

RYDGES LANDS AT SYDNEY INTERNATIONAL AIRPORT

Lipman Pty Ltd were appointed as design & construct contractors for Rydges' 4 ½ star hotel

D&C CONTRACTORS : Lipman Pty Ltd
CLIENT : Denwol Group Pty Ltd and Sydney International Airport Hotel P/L
PROJECT MANAGER : Construction Assignments
ARCHITECT : Allen Jack + Cottier
STRUCTURAL ENGINEERS : B.G. & E.
INTERIORS : WMK Architecture
PROJECT END VALUE : \$79,000,000
COMPLETION : 6th May 2013



One of the latest new buildings to grace the Sydney skyline is the new Rydges International Airport Hotel.

The hotel consists of 318 rooms, a bar, a restaurant and gymnasium. International travellers have been looking for a quality hotel that is close to the arrival and departure terminals for a long time and this development caters for them perfectly. The building's location is immediately across the road from the terminal and within minutes of waking up passengers can be at their departure gates. Rydges Hotels have already received a high demand for room occupancy, the hotel will be a very valuable business proposition.

Lipman Pty Ltd was appointed by the developers as the Design & Construction Contractors for the project. Their appointment began at the very early preliminary cost planning stages, even before designs were prepared. Together with the Client and Project Manager a full financial feasibility and budget was established, then Lipman appointed AJ+C Architects and the other consultants. The design was proven up after various alternative architectural layouts, structural systems and façade systems were investigated and costed.

Paul Edwards, Construction Manager at Lipman said the project was well within the company's capabilities and it was through the co-ordinated efforts of all the parties involved that a solution which exceed the client's expectations in both cost and design was achieved.

"We were acutely aware that this was a four and a half star project, so the end result needed to be without fault in terms of structural integrity, fit, finish, quality and cost", Paul said. "We also commissioned Simons Green Energy to provide co-generation systems for emergency power and hot water together with other features that provided the hotel with a green cost effective solution and a low carbon output".

Construction began on 23rd February 2012 with an initial sod turning ceremony by the Minister for Tourism, George Souris and was completed on 6th May 2013. Due to ongoing and collaborative relationships, the facility opened for trade three months prior to the original planned opening date.

Lipman Pty Ltd has had more than forty seven years extensive experience in the construction of new and refurbished buildings in the Sydney region. The scale over these years has ranged from the Northpoint building in North Sydney to numerous commercial office buildings, hospitality, education, health, industrial and retail projects. Some current projects include Wet 'n' Wild, a \$30m Early Learning Centre at the University of Wollongong, the University of Technology Sydney Rowing Club at Haberfield and a \$40 million Aged Care Facility at Castle Hill.

An underlying commitment of Lipman that was established by Phillip Lipman when he started the company back in 1966 was to be a co-operative contractor. Providing a team based approach with a positive attitude to each project is fundamental to the performance on every project.

One core value of all projects completed by Lipman are that they are defect free at completion.

The Sydney International Airport Hotel has opened its doors to a 80 room occupancy on its first night with over 1,200 bookings in the first week. A success for everyone involved.

For more information contact Lipman Pty Ltd, Level 6, 66 Berry Street, North Sydney, NSW, 2060, phone 9955 7000, fax 9955 3166 or website www.lipman.com.au.



ENSURING THE SYDNEY AIRPORT RYDGES HOTEL IS AS UNIQUE AS THE CITY IT RESIDES IN

With a reputable brand such as Rydges Hotels involved, the building owners, Denwol, were sure to engage an architectural firm that were up to the task of delivering a design that was in keeping with the current Rydges brand style whilst still pushing the brand forward.

WMK Architecture, who recently underwent a brand realignment in order to best service their ever-growing client list, were commissioned by Denwol to provide a complete interior design solution. John Andreas, Director at WMK Architecture, said that the project was a great addition to their portfolio, but didn't present any challenge that wasn't within the organisations capabilities. "We worked on the look, feel and finish of each individual room, as well as foyers, bars, the restaurant and the conference room," John said.

As with any large development that is erected in the ever-decreasing vacant land around the Sydney vicinity, physical size was an issue. "Each room could only be 24m² so we had strict guidelines to work with whilst still needing to offer the end user maximum space and natural light," John said. Creating a room with a generous and spacious feel in a footprint of just 24m² may seem like a difficult task to most of us, but the previous experience in larger developments such as the Shangri-La Hotel and a number of developments in both commercial and residential fields ensured that WMK had the skill set required to undertake the project.

