

high performance translucent building systems

Project Report

Tintern Middle School

Melbourne, Australia







Photography: Brendan Finn

Architect: Architectus

KALWALL®

high performance translucent building systems

KALWALL SPECIFICATION:

Panel: 4.00", thermally broken

Grid core: vertikal

Exterior FRP: crystal

Interior FRP: white

System finish: aluminum #79

U-Value: .08 | 0.45 Wm2K

Solar Heat Gain Coefficient: 0.04

Visible Light Transmission: 7%

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.

Tintern Middle School

The Tintern Middle Schools in the Melbourne suburb of Ringwood East, Australia had a unique need for its new classroom building.

The school's Parallel Learning method of teaching separates boys and girls in grades 7, 8 and 9, but the administration wanted the students housed in the same classroom building. Kalwall translucent sandwich panels were a vital part of the solution by James Jones, design principal for Architectus Melbourne.

Jones had been intrigued by Kalwall's unique features and found a perfect fit in this project. He designed a building with two wings, one for each gender, joined by a bridge that housed the staff office. Kalwall panels line the sides of each wing.

The panels achieved several objectives of the project, providing the high thermal performance and energy efficiency Kalwall is known for and being code compliant. The walls allow soft natural light to enter each classroom on two sides, yet maintain privacy between the girls' and boys' buildings.

"I was attracted to the fact that you can up-spec the insulation to increase the resistance of heat loss... and it was erected incredibly quickly," Jones said. "It gives the effect of a fully glazed building, it glows at night and it gives a light quality much softer than say polycarbonate because it is diffuse. It reminds me of a Japanese Shoji screen."

















