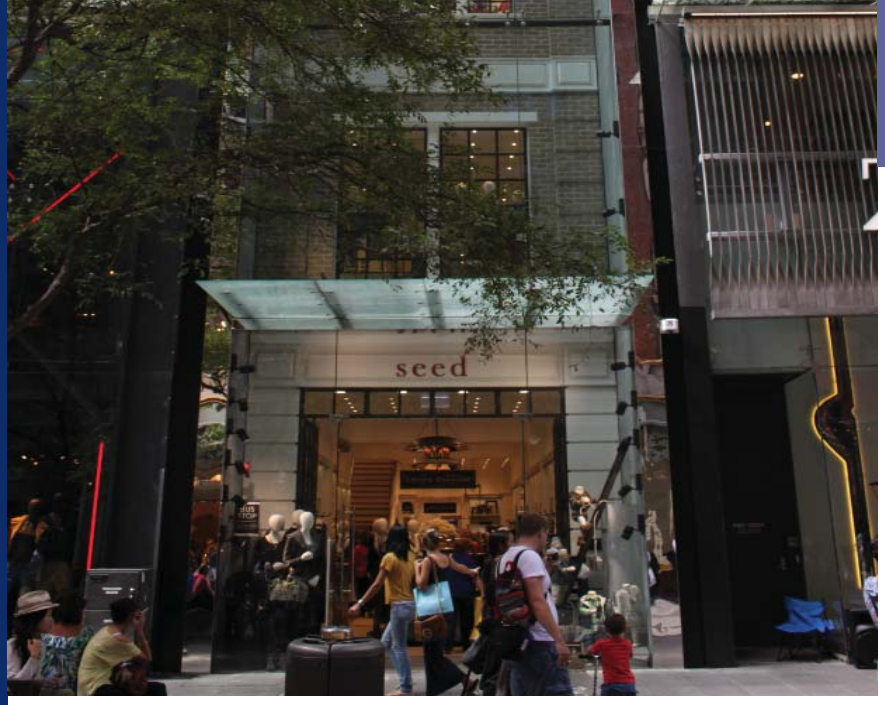
Pitt Street Mall



Overnight success

Erection of a four-storey, high-end retail outlet in a jaw-dropping 72 hours right in the heart of one of Australia's busiest and most prestigious shopping precincts has made construction history.

Set right at the mouth of Sydney Westfield's new, $2 billion flagship shopping centre in Pitt Street Mall, the record-making construction is located squarely in one of the world's most expensive rental-per-capita retail strips.

The build took place in the dead of night over two weekends to cause minimum disruption to passing shoppers and surrounding tenants. With the shell completed in the equivalent of just three days, the aim was to have the four-storey outlet tenanted, open and recouping rental returns in time for Christmas. The astonishing speed of precast delivery and construction put the rest of the project squarely on track to achieve this aim.

According to Paul di Cristo, from project manager Cerno Management, completion of the project using conventional methods would have taken three to four months. Specialist precast builder Baseline Constructions worked hand-in-hand with the project manager and with Hanson Precast, which supplied and erected the 100 per cent precast structure to ensure the on-time, on-budget completion.

Precast Manufacturer
Hanson Precast

Architect
Buchan Group with Baseline Constructions

Engineer
Waterman

www.nationalprecast.com.au

To maximise floorspace, the architect designed the structure without columns, so key walls are load bearing, while the façade is frameless glass, providing optimum stock exposure. With a gross floor area of 180 square metres, and floor-to-floor heights of 4.5 metres, the project comprises 69 wall panels in 180 mm, 200 mm and 220 mm thicknesses. Four suspended floors were constructed using 106 hollowcore floor planks with 60 mm topping.

Hanson
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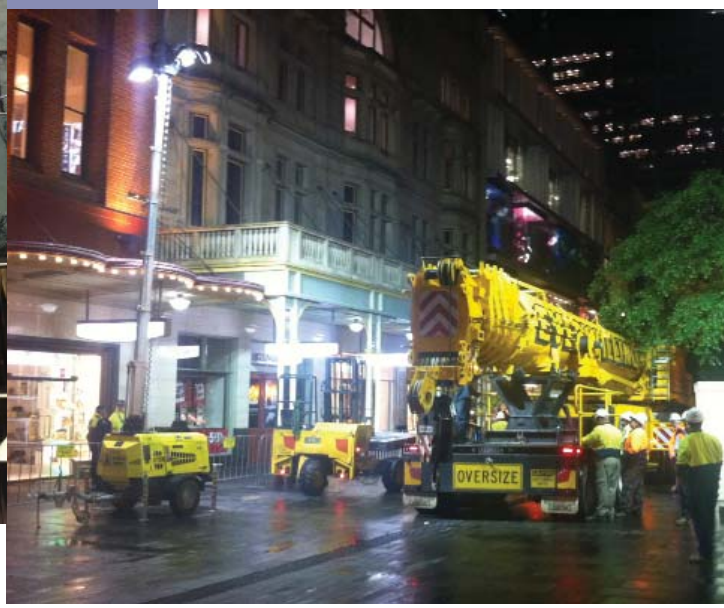
making precast easy



Stability under lateral loading was achieved by grouping together the vertical wall panels at the front and back of the building, to act as one structural element using welded steel connections cast into the precast. The engineered and accurate positioning of the temporary bracing of the double height wall panels to allow construction access to the floor planks was important in achieving the five day turnaround between the two weekends.

"We manufactured the wall and floor components to the tightest specifications after extensive consultation with the architect and builder" says Chris Parsons, from Hanson Precast. "This significantly reduced labour, materials and other costs and wastage associated with a conventional build of this style. There was no room for error on the project, and no second chances, with installation from 10:00 pm Friday to 8:00 am Sunday over two weekends. It was a precision job from concept to execution."

In addition to complying with strict planning controls and tight timeframes, the project team had to contend with serious site constraints – access was tight and extremely limited with the one exposed face of the structure fronting on to the busy pedestrian mall and no significant vehicular access. Precision craneage therefore became crucial to the project's success, with Everwilling Cranes engaged from an early stage to ensure that all tolerances and margins were correctly assessed then addressed for a swift, problem-free result.

"This project represents the future of inner-urban construction and is testimony to a whole host of factors – but especially the close teamwork involved," says Nicholas Bettar, Managing Director of Baseline Constructions.

"It's the outcome not only of meticulous design and planning but also close liaison with the Sydney City Council. Councillors had a very strong grasp of the vision and understood the major advantages that this mode of construction offers. It is our firm belief that what we consider to be exceptional today will become much more the norm in the future, as awareness of the possibilities offered by the intelligent use of precast for these kinds of applications grows."