DROPPING IN FROM ABOVE

When it comes to the installation of large, heavy equipment on a significant development – particularly large air-conditioning units on a roof, this is not a simple, every day task.

It inevitably requires extensive coordination, including transporting equipment to site, which can mean road closures and obtaining the required permits to close roads. Once the equipment is delivered to the site, a crane is required to lift the equipment onto the roof. These requirements alone can often lead to down times.

Contractor PTAC was awarded for the full design and construct of the air-conditioning system for the Bunnings Kingsgrove, they are also responsible for coordinating products on-site delivery, on-time for the helicopter lift to ensure no resources or time was wasted. As a supplier of the KX series for this job, Mitsubishi Heavy Industries Air-Conditioners Australia (MHIAA) liaised with PTAC meticulously to ensure the KX series was delivered in-full and on-time for the helicopter lift.

"The use of a helicopter allowed for multiple drop points on the roof for the various items required. Besides the air-conditioning systems, fans and platforms were also lifted," MHIAA's Ross Ayden explains.

"Using the helicopter eliminated road closures and the added down times of relocating and resetting the crane. The helicopter drop also provided greater flexibility for the installer teams and less impact on the local environment."

In arranging the helicopter drop, an application to Civil Aviation Safety Authority (CASA) for air space permits was required. Notification to police and local residents was also required prior to the day of the drop.

"As part of the CASA permit, a 'ditch point' was required in case of engine failure and such," adds Ross. "Given proximity of residents and the freeway, this was solved by clearing the store's carpark area."

MHIAA was thrilled to be part of this project and worked tirelessly and determinedly to ensure MHIAA provided PTAC the right system required for this specific job. "The satisfying result was that all equipment was in place ready for the contractors in quick time with no interruptions to the local traffic or residents," Ross says.

"MHIAA's head office is only a stone's throw from this building, so we watched the progress of its construction with a keen interest and desire to be on the roof!"

Ross adds that the contractor PTAC have had many construct and design projects experienced like this job and MHIAA is confident that the KX series (VRF) system is the best solution for the Bunnings Kingsrove site requirements. "The operating conditions, connection capacity, flexibility and extensive pipe options (of the equipment) suited the format required to temper the air in the building to the design criteria," he says.

A wholly owned subsidiary of Mitsubishi Heavy Industries Ltd, MHIAA was formed in 2009 following extensive growth of Mitsubishi Heavy Industries' air-conditioners, which first entered the market in the 1970s.



Q-ton - New to MHIAA

Further demonstrating the company's commitment to solutions, the MHIAA team has launched the Q-ton, an air-to-water heat pump which uses carbon dioxide gas as a refrigerant.

Combining rotary and scroll technology (making it the world's first two-stage compressor), the Q-ton can be used across a variety of applications for the supply of sanitary hot water – from medium to large demands. This includes commercial buildings such as hotels, apartment blocks, hospitals, care homes and more.

This innovative and unique air source heat pump allows for maximum efficiency and low electricity consumption. Via the user-friendly touch-screen panel, the system can be set up to meet specific requirements and monitor hot water production and availability.

Q-ton's use of safe and highly-efficient carbon dioxide (a natural gas), is environmentally friendly compared to other products using standard refrigerants. It also meets the stringent requirements of the world's foremost environmental assessment method and rating system BREEAM.

The Q-ton is an example of MHIAA's continual commitment to superior technology that outlasts and outperforms.

For more information contact Mitsubishi Heavy Industries Air-conditioners Australia Pty Ltd, 9C Commercial Road, Kingsgrove NSW 2208, phone 1300 138 008, fax 02 8571 7992, website www.mhiaa.com.au or www.q-ton.mhiaa.com.au



POSITIVE MOVES FOR THE FASTEST PANEL SYSTEM

Dokadek 30 Panel system sets a new benchmark in area (thereby minimising the number of panels required) with easy formwork performance.

handling - an ergonomic design incorporating largest possible area

With the first images of the new Darling Harbor Development in CBD Sydney, interest in this multi-million dollar development is growing rapidly.

