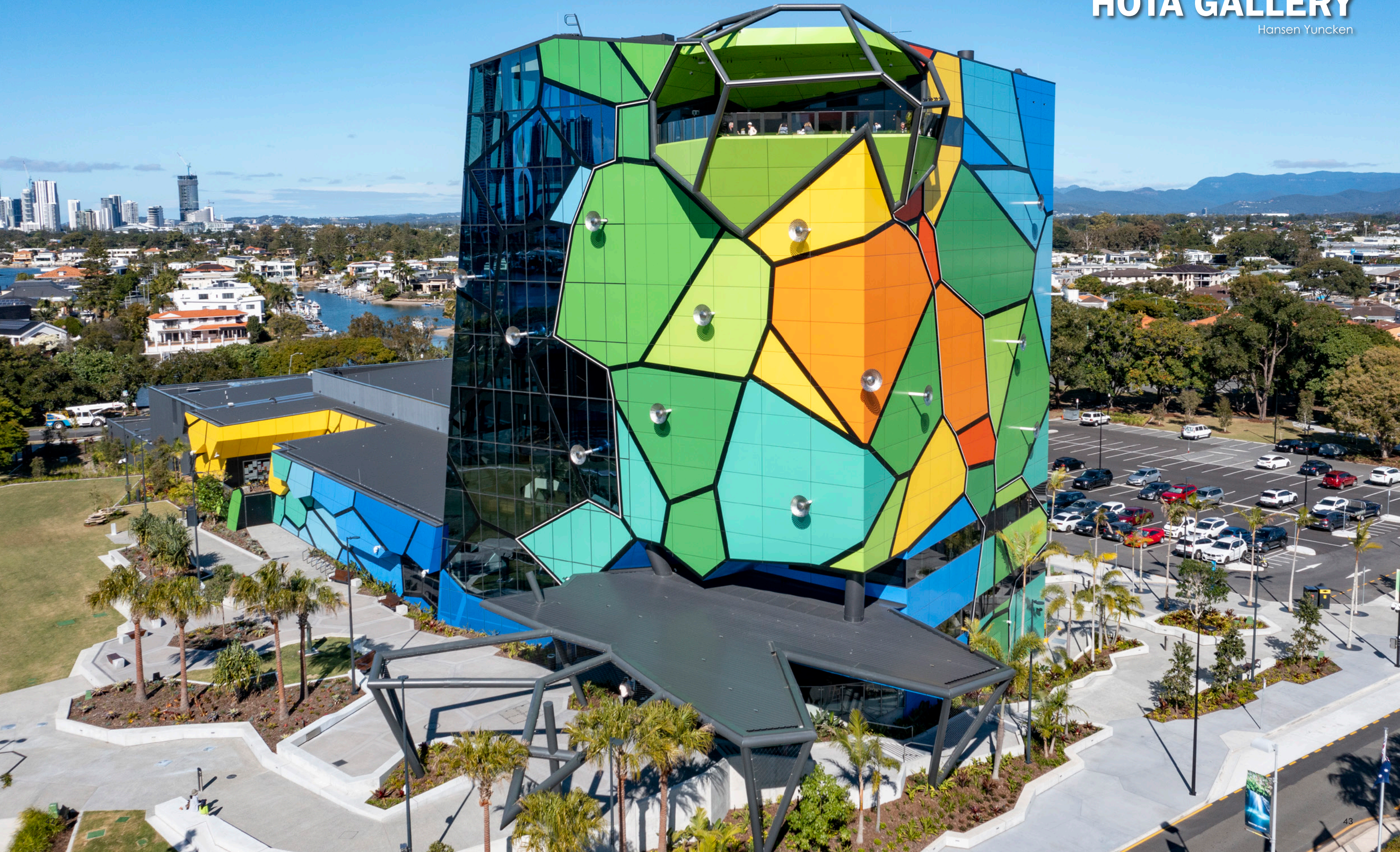


QLD PROJECT FEATURE
HOME OF THE ARTS
HOTA GALLERY

Hansen Yuncken



HOME OF THE ARTS

DEVELOPER : City of Gold Coast
MAIN CONSTRUCTION COMPANY : Hansen Yuncken
ARCHITECT : ARM
STRUCTURAL ENGINEER : ARUP
CONSTRUCTION VALUE : \$60.5 million



The HOTA (Home of the Arts) Art Gallery spans 7-levels and is the largest public gallery outside a capital city with over 2,000m² of international standard exhibition space which includes a main exhibition gallery, a dedicated children's gallery, exhibition space for temporary exhibitions, and nearly 1,000m² of collection storage.

Hansen Yuncken is one of Australia's most accomplished builders, with over a century of service and thousands of projects completed. Hansen Yuncken was engaged by the City of Gold Coast to commence the first stage of the 2-stage Managing Contractor delivery method for the \$60.5 million Home of the Arts (HOTA) Gallery located at Surfers Paradise.

The HOTA Gallery forms part of the City of Gold Coast's transformational Cultural Precinct Development and will host Australian and internationally recognised exhibitions.

The planning for the construction of the remarkable building commenced in late 2018, based on a concept design from an international competition held in 2012-13. The HOTA precinct and new Gallery were to be unified visually by the dynamic, organic cellular structure of the Voronoi, nature's most robust but delicate pattern. The colours for the building follow the palette from the William Robinson painting, 'The Rainforest', one of the most valued paintings in the City's collection.

