



Applications & Innovations

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Applications



Float out of this world and into the past with precast

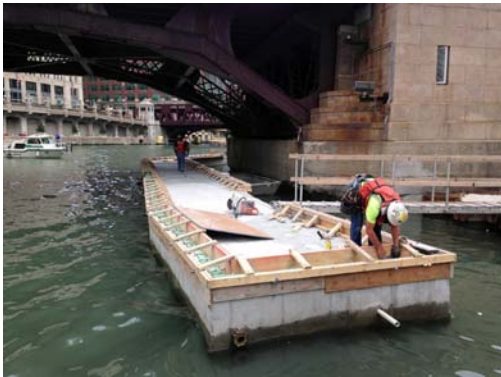
A proposed design for Sydney's *Chau Chak Wing* Museum entails an off-form "floating white concrete box" atop a sandstone-coloured base of precast concrete panels. Housing a vast collection of historical artefacts, the museum's success literally *rests* on precast concrete.

[Read more here.](#)

Say goodbye to WA's maddening traffic jams

Off-site manufacturing will make a significant contribution to the Great Northern Connect - a project between Lang O'Rourke and BGC Contracting that is set to improve freight links and free up congested roads in WA. Strict bridge specifications and cost minimisation are key drivers for the use of precast concrete.

[Read more here.](#)



Walk on water, thanks to precast concrete

A new walkway along the Chicago River is allowing local pedestrians to easily commute from the city centre to the lakefront. Supporting the river's pathway are nine underbridge "tubs" made out of the only material that could meet the project's needs - precast concrete.

[Read more here.](#)

Star Wars fans rejoice—this fibreglass-concrete façade will give you major Death Star vibes

An information technology centre in Moscow features a striking arrangement of precast fibreglass-concrete façade panels. An array of lines and circles have been imprinted into fibreglass-concrete panels, which imitate the look of an electronic surface board (or, if you squint one eye, the Death Star).

[Read more here.](#)



Innovations



3D printing & precast concrete creating a modern renaissance

As members who attended May's meeting would know, a new 3D printing system called FreeFAB uses specialised wax to print highly precise moulds used to manufacture precast concrete. Allowing for structural optimisation, this new system is inspiring the construction space to bring back gothic 12th Century architectural detailing.

[Read more here.](#)

Toilets being built 'in a flush'

Textile reinforced concrete panels have been developed for the construction of affordable, lightweight, durable, and non-corrosive structures. The CSIR lab in Chennai, India has demonstrated the textile reinforced concrete prototyping technology (TRCPT) by building a toilet in just four hours.

[Read more here.](#)



Tyred of cracked concrete?

A study conducted by the University of British Columbia suggests recycled tyre fibres in concrete can reduce crack formation by more than 90 percent. Not only can fibre-reinforced concrete create more robust means of construction, but it can also have widespread benefits on the environment.

[Read more here.](#)

Pre-castaway canoe

Swiss students from ETH Zurich university have made a concrete canoe that not only floats, but also won 1st place for Design Innovation at Germany's Concrete Canoe Regatta. For the fabrication of the canoe's skeleton, a plastic formwork was 3D printed and then cast in ultra-high-performance fibre-reinforced concrete.

[Read more here.](#)

