

The Bowden Centre, Mt Annan Botanic Garden

The project

The Bowden Centre is an educational building at Mt Annan Botanic Garden NSW. The building's primary purpose is to provide a teaching facility as well as accommodating a broad range of other activities such as seminars and weddings.

The building is a landmark design bringing together high standards of ecological sustainability, within a very modest budget. Sustainable design elements include:

- Recycled steel structure and aluminium windows
- The thermal management of the building via a ground coupled, water based air conditioning system
- Inclusion of a series of plywood clad, vertical wall openings that act as alternatives to conventionally glazed windows
- High performance insulation
- natural ventilation
- rainwater collection



Location

Mt Annan, NSW

Building type:

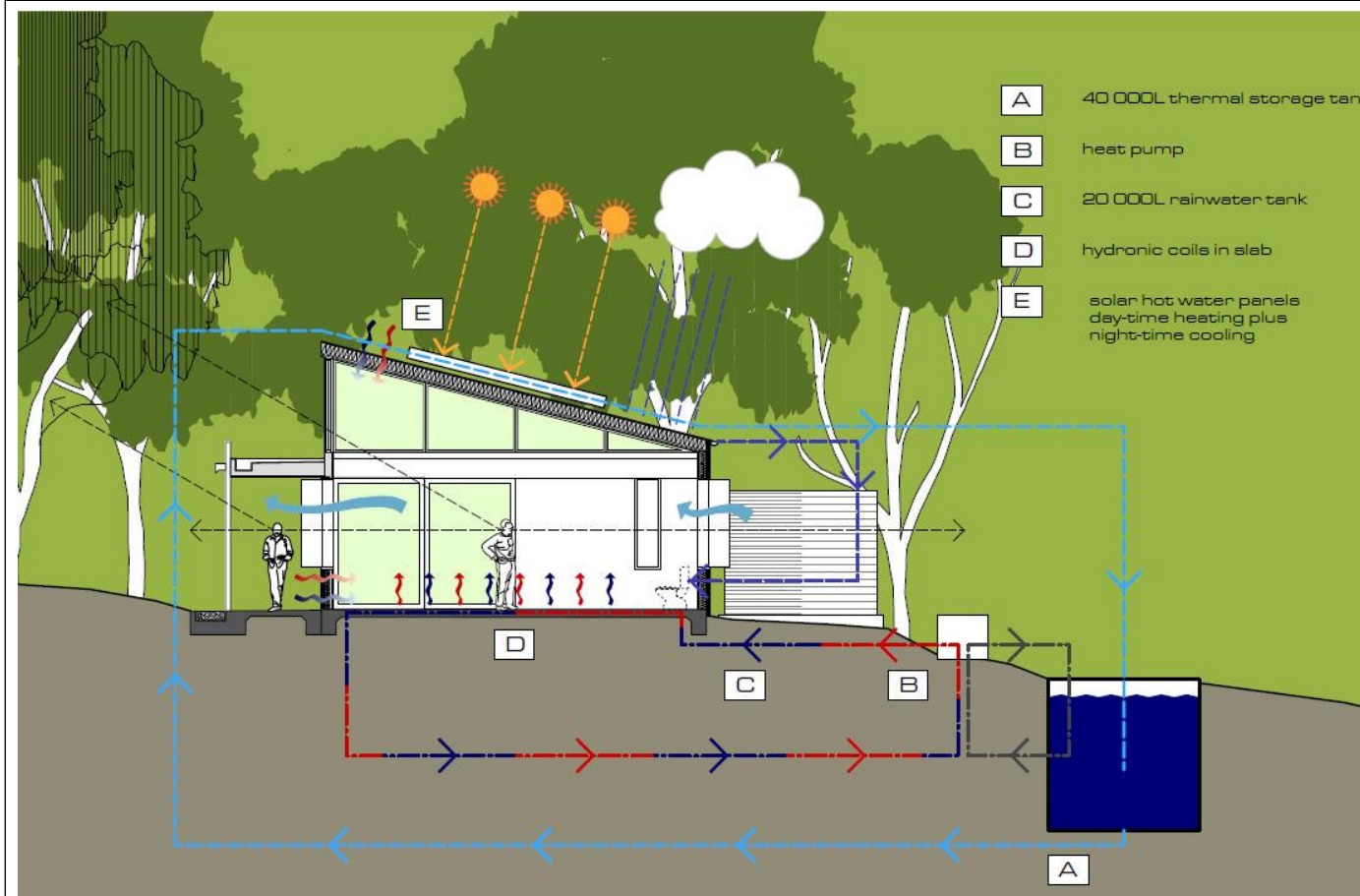
New education building

NLA

345 m² structure with supporting facilities including staff offices and a commercial kitchen.

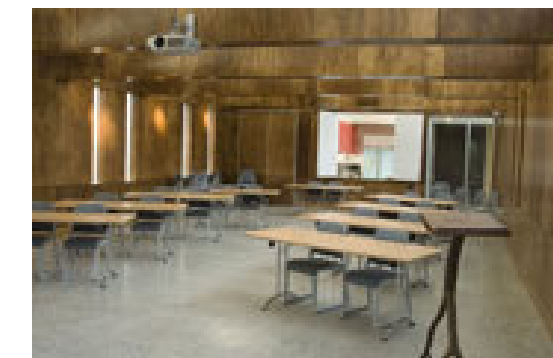
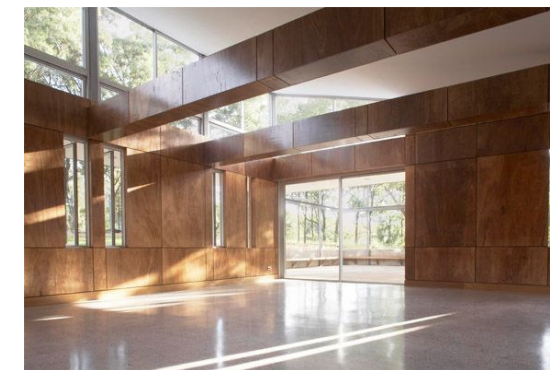
Features

- The RAIA Sulman Award for Public Architecture (NSW)
- The RAIA Award for Sustainable Architecture (NSW)
- Hydronic radiant floor for heating and cooling coupled to solar collectors and underground tank



A building that responds rapidly to a range of uses and conditions

Heat from the roof is stored in a 40,000 litre below ground water tank, and then transfers that energy into the building by way of a heat pump to the polished concrete floors. In summer the system works in reverse to cool the building by chilling the concrete slab.



Radiant floors combined with natural ventilation provide high levels of thermal comfort