Hansen Yuncken worked collaboratively with project stakeholders to develop the design from the original concept to a detailed set of project plan documents. "Hansen Yuncken's wide experience was vital in this process to ensure the incorporation of critical elements such as buildability, construction methodologies, cost planning and value management," said Project Manager, Rod Derbyshire.

The final agreed design included a main exhibition gallery of 1,000m², a collections store of 1,000m² to house the art work when not on show, three galleries for exhibitions, artists' workshop, childrens' gallery, two restaurants, an elaborate feature stair allowing the public to walk between galleries while taking in the views of Surfers Paradise, administration and back of house spaces and extensive hard and soft landscaping.

A full BIM process was adopted which was completed to LOD400. Hansen Yuncken's BIM management team assisted the process and although being very demanding, resulted in the team being able to resolve many

challenges posed by the complex geometry and interface between several different materials and façade systems, and the need to maintain critical clear heights in gallery spaces while ensuring the layout of services was aesthetically pleasing even though many were exposed.

Construction commenced in late April 2019. Notable challenges included the erection of the feature stair that weaved the tower from the ground floor to the rooftop bar, the erection of the roof pop out structure and the implementation and commissioning of the critical AAA services, including temperature and humidity control systems.

The unique pop-out structure involved extensive planning. The CHS prefabricated steel members were erected in three large sections in the fabricator's Brisbane yard to ensure tolerances and setout, then disassembled into 18 prefabricated sections that were transported to site and erected.

The sequence of installation was carefully planned and the erection included 13 full penetration butt welds, each taking 1 to 1.5 days to complete. The members were lifted into position, landing on the temporary propping and cradles, then held in position by the crane until temporary brackets were secured between members and a series of tack welds completed. The crane could then move onto the next member while the butt weld process could begin.

The building was handed over in February 2021 providing the Gallery with three months to prepare for the opening exhibition in May 2021. Hansen Yuncken was proud to have been associated with the iconic building, with the high quality of spaces evident both within and outside the Gallery including superb landscaping. The HOTA Gallery adds another significant project to Hansen Yuncken's impressive portfolio in the Australian cultural sector.

For more information contact Hansen Yuncken, Level 1, 639 Wickham Street, Fortitude Valley QLD 4006, phone 07 3872 4000, email brisbane@hansenyuncken.com.au, website www.hansenyuncken.com.au

Below Dexion Hendra designed, engineered, manufactured and installed sliding art storage racks for the gallery.

Photo supplied by HOTA Home of the Arts



The name Dexion is well known throughout Australia for their expertise in quality storage solutions including pallet racking and shelving.

Hansen Yuncken and the HOTA Gallery turned to Dexion Hendra to provide specialist sliding racks for the storage of valuable artworks at the HOTA Gallery. This major project was undertaken by 16 team members at Dexion Hendra, with the design, engineering, manufacture and installation of the sliding art storage racks taking the team six months to complete.

“The racks are a unique storage product, designed and engineered exclusively to the client’s specifications. The racks enable Gallery staff to securely store and then access individual art works, with the manually controlled sliding mechanism providing smooth and easy movement with excellent safety attributes,” explained Glenn Thomas, General Manager.

The racks have a durable steel construction. The double faced, woven steel mesh design allows the Gallery staff to hang artwork on both sides of the rack without interference. The mesh is flush with the posts allowing a totally flexible arrangement.

The other unique feature of the project is that the Dexion Hendra sliding art storage racks are the largest of their kind ever made. “Our team thrives on a new challenge. It was exciting to be part of the HOTA project, designing specialty racks that will facilitate the protection and efficient handling of valuable art pieces. The quality of construction means that they will be part of the HOTA Gallery for decades.”

Dexion Hendra is no stranger to providing local government and community art galleries with storage solutions. Similar projects have been undertaken for Brisbane City Council, Moreton Bay Regional Council, Redlands City Council and the Winton Art Gallery.

The Dexion art storage is a particularly practical product with an emphasis on the effective use of space with many options available to suit the specific needs of each individual client, making it a popular choice for galleries and other clients throughout Australia.

The mobile art rack delivers an almost limitless hanging arrangement while ensuring only one access aisle is needed. This storage system also offers greater capacity, with double sided mesh screens that are flush to the art rack frame.

The range of industrial, commercial and office storage solutions provided by Dexion Hendra is almost without limit and includes selective pallet racking, drive-in pallet racking, shuttle racking, cantilever racking and double deep racking. Dexion Hendra can also supply warehouse relocation services, rack safety audits and office furniture.

Dexion can assist clients to narrow down the most appropriate storage and racking solution for their needs. “With so many options available, we can provide a consultancy and design service to ensure the most appropriate, cost effective solution is recommended to clients to improve materials handling and supply chain performance, while providing protection of assets,” explained Glenn.

All Dexion Hendra products are built to the highest standards. Racking is made from high grade steel and the range of commercial products such as Compactus®, lockers and filing cabinets are cleverly designed and built with durability.

