

A LUCENT LIFESTYLE

and infinity edge pool.

The \$67 million Lucent North Sydney complex is comprised of 211 light-filled apartments with extraordinary interiors and panoramic views with resort-style facilities including a gym, rooftop garden and a stunning infinity edge pool. Inside the apartments, residents will find contemporary materials and finishes that create a home that's warm and opulent, with timeless appeal.

The Greenland Group developed and constructed the apartments with their in-house construction department providing full construction management and superintendent services.

The property group faced a number of challenges on this project, but intense planning and execution ensured a positive outcome. Challenges included the deep excavation with six levels to be dug in rock. They also worked next door to another live construction site, which made safety a high priority and consideration.

Another challenge was the lack of open space on site for storage of materials or delivery. So staging of work needed to be carefully considered throughout the project. The building looked onto the busy Pacific Highway, so all deliveries had to be coordinated through a small laneway shared with the neighbouring construction site.

In Australia, the Greenland Group has a total of 65 staff. 300 people were working on Lucent North Sydney at the peak of construction. The stunning complex was possible, and completed six-weeks early, thanks to the skilled team of planners, designers, engineers and builders.

Three exciting projects that Greenland Group are also driving in Sydney are the flagship development, Greenland Centre Sydney, which will also be Sydney's tallest residential tower once complete. The Leichhardt Green apartments are also under construction, with 287 low-rise apartments spread across five buildings. The Omnia project at Potts Point is a 135 premium apartment building that will include a supermarket and specialty retail.

Established in 1992, Greenland Group is a pioneer in China's integrated real estate market. It currently ranks 311 globally in 2016's Fortune 500 and is the fastest growing company in China and third-fastest in the world.

The company's foundations are in the real estate industry, where it employs an innovative approach and positive vision for the future. Their real estate projects are spread throughout more than 90 cities in 29 Chinese provinces, including Shanghai, Beijing, Hong Kong, Chongqing and Guangzhou.

Whilst there has been much success in China, in the past two years, Greenland Group have begun moving into international markets, making full use of their resources in China and globally. They now have a significant presence in 13 cities in nine countries and four continents, including Australia, the United States, Canada, United Kingdom,



DEVELOPER : Greenland Group MAIN CONSTRUCTION COMPANY : Richard Crookes Construction STRUCTURAL ENGINEER : M+G Consulting **CONSTRUCTION VALUE : \$67**



The \$67M Lucent North Sydney apartments are comprised of stunning features and resort style facilities. Residents enjoy state-of-the-art interiors and panoramic views, a gym, rooftop garden

Germany, Spain, South Korea, Thailand, Malaysia and Japan. Globally, Greenland Group have invested \$8 billion AUD in new overseas projects and up to \$2.6 billion AUD in Australian real estate projects, with more in the pipeline.

In 2013, Greenland Group recorded \$54US billion in income and business revenue, and total assets worth \$58US billion at the end of that year. This performance can be attributed to the company's real estate interests and development supported by its interests in related industries such as energy and finance.

Integrating the latest advances in technology, Greenland Group excels in product quality and variety. It is a leader in the development of super high-rise buildings, large urban complexes and residential developments, with an ongoing total construction area of 52 million square metres.

Greenland Group is heavily committed to fulfilling its social responsibilities. It has donated in excess of \$32US million to set up the "Greenland Charity Fund" and have launched a public welfare initiative called the "Greenland Project." The company has donated an accumulated total of \$160US million to charity and public services.

For more information contact Greenland Group Australia, Suite 201, Level 2, 233 Castlereagh Street, Sydney NSW 2000, phone 02 8262 1400, website www.greenlandaustralia.com.au/en/ australia-greenland





Orion Mechanical Services (OMS) specialise in the design and installation of air conditioning and ventilation systems for commercial, industrial and residential projects in NSW. They have extensive experience in high-end residential projects and luxury homes. They have expertise in reviewing existing complex mechanical designs and refining, improving and simplifying to the best outcome for the builder/client and long term end user.

