

THE FUTURE IS NOW

DEVELOPER : Longton Property Group

MAIN CONSTRUCTION COMPANY : Icon Co

ARCHITECTS : MD+A Architects and nettletontribe Architects

STRUCTURAL ENGINEER : Northop

CONSTRUCTION VALUE : \$136 million

The Avantara Residences represent the newest ‘Smart Building’ mixed use development. Comprising 328 one, two, and three bedroom apartments over two towers, each apartment has its own home automation system where residents can control lighting, open and close blinds, and a range of other features by an iPad. The project also includes two rooftop retreats with a pool, gym, BBQ areas and garden.

The Avantara Residences features 328-residential high tech apartments made up of studios, one, two, and three bedroom apartments, with access to a retail level and basement carpark.

The development is at the forefront of home automation providing residents with the latest technologies including biometrics, remote lighting and air conditioning control. The common areas spread throughout the project includes a 25m swimming pool, timber decking, seating and BBQ areas, as well as multi-purpose rooms and a gym.

The twin tower project comprising of 13 and 12-storey towers, and over two levels of parking for 485 vehicles, required careful planning during the early works. “With the basement structure constructed well below the water table, Icon Co had to provide a solution for the basement waterproofing as well as an engineered solution for dewatering during construction,” said Joanna Moore, Icon Co Executive Assistant.

Avantara’s design uses a void design, constructing ‘Streets in the Sky’ residential corridors, which were constructed top down. The corridors form an atrium, linking multiple voids, on each level to bring natural light and ventilation to the apartments. The voids allow the design to meet all necessary light and ventilation requirements, and act as part of the fire and smoke compliance measures.

EBSA provided a specialised window automation system that activates in the event of a fire. All SOU apartment windows

facing the ‘Streets in the Sky’ corridors are automated to close on a general fire alarm. At the same time, the automated roof skylights open to enable smoke to egress from the residential atrium designed corridors in a chimney like effect.

Icon Co is an award-winning company with offices in Sydney, Melbourne, Brisbane, and New Zealand. The company has extensive experience in the construction of integrated developments, with the ability to offer early contractor involvement, pre-construction partnering and joint venture contracts as well as construction management, D&C services and turnkey arrangements.

For more information contact Icon Co, Suite 3, 110 Cubitt Street, Richmond VIC 3121, phone 03 9429 6099, fax 03 9429 8022, email info@iconco.com.au, website www.iconco.com.au



Below Fresh Landscapes Group provided well thought out solutions to the landscape design for the Avantra Residences.

Fresh Landscapes Group delivered turnkey package for the outdoor areas including detailed concrete/civil works and hard landscaping items for the exciting Icon Avantra Multi Residential project in Mascot.

“The Avantra project consisted of large scale raised planter boxes constructed out of block work with rendered finish. The project consisted of a lot of mature ex ground stock. We used our relationship with the nurseries to provide quality plants to deliver the WOW factor to our client for this project,” explained Tom Kenny, Fresh Landscapes Group Project Manager. “All garden beds included detailed drainage works along bulk fill to achieve levels indicated.”

At ground floor, Fresh Landscapes Group installed the detailed concrete works including decorative exposed concrete pathways, and a large commercial driveway and crossover to tie into the existing road.

There was a strict timeline to install the driveway as the main entrance for deliveries had to be closed off. Once Fresh was handed the area of works and they completed all the services checks, Fresh Landscapes Group found that running just underneath the existing concrete were all kinds of services including Optus roughly 300mm down. A new methodology had to be under taken to complete the works, the project management team put together the new programme taking a proactive approach to overcome the delay in front of both parties. Once it was approved, all resources were assigned to complete the demolition and reinstate with out any extended time required.

A large amount of synthetic turf was also installed between the buildings, highlighting the shaped areas of the design. Artificial turf was chosen to lower maintenance and to prevent the risk of real turf suffering or struggling in the space.

These areas also needed to be wheel chair accessible, which limited the type of synthetic turf that could be used. Fresh Landscapes Group undertook extensive research to assess the suitability of a number of products narrowing the selection to two types. A lush and realistic turf was chosen, which adhered

to the accessibility requirements, and visually enhances the space.

