

PentaClad[™] Product Data Sheet

Polycarbonate Cladding Systems





Product Specifications



- Polycarbonate glazing panel
- B Triple-tooth panel connector
- Stainless steel panel clip
- Aluminum purlin substructure
- Aluminum framing system



Product Specifications

Glazing	Translucent polycarbonate panel with Nano-Cell® extrusion
Thickness:	10 mm, 12 mm, or 16 mm
Width:	2 ft nominal (23 5/8 in) (600 mm)
Length:	Up to 38 ft long
Panel Weight:	$12 \text{ mm} = 0.53 \text{ lb/ft}^2$ 16 mm = 0.70 lb/ft ²
Panel Joint:	Mechanically interlocking triple-tooth connection
Color Options:	Standard - clear, white, ice white, blue, green, bronze, refl. gray

Note: all colors are available with a matte finish upon request - consult for other available color options

Glazing Extrusion

Our translucent polycarbonate glazing is precision engineered with Nano-Cell® technology. This specialized panel extrusion results in the cells measuring smaller than 0.18 inches, providing the panel with superior durability and prolonged resistance to impact. The unique cell structure significantly improves the quality and balanced distribution of glare-free natural light. Glazing panels are also co-extruded with a specialized UV inhibitor on both sides of the panel.



Wide-Cell Extrusion

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Triple-Tooth Connection

The triple-tooth edge on the upstands of the glazing panels enables the system to withstand extremely high loads without concern for the panels disengaging. As the panels deflect, their grip on the u-shaped panel connector actually strengthens, ensuring long-term performance under loading conditions.





Testing/Performance

Test Description	Test Procedure	Results & Comments
Ignition Temperature, Smoke Density, and Combustibility Classification	ASTM D635, D1929, D2843, E84	Complies with Ignition Temperature and Smoke Density defined in IBC Section 2606.4. Combustibility Class: CC1. See ICC-ESR-4745 for full details.
Uniform Load Structural /Span	ASTM E330	10mm, Polycarbonate batten: 4' span 10mm, Aluminum batten: 4' to 7' span NOTE: PROJECT SPECIFIC SPANS MUST BE CALCULATED USING PROJECT SPECIFIC VARIABLES
Water Penetration	AAMA 501.2	Pass

*Spanning capabilities are dependent on project specific design loads, which are determined based on several different factors, including location on the building, height above ground, wind speed, etc.

Note: Glazing panels come in several thicknesses. Please consult Kingspan Light + Air to verify individual test results specific to each panel thickness.

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