

# SAILING TOWARDS SUCCESS

CLIENT : Searoad Ferries  
MAIN CONSTRUCTION COMPANY : Kane Constructions  
ARCHITECT : F2 Architecture  
ENGINEER : JBA Engineering  
CONSTRUCTION VALUE : \$16 million  
TYPE : Port / Infrastructure



The Queenscliff Searoad Ferries Terminal redevelopment includes the construction of a new building across two floors featuring a stainless steel façade, complete with modern facilities and bathrooms, safer access, improved car parking areas and opportunities for retail such as cafés and tourism ventures.

**Kane Constructions was appointed to deliver the new \$16 million world-class ferry terminal building at Queenscliff for Searoad Ferries.**

The new building provides local commuters, day trippers and international tourists an architecturally designed experience as they embark across Port Phillip Bay.

The development of the Queenscliff Searoad Ferries Terminal consists of the demolition of the existing terminal building and construction of a new building across two floors with a feature stainless steel façade, ticketing and retail area, toilets, kitchens, café, bar and passenger lounge.

The structure was designed by F2 Architecture and was extremely high level in its intent and execution. Every item in the structure was prototyped and thoroughly reviewed before fabrication and installation.

A key architectural feature of the new building includes the curved roof providing weather protection for passengers boarding or disembarking across all seasons.

“The design and shape of the structure is complex and it took longer than we were hoping for,” said Project Manager, Josh Delahunty.

“The curves in the roof are made from stainless steel and every element of this build needed to be measured, modelled, a template cut and then ordered and fabricated section by section.” Of course, what was most challenging has also provided the highlight of this unique building.

“The finishes are exceptional,” said Josh. “Mack Bros supplied the product. The stainless steel standing seam for the façade as well as some of the internal structure comes from Japan. It arrives in rolls and goes straight to Melbourne where it is cut and produced to suit the site standards.”

Every product used on this build had to be of the highest marine grade in order to withstand the elements. The stainless steel used is perfect for the conditions and will never rust.

Kane Construction commenced work onsite in May 2021 and estimated there have been 40-50 workers onsite each day. The project took place around a live, working environment and construction could not impact the ferry operations.

“The elements and the site conditions were tricky,” said Josh. “It was very windy and wet and part of the build extended out over the water which meant we needed to erect scaffolding over the water.” The fabrication and installation of the stainless steel pieces proved to be more time consuming than planned, with the project timeframe pushed out by two-three months.

Kane Constructions is a multi award winning, privately owned commercial construction company active in all sectors of the industry. The company has a turnover in excess of \$1 billion and over 450 full time employees.

Jonathan Forster established the company in Melbourne in 1973 and was Managing Director until 2001, Executive Chairman until 2015,



and Chairman since 2016. Kane Constructions operates throughout the east coast of Australia and overseas through offices in Melbourne, Sydney, Brisbane, and Canberra.

Recent and current projects include the Northcote Aquatic and Recreation Centre, Paula Fox Melanoma and Cancer Centre, Springwood Shopping Centre Redevelopment and St Vincent's Private Hospital Fitzroy.

Kane Constructions was awarded the 2022 Regional Commercial Builder of the Year at the Master Builders Association of Victoria awards and the National Professional Excellence in Commercial Construction: \$60 million plus award at the AIB national awards in October for the delivery of the Ballarat GovHub project.

*For more information contact Kane Constructions, Level 9, 510 Church Street, Cremorne VIC 3121, phone 03 8420 1200, email viccontact@kane.com.au, website www.kane.com.au*



Below Approval Systems were contracted to be the building surveyor for the Queenscliff Searoad Ferries Terminal.

Below Meinhardt completed full design and construction documentation and completed construction phase services.



Approval Systems was appointed to the role of the statutory building surveyor for the Queenscliff Searoad Ferries Terminal project in 2018. The building contains layers of complexity including its use and function as a public building, the need to accommodate vehicle traffic to sea-going vessels' loading infrastructure, the harsh maritime environment and its unique architectural form.

