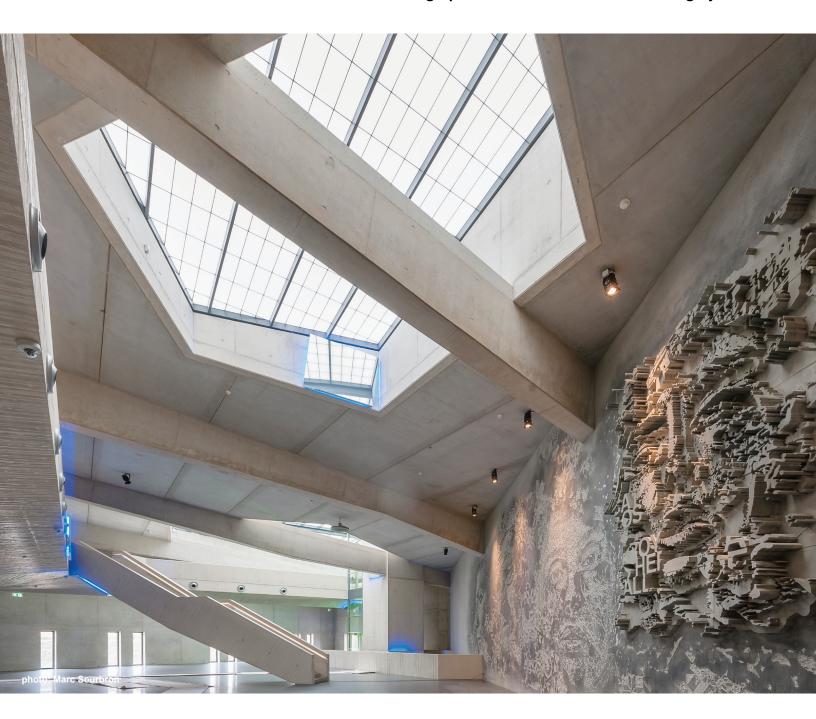
# KALWALL®

high performance translucent building systems



# SKYROOFS®

Pre-engineered Skyroofs

Custom Skyroofs

Clearspan™ Systems

# **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

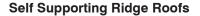
Standard or thermally broken aluminum Clamp-tite™ fastening system

U-factors range from 0.53 - 0.05 (3.01 to 0.28 W/m<sup>2</sup>K)

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 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  $180^{\circ}$  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)





# **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

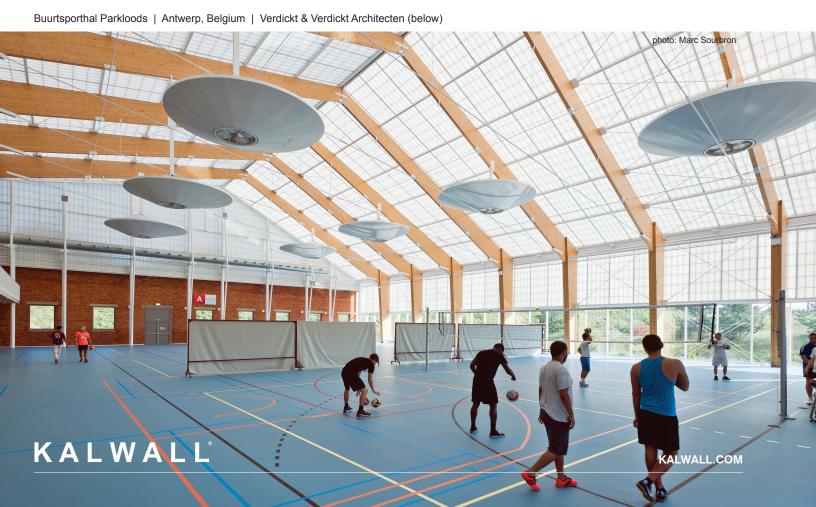
Shoji 12" x 24" (300 mm x 600 mm) | 10" x 24" (250 mm x 600 mm) are standard

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







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 occassional 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/ft² (24.41 kg/m²)