Fresh Landscapes Group specialise in offering their clients a full turnkey scope of works. This includes civil, outdoor building/construction, design, commercial pools, hard landscaping, inhouse engineering. This allows their clients to focus on practical completion of these projects and their inhouse resources to be more efficient with their time.

With senior management having over 30 years experience, Fresh Landscapes Group have delivered on what they have promised with there clients time and time again, this has given the company the strong re-preparation in the market of being a their one landscape construction company.

Operating out of their Head office in Seven Hills, New South Wales, the company employ 90 highly skilled staff members across the construction and maintenance division in New South Wales.

Fresh Landscapes Group has a strong pipe line of tier one projects in New South Wales coming up towards the end of the year – Putney Peak development, (Frasers Group), Omnia King Cross (ProBuild/Greenland), The Finery Waterloo (Mirvac Constructions), Communities development (Lendlease).

For more information contact Fresh Landscapes Group, Unit 6, 81-83 Station Road, Seven Hills NSW 2147, phone 02 9674 5131, email admin@freshlandscapes.com.au, website www.freshlandscapes.com.au



fresh LANDSCAPES GROUP
deliver on what we promise



EBSA Pty Ltd has successfully completed one of the largest installations of window actuators, smoke control panels and roof mounted smoke hatches in Australia for the Avantra project.

The newest development showcasing 'smart' technologies, the project spans 8,762m², with 328-apartments, two buildings and a courtyard garden.

The brief initially comprised the installation of 766 CDC0252 chain actuators and 290 RZN smoke control panels which were integrated via the proprietary Adcomnet Bus System from D+H Mechatronic.

Each apartment is activated by a local smoke detector which only closes windows in the affected apartment. In addition to that a general fire alarm within either building will close all of the windows in that building. The functionality that this advanced system brought to the project allows for the building manager to access fault and alarm status for every apartment from a centrally located touchscreen.

"One of the key focus points in regards to such a large system was to ensure that it could be maintained and serviced efficiently, and our design has achieved this," EBSA Director, Chris Guy explained.

An additional component of the project saw EBSA partner with German manufacturer Lamilux to launch the PR60 Glass Roof Hatch system in Australia. This system

is certified to EN12101 and integrated perfectly into the existing solution due to the configurable Adcomnet Bus System.

"The roof hatches comprise 155 operable glass flaps weighing from 120 up to 160kg each," explained Chris. "In the event that a fire occurs, all awning windows close and cannot be reopened from within the apartment. At the same time the smoke hatches will drive open to allow the smoke to escape."

The smoke hatches alone weighed 32 tonnes and were craned onto the roof of each tower where the EBSA team set about integrating them into the project.

EBSA are a leading specialist in operable façades, automating nearly all types of windows for natural ventilation and smoke relief, as well as providing a leading range of architectural glass louvres.

"The introduction of Lamilux as an EBSA partner is great news as it adds to the quality solutions we can offer. D+H Mechatronic alone has been present in the Australian market for over 20 years and we attended their 50th birthday celebrations in Germany earlier this year," said Chris.

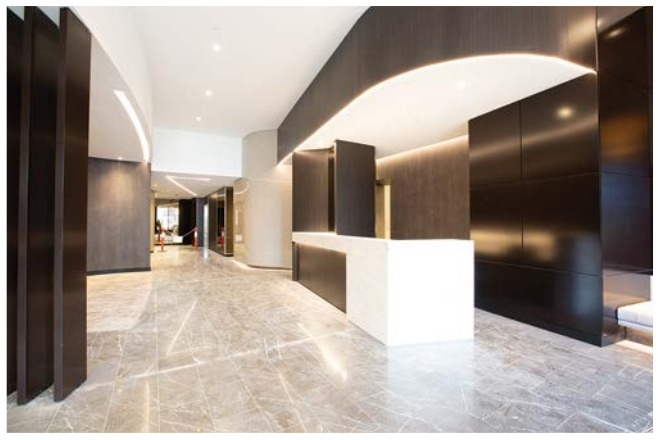
When it comes to design consultation, EBSA takes a three step approach with their consultancy service advising on sales and planning, project management and the installation and commissioning of the end products. "Our single biggest point of difference is our ability to deliver onsite. We have proven this time and again and it's the reason our clients continue to use us, Avantra is no exception," explained Chris.