Orion Mechanical delivers high quality results that adhere to project specifications and exceed customer expectations, resulting in a high percentage of repeat business. They pride themselves on maintaining strong relationships with some of Australia's best developers, architects and builders.

Orion Mechanical is based in the southern Sydney suburb of Alexandria. The company was established in 1999 after the company's founder, Justin Phillips identified a need and a desire to create and grow a sustainable, well-funded, experienced and professionally managed specialist air conditioning business.

Priding itself on its goal of long term sustainability Orion Mechanical invests heavily in the education and development of its direct labour force. Orion Mechanical treats its subcontractors and their employees with the same values and respect that it does its own staff and clients. This has resulted in Orion Mechanical having at its disposal an army of dependable, loyal, long term specialist sub-contractor and suppliers.

Justin has over 25 years experience in the Australian building and construction sector, and has 20 years experience in HVAC contract services. He holds a Bachelor of Building/ Science (Honours) from the University of NSW. His partner and co-founder, Louise Thurgood has over 25 years experience in large scale infrastructure projects and has held senior executive and non-executive roles in the infrastructure and finance industry.

Orion Mechanical designed and installed the air conditioning and ventilation systems for the Lucent North Sydney project. This included the water cooled air conditioning units and ventilation requirements within each apartment, the car park ventilation systems, the stair pressurisation systems, the garbage exhausts, entry lobby, concierge, gym and all other communal areas. The design includes a large open circuit condenser water system with roof mounted cooling towers; a cyclonic water filtration system; VSD driven condenser water pumps; and primary hot water plant serving all apartments. In addition, horizontal water cooled packaged air conditioning units are located above the bathroom ceilings of each apartment. To ensure that they uphold their high standards, they sourced the highest quality equipment from each product category to assemble and deliver the best system possible.

Orion Mechanical sourced and used the following: Temperzone water cooled package air conditioning units; Leasum air conditioning controls with on-board zoning; Tour and Anderson Compact-P pressure independent motorised balancing valves; BAC Cooling Towers with low noise fans; Rheem outdoor boilers; Masterflow condenser water and heating water pumps and buffer tanks; Pacific HVAC ventilation fans and attenuators; along with Elicent bathroom ventilation fans; PVC round and flat pack duct for their apartment ventilation systems; and Airfoil for all grilles and insulated plenum boxes.

Orion Mechanical used some innovative products on this project which included PVC flat pack duct for apartment horizontal discharge toilet and kitchen exhausts where there was limited ceiling space. They also designed and installed a mini BMS System to control and monitor the central condensor water plant.

The company recently finished works on the Australia Towers Stage II project for Parkview Constructions at Sydney Olympic Park (Homebush) which included 610 apartments. Current jobs include the completion of nine separate building projects at Breakfast Point also for Richard Crookes Constructions. Other current projects include Macquarie Park Village, Travelodge Mascot and Mezzo Apartments Glebe for Parkview Constructions.

"Orion Mechanical Services are proud to be associated with this project and we value our on-going relationship with quality builders like Richard Crookes Construction," Justin Phillips commented.

For more information contact Orion Mechanical Services Pty Ltd, Unit 40, 34-36 Ralph Street, Alexandria NSW 2015, phone 02 9669 1404, fax 02 9669 2404, email info@orionmechanical.com.au, website www.orionmechanical.com.au



Calibre Consulting is a professional infrastructure services firm dedicated to providing client-focused design solutions within the built environment space. Calibre Consulting provided structural and civil engineering services for this prestigious \$67 million residential development in North Sydney. Calibre worked closely with the developer Greenland Group and the contractor Richard Crookes Constructions to optimise the structure design within the overall building layout. A cost effective structure was achieved by establishing column positions to achieve efficient floor designs for structure and unit layouts, and minimise or eliminate column transfers within the tower and basement. Prefabricated wall systems using OZM walls, Dincel walls and precast walls were adopted to eliminate wall formwork and reduce construction time.

The site has a fall along both street frontages requiring close attention to coordinating the structure steps and levels with the ground floor functional layout and street levels. Calibre were involved in all stages of the project from initial concept design thru to construction and are proud to have been involved in this significant project.