"Being based at Sydney airport, the aim of the project was to come up with an end result that was truly international," John said. "Thousands of people transition through Sydney Airport on any given day from many cultures right around the globe, and many will be using the Rydges hotel to rest up before moving on, so we were aiming to represent the brand in a truly global and multicultural way."

The \$68 million development that features 317 rooms, a gym, a bar and a restaurant is rated at four stars and will offer travellers the first taste of onsite accommodation. "The design is very much about convenience, with the site located directly adjacent to the international terminal so passengers can walk directly to or from check-in," John said. "The interior design strategy thematically draws from elements of aircraft and a quintessential Sydney vibe. We have aimed to offer a cool and calming environment that is a counterpoint to the long haul flights that many of the customers may have just come off or be going to."

With WMK Architecture working on the interior design of the project Denwol, and ultimately Rydges, were able to gain maximum commercial efficiency in order to minimise spend and maximise results. "A big part of any project is the bottom line," John said. "Our holistic approach allowed us to take on the project as one complete unit, minimise costs and ensure the best value for the client right from the word go. Our trans-disciplinary teams have been able to deliver a coherent brand message that is uniquely Rydges right throughout the building, ensuring the end result is a unique space that people can enjoy, rather than just another piece of the built environment."

With WMK Architecture currently undertaking a range of new and exciting projects that include The Quay Apartments in the Chinatown precinct, there's no doubt they're changing the Australian skyline at a rapid pace.

For more information contact WMK ARCHITECTURE, Level 1, 346 – 348 Kent Street Sydney NSW 2000, Mr John Andreas, Director phone 02 9299 0401, website www.wmkarchitecture.com



GENERATING A CLEAN, GREEN, ENERGY, EFFICIENT FUTURE WITH COGENERATION

Sustainability comes about when wise decisions are implemented with superior technology, like the 70kWe natural gas fired Cogeneration unit Simons Green Energy (SGE) has installed for the Rydges Hotel at Sydney Airport.

The Denwol Group, a diversified Australian property group involved in the development of the hotel was committed to achieving cost-effective and planet-protective outcomes, which the Cogeneration unit will deliver through reducing the Hotel's energy costs and cutting its anticipated energy usage by 360,000 kWh per year.

SGE's system uses gas-fired generation to provide a portion of the hotel's electricity demands, with the waste heat from the process providing hot water for the hotel's domestic and kitchen requirements.

Installation commenced in December 2012, and under the leadership of SGE's Site Manager, Neil Anderson, was completed in April 2013, with the plant commissioned on May 4, 2013.

The complete remit of plant and equipment SGE supplied and installed included an X SEVA -SEV MA 70NG - 70kW (e) Cogeneration system; a LUVÉ 149kW SHLN dump radiator; and three Edwards LEX 350 3500L heat exchange tanks, along with Grundfos pumps, aluminium lagged copper pipework, Embleton springs, an Active air ventilation system and associated materials including pumps and valves.

SGE's team on the project included a Design Engineer, Electrical Engineer, Site Manager, four plumbers, insulation contractors, mechanical air supply contractors and a commissioning engineer.

"We worked closely with Stowe Electrical to integrate the engine into the overall electrical installation. This particular system has been designed to work in both parallel mode and island mode meaning it will not only generate electricity on a day to day basis, operating parallel to the main grid, but is also capable of taking over in the event of a black-out to provide power for critical services in the building," said SGE CEO, Derek Simons.

The engineering team worked closely with, Denwol Group, and the appointed contractors, Lipman Pty Ltd, as well as mechanical and electrical contractors to ensure a smooth installation.

A meticulous approach was taken towards scheduling and coordination with other construction works in order to achieve the various milestones involved, with limits on crane time and the rooftop location of the Cogeneration System adding to the challenge. In announcing the initiative, Phillip Wolanski, Director of Denwol Group, said their objective in following this path was to show some foresight and a real environmental sensitivity.

"We wanted any green initiatives to be practical, have strong environmental outcomes and provide us with financial payback over time. The Cogeneration unit provides us with these three essential criteria," Mr Wolanski said. Derek Simons said that "the Cogeneration System will be a great platform for other hotels to follow."

