

LIGHTS. CAMERA. ACTION

CLIENTS : Docklands Studios Melbourne, Development Victoria and Creative Victoria
 MAIN CONSTRUCTION COMPANY : Kane Constructions
 ARCHITECT : Grimshaw Architects
 ENGINEERS : WSP Australia, Integral Group Australia and Arup
 CONSTRUCTION VALUE : \$40 million

The Docklands Studios Melbourne (DSM) Project involves the construction of a purpose built 3,700m² state-of-the-art, dry-hire facility for film and television production. The construction of Sound Stage 6 increases the studios stage capacity by 60% to a total stage area of 10,000m², making it one of the largest production stages within the southern hemisphere. The facility is 17.5m high internally, and offers full soundproofing, a floor loading capacity of 20KPA, along with a 900,000L subfloor tank for the filming of underwater scenes.

Sound Stage 6 is the new flagship stage for the world class studios located in the heart of Melbourne. Its combination of floor space and height, as well as a wet stage, give it features common to only a handful of stages worldwide, positioning DSM as a leading competitor with larger Australian based studios in Sydney and the Gold Coast. It is expected to attract large scale international productions.

The design of the building integrates with the architectural language of the existing buildings in the precinct and meets the high level of acoustic performance essential to the operation of the facility.

Kane Constructions was awarded the Design & Construct contract during the early design stage in September 2020, with Stage 6 reaching practical completion in February 2022. Ortech and acoustic elephant doors were used in the construction of Sound Stage 6 to control external noise.

This was particularly important given the proximity to the Citylink roadway. The acoustic performance of the building was a large focus for this project with extensive consideration given to internal reverberation control, vibration control and sound insulation.

“We used Ortech Durra panels for acoustic sound insulation. The integration of the Ortech Durra panels with the structural steelwork meant we needed close coordination with a wide range of trades in order to get the acoustic connection correct. These trades and consultants included the acoustic engineer, structural engineer, architect, steel fabricators, and the roofers and riggers onsite,” said Mark Spolidoro, Project Manager for Kane Constructions.

Ortech Durra panel is a fully certified wall and ceiling panel system that contains an engineered biomass panel core made entirely out of reclaimed wheat straw. It is 100% recyclable and biodegradable while maintaining the desired properties of acoustic and thermal control, fire resistance and durability.

The three storey annex building attached to the Sound Stage provides best practice office workspaces by promoting natural light, sun control measures, ventilation, access to outdoor spaces and a flexible open-plan working environment.

Kane Constructions had a management team of 10 personnel leading the delivery of the DSM project. At the peak of construction,

120 workers were delivering works onsite. The five existing sound stages remained operational while the project was under construction.

“The doors were sourced, designed and built from ACARAN in Brisbane. Sourcing materials and products outside of Melbourne was a key challenge during the peak of COVID. Shipping the doors across the border from Queensland to Victoria and then managing the installation from interstate was no exception,” said Mark

“We had an outstanding pool of subcontractors on this project. We developed a strong collaborative working relationship from the outset right through from design through to construction.”

“Our team took pride in maintaining a collective, highly communicative, positive and effective culture. Through leadership, consultation, implementation and a ‘roll up your sleeves’ approach, our senior management team led by example and demonstrated a continued commitment to delivering positive project outcomes,” said Mark

Founded in Melbourne in 1973, Kane Constructions has grown into a multi-award winning commercial construction company with over 2,000 successfully completed projects across all industry sectors. With over 450 employees, Kane operates throughout the east coast of Australia and overseas from offices in Melbourne, Sydney, Brisbane, Sunshine Coast and Canberra.

No stranger to industry accolades, Kane was awarded the 2016 and 2019 National Construction Master Builder of the Year, as well



as Master Builder of the Year in Victoria in 2016, 2017 and 2019. Recently, the \$40 million Docklands Studios Stage 6 project won the 2021 Master Builders Association of Victoria Excellence in Health and Safety Award.

Heading into 2022, the team are currently delivering several notable projects in Victoria including the \$152 million Bendigo Law Courts, \$50 million Northcote Aquatic and Recreation Centre (NARC), \$54 million Whitehorse Performing Arts Centre, \$18.6 million Spirit of Tasmania Passenger Terminal Building and the \$76 million Wonthaggi Hospital Expansion Project.

For more information contact Kane Constructions, 658 Church Street, Richmond VIC 3121, phone 03 8420 1200, email viccontact@kane.com.au, website www.kane.com.au

Below Signal & Hobbs developed and installed a modular Ortech Industries Durra panel Acoustic insulation system.



Roofing specialists Signal & Hobbs were contracted to complete the roof and internal wall installation of Docklands Studios Stage 6.

Roof installation consisted of multiple layers that included Lysaght Spandek roofing profile in Australian made Bluescope steel to the outer roof skin, Ortech Industries Durra panel Acoustic insulation system, CSR Bradford glass wool, and Proctor HTR vapour barrier products. The approach was determined to provide the best thermal and acoustic performance, and this has been proven in practice

The Ortech system consisted of 2 layers. The lower layer of the Ortech system was fixed to the steel frame using isolation pads. The lower layer incorporated a soundsorb cassette and 2 x 50mm Durra panels, and was covered with glass wool prior to upper Ortech system installation.

The upper layer of Dura Boards was laminated with a cement sheet and another layer of glass wool. This build up was covered in Proctor HTR and finished with a sprung curved Spandek profile roof.

