

Breaking the rules to change the face of hospital design



Architectural trailblazers have revolutionised the way we look at health care buildings, crafting adventurous, inspirational designs brimming with bright colours and unique features. But, on face value, they are seemingly breaking the rules by using one of the most unlikely of all building materials - precast concrete supplied by the pioneering Trent Concrete.

Forget about drab grey slabs, architects like those behind the Royal Alexandra Children's Hospital, Brighton, are achieving breathtaking designs within limited public sector budgets to turn precast concrete into a range of stunning shapes and features.

By combining precast concrete with reconstructed stone cladding and a host of other natural materials, all created off-site for extra efficiency, hospitals no longer need to be drab, functional buildings that are daunting for staff, patients and their families.



With precast concrete cladding it's now possible to give any building a spectacular look that won't harm the environment, making it the ideal solution for architects searching for sustainability and flexible, creative design.

David Walker,
Managing Director,
Trent Concrete

Project:	The Royal Alexandra Children's Hospital
Client:	Brighton and Hove City PCT
Architect:	BDP
Contractor:	Kajima
Façade Contractor:	English Architectural Glazing
Products:	Buff-coloured reconstructed stone cladding panels
Completion date:	2006



A children's hospital like no other

Façade contractor English Architectural Glazing Ltd commissioned Trent Concrete to provide the finishing touch to the major PFI project. The company's cladding expertise and unique off-site precast techniques were deployed to create a stunning exterior for the site, offering both in and outpatient facilities for children - along with intensive care and 24 hour emergency care.

The Brief

Trent's brief was simple yet demanding; the Royal Alexandra Children's Hospital should not look like a hospital.

The ark-like shape of the structure and the use of bold colours would combine to create an inspirational building that would be the ideal, welcoming environment for children to be treated in.

Access to the existing grounds of the existing Royal Sussex County Hospital, where the new hospital was being built, also had to be maintained for staff and the public at all times throughout the works.

Solution

Nearly 2,000 square metres of flat and 300 square metres of curved, storey-height punched window panels were produced in sparkling white, acid-etched reconstructed stone.

These were complemented by a rainbow of 400mm, deep coloured bands - in blue, green, orange and yellow - that run around the entire building, for an added splash of dazzling colour.

Benefits

Following a growing trend, windows and glazing were incorporated directly into the main concrete panels at Trent's Nottingham factory, rather than on site. The final cladding was then lifted directly from the delivery vehicle - with no need for expensive and labour intensive scaffolding.

This ultra efficient system was also specified by the contractors to maintain access to the existing hospital site.

As well as producing an attractive and weatherproof cladding solution, precast concrete is also environmentally sustainable. This makes it ideal for public building projects that have to meet strict government eco targets.

Along with intrinsic fire resistance, the benefits of precast concrete for a building include good thermal efficiency and fabric energy storage, sound insulation, minimum vibration and a long life.