

# GROWING HEALTHY

CLIENT : Barwon Health  
MAIN CONSTRUCTION COMPANY : Kane Constructions Pty Ltd  
ARCHITECT : Silver Thomas Hanley Architects Pty Ltd  
PROJECT VALUE : \$128 million



The \$128M University Hospital Geelong Major Upgrade Works includes refurbishments and upgrades to facilities and wards, addressing the immediate needs of Barwon Health.

**Kane Constructions can almost taste the end of the redevelopment of Geelong Hospital.** Since 2010, Kane have delivered six modules of work to enhance and expand the hospital's facilities, and are now working on the final seventh.

Their work began with two concurrent projects: an office conversion and fit-out from the previous emergency department, and construction of a 24-bed acute inpatient ward. Existing operating theatres were then also refurbished, along with an 8-bed expansion of the hospital's Sawston Centre Mental Health Facility.

In 2012 Kane commenced a fourth module of work, the extension of Geelong's outpatient building including demolition, building a single storey structure and refitting interiors into an outpatient's annex. The executive and finance department, who had been temporarily relocated to this site whilst their new accommodation was being built, moved again to new offices. Multiple movements of hospital teams and facilities highlight the challenge integral to this build: providing a seamless transition into new and extended hospital facilities, whilst enabling continuance of critical hospital functions. Kane's planning and logistics has meant several moves for core hospital services without compromising vital functionality.

Kane's next job was to build a four storey ICU building. Part way through, additional funding expanded the scope to seven storeys, with a plant room and helipad at levels 8 and 9 respectively. The new construction will yield a 96-bed inpatient ICU. The work has included retention and foundation piling, construction and fit-out, plus installation of a new substation, generator and switchboard. The resulting 'Baxter Wing' will comprise a four level emergency department with a medical assessment unit on level 1 plus intensive care. Construction of the helipad is Kane's seventh project element, currently in design phase with expected delivery November 2015.

The hospital expansion also includes development of two levels for supportive care services for cancer patients, including 32 oncology beds and 24 palliative care beds. The design offers flexibility for expansion of emergency and acute care services to meet the

growing demands of the Barwon Health region. The challenges of integrating the project's inter-related elements with concurrent hospital services are evident, but have been successfully managed by Kane's logistical expertise.

Kane undertook construction whilst the emergency department maintained normal operations. "The Baxter Wing involved demolition and constructing a new eight-storey building bang in the middle of an existing, operating hospital," explains Kane's Howard Dawson. "We had to relocate all hospital services because the existing structure housed all services including electricity, gas, chilled water. These core services were relocated and then relocated again as projects progressed."

Dawson considers the strength of delivery and their success has been due to a highly collaborative approach between all parties. He explains the close liaison with the hospital to arrive at a modular building approach that would ensure continuous hospital operations. "There has been a lot of logistical organisation and communications. We worked with very restricted access and were still constructing when the ICU was handed over. We required a tower crane and shared a delivery area with the hospital's loading dock for hospital goods. Good collaboration between all parties has made it happen with services uninterrupted."

Dawson is also proud that Kane used local products where possible. For example, despite the option of a fully-imported curtain wall, Kane approached local glass manufacturers, glaziers and aluminium extruders to maintain local community involvement. "We have a great history with Geelong and pushed for local procurement."

Kane is a privately owned commercial construction company with over 250 employees across the eastern seaboard involved in projects in Australia and overseas. Kane's annual turnover exceeds \$450 million and they offer a range of project management, design and construction services.

*For more information contact Kane Constructions Pty Ltd, Level 1, Building 1, 658 Church Street, Richmond VIC 3121, phone 03 8420 1200, fax 03 8420 1201, website [www.kane.com.au](http://www.kane.com.au)*

**Below** Ballarat Associated Fibrous Plasters built and lined all walls and ceilings at the Geelong Hospital Expansion.

**Below** Capral Aluminium designed and extruded the glazing system and provided products for the curtain wall system.



**Ballarat Associated Fibrous Plasters are becoming experts when it comes to hospitals.** Having completed work at St John of God Ballarat and Ballarat Base hospital, they are also contracted to build and line all walls and ceilings at the Geelong Hospital Expansion.

At Geelong Hospital, Ballarat Associated Fibrous Plasters have been working since early 2014 to install stud walls, feature walls, suspended tile ceilings, feature ceilings, curved bulkheads, feature plasterboards and completing rendering and gyprocking. They have contributed to building acute inpatient wards, operating theatres, common access areas, corridors and offices.

