

## Product Evaluation

CWSF67 | 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-67

**Effective Date:** November 1, 2022

**Re-evaluation Date:** November 2025

**Product Name:** Resistor 3300 Aluminum Storefront Wall System, Large and Small Missile Impact, Impact Resistant

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

### General Description:

The Resistor 3300 is an aluminum frame storefront wall system used for commercial installations.

**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 manufacturer's name (Trulite Glass and Aluminum Solutions); the product name (Resistor 3300 Series Storefront); that the Installation and Design Pressures are per drawing AD21-03; the test standards: (TAS 201-94, TAS 202-94, TAS 203-94,

ASTM E 330, ASTM E 1886, ASTM E 1996); and missile level (Large Missile Impact Rated, Missile Level D).

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

**Limitations:**

**Design Drawings:**

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

Drawing No. AD21-03; "Resistor 3300 StoreFront Wall Large and Small Missile Impact;" Sheets 1 thru 15 of 15; Rev 03; 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 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 design pressure ratings as a function of glass load capacity, mullion load capacity, jamb load capacity, and anchor load capacity. 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 wall system has been tested for windborne debris resistance. These assemblies 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 assembly's design pressure rating. 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 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)
- steel (minimum 12-gauge,  $F_y = 36$  ksi).
- aluminum (minimum 1/8" thick, 6063-T6)
- 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.