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Design development

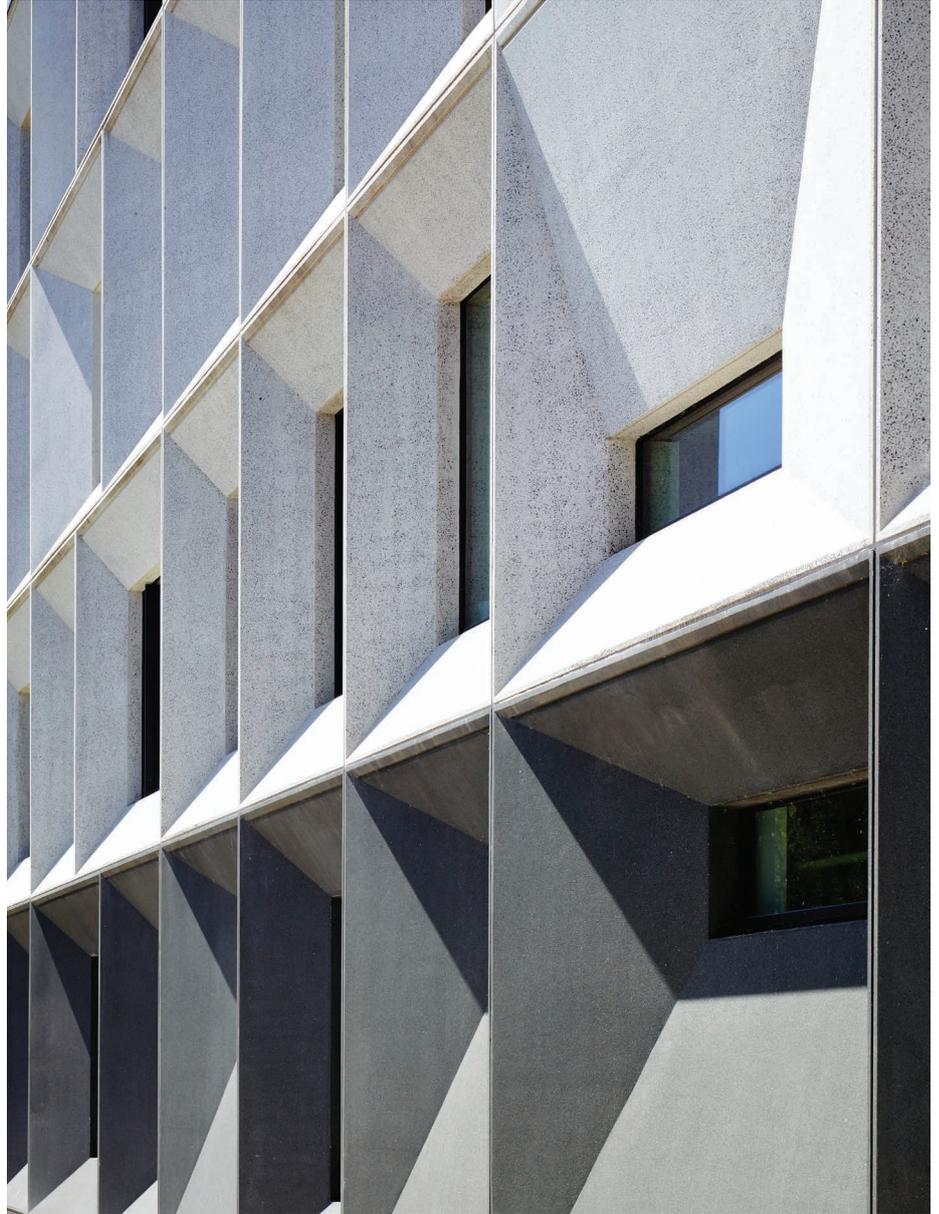
Precast concrete façade panels

The most striking element of the design is the faceted reinforced precast concrete panels to the four curriculum buildings. Manufactured at Techrete's casting facility in Lincolnshire, these are 3.0m and 4.5m long to align with a typical classroom and structural module of 7.5m, as well as allowing a smaller module to be composed for smaller internal accommodation. Fabricating the panels under controlled conditions maximised quality, minimised waste and reduced working at height. Extensive off-site manufacture also resulted in enhanced safety and speed of installation.

The cleverly optimised panel catalogue for the curriculum buildings provides visual variation through minimum mould types which are subtle on long elevations and more lively on flank elevations. The panels were developed to allow weathering and faceted to create a visually interesting and playful façade in addition to providing increased solar shading.

A bespoke concrete mix and finish was developed with Techrete to create the black with mica fleck acid-etched base panels and the off-white with dark aggregate fleck heavily acid-etched upper panels. Final detailing of drip edges and a 'corduroy' base was also developed to address staining and weathering considerations.

The curriculum buildings utilise an internally exposed in-situ concrete building frame, stair core walls and flat slab construction. Using both precast and in-situ concrete in an innovative manner has delivered robust, aesthetically pleasing buildings without compromising the budget, architectural intent, or brief.



'Striking load-bearing precast panels are cleverly optimised to give a pleasing pattern rather than rigid repartition. The quality achieved from simple concrete finishes shows what can be accomplished within a tight BSF budget.'

- Judges' comments, Concrete Society Awards

Design development

Manufacture and installation of Techrete precast concrete panels





School entrance with detail of precast faceted concrete façade panels



View across multi games area to curriculum buildings

© Tim Soar



Curriculum building

© Rob Parrish



Pedestrian spine looking back towards public entrance



Detail of precast faceted concrete façade panels