

# REIMAGINED LIVING

Republic & Dusk comprises two towers of 14 and 19 stories of 391 apartments rich in contemporary styling and quality finishes which includes a resident library, lounge, gourmet chef's kitchen, dining room and stunning rooftop terrace with breathtaking vistas, plus basement carpark and retail tenancies

**On the shores of Lake Ginninderra in Canberra a new model for modern living is emerging.** The Republic Precinct, including the Dusk addition, will be the largest mixed-use development in Canberra's history and will form a landmark for Canberra's urban future, blending a mixture of private and public spaces that celebrates community and lifestyle while offering unrivalled value for money.

The project features 391 premium apartments, a dining and retail precinct, communal landscaped areas and a rooftop garden for residents.

"The logistics of the precinct were challenging. There were many nearby interfaces including three main roads, the bus interchange, a college and the adjoining Stage 2 construction site," said Kristoff Pene,

Project Manager. The design needed to be well coordinated and went through an immense amount of pre-planning to arrive at a clear understanding of what was needed.

"Due to the scale of the project and challenging timeframes, we spoke to subcontractors about off site fabrication options," said Kristoff. "We were able to have items such as kitchens ready for install prior to getting off the ground.

Likewise, windows were manufactured and stored prior to being required on the project. It was about making our longer lead time items work in our favour instead of against us. The process also ensured quality was of the highest standard as there were little to no onsite alterations required."

In line with their five year operational and business strategy, Geocon have formally introduced 'Lean Construction' methods into their operational platforms. The Republic Precinct project has seen the introduction of best practice systems and methodologies to meet key metrics associated with quality, cost, delivery and safety.

"As a starting point for the roll out of lean manufacturing, Geocon have been integrating all site sub-contractors much deeper into the overall construction sequence," said Kristoff. "We installed formal 'onsite' warehousing resulting in a controlled flow of inventory through the build,

eliminating over or undersupply of materials and inefficient use of space."

"We then captured data to continuously improve our operational processes and drive further gains. By linking the supply chain with the construction schedule we can ensure that when construction slows, inventory replenishment slows and when construction speeds up, replenishment speeds up. This brought significant benefits in terms of project cost management and subcontractor cash flow."

Geocon as a business are going from strength to strength with many exciting projects coming up including three residential developments in Woden, Gungahlin and Tuggeranong as well as new hotels and the Kingston Arts Precinct which is due to become an intrinsic part of Canberra's cultural landscape.

Geocon are establishing systems and processes that strengthen the collaboration

and integration of subcontractors to drive project and business performance for their clients and business partners.

"Over the course of the project the team became an extremely tightly knit unit," said Kristoff. "I would put the success of the project down to the bond we formed which created a mentality where everyone worked for each other with a common goal to deliver the best project possible."

"The culture at Geocon is full of energy and excitement. You see this culture reflected on the faces of the staff. We are building Canberra and doing projects on a scale that Canberra has never seen before. Personally I have loved every moment of Republic. The opportunity to change the landscape of a community doesn't come along every day and to see what it has become makes me proud."

*For more information contact Geocon, Unit 18, Level 1, 24 Iron Knob Street, Fyshwick ACT 2609, phone 02 6255 0430, website [www.geocon.com.au](http://www.geocon.com.au)*

DEVELOPER : Geocon  
MAIN CONSTRUCTION COMPANY : Geocon  
ARCHITECT : Fender Katsalidis  
CONSTRUCTION VALUE : \$111 million

Below Adcon supplied electric jump form systems to the Republic project, customising the forms with Geocons branding.



**The Republic development by Geocon will be Canberra's largest ever residential development when completed.** The project contains 41,325m<sup>3</sup> of concrete, 6,125 tonnes of reinforcement, 60,000m<sup>2</sup> of façade and 720km of electric cabling.

Adcon commenced onsite at Republic in early 2019. They established the two jump forms to commence the construction of the primary cores for the High Society towers. In early October 2019, they also mobilised and established the self-climbing platform screens for the project which were designed and manufactured by Adcon Engineering.