Warehouse automation incorporating the latest in conveyor technology is also a Dexion Hendra speciality. “We have the know-how and experience to deliver seamless, integrated solutions that incorporate the latest in world class machinery to ensure warehouse operations

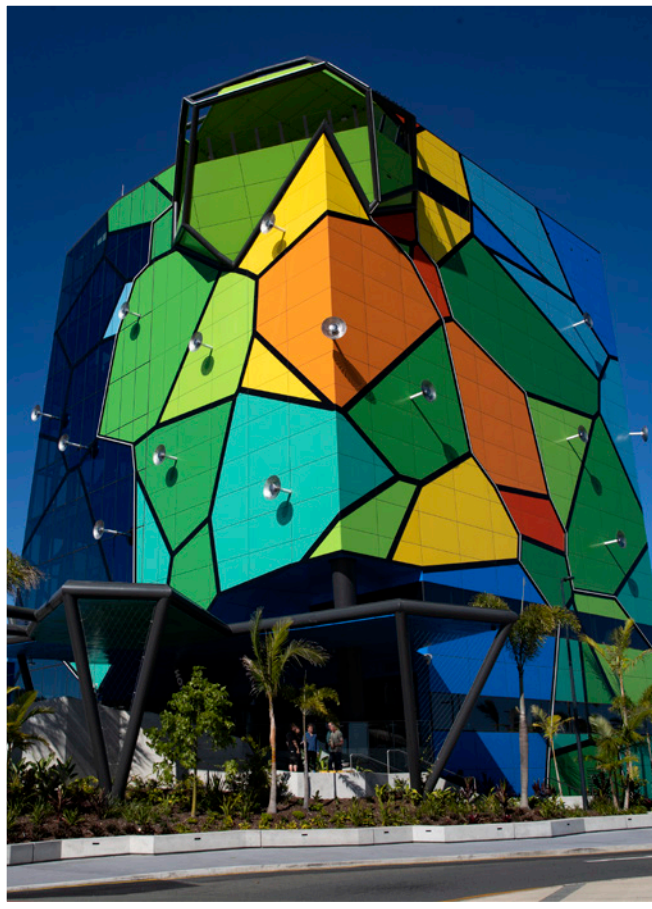
are streamlined and competitive,” Glenn said. “For companies with a national footprint, the Dexion Australia group has supply centres across the country so supplies of parts and service are readily available.”

Dexion Hendra, as part of the Dexion Storage Solutions Group, is the progressive, customer focussed supplier for companies in Brisbane and throughout greater Queensland and all of Australia, seeking innovative and cost effective storage solutions.

For more information contact Dexion Hendra, 370 Nudgee Road, Hendra QLD 4011, phone 07 3332 0222, email sales@dexionhendra.com.au, website www.dexionhendra.com.au

Below Aodeli Australia supplied SAP 3mm solid aluminium panels made from 5052 marine grade aluminium for the stunning façade.

Below Cladding Creations shaped, bent and routed at the aluminium panels to create the cellular-web appearance of the façade.



The stunning façade of the HOTA Gallery in Surfers Paradise has been constructed using high grade, fire safe SAP aluminium panels supplied by locally based Aodeli Australia, a leading supplier of aluminium architectural cladding solutions which meet Australian Standard AS1530.1 for non-combustibility.

The preferred product solution for the exterior cladding was Aodeli's SAP 3mm solid aluminium panel made from 5052 marine grade aluminium. These premium quality panels are a proven fire safe solution as well as being resistant to the Gold Coast's climatic conditions.

The unique design of the Gallery required 11 separate custom matched colours for the panels as chosen by the project architects, ARM Architecture to achieve their iconic design. Accomplishing the high specification colour matching is a particular capability of Aodeli.

"We were able to translate the architect's vision into reality with exact colour matches, with each panel having a consistent, seamless colour application through our coil coating process," said Wayne Saunders, General Manager of Aodeli Australia.

The Aodeli SAP aluminium panels were cut and bent to the required sizes to create the distinctive cellular Voronoi design by Cladding Creations, another local company.

The HOTA Gallery will be an iconic part of the Gold Coast landscape for decades to come, so the choice of 5052 marine grade aluminium ensures greater longevity compared to lesser grade aluminium panels. "We only offer 5052 grade alloys at Aodeli because of our commitment to quality and sustainability," Wayne said. "These panels combined with the use of the superior three coat PVDF Kynar 500 paint technology provides first class protection against weathering, aging and pollution."

Aodeli Australia is a relatively small but growing manufacturer and was proud to be associated with this significant local project. Other projects include Monterey Apartments at Kangaroo Point, Australia's tallest residential timber tower, where Aodeli's solid and perforated panels form part of the façade. Aodeli also offers façade recladding solutions and recently completed the recladding of the Cairns Hospital.

For more information contact Aodeli Australia, phone 1300 263 354, email admin@aodeli.com.au, website www.aodeli.com.au

Cladding Creations is an industry leader in the design, supply, fabrication and installation of architectural façade systems. The complex exterior design of HOTA Gallery features a Voronoi pattern, providing a cellular-web appearance over-laid with individual solid aluminium panels in 11 custom colours. The SAP 3mm 5052 marine grade aluminium panels, custom colour matched, were supplied by Aodeli Australia.

The individual panels were shaped, bent and routed at the Cladding Creations' Burleigh Heads manufacturing plant, which is equipped with the latest 3D software and CNC technology to undertake the most intricate designs.

"The most interesting feature of the façade that we had to deal with was the black band which separated the different coloured panels and was designed to be 10mm proud of the panels," said Damian Popovic, Director of Cladding Creations. "Once manufactured, the band and panels were mechanically fixed to the aluminium sub-frame, with the panels strengthened by aluminium stiffeners and structural silicone."

Cladding Creations were involved on the project for around seven months, with up to 15 experienced employees including the Project

Manager engaged on the installation. "We were continually in communication with ARUP façade engineering team and Hansen Yuncken during installation to ensure all design specifications were met and any design issues resolved. It was a successful project for Cladding Creations and we were proud to be part of it."

