

Recreating a Scottish baronial castle

The National Precast Concrete Association Australia highlights the pivotal role that precast concrete played in the successful execution of The John Cunningham Student Centre.



By the National Precast Concrete Association Australia.



The John Cunningham Student Centre at The Scots College. (Images: Melgrand)

In the heart of Bellevue Hill, Sydney, a grand architectural project is now complete: The John Cunningham Student Centre at The Scots College. This ambitious endeavour seeks to recreate the grandeur of a Scottish baronial castle, blending design motifs from the 17th and 19th centuries. The project stands as a testament to both historical reverence and modern innovation, with National Precast Concrete Association Australia (National Precast) Precaster Melgrand playing a pivotal role by supplying nearly 180 tonnes of precast 'stone' elements – comprising over 1,600 individual precast 'stones' in more than 100 unique designs.

According to Melgrand director Tim Kipp, the decision to use precast concrete for this project was driven by a combination of cost efficiency and architectural fidelity. "Quarried sandstone, while authentic, is prohibitively expensive," says Kipp. "Melgrand's precast elements offered a cost-efficient alternative, reducing the stonework expense to about one third of that for quarried sandstone."

"This cost-saving measure was crucial in achieving the intricate and extravagant façade within the allocated budget."

Melgrand's materials earned an AA certification, confirming their parity with

heritage-grade sandstone and meeting all project needs. Engineered to meet site demands, the precast elements offered flexibility in colour and material.

Intricate architectural design

The scale and complexity of the project presented numerous challenges. This was the first time such an extensive Scottish baronial structure had been attempted in Sydney. Coordinating the design and fabrication of a wide variety of elements – including walling, flooring, columns and intricate decorative pieces – required meticulous planning and execution.

The architects specified George 200 grade sandstone for key components, necessitating a close visual match in the precast elements to maintain architectural integrity. Melgrand's expertise ensured that the cast sandstone elements matched the heritage-grade sandstone in colour, texture and architectural detail.

Crafting architectural masterpieces

Melgrand's contribution to the John Cunningham Student Centre encompasses a diverse array of bespoke architectural elements, meticulously crafted to evoke the

essence of heritage sandstone. From the distinctive cast stone crowstep gable capping to the ornate cornice elements and intricate machicolations, each piece was designed to enhance the building's historical aesthetic.

The inclusion of stringcourse, corbels, custom balustrading and base baluster capping further enriches the visual tapestry, while classical and custom columns provide structural elegance. Pier cappings and grey concrete lintel elements complete the ensemble, showcasing the company's commitment to quality and consistency. These elements not only meet stringent architectural specifications but also seamlessly integrate into the Scottish baronial narrative of the centre, promising a timeless and cohesive architectural masterpiece.

Blend of history and modern engineering

The John Cunningham Student Centre opened its doors in March 2024. The project represents one of the first Scottish baronial buildings in Australia, a bold move to infuse a distinctively Scottish architectural heritage into Sydney's urban landscape. According to National Precast CEO Sarah Bachmann, "The John Cunningham Student Centre stands as a remarkable fusion of historical reverence and modern engineering."



Melgrand supplied nearly 180 tonnes of precast 'stone' elements for The John Cunningham Student Centre.

Through the innovative use of precast concrete, Melgrand has enabled the creation of a stunning Scottish baronial façade that balances cost-efficiency with architectural authenticity. This project not only enhances the aesthetic and functional landscape of Bellevue Hill but also celebrates a significant aspect of Scottish heritage. As the centre opens, it promises to be a landmark of neo-traditional design, showcasing the timeless appeal of Scottish baronial architecture in a contemporary context.



The John Cunningham Student Centre features a diverse array of bespoke architectural precast elements.

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