Mercure Sydney Hotel Catholic Club Liverpool

A total solution

A brand new 4.5 star hotel has set new standards and offered insights into the possibilities offered by a total application of precast.

The Mercure Sydney Hotel Liverpool, which shares the site of the Liverpool Catholic Club, has swiftly become a quality landmark.

The 104 room, six storey hotel shares the facilities of the Club, which include an ice rink, gym and sporting fields. In addition to its function and four separate dining facilities, the hotel has four pools, including lap, leisure and wading pools. Between them, the facilities on this site have helped enhance the identity of the wider community they serve.

Precast played a vital role in this construction from the earliest stage. It offered not only speed and ease of construction that enabled completion of the $20 million project in only 14 months – but has also become an exemplar of the new direction for precast construction, as Richard Lorenzin, from Sydney based precast manufacturer, Hanson Precast, explains.

"Total precast buildings represent a growing area, as more and more architects, engineers and builders recognise the ability of precast to meet a project's requirement at every stage".

"Whereas in the past you might have seen precast used for certain elements in a project - say, precast walling for its versatility and durability of finish or to meet site, speed, safety or environmental requirements - you can really see that this project is a classic example of the next logical step."

Architect and Project Superintendent
Wood + Day Partnership

Service Engineer
Robert Bird Group

Builders
James Clifford Construction

Precast Manufacturer
Hanson Precast

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making precast easy

With total precast construction, the use of precast is anticipated and planned for right from the concept stage. This makes the most of all of its capabilities: structural qualities, versatility of finish, minimal maintenance, durability, sustainability and so on. The end result is a speedy, cost effective project that avoids double handling and open-ended insitu solutions.

"Sometimes, for example with architectural precast incorporating finishes such as polishing, insitu concrete construction is used for the structure, with precast as cladding only. It's a waste because with planning and foresight, you can use precast to offer both structural and impressive aesthetics, as we have done in this case," says Richard.

Once the first floor insitu suspended slab was poured, it was time for the precast.

Close to 3,000m2 of wall panels and 3,500m2 of precast flooring – supported by load-bearing precast walls – were installed using a 100 tonne mobile crane. This took place over five separate visits, in just 25 days – a feat which required delivery of some 155 loads.

The finish to some wall panels was acid etched, while other panels were polished. The concrete mix was based on an off-white cement, coloured aggregate and local sands.

A typical polished external panel was 8,500mm long x 3,450mm high and 200mm thick, with wall panels on the top level an expansive 4.28m high to allow for fixing of roof steel. Internal polished loadbearing wall panels were fixed with precast lintels ready to accept the hollowcore floor planks.