The internal acoustic wall was a build up of CSR Anticon fixed to the precast panel followed by a layer of Ortech Dura panel, with Martini board acoustic insulation completing the build up. Signal & Hobbs worked closely with structural engineers at Apex Welding and Steel Fabrication to ensure the integrity of the structural support system.

Signal & Hobbs site team needed to ensure the 60m radius of the roof was maintained and alignment of the modules with the superstructure was critical. To meet this challenge, Signal & Hobbs developed a solution using custom made jigs to prefabricate the frames on the ground. This allowed for a modular system installation, using a hydraulically controlled custom made lifting frame developed by Ortech Industries specifically for this project.

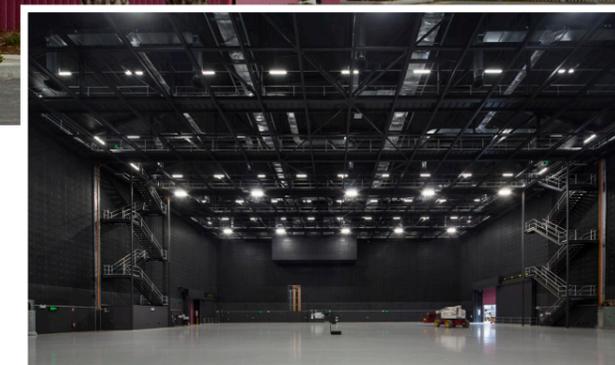
This approach enabled Signal & Hobbs to fabricate the modules to maintain the required tolerances and ensured they would drop correctly into position.

Once the modular solution had been developed, Signal & Hobbs were able to call on P&D cranes and Shot-AI Constructions to

provide their expertise and highly skilled riggers to assist with the installation of the modularised Ortech system. The modular system drastically improved the speed of installation onsite benefiting the overall project timeline.

Working closely with the Kane Construction team, Signal & Hobbs commenced planning for the project delivery in November 2020 with onsite works commencing March 2021 and the bulk of works completed by November 2021. Signal & Hobbs mobilised 20 of their experienced roofers lead by Site Foreman Luke Houldcroft to undertake the work, drawing on the specialist skills required to complete the install to the expected high standard.

Signal & Hobbs were a natural choice for the project with a 50 year heritage, specialist expertise and a strong reputation in the market, based on a track record as a trusted roofing subcontractor for major construction projects. While this was a major project with a significant roofing area, the team are used to dealing with projects of this size, and were able to apply the expertise they have developed working on many similar Tier 1 construction projects.



“We are proud to have worked on the Development Victoria Docklands Studio project, supporting Kane Constructions to successfully deliver Stage 6,” said Rodney Signal, Director of Signal & Hobbs. “Bringing our engineering expertise to bear, along with our fabrication capability, we were able to overcome some specific project challenges with the roof radius by introducing a modular pre-fabrication approach that enabled us to achieve tight tolerances and install a multi-layered roof while reducing the time spent onsite.”

For more information contact Signal & Hobbs Roofing Specialists, 20 Summit Road, Noble Park North VIC 3174, phone 03 8726 3050, email reception@sighob.com.au

Below Victoria City Tiling completed the waterproofing, screeding and tiling in all of the internal wet areas and balconies.

Tiling work for the Docklands Studios Stage 6 project was put into the capable and experienced hands of Victoria City Tiling. This included waterproofing, screeding and tiling all of the inside bathrooms and external public amenities, as well as the balcony.

The company started work in June 2021 and completed the project in February 2022 with a team of five tilers. “The job was really good and the whole process went very smoothly,” said Dawoud Nazari, CEO and Manager of Victoria City Tiling. Despite the challenges of COVID, Dawoud was pleased with the project delivery.

Dawoud and his team needed to coordinate with a range of trades onsite including insulators, plumbers and electricians, to create a polished finish for each space. When COVID restrictions were introduced, this required juggling the schedule to work with only 25% of trades allowed onsite.

Victoria City Tiling also worked closely with the Architects to ensure that the tiles used throughout the wet areas, met the high quality required for the project. The team successfully managed a range of restrictions that arose during peak COVID periods, to supply the required tiles and create a high caliber finish.

“We pride our business on our ability to provide quality services and workmanship to all our customers no matter how big or small

a job may be,” Dawoud said. “We offer sound honest advice that could potentially save you hundreds if not thousands of dollars in the long term.”

Victoria City Tiling was established in 2006, and pride themselves on a professional and high quality tiling services, which they are able to deliver across a range of Melbourne sites.

With over 20 years experience, the team are able to offer a range of services including residential tiling, commercial tiling, paving, waterproofing and screeding. The company have recently expanded their operations to include joinery and stone work.

“We’ve worked with thousands of companies – both big and small – and I treat all jobs as though they were my own family and home,” said Dawoud. “Customer satisfaction is one of the most rewarding and incredible feelings.”

Recent projects include Bendigo Law Court, 80 Collins Street, Bunnings Mercure Hotel in Doncaster, North Blackburn Shopping Centre, 150 Lonsdale Street, Chadstone Luxury Flagship Shopping Centre, Victorian Academy in East Melbourne and the Cbus Property fitout.

For more information contact Victoria City Tiling, 21 Central Avenue, Sunshine VIC 3020, phone 03 8590 1432, email info@vctiling.com.au, website www.victoriacity-tiling.com.au



