

Light + Air
North America



PentaClad™ Product Brochure

Polycarbonate Cladding System





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About Kingspan Light + Air

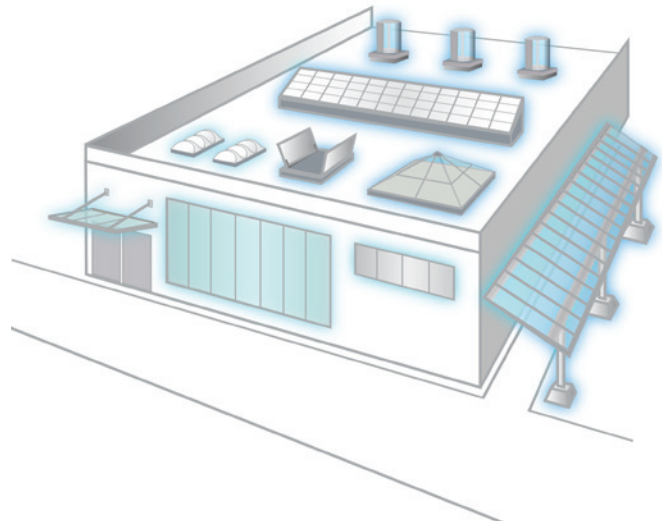
Who We Are

Kingspan Light + Air (KLA) is an award-winning innovator of translucent daylighting solutions for high-performance building envelopes headquartered just north of Chicago.

We are a pioneer and leader of the daylighting industry, and continually innovate so clients never have to choose between efficiency, style, and safety. And our focus on sustainability is instilled at every level of the company and at every step in the manufacturing process.

Our global team of highly-skilled and experienced professionals and extensive manufacturing capability ensure we are the partner of choice for the ever-changing world of modern construction. Together, we leverage our knowledge and expertise to serve as the leading daylighting consultants for the architectural community and building industry.

Never Compromise. Always Innovate.



The KLA Advantage

You shouldn't have to compromise your design. We want to enable architects to achieve the highest levels of building performance without sacrificing aesthetics.

This is why we team up with architects, contractors, and building owners to develop the most versatile daylighting systems on the market. We will work with you from design concept through engineering and installation - and beyond - to ensure the highest levels of performance and quality.

Our expansive line-up of daylighting and natural ventilation solutions - from custom skylights and wall systems to tubular daylighting devices to canopies and small unit skylights - means that we can provide you with a system that fits your project's specific needs.



ENERGY



CARBON



CIRCULARITY



WATER



At Kingspan, we want to play our part. We believe advanced materials, building systems and digital technologies hold the key to addressing these issues. Working in partnership with the industry, and through our new IKON innovation centre in Ireland and our Planet Passionate global sustainability program, we are confident that together we can:

1. Move to a clean energy future
2. Manage the earth's resources more sustainably
3. Protect our natural environment

What is Planet Passionate?

Planet Passionate is Kingspan's ambitious 10-year global sustainability program which aims to impact three global issues:

- Climate change
- Circularity
- Protection of our natural world

By setting ourselves challenging targets in the areas of energy, carbon, circularity and water, we aim to make significant advances in the sustainability of both our business operations and products.

PentaClad™

Polycarbonate Cladding Systems

Our PentaClad™ polycarbonate cladding system offers an effective solution for enclosing non-conditioned spaces.

The single panel design uses Nano-Cell® technology to provide durability and impact resistance plus balanced distribution of natural light. The system helps modernize building exteriors or hide mechanical structures with a standing seam or flush appearance that allows for graphics and backlighting. It's a great tool for creating eye-catching light boxes that highlight an entryway or public space.

Features + Benefits

Nano-Cell® technology uses cells measuring smaller than 0.18 inches to provide superior durability

Glazing panels are co-extruded with a specialized UV inhibitor for long-term performance

Polycarbonate glazing panels feature a double-tooth connection for superior loading capabilities

Stainless steel panel clips with aluminum purlin substructure and aluminum framing system provide additional strength

Can be designed to meet hurricane standards

Creates space for signage or applied graphics

Backlighting opportunities allow for "light box" designs that can draw in customers or highlight building features

Lightweight and easy to install





Designed to Your Project's Needs

Our team can help you create a custom cladding system that fits your project's needs. From multiple sheet color combinations and custom finish colors to unique shapes and designs, we'll work with you from initial design concept to installation and beyond.

Not sure where to start? Contact us today to get started - we offer architectural design support and will walk through all of our available options to find the right fit for your design.

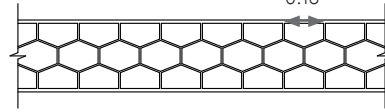


Product Details

Glazing Extrusion

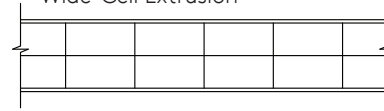
Our Pentaglas® translucent glazing is precision engineered with Nano-Cell® technology. This specialized panel extrusion results in the cells measuring smaller than 0.18 inches, providing the panel with superior durability and prolonged resistance to impact. The unique cell structure significantly improves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

Nano-Cell Extrusion



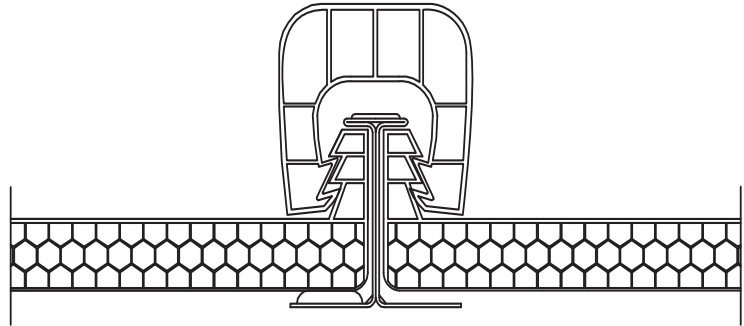
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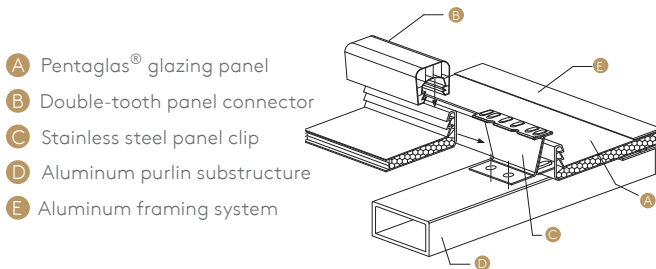
Wide-Cell Extrusion



Double-Tooth Connection

The double-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.





Product Specifications

Glazing	Pentaglas® 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 40 ft long
Panel Weight:	12 mm = 0.53 lb/ft ² 16 mm = 0.70 lb/ft ²
Panel Joint:	Mechanically interlocking double-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



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For the product offering in other markets please
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For additional technical information and/or daylighting systems design
consultation, contact Kingspan Light + Air for your specific needs. Care has
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