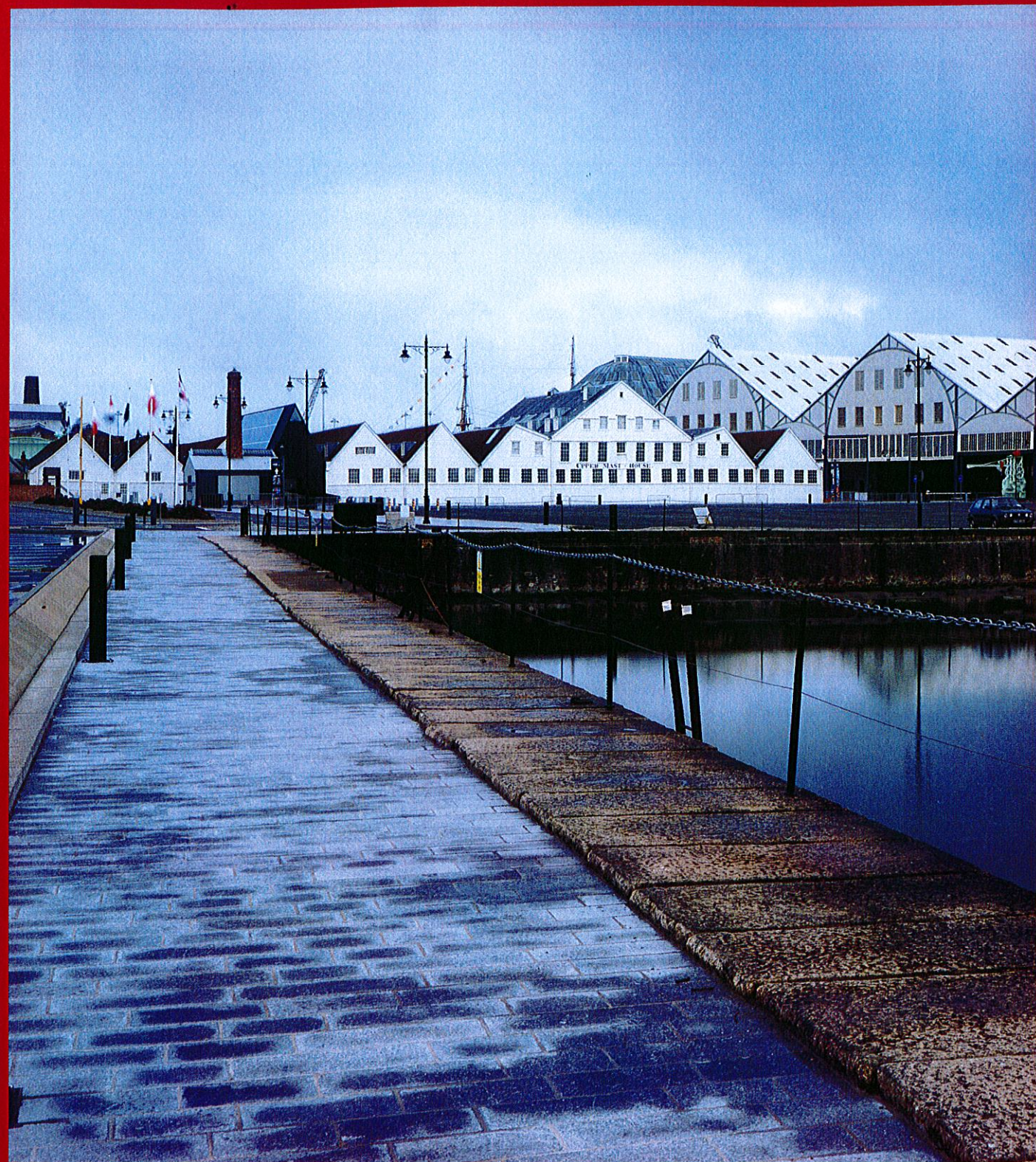


Command of the Oceans by Baynes and Mitchell Architects



Appraisal Jay Merrick
Photography H el ene Binet

An appreciation of the Command of the Oceans visitor centre at The Historic Dockyard Chatham must start with its extraordinary 32ha setting and history, which began with Henry VIII's order to build a ships' store on the Medway.

The fortified expansion of the shipyard during the 18th and 19th centuries has left a complex with 47 Scheduled Ancient Monuments on a site classified as an Ancient Monument of National Importance, which until 1932 was secretly blanked on Ordnance Survey maps.

The Royal Navy closed the dockyard in 1984, since when it has been run by a trust which conserves and adapts it as a series of visitor attractions. Ships such as Nelson's *Victory*, and the *Temeraire*, immortalised in Turner's painting, were launched here. So was the *Namur*, whose innovative rounded and reinforced bow set a decisive battle-superiority precedent in 1756. The accidental discovery in 1995 of the *Namur's* massive structural timbers beneath three layers of flooring during renovations of the 1780 Wheelwrights Shop triggered the Command of the Oceans project.

Four aspects of Baynes and Mitchell's scheme make it Stirling-worthy: the boldness of the original design proposal, which ignored a specific suggestion in the brief; the solutions to structural, construction, and programmatic challenges; the finessed meeting-points between old and new elements; and the reconfiguring of the wider site, which had been a sprawling, ill-defined car park in front of the five massive slipway sheds.

