

**Structures Unlimited, Inc.**  
*Energy-Efficient Skylights & Pool Enclosures*

# **Clearspan Skylights**

*Spans over 100'!*

[skylightinfo.com](http://skylightinfo.com)

Roosevelt Elementary School, Elkhart, IN; R-20 Kalwall+ Nanogel®  
Architect: Fanning Howey Associates, Inc.; Photo: Bill Lempho

# Structures Unlimited, Inc.

## Structural Clearspan Skylights

When you need it done right, on time and on budget, Structures Unlimited, Inc. is the solution. Aluminum box beam superstructures provide the basis for these energy-efficient, pre-engineered skylight systems. No more need for separate steel fabricators, glazers and painters – these skylights are pre-fabricated, pre-finished and ready for quick, curb-up installation.

All Structures Unlimited skylights are engineered to withstand the toughest environments – from hail storms to hurricane winds, to high snow and drift loads. Kalwall translucent panels are secured to the box beam rafters to form a rigid, cohesive structure. The unique overlap system provides a “shingle effect”, virtually eliminating leaks, while our fully thermally broken panel system improves the building envelope performance by reducing solar heat gain and heat loss.

- Spans over 100 feet
- Thermal performance up to R-20!
- Low solar heat gain
- Condensation and corrosion resistant
- Maintenance-free
- Up to 42 LEED® v3 points
- Made in the U.S.A.
- Meets Anti-Terrorism/Force Protection standards

**NEW**  
Aluminum  
truss system  
now available!



*The School of the Future, Philadelphia, PA; LEED® Silver  
The Prisco Group, Architects; Andre Bell, The Prisco Group, Photography*

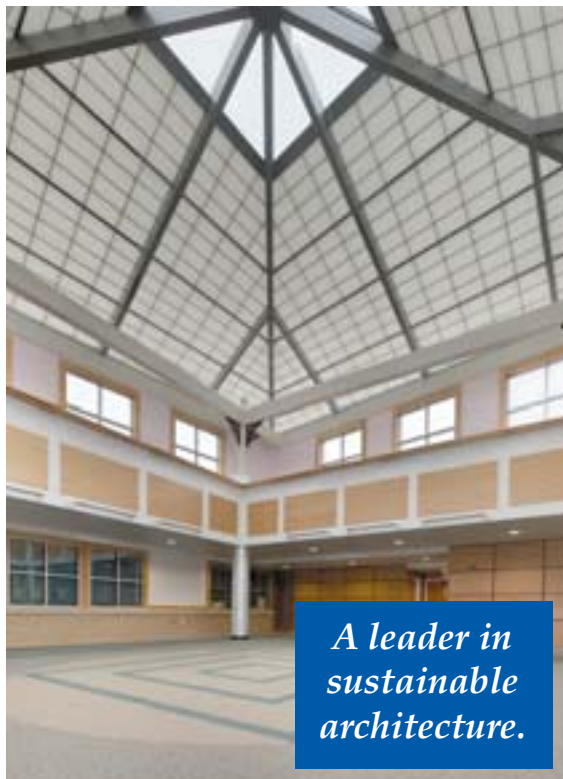
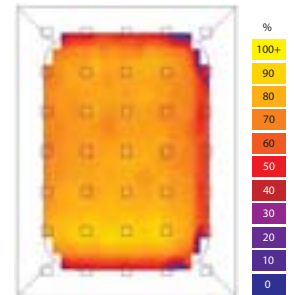


*Metro Family YMCA, Portland, OR; BOORA Architects*

## Daylight Modeling

[daylightmodeling.com](http://daylightmodeling.com)

At no charge, Structures Unlimited can provide a computer-generated daylight analysis. Specific light levels can be obtained simply by changing the color of the panels or the amount of insulation utilized. When daylight is critical, in environments such as schools, laboratories or studios, this service can be invaluable in creating just the right amount of light required for each specific task.



*A leader in  
sustainable  
architecture.*

*Harold T. Wiley School, Watertown, NY  
Photo courtesy of Architect: Bernier Carr & Associates, P.C.*



*Concord Hospital M.O.B. South, Concord, NH; JSA Inc., Architects*

# Engineering

Structures Unlimited can generate, also at no charge, support-reaction calculations, allowing your structural engineers to determine exactly how to construct the curbs and/or bearing walls necessary to support the skylight. In specific instances, tie rods, trusses or slip connections can greatly reduce the outward thrust exerted by the unit, greatly reducing the size (and cost) of the structural steel supports.

Experience the peace of mind knowing that every Structures Unlimited skylight is pre-engineered, pre-fabricated and pre-finished, reducing erection time and allowing for the interior finish work to be completed on schedule.



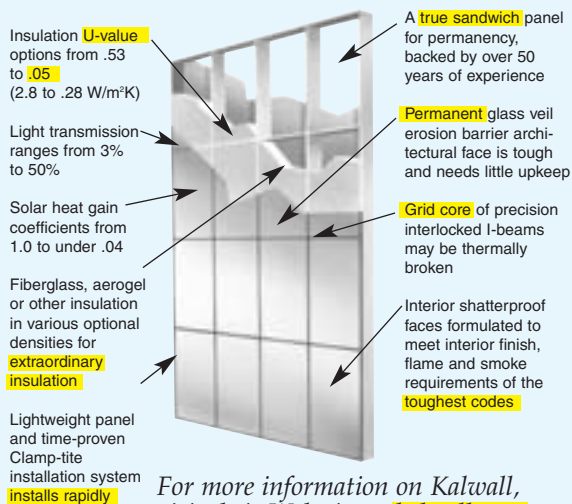
OSHA Fall-through Compliant

Patan Hospital, Kathmandu, Nepal; OZ Architecture, Architects



A.I.T.E. at Rippowam Campus, Stamford, CT; Fuller and D'Angelo, P.C. Architects and Planners

Structures Unlimited, Inc. skylights utilize the patented Kalwall® structural roof panel system. It's the most highly insulating, diffuse-light-transmitting technology in the world! Structural thermally broken panels – NFRC Certified, and ICC and UL Listed.

