

# Trent Concrete produces a work of art in Nottingham



Awe inspiring lace designs that helped establish a world famous industry in the heart of Nottingham have been set in concrete as part of an iconic, multi-million pound arts centre.

The project was a major challenge for Trent Concrete, which used its wealth of precast experience to reproduce a unique lace pattern in the reconstructed stone cladding being manufactured at the new Centre for Contemporary Arts Nottingham (CCAN).



<b>Project:</b>	Centre for Contemporary Arts Nottingham (CCAN)
<b>Client:</b>	Nottingham City Council
<b>Architect:</b>	Caruso St John
<b>Contractor:</b>	Sol Construction
<b>Products:</b>	Green scalloped wall panels & black polished concrete plinth
<b>Completion date:</b>	Autumn of 2008

**“We are thrilled to be able to use our precast concrete expertise to create such a unique and beautiful finish for what promises to be a landmark building for Nottingham.”**

David Walker,  
Managing Director,  
Trent Concrete



## Pushing the boundaries of precasting

CCAN is a perfect illustration of Trent Concrete's outstanding ability to create stunning bespoke designs meeting any client's needs, no matter how challenging.

The creators of the centre wanted to find a way to incorporate an intricate pattern based on a sample of Victorian lace found in a time capsule, unearthed when a new supermarket was being built in the city, to add the final touch to the stylish, £13m arts centre.

Drawing on all its precasting expertise, Trent was able to create a stunning solution that promises to be a key feature of the development.

### Brief

Trent Concrete is creating and installing 1,100 square metres of green scalloped wall panels made to a bespoke Victorian lace pattern design for the arts centre. Ranging from 4-11m in height, the heaviest of the 93 individual units weighs in at 11.5 tonnes.

Under its nearly £500,000 contract with Caruso St John Architects, Trent is also providing a 200 square metre black polished concrete plinth, of varying heights, to surround the bottom of the building. This will guarantee an impressive finish to the project.

### Solution

This pattern was initially given to design specialists at Derby University, who used lasers to replicate the exact pattern on a piece of timber. It was then sent to Germany, where leading rubber mould supplier Reckli was able to transfer the design onto a durable rubber mat.

The finished template is now being placed into concrete-ready moulds, so the intricate pattern can be exactly reproduced on the cladding Trent Concrete is making for the £13m arts centre.

With the first hurdle passed, the remaining challenge is to safely install the stunning wall panels. To do this, Trent has developed innovative methods of handling, storing, transporting and erecting the massive panels to ensure the detailed finish is protected.

Purpose-built metal frames will be used to carefully turn the completed panels onto their edges, for easier and safer transport. Once delivered on site, a special 'shoe' (made from a steel frame) will then be used to carefully turn them back 90 degrees before finally being fixed to the building.

### Benefits

The CCAN project shows Trent's ability to create astounding works of art that can truly inspire anyone who sees them.

Delivered to site on a just in time basis, the concrete units are being carefully manoeuvred in by a purpose built metal frame. Being manufactured off-site means that time on site is reduced, avoiding any disruptions or delays - and ensures that overall efficiency is enhanced.

This construction method also reduces waste and improves the sustainability of the project, with all materials stored correctly and recycled wherever possible.

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.