



DIVING INTO IT

DEVELOPER : Mornington Peninsula Shire Council
MAIN CONSTRUCTION COMPANY : Buxton Construction
ARCHITECT : Peddle Thorp
STRUCTURAL ENGINEER : Wallbridge and Gilbert
CONSTRUCTION VALUE : \$38.5 million

The Rosebud Aquatic Centre features an indoor 51.5m eight lane pool, warm water and learn-to-swim pools, aqua play area, spa, sauna and steam rooms. The project also comprised of the reception, café, entry foyer and health club including programme rooms, gym and multi-purpose room, along with environmental design features to improve efficiency throughout the building.

Buxton Construction is a trusted, multi-award winning construction company with several aquatic projects to their credit. The company has broad professional capabilities across the commercial, industrial, education, high end residential, retirement living and sports sectors.

The spectacular Rosebud Aquatic Centre for Mornington Peninsula Shire Council, is Buxton's latest accomplishment. The \$38.5 million project is centred around an indoor 51.5m, eight lane Olympic sized pool which can be split into two 25m pools though the use of a special boom. The centre also has warm water and learn-to-swim pools, aqua play area, spa, sauna and steam rooms with access for people with a disability, a family change village, offices, reception, a café with commercial kitchen, entry foyer, a health club including programme rooms, social space, a large gym, multi-purpose room, a wellness centre, external terraced areas and landscaping.

"There are stringent regulations surrounding air leakage from buildings containing large swimming pools and special construction techniques are required to ensure air pressurisation and tightness is maintained in the structure, supported by testing to ensure compliance," said Operations Manager, Jeremy Laird. "Perhaps the most challenging aspect however, is the construction of the Olympic sized pool and the roof spanning across the entire facility."

Once the pool was formed up and poured, it had to undertake the hydrostatic testing process where it has to be left for 28 days to let the structure cure. It was then filled with water and left for 25 days to check for leaks. The water was then pumped out and recycled for other pools and the pool structure had to be left to dry out again over 30 days before tiling could begin. This meant that the roof had to be completed to ensure the pool remained dry during the 30 day drying period. This required precise onsite coordination to ensure the roof could be constructed while other trades were working below.

The roof was built using insulated Colorbond Klip-Lok sheets secured to a steel framework. The walls comprised insulated Kingspan panels and a polycarbonate multi-cell walling system which allowed light to penetrate the structure. A thermally broken glazing system was used for the windows. "All these elements ensured high performance insulation for the building envelope," Jeremy said.

The pandemic introduced other challenges for the building schedule as key materials were being sourced from overseas, including the specialised boom for the pool from Seattle, the aqua play equipment manufactured in Canada and the pool tiles shipped from Germany.

Further distinctive features that had to be accommodated were the intensive services that are required to run 24 hours per day, seven days per week including very large circulation pumps, chlorination and UV light disinfection plant and other pool equipment.

Buxton commenced work in September 2019 and the company had eight of their staff onsite throughout, with support from staff in the office. "Buxton have considerable experience in building these centres, having completed a number of similar projects including the Geelong Leisure Links Aquatic Centre and the Croydon Aquatic Centre, Broadmeadows Leisure Centre, Ascot Vale Leisure Centre, Beacon

Cove Recreation Centre, Peninsula Kingswood Country Club Sports Centre, as well as a significant number of pools connected to mixed use developments," said Jeremy.

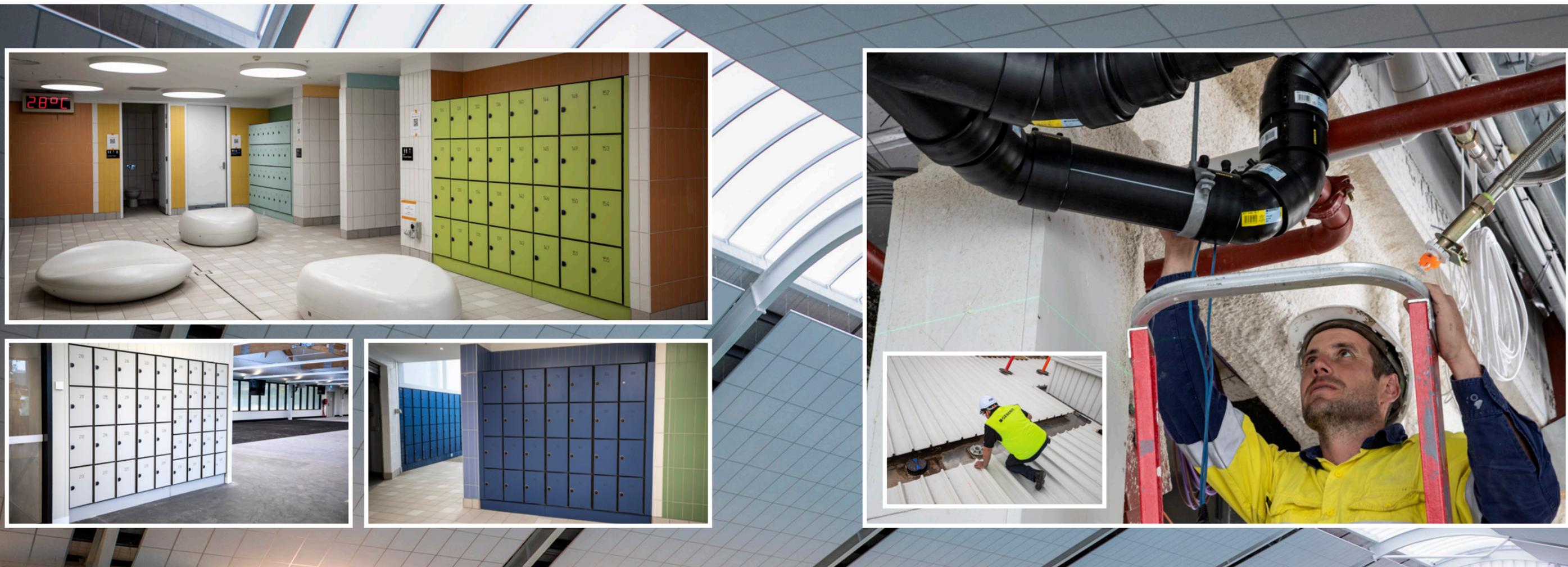
Buxton has a culture of continuous improvement and consistently strives to ensure that their delivery, performance and the quality of work meets the highest industry standards. "Buxton pride themselves on combining traditional core values alongside innovative thinking and methodology," Jeremy said. "The Rosebud Aquatic Centre is a great example of our approach."