Adcon's full inhouse design and fabrication capability not only allows them to do many tasks within the company to ensure quality, costs and deadlines are well managed, but also allows them to customise solutions to suit design specifications.

The two 27-storey glass towers comprising High Society at Republic, feature complex architectural shapes and curves, requiring Adcon to produce bespoke screens which reflected the façade curvature to ensure the whole perimeter of the building was covered.

Adcon is currently assisting Geocon with Stage 2 of the project and the structure is due for completion in the second quarter of 2020. "We have been proud to work alongside Geocon and the delivery team to deliver reimagined 20<sup>th</sup> century living at the Republic precinct in Belconnen," said Danny Isaac, Managing Director of the Adcon Group of Companies.

The electric jump form systems that Adcon provided for the Grand Central Towers project benefit from the latest in formwork technologies. The electric jump form systems combine high performance with energy efficiency, working off normal 32 amps of power. Through their inhouse engineering department, Adcon Engineering, they have invested in developing and manufacturing their own cutting edge formwork systems that combine efficiency and safety.

"Our system has been developed with the future in mind. The entire system is controlled by a coloured touch screen and the jacks have a massive capacity that can jump the system on just 12MPa of concrete. The placing boom is free standing on the jump which eliminates any ties to the core below," explained Danny. "The whole jump can go up one full floor in only 20 minutes with minimal noise. The jump is also self levelling which means adjustment is not required for each jump."

"Our screens are very light with six working platforms on every screen, allowing finishing trades to work safely while they progress the building. The reactions from the screens on the slabs are also very low to eliminate the need for extensive back propping," Danny said. "Our focus is on ensuring safety through modelling systems to remove risk by recommending the right formwork system for each specific task. We work with our clients to remove or mitigate risks wherever possible."

Another aspect of Adcon's services includes branding of their products onsite. Geocon's iconic 'Sunbird Orange' can be seen right across Canberra, projecting from the tower crane jibs and down the cores from the jump forms. "Branding was a highly importance factor for Geocon," explained Danny. To further enhance this, Adcon provided a screen system that was painted to match at no additional cost.

Adcon have a strong reputation for delivering large multi-level building structures on time and on budget across the east coast of Australia. The company have successfully forged long standing relationships with major repeat clients who have made Adcon a preferred contractor. Geocon is no exception.

Below Adcon's full inhouse design and fabrication capability allows them to customise to suit design specifications.

"Our first project for Geocon was Grand Central Towers," said Danny. "This ground breaking mixed use development offered unrivalled connectivity across the city from its location at the junction of the Light Rail Stage 2. Coming in at 26 and 18-storeys, the towers have the capacity to house commercial accommodation, health facilities, offices and shops."

For this initial project Grand Central Towers, Adcon Engineering designed and manufactured the electric self-climbing jump forms for the two lift and stair cores as well as lightweight platform perimeter edge protection screens. Through their engagement Adcon were able to add significant value to the project.

"We recommended having the 32m placing boom located on top of the jump form. This relatively normal industry practice was a new idea for Geocon and helped eliminate penetrations and back propping that would otherwise be required for placing boom towers located conventionally throughout the slabs, and also eliminated the need for tying in the boom through the core," explained Danny.

Regardless of the project, Adcon's primary focus is on providing the latest in formwork system design while ensuring total programme and delivery certainty. This certainty enables Adcon's clients to deliver their construction programmes with complete confidence in the on time delivery of Adcon's systems.

"Adcon thoroughly understands the importance of delivering on time, within budget and at a level of quality that ensures client satisfaction," said Danny. "To embed this throughout the planning and construction process we bring strong industry partners who share these objectives to projects with us."

"During the pre-construction phase our team of engineers, planners, draftsmen and construction managers work seamlessly with the client to develop formwork systems that are safe and customised to the project with

the aim of delivering optimum performance gains throughout the construction cycle."

With a wide range of projects of different types along the east coast of Australia, Adcon Group are well placed to build on the success of the Republic project and continue delivering high performing construction systems to some of Australia's most significant projects. Their knowledge, experience and professional approach has established them as one of the current day industry leaders.

