

## Product Evaluation

CWSF50 | 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-50

**Effective Date:** November 1, 2021

**Re-evaluation Date:** November 2025

**Product Name:** Series GPX Fire Rated Aluminum Window Wall System, Impact Resistant

**Manufacturer:** SAFTIFIRST  
100 North Hill Drive, Suite 12  
Brisbane, CA 94005-1010  
(415) 230-6740

### General Description:

The GPX Fire Rated is an aluminum window wall system used for commercial installations. This evaluation report includes the following storefront assemblies:

- Muller Assemblies with Reinforcement (Aluminum or Steel)

**Doors:** Doors referenced in this product evaluation report and in the approved drawings are SAFTIFIRST door products. The SAFTIFIRST doors used with these assemblies must be listed in separate TDI product evaluation reports.

**Product Identification:** A SAFTIFIRST label will be affixed to the window wall assembly. The label includes the manufacturer's name (SAFTIFIRST); the product name (GPX Fire Rated Window Wall System); the drawing number (W15-85); the test standards (TAS 201/202/203-94); and the missile rating (Large Missile Impact Rated).

**Compliance:** The window wall 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:**

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

Drawing No. W15-85 titled "GPX Fire Rated Window Wall System (LMI);" Sheets 1 thru 5 of 5; dated November 3, 2015; Rev. A dated September 28, 2021; signed and sealed by Jalal Farooq, P.E on October 11, 2021. This evaluation report refers to the stated drawings as the approved drawings.

**Fabrication and Assembly:** SAFTIFIRST window wall systems are fabricated in the factory. The aluminum window 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 allowable design pressure rating for the window wall system is specified on the design drawing. The maximum allowable design pressure rating is +80 / -80 psf.
- If the window wall 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 window wall system in this evaluation report.

**Impact Resistance:**

The store front 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 located within 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 SAFTIFIRST Installation Instructions and the approved drawings specified in this evaluation report. Detailed installation instructions are available from SAFTIFIRST.

**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 1/8" thick,  $F_y = 36$  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.