

Product Evaluation

DR1222 | 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: DR-1222

Effective Date: February 1, 2022

Re-evaluation Date: September 2025

Product Name: Series SI 33350 Lite Rail In-Fold/Out-Fold Aluminum Folding Glass Wall Systems, Non-Impact Resistant

Manufacturer: Solar Innovations, Inc.
31 Roberts Road
Pine Grove, PA 17963
(570) 915-1500

General Description:

System	Description	Label Rating	Design Pressure Rating
1	Series SI 33350 Lite Rail In-Fold and Out-Fold Aluminum Folding Glass Wall	Maximum Size Tested: 261x119	+50 / -50 psf

Product Dimensions:

System	Overall Frame Size	Panel Size	Panel Daylight Opening Size
1	260-11/16" x 118-1/2"	42" x 114"	39-1/4" x 107-1/4"

Product Identification (Certification Agency Label:

System		
1	Certification Agency	NAMI
	Manufacturer's Name or Code Name	Solar Innovations, Inc.
	Product Name	SI 33350 Standard and Lite Rail In-Fold/Out-Fold Aluminum Folding Glass Wall
	Test Standards	ASTM E 330-2(10)

Compliance: The glass wall assemblies passed test criteria equivalent to ASTM E 330-14.

Impact Resistance:

System	Impact Resistant	Requirement
1-4	No	Provide an impact protective system when installing the product in areas that require windborne debris protection.

Fabrication and Assembly: The folding glass wall panels are fabricated in the factory. The panels themselves are assembled and glazed at their facility. The heads, sill, and side jambs are fabricated at their facility assembled at the jobsite.

Hardware: Requirements for hardware are specified on the approved drawings.

Installation:

General: The assembly must be installed in accordance with the manufacturer's installation instructions and this product evaluation. Detailed drawings and installation instructions are available from the manufacturer.

Design Drawings: The aluminum folding glass wall systems must be installed in accordance with following listed drawings:

Drawing No. 08-03486; titled "SI 3000 Lite Rail In/Out Aluminum FGW Non-Impact;" Sheets 1-12; dated March 31, 2021; signed and sealed by Luis R. Lomas, P.E., on January 7, 2022

The stated drawing will be referred to as the approved drawing in this evaluation report. A copy of the approved drawing must be available at the jobsite.

Wall Framing Construction: The folding glass 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)
- Wood dimension lumber (minimum Spruce-Pine-Fir, $G \geq 0.42$)
- Masonry (ASTM C-90, Grade N, Type 1 (or greater))
- Steel (minimum 12 gauge, 33 ksi)
- Aluminum (6063-T5, 1/8" thick minimum)

Installation:

- Folding glass wall systems are installed in accordance with the approved drawings.
- The approved drawings indicate 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.