

Kalwall® is a translucent, highly insulating diffuse light transmitting building system for walls and roofs. It absorbs external daylight and redistributes an internal ‘museum quality’ light that virtually eliminates glare, hotspots and shadows. When Kalwall was first introduced into the UK by Stoakes Systems its acknowledged technical and physical properties were and still are major selling points. However the positive impact on the psychological well-being of the people using Kalwall buildings has proved to be a wonderful bonus, as is witnessed by the comments we print here.

Schools and performance

In America, studies have been carried out on the effect of daylighting in schools and its relationship with student performance. In one such study¹ data specifically related to maths and reading took into account 21,000 student records from three quite different areas - California, Washington and Colorado. Each classroom was assigned a 0-5 scale indicating the size and tint of its windows, the presence or otherwise of sky lighting and the overall amount of daylight expected. The study found:

1Learning rates were 26% higher in reading and 20% higher in mathematics in classrooms with most natural light.

1Students with a well-designed skylight improved 19-20% faster than those students without a skylight.

1The 99% statistical certainly of the research confirmed that improved daylighting helps students to work more efficiently, learn more, reduce absenteeism and be more healthy.

Schools and glass

Traditional glazing can have disadvantages for schools. Unless properly designed, glass can allow uncontrolled sunshine into the building and, with it, unwanted heat gain. The associated glare, shadows and reflections can create discomfort.

Kalwall's evenly distributed light virtually eliminates glare, shadows and hot-spots and controls solar gain without the need for external shading devices, curtains or blinds. Hence a school's capital and maintenance expenditure can be reduced.

Schools and energy

Enhanced daylight transmission means less reliance and considerable reduction of artificial lighting, even on cloudy days. Kalwall's high insulating efficiency can contribute to savings in heating costs and enables designers to increase the amount of natural daylight within the building.

Schools and 'green' issues

Kalwall is rated green because of its materials and composition which reduce the environmental impact of building and contribute to a safer, healthier indoor environment.It is the only translucent daylighting product approved and listed in the US GreenSpec Directory

Schools and maintenance

Kalwall is virtually maintenance free and self-cleansing. Its high resistance to impact and mechanical damage is especially suited to heavy use in schools.

¹Research conducted by Fairs Oaks energy consulting group in Sacramento for The State Board for Energy Efficiency and The Pacific Gas & Electric Co.

'My guess is this will make a huge impact on school design' ARTHUR ROSENFELD, SENIOR ADVISER US ENERGY DEPARTMENT



Top, City Learning Centre, Monks Park School, Bristol. Architect, Alec French Architects.

Above and inset, Crestwood College, Eastleigh. Architect, Hampshire County Council Architecture & Design Services.

If you are considering building, improving or extending your facilities mention Kalwall to your building design team or contact

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STOAKES SYSTEMS LIMITED

Schools
and
Kalwall®



...children
are **changed,**
are more
focused
and keen to
learn*



* Lyn Roberts, Director, City Learning Centre, Monks Park School, Bristol.

Kalwall® is manufactured and patented by the Kalwall Corporation

'A conventional design and build project, like this, might not have ended up with Kalwall. We performed some gymnastics in order to get Kalwall specified because it was also wanted by the client and teachers. In fact, Bristol City Council even ordered the Kalwall before the contractor had been appointed! We think Kalwall works brilliantly in more senses than one'.

Nigel Dyke of Alec French Architects

'...although the Kalwall is floor to ceiling it has survived 11-16 year old students for all that time with absolutely no damage. We all agree that the diffused lighting makes for a bright, warm and attractive ambience all the year round. Interestingly, Kalwall also insulates us from the noise of the adjacent railway-line'.

Derek Kwai, special projects manager Morpeth School Hackney London



*Top, Kingfisher House, Enfield College, London.
Architect, van Heyningen and Haward Architects*

*Above, Crossways Academy, London.
Architect, IID Architects.*

'We are delighted with the Kalwall, especially because it means that we do not need expensive artificial lighting, even on cloudy and dull days. Our children have special needs such as learning difficulties or are autistic; they love the new hall.'

The absence of shadows and glare make it so much better than other sports halls I have worked in.

We are in a built-up area and an interesting side-effect of Kalwall is that at night there are no glaring lights to dazzle local homes'.

Wayne Curtis, sports hall manager of St Christopher's School, Leigh-on-Sea

'Our children have emotional and behavioural difficulties and it is vital to have a facility such as this. It's interesting how Kalwall's diffused lighting has such a calming effect on them'.

Mary Loizou, head teacher at Belmont Park School Leyton



*Above, Hartlepool College of Further Education.
Architect, Sanderson Weatherall.*



*Top, (Sportsball). St. Bedes Inter-Church School, Cambridge.
Architect, Peter Smith Associates.*

*Above, De Ferrers Specialist Technology College, Burton upon Trent.
Architect, Aedas, Manchester.*



'This building has a high buzz factor. The rooms have

a visual and physical impact with space and light that gives them a freedom

and feel quite unlike any other classrooms the children have experienced. Visitors find it endlessly fascinating.

Children are changed by it, are more focused and keen to learn'.

Lyn Roberts director Monks Park School, Bristol

'A good building like this makes education a pleasure.

This project represents the standards we should be aiming for across the country.

It is crisp, light and airy and staggering value for money'.

The judges on the City Learning Centres in Bristol, winner of the Prime Minister's Better Building Award 2002.



*Top, Harris Girls' Academy, London.
Architect, Southwark Building Design Services.*

*Above, City Learning Centre, Brislington School, Bristol.
Architect, Alec French Architects.*