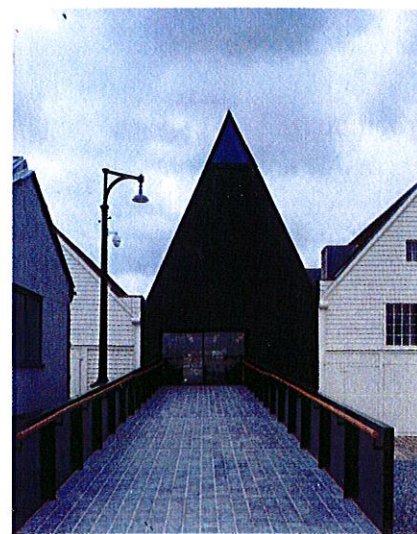
At the heart of the scheme is the two-level reception building, which connects new exhibition and event spaces in the listed Georgian naval workshops on either side. The building has been inserted into the not-quite-rectangular gap between the two-bay Mast House and the previously defunct three-bay Wheelwrights Shop. The structure replaces the Mast House entrance, which was at lower ground floor level.

Visitors now cross a slightly sloped, black-painted steel bridge, with minimal, no-nonsense detailing, which takes them from the car park to the ground floor of the Command of the Oceans reception and exhibition spaces. They pass through a fa ade sheathed with seamed black-patinated zinc and find themselves in a volume that leads directly to the Mast House and Mould Loft on one side and, on the other, down a ramp into the Hearts of Oak gallery and a new space where the *Namur's* timbers lie.

The black sheathing – well-detailed, precisely installed – is in deliberate contrast to the off-white paint on the adjacent run of historic naval workshops, whose jagged roof pitches are irregular in height. So you know from some distance this is where you get into Command of the Oceans.

The brief indicated some sort of improvement to the original lower ground floor entrance. But Alan Mitchell realised that the creation of a higher entrance, combined with a 1m lifting of the ground floor of the Mast House and Mould Loft, would produce exhibition, caf e and event spaces and, beneath them, create enough head height to allow visitors to process, without ducking down, past the *Namur's* timbers.

'The architects were quite brave,' says the trust's chief executive, Bill Ferris. 'The buildings slope from north to south along their long axes. The



internal ramp solved that. The other architects saw the level-change as a problem. Alan Mitchell saw it as an opportunity. They nailed it.'

Mitchell admits that the insertion of the new building was 'a challenge all the way'. He fought successfully to retain key architectural outcomes. Initially, the trust considered a flat-roofed reception building, which the architects resisted. The beauty and contextual logic of the new, steeple-sharp reception space is amplified by the run of scissor-trusses down its long axis. Visually, it's a pale and very satisfying volume; the criss-crossed, marginally asymmetrical perspective is accentuated by the practice's insistence on concealed structural connections and other details.

Baynes and Mitchell also insisted on a mixture of smooth and board-marked horizontals in the concrete structure that holds the descending ramp and the concrete bracing columns connected to the wooden structures of the buildings on either side. 'It would have been cheaper and easier to say no to the board-marking,' explains Ferris, 'but these guys convinced me from day one that it was essential. All the angst of delivering it was worth it. The number of visitors who fondle the concrete is amazing.'

The angst was triggered by the slightly skewed plan of the original gap between the buildings on either side. The increasing space between the new concrete and timber reception structure and the renovated timber boarding on the east side of the adjoining volume have been handled with considerable design (and construction) skill.

Apart from the substantial and protruding CLT portal casings that lead into the upper exhibition spaces, and the big rectangular window at the south end of the reception volume, interventions are low-key. 'Less is more in this type of intervention,' says Mitchell. 'A lot of it's about what we haven't done. There was no intention to improve what was already right.'

There was a critical challenge of buildability in the lifting of the upper floor of the Wheelwrights Shop. A working platform was hung from temporary metal box-trusses and the existing historic timber structural frame, and the new Douglas fir-boarded floor built above it, 1m higher than the mess of old floorboards above the *Namur's* timber. The new floor was re-set on load-spreading metal couplings anchored to the grid of historic posts, which were raised on new concrete and brick strip-footings.

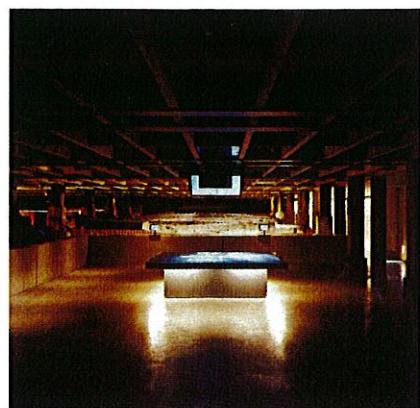
These elements of the project are the most obviously impressive: an outstanding combination of historic fabric and formally and materially sophisticated new architecture. There isn't room to fully describe the equally important preparatory 'grunt' – the scraping away of physical and literary layers to understand the past lives of the Mast Ponds, the Brunel Canal, the *Namur's* timbers, and the buildings themselves. But all this was crucial in developing a scheme that has completely redefined the area north of the Command of the Oceans tableau.

This once nondescript wasteland now has historic, functional and programmatic meaning as the old buildings are brought to life by the sharply-pointed new kid on the Georgian block – a small but very adroitly composed descendant of the dockyard's magnificent timber-structured No.3 Slip, built in 1838.

