

AN INNOVATIVE HUB

South Eveleigh is a business and technology hub consisting of nine commercial buildings surrounded by shared public spaces. Building 2, The Foundry, is a 7-storey commercial office building with ground level retail stores and a supermarket. The design of the precinct creates a place for people to connect culturally, socially and physically.

Mirvac, one of the country's foremost diversified Australian property groups, is leading the revitalisation of South Eveleigh in Sydney's inner suburb of Eveleigh. South Eveleigh is set to become a world class technology and innovation hub that will boost Sydney's position as a truly global city. The vision for South Eveleigh has been uniquely co-created by Mirvac, it's consortium partners AMP Capital, Sunsuper, Centuria Property Funds, and anchor tenant Commonwealth Bank of Australia (CBA). CBA has moved into both Building 1 (Axle) and Building 2 (The Foundry).

Mirvac's brief for The Foundry was to construct an office building that was tailor made to support the complex and dynamic needs of CBA's workforce and other future tenants of the site, as well as actively promote team engagement, collaboration and innovation. The result is a flexible workspace that brings environmental sustainability to the fore of office design.

Key to the success of this project was the integration and collaboration of all the design disciplines from the outset, including substantial input from CBA. Architects Francis-Jones Morehen Thorp and interior designers Davenport Campbell worked closely with Mirvac and CBA to design The Foundry, creating an environment reflecting a miniature city.

Hayden Callaghan, Mirvac's Project Manager, Apartments and Commercial Construction, said that Mirvac's approach to building The Foundry was highly innovative. In the initial design phase, the Mirvac project team set the challenge of moving away from traditional construction methods. Instead, they employed DfMLA (Design for Manufacture, Logistic and Assembly), a methodology for product development in which designers and manufacturing engineers work together instead of separately. Essentially, Mirvac wanted to prefabricate as much of the building offsite as they could and install pre-assembled components onsite. This approach resulted in improved worker health and safety and faster production onsite. Approximately 29% of the project value was pre-fabricated or assembled using DfMLA.

The outcome saw a traditional, reinforced concrete framed building transformed into a composite structural steel building. It is the largest steel commercial building in Australia, entirely constructed from 8,000 tonnes of structural steel procured directly from a steel fabricator. "With the use of structural steel, our waste through the construction period was significantly reduced, resulting in approximately 1,000 tonnes less waste generated onsite against the traditional forms of construction," said Hayden.

The roof is a striking feature of The Foundry and was itself pre-fabricated. It includes 22 x 9 tonne skylight modules, 2 x 65 tonne skylight modules installed by dual crane lift and six pre-fabricated curved roof features.

Additional aspects of the pre-fabricated work included 2.5km of balustrade covering the internal atrium, installed without utilising scaffolding within the atrium as edge protection. "We also prefabricated and assembled atrium switch back stairs and fire stairs. Services risers and horizontal plant room pipe work were also pre-fabricated and assembled offsite," said Hayden.

The floor plates in the building are amongst the largest in a commercial building in Australia. The ground floor plate is the biggest at just under 10,000m².

The Foundry is also targeting very high building efficiency scores with a 6 Star Green Star Base Building award, 5 Star NABERs energy and 5 Star NABERs water ratings.

Complete in June 2020, around 90 members of the Mirvac team were involved during the course of the project, with a peak of 78 during the height of construction activity. Mirvac also engaged with a number of charity, community and social enterprise groups to provide them with employment opportunities over the course of the project.

South Eveleigh by Mirvac is a place of innovation, productivity and collaboration with a strong sense of community at its heart. Centred around three buildings that deliver 180,000m² of commercial office space and 10,000m² of retail space, South Eveleigh is designed to bring a large and diverse mix of professionals, workers, students, artists, locals and visitors together in one unique location.

For more information contact Mirvac, Level 28, 200 George Street, Sydney NSW 2000, phone 02 9080 8000, fax 02 9080 8111, website www.mirvac.com

DEVELOPER : Mirvac Project Pty Ltd
MAIN CONSTRUCTION COMPANY : Mirvac Constructions Pty Ltd
TOTAL DEVELOPMENT VALUE : \$1 billion

Below Cubic were responsible for delivering the interior fitout design and installation including the ceilings, partitions, doors and hardware.

Committed to delivering excellence, Cubic Interiors proudly celebrated 25 years of service to the Australian construction industry in December 2019.

