



PentaClad™ Product Brochure

Polycarbonate Cladding System





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About Kingspan Light + Air

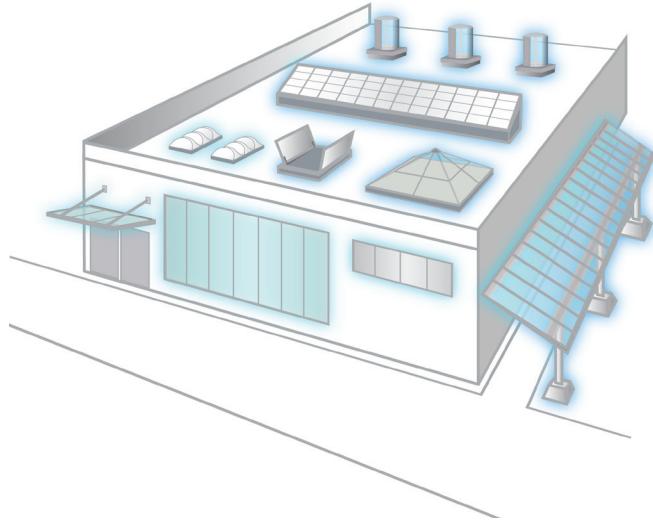
Who We Are

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 a leading daylighting consultant 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 high levels of building performance without sacrificing aesthetics.

This is why we team up with architects, contractors, and building owners to develop eye-catching and versatile daylighting systems. We will work with you from design concept through engineering and installation - and beyond - to ensure high 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.



**WE ARE
PLANET
PASSIONATE**

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 sustainability program which aims to impact three global issues:

- Climate change
- Circular
- 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, or cladding over other insulation and air/water barriers.

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 triple-tooth connection for superior loading capabilities

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

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.

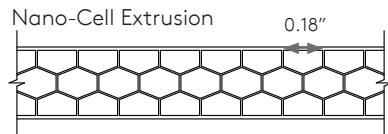
Not sure where to start? Contact us today to get started - we offer architectural design support and will walk through all of our available options to find the right fit for your design.



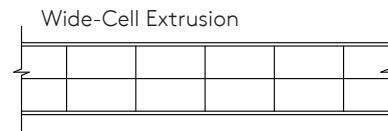
Product Details

Glazing Extrusion

Our 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.

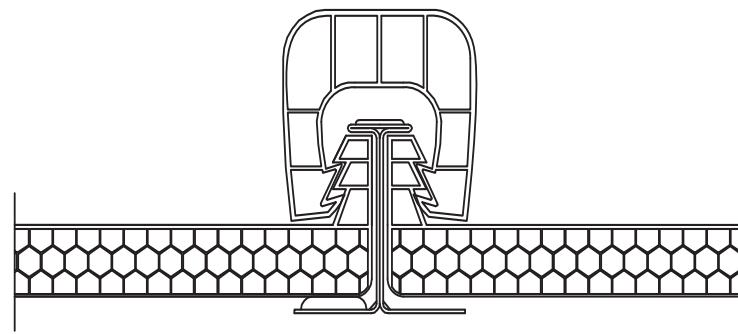


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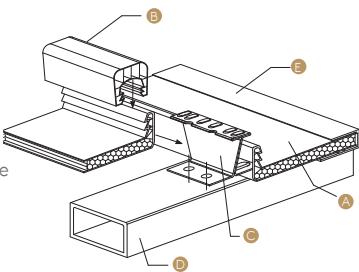
Triple-Tooth Connection

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.





- A** Polycarbonate glazing panel
- B** Triple-tooth panel connector
- C** Stainless steel panel clip
- D** Aluminum purlin substructure
- E** Aluminum framing system



Product Specifications

Glazing	Translucent polycarbonate panel with Nano-Cell® extrusion
Thickness:	10 mm, 12mm or 16 mm
Width:	2 ft nominal (23 5/8 in) (600 mm)
Length:	Up to 25 ft long
Panel Weight:	12 mm = 0.53 lb/ft ² 16 mm = 0.70 lb/ft ²
Panel Joint:	Mechanically interlocking triple-tooth connection
Color Options:	Standard (Matte): Clear, Ice White, White Non-Standard (Non-Matte): Blue, Green, Reflective Gray, Gray, Bronze Note: Contact us for other available color options
Finish Options:	Anodized and AAMA 2605 painted options available



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