

## Product Evaluation

CWSF71 | 1121

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-71

**Effective Date:** November 1, 2021

**Re-evaluation Date:** November 2025

**Product Name:** Series E34000/T34000 Aluminum Storefront System, Impact Resistant

**Manufacturer:** Tubelite, Inc.  
3056 Walker Ridge Drive N.W.  
Walker, MI 49544  
(800) 866-2227

### General Description:

The Series E34000/T34000 is an aluminum frame storefront system used for commercial installations. This evaluation report includes the following configuration:

E34000/T34000 Storefront with Door and Transom

**Doors:** Doors referenced in this product evaluation report are Tubelite, Inc. door products. The Tubelite, Inc. doors used with these assemblies must be listed in separate TDI product evaluation reports.

**Product Identification:** A Tubelite, Inc. label will be affixed to the storefront assembly. The label includes the manufacturer's name (Tubelite, Inc.); the product name (Forcefront Storm E/T34000); that the Allowable Dimensions and Design Pressures are as specified in the Referenced Drawings;

the drawing number (TLI013; the test standards: TAS 201-94, TAS 202-94, TAS 203-94, ASTM E 330-14, ASTM E 1886-13a, ASTM E 1996-14a; and the missile rating (Missile Level D).

**Limitations:****Design Drawings:**

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

Drawing No. TLI013; "Series E34000/T34000 StoreFront (WZ3) (IMPACT);" Sheets 1 thru 10 of 10; dated February 22, 2021; signed and sealed by Hermes F. Norero, P.E on September 18, 2021. This evaluation report refers to the stated drawings as the approved drawings.

**Fabrication and Assembly:** Tubelite, Inc. aluminum 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 storefront system has design pressure ratings as a function of glass load capacity, mullion 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 system satisfies TDI's criteria for protection from windborne debris. 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. These assemblies may not be installed on essential facilities below 30 feet from grade in Wind Zone 3 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 Tubelite, Inc. installation instructions and the approved drawings specified in this evaluation report. Detailed installation instructions are available from Tubelite, Inc.

**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)
- steel (minimum 18-gauge,  $F_y = 33$  ksi).
- aluminum (minimum 0.090" thick, 6063-T5)
- wood (minimum specific gravity,  $SG=0.42$ )
- grout-filled CMU (ASTM C-90; minimum compressive strength: 2,000 psi)

Refer to the design drawings for specific wall framing construction requirements.

**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.