



A FLAWLESS PEARL

The \$290M Prima Pearl is the third tallest residential tower in Australia at 255m high and over 70 storeys. Prima Tower comprises 659 designer apartments of a range of floor plans and A-Grade commercial office space, in the heart of Melbourne's Southbank precinct.

DEVELOPER : PDG Corporation and Schiavello
CONSTRUCTION COMPANY : Brookfield Multiplex
CONSTRUCTION VALUE : \$290 million
ARCHITECT : Disegno Australia
STRUCTURAL ENGINEER : Meinhardt

PDG and Schiavello are joint venture partners in the development of Prima Tower. PDG's in-house design studio Disegno Australia worked on the project from inception to completion, with Senior Associate Roberto Dreolini leading the team of architects and designers.

The biggest challenge on this project was the staged hand over. Residents moved into the building while there were still 10 floors of structure left to pour (due to the height of the building). Noise was reduced through careful positioning of the concrete pump line. Detailed planning was required when positioning the cranes, street loading bays and the other construction elements that were required, to also help minimise interference with residents. Temporary plant rooms were put in place to provide the residents with services until the permanent plant room on the roof of the tower was constructed and commissioned. Temporary amenities were located on the upper floors during construction to reduce travel times for workers.

Due to the sheer height of the tower construction, logistics proved to be complex. This challenge was assisted through the use of KONE JumpLifts. These temporary lifts can be put into service well before the high-rise lift motor room is built and provides superior speed, comfort and safety when compared to a traditional external hoist. To help with access the Favelle Favco M220DX internal climbing crane (in addition to the brand new Favelle Favco M600D external climber) was employed. Located within the core, the lifts were able to 'free' the jump form/core from the slabs and enable it to rise higher than a traditional high-rise.

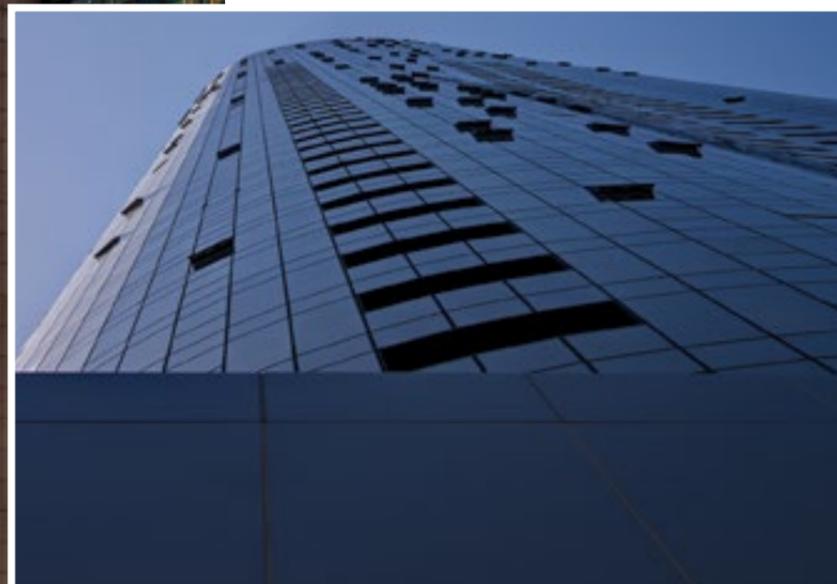
The KONE JumpLifts (2000 model) used for this project were new and had not been used in Australia before. They are also a prototype model and at 4m/s are the fastest temporary lifts in the world. The speed of construction was very rapid and the structure consistently cycled at 4-5 days per floor, with the following trades keeping pace.

Prima Pearl's iconic glass façade is made up of 8,500 unique panels all individually constructed and designed for a specific spot on the building façade. They were designed and installed with complete precision to give the façade a seamless look and enable installation to run quickly and smoothly. It is the differing sizes of these panels that create light and shadows on the building as the sun moves throughout the day. This gives the building its unique shape moving from concave to convex along the buildings height.

As a flagship development for PDG, it was imperative to create a building that offered clients the best in amenity, quality and service. It was important to develop a building that was simple, unique and to stand as a timeless icon in Melbourne's Skyline. The building was intricately designed with seamless finishes both inside and out to reflect this vision.

