

# KALWALL®

high performance translucent building systems



photo: Marc Sourbron

## SKYROOFS®

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Pre-engineered Skyroofs

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Custom Skyroofs

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Clearspan™ Systems

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KALWALL.COM

# Pre-engineered Skyroofs®

Flat or curved, Pre-engineered Skyroofs can span up to 25' (7620 mm) offering the ultimate in energy-efficient, diffuse daylighting. Designed to withstand hurricane-force winds and high snow loads, all are OSHA fall-through compliant.

## Pre-engineered Skyroofs

All of our Pre-engineered Skyroofs offer attractive, affordable toplighting solutions for any daylit space. These systems are available in many configurations including:

**Standard, aluminum or thermally broken interlocking I-beam panel grid core**

**Standard or thermally broken aluminum Clamp-tite™ fastening system**

**U-factors range from 0.53 - 0.05 (3.01 to 0.28 W/m²K)**

**Solar Heat Gain Coefficients (SHGC) from 0.65 to 0.04**

**Visible Light Transmission (VLT) values from 3% to 58%**

SELF SUPPORTING RIDGE ROOFS | KALCURVE 90° LOW PROFILE VAULT | KALWALL 180° VAULT

## Self Supporting Ridge Roofs

Self Supporting Ridge Roofs can span up to 24'-0" (7315 mm) making them an efficient, budget-friendly toplighting solution that delivers daylight deep into spaces.

**Self Supporting Ridge Roofs are available in any slope between 18.43° and 45°**

**Standard slopes are: 18.43°, 20°, 27.25°, 33.33° and 45°**

**Translucent Kalwall or glass IGU gable end walls are available**

**Thermal covers are available for all Clamp-tite™ aluminum components**

**Larger spans are available as Custom Skyroofs**

SELF SUPPORTING RIDGE ROOF | WITH HIP ENDS | WITH KALWALL END WALLS | WITH GLASS END WALLS

## Kalcurve® 90° Low Profile Vaults

Kalcurve self supporting 90° Low Profile Vaults can span up to 25'-0" with translucent or glass end walls providing an elegant toplighting solution that always delivers.

**Available in spans from 6' (1800 mm) to 25' (7600 mm) in 1' (300 mm) increments**

**Clamp-tite™ fastening system with standard and custom KCRF™ finish options**

**Shoji 12" x 24" (300 mm x 600 mm) | 10" x 24" (250 mm x 600 mm) are standard**

**Shoji 8" x 20" (200 mm x 500 mm) is recommended for long span applications**

**Various angles of curvature and non-standard spans are available as Custom Skyroofs**

KALCURVE 90° LOW PROFILE VAULT | WITH KALWALL END WALLS | WITH GLASS END WALLS

## Kalcurve® 180° Vaults

Kalcurve provides exceptional toplighting in a classic form. Self supporting 180° Vaults can span up to 20'-0" and are available with either translucent or glass end walls.

**Available in spans from 6' (1800 mm) to 20' (6100 mm) in 1' (300 mm) increments**

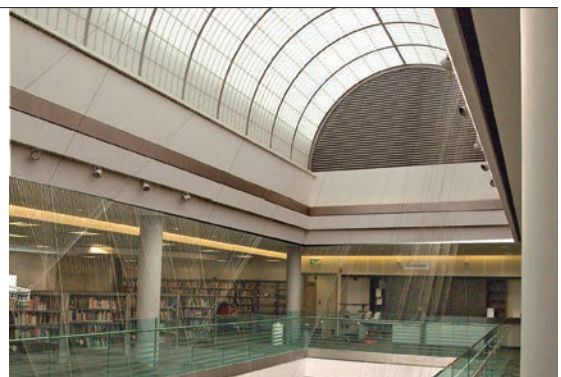
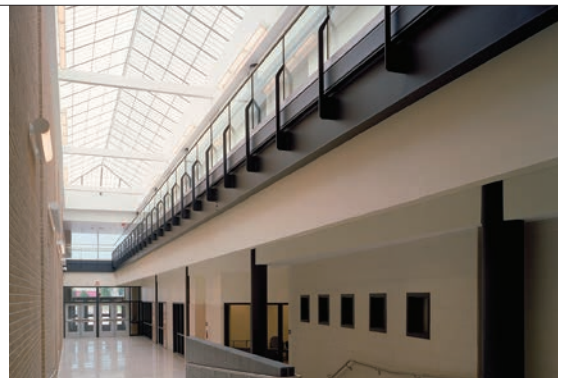
**Clamp-tite™ fastening system with standard and custom KCRF™ finish options**