One of their latest assignments has been South Eveleigh – Building 2 The Foundry, a world class commercial office building by Mirvac and leased by CBA, with retail at ground level and spaces for cultural and social activities. Building 2 is part of the overall transformation of the old railway workshops at Redfern in inner Sydney into The Australian Technology Park, an internationally recognised centre providing a holistic approach to the commercialisation of research and development.

Cubic Interiors, renowned for delivering the most complex and challenging interior builds, was responsible for the interior fitout. This included coordination and installation of ceilings, partitions, aluminium suites, glazing, doors, hardware and access floors.

The Foundry provided Cubic with the opportunity to utilise all their professional design and construction expertise as well as the extensive experience in their ranks of over 350 team members.

Cubic undertakes each project with a wholistic approach to their design solution, incorporating products from their worldwide supply chain partners. The project allowed Cubic to showcase their capability in creating the perfect balance between form and function. Many of the main features of the building's interior demonstrate Cubic's powerful relationship with their supply chain partners, including metal ceilings from SAS international, a series of complex acoustic solutions highlighting the exposed overhead services created with CSR Martini, and free standing office pod solutions with locally procured glazed wall and door systems.

Cubic's partnership with JVP allowed the company to use GECA certified, 99% recycled, Access flooring system, throughout the development. "The access floors are Italian made and deemed the best system on the market," said Cubic CEO, Robert Migliorino.

With a dedication to offering the best products to suit any situation, Cubic developed a broad readed acoustic laminated

glass product, engineered in conjunction with Cooling Bros. A feature designed by Fitout Architect, Davenport Campbell.

Other major architectural features includes the perforated curved metal bulkheads and soffits to the glazed atrium perimeter.

"The success of this project is an example of how Cubic's self performing fitout delivery model, along with the multiple products they offer to the Australian market, truly encompasses our mastery," said Robert.

One of the distinctive features of the fitout was the foyer ceiling comprised of linear battens in a polished anodised finish which created a sense of grandeur to the main entrance of the building.

The Foundry was also the first project within Australia to create a black tiled ceiling which produces a night sky effect within the workspace.

The specifications also called for the use of Metrix perforated panels. Each individual panel had to have a unique shop drawing formulated which allowed for alignment of screws between panels. The curved panels were installed to the atrium perimeters and added a striking architectural element to the workspace.

Cubic's mission is to provide world class products and services and to deliver responsive and premium working environments. Cubic works closely with their clients to provide programme and budget certainty, with a single point of accountability and seamless teamwork.

Site Manager, Luke Kargin said that working with Mirvac on this unique project at South Eveleigh had been very positive. "Cubic's team shares pride in the outcome which provides a first class working environment."

Cubic's other recent projects include The Ribbon at Darling Harbour with Grocon and Wynyard Place with Multiplex.

For more information contact Cubic Interiors, Unit 4, 4 Avenue of the Americas, Newington NSW 2127, phone 1300 028 242, email info@cubic.com.au, website www.cubic.com.au





Below Chevalier (Aluminium Engineering) Australia designed, manufactured and installed the curtain wall, aluminium sunshades and terracotta façade.

Chevalier (Aluminium Engineering) Australia offers a complete façade solution for the construction industry. Their services encompass design, manufacture, fabrication, installation, testing and ongoing maintenance.

Chevalier had a major role to play in the design, manufacture, supply and installation of a number of external elements at South Eveleigh – Building 2 The Foundry. The Foundry is part of a significant project being built by Mirvac involving the transformation of the old Eveleigh railway yards into a world leading technology and innovation park.

Chevalier's contribution to the construction of The Foundry was the design, manufacture, supply and installation of the unitised curtain wall, aluminium sunshade, the terracotta façade and door and aluminium cladding. In keeping with the magnitude of the project, Chevalier was on the job for around two years from inception and more than 500 staff members were involved including the design team, engineering team, fabrication team and project management team.

General Manager, Vivian Leung said that Chevalier (Aluminium Engineering) Australia had an extremely talented skill base both in Australia and in their Hong Kong head office. "Sites with high technical requirements are always delicate to manage, and this is exacerbated when dealing with such a large site and a number of unexpected technical challenges. On the design side, the vertical sun shade required special focus to achieve the desired result."

The fabrication of the vertical fins was particularly demanding due to their weight and size. "The colour was also very distinctive requiring special attention. The installation of the fins demanded skill and extra care to ensure the alignment was very accurate. Our team did an excellent job."