The precision needed at the design, production and installation stages had a host of trades including contractors, sub contractors, suppliers and manufacturers working hand in hand to ensure all of the pieces of the puzzle would fit together perfectly. All parties involved are very proud of their efforts throughout the design and construction process in creating a tower that offers a level of livability and lifestyle amenities previously unseen in the Melbourne market.

For more information contact PDG Corporation, Level 17, 501 Swanston Street, Melbourne VIC 3000, phone 03 9662 9996, fax 03 9662 3085, email info@pdg.com.au, website www.pdg.com.au



RIISING TO THE CHALLENGE

For Westkon Precast, working on the third tallest residential tower in Australia was both an honor and a challenge. Prima Pearl Tower reaches 255m high and rises over Melbourne's Southbank precinct. Underneath the glossy exterior is thousands of internal precast structural walls proudly manufactured by the team at Westkon Precast.

The exterior design of the tower is rounded to reduce wind pressure around the building, so as each floor was added the shape of the building curved both in and out. With little repetition between floors, the concrete panels for each level needed to be manufactured to exact measurements. Cycle times between floors were critical so it was important that there weren't any delays.

Starting at level 10, Westkon Precast used their 26 years of experience to manufacture the concrete panels for the 62 levels above. The sheer scale of the building meant that it was crucial for Westkon Precast to synchronise the manufacturing program at their factories, with progress on site. With 1 floor level completed approximately every week, each

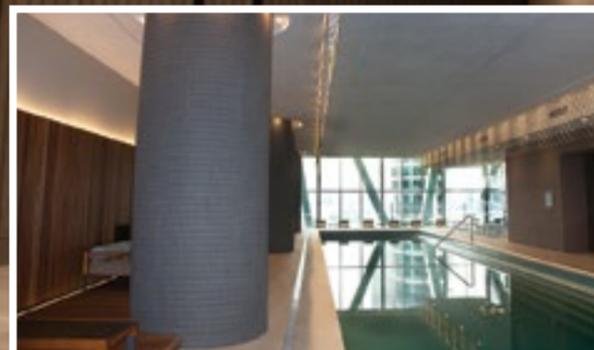
panel was required to arrive on site within a strict delivery window. Other possible delay risks were mitigated by Westkon storing at least 3 floors of precast panels in advance of the structure on site, it guaranteed delivery of the panels every week.

While the type of panel used was standard, the difference with Prima Pearl was the requirement to manufacture each panel to specialised structural specifications within a strict time frame and in very large volumes. Specially selected, high performance 80 MPa concrete was used for this project.

Westkon Precast was chosen for the Prima Tower project as a result of their reliability, extensive capabilities and competitive package. With two large precast facilities located in Sunshine and Melton, Westkon Precast has the expertise and capacity to supply precast to any commercial, civil or major project.

Other significant projects include Residential towers in the CBD Abode, Concavo, Upper West Side, Melbourne One, Australis and Tower 6 Southbank. The team has also supplied feature architectural panels to Monash Uni Residential (3000 panels in 4 months), Geelong Hospital, Epworth Hospital Geelong, Ballarat Hospital, Commercial Road Parahn as well as the supply of Bridge Girders and Parapets to civil projects on the Western Highway, Princes Highway Gippsland, Webb Dock and Melbourne Airport.

For more information contact Westkon Precast, 133-199 Ferris Road, Melton VIC 3337, phone 03 8746 1300, fax 03 9747 3088, email info@westkon.com.au, website www.westkon.com.au



NEW HEIGHTS

Through a commitment to quality and service, Expoconti Pty Ltd has successfully established itself as a leader in their industry.

The team carried out plastering work and the internal fit out at the Prima Pearl Tower development in Southbank, Melbourne. The scope of works included the ground floor lobby and Level 9 pool area.

In order to provide a successful result on all projects, Expoconti Pty Ltd employs highly skilled tradesmen who embrace a strict Quality Management System. The company has excellent relationships with large, well-respected organisations including Boulderstone, Brookfield Multiplex and Bovis Lend Lease.

