

ICC-ES Evaluation Report

ESR-4745

Reissued October 2024


This report also contains:

- [CA Supplement](#)

Subject to renewal October 2026

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<p>DIVISION: 08 00 00— OPENINGS</p> <p>Section: 08 84 00— Plastic Glazing</p>	<p>REPORT HOLDER: KINGSPAN LIGHT + AIR</p>	<p>EVALUATION SUBJECT: KILON POLYCARBONATE MULTIWALL AND U- LITE SOLID MONOLITHIC SHEET</p>	
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1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2021, 2018, 2015, 2012, and 2009 [International Building Code® \(IBC\)](#)

Property evaluated:

Light-transmitting plastics

2.0 USES

The Kilon flat multiwall and U-Lite solid monolithic polycarbonate sheets comply with the requirements for light-transmitting plastics in IBC Section 2606.4.

3.0 DESCRIPTION

The flat multiwall and monolithic polycarbonate sheets are light-transmitting plastics complying with IBC Section 2606.4 and have a CC1 plastic combustibility classification.

The multiwall sheets are typically 600 millimeters (23.6 inches) wide and are available in various colors, thicknesses and configurations. See [Table 1](#) for size and configuration details.

The solid monolithic sheet is typically 600 millimeters (23.6 inches) wide and 4 mm (0.157 inches) thick.

4.0 DESIGN AND INSTALLATION

4.1 General:

Use of the flat multiwall and solid monolithic polycarbonate sheets is limited to applications permitted by the IBC for light-transmitting plastics. The manufacturer’s published installation instructions and this report must be strictly adhered to.

4.2 Light-transmitting Plastics:

All products have a self-ignition temperature greater than 650°F (343°C) per ASTM D1929; a smoke-developed index not greater than 450 per ASTM E84 or a maximum average smoke density rating less than 75 per ASTM D2843; and a CC1 rating per ASTM D635. Therefore, all products comply with the requirements for light-transmitting plastics per IBC Section 2606.4.

5.0 CONDITIONS OF USE:

The Kilon flat multiwall and U-Lite solid monolithic polycarbonate sheets 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 The sheets are manufactured, installed, and identified as called for in this report, the IBC and the manufacturer’s published installation instructions. In the event of a conflict between this report and the manufacturer’s published installation instructions, this report governs.
- 5.2 End use of the panels requires justification of compliance with appropriate code requirements, including installation, structural, impact and durability conditions.

6.0 EVIDENCE SUBMITTED

- 6.1 Reports of tests in accordance with ASTM D635, ASTM D1929, ASTM D2843, and ASTM E84.
- 6.2 Quality documentation.

7.0 IDENTIFICATION

- 7.1 The ICC-ES mark of conformity, electronic labeling, or the evaluation report number (ICC-ES ESR-4745) 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 sheets are identified with a label bearing the product name (Kilon polycarbonate multiwall and U-Lite solid monolithic sheet) and the CC1 plastic classification.
- 7.3 The report holder’s contact information is the following:

KINGSPAN LIGHT + AIR
CARRICKMACROSS ROAD
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TABLE 1—KILON POLYCARBONATE MULTIWALL AND U-LITE SOLID MONOLITHIC SHEET DESCRIPTIONS

SHEET TYPE	SHEET THICKNESS	CORE CONFIGURATION
U-Lite Solid Monolithic	4 mm	-
Multiwall	8 mm	Honeycomb
	10 mm	
	12 mm	
	16 mm	7-wall
	16 mm	Multicell
	20 mm	
UniQuad Multiwall	10 mm	

For **SI**: 1 inch = 25.4 mm, 1 pound per linear foot = 1.48 kg/m.

DIVISION: 08 00 00—OPENINGS
Section: 08 84 00—Plastic Glazing

REPORT HOLDER:

KINGSPAN LIGHT + AIR

EVALUATION SUBJECT:

KILON POLYCARBONATE MULTIWALL AND U-LITE SOLID MONOLITHIC SHEET

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that Kilon Polycarbonate Multiwall and U-Lite Solid Monolithic Sheet, described in ICC-ES evaluation report ESR-4745, have also been evaluated for compliance with the code(s) noted below.

Applicable code edition(s):

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 Kilon Polycarbonate Multiwall and U-Lite Solid Monolithic Sheet, described in Sections 2.0 through 7.0 of the evaluation report ESR-4745, comply with CBC Chapter 26, 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 Chapter 26, 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.