With 600 staff in Australia, New Zealand and Singapore they are a 'right size' business – not too big, and not too small. Calibre businesses

provide a diverse range of services across engineering, consulting, project delivery, construction and asset management services to the resources, infrastructure and built environment sectors. They have an established platform for growth both locally and international and are a growing consultancy with offices across the Asia-Pacific region. Their portfolio of works include a full range of civil, structural and environmental engineering solutions (in all offices) as well as town planning and surveying from their Melbourne, Sydney and New Zealand offices. Calibre Consulting also offer specialist services supporting the mining and resources sector.

Exceptional performance, client satisfaction and value for money are Calibre's main business priorities. They believe the views of their clients provide insight into their service standards. They encourage their clients to tell them how they can improve. Calibre's main goal is to become a trusted advisor and leading provider of professional infrastructure services. Current works for Calibre Consulting include the York & George residential project, B1 Square and the Bay Park project.

For more information contact Calibre Consulting, Level 7, 601 Pacific Highway, St Leonards NSW 2065, phone 02 9004 8855, fax 02 9004 8858, website www.calibreconsulting.co Advance Metal Industries Australia (AMIA) have assisted their clients in Design Development of balustrades and other architectural metal works and created a niche in helping the client's vision become a tangible reality. Builders and architects can rely on the experience of the team at AMIA to create value to their project and address complex design issues.

AMIA has powder coated its manufactured products for some 30 years and offers a 15 year powder coating warranty on aluminium and was one of the first accredited through Interpon Powder Coatings to offer 10 year Steelplex and Metaplex Warranty coatings on carbon steel. These coatings were applied to another RCC Project, Building 7 University of Technology Sydney UTS.

AMIA are a family owned business, commencing operation in 1984 with two employees. Today they have 60 on their team and operate at six different sites, transporting its products and services to all parts of Australia.

For more information contact Advanced Metal Industries AustraliaTheir major commercial projects extend through Queensland and
New South Wales, with fabricated products being exported to Hong
Kong, Suzhou and Beijing in China.For more information contact Advanced Metal Industries Australia
(AMIA), 183 Orlando Street, Coffs Harbour NSW 2450,
phone 02 6652 6955, fax 02 6652 3676, email sales@amia.com.au,
website www.amia.com.au

Lead by Director Chris Hall, six employees worked on the Lucent North Sydney Project where AMIA provided glazed façade balustrades including the 55m glazed steel awning at street level. Decorative ceramic frit coatings are included on much of the balustrade and street awning glazing. This reflected the graphic detailing required by the client and consultant team.

Stainless steel and mild steel balustrades were supplied to the numerous stairwells throughout the project. Other metalwork supplied included steel sign frames and aluminium screens around the rooftop.

AMIA has created a long standing and successful relationship with Richard Crookes Constructions for more than ten years. Norwest International Hotel (Baulkham Hills) was their first project together completed 16 years ago. This is testament to the long and strong relationship developed with Richard Crookes Constructions.



Austral Precast is Australia's leading provider of structure precast concrete building solutions. All product solutions and services are available nationwide with factories located in NSW, QLD, VIC and WA.

With a staff base of around 210, Austral Precast offers a one-stop shop; from estimating services and drafting through to detailing, panel bracing, grouting, caulking and welding. Austral Precast also have a department that specialise in manufacturing and offer a wealth of knowledge and experience to their clients.

When achieving the goal of fitting within a tight installation schedule, precast concrete is an ideal choice. Because precast concrete is manufactured off site and made to client specifications, manufacture and site preparation can occur simultaneously with quick and straight forward installation. This ensures faster enclosure of the structure, minimal delay to work being carried out by other trades, and limited site congestion with no delays resulting from external weather conditions.

For the Lucent North Sydney project this meant installation on time and with minimal fuss, all under the meticulous gaze of Austral Precast's installation team. Easy and fast installation is just one of many benefits that makes precast concrete an ideal construction material and which has seen its increased use in high rise residential, commercial, and industrial construction. Along with outstanding durability resulting from the use of concrete in various densities and compositions, precast concrete is a strong, low maintenance, cost-effective material that will endure the ravages of weather, time, pollution, and other external forces with minimal degradation or damage.

