



GREEN SCHOOL GETS AN A+

ELEVATE™ ALUMINIUM SYSTEMS USED IN ONE OF AUSTRALIA'S FIRST GREEN LEARNING SPACES
TAYLORS WINDOW SUPPLIES DELIVER INNOVATIVE WINDOW SYSTEMS FOR A UNIQUE PROJECT



The face of Australian education is changing. Across the country, many students and teachers spend their days in badly designed classrooms, with little access to daylight, and minimal indoor air quality. But when Gungahlin College, a \$72.7 million college in Canberra's north, opened its doors in February 2011, a new benchmark in green schools was set.

Typically, conventional education buildings are designed to meet only minimum building-code standards. This approach can result in lower comfort and productivity levels, and potentially unhealthy work environments. Gungahlin College is part of the ACT Government's \$496 million investment in upgrading every public school, and building new schools where they are needed most. The design of the college incorporates a range of environmentally sustainable design features aimed at achieving a 5 Green Star rating from the Green Building Council of Australia.

The facility was jointly designed by Munns Sly Moore Architects, and Williams Boag Architects, and built by PBS Building (ACT) Pty Ltd. Their goal was to

design and encourage best practice in teaching and learning, and create a facility with the flexibility to adapt to new approaches and technologies in the future.

The glazing is a particular feature of the building and represents a close collaboration between the architects, sustainability consultant and Taylors Window Supplies.

Using the vast array of Elevate™ window and door systems Taylors Window Supplies optimised the glazing throughout the College. Their aim was to connect the interior of the college with the outside world, while balancing the requirements of effective thermal performance and natural ventilation.

Taylors ensured all glazing was Section J compliant. In addition, all fixed windows are double glazed, while low-level glass louvres assist in the circulation of fresh air throughout the buildings. This air is extracted through thermal chimneys. The face of these chimneys is also glazed to enhance natural light and create a 'stack effect' within the chimney.



Series 624 CentreGLAZE™ Elevate™ Framing (150mm)

- Frame and glazing pocket designed to be accept 24mm insulating glass units (IGUs) with required 12mm bite plus another 4mm to cater for glass production and installation tolerances.
- Compatible with a large range of other AWS framing systems, including sliding doors.
- Snap together and interlocking expansion mullions.
- Matching 50mm thick hinged, pivot or sliding door designed to accept 24mm thick double glazing and a large variety of industry standard hardware.
- Two fully beaded midrail sizes to choose from (125mm and 200mm deep).
- Concealed overhead transom also designed to accept 24mm IGUs.
- We can insert awning sashes into the framing - if required. These sashes will also accept 24mm IGUs

To enable more refined control of airflow, a high-level glazed 'curtain' incorporating glass louvres around the double-height voids is located in the spine of the buildings.

Architects specified double glazing and laminated glass to minimise sound transfer between the project houses, classrooms, library and performing arts areas. One of the great advantages of Elevate™ systems is the ability for the full suite of products to accept glazing options from 6mm through to 24mm offering considerable flexibility in design to allow architects to achieve the functional outcomes they desire.

Classrooms were divided by glass walls to create a light and welcoming feel throughout. For natural ventilation and passive cooling, louvres were fitted throughout the building façade and between classroom areas. The

seraphic coloured glass used in sections of the building façade have created a stunning visual aesthetic.

Selected products from the Elevate™ range included Series 424 and 624 CentreGLAZE Commercial framing with Breezeway Louvre galleries (6mm tgh), Series 606 FrontGLAZE Commercial framing, Series 50 and 52 Commercial Doors.

On average, green schools use one third less energy than conventional schools, saving thousands of tonnes of greenhouse gases each year. Gungahlin College, with its clever use of glazing, optimal solar orientation and water storage, an underground thermal labyrinth for natural heating and cooling, thermal chimneys and low water-use landscaping, has set the standard for years to come.



Taylor's has been manufacturing windows and doors for Southern NSW and the ACT for more than 40 years. Their extensive knowledge and experience in all aspects of aluminium joinery enables them to provide their customers with a product that is second to none. In every project that Taylor's undertake – large or small – their goal is customer satisfaction, with focus on both quality and service. Being a family owned and managed business, Taylor's offer personalised service and products that are customised to their customers' requirements.



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For the latest technical information regarding Series 624 Commercial framing or other Elevate™ Aluminium Systems, visit our website: www.elevatealuminium.com.au



2D & 3D CAD FILES AVAILABLE

Download the Series 624 Commercial Framing CAD & Revit 3D files to use in your projects from our website: specifyaws.com.au



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