

COVER STORY

QLD PROJECT FEATURE

BRISBANE SKYTOWER

Billbergia / AMP Capital



BEYOND THE SKIES

DEVELOPER : Billbergia and AMP Capital

MAIN CONSTRUCTION COMPANY : Hutchinson Builders

ARCHITECT : Noel Robinson Architects; and Nettleton Tribe (Documentation)

STRUCTURAL ENGINEER : Bonacci Group

CONSTRUCTION VALUE : \$1 billion

Brisbane Skytower is Australia's single largest residential building with 1,141 one, two and three bedroom and penthouse luxury apartments. Featuring amazing views over Moreton Bay, the Glasshouse Mountains and the Brisbane CBD, world class amenities such as gyms, steam rooms, and the southern hemisphere's highest pool, Brisbane Skytower is a residential experience never before offered.

Soaring 274.3m high, the 90-storey Brisbane Skytower is the tallest residential tower in the Queensland and another premium development by multi-award-winning Billbergia Group.

The iconic structure in Brisbane's CBD, not only offers 1,141 luxurious, self-contained apartments with stunning, awe inspiring views, world class resort style amenities, and the southern hemisphere's highest infinity pool at the tower's crown, its grand architecture is a remarkable statement in Brisbane's growing contemporary skyline.

"Skytower also sets a benchmark for innovative construction. Its elegant triangular design, curved corners, curtain wall façade and the central core, is articulated in three distinct sections that sit one on top of the other to break up the building's overall mass," said Billbergia's Project Director, Bill McGarry. "The unique architectural shape has been designed to reduce wind loading and vortex shedding, negating the need for any mass dampening devices at the top of the building to reduce sway."

Skytower's internal configuration is designed with four separate residential zones, each with its own independent lifts, lobbies and recreational deck incorporating gyms, pools, BBQ areas and steam rooms. Apartments range from one to four bedrooms and luxurious four bedroom 2-level penthouses, with 10 levels of basement parking.

A family owned development company based in Sydney with a 31-year successful history in creating communities, Billbergia acquired the Skytower site in 2010 in conjunction with AMP Capital. Early site works commenced on the \$1 billion development in 2013 with construction of the tower beginning in mid-2015. The site reached its maximum height in early 2019.

Billbergia has managed the entire development process through all phases of

planning, design, financing, construction and sales and marketing.

"Brisbane Skytower's development is the culmination of more than seven years of detailed planning and negotiation for the strategically located CBD site adjacent to the City Botanic Gardens," said Bill. "The architectural form is underpinned by our philosophy of design excellence and innovation to deliver an awe inspiring and uniquely identifiable landmark that positions Brisbane as a modern new world city."

The ground plane enriches the streetscape with a dramatic curved awning that creates a bold entry statement to a grand 5m high residential entry area, landscaping and a new pedestrian laneway connecting Margaret and Mary Streets, activating a long-underutilised part of the city.

The project has also delivered Brisbane's first building to be approved in a vertically staged manner. Given the lack of precedence for vertical staging, the development team negotiated the programmed stages with Brisbane City Council.

"Constructing the tower in separate stages one on top of the other, allowed progressive completion dates with the financial settlement

of apartments on the lower levels from as early as mid-2017 enabling reductions in peak debt," said Bill.

"Settlement proceeds were applied to construction financing for subsequent stages and by mid-2018 more than half of the building was occupied, freeing up capital to complete final stages along with the platinum penthouse stage, to be released before the end of 2019. Brisbane Skytower has made a significant contribution to creating a vibrant new residential community in Brisbane's CBD."