One project that was recently awarded to Adcon is the Parkville Station project in Melbourne. "Our scope on the Parkville Station project comprises the critical structure elements for the main station box," said Danny. This exciting project will be built directly below Grattan Street between Royal Parade and Leicester Street with four separate entrances.

Also in Melbourne, Adcon are responsible for the complete structural package for the 42-storey, 202 Normanby Road development comprising formwork, reinforcement supply and fix, concrete pump, place and finish, precast installation, perimeter edge protection screens and the introduction of Adcon Engineering's electric self-climbing jump form system.

In Queensland, Adcon is currently delivering formwork solutions for the Koko and Opus developments at Broadbeach. Both projects will also utilise Adcon Engineering's electric self-climbing jump form system.

With over 30 years of construction experience, Adcon Group has a vast depth of knowledge and aims to deliver value to all their clients by being adaptable to their needs. Their current clients are already seeing the benefits of formwork and external protection screen systems that allow construction to proceed when other projects are delayed and achieve project completion far quicker than conventional formwork techniques.

**For more information contact Adcon Group,** 39 Taras Avenue, Altona North VIC 3025, phone 03 9098 8767, email [info@adcongroup.com.au](mailto:info@adcongroup.com.au), website [www.adcongroup.com.au](http://www.adcongroup.com.au)



Below MN8 Consulting provided extensive mechanical services engineering across the whole site.

**MN8 Consulting (MN8) were chosen to deliver their mechanical engineering services to the Republic & Dusk development.** This project will transform Canberra's skyline making it one of the city's largest residential project.

The developer, Geocon, needed experienced engineers who were ready to collaborate to achieve their vision of a project that redefines contemporary living with unrivalled value for money.

MN8 are delivering their services for the entire project, spanning across all phases, from inception to construction. Their existing relationship with Geocon put them in a good position to deliver the best possible outcomes for the project. "We have worked with Geocon for a few years now," said Rob Withers, Managing Director of MN8. "We have a good relationship with them and we know how each other works."

"Engineers can usually deal with quantitative components," said Rob. "But when you need to mix that with aesthetics or the way the physical environment feels, often the solutions are left wanting. In that regard we pride ourselves on the ability to develop collaborative solutions. Particularly on large scale projects like Republic & Dusk, which are built in stages, you need to look ahead and plan so that the overall design is optimised for space, cost and useability."

MN8 were able to bring their construction expertise to the project to deliver efficiently buildable solutions. "Some of our staff have previously worked for leading contractors," said Rob. "We encourage communication back from 'the coal face' to improve the efficient and effective conversion of the technical to the real world. There's no point specifying something that is inefficient to build because the likelihood of that being brought to fruition during increasingly tight time and cost boundaries is not high."

"It's why we invest ourself in projects and even though our scope usually doesn't extend to it, you'll find us onsite checking what can be improved. The installing mechanical contractor and site staff actually knows our name, and quite often, they end up knowing us personally."

On such a collaborative project it is important to understand other parties' perspectives and MN8 were able to utilise leading digital technologies to communicate their ideas to the wider project team. "We are trying to offer something that's highly technical in nature to people who often have no engineering background," said Rob. "The 3D collaboration software really helped in that regard. It allows easy conceptualisation of the infrastructure and has been a great innovation that Geocon and the services consultants have developed."

