O'Donnell + Tuomey's striking riverside shapes

Architectural education: an uncertain future

Walworth Town Hall roof rises from the ashes

Future winners: practices showing promise

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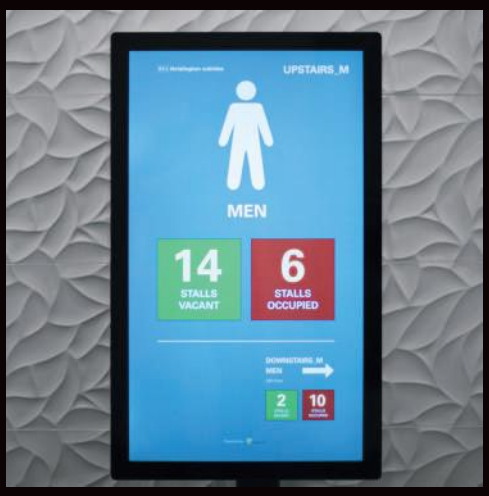

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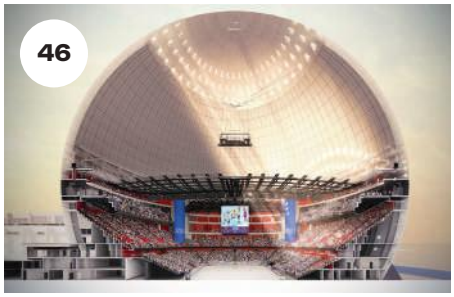

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Pulling the outside in, making CNC robots crazy, and remembering postwar modernist trailblazer Ursula Bowyer: ribaj.com

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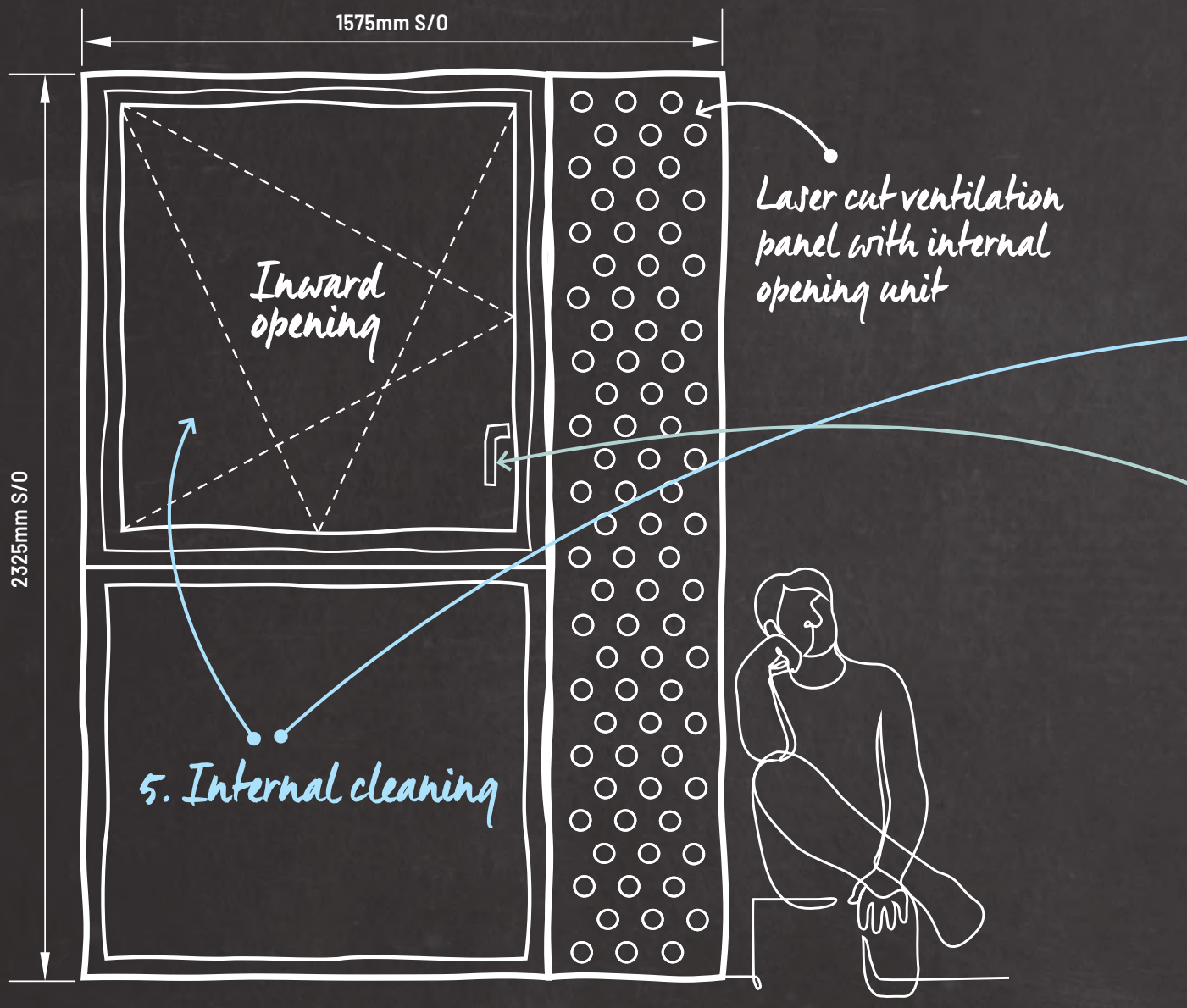

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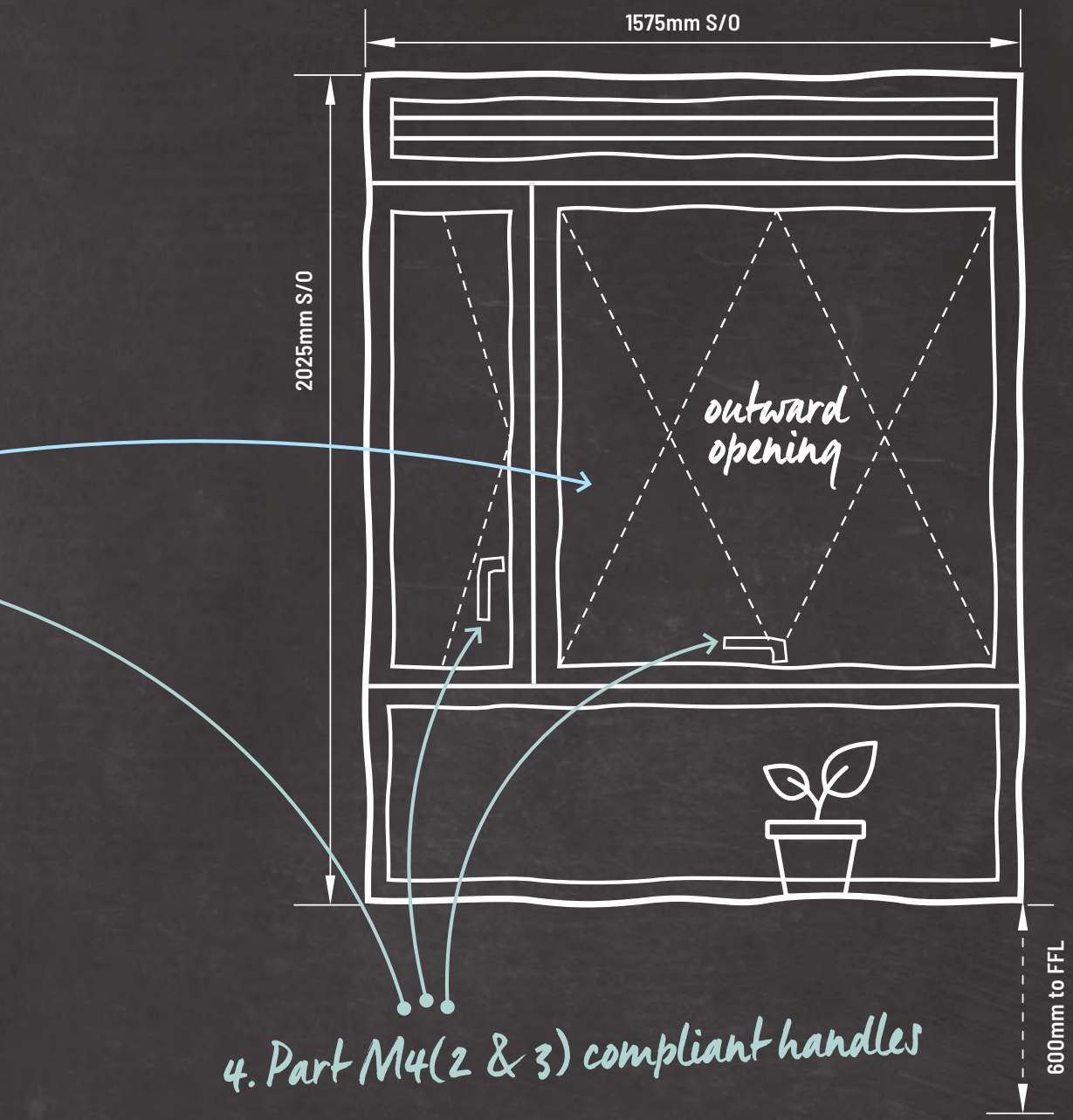

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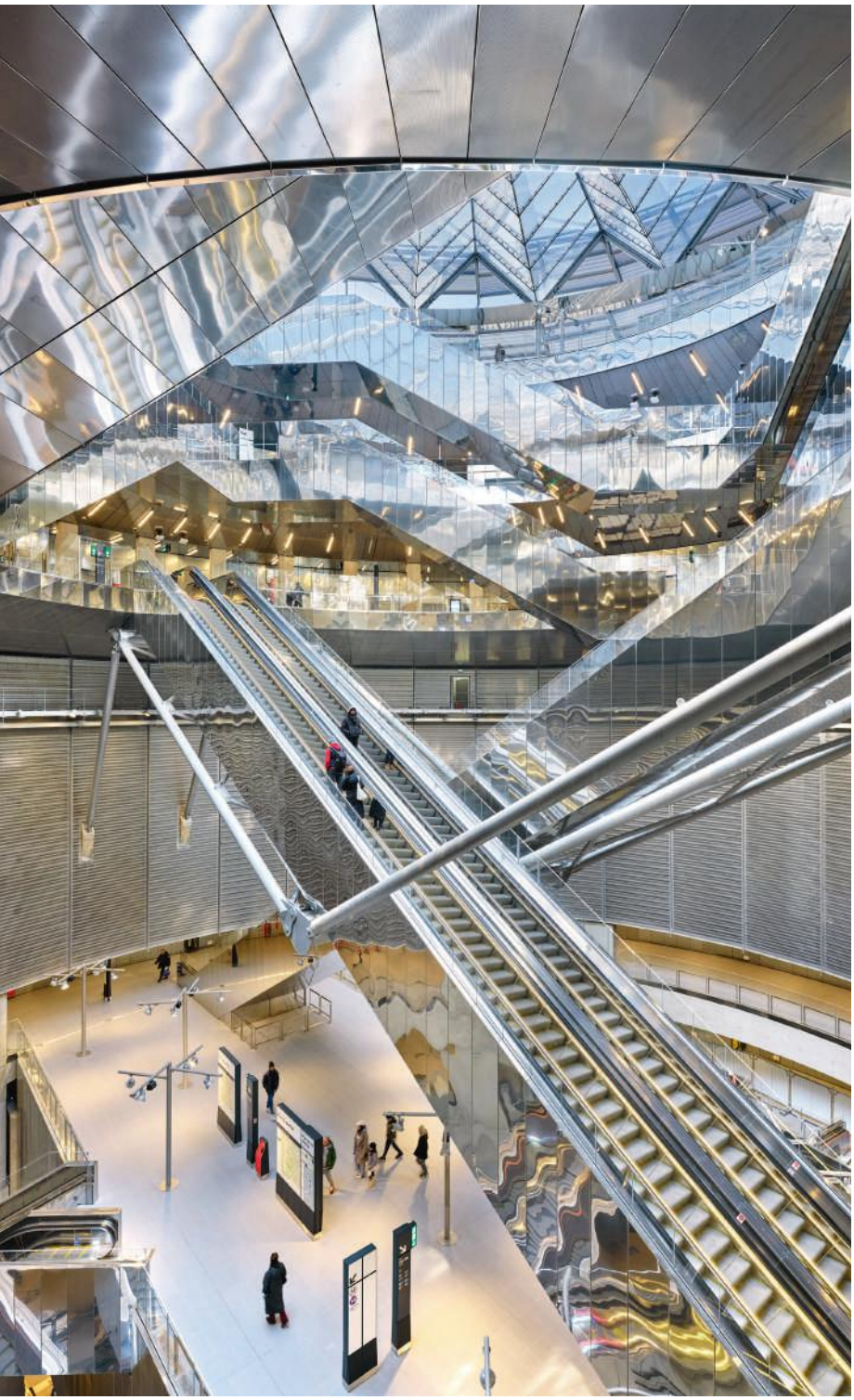
1: Buildings



GARE DE VILLEJUIF-GUSTAVE ROUSSY, VILLEJUIF

DOMINIQUE PERRAULT ARCHITECTURE

Read the full story: ribaj.com/villejuif–gustave-roussy

Currently Europe's largest civil-engineering endeavour, the €36 billion Grand Paris Express – the French capital's new orbital metro – will see the city's 245km-long network extended to a mammoth 400km between now and the 2030s.

If all goes to plan, 68 new stations will serve Paris's suburbs in a transport revolution for a city that, historically, has forced its 'banlieusards' into the centre to reach other parts of the periphery. Of the four new lines, number 15 will be the most heavily used, since it serves the 'petite couronne', as the ring of nearest suburbs is known. Scheduled to open in 2026, Line 15 already has one completed station, Dominique Perrault's Gare de Villejuif-Gustave Roussy, a major interchange with the newly extended Line 14.

Above ground, the station is relatively discreet: a single-storey, free-standing metallic structure that's located in the middle of a new public plaza linking the Institut Gustave Roussy (a hospital specialising in cancer treatment) to the Parc des Hautes-Bruyères. The action happens 50m below ground level, where an estimated 100,000 passengers daily will change trains once Line 15 comes into service.

To get travellers down there, Perrault sank an enormous, 70m-wide concrete cylinder – which according to him is the geometric form that uses the least material – whose perimeter wall is one metre thick. Lined with shops and technical spaces, the cylinder is open to the air at its centre, obviating the need for mechanical smoke-evacuation systems. A dainty lightweight roof in ETFE, meanwhile, hovers above to keep the weather at bay.

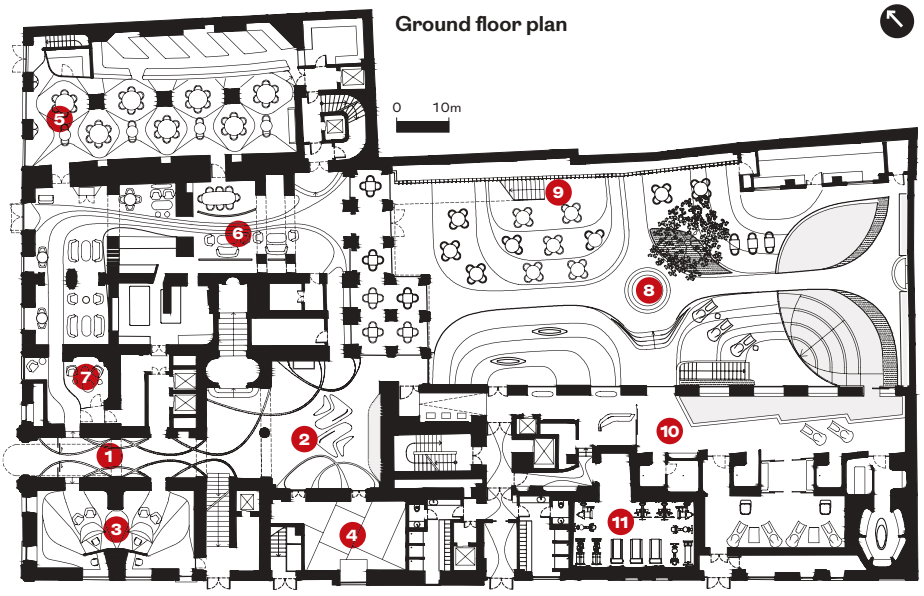
A spectacular series of escalators descends into the void, which is crossed by concrete tubes containing the tracks and platforms. Augmenting the sense of drama, various raw-concrete and metallic finishes help reflect light. Although a hackneyed term, the adjective 'Piranesian' seems entirely justified to describe this impressive feat of civil engineering.

Andrew Ayers

All for love

Zaha Hadid Architects' hotel transformation of a 16th-century Roman palazzo sets out to achieve beauty through excess – a goal it comprehensively achieves

Words: John Jervis
Photographs: Chris Dalton



1 Gallery
2 Lobby
3 Reception
4 Playroom
5 Restaurant
6 Bar and bistro
7 Cigar room
8 Garden
9 Stair to first floor terrace
10 Spa
11 Gym

IN NUMBERS

74
rooms and suites

800m²
external garden

90m²
gallery with preserved bottega

230
applications for building permissions

Approaching the unremarkable facade of Palazzo Capponi, just off Rome's Piazza del Popolo, there is little sign of the contemporary, beyond a small canopy above its arched doorway. Step through, though, and serpentine interventions are everywhere, thanks to its transformation by Zaha Hadid Architects into the latest high-luxury offering from the Romeo Collection hotel group.

Sweeping backlit strips of slim steel run along the ceiling of the entrance corridor, leading past a restored staircase, and through to a small courtyard. Fitted with a retractable roof and latticed metal arches springing from the floor, this central hub houses a glossy red piano, corneous black ZHA furniture and a water-feature-cum-artwork swathing an entire wall to ostentatious effect.

Hotel Romeo Roma was among the last projects initiated by Zaha Hadid, kicking off in 2015, and overseen to completion by ZHA director Paola Cattarin, whose previous assignments include project director for the Salerno Maritime Terminal and a variety of masterplans across China. Curves dominate the 16th-century mansion's makeover. Almost all interiors are encased in a sinuous second skin, hiding the original orthogonal rooms with sweeping surfaces inspired by baroque vaults – and by the palazzo's surviving fabric – to 'create a dialogue between past and present', in Cattarin's words. At the request of Alfredo Romeo, founder of the Romeo Collection, natural materials (always high-quality, usually glossy, and occasionally fused together as a single surface) prevail over the practice's usual synthetic options. Achieving Hadid's trademark three-dimensional futurism in marble, basalt, woods, steel and expanses of ebony veneer required exquisite craftsmanship (including technology from the yacht industry), specialist suppliers and serious outlay.

This cladding serves purposes beyond beauty and a unique selling point. Despite wholesale alteration over the years, the palazzo is rigorously listed, including its two 1950s extensions, which date from its previous guise as a government office. The preservation and reinforcement of all structural elements necessitated external services, now hidden in the cavity between old and new. This retention of original fabric also resulted in a tricky jigsaw of diminutive spaces. Various ploys are used to avoid potential claustrophobia, from oculi punctured through marble walls to partitions consisting of veneered fins, enhancing sightlines and offering the illusion of space. The new surfaces are also intended to regulate ventilation, acoustics and temperature.

Ensuring overall coherence while giving each public area a specific character was a challenge, particularly with the curve as a single dominant

Below One of the fresco suites gives access to a balcony above the main entrance.

JACOPO SPILIMBERGO (ALL IMAGES COURTESY ROMEO COLLECTION)

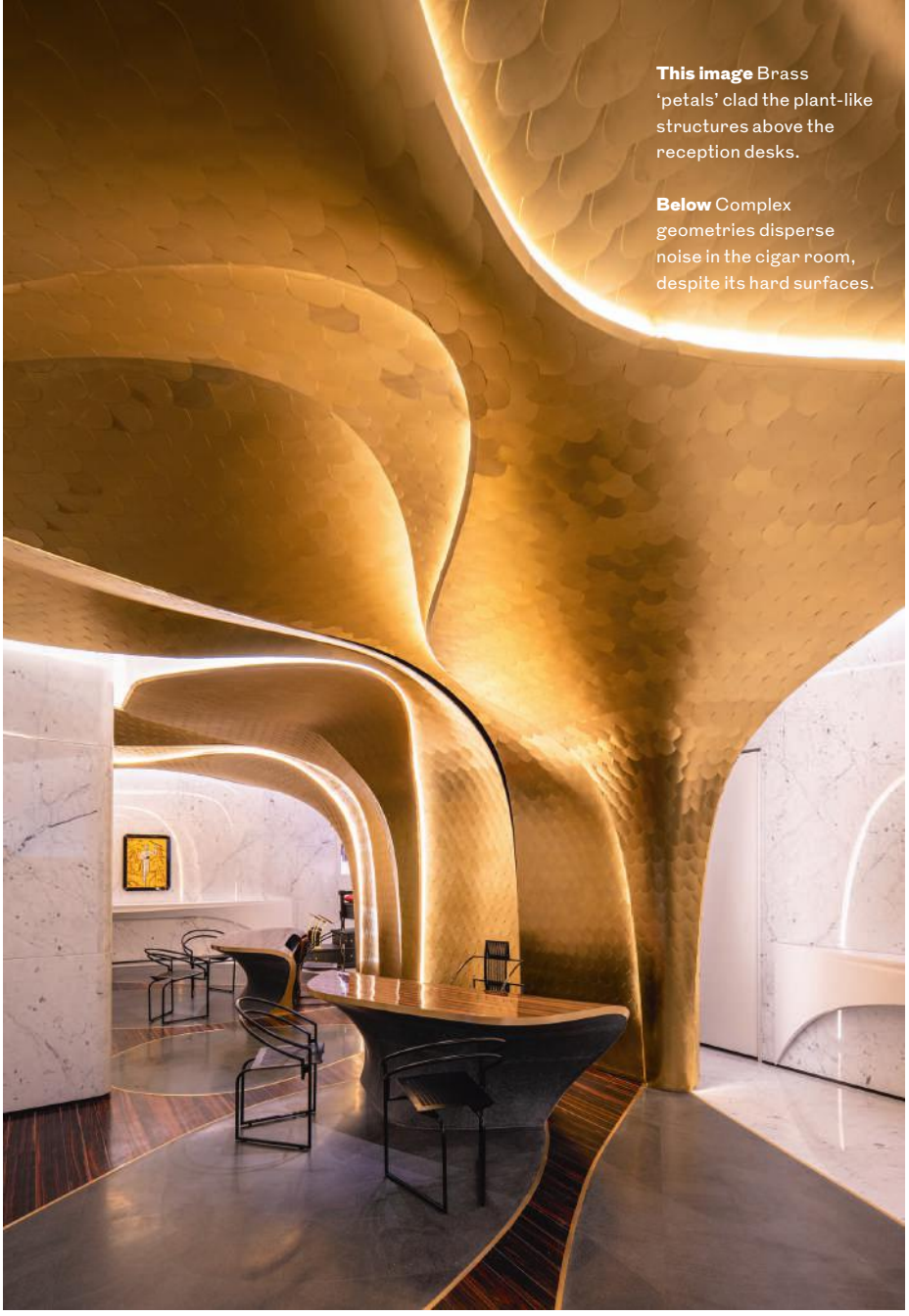
Various ploys are used to avoid claustrophobia and offer the illusion of space

Credits
Client
Romeo Gestioni
Client representative and project manager
Romeo Design – Ivan Russo
Structural engineer
Studio Beta
MEP consultant Spring
Lighting Corte Gherardi
Water features
Fluidra Engineering
Special structures
EOSS Architettura
Interior furnishings
Arte+Partners, Barretta, Devoto Design
Construction company
Mannelli Costruzioni, Ga.Re.Co.

gesture. The natural distortions of the vaults created by the palazzo's irregular geometries, and the resulting haphazard intersections, provide one solution; the diversity of materials another. The womb-like reception, with its eye-catching fronds clad in brass scales amid cantilevered desks of lava stone and ebony, is among the most persuasive. Another eye-catcher, despite its limited practicality, is the small cigar room. On a well-trodden route, and with two glass walls, it is a fishbowl for occupants of its two low leather chairs – although the skill with which dark veneers are shaped around layers of recessed shelving is undeniable.

Far more important, however, is the atmospheric restaurant – chef Alain Ducasse's first in Rome – with its carefully planned kitchen fully exposed to diners. Long, thin slices curve through the low Macassar ebony roof, and microlights behind highlight its rippling surface. Across the courtyard, the bistro takes a similar approach, but with additional height creating towering aisles, with a touch of rainforest thrown in.

This description of extraordinary, expensive and high-gloss interiors could go on. The aim, as Romeo says, is 'to make the most beautiful hotel in the world – one that looks like no other'. It is something of a relief, in fact, to reach the relatively subdued spa, featuring a glowing wall of Sicilian rock salt, while the soft ash cladding the adjoining gym is



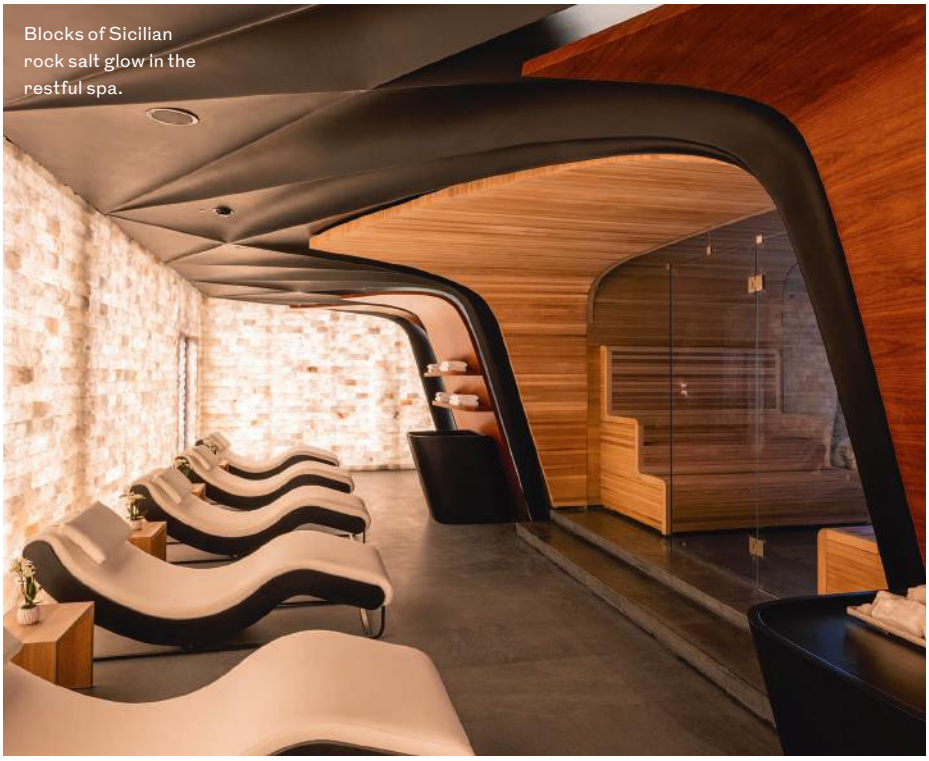
This image Brass 'petals' clad the plant-like structures above the reception desks.

Below Complex geometries disperse noise in the cigar room, despite its hard surfaces.

similarly welcome, offering acoustic and visual moderation. But the long slim pool alongside, running under intimidating dark arches, presages an alternative attraction for residents.

As it flows out into the hotel's surprisingly large garden, the pool transforms into a glass-bottomed arc of water, enabling swimmers to paddle above the ruins of a Roman bottega beneath. The unexpected discovery, excavation and protection of this 2,000-year-old workshop during renovations added considerable time and expense, but also an additional depth of meaning to the conversion. One of the resulting finds, a head of Livia Drusilla, is on display alongside the red piano. Once studied, more artefacts will join it.