Other projects by EBSA include 177 Pacific Highway in North Sydney, University of Queensland Global Change Institute, University of Tasmania IMAS, Melbourne University FABP, Monash University LTB, CSIRO Black Mountain (Canberra) as well as natural ventilation systems to over 100 other education buildings around the country.

For more information contact EBSA Australia, Unit 5/18 Hinkler Court, Hinkler Industrial Park, Brendale QLD 4500, phone 1300 327 200, email info@ebsa.com.au, website www.ebsa.com.au

Below KTL Australia helped to facilitate the transportation of international products required for the construction of the development.

Below The Avantra Residences interiors were designed thoughtfully by Archer Design to create a stylish contemporary feel.



KTL Australia coordinated the end to end logistics required for the Construction of the Avantra Residences. They used their expertise and knowledge in project management as well as construction logistics to provide a professional and seamless service.

This included liaising with overseas suppliers, international shipping, handling of Australian local customs and quarantine formalities, inventory, storage and transportation to the project site.

Established in 2008, Victorian based KTL Australia is now widely recognised across Australia as freight forwarding experts, specialising in the building and construction industry. This in turn enables KTL Australia to work directly with some of Australia's largest and most reputable construction companies.

Over the years the company has established strong relationships with suppliers of stone, tile, façade and joinery based in China, Vietnam, Malaysia and Europe.

With a team of highly trained staff who are well experienced to handle the most complex of jobs, KTL Australia is able to provide a service that is second to none.

Once engaged on a project they will be able to give advice and help streamline the logistics process.

The services offered at KTL Australia are extensive and range from full container loads, consolidation services and air cargo to and from locations across the globe.

Other specialised services include roll-on/roll-off (out of gauge shipments), interstate road or rail transport as well as coastal shipping. This enables KTL Australia to be able to service any type of request with regard to transport logistics.



For more information contact KTL Australia, 22/ 85-91 Keilor Park Drive, Tullamarine VIC 3043, phone 03 9383 9600, fax 03 9383 9601, email info@ktlaustralia.com, website www.ktlaustralia.com

Interior Architects, Archer Design were responsible for all interior architectural components throughout the residences as well as all common areas. The luxurious project features 328-apartments over two towers, and utilises the very best in home automation systems allowing residents to take total control of their environment.

For Archer Design, the project involved creating an atmosphere of glamour and sophistication. The development's one, two, and three bedroom apartments offer a sanctuary to residents, created by the monochromatic palette used throughout the development. Strategic use of marble, bronze mirror panels, timber laminates and painted, compressed fibre cement panels, are accentuated with features such as gold leaf pendant lights to create an overall tone of allure and intrigue to the two building lobbies.

Archer Design was brought onto the project during the initial stages in 2013, and have moved through all stages with ease and comfort, which Director, Richard Archer said was largely thanks to Icon Co and the developer Longton.

"Icon really did a great job in ensuring all work could be carried out efficiently without any unforeseen difficulties," explained Richard.

"Of course, a commercial project always comes with budget restrictions and in this case, the lobby areas were always understood to be important spaces, worthy of additional outlay. However, in the end it is about maximising the result within the restraints given; and at Avantra this was certainly never compromised."

Archer Design are well known for large residential work across Sydney, both private and commercial in scale. With a definite classic modern look to their designs, their approach is glamorous with an aim to create highly functional beautiful environments. Other projects by Archer Design include Bathers Cronulla North in Milson's Point and the Hyde Penthouse, Sydney CBD.

For more information contact Archer Design, Suite 35, 61 Marlborough Street, Surry Hills NSW 2010, phone 02 9698 9754, email mail@archerdesign.com.au, website www.archerdesign.com.au



Below DEDICO Development Services provided development management and project management services on the Avantra.



DEDICO Development Services deliver the complete property development package with a primary focus on residential, commercial, hotel and land subdivision projects. They have a proven track record which has won the confidence and trust of some of Australia's most successful property developers.