"Some elements of the design required resolution under the Building Code of Australia performance requirements, which were designed with input from specialists such as fire safety engineers, access consultants and façade engineers. Our wealth of knowledge, experience and expertise was called upon to review the design and issue the building approvals for the terminal," said Director, Joe Zita

"We were thrilled to be involved with the project, which the Approval Systems team were professionally invested in due to its importance as a significant piece of state and regional infrastructure which will create a legacy for the local community."

Approval Systems has been one of Victoria's preeminent building surveying practices for over 20 years. With a reputation for being reliable and integrity focussed, the practice has built up a

comprehensive body of work in its portfolio, representing most sectors of the property industry.

Approval Systems' projects range from major mixed-use developments, health and aged care, retail and commercial through to innovative domestic design. They work with project teams from concept stage, through design development, contract documentation and construction to ensure compliance of design with all relevant building regulations and codes.

Recent projects include East Brunswick Village, St Vincent's Hospice and Aged Care, Alfred Health's Innovation and Education Hub, Frankston Law Courts, Chemist Warehouse, Yarra Valley Grammar and Newlands Road Industrial Estate.

For more information contact Approval Systems, 7.05, 289 Flinders Lane, Melbourne VIC 3000, phone 03 9639 5500, email mail@approvalsystems.com.au, website approvalsystems.com.au

Meinhardt Australia provided an alternate design that included material and time cost savings to Kane Construction during the bid phase of the Queenscliff Searoad Ferries Terminal. Once Kane's bid was successful, Meinhardt completed full design and construction documentation services and completed construction phase services.

"Three structural engineers worked on simplifying the structural design element arrangement behind the curved architectural form," said Meinhardt Director, Stephen Payne. "The structure involved extensive analysis of the large roof cantilevers and part of the structure that partially extends over the water to determine the serviceability performance of the roof cantilevers with presetting the propped construction – the preset deflection was spot on."

Meinhardt Australia is a multi-disciplinary engineering and technical services consultancy with over 60 years experience. Formed in Melbourne in 1955, they now work nationally out of Melbourne, Sydney, Adelaide, Brisbane, Gold Coast and Sunshine Coast. Meinhardt Australia is part of the Meinhardt Group globally, with 51 international offices. "We pride ourselves in collaborating knowledge, expertise and resources between offices to service our clients nationally across Australia," said Stephen.

Meinhardt's approach is to offer commercially savvy and ready buildable structural designs that are familiar to the marketplace minimising material and systems procurement risks and allowing contractors to reduce construction time and refine their tender price. As taller and more uniquely shaped buildings become more common, civil and structural (C&S) engineers are constantly challenged to break new ground and reach for new heights. Meinhardt's renowned innovative C&S practice along with decades of experience, has cemented their reputation as market leaders.

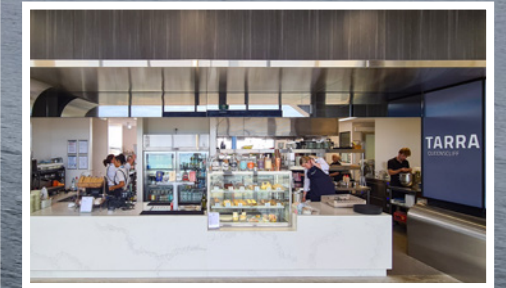
Meinhardt's current projects vary across all sectors and include Pathway to 152 Mental health beds construction over four hospital campuses, the Geelong Arts Center, St Vincent's Private Hospital, Victorian Melanoma Centre, CSL Global Clinical Manufacturing Facility, multiple highrise residential and commercial towers in Box Hill and the Sorrento Searoad Ferry Terminal.