Art is a feature of Hotel Romeo Roma. On one side of the garden, a typically glamorous white ZHA staircase is extruded from an impending green wall, leading up to a raised terrace



Blocks of Sicilian rock salt glow in the restful spa.

The restaurant's ebony vaults, with embedded microlights, are designed to resemble tree canopies.

with a flamboyant lacquered mural of the Piazza Popolo by Ugo Nespolo. Such artworks from Alfredo Romeo's collection permeate the hotel, ranging from 19th-century landscapes to metaphysical scenes, lingering on Pop Art and monochrome nude photography.

Of the 74 rooms and suites, most are in keeping with the overall aesthetic – meandering wood surrounds both orthogonal mattresses and curving hot tubs, while fireplaces split through the veneer cladding to produce smoke-mimicking steam. Five suites on the piano nobile, however, boast restored frescoes, some dating back to the 17th century. Two even have mezzanines (reached by perilous Krion staircases, incorporating sculptural bathtubs and weighing three tonnes in total), which give intimate bedtime views of Roman campagna and caryatids. One also opens onto the palazzo's facade, providing access to the two heraldic statues perched in alcoves above its doorway.

What to make of it all? The stated goal is a certain 'je ne sais quoi', but this is not really what Hotel Romeo Rome achieves. It is in-your-face, all-embracing, ambitious, excessive, and distinct from Rome's traditional hotel offering. It may be disquieting – as is all extreme luxury – and it would be easy to be sarcastic. But that would be to miss the point.

Later this year, another Hotel Romeo will be launched in Massa Lubrense, just south of Sorrento, this time designed by Kengo Kuma. The group's ambition is hospitality with a big point of difference and industry-topping rates. Leaving a hostage to fortune in a high-risk business, it seems to have found a market – although a return on investment may prove more difficult to attain. ●

Left External garden with fluid stairs to the first-floor terrace.

Below Fresco suites give intimate access to restored murals.

Bottom left A gallery under the swimming pool protects the newly discovered Roman bottega.

Quiet pride

Maccreanor Lavington's MacFarlane Place scheme for Peabody salutes Victorian blocks while offering thoughtful aesthetic and practical touches

Words: Flo Armitage-Hookes Photographs: Tim Crocker

IN NUMBERS

13,921m²
GIA

11,191m²
NSA
(net saleable area)

799
whole-life carbon, KgCO₂eq/m²
(A-C excl B6-7)

Below Three colours of brick and careful compositions detail facades.

PICTURE CREDIT EDGE

Once again, change is afoot in London's White City. The area was home to the 1908 Franco-British Exhibition – a flurry of whitewashed palaces, ornaments and artificial lakes – and more recently to the BBC Television Centre, a purpose-built studio complex. Today, it is in the midst of an AHMM masterplan to transform a 5.7-hectare site into housing, offices, leisure spaces and new television studios. Phase 1 completed in 2018 and Phase 2, bar one plot, is due to complete in 2027.

At its southern end, 1 and 2 MacFarlane Place, designed by Maccreanor Lavington for Peabody, delivers the scheme's 142 affordable homes, all with heat-regulating external shutters. The scheme mediates the transition between the red-brick Victorian vernacular of Shepherd's Bush and flashier new developments beyond.

The triangular site tapers to the north and is closely bounded by a railway viaduct, Victorian terrace and A-road. Despite also facing a bus station and Westfield shopping centre, the scheme is arranged in such a way that it doesn't feel penned in or overshadowed by the surrounding infrastructure.

'They're siblings, not twins,' project architect Owen Jowett says, as we wind our way around and between the blocks. Differences include metalwork colour, typical window shape and number of facades. There's something reassuring about the variations, even if you don't always actively notice them. They blend the new build and its all-at-once-ness into the accumulated urban context.

Block 1 has 79 homes – 71 for London Affordable Rent and eight for London

Living Rent – arranged in a loose U-shape around a raised courtyard garden. The eight-storey road-facing facade steps down to six storeys on one side and stacked maisonettes on the other, with the courtyard opening up to the railway and frequent flashes of red-and-white tube trains.

Block 2 is taller but narrower and has 63 homes, 26 for London Living Rent and 37 shared ownership, with a communal corner roof terrace. Commercial space (yet to be filled), bike stores and disabled

1 MacFarlane Place
2 Hammersmith Park
3 Television Centre
4 Wood Lane Underground
5 White City Bus Station
6 Westfield Shopping Centre
7 Shepherd's Bush Market Underground

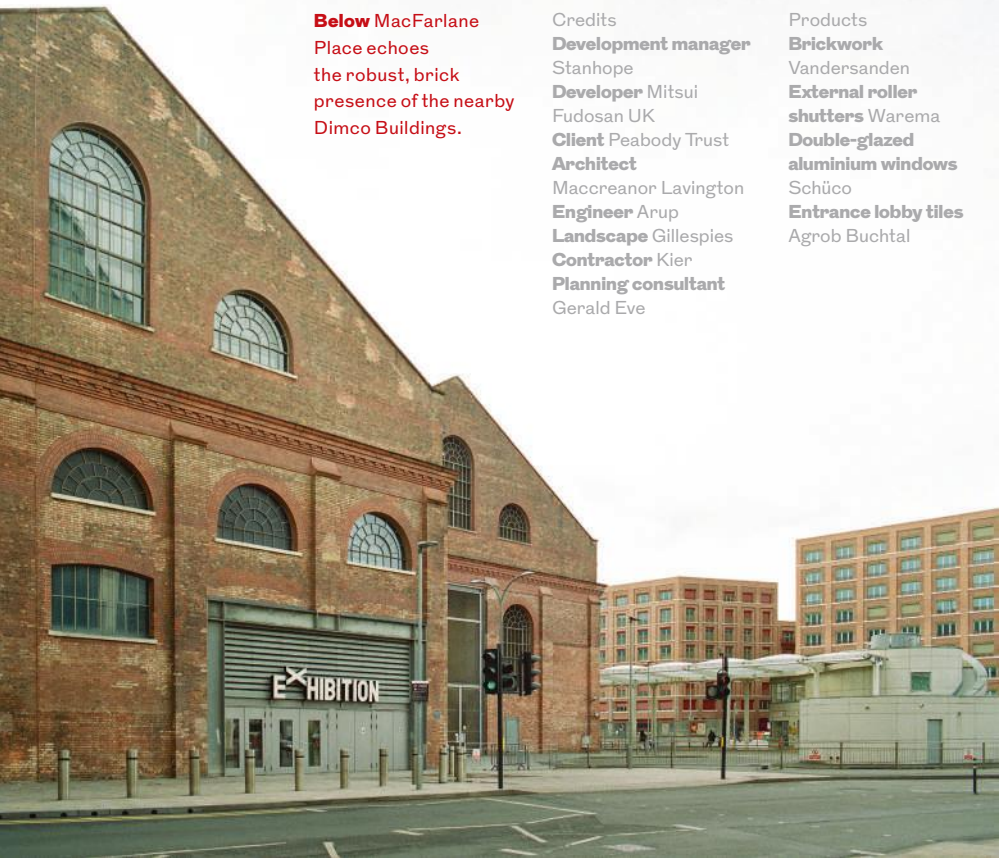
Below Differences between the sibling blocks pay off.

car parking occupy the ground floors. Both entrances face a new paved road, which slices through the site and will eventually connect to the rest of the masterplan and Hammersmith Park through the railway arches.

Sturdy frontages, characterful detailing, red brick and white banding draw on London's Victorian mansion blocks. 'It's the only time that London really did a good, aspirational apartment building,' reflects Jowett. Granted, the typology has become well-cited by projects over the last decade. But the influence would have been relatively novel when the scheme was first designed and, crucially, MacFarlane Place offers far more.

The scheme operates on multiple scales. From afar, the buildings are blocky and monochrome enough to be seen – and to feel permanent. They echo the nearby Dimco Buildings, a pair of large brick sheds built as part of an electricity generating station in 1898. Yet the closer you get, more detail and difference emerges.

The site is tightly bound by a road, a railway viaduct and a Victorian terrace.



FIONA SMALLSHAW

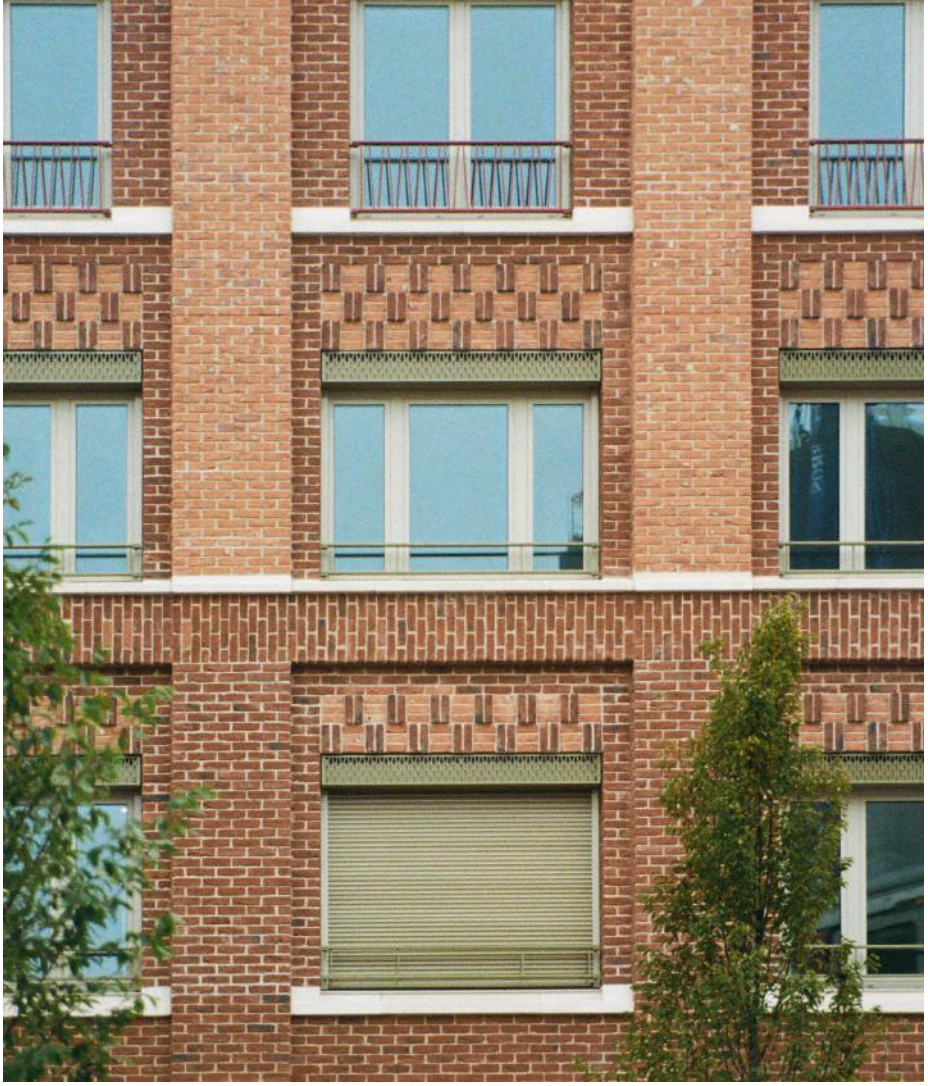
Below MacFarlane Place echoes the robust, brick presence of the nearby Dimco Buildings.

Credits
Development manager Stanhope
Developer Mitsui Fudosan UK
Client Peabody Trust
Architect Maccreanor Lavington
Engineer Arup
Landscape Gillespies
Contractor Kier
Planning consultant Gerald Eve

Products
Brickwork Vandersanden
External roller shutters Warema
Double-glazed aluminium windows Schüco
Entrance lobby tiles Agrob Buchtal

Pattern and texture ripple out from each window, using three colours of brick and varied compositions. On some facades, windows are framed by mid-red bricks and then framed again by a darker burgundy trim. On others, windows are topped by a more decorative strip of alternating lighter horizontal and projecting vertical bricks, all contained within a thicker burgundy outline. These varied details are gridded by regular pillars and white bands, running the length and width of the buildings, into a nuanced brick-and-window tartan. The facades read as a unified scheme, yet still surprise and delight with irregularity.

External roller shutters, in themselves, are not a new innovation. They are widely popular across Europe and a tried and tested sun-shading device. In the UK, however, they have barely made an appearance. MacFarlane Place has more than 500 and is thought to be the largest UK residential installation to date. The metal shutters roll up into a metal



FIONA SMALLSHAW

Left Sun-shading external roller shutters negate the need for air conditioning.

Below Planters, benches and a play area populate Block 1's courtyard garden.

All the London Affordable Rent and London Living Rent homes are occupied and few shared ownership units remain. New tenants are moving in as we enter Block 2: suitcases and furniture lean up against the beautifully tiled lobby, doors are wedged ajar in corridors, and we're even welcomed inside by one tenant. We're privy to new beginnings, and there's a tangible sense of excitement.

Amid the paucity of new high-quality affordable housing, Peabody and Maccreanor Lavington have delivered homes that are user-conscious, innovative and feel generous. While

box above the windows and are electrically operated from inside each flat. They prevent overheating during the day, eliminating the need for air conditioning and opening windows at high-traffic, high-noise times.

Prisca Thielmann, Maccreanor Lavington's associate director, grew up using shutters in Germany and explains how intuitive the process is. 'It's what we always used to do: shut your windows in the morning, don't let the hot air come in, come back home in the evening and it's nice and cool inside,' she says. 'And when it does cool down outside, open the windows. That's the system, and you don't forget it.' Peabody embraced the shutters, which will keep energy use lower and costs more affordable for tenants and residents. They will also enable users to regulate their own temperature, depending on personal preferences and the orientation of their home. Walking around the blocks, shutters are lowered to different increments and it's clear that they are already well used.

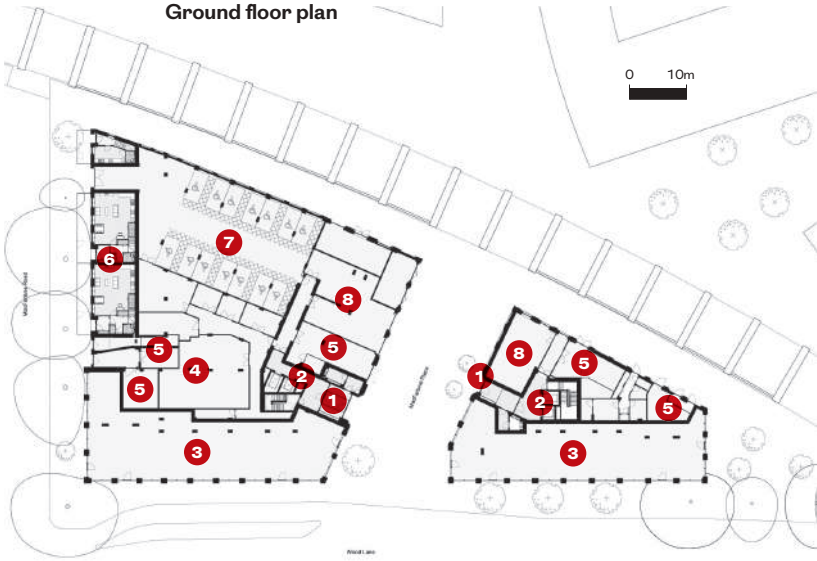
It is a visually ambitious and nuanced project that attends to immediate street context

1 Entrance
2 Lift lobby
3 Commercial space
4 Plant room
5 Refuse store
6 Maisonettes
7 Car park
8 Cycle store
9 Courtyard garden

Phase 2 is still ongoing, it's difficult to fully know exactly how the scheme will operate within the new Television Centre masterplan. Behind MacFarlane Place, the lift shaft of AHMM's new 23-storey residential tower stands bare, mid-construction, and the viaduct arches are boarded up. However, Maccreanor Lavington has certainly created a visually ambitious, nuanced project that attends to both the immediate street context and scale of nearby infrastructure. The design draws on the London mansion block, without mimicking it, and weaves in a variety of references and practical solutions to create something new.

In a gracious gesture to White City old and new, it rewards those who look carefully but doesn't trouble those who don't. MacFarlane Place can be walked past or savoured.

Ground floor plan



Level 1 floor plan

Below Dark green, grooved lobby tiles exceed standard Peabody specification.

Bottom right All windows are fully openable for easy cleaning.

Gasholders, Kings Cross, London
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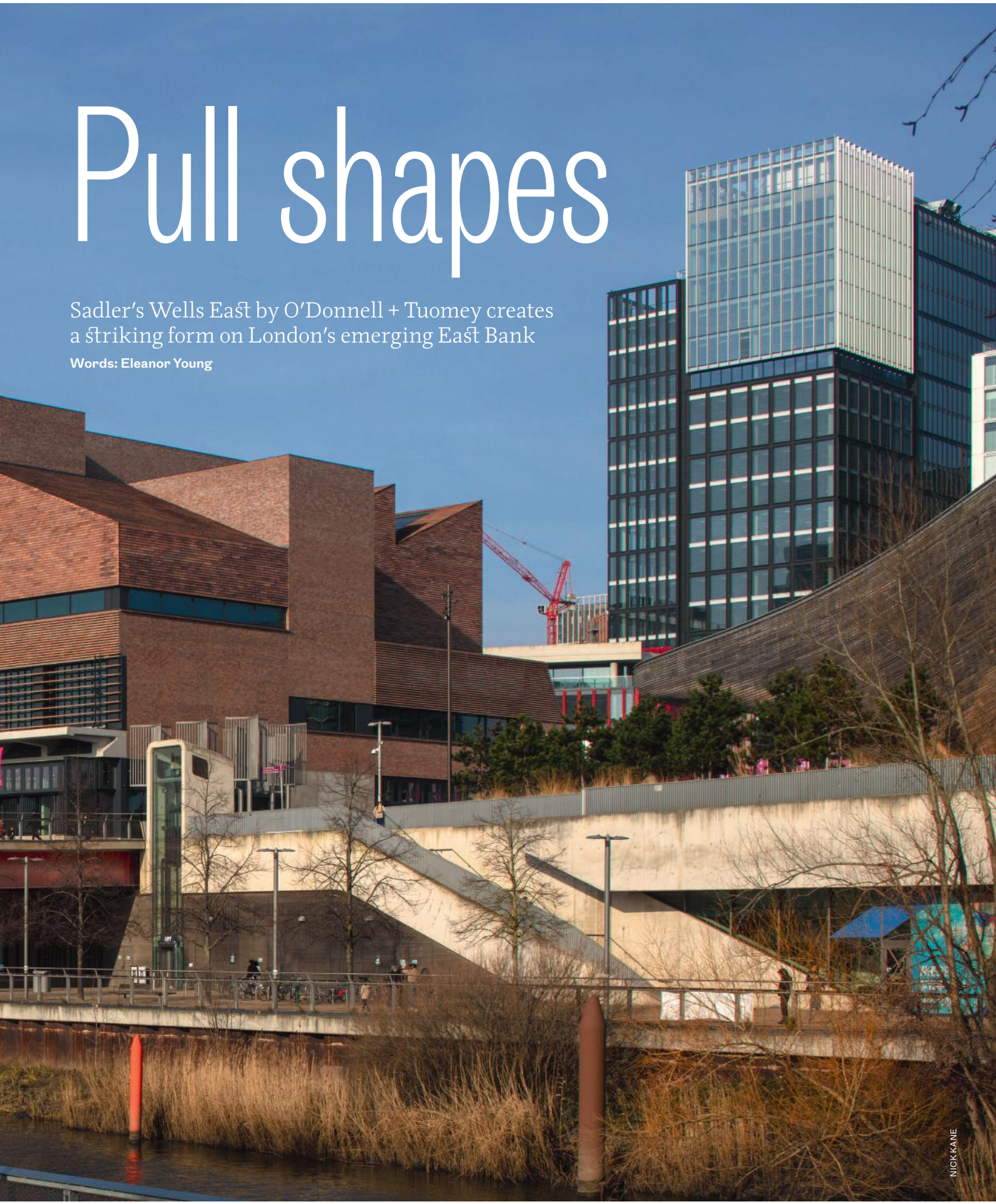
Sadler's Wells East from across the River Lea, with two of the other East Bank institutions alongside.

Pull shapes

Sadler's Wells East by O'Donnell + Tuomey creates a striking form on London's emerging East Bank

Words: Eleanor Young



NICK KANE

IN NUMBERS

8,283m²
area

6.3 kWh/m²
predicted annual on-site renewable energy generation

Confidential
total contract cost

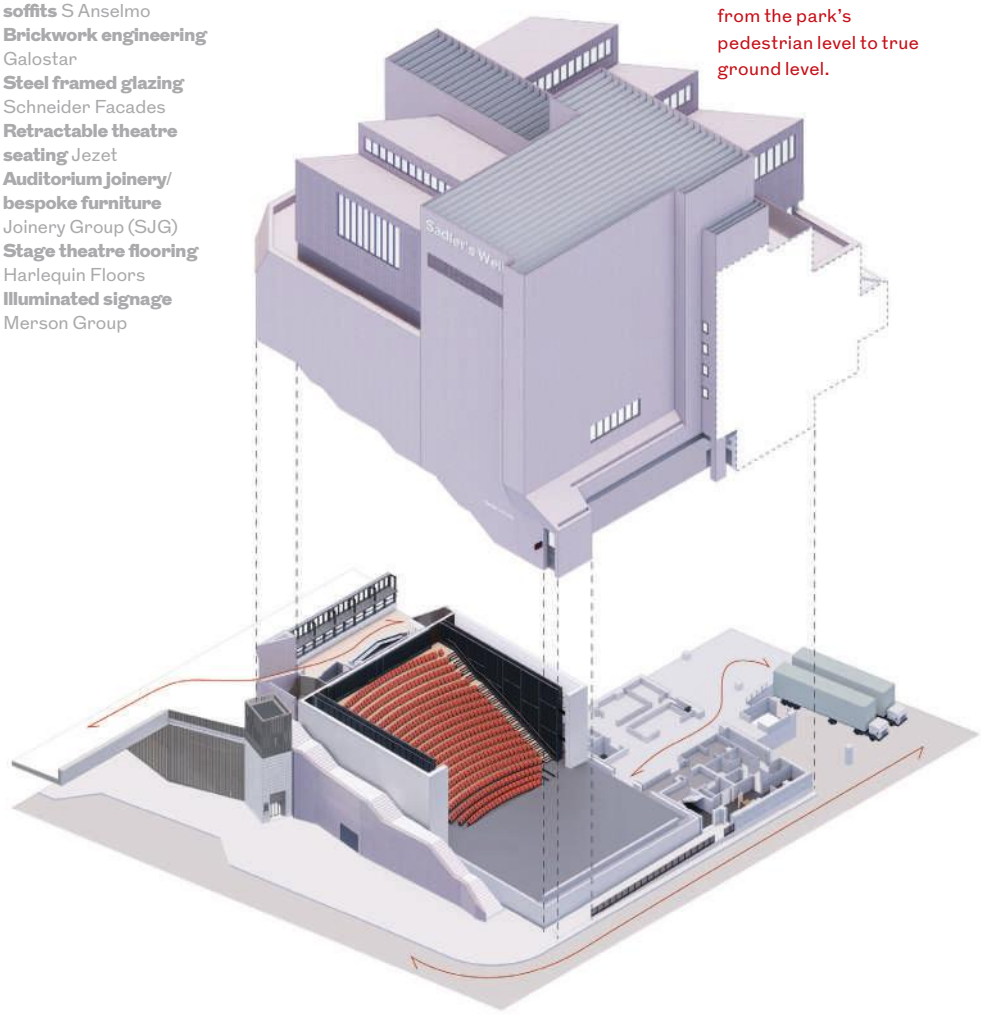
A champfered corner creates a welcoming entrance along the axis from Westfield and Stratford Station.

NICK KANE

The gateway to London's Queen Elizabeth Olympic Park is, for most people, Westfield Stratford City shopping centre. The bright lights and distractions of window displays sit in contrast to the large-scale moves of the buildings beyond, with grand forms that can appear impenetrable – take the looming futurism of Zaha Hadid Architects' Aquatics Centre. But right opposite is the new Sadler's Wells East, a warm entrance cut deep into the brick, angled towards the flow of arrivals. O'Donnell + Tuomey's design has a cutaway corner, welcoming visitors to the dance organisation.

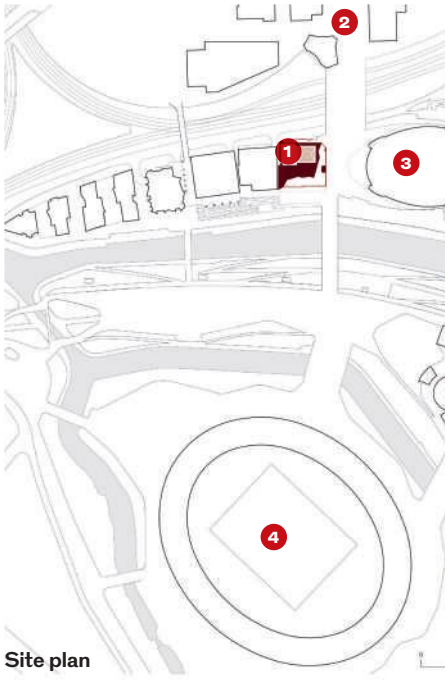
This design is an iceberg; the auditorium is largely below the pedestrian level of Stratford Walk, extending down 8m to the service road below and leaving the 'ground' level free to welcome visitors. The building itself reaches out into the public realm. The heavily framed windows open up to create a canopy for audiences to drink under. Floor-to-ceiling glazing on the corner means more space where you can see the public performance space being brought to life – this is an open foyer of the sort seen at the South Bank Centre. With overlooking terraces and a small performance space stepping down to

Suppliers
Brick, tiles, clay paving/ soffits S Anselmo
Brickwork engineering Galostar
Steel framed glazing Schneider Facades
Retractable theatre seating Jezet
Auditorium joinery/ bespoke furniture Joinery Group (SJG)
Stage theatre flooring Harlequin Floors
Illuminated signage Merson Group



The auditorium – designed with Charcoal Blue – drops down from the park's pedestrian level to true ground level.

1 Sadler's Wells East
2 To Westfield Stratford
3 London Aquatics Centre
4 London Stadium



Site plan

the River Lea, the building pushes out a concrete-framed canopy, studded with pavement lights, which allows the sunshine through.

Perhaps it should be no surprise that the building's massing works in its favour. RIBA Royal Gold Medallist O'Donnell + Tuomey was a key part of the masterplan team for the four cultural buildings of what has been dubbed the East Bank, working with Allies and Morrison and Girona's Arquitecturia Camps Felip. The Dublin-based practice is also delivering the other cultural showpiece of this collection, in the form of V&A East Museum. Sandwiched between it and Sadler's Wells East are two projects by Allies and Morrison: BBC Music Studios, which relocates the broadcaster's Maida Vale studios, and UAL's London College of Fashion, which pushes up – rather bullishly –

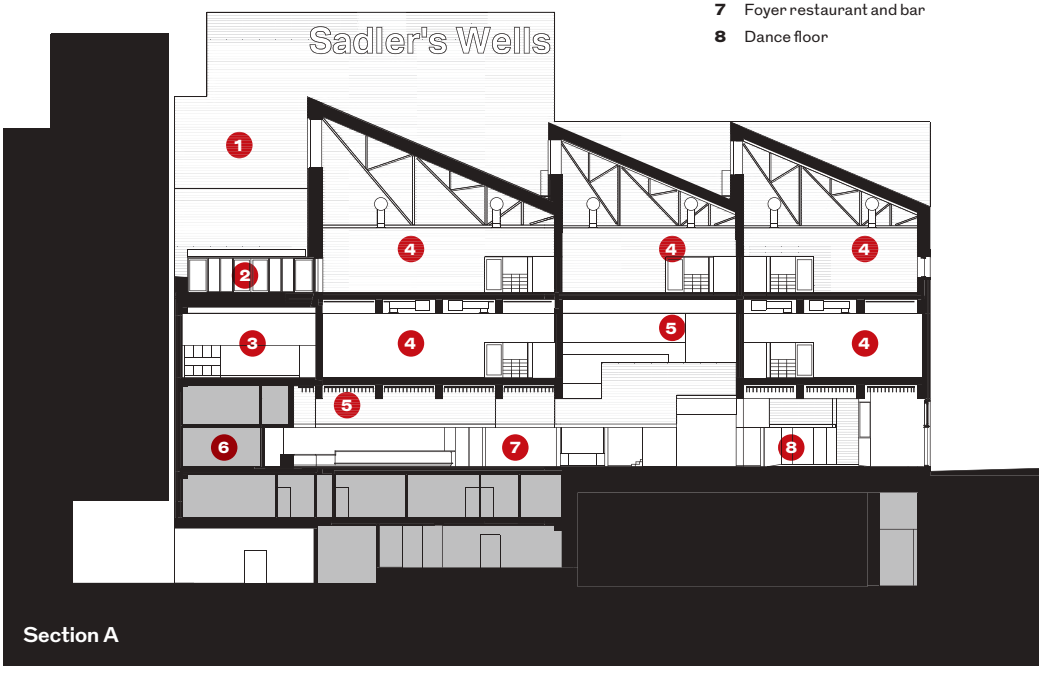
NICK KANE

The dramatic colours from artist Eva Rothschild's tapestries add piquancy to the muted materials.

