

Product Evaluation

CWSF63 | 1122

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 1-800-248-6032.

Evaluation ID: CWSF-63

Effective Date: November 1, 2022

Re-evaluation Date: November 2025

Product Name: Resistor 3000R Aluminum Storefront Wall System, Impact Resistant

Manufacturer: Trulite Glass and Aluminum Solutions
403 Westpark Court
Suite 201
Peachtree City, GA 30269
(800) 432-8132

General Description: The Resistor 3000R is an aluminum frame storefront wall system used for commercial installations.

Doors: Doors referenced in this product evaluation report are not part of this product evaluation report. The doors used with these assemblies must be listed in a separate TDI product evaluation report.

Product Identification: A Trulite label will be affixed to the assembly. The label includes the manufacturer's name: (Trulite Glass & Aluminum Solutions); the product name: (Resistor 3000R Series Storefront); the test standards (TAS 201-94, TAS 202-94, TAS 203-94, ASTM E 330, ASTM E 1886, ASTM E 1996); the missile level (Large Missile Impact Rated, Missile Level D); and Installation and Design Pressures Per DWG TA18-05.

Compliance: These assemblies passed test criteria equivalent to ASTM E330-14, ASTM E1886-13a, and ASTM E1996-14a as referenced in the 2018 IRC and the 2018 IBC.

Limitations:**Design Drawings:**

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

Drawing No. TA18-05 titled "Resistor 3000R Aluminum Storefront Wall-LMI;" Sheets 1 thru 13 of 13; Rev 2; dated August 29, 2022; signed and sealed by Yiping Wang, P.E on September 6, 2022. This evaluation report refers to the stated drawings as the approved drawings.

Fabrication and Assembly: Trulite Glass & Aluminum Solutions 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):

The aluminum storefront systems have a maximum design pressure rating of +100/-100 psf. Refer to drawing TA18-05 for specific design pressure requirements.

Impact Resistance:

These assemblies have been tested for windborne debris resistance. These assemblies have passed an impact criteria equivalent to Missile Level D specified in ASTM E 1996-14a. Install these assemblies at any height on the structure that does not exceed the design pressure rating for the assembly. For essential facilities, the assembly may not be installed below a height of 30 feet in Wind Zone 3 and may be installed at all heights in Wind Zone 2 as defined in ASTM E 1996-14a.

Acceptance of Other Assemblies:

The approved drawings specify the limitations on overall frame width.

The approved drawings specify limitations on vertical height.

Doors used with the assemblies must be listed in separate TDI product evaluation reports.

Installation:

General: Prepare and install the assembly in accordance with the manufacturers recommended installation instructions. Detailed installation instructions and drawings are available in the approved drawings.

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)
- Wood: Minimum specific gravity of 0.55
- Masonry: Grout Filled Block Per ASTM C90 with $f'm = 2,000$ psi minimum.
- Steel: Minimum 12 gauge; FY=36 ksi
- Aluminum: Minimum 1/8" thick; 6063-T5

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.