

PROTECTING COMMUNITY FROM NOISE URBAN WELL-BEING IN BARANGAROO

BACKGROUND

Barangaroo is the new harbour foreshore playground located south of the Sydney Harbour Bridge in Sydney, Australia.

Once an old container terminal, Barangaroo is transforming into a globally spectacular 22-hectare waterfront precinct. As part of the new project, premium high-rise office buildings – the three International Towers Sydney – were built and opened at the end of 2016.

Barangaroo is expected to be complete in 2024, when the Sydney Metro is due to open.

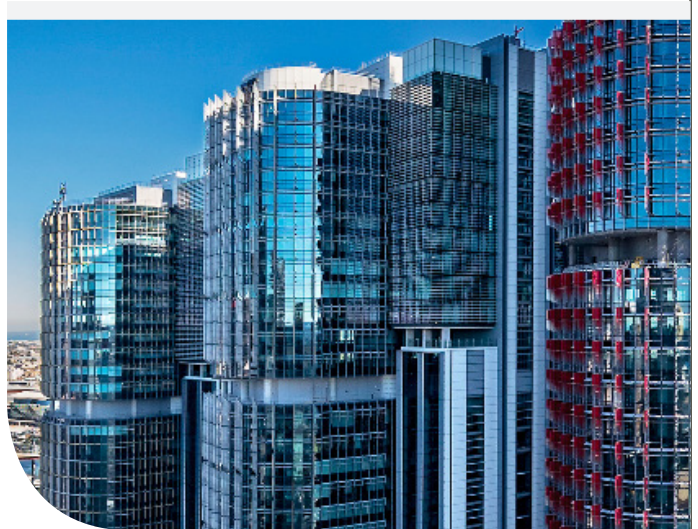
THE SOLUTION

As specialists in Acoustic and Thermal materials, Pyrotek provided Soundlag™, Wavebar®, Quadzero™ and Sorbertextile™ P44FR throughout the precinct to control the transfer of noise.

Installed into the false ceilings and plenum spaces was Wavebar® and Quadzero™, to control unwanted sound. These noise barrier products were also used to stop HVAC and machinery noises in surrounding cavity spaces.

Our acoustic pipe and duct lagging product, Soundlag™, was installed around wastewater pipes in the building. Soundlag offers a unique construction which gives the dual benefits of a noise barrier and a sound absorber. The aluminium foil facing offers a fire resistant covering which has a 6-star rating that complies with the Building Code of Australia (BCA).

The acoustic fabric, Sorbertextile™ P44FR, was installed throughout the precinct behind the structural panels to absorb the surrounding noise throughout Barangaroo reserve. This product was designed for installation behind perforated panels to provide excellent sound absorption, an elegant appearance and prevent fibre release from bulk materials.



The International Towers of Sydney feature a host of Pyrotek products

RESULTS

The creation of Barangaroo is long term. When complete in 2024, Barangaroo will accommodate more than 23,000 workers and residents, and host thousands of visitors each day. With the installation of Pyrotek products within the new financial and retail precinct of Barangaroo, the developer can ensure a quieter atmosphere for employees and residents.

Lagging conforms to the building standards ensuring the material selection effectively reduces the transmission of airborne noise to address acoustic, thermal and vibrational transfer and provide the positive urban environment required.

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View of Soundlag installed above ceiling below residential apartments