Chevalier has a proven track record on a variety of large iconic projects. The company has been engaged on Buildings 1, 2 and 3 at the South Eveleigh and their previous completed façade work has included the Zen Apartments, Wentworth Point, the Hyatt Regency at Darling Harbour, the American Express building and the Australian Taxation Office building in Sydney's CBD.

Chevalier offers complete façade solutions from design through to installation and

maintenance services. "Our inhouse design and engineering team utilises the very latest techniques in creating building envelopes while meeting environmental and structural industry standards," said Vivian.

Chevalier set up their façade business, Chevalier (Aluminium Engineering) Limited in 1983 and their local subsidiary Chevalier (Aluminium Engineering) Australia was established in 2001 to bring the products and skills of its parent company, Chevalier International Holdings Limited, to the Australian market. The company has completed more than 650 projects in Hong Kong, Japan and South East Asia as well as Australia. They are now a leading contractor of curtain walls, metal cladding, glass walls, skylights, louvres, aluminium windows and granite cladding.

Chevalier's manufacturing plant is located in Dongguan, China. The plant has been in operation since 1988 producing a range of engineering and structural building products. State-of-the-art curtain wall fabrication equipment is used to ensure all quality requirements and delivery schedules are met. Chevalier is committed to achieving the highest standards required by clients through close supervision and strict quality control. They also maintain the highest standards of safety for its workforce and other stakeholders.

The financial strength of Chevalier is evidenced by their public listing on the Hong Kong Stock Exchange. They have over 10,000 employees across their subsidiaries and associated companies throughout China, south east Asia, Japan, Canada, USA and Australia.

Chevalier's research and development team ensures that the company is at the forefront of innovative design, manufacturing and installation methods. "The building industry is changing at a rapid rate as it strives to meet environmental sustainability targets, new industry standards on the use of safe building materials and cost effectiveness. Chevalier (Aluminium Engineering) Australia is equipped to meet all these targets on behalf of their clients and to deliver excellence in quality," said Vivian.

For more information contact Chevalier (Aluminium Engineering) Australia, Suite 1603, 109 Pitt Street, NSW 2000, phone 02 9232 3189, email info@chevalier.com, website www.chevalier.com

Below ABS Façade delivered a complete cladding package for The Foundry, incorporating non-combustible, high performance materials.

ABS Façade is an award-winning leader in the supply, fabrication and installation of architectural façades for the commercial building industry. Headquartered in the Australian Capital Territory with offices in Queensland, Victoria, South Australia, Western Australia and Sydney, ABS Façade is ideally placed to service construction companies nationwide. Their proud record includes iconic façade installation at projects ranging from the Australian National University Union Court to St Vincent's Private Hospital in Sydney.

ABS Façade was chosen by project coordinators, Mirvac for the main foyer glazing and retail shopfront elements on Building 2. The custom designed façade includes large format glazing, revolving doors, triangulated cladding and automated frameless glass louvres. "The chosen materials are designed to optimise thermal comfort, energy and visual light transmission performance," said Senior Project Manager, John Myers.

ABS Façade began planning for the project in March 2019 and work onsite commenced in June. Completion was in April 2020. "At the peak of activity we had 16 of our team onsite. On the technical management side we usually had around three people on the project."

A key factor in the smooth running of the project from ABS Façade's perspective was Mirvac's support and cooperation. "We have a great relationship with Mirvac and the professional manner in which they managed the site and all the contractors engaged on the project made it an enjoyable experience," John said. "We were able to move our team and materials around the site with minimal disruption."

Bespoke façades always have inherent challenges. The Foundry façade was relatively simple in design but was labour intensive to install. The company has delivered more unusual and technically difficult projects but nevertheless it was the experience and skill of the ABS Façade team and support from the Mirvac project team which ensured all aspects of the job from design through the fabrication stage and on to installation went as planned.

"Although the facade elements were assembled in situ, to meet the schedule, ABS Façade maximised the use of their prefabrication facility, allowing for maximum offsite work before materials were delivered to the site and installed," said John.

ABS Façade not only fabricates and installs facades on new builds, but also provides a valuable service rectifying existing façades, particularly where unsafe materials require removal and replacement. Over many years of experience in the façade industry, ABS Façade has developed innovative and practical approaches to façade installation and rectification services.