PETER MOLLOY

The L-shaped foyer gives a corner dance floor centre stage.

PETER MOLLOY



Section A

to 17 storeys, enlivened inside by its dramatic snaking staircases. There will also be 600 new homes on this narrow strip of land, drawn together by some of the same cues from the masterplan of a common ground and a sense that the buildings have been created by casting.

So far the object buildings do indeed share a sense of solidity. The V&A and London College of Fashion work hard to touch the ground lightly. Sadler's Wells, with its history of ballet, does not attempt to pirouette by the Lea; instead, its tectonic message is one of a place of making, with 'north' lights setting up a sawtooth roofline. The artistic director, Alistair Spalding, has set the ambition, launching a hip-hop academy (Academy Breakin' Convention) on the upper floors and a choreography doctorate as well as other dance classes and engagement. 'It is a straightforward building for working and playing,' says O'Donnell + Tuomey founding director Sheila O'Donnell.

Just how 'straightforward' is a moot point. But it certainly can be explained like that with forcefully rectilinear studios gathered around the fly tower and the series of rooms each visible – to the trained observer – in the brick shapes of the building. 'It is a building of big rooms,' says O'Donnell. 'And that shows outside.'

'It is a building wearing its costume – bare naked compared to other buildings'

Top left A canopy creates a sheltered space to look out over public space and river.

Below The bricks continue inside, here disguising vents from the auditorium.

PETER MOLLOY

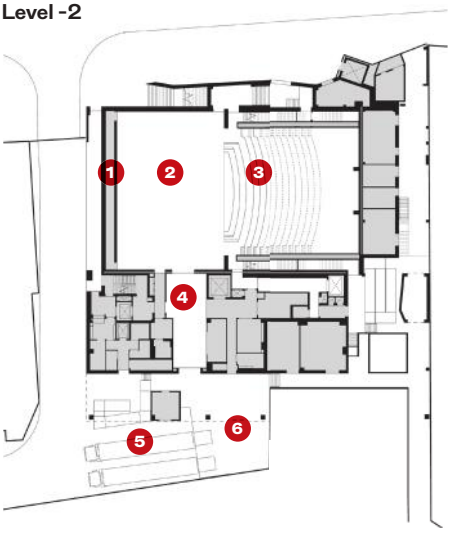
Ribbon windows around the studios seem equally to point to simplicity. John Tuomey echoes his partner's sentiment. 'It is a building wearing its costume,' he says, 'bare naked compared to other buildings.'

As you might expect from O'Donnell + Tuomey, the brick itself plays an important role, from the idea of casting or carving from a solid driving brick, to other bricks accompanied by some large-format tiles from the same clay, provided by manufacturer S Anselmo. There are elbow bricks, pointed bricks, sharp bricks and specials; there are cills in the clay; there were 71 moulds. Rows of bricks, held by dowels, are lined up as horizontal louvres to shade and control views into the studios, hung clay tiles encase the studios. On the rehearsal studio, the tiles stop short of the ground to leave glazing and a bed of planting right up to the window, so softening the high roof terrace. If you should go down to the service road, Carpenter Road, at the base of the building, you will see the brick-encased external stair climbing slowly up to the 'ground' floor entrance, oversized clay tiles building a solid banister, drawing a line on this otherwise blank auditorium facade. It is from the base you can appreciate Tuomey's ambition for 'brand new

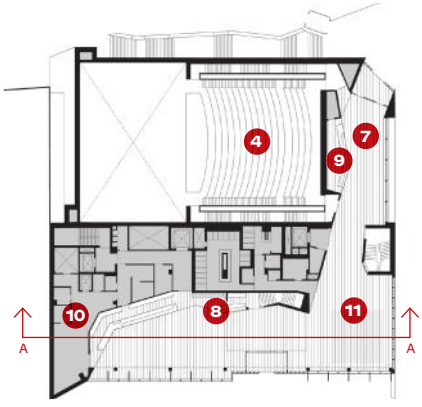
A restaurant and bar sit at one end of the foyer.

NICK KANE

Level -2

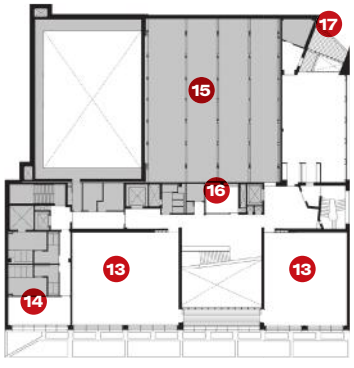


Level 0

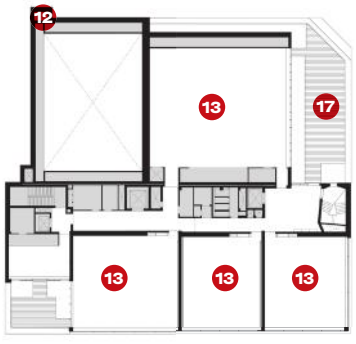


1 Run-around
2 Stage
3 Auditorium
4 Scene dock
5 Loading bay
6 Get-in
7 Foyer
8 Welcome desk/ shop
9 Restaurant/ bar
10 Kitchen
11 Dance floor
12 Fly gallery
13 Studio
14 Green room
15 Acoustic isolation zone and plant room
16 Classroom
17 Terrace

Level 2



Level 3

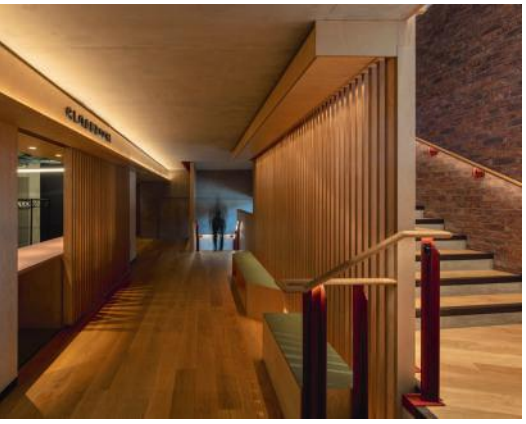


Level 03 Plan

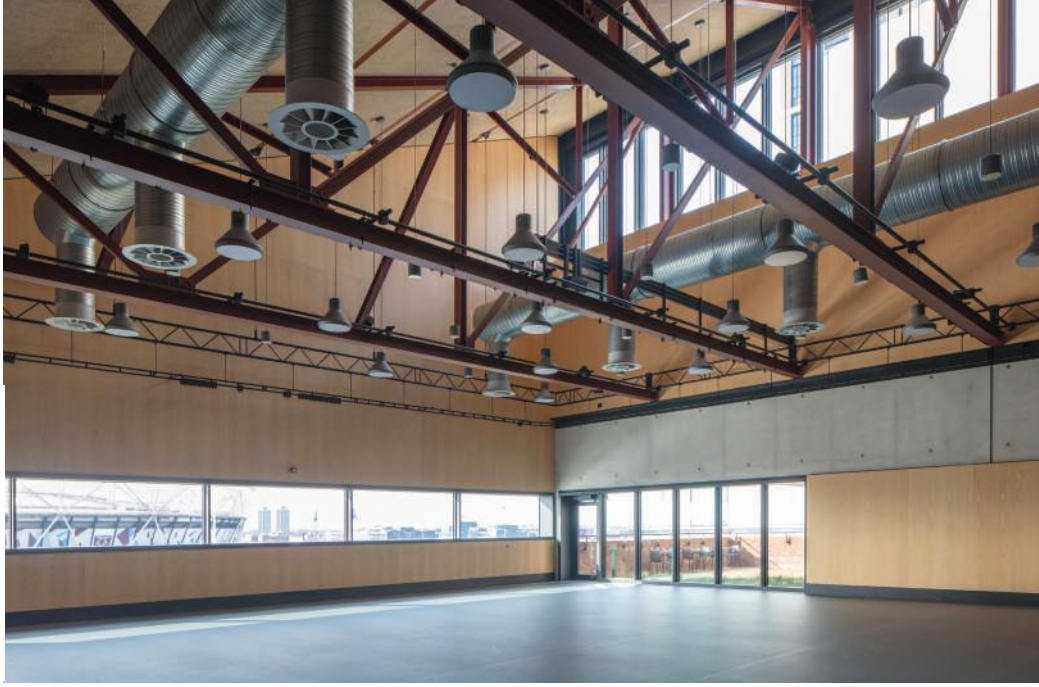
ancient' as the ventilation shaft projects out above the stage door.

When arriving for an evening performance, very little of this matters. It is all about getting in, the bar contained under the red steel beam and the nooks where you can take your interval drink. O'Donnell + Tuomey does in plan here what it does in section in other, typically vertical, buildings – creating nooks and crannies, as Tuomey notes. The auditorium itself continues the sense of warmth and solidity from the front of house spaces, by means of a cork floor, ply seats and umber seat cushions.

Tuomey points out that sightlines are demanding in dance as you have to be able to see the performers' feet. At its opening show, Vicki Igbokwe-Ozoagu's Our Mighty Groove, the 550 seats were stowed away during the interval. For the second half, the audience funnelled down the staircases in the double-skinned walls, on either side of where the bleachers had been, to vogue and waack alongside the performers in an almighty sweaty club night. While the double-skinned wall enables the seating and stage format to be flexible, it also allows quick access to hang lights and helps deliver on acoustic separation. For the Sadler's Wells team and the many



NICK KANE



visiting dance companies there is also a run-around along the back of the stage giving performers a way to cross, out of sight of the audience. The six entrances for performers also give more flexibility than the four it would typically have. The loading bays extend under the outdoor terrace with access shared with the other East Bank institutions. What is oddly not shared is a party wall. For acoustic separation, the two walls of Sadler's Wells and the BBC studios sit shyly side by side just centimetres apart. Acoustic separation also accounts for a huge hidden space within the volume of the building between the auditorium and the rehearsal studio, allowing both to operate at full pelt at the same time.

Credits
Architect
O'Donnell + Tuomey
Client London Legacy Development Corporation
Structural and M&E engineer Buro Happold
Quantity surveyor Gardiner & Theobald
Project manager Mace
Theatre consultant Charcoal Blue
Acoustic consultant Charcoal Blue
Landscape consultant LDA
Lighting consultant Buro Happold
Feature lighting consultant Aideen Malone

Top left Strips of ply create internal divisions that allow glimpses of movement behind them.

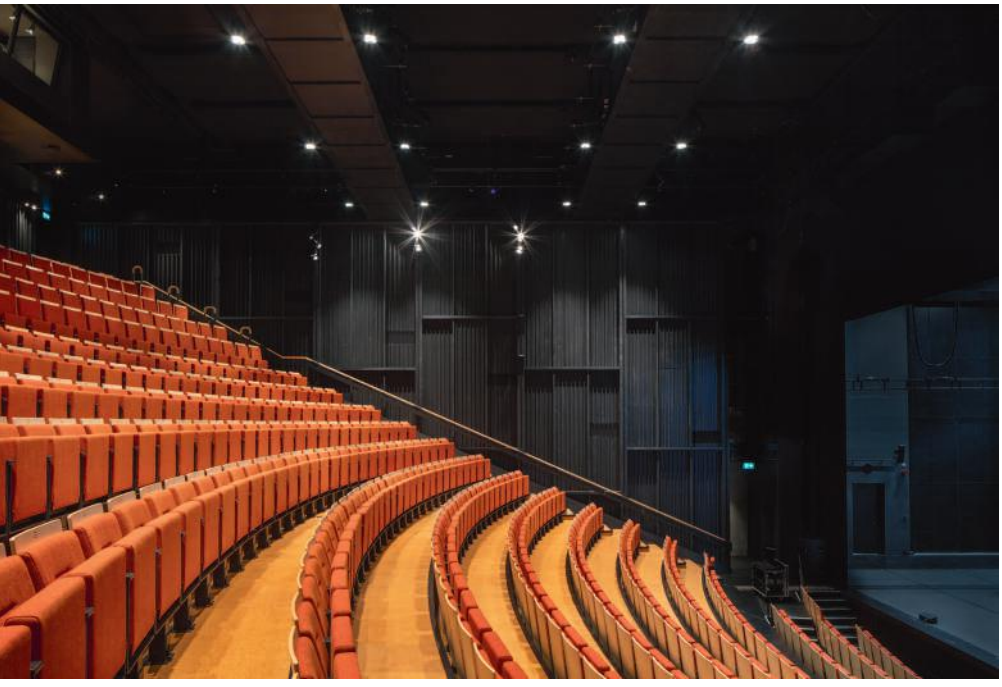
Above A line of windows gives views out for dancers above a lofty studio.

Bottom right Rusty red steels accent openings.

Below Bleacher seating and staircases beyond the wall either side of the seats this a very flexible performance space.

Inside there are ply highlights and a rusty red steel delineating spaces alongside the planes of brick and concrete – the concrete to be draped with brilliant tapestries – while outside the concrete panels are due to receive a commissioned graffiti design. Inside and out, the building is designed for 'civic participation' – the sort of legacy the building's client, the London Legacy Development Corporation, is charged with delivering. I can imagine it peopled with users coming for the space and ambience, the welcome and the Wi-Fi, like the British Library. Then perhaps on the dot of 6pm they will rise up in a balletic flash mob of silent disco and truly bring Sadler's Wells East alive.

NICK KANE



NICK KANE

PETER MOLLOY

How to specify rainscreen insulation for real-world performance

When specifying rainscreen insulation, architects must consider how their designed performance may be affected by real world conditions. Luke Davies, rock mineral wool product manager at Knauf Insulation, explains why material choice is crucial for bridging the performance gap

Fire safety regulations mandate non-combustible insulation for certain external wall system build-ups on residential buildings between 11m and 18m in height. The exception is if a full-scale fire test to BS 8414-1 or -2 has been undertaken.

Yet this is only valid if the system is installed to the exact same specification as the test. As we know, what happens on site isn't always consistent with the design, so to help mitigate fire risk, architects should always specify non-combustible insulation, with a Euroclass A1 or A2-s1,d0 reaction to fire classification.

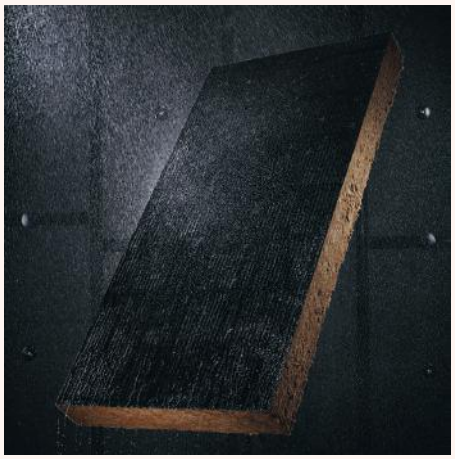
When it comes to thermal performance, U-value calculations assume a perfect installation. But human error, uneven substrates, and movement from subsequent work can all introduce air gaps, impacting performance. Flexible insulation, such as rock mineral wool, is easier to install correctly and is more forgiving of real-world conditions. It has the added bonus of knitting together at the joints, minimising gaps and maximising performance.

Leaving rainscreen insulation exposed to weather conditions can cause damage that also negatively impacts performance. For this reason, it should be installed on a rolling front – but a survey suggests that on average this happens less than 50 per cent of the time. Architects can help to preserve their intended performance by specifying Rocksilk RainScreen Slab EE, which has an enhanced water-repellent facing that reduces the risk of water damage when the insulation is left exposed during construction.

By prioritising non-combustibility, ease of correct installation, and resilience to weathering during construction, architects can specify insulation that supports real-world performance. ●

Luke Davies is rock mineral wool product manager at Knauf Insulation

Above Rock mineral wool insulation is easier to install correctly.
Left Luke Davies of Knauf Insulation.
Below Rocksilk RainScreen Slab EE has an enhanced water-repellent facing.



KNAUF INSULATION

Take Knauf Insulation's RIBA-certified CPD, Specifying Rainscreen Insulation for Real Performance: tinyurl.com/56mcbk4b

Ahead of the curve

David Kohn Architects' Gradel Quadrangles at New College, Oxford, is a rich, beguiling campus that offers subtle nods to its parent institution

Words: Chris Foges
Photographs: Will Pryce

IN NUMBERS

5,639m²
GIFA

£72 million
total project value

£55 million
construction cost

£9,670
cost per m²

Quadrangles at Oxford University have one thing in common: they are, as the name suggests, at least roughly rectilinear. Or they have been until now, with the arrival of curved quads at the Gradel Quadrangles designed by David Kohn Architects for New College.

Bends and bulges abound in every detail of an ensemble comprising 94 student bedrooms and ancillary facilities, offices, a concert hall, and a classroom wing for a prep school attached to the college. This disparate mix is distributed between three new buildings – a bijou porter's lodge, a fluted tower and a horseshoe-shaped block – which together with three Edwardian villas frame a trio of interconnected courts.

The flowing, curvilinear geometry is subtly organic, with hints of animal and mineral in the sinuous stone facades and reptilian scales of an undulating roofscape. It has produced a powerfully enigmatic place, where familiar features of the traditional quad have been recomposed into something strange, but atmospheric and distinctive.

'People might think this is wilful, gestural form-making on the part of the architect,' says Kohn, as we survey the complex. 'Yes, I am very interested in soft, informal architecture, but the project also needed it'.

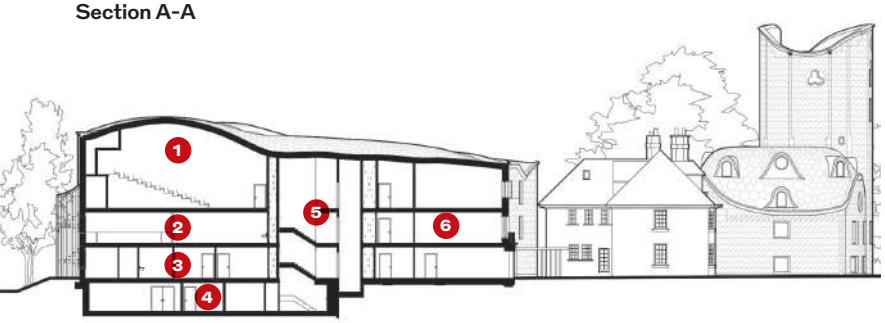
Eschewing orthogonal plans helped to get a lot onto the site, which is a stone's throw from the dense heart of academic Oxford but had a suburban character valued by local planners. They had denied several earlier schemes for the plot, which contained four Arts and Crafts villas and many protected trees, and New College saw its 2015 design competition as the last chance to accommodate all undergraduates in-house.

Kohn's fluid layout, which involved the demolition of one house, another wing and a 1950s school block,

Left Bay windows and some steep pitched roofs echo Edwardian villas on the site.

Below Looking south, the tower converses with the city's stone and dreaming spires.

Section A-A



1 School hall
2 School dining room
3 School staff
4 Plant
5 Lift and stairs
6 Classroom

Right A carving of the college founder is set near the entrance.

Below A playground for a prep school forms the third quad.

brings new structures into touching distance of existing villas in a way that still feels comfortable.

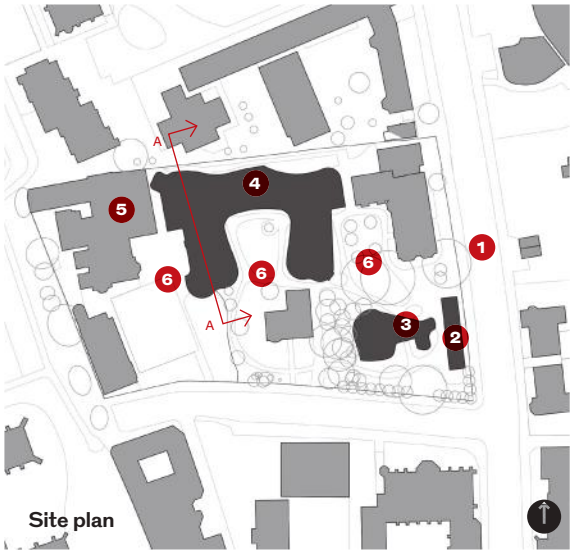
Novelty was also important: for New College, a tradition of architectural innovation is a source of pride. Its Front Quad (1403) was the first purpose-built university quadrangle. In the late 17th century, the college added Oxford's first three-sided quad, opening onto gardens. It represents, says Kohn, a transition from monastic seclusion and the rigid separation of academic and urban life. The brief for the new development stipulated that it must be quad-based but with an even more open, welcoming character. DKA sought to set the tone by softening the interface between architecture and landscape.

Approaching along Mansfield Road, a deliberately picturesque composition is gradually but readily revealed. The six-storey tower, visible from afar, is a friendly sentinel, faced – like all of the buildings – in richly detailed stone.

Diagonal joints catch the sun, amplifying the animation of rippling facades whose incurvation presents a slender profile to every viewpoint. Accents of red Cumbrian sandstone sit against beautifully variegated Ancaster limestone, whose flashes of chalky white and pale blue are brighter than Oxford's mellow Clipsham stone. (With a zigzag pattern like bunting at the eaves of the horseshoe, and the champagne sparkle of mica flakes, the effect is distinctly festive.)

Most of the accommodation is pulled back from the site boundary, arranged to make a string of south-facing open courts. With a low perimeter fence, rather than central Oxford's typical high walls, one can look into the interior through a screen of trees. But the best view is from the porter's lodge.

1 Mansfield Road
2 Porter's lodge
3 Tower and flats
4 Horseshoe building
5 New College School
6 Courtyard



Site plan

This image Darkened passages between courts are familiar from traditional quads.

Below A 'squinch' frames the view from the porter's lodge.

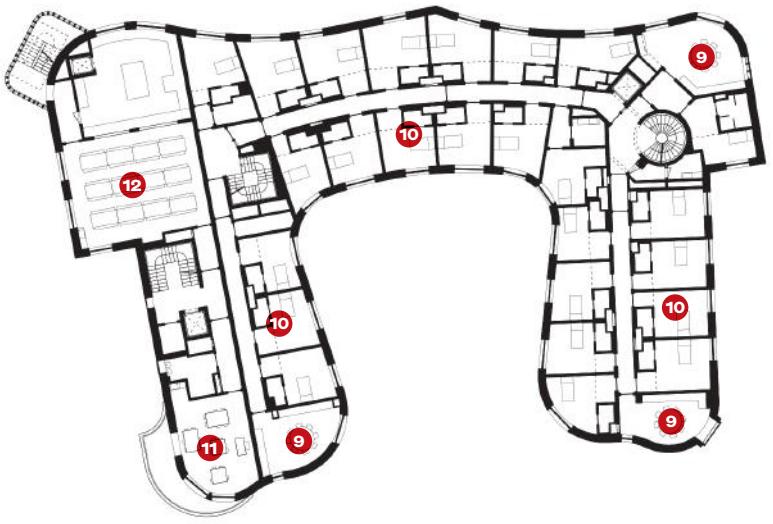
This small yet strong-flavoured building holds its place among larger neighbours: a cambered roofline swells to accommodate an arched entrance cutting into the lodge at an angle. Ahead, gardens wend between the rounded ends of buildings layered like theatre flats, drawing the eye into the distance. A relaxed atmosphere induced by the liquid landscape and meandering walls is offset by the precision and poise of taut, decorated stonework and rooflines gathered into tight parabolic pleats.

Enabling this view from the street was important, helping avoid the impression of secrecy or standoffishness, even though the quads are off limits to the public. 'A lot of design decisions were as much about the city as about the college,' says Kohn. Another contribution is made by filigree metal gates designed by the Irish sculptor Eva Rothschild.

A second art commission solved a delicate problem. New College is famous for its gargoyles, and insisted on their inclusion. Kohn massaged the brief to give contemporary relevance to a traditional subject. A New College biology professor identified 25 endangered animals, which were modelled by artist Monster Chetwynd and carved by stonemason Fergus Wessel. The negotiation reflects the architects' attitude to the whole project, in which many influential voices had to be heard. 'There were constant demands,' says Kohn. 'Our role was to be open and find how they might fit'. Perched on the wandering eaves line, above recessed downpipes, the pangolins and golden moles seem right at home.

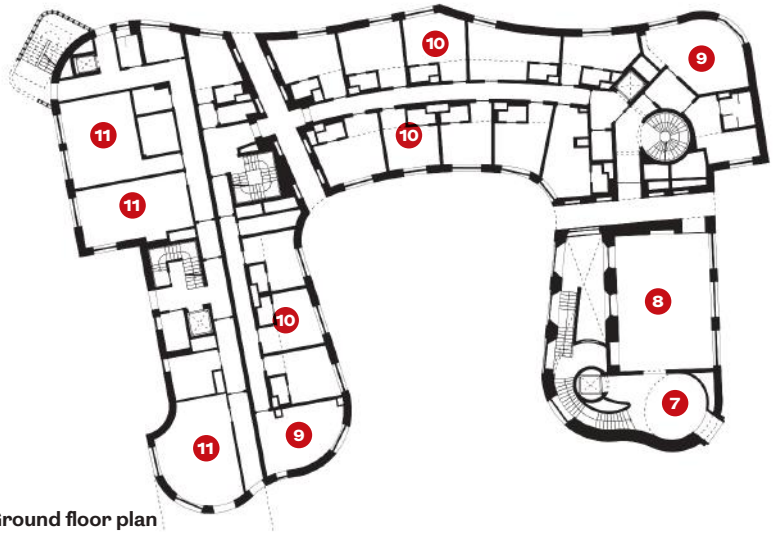
This stone bestiary might not have been the architects' choice, but does mesh with a design language that flirts with the fantastical. If Tolkien were still commuting past the site he might see echoes of Bag End in the low-slung lodge, with its giant porthole window. A bridge links the tower

The horseshoe block contains facilities for New College School and student bedrooms.

