TDI | Texas Department of Insurance

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Product Evaluation

WIN2698 | 0222 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: WIN-2698

Effective Date: February 1, 2022
Re-evaluation Date: February 2026

Product Name: Series 8430TL Thermally Broken Aluminum Single Hung Windows, Impact Resistant

Manufacturer: Kawneer Company, Inc.
Technology Park/ Atlanta
555 Guthridge Court
Norcross, GA 30092-3503
(770) 449-5555

General Description:
The 8430TL aluminum windows are used for commercial installation. This evaluation report includes the following assemblies:

- Individual Single Hung Window anchored with mounting clips
- Individual Single Hung Window anchored with receptor
- Multiple Windows anchored with mounting clips
- Multiple Windows anchored with receptor

Product Identification: A Kawneer label will be affixed to the window assembly. The label includes the manufacturer's name (Kawneer); the product name (8430TL Thermal Windows (Single Hung)); the design pressures and assembly size are per TDI drawing 1897T; the test standards (TAS 201, TAS 202, TAS 203); and the Missile Level (Small and Large Missile Impact Rated-Zone 4, Missile Level D).

Compliance: The window assemblies passed test criteria equivalent to ASTM E330-14, ASTM E1886-13a, and ASTM E1996-14a.

Limitations:

Design Drawings: The window assemblies must comply with and be installed in accordance with the following design drawings:

- Drawing No. 1897T, titled "8430TL Single Hung Window (Small & Large Missile Impact);" Sheets 1 thru 6 of 6; dated March 4, 2021; signed and sealed by Warren W. Schaefer, P.E. on March 4, 2021. This evaluation report refers to the stated drawing as the approved drawing.

Fabrication and Assembly: Kawneer window systems are fabricated in the factory. The aluminum window system is 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 aluminum window system has a maximum design pressure rating of +90 / -90 psf. Refer to the approved drawing for specific design pressure requirements.

Impact Resistance: The window system satisfies TDI's criteria for protection from windborne debris. These assembly passed the equivalent of Missile Level D specified in ASTM E1996-14a. Install the assembly 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.

Installation Instructions:

General: Prepare and install the assembly in accordance with Kawneer's installation instructions and the approved drawing specified in this report. Detailed installation instructions are available from Kawneer.

Wall Framing Construction: The window system may be mounted to several types of wall framing construction. The types of wall framing constructions allowed include:

- Concrete (minimum compressive strength: 2,500 psi)
- CMU (concrete filled)
- Wood (minimum specific gravity, SG=0.55)
- Steel (minimum 1/8" thick, Fy=36 ksi)
- Metal stud (minimum 18 gauge, 33 ksi)
- Aluminum (minimum 0.10" thick, 6063-T5)

Refer to the design drawing for specific wall construction requirements.

Fastener Requirements:

- Refer to the approved drawing for anchor layout and notes
- Refer to the approved drawing for the minimum embedment depths for the fasteners and the minimum edge distanced (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.