

ICC-ES Evaluation Report

ESR-2590

Reissued June 1, 2010

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DIVISION: 08—DOORS AND WINDOWS
Section: 08840—Plastic Glazing**REPORT HOLDER:****PLASKOLITE, INC.**
POST OFFICE BOX 1497
COLUMBUS, OHIO 43216-1497
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www.plaskolite.com**EVALUATION SUBJECT:****DURAPLEX® HIGH IMPACT ACRYLIC SHEET****1.0 EVALUATION SCOPE****Compliance with the following codes:**

- 2006 *International Building Code*® (IBC)
- Other Codes (see Section 8.0)

Properties evaluated:

- Light-transmitting plastics
- Durability

2.0 USES

The Plaskolite plastic sheets recognized in this report comply with the specifications for light-transmitting plastics in IBC Section 2606.4. End use of the plastic sheets is outside the scope of this report, thereby requiring compliance, to the satisfaction of the code official, with requirements of code sections applicable to end use (such as, but not limited to, structural and drop-out performance).

The plastic sheets may be used as signs where allowed in Sections 402.15 and 2611 of the IBC.

3.0 DESCRIPTION

Duraplex® High Impact Acrylic Sheet is a polymethyl methacrylate extruded acrylic sheet. The sheets are available in transparent or translucent form, either as flat sheets or reeled (rolled on a spool). The flat sheets have thicknesses from 0.060 inch to 0.236 inch (1.5 mm to 6.0 mm), widths up to 104 inches (2642 mm), and various lengths up to 15 feet (4.573 m). Reeled sheets are available in thicknesses from 0.118 inch to 0.236 inch (3 mm to 6 mm), in widths of 39 inches to 104 inches (991 mm to 2642 mm), and in lengths of 250, 350, 400 and 500 feet (76.2, 106.7, 121.9 and 152.4 m). Top and bottom

sheet surfaces are covered with polyethylene film or paper masking, for protection during shipping and handling that must be removed before installation. The sheet material is a light-transmitting plastic with CC2 classification.

4.0 INSTALLATION

The materials shall be installed as set forth in the applicable code and the manufacturer's published installation instructions. If there is a conflict between the manufacturer's published installation instructions and this report, this report governs.

5.0 CONDITIONS OF USE

The Plaskolite plastic sheets described in this report comply with, or are suitable alternatives to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions.

- 5.1** The product is manufactured, installed and identified as set forth in this report, the applicable code and the manufacturer's instructions.
- 5.2** Use of the plastic sheets in skylights and in exterior wall and roof panel applications is limited to skylights and exterior wall and roof panel products specifically recognized in a current ICC-ES evaluation report.
- 5.3** End use of the product requires justification of compliance with appropriate code requirements, including structural and impact considerations.
- 5.4** Impact resistance has not been evaluated.

6.0 EVIDENCE SUBMITTED

- 6.1** Manufacturer's descriptive literature.
- 6.2** Reports of tests in accordance with UBC Standard 26-5 (ASTM D 2843), UBC Standard 26-6 (ASTM D 1929) and UBC Standard 26-7 (ASTM D 635).
- 6.3** Weathering data in accordance with the ICC-ES Acceptance Criteria for Plastic Skylights (AC16), dated February 2008.
- 6.4** A quality control manual.

7.0 IDENTIFICATION

The Duraplex® High Impact Acrylic Sheets described in this evaluation report are labeled with the manufacturer's name (Plaskolite, Inc.) and address, the product name (Duraplex®), the lot number, the thickness, the plastic classification (CC2) and the evaluation report number (ESR-2590).

8.0 OTHER CODES

8.1 Evaluation Scope:

In addition to the codes referenced in Section 1.0, the products in this report were evaluated for compliance with the requirements of the following legacy codes:

- 1997 *Uniform Building Code*™ (UBC)
- 1997 *Uniform Sign Code*™ (USC)

The Duraplex® High Impact Acrylic Sheets described in this report comply with, or are suitable alternatives to what is specified in, those codes listed above, subject to the provisions of Section 8.2 through 8.7.

8.2 Use:

See Section 2.0 and add the following sentence:

The plastic sheets may be used as signs where allowed in Section 212 of the 1997 *Uniform Sign Code*™.

8.3 Description:

See Section 3.0 except replace the last sentence of Section 3.0 with the two sentences below:

The sheet material is an approved plastic with CC2 classification in accordance with UBC Standard 26-7. Flat and reeled sheets with a nominal thickness of 0.177 inch (4.5 mm) may be used with CC2 classification approved plastic for fabrication of signs, in accordance with Section 212 of the 1997 *Uniform Sign Code*™.

8.4 Installation:

See Section 4.0.

8.5 Conditions of Use:

See Section 5.0.

8.6 Evidence Submitted:

See Section 6.0 except replace the wording in Section 6.2 with the following.

Reports of tests in accordance with UBC Standard 26-7, UBC Standard 26-6 and UBC Standard 26-5.

8.7 Identification:

See Section 7.0.