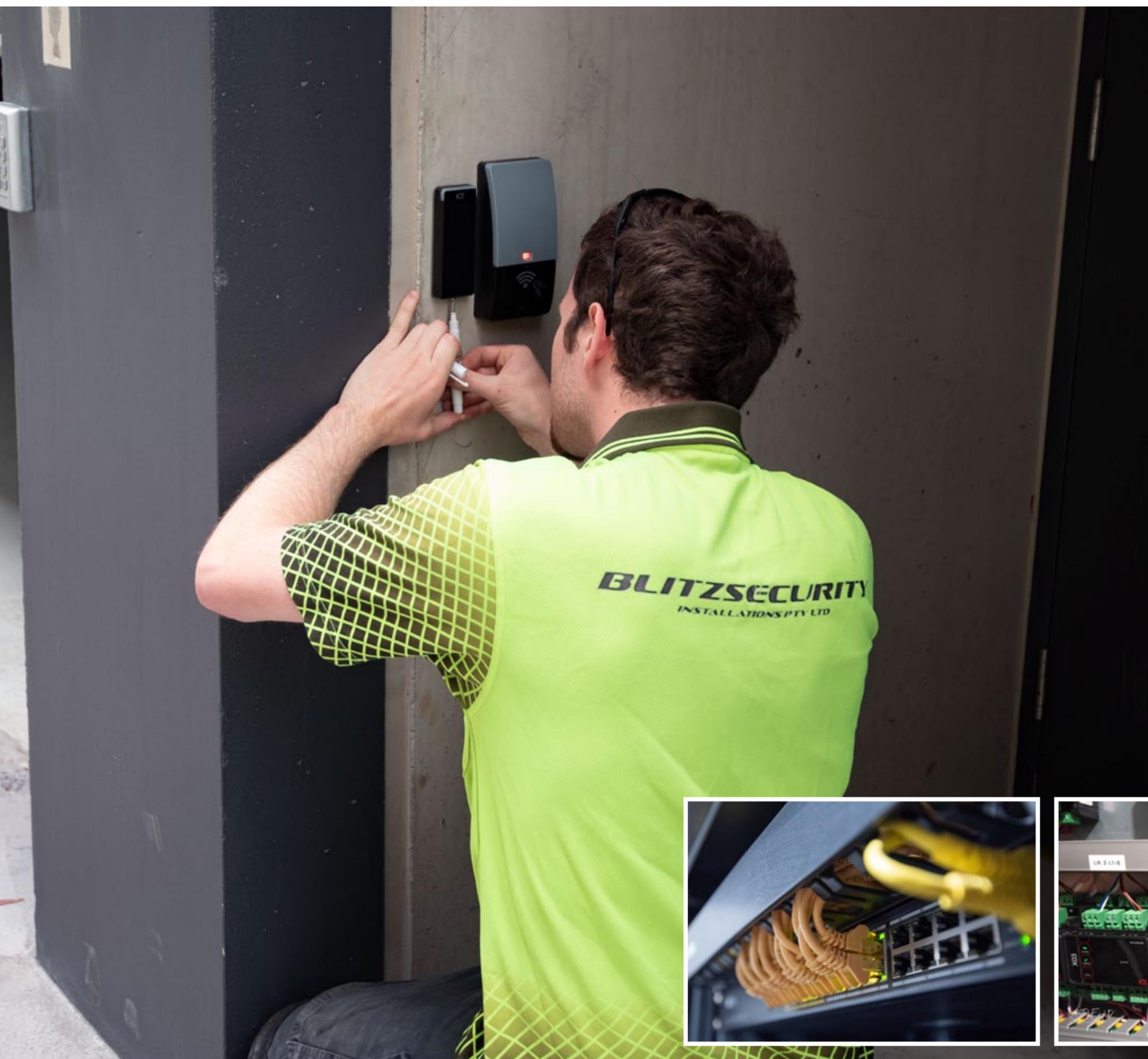
"It's always important that you stay aware of the latest technology and best practice to ensure you are consistently delivering the best outcomes. It's a worthwhile investment as the potential gains are so big. You need to be sure that everything is as good as it possibly can be."

Working in such an open, collaborative way has enabled MN8 to deliver solutions that are not only technically proficient, but also fully integrated with the wider design vision of the overall project.

"I think that's a key point of difference with us," said Rob. "It's not a sales pitch that we actually want our designs to work and achieve the best outcome." A large reason MN8 exists is because of their ability to properly bridge the gap between high levels of technical capabilities and what clients want. It's the ability to empathise.