Project data

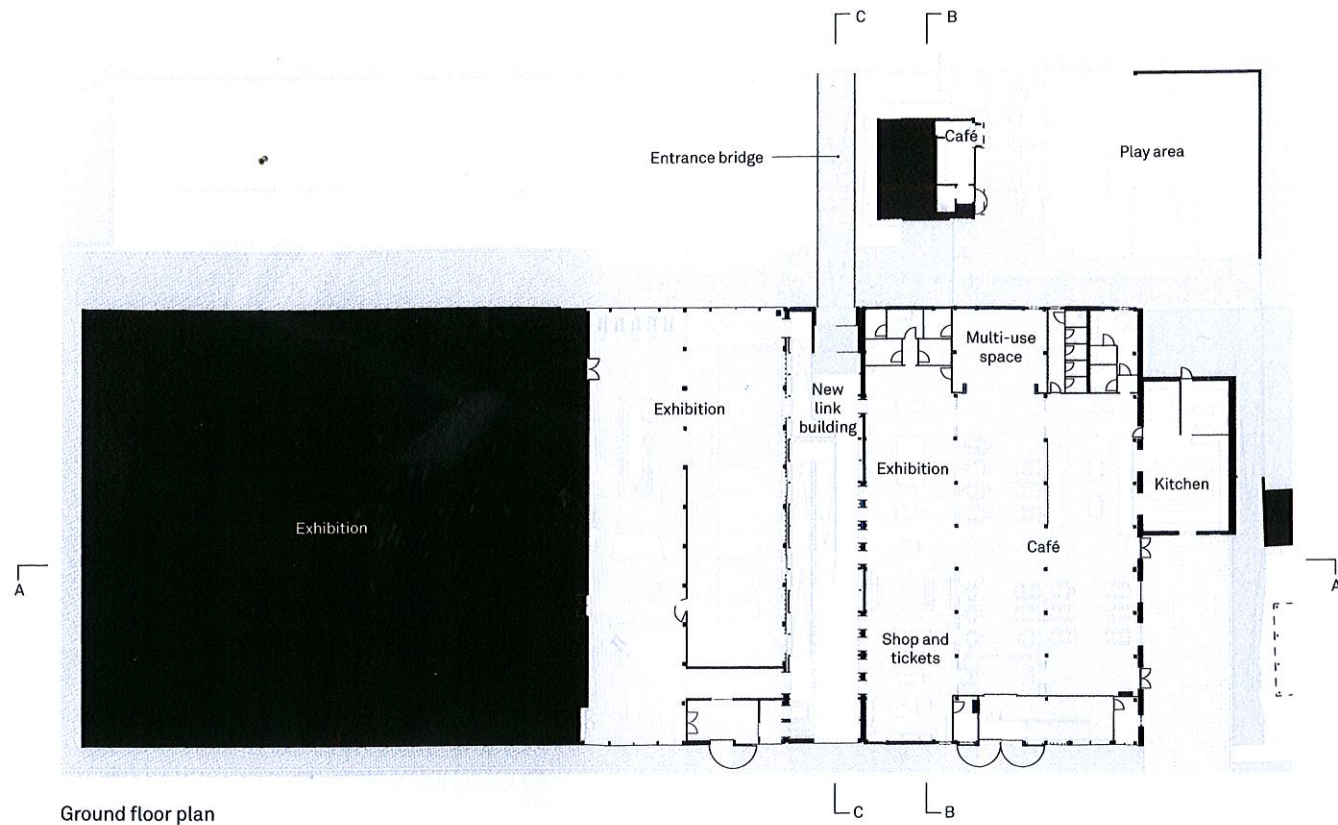
Start on site July 2014
Completion May 2016
Gross internal floor area 1,800m²
Form of contract Traditional GC Works
Construction cost £8.13 million
Construction cost per m² £2,322
Architect Baynes and Mitchell Architects
Consultant Conservation Architect Ptolemy Dean Architects
Client Chatham Historic Dockyard Trust
Structural engineer Price & Myers
M&E consultant Skelly & Couch
Quantity surveyor/cost consultant Robert Dollin & Co
Approved building inspector JM Partnership
Experiential designer Land Design Studio
Project manager Artelia UK
Timber decay consultant Ridout Associates
Archaeologist Wessex Archaeology
External works contractor Raymond Brown Construction
Main contractor (initial) Fairhurst Ward Abbotts
Main contractor (completion) WW Martin
CAD software used Vectorworks

