

# Product Comparison



## Fiberglass Reinforced Panels vs. Multiwall Polycarbonate Panels



Fiberglass sandwich panel photographed side-by-side with a Wasco 40mm multiwall polycarbonate panel.

### 2¾" Fiberglass Sandwich Panel Systems

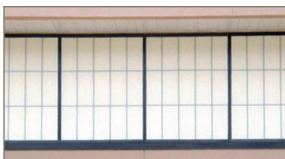
### 40mm Multiwall Polycarbonate Systems

#### Performance:

U-value	.23 White Faces	.30 Opal; .28 Opal IR; .27 Clear IR (per NFRC)
Light transmission	20% – 30%	26% Opal; 22% Opal IR; 35% Clear IR
SHGC	.23 White/White; .28 Crystal/White	.34 Opal; .26 Opal IR; .30 Clear IR (per NFRC)
Impact resistance	UL 972	UL 972 ASTM 822-92 Hail Impact
Flame Spread	50 Flame, UL 723	0 Flame, ASTM E-84 / UL 723
Smoke Development	250 Smoke, UL 723	120 Smoke, CC1 Rated, Class A, Class 1
Color change	3.0 CIE Units after 5 years – ASTM 2244 (Paints / Coatings)	Less than 10 pts after 10 years – ASTM 1925
Deflection	L/60	L/100

#### Design:

Fiberglass exterior and interior face sheets are adhered to an aluminum grid core. The grid core can also be thermally broken. The typical .23 u-value panel is insulated with fiberglass. Interior and exterior panels are fastened to the grid core with adhesives and the system is installed with exposed fasteners.



A 2¾" Fiberglass Sandwich Panel System

The fiberglass facers have a coating for UV protection, which is subject to weathering away resulting in color change. The absence of the coating will cause the fiberglass to "fiberbloom". This is common with older panels and leads to additional discoloration with the added retention of dirt. The fiberglass warranty calls for on-going UV maintenance by reapplying coatings.



Wasco's LumiWall 40mm Multiwall Polycarbonate System

There is a potential for the dew point to fall within the panels between the faces. Moisture on the fiberglass insulation can lead to mold development, contributing to discoloration.

Wasco's 40mm multiwall polycarbonate system—LumiWall—is constructed with fully fabricated, lightweight, interlocking tongue and groove multiwall polycarbonate panels. It is a dry glaze system requiring no sealants on the panels and offers optional polyurethane thermal breaks in the frame for improved thermal performance. Two separate assembly points create a tight attractive corner with no exposed fasteners.

LumiWall has a coextruded layer of UV inhibitor to a depth of 50 microns and requires no maintenance. Polycarbonate is not made of fibers that will deteriorate, which allows it to maintain its shape, color, and strength even when exposed to UV light.

Lumiwall is constructed with a sloped sill nose with recessed weeps for maximum drainage.