Government departments. that also contained two lifts. greatly improved. DEVELOPER: KTQ Developments MAIN CONSTRUCTION COMPANY: Sommer and Staff Construction **ARCHITECT: Cottee Parker Architects Pty Ltd**

PROJECT VALUE: \$40 million

RISING ABOVE THE CROWD

The \$40 million Orion Apartments project is in the epicentre of the Eastern Suburbs where there is high demand for the flourishing lifestyle and friendly vibe. With 186 one and two bedroom apartments with spacious open plan living areas and modern kitchens over ten levels, roof top pool and two levels of basement parking, the Orion Apartments is transforming Coorparoo.

A new apartment block in the evolving Brisbane suburb of Coorparoo has arisen, with construction industry experts Sommer and Staff at the helm. Established in 1974, Sommer and Staff have built its reputation on its multi faceted skills of design and construction, project management and consulting services. They have completed residential; commercial and retail; legal and defence; health and aged care; hospitality and mining; and resource projects for private enterprise as well as State and Federal Government departments.

Appointed as the design and construct contractors on the \$40 million Orion Apartments, Sommer and Staff worked closely with KTQ developers to ensure the best possible design for the multi-storey apartment block was produced. KTQ Developers had purchased the property with an existing Development Approval for 186 units over ten levels with two and a half basement levels of carpark. The initial design concept also consisted of a larger north tower connected by a covered walk to a smaller south tower that also contained two lifts.

Wanting to provide a more rationalised design, Sommer and Staff amended the concept to two equally sized towers connected by a common lift core containing three lifts. This provided a more balanced appearance to the building as well as providing better access and more security on each floor for the residents. By making these amendments, travel distances for fire safety were also greatly improved.

The initial concept for the buildings was for a load-bearing blockwork structure which traditionally has been one of the most cost effective methods of construction for a development of this size.

Using their advanced knowledge, Sommer and Staff determined that it would be cost effective as well as acoustically sound to change the building design to a flat slab and column structure. This alternative light weight construction method enabled shorter construction times and better compliance with National Building Code requirements.

Consisting of light weight internal and external walls using standard walling systems from CSR Gyprock, this method also ensured that fire and acoustic requirements were met.

Weight savings within the structure were also provided and together with the introduction of post tensioning enabled the typical slabs to the reduced to 200mm thick.

By switching to the flat slab and column structure, Sommer and Staff eliminated the need for an extra trade on the job as well as speeding up production time. Crane costs were also reduced as there was less need to load materials and remove rubbish, and the addition of a separate stud and plasterboard wall was not needed to meet sound rating requirements.

Further time savings were found by changing the conventionally formed columns to blade walls using the AFS System which is permanent formwork.

The AFS panels can be stood on day one and then the deck formwork installed up to them immediately. The panels can then be filled with concrete straight from the deck saving on scaffolding required for the pouring of conventional columns.

Located close to public transport and located just 4 km from the Brisbane CBD, Coorparoo is being transformed to meet the demand of inner city living, the high number of owner occupier buyers is testament to the quality of the project. The Orion Apartments have been built with the Queensland climate in mind, with a rooftop pool being just one of its many features.

Orion Apartments will be the first project in Coorparoo to rise above four levels, and the twin 11-storey towers are sure to be a stunning sight against the picturesque city backdrop.

Sommer and Staff are proud to have been behind the design and construction stage of these luxury apartments, and will continue to build their strong relationships with their stakeholders in Australia and off shore.

For more information contact Sommer and Staff Constructions, 25 Argon Street, Sumner QLD 4074, phone 07 3376 7544, email info@sommer.com.au, website www.sommer.com.au

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Below Airlie Glass and Aluminium provided the concrete elements for Orion Apartments.



Established in 2005 by Marc Garcia, MG Constructions QLD Pty Ltd have grown to be a solid family business, working with leading developers and builders across Queensland on multiple size projects. Specialising in all facets of industrial, commercial and decorative concreting, MG Constructions QLD Pty Ltd were the perfect choice when it came to Orion Apartments in Coorparoo, Queensland. The apartment block, consisting of twin 11-storey towers, required experts in the concreting field, and this is certainly what they acquired with MG Constructions QLD Pty Ltd.