DEDICO's expertise has been demonstrated at the Avantra Residences project, where the company are providing development management and project management services for the Developer, Longton Property Group. DEDICO sourced and amalgamated three sites in the Mascot Town Centre Precinct, creating a development site of 8,757m² that will yield 328 residential apartments. Avantra is an exciting residential project which incorporates unique features including the integration of Longton's innovative iButler concept and home automation system.

Principal of DEDICO, John Green, said that his company was managing every step of the project, from sourcing the land through to completion settlements.

"Avantra Residences has been a very successful management project for DEDICO, but it brought a few challenges along the way. Right from the outset, securing the three blocks meant negotiating

with owners who had tenants with secure leases so we had to negotiate terminations and appropriate compensation. This was completed in a timely manner so we could proceed with the development application and the early release of works contracts."

Other challenges included negotiating building height limits and floor space footprints which were dictated by council setback controls. DEDICO's experience and planning resulted in a design with more sellable area in the development. Other developments planned on neighbouring properties which came in after the Avantra project was underway created issues like negotiating crane heights and use which had to be negotiated with the local council, the airport authorities and other developers.

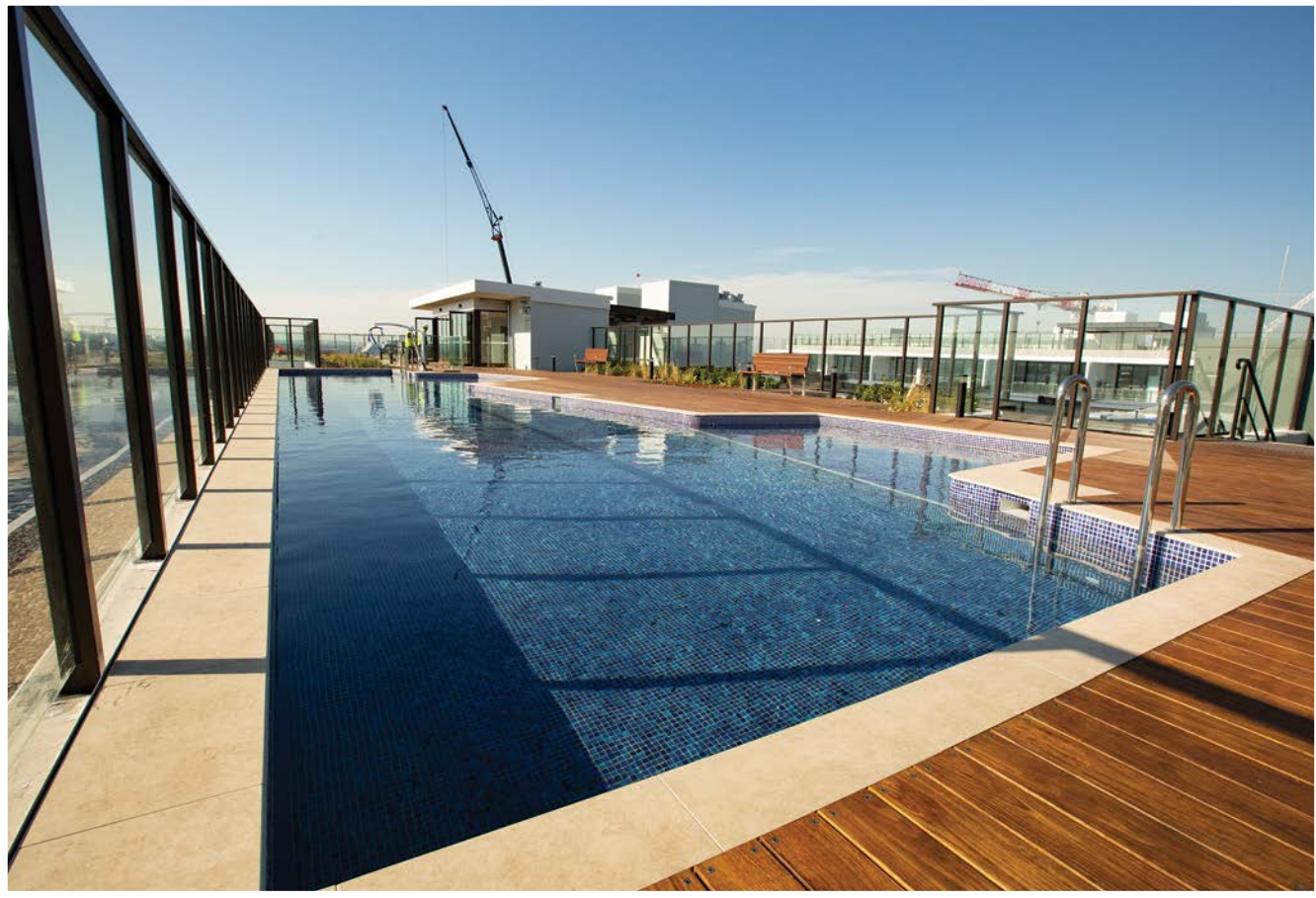
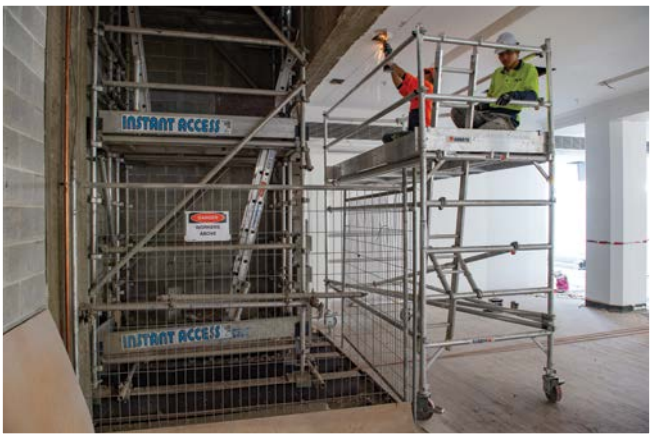
DEDICO's professional team has an unequalled skill set based on extensive experience and is dedicated to managing each project to their successful and timely completion, as it has done at Avantra Residences.

