

Light + Air  
North America



# UniQuad® Product Brochure

Polycarbonate Translucent Wall Systems





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# About Us

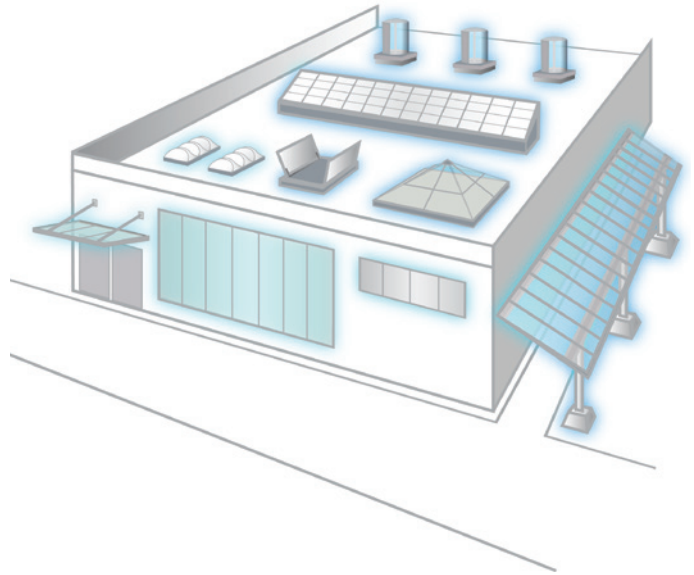
## Who We Are

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

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 capabilities make us a trusted partner in the ever-changing world of modern construction. Together, we leverage our knowledge and expertise to serve as one of 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.



# UniQuad® Translucent Wall Systems

The extreme versatility and unitized assembly of our UniQuad® system makes it the perfect system for walls and building facades.

UniQuad can be easily integrated with other building envelope components - such as the Kingspan range of insulated metal panels - due to its sleek, linear aesthetic and modular construction.

UniQuad offers designers the opportunity to rethink daylighting in a creative and inspiring way. This system has become the benchmark for what's possible when imagination meets innovation, enabling architects to achieve the highest levels of building performance without compromising on the aesthetic qualities of their designs.

- Internal aluminum support members create an efficient unitized system and a clean aesthetic
- Wide range of standard and custom glazing colors, as well as graphic options (contact us for details)
- Unitized panel assemblies allow for easy installation - with panels up to 38 feet tall
- Easy to maintain - simple cleaning only
- Removable Skin Technology (RST) allows removal of interior or exterior glazing while maintaining envelope integrity
- Specialty systems available - from blast and hurricane protection to sound control and forced entry
- Can incorporate LED backlighting for an eye-catching look
- Pre-engineered options available for faster lead times
- End-of-life sustainability - most materials can be recycled and an Environmental Product Declaration is available
- Integrated insulated metal panel option also available



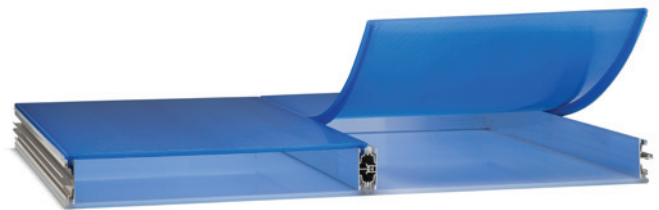
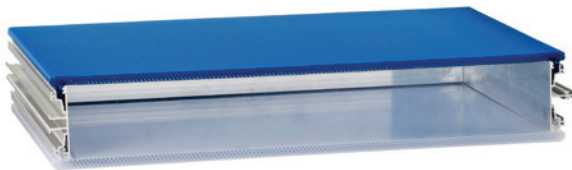




## Two-Panel System Benefits

Utilize a single and trusted system designed to adapt to meet your building performance needs. We understand that due to budget, occupancy, and building type, not all building envelopes are made equal. Our systems are made up of two independent glazing panels with an internal cavity between them that can be modified with additional inserts, customizing the performance of the system based on the building's specific requirements.

- Removable Skin Technology - individual panels can be changed without interrupting ongoing building operations or compromising the integrity of the building envelope
- Zero to low maintenance systems
- Highest light transmission to thermal performance ratio
- Multi-Color options
- Nano-Cell Technology - significantly improves quality and balanced distribution of glare-free natural light
- Highest light transmission to impact loading ratio
- Long span capabilities - up to 40'
- 100% recyclable



## Multi-Color Panel Options

A different color can be selected for each of the two independent glazing panels that make up the system.

While glazing color combinations offer an opportunity for creativity, they also serve a practical purpose when tailoring the performance of the system. Each glazing color has an inherent solar performance. By varying the combination of the glazing colors, not only can you create unique visual elements, but you can also customize the solar performance of the system. An optional matte finish on the panels will increase their ability to diffuse light and eliminate glare as well.



# UniQuad® Translucent Walls



## Design + Engineer + Manufacture

The hallmark of the UniQuad® system is the innovative two-piece panel connection, which enables the system to be unitized. The panels themselves are factory glazed and assembled for superior quality control. The unitized construction of the system results in quick, cost-effective installation.



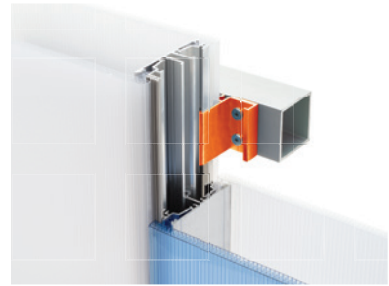
## Frame System

The two-piece frame system consists of a sill and sub-sill. It is designed so that the necessary fasteners don't penetrate the sill frame.



