

**ICC-ES Evaluation Report****ESR-1253**

Issued July 1, 2013

*This report is subject to renewal July 1, 2014.*[www.icc-es.org](http://www.icc-es.org) | (800) 423-6587 | (562) 699-0543

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**DIVISION: 08 00 00—OPENINGS**  
**Section: 08 84 00—Plastic Glazing****REPORT HOLDER:****CPI DAYLIGHTING, INC.**  
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[www.cpidaylighting.com](http://www.cpidaylighting.com)**EVALUATION SUBJECT****QUADWALL, UNIQUAD, PENTAGLAS, DUALWALL AND  
U-LITE PANELS****1.0 EVALUATION SCOPE****Compliance with the following codes:**2012, 2009 and 2006 *International Building Code*® (IBC)**Property evaluated:**

Light-transmitting plastics

**2.0 USES**

The Quadwall, UniQuad, Pentaglas, Dualwall and U-Lite panels described in this report comply with the requirements for light-transmitting plastics in 2012, 2009 and 2006 IBC Section 2606.4. End use of the panels is outside the scope of this report, thereby requiring that compliance with the IBC requirements applicable to the end use (such as, but not limited to, structural and durability performance) be demonstrated to the code official.

**3.0 DESCRIPTION**

The Quadwall, UniQuad, Pentaglas, Dualwall and U-Lite translucent polycarbonate panels recognized in this report are light-transmitting plastics complying with IBC Section 2606.4, and have a CC1 plastic combustibility classification. The panels are available in up to a 45.3-foot (13 800 mm) length and in various widths, thicknesses and configurations. See Table 1 and Figure

1 for size and configuration details. As shown in Table 1 and Figure 1, the 8- and 10-millimeter-thick Quadwall, UniQuad, and Pentaglas panels are identical panels, except for the product name.

**4.0 INSTALLATION**

Use of the Quadwall, UniQuad, Pentaglas, Dualwall and U-Lite panels recognized in this report 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.

**5.0 CONDITIONS OF USE**

The Quadwall, UniQuad, Pentaglas, Dualwall and U-Lite panels described in this report comply with, or are suitable alternatives to what is specified in, those codes indicated in Section 1.0 of this report, subject to the following conditions:

- 5.1** The panels 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 considerations.

**6.0 EVIDENCE SUBMITTED**

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

**7.0 IDENTIFICATION**

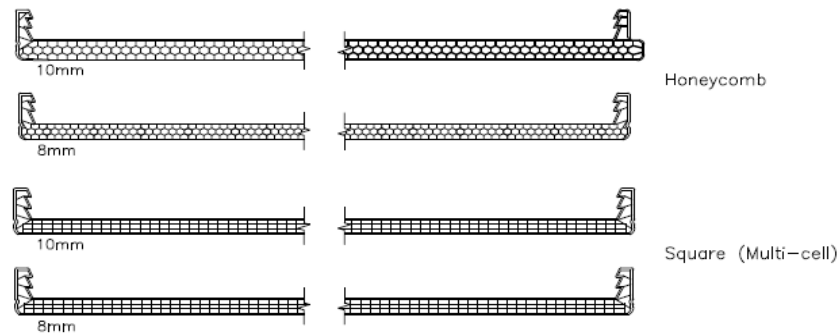
The panels are identified with a label bearing the manufacturer's name (CPI Daylighting), the product name (Quadwall, UniQuad, Pentaglas, Dualwall or U-Lite), the CC1 plastic classification and the evaluation report number (ESR-1253).

TABLE 1—PANEL DESCRIPTIONS<sup>1</sup>

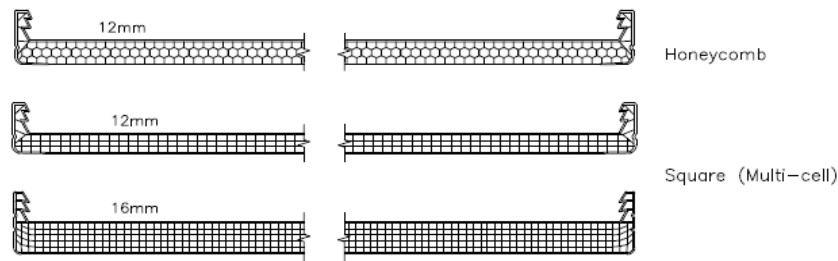
PANEL TYPE	PANEL THICKNESS	CORE CONFIGURATION	PANEL WIDTH
Quadwall UniQuad Pentaglas	8 mm	Square (Multi-cell)	600 mm
		Honeycomb	600 mm
	10 mm	Square (Multi-cell)	600 mm
		Honeycomb	600 mm
Pentaglas	12 mm	Square (Multi-cell)	600 mm
			900 mm
		Honeycomb	600 mm
	16 mm	Square (Multi-cell)	600 mm
			900 mm
			1040 mm
Dualwall	8 mm	Square	600 mm
	10 mm	Square	600 mm
U-Lite	4 mm	n/a	600 mm

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

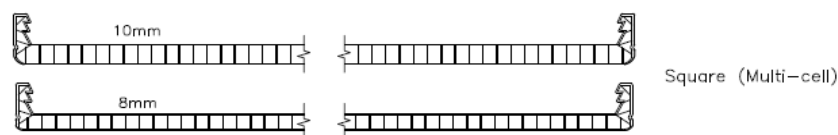
<sup>1</sup>See Figure 1 for panel configuration details



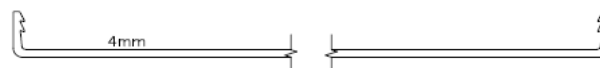
Quadwall, Uniquad, and Pentaglas 8mm and 10mm Panel Profiles



Pentaglas 12mm and 16mm Panel Profiles



Dualwall 8mm and 10mm Panel Profiles



U-Lite 4mm Panel Profiles

FIGURE 1—PANEL PROFILES