*For more information contact MN8 Consulting, 5/107 Wollongong Street, Fyshwick ACT 2609, phone 0412 12 68 73, email [rob@mn8consulting.com.au](mailto:rob@mn8consulting.com.au), website [www.mn8consulting.com.au](http://www.mn8consulting.com.au)*





**Blitz Security were contracted to ensure that the highest standard of security and access control systems were provided to the Republic & Dusk, due to their strong reputation for excellence in service and client satisfaction.**

“We approached the project as one big precinct including the last stages which required some forward thinking and planning,” said Jason Hogh, Managing Director of Blitz Security. “We are installing access control, intercoms and CCTV systems and an ICT Protégé GX enterprise level high commercial grade system. We had to go for that to ensure it worked as one management system across all phases.”

Ensuring the system could be expanded to accommodate the future phases required careful consideration of the management software. “If you have three houses you can’t put in three separate alarm systems and hope they all work together,” explained Jason. “You have to plan and install a product that will be expandable in the future.”

There were also some units in the development that required special systems to be installed. “There are 10 units for the disabled in the Republic & Dusk and the requirements were different for those units,” said Jason. “The intercom system needed to be upgraded to push through to phones or tablets so residents don’t need to get up to operate it. They also required long range Bluetooth technology for unlocking of doors.”

The construction timescales for the development are quite rapid which also

required careful planning. “The timeframe was a challenge,” Jason said. “It’s a fast build, but we’ve got reliable and full qualified staff to enable us to deliver within the timescales. It takes a lot of planning initially and good execution is important as well. We needed high quality staff as we can’t afford to miss anything when you only get one chance onsite.”

Blitz Security has a long and established relationship with the developer, Geocoin, having previously worked for them on the Infinity and Midnight developments as well as the upcoming Grand Central Towers. “With them we get the planning done up front and they are very good at that,” Jason said. “We have had a good working relationship with them in the past and we have a few projects coming up in the future.”

Blitz Security specialise in the supply and installation of security, access control, CCTV and intercom systems. From their home base in Canberra, they service the Australian Capital Territory and the South Coast and Snowy regions of New South Wales and they are currently looking into expanding into other areas as well.

“Our team size gives the flexibility and capacity to service multiple projects at once,” said Jason. “We have a good relationship with most of the Tier 1 builders in Canberra and we’d like to be the ones that set the benchmark for the industry around town.”

On all their projects, Blitz Security strive to develop new and innovative techniques to deliver projects that exceed their clients’ expectations. Since their establishment in 2010 they have experienced steady growth through providing quality work, customer satisfaction and on time completion.

Blitz Security has a team that is fully qualified, licenced and certified for any kind of security installation. They view the high level of repeat business and receive from their customers as an important sign that they are on the right track in their mission to achieve customer satisfaction.

*For more information contact Blitz Security, 5/189 Flemington Road, Mitchell ACT 2911, phone 0410 517 035, email [sales@blitzsecurity.com.au](mailto:sales@blitzsecurity.com.au), website [www.blitzsecurity.com.au](http://www.blitzsecurity.com.au)*

Below PDA Marble and Granite supplied stone bench tops and splash backs for the apartment kitchens.

**The Republic & Dusk residential development in Canberra features modern apartments with premium finishes throughout.** This includes stone bench tops and splash backs which are being fabricated and installed by PDA Marble and Granite, a quality, high end distributor that offers superior customer service.

“We are supplying, manufacturing and installing all the stone kitchen bench tops and splash backs for both projects,” said Dino Tagliapietra, Director of PDA Marble and Granite. “We started onsite at the beginning of August with completion at the end of December 2019.”

On the Republic & Dusk project, Geocon have been promoting the adoption of lean manufacturing principles to their subcontractors and PDA Marble and Granite were well placed to deliver. “We prefabricate as much as we can to avoid the need for site measurements,” said Dino. “We want the factory to be productive which enables us to stay ahead of the site works and meet program demands.”

“From the design and joinery drawings we were given, our inhouse drafting team prepared fabrication drawings for approval by the head contractor. Once an approval is received scheduling and production begins using our automated production process” Dino explained.