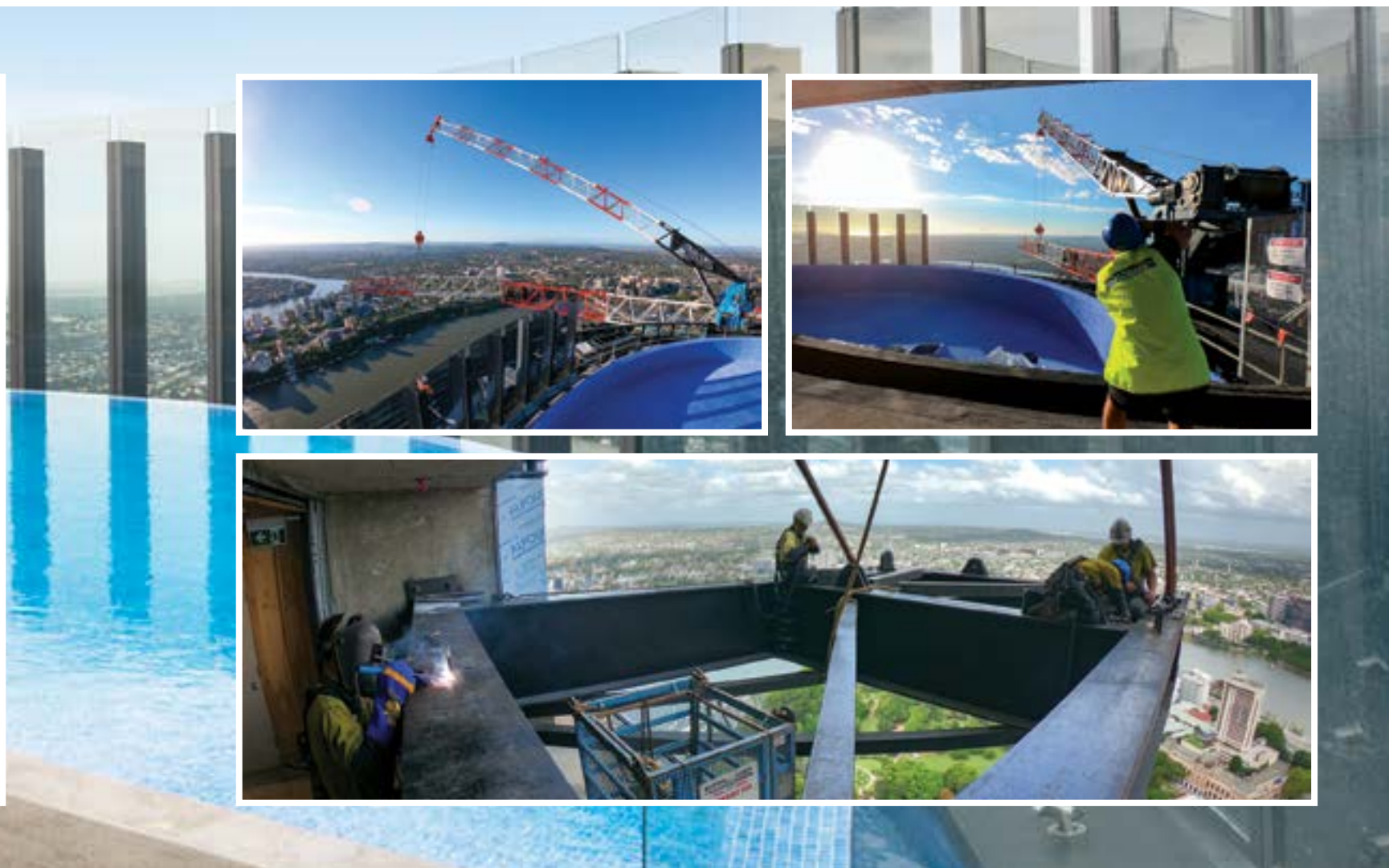
Billbergia conducts business across every stage of the property life cycle from investment management, acquisition, development management, planning and design to construction, project marketing and sales. In creating Brisbane Skytower, Billbergia hope that the residents appreciate all of the thoughtful extras that make a Billbergia property unique and life more enjoyable. Over 25,000 people live in Billbergia communities, and a further 25,000 will move in over the next decade.