74

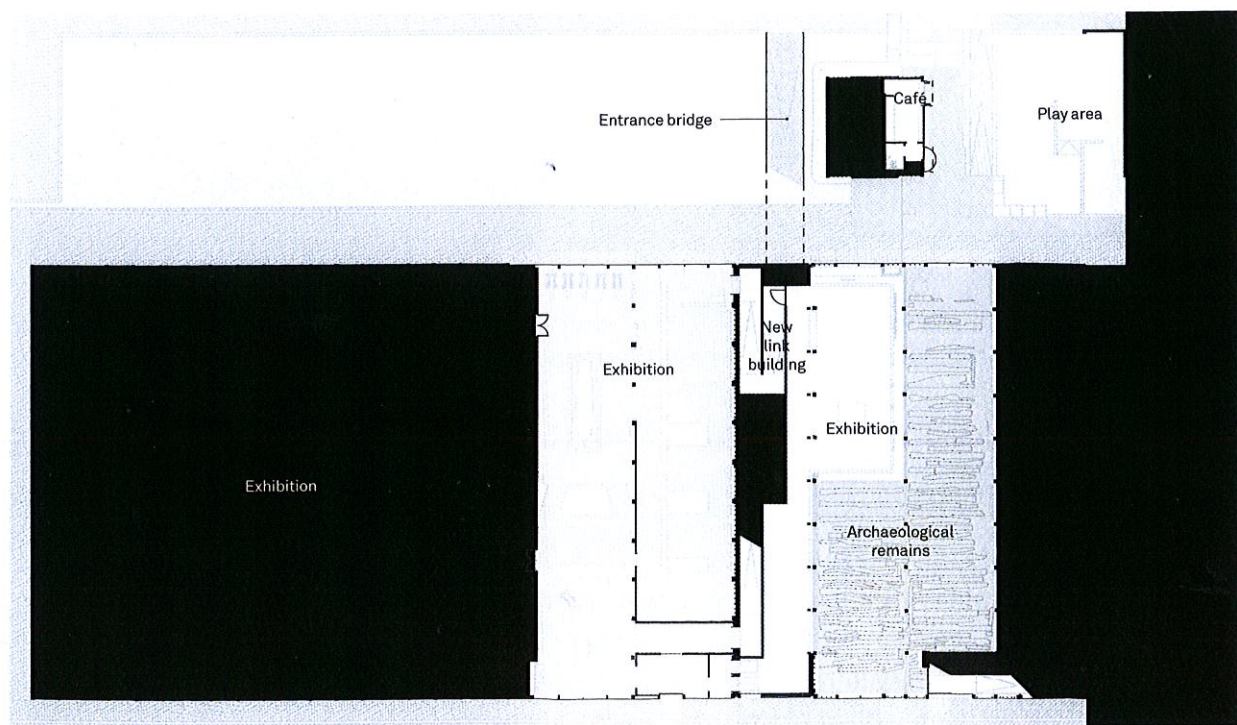


Jay Merrick is architecture critic of *The Independent*

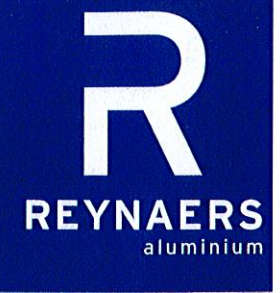
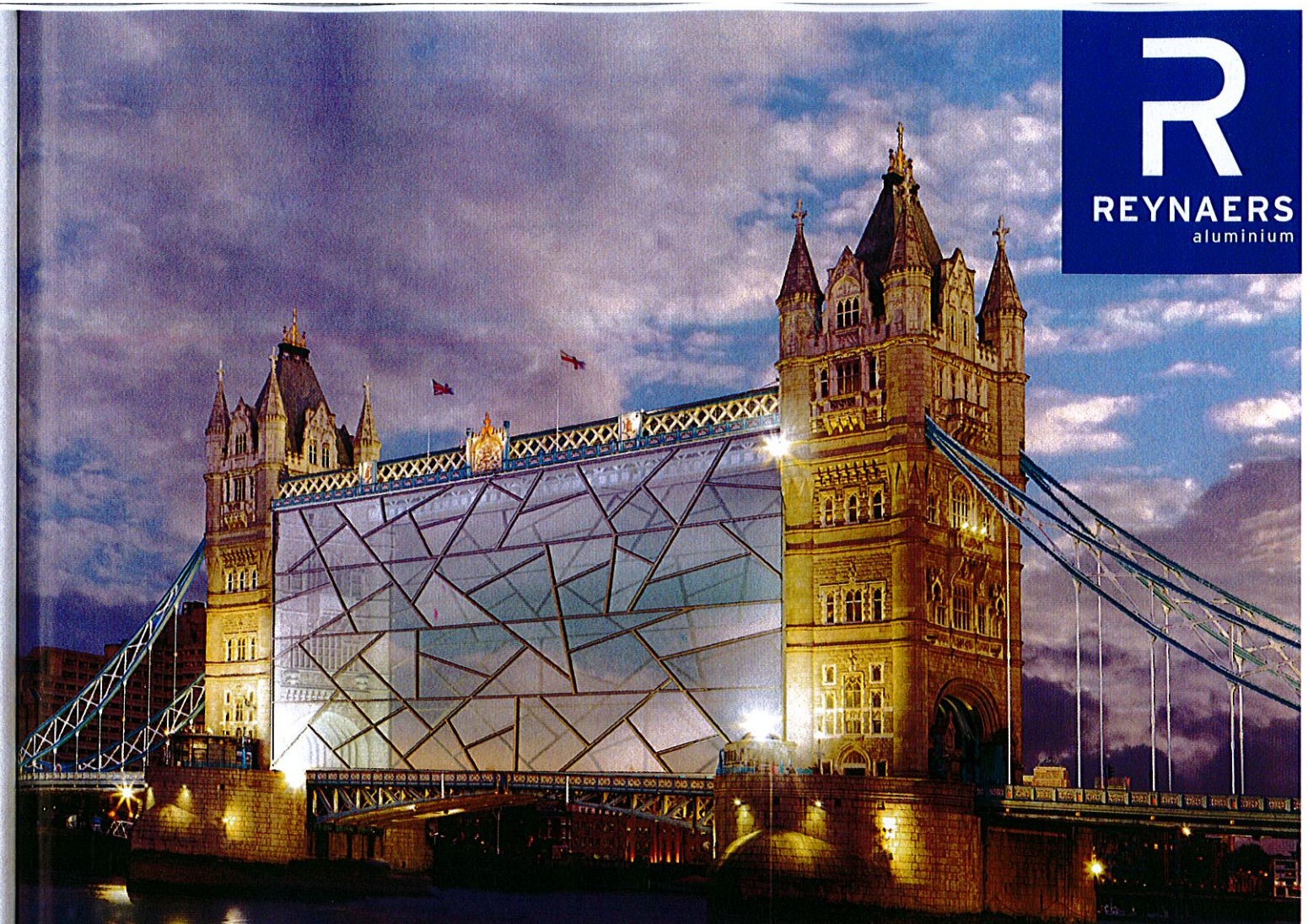
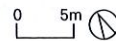




Ground floor plan



Lower ground floor plan



ANY SPACE, TRANSFORMED.