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





# 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

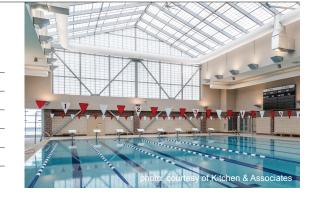
Total curb-up responsibility from design + engineering to fabrication + installation

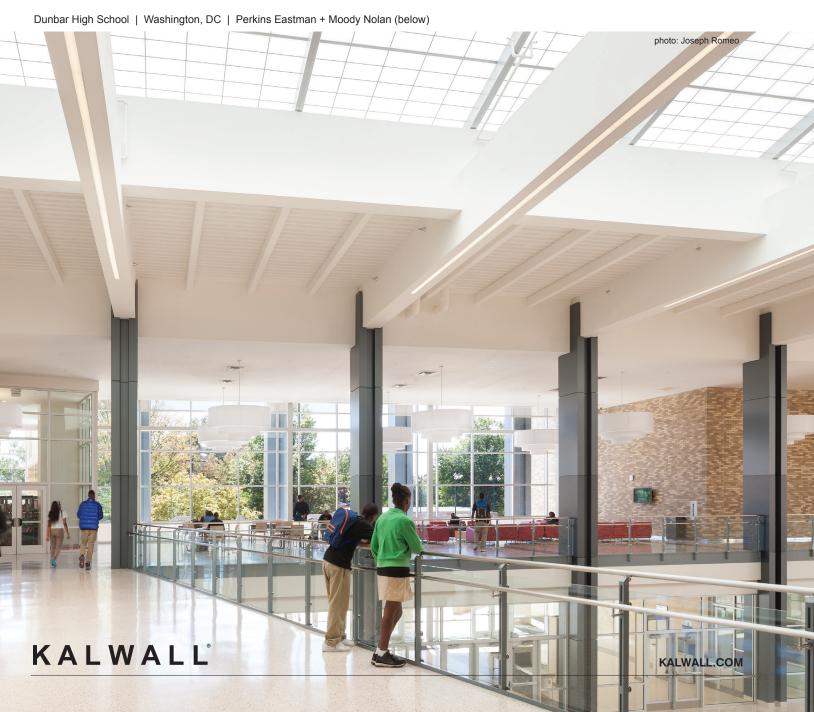
Lightweight - typically less than 5 lbs/ft² (24.41 kg/m²)

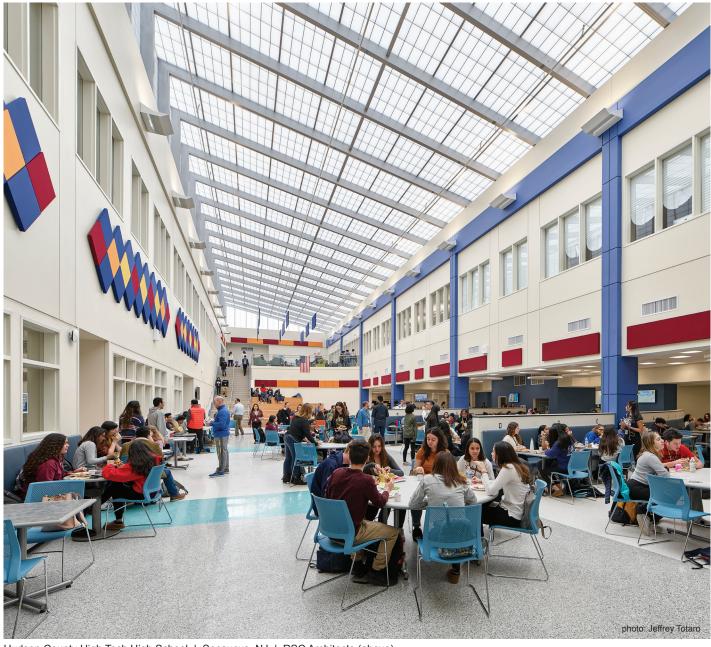
Perfect for custom and unique designs for toplighting applications

Can support light fixtures, sprinkler systems, and suspended artwork

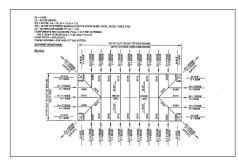
#### **CLEARSPAN SYSTEMS**







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.

# Experience the world's most advanced daylighting systems



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



















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