"We use the latest cutting edge design, engineering and fabrication technologies in our factory at Hume in the Australian Capital Territory," said John. "We combine that with detailed and effective client consultation. We aim to minimise time spent onsite through best practice training and equipment use, thereby reducing completion times, reducing costs and maximising safety outcomes."

For more information contact ABS Façade, 2 McManus Street, McMahon's Point NSW 2060, phone 0417 984 607, email enquiries.nsw@absfacade.com.au, website www.absfacade.com.au



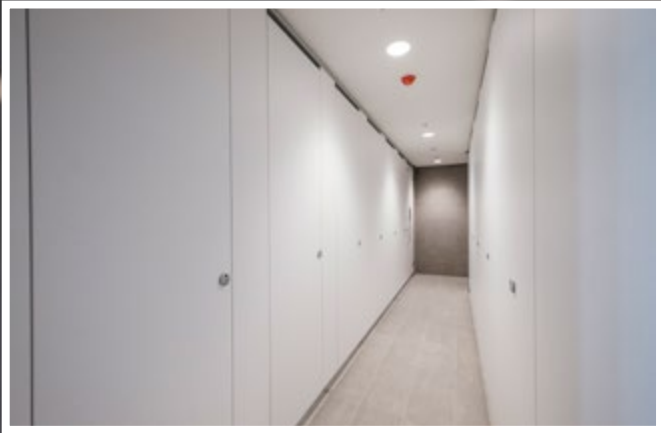


South Eveleigh – Building 2 The Foundry, New South Wales

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Below Structural Steel Group installed around 8,500 tonnes of structural steel for the The Foundry.

Below Toilet Partition Industries P/L completed the non-standard floor-to-ceiling partitions and accessories.



Structural Steel Group is a leading specialist in the design, manufacture and installation of steel structures with an unequalled knowledge of steel's capabilities and qualities as a building material. The company has won numerous major contracts with Tier 1 and 2 builders.

Mirvac contracted Structural Steel Group to handle all the steel installation at The Foundry at South Eveleigh. CBA will be the anchor tenant in the park which is set to become a world class technology and innovation hub.

Managing Director of Structural Steel Group, Mark Sgaravizzi, said the steel was manufactured in China and Structural Steel was responsible for the erection of the steel onsite. "Our design team did make an input to the final design to assist the speed of the erection process. This did make a positive impact during construction."

The total weight of the steel components was around 8,500 tonnes. The installation team from Structural Steel Group assembled major components onsite and lifted each of the large modules into place in one lift. "This had major benefits from a safety perspective," said Mark.

A major challenge was the main skylight on the roof which required considerable planning to lift it into place. The lift was successfully achieved using two 50 tonne tower cranes.

Structural Steel Group has a focus on large projects for which they has both the knowledge and capacity to achieve an outstanding result. "Our experienced team utilises the latest 3D modelling technology and CNC processing to produce a high quality, cost effective fabricated steel product," said Mark. "Backing them up are our skilled trades who sand blast, paint and do the final on site installation. We provide a complete service so that our client builders can concentrate on the other tasks in the construction timeline."

Major projects by the Group have included the Overseas Passenger Terminal at Circular Quay and the Western Sydney Stadium.

For more information contact Structural Steel Group, 9 Kialba Road, Campbelltown NSW 2560, phone 02 4627 0060, email inquiries@structuralgrp.com.au, website www.structuralgrp.com.au

Renowned as an industry leading specialist in the manufacture and installation of commercial toilet partitions, wet area joinery and accessories, Toilet Partition Industries P/L (TPI) has a superior range of products with a project history which includes the Sydney Opera House, Australia Square, MLC Centre, Barangaroo Tower 1 and Governor Phillip Tower. TPI is often the company of choice for toilet and shower partitions by major construction companies on the Australian east coast.

Mirvac selected TPI to manufacture and install special architect designed toilet and shower partitions for Building 2 at the South Eveleigh development, The Foundry. One of two buildings to form a state-of-the-art campus for 10,000 staff of the CBA, the 7-storey building with retail shops on the ground floor and vaulted roof required 60 cubicles on each floor.

TPI's CEO Mark Bush, said that the partitions were non-standard design as they were all floor-to-ceiling, almost like separate rooms, providing security and privacy. "In addition, the design of the partitions required them to be secret fixed into the wall as opposed to the usual method of fixing with aluminium angles screwed to the wall. Twelve of our most skillful team members assembled

and completed the installation onsite after the partitions were manufactured in our Condell Park facility."