"The system is technologically advanced and very efficient at about 85% conversion efficiency

compared with 30% efficiency for conventional grid-supplied electricity," Mr Simons said. "With escalating electricity prices and the recent introduction of a carbon price, the future savings for the hotel will be substantial."

The Simons Engineering Group was first established in 1932. From offices in Sydney and Melbourne and through a national network of distributors, Simons provides energy-efficient solutions for power, hot water, heating and cooling, drawing on the talents of the world's leading designers and manufacturers.

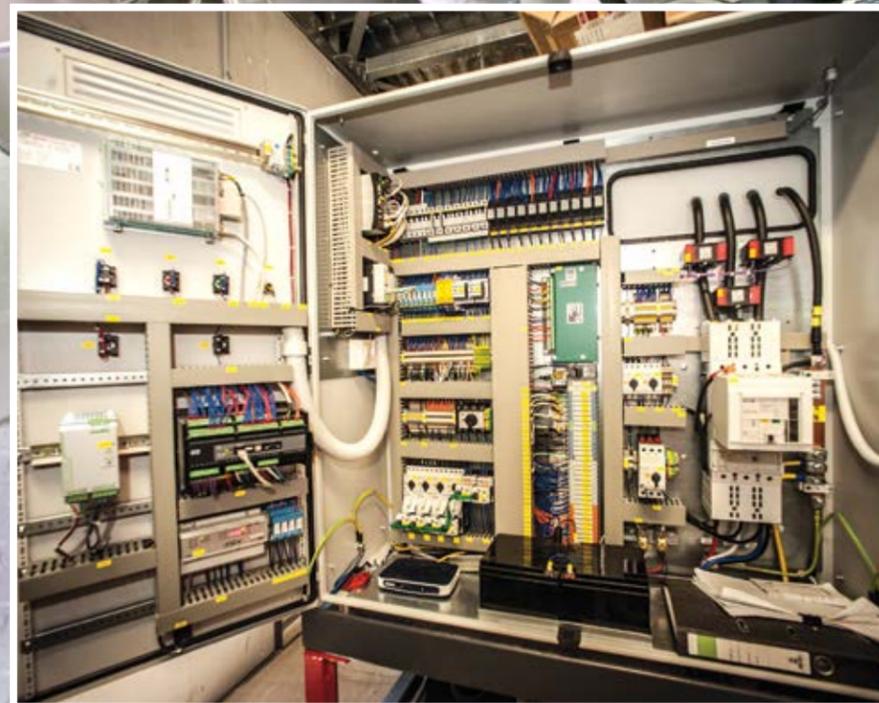
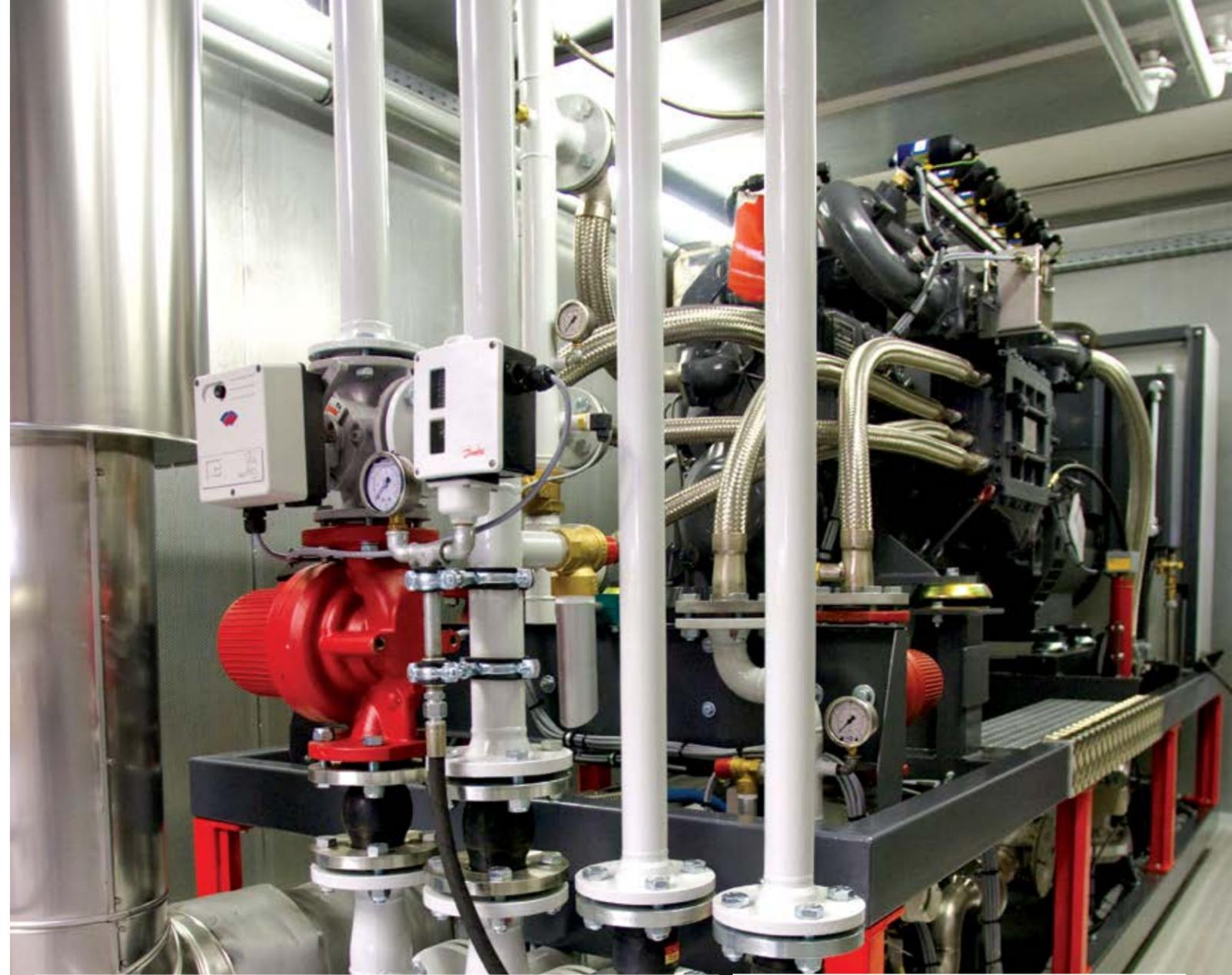
The company supplies projects across the development spectrum with leading-edge systems for Cogeneration - Combined Heat and Power (CHP) technology and Trigeneration - Combined Heat, Power and Cooling (CHPC). SGE also provide a range of high efficiency boilers, including gas boilers, electric boilers, hot water boilers and condensing boilers.

