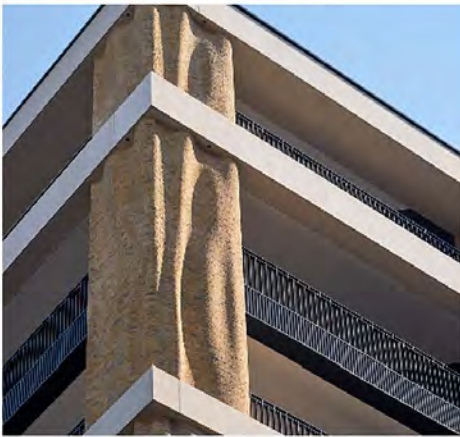




ORIGIN STORY

Tide Bankside

The story behind Squire & Partners' mysterious "eroded" facade

Squire & Partners was inspired by the historic Thames riverscape to design an organic, 'eroded' facade for its net-zero office building. It just had to work out how to build it ...

The south bank of the Thames between Southwark and Blackfriars bridges must be one of the most narratively rich stretches of river in the world: a place of Roman traders, Viking warlords, Elizabethan theatres and bearpits, Dickensian wharves and warehouses, all before its modern-day reinvention as the Bankside cultural quarter, anchored by the twin flagships of Tate Modern and Shakespeare's Globe.

TIDE Bankside, located immediately behind the Globe, has been consciously woven into this story. The 12-storey building is recognisably an office block, but its brickwork piers and columns are unlike any commercial facade you've ever seen: gnarled, twisting trunks that seem to have washed up on the river's muddy shore.

Tim Gledstone, senior partner at architect Squire & Partners, had observed how Bankside's built environment was in constant dialogue with the river, and wanted the new building to engage with this gently shifting landscape. "If you go down to the Thames, you can see all of these brick piers and timber posts that have just eroded, like bits of driftwood. That's what we wanted to accelerate, so that the building feels bedded in."

Gledstone and his team initially sculpted the columns in clay, evoking the way that saltwater gradually carves channels and rivulets into rock. Then they scanned the design and imported it into Rhino software. The original intention was to cast the forms in precast concrete using bespoke moulds. "We thought that it would be pushing the technology a bit, but that it could be done." They also wanted to use aggregates from the Thames to create "a local dirty mix, with sandy pigments and little flints and stones you find along the river".

Then, two weeks before the scheme was due to go before the planning committee, a problem arose. "Southwark's new design officer said, 'I like everything you've done here, but I want it to be in brick.' I had no idea how we were going to do it, but our client told us, 'just say yes and we'll figure it out later'." The practice tested out a number of approaches. "We came up with the idea of just using headers, or making the design more pixelated, but that flattened the geometry too much. Everyone agreed that prefabrication was the only way to do it properly."

That was when they turned to precast cladding specialist Thorp Precast. "We quite like doing mad, complicated jobs," says founding director Harvey Thorp. "When the team from Squire came up and showed me the images of what they wanted, I said, 'I think I know exactly how I could do that'." Thorp's vast Stoke-on-Trent factory is equipped with a five-axis CNC machine, which cuts in three dimensions, as well as being able to tilt and rotate the cutting medium.

The plan was to import the digital design and then cut each brick to the designated profile using a water jet, then set the bricks in precast panels. Using water to accelerate the eroded aesthetic and expose the softer inner brick added to the "romance" of the design, Gledstone says. Once the bricks were cut, each was allocated a "passport" to indicate its precise location on the panel.

They were then placed in a polystyrene mould, CNC-cut along the same digitally coded contours as the bricks, to hold them in position while a backing layer of concrete was



Project Team

Architect

Squire & Partners

Structural engineer

Heyne Tillett Steel

Services engineer

Hoare Lea

Main contractor

Kier

Cladding designer and manufacturer

Thorp Precast

poured, up to 300mm deep. Where thinner panels were required, ultra-high performance reinforced-fibre concrete was used, reducing the depth to as little as 50mm.

The key was to maximise the use of each brick and each mould, both to eliminate waste and to make the plan stack up financially. "We referred to it as the mirror image, or the butterfly – if we cut one brick, we would use the negative too," Thorp says. They could also turn the bricks upside down: "So from one cut, you have four potential patterns. We set some rules for the thickness and depth of the cuts, and Tim's team went away and worked on the different variations."

Some elements required an even more inventive solution. The corner column on the junction between Park and Emerson streets – which Gledstone and Thorp refer to as "the stiletto" – is three-dimensional and visible from all sides, with nowhere to conceal joints. This was cast vertically in four-sided sections, allowing the brickwork bonds to turn the corner rather than simply stopping at the end of a panel.

Each section was about 2m high with a hollow core. On site, the sections essentially acted as permanent formwork: lowered by crane over vertical reinforcement, before being filled with in-situ concrete. Despite its appearance, this is an extremely robust building, designed to last for 180 years. "We wanted a high-performance, low-carbon frame that could evolve over generations," says Gledstone.

"It has solid bones and uses high-quality, long-lasting materials." The in-situ concrete frame has been described by Mark Tillett of structural engineer Heyne Tillett Steel as "probably the most sustainable RC structure of this scale in London", thanks to the use of an industry-leading 65% GGBS mix and local aggregates. Its piled raft foundation also helps to reduce material and, consequently, the building's embodied carbon. This has been measured at 493kg/CO₂e/m² (stages A1-A5), 17% below the LETI 2020 best practice target.

In operational terms, the building contains 14,000m² of grade A workspace, and has achieved NABERS 5* and BREEAM Outstanding ratings. Its energy consumption has been measured at 55kWh/m²/year, in line with the UK Green Building Council's net-zero carbon interim energy target for 2030-35. The eventful history of Bankside suggests that a lot can change in 180 years – the only certainty is that the Thames will keep on rolling. TIDE Bankside's loose-fit grid has been designed to be adaptable to a variety of uses, including life sciences, retail and residential. Whatever the future holds, it's ready to go with the tidal flow.

Interview by Nick Jones

Photos: Andy Stagg, Gareth Gardner

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