







Full UV Protection

- Retractable Roof Panels Condensation-Free Corrosion-Proof Shatterproof Superior Structural Integrity
- The Most Highly Insulating Thermally Broken Filters the Sun's Harmful Rays Long Life Cycle
- Proven Performance in Every Climate Single-Source Responsibility From Design to Installation



Structures Unlimited, Inc.

structuresunlimitedinc.com



# Pool Enclosures and Skylights

Structures Unlimited, Inc., has provided quality, energy-efficient pool enclosures and natatoriums since 1968. There is simply no system available today that can deliver diffuse, museum-quality daylight™ and eco-friendly thermal performance like Structures Unlimited. All of our enclosures are pre-engineered and pre-finished for both beauty and longevity.

In today's energy-conscious environment, the insulating value of a building is critical to its long-term value. Unlike glass or polycarbonate systems, Structures Unlimited delivers natural daylight without sacrificing thermal performance. The highly insulating Kalwall panel can deliver an astounding R-20!

- Pre-engineered structural aluminum framing system eliminates corrosion and reduces the use of ferrous metals in humid, chlorine-laden environments
- Virtually maintenance-free
- Sliding glass doors and fixed windows available
- Meets national and local building codes
- Provides glare-free, natural daylight
- Interior reflectivity maximizes indirect lighting
- Up to 40 LEED® v3 points
- Motorized operable roof systems available
- Roof systems meet OSHA fall-through requirements
- Single-source engineering, manufacturing and installation
- NOW Kalwall 100<sup>™</sup>, 4" (100 mm) thick panels for even greater energy and structural performance

## No one delivers daylight like we do

As a strategic partner with Kalwall Corporation, daylighting comes naturally. Kalwall invented the composite structural sandwich panel in 1955 and has improved on it ever since. Glare can be an extreme safety hazard in any aquatic environment, especially competition pools and natatoriums. The Kalwall panel delivers exactly the right type of daylight for a pool environment – soft, glare-free daylight that's perfect for swimmers and divers.

## Operable Roofs

Want to enjoy the outdoors? Simply turn a switch and let the sun – or moon – shine in. Our operable skylights are simple, affordable and reliable.

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• Hotels and resorts • Private residences



Active-adult communities



• Schools and colleges • Municipalities



Military facilities
YMCAs
Fitness clubs



There is no substitute for this unique

composite fenestration technology! Kalwall is a true sandwich panel formed by permanently bonding specially formulated, fiberglass-reinforced translucent faces to a structural composite I-beam grid core. The resultant panel is a full  $2\frac{3}{4}$ " (70 mm) thick, yet weighs only  $1\frac{1}{2}$  pounds per square foot; compare the following performance characteristics with plastic glazing panels that measure only \( \frac{5}{8} \)" (16 mm) or 1" (25 mm) thick.

Kalwall's structural thermal break design provides superior insulating values and the ultimate in energy performance and condensation control. Kalwall's Condensation Resistance Factor (CRF) exceeds 90 when measured at the grid core.

#### **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.

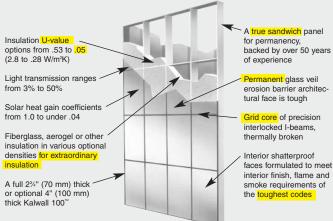
FACE SHEET COMBINATIONS		% LIGHT TRANSMISSION AT note 1 VARIOUS INSULATION U-VALUES				SKYROOF® SOLAR HEAT GAIN COEFFICIENT @ 0°∠ note 2			
EXTERIOR COLOR	INTERIOR COLOR	.23 "U" note 3	.14 "U" note 3	.10 "U" note 3	.05 "U" note 3	.23 "U" note 3	.14 "U" note 3	.10 "U" note 3	.05 "U" note 3
Aqua	White	17	6	4	13	0.24	0.14	0.10	0.21
Rose	White	18	6	4	14	0.24	0.15	0.10	0.21
Ice Blue	White	20	8	6	18	0.28	0.17	0.12	0.26
White	White	15	8	5	12	0.23	0.15	0.11	0.18
Crystal	White	20	12	8	17	0.28	0.17	0.13	0.25
Crystal	Crystal	30	15	10	N/A	0.33	0.18	0.13	N/A



### **Outperforms** all others!

- U-value SI conversion:  $1.0 \text{ W/m}^2\text{K} = 0.176 \text{ Btu/hr/ft}^2/^*\text{F}$  1. Approximate values by ASTM E-972. 2. At  $0^\circ$  incident angle. 3. U-values determined by NFRC test method at certified labs.

Please verify latest technical information, as product changes can affect performance. Check with Technical Services Department for further clarification. Since this table is of a very technical nature, please consult your heating and ventilation engineer for proper interpretation.



ICC-ES listed for quality assurance and IBC compliance



This is **NOT** possible with competitive systems!







Your connection to more information on daylighting large spaces!

# Structures Unlimited,

Design, manufacture and construction backed by over 50 years of experience.

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