



Royal Women's Hospital

Project:	Royal Women's Hospital - MRI Facility
Installer:	Apex Air-Conditioning
Fabricator:	Baron Insulation
Builder/Developer:	Royal Women's Health Partnership
Architect:	DWI Architects
Cost:	\$250,000,000

Project Requirements



The new Royal Women's Hospital opened on 22nd June 2008, to provide women and newborn babies with the very best in world-class healthcare. Delivered under the Victorian Government's *Partnerships Victoria* model, 'The Women's' features international best practice in contemporary hospital design including world-class technology and research facilities.

The Women's has a mission to provide quality health services to meet the needs of women and newborn babies, especially those requiring specialist care. These services are informed by research and are provided within an environment of innovation and education. Resources are effectively managed to support those services that are ethically, socially and financially responsible.

This philosophy aligned well with the mission of Fletcher Insulation to deliver environmentally sustainable insulation solutions in a way that is distinctive and of superior value to our customers.

After careful analysis of the project brief, Fletcher Insulation Ductboard™ Glasswool insulation was put forward as the material of choice to satisfy the air handling requirements throughout the state-of-the art Magnetic Resonance Imaging (MRI) facility.

Created at Australia's largest Glasswool insulation manufacturing facility, Fletcher Insulation's recently upgraded Dandenong plant has set a new era in green manufacturing with the commissioning of advanced, home grown energy efficient furnaces, incorporating recycling and other sustainability measures. The all-in-one air-conditioning duct solution was fabricated by Baron Insulation at Seaford, before being expertly installed at the Parkville site by Apex Air-Conditioning.

Environmental Considerations

The requirement to deliver clean, quiet air to maintain constant temperature and humidity throughout the facility was a primary consideration. To achieve this goal utilizing a product composed of 70% recycled materials, manufactured locally, with a enviable pedigree in the international air-conditioning market was a bonus.

In line with the construction team efforts to ensure that environmental measures such as waste minimisation opportunities were maximized, air-conditioning ductwork was prefabricated in the factory and brought to site for installation. Thus avoiding the need to dispose of off-cuts and excess materials.

All Fletcher Insulation products comply with the GreenStar insulant ODP emissions credit requirement, avoiding the use of ozone depleting substances in both manufacture and composition.



Technical/Performance Issues

Ductboard™ offers a fully engineered fabricated system ensuring uniformity of thickness at corner folds, positively located joints mechanically fastened and taped to provide a complete vapour barrier and airtight construction.

Large sections can be fabricated complete with starting collars, zone dampers, control motors, and even hanging points to reduce site time.

The economical lightweight ducting solution is at least 30% lighter than internally lined sheetmetal duct. Systems fabricated with Ductboard™ deliver air, not noise. Excellent sound absorption properties and up to 20% higher noise attenuation than sheetmetal ducting.

Lightweight sections make for easy installation with no heavy lifting. Complex shapes are easily fabricated to conform to restricted ceiling plenum heights with no allowance required for external insulation or framing.

Finished internally with a matt black non-flammable water based neoprene finish that enhances Ductboard™'s tried and tested airway surface performance.

Recent Projects

Fletcher Insulation Glasswool Insulation has recently been specified and installed as :-

- Roof and/or wall thermal and acoustic insulation in the Mater Hospital, Royal North Shore Hospital, St Vincent's Hospital, Concord Hospital, Box Hill Hospital, Maroondah Hospital, Caulfield Medical Centre, The Alfred Hospital.
- Air-conditioning thermal and acoustic insulation in Royal Women's Hospital, St Vincent's Hospital, Rockingham Hospital, Wangaratta Hospital, Managatang Hospital, Linacre Hospital, Moe Community Hospital, Peninsula Private Hospital, Ballarat Base Hospital and the Royal Dental Institute.



The Result

The exacting specifications and tight construction windows required that delivery and installation of the air handling ductwork be timed to the hour.

The vastly experienced crew at Baron Insulation collaborating with Apex Air-Conditioning ensured that these requirements were adhered to, and completed the contract ahead of time, exceeding the expectations of the Royal Women's Health Partnership.