For more information contact Billbergia, 25 Angas Street, Meadowbank NSW 2114, phone 02 8878 6900, email info@billbergia.com.au, website www.brisbaneskytower.com or www.billbergia.com.au



Below Infinity Constructions QLD supplied and operated OM Formwork Jump System at Brisbane Skytower.

Below Rowles Time Management (RTM) provided specialised construction programming, planning and scheduling for the Brisbane Skytower.



All good quality development outcomes begin with a sound structure and the formwork company's constructive performance. With over 25 years experience across many major landmark commercial projects, Hutchinson Builders chose Infinity Constructions QLD's (ICQ) for the formwork requirements for their 274m (898 ft) Brisbane Skytower project.

As the tallest residential building in the southern hemisphere, the new state-of-the-art Brisbane Skytower sets a new benchmark in design.

"Successful project outcomes never occur by good fortune or chance," said ICQ Managing Director, Hugh Owen. "Our company was established by experienced, talented, like minded individuals. Together with our clients we continually develop new formwork innovations to deliver successful structural project outcomes."

Since February 2016, over 40 of the expert ICQ team have supplied and operated OM Formwork Jump System at Brisbane Skytower.

"This system included all vertical structural elements, along with structural floors within the 91st floor of Skytower," Hugh continued. "I can proudly say our professional, well honed team maintained

the pre-agreed structural outcomes delivering a four/five day floor cycle/turnaround throughout that offered our clients added value and certainty."

Consistently setting new formwork benchmarks, the ICQ inhouse multi-faceted, experienced and skilled team provide only the best commercial formwork available. They specialise in providing their formwork jump system, and formwork methodology's to developers and Tier 1 builders for high rise projects. Based in South-East Queensland, ICQ continually implements and develops new and innovative structural construction systems that add safety, value and faster delivery.

Other projects that ICQ are currently working on include Ocean Apartments Surfers Paradise for Meriton, 300 George Street, 'The One Tower' Brisbane and Queens Wharf Tower 4 for Multiplex, and Star Casino and 272 Hedges Avenue on the Gold Coast for Hutchinson Builders.

For more information contact Infinity Constructions QLD, 3/191 Sandy Creek Road, Yatala QLD 4207, phone 07 3287 2724, email info@infinityconstructionsqld.com.au, website infinityconstructionsqld.com.au

In all projects time is money and to ensure successful delivery, experience counts for everything. For 34 years Rowles Time Management (RTM) has specialised in construction programming, planning and scheduling on some of Australia's most significant building projects, including Brisbane Skytower for Hutchinson Builders.

"From inception through to project completion of this iconic building, our extensively experienced and diverse RTM team provided the tender, detailed, target and trade resourcing programmes, and ongoing programme status updates and monitoring," said RTM Director, Richard Rowles. "Coming from a variety of building industry backgrounds is what sets our team apart. We are well known for our outstanding performance working with a wide variety of clients across all sectors of the Construction Industry."

RTM's services ensure a clear way forward for the procurement and construction of a project through detailed planning, programming, prioritising, managing and monitoring of all elements of a project. RTM work with building contractors and subcontractors, developers, project managers, architects, lawyers, financial institutions, and various Federal, State & Local Government Departments on a broad range of projects varying in scale and complexity.

At 90-storeys, Skytower's construction had its challenges. "A tailor made all encompassing and versatile self-climbing jump form system was used to construct all vertical elements of the Tower enabling completion of a structural floor cycle every week and often faster," Richard added.

"It was imperative that the building façade and internal finishes 'cycled' at the same pace as the Structure. Connecting the Façade installation with the self climbing structural system provided the necessary link that would drag the rest of the project along for the ride. To complete the process required detailed planning and heavy monitoring of onsite progress and resources. For many projects it is the early planning and detailed programming in relation to site set up and construction methodology that ultimately determines the success of the project."

RTM is also working on the Herston Quarter Specialist Rehabilitation and Ambulatory Care Centre, New Performing Arts Venue at South Bank, University of the Sunshine Coast Moreton Bay Campus Foundation Building, Kiamal Solar Farm at Mildura (VIC), Manunda Place in Darwin, and the North Queensland Stadium in Townsville.