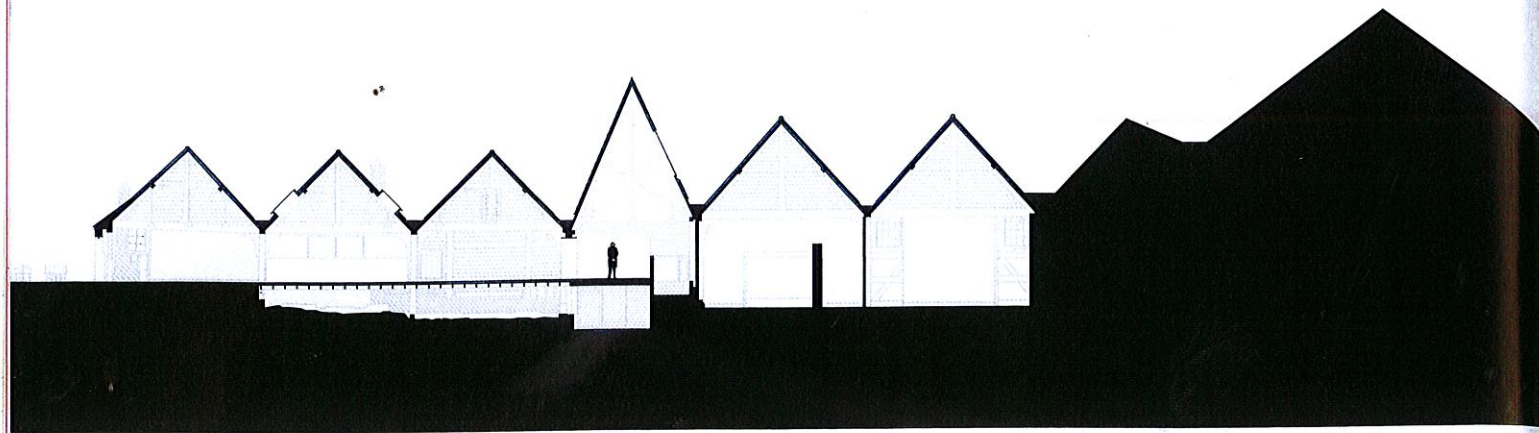
**New angles on
iconic design.**

With one of the most comprehensive product ranges on the market, Reynaers really does have a solution for almost any building, whatever shape or size.

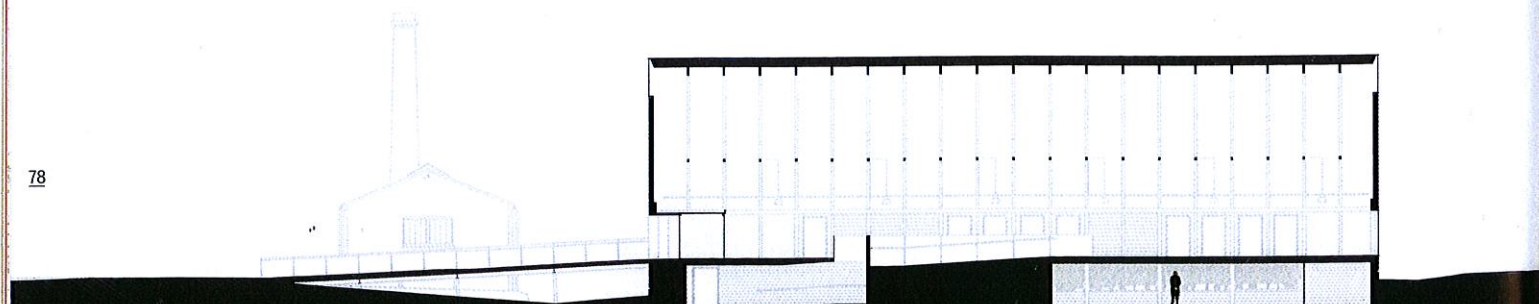
Our multi-level façades, for example, mean that architects need never again feel that their creativity is constrained by product limitations.

The range has been specifically developed to allow maximum flexibility in design and performance.

Discover more at reynaers.co.uk/anyspace-curtainwall

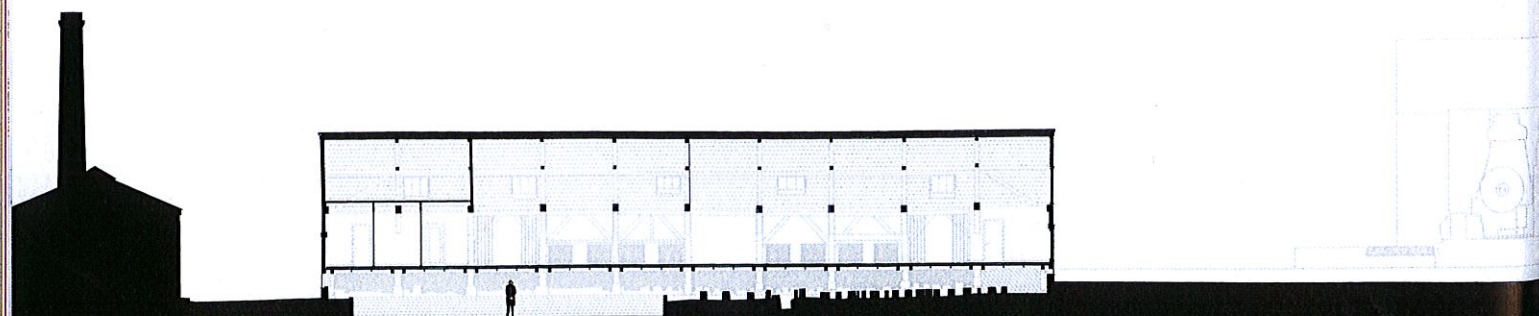


Section A-A



78

Section B-B






Section C-C

0 5m

The information is given for guidance only. Photo credits: Thinkstock - anessey.com - 05/17

3 prestige projects 
32 plans 
100% design focused 

-  Multiple shapes in 3 materials
-  Integrated solutions
-  A ceiling for every space*