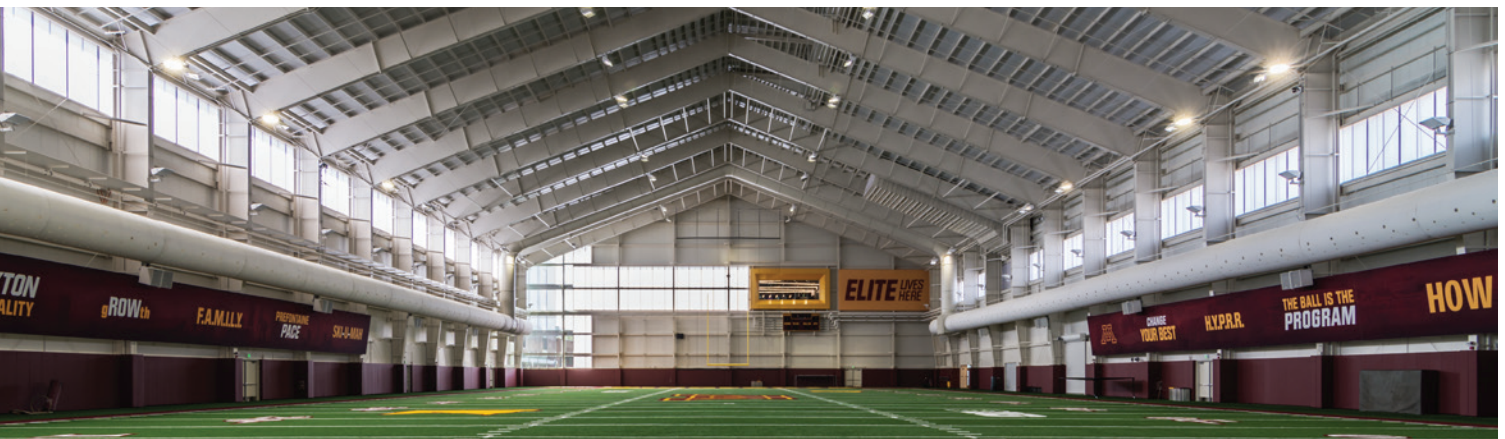
## UniClip

Our concealed UniClip is capable of withstanding heavy loads. The specialized design enables the panels to be installed quickly and removes the need for frame caps.



## Panel Clip

The panel clip prevents the glazing from breaking under extreme clip loads, as is common with other systems. The metal-to-metal connection enables the glazing to freely expand and contract. It also increases the system's ability to withstand high loads and span floor-to-slab.







# Specialty Systems

## Specialized Performance Options

Whether you need a system that can dynamically manage light levels in a classroom, meet forced entry standards for military facilities, or anything in between, we can help you achieve your performance goals

- Additional Insulation
- LED Lighting
- Sound Reduction (STC)
- Forced Entry Resistance - Dept of Defense standards
- Perforated Metal Insert



Additional Insulation



Specialized Performance



## Graphics + LED Lighting

Graphics and LED lighting can be useful in creating an iconic look or to reinforce a brand on the system's interior or exterior panels, making your building stand out as a beacon of creativity, day or night.

## Longer Clear Spans

Due to the design of the internal support structure, the two-panel system can achieve longer spans and still comply with deflection and code requirements. The ability to span floor-to-slab minimizes the necessary support structures, thus reducing material and labor costs. It also improves the aesthetic quality of the system.

## Nano-Cell® Glazing

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 superior durability and prolonged resistance to impact. The unique cell structure significantly improves the quality and balanced distribution of glare-free natural light.





## Benefits of Working with Kingspan Light + Air

### Design Assistance

Our team is ready to assist you with your daylighting needs. If you're not sure where to begin, or what the best solution is for your next project, our team of daylighting experts and engineers will work with you to find the right solution. We will walk you through each step of the process, from design to manufacturing to installation and beyond.

### Decades of Experience

We're no strangers to translucent skylights... in fact, our roots run deep in the industry. In recent years, Kingspan Light + Air acquired CPI Daylighting and Major Industries, Inc. - manufacturers of translucent skylight systems. Our combined industry expertise and experience allow us to work through your toughest daylighting challenges.

### Expert Installation

We work with certified installers who have the product training and know-how to install your system the proper way the first time. We'll work with you throughout the process to ensure that the system you receive is functioning properly.

# Renovations & Retrofits

## Why Renovate?

- Outdated or degenerating systems are under-performing
- Discoloration has resulted in a significant decrease in light levels
- Deterioration is causing leaks and potential structural failures

Retrofits and renovations can play a key role in revitalizing environments that are suffering from lack of adequate natural lighting. Deteriorating glazing can often block out blue spectrum light, which accounts for the majority of health benefits associated with natural light.

We offer a variety of simple and effective solutions designed to re-glaze or replace existing systems that are under-performing or are in desperate need of repair due to damage or deterioration.

We renovate: glass, fiberglass, acrylic, and polycarbonate.





# Our Commitment to Sustainable Design



## ENERGY



## CARBON



## CIRCULARITY



## WATER



### What is Planet Passionate?

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

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.

Learn more about Planet Passionate by visiting <https://www.kingspan.com/us/en/about-us/Planet-Passionate/>.



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For the product offering in other markets please  
contact your local sales representative or visit  
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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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