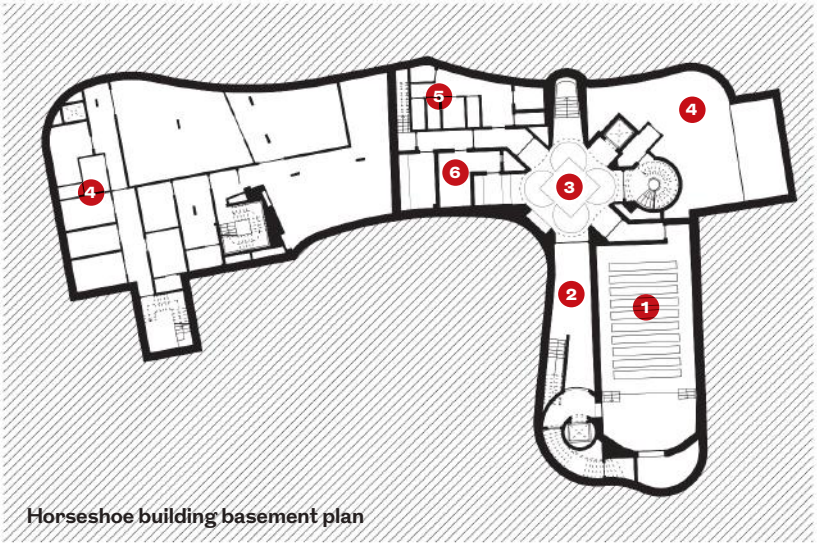


First floor plan

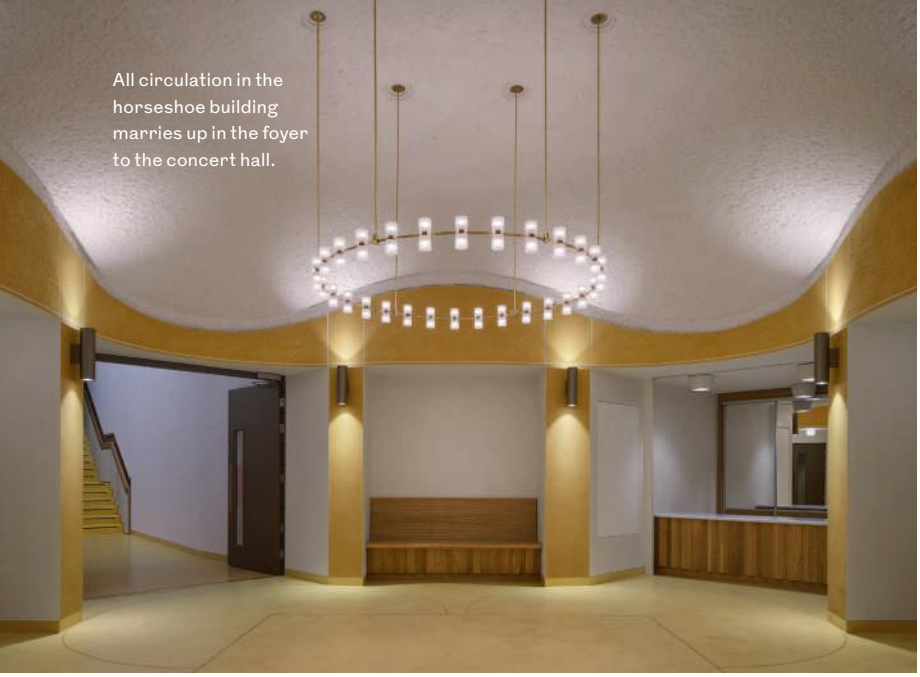
1 Music hall
2 Gallery
3 Foyer
4 Plant
5 WCs
6 Kitchenette
7 Entrance lobby
8 Common room
9 Shared kitchen
10 Student bedroom
11 School classroom
12 School dining/kitchen



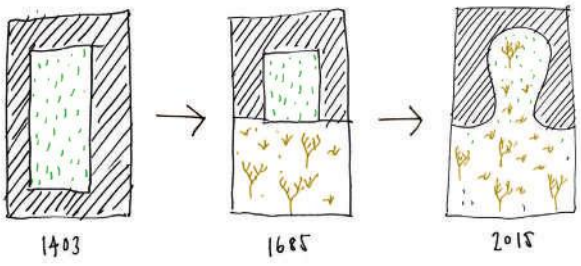
Ground floor plan



Horseshoe building basement plan



All circulation in the horseshoe building marries up in the foyer to the concert hall.



Above Kohn's quad continues a gradual evolution towards open informality.

Bottom The 115-seat box-in-box recital hall is the city's only venue of its type.

A sprayed acoustic ceiling contributes to a warm ambience in the gallery.

to a four-storey block of flats, whose steep roof and arched dormers could have sprung from a fairy tale.

Subtle surrealism also permeates the interiors. Take the tower, which houses the Gradel Institute of Charity, a research centre funded by New College alumnus Chris Gradel, who was also the project's main sponsor. As planners pushed to make it more of a feature, DKA accentuated its slender proportions with a tiny footprint. Beside a lift and a large, splayed staircase there's only space for one small study on each level. The floor-to-envelope ratio creates strange tricks of scale like Alice's experiences in Wonderland – another enchanted Oxford garden – but was the price of consent for the larger scheme. 'It's a folly, not an extravagance,' says Kohn.

The tower's amoebic plan, with three lobes, is an allusion to trefoils found in carved screens in the college chapel. The figure reappears in ventilation grilles, and as one of many eccentric window shapes, along with hexagonal lozenges, circles and keyholes.

A more high-minded historic reference is made in the basement foyer to the recital hall, below the

horseshoe building. A flight of marble steps tucked into a niche marks the site of a Civil War rampart. A Greek inscription offers half of a riddle, whose Latin pair is on a mound in the gardens of New College, which provided a sightline to the fortification. Like the gargoyles, these coded details will give curious students pleasure, but also help convey that this satellite campus is part of the institution.

Descending to this basement level is thrilling. A winding stair drops through a double-height gallery with kaleidoscopic light bouncing between curved walls. It arrives in the octagonal foyer, whose edges are smoothed by bowed walls and a shallow domed ceiling. Here, it is clearly evident that the buildings' freeform appearance belies tight, skilful planning.

Right angles are also scarce upstairs in the residential block. Below an oculus, a spiral staircase disgorges onto landings with chamfered corners and oblique views into bright, wavy-walled kitchens. Bedrooms are double-loaded on corridors that arc gently round the horseshoe. One result is more individuality than in the slabs of identikit accommodation found on most campuses, which one can imagine fostering a greater sense of belonging.

The best rooms are at the top, with mezzanine sleeping platforms below plastered ceilings that swoop like folds of fabric. From a window, we look over more sober recent additions to the city, towards Hawksmoor's neo-Gothic towers at All Souls. 'I think of them as a friend to this building,' says Kohn. 'They are both fruity and free in their references'.

In shared kitchens, soffits sag into corners, making a trip to the fridge an enjoyable event. Across the party wall in the prep school, the ceiling of an upper-floor hall plunges in pendulous billows over retractable seating and down towards the stage.

Such gymnastics are challenging to realise. Early on, Kohn envisaged the roof as a catenary vault formed of tiles – but that way, the necessary spaces couldn't be achieved. Sprayed concrete was tested and rejected as too risky. Having explored six construction methods, the contractor proposed a complex glulam frame, fabricated in Switzerland. Wood provided a notable reduction in embodied energy, over which New College engineering professor Barbara Rossi was keeping close watch.

Externally, the roof is finished in thousands of unique polygonal plates of anodized aluminium, tessellated by a software script. For the most part, they appear smoothly continuous over the surface, but some ragged edges and yawning gaps that have yet to be remedied hint at a considerable struggle.

There are no such flaws in the facades. Each 70mm-thick block was cut to be laid in a diamond bond, and curved on its inside and outside faces. Rationalision during design reduced innumerable radii to four without any apparent loss of fluidity. As we follow each building's meandering perimeter, every course marries up with millimetre precision.

The heft of stone and concrete leave no doubt that Gradel Quadrangles could endure far beyond its 100-year design life. The main impression, though, is not of weight but a certain lightness of spirit. For an architect, curves do not make for an easy life, but the evident pleasure taken in design will add to residents' enjoyment of this rich, beguiling place.

Credits
Architect
David Kohn Architects
Client
New College Oxford
Structural engineer
Price & Myers
M&E consultant
Skelly & Couch
Principal designer
Oxford Architects
Main contractor
Sir Robert McAlpine
Landscape design
Todd Longstaffe-Gowan
Theatre consultant
Charcoal Blue
Artists
Eva Rothschild,
Monster Chetwynd
Stonemason
Fergus Wessel

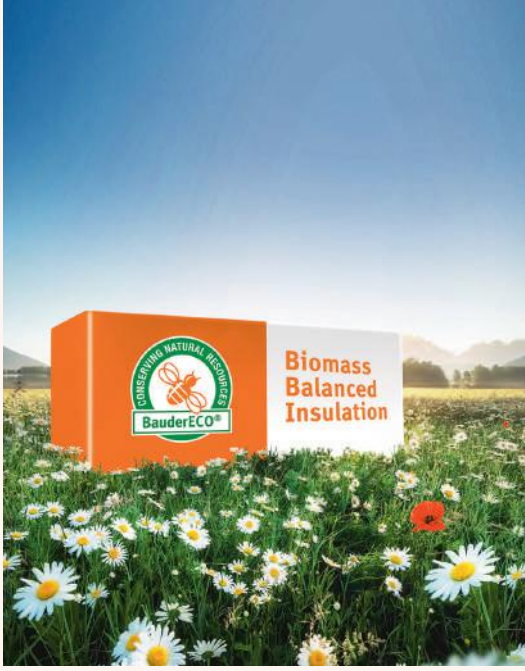
Suppliers and subcontractors
Stone facade contractor
Grants of Shoreditch
Timber roof specialist
Blumer Lehmann
Gate fabricator
The White Wall Company
Window system
Schüco
Acoustic ceiling
Oscar Acoustics

Top left, left Unusual geometries extend to students' bedrooms and shared kitchens.

Top right A carved pangolin is integrated into the stonework at the eaves.

Biomass offers an insulation solution

As organisations are increasingly held to account over the carbon emissions associated with their material choices, BauderECO FF polyisocyanurate (PIR) insulation board offers a more environmentally responsible option



In its production of BauderECO FF polyisocyanurate (PIR) insulation board, Bauder adopts the biomass balance approach. The result is an insulation core that is composed of 80 per cent biomass-based raw materials.

Bauder is well known for its sustainable green roof, blue roof and photovoltaic (PV) system solutions. With BauderECO FF, it is making progress at product level by adopting the biomass balance approach to its manufacture.

80 per cent biomass-based raw materials, independently verified

When producing BauderECO FF PIR insulation, Bauder sources approximately 80 per cent of feedstock from processed renewable biomass, replacing those derivatives obtained from fossil sources, reducing embodied CO_2 and preserving natural resources. The biomass-balanced raw materials combine with recycled milling and sawing dust from PIR, coupled with other ingredients, to form the insulating core of BauderECO FF. This process, and the volume of biomass inputs, and their outputs, is independently verified and certified in accordance with the REDcert² standard.

The biomass balance approach

The biomass balance approach refers to a chain of custody model that tracks the amount of renewable plant-based raw material content through a manufacturing process or supply chain, while ensuring an appropriate allocation of this content to the finished product. It allows for the mixing of sustainably sourced and non-sustainable materials. The many benefits of the biomass balance approach include driving the use of renewable resources, helping save fossil reserves and reducing greenhouse gas emissions, while enabling products to have identical technical characteristics.

With increasing pressure on organisations to be held accountable for their greenhouse gas emissions, BauderECO FF offers Bauder's clients a more environmentally responsible choice to traditional PIR insulation, representing its continued commitment to providing roofing systems and products that contribute to a more sustainable future.

Above BauderECO FF insulation is manufactured using the biomass balance approach.

Left BauderECO FF insulation boards.

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Ecological architecture on show

POA Architects' green building project for China's Phoenix Green Valley Comprehensive Protection Zone showcases innovative ecological architecture that works in harmony with people, the environment and technology

poa

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Bird's-eye view of Phoenix Green Valley – a natural, ecological and efficient space.

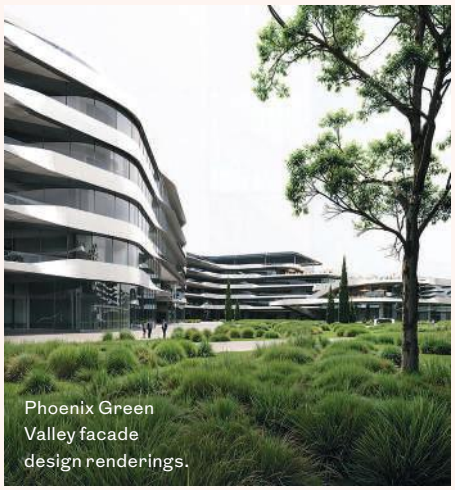
Phoenix Green Valley bird's-eye view rendering. The Phoenix symbolises perseverance and regeneration, which is integrated into the overall layout.

As the first green building project in China's comprehensive free trade zone, the Phoenix Green Valley Comprehensive Protection Zone designed by Pan Chengshou, principal partner of POA Architects, showcases Yiwu's innovative concept of ecological architecture under the "Belt and Road" Initiative. Through the harmonious relationship between people, buildings and the environment and the application of intelligent and economical technology, the project has created a new model of green building.

The valley of vitality of industrial integration

While fulfilling the basic programmes of a bonded zone, the project also introduces a public service centre that supports live streaming, trade exhibitions and amenities such as a canteen. It skilfully combines functionality, modernisation and sustainability to facilitate development and urban regeneration.

The Phoenix Green Valley design concept is deeply rooted in traditional Chinese culture, drawing inspiration from the phoenix as a symbol of indomitable spirit and regeneration to organise the overall layout. The masterplan adopts a "one core, two axes and four areas" pattern, ensuring efficient connectivity. The urban industrial renewal axis links logistics, maintenance, manufacturing, supporting services and R&D, while the urban ecological axis introduces cultural landscapes that infuse the project with the city spirit. A "shared cloud platform" functions as the project's smart brain, integrating industries, services and facilities through an interconnected network of walkways and corridors. This enhances the operational efficiency of the entire campus. The design promotes integration with Phase I of the Comprehensive Bonded Zone and enables smooth customs flow through a "one access controlling two areas" system, facilitating functional connectivity and resource sharing.



Phoenix Green Valley facade design renderings.

The valley of human symbiosis

The functional design is diverse and comprehensive. A comprehensive service building integrates various amenities and technical service platforms, offering shared spaces. The R&D area offers various modes and its garden-style design seamlessly blends indoor and outdoor spaces. The manufacturing area features courtyard-style factory clusters, employing a modularised design approach to adapt to diverse enterprise needs. Additionally, the storage and logistics area, connected to Phase I of the Comprehensive Bonded Zone via an elevated bridge, ensures an efficient, circular flow of goods while aligning with the industry formats.

The project introduces creative architectural design concepts such as Phoenix Green Valley and Shared Cloud Platform, tackling key challenges of the design brief. It features a modern and visually aesthetic appearance, clear functional zoning, versatility and strong sustainability. The design thoughtfully incorporates traditional cultural heritage while emphasising meticulous detailing, eco-conscious materials and harmony with the surrounding environment, exemplifying both innovation and authenticity.

The valley of technology-driven connectivity

The project intends to establish China's first 3-star green comprehensive bonded zone, exceeding the standards of LEED Gold certification. Passive energy-saving maximise natural ventilation and daylight, reducing heating and cooling loads in both winter and summer. These strategies extend across all scales, from building layouts and geometric forms to the intricate detailing of windows.

The rooftop photovoltaic system employs BIPV (building-integrated photovoltaics), featuring silver aluminium panels and cadmium telluride thin-film modules. The design team leverages parametric tools to standardise roof segmentation, minimising the use of non-standard panels and controlling construction complexity and costs. Photovoltaic panel placements are optimised according to roof angles and orientations to achieve maximum energy conversion efficiency. With a total panel area of approximately 84,000 sq m and an installed capacity of 12,840kW, the system generates 16,300,000 Wh annually, offsetting approximately 12,800 tons of carbon emissions each year.

Sustainable energy for large public spaces is provided by ground-source heat pumps, while independent CRC units ensure flexible energy use for individual buildings. The project employs simple, natural and durable materials such as bamboo plywood, terrazzo (a traditional craft now in decline), locally sourced stone and exposed concrete, embodying a unpretentious aesthetic. Features like permeable brick paving and rooftop greenery reduce surface runoff, while an underground rainwater recycling system collects water for irrigating landscaped courtyards and rooftop gardens.

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2: Intelligence

IF WE ARE TO IMPLEMENT NET ZERO, ARCHITECTS NEED TO ROLL UP THEIR SLEEVES
LAURA CARRARA-CAGNI

Regulatory bodies are setting ambitious targets to reduce carbon footprints and promote sustainable building practices, but many remain unmet. The real-estate sector is searching for solutions to achieve these tough goals, sometimes resorting to negotiating targets down, or even, as in the United States, incorporating non-compliance fines in financial plans to pass on to tenants. These approaches diminish the value of the targets and, crucially, fail to address the climate emergency.

Unfortunately, the path to compliance is fraught with difficulties, including inconsistent policies, the complex nature of emissions reduction across the stages of a building's life cycle, financial constraints, and the slow pace of technological advancements. In many cases, this next-generation technology is essential to reaching industry targets, but not properly understood or implemented because there is a disconnect between property professionals and community representatives on one side, and the technical consultants – such as physicists and engineers – on the other.

The good news: architects are the connecting element. We are the pivotal players in the design and construction process, uniquely placed to influence the path to net zero by pulling together the best technical consultants while consulting with stakeholders. Instead of just delivering a brief, our role is to proactively create solutions and shape visions, then implement them. We can understand the systemic obstacles, evaluate case studies, foster dialogue on innovative strategies, and set up collaborative efforts to bridge the gap between regulatory ambitions and practical application. This is an important, meaningful opportunity for our profession – and it's what we do best!

This is why we created Cagni Williams Energy, with a mission to drive meaningful change in the built environment, providing advice and solutions to enable property owners to meet net-zero goals via effective technical solutions. From designing ambient loop heat networks for communities, to crafting comprehensive energy plans for projects, it drives progress on challenging, sometimes complex pilot schemes that otherwise might not succeed. The intention? To think globally and act locally, decarbonising the world one project at a time.

'Architects are the pivotal players in the design and construction process, uniquely placed to influence the path towards net zero'

Laura Carrara-Cagni is a founding director of Cagni Williams Associates, and the recently launched Cagni Williams Energy, which is helping to create the Sidney Street Heat Network project, a community ground source heat pump array serving more than 300 homes, two hospitals, a church and a school, and other stakeholders. She is the co-chair of the Urban Land Institute Europe Life Science and Healthcare Product Council, and a board member of Business Club Italia.

AGNESE SANVITO

Intelligence is officially approved RIBA CPD. Look out for icons throughout the section indicating core curriculum areas.

Uncertain futures

The shifting focus of architectural education means change is guaranteed, but beyond that lie more questions than answers, finds Eleanor Young

Procurement & contracts

Legal, regulatory & statutory compliance

'We are going to see change coming in over the next few years,' says Jenny Russell, RIBA director of education and learning. 'It'll be a slow process and that is a good thing.' This decade of change will gradually filter down into practices. It has begun with the Architects Registration Board changes and university responses to them, with many architecture schools reviewing their course offer. With new structures it seems likely the flow of Part 1 and Part 2 students that has defined architectural practice over the years will be reduced.

The background: in 2024 the ARB announced it was to focus on registering courses at master's level and above only (Part 2 and 3). The news, with the tagline of the end of Part 1, 2, and 3, has had the unhappy side effect of undermining the status of architecture degrees. (RIBA will continue to use the terms and recognise architecture courses at Part 1, 2 and 3, and the value of an undergraduate degree in architecture, and maintain a system that is recognised worldwide.) Its impact is playing out in the context of real-terms funding cuts and fewer lucrative international students, in an unstable university sector that is cutting an estimated 10,000 staff to address deficits.

More ARB changes are to come, with a commission on Professional Practice Experience having taken evidence and due to make recommendations for consultation shortly. Part 3 course directors are holding their collective breath – having been advised to wait on those recommendations.

Structural changes to education

There is still debate about whether this reform will achieve its aims. Speaking at Interface 3, RIBA's recent symposium on education and practice, Lee Ivett, head of the Grenfell-Baines Institute of Architecture at the University of Central Lancashire (UCLAN) was outspoken in his critique of 'ill considered reforms… [and] a misguided obsession with structure.' Other heads of architecture are looking at how to adapt.

A late 2024 RIBA survey showed the institutions offering architecture courses are already feeling disruption, with over a quarter either planning major changes, for example a new MArch, or unsure about their course plans. Some active options on the table are integrated degree and master's programmes, which would run straight through from first to final year, without a year out in either five or a reduced four years, and courses combining a master's and professional practice. Most plans are still under wraps, though the University of East London has made public its plans for a version of a combined course bringing together Part 2 master's and Part 3 professional practice.

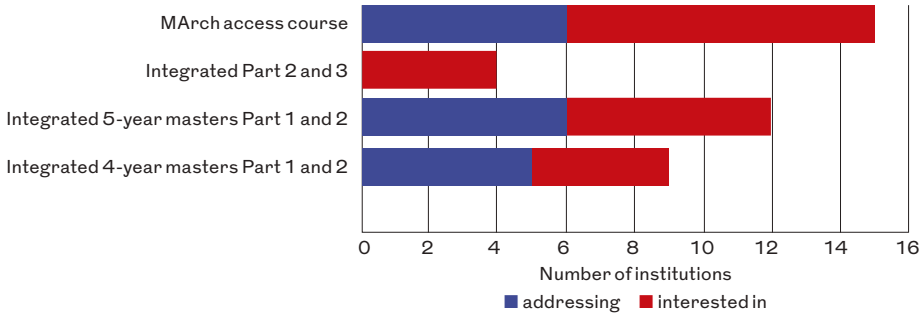
Impact on practice experience

Combined and shorter courses are likely to lead to less practical experience at early stages for students of architecture, and that practical experience would likely be delivered in shorter periods within the course structures. This would make for a different sort of profession and make the relationship between practice and future architects, which has enlivened practices for many years, less close. 'We love our Part 1 students,' says Sasha Bhavan of small practice Knox Bhavan. 'They bring a lightness to the practice with their love of models and exploration, and they bring technology.'

'Will typical tasks undertaken by year-out students end up landing on the shoulders of post-Part 2 students?', asks Russell. If practice has to operate with fewer Part 1 students, will there be bored Part 2 students or will AI pick up the slack? Ivett of UCLAN picks up the thread: 'Should we really supply a student after a four years combined master's and pay a minimum wage or do we have to step up and pay what they deserve?' Alternatively, will practice leaders need to set up alternative progression pathways for recruits?

Reducing the churn of incoming students, and committing to employing future architects on a permanent basis without the 'try before you buy' that Part 1 has provided over the years, also means difficult conversations about under

Emerging course types — planned and under investigation



Source: RIBA survey of UK institutions with RIBA-validated architecture courses, 2024

DENNIS GILBERT/VIEW

Above 'We love our Part 1 students, they bring a lightness to the practice,' says Sasha Bhavan of Peckham-based Knox Bhavan.

performance or cultural fit can't be dodged by the imminent departure of a Part 1 student. And that the leeway Part 1 employees give to small practices to expand or contract without the painful process of redundancy is reduced.

On the upside there would be less employee churn and less need for an annual cycle of training and mentoring.

Perhaps the most significant impact would be if Part 2 master's students landed in studios after four or five years of architecture education with barely any experience in practice. This can already be an issue with Part 1 students. At the symposium, one third year student mentioned the consensus at their table of students: 'Employers need to be more forgiving and foster students over the experience gap.'

It is hard to discern the future in this period of change. 'But it may be that students will continue to seek out practice experience and Part 1 jobs will continue to be advertised,' says Russell.

What education will employees have?

The ARB registration focus on master's and above comes with the initial aim of opening up access to students who haven't taken a degree course in architecture – say from planning, construction or even film. It leaves decisions about who to accept onto a master's in architecture in the hands of the institution offering it. The RIBA survey shows a significant number of institutions looking at, or interested in exploring, architectural access courses for students transferring into the discipline at master's level, though the only one public is Kingston University.

For practices this means they may want to take a closer look at the CVs of Part 2 students or even qualified architects as the cohort comes through, and perhaps focus more closely on what different skills applicants might have with a thorough interrogation of their portfolio. Practices will also need to understand where unexpected knowledge gaps might be – things that would typically be covered in a degree course in architecture.

Student loans

Frustratingly for the ARB's intention of increasing the diversity of entrants to the profession, the funding does not match. Architecture students in England have a special deal, so the more generous degree-level loans (£9,535 a year) continue through the master's course. But this will only apply to those taking degrees in architecture or architectural technology. Students who have taken on other undergraduate degrees will only be eligible for the loan of £12,471 per course when they reach master's level – split over two years. This leaves switchers to architectural master's worse off.

Apprenticeships

Apprenticeships are the training that is most deeply embedded in practice and practical experience. There are a small number of level 6 degree apprenticeships in architecture, but the majority are level 7, covering master's study. At the RIBA symposium Scott Brownrigg's Elizabeth Akamo spoke confidently of her experience going through an apprenticeship with strong support, accelerated learning and a certain acceptance of mistakes.

Yet all the signs are that the government is focusing apprenticeship funding on the lower education levels in its upcoming review. The RIBA is one of the voices petitioning it to continue to support this valuable route. It described them as 'an additional access route for people from underrepresented groups to participate in built environment professions, ensuring a wide range of voices and experiences are reflected in the communities and places we create'. Though hard work for the student, it changes the story on the cost of studying, with no fees and the apprentice supported with an income. While there are only a limited number of practices offering apprenticeships the loss would be a blow to them and the investment they have put into the scheme, as well as to potential applicants. ●

HOW STUDENTS ARE TAUGHT

In this time of flux in universities, exactly how students are being taught is up for discussion. Studio space is always under threat. 'Architectural education is being dictated by university estate teams,' warns UCLAN's Lee Ivett, who prefers all learning to be embedded in studio teaching with practical application. Professor Alex Wright, head of architecture at the University of Bath, is determined to safeguard resources for studio learning. He used RIBA's education and practice symposium to float the idea that the broadcast elements of teaching, primarily lectures, could be delivered efficiently across institutions with experts from relevant areas pooling recorded lectures. Meanwhile Steven Coombs, director of undergraduate teaching at the Welsh School of Architecture, raises the alarm about the 50 competencies now explicitly demanded of students. 'They don't fit what architecture does,' he says. 'And we won't know the implications until graduates start coming through.'

Architecture for the ears

Sound is too often the afterthought of building design, but it's the invisible, omnipresent element that can make people feel inspired and connected to spaces

L-ACOUSTICS

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Think of sound as the emotions of a space. While the visual aesthetics are a feast for the eyes, the space's sound is the heartbeat of its soul – it pulses with life, sets the mood, and gives depth to each moment spent within. Sound shapes our world, yet it's often treated as a secondary concern in building design – an issue to be fixed later, not a key element to be considered from the start. But what if we could design spaces to sound as good as they look?

Increasingly, architects are realising that the experience of a building is as much about what you hear as what you see. This pursuit of sonic excellence took centre stage at a January event hosted by RIBAJ in partnership with sound technology manufacturer L-Acoustics. Leading architects gathered to share innovative approaches to optimising sound, from minimising noise and shaping acoustic

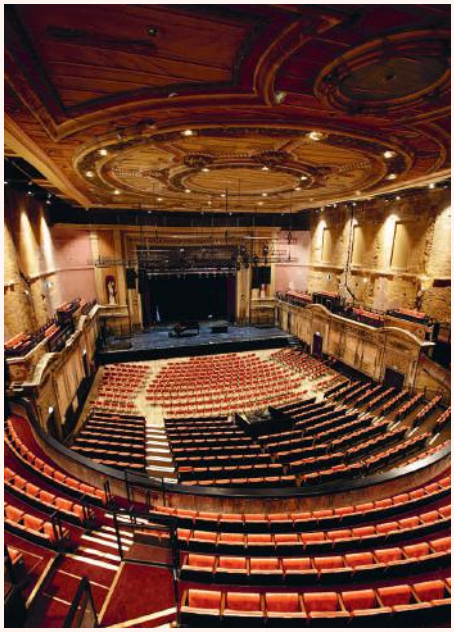
characteristics to enhancing overall sound quality. It was a call to action.

How can the architectural profession elevate the importance of acoustics, both in practice and education?
This challenge aligns with the work of sound consultant Julian Treasure, who advocates for 'conscious listening' and 'invisible architecture'. He believes we should be 'designing not for appearance but experience', crafting spaces that 'sound as good as they look, and improve our quality of life, health and wellbeing, social behaviour, and productivity'. This ideal, however, often clashes with reality.