Soaring elegantly skyward, with spectacular panoramic harbour and city views, Lucent is North Sydney's unique destination for luxurious residential living. These extraordinary light-filled apartments set a new standard for inspired design. With lavish resort-style facilities, a lush rooftop garden and opulent interiors and features, it's the perfect place to indulge, entertain and unwind. Austral Precast was contracted to provide the external precast concrete façade elements to Lucent Apartments eye-catching façade. Other projects Austral Precast have supplied their world-class precast concrete solutions to include Eve Apartments in Erskinville, Westfield Garden City in Brisbane, Patrick Port Botany Development, and Barangaroo Apartments.

For more information contact Austral Precast Pty Ltd, 33-41 Cowpasture Road, Wetherill Park NSW 2164, phone 1300 778 668, www.australprecast.com.au **OC Energy specialises in the implementation of Embedded Networks.** Specifically, OC Energy focuses on establishing Electrical Embedded Networks along the Eastern Seaboard of Australia. The implementation of an embedded network allows OC Energy to consistently deliver discounted electricity to customers in a way unparalleled in the market place.

Their innovative business model has also been developed to encapsulate the supply and management of Hot Water Plants and Hot Water Meters. Further to that, OC Energy also offers VLife to their clients which is an innovative unified technology platform developed for high-rise residential and commercial markets. VLife combines in-building Wi-Fi management, utility management, unified communications and connected community features. They are also capable of providing Fiber to the Property (FTTP) mandated by the NBN Rollout.

OC Energy is privately owned with offices in Sydney, Brisbane and their head office is in Melbourne. Their management team collectively boast over 100 years of experience in the provision and management of Embedded Networks with experiences in a variety of fields covering IT, legal, finance, property and engineering. The Victorian company has been in business for approximately eight years and their portfolio of work is expanding rapidly. On the recent \$67 million Lucent North Sydney project, OC Energy's National Implementation Manager, Steve Hazelwood, worked closely with the projects key stakeholders – Hugh Davidson, the Construction Manager with Greenland Group alongside the building team at Richard Crookes Construction lead by Gregg Armstrong. They were able to undertake a comprehensive assessment of the site and subsequently establish an Electrical Embedded Network.

The Energy Company manages infrastructure in excess of 100 sites across Australia. One of their recent signature projects is the Greenland Centre, which is the highest residential tower in Sydney's CBD. OC Energy pride themselves on the capacity to provide a 'big business' service while remaining focused on providing a bespoke solution to each individual Client and Developer.



For more information contact OC Energy, 636 St Kilda Road, Melbourne VIC 3004, phone 1300 494 080, fax 03 8888 7978, email info@ocenergy.com.au, website www.ocenergy.com.au



"No surprises" is how Executive Quantity Surveyor, Gary Tayfield described the Greenland project at Lucent North Sydney.

MBM worked closely with the developers, Greenland Group delivering a full quantity surveying service, including pre-contract cost advising, cost planning, value engineering, bill of quantities, tender review and post contract services with assessments of progress payments and variations.

Gary believes the project's success of the resulting quality development is due to the collaborative working relationship between Greenland and MBM. "We were really part of the team. Being included in all stages of the development meant there was a deep understanding of the client's needs. Together with our strong industry knowledge and expertise, we were able to provide tailored solutions that required little variation," Gary said.

With regular meetings and briefings at each stage from its inception to its construction, it has run very smoothly which MBM attributes to the risk management and quality assurance approach and the detailed documentation during the design phase. Gary believes that the success of the project can also be attributed to the Greenland Group's understanding of the importance of Bill of Quantities (BOQ). A BOQ ensures that the pricing and tender process is consistent and accurate and avoids potential issues during the construction phase.

The Lucent North Sydney project was led by Project Director/ Managing Director, David Madden and Executive Quantity Surveyor, Gary Tayfield and Senior Quantity Surveyor, Tony Chow and supported by a national multi-disciplinary team.