Cladding Creations has also installed 4,000m² of Aodeli's SAP solid aluminium panels and perforated screens on the timber-structured Monterey Apartments at Brisbane's Kangaroo Point.

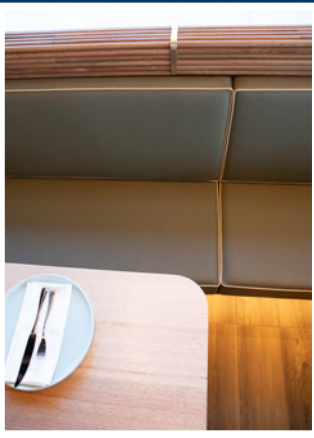
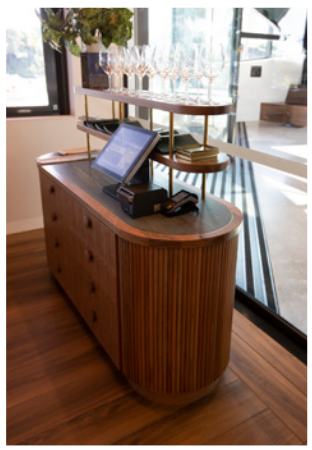
For more information contact Cladding Creations, 7/11 Taree Street, Burleigh Heads QLD 4220, phone 1800 432 223, email info@claddingcreations.com.au, website www.claddingcreations.com.au



Below Soil Surveys Engineering undertook geotechnical investigations on the site to provide design parameters for the buildings foundations.



Below Brisbane Joinery and Shopfitters fabricated and installed all joinery work at HOTA, including restaurant furniture and bathroom infinity mirrors.



Soil Surveys Engineering is a leading geotechnical engineering consultancy based in Brisbane and the Gold Coast. The company’s wide experience and professional skills have played a pivotal role in the construction of the HOTA Gallery located in Surfers Paradise and the prior development of the wider cultural precinct, including the Green Bridge from the HOTA site to Chevron Island and the outdoor amphitheatre and stage.

Engaged by Hansen Yuncken for the Gallery project, Soil Surveys undertook geotechnical investigations in early 2018, drilling deep boreholes up to 40m in depth. The site profile was found to consist of various alluvial deposits to depths exceeding 20m before rock was encountered. With this information, Soils Surveys was able to provide design parameters that were ultimately utilised by the structural designers to arrive at a deep foundation solution incorporating CFA (continuous flight auger) piles.

During construction, Soil Surveys Engineering undertook an audit role of earthworks and provided design and certification of a working platform for the CFA piling rig. A 120 tonne piling rig applied operational loads of up to 350kPa, requiring design of a substantial construction platform. Soil Surveys were able to demonstrate time

and cost savings for the project by utilising existing in situ materials, reducing the requirement for imported fill.

The company dealt with a range of challenges during their extensive involvement with the development of the HOTA cultural precinct and Gallery, including working in an operating public space. “Providing safe areas for large construction equipment and communicating effectively with multiple consultants and contractors was also a priority,” said Nathan Brooking, Gold Coast Engineering Manager for Soils Surveys.

Soil Surveys’ client base is extensive, ranging from large multinational organisations to small companies in both the public and private sectors. “We provide a superior geotechnical service of real practical value for our clients,” Nathan said. “Our designs and reports are a combination of high technical merit and workable solutions.”

For more information contact Soil Surveys Engineering, Level 2, 19 Finchley Street, Milton QLD 4064, phone 07 3369 6000, email info@soilsurveys.com.au, website www.soilsurveys.com.au

Brisbane Joinery and Shopfitting, an accomplished team of professionals with an impressive portfolio of quality work, fabricated and installed all joinery work at HOTA.

The extensive scope of the joinery work at the Gallery included all office cabinetry, reception desks, the joinery for the childrens’ workshop, the restaurant fitouts on the ground floor and Level 5 and sophisticated finishes in the bathrooms including cabinets with mirror doors, brass shelves and large infinity mirrors with brass floor to ceiling supports.

“The detail in the restaurants included solid timber slabs for bar tops, waiter stations, credenzas, a gantry above the bar with brass features, granite stone backs to the bars for bottle displays, booths with leather upholstery and outdoor banquet seating including mobile seats totally upholstered,” said Chad Chemali, Project Manager.

Spotted gum was used for the joinery and gallery furniture, which was fabricated offsite when possible however around 50% of the work involved fitting and installation onsite. “We had a team of up to six of our team working either at the factory or onsite throughout our nine month engagement at the Gallery,” Chad said.

A sister company of Brisbane Joinery, Staintec, provided all the stainless steel for the two restaurants, including kitchen benchtops, ice wells and in other sections of the bars.

Brisbane Joinery specialises in one off projects with distinctive architectural features requiring skill and precision. Around Brisbane, the company’s work can be seen at Blackbird Bar and Grill, Eagle Street, Gerard’s Bistro and Bar 11 in Fortitude Valley, IRIS rooftop bar for Hotel X, and they have also built multiple Oscar Oscar Hair Salons across Australia.

For more information contact Brisbane Joinery and Shopfitting, 59 Dunn Road, Rocklea QLD 4106, phone 07 3276 8975, email chad@brisjoinery.com.au, website www.brisjoinery.com.au

Below SPL Security Solutions completed the door hardware supply and bespoke electronic lock installation across the HOTA Gallery.

