

Inspirational school design that knows no bounds



With words and symbols from global cultures etched into the outside walls for a striking appearance, the designers of a new Telford School crafted an 'A' Grade development that inspires the whole community.

What might not be so immediately obvious is how these stunning effects were achieved. Amazingly, this intricate, highly detailed work was created using precast reconstructed stone cladding - the unsung hero of modern construction.

The drab grey concrete slabs such cladding is commonly associated with are now a thing of the past. Architectural trailblazers in the public sector are using the very latest precast technology to bring incredible designs to life in a way that won't break the bank, with plenty of green credentials and efficient off-site construction to boot.



Companies like Trent Concrete, capable of precasting off site ready for delivery when needed, are an invaluable asset on projects with a short site time. It's a very efficient way of working that still guarantees a quality finish.!

Jonathan Cowper,
Associate Director,
Aedas Architects

Project:	The Hadley Learning Community
Client:	Telford and Wrekin Council
Architect:	Aedas Architects
Contractor:	Interserve Projects
Products:	Buff-coloured reconstructed stone cladding panels
Completion date:	2006



Concrete cladding skills that can't be taught

Located in central Telford, the Hadley Learning Community (HLC) is a £70 million PFI project that represented a major investment by the borough of Telford & Wrekin Council in creating a 21st century campus for the area.

Opened last year, The Hadley Learning Community includes a 1,200 place secondary school, the relocated Bridge Special School and a 420 place primary school.

Other facilities on site for the whole community include a crèche, nursery and childcare support, health services for young children, a learning resource centre, 150 seat theatre, café, swimming pool, fitness gym and sports pitches.

Brief

With the goal of creating a unique educational development, the developers of the HLC wanted to create a one of a kind building that would inspire everyone who saw it.

Following a successful public sector partnership on two major hospital projects, the company was chosen once again by Aedas Architects to turn its unique vision for the Hadley Learning Community project into reality.

As an added finishing touch, Trent's work would include finding an efficient way to etch the complex lettering and symbols desired for the exterior walls.

Solution

To complement the striking, cog-wheel shaped site, Trent produced more than 3,000 square metres of buff-coloured reconstructed stone cladding panels varying in height from 3-7 metres.

As well as the main panels, Trent Concrete also produced hundreds of metres of fascia panels and plinth units to add the finishing touch of class to the school.

To create the eye catching appearance a dual mix finish was used. A smooth light acid etch was utilised for the margin of the panel with deeper etching giving a darker appearance for the main body, which then incorporated the inspirational letters and words - such as 'C' for 'Creativity' and 'L' for 'Learning' - repeated in a multitude of languages and symbols.

The breathtaking effect was achieved by raising the shape of the lettering in Trent's purpose-built moulds, creating permanent indents in each panel.

Benefits

For school building designers, reconstructed stone cladding gives them the freedom to craft elaborate, emotive structures that will enhance the learning environment for everyone who uses them.

David Walker, Managing Director of Trent Concrete, said: "This was a unique project for us as we are rarely asked to add lettering to our panels and never before in a multitude of foreign languages."

"It presented an interesting challenge but the techniques we developed are now being used on a wide range of schemes, including adding an incredibly intricate lace pattern for a new arts centre in Nottingham."

"That is the beauty of precast concrete; we can meet any architect's requirements - all designs and shapes are possible."

Using Trent's off-site construction expertise, Aedas Architects and main contractor Interserve Project Services were able to easily meet the tight deadlines set to ensure the school was ready for the first September pupil intake.

Delivered to site on a just in time basis, every Trent Concrete panel is produced at the company's Nottingham Factory using the very latest precasting technology. Being manufactured off-site means that time on site is reduced, avoiding any unnecessary disruptions or delays - and ensuring that overall efficiency is enhanced.

Trent Concrete products offer a number of benefits over traditional stone cladding, from cost effectiveness to speed of construction and durability. The company has also undertaken a sustainability review of all aspects of its work to ensure minimum environmental impact and carbon footprint.