Product Evaluation

Evaluation ID: CWSF-42  Effective Date: January 1, 2022
Re-evaluation Date: January 2026

Product Name: Series E44000FS Aluminum Storefront System, Impact Resistant

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

General Description:
The Series E44000FS is an aluminum frame storefront system used for commercial installations. This evaluation report includes the following configuration:

E44000FS Single Span Storefront

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 E44000FS); that the Allowable Dimensions and Design Pressures are as specified in the Referenced Drawings;
the drawing number (101283D-TDI-A); the test standards: 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:


**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 a maximum design pressure rating of \( \pm 70 \text{ psf} \). Refer to 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 1/4" thick, Fy = 33 ksi).
- aluminum (minimum 1/4" thick, 6063-T5)

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.