**Shoji 12" x 24" (300 mm x 600 mm) | 10" x 24" (250 mm x 600 mm) are standard**

**Shoji 8" x 20" (200 mm x 500 mm) is recommended for long span applications**

**Non-standard spans are also available as Custom Skyroofs**

KALCURVE 180° VAULT | WITH KALWALL END WALLS | WITH GLASS END WALLS



Ellis Hall, Spartanburg Methodist College | Spartanburg, SC | McMillan Pazdan Smith (opposite page)





Please visit [KALWALL.COM](http://KALWALL.COM) for all pre-engineered skyroof specifications, CAD details, BIM families & performance charts



# Custom Skyroofs®

Our Custom Skyroofs offer designers the same performance offered by our Pre-engineered Skyroofs but, with even greater flexibility by combining Kalwall translucent panels along with sub-structures designed and installed by others.

## Custom Skyroofs

For larger Kalwall applications, with sub-structures designed and installed by others, a wide range of flat panel sizes and shapes are available. Consult factory for details.

**Kalwall and Kalwall 100 flat panels are available over structural supports by others**  
**Custom shed roofs, ridge roofs, pyramids, segmented domes and complex geometries**  
**Shoji 12" x 24" (300 mm x 600 mm) | 10" x 24" (250 mm x 600 mm) are standard**  
**Shoji 8" x 20" (200 mm x 500 mm) is recommended for long span applications**  
**Tuckerman and Staggered grids are optional. Not available in Verti-kal™ or Ladder**

SUPPORTED ROOFS | KALWALL 100



## Kalcurve® Custom Skyroofs

For custom Kalcurve applications, a wide range of options are available for supported roofs. Custom spans for self supporting Low Profile and 180° Vaults are also available.

**90°, 180°, or custom radii available - min. 3' (900 mm) | max. 75' (22860 mm)**  
**Clamp-tite™ fastening system with standard and custom KCRF™ finish options**  
**Shoji 12" x 24" (300 mm x 600 mm) | 10" x 24" (250 mm x 600 mm) are standard**  
**Shoji 8" x 20" (200 mm x 500 mm) is recommended for long span applications**  
**Not available with: Kalwall 100 | Lumira® aerogel | thermally-broken Clamp-tite™**

KALCURVE SUPPORTED ROOFS | CUSTOM KALCURVE LOW PROFILE + KALCURVE 180° VAULTS



Buurtsporhal Parkloods | Antwerp, Belgium | Verdickt & Verdickt Architecten (below)



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photo: Kate Joyce

Elgin Artspace Lofts | Elgin, IL | BKV Group (above)

## Removable Skylights

Removable Skylights are available in many configurations including center ridge, pyramid and shed roofs for projects where large equipment must be periodically accessed.

**Provides occasional access for servicing and replacing large equipment**

**Simple, reusable Removable Skylights with lift-up flashing detail**

**Integrated ring bolts for lifting Removable Skylights with clip angles at curb**

**Lightweight systems - typically less than 5 lbs/ft<sup>2</sup> (24.41 kg/m<sup>2</sup>)**

**Consult factory for design parameters based on project-specific criteria**

REMOVABLE PYRAMID | REMOVABLE SHED ROOF | REMOVABLE RIDGE ROOF | WITH HIP ENDS



## Specialty Applications

Custom Skyroofs can be engineered to meet a wide range of specialty applications while delivering balanced daylight deeper into spaces than conventional glazing systems.

