Precast architectural marvel

Situated at the bustling heart of Sydney's central business district, the Poly Centre stands tall as a remarkable architectural masterpiece, distinguished by its striking precast concrete façade.

By the National Precast Concrete Association Australia.

Located at 210 George Street, the Poly Centre boasts an impressive precast concrete façade, establishing itself as a landmark integral to the city's skyline.

The commercial tower merges contemporary design with functionality, epitomising modern architecture and efficiency. With its sleek precast design, state-of-the-art amenities and prime location, it stands as a sought-after destination for businesses of all sizes.

Design fused with functionality

The Poly Centre's design, a testament to the creativity and vision of Grimshaw architects, rises 27 storeys high, commanding attention as it seamlessly blends glass, steel and over 500 precast concrete elements to create a stunning façade. The building's sleek lines, sharp angles and reflective glass exterior give it a distinctively modern and dynamic appearance.

Extensive use of precast

National Precast Concrete Association Australia Master Precaster, Advanced Precast, was selected to manufacture and supply the precast for the Poly Centre.

The 500-plus elements necessitated the fabrication of more than 10 moulds, each catering to different shapes and profiles. For the east façade, over 300 grooved wall panels, including numerous curved panels measuring between three and 31 square metres, were manufactured.

Additionally, the main façade features 135 arched and rectangular columns weighing between five and 17 tonnes, while four-square-metre grooved soffit panels with a triangular shape adorn George Street. All panels were manufactured using an off-white oxide.

Testament to sustainability

The Poly Centre stands as a testament to Sydney's commitment to sustainable architecture. Recognising the importance of reducing its carbon footprint, the building incorporates numerous eco-friendly features.

Choosing precast as a construction method for the project maximised the benefits of offsite manufacturing. This approach shifted construction activities from a potentially cluttered and less secure onsite environment to a controlled, quality-focused factory setting. Here, superior manufacturing methods, employing local materials in production, were utilised, resulting in minimised waste.

The structure absorbs carbon over its life, requires minimal ongoing maintenance and does not burn or emit fumes. Clever attention to detail ensures natural light floods the interior through energy-efficient glass panels, reducing the need for artificial lighting during the day. State-of-the-art water conservation systems, including rainwater harvesting and greywater recycling, minimise water consumption.

These sustainable initiatives not only contribute to the wellbeing of the local community and environment but also create a healthier and more comfortable workspace for its occupants.

Architectural excellence

The Poly Centre at 210 George Street exemplifies Sydney's commitment to architectural excellence, sustainability and urban sophistication. With its striking design, prime location, sustainable features and innovative amenities, this remarkable building has become an iconic landmark in the city's skyline.

The Poly Centre commands attention as it seamlessly blends glass, steel and over 500 precast concrete elements to create a stunning façade. (Image: Advanced Precast)

Project
The Poly Centre

Location
210 George Street, Sydney, New South Wales

Architect
Grimshaw

Engineer
WSP

Builder
BESIX Watpac

Master Precaster
Advanced Precast

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