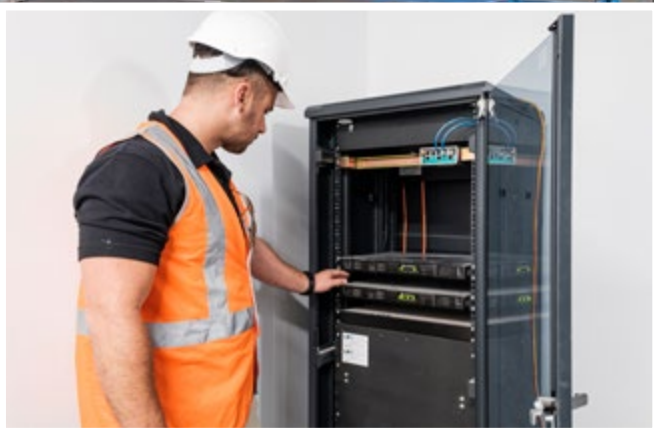
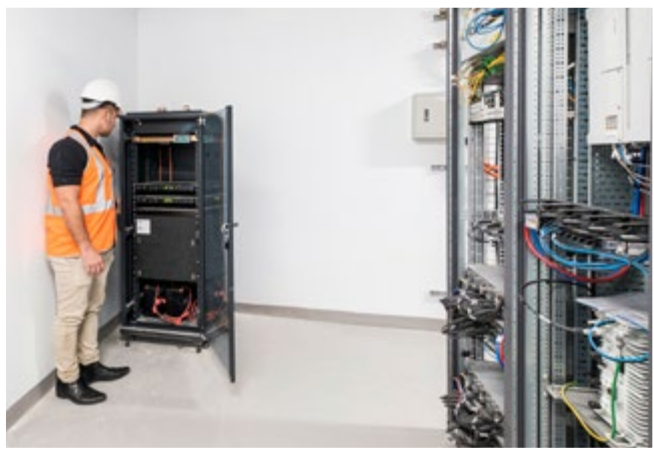
TPI also provided the accessories for the partitions including hand rails in the ambulant toilets, toilet roll holders and end-of-trip facilities.

TPI and Mirvac have a very good working relationship based on excellent communication. "This was a great project on which to partner with Mirvac and it was rewarding to achieve the concepts and designs requested by the architects," said Mark. "Toilet Partition Industries P/L have been honoured to work on this project with the skillful team at Mirvac."

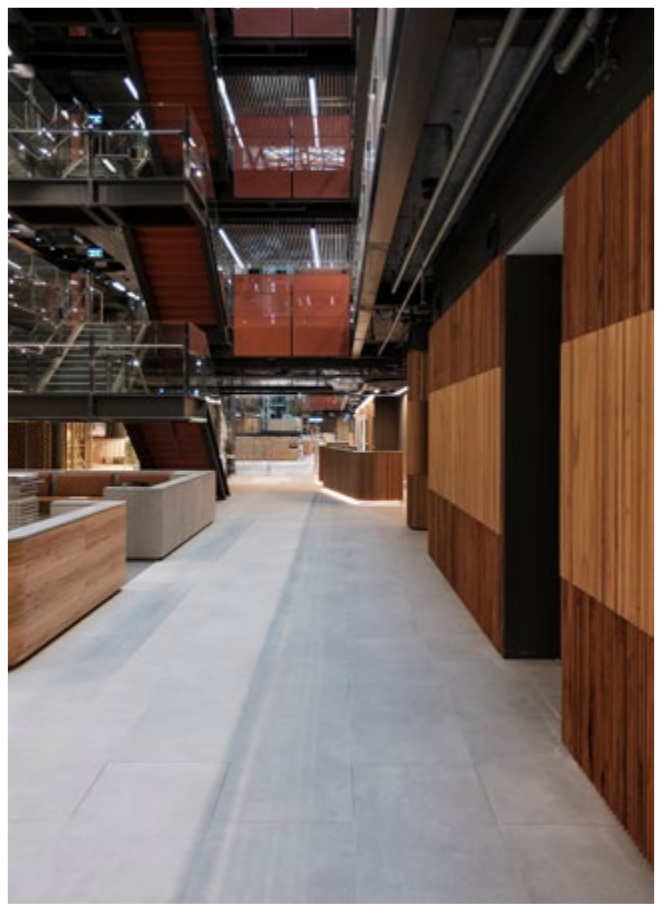
TPI has been in the business for 23 years and has a team of 42 people who can provide a large range of standard or bespoke toilet partitioning for any project, both new builds and refurbishments.