**Windborne debris resistance - tested and certified up to large missile D**

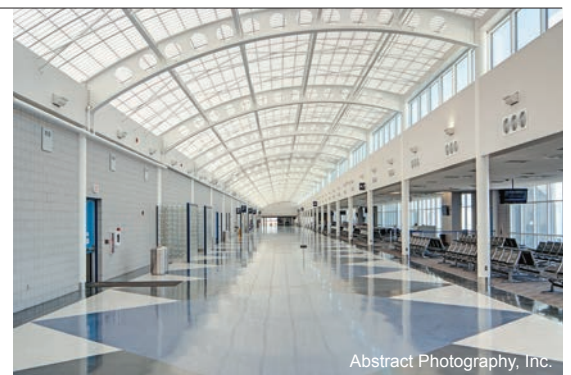
**Blast resistant systems meet DOD UFC 4-010-01 anti-terrorism force protection**

**Factory Mutual certified roof systems: FM 4471**

**OSHA fall through protection**

**Class A roof systems**

WINDBORNE DEBRIS RESISTANT SKYROOF | BLAST RESISTANT SKYROOF | FM RATED SKYROOF | CLASS A ROOF



Abstract Photography, Inc.

Please visit [KALWALL.COM](http://KALWALL.COM) for all custom skyroof specifications, CAD details, BIM families & performance charts online



# Clearspan™ Systems

Take daylighting to a whole other level by combining lightweight, corrosion resistant aluminum sub-structures with Kalwall translucent sandwich panels to form Clearspan Systems by our strategic partner, Structures Unlimited, Inc.

## Clearspan Systems

Turnkey daylighting solutions from the premier single-source manufacturer, Structures Unlimited, offer all the benefits of the Kalwall panel plus so many more including:

- Clearspans of over 100' (30 m) utilizing structural aluminum framing
- Total curb-up responsibility from design + engineering to fabrication + installation
- Lightweight - typically less than 5 lbs/ft² (24.41 kg/m²)
- Perfect for custom and unique designs for toplighting applications
- Can support light fixtures, sprinkler systems, and suspended artwork



photo: courtesy of Kitchen & Associates

### CLEARSPAN SYSTEMS

Dunbar High School | Washington, DC | Perkins Eastman + Moody Nolan (below)



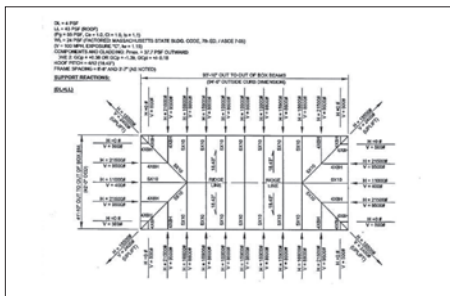
photo: Joseph Romeo





photo: Jeffrey Totaro

Hudson County High Tech High School | Secaucus, NJ | RSC Architects (above)



### Engineering Services

Receive assistance throughout the design phases including complete structural calculations from the curb up accompanied by stamped drawings. Specialty areas include snow and drift loads as well as blast and windborne debris protection.



### Precision Fabrication

CNC machining centers offer high tolerances (.001/meter) for structural components that fully integrate with panel and system. From precision milling to certified welding + corrosion resistant finishing, Structures Unlimited, Inc. does it all.



### Professional Installation

Eliminate the hassle of coordinating multiple trades by working with one sub-contractor who does it all. Enjoy the time savings offered by using a factory pre-engineered, pre-finished structural aluminum system with Kalwall.

Please visit [www.StructuresUnlimitedInc.com](http://www.StructuresUnlimitedInc.com) for all clearspan™ system specifications, CAD details & 3D details online



# Experience the world's most advanced daylighting systems



photo: Alex Upton

Benenden Hospital | Cranbrook, Kent, UK | CA Vaughan Blundell + SR SArchitects Ltd



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