For more information contact Simons Green Energy, 75 Botany Road Rosebery NSW 2018, phone 02 8338 8660, email info@simonsgreenenergy.com.au, website www.simonsgreenenergy.com.au

When assessing the suitability of cogeneration for a client project, SGE use a five-step analysis. This examines factors including the availability of natural gas or biofuels and the demand for energy and heating/cooling; an in-depth feasibility study carried out by the engineering team which calculates the base loads and forms a basis for the system design; a site visit to look at constructability requirements; modelling to assess the exact equipment required; and analysis of the investment case and appropriate funding model.

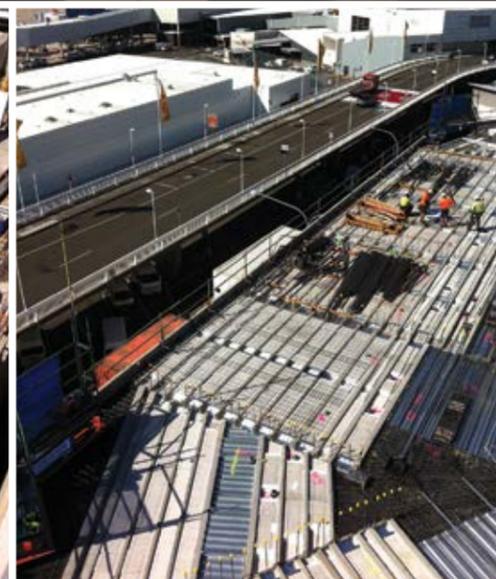
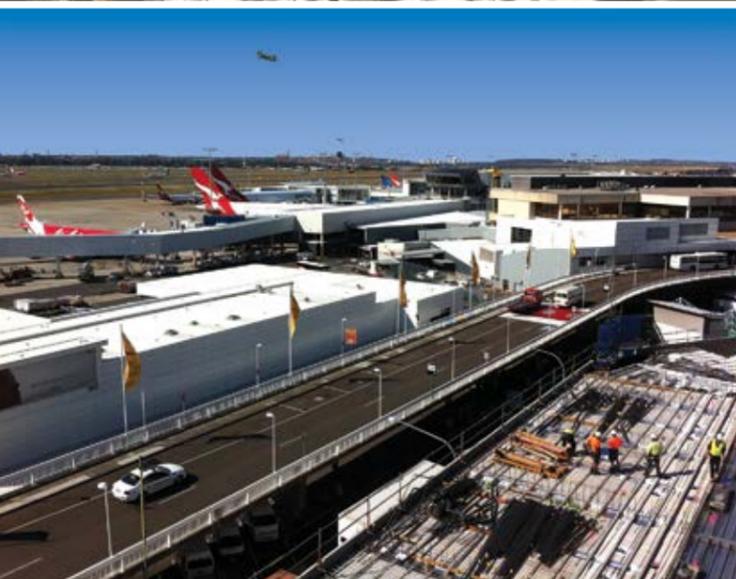
"The most effective time for the systems to be incorporated is early in the construction process, as the building systems can be built around the Cogeneration System. However with Simons custom designed systems, we are able to retrofit Cogeneration and Trigeneration Systems to most existing installations providing there is adequate space for our equipment, an adequate electrical load, and an adequate cooling/heating load," said Derek Simons.

Castle Hill RSL Club achieved substantial energy cost savings with the help of SGE, who installed a 142kWe Cogeneration System in the club's aquatic centre in 2011. In the first year of operation, the system saved the club \$80 000 in electricity costs, and SGE are now in the process of installing a Trigeneration System (150kWe CHP) and 175kWe Absorption Chiller to service the rest of the club.



Little Creatures Brewery

SGE installed a 1,200 kWe Cogeneration System that will provide power to the brew-house, heating and steam for the brewery's numerous process heating applications.



ON THE FAST TRACK

Ultrafloor was chosen to undertake the structural flooring package for the suspended concrete floors to Levels 3 through to 8 along with the rooftop Conference Room on the Rydges Hotel development.

Established in 1990, Ultrafloor has formed an experienced and passionate team focused on providing the construction sector with safe, innovative, efficient and cost effective precast concrete flooring solutions. The company has developed innovative systems that allow developers, builders and engineers to benefit from the speed of installation and the structural and commercial efficiencies that only an Ultrafloor system can deliver.

Ultrafloor manufactures a wide range of precast concrete beams, hobs and lintels and provide an extensive variety of flooring systems for both residential and commercial projects.

With the ability to manufacture up to 6 kilometres of beams per day, Ultrafloor has become the leading supplier and installer of precast flooring solutions in Australia. From their two factories, they have supplied in excess of 3,000,000 m² of product to projects in major cities and regional centres of Australia. All Ultrafloor products are manufactured under ISO9001 accredited processes.

For the Rydges Hotel project, Ultrafloor was chosen due to their extensive experience as well as being a reliable, single point of responsibility for the flooring package. Their experience working to tight construction programs was utilized on the Rydges Hotel project as was the company's ability to work with a thin structural floor zone and limited access to the loading zone for site deliveries.

In order to meet the specific challenges of this project Ultrafloor implemented a complete 'flooring solutions approach' for Lipman which permitted an integration of design and commercial considerations that resulted in an optimised solution being developed for the total flooring system and its sub-elements.

Lipman involved Ultrafloor in the early stages of the project's evolution and thus were able to benefit from the Ultrafloor design team's input at key stages of the development.

The entire flooring element to each level was designed and fully documented by Ultrafloor's in-house team of design engineers and drafting personnel. Where appropriate Ultrafloor engineers augmented the Ultrafloor system by incorporating insitu formed and post-tensioned elements to deliver an efficient and comprehensive flooring system that allowed the builder to construct the hotel several weeks ahead of the anticipated deadline.

Equally important to the success of this project was the mode of delivery - the flooring package was coordinated and installed by Ultrafloor's installation team under a single contract, thus eliminating delays associated with coordinating the multiple sub-contractors.

