



THE FLANNERY CENTRE

THERMALHEART™ SYSTEMS ENSURE SUSTAINABILITY REQUIREMENTS ARE MET
CRAWFORD ARCHITECTS DESIGN A SUSTAINABLE CENTRE FOR APPRENTICES IN REGIONAL AUSTRALIA



With the help of the Federal Government, Skillset, one of Australia’s largest Group Training organisations, has created a world-class green skills and sustainability centre in the New South Wales Central Tablelands, in Bathurst.

The Flannery Centre, named after renowned environmental advocate and 2007 Australian of the Year Tim Flannery, was built under the Green Star program run by the Green Building Council of Australia.

Crawford Architects were appointed with the significant task of designing a sustainable, practical and memorable architectural work. It is now the home of education in sustainability for the region, teaching and showcasing leading edge sustainable building solutions to the problems that building professionals face today and will face well into the future. Built with a reduced ‘ecological footprint’, the result is a building with a remarkably low energy demand for heating, cooling and lighting.

The brief for the building was simple. To create a green skills and sustainability centre for apprentices in regional Australia, with an all-encompassing design that promotes biodiversity, encourages recycling, adopts numerous water conservation techniques, has a reduced reliance on energy sourced from fossil fuels and limits soil-site displacement.

The paramount building requirement was to implement sustainable building techniques, with corresponding appropriate material and product selections that assist in the ongoing endeavour of ensuring the stock of natural resources is managed. Reverse veneer construction detailing, rammed earth walls and commercial thermally broken window frames are all contributing techniques and systems implemented in the building by Crawford Architects’ Director Paul Godsell, to ensure The Flannery Centre maintains its exceptional sustainable and green rating.



Every part of The Flannery Centre's envelope fabric was required to have outstanding thermal performance – the glazing solution was no exception. The building required a large number of aluminium windows and doors, all in varying sizes and shapes. The glazing brief was a product that was to be thermally efficient, durable, aesthetically satisfying, and matched the modern appearance of the rest of the building – an interpretation of the rural shed – split with galleries and a student hub.

AWS's ThermalHEART™ range of thermally broken aluminium windows and doors was chosen for the job. The thermal break in ThermalHEART™ windows and doors is created using a polyamide strip between the aluminium

exterior and interior elements. The thermal break minimises the transfer of heat and cold through the aluminium window frame, giving the thermally broken aluminium window excellent insulation properties. Polyamide has very similar expansion rates to aluminium, ensuring ThermalHEART™ extrusions maintain excellent structural integrity.

Bathurst Glass Service, an experienced AWS fabricator was chosen to supply and install the aluminium windows and doors throughout the building due to its reputation for high quality products.

The completed project is a building with a reduced ecological footprint and a dramatically low energy demand.

Thermal Commercial with Awning Sash:

- ThermalHEART™ window and door frames have been designed in Australia to suit our building conditions.
- Series 726 incorporates ThermalHEART™ technology giving a true wide thermal break. WERS (Window Energy Rating System) data shows that using the same IGU in a ThermalHEART™ awning window is 32% more efficient than a standard window.
- A major advantage with ThermalHEART™ in cold climates is the reduction of internal condensation.
- ThermalHEART™ is also beneficial in hot climates, providing extra insulation to reduce requirements for home cooling.
- ThermalHEART™ is available in a range of stocked colours, including dual colours.
- Awning sashes can be fitted with cam handles, manual chain winders or electric winders.



Bathurst Glass Service was established in Bathurst in 1953 and has serviced the Bathurst and surrounding areas with aluminium joinery and glass for the last 54 years. Bathurst Glass Service is a family owned business and is the leading supplier of aluminium windows and doors in the Bathurst area.



NEED MORE INFORMATION?

For the latest technical information regarding the ThermalHEART™ range of products, visit our website: www.thermalheart.com.au



2D & 3D CAD FILES AVAILABLE

Download the ThermalHEART™ Series 726 CAD & Revit 3D files to use in your projects from the SpecifyAWS website: www.specifyaws.com.au



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