Prima Pearl Tower is Melbourne's second tallest residential building and features 691 apartments. The development is spread across 67 levels and offers hotel style amenities and podium parking.

Specialising in plasterboard fit out, fibre cement and aluminum cladding, along with architectural paneling, Expoconti Pty Ltd is able to cater to developments of all types and sizes. The team is also able to carry out timber and plywood works including doors, frames and hardware installation.

Established in 1990, Expoconti Pty Ltd has been involved in many successful developments including:

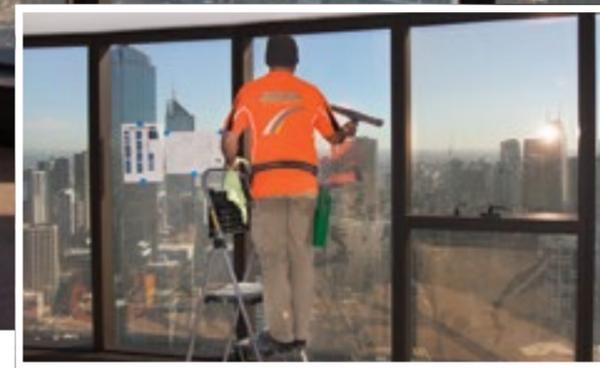
- Melbourne Exhibition Centre
- Crown Casino
- Melbourne Sports & Aquatic Centre
- Commonwealth Law Courts.

The team also enjoys working with lifestyle projects and as a result the company boasts an extensive portfolio of high-rise apartments. Some of these developments include:

- Yarra Crest Apartments
- HMAS Beach Apartments
- Liverty Towers
- Flinders Wharf Apartments

Expoconti Pty Ltd is always open to taking on new projects to expand their portfolio to new heights, as was demonstrated with their work on Prima Pearl Tower.

For more information contact Expoconti Pty Ltd, 128-138 Rodeo Drive, Dandenong South VIC 3175, phone 03 9793 4199, fax 03 9793 4099, website www.expoconti.com



IN PERFECT FORM

Form700 was selected as the principle contractor to undertake the 72 level Prima Pearl development in Melbourne. The \$292 million dollar building is a residential skyscraper situated in the Southbank precinct of Melbourne, Victoria. The building stands at 254 metres high, making it the fourth tallest building in Melbourne, and the fifth tallest in Australia. The development comprises 667 apartments spread across 72 levels.

Form700's role on the project has encompassed all the works involved in building the concrete structure including:

- Supply and erect formwork as well as fix reinforcement
- Supply, pump, place and finish concrete
- Supply and operation of Form700 Self-Climbing Core Systems and Form700 Self-Climbing Perimeter Safety Screens

The design team at Form700 was instrumental in the final building design. The design, planning and approach used by Form700 allowed slabs to be poured at astonishing speeds averaging a 4 day/level cycle. A level being completed every 4 days meant the tower could progress exceptionally fast and ahead of program.

The transfer floor (level 10) presented significant challenges with a gross floor area of 1994m². This level saw 2674m³ of concrete with 536 tonnes of reinforcement completed within 18 days.

The Prima Pearl Tower is a unique project, with a challenging build which has resulting in some interesting project statistics, listed below, generated from the construction.

- Total Concrete: 42,536m³
- Total Reinforcement: 4,068 tonnes
- Total Post Tensioning: 397 tonnes
- Total Formwork: 183,606m²
- Total Precast Panels: 2372

Form700 is one of the largest concrete structure building companies in Australia. They began operations in 2001 and have successfully completed many significant projects in Melbourne, Adelaide and Perth.

The company has the capabilities to produce unique projects of all types and scale. Their experience, and comprehensive knowledge, has equipped the company with record floor to floor cycle times, high quality finishes and most importantly, the safest working environment for its people.

For more information contact Form700 Pty Ltd, 68/76 Drake Boulevard, Altona VIC 3018, phone 03 8331 7100, fax 03 8331 7150, email info@form700.com.au, website www.form700.com.au

SPICK AND SPAN, ACCORDING TO PLAN

Commitment to their clients, quality results and consistent professionalism make Clean City Services (CCS) a valuable asset to a project like Prima Tower.

