Promat

Case Study

AMP Building, 33 Alfred Street, Sydney

ARCHITECT: Johnson Pilton Walker Architects **BUILDER:** Built
INSTALLER: Allsystems PFP **PRODUCT:** CAFCO® 300

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Background

Gently towering over CBD's busy Alfred Street, the AMP Building stands as a pioneering landmark in Sydney's architectural evolution. Designed by Johnson Pilton Walker Architects, this iconic skyscraper broke through the city's long-standing height restrictions upon its completion in 1962. Now, as an essential part of the revitalised Quay Quarter Sydney precinct, the edifice is poised to usher in a new era of future-fit workspaces.

As part of these revitalisation efforts, the AMP Building is undergoing a meticulous refurbishment led by Built, which thoughtfully blends its rich legacy with contemporary design and safety standards. This transformation honours the structure's original form while introducing state-of-the-art amenities, ensuring the AMP Building remains an integral architectural element of the Sydney cityscape for decades to come.

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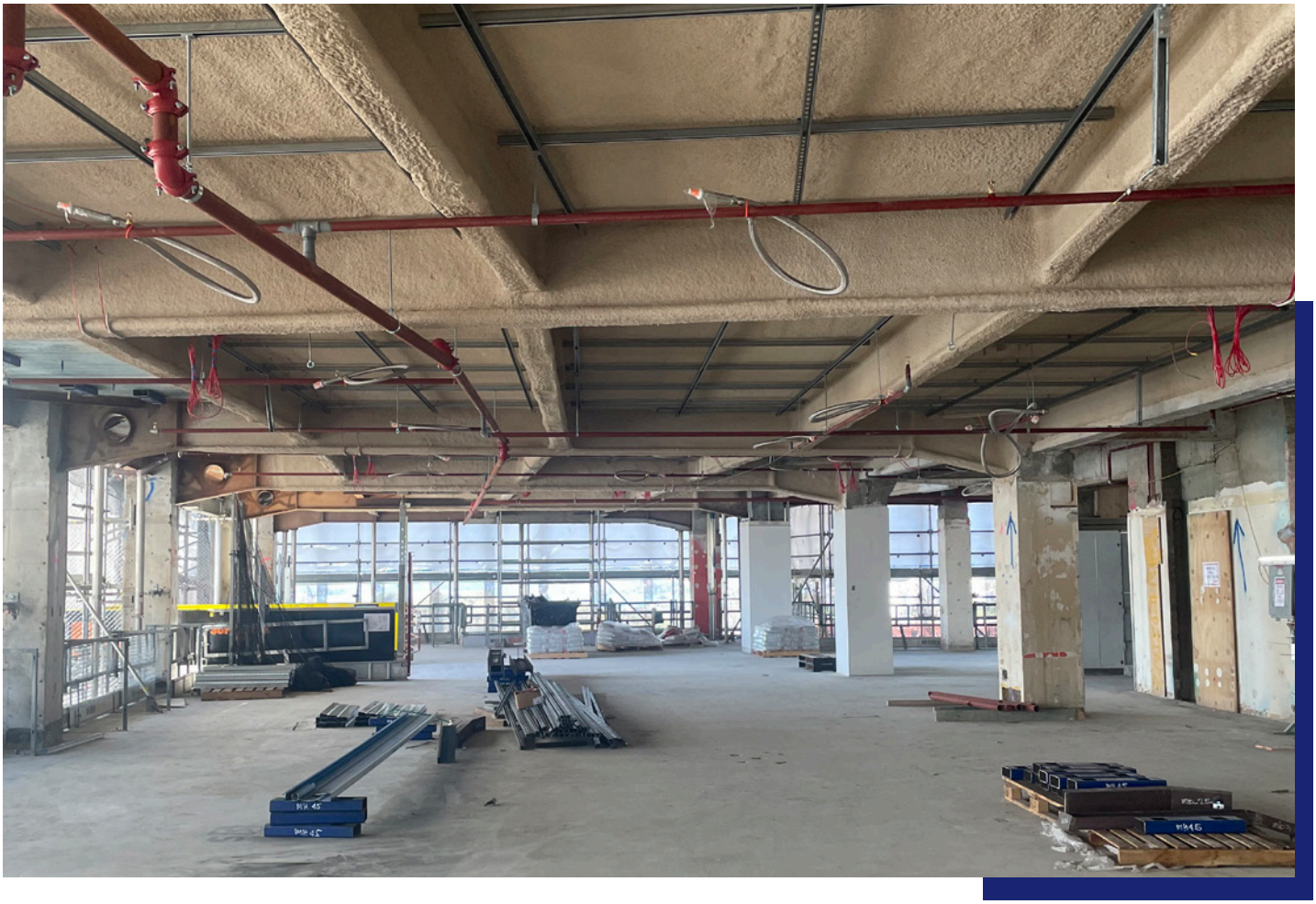
Challenge