For more information contact DEDICO Development Services Pty Ltd, GPO Box 4631, Sydney NSW 2001, phone 02 8019 7475, email info@dedico.com.au, website www.dedico.com.au

Below Instant Access provided innovative cantilevered scaffolding solutions to get access hard to reach areas of the development.

EMBELTON
NOISE AND VIBRATION ISOLATION

Below Embelton supplied high quality springs to assist with vibration and acoustic issues for the pool and gym areas.



Providers of access equipment, Instant Access were asked to provide access for trades to complete finishing works to the large scale development. The Avantra Residents makes use of large light voids to let in natural light and provide access to stunning views, however this required innovative solutions to provide access to these areas.

“Scaffolds couldn’t be built from the ground up which is the usual way, instead we built and secured the scaffold outside the void and cantilevered out across the void. We then built up to reach areas required to be worked on by the trades,” explained Gareth Edwards, Scaffold Business Manager at Instant Access in Sydney.

Celebrating 50 years this year, Instant Access is a leading provider of aluminium scaffolding, mobile towers, elevated working platforms, and swing stages. Instant Access are able to provide specialised access solutions on a wide range of products. The Avantra Residences are just one example of their capabilities.

For more information contact Instant Access Australia Pty Ltd, Level 1, Unit 3, 13 South Street, Rydalmere NSW 2116, phone 1300 102 050, email info@instantaccess.com.au, website www.instantaccess.com.au



A leading supplier of noise and vibration control and timber flooring, Embelton provided a range of services to the eco-friendly, high end apartment development.

For Embelton, the contract was quite straightforward, with their concentration focused on the rooftop pool. Pools create a number of different considerations when it comes to sound travelling through a development. Vibrations are typically elevated in these kinds of structures, and Embelton worked closely with site engineers to find a solution to maximise noise reduction to the interior and exterior areas of the building.

