



PROJECT DETAILS

Client: City of Bradford MDC

Purpose: Swimming pool

Architect: Bradford City Council

Contractor: NU Construction

Completion: 2007

In Brief:

- How do you refurbish a deteriorating local authority swimming pool?
- How do you maximise the ingress of natural daylight while retaining privacy and eliminating the need for blinds or external shading devices?
- How do you improve pool and swimmer safety by minimising glare and shadows being cast on the water?
- How do you source a translucent cladding system which is highly insulating, saves energy on artificial lighting and reduces maintenance?
- Why is Kalwall so widely used for both new and refurbished swimming-pools, sports halls and leisure centres?

The Project

Eccleshill Swimming Pool is a local authority run pool in Bradford, West Yorkshire. Built in 1968, the original design was a steel framed curtain wall with plywood cladding panels and a clearstory band of glass at the head. Although the original panels were later replaced with insulated ones the steel frame was corroding and became structurally unsound, so much so that the pool would have to be closed on safety grounds unless a cost effective refurbishment solution could quickly be found to solve the problem.



The Solution

The agreed solution was to demolish the flank wall and rebuild in a different type of construction. Obviously, it was important to retain a large element of fenestration by installing a translucent system which would generate good daylight and also give protection against vandalism. Consequently it was the decision of Bradford MDC architects to rebuild using the Kalwall system. That decision was based on the architects' knowledge of Kalwall, particularly its reputation and widespread use on many new swimming pools, including some local authority pools which had also been refurbished. Consequently, Kalwall was installed over more than half the depth of the wall while the lower part was opaque and clad externally with terracotta tiles. At night, the pool presents a glowing exterior.

The Comments

Bradford Metropolitan District Council and the public were delighted with the final refurbishment. The stunning effect of using Kalwall to diffuse natural daylight into the pool greatly improved the interior ambience. Running costs have been reduced because of the improved insulation and less reliance on artificial lighting. Another important observation is that the diffused daylight eliminates glare and veiling on the water which means that lifeguards can see swimmers better.

The System

Kalwall is the most highly insulating diffuse light transmitting cladding (and skylighting) system available. It is designed to transmit "museum-quality" light evenly across the interior without glare or harsh contrasts of light and shade. The translucent panels are factory prefabricated to the exact size and configuration for each project. Panels can be flat or curved, and opening or fixed glazed window units can be incorporated. The panel is generally 70mm thick (100mm is also available) and by providing various densities of insulation. The thermal resistance and therefore 'U' values can be varied without loss of light. With Cabot's aerogel Lumira (previously called Nanogel), a 'U' value of 0.28W/m²K can be achieved. Kalwall is resistant to damage and is largely self-cleaning.

More Information

For Technical information, downloadable publications, project case studies and short videos, visit www.stoakes.co.uk or telephone 020 8660 7667.

THIS POLYCARBONATE ROOF AT SHANKILL ROAD, BELFAST FAILED AND WAS REPLACED WITH KALWALL



KALWALL REPLACED FAILED PATENT GLAZING AT SCOTLAND'S JOCK STEIN CENTRE CREATING IDEAL PLAYING CONDITIONS



KALWALL SPARKLES BETWEEN BRICK PILLARS AFTER LETCHWORTH'S LOCAL AUTHORITY POOL REFURBISHMENT