MBM is an award winning and accredited practice, originally established in 2002, as a quantity surveying firm, and has grown into a national advisory practice with over 100 staff. A values-driven business based on Precision, Integrity and Reliability, the multidisciplinary team provides innovative, tailored and optimal solutions to its public, corporate and private sector clients across Australia, PNG, New Zealand, China and Japan.

For more information MBM PL Pty Ltd, Level 7, 68 Pitt Street, Sydney NSW 2000, phone 02 9270 1000, email dm@mbmpl.com.au, website www.mbmpl.com.au

The team at ABC Boral Group have extensive knowledge and experience in sealing of all major flooring, tiling, grinding, polishing and buffing. The specialists work with all types of flooring, including marble, concrete, tiles, terrazzo, granite, sandstone and travertine along with natural stone.

The Sydney based company started trading 15 years ago and now consists of around 130 dedicated staff including; truck drivers; tilers who focus on ongoing maintenance; restorations; and refurbishments.

Being a family owned and operated business, their directors take a 'hands on' approach and often travel overseas numerous times a year to handpick their products and import them at a much cheaper rate than their competitors.

Thirty of ABC Boral's experienced staff were seconded to work on the Lucent North Sydney project, where they co-ordinated the floor and wall tiling for the bespoke luxury apartments. Their ongoing team work and professionalism ensured the best outcome for the development.

ABC Boral Group pride themselves on not only offering great service at a competitive price, but also getting the job completed on time.

Below ABC Boral Group provided tiling and floor services to the Lucent North Sydney apartments.

Their quality workmanship combined with their detailed and dedicated customer service will assist future and current clients to make the right choice for any home or company. ABC Boral don't just specialise within the commercial sector, but the residential sector as well.

All of ABC Boral's work is covered by Public Liability and Workers Compensation, providing relief for clients. Their work also meets the requirements of the OH&S and Work Cover NSW and all of their employees have completed the OH&S Green Card course as required by NSW legislation.

ABC Boral Group are currently working on a number of projects around Sydney, including the Oran Park Shopping Centre, Bupa Clemton Park and Bupa Queens Park, Cardinal Freeman Retirement Village (Ashfield), along with the Pullman Hotel (Mascot).

For more information contact ABC Boral Group Pty Ltd, 445-449 Liverpool Road, Ashfield NSW 2131, phone 02 9799 9930, fax 02 9799 7231, email admin@abcboralgroup.com.au, website www.abcboralgroup.com.au

AMA Windows + Glass Façades started back in 2005, although their industry experience dates back to the 1980s and is born of Micos Aluminium which commenced in 1958. Over the last year, they have embarked on a phase of expansion and have been awarded a number of prestigious projects in Sydney.

They are specialists in the design and manufacture of architectural commercial grade aluminium windows, doors, curtain walls, and frameless glass entries. They have a highly experienced team who are committed to producing vast products of the highest standard, and have a combined knowledge base that varies from managing multi-density/high rises to complex commercial buildings.

Fifteen skilled staff members provided both direct and indirect work on the Lucent North Sydney project where AMA Windows designed and tested a new suite specifically within a very short timeframe. The result was an exceptional looking façade that met the requirements of both the client and architect.

With over 35 full time employees, AMA Windows are one of the few
manufacturers who still have a full scale operational facility in Botany, NewFor more information contact AMA Windows + Glass Façades,
9 Byrnes Street, Botany NSW 2019, phone 02 9666 9992, fax 02 9666 9994,
email info@amawindows.com.au, website www.amawindows.com.au

WWW.ANCR.COM.AU

Lucent North Sydney, New South Wales



All AMA products are their own proprietary systems that are designed for Australian markets and are independently tested by NATA approved laboratories, with regards to wind, water, air, operating forces, acoustics and WERS.

Their in-house team tailor each project from beginning to end without any compromise to lead-time or quality. With full time QA staff overseeing the production, packing and loading of their product all the way through to its final destination, clients can be assured that they are dealing with a supplier that believes in getting it right first.