Since December 2013, they have been providing fulltime services to Probuild at the site, completing final detail cleans to all completed apartments, the ground floor and car park, and cleaning for external parts of the building via rope access.

This includes the challenging task of cleaning all of the project's glazing, including frames, internally and externally, with abseiling required for the cleaning of some of the windows in the complex parts of the facade.

Between 4 to 10 CCS staff have been working consistently on the project, using PH neutral products for the interiors, and environmentally friendly products such as View Quick, Citros and dishwashing liquid for windows and other external areas. When a project nears completion and the buyer handover stage, CCS will increase their staff to up to 15, depending on the program requirements.

"The challenge is to complete the project on time and ensure the developer and the builder are satisfied with our results," said CCS Spokesman, George Nestorovski.

CCS was founded in Melbourne in 2001, and opened a Canberra operation in 2005. Their high standards and exceptional eye for detail have resulted in a solid client base of major builders. Recent projects include The Quays in Docklands, National 4 in Canberra, Eden Apartments, Tower 8 by Mirvac, Yarras Edge, Wrap Tower and MY80.

In Melbourne the company has 30 fulltime staff including 2 project coordinators, and in Canberra a team of 12 employees including a project coordinator. Having experienced and dedicated project management staff enables CCS to develop efficient programs which meet client and builder timetables and deliver exceptional results for projects across the commercial, industrial, retail and private sectors.

"We have established an excellent reputation," said George "we have experienced staff who respect each other and their work. Our approach to both our clients and our team is to remember our working relationship at all times, work with each other to the best of our ability and treat each other with respect and care, that way we can have a long and successful relationship."

For more information contact Clean City Services (AUST) Pty Ltd, P.O. Box 1218, Lalor VIC 3075, phone 03 9466 9131, fax 03 9466 9131, email cleancity@bigpond.com, website www.cleancityservices.com

YOUR VISION,
OUR PASSION,
ONE DREAM.



Novas Interiors Group of Companies are proud to have been associated with one of Melbourne's iconic and prestigious residential developments. 'Prima Pearl' transcends the holistic design and dimension with a facade that makes a statement of sophistication and elegance, overlooking Botanical Gardens and Port Phillip Bay beyond.

Novas Architectural 'Signature Design' option provided PDG and Schiavello the design freedom to enhance the contemporary finishes selected throughout this project. The Novas # 31 Polished Stainless Steel Lever was carefully selected to provide an elegant entry to a premium living environment. Another of our companies, Novas Luxe, supplied 'Signature' bathroom accessories to ensure a seamless design concept between Architectural and Bathware products.

PDG and Schiavello both appreciated the professional approach from Novas Interiors, ensuring seamless transition from concept to reality.



NOVAS GLASS

NOVAS
LUXE

LIVDRID
TITDRID

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PROVEN TO DELIVER

CDC boasts a successful and proven track record for delivering many of Australia's largest construction projects. CDC carried out extensive work for the Prima Pearl project in Melbourne.

The scope of works included all hydraulics, hot and cold water, sanitary plumbing, drainage and gas. Installation was completed in 670 apartments with approximately 35 dedicated employees working on the project over two and a half years.

A 40,000 litre water tank was implemented to pump from the bottom of the tower all the way to the top level. This process eliminated the need for plant rooms throughout the complex.

CDC has established a solid working history with Brookfield Multiplex which stems from many years of working collaboratively along with a portfolio of successful projects. CDC is trusted by countless top tier construction companies.

CDC has evolved over the past 30 years to become an industry leader in Commercial Plumbing. This was not an instant result, instead the result of constant commitment and hard work. The team continuously works hard to evolve and refine their work processes.

With a team of over 200 employees, CDC looks forward to delivering Australia's premier projects well into the future and are currently working together with Brookfield Multiplex at Epworth Hospital in Geelong and E.Q. Tower in Melbourne.

For more information contact CDC Plumbing & Drainage, PO Box 168, Tullamarine VIC 3043, phone 03 9272 9000, fax 03 9272 9099, email reception@cdclumbing.com, website www.cdclumbing.com