Embelton provided their high performing 40mm deflection spring isolator system for this project not only to reduce the impact energy, but also re-radiated noise due to structure borne vibrational energy to the nearby gym and lower level residences. “The Embelton springs supplied to the Avantra pool performed their useful function in successfully reducing the noise and vibration issues typically presented in rooftop structures of this kind,” explained Bob Gibbs from Embelton.

Embelton operate a national team servicing all States and the company’s ISO 9001 accreditation provides their clients with

confidence regarding product quality and service. Trading since 1925 across two main industries; timber flooring and noise and vibration isolation, they also hold manufacture operations in cork, rubber and metals fabrication.

Specialising in design and supply solutions for both noise and vibration control as well as timber flooring, Embelton work closely with leading acoustical consultants, structural design engineers, architects, builders, and installers. Their products are found in a number of major projects across Australia, Asia and the Middle East, and with time, have built Embelton a strong reputation for quality, service and engineering innovation.

Other select projects by Embelton include Burswood Towers, Perth and Melbourne Recital Centre.

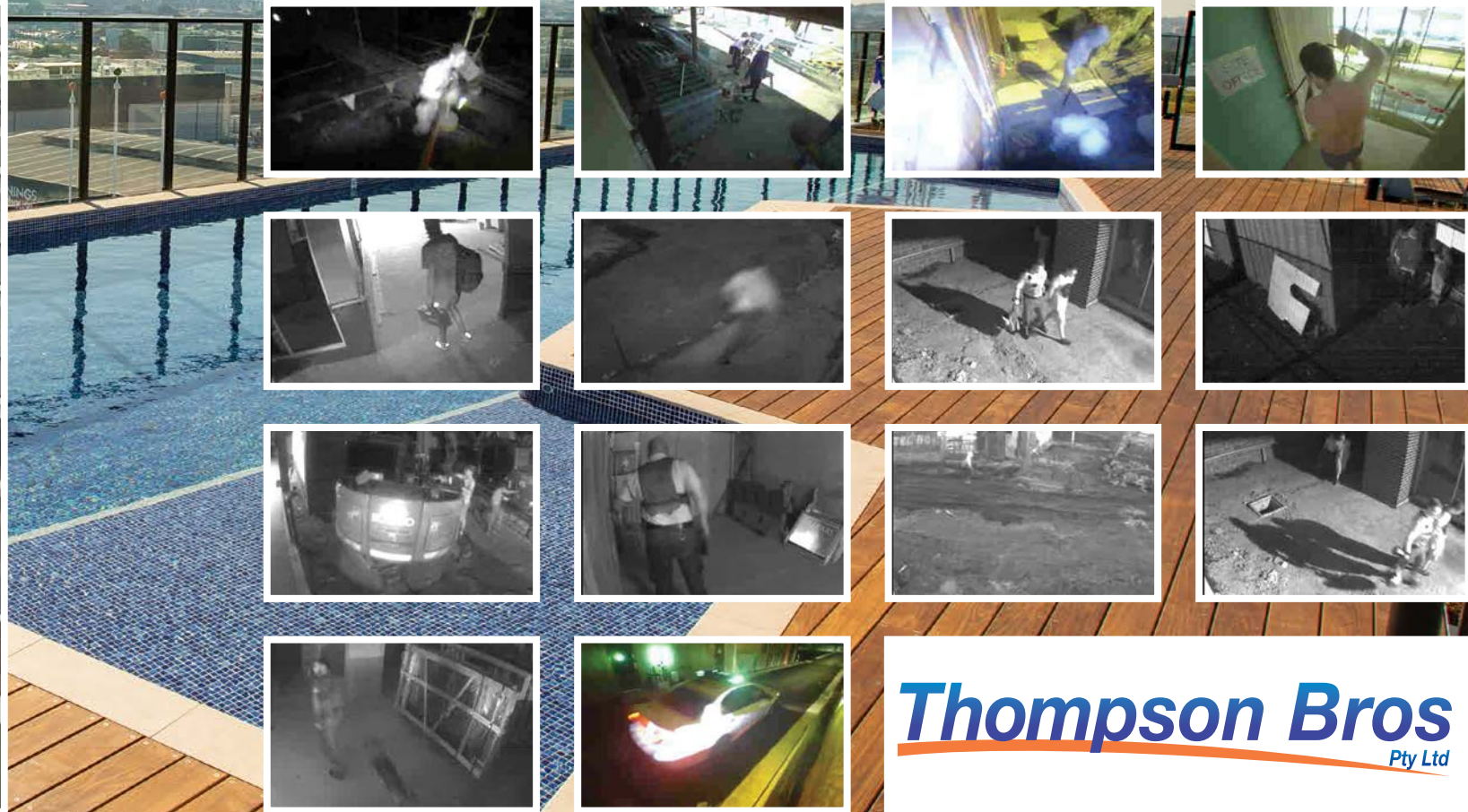


For more information Embelton, 50 Newton Road, Wetherill Park NSW 2164, phone 02 9748 3188 fax 02 9748 3122, website www.embelton.com.au

Below Checkpoint Group supplied a comprehensive custom Cygnus wireless nurse call and evacuation system for site safety during construction.



Below Thompson Bros installed a high tech video verification alarm system for site security at the Avantra Residences.



Thompson Bros
Pty Ltd

Checkpoint Group were on hand at Avantra to provide a comprehensive wireless safety system solution during construction. The project involved the development of 328-apartments across two towers covering an impressive area, with a large number of trades onsite.

For Checkpoint Group, the Cygnus wireless system supplied to Avantra’s construction site, provided a high level of sophistication to keep the site safe during construction. The system incorporated a combined first aid nurse call system and evacuation system, which ensured the safety of the workers onsite and gave the Icon Co staff the ability to evacuate the site in the event of an emergency.

The system uses a wireless mesh network technology which means no additional repeaters are required, even on very large sites. Being fully wireless and battery powered the system is modular and easy to use.

The Avantra system was supplied with two additional incident broadcast modules. The Cygnus radio voice alert module automatically broadcasts incidents as a repeating voice message over the site radios and the SMS module sends a text message to up to 10 phones.