As well as benefiting from speed of construction, Ultrafloor systems offer significant savings in terms of reducing the volume of concrete and reinforcement materials consumed in a project. And whilst the dematerialisation aspect is significant, there is also less site labour, less vehicular movements and less waste generally. Coupled with the enhanced acoustic performance provided by the Ultrafloor ribbed soffit there are great outcomes available in terms of sustainability.

The beauty of the Ultrafloor system is that it allows for early programming of fitout trades. As a precast solution, the Ultrafloor system is able to have the majority of its temporary supports stripped out much earlier than non-precast systems allowing for the fast-tracking of fitout works and facilitating a more rapid build process. For the Rydges Hotel project, the opportunity to fast track the fitout was facilitated by pre-loading the decks with plasterboard and other materials prior to the installation of the next floor.

To find out whether your project might benefit from a more integrated 'flooring solutions approach' contact your local Ultrafloor representative on:

Freecall -1800 858 723
 Email - info@ultrafloor.com
 Website - www.ultrafloor.com



A COOL CHANGE

Equilibrium Air Conditioning were contracted to compile design and construct solutions for the air conditioning and ventilation on the Rydges Hotel project. The design incorporated energy efficiencies and flexible operation with attention to the acoustic treatment in the hotel suites. Equilibrium Air Conditioning was approached by Lipman to provide a solution that met the needs of the hotel operator, Rydges.

There were tight constraints on the available ceiling space as well as the need for very quiet fan coil operation within the suites. Equilibrium Air Conditioning drew upon the expertise of their in-house acoustic engineers in providing a cost effective outcome for the project.

The use of Heat Recovery Variable Refrigerant Flow Systems allowed independent control and energy monitoring for each suite together with on/off control linked to key card access. The heat recovery system utilises waste heat to provide heating when required.

Equilibrium Air Conditioning have served the commercial construction industry for more than 40 years and in that time have become appreciated as a company that can deliver a quality design and construct solution which incorporates the latest innovations while complying with Green Star and National Australian Built Environment Rating System.

The professional team at Equilibrium Air Conditioning provides complete solutions to suit any type of development, whether it is commercial office space, healthcare, education, retail or industrial construct.

Equilibrium Air Conditioning (NSW) Pty Limited, Joseph Maric Commercial Manager, Suite 7, 38 Brookhollow Avenue, Norwest Business Park, Baulkham Hills, NSW 2153, phone (02) 9439 4822, fax (02) 9439 4699, email office@eqac.com.au, website www.equilibriumac.com.au

COLOUR PIONEERS

Nawkaw gives projects like the Rydges Hotel in Sydney a fabulous finish – both aesthetically and in terms of timely completion – with their innovative and cost-effective concrete and masonry colour system.

By working closely with the precast and window manufacturers Nawkaw was able to complete the application of their unique colouring system in the precast yard, which proved a massive time-saver for the project team, and allowed for scrupulous quality control of the spectacular result.

Tony Watling, Managing Director of Nawkaw Australia, worked closely with Lipman architects and SACL (Sydney Airport Corporation Ltd) to discuss the project requirements and determine the suitability of Nawkaw applied finish on the grey precast elements which form the external façade.

The final product has certainly exceeded expectations, with a brilliant, modern, metallic speckle finish which is guaranteed to continue to glow for a minimum of 25 years. The Nawkaw system is based on mineral oxide emulsions, which penetrate deeply into the surface, giving easier colour

control and reduced use of oxides compared to in-mix coloured concrete. For the Rydges project, the Nawkaw finish was applied in sequence with the window installation, which also took place at the precast yard, enabling entire factory-finished units to be delivered to site. Any issues identified on site were rectified using abseil rope techniques.

Since 1997, Nawkaw Australia has been bringing the Nawkaw process for changing the colour of brick, block and concrete to both new builds and restoration projects around Australia, including the award-winning QEII Courts of Law in Brisbane.

Nawkaw's abilities have resulted in ongoing expansion, and the company now has offices in Melbourne, Brisbane, Perth, Adelaide, Hobart and New Zealand. With every project they undertake, their skills and innovativeness impress, as the Nawkaw colour system delivers sustainable, cost-effective and beautiful solutions for all types of architectural visions.

For more information contact Nawkaw Australia, phone 1300 NAWKAW (1300 629 529), email info@nawkaw.com.au, website www.nawkaw.com.au