For more information confirmation contact Meinhardt Australia, Level 12, 501 Swanston Street, Melbourne VIC 3000, phone 03 8676 1200, email contact@meinhardtgroup.com, website www.meinhardtgroup.com



Below Mack Bros Roofing manufactured the roof sheets and internal/external cladding in the walkways.

Below Foodservice Consultants Australia designed the kitchen and food service spaces at Queecliff Searoad Ferries Terminal.



**Mack Bros Roofing Products were contracted to manufacture the roofing and soffits for the iconic world class Queenscliff Searoad Ferries Terminal.**

The striking curved building has been designed by award winning architectural practice F2 Architecture who approached Mack Bros to finish the structure with unique cladding, and enhance the architectural design. Mack Bros' have a strong reputation as innovators of roll forming and their expertise in curving had them well placed to achieve the technical precision required from the projects design.

Stainless steel is ideal for the harsh environment and perfectly complemented the natural backdrop of Port Phillip Bay. F2 Architecture selected the versatile and elegant Straightline Seam 40 product to achieve the right look for the roof, and for the soffits, Mack Bros Straightline Revell 25 was used to achieve the complexity of the inner curve of the design.

While the building has a seemingly simple and natural flow, it is very complex when considering the manufacturing and installation of cladding. The need for precision curving of standing seam panels

and reveals called for by the architects vision, required Mack Bros to implement a new technology to achieve the required outcome.

"This was particularly challenging and it was necessary to work in collaboration with the architect and installer, and build working prototypes," explained Mack Bros Roofing Manager, Ian Mack. "The final result is testament to the quality we achieved. The curving of the soffits is the first of its kind in Australia."

The success of this collaboration has cemented Mack Bros as pioneers and leaders in roll forming techniques, who will continue to expand the possibilities on the forms buildings can take and what can be achieved, to bring these designs into reality.

More than seven decades attest to Mack Bros Roofing quality of service and workmanship. The company is a family business and owners Wayne and Ian Mack welcome architects to discuss their future design aspirations.

**For more information contact Mack Bros Roofing Products, 630 Heatherton Road, Clayton South VIC 3169, phone 03 9571 7911, email imack@mackbros.com.au, website www.mackbros.com.au**

**Foodservice Consultants Australia (FCA) is a multi-disciplinary consulting firm that specialises in the design of foodservice facilities and the development of catering operating systems.** Contracted to design the kitchen and all food service spaces including equipment in the Queenscliff Searoad Ferries Terminal based on the predefined menu.

"The kitchen and food spaces were designed to be efficient," explained FCA Director, Julian Ha. "Like most projects we had limited space to work with. This means the space must have flexibility to service three F&B areas - the main dine-in cafe and take away, the bar and supplies for the ferries."

"The back-of-house had to work so that it could take in new supplies, store the food for both the cafe and the ferries, while maintaining a clear separation between raw and cooked products to avoid contamination. It was a challenge, but we were able to find a workable solution," said Julian. "It was great working with the design team. They really listened to our ideas and took our suggestions on board."

FCA provides superior food and beverage facilities design for their clients, ensuring maximum value concept, design, development and

execution of foodservice facilities. All facilities are designed with the budget in mind for efficiency and sustainability.

They have a highly motivated team of catering operations, facilities design and project management professionals and key support staff. Using best practice and technical processes throughout the project, FCA constantly measures their effectiveness through performance measurement, benchmarking and client feedback.

Foodservice Consultants Australia and MTD Hospitality Consulting are part of the FCA Group. FCA works throughout Australia, Asia Pacific and the Middle East from their offices in Melbourne. Projects include hospitals, aged care facilities, high end restaurants, businesses, industry, and institutional projects including prisons and schools.

**For more information contact Foodservice Consultants Australia, 10 Mavron Street, Ashwood VIC 3147, phone 03 9887 6628, email melb@foodserviceconsultants.com.au, website www.foodserviceconsultants.com.au**





Queenscliff Searoad Ferries Terminal, Victoria