Below HOTA features a SafeScape S9000 side coiling fire shutter with an integrated egress door installed by Greene Fire.



SPL Security Solutions protects businesses, assets and people through state-of-the-art mechanical and electronic locking solutions, backed by outstanding customer service from their 100+ strong team. Working with Hansen Yuncken, SPL completed the door hardware supply and bespoke electronic lock installation at the impressive HOTA Gallery on the Gold Coast.

Specific items supplied by SPL included door hardware, sanitary ware and electromagnetic locks. The company’s project team and specialist locksmiths, under the leadership of Thao Valitutti, worked collaboratively and creatively with Hansen Yuncken, their subcontractors and the architect to meet the design and high technical specifications demanded in the unique HOTA Gallery building.

“We project managed Hansen Yuncken’s site requirements as well as ensuring the supply of compliant, high quality dormakaba hardware according to the construction schedule,” said Greg Noble, Architectural Manager.

SPL Security Solutions overcame several challenges presented by the project, from providing onsite design and functional advice to meet

changing construction needs, through to installing electromagnets to secure enormous 10m high sliding doors.

Specialising in the provision of mechanical and electronic hardware, access control solutions and locksmithing services across south-east Queensland and northern New South Wales, SPL is ideally positioned to provide fast, efficient and effective security solutions.

SPL include the design and installation of bespoke restricted keying systems, automatic door operators, mechanical door hardware for all door types, the supply and installation of hotel locking, access control systems and CCTV.

SPL is currently working at Ocean by Meriton and Jewel Residences at Surfers Paradise, Destination Gold Coast at Broadbeach, the refurbishment of the Gabba, Tricare Ashgrove Residential Aged Care development and various fitouts including Rio Tinto at the Midtown Building in Brisbane’s CBD.

For more information contact SPL Security Solutions, 101 Ashmore Road, Bundall QLD 4217, phone 07 5588 8111, email info@spl.com.au, website www.splsecurity.com.au

Greene Fire installed the first SafeScape S9000 side coiling fire shutter with an integrated egress door in Australia, in the HOTA Gallery, representing world class fire safety technology.

Produced by McKeon in the United States, the S9000 was the ideal solution for the HOTA Gallery, with the side coiling system providing emergency egress where conventional swinging doors would not provide an adequate design solution. “All the housing for the S9000 is to one side so it does not intrude on the aesthetics of the building and its architectural features, as it is virtually invisible,” Karl Pettit, New South Wales and Queensland State Manager for Greene Fire.

The built-in egress door is fully compliant with fire standards and leads occupants to a safe fire exit door. Another advantage of the SafeScape S9000 is that its basic design means that it only takes a couple of days for two people to install it.

“The side coiling design with inbuilt egress doors makes the S9000 the perfect solution for cross-corridor situations in schools or hospitals. They have also been widely installed overseas in casinos, convention centres, museums, railway stations and retail spaces where there are area Fire separations required, occupancy separations and elevator

lobby separations. It is also ideal where there is restricted headroom, as the head track assembly is able to navigate around tight curves and contoured openings.”

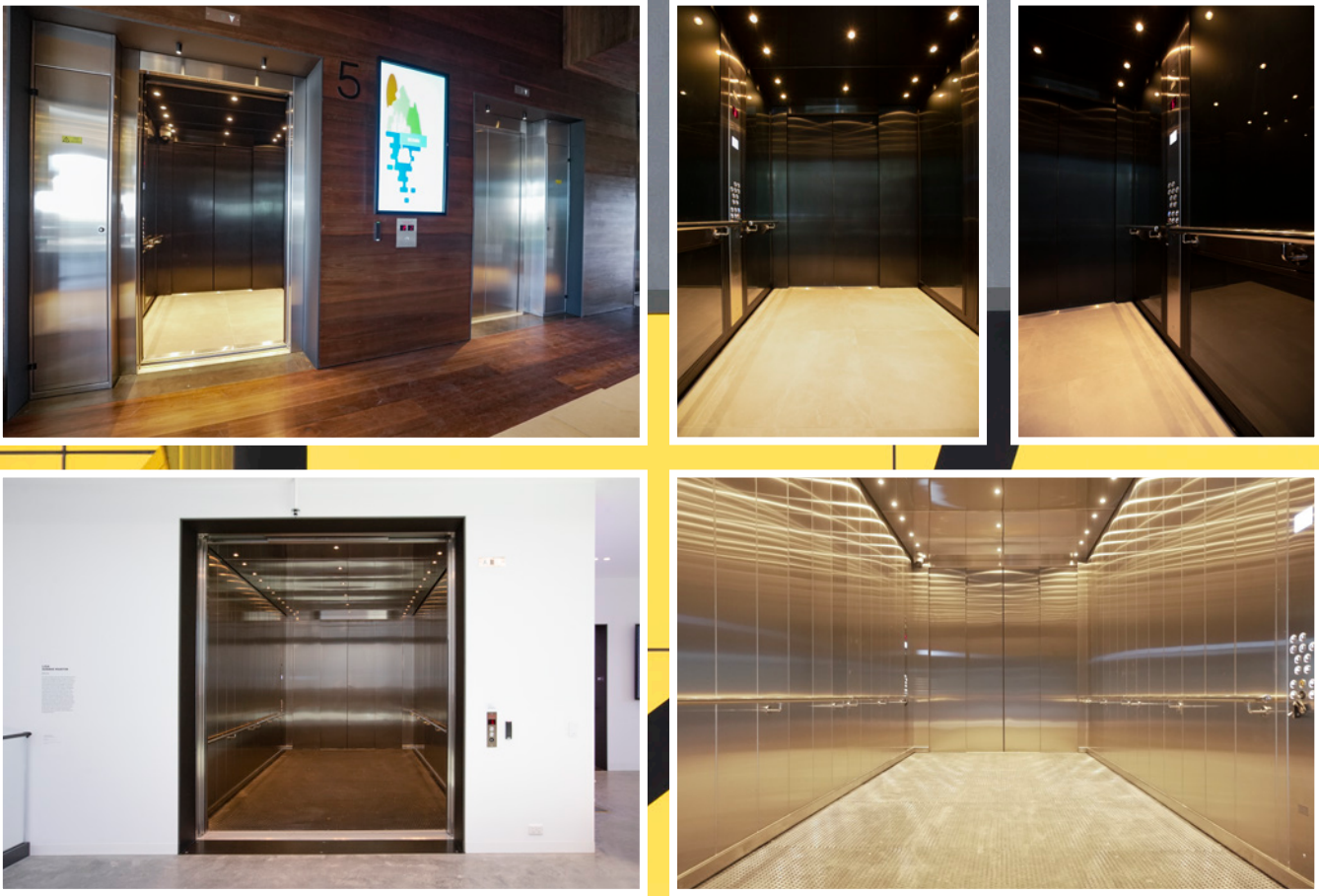
Greene Fire is the distributor for McKeon Door, the only manufacturer in the world to offer standard swing egress doors in their fire rated wide span opening protectives. With offices in Sydney and Melbourne, Greene Fire can deliver a range of compliant products for fire engineered solutions, like the SafeScape S9000.