Darling Square is the new residential and creative quarter that takes its place in one of Sydney's most economically and socially potent precincts. It will be considered a hotbed for innovation; future living that weaves its way into the fabric of the city, attracting a bustling community that can work, live, shop and play in a great new city neighbourhood. The project's formwork contractor Dalma Form Specialist Pty Ltd selected the newly developed Dokadek 30 Panel System for this remarkable north west plot carpark project at Darling Harbour. Doka Australia provided a total of 4,500m² of Dokadek 30 Floor Panels for the project.

Innovative Design - Up to the Challenge.

Developed with a focus on speed, safety and versatility, the Dokadek 30 system sets a new benchmark in panel formwork systems. Dokadek 30 is the result of over five years Research and Development work - including numerous field trials – and the Darling Harbour Development is benefitting from all advantages this system has to offer.

One of the key benefits of the Dokadek 30 system is that it only has three main components, namely: the prop, the head and the panels. As well as streamlining logistics and on-site component storage, Dokadek 30's minimal inventory can help to eliminate on-site confusion with incorrect parts.

For maximum versatility, the panels are available in a choice of two sizes (2.44m x 1.22m or 2.44m x 0.81m). The panel sizes have been specifically designed to deliver the ideal combination of large

area (thereby minimising the number of panels required) with easy handling - an ergonomic design incorporating largest possible area whilst still remaining a practical and easy-to-handle size. The panels feature Doka's high performance Xlife sheet, which combines excellent durability for maximum reuse capability with a good quality off-form finish.

"The Darling Harbor North West Plot Project presented a number of challenges in the design stage, thanks to the seamlessly integration of formwork system for the slab areas with conventional formwork under the beams," said Stephen Lake, Project Engineer. "Importantly, we were able to overcome these challenges by using Dokadek 30 Panel system, which forms large slab areas quickly and safely from ground level. The use of the Dokadek infill beams around the perimeter of the Dokadek area allows the panels to merge effortlessly into the conventional formwork under the beams."

The Dalma Form Specialist team was also pleased with the safety features of the panel system. Dokadek 30's unique design means that it is erected from below; it cannot be put together from the top down. This not only means that the formwork crew can see that they're putting it together correctly; it also eliminates the risks associated with crews standing on an unstable surface or working from above.

Jason Andrijic Operations Manager for Dalma said, "The reasons why we like the system is because of the speed, it's quick up and down, good quality off-panel finish, easy to manoeuvre around site, equally effective for high strutting floors, easy to transition from panel to conventional formwork with the use of the infill beam, prop centres allows excellent, easily delineated access under formed deck, not many component so easy to manage on site."

For more information contact Doka Formwork Australia Pty Ltd, 52 Airds Road, Minto NSW 2566, phone 02 8796 0500, email nelli.hegi@doka.com, website www.doka.com.au



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Hebel – better by design.



SPECIALISTS IN THEIR FIELDS

Faraday Pty Ltd design, install and test electromagnetic shielding systems for major medical, commercial, industrial, and defence projects throughout Australia and New Zealand.

One facility to benefit from Faraday's expertise was the New Royal Adelaide Hospital. "Faraday completed a suite of 5 MRI suites for the Imaging Departments'." said Managing Director, Kingsley McRae.

Faraday profiles and delivers solutions for problematic sites. In one case it was a large magnetic field generated by Melbourne's trams, 50m from the proposed site of Peter Doherty Institute's sensitive electron microscope. Faraday calculated the electromagnetic field from the tram's electrical supply to determine the required solution

"We installed a complete shielding solution, incorporating a Magnetic Active Magnetic Compensation System (MACS) which produces a counter-veiling magnetic field, in addition to an EMF shielded enclosure, which enabled the microscope to work in an environment it otherwise would not" said Kingsley.

The Melbourne Brain Centre in Parkville, Victoria was another project which highlighted Faraday's expertise. From a bespoke engineered steel structure to support 20 + tonnes of magnetic shielding, through to a high performance copper radio frequency (RF) shield, Faraday successfully designed and constructed the first 7 Tesla MRI suite in Australia. Faraday invested considerable time working with everyone from the head contractor, Brookfield Multiplex, to the electrician, mechanical services contractor, fire services contractor, MRI supplier and end users to produce a complex design solution.