One of the reasons for the lean manufacturing approach was the tight timescale for project delivery, which required close consultation with suppliers. “At the beginning of the project Geocon sat down with us to review their schedules,” Dino said. “They are quite time conscious and want to move fast but they were quite happy for us to comment so we could find a happy medium. We have met programmes with the project which comes down to us being able to pre-manufacture our products.”

With the Republic & Dusk project, PDA Marble and Granite are set to maintain their status as leaders in quality stone sourcing, supply and installation. “Overall it is straight forward and we have a large manufacturing capacity having purchased various automated

saws and polishers over the last year so the products can really flow through our workshop.”

Republic & Dusk represents a step forward in PDA Marble and Granite’s relationship with the main contractor, Geocon. “We have worked with Geocon before on the Wayfarer and Abode Hotel Kingston” said Dino.

“Geocon are a well organised builder and their operation is very streamlined. We’re also doing Grand Central Towers in the Woden precinct with Geocon.”

“We are a family run business,” said Dino. “My father set up the business and my brother and I took it over.”

Based in Queanbeyan, PDA Marble and Granite serves the Australian Capital Territory, regional New South Wales and Sydney. With over 45 years in the industry, their expert stone masons, draftsmen and project managers understand the intricacies of working with different stone products.

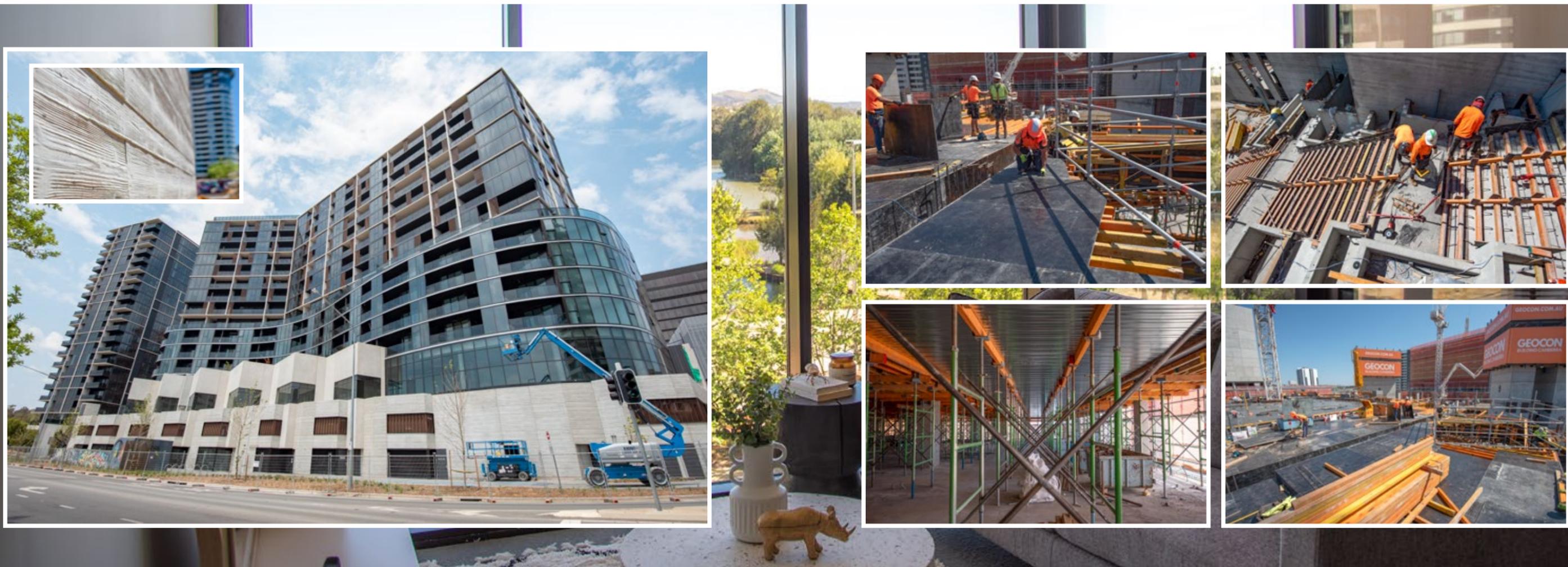
PDA Marble and Granite have completed many high-profile stone and tiling projects which include Canberra International Airport, Canberra Centre Shopping Mall, Realm Hotel and Sydney University.

