnvelope
803 Airport Rd.
Terrell, TX 75160
(972) 551-6100

General Description:

The FG-5750 StormMax® storefront system is an aluminum frame system used for commercial installations. It is Large Missile Impact Rated – Missile Level E.

Doors: Oldcastle BuildingEnvelope doors used with these assemblies must be listed in a separate TDI product evaluation report.

Product Identification: An Oldcastle BuildingEnvelope label will be affixed to the storefront assembly. The label includes the following information:

FG-5750 StormMax® Storefront System: The label includes the manufacturer's name (Oldcastle BuildingEnvelope); the product name (FG-5750 StormMax® Storefront (Level E)); the design pressures and dimensions are per drawing OBE009; the test standards (ASTM E330-14, ASTM E1886-13a, ASTM E1996-17); and Large Missile Impact Rated – Missile Level E.

Limitations:

Design Drawings: Storefront assemblies must comply and be installed in accordance with the following design drawing:

- Drawing No. OBE009; "FG-5750 StormMax® Aluminum Storefront System" Sheets 1 thru 14 of 14; dated January 4, 2023; signed and sealed by Hermes F. Norero, P.E on February 2, 2023. This evaluation report refers to the stated drawings as the approved drawings.

Fabrication and Assembly: Oldcastle BuildingEnvelope StormMax® storefront systems are fabricated in the factory. The aluminum storefront systems are assembled and glazed at the jobsite. The approved drawings referenced in this evaluation report indicate the options for the glazing construction.

Design Pressure (DP):

FG-5750 StormMax® Storefront System: The storefront system has a maximum design pressure rating of +70 psf / -90 psf. Refer to the approved drawing for specific design pressure requirements.

If the storefront system is used with doors, then the design pressure rating of the complete assembly will be the lesser of the allowable design pressure rating for the doors and the storefront system in this evaluation report.

Impact Resistance:

FG-5750 StormMax® Storefront System: The storefront system satisfies TDI's criteria for protection from windborne debris. These assemblies passed the equivalent of Missile Level E specified in ASTM E 1996-14a. Install these assemblies at any height on the structure that does not exceed the assembly's design pressure rating.

Acceptance of Other Assemblies:

- The approved drawings specify the limitations on overall width.
- Assemblies must not exceed the heights shown on the approved drawings.
- Doors used with these assemblies must be listed in separate TDI product evaluation reports.

Installation Instructions:

General: Prepare and install the assembly in accordance with the Oldcastle BuildingEnvelope installation instructions and the approved drawings specified in this evaluation report. Detailed installation instructions are available from Oldcastle BuildingEnvelope.

Installation:

Wall Framing Construction: The aluminum storefront system may be mounted to several types of wall framing construction. The types of wall framing construction allowed include:

- concrete (minimum compressive strength: 3,000 psi)
- C-90 hollow/filled block (minimum compressive strength: 2000 psi)
- steel (minimum 16-gauge; Fy=36 ksi)

- wood (minimum specific gravity, SG=0.42)
- aluminum (minimum 1/8" thick, 6063-T5)

Refer to the appropriate design drawing for the allowed wall framing construction.

Fastener Requirements:

- Refer to the approved drawings for the anchor layout and notes.
- Refer to the approved drawings for the minimum embedment depths for the fasteners and the minimum edge distances (minimum distance fastener must be from the edge of the substrate material) for the fasteners.

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