Ensuring the structural integrity and fire safety of this landmark presented a unique challenge. The original construction utilised Celdek, a now-obsolete composite decking system for which minimal fire protection data existed. While the existing fire protection measures were an unknown factor, modernising the safety systems required achieving a 120/120/120 Fire Resistance Level (FRL) for the slabs. "The existing flooring system needed its fire rating reinstated, but there was no documentation on the original rating," explains Peter Marzullo, who heads up Allsystems Passive Fire Protection, a contractor brought on by the builder's project manager.

Additionally, the decades-old structure harboured another danger: asbestos. This required careful remediation work, adding complexity to the renovation timeline.



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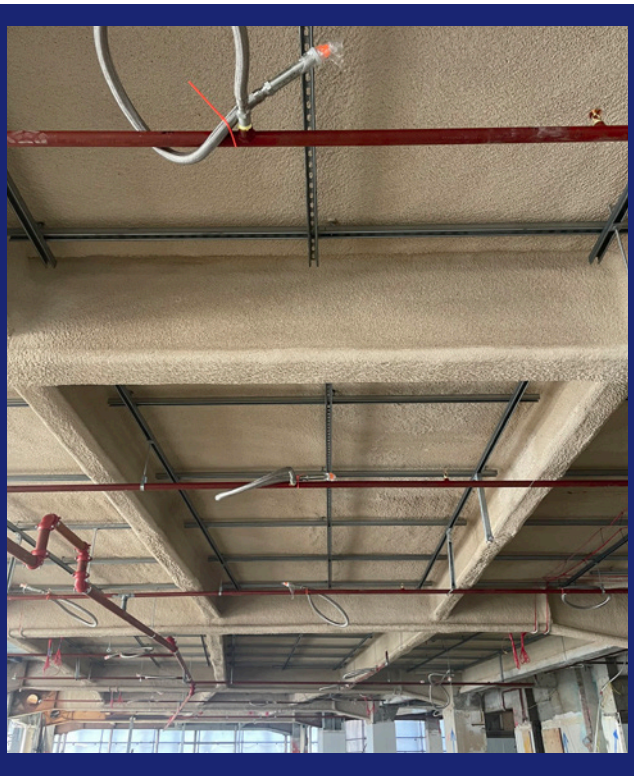

Solution

Promat, a renowned expert in passive fire protection with a global presence, was engaged to help engineer an appropriate solution. “Promat systems are meticulously tested and comply with all the relevant Australian standards and the National Construction Code,” Peter explains. “We have worked with them on a broad range of projects over the years.”

Promat rose to the challenge, leveraging their extensive global network of experts and innovative solutions. Working with Warrington Fire Research and project engineers, Promat drew on testing results from similar slab types to develop a project-specific assessment. Over a period of several months, this robust and careful analysis determined that a 13mm coating of Promat CAFCO® 300 would provide the required FRL for the existing Celdek slabs.

Promat further demonstrated their adaptability by calculating the necessary thicknesses needed for non-standard sized steel beams, ensuring those elements could also be protected with CAFCO® 300. This streamlined the fire-proofing process and enhanced project efficiency. In total, approximately 20,000m2 of Celdek will receive the advanced protection of CAFCO® 300 by the time the extensive renovation project is completed.

By tailoring their solutions to the unique context of the project, Promat played a pivotal role in ensuring the fire safety and structural integrity of this historic renovation. “Promat’s services have been second to none,” says Peter. “Their product availability has been consistently good, and their technical assistance is outstanding. With passive fire safety, no two jobs are the same, and it’s rare to find the kind of support where you can quickly get reliable guidance on the unique challenges that every fire protection project presents. Promat has been invaluable in that regard.”

Promat’s expertise, collaborative approach, and commitment to innovation are instrumental in the successful transformation of the AMP Building into a safe and modern landmark. The iconic skyscraper is on track to seamlessly blend its heritage with the highest standards of contemporary design.