LESS HASSLE. MORE CREATIVITY.

www.armstrongceilings.co.uk

Inspiring Great Spaces®

Armstrong®
CEILING SOLUTIONS

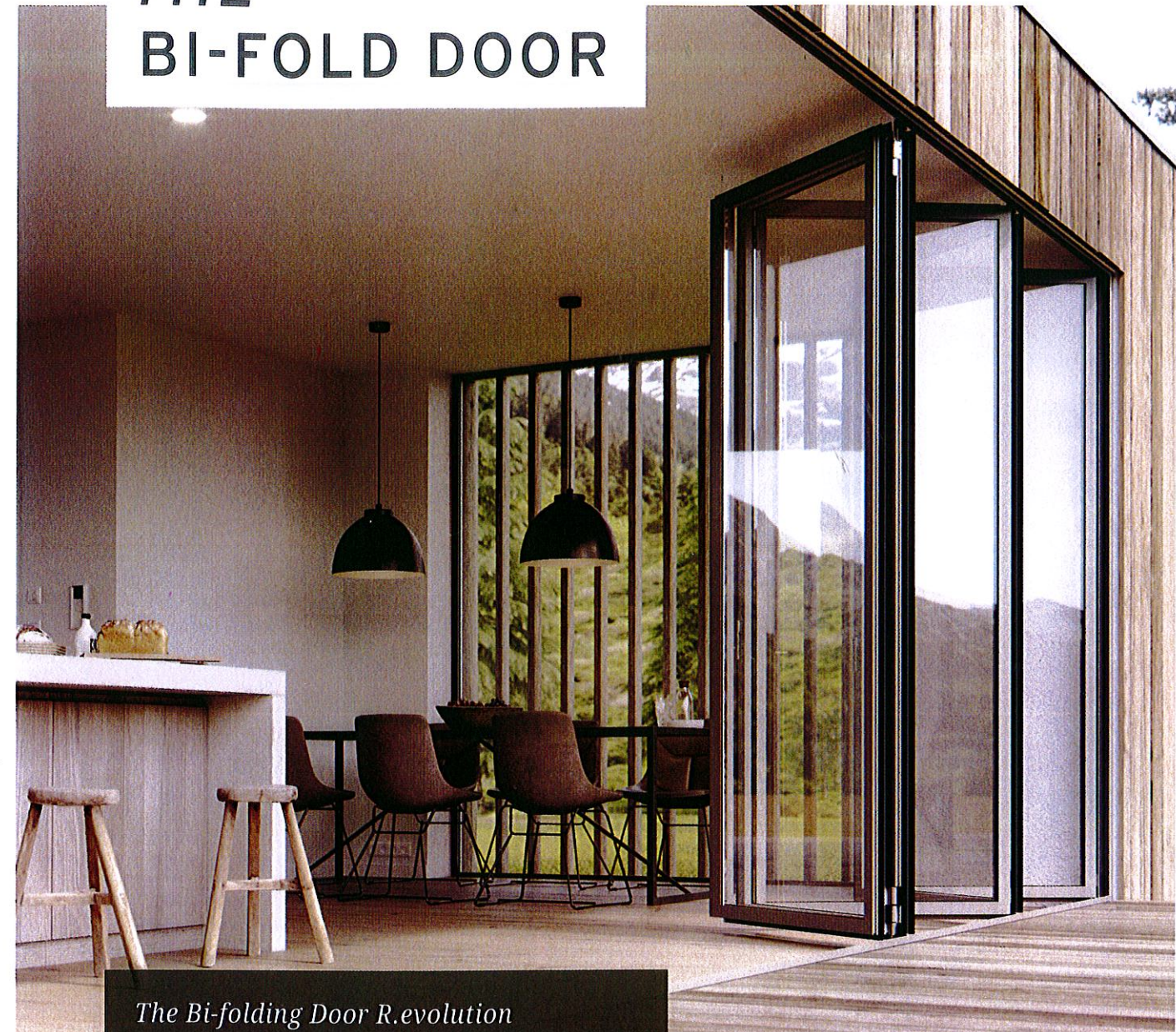


80

'The result is much greater than the sum of its parts and the heritage, not least the ship's timbers beneath the buildings, becomes the star of the show – the central intention of the brief'

Bill Ferris, chief executive, Chatham Historic Dockyard Trust

THE BI-FOLD DOOR



The Bi-folding Door R.evolution

30 years of expertise in one product:
Perfect functionality, the slimmest sight lines
of only 99mm, the best thermal insulation
values of $U_w = 0.8$ and endless design options.

