

KALWALL®+NANOGE^L

KALWALL® is a unique cladding and roofing system for diffusing natural daylight and transmitting it internally as 'museum quality' light. It eliminates shadows, glare and sharp contrasts, and can overcome any need for external solar control or internal blinds and curtains.

NANOGE^L is a light transmitting aerogel, comprising about 95% air, in nano-sized pores that inhibit heat transfer. Aerogels are the world's lightest and best insulating solids.

Advantages of KALWALL+NANOGE^L

Diffused natural daylight changes the ambience of interiors and is proven to have a fundamental influence on personal well-being, working and learning.

KALWALL+NANOGE^L achieves a very low 'U' value of 0.28 W/m²K. This enables architects and designers to achieve insulation values equivalent to a solid wall, and four times better than insulating glass units, while using large areas of translucent cladding or roofing.

The proven benefits of the Kalwall system include...

- + Diffused Museum Quality™ daylight
- + Elimination of harsh lighting contrasts
- + Control of solar gain
- + Reduced energy costs

...plus the addition of Nanogel Aerogel to the Kalwall System provides

- + Very high thermal insulation
- + Improved sound insulation
- + Greater reductions in energy costs for heating, lighting and air-conditioning

Technical Characteristics

KALWALL+NANOGE^L is the most highly insulating diffuse light transmitting system available. Translucent structural composite sandwich panels are constructed by permanently bonding specially formulated fibre-glass sheets to a grid core constructed of interlocking extruded thermally broken aluminium I-beams. When filled with Nanogel, Kalwall panels combine exceptionally high insulation with light diffusion. Kalwall panels are factory prefabricated to the exact size and configuration required for each individual project. Wall or roof panels can provide total design flexibility. Opening or fixed glazed windows can be incorporated into the panels using Kalwall's integral clamp-tite™ installation systems.

KALWALL+NANOGE^L

panel dimensions (maximum):

1200mm x 3600mm or 1500mm x 3000mm



KALWALL+NANOGE^L thermal Insulation and light transmissions:

'U' value of 0.28W/m²K

Light transmission: 9-12%

Solar factors – 0.08-0.11

KALWALL is manufactured and patented by Kalwall Corporation, USA www.kalwall.com

NANOGE^L is a registered trademark of Cabot Corporation. www.nanogel.com

STOAKES

STOAKES SYSTEMS LIMITED

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Kalwall is also available in the following countries

through these specialist distributors:

Benelux countries – Hermans NV +32 (0) 16 82 03 00

Ireland – McNeill-McManus +44 (0) 2890 832 025

Scotland – SD Systems +44 (0)141 812 0196

Spain – Astrawall Iberica +34 948 312 850

KALWALL®

NANOGE^L

*Kalwall + Nanogel =
diffused daylight with insulation
better than a solid wall!*

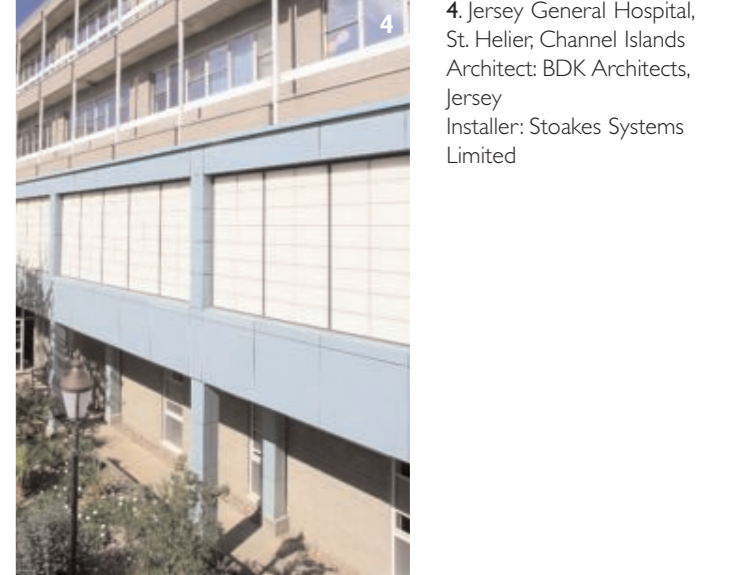
KALWALL+[®]NANOGE[®]L



1 Highcrest Community School, High Wycombe, Buckinghamshire
Architect: Jacobs Architecture
Installer: Stoakes Systems Limited



2 Cedars Business Centre, Hemsworth, Yorkshire
Architect: Atkins, Leeds
Installer: Stoakes Systems Limited



4 Jersey General Hospital, St. Helier; Channel Islands
Architect: BDK Architects, Jersey
Installer: Stoakes Systems Limited

NANOGE[®]L the invisible ingredient

With the invisible inclusion of Nanogel insulation, Kalwall panels achieve a 'U' value of 0.28 W/m²K; better than a solid wall and up to four times better than double glazing. We show here a representative selection of buildings that exploit the unique qualities of KALWALL+NANOGE[®]L.



3 Roosevelt Elementary School, Elkhart, Indiana
Architect: Fanning/Howey Associates, Inc.



5 All Saints College, Newcastle upon Tyne
Architect: City Design, Newcastle City Council
Installer: SD Systems, Glasgow