MG Constructions QLD Pty Ltd provided all the concrete elements on the Orion Apartment project, placing and finishing the foundations and ground slabs, as well as the vertical and suspended concrete slabs. Using the latest concrete technology, equipment and methods, MG Constructions QLD Pty Ltd provided a professional finish that met with project specifications. In addition, Danley construction join products were used, allowing for greater pour sizes therefore achieving more efficient solutions on site.

Work on the Orion Apartments was not without its challenges due to the building footprint taking up most of the boundaries. This proved to be difficult when it came to the setting up of the concrete pumps and the pouring of the concrete, as well as concrete truck access onto site. These issues were overcome however, and the MG team continued to produce quality work despite the limitations.

MG Constructions QLD Pty Ltd have proven time and time again their ability to work closely with construction companies and developers and their work on the Orion Apartments was no exception. Their professionalism, skills and attention to detail are key to their long customer relationships and the repeat business that they gain from major companies.

Currently working on projects including Annexe Apartments, Aveo Clayfield Aged Care, Boston Apartments, Aldi Marsden and Slacks Creek. MG Constructions QLD Pty Ltd continue their high level of workmanship and personalized services throughout Brisbane and the Gold Coast region.

For more information contact MG Constructions QLD Pty Ltd, 27/1631 Wynnum Road, Tingalpa QLD 4173, phone 07 3172 5703, fax 07 3009 0652, email admin@mgconstructions.com, website www.mgconstructions.com

When it came to fitting windows and doors for the Orion Apartments in Coorparoo, Queensland, Airlie Glass and Aluminium had it covered. Airlee Glass and Aluminium have been offering aluminium window and door solutions to residential and commercial markets across Australia since its establishment in 1996. They are committed to staying in touch with the changes in the building industry and always ensure that they meet strict Australian Standards.

Specialists in manufacturing energy efficient windows and doors, Airlie Glass and Aluminium ensured that the twin 11-storey towers of the Orion Apartments would benefit from energy efficient products to counteract the Queensland weather conditions and the noise elements of bustling Coorparoo.

As a result, 186 apartments were fitted out with Wintec Aluminium doors and ALSPEC Awning Windows. The ALSPEC Awning Windows were ideal for the multi level apartments, offering the benefit of overlapping internal and external seals to provide superior weather performance. The engineered window systems were perfect for the residential units, and as well as providing ease of use, offer energy efficiency properties as well as supreme weatherability and noise reduction.

When it came to doors, Wintec were the preferred choice. The Wintec sliding doors have been engineered to carry substantial glass sizes and weights, yet still have the ability to be easily operated. The double glazing also ensures for better energy efficiency and acoustic results whilst still being visually appealing, fitting in well with the modern living feel that the Orion Apartments portray.

The utilisation of these modern glass and aluminium products created light filled apartments with spectacular views across Coorparoo.

Experts in their industry, Airlie Glass and Aluminium custom make to their clients requirements, achieving their clients' vision whilst creating a high level of comfort, even on the most challenging of projects.

For more information contact Airlie Glass and Aluminium, 16 McIntosh Drive, Cannonvale QLD 4802, phone 07 4946 4055, email agaaccounts@bigpond.com, website www.airlieglass.com.au

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Zico Formwork is a growing formwork company achieving a high recommendation in the South-East Queensland market on the back of the company's three core values, Safety and Environment (zero harm); Quality (highest standard every time); Schedule (on time and budget).

With a highly skilled work force committed to these core values Zico has complete a number of high profile projects in the commercial, industrial, residential, health and community sectors. The key to achieving these core values is a highly motivated work force and significant investment in market leading formwork systems that improve safety, quality and efficiency.

The Orion apartment's project consisted of 30,500m² of formwork to columns, soffits, including forming transfer slabs at 6.5m, lift shafts and installation of 4,500m2 of permanent wall formwork.

Zico Formwork utilised a rail guided crane assisted core system for the construction of the central lift core. Zico were able to overcome a restricted site by prefabricating items off-site in their expansive warehouse facilities.

The formwork team were able to condense the structures program through the utilisation of Novatec formwork hoists reducing dependence of tower crane and mitigating any potential down-time.

Zico Formwork have capitalised on 15 years construction knowledge to have a varied portfolio of work in hand spread amongst South-East Queensland's largest head contractors.

For more information contact Zico Formwork Pty Ltd, Unit 2B, 43 Spine Street, Sumner Park QLD 4074, phone 07 3715 7254, email contracts@zicoformwork.com