The 50-year old company have had up to 35 of their 50-strong staff deployed to the site.

Ballarat Associated Fibrous Plasters have used USG Boral plasterboard for its fire, steam and water resistance and its acoustic properties. Atkar timber panelling has been used for feature timber work and Vogl fuge perforated plasterboard installed for its stylish appearance coupled with excellent acoustic performance that is so important for a hospital environment.

Shaun Holloway from Ballarat Associated Fibrous Plasters says they have worked to maintain the architect's requirements. "The challenge with this work is that there's no room to be one or two millimetres out. For the feature timber work, we had to measure, send away for fabrication, and then return and install. We work hard to achieve the architect's vision."

Ballarat Associated Fibrous Plasters provide a range of expertise and hardware for both domestic and commercial customers, operating from their purpose built facility in Ballarat. From keystones, corbels and cornices to base boards, bulkheads and strapping bosses, Ballarat Associated Fibrous Plasters maintain a wide range of stock as well as supplying and installing insulation, suspended ceilings and plasterboard.

*For more information contact Ballarat Associated Fibrous Plasters Pty Ltd, 351 Learmonth Road, Mitchell Park (Ballarat) VIC 3355, phone 03 5339 1854, fax 03 5339 6737, website [www.ballaratplasters.com.au](http://www.ballaratplasters.com.au)*

**With significant growth in the Geelong area and future growth on the cards, Barwon Health embarked on extensive upgrades to the Geelong hospital from 2010.** The expansion of existing facilities enhances the current intensive care and emergency facilities, and will provide 96 extra beds, extra mental health beds, a helipad and two stories for supporting services for cancer patient's treatment and palliative care. The ICU and emergency services are located in a new, eight-storey building constructed by Kane Construction, and featuring a glass curtain wall.

Capral Aluminium have over 75 years experience in extruding and rolling aluminium, making sheets, plates, panels, tubes, rods and a range of geometric shapes for a wide range of industry applications. Participating in design and supply to residential and commercial customers, Capral provide aluminium doors, windows, shower enclosures, wardrobes and more.

Capral have been involved in the design and manufacture of glazing systems in the Geelong Hospital expansion. The team provided technical support and advice to the façade engineer, and to the fabricator, Westcoast Windows of Newtown, Geelong. The curtain wall system installed at the new hospital expansion is typical for a mid sized project and building of this size.

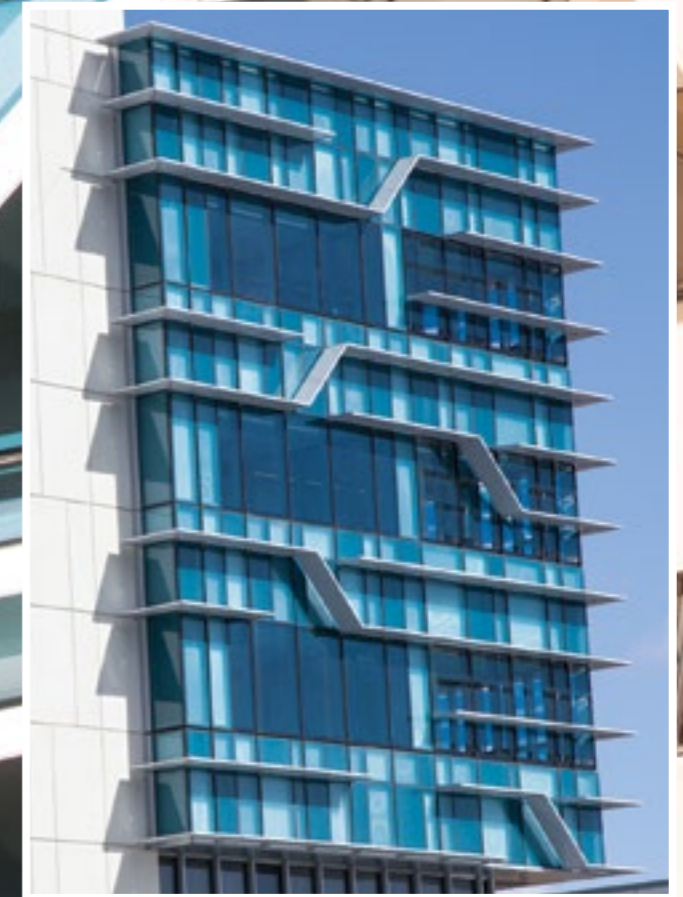
"We are regularly involved in a large number of commercial projects throughout Australia with offices and retail centres in every state and several fabrication plants," notes Capral's Andrew Maslin. "Our experience nationwide footprint, manufacturing and distribution is a big advantage".