For more information contact Rowles Time Management, phone 07 3846 2922, website www.rowlestm.com.au

Below Planet Plumbing QLD completed all the hydraulic services, design and construction for Brisbane Skytower.



Planet Plumbing QLD have a proven track record in delivering specialised hydraulic solutions to prestigious projects and were subsequently chosen for Brisbane’s 90-storey Skytower project.

“Our scope of works for Skytower included all the hydraulic services, design and construction for the iconic building,” said Project Manager, Travis Walkley. “Thirty of our skilled, professionally qualified and knowledgeable team also planned and installed all the plumbing, drainage, syphonics, gas, hot and cold water, pumps, tanks, grates, and other equipment.”

Proudly Australian owned, Planet Plumbing QLD’s certified quality management system ensures the highest quality workmanship, at every stage of the process, delivering exceptional and unprecedented results.

A ‘No problems only solutions’ attitude, a great team, innovative solutions, value management, cost effectiveness and passion, has been the company’s key to success and has built the firms reputation over the past 25 years.

With a solid track record, numerous successful partnerships on Tier 1 developments, and their extensive experience across a range of

construction projects and market sectors, Planet Plumbing QLD are capable of delivering high quality hydraulic solutions on any type of development, both private and public.

“While our work speaks for itself, our greatest strength is the solid client and supplier relationships we’ve built over the years, whilst maintaining open lines of communication from concept to completion and beyond,” Travis added. “With dedicated offices throughout Australia’s East Coast and numerous Tier 1 contracts across the country, we can confidently tailor a solution for your project’s needs.”

Recent projects in Planet Plumbing QLD’s portfolio include Brisbane One, 900 Ann Street and Ivy and Eve in Brisbane.

For more information contact Planet Plumbing QLD, 8/45 Canberra Street, Hemmant QLD 4174, phone 07 3166 2171, email info@planetplumbing.com.au, website www.planetplumbing.com.au

Below Embelton completed the impressive acoustic engineering for the pools, gym areas and apartments throughout the tower.



When Embelton is involved in a development you know you have the best flooring, acoustics, and noise and vibration isolation available in your building. Renowned for their outstanding design, supply and installation, Embelton work with leading acoustical consultants, structural design engineers, architects, builders and installers to ensure perfection, just as they did at Brisbane Skytower.

“We worked with NRA Collaborative and Renzo Tonin Acoustic Consultants in the design/conception stages to define the project parameters, then with the Hutchinson Builders, Acoustic Logic and ADG Structural Engineers in Brisbane to refine the design to meet budget and client expectations,” said General Manager of Engineering, Rajeev Nand.

Brisbane Skytower was a massive undertaking in terms of acoustic engineering. Not only does the tower contain 1,138 luxury one, two, three and four bedroom apartments and penthouses, the development features Australia’s highest infinity pool, plus two additional swimming pools, multiple recreation decks and a fully equipped gym.

“The pool isolation on Levels 40, 66 and 89 has five layer rubber pads. The gym on Level 40 has floor isolation systems, as does the Blackbutt

flooring including custom made Scotia and other trim accessories for apartments on Level 25 to 80, and Australian Spotted Gum timber flooring in the penthouses from Level 80 to 83. In total 4,900m² of Australian species flooring was supplied,” Rajeev explained. “We also provided isolation of plantroom spring riser supports and chiller plinth isolation solutions.”

With a reputation for delivering quality products, service and expertise, Embelton offers a unique capability for their clients from design inception to finished installation and completion. As a result, Embelton’s product portfolio showcases many significant projects across Australia, Asia, Europe and the Middle East.

Headquartered in Melbourne, Embelton employs over 100 permanent staff along with hundreds of contractors across three countries and seven capital cities.

For more information contact Embelton, 147 Bakers Road, Coburg VIC 3058, phone 03 9353 4811, fax 03 9353 4855, email gpevic@embelton.com, website www.embelton.com



Even the chosen kitchen appliances are the worlds' best in Brisbane's luxurious, iconic, landmark building: Brisbane Skytower.