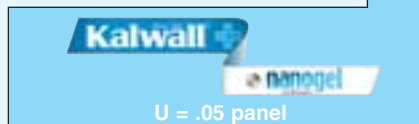


For more information on Kalwall, visit their Web site at [kalwall.com](http://kalwall.com)

## Energy and Daylighting Characteristics

Listed are a few of the light transmitting, solar heat gain and insulating factors of the many common face combinations of Kalwall Structural Roof Panels. Many other options are available.

FACE SHEET COMBINATIONS		% LIGHT TRANSMISSION AT <sup>note 1</sup> VARIOUS INSULATION U-VALUES				SKYROOF SOLAR HEAT GAIN COEFFICIENT @ 0° <sup>note 2</sup>			
EXTERIOR COLOR	INTERIOR COLOR	.23 "U" <sup>note 3</sup>	.14 "U" <sup>note 3</sup>	.10 "U" <sup>note 3</sup>	.05 "U" <sup>note 3</sup>	.23 "U" <sup>note 3</sup>	.14 "U" <sup>note 3</sup>	.10 "U" <sup>note 3</sup>	.05 "U" <sup>note 3</sup>
Aqua	White	17	6	4	12	0.19	0.10	0.07	0.25
Rose	White	18	6	4	12	0.19	0.10	0.07	0.25
Ice Blue	White	20	8	6	15	0.22	0.11	0.07	0.29
White	White	15	8	5	12	0.16	0.09	0.06	0.18
Crystal	White	20	12	8	15	0.23	0.11	0.07	0.24
Crystal	Crystal	30	15	10	20	0.27	0.14	0.09	0.28



**Outperforms all others!**

U-value SI conversion: 1.0 W/m²K - 0.176 Btu/hr/ft²/°F  
 1. Approximate values by ASTM E-972.  
 2. At 0° incident angle.  
 3. U-values determined by NFRC test method at certified labs.

Please verify latest technical information, as product changes can affect performance.

## NEW Kalwall 4" (100 mm) thick panels for even greater energy and structural performance!

FACE SHEET COMBINATIONS		% LIGHT TRANSMISSION			SOLAR HEAT GAIN COEFFICIENT		
EXTERIOR COLOR	INTERIOR COLOR	0.55 "U"	0.15 "U"	0.08 "U"	0.55 "U"	0.15 "U"	0.08 "U"
White	White	20	12	5	0.38	0.06	NA
Crystal	White	35	14	7	0.52	0.08	0.04
Crystal	Crystal	50	17	8	0.65	0.10	0.07

Check with Technical Services Department for further clarification. Since these tables are of a very technical nature, please consult your heating and ventilation engineer for proper interpretation.

## Other Design Configurations

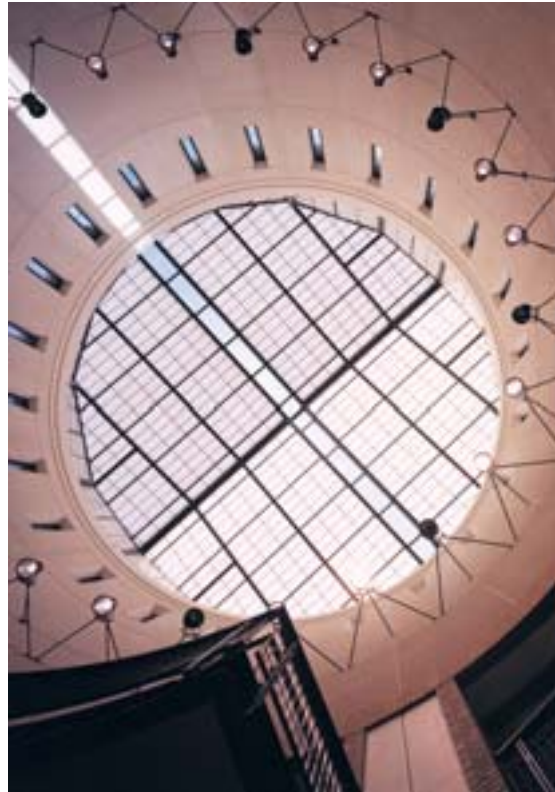
- Canopies and walkways
- Removable skylights
- Swimming pool enclosures



Riverstone Resort & Spa, Pigeon Forge, TN  
Fugleberg Koch Associates, Architects



Aquarium at Mandalay Bay, Las Vegas, NV; Klini-Juba Architects



Metropolitan Community College, Sarpa Center/La Vista Public Library La Vista, NE  
Zenon Beringer Mabrey Partners, Architect; Tom Kessler, Photography



Sedgwick County Zoo Jungle, Wichita, KS

*Pre-engineered composite system, single-source, design-build concept allows for rapid installation.*

## Structures Unlimited, Inc.

Energy-Efficient Skylights & Pool Enclosures

Design, manufacture and construction backed by over 55 years of experience.

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[skylightinfo.com](http://skylightinfo.com) • [kalwall.com](http://kalwall.com) • [daylightmodeling.com](http://daylightmodeling.com)

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For statement of warranty, contact Structures Unlimited, Inc.