Capral's manufacturing facilities can meet wide-ranging customer needs, providing standard or custom extrusions, CNC machining and routing, knurling, rumbering, anodising, powdercoating, slotting, punching and precision cutting. Finishes are not overlooked - Capral offer an extensive ranges of powdercoat and anodised finishes for industrial, residential and commercial projects. Finishes are both suitable for interior and exterior applications.

*For more information contact Capral Aluminium Pty Ltd, Unit 3, 38-40 Little Boundary Road, Laverton North VIC 3026, phone 03 9315 3781, fax 03 9315 37861, website [www.capral.com.au](http://www.capral.com.au)*

**Below** All About Traffic Management provided traffic management services including both planning and implementation of traffic control, as well as spotting services for Geelong Hospital.

**Below** Westcoast Windows fabricated and installed the curtain wall façade, as well as provided the fit-out of internal windows for Geelong Hospital.



**Working on a redevelopment site in a built up area is challenging.** The site must remain operational for critical and life-saving purposes, the logistics of ensuring safe and efficient movement of people and equipment is paramount.

At Geelong Hospital, the major construction is that of an 8-storey block located within the existing working hospital complex. Service interruption is impossible and several relocations of both human resources and infrastructure have been required. Whilst Kane Construction have been responsible for oversight and liaison with hospital authorities to ensure hospital operations were maintained, All About Traffic Management have been providing support since June 2013. They were tasked to provide planning, implementation and spotting services to the contractors.

Wayne Raeburn, General Manager of All About Traffic Management, commented, "We've had less input at Geelong Hospital than at other sites because the majority of what has happened has been within the confines of the hospital boundaries. Most staff and patient movements have been within the hospital. We have been dealing with movements around the hospital site and as such our major concern has been with pedestrian safety".

All About Traffic Management is a young company, operating since 2010 primarily in the Geelong and Ballarat areas, with several clients in Melbourne.

The company has 30 employees and 5 on the Geelong Hospital project at peak times. As well as traffic management, they assist contractors in meeting their obligations with appropriate approvals. All About Traffic Management also offer equipment hire, such as VMS and arrow boards, cones, and truck mounted attenuators.

"Our focus is quality," claims Raeburn. "We ensure that our crews are well-trained and capable of adapting to changing circumstances on site. We train to be proactive, and anticipate risks." That's a philosophy that should keep contractors on the outside of the hospital, rather than inside.

*For more information contact All About Traffic Management Pty Ltd, P.O. Box 2090, Grovedale East VIC 3216, phone 03 5248 0329, fax 03 5248 0329, email info@allabouttraffic.com.au, website www.allabouttraffic.com.au*

**Westcoast Windows is a family operated and owned Geelong-based company.** Being local meant that Westcoast was the contractor of choice to provide glazing solutions for ongoing work extending the Geelong Hospital. At peak, Westcoast had around 12 of its 40 hardworking staff engaged on the hospital project extension, completing a range of glazing installations.

A large part of Westcoast's work was façade fabrication and installation, supplying a curtain wall for 5 of the 7-storeys of the Emergency Department Tower.

Manufacturing began in December 2013 and the first panel was installed in January 2014. Westcoast used a Capral CW175 curtain wall system with Viridian glass and completed the bulk of the façade work within 4-5 months. The system offers high structural performance perfect for buildings of this size. Additional work in the emergency department tower included fit-out of internal windows.

"The project involved very tight time frames," notes Westcoast's Matthew Hammond, "but we could adapt to changes quickly because we were on site and we use Australian local products." The curtain wall modules were fabricated off-site at Westcoast's facility

in Geelong, with little transport required to deliver the panels and crane into place. Despite construction taking place alongside regular hospital service delivery in an existing hospital facility, Hammond says access was not a problem.

Work at the Geelong Hospital represents one of Westcoast's larger jobs. The company has been operating since 1987 with the bulk of its contracts in Geelong and the western districts of Melbourne.

As a testament to the quality of work and performance of the company, Westcoast continued to work on site as well as working on additional projects. Current work includes installations at the hospital's new supportive care building, including internal glazing, glazed rooves and balustrades.

*For more information contact Westcoast Windows Pty Ltd, 20 Lambert Avenue, Newtown VIC 3220, phone 03 5221 6999, fax 03 5221 8880, email jase@westcoastwindows.com.au*