solarlux.co.uk



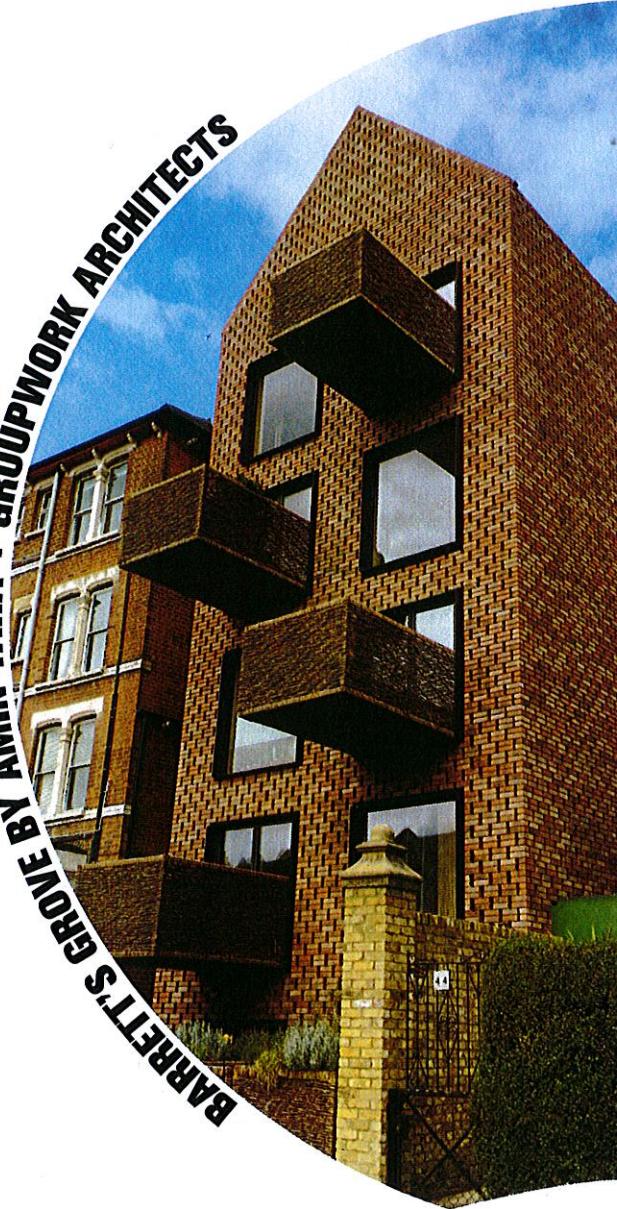
Cladding : Blackened Zinc
Steelwork : Milled steel with Danish oil
CHATHAM Docks : Completed

June 1

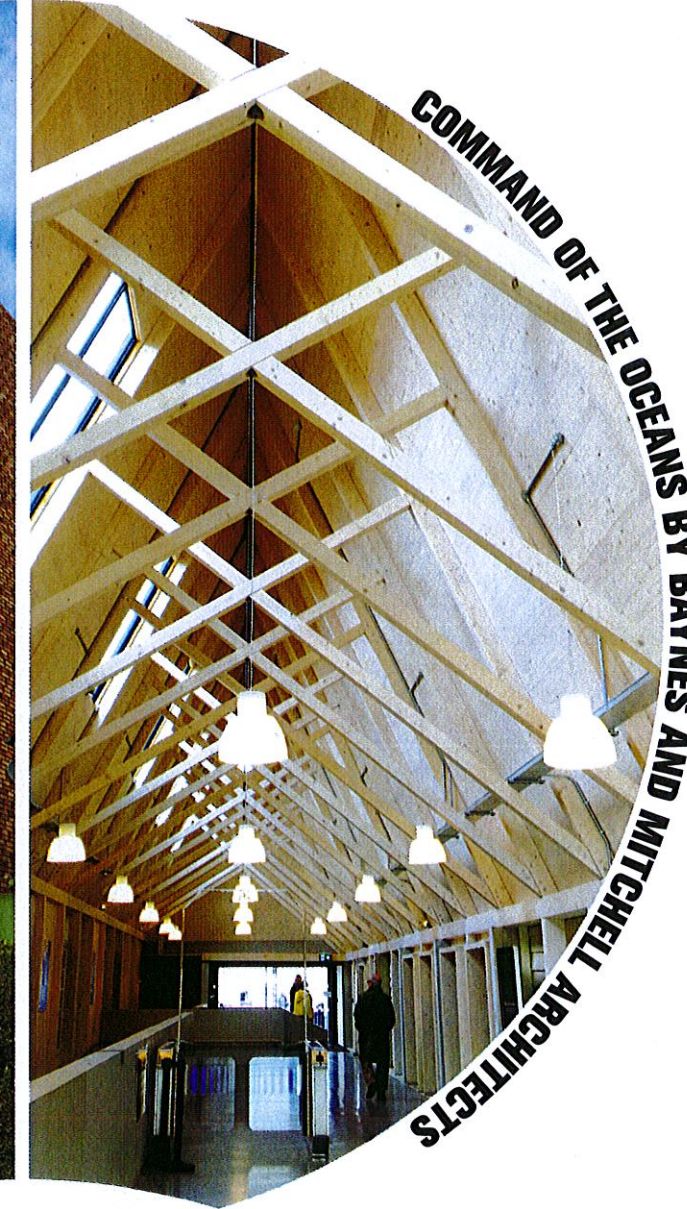
Sketch of the completed project by Ptolemy Dean

TWO STIRLING PRIZE SHORTLISTED BUILDINGS TWO WORLD-CLASS SOLID TIMBER FRAMES

BARRETT'S GROVE BY AMIN TAHA + GROUPWORK ARCHITECTS



COMMAND OF THE OCEANS BY BAYNES AND MITCHELL ARCHITECTS



WWW.EGOIN.COM • EGOIN@EGOIN.COM • 07981509724 • 36 ST MARY'S ST, EH1 1SX, EDINBURGH

How we built it

The first sketches of the project, completed on the train on the way back from the site visit, represent almost exactly the building that was delivered. They showed a new building filling the gap between two existing structures, the peak of its ridge rising higher than those to either side. A new floor covered the ship's timbers, providing valuable space to the Wheelwrights Shop above and enclosing a low, sunken gallery for viewing the timbers below.