With current projects totalling around \$250 million, Buxton Construction continues to contribute to the built environment around Melbourne, including the Ivanhoe Library and Cultural Hub, Elison luxury townhouses in Kew, a mixed use development in Swan Street, Richmond, Stage 2 of the Nelson Bourke apartments in Ringwood, Morgan BassCare Independent Living in Glen Iris and social housing for Housing First.

For more information contact Buxton Constructions, 1/262 Lorimer Street, Port Melbourne VIC 3207, phone 03 9644 7000, email admin@buxtonconstruction.com.au, website www.buxtonconstruction.com.au

Below METRA Australia were responsible for all the locker systems throughout Rosebud Aquatic Centre.

Below PCD Group installed a Geberit Pluvia Siphonic system to the roof areas of the project.



METRA Australia is at the forefront of innovative locker solutions, delivering touchless, reliable, and robust personal locker storage utilising smart locking technology with cashless payment solutions.

METRA Australia's locker systems are ideally suited to high moisture environments like aquatic centres, water parks and gymnasiums so was a logical choice for the new Rosebud Aquatic Centre in Melbourne. Working closely with the builder Buxton and the client, the METRA team designed an appropriate locker system that would serve the Centre's members as well as casual patrons. An RFID 'on door' locking system was installed on all lockers which were arranged in banks outside the family change area and the gym and fitness rooms on Level 1.

One of the great strengths of METRA's lockers is that they are manufactured from high pressure laminate, providing robust security and damage resistance. "HPL is durable and resistant to moisture and corrosion," said General Manager, John Sottile. "No part of the locker structure is susceptible to rust. Particularly significant is that the HPL material is anti-bacterial, a real plus in these health conscious times."

World class hardware, software and technology is used in designing systems for clients. Working with the facility management software group, the MyMetraLocker software integrates seamlessly, allowing control of who can access what lockers. The software also allows for analysis of locker use with reporting options and a real time view of locker status. Remote opening can be actioned either by the software or by Mastercard®.

With offices in Melbourne, Sydney and Brisbane, METRA Australia can provide solutions to clients nationwide across all industry and government sectors. Recent projects include the Gunyama Park Aquatic and Recreation Centre in Zetland, New South Wales and the Peninsular Aquatic and Recreation Centre in Frankston, Victoria.

For more information contact METRA Australia, phone 1300 638 722, email sales@metraaus.com.au, website www.metraaus.com.au

Geberit Australia, part of the global Geberit Group, is a world leader in the design of siphonic roof drainage systems and has been successfully operating in the Pacific region for over two decades. Geberit Pluvia Siphonic outlets, piping and fittings were chosen for the Rosebud Aquatic Centre in Melbourne.

The Geberit Pluvia Siphonic system allows large roof areas to be drained using fewer pipes and simplified hydraulic designs, allowing architects to develop building plans free from the restrictions of conventional roof drainage systems. The Pluvia system was an ideal choice for the expansive roof area at the aquatic centre. Marc Williams, Southern Region Sales Engineer, coordinated the design, quotation and onsite training for the project. The products were supplied by Reece Abbotsford and installation was undertaken by PCD Group.

The decision to utilise siphonic rainwater drainage was made late in the design and early in the construction process. "We called on Eranda Dissanayake in the Geberit Pluvia design studio at our Sydney office to design the siphonic rainwater system requirements on Geberit's specialised ProPlanner software. The design was constantly updated as installation progressed during the building's construction, with final installation in November 2020," said Marc.

Geberit Pluvia Siphonic rainwater systems can be used on any project, from skyscrapers to warehouses, utilising hydraulics to drain rainwater faster, through fewer pipes of a smaller diameter than conventional systems. This results in a simpler civil system underneath the building. Geberit supplies full design and onsite support to builders, architects and plumbers.

In the last 18 months, Geberit Pluvia systems have been installed on iconic Melbourne projects including the M-City multi-tower development in Clayton, the Collins Arch project with its twin linked 42-floor towers in the CBD and the 70-storey Swanston Central apartment tower.

For more information contact Geberit Australia, 6-8 Byfield Street, Macquarie Park NSW 2113, phone 02 9889 7866, email sales.au@geberit.com, website www.geberit.com.au