As Helen Taylor, an education design specialist and Director at international practice Scott Brownrigg, observes, while there's growing optimism around acoustics and inclusive design, sound remains 'literally invisible' in many architectural conversations. 'It isn't well covered in typical architectural education,' she explains, 'and not often part of architectural discussions unless it's in relation to technical standards.'

'Hearing affects feelings,' declares Jason Flanagan of London-based Flanagan Lawrence, whose experience spans from the Sage Gateshead to the Royal Welsh College of Music and Drama. He laments that acoustics remains 'a niche subject in architectural education, compared with light and sight, especially outside the performing arts'.

Imagine: airports, railway stations and foyers designed not just for visual appeal but for acoustic tranquility – spaces where sound enhances, rather than detracts from, the experience.
This wider application of acoustic principles is crucial, according to Tim Boot, director at L-Acoustics. 'We live in a world of noise,' he asserts. 'At a subconscious level, hearing is critical, yet we undervalue it, creating environments that are not only noisy but also fatiguing.' Boot believes the architectural profession holds the key to changing this. 'Great architecture is about crafting an experience,' he explains. 'It's about manipulating all of the senses. So why not fully engage sound?' He emphasises that acoustic considerations can't be an afterthought.



Above L-Acoustics installation at Alexandra Palace Theatre, London.

Opposite Crafting soundscapes that complement the rich history and contemporary luxury of the The Roof Gardens in Kensigton, west London.

'You need to define the intended purpose of a space from the very beginning,' Boot continues. 'The sound in a corporate lobby is just as vital as the sound in the boardroom. It's not about adding sound later; it's about designing for sound from the outset.' He challenges the profession: 'If we fail to attune the acoustics of a space to its function, we diminish productivity and communication and the emotional impact that space can have.'

For Helen Taylor, the importance of sound resonates deeply within the realm of education. 'After light, sound is critical to educational experience and outcomes,' she emphasises. 'Research links acoustics to academic performance, and to physical and mental health – issues especially crucial for children, young people, and those with disabilities.' Investing in good acoustics early is key: 'Retrofitting solutions or dealing with the failure of poorly designed environments is far more costly.'

Performing arts venues lead the way in acoustic and sound design. 'You need a blank slate to create different acoustic environments,' Tim Boot points out. 'But it's hard to undo noise.' These acoustic environments are key, says Jason Flanagan: 'You need to work with the performance room to create the right space for the music, whether it's a chamber work needing an intimate interior or a 200-strong choir in a large church. Each venue must be flexible, with a degree of tuneability.'

Natural acoustics often play a key role. Flanagan explains how acoustic absorption can be introduced, noting the growing use of electronic systems, which 'affect the historic fabric less'. Flanagan Lawrence is currently exploring the use of L-Acoustics' Ambiance, an electro-acoustic enhancement system, in its transformation of Cardiff's Grade II*-listed Old Library.

A tour of the East Wing of London's Alexandra Palace, a heritage project by Feilden Cragg Bradley Studios, showcased the integration of modern services in a Victorian theatre. Project architect Daniel Burt highlighted the importance of the floor and ceiling, explaining how the ceiling void's 'drum skin' quality contributed to the space's 'fantastic acoustic character'. Meanwhile L-Acoustics' loudspeaker systems ensure consistent sound quality, with retractable baffles adding acoustic versatility.

Tim Boot emphasises that optimal sound isn't just a matter of luck. 'Electronic systems allow us to dynamically shift acoustics,' he says. 'With a single click, a room can transform from a cinema to a concert hall, a meeting room to a nightclub. This finally realises the 20th-century dream of the multifunctional room – no longer a "multi-useless" space. By carefully integrating architecture, lighting and acoustics, we can create truly versatile environments, a major advancement for architecture.' ●

L-ACOUSTICS (2)

CHRIS WHARTON

Hitting new heights

At Grade II-listed Walworth Town Hall, gutted by fire in 2013, Feix&Merlin has worked boldly yet sensitively within original roof dimensions to create striking spaces using modern materials, reports Pamela Buxton

When fire ravaged Walworth Town Hall in 2013, the roofs were lost, leaving the Grade II-listed building open to the sky and on Historic England's Heritage at Risk register. More than a decade later, its renovation is done at last as part of a wider repurposing of council buildings on the Walworth Road in London's Elephant and Castle.

In collaboration with architect Feix&Merlin, developer General Projects has turned them into flexible workspace, with most of the ground floor open to public use in new ways, including a café/restaurant and community centre. The complex project has taken in the adjacent former Newington Library (1892) and Cuming Museum (1902), which have moved to the nearby Southwark Heritage Centre and Walworth Library, linking the disparate buildings and improving access throughout.

For Feix&Merlin, it has been an exercise in judging interventions in the historic fabric: how best to retain traces of its past, when to reinstate original designs, and when to intervene in a contemporary way. It has, says architect Julia Feix, been 'a nice mix of leaving and adding' as the practice assessed fire and water damage, and the changes needed to make its new incarnation a success. These include a relocated main entrance addressing the new Walworth Square around the corner from Walworth Road, achieved by turning three windows into doors and creating wide entrance steps overlooking the square.

The practice divided spaces into three categories of heritage significance and devised appropriate responses. This included a respectful and scholarly approach to restoring key historic areas such as the main staircase, and former library and museum, and a more contemporary interpretation in some more damaged areas, like the 1865 town hall building and its 1902 extension.

This is clear in the café/restaurant at the new entrance lobby, where traces of the fire event are retained and celebrated as part of the building's history. Severely fire and water damaged, this has been opened up with many dividing walls removed (micro-cement floor inserts offer reminders of their presence). In this important new space, perimeter walls are plastered only to dado level and left with the evocative traces of the fire. Haworth Tompkins' Battersea Arts Centre and Squire's The Department Store projects were key reference points, it is no surprise to learn. The walls' edgy, distressed texture combines to good effect with the warmth of a series of new glulam arched columns supporting the CLT ceiling. The as-found approach to the walls has also been used in other damaged areas of the building.

The boldest intervention is in the badly damaged former council chamber, above the café/restaurant space. It has been repurposed into a spectacular office space, rising 10.5m to a striking exposed roof structure, and overlooked by a horseshoe-shaped gallery.

Feix&Merlin worked with structural engineers Heyne Tillett Steel (HTS)

to create the new roof, which has a truncated pyramid form. As with all replacement roofs in the town hall, this follows the original roof massing and Welsh slate-clad appearance externally, but there the similarity ends. While the lost roof was built traditionally in timber and obscured from the council chamber by a ceiling, the new one was created in glulam and CLT and conceived as a main interior design feature, with a central grid of illuminated recessed panels surrounded by timber soffits.

'We had to stick to the original shape and height, but wanted to keep it exposed, and for it to be timber,' says Feix, adding that the aim was for it to be as beautiful as possible. As throughout the project, CLT and glulam appealed for sustainability and aesthetic reasons, with steelwork kept to a minimum.

'We're building the original mass of the roof, but we've done it in a modern way while using traditional materials,' says Jonathan Flint, a senior associate at HTS. 'Rather than the sawn timber roof trusses of the 19th century, we've taken a modern approach to an old material.'

For the new roof structure, the engineers used a concrete ring beam that had been installed immediately after the fire to secure the walls in the absence of the roof. Four glulam two-directional trusses spring from this to span the 13.5m x 13.5m space, each 240mm wide, with slender carbon steel tubular bracing elements to keep the structure as open as possible in the middle. The sides are formed in CLT slabs of spruce.

'Because it's quite square, the arrangement is that we have two trusses in each direction forming the box,' says Flint, adding that by using the timber mostly in compression, and the steel to take the tension, the design plays to the strength of both materials. The trusses, prefabricated by B&K Structures, arrived onsite by road and were craned into place over just a couple of weeks.

The structure combines with a central lighting grid feature. With a glazed lantern ruled out due to maintenance considerations, the architects chose an array of nine illuminated stretched panels below the

FEIX&MERLIN

Above Steel-braced glulam trusses span a square opening to create the imposing new faux rooflight.

Opposite The roof structure, sitting on a concrete ring beam, seems to hover above the space below.

CLT roof panels. 'We wanted to emulate the roof light we couldn't have, so went for Barrisol,' says Feix.

The temperature of the lighting can be varied as desired from a warm 2700K to cool 4000K. Here, as throughout the project, the CLT and glulam is treated with a white wash fire protection. The flat roof panels in the centre are installed on a 1:60 pitch to encourage rain run-off.

The other major intervention to the chamber is the new horseshoe gallery, which is cantilevered out from the wall, supported in the corner by diagonal members. It replaces a much narrower original balcony that overlooked the chamber on one side. The architects took inspiration from a surviving fragment of railing, enlarging the decorative motif to form the CNC-cut, raw steel balcony front. Working with Stephen Levrant Heritage Architecture, the window surrounds were recreated with reference to a surviving remnant. Walls are repaired in a traditional lime plaster except in upper areas, where brickwork is visible. Levrant was also involved in the repair specification for other key heritage areas in the group of buildings, including the library, museum and main staircase. Throughout, a new Victorian-inspired colour scheme of blue, sage green and damson has been introduced.

The design team took a different approach in the new roof for the adjoining town hall extension wing of 1902, where the fire began. While again working within the recreated original roofline, the space behind this was enclosed to create a lightweight storey of extra office space. HTS achieved this by adding a series of glulam columns and beams sitting on the original masonry spine wall of the building. This in turn supports the new CLT roof, with more CLT forming the mansard, dormers and pyramid turrets. Inside, the effect is warm and cocooning, with the distinctive aroma of wood.

The embodied carbon of all the CLT and glulam in the former council chamber and town hall extension is 97t CO_2e. This compares with an additional 68t CO_2e if it had been built in steel frame and concrete metal decking slabs. It is the first time the architects have used CLT, and they are clearly big fans. 'I love it. It's such a beautiful material. I can't sing its praises more,' says Feix.

A third lost roof, on the corner of the Walworth Road, was reinstated by the council in a traditional timber construction design and topped with Welsh slate. Feix&Merlin added insulation and spruce lining to match the CLT in the council chamber.

After a five-year gestation, the town hall is off the Heritage at Risk register and beginning its new life, with space for 550 workers in flexible offices and co-working desks. The architects have clearly worked hard to increase accessibility from 24 to 60 per cent, linking up the various buildings and opening up the ground floor space as much as possible.

Along the way, they've risen to the challenge of destroyed roofs, fire and water damage, asbestos, and lots of unknowns to create an appealing mix of workspaces and public spaces with contrasting characters.

'Considering what we found, it's been a fairly smooth ride, says Feix.

Credits
Architect Feix&Merlin
Client General Projects
Structural engineer Heyne Tillett Steel
M&E consultant RED Engineering
Quantity surveyor Quartz
Heritage architect (planning) Donald Insall Associates
Heritage architect (tender) Heritage Architecture
Planning consultant Environmental Economics
Project manager Quartz
CDM coordinator ORSA
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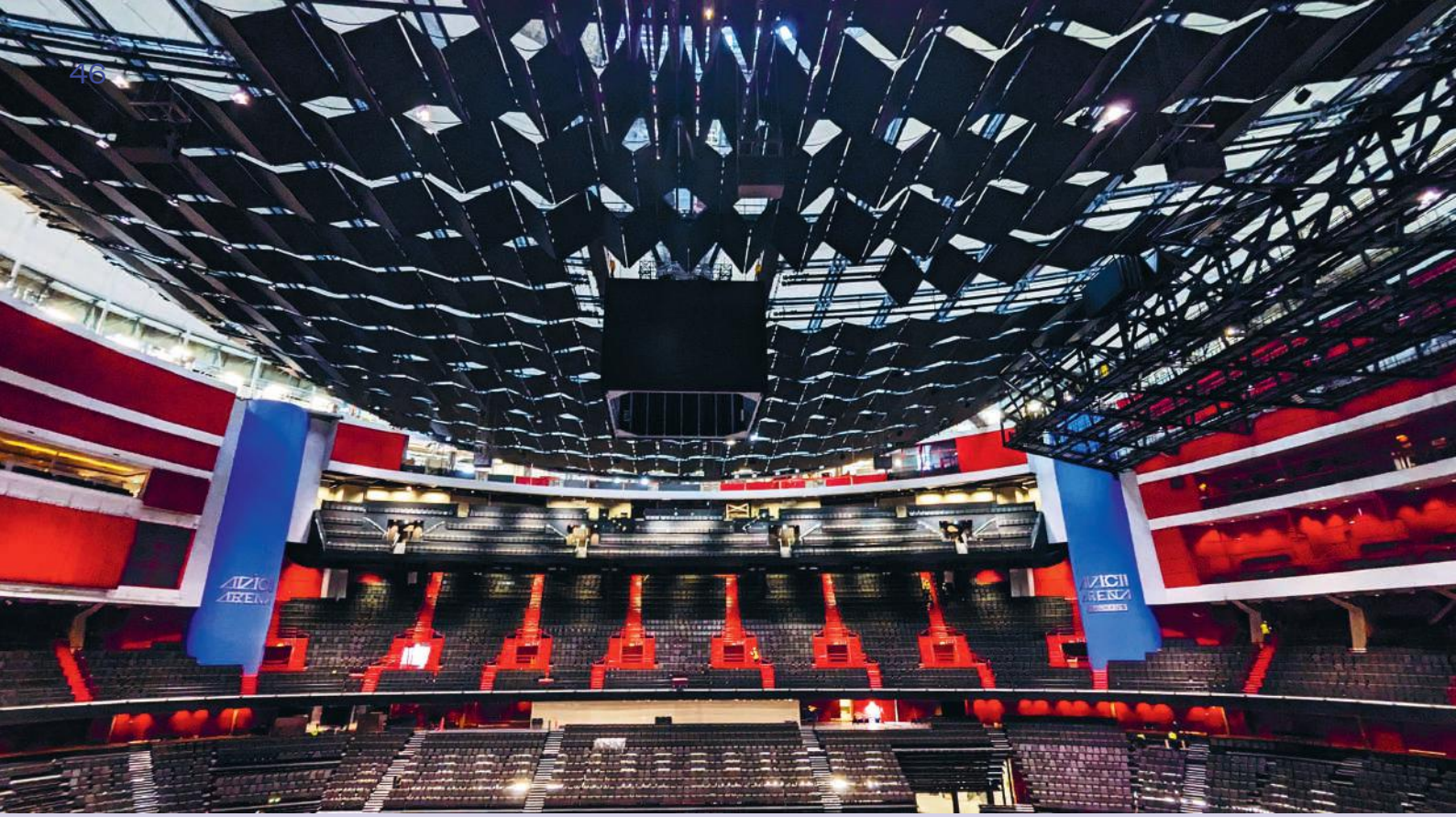


Second skin for sonics

At Stockholm's Avicii Arena, a massive new internal retractable roof enables the venue to rapidly transform in response to its events schedule, finds Jan-Carlos Kucharek

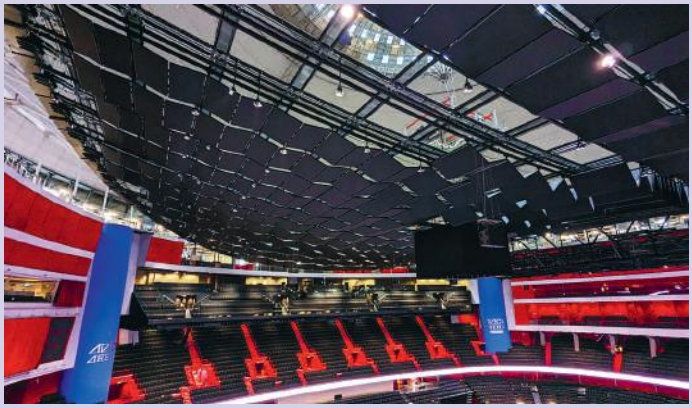
Until recently, the 1989 Stockholm Globe Arena had been the world's biggest spherical building. Designed by architects Svante Berg, Lars Vretblad and Esbjörn Adamson, its aluminium-clad, structural steel structure, dotted with portholes, seems to reference not just Étienne-Louis Boullée but the 1970s Japanese Metabolists.

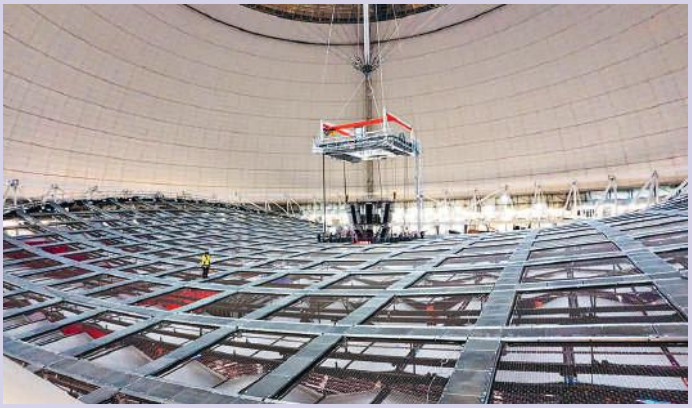
Renamed Avicii Arena in 2021 after the late DJ, and in response to commercial and performance needs, it reopened in February after extensive transformation. Most notably, a vast new internal retractable roof of folding acoustic panels enables the space's scale to be radically modulated according to event. The novel cable-stay design is by architect HOK with C.F. Møller Architects and engineer Schlaich Bergermann Partner (SBP), which worked on the 1972 Munich Olympics' pioneering lightweight structures. Its sustainability attributes go well beyond minimal material use.

Set 30-43m above the field of play, the new curved roof, with its acoustic and spatial intimacy, enables the city's ice hockey teams, and fans, to adopt the arena. This has freed up the adjacent Hovet Arena site for demolition as part of a massive urban regeneration of south Stockholm's former meatpacking district. As John Rhodes, HOK design principal and director of sport and entertainment points out, the design – which includes new seating and event viewing configurations – in effect obviated the need for an alternative sports venue, and the embodied carbon and economic cost it would represent. It also creates a state-of-the-art facility for live performers who previously would have had to battle with the challenging acoustic and technical limitations of a cavernous 108m-high space.

'There's been real changes to the event ecosystem, with buildings needing to be more flexible in what they can host – and higher performing,' adds Rhodes. 'The existing arena could have supported 60 tonnes of kit, but with showmanship demands ever-increasing, it can be now be more than 200 tonnes. There is also a need to meet turnaround times, now measured in hours, for revenue reasons.' These concerns, and the existing structure's heritage-listing, led to the bespoke tensile net roof design.

Nuno Guerreiro, HOK project designer, described the found conditions of a lower 'bowl' of 48 huge steel rib sections on concrete shear walls with four 'hero' cores supporting numerous concrete audience tiers. A massive hemispherical Mero spaceframe meets this at the structure's 'equator', and initial studies looked at using this as the support for the new roof. 'Accurate point cloud studies allowed us to conduct deep analysis of the structure down to the foundations but hopes for high levels of structural redundancy instead revealed very efficient engineering,' explains Guereirro. 'We realised quickly that





NUNO GUERREIRO (ALL PHOTOS)

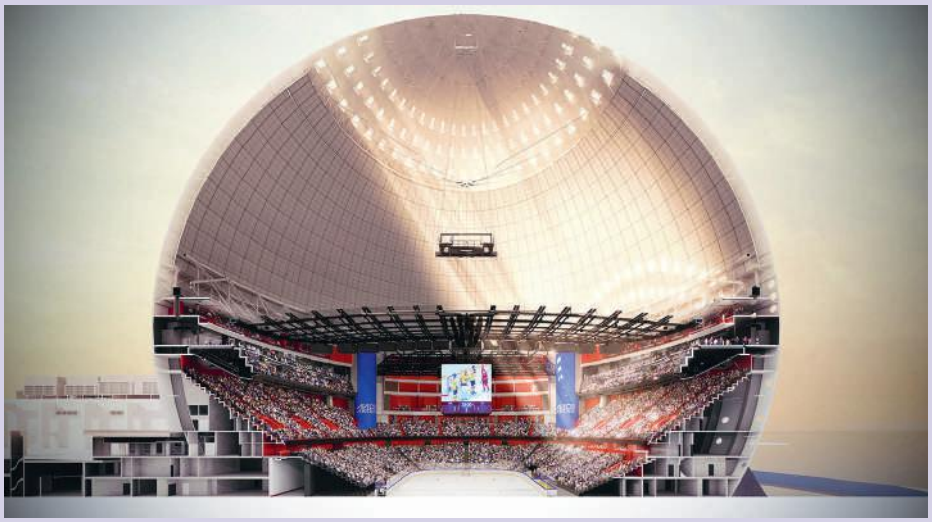
we would need a lightweight structural solution that would not only support its own and imposed loads, but work with an MEP strategy that could deliver coolth and lighting to the venue floor.'

This led to the proposition of a hyperbolic paraboloid surface of pairs of 45mm diameter steel post-tensioned cables, attached back to a wave-shaped steel tension ring; its curvature generating a self-sustaining and stable cable net structure. But as SBP managing director Knut Stockhusen outlines, things weren't as simple as the form. 'It wasn't possible to support this ring directly downwards as concrete tiers and arena structure got in the way, so we had to suspend it within an inclined truss connecting back to a larger 'top' ring running round the perimeter,' he says. 'This is a compression ring as all the forces acting here are tensile pulling against it, putting it into compression. It shortcuts all forces acting in the suspended cable net and truss, so that only vertical load transmits into the existing building.' Stockhusen adds that some concrete columns were encased in steel sleeves to take extra load and transfer it into the existing steel ribs.

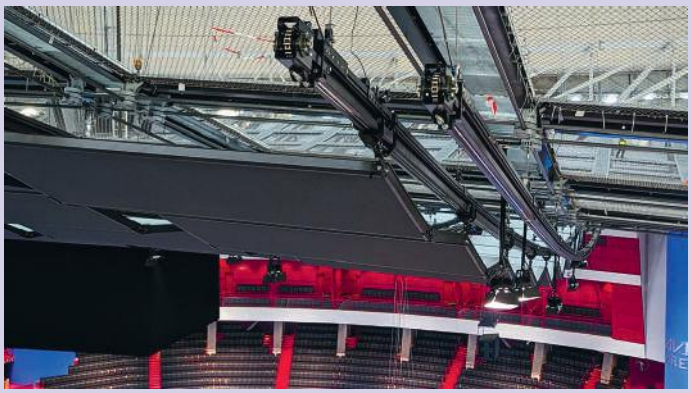
The resulting 12m deep tri-chord beam is notable for two reasons. First, with 40mm-thick steel tension and compression ring sections of 1.1m x 0.5m and 0.6m x 0.5m respectively, linked by 320mm diameter steel trusses, it's massive. Secondly, running around a nearly 350m perimeter, with its gentle curve supporting the 'Pringle'-shaped suspended roof, it nonetheless appears a thing of great delicacy. Its

HOK (2)

Opposite The new 80m x 75m cable net roof and new gondola seating tier, pictured, bring better acoustics, and all the action, to the arena's fans.
Top left Suspended at the original building's 'equator' level, the roof modulates both form and acoustics.
Top right The grid of steel mesh and steel hatchways makes the roof, and the tech hanging from its soffit, easily and quickly accessible.
Above Drawing of the massive tri-chord beam transferring the dead and imposed loads of the roof directly down onto the existing structure.
Below The new roof can be fully retracted to reveal the original spherical roof's enormity.



HOK



Above Dramatic, raked gondola seating and bars (blue/purple) freed up the level above for conference or entertainment events.

Left Retractable roof components were all off-the-shelf items, pared down to facilitate greater loading capacity for live event tech.

design economy was complicated by a need for the roof to take account of a central 'jumbotron' display, which is lowered over the ice rink on match days, requiring a 9m x 9m hole in the centre of this highly interdependent cable mesh. 'Hefty beams were needed on all sides of the opening to divert the 1,000kN forces running through the cables,' notes Stockhusen, acknowledging the efforts of the roof steel and specialist subcontractor who built it, 'given the demands of the construction tolerances'.

Rhodes says the idea for the 80m x 75m retractable roof system came from a previous proposal HOK had investigated, along with SBP's realised Heart of Doha moving solar shading project; both were shown to the client to argue its viability. The solution adopted was a steel rail system running below and held up by the double cable tensile mesh, at 4.5m centres. HOK's Guerreiro says the aim was simplicity. 'Everything we opted for – rails, winches, chains, hangers, steel clamps and hinges – were off-the-shelf items; to cut weight, we ran with simple wire connections on lower panel edges instead of hinges,' he says. The retraction system was tested as a prototype to ensure it worked, even on just one motor, since in fire scenarios, when the building must to be cleared in less than eight minutes, the roof needs to failsafe open for smoke ventilation purposes.

Each 8.7m^2 panel is made of a 3.84m x 2.26m aluminum frame section, with a 100mm core of porous, fire-resistant, sound absorbing material. 'The panel's "top" side is of acoustically transparent fabric to absorb low frequencies bouncing down off the dome, while the "bottom" is of stretched polymer material to reflect frequencies above 500Hz,' explains Rhodes. The 'Pringle' form had other benefits too. 'When engineers began testing it, the shape generated much better acoustics than a horizontal ceiling – even the angled position of panels in the "deployed" position improves the general acoustics,' adds Guerreiro. In terms of access and maintenance, HOK's decision to run steel mesh over openings between cable net runs also means the whole roof is a walkable surface. 'Operatives who want to hang tech for shows have a tartan grid of hatchways beneath which steels and cable trays run, so they can "bridle-in" and work at height safely,' says Rhodes.

The venue's roof is part of a larger reconfiguration. New bleacher seating layouts improve proximity to the ice rink and, retracted in concert mode, create an acoustically attenuated wall facing the large 'mosh pit'. There's also a pair of high-level structural interventions. New seating 'gondolas' bring 800 people closer to the action, freeing-up an underused corporate boxes level, Rhodes thinks, for 'conferencing, a luminarium or sky garden perhaps'. Formed of four steeply raked tiers of 12mm thick folded steel plate, each is supported by steel struts running back to the perimeter structure, and serve to hide a large new MEP ring of servicing, which provides powerful air cooling via high-velocity nozzles, and field-of-play lighting.

Their vertiginous addition not only maintains the venue's 16,000 capacity but further serves to spatially modulate this vast but formerly problematic arena, creating a spectacular vantage point from which to enjoy the game or concert. But with the elegant roof able to retract in just 10 minutes, it also allows for that complex intimacy to be exchanged for the spherical original's simple shock. ●

Credits
Client SGAF AB for the City of Stockholm
Operator Stockholm Live/ASM Europe
Architecture HOK London (S&E) in association with C.F. Møller Architects
Structure engineering Schlaich Bergermann Partner (SBP)
MEP engineering Ramboll
Acoustics engineering Efterklang
Specialist lighting Light Bureau
Cost Afry
Heritage advisor Mattias Eklund
Project management consultancy Legends
Main contractor NCC
Specialist sub-contractors Mostostal (steel structure), Taiyo Europe (cable net and retractable ceiling), Lanaro (panels and mechanical systems), Alfing (fixed and retractable seating)

ALMA VERT

ALMA VERT is a thermal bridging block made from raw materials derived from production waste sources, primarily recycled PET plastic. Once the product reaches the end of its life cycle, it can be recycled for reuse, contributing to a circular economy.

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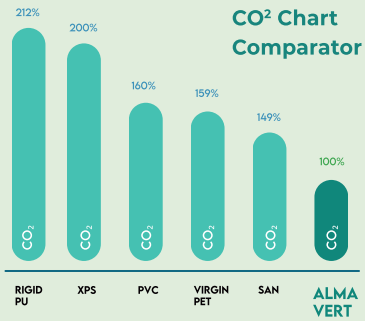
These panels leverage high-tech, eco-friendly materials to significantly reduce CO2 emissions while meeting stringent industry standards for recyclable, lightweight, and durable composite structures that excel in reducing thermal bridges.

