

## ICC-ES Evaluation Report

**ESR-1407**

Reissued October 1, 2009

*This report is subject to re-examination in one year.*[www.icc-es.org](http://www.icc-es.org) | (800) 423-6587 | (562) 699-0543

A Subsidiary of the International Code Council®

**DIVISION: 08—DOORS AND WINDOWS**  
**Section: 08840—Plastic Glazing****DIVISION: 09—FINISHES**  
**Section: 09545—Special Ceiling Surfaces**  
**Section: 09770—Special Wall Surfaces****REPORT HOLDER:****EASTMAN CHEMICAL COMPANY**  
100 NORTH EASTMAN ROAD, BUILDING 230  
KINGSPORT, TENNESSEE 37662  
(423) 229-3159[www.eastman.com](http://www.eastman.com)  
[ryoung@eastman.com](mailto:ryoung@eastman.com)**EVALUATION SUBJECT:****EASTMAN CHEMICAL COMPANY RESINS: KELVX®  
RESIN, TIGLAZE® ST COPOLYESTER, TIGLAZE SUV,  
SPECTAR 14471, EASTAR 15086 AND TIGLAZE® SV  
SPARTECH PLASTIC SHEETS: SPECTAR SHEET,  
ULTRATUF-CX, ULTRATUF CX-D, STORMTUF AND  
SOLAREX SV****ADDITIONAL LISTEE:****SPARTECH PLASTICS**  
120 SOUTH CENTRAL AVENUE, SUITE 1700  
CLAYTON, MISSOURI 63105**1.0 EVALUATION SCOPE****Compliance with the following codes:**

- 2006 *International Building Code*® (IBC)
- 2006 *International Residential Code*® (IRC)
- 1997 *Uniform Building Code*™ (UBC)
- 1997 *Uniform Sign Code*™ (USC)

**Properties evaluated:**

- Approved plastics
- Durability
- Interior Finish

**2.0 USES**

The plastic sheets described in this report are used, when installed in accordance with this report, as light-transmitting plastics in skylights, and in exterior wall, roof panel and

interior sign applications. Use as signs in covered malls is limited to Spectar Sheet. When installed in accordance with Section 4.0, Spectar Sheet may be used as an interior wall and ceiling finish material under IBC Section 803.2 and IRC Section 315.4; as an interior finish in atriums under IBC Section 404.7; as a light-transmitting plastic diffuser under IBC Section 2606.7; as a light-transmitting plastic interior sign under IBC Section 2611; and as a plastic sign under IBC Section 402.15.

**3.0 DESCRIPTION****3.1 General:**

KelvX® Resin, TiGLAZE® ST Copolyester, TiGlaze SUV, Spectar 14471, Eastar 15086, and TiGLAZE® SV resins provided by Eastman Chemical Company are extruded by Spartech Plastics to form flat, thermoplastic sheet products. The plastic sheets are available in smooth, matte, prismatic and textured surface finishes and are covered with polyethylene masking on one or both sides, for protection during shipping and handling. The plastic sheets used for exterior applications have an ultraviolet-light protective layer on the exterior side of the sheet.

**3.2 Materials:**

Spectar Sheet, ULTRATUF-CX, ULTRATUF CX-D, STORMTUF and Solarex SV plastic sheets are classified as CC1 approved plastic complying with Section 2606.4 of the IBC, Section 217 of the UBC, and Section 212 of the USC. The plastic sheet material complies as a light-transmitting plastic glazing in accordance with Section 2608 of the IBC, Section R308.6 of the IRC, and Section 2409 of the UBC.

Plastic sheets produced from KelvX® Resin, TiGLAZE® ST Copolyester (ULTRATUF-CX, ULTRATUF CX-D, TiGlaze SUV and STORMTUF), and Spectar 14471 (Spectar Sheet) are available in clear and translucent forms, in nominal thicknesses of 0.080 and 0.236 inch (2.0 and 6.0 mm). Solarex® SV is available in clear and translucent forms, in nominal thicknesses of 0.080 and 0.118 inch (2.0 and 3.0 mm). Spectar Sheets, when used in interior applications, are available in clear and translucent forms, in nominal thicknesses between 0.060 and 0.354 inch (1.52 and 8.99 mm).

**4.0 INSTALLATION**

The materials must be installed as set forth in the applicable code and the manufacturer's published installation instructions. If the manufacturer's published instructions differ from this report, this report governs.

ULTRATUF-CX, ULTRATUF CX-D, STORMTUF, Solarex SV and Spectar Sheet may be used where CC1 light-transmitting plastics complying with IBC Section 2606.4 are permitted.

When Spectar Sheet is attached to walls and ceilings as an interior wall and ceiling finish material, light-transmitting plastic diffuser, light-transmitting plastic interior sign or plastic sign, sheets having a maximum thickness of 0.236 inch (5.99 mm) must be installed directly to the wall or ceiling using approved mechanical fasteners; while sheets having a maximum thickness greater than 0.236 inch (5.99 mm) but less than 0.354 inch (8.99 mm) must be offset from the wall or ceiling a minimum of 1 inch (25.4 mm) using approved mechanical fasteners.

## 5.0 CONDITIONS OF USE

The Eastman Chemical Company resins and Spartech Plastics extruded 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 Recognition in this report is limited to plastic sheets produced by Spartech Plastics from Eastman Chemical resins. The plastic sheets must be manufactured and identified in accordance with this report and the applicable code.
- 5.2 The plastic sheets have not been evaluated for the structural requirements of the applicable code.
- 5.3 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.

- 5.4 Spectar Sheet may be used for interior sign applications in accordance with IBC Section 2611, including use as signs in covered mall buildings. The other plastic sheets recognized in this report may be used for exterior sign applications, but not as signs in covered mall buildings.

## 6.0 EVIDENCE SUBMITTED

- 6.1 Manufacturer's descriptive literature Reports of tests in accordance with ASTM Standards D 635 (UBC Standard 26-7), D 1929 (UBC Standard 26-6) and D 2843 (UBC Standard 26-5).
- 6.2 Weathering data in accordance with the ICC-ES Acceptance Criteria for Plastic Skylights (AC16), dated February 2008 (editorially revised April 2008).
- 6.3 Reports of tests in accordance with NFPA 286.
- 6.4 A quality control manual.

## 7.0 IDENTIFICATION

Each plastic sheet must be identified by a label bearing the manufacturer's name (Spartech Plastics Company), manufacturing plant location, product name, date of manufacture, plastic sheet thickness, plastic classification (CC1) and the evaluation report number (ESR-1407). There is also a separate label, indicating "UV side," on the UV protective layer side of the plastic sheets.