



LEARNING, LIGHT & LIFESTYLE

DLG ALUMINIUM & GLAZING UTILISE INNOVATIVE ELEVATE™ ALUMINIUM SYSTEMS AS PART OF A NEW SUSTAINABLE BUILDING PHILOSOPHY BEING EMBRACED BY CHARLES STURT UNIVERSITY



A bold new building philosophy adopted by the Charles Sturt University has given rise to an impressive development - The Thurgoona 'Learning Commons Building'. Located on the University's Thurgoona campus, the site houses the campus library and a 24-hour learning hub, and demonstrates how major public facilities can reflect modern lifestyles yet have minimal impact on the local environment.

Situated in Albury-Wodonga, on the border of NSW and Victoria, Charles Sturt University (CSU) is one of Australia's leading providers of on-campus and distance tertiary education. In 2007, CSU made a commitment to improving the environmental credentials of its campus facilities. Part of that commitment saw the commencement of a major sustainable building project. The 15-year, \$50 million building program has embraced a new approach to building design; a comprehensive, environmentally sensitive process that spans site planning, materials selection and building methods. It is an outstanding example of minimal energy use and the on-site management of water and waste.

Designed by local architects, JVP (Jovaras Westland Partnership), the building utilises a wide range of ESD techniques, including high insulation, careful solar orientation, water re-use and extensive use of high-performance glazing.

The design is dynamic and striking, incorporating bold geometric features, long parabolic curves and lofty ceilings. Given the unique characteristics of the design and the significant use of glazing throughout, the designers recognised the need to choose their glazing experts with care. AWS fabricator, DLG Aluminium and Glazing, was selected for the task.

A number of critical factors were to impact the project's glazing requirements. First, the environmental credentials of the project demanded exceptional outcomes from the large expanses of glazing which form the building's facade. Second, the building sits within a major bushfire zone. Third, given the building's function, acoustic performance needed to be enhanced. And finally, glazing had to be sympathetic to the design and aesthetic criteria.

DLG Aluminium & Glazing is well-versed in



The Series 426 & 626 FrontGLAZE™ Double Glaze Commercial framing has a number of innovative features which made it an ideal choice for this project, these include:

- Framing offers 12mm glass bite on all edges.
- Unlike industry standard beading we have braced the glazing bead to ensure it stays securely in place.
- Matching hinged doors are available that will accept the same 24mm IGU's.
- Centre pivot and transoms also accept the thick 24mm glass.
- To complete the package we also offer inlay adaptors to accept awning and casement sashes that will accept 24mm thick glass.

balancing the competing requirements of a project to achieve the ideal glazing solutions. Drawing from a wide choice of exceptional commercial framing systems in the Elevate™ Aluminium Systems range, the team ultimately decided on AWS Series 426 and 626 FrontGLAZE™ Double Glazed suites. The reason? Series 426 and 626 FrontGLAZE™ framing accepts insulated glass units up to 24mm thick. These systems enabled energy and acoustic performance outcomes to be achieved, and are compatible with a variety of systems from the Elevate™ and Architectural Series.

To create the unique glazing design on the building's façade, FrontGLAZE™ framing was integrated into the main support columns to achieve excellent structural integrity.

The use of automatic door operators and

internal frameless glass structures assisted with the issue of crowd division and dispersion, to meet all BCA requirements.

In addition, IGUs incorporating Low-E glass to various elevations, enabled designers to achieve the required Uw and SHGC values. Bush fire protection was enhanced through use of Viridian Frontline™ IGUs.

Awning sashes were also cleverly incorporated into the framing to enable cross-flow ventilation, and to assist with passive cooling and ventilation.

This project was recognized by the Australian Window Association 2009 Design Awards as the "Best use of Commercial Glazing" in a new building application.



DLG Aluminium & Glazing worked closely with Architects to achieve the ideal glazing solution for the project balancing the requirements for energy efficient, acoustic performance, aesthetics and bushfire regulation compliance. The team at DLG is dedicated to providing customers with the personal service and technical excellence they have come to expect - as well as good value for money. The DLG showroom offers an extensive display of Vantage and Elevate™ systems and provides the ideal environment to make informed decisions about the windows and doors for your project.



NEED MORE INFORMATION?

For the latest technical information regarding the Series 426 or 626 FrontGLAZE™ Double Glaze framing or other Elevate™ Aluminium Systems products visit our website: www.elevatealuminium.com.au



2 & 3D CAD FILES AVAILABLE

Download Series 426 or 626 CAD & Revit 3D Files to use in your projects from the SpecifyAWS Website: www.specifyaws.com.au



ARCHITECTURAL WINDOW SYSTEMS

76-78 JEDDA RD, PRESTONS, NSW 2170

P: 02 8783 7611 | F: 02 8783 7633

WWW.AWSAUSTRALIA.COM.AU

TECHSUPPORT@AWSAUSTRALIA.COM.AU