Currently, Greene Fire is undertaking projects at the Quay Quarter Tower and the Sydney Metro.

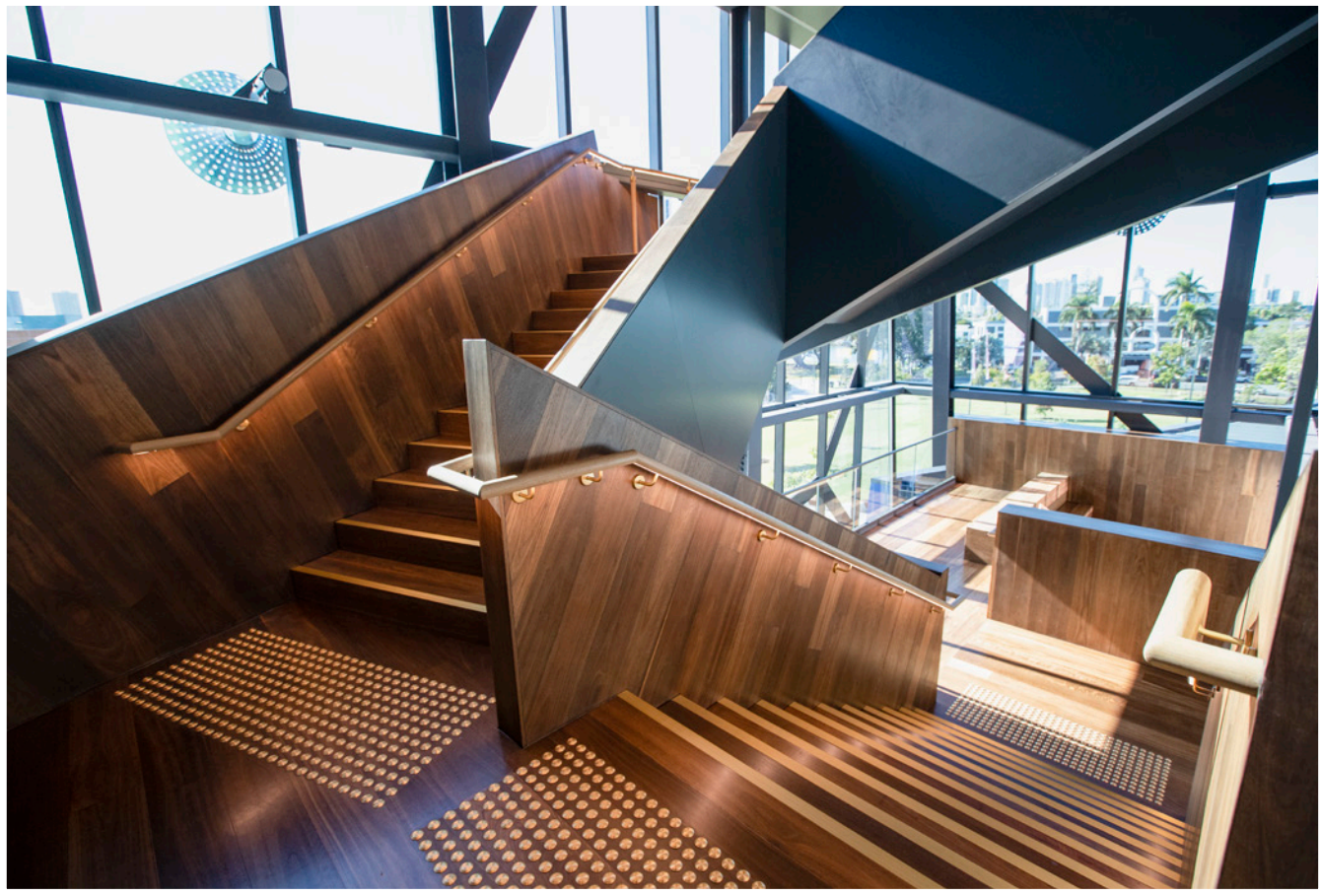
For more information contact Greene Fire, Unit 2/7-11 Parraweena Road, Taren Point NSW 2229, phone 02 9526 3100, email sales@greenefire.com.au, website www.greenefire.com.au



Below KLEEMANN Elevators Australia designed, manufactured and installed all the unique lifts required for the gallery.