Offering stunning views of Brisbane, the towering Brisbane Skytower delivers an unprecedented level of sophistication for residents. With an infinity pool, onsite gym, and an incredible attention to detail for that personal touch, the development sets a new benchmark in luxury apartments.

The 48 Skytower Penthouses were fitted out with products from the world's luxury brand of home appliances – Gaggenau.

"Gaggenau design is avant-garde yet timeless" says Olya Yemchenko, Brand Communications Manager Gaggenau and Commercial "We skilfully hand build our pieces using the finest materials because that is how you create something that will last."



Being over 300 years old, Gaggenau enable and inspire with appliances that are extraordinary in both performance and appearance

Being over 300 years old, Gaggenau enable and inspire with appliances that are extraordinary in both performance and appearance.

The selected built-in Gaggenau 200 series metallic ovens and compact appliances offer professional results in a private setting. The complimenting "Vario 200 series cooktops were chosen for their flexibility to create a bespoke cooking solution," said Richard Woodmason, Regional Commercial Manager.

The penthouses have different floorplans, cleverly configured to make the best use of the space and the views of the city from almost 270m above ground – making them the highest residential penthouses in Australia. The kitchens are completed with the Gaggenau 200 series integrated dishwashers that succeed in making life easier.

Gaggenau home appliances can be found in a number of luxury developments in Queensland such as Virtuoso by Stockwell, Banc Living by Ideal Property Australia and Zahra by Spyre Group.

Gaggenau is the perfect partner for developers looking to differentiate themselves in the market and looking for luxury home appliances to match their luxury apartments.

For more information contact Gaggenau, 1555 Centre Road, Clayton VIC 3168, phone 1300 170 552, website www.gaggenau.com.au

Below Navaska designed and implemented Australia's largest water cooled VRF installation for Brisbane Skytower.



Navaska are a privately owned award-winning HVAC&R contractor providing high end design, installation and support services to a comprehensive portfolio of construction, commercial and industrial customers across South East and Central Queensland.

"We've proudly delivered a number of landmark Queensland projects in partnership with Hutchinson Builders, including Skytower, The Fantauzzo hotel, and the acclaimed Howard Smith Wharves Precinct," said Navaska's Managing Director, Ross McLennan. "The latter has the world's most comprehensively integrated Mitsubishi Electric VRF, DX, Chiller and BMS solutions."

Multiple Mitsubishi Electric City-Multi heat recovery water cooled VRF systems with centralised CW systems and horizontal discharge cooling towers were used for Skytower. "This design provided the client with a compact and discreet installation that maximised available floor space for the developer and apartment owners allowing for efficient transfer of energy between apartments without the need for wasteful rejection of energy to atmosphere."

"To meet the needs of the project's dynamic four day jump schedule, our team provided innovative pre-assembly solutions reducing time

and refuse onsite," Ross added. "These offsite initiatives, use of Revit and Trimble guided precast in-slab hanging solutions ensured successful delivery of mechanical services across the project. Apartment owners also benefit from a design that minimises the use of refrigerants, while delivering high COP's with considerable savings in operating costs."

Navaska has an inhouse team of engineers, draftsman, mechanical plumbers, sheetmetal workers, electricians, service technicians, apprentices and a local group of specialist supplier and subcontract partners. Their capability covers the design, installation and support of both chilled water and refrigerant cooling mediums, specialising in water cooled VRF and complex cooling.

Navaska have a solution to suit your next project, be it a water cooled VRF, or a chilled water solution, commercial air conditioning project, or a turn-key industrial ammonia refrigeration system. **Navaska a Mitsubishi Electric Diamond Dealer, and 2019/2017 Mitsubishi Electric Australia City Multi VRF National Dealer Award winner.**

For more information contact Navaska, phone 07 3890 2633, email enquiries@navaska.com.au, website www.navaska.com.au