**For more information contact PDA Marble and Granite,** 29 Kendall North Avenue, Queanbeyan NSW 2620, phone 02 6297 4443, fax 02 6299 3389, email [sales@pdamarble.com.au](mailto:sales@pdamarble.com.au), website [www.pdamarble.com.au](http://www.pdamarble.com.au)



**Below** Advanced Precast delivered over 10,000m<sup>2</sup> of precast concrete to site for Republic & Dusk.

**Below** IC Formwork Services supplied the jump form, prefabricated stairs, slab, column, wall and landscape formwork.



**Advanced Precast (AP)** has grown to become one of Australia's market leaders in the field of precast concrete for the building industry. The company services Melbourne, Sydney, Canberra, Brisbane, Gold Coast and surrounding areas.

AP was involved from the projects conception stage, reviewing the consultant's documentation and value adding by suggesting smarts and efficiencies not just for the precast, but also for the structure.

Business Development Executive, Marco Alcuri stated "We are proud to have been given the opportunity by Geocon to work together and meet expectations on Republic which is setting the new exciting standard for the Canberra of tomorrow."

"Republic presented a tight programme and logistical challenges throughout the project which by working together with Geocon we were able to find solutions and deliver. One example was converting the in-situ feature 'K shaped' columns to precast which saved time and delivered a high quality product."

AP brings a wealth of knowledge and experience to offsite manufacture to ensure speed onsite and a quality finish. "Generally with precast,

the labour required on construction sites is reduced. We provide peace of mind with the knowledge that products supplied to site are manufactured in a quality-controlled environment. The beauty in precast is being able to achieve complex features, shapes and sizes on a construction site, simply in a single lift off the delivery truck," Marco added.

"Having our own inhouse teams and crews enables us to control the whole process from shop drawings, engineering for temporary handling and erection, manufacture and erection with health and safety our number one priority," said Marco. "We get great satisfaction from walking onsite and seeing the initial concept come to life."

Since their establishment in 1982, AP continues to lead by example in the delivery of innovative and cost effective solutions for building structures.

*For more information contact Advanced Precast Australia, 499-501 Victoria Street, Wetherill Park NSW 2164, phone 02 9756 5631, email [info@advprecast.com.au](mailto:info@advprecast.com.au), website [www.advprecast.com.au](http://www.advprecast.com.au)*

**IC Formwork Services** has a proud history of contributing to the ever evolving Canberra skyline. One of the largest and most experienced formwork providers in the region, IC Formwork was the natural choice for supplying efficient formwork solutions to the Republic & Dusk.

IC Formwork Services were responsible for the design and delivery of all formwork systems at the Republic & Dusk inclusive of the jump form, prefabricated stairs, slab, column, wall and landscape formwork. A company that prides itself on providing win-win solutions for builders, they brought their trademark commitment, ensuring the best possible formwork systems for the project.

In the early stages of the project, IC Formwork Services worked closely with Geocon to ensure the formwork systems would be safe and efficient during the construction phase of the project. The results speak for themselves with the Republic & Dusk structure being delivered safely, within programme and to the highest quality standard.

Since being founded in 1980, IC Formwork Services has provided innovative formwork to commercial and residential construction projects in the Australian Capital Territory and surrounding regions.

As a family business, they remain dedicated to upholding the same values and work ethic underpinning their success. Prioritising quality and safety, the company has built their reputation on always supplying the most efficient formwork solutions.

IC Formwork Services' extensive range of formwork systems for soffit, lift shaft, column, wall and stair formation systems include table and panel systems, hydraulic lift shaft systems and pre-fabricated wall and column systems, metal decking systems and stair systems.