This alerts staff with the location and type of the incident to greatly reduce response time in an emergency.

The system can also be easily interfaced with external systems with multiple inputs/outputs. Examples are monitoring critical equipment or releasing doors in an evacuation.

Checkpoint Group supply innovative safety solutions, fire protection, communication, security, access control solutions and first aid equipment. Other Cygnus projects include in Barangaroo, North West Rail Link, Ryde Gardens in New South Wales, Hobart Hospital in Tasmania, Townsville Stadium and Brisbane City Apartments in Queensland, Adelaide Airport in South Australia and Karratha Site in Western Australia.

For more information contact Checkpoint Group, 30 Faunce Street, Queanbeyan NSW 2620, phone 1800 273 473, email sales@checkpointproducts.com.au, website www.checkpointproducts.com.au

The Avantra Residences represents the latest in ‘smart building’ technologies, and every part of the construction benefited.

Thompson Bros Pty Ltd are serious about security, supplying the revolutionary video verified security system for use during the construction process.

“The system we installed at Avantra was unique and specifically designed for the construction site,” explained company Director, Paul Thompson. “We used a totally wireless back to base video alarm system which was 100% mobile.”

The product is an alarm system with video verification. If the system detects movement a 10 second video clip is sent to the control room. The video allows, the operator to determine the nature of the disturbance, such as a dog, cat or person and respond accordingly.

“Being a verified system, it meets with police response policies meaning if the clip is of a person and it is in the middle of the night, police can be called,” explained Paul. “This process of escalation in security takes place whilst the person identified hears no alarm and has no knowledge they have been spotted.”

The video alarm systems offered by Thompson Bros are the most flexible, efficient and effective means of security monitoring available to date. They provide excellent security to a work site, without causing unnecessary disturbances for false alarms.

Thompson Bros have been operating for over 11 years with a team of eight. They service the construction industry across the board from commercial work to private residential to factories. With the adaptability of their systems to change according to any site changes relatively simply and easily, they are the preferred choice for over 300 work sites across Sydney and Queensland.

For more information contact Thompson Bros Pty Ltd, 27/11 Davies Road, Padstow NSW 2211, phone 1300 501 337, email videoief@thompsonbros.com.au, website www.thompsonbros.com.au