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-03  Effective Date: November 1, 2021
Re-evaluation Date: November 2025

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

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

General Description:
The Resistor 3000 is an aluminum frame storefront wall system used for commercial installations. This evaluation report includes the following storefront assemblies:

- Mulled Assemblies with Steel Reinforcement
- Mulled Assemblies without Steel Reinforcement
- Double Door with Transom and Sidelites
- Single Door with Transom and Sidelites
- Door Frames without Transoms and with Sidelites

Doors: Doors referenced in this product evaluation report are Trulite Glass and Aluminum Solutions door products. The Trulite Glass and Aluminum Solutions doors used with these assemblies must be listed in separate TDI product evaluation reports.
**Product Identification:** A Trulite Glass and Aluminum Solutions label will be affixed to the storefront assembly. The label includes the following information:

The label includes the manufacturer’s name (Trulite Glass and Aluminum Solutions); the product name (Resistor 3000 Storefront); the test standards (TAS 201-94, 202-94, 203-94, ASTM E 330, ASTM E 1886, ASTM E 1996); the Missile Level (Large Missile Impact Rated, Missile Level D); and that the Installation and Design Pressure are per TDI Drawing TAD14-01.

**Compliance:** The storefront assemblies passed test criteria equivalent to ASTM E 330-14, ASTM E 1886-13a, and ASTM E 1996-14a as referenced in the 2018 IRC and 2018 IBC.

**Limitations:**

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

Drawing No. TAD14-01, “Resistor 3000 Aluminum StoreFront Wall-LMI,” Sheets 1 thru 11 of 11, dated September 30, 2021, signed, and sealed by Yiping Wang, P.E on October 13, 2021. This evaluation report refers to the stated drawings as the approved drawings.

**Fabrication and Assembly:** Trulite Glass and Aluminum Solutions aluminum storefront wall systems are fabricated in the factory. The aluminum storefront wall 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 storefront wall system has a maximum design pressure rating of +100 psf / -100 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:**
The storefront system satisfies TDI’s criteria for protection from windborne debris. These assemblies passed the equivalent of Missile Level D 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. The assembly may not be installed below a height of 30 feet on essential facilities as defined in ASCE 7-16.
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 Trulite Glass and Aluminum Solutions installation instructions and the approved drawings specified in this evaluation report. Detailed installation instructions are available from Trulite Glass and Aluminum Solutions.

**Installation:**

**Wall Framing Construction:** The aluminum storefront wall 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)
- grout-filled concrete masonry unit (minimum compressive strength: 2,000 psi)
- hollow concrete masonry unit (minimum compressive strength: 2,000 psi)
- steel (minimum 12-gauge, Fy = 36 ksi).
- aluminum (minimum 1/8" thick, 6063-T5)
- wood (minimum specific gravity, SG=0.55)

**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.