

ICC-ES Evaluation Report

ESR-4885

Reissued October 2024


This report also contains:

- [CA Supplement](#)

Subject to renewal October 2025

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DIVISION: 09 00 00— FINISHES Section: 09 62 83— Structural Glass Flooring	REPORT HOLDER: GLASS FLOORING SYSTEMS, INC.	EVALUATION SUBJECT: SKYFLOOR® SERIES 2000 WALKABLE SKYLIGHT	
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1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2021, 2018 and 2015 [International Building Code® \(IBC\)](#)

Properties evaluated:

- Structural
- Air Infiltration
- Water Penetration Resistance

2.0 USES

The SkyFloor® Series 2000 Walkable Skylight has been shown to comply with IBC Sections 2405.5 and 2409.1 and is used in nonclassified roofing assemblies and floors where fire-resistance rated construction is not required.

3.0 DESCRIPTION

The SkyFloor® Series 2000 Walkable Skylight components consist of glass panels, spacers, gaskets, setting blocks, silicone and backer rods supported by aluminum (6063 T6) z-shape extrusions along the entire perimeter. See [Figure 1](#). The product specifications are as noted in the approved quality control documents. Other components installed at the jobsite must comply with the following:

3.1 Top Glass Panels:

The laminated top glass panels must comply with ASTM C1172 and comply with Category II of CPSC 16 CFR Part 1201 or Class A of ANSI Z97.1.

The individual layers of the laminated glass panels must be Kind FT fully tempered glass complying with ASTM C1048.

The PVB interlayers must have a minimum shear modulus of 70 psi for $T \leq 122^{\circ}\text{F}$ (.48 MPa for $T \leq 50^{\circ}\text{C}$).

The top glass panels must consist of three glass layers and two interlayers. Each glass layer must have a minimum nominal thickness of 0.390 inch (9.91 mm). The PVB interlayers must have a minimum 0.060-inch (1.52 mm) thickness. The overall minimum nominal thickness must be 1.29 inches (32.8 mm) and must be $45^{13}/_{16}$ inches (1164 mm) square.

3.2 Bottom Glass Panels:

The bottom panels must comply with the same material specifications as the top glass panels, except that they consist of two glass layers and one interlayer. The glass layers must have a minimum nominal thickness of

0.150 inch (3.81 mm). The PVB interlayer must have a minimum 0.060-inch (1.52 mm) thickness. The overall minimum nominal thickness must be 0.360 inch (9.14 mm) and must be 42¹/₂ inches (1080 mm) square.

3.3 Silicone:

The silicone must comply with ASTM C920 Type S, Grade NS, Class 50, Use NT, G and A and ASTM C1184.

4.0 DESIGN AND INSTALLATION

4.1 Design:

The SkyFloor® Series 2000 Walkable Skylight has an ASD allowable positive uniform live load capacity of 100 psf (4.8 KPa) and an ASD allowable negative uniform wind load of 100 psf (4.8 KPa). The maximum deflection at the allowable loads is less than L/175. Concentrated live loads per Chapter 16 of the IBC must be considered by the registered design professional.

The system meets the air infiltration and water penetration resistance requirements of AAMA/WDMA/CSA 101/I.S.2/A440.

4.2 Installation:

Installation must comply with [Figure 1](#). The system must be continuously supported around the entire perimeter with the z-shape extrusions, and the z-shape extrusions must be continuously supported along the 4-inch (102 mm) bottom flange and anchored to the supporting structure.

5.0 CONDITIONS OF USE:

The SkyFloor® Series 2000 Walkable Skylight described in this report complies with, or is a suitable alternative to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

- 5.1 Use in fire-resistance rated construction is outside of the scope of this report.
- 5.2 Use in classified roofing assemblies is outside of the scope of this report.
- 5.3 Slip resistance is outside of the scope of this report.
- 5.4 Installation shall comply with IBC Section 2405.
- 5.5 The thermal break shall not be directly exposed to moisture or sunlight when installed in exterior locations.
- 5.6 All glass must be fully-tempered Type II laminated glass, with an interlayer complying with Section 3.1 and 3.2 of this report and fabricated and inspected in accordance with ASTM C1172. The glass fabricator must provide certification of compliance with ASTM C1172.
- 5.7 The system components, except for the glass, silicone, and fasteners, are supplied by the report holder.
- 5.8 Installation of aluminum in contact with dissimilar materials shall comply with the Aluminum Design Manual (ADM) Section M.7.
- 5.9 Concentrated live loads are outside of the scope of this report.
- 5.10 Anchorage of the perimeter supports to the supporting structure is outside of the scope of this report.

6.0 EVIDENCE SUBMITTED

- 6.1 Data in accordance with AAMA/WDMA/CSA 101/I.S.2/A440, ASTM E1300, and ASTM E72.
- 6.2 Quality documentation in accordance with the [ICC-ES Acceptance Criteria for Quality Documentation \(AC10\)](#), dated January 2019.