*For more information contact IC Formwork Services, 1 Couranga Crescent, Hume ACT 2620, phone 02 6260 1260, fax 02 6260 1842, email [icf@icformwork.com.au](mailto:icf@icformwork.com.au)*

Below AFS Systems supplied 10,000m<sup>2</sup> of their Rediwall® system to Stage 1 and a further 14,500m<sup>2</sup> of Rediwall® to Stage 2.

Below Capital Veneering were contracted to deliver joinery for the apartments and common areas



**AFS Systems (AFS) is a leading manufacturer of permanent formwork walling systems.** For the Republic & Dusk residential development in Canberra, AFS were a natural choice, manufacturing and supplying over 10,000m<sup>2</sup> of their Rediwall® system to Stage 1 Dusk and a further 14,500m<sup>2</sup> of Rediwall® to the Stage 2 development High Society.

AFS Rediwall® is a PVC permanent formwork featuring precision-extruded components that easily snap together interconnecting for rapid installation. CodeMark Certified and AS3600 compliant Rediwall® is load bearing for multi-level structures providing a consistently clean, even, water resistant surface that depending on the application, often doesn't require any finishing.

"Geocon were looking for a permanent formwork PVC walling system for their development," said Michael Schroedl, AFS Business Development Manager. "AFS Rediwall® was chosen for a number of reasons that included product design, range of profiles and accessories available, the speed of construction the system offered together with access to technical support, ongoing customer service, logistics and after-sales support. Overall AFS Rediwall® offered a complete end to end package."

AFS' strong relationship with Geocon has continued with the Republic and Dusk project. "Geocon are the biggest builder in Canberra and they are delivering the largest projects that Canberra has ever seen," said Michael. "We are proud to have had a long-standing partnership with them across multiple high-rise projects and are looking forward to continuing that relationship across future developments."

AFS Systems was established in 1996 and acquired by CSR Limited in 2014. With offices in New South Wales, Queensland and Victoria, the company manufactures and supplies afs rediwall® pvc and afs logicwall® fibre cement permanent formwork walling systems to a range of developments including multi-residential apartments, hotels, student accommodation, shopping centres, hospitals, prisons and aged care facilities.

*For more information contact AFS Systems, PO Box 234, Minto NSW 2566, phone 1300 727 237, email [afssales@csr.com.au](mailto:afssales@csr.com.au), website [www.afsformwork.com.au](http://www.afsformwork.com.au)*

**Capital Veneering offer commercial and residential joinery solutions that inspire those who use them.** They were contracted to deliver joinery for the apartments and common areas in the Republic & Dusk mixed use developments in Canberra.

"The bulk of our work is in the manufacture of the components and is carried out offsite," said Ben Madden, Managing Director of Capital Veneering. "Onsite, we installed the joinery that we built in our factory in Queanbeyan. We started work on this project in the factory around April 2019. We refined the design to make it buildable, and then produced shop drawings and prototypes to obtain approval before going into full scale production."

Capital Veneering produced a full working kitchen prototype in their workshop. "We install all of the appliances to ensure they fit and that there is adequate access for service reticulation such as water and electrical," said Ben. "All key stakeholders, including other trades, inspected the prototype and had the opportunity to provide feedback."

"Geocon are quite efficient with logistics, working with a lean manufacturing methodology and trying to get their subcontractors on board," said Ben. "We are looking at all our processes. Given the

volume of joinery we have to produce a small difference can have a huge impact."

"This was a great project for us and part of building our ongoing relationship with Geocon," said Ben. "This project is as big as it gets in Canberra and we are capable of delivering these projects on time, on budget and to the high standard expected of Capital Veneering."

The company has been operating for 20 years and has an accomplished team, with many years experience in commercial joinery and project management.

Their projects range from multi-unit projects to commercial fitouts and high end private residences. Capital Veneering recently completed a large project at ANU for Lendlease and their current projects include work at Parliament House and the Department of Home Affairs as well as other projects for Geocon.

*For more information contact Capital Veneering, PO Box 768, Fyshwick ACT 2609, phone 02 6299 1557, email [info@capitalveneering.com.au](mailto:info@capitalveneering.com.au), website [www.capitalveneering.com.au](http://www.capitalveneering.com.au)*