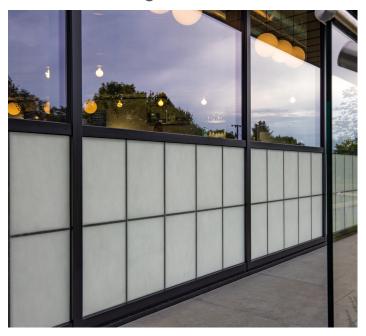


high performance translucent building systems

# **Project Report**

## Frank's Ice Cream

Wales, United Kingdom







Architect: Sauro Architectural

Photos: Behind The Lens Media Ltd



high performance translucent building systems

#### KALWALL SPECIFICATION:

Panel: 2.75" | 70 mm

Grid core: shoji

Exterior FRP: white

Interior FRP: white

System finish: aluminium #79

U-Value: .14 | .78 Wm2K

Solar Heat Gain Coefficient: .14

Visible Light Transmission: 9%

#### WHAT IS KALWALL?

A translucent, structural sandwich panel that provides:

Glare-free, balanced daylighting

Superior thermal performance

Energy + electricity saving

Low maintenance life cycle requirements

Safety + security through visual privacy

Durability + graffiti / vandal-resistance

Hurricane, explosion venting + blast rated options



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For unparalleled thermal performance in translucent daylighting, consider specifying Kalwall with **CABOT's Lumira**® aerogel insulation. Available in 2.75" (70 mm) panel formats up to: 4' x 12' (1200 mm x 3600 mm) and 5' x 10' (1500 mm x 3000 mm) maximum.

### Frank's Ice Cream, Wales, UK

#### LIGHT BEAMS AHEAD FOR ICE CREAM

Established in 1922, Frank's is one of the United Kingdom's leading ice cream brands, built on a foundation of tradition, passion and innovation. These characteristics are on display at the company's new Gelateria & Innovation lab.

At the heart of this project, a focus on materials helped merge the spirit of a traditional Italian ice cream shop with modern functionality. Natural materials, including slate, wood and terrazzo tile, were paired with an abundance of natural daylight to create a welcoming environment for the frozen treat aficionado.

The daylighting is achieved through a strategic combination of transparent glass to allow view and translucent Kalwall panels to improve performance. Kalwall's technology diffuses light for a healthier, more balanced atmosphere, and the panels are highly insulated to ensure thermal performance often lost with glass.

Kalwall's complimentary daylight modeling helped determine the specific placement of the translucent and transparent materials. The models—which measure annual sun exposure and glare probability, among other metrics—showed how including Kalwall on the ground floor, both below the glass windows and above the display counter, could significantly reduce solar heat gain and minimize glare. Combined with a u-value of .14, the Kalwall panels help maintain a perfect temperature for serving ice cream while providing significant energy savings.

Maintaining large areas of glass on the first floor allows people outside to see and be tempted to come in, but the second floor uses the translucent Kalwall panels much more liberally to create a unique meeting space enveloped in light. Kalwall panels are unitized with glass to provide a view out.

Factory pre-finished, modular panels allowed for rapid on-site installation. The lightweight panels require minimal support structure and were customized to create a unique silhouette that mimics the gable roof building commonly found in Frank's hometown of Ammanford.

At night, the panels can be lit from within to create a soft, attractive glow, reminding everyone that it's never a bad time for ice cream.

















