



Product Evaluation

CWSF33 | 1216

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 (800) 248-6032.

Evaluation ID: CWSF-33

Effective Date: December 1, 2016

Re-evaluation Date: December 2020

Product Name: IR501T and IR501UT Aluminum Storefront System, Impact Resistant

Manufacturer: Kawneer Company, Inc.
555 Guthridge Court
Norcross, Georgia 30092-3503
(770) 840 - 6426

General Description:

This evaluation report is for the IR501T / IR501UT aluminum storefront system. The system is used for commercial installations. This evaluation report includes the following storefront assemblies:

- Multiple Fixed Panel Storefront Assembly
- Storefront Assembly with Project-Out Windows
- Multiple Fixed Panel Storefront Assembly with 90 Degree and 135 Degree Corners

Product Identification: A Kawneer label will be affixed to the storefront assembly.

Products Installed in Accordance with Drawing No. 1758T Rev A (Large Missile Impact, Wet Glazed) and with Drawing No. 1760T Rev A (Large Missile Impact, Dry Glazed): The label includes the manufacturer's name (Kawneer); the product name (IR501T / IR501UT Storefront); that the design pressure and size are per drawings #1758T Rev A and #1760T Rev A; and that the product complies with ASTM E 330-02, ASTM E 1886-05, ASTM E 1996-09, Large Missile Impact, Zone 4-Level D.

Products Installed in Accordance with Drawing No. 1759T Rev A (Small Missile Impact, Dry Glazed): The label includes the manufacturer's name (Kawneer); the product name (IR501 / IR501 UT Storefront); that the design pressure and size are per drawing #1759T Rev A; and that the product complies with ASTM E 330-02, ASTM E 1886-05, ASTM E 1996-09, Small Missile Impact Zone, Level A.

Limitations:**Design Drawings:**

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

Drawing No. 1758T Rev A, titled "IR501T & IR501UT Aluminum Large Missile Impact Storefront System (Wet Glazed)," Sheets 1 thru 10 of 10, dated 3/19/13, Rev A dated 03/29/16 signed and sealed by Warren W. Schaeffer., P.E on Mar-29-2016. The stated drawings will be referred to as the approved drawings in this evaluation report.

Drawing No. 1760T Rev A, titled "IR501T & IR501UT Aluminum Large Missile Impact Storefront System (Dry Glazed)," Sheets 1 thru 10 of 10, dated 3/19/13, Rev A dated 03/29/16 signed and sealed by Warren W. Schaeffer., P.E on Mar-29-2016. The stated drawings will be referred to as the approved drawings in this evaluation report.

Store front assemblies complying with the requirements for small missile impact must comply and be installed in accordance with the following drawing:

Drawing No. 1759T Rev A, titled "IR501T & IR501UT Aluminum Small Missile Impact Storefront System (Dry Glazed)," Sheets 1 thru 10 of 10, dated 3/19/13, Rev A dated 03/29/16 signed and sealed by Warren W. Schaeffer., P.E on Mar-29-2016. The stated drawings will be referred to as the approved drawings in this evaluation report.

Fabrication and Assembly: The Kawneer 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 +70 psf / -70 psf. Refer to the approved drawing for specific design pressure requirements.

Impact Resistance:

Products Installed in Accordance with Drawings No. 1758T Rev A and 1760T Rev A: These assemblies satisfy the Texas Department of Insurance's criteria for protection from windborne debris in both the **Inland I** and **Seaward** zones. These assemblies have passed an impact criteria equivalent to Missile Level D specified in ASTM E 1996-09. These assemblies may be installed at any height on the structure as long as the design pressure rating for the assembly is not exceeded. These assemblies will not need to be protected with an impact protective system when installed in areas where windborne debris protection is required.

Products Installed in Accordance with Drawing No. 1759T Rev A: These assemblies satisfy the Texas Department of Insurance's criteria for protection from windborne debris in both the **Inland I** and **Seaward** zones. These assemblies have passed an impact criteria equivalent to Missile Level A specified in ASTM E 1996-09. These assemblies shall be installed at a height of 30 feet or greater on the structure as long as the design pressure rating for the assembly is not exceeded. These assemblies will not need to be protected with an impact protective system when installed in areas where windborne debris protection is required.

Acceptance of Other Assemblies:

- Limitations on horizontal stacking, overall width, and the number of vertical panels used must be as specified on the approved drawings.
- Limitations on the placement of project-out windows and the number of project-out windows shall be as specified on the approved drawings.

Installation Instructions:

General: Prepare and install the assembly in accordance with Kawneer installation instructions and the approved drawings specified in this evaluation report.

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)
- Wood dimension lumber (minimum Southern Yellow Pine)
- Masonry – (ASTM C-90, Grade N, Type 1 or greater)
- Steel studs (minimum 16 gauge, 33 ksi)
- Steel (1/8" thick, A36 (minimum Fy = 36 ksi))
- Aluminum (minimum 0.100" thick, 6063-T6)

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, the IBC, and the Texas Revisions.