For more information contact Toilet Partition Industries, 123 Eldridge Road, Condell Park NSW 2200, phone 02 9709 6501, email info@tpi.net.au, website www.tpi.net.au

Below BTW Communications installed a MOTOTRBO Capacity Plus two-way radio system in The Foundry.



Below Nash Group supplied and installed the upper ground floor tiling and porcelain tiles throughout the amenities.



BTW Communications is a highly regarded two-way radio communications specialist, with almost 30 years experience in delivering the latest technology for both permanent integrated installations and hire services for sporting events, concerts and other temporary functions. An award-winning Motorola Solutions platinum partner, BTW Communications was engaged on the South Eveleigh – Building 2 The Foundry to provide an integrated two-way radio system for future use by the security departments of tenants CBA and Mirvac.

BTW Technician, Julian Vella said that BTW Communications installed a MOTOTRBO Capacity Plus two-way radio system. “The system was hard wired into the building with two repeaters connected with tuning equipment in a dedicated room. An antenna was installed on the roof.”

The installation was seamless using up to six of the 30 strong BTW Communications team. The only slight delay was a result of finding an antenna design that satisfied the design of the building.

BTW Communications will be providing ongoing back up service to CBA and Mirvac for the system, including rapid critical service responses and solutions to keep the network operational if repair is needed.

BTW Communications has offices in Sydney, Canberra, and Wollongong providing responsive and high quality servicing to their clients, both those with permanent installations or those on short term or long term equipment hiring.

The two-way radio systems provided by BTW create operational efficiency while improving safety and security. Innovative customised solutions can be devised to aid all business requirements, including radio hire, sales, system design, installation, maintenance services or technical support.

BTW Communications regularly services events at the Regatta Centre in Penrith with hire equipment. They are also installing major radio systems for Lendlease at Sydney Metro Martin Place and the Australian Racing Drivers’ Club at Eastern Creek. The versatility of the company’s services is demonstrated by the installation of a large system at a substantial agricultural enterprise in south west New South Wales.

For more information contact BTW Communications, 6 Production Place, Sydney NSW 2750, phone 1800 896 929, email sales@btw.com.au, website www.btw.com.au

Nash Group has a well deserved reputation for the highest quality tile and stonework, delivered to budget and on schedule. Mirvac selected the Nash Group for tiling and paving at Building 2 called The Foundry, one of three buildings being constructed at South Eveleigh as part of the Australian Technology Park. Buildings 1 and 2 are occupied by 10,000 CBA staff.

Working consistently between February 2019 and April 2020, Nash Group had 20 employees engaged at peak times. An extensive area required the supply and installation of porcelain tiles, which included all amenities, the upper ground special CBA floor tiling, the foyer lobby and lift cars. Nash Group also supplied and installed granite pavers to the upper ground level and Level 5. Custom stairs were also tiled in the foyer and the area called the locomotive entry.

“Quality management was the biggest challenge on the project,” said Project Coordinator, DJ Huh. “We ensured we had zero defects to the satisfaction of Mirvac. This is always our objective on any project.”

Large floor areas were also challenging. “The upper ground level required around 3,000m² of large format tiles measuring 1200mm x 600mm in a brick pattern,” said DJ. “Our skilled tiling team had to take

account of surface flatness with the large format tiles to make sure there were no lipping problems.”

As well as their work with Australia’s major construction companies, the Nash Group also supplies tile and stone to the public through their stunning purpose built Nash Tiles showroom in Condell Park, Sydney. The Nash Group sources an extensive range of quality stone and tiles from Australia and around the world from which clients can choose.

The Nash Group’s past projects include basalt cladding on the Western Sydney University Clinical School and the Westfield development in Sydney’s CBD. Currently the company is working on the South Eveleigh Building 4.

For more information contact Nash Group, 58 Harley Crescent, Condell Park NSW 2200, phone 02 9792 7608, email info@nashgroup.com.au, website www.nashgroup.com.au



South Eveleigh – Building 2 The Foundry, New South Wales