

# Daylight Replacement Systems

Window • Curtainwall • Skylight • Canopy



Since 1955  
**Kalwall**<sup>®</sup>

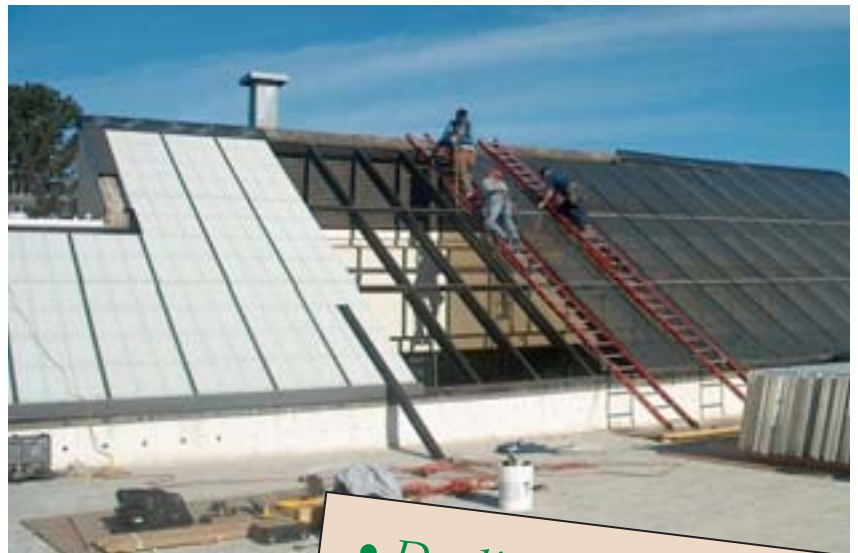
[kalwall.com](http://kalwall.com) • [daylightmodeling.com](http://daylightmodeling.com)



The ultimate daylighting solution for aging buildings... superior design and insulation allows Kalwall to pay for itself in energy, installation and maintenance savings!



Upgrade the energy performance, daylighting and aesthetics of any building.  
U = .05 with Kalwall+ Nanogel<sup>®</sup>



- Daylighting solutions for the ultimate energy savings!
- Green
- Performance U = .05
- Healthy • LEED<sup>®</sup>

**daylightmodeling.com**

Now you can see accurate simulations of how diffuse daylight can effect your designs. There is no better way to calculate the impact and alternatives.

## The Most Highly Insulated, Diffuse-Light-Transmitting System

- Cuts Heating Costs
- Reduces Air Conditioning Costs
- Saves on Electric Lighting Costs
- Virtually Maintenance-free
- Shatterproof
- Vandal-resistant



### A Unique Daylighting Replacement Technology

A total commitment for over 50 years to research and development, product improvement and innovation have positioned Kalwall as the standard setter in window replacement. The Kalwall Translucent Insulated Panel is the heart of this state-of-the-art system: a structural composite sandwich panel formed by permanently bonding specially formulated translucent fiberglass sheets to a grid core of interlocked, structural I-beams. The fiberglass faces have an innovative weather-resistant, low-maintenance composition. Translucent insulation is available in various densities with insulating U-value options from .53 to .05. The Standard System is 2 3/4" thick and can be up to 4" thick. Kalwall Window, Wall and Skylight Replacements can be justified on their energy savings payback alone!



Insulation U-value options from .53 to .05  
(2.8 to .28 W/m<sup>2</sup>K)

Light transmission ranges from 3% to 50%

Solar Heat Gain coefficients from 1.0 to under .04

Fiberglass, aerogel or other insulation in various optional densities for extraordinary insulation

Lightweight panel and time-proven Clamp-tite installation system installs rapidly



A true sandwich panel for permanency, backed by over 50 years of experience

Permanent glass veil erosion barrier architectural face is tough and needs little upkeep

Grid core of precision interlocked I-beams may be thermally broken

Interior shatterproof faces formulated to meet interior finish, flame and smoke requirements of the toughest codes

### THE OPTIONS ARE ALL YOURS!

Kalwall has developed a sophistication in retrofit design, engineering and performance that clearly excels. While other systems sacrifice either most or all of the natural lighting with the use of opaque panels or required shading devices, Kalwall transmits an abundance of soft, diffused, natural light.

