



STUART BLAKLEY EXPLORES THE
POTENTIAL OF USING CONCRETE
IN BATHROOMS

Concrete EVIDENCE



Let's face it. Concrete has a shady past. Ask anyone on the street what they think of it and they're sure to mention (a) greyness and (b) naff '60s council estates. Of course the more design conscious would disagree. What's the most popular construction material in Ireland at present? Brick perhaps? Maybe stone? Actually concrete wins hands down. We work in it, live in it, drive on it.

Yet, quite often we don't even notice concrete around us because it's covered over. Now, cutting edge Irish architects and companies are exploring new ways of exploiting the naked material.

"We at Michael McNamara & Co are proud of our concreting achievements in the Millennium Wing of the National Gallery," say the builders. Rightly so. This is one of the architectural gems of early 21st century Ireland. Designed by Benson & Forsyth, its metaphorical mantelpiece is overcrowded with awards.

It won an Irish Concrete Award shortly after completion. Jury chairman Paul Hackett of John Sisk & Son remarks, "It's wonderful to see such a fine example of concrete forming an important part of our cultural heritage." Within the project, cookie cut-out apertures and overlapping fair faced white concrete wall planes play games of light and shadow. A plethora of peepholes run riot.

[Above]:

This bathroom designed by Mackay + Partners makes great use of contrasting materials including concrete

[Below]:

'Renobuild's polished concrete floors are proving to be a big hit with the public



"The building is a 'complete' in situ concrete frame with continuous concrete back up walls to certain areas," explains project architect Jim Hutcheson. "Only the stair treads were precast. Concrete was the most appropriate material in terms of constructing many of the more complex forms of the building."

Did concrete inform the design as well as the construction? He replies, "We're always anxious to tailor the aesthetics of our buildings to their materiality. In terms of concrete this means using the shuttering board sizes, fixing details and edge conditions to inform the way the material is expressed on the interior."

Hutcheson continues, "Our concrete supplier was located close by at Hanover Quay. The design mix produced by Kilsaran Concrete included bagged white cement from Blue Circle and fine aggregate which was crushed rock dust."

Concrete is making inroads (no pun) into domestic interiors as well. Seamus Redmond of Renobuild Ireland notes that concrete is increasingly being used as the flooring of choice for bathrooms.

Redmond adds, "At Renobuild prices vary from €50 per square metre upwards. Polished concrete is our main business now and is gaining in popularity each month. It's becoming increasingly used in bathrooms. If low carbon concrete is used then the impact on the environment is greatly reduced."

Vincent Fitzpatrick's company Unique in County Laois specialises in decorative concrete products. Such products are commonplace in the US but are relatively new in Ireland. He also observes that, "Concrete is now being used in a lot more applications as a finished product. Interior furniture such as kitchen worktops, acid stained bathroom floors and so on. Architects are specifying it more and more. The general public are gradually coming round to the idea of using concrete visibly in new ways in their homes."

Achieving the ultimate contemporary look isn't the only advantage of using concrete in a bathroom. It's easy to maintain and simple to change if you ever want to redecorate – a carpet can be placed over a concrete floor or you can tile over a concrete wall. Concrete floors are especially durable in areas which get a lot of sand or snow. The latter, as many will attest, was certainly relevant to Ireland last winter!

One of the most stylish bathrooms to use concrete in recent times was designed by Ken Mackay, senior partner at Mackay + Partners, for his own home in the Barbican, London. The Barbican has been at the zenith of cosmopolitan living for 30 years now. You won't find any of its fashionable residents complaining about the dullness of concrete or its mid 20th century public housing connotations. Instead, they embrace it, aesthetically if not literally.

Mackay reveals, "I feel that the bush hammering of the concrete columns and balconies works very well. It follows the brutalist aesthetic set by Corbusier." The original concrete architecture inspired his bathroom design.

He continues, "We've contrasted the giant bush hammered concrete pillars and ceilings with crisp white plaster walls. Dark lacquered walls and mirrors also contrast with the concrete."

The result proves that when concrete is used thoughtfully it can be just as appropriate for a private bathroom as a public art gallery.



Cement to be... a brief history

- 7,000BC Concrete has been around for nine millennia or so. In 1985 builders in Galilee discover the oldest surviving concrete in the world made of lime and stones.
- 600BC Ancient Greeks start to use mortars which can set and harden in both air and water when mixed with water.
- 300BC The Romans create Pozzolanic cement, a volcanic material with cementing properties. As seen in the concrete dome of the Pantheon. The Latin word 'concretus' which means compounded is invented.
- 1750 Engineer John Smeaton erects a lighthouse in Plymouth. The distance from shore and subsequent delay of lime settling means stone isn't viable. He realises that mortars made from lime produced from burning limestone which contains clay can set in both air and water. Hey presto – a concrete lighthouse!
- 1824 Joseph Aspdin, a stonemason from Leeds, makes a cement by heating chalk and clay together, and then grinding it down to a fine powder. He names it Portland cement due to its resemblance to Portland stone.
- 1828 Mass production of Portland cement begins and concrete takes off in the popularity stakes.
- 1850 Concrete is first used in Ireland in the foundations of a bridge crossing the River Glyde in Dundalk.
- 1870 A milestone in concrete by Bindon Stoney, 'the Father of Irish concrete'. He develops precast concrete blocks to erect the North Wall along the tidal Liffey.
- 1892 Frenchman François Hennebique sets up his reinforced concrete firm. Early reinforced concrete is patented rather than generic.
- 1902 Auguste Perret's seminal Parisian apartment block rejoices in its concrete construction rather than trying to conceal it which has previously been the fashion.
- 1904 Somerset's Linen Mill in Belfast, the first Hennebique building in Ireland, is completed.
- 1933 The Irish Government's Cement Act of 1933 paves the way for cement factories in Drogheda and Limerick.
- 1961-75 Brutalist icons Sam Stephenson's Central Bank in Dublin and Francis Pym's Ulster Museum extension in Belfast are built.
- 1990 Pre-stressed concrete is widely used. No tension equals no cracking.
- 2000 Self-compacting concrete is discovered. A new easy flowing admixture gets rid of air bubbles.
- 2005 Pat O'Rourke, Marketing and PR Manager of the Irish Concrete Federation, states, "The total value of the precast concrete, concrete product, ready mix concrete and sandstone industry in Ireland this year is valued at €2.1 billion."
- 2011 Hundreds more innovations are developed, especially in the US. Look out for semi-transparent concrete.