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## FOXGROUND PAVILION

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■ EVOLUTION WINDOW SYSTEMS WERE PART OF THE DESIGN PROCESS IN THIS PASSIVE SOLAR HOME WITH A LOW-CARBON FOOTPRINT

With an idea to build a passive solar home with a low-carbon footprint, owner-builder Joe Cato decided to build a home on an 80-acre property in Kiama, NSW. With the vision of a four-bedroom, single storey rammed-earth home, Joe and his wife Maura pushed their craftsman elements to the limit to produce this bespoke home.

After meeting Evolution Window Systems at a Grand Designs expo, Joe worked with Evolution through the design process. They put together a window and door brief which was to provide a product that would perform the best thermally, bearing in mind that the

site is in one of NSW's wettest areas, receiving 2m of rain annually. Because of this, double glazing and the thermal break system became the obvious choice.

Commercial ThermalHeart™ Series 804 thermally broken 100mm CentreGLAZE™ framing was used. It delivers excellent thermal performance and is ideal for commercial and high-end residential projects where minimising heat or cold transfer is desired. A 'thermal break' is incorporated which separates the inside and the outside elements of the frame providing an insulator to minimise the transfer of heat or cold between the elements.

The Series 731 thermally broken sliding door reduces internal condensation. A major reason why this product was chosen was because it has a high water resistance of 300Pa.

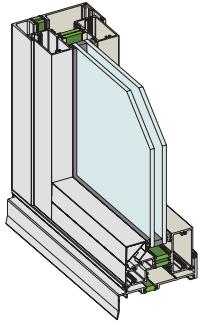
Large window spans facing south don't contribute to a building from a passive solar design perspective but they do showcase the extraordinary view. Because the home has a north-facing frontage, provisions were made to capture the winter sun in the living area. Raising the ceiling height in the living area and utilising louvered windows achieved just that.

"The service provided by Evolution Windows was excellent. They accommodated changes to our construction program and changes to our scope of works admirably. Evolution Windows provided excellent advice on our final specification. The products are of exceptional quality and the heat transfer properties of the windows and doors work just as we intended." – Joe Cato



For more information and the full gallery, visit:  
[thermalheart.com.au](http://thermalheart.com.au)

Architect: Joe Cato, Cato Consulting | Photographer: Jon Harris Photography



#### **THERMALHEART™ SERIES 804 THERMALLY BROKEN 100MM CENTREGLAZE™ FRAMING**

- × An innovative thermally broken aluminium CentreGLAZE™ framing system measuring 100mm x 60mm.
- × Series 804 delivers excellent thermal performance. ideal for commercial and high-end residential applications where minimising heat or cold transfer is desired.
- × To enable excellent thermal performance to be achieved, a "Thermal Break" is incorporated which separates the inside and outside elements of the frame providing an insulator to minimise the transfer of heat or cold between the elements.
- × This insulating strip is manufactured from polyamide and delivers the same structural properties as aluminium to ensure the integrity of the system is maintained.
- × Reinforced tall glazing bead at sill tolerates high negative wind loads.



Evolution Window Systems are a Sydney based leading manufacturer of award winning, contemporary architectural aluminium windows and doors. Located in the heart of St Marys, they happily service St Marys as well as Sydney and its surrounds. Operating since 1996, their business is established and well equipped to supply and install aluminium windows and doors to both residential and commercial applications.

2D & 3D CAD Files Available | Download from [specifyaws.com.au](http://specifyaws.com.au) to use in your projects.

For more information on this and the rest of the ThermalHEART™ range: [thermalheart.com.au](http://thermalheart.com.au)

