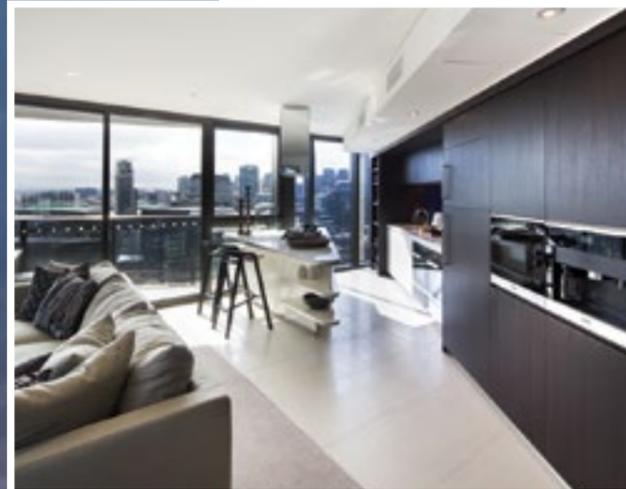


AN ARRAY OF LUXURY ON THE YARRA'S EDGE

The \$220M Array Dockland Apartments at 125 metres in height has redefined Melbourne's skyline and is now the ultimate waterfront address at Yarra's Edge for Melbourne's elite. Poised just 8 metres from the water's edge, it consists of 199 apartments with a grand lobby, resident recreational room and gymnasium.



Some significant design features of the Array Apartments include:

- Stylish LED downlights throughout the building.
- Enclosed balconies wherever possible to maintain usability throughout the year.
- Private garages for premium apartments.
- Bluestone paving throughout the public realm.

Mirvac's design philosophy is backed by the superior finishes of its kitchens and bathrooms, to which the client adds their own style with designer finishes. Array takes this commitment to a new level with the opportunity to upgrade to a Chef's or Entertainer's Kitchen.

With technology and lifestyles constantly changing, Mirvac has found that their customers are seeking flexibility in their homes too. The new Chef's Kitchen promotes cooking as a focus and an exhibition of sorts, while the Entertainer's Kitchen maintains the more traditional approach to provide clean uncluttered surfaces and fresh colour options.

In line with international design trends, the choice of a light or dark colour scheme – London and New York – were available for finishes throughout the homes. The London scheme is warm and inviting and complements the choice of contemporary or traditional furniture perfectly. New York presents a cooler palette, providing a sophisticated base for a more Avant Garde direction. The Paris scheme upgrade offers another level of opulence with a distinctive contemporary design, featuring a sophisticated palette of dark timber veneer, glossy white lacquer and a beautiful Atlantic Blue colour-backed glass splashback accent in the kitchen.

Furthermore, the creation of the 'outdoor room' balconies offer spacious outdoor entertaining spaces that takes advantage of the spectacular views across Point Park – a green oasis that features picnic and barbecue facilities – towards the city beyond.

With iconic projects including The Melburnian, Laureate and Beacon Cove to its name, Mirvac has a proven reputation as a prestigious company whose projects are synonymous with luxury, quality and standing the test of time. Array stands tall among the best in Melbourne's prestige property market. At the forefront of luxury design, the \$8 million twin, multi-level four bedroom penthouses poised at the top extends the concept of opulence, creating exclusive sanctuaries of privacy and tranquility set in the sky.

Mirvac's brief to its designers was to create the most desirable, luxuriously appointed penthouses ever to grace Melbourne's waterfront. Informed by years of experience and customer feedback, Mirvac's Design Director Julian Venning and his team have responded with homes of incomparable luxury and cutting edge technology.

Gaggenau appliances, a private internal lift, home automation system, butler's pantry, separate theatre and private quarters for a live-in Au Pair or overseas visitor are just some of the bespoke features offered.

The upper level is a tranquil escape with a conservatory, generously sized master bedroom and grand ensuite. Two additional bedrooms also have their own private ensuites. Enhancing the feeling of indulgence, each home will be furnished with customised finishes of natural stone, upholstered fabric walls, warm timbers and plush pile carpets.

Mirvac has now launched Wharf's Entrance, which heralds the next chapter at Yarra's Edge in Melbourne Docklands for Mirvac. The first stage at Wharf's Entrance includes Forge Apartments (228 apartments), Wharfside Residences (11 Riverfront homes) and Cargo Homes (7 Home Offices).

For more information contact Mirvac Pty Ltd, Level 5, Building Q3, 6 Riverside Quay, South Bank VIC 3006, phone 03 9695 9400, fax 03 9695 9444, website www.arraybymirvac.com

Mirvac's unique, integrated model saw them oversee the entire design, sales, marketing and construction process for the Array Docklands development, ensuring superior quality control and high levels of customer service. As with any project, there were complex issues that required careful consideration and planning. Some of these included:

- Access difficulties from building in close proximity to the River.
- Interaction with surrounding residents.
- Podium façade design and installation. Needed to respond to T5 façade colour and rhythm.
- Removing large established trees to be maintained off-site and then re-instated once the building was completed.
- Design and installation of building crown. Heavily engineered design enabled the crown to be functional and buildable, yet aesthetically pleasing.
- Re-designing apartments to accommodate purchasers requesting to combine 2 or 3 apartments to make large sub-penthouses.

Mirvac drew from their extensive experience in delivering considered, sustainable developments and installed solar panels on the podium roof in order to feed power back in to the grid to off-set power usage in the ground floor lobby.

MAIN CONSTRUCTION COMPANY : Mirvac Pty Ltd
STRUCTURAL ENGINEER : Robert Bird Pty Ltd
ELECTRICAL ENGINEER : WSP Buildings Pty Ltd
PROJECT VALUE : \$220 million

Below BG&E Façades provided the full range of Façade Consultancy, ranging from schematic to construction to Mirvac for Array Docklands.