Below Custom Timber Flooring installed the stunning thermally modified hardwood across the project, including on the stairs, flooring and ceiling.



KLEEMANN Elevators Australia, a leading lift, escalator and moving walkway specialist, was appointed by Hansen Yuncken to design, manufacture and install the lift requirements in the impressive HOTA Gallery on the Gold Coast.

Three lifts were required in the building to move people and goods between 7-floors. Two lifts were reserved for passengers and one was specifically designed as a goods lift with a number of unique features. The Gallery had a requirement for a 3m high door opening on the goods lift and the capability to lift 9 tonnes.

“The Gallery will be exhibiting large art pieces so needs the capacity to move the pieces within the Gallery without being limited by the size and lifting capability of the goods elevator. KLEEMANN is the only company able to manufacture to the door height specification which is unusually high. We used an overhead traction lift mechanism to ensure the heavy lifting capacity could be met,” said Matt Halim, Queensland Regional Manager.

KLEEMANN’s design team worked closely with the Gallery’s architects and builder Hansen Yuncken to ensure all the unique specifications were met. “We will also be continuing our association

with the installed lifts on an ongoing basis through our service team, to ensure maximum performance and reliability, with a minimum of down time,” said Matt said.

KLEEMANN Elevators Australia is currently manufacturing and installing unique lift solutions for Rockhampton Art Gallery and has also recently completed other large and complex installations, like the 12 escalators, passenger and goods lifts at Market Square Sunnybank. KLEEMANN has also been a major supplier to the Queensland Department of Education and for many years.

As part of the global KLEEMANN Group, KLEEMANN Elevators Australia leverages pioneering research, state-of-the-art design and inhouse manufacturing excellence; to deliver exceptional equipment solutions and service outcomes for thier customers.

For more information contact KLEEMANN Elevators Australia, Unit D2, 5 Grevillea Place, Brisbane Airport QLD 4008, phone 07 3103 0611, email info@kleemannlifts.com.au, website www.kleemannlifts.com

HOTA takes advantage of Custom Timber Flooring’s experience in creating amazing spaces with natural timber. Using an Australian hardwood product, Hurford’s Roasted Peat supplied by Hurford Flooring, timber is featured throughout the galleriing, with its inclusion on the floors, stairs and ceilings.

“The total area covered was approximately 3,000m²,” said Michael Young, Director. “Our team of five floor professionals completed the entire job in under five months. The work included laying and fixing the tongue and groove boards, followed by sanding and an application of an alcohol-based sealer with a water-based finishing oil as a final coat.”

Hurford’s Roasted is a high temperature thermally modified hardwood that uses a custom designed heating programme to alter the woods molecular structure. This has many benefits that include locking in the colour, increasing the durability and limiting movement to a fraction of normal kiln dried flooring. “The finished timber had a deep rich tone and provided a luxurious appearance, adding to the ambience of the Gallery for visitors,” Michael said.

Apart from their commercial assignments, a large part of Custom Timber Flooring’s work is in the high end residential sector in

