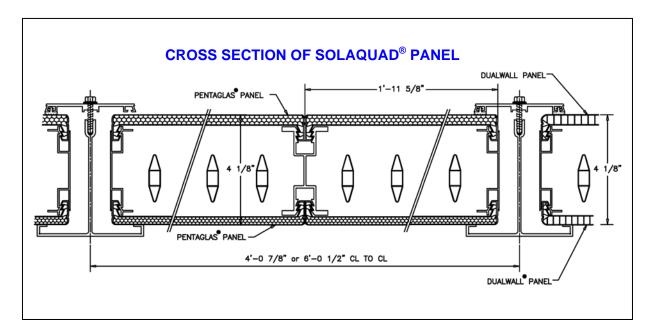


# SOLAQUAD<sup>®</sup> GLAZING PANELS

The SolaQuad<sup>®</sup> system design is comprised of Quadwall<sup>®</sup> assembly of dual glazed polycarbonate panels with built-in revolving arrays of SolaBlades<sup>®</sup>. Each SolaBlade<sup>®</sup> has an opaque, flat face, and the position of the SolaBlades<sup>®</sup> in relation to the sun determines the amount of sunlight and heat gain transmitted through the panel.





The SolaBlades<sup>®</sup> can be set to deliver direct or diffused sunlight. By angling the sunlight that penetrates the space, the SolaBlades<sup>®</sup> make use of the physical fact that light hitting at an angle delivers less energy per square foot than direct sunlight. A sun-tracking sensor also allows alignment of the SolaBlades<sup>®</sup> to an optimal position <u>in relation to the sun's position in the sky</u> to harvest daylight that would otherwise be lost due to the low incident angle of the sun early and late in the day.

### **AVAILABLE GLAZING COLORS**

The standard color for the translucent polycarbonate panels is clear over clear matte.

The standard color for the SolaBlades<sup>®</sup> is opaque white.

Additional colors for the main panel are available: Green, Blue, Ice White, White and Low-E Pearl.

**Anti-Glare Diffusing Matte Finish** – Proprietary matte finish can be added to the exterior and/or the interior glazing panels. The matte finish layer creates a diffusing surface that also acts as an anti- glare surface. The panel provides highest light transmission with excellent light distribution.

### THERMAL AND LIGHT PERFORMANCE

SolaQuad<sup>®</sup> offers variable light transmission from 3% to 62% and any desired light transmission and corresponding shading coefficient between.

	Quadwall <sup>®</sup> Panels Configuration	
	Pentaglas <sup>®</sup> - Clear/Clear Matte (Standard)	Dualwall- Clear/Clear Matte
L.T% -in open position	52%	62%
L.T%-in closed position	3%	5%
SHGC -in open position	0.417	0.59
SHGC -in closed position	0.113	0.15
U Value of glazing panels	0.24	0.26

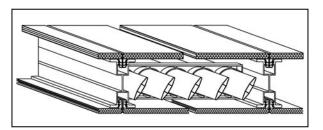
Notes: Glazing panel's colors affect the L.T% and SHGC. Glazing panel colors may be selected to achieve other desired optical and SHGC performance.

## HOW SOLAQUAD<sup>®</sup> PANELS ARE VIEWED BY BUILDING CODES

The SolaQuad<sup>®</sup> system is recognized as "Approved Plastics" with CC1 Classification, for use as light transmitting materials in buildings and structures as follows: Self-ignition temperature of 1000 degrees F per ASTM 1929, Smoke density of 54% per ASTM 2843, Burning Extend of CC1 per ASTM D635 and Interior Flame Spread of Class A (less than 25) per ASTM E-84

#### **DOUBLE LAYERS OF PROTECTION**

- SolaQuad<sup>®</sup> is an assembly of two panels containing multi isolated air spaces for increased insulation and provides superior performance for the cost.
  - 1. The patented standing seam connector allows the efficient addition of a second layer at a marginal extra cost.



- 2. The two layers of glazing provide redundant protection of the covered space.
- 3. The SolaQuad<sup>®</sup> system's longevity can be extended indefinitely by replacing exterior glazing panels without exposing the building's interior. The interior glazing panel remains intact for the life of the building envelope.
- 4. In comparison, adding or replacing a double layer on other glazing systems would require significant extra cost; any damage to the exterior face would require intensive replacements that would interrupt the building's function.