The Alma Vert bridging blocks in different density classes **(115 kg/m³, 200 kg/m³, and 350 kg/m³**) are designed for various applications depending on both the structural and thermal requirements.



KEY ADVANTAGES, ALL IN ONE PANEL
STRENGTH, INSULATION, PROTECTION

KEY FEATURES

Environmentally Friendly: Made from 100% recycled materials, contributing to sustainable building practices by supporting circular economy principles and reducing CO^2 emissions.

Moisture Resistance: Closed-cell foam structure that prevents moisture ingress, reducing the risk of thermal degradation and extending the lifespan of the insulation.

Breathable Material: Permeable to water vapour diffusion, helping prevent condensation and promoting healthier indoor air quality.

Lightweight: Easy to handle and install, reducing transportation and installation costs while speeding up construction timelines.

Customisable Sizes: Available in various thicknesses and dimensions, providing design flexibility for a wide range of building applications.

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BLOG POST

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A home that belongs

Shaped by context, built to last, and filled with daylight.

A SETTLEMENT IN THE FOREST

For the 'Berry Cottage' project in Rågeleje, architect Martin Kallesø looked to the traditional villages of the region. Rather than a single large house, the vision was a settlement in the forest—main house, guesthouse, and greenhouse—flanking a forest clearing, blending into the surroundings.

01 A pink wooden cottage with VELUX Multiple Roof Windows, seamlessly blending with its forest surroundings.

02 A warm and airy interior where natural materials, expansive openings, and roof windows create a seamless connection to the outdoors.

ROOTED IN PLACE. DESIGNED FOR LIFE

Upon returning from a three-year stay in Georgia, USA, the clients settled in Copenhagen, founded their company, and began searching for a simple weekend house. A spontaneous trip led them to Rågeleje, where they discovered the perfect plot nestled in the forest.

"For us, a home is one of the finest things we, as architects, can design – it is the closest thing, a framework for the life we live."

Martin and Pil Kallesø,
Kallesø Arkitekter

03 Plenty of daylight in the house and view of the sky and treetops

DAYLIGHT TRANSFORMS A SPACE

With multiple roof windows, daylight reaches deep into the room, creating an open and airy atmosphere. Positioned close to the ridge, they play a vital part in inviting nature inside, ensuring natural ventilation and daylight while maintaining a constant connection to the surrounding nature.

04 Outdoor shower

A HOME MADE OF MOMENTS

Cooking with the doors open. Showering under the sky. Watching the sun trace across the walls. Berry Cottage is a retreat shaped by simple pleasures and thoughtful design.

SUSTAINABILITY IS NOT AN ADD-ON

"The house is sustainable simply because it is good architecture. We don't need more. We don't believe in particularly sustainable architecture; we only believe in good, contextual architecture made of beautiful, durable materials that age gracefully."

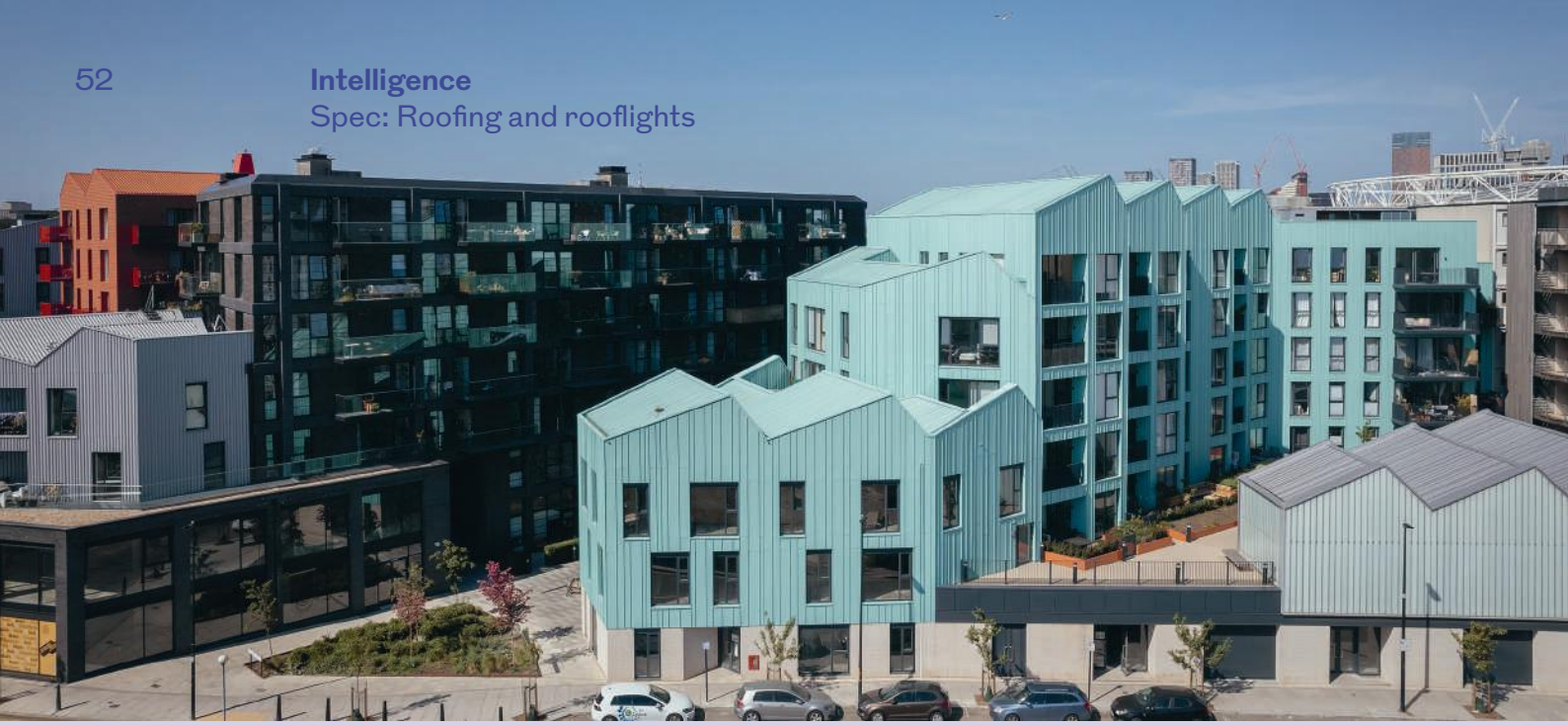
Martin Kallesø,
Kallesø Arkitekter

05 A harmonious retreat where architecture and nature coexist—an inviting guesthouse and greenhouse tucked into the forest landscape.

PROJECT DATA

Location:	Rågeleje, Denmark
Architecture:	Kallesø Arkitekter
Year:	2024
Photography:	Mads Frederik Christensen

See how **VELUX daylight solutions** can amplify spatial quality, material expression, and the connection between architecture and nature, while supporting sustainable design. Scan to read more.



Blurring the lines

Above Looking east from Wick Lane across the development to the Olympic park, the variation of roof forms is evident.

In east London, dRMM's Wick Lane development combines industrial and residential space. Its roofing design and materials, which reference Hackney Wick's heritage, are key to its coherence, explains senior associate Will Howard

Wick Lane is a pioneering co-location project that integrates industrial and residential spaces in Hackney Wick. Sited between a conservation area and strategic industrial land (SIL), it balances community needs with urban development. Industrial units act as buffers, protecting residential quality while unlocking growth opportunities. Shared courtyards and lanes encourage social interaction, and ensure separation between work and living space.

The development consists of six distinct buildings, each reflecting Hackney Wick's industrial heritage through varied architectural styles, from a red brick mill-style, a 1960s-esque framed facade, to contemporary corrugated metal and standing seam finishes. This carefully curated material palette reinforces local identity and helps integrate suitable workspaces for local businesses. By blending industrial vibrancy with residential liveability, Wick Lane aims to create a varied community of people working and living in close proximity.

→ Historical reference and roof shape

Of the four distinct roof types, three are tonally matched to the facade materials, ensuring a cohesive visual language. The scheme's character is largely shaped by varied roof forms, drawing inspiration from vernacular housing typologies and industrial north-light sawtooth roofs – references that are embedded in the local context. This dual influence introduces an element of intrigue, subtly blurring the distinction between residential and workplace areas. The approach to the roofscape helps achieve balance, allowing for a coherent and harmonious intensification of mixed-use functions.

The geometry and slope of the asymmetrical roof form take reference from a nearby derelict gable wall (visible lower right in image) aligning with a new pedestrian route through the site. This distinctive shape creates vaulted double-height ceilings in many upper-level homes, including four distinctive 'townhouses' positioned above a double-height industrial workspace, and accessed via an elevated podium garden.

JIM STEPHENSON (6)

IN NUMBERS

17,241m²
GIA

2,250m²
commercial space

7
storeys

175
homes

4 years 3 months
construction period

↑ Material choice

Material selection was rooted both in context and technical suitability as a roofing and facade system. This creates a unified expression, and a relationship between roof and wall.

Four roof types comprise pitched sinusoidal and pitched standing-seam cladding, pitched clay roof tiles and a flat green roof. While pitched roofs share a visually cohesive aesthetic, technical construction varies. All use warm roof construction, with inclined forms supported by primary steels. The clad roofs feature a build-up of metal profile sheets, rigid insulation, and a helping-hand brackets system to secure the sheeting. The clay tile roof also uses a steel frame, but the backing structure is formed using traditional timber battens, ensuring the project utilises existing supply chain capabilities and supports local tradespeople.

The concrete frame's flat roof is of conventional construction. The interplay of flat and pitched roofs was key in a form-making of variety and architectural richness.

→↘Refinement of details

A key design feature common to all the buildings is integration of hidden gutters, discreetly sited behind parapets with concealed hoppers and recessed downpipes. This detailing enhances the overall aesthetic, contributing to a refined and seamless appearance. By colour-matching gutters, copings and flashings, visual clutter is minimised,so buildings read as an architectural collage when viewed together.

The selected materials, typically used in industrial construction, tend to prioritise speed and efficiency. Application here to residential buildings required heightened levels of precision in detailing and setting out, exceeding sub-contractors' expectations, particularly in the case of sinusoidal cladding. Sheet materials' every seam and curve was meticulously aligned with window pods and building corners, eliminating need for oversized flashings or cover trims. These details reinforce the project's identity, dissolving the perceived boundaries between industrial and residential spaces. ●

Credits
Architect dRMM
Client and main contractor Taylor Wimpey London
Structural engineer AECOM (planning)/Clarke Nicholls Marcel (executive)
Fire engineer AECOM
MEP Pinnacle ESP (planning)/ Venables Associates (executive)
Landscape architect Grant Associates (planning)/JFA (executive)
Energy and sustainability consultant Environmental Economics
Heritage consultant Tibbalds
QS Martin Arnold
Daylight/sunlight Anstey Horne

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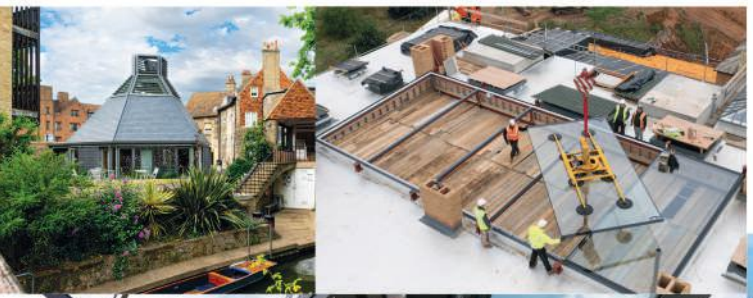

Checklist: flat roofs

Designing and specifying flat roofs requires many considerations, from practicality and appearance to material selection, performance, cost and maintenance. Mark Austin, technical director at SpecStudio, runs down the design aspects to review to develop a thorough, detailed specification

What is a flat roof?

With reference to BS 6229, a flat roof is defined as a flat or curved roof with a pitch not greater than 10° to the horizontal, with a continuously supported flexible waterproof covering on a supporting structure that is both dense and heavy (for instance, a concrete slab), or consists of framing members supporting a lightweight deck of metal or of timber-based material.

Main types of flat roof

- Uninsulated – no insulation either under or over the substrate/deck.
- Cold – insulation located under the substrate/ deck. Depending on the type of substrate/ deck construction, ventilation may be necessary.
- Warm – insulation located over the substrate/deck, with the waterproofing membrane located over the insulation.
- Inverted – membrane located directly on the substrate/deck with insulation above.

Various materials can be used in the composition of the roof build-up, and may be used in multiple combinations:

Membranes

- **Main types of membrane:**
- Liquid applied – either cold (single-component polyurethane (PU)) or two-component poly (methyl methacrylate) (PMMA), with reinforcement layer or hot (either modified bitumen (with reinforcement layer) or asphalt-based material).
- Reinforced bituminous sheet – either styrene-butadiene-styrene (SBS) or atactic polypropylene (APP) modified. Generally SBS is most suitable for the UK.
- Single ply – composed predominantly of synthetic polymer involving either polyvinyl chloride (PVC) or flexible polyolefin (FPO).

There are advantages and disadvantages with each. Seek advice from the roof system manufacturer as to most appropriate use on specific projects.

Insulation

- **Main types of insulation:**
- Cellular glass – manufactured from grinding down recycled/waste glass into a powder and mixing with a foaming agent. Kiln-fired, it creates a substance of closed-cell micropores, which can be formed into slabs.
- Mineral wool – manufactured from melting down of rock minerals (such as basalt, and recycled slag) and spinning them into fibres forming wool-like textured slabs.
- Polyisocyanurate (PIR) – rigid foam material that is formulated from various chemicals.
- Expanded polystyrene (EPS) – rigid, closed cell, thermoplastic foam produced from solid beads of polystyrene.
- Extruded polystyrene (XPS) – rigid, thermoplastic foam that is formed by extrusion.

Insulation can be used to create the falls required, primarily in warm roof construction. Again, there are pros and cons to the attributes of each type of insulation – seek guidance from manufacturers.

The specifier needs to be explicit in terms of use and required performance so the most appropriate recommendations can be given. The main attributes to consider are fire, resistance to loading, thermal performance and ability to perform if wet. For instance, thermoplastic products can be better at load resistance, achieving thermal performance in reduced zones, but are combustible, achieving, at best Class E to BS EN 13501.

We do not advocate the use of polystyrene-based insulation unless there is no alternative, but where necessary to use it, it should be encapsulated in non-combustible material. The overall system should also achieve BROOF(t4) as a minimum.

Surfacing

- **Main types of surfacing – can be combinations of the following:**
- None – membrane provides the surface.
- Over slabs – may require the expertise of the structural engineer.
- Stone ballast – consider the size and necessary containment to ensure stones can't, for example, be picked up by birds and dropped from height.
- Concrete pavers – bedded on over slab, or on proprietary pedestals.
- Natural stone pavers – bedded on over slab, or on proprietary pedestals.
- Timber decking planks – on proprietary support.
- Glass reinforced plastic (GRP) imitation timber decking planks – on proprietary support.
- Brown/ biodiverse – suitable substrate/growing medium to nurture natural colonisation of flora and fauna, often with prearranged biodiverse features such as log piles. Build-up includes filtration and drainage elements. Fire breaks will need to be incorporated.
- Extensive green/biodiverse – options as to planting types (plug plants/ seed mixes, pre-grown on matts) on suitable substrate/growing medium with filtration and drainage. Fire breaks will need to be incorporated.
- Intensive green/ biodiverse – all types of surfacing including but not limited to soft landscaping such as planting, turfing, shrubbery, trees and so on, on suitable substrates/ growing mediums. Hard landscaping such as paving, paths, roads; fixtures and fittings.

It is crucial to be clear about who assumes responsibility for designing and specifying surfacing. Other considerations include use of ballast for visual and stability and protection purposes, but correct size and grading is key.

Key considerations

We always align our specifications with the procurement and design responsibility matrix (DRM). We need to understand if an element of the design is prescriptive (architect design responsibility) or descriptive (contractor/sub-contractor responsibility). Final design solutions would usually be descriptive, but this depends on contractual appointment.

Due diligence should be undertaken with reputable manufacturers to ascertain the most suitable construction approach for the complexities and service conditions (including interface detailing), zones (in which any roof construction must fit), required design/service life, and cost constraints. Designers will need to understand the different approaches to construction and options to assist when in dialogue with roof manufacturers.

Testing/inspection to allow for

- **Offsite testing:**
- Independently certified test data.
- Where not for the particular service conditions, testing may have to be undertaken.

- **Onsite testing:**
- Adhesion/ compatibility testing (prior to installation).
- Incremental inspection at key points of the system installation in the presence of client, contractor, sub-contractor and manufacturer for quality control purposes, before subsequent phases of the installation are permitted.
- Electronic and flood testing to check workmanship.

Best practice/technical details

- **Standards/bodies (general):**
- BS 6229: 2018 – flat roofs with continually supported flexible waterproof coverings. Code of practice. Considered the primary overarching standard.
- REP BR 504 – roofs and roofing. Performance, diagnosis, maintenance, repair and the avoidance of defects, published by the Building Research Establishment (BRE).
- BS 8217 – reinforced bitumen membranes for roofing. Code of practice.
- Liquid Roofing and Waterproofing Association (LRWA).
- Single Ply Roofing Association (SPRA).

- **Standards/bodies (green roofs):**
- Green Roof Organisation (GRO) Green Roof Code – code of best practice for the UK.
- Guidelines for the Planning, Construction and Maintenance of Green Roofing (FLL Guidelines for green roofs) published by German Landscape Research, Development and Construction Society (FLL).
- Fire Performance of Green Roofs and Walls, published by Ministry for Housing, Communities and Local Government (MHCLG).

Key considerations

'Flat' roof construction should be proprietary systems by a reputable manufacturer with independent third-party testing. Necessary performance should be understood and established, since this will form the basis of achieving the correct design solution:

- Weathertight.
- Reaction to fire – generally BROOF(t4) to BS EN 13501-5, though building regulations may permit lesser performance in certain locations. Roofing tested to only BS 476 should not be accepted. In some instances, as dictated by building regulations, non-combustible insulation must be used.
- Loadings (permanent and imposed) – compliant with BS EN 1991, including to resist wind loads applicable to location.
- Movement.
- Thermal performance.
- Condensation – must not form internally of the waterproofing membrane or interstitially.
- Sustainability.
- Acoustics – provide required level of sound reduction.

Consideration should be given to any potential planning restrictions/ requirements (may affect 'surfacing' requirements/ stipulations).

Thought should be given to fixtures and fittings interfacing with the roof, required in the broader building design, and how these need to be secured/ fixed, to installation of PV panels. Any breach of the waterproofing membrane should be minimised and appropriately detailed.

Similarly, roof penetrations should be minimised. Penetrations to be sized and coordinated such that they can be accommodated by appropriate detailing.

Key contacts

Other members of the design team should be liaised with as appropriate in a range of instances (list below is not exhaustive).

- **Structural engineer:**
- To ensure that substrate/decking is also accurately specified, including but not limited to materiality: concrete (in-situ/precast), profiled metal with plywood overlay or concrete infill, plywood decking). Grades of materials finishes need to be correct for the intended purpose in terms of structure and also to receive the necessary roof construction. All compliant with appropriate standards for the associated materials.
- Appropriate gradients/falls will need to be achieved. No ponding should occur, with consideration given to deflections, coordinated with rainwater drainage.
- Understand where primary building construction/movement joints occur so appropriate detailing can be undertaken without compromising performance.
- Ascertain loads applied to the works when in use: this is a performance criterion that the roof system needs to achieve.

- **Services engineer:**
- Rainwater drainage strategy needs to be considered early in the design phase, comprising the following options and need for integration and detailing.
- Rapid drainage through gravity or syphonic action, compliant with BS EN 12056 and BS 8490.
- Attenuation via 'blue roof' principles. Compliant with NFRC Technical Guidance Note for the Construction and Design of Blue Roofs, published by The National Federation of Roofing Contractors and BS 8582.
- Integration of photovoltaic (PV) panels and similar type fixtures and fittings.
- Penetrations of services. Refer to points regarding this raised earlier.

It's important that installation shall be by operatives recommended/ approved by and trained by the system manufacturer, to maximise quality control through trusted partnerships.

The components of the entire assembly and full installation need to be covered by a single-source warranty, with approval from the manufacturer for all materials used in the works. The warranty should include an insurance company backing, paid as a single premium at the start of the policy. Guarantees shall be jointly provided by both the manufacturer and the contractor.

Flat roof specification checklist

- ☐ What is the design responsibility? Will be a performance (descriptive) specification based on a system, or fully designed (prescriptive)?
- ☐ Is the proposed system pre-tested and certified for the conditions of use intended?
- ☐ Has input and advice been sought and received from manufacturers?
- ☐ Any there any planning restrictions/requirements.
- ☐ What is the surface finish?
- ☐ What are the performance requirements (fire/ acoustic/ wind loadings/ sustainability).
- ☐ Can client warranty requirements be achieved?
- ☐ Have quality control requirements been cleared described?
- ☐ Have all interfaces and co-ordination with other disciplines been considered?

SpecStudio is an independent specification writing team delivering specifications for architectural and design practices: specstudio.uk

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Boost your resilience

With the latest figures showing practices' profits falling, a roundtable looked at how architects can best bounce back and adapt to new situations

Nursery and primary school, Pleine-Fougères, France designed by 31/44.

31/44 ARCHITECTS

'Resilience' – bouncing back from setbacks and adapting to new situations – translates into the business lexicon as the ability to continue healthy and robust operations during times of crisis. The 2020s have been plenty turbulent, and they're not even half done. Resilience is how we will make it through. This concern is precisely why the RIBA's Business and Career Resilience Hub exists: to provide members with the tools to succeed.

Current challenges

'Hands up how many of us actually turned a profit last year?' asked Nixie Edwards, co-founder of Manchester and Burnley-based Had & Co at the recent roundtable. 'Because all the architects we know agree that 2024 was dire … it felt like we were back to 2008.'

Statistics support this. According to the RIBA's Business Benchmarking survey, average architects' profits haven't risen since 2019 and, in fact, fell by 2 per cent last year despite growth in revenue. All but the largest firms have been hit by a potent combination of goods and wage inflation, increased fixed costs plus a dysfunctional planning system and Building Safety Act repercussions. As Helena Rivera, director of A Small Studio summarised: 'Overheads are a killer … the landscape for architects in a traditional contract management role is really difficult.'

Diversity – of projects and talent

'Building stuff is the least profitable thing to do,' ironically agreed Tobias Jewson, director of 31/44 Architects. So, how are our panellists surviving right now? Diversification is a key commonality. Saira Hussain, also a co-founder of Had & Co, elaborated: 'Letting, branding, feasibility studies, accessibility and heritage statements … we are now pushing for [these different offerings] and selling them to clients".

Tim Fu, whose studio specialises in AI-informed design, offers training and collaboration with academia as a 'safety net'. Meanwhile, Kuldeep Gill, director of technology at TP Bennett, noted the contribution his firm's interior design offering had made to profits in 2024.

Diversity of talent is crucial too. Gill feels that diverse representation at board level has seen direct benefits in terms of talent retention and ability to better understand 'who TP Bennett are providing work for'. Rivera agreed. 'Resilience is definitely around diversification,' she said. Having, until recently, an all-female team (recruited on talent, not demographics) alongside strong corporate social responsibility has attracted clients who share these values. 'Clients definitely approach us for our ethical stance,' she said.

'Diverse representation has seen benefits in terms of talent retention and ability to better understand who we are providing work for'

Winning work globally, locally and socially

According to RIBA head of economic research Adrian Malleson , £1 in every £4 made by UK architectural practices is from overseas – predominantly the US, Europe (Poland seeing significant growth), East Asia (mainly China and Hong Kong) and the Middle East (Saudi Arabia). For our panellists too, an outward-facing model is serving them well. Fu obtains most of his work from global clients; likewise, 31/44's Nantes office not only gives the practice a foothold in Europe but also an opportunity to collaborate with other practices seeking to enter that market.

For Had & Co, meanwhile, amplifying efforts locally, and reinforcing the practice's presence with two highly visible shopfronts, has cemented its business. 'We get quite a few walk-in clients,' said Edwards, 'and our main selling point is that we have this commercial presence on the high street … we started off as small-scale residential but now most of our clients are developers [and have grown with us].' The downside, jokes Hussain, is that 'even if we hide in the back, if they see our car parked outside, they drop in for a chat and we can't get any work done'.

All participants agreed that social media played a huge role in gaining work. Had & Co uses it for visibility, with frequent posts accompanying its PR efforts. 'The work might not come directly from Instagram,' said Hussain, but clients say they 'saw us on there. The more we post, the more chance there is of us being in their thoughts.' It is seen as a 'democratic' platform that amplifies smaller voices to the same volume as large industry players.

This is certainly true for 31/44, a nine-person practice with a 31.4k Instagram following. Jewson believes, however, that social media is primarily useful as a conduit for meaningful conversations with other architects.

Fu, meanwhile, said social media was a direct and successful means of cultivating clients. 'It has allowed me to proliferate my ideas [and build up brand awareness] which I was able to funnel into a business model based on my personal endeavours,' he said.

Managing expectations and fees

Almost all the participants admitted to avoiding uninvited competitions as the unpaid time required to pursue these opportunities was unviable.

In terms of fees, nearly all of them bill by the hour, invoicing on a monthly basis. One studio, however, favoured an upfront fixed-fee model during stages 1-5, with 50 per cent payable at the beginning and 50 per cent at the end; site management is billed weekly. This transparency has been a selling point for residential projects as it manages client

Below The team of A Small Studio outside their base.

JIM STEPHENSON

Studio Tim Fu's marina in the Middle East.

STUDIO TIM FU

expectations, even if a few would-be clients balk at the cost and walk away.

The smaller practices said they spent undesirable amounts of time and energy trying to analyse income data, track conversions, chase leads and so on. Rivera said that having a studio manager who is not a fee earner had been helpful in balancing these priorities. According to Malleson, architects estimate that 70 per cent of their time is spent on billable work but some in the room felt this figure was high compared with their experience.

AI and productivity hacks

'Administrative work can be an area where AI can be leveraged such as pointing large language tools at local repositories to capture past experience and aid future efforts to win work,' suggests Marek Suchocki, Autodesk's head of industry associations and strategy. Many Autodesk customers are leveraging the AI and machine learning features available in our tools to eliminate some laborious tasks and also by creating scripts that can be re-run to automate routine procedures. How else are architects using it?

Fu is at the forefront here, harnessing AI as a collaboration tool that allows clients to participate in designs. AI also enables the practice to turn around ideas very quickly, a key USP for his clients. 'We have trained GPT systems that give client, HR, management advice … even a "Tim's philosophy" GPT,' he said.

He is somewhat rare in this. According to Malleson, 19 per cent of architects see themselves as early adopters of tech and 11 per cent as innovators. While 41 per cent are using AI in some way, this is often 'light' and in early design stages. Meanwhile, 57 per cent think AI will improve efficiency in the design process but only 20 per cent are pointing resources at R&D, so 'practices are not always investing in getting ahead with it'. Larger companies can dedicate more resource to emerging tech. There was a general agreement that datasets need to be shared between companies if AI is to be an equitable resource within the industry.

Rivera uses it for heritage statements, access statements, local plan information and similar. Yet she expressed reservations about the ethics of AI in its current state. 'How do you navigate data protection with GPT?' she asked. 'I find this very uncomfortable. We could be breaching all sorts of architectural codes of conduct … I make sure to edit out client and site data wherever it appears.' For her, 'this all goes back to how important is it to run an ethical practice'.

The future

Two key themes emerged. The first concerned training a resilient next generation. Had & Co regularly takes on T-Level work-experience students and believes the apprenticeship model to be an excellent entry into the profession. 'Some graduates have actually said to me: "I don't want to work on this, it's boring",' said Hussain. 'But this is the sort of work available in the north-east! Apprentices, on the other hand, know what to expect from day one.'