Kalwall Systems are known for their total design flexibility. Wall and Window System options include: translucent panels, opaque panels, opening glass windows, louvers, spandrel panels and even explosion relief panels. Kalwall's own high-performance sash units provide thermal efficiency unmatched in a 2 3/4" unit. These systems pass all commercial requirements for an AAMA rated HP 1000 and HC 2000 sash, including wind velocities of 100 mph.

**Kalwall + nanogel** U = .05

**Kalwall 100** U = .08



## ***A True Building Upgrade!***

Any building can be transformed into a brighter, healthier, happier place to work and learn! Kalwall upgrades the energy efficiency of a building and also delivers significant additional savings in maintenance and repairs. The net result is a true boost to the asset value of the property! You'll be amazed by the improvement both inside and out.

*Look at the "before and after" difference in this building!*



## ***Proven Technological Advantages!***

Fenestration is the weak link in the energy performance of any building. To put the potential fuel savings into perspective, consider the overall wall space your current windows occupy. It is not uncommon for 50% or more of a building's surface to be windows. It's easy to see that dramatically improving the insulation of such a significant portion of your building's surface would have enormous impact. Kalwall Window Replacements are over 300% more efficient than insulated glass. Even Kalwall's standard panels outperform a solid concrete wall 16" thick! It is not an exaggeration to claim fuel savings of up to 40% following the installation of Kalwall Window Replacements. The savings in heating and cooling costs alone deliver a quick payback. But that's just the beginning of the economic advantages to Kalwall's Window Replacement technology.

Repeated window maintenance costs are eliminated! Kalwall is shatter-proof... no more broken windows to replace! No more scraping, re-caulking and painting sashes. Savings are also realized with the elimination of curtains and shades and the associated maintenance and replacement costs. Even window washing becomes unnecessary as every rainfall cleans the smooth exterior of the panels, leaving a clean, streak-free surface. Kalwall also puts an end to condensation problems associated with glass.



Skylight and Skyroof Replacements can be installed from the outside of a building, resulting in an absolute minimum of disruption. Panel assemblies are factory prefabricated to the maximum size and configuration possible. This preassembly of modular units ensures proper installation and eliminates joints. Installation time is much faster and always trouble-free, as job site cutting or fabrication is almost eliminated. Installation can be performed by Kalwall's local contractor or a factory team.



***Installation is Faster, Less Disruptive and More Economical!***

Since 1955  
**Kalwall**®

**Daylight you can use...**

More and more studies show workers are more productive and children learn better and are healthier in natural daylight! The high-tech solution to glare, shadows and lighting that has revolutionized the way America works, learns, plays and lives! Kalwall is also computer screen-friendly!

In today's workplaces and classrooms, the issue of glare and harsh sunlight reflections off computer screens and monitors is overcome by the diffuse light properties of Kalwall. Harmful ultraviolet rays are also screened out. The result: an even wash of usable daylight that is easier on the eyes. Even on cloudy and overcast days, the atmosphere created by balanced, diffused daylight offers a positive effect on attitude and productivity. Although vents and windows can be incorporated into the design, an opening completely filled with diffused light transmitting panels eliminates outside distractions that can capture wandering eyes.

**The Colorful World of Kalwall...**

Kalwall panels are available in a variety of standard colors and shades. More dramatic effects can be created by coloring the unique, solid-state, translucent insulation during the manufacturing process. All-aluminum framing is available in a wide variety of architectural color finishes and treatments that are factory applied for greater durability. Kalwall exceeds all building code requirements, including S. Florida, New York City and Los Angeles, and carries UL and ICC-ES listings, as well as FM and CE approvals in its arsenal of options.

Since 1955  
**Kalwall**®

See our "Bright Ideas" Web site!

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

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**The Top 10 Reasons R-20**  
*Kalwall is the preferred daylighting choice!*

1. Green, LEED, saves energy
2. Glare-free diffused, usable daylight means no need for curtains or shades
3. Reduced lighting costs and controlled solar gain
4. Highly insulating, superior energy performance, U = .05
5. Maintenance-free... no scraping, painting or washing
6. Shatterproof and vandal-resistant
7. Pre-engineered, permanent... over 50 years experience
8. Installs fast... one room at a time from inside or outside
9. Lightweight, low cost to buy, install and own
10. Aesthetically pleasing... a true upgrade