7.0 IDENTIFICATION

- 7.1 The ICC-ES mark of conformity, electronic labeling, or the evaluation report number (ICC-ES ESR-4885) along with the name, registered trademark, or registered logo of the report holder must be included in the product label.
- 7.2 In addition, the SkyFloor® Walkable Skylights components, except for the glass, silicon, and fasteners, are packaged with a label bearing the report holder's name; and product description.

The glass panels must be identified as specified in this report and the applicable code.
- 7.3 The report holder's contact information is the following:

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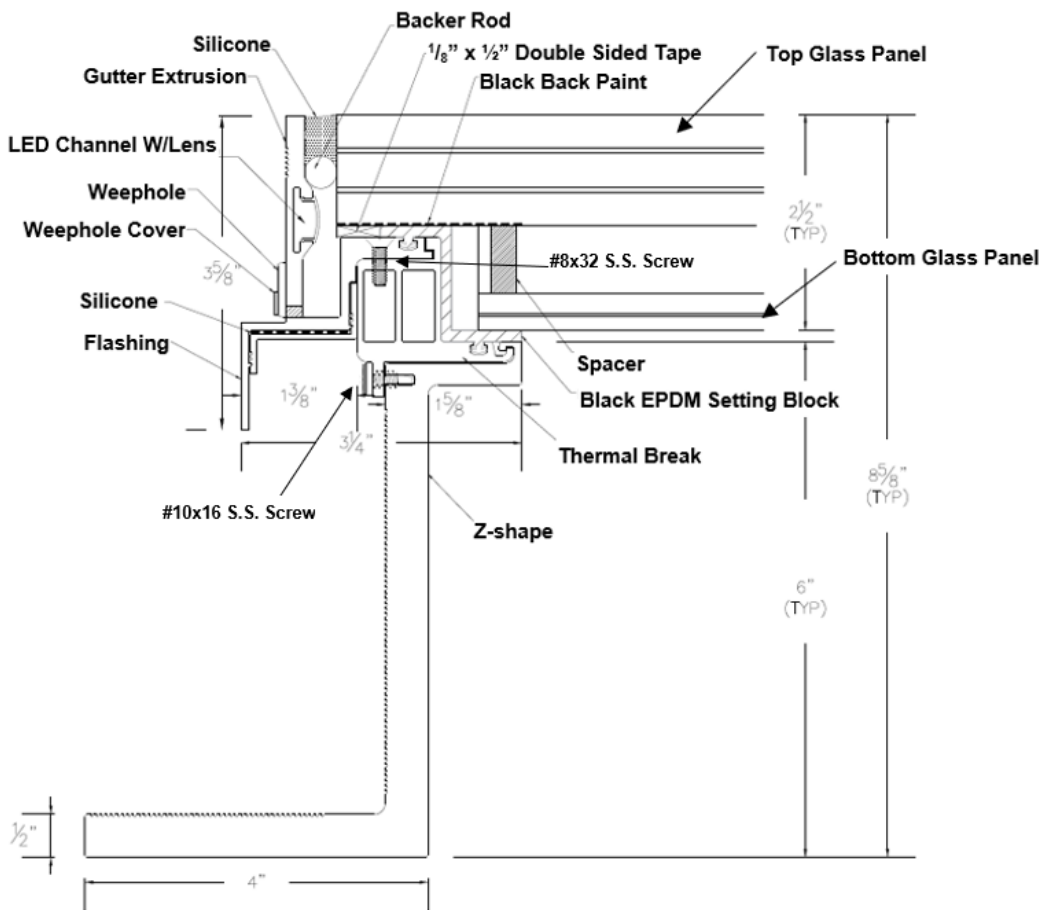


FIGURE 1—EXAMPLE PERIMETER CROSS SECTION

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DIVISION: 09 00 00—FINISHES

Section: 09 62 83—Structural Glass Flooring

REPORT HOLDER:

GLASS FLOORING SYSTEMS, INC.

EVALUATION SUBJECT:

SKYFLOOR® SERIES 2000 WALKABLE SKYLIGHT

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that Skyfloor® Series 2000 Walkable Skylight, described in ICC-ES evaluation report ESR-4885, has also been evaluated for compliance with the codes noted below.

Applicable code editions:

2022 and 2019 *California Building Code* (CBC)

For evaluation of applicable Chapters adopted by the California Office of Statewide Health Planning and Development (OSHPD) AKA: California Department of Health Care Access and Information (HCAI) and the Division of State Architect (DSA), see Sections 2.1.1 and 2.1.2 below.

2.0 CONCLUSIONS

2.1 CBC:

The Skyfloor® Series 2000 Walkable Skylight, described in Sections 2.0 through 7.0 of the evaluation report ESR-4885, complies with CBC Chapters 16 and 24, provided the design and installation are in accordance with the 2021 and 2018 *International Building Code*® (IBC) provisions noted in the evaluation report and the additional requirements of CBC Chapters 16 and 24, as applicable.

2.1.1 OSHPD:

The applicable OSHPD Sections and Chapters of the CBC are beyond the scope of this supplement.

2.1.2 DSA:

The applicable DSA Sections and Chapters of the CBC are beyond the scope of this supplement.

This supplement expires concurrently with the evaluation report, reissued October 2024.