From Faraday's humble beginnings in 2002, the Directors were determined to have a national focus. By employing full-time Australian staff, we maintain quality control and timely customer service.

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For more information contact Faraday Pty Ltd, PO Box 555, Bayswater VIC 3153, phone 03 9729 5000, website www.faradayshielding.com.au

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Supplying premium quality façades to the Australian building industry since 1988, SGI Architectural's speciality is quality, environmentally-friendly and innovative buildings that stand out from the crowd.

This evidence of this can be seen on the 12,000m² Newcastle Courthouse complex. SGI supplied the exterior cladding products, working with the architects during the planning, design and specification stages through to project delivery.

These products included Prodema PRODEX wood panels and Alpolic VMZINC Composite panels. Both use natural resources (wood and zinc), providing sustainable choices in building cladding.

"Prodema PRODEX panels offer a high level of durability as their composition renders them resistant to continuous exposure to sunlight and sharp changes in temperature and humidity," explains SGI CEO Stephen Geddes.

"The panels are virtually maintenance free as the exterior PVDF (polyvinylidene fluoride) film provides a maximum level of care for the timber veneer, ensuring panels are protected from moisture, rain, sunlight, and even the build-up of dirt on the panel's surface."

"PRODEX panels also offer maximum resistance to vandalism as the outer chemical non-stick layer impregnated into the panels prevents aerosol paint from sticking permanently to the surface."

Additionally, Prodema has a PEFC (Programme for the Endorsement of Forest Certification). "This is the guarantee the products have been

manufactured with raw forest materials managed in a socially and environmentally responsible way," adds Stephen. The use of Alpolic Zinc Composite Material also provided an extremely durable material for the courthouse.

While a zinc roof can last up to a century in an urban setting, a zinc façade, which is not exposed to the same amount of UV and rainfall, can last even longer. As well as being cost effective and ecologically-friendly, the material, which is specifically designed for the construction industry, complies with worldwide fire codes.

With its use of sustainable and durable products, SGI continues to go from strength to strength, including forming new relationships with suppliers, builder and architects worldwide.

For more information contact SGI Architectural, Unit 31/5-7 Inglewood Place, Baulkham Hills NSW 2153, phone 02 9620 7988, email info@sgi-architectural.com.au, website www.sgi-architectural.com.au

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ELITE EXPERIENCE

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explains Jay Rowley, Co-Founder/Director of Elite Survey.

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SUPERIOR CLEANING SERVICES

Having been in commercial cleaning, construction cleaning and property service for more than a decade, SEQ Construction Cleaning has built an outstanding reputation for delivering high-quality services at an affordable price.

As a company, SEQ strives to not only complete works to its clients' expectations, but to surpass them.

Engaged as the cleaning contractors for the Pacific Fair Redevelopment, SEQ carried out the builders and final clean for the project. So far, SEQ has been involved onsite for all three stages of the redevelopment.

The work saw up to 30 SEQ staff work rotating day and night shifts to ensure they met the scheduled opening deadline. The work also involved a significant amount of organisation with other onsite trades to ensure a quality job was signed over by the scheduled opening.

"We were pleased to provide high-quality cleaning using a number of different methods," says SEQ's Jeremy Bell. "We were pleased that we were able to hand over to the client in time for the opening.

"We were also able to work in with the foreman to complete additional works when required. There are always challenges working when other trades (are) present, however all trades were able to work together as a team to reach the desired outcome."

In conjunction with the Pacific Fair Stage 3, SEQ had staff completing Builders and Final Cleans in H&M and David Jones store fitouts for Hansen Yuncken. The company was also working on the Blackwatch Alto Apartments, Hutchinson SNP and Watpac 180 Ann Street projects.

"SEQ prides itself on our ability to work with our client to deliver a high-quality job every time," adds Jeremy.

"We were particularly excited that our relationship at Pacific Fair opened opportunities with Hansen Yuncken. We are always excited to work with new clients."





For more information contact SEQ Construction Cleaning, 36/20 Ellerslie Road, Meadowbrook QLD 4131, phone 07 3200 4040, email admin@seqcc.com.au, website www.seqcommercialcleaning.com.au

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