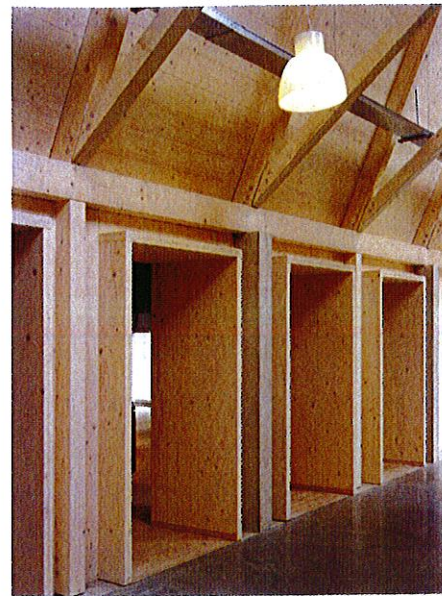
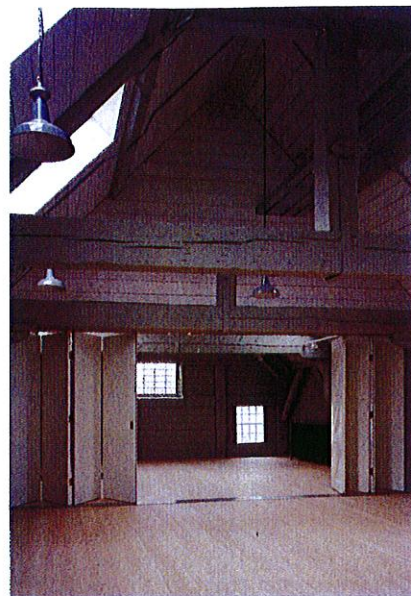
Development of the early proposals was largely through sketch models, examining various methods of achieving the required circulation routes. As these proposals developed, so did our models, starting to look at repetition of structure, the effects of light and shadow and specific interfaces that we were struggling to imagine in two dimensions. A 3D point cloud survey of the gap between the buildings formed the base for a digital model, which we used to accurately set out the new building.

We produced renders to convey the atmosphere we imagined the undercroft gallery might have, and combined these with a 1:1 mock-up of the floor structure built in-situ (constructed by the client), which required the interested party to stand in a hole outside the building and peer in through another hole in the wall. Despite these efforts, people still struggled to imagine what the final gallery space would feel like and, for many, I think the impact of that space comes as a surprise.

One of the most significant obstacles to construction was the protection of the timbers in-situ while the floor above them was being constructed. The initial main contractor (who went into administration two-thirds of the way through the build) proposed the solution. Tension cables were run through the building, picked up at either end by rows of large concrete blocks, and supported at intervals along their length by chains connected to box trusses spanning between existing beams. Metal trays sat on the cables, providing a working platform above the timbers (in effect, a suspension bridge) that facilitated the entire construction of the new floor. Once complete, the temporary floor was removed without any requirement for construction personnel among the archaeology.

Delivering the promise of those early sketches took an enormous amount of dedication, effort and resilience from the combined design and client team. Central to the success has been the drive and experience of the client. Early engagement of key bodies like Historic England, consultation with local interest groups, and an intimate knowledge of the site all helped to create an atmosphere of confidence and control in the overall process – one that could otherwise have been perceived as prohibitively fraught with risk. Huge credit for the completion of the project that so accurately reflects those early sketches is due to the client for its unfailing commitment to that vision.

*Brendan Higgins, associate,
Baynes and Mitchell Architects*



GIVE YOUR BUILD THE PERFECT FINISH

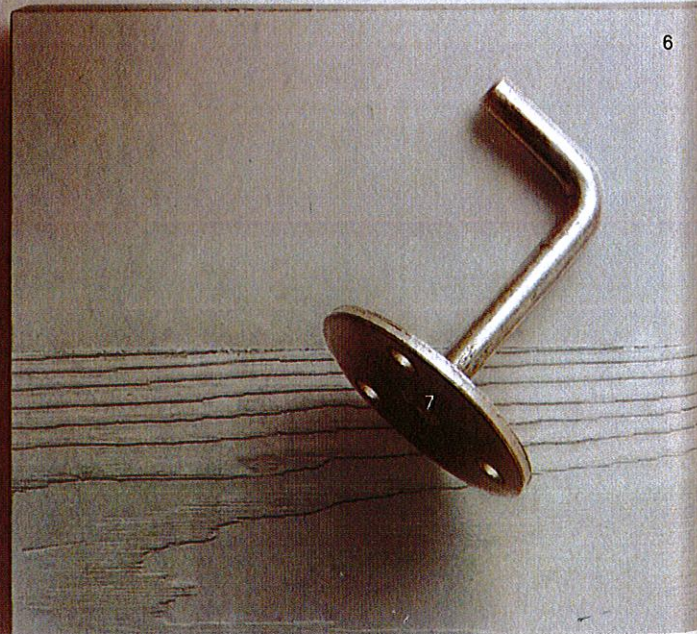
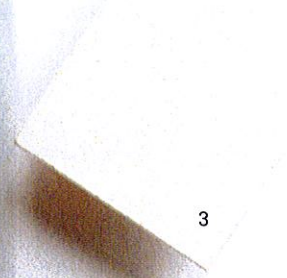
with our extensive range
of external silicone
renders and finishes

Natural Finish
Water Repellent
Low Maintenance
Allows Breathability
Extensive Colour Range

**K Rend**
Silicone Coloured Renders

The UK's largest independent
silicone coloured renders manufacturer

WWW.K-REND.CO.UK



1. Egoin whitewood spruce cross-laminated timber panels, glulam columns and truss members. Osmo PolyX-Oil White finish and Envirograf QVFR-Clear flame-retardant treatment
2. Tumbled blue stone setts by Pierre Bleue Belge
3. Fermacell gypsum board to partitions
4. Anthra Zinc standing seam cladding by VM Zinc
5. Dinesen Douglas fir floorboard, white floor soap finish
6. Boardmarked concrete (combination of plained smooth boards and sandblasted course boards used for formwork)
7. Plain steel handrail bracket by FH Brundle