Below ESG Environmental designed and implemented a soil reuse strategy maximising the reuse of materials and minimising off site disposal costs for the Array Docklands project.



BG&E Façades was engaged on the Array Docklands project to evaluate the existing façade concept and value manage a cost effective design, taking into consideration logistics and construction sequences.

In apartments, understanding the total façade while also considering acoustic detailing, thermal performance, structural movements and construction issues is paramount to the delivery of a compliant façade.

Although the procurement of glass for the Array Docklands proved challenging, BG&E Façades were able to meet all requirements and provide a sustainable solution. Visual intent and thermal performance were also successfully achieved within budget.

As with all projects, effective coordination and communication with other trades is essential. A full size visual mock up was erected to give the client an idea of how junctions, fittings and the like is assembled. The mock up was also used as a quality benchmark.

BG&E Façades has a team of specialist multi-disciplinary professionals consisting of engineers, architects, façade designers, materials scientist

and building physicists who cater for the challenging requirements of the client.

Their core capabilities include:

- Façade Concept Design
- LEED Rating
- Building Physics
- Materials Science
- Façade Sustainability Evaluation
- Façade Tender Documentation
- Façade Remediation

By providing a proactive and innovative approach to design, BG&E Façades delivers a seamless solution to all clients, on every project.

For more information contact BG&E Façades Pty Ltd, 2/37-41 Little Bourke Street, Melbourne VIC 3000, phone 03 9652 3900, email oliver.ng@bgefaçades.com, website www.bgeeng.com

ESG Environmental (ESG) is a boutique consultancy with a proactive approach to the many environmental issues that can occur during a development. They provide strategic advice along with proactive, responsive and timely solutions that result in streamlined project delivery and decreased costs.

For the Array Docklands project, ESG designed and implemented a soil reuse strategy that maximised the reuse of materials on site and minimised off site disposal costs, which resulted in a cost saving of approximately \$2 million.

Established in 2010, and with extensive experience in environmental assessment and remediation for all aspects of land development and acquisition, the ESG team has successfully built lasting relationships with a growing group of private and public organisations. ESG conducts projects for some of the world's largest mining, property, investment, construction, petrochemical and industrial organisations along with government bodies at all levels.

The team is capable of working on projects of any size, from strategic design and pre-planning through to completion, and has the resources to deal with all complexities including natural disaster and emergency works.

Under the direction of 3 key members, Philip Harvey (Director), Stuart Graham (Senior Consultant) and Juan Medina (Environmental Scientist) the ESG team provided their expertise and knowledge on the Array Docklands.

Works for this particular project included:

- Pre-assessment for waste classification of soils prior to site works commencing
- Maximisation of the reuse of soils on site
- Minimisation of the disposal of soils off site
- Reduction in the volume of prescribed waste for off-site disposal
- Assessment of groundwater condition
- Assessment and management of potential acid sulphate soils
- Clarification and agreement of environmental works with the appointed Environmental Auditor
- Arrangement of a trade waste discharge agreement with South East Water
- Provision of site environmental monitoring equipment and
- Support for unexpected finds.

For more information contact ESG Environmental Pty Ltd, 28A Blazey Street, Richmond VIC 3121, phone 03 9029 7300, email vicadmin@esgenvironmental.com.au, website www.esgenvironmental.com.au

Below Micos Group designed, fabricated, delivered and installed the façades for the Array Docklands project.



Array Docklands, VIC



Micos is leading the way in Australia as a premium supplier of Glass and Aluminium façade solutions. The team at Micos provided products and services for the Array Docklands, Melbourne. The works included the design (that contained a fully bespoke system development specifically for this project), engineering, fabrication, delivery and installation of all the external fully enclosed glazed façade elements.

The buildings thermal and acoustic strategy was challenging due to surrounding environmental factors that required Micos to perform within individual internal space usages, resulting in over 20 various glass types being used. The main towers double-glazed, crystal-grey tinted glass was procured from the USA to achieve performance and architectural requirements, in respect to the overall buildings lustre and aesthetic appearance.

One of the most striking features of the building is the 2 shear glass vertical sections, on the northern façade, that look down the Yarra River towards the city centre. These triangulate in and out as they stretch up the façade from level 6 to 34. To achieve this feature, Micos developed a new 'Window Wall' façade system that reproduces the aesthetics of a curtain wall, yet has the ability to be installed earlier, in conjunction with the other façade elements and to achieve this architectural characteristic whilst closing the buildings envelope in line with the project programme. Micos has been

supplying aluminium windows and doors along with curtain wall façades since 1958. The company boasts a successful team of 130 employees and their services include Aluminium façade solutions, window and doors, custom curtain wall systems, unitised curtain walls, frameless glass and bespoke architectural applications

Micos are also currently working on the following projects, Riverside Quay VIC for Mirvac, the 68 story 'Vision Apartments' tower under the direction of Brady Group and the design development of the 'Skye by Crown' in North Sydney, which also incorporates the Micos 'Window Wall' system.

Array Docklands required complex coordination of all façade elements and the ability to bring them all together globally. Micos used their extensive experience to successfully carry out the works in a timely manner to meet the clients program schedule. From early beginnings to today, Micos Group is a business that has steadfastly combined old world service and values with the cutting-edge technologies of the future.

For more information contact Micos Group Pty Ltd, Suite 1.02, Unit 16B, Discovery Cove Industrial Estate, 1801 Botany Road, Banksmeadow NSW 2019, phone 02 8058 3000, fax 02 8058 3049, email enquiries@micos.com.au, website www.micos.com.au