The second emerging theme was of leveraging digital transformation as a force for good, even if an agent of radical change. 'A smart social media presence, showcasing, say, use of AI and other digital solutions can enhance brand awareness and let you compete with larger practices like the Fosters of this world by differentiating your services,' said Suchocki. 'You may not deliver the same number of projects but I think that AI, if you embrace it, gives a smaller practice the capability to deliver equivalent work.'

This RIBAJ roundtable was produced in association with Autodesk, autodesk.co.uk

WHAT ONE ADVANTAGE CAN TECHNOLOGY BRING ARCHITECTS IN OPTIMISING BUSINESS RESILIENCE?

It can level the playing field

'Social media has given us a democratic way of having our work seen,' says Helena Rivera. 'It is a good platform to build brand awareness and find your proper voice.'

It encourages talent

'Embracing AI can help smaller practices attract the right talent. By showing that you use advanced tools and technologies, you can appeal to the right applicants as well as clients and get those fees up,' says Marek Suchocki.

It is a strategic tool

'What is an architect there to do? Win work or draw?' asks Kuldeep Gill. Strategic use of technology drives growth through efficiency and innovation.

It shakes up the system:

'Traditional corporate structures won't work in the post AI era,' says Tim Fu. 'It is wild how operations can be run in today's digital world.'

AUTODESK

Using technology to give a better sense of the design with Studio Tim Fu.

STUDIO TIM FU

RIBA ELECTIONS 2025

During 2025 RIBA will hold the following elections:

- **Vice-President Membership**
  Any RIBA Chartered Member is eligible to stand, and the successful candidates will serve a two-year term from 1 September 2025.
- **RIBA Council**
- **Council Member Seats – 2 seats**
  Any current Chartered Member can stand for one of the two seats available. Successful candidates will serve a three-year term from 1 September 2025.
- **Regional Council Member Seats – 8 seats**
  Any current Chartered Member on the electoral register for one of the Regions listed below can stand for one of the seats available in that region. The term of office will be three years from 1 September 2025.
  - RIBA Council Member – two seats
  - RIBA East – two seats
  - RIBA South – two seats
  - RIBA Scotland North – one seat
  - RIBA Northern Ireland – one seat
- **Associate Member Seat – 2 seats**
  Any current Associate Member is eligible to stand for one of the two seats available. Successful candidates will serve a 3-year term from 1 September 2025.
- **Student Members – 2 seats**
  Any current Student Members or any person eligible to be a Student Member defined as a student on a RIBA recognised Part 1 or 2 course or during a year out between Part 1 and Part 2 and has attained the age of 18 at the time of nomination. Successful candidates will serve a 3-year term from 1 September 2025.

Timetable for Elections

- Notice of election: 23 April 2025
- Nominations open: 30 April 2025
- Nominations close: 14 May 2025
- Voting opens: 16 June 2025
- Voting closes: 27 June 2025

To be eligible to participate in this year's annual RIBA election, you must be a RIBA Member on the qualifying date. If you are not a RIBA Member and are eligible for RIBA Membership, you must have submitted your application online no later than **23.59 on 14 April, 2025**.

RIBA has a commitment to sustainability and using resources effectively and efficiently. In line with this, the elections process will be conducted online. Members who wish to participate in any election must have a registered email address with the RIBA. If any member has recently changed their contact details, please update their information no later than **23.59 on 14 May, 2025**. This can be done by accessing the member portal at www.architecture.com/login.

If you have any questions about any RIBA election, please email elections@riba.org

The Returning Officer

Note: All times BST (GMT+1)

RIBA
Architecture.com

President —
architecture's definitive skill
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Future winners —
'global, hyperlocal' practice
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3: Culture

Ed Reeve
King Abdulaziz Centre for World Culture (Ithra), Dhahran, Saudi Arabia, 2016
Canon 5DsR with EF24-70mm f/2.8L II USM lens

Ed Reeve tells me he wanted to be a photographer from an early age: 'I used to close one eye and frame something through a door or window; when my parents asked what I was doing, I'd say making pictures.' They must have made a mental note; when he turned 11 they bought him a green Konica Pop 35mm camera and he's never looked back.

Starting with family and friends, cars and landscapes, his ambitions grew as he got older – a birthday present for schoolmates would be to shoot their parties and give them the album. When his father died in 2016, he captured his garage using the medium he loved to summon a sense of the man he'd lost: 'It said so much about him; his pipe, how he hung up his tools, nuts and bolts in tobacco tins, or scribbled notes on boxes.'

While working in Saudi Arabia, he took this twilight shot of Snøhetta's Ithra: a strange, primal form rising, he says, from the site where the state first struck oil. Like delicately balanced pebbles, it seems a metaphor for the serendipitous geologies hidden below the sands. Reeve says he struggled with its facade of fine, stainless steel tubes, which resulted in a strong moiré effect; like oil on water.

Soon after, he'd find himself in his late father's garage, wrestling with his own efforts to give form to the ineffable; 'in a way, to do a portrait of him, but without him in it'. ● **Jan-Carlos Kucharek**

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'Churches are havens of free indoor space – and a testament to the power of architecture wherever you see them'

Buildings as keepers of value

Churches show that mass communications predate the modern day, says Eleanor Young

Will you think me old-fashioned if I write about churches? Well, you shouldn't. They were way ahead of television or social media, setting up mass communications in the Middle Ages, broadcasting values and summons to parishioners, far more effective – if a little less nuanced – than a town crier. And when mechanical clocks came along, they added another application – timekeeping.

Having been brought up in the country and in the Church of England, the bells used to mean to me the beginning of a rather slow, cold, hour of Sunday service punctuated by the keep-fit routine: kneel to pray, stand to sing, 'please be seated' to listen; and repeat.

Now I hear drifts of the bells from across the valley with the same pleasure and nostalgia I usually reserve for trees and landscape views. Churches are havens of free indoor space in villages, galleries of gilded crosses and stained glass in every town, concert halls in the city, hymns to carpenters and craftspeople – and a testament to the power of architecture wherever you see them. They are redolent with history and tradition, even where other traditions may have had more vigour in chapels and mosques.

Church buildings celebrated and glorified the Almighty, and brought people to worship for centuries. They were not, however, enough to keep the majority of the population attending them each Sunday. But there is continuity for the passer-by, spying a stone tower rising up from the yew tree at a bend in the road, breathing in the space around them in the city, connecting with the history as you cut past their iron railings and old walls.

We rarely get a chance to celebrate quinquennial inspections of churches by architects. But these, and countless small interventions to allow a warmer welcome accompanied by coffee and a toilet, are the things that enable church buildings not just to survive in our landscape but to reach out a hand to the society around them. The National Churches Trust commissioned independent analysis, which in 2024 estimated that churches of all denominations relieve costs and support the NHS to the tune of £8.4 billion a year. It enumerated the value of warm spaces held in churches, food banks, the hosting of AA groups, parents' and toddlers' meetings, and more.

The best of the values built into the ancient walls of churches persist – and are part of the fabric of our society. They don't merely broadcast; they create a home for connections between people, working against the forces of loneliness and isolation.

ONLY ON RIBAJ.COM

Three outstanding extensions to Grade-II-listed houses provide inspiration and practical insights

House extension
ribaj.com/listed-extensions

Below St John the Baptist, Burford, Oxfordshire, with a parish hall designed by Clews Architects alongside it.

STEPHANIE WUNDERLICH PHOTO: ANDY MARSHALL

Closing the morality gap

Judgement and quality can set architects apart from any technological solution and start to close the gap between profit and public good, argues Muyiwa Oki

Six months left. The clock ticks, yet still I find myself engaging in first-time experiences late into my tenure as president. Last month, I was giving evidence to the Housing and Local Government Committee, led by MP Florence Eshalomi. The topic? The UK government's ambition to build 1.5 million homes. A bold commitment – but is our construction sector equipped to deliver?

I introduced myself by reaffirming RIBA's purpose: 'to advance the theory and practice of architecture, setting and enabling the highest design and delivery standards'. But how do we do so in a world where the only constant is change?

Professions are caught between a fast-shifting technological landscape and deep systemic challenges. We're gearing up to launch a taskforce aimed at transforming architecture's workplace culture. Why? Because we're stuck in a cycle that prioritises surviving over thriving. The structures that shape our industry, from economic incentives to workplace hierarchies, have not evolved at the pace necessary to foster meaningful, sustainable progress. That leaves us with a morality gap.

We hold architecture to the highest ideals: good judgement, precision and an unerring focus on quality. Yet we often fail to interrogate the systems that stifle those very attributes.

We should be responsible capitalists, serving nature, people and the common good, not just financialised real estate markets. But we treat architecture as if it is removed from the broader economic realities that dictate how (and for whom) buildings are made. In healthcare, we would never consider axing regulations that protect patients. So why did we accept the erosion of standards under the guise of speed and cost-cutting?

In the face of AI's relentless march, humans maintain the ability to discern, curate, and synthesise disparate influences into something distinct. AI's composite of perspectives produces the median, the average, and the almost-good enough. But reaching the highest standard takes judgement. That is where architects must distinguish themselves. The more mediocrity AI generates, the greater opportunity for those who can cut through the noise with clarity and vision.

Architectural judgement understands the interplay of light and material, as seen here at the White Eagle Lodge temple by James Gorst Architects.

Our ability to command a margin and to assert our work's value hinges on cultivating a web of historical, cultural, and material references to inform our practice. Architecture is a discipline, a critical lens through which we shape the built environment. It separates the exceptional from the acceptable. But discussions of architecture are too often reduced to aesthetic preference rather than the rigorous application of good judgement.

Judgement is honed through experience – experiencing a city, feeling its rhythms, understanding the interplay of light and material, and engaging with the social and economic forces that shape our urbanity. It cannot be engineered or outsourced; it is our profession's definitive skill.

Yet architecture is increasingly treated as just another commodity in an over-financialised economy. Our designs shape lives, communities and ecosystems. The economic system, however, prioritises short-term returns over long-term societal value. As a creative profession we must develop tools that communicate these tacit values, and embed proper feedback loops – mechanisms to ensure that what we build serves not just markets, but people and the planet.

The challenge before us is of productivity and purpose, even beyond delivering those 1.5 million homes. We must redefine what responsible capitalism looks like in our industry. We must close the morality gap between profit and public good. And above all, we must reclaim architecture as a discipline of quality and judgement.

FOCUS ON THE FUTURE

Last month, we hosted the Festival of the Future, a two-day event for children, young people and adults, inspiring the next generation of city makers. With over 20 partners, the programme featured AI in architecture workshops, industry debates, carpentry sessions and more, offering creative and practical experiences for aspiring architects from all backgrounds.

STEPHANIE WUNDERLICH PHOTO: RORY GARDINER

RIBA PROFESSIONAL SERVICES CONTRACTS

An amended suite of contracts for 2024 is now available for the provision of built environment consultancy services across projects of all sizes and complexities, including a new addition - Building Regulations Principal Designer PSC 2024.

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Eye Line 2025: call for entries

RIBAJ's annual, international competition showcasing students' and practitioners' drawing and rendering skills is now open for 2025 entries

Is your gift for visual expression as sharp as your imagination? Eye Line, RIBAJ's annual, international competition showcasing drawing and rendering skills, is open for 2025 entries. As ever, we are asking for images, in student and practitioner categories, which brilliantly convey architecture, in any medium or combination of media.

We are seeking the finest work, here and internationally, from those at the sharp end of representation. Images of all kinds, from hand-drawn concept sketches to technically proficient and layered renders, are eligible. 'Drawing' includes any method by which the power of an architectural idea is communicated, whether of existing buildings or works of the imagination, and AI entries will be considered if they are declared as such.

Practitioners and students are eligible to enter different categories:

- Student category: images made by people in architectural education, or who are submitting work executed before final qualification.
- Practitioner category: images made by architects who are fully qualified and working in practice or academia, whether for real-world projects or exploring ideas or experiences.

Winning entries will be published in the July/August RIBAJ and on ribaj.com, and we hope to have a winners' party and show at the RIBA. Our colleagues at RIBA's Drawings and Archives Collection inspect winners for potential inclusion in their famous archive.

Last year's student winner was the National University of Singapore's Kun Yi James Lim, whose fractured plan and elevational images, shot through by rays of sun, aimed to give expression to fleeting moments or past remembrances – a Proustian projection of human experience. Practitioner winner was Welcome to Tribuneville, from Luis-Miguel Lus-Arana, a professor at Spain's University of Zaragoza. His epic, 3m-long drawing, showing 60 entries from the 1922 Chicago Tribune Tower competition, is an obsessive menagerie of building types and styles, imagining a new, fantasy quarter for the Windy City.

Every year we are gratified by the originality, wit and talent in evidence with Eye Line, our international, free-to-enter drawing and visualisation award. Practitioners and students – show us your best work and seize the opportunity to join a prestigious cohort of past winners! ●

Above Robert Evans, Design Centre at Carsington Water. Oil paint on panel 450 x 250mm. Second place, Practitioner, Eye Line 2024

2025 JUDGES

Mary Duggan
Director, Mary Duggan Architects
Samantha Hardingham
Independent writer, designer and educator
Luis Miguel Lus Arana
Winner Eye Line 2024. Associate professor, University of Zaragoza School of Engineering and Architecture
Bongani Muchemwa
Director, McCloy + Muchemwa Architects
Jan-Carlos Kucharek (chair)
Deputy editor, RIBAJ

EYE LINE RULES

We seek the best 2D representations of a building design or concept via visual means. They may be hand- or digitally drawn, incorporating collage or any combination or overlay of methods. Video and straight photography are excluded. AI entries to the Eye Line competition should be stated as such.

- Enter in either the student or practitioner category. The RIBA Journal reserves the right to reallocate entries to a different category if deemed necessary.
- Maximum of three images per entry, from different projects or all from the same one.
- Joint entries on which more than one person has worked are eligible, with authors stated.
- All entries must be uploaded via the link below. We cannot accept physical works. Images must be at 300dpi, file size maximum 25MB.
- Work must have been produced within the three years up to the competition closing date and must not previously have been entered for Eye Line.

Enter at: ribaj.com/culture/enter-eye-line

INFORMATION REQUIRED

- Title of work(s) if applicable, and medium.
- Name of the author(s) of the entered work.
- Name of organisation where author works or studies.
- Email, postal address and phone number.
- Dimensions of the original work as presented, in mm.
- Date work was completed.

KEY DATES

Deadline: Friday 9 May 2025, 14:00 BST
Judging: End May 2025
Winners and commendations published: RIBAJ July/August 2025 and online.
Exhibition opens (provisional): August/September 2025
Correspondence: eyeline.ribaj@riba.org

eye line

Powers of Ten: play with scale to gain pounds

Create an object, installation, building or urban intervention that plays on the idea of scale, to create wonder, drama or even shock. Using SterlingOSB Zero as a material for transforming spatial perception, you could win £2,500

Adolf Loos created a Tardis from his tiny 1909 American Bar in Vienna.

ORCH CHEMELLO/RIBA COLLECTIONS

In 1977, the American architects Charles and Ray Eames released a groundbreaking film. It was based on Dutch educator Kees Boeke's 1957 book Cosmic View, which looked at our universe, planet – and us – in an attempt to visualise the world we see, the inner world we can't, and the distant ones we can barely comprehend.

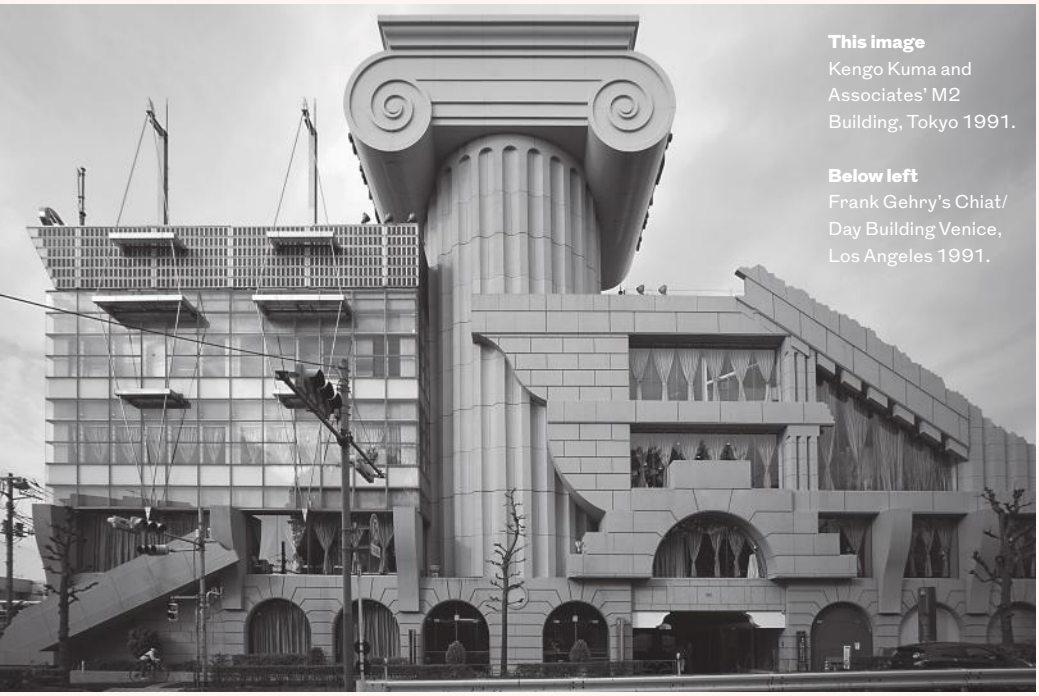
The result was a nine-minute film, The Powers of Ten. Opening with a couple lying on a picnic blanket in a park, it is a study in orders of magnitude, zooming out exponentially to the edges of the universe, then zooming back into their bodies to the size of an electron. The Eameses' clever scale shifts take us from a 1:1 understanding of reality, to revealing the complexity and magic of existence.

Architects have had a technical fascination with scale ever since the Renaissance, when the idea of drawing buildings as a prerequisite to building them resulted in an abstraction that effectively brought the modern profession into being. They still occupy this territory, albeit with contemporary technology: like the Eames' film, architects can 'zoom in' or 'zoom out' of their drawings ad infinitum, with no loss of detail.

Investigating the nature of scale

In our competition's 10th anniversary year, we are asking you to utilise SterlingOSB Zero board to investigate the nature of scale.

Take inspiration from Borromini's arcade at the Palazzo Spada – a sophisticated perspectival play on scale – or Thomas Chippendale using elements of grand classical architecture and incorporating them at far smaller scale in his famous 18th-century furniture. Using mirrors, in 1909, architect Adolf



This image
Kengo Kuma and Associates' M2 Building, Tokyo 1991.

Below left
Frank Gehry's Chiat/Day Building Venice, Los Angeles 1991.

JOHN BARR/RIBA COLLECTIONS

Loos made a tiny Vienna bar look enormous, while in 1970s Italy, practice Superstudio ran black and white grids on their Quaderna furniture and imagined extending them to cover the world. And what about Frank Gehry's binoculars?!

What would YOU do? Using SterlingOSB Zero as your base material, we want to see you putting your imagination and ingenuity to use, to create your own physical meditation on the nature of scale.

It might be a model, sculpture, piece of furniture, mise-en-scene, a building, a folly – or even a monument! What we'd really like is to get a sense of how you are playing with the principles of scale to intrigue, amuse or confound the viewer, using the simplicity of SterlingOSB Zero, with other materials, perhaps, to create something that is captivating and illusory. ●

WHO CAN ENTER

We welcome entries from experienced architects, emerging architects, those in Part I and II professional training, diploma and undergraduate architectural students. Applying to all, we want the emphasis to be on imagination and fun – so enjoy yourselves!

JUDGING

Chaired by the RIBA Journal, judges will look for imaginative responses to the brief that make best use of SterlingOSB Zero. We anticipate other materials and surfaces will form an integral part of any proposition, but expect SterlingOSB Zero panels to be the main constituent of the design. Since this is a conceptual brief, we do not require entrants to meet building codes or standards.

In this competition, the winning proposal will be the one that in the judges' view proves the most imaginative, intelligent or playful response to interrogating the nature of scale. It may have a context – or none – but we expect it to be theoretically buildable and that a construction strategy could be evidenced.

You should also be able to explain the specific benefits that using SterlingOSB Zero brings to your proposal – whether that be in terms of structure, space-forming, sustainability or aesthetics.

Find out more about the nature of SterlingOSB Zero at ribaj.com/osb-properties

TIM BENTON/RIBA COLLECTIONS

JUDGES

To be announced. The panel will be chaired by Jan-Carlos Kucharek, RIBAJ deputy editor, and include Claire Ironside, marketing executive at West Fraser UK.

DEADLINE

Entries should be received no later than 14:00 BST, Monday 23 June 2025

TO ENTER

Go to ribaj.com/powers-of-ten

Entries should be submitted on no more than two A3 sheets, supplied electronically as PDFs and uploaded to the official entry website.

How you choose to describe your proposal is up to you but may include:

- Plans and sections explaining the proposal nature, its structure and material choices.
- 3D or perspectival images that communicate how any play on scale is being achieved.
- Any supplementary images (such as model shots or visualisations) which entrants feel would best convey the proposition.
- An explanation of no more than 500 words should be uploaded to the website entry form, describing the proposal and in what way it claims to meet the brief.

NOTES

- The judges' decision is final. No correspondence will be entered into by organisers or judges regarding entries or winners.
- First prize of £2,500; three Commended prizes of £500.
- Shortlisted entries will be notified in writing, with entrants subsequently invited to the winners' announcement and prize-giving event, which will take place on 25 September 2025.
- By entering this RIBAJ competition, West Fraser has your agreement to using your name/company name and collateral produced by our marketing agency – videos, interviews, case studies, images – for our company's website, social media, digital and print media titles.
- Please email questions to ribaj.powers-of-ten@riba.org

Destination unknown

'We know that when we hand over a project, it will change and adapt – we just want to create a framework to support that'

Future winners is RIBAJ's annual look at architectural practices showing great promise. Opening our 2025 showcase, members of IDK discuss balancing big-hitting cultural projects and grassroots work with Jan-Carlos Kucharek

Left IDK directors (from left) Mike Lim, James Pockson and Roddy Bow outside their Iliffe Yard office.

Only a week after meeting them did it dawn on me that IDK isn't an acronym of its members' surnames. So what does it mean?

A Google search suggests 'I don't know', confirmed in an analogue way later, over the phone: '50 per cent it's an anonymous acronym – which we like,' says director Mike Lim. 'But it still has us wondering, when we meet people, if they'll think to ask!' It's also why it says in its glossy, zine-like brochure, that IDK's architecture 'begins at the brief… built from conversations', with Lim adding that 'it reminds us we're not supposed to have all the answers, that we should focus on the process rather than the outcome'.

In 2023, that fascination with process saw this small practice of seven win the open competition to design the David Bowie Centre (DBC) in the Diller, Scofidio + Renfro-designed V&A East Storehouse, opening in September. Sited in the existing Here East, at 16,000m^2 and holding more than half a million pieces from the museum's collections, East Storehouse is the working end of the V&A's move to Stratford's Queen Elizabeth Park, where O'Donnell + Tuomey's V&A East Museum will open in 2026. Unlike this though, the Storehouse – where many items are intended to be publicly accessible, even touchable – is being hailed as the future of curation and display. This excited IDK enough to enter the DBC competition and sprinkle their own bit of stardust on Ziggy.

MORGAN O'DONOVAN

IDK's Cumbria wellness centre proposal placed a light steel octagonal roof on massive cut slabs of local stone

I meet Lim and IDK's two other directors at its office in the curiously Dickensian context of Iliffe Yard, in the shadow of Elephant and Castle's burgeoning towers. It's clear from the conversation flow and the way one tops and another tails a line of thinking, that these three have spent a while in each others' company. Lim and James Pockson met as Cambridge undergraduates, both meeting Roddy Bow while doing their MAs at the RCA in 2014. Between them, they've notched up years of hard graft in practice, with Lim exhausting himself in OMA's Hong Kong competitions team, Pockson at Herzog & de Meuron, knee-deep in 'the big hole' that was Tate Modern and Bow finding his groove at Lacaton & Vassal. Living in Paris for the last decade, he now forms IDK's satellite office.

The David Bowie Centre is their most significant project to date. Set within the Storehouse, it will hold more than 90,000 items tracing the shape-shifting icon's rise to fame, and intends to be as trailblazing as the man himself. That's not just down to the expected audiovisual shows and curated displays, but also a guiderail system for Bowie's many costumes – like one you might see in your local dry cleaner, but on amphetamine. IDK's stance, as with cultural and community projects it has worked on before, was a multi-disciplinary one, which members put down in no small measure to spending their RCA time hanging out with artists and designers.

Above IDK is helping young people in La Courneuve, Paris to visualise futures for their urban spaces. **Below** Bespoke add-ons to generic shelving systems form the basis of IDK's highly accessible exhibition proposal for the DBC.

'We founded IDK with the idea that we wanted to do things differently, developing a model of practice that didn't just involve a roomful of architects,' says Pockson, looking around, as he points out the team members that are designers or based in cultural project delivery. This might have resulted in the 'Fun Palace' overwhelm of the original competition entry, but the final design has since been tempered by IDK's real-world pragmatism and keenness to listen.

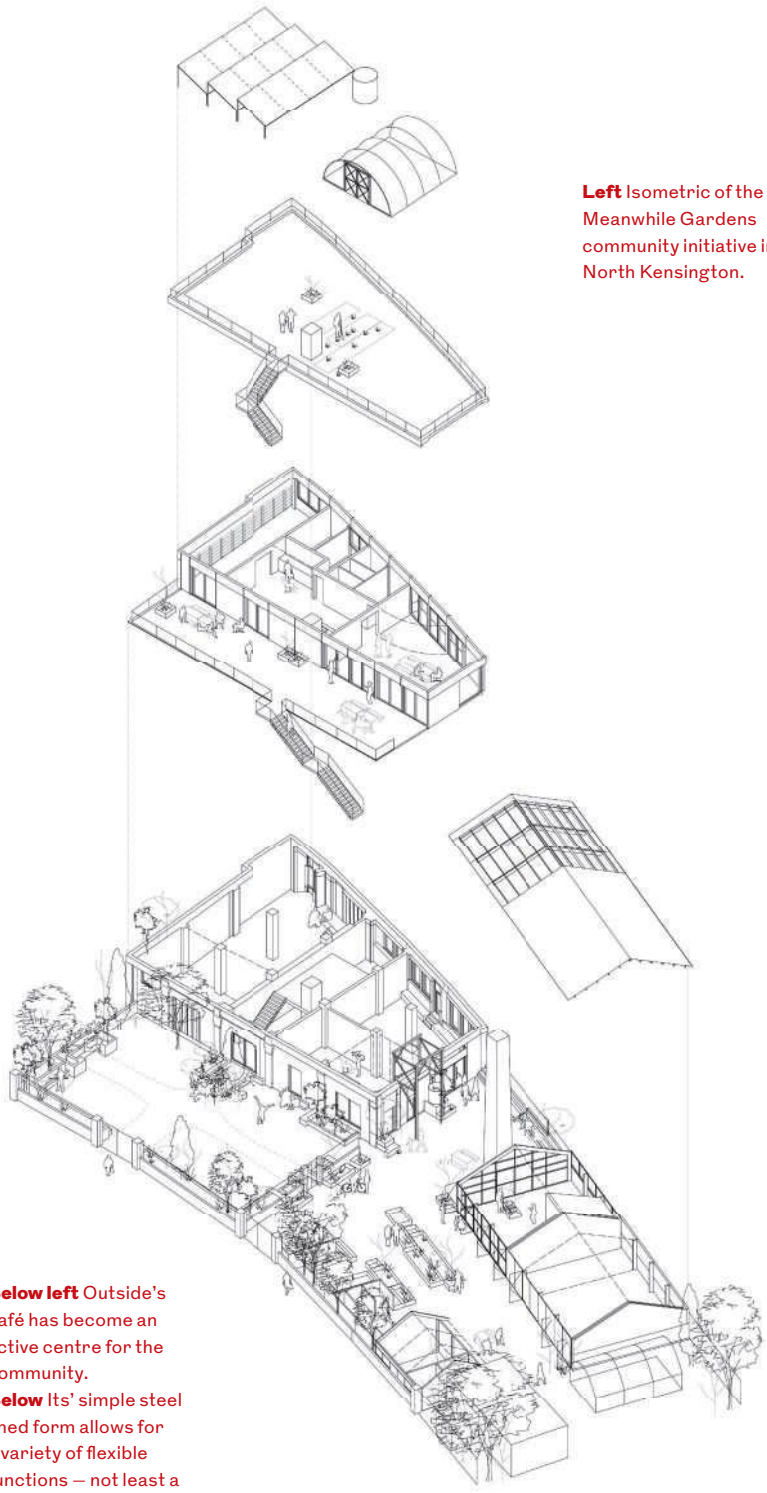
Lim presents as the firm's frontman, explaining the DBC and the impact of discussions with curators around generating their bespoke take on a standard pallet racking system to fill the space. But I sense that Pockson, who worked with Nissen Richards Studio at the Courtauld, is leading delivery. 'Coming from OMA, I'm happiest at the conceptual scale, while Jim brings an eye for technical detail, and Roddy has real

IDK (3)

awareness of economy of means,' says Lim. Bow nuances the generalism: 'I'd say we're a support ecosystem. With most of our jobs, one of us tends to run with it, as we realised the best way was to trust each other, while knowing we can rely on one another when in need of a different skill set.'