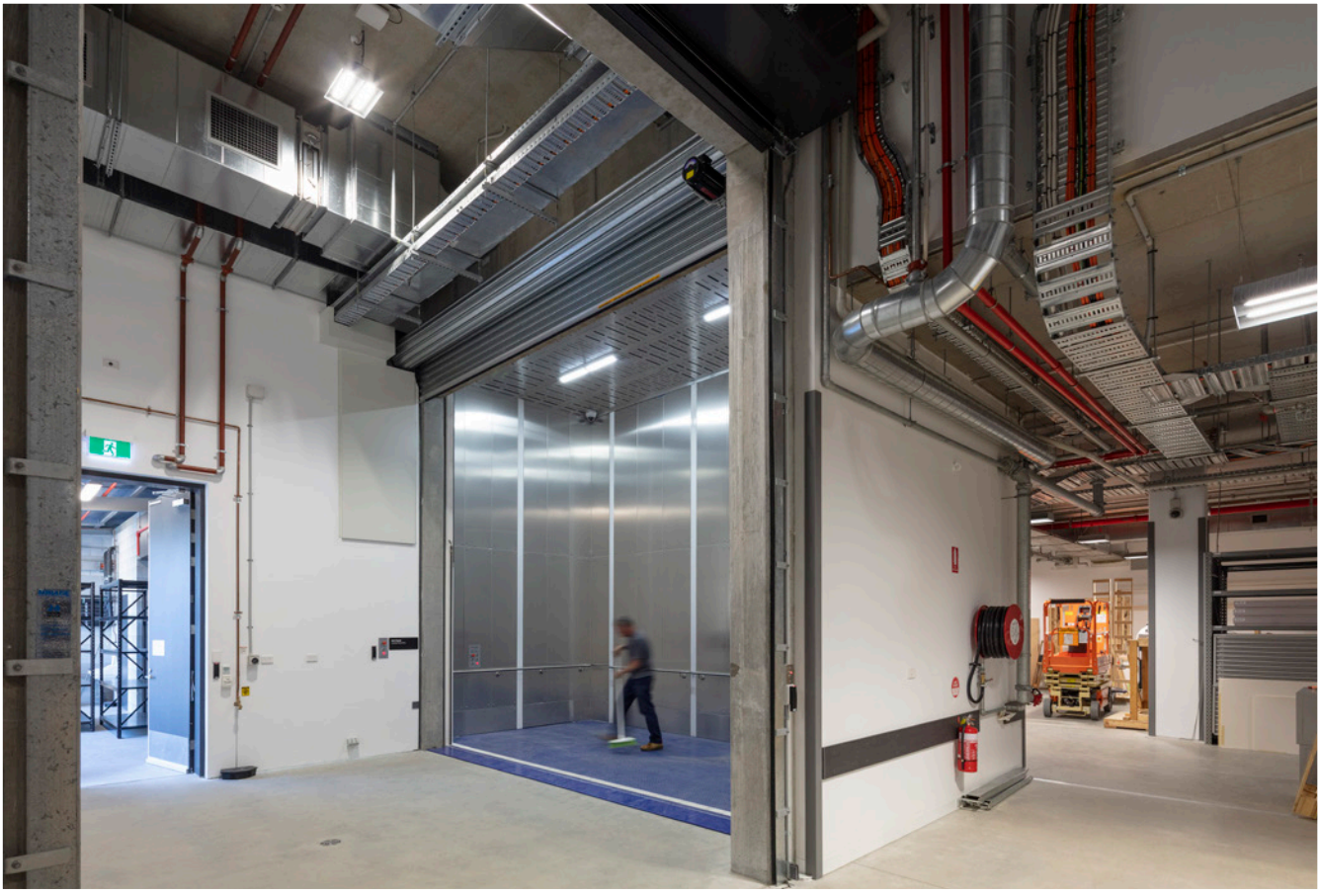
south-east Queensland where they undertake all aspects of plank timber flooring, parquetry timber flooring, custom stairs and feature walls and ceilings. “We are tongue and groove specialists, particularly in solid European oak flooring. At the present time we are laying this product in a \$6 million private residence on the Gold Coast.”



For more information contact Custom Timber Flooring, phone 0488 346 327, email customtimberflooring@gmail.com

Below Southwell Lifts and Hoists created a custom scissor art hoist with a 5 tonne capacity and a 5.9m x 2.9m platform.

Below Dewpoint Group installed and commissioned an Air Handling Unit which serves the entire gallery space.



The newly completed HOTA Gallery required a custom designed hoist to assist in the movement of the gallery’s iconic pieces. Southwell Lifts and Hoists, based in Camden in south-west Sydney designed, manufactured and installed the bespoke scissor art hoist with a 5 tonne capacity and a 5.9m x 2.9m platform.

The particular challenge in designing and installing the art hoist at the HOTA Gallery was that the walls on the hoist were specified at 5m high. Due to the size and complexity of the project, most of the company’s 23-strong workshop team were involved as well as the engineering design team, multiple draftsmen, the factory manager, the project manager and installations team.

COVID-19 posed extra difficulties as the whole project was carried out during the lockdown period.

“The special art hoist is a totally Australian made product,” said Hamish McGregor, General Manager of Southwell Lifts and Hoists. “Our factories at Camden and Smeaton Grange can provide lifts and hoists anywhere in Australia and New Zealand. We also provide after sales service to all our customers, ensuring the longevity of our products and minimising down times.

“One of our 25 tonne truck lifts in the Melbourne Art Gallery has been operating for 30 years and is continuing to provide valuable service,” said Hamish.

Southwell Lifts and Hoists was established as a family-run business in 1945 and brings their 76 years of experience in mechanical and electrical engineering to the design, manufacture, installation and servicing of speciality lifts and hoists including ground support equipment for the airline industry, goods lifts for the self-storage industry, car lifts with turntables and one-off lifting applications.

Southwell Lifts and Hoists currently has 67 projects underway around Australia and New Zealand, including a custom triple scissor art hoist for the Sydney Modern Art Gallery with a 9 tonne capacity travelling 9.5m.

For more information contact Southwell Lifts and Hoists, 36 Edward Street, Camden NSW 2570, phone 02 4655 7007, email sales@southwell.com.au, website www.southwell.com.au

Hansen Yuncken engaged Dewpoint Group to work on the new build of ‘Home of The Arts’ on the Gold Coast as Dewpoint are recognised as an industry leader in design, installation and maintenance of air conditioning mechanical services. The business operates out of Brisbane and Sydney.

HOTA is a state-of-the-art, complex project that had to navigate significant challenges including maintaining strict temperature and humidity criteria, within AAA rated spaces, to allow the display/storage of significant artworks. The building was completed successfully and was opened in May.

The construction has a vertical format gallery over 6-levels and over 1,000m² of AAA rated control exhibition space.

As part of the works, the team installed and commissioned four pipe air cooled chillers which provides simultaneous heating and cooling helping to reduce the energy typically used in a AAA rated building.

The entire Dewpoint team consisted of approximately 30 skilled tradesmen which worked in conjunction with thier design and project team to deliver this outstanding project. This completion was a great

addition to Dewpoint Groups portfolio, who’s specialist capabilities range across commercial, hospital, laboratory, university, leisure and defence sectors.



For more information contact Dewpoint Group, 24 Webster Road, Stafford, QLD 4053, phone 07 3352 4446, email reception@dewpointgroup.com.au