What is clear is that the firm feeds off collaboration, not just internally but with clients and communities that engage it. Bow's youth near Bantham Beach AONB in Devon, saw him lead on Outside, a project there that delivered a much-needed community hub for local residents and their kids. There, a mini skateboard bowl sits alongside small-scale farming, pottery space and café. Designed as a simple steel shed with corrugated plastic cladding, there's enough to get a sense of the firm's drive for minimal material use and loose-fit flexibility. Describing it, Bow reveals his surfer days: 'In the surfboard shaping bay, we ran strip lights at low level so you can register the needed symmetry using shadows as a sanding guide.' Yes, Outside might be about bigger-picture activities, but IDK is also engaging with users to enable them to work at the scale of the detail.

Likewise with Meanwhile Gardens, sitting by the Grand Union Canal, in the shadow of North Kensington's Trellick Tower. Here, IDK has been involved with local residents since 2018, helping to create a new vision for the semi-derelict 19th century industrial building and garden space that the 50-year-old community association shares with a local steel band. 'We had a long consultation period with both to see how the building could be revised and retrofitted,' says Pockson, adding that the study qualified for RBKC funding – no pro bono here. The result is a low-cost proposal of a suspended steel floor over the existing building roof, allowing for new timber-framed admin spaces as well as rooftop gardens, which has a refreshing contingency. 'We had to build a business case to the local authority to prove this hub and its garden were critical assets



IDK

Left Isometric of the Meanwhile Gardens community initiative in North Kensington.

Below left Outside's café has become an active centre for the community.
Below Its' simple steel shed form allows for a variety of flexible functions – not least a surfboard shaping bay.

MAX CREASY (2)

IDK

for Trellick and Cheltenham estate residents, he explains. 'We've worked with this community for years – one of our long-form projects where we go in deep.' It's now at site survey investigation stage.

With IDK, ideas gestate too. Its Recycled Warehouse project, housing a client's Airstream caravans, had IDK considering the sustainability angle and procuring a steel portal frame off eBay 'like farmers do', with client cost benefits. Though Lim regrets the project not going forward, merged with that Bantham Beach 'loose-fit' approach, the ideas have fed into the firm's Blencathra business centre in the Lake District. There, hybrid steel monopitch roofs create elegant, respectful workspaces in this protected landscape.

In an evolution of this, IDK is working on Bromyard Depot in rural Herefordshire, which also includes the possibility of housing. The firm has dallied with domestic work, and taken pride in it – Pockson shows me Clematis Cottage, a sustainable retrofit of a 19th-century farm workers' house 'that's a meditation on new conservation practice'. Its new stone porch, he adds, 'is a homage to Gimson's village hall in Kelmscott!' But scaling up is in IDK's sights, and there is hope that, with the government's huge housing targets, a tie-in with an architect delivery partner might be the perfect segue into the sector.

In the meantime, Bow is putting the final touches to a small exhibition in Paris. Primed by his reuse experience at Lacaton & Vassal, he's worked for years with youth groups in La Courneuve, a Paris suburb undergoing major demolition and urban upheaval. 'La cité du turfu' (French slang for future) is the result of design workshops he runs with the teenagers to imagine new narratives for their housing blocks and urban spaces. They'll be taking over part of the Palais de Tokyo this month (April).

Above Blencathra business centre, Lake District: simple hybrid steel sheds, well built. **Below** Not all architects: Natsuno Katashima,James Pockson, Roddy Bow Tessa Pierce, Jessica Kendall Mike Lim, George Ellison.

I ask if all this 'engagement' results in the kind of 'mission creep' that can harm young firms. But IDK's members feel the best work comes of it. That said, they did the hard yards at previous practices and are aware of not over-committing themselves. 'We came out of firms that spent time and energy ensuring things stayed exactly as designed,' says Lim. 'For us, we know when we hand over a project, it will change and adapt – we just want to create a framework to support that.'

That humility seems almost out of place for a driven firm that, Lim adds, has another 'exciting but secret' cultural project on the cards – but success here is born out of IDK's ongoing grassroots work. 'Understanding the impact architecture can have on any organisation's viability forces us to ask ourselves how much building is actually needed – and stopping there,' muses Pockson. 'Our ambition is to get really good at knowing when enough is enough.'

MORGAN O'DONOVAN

O'DonnellBrown's three directors (from left): Michael Dougall, Sam Brown and Jennifer O'Donnell.

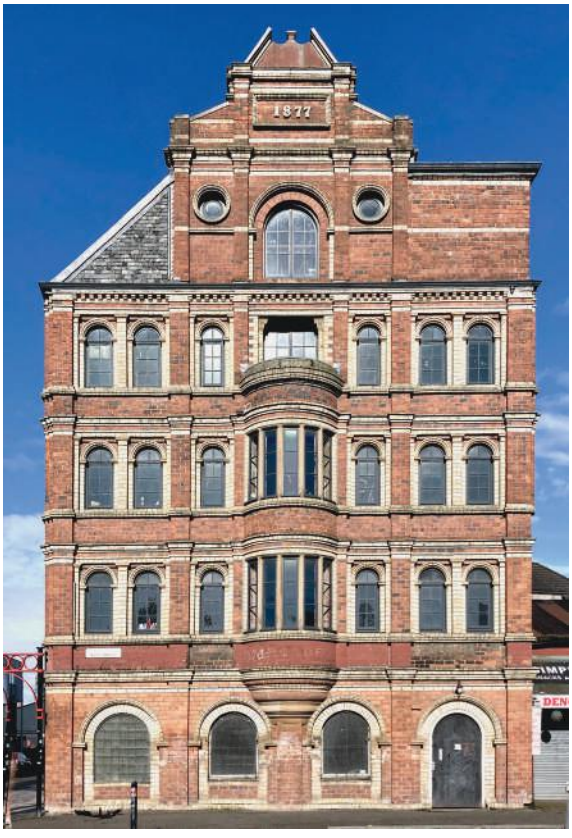
TIMOTHY SOAR

Outsized influence

A focus on community and collaboration has helped small Glasgow practice O'DonnellBrown towards big achievements, reports John Jervis

The word 'strategy' comes up surprisingly often when talking to O'DonnellBrown's three directors. Founded in London in 2013, the practice has grown in a steady, deliberate fashion to today's eight-strong contingent, despite a rapid rethink after a 2016 move to Glasgow. Current projects are diverse and compelling: from transforming a local pipe factory into a creative hub, in collaboration with Loader Monteith; to delivering 'Gap Homes' for young people leaving care, with Barnardo's; to a major regeneration of the Govan Graving Docks on the Clyde, with ZM Architecture.

Founders and life partners Sam Brown and Jennifer O'Donnell graduated from the Glasgow School of Art in 2007, before moving to London, with Brown taking a job at Tower Hamlets Council, focusing on education. O'Donnell, who had spent time fundraising for a Nepal-based



Right The retrofit of the 1870s Pipe Factory in Glasgow's Barras Market focuses on sustainability, accessibility and creativity.

LOADER MONTEITH

ROSS CAMPBELL

Above The self-initiated Community Classroom in the garden of the firm's previous studio in Glasgow's Southside.

NGO, travelling there to help develop a school project, worked at a range of London practices, notably Hawkins\Brown. She joined Brown at Tower Hamlets in 2013 as the pair set up shop, giving 'an opportunity to test working together; it wasn't a given that we wouldn't kill each other'.

According to O'Donnell, their mutual experience renovating and extending schools and nurseries 'really set the practice's DNA, in terms of both community-minded architecture and working with existing buildings'. That DNA soon proved its worth. The refurb and extension of Swanlea Sixth Form, Tower Hamlets – wrapping new and old in a unifying layer of dark-stained timber and thick cladding – gained awards, 'stretching our skills; galvanising our recognition of what we wanted to do together', Brown says.

On moving to Scotland for family reasons, this 'bedrock of experience' proved undervalued. Despite ongoing school projects in the South East, efforts to break into Scottish education were frustrated by procurement barriers. 'It was hard, as we'd started to specialise, but it proved a pivot point – we had to diversify,' says Brown. 'We targeted residential, retrofit and community engagement, drawing on our London experiences. Our entrepreneurial spirit kicked in – we decided to do something about it ourselves.'

'We needed to be proactive, inquisitive and not afraid to start conversations,' continues O'Donnell. 'It's something of a point of difference as a practice.' Key was the arrival of Michael Dougall in 2019, after a decade working on community housing with Collective Architecture, and a stint as the youngest ever president of the Glasgow Institute of Architects. A graduate from the University of Strathclyde, he brought with him considerable residential expertise, along with vital insights into how to build teams and contacts to deliver major developments in the city.

One self-initiated research project, prescient given the impending pandemic, was the Community Classroom. Emboldened by converting its own studio, the practice created this demountable, adaptable timber structure for accessible outdoor learning in 2019. O'Donnell reflects, 'We gained so much confidence in how we work, and our approach to relationships and projects.' It also resulted in a major client. Five apprentices from Barnardo's Works were involved in the build, leading to a stream of work, initially around establishing, and then delivering, the charity's Gap Homes typology for young people leaving care in the UK. Last November, residents moved into the first cluster in Stirling.

Proactivity and conversations have proved rewarding. Winning Archiboo's 2020 Architect Pitch for post-pandemic housing forged links with HUB, with an Edinburgh print works conversion completing this year. A relationship with developer New City Vision led to its largest completed project to date, the Foundry in Glasgow's Southside – 206 new build apartments, due for handover in spring. And starting conversations has also proved vital for delivery. The repurposing of the derelict Govan Graving Docks is a decades-long saga, but a masterplan has finally been drawn up, with 300 homes, a heritage park and dock, an active travel route and the retrofit of the surviving pumphouse. Expertise working with councils and communities has been key, says O'Donnell. 'Flipping the development's narrative, leading with public access before talking about new homes, starting from the ground up, actually going out and speaking to people, building trust… It sounds trite, but we spent the best part of a year listening.'

Another key strategy is collaboration: 'We're agile, and hands-on in terms of directors, but working with other practices helps us access new markets and larger projects, and punch above our weight,' says Brown. One example: it approached White Arkitekter to forge a joint entry to an open

TIM CROCKER

Below The refurbishment and extension of Swanlea Sixth Form in Tower Hamlets was an important launch pad for O'DonnellBrown.

competition organised by the Royal Incorporation of Architects, Scotland, for a £15m cultural retrofit on Dumfries' Crichton Estate. Beating Hoskins and Caruso St John ('a real confidence boost', admits Brown) resulted in a fulfilling relationship based on shared values, with White Arkitekter's sustainability expertise matched by the practice's retrofit experience and local knowledge – early-stage proposals include earth-based construction.

Retaining external roles also speaks to O'DonnellBrown's ethos, and enriches both projects and networks. At present, Brown is teaching at Sheffield University, Dougall is an examiner with the Architects Professional Examination Authority in Scotland, while O'Donnell has just started a second term as a Design Council Expert, intertwining her with London discourse. This 'divide and conquer strategy' (as O'Donnell jokingly puts it) relates to social responsibility, but also to national ambitions: 'We're proud to be based in Glasgow,' says Brown, 'but want to be regarded as a UK practice – we're passionate about being open to different places.' School projects in London keep the firm at the cutting edge of material passports and reuse, now rooted in its processes. Zero Waste Scotland was brought in to run circular economy workshops for the Gap Homes, while Material Index is providing audits at the Crichton Estate.

We finish by talking about a project that epitomises O'DonnellBrown – the conversion of the redundant Millport Town Hall on the Isle of Cumbrae into a community centre, due to be completed later this year. Kicking off with a feasibility study commissioned by a local charity back in 2018, it's an example of the practice's early gambles bearing belated fruit. 'It's been challenging,' says Brown, 'helping an inexperienced group manage the project, and navigate the processes. They've made 103 funding applications and had 49 successful,

Right The regeneration of the Govan Graving Docks is the studio's most ambitious project to date, involving extensive consultation.

O'DONNELLBROWN

which is incredible – it's grown to a £3.5–4 million undertaking, all run by volunteers.'

2025 is a big year for completions, so existing projects and clients are O'DonnellBrown's priority. Even so, the firm is toying with the idea of small-scale development, and is one of three finalists for the C40 Reinventing Cities competition to regenerate Glasgow's canals, in conjunction with Mikhail Riches. Looking back, Dougall says, 'You can trace from where we were in 2019, to where we are now, in quite a linear way… It's been about being a smaller, agile practice, but also playing the long game.' The residential and retrofit focus, he says, is no accident, relating to two vital issues, the housing crisis and climate emergency: 'In some ways, we've been quite strategic – these types of projects are getting commissioned and coverage because they are so critical. And we're well-placed to deliver them, thanks to the experience and expertise we've developed.' That progressive focus also plays a role in engaging the team, praised by the directors as key to the practice's success: 'They're so talented', says O'Donnell, 'We wouldn't be able to do what we do without them, so it's vital to keep them energised.'

The struggle to penetrate Scottish education goes on, but for Brown, 'perhaps the most satisfying recognition of where we've got to is the feasibility work we're currently doing at Smith's Dock, Newcastle. The client basically punched "dock regeneration architect" into Google, and our name came up'. The strategy, it seems, is working.

O'DONNELLBROWN

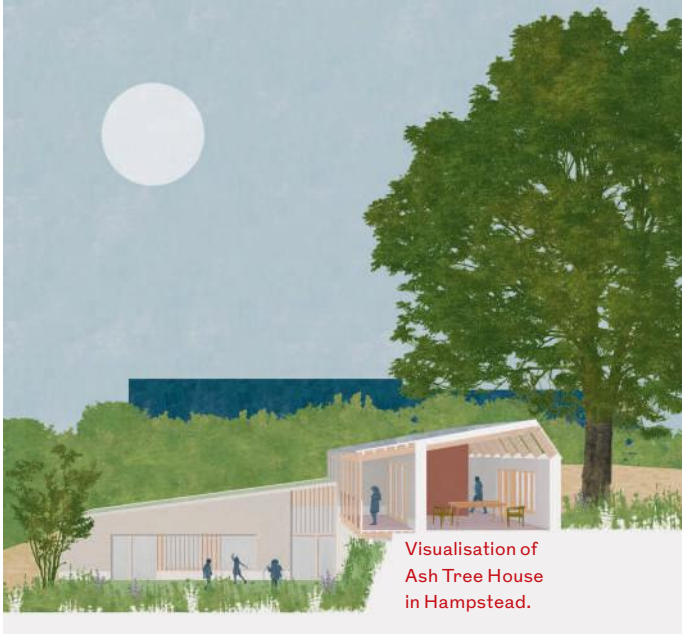
Left Rejuvenating the redundant Millport Town Hall has been a passion project since 2018 for O'DonnellBrown.

Right The recently completed Gap Homes in Stirling, for Barnardo's, provide accommodation for young people leaving the care system.

ROSS CAMPBELL

Fast-moving object

Artefact emerged almost impulsively during the pandemic, but the practice's founders have since moved purposefully to complete a series of striking projects, finds Chris Foges



ARTEFACT

Visualisation of Ash Tree House in Hampstead.

NICK DEARDEN

Artefact founders Daniel Marmot, 40, and Benedetta Rogers, 38.

Artefact was born on a beach, and in a hurry. Founders Daniel Marmot and Benedetta Rogers were working at the same London practice, and taking on small side projects, when the opportunity arose to do a new build house together. With some family and friends in tow, they took a trip to Southend to consider their options. In the depths of the pandemic, with the world already upside down, it seemed a good moment to take the plunge.

The move might not have been long-planned, but neither was it precipitous. 'I'd always been clear I didn't want my own practice too early,' says Marmot. 'In your mid-thirties you've learned enough to feel confident about doing the work'.

Both founders had wide-ranging on-the-job experience. They had delivered small and large buildings at several firms, most recently Henley Halebrown. Separately, they'd also done stints at public realm practice Publica, getting involved in research and policy development. There was some entrepreneurial grounding too. As Studio RO\ST, Rogers had produced self-initiated or self-built projects including AirDraft for the Architecture Foundation. Having added an inflatable enclosure to a disused barge, she devised an events programme and toured the structure around the canal network.

'One thing that characterises our generation has been the shift away from old-fashioned architecture towards other forms of socially engaged practice, from pop-up projects to offices doing consultation or strategy work,' says Marmot. 'We've always enjoyed that too, but when we talked about our business plan, our priority was clear: let's build stuff.'

Easier said than done, of course. Four years on from the commission, their first house has only just got planning consent, despite evident sensitivity to its Hampstead setting. Wrapping around an ash tree, it straddles a step in the site

'We're not scared of colour, but don't approach projects wondering where we should put it – it has always been a specific response to the context'

NICK DEARDEN

which will be embanked with earth bags as part of a diligent sustainability strategy.

In the meantime, though, the pair have completed a clutch of accomplished domestic extensions. The immediacy of that work – seeing something appear on site soon after being drawn – has been an enjoyable 'revelation' after the slow-burn of estate regeneration at Henley Halebrown. They've also made forays into public building, including a low-budget community centre in the undercroft of a 1950s Hackney church.

All of that has been handled by the two partners, who work from a compact studio on an industrial estate in South Tottenham. It's the kind of place where the customised bicycles of assorted creatives pack the entrance hall, while skip lorries thunder up and down the road outside.

Though Marmot and Rogers have different characters, they explain, there is a shared design sensibility. They like to look for inspiration in diverse cultures, and aim to make buildings that combine a rational, easily-explained logic with moments of 'disorder' that create distinctive identity. The craft of architecture is a central preoccupation, as is a curious, critical attitude to construction. Why, they ask, must we accept the inevitability of the concrete frame or cavity wall?

Top Pirouette House extends a 1980s house in North London with a 'timber cloister'.

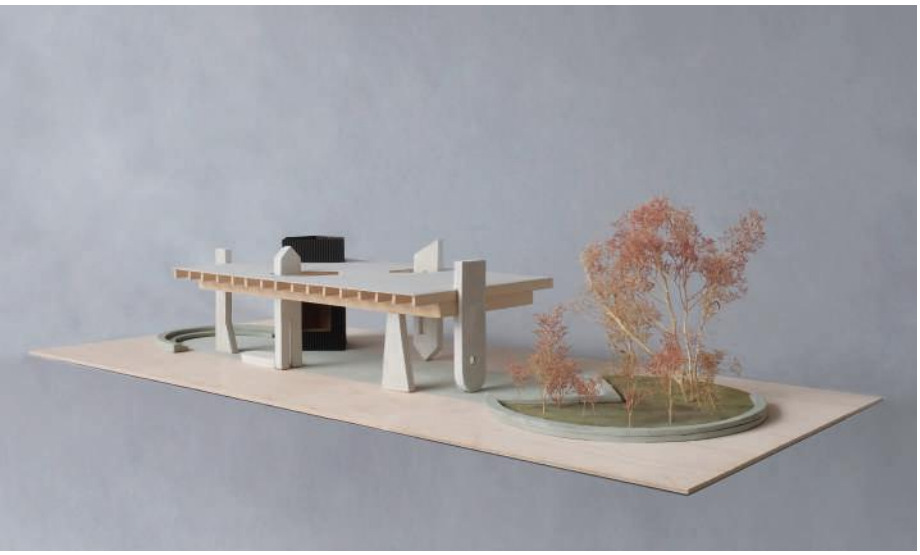
Above Red-painted fins sit over pigmented blockwork and silvered larch boards at Pirouette House.

They tend to look after their own schemes, but make time for day-long design workshops over a roll of tracing paper. 'We push and pull in different directions,' says Marmot, 'and then there's a moment where it crystallises in something neither of us would have done alone.'

Material samples dotted around the studio give an impression of recent work in distilled form. Rich reds and chalky blues show a knack for harmonising colour. Projects such as the Pirouette House extension, in Islington, feature bold but tasteful palettes that jump off the page or screen – not that the architects had 'Instagram moments' in mind, they hasten to point out.

'We're not scared of colour, but don't approach projects thinking, "Where shall we put it on this one?",' says Rogers. 'It's always been a specific response to the context.' In the Triangle House, an enfilade extension to a 1950s suburban Surrey

ARTEFACT



Left Archaic-looking stone columns are paired with a timber roof in a Cambridge pavilion designed with Sahra Hersi.

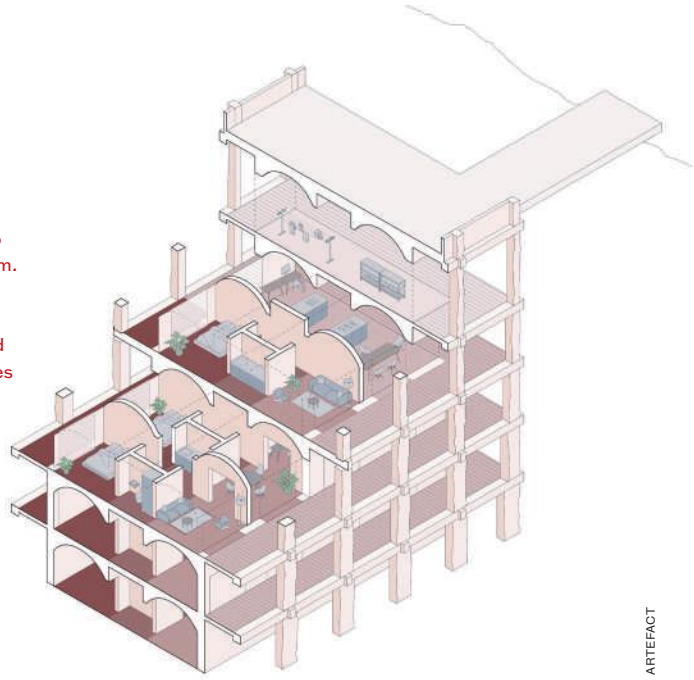
Below The Common Rooms project added community spaces to a 1950s London church by Nugent Cachemaille-Day.

JIM STEPHENSON

LORENZO ZANDRI

Left A canopy with a V-shaped column marks the entrance to Triangle House, Epsom.

Right Social housing imagined for a disused Dorset quarry features Balearic-influenced stone vaulting.



ARTEFACT

home, blue-pigmented concrete, terracotta spandrels and a yellow-painted ceiling are references to the client's heritage, and were drawn from the book Caribbean Style. The bright accents also ameliorate a lean, almost spartan structure. Walls are constructed from a single leaf of hollow blockwork, with mineral wool insulation and render to the outside – a product of the architects' interest in simple, monolithic construction that can cut cost and carbon while adding character.

Samples in the studio also point to that line of inquiry. In one corner there are giant unfired bricks made of clay-rich earth and chopped straw, under consideration for the Hampstead house. On the desks sit bricks of Portland stone, pitted and veined so that they resemble bars of tasty nougat.

A series of projects exploring mineral construction began with a pavilion for Clerkenwell Design Week: a lightweight roof rested on columns of stone bricks, and a bench seat made from 'unloved' limestone slabs whose superficial faults would see them rejected for most uses. For a development site in Cambridge, the practice proposed an unbuilt communal pavilion again using limestone, from nearby Lincolnshire,

IVAN JONES

Above Brick from a Stone, a pavilion showcasing new building products.

to give a sense of history and durability to a temporary structure.

For the Davidson Prize ideas competition they imagined a sheltered hamlet of affordable homes on the Isle of Portland. Built from local stone and seaweed, Bedrock would create both economic benefit and real cultural connection. It is 'mindblowing', the pair say, that housing on the peninsula is usually made from products shipped from around the world and slathered in dismal pebbledash, when rich resources lie just beneath.

Bedrock hints at the scale of buildings Marmot and Rogers would like to work on, without leaving behind the domestic work that allows rapid prototyping of ideas. They have teamed up with others to enter European housing competitions, but at home face the Catch 22 situation where public clients want to see similar past work.

One recent commission for a pair of houses in rural Somerset does bring an incremental increase in scale, and broadens the client list to include commercial developers. The practice has also turned down offers, says Rogers, which would have required expanding the team but held little architectural interest. For now, the pair continue to enjoy the energising stimulus of being hands-on in all aspects of research, design and site work. After a fast start, growth will come in good time.

LORENZO ZANDRI

Left The garden facade of Triangle House comprises blue triangular blocks and pink terracotta tiles.

Right A linked pair of houses is being designed for a rural site near Bruton.

ARTEFACT

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Beyond borders

From Somerset to Rajasthan, 'global, hyperlocal' is how distinctive practice Studio Saar operates. That's thanks to its industrial backing and the impetus of its founders, writes Eleanor Young

Not many architectural practices are part of an industrial titan. But Studio Saar is one. Based in the Somerset town of Frome and the city of Udaipur in Rajasthan, India, it is the partnership of Jonny Buckland and Ananya Singhal, who met as undergraduates. It has a highly unusual range of interests thanks to its founders, from running a circuit board factory in India to masterplanning a community-led settlement on its UK doorstep. 'We're a confusing practice,' laughs Singhal. 'Incredibly small with massive projects.'

I meet the pair just after a strategy day, and not long after the Mayday Saxonvale social enterprise secured ownership of the post-industrial site where more than 260 new homes will be built – next to the old Silk Mill that is Studio Saar's base. They are buzzing with ideas about urban work, retrofit and the places they care so much about. 'We are very local practices in India and Frome: a global, hyperlocal firm,' enthuses Singhal.

TIM MERCER

Below Ananya Singhal and Jonny Buckland outside their Silk Mill base in Somerset.

HAYES DAVIDSON (2)

I am swept up with the enthusiasm and energy as we perch in the practice's well-decked-out workshop ('the meeting room is tricky – you all have to get up if someone needs the loo,' confides Singhal later). The detail comes from Buckland, with care and attention, and the odd flash of dry humour, while Singhal's infectious optimism sets the tone. He is over in the UK once a month. 'I don't get jet lag,' he says, expanding on this to add: 'I don't get hangovers.'

But we must backtrack to understand how this singular firm came to be. When Buckland and Singhal finished their Part 1, they went their separate ways, Buckland carrying on through to his Part 3 through work at FCB Studios and AHMM, then onto humanitarian architecture. Singhal returned to his family firm Secure Meters, which makes electric meters that are used across the world, as Singhal's father stepped back and he took on a new leadership role. The two came together again briefly, extending a family home in Hampshire.

As the two of them talk now about a recent Rajasthan agricultural project, Cowshed (2024), you can see the synergy. Buckland introduces it in a deadpan way, setting up the joke: 'It is a brief for an animal, a herd.' And Singhal follows up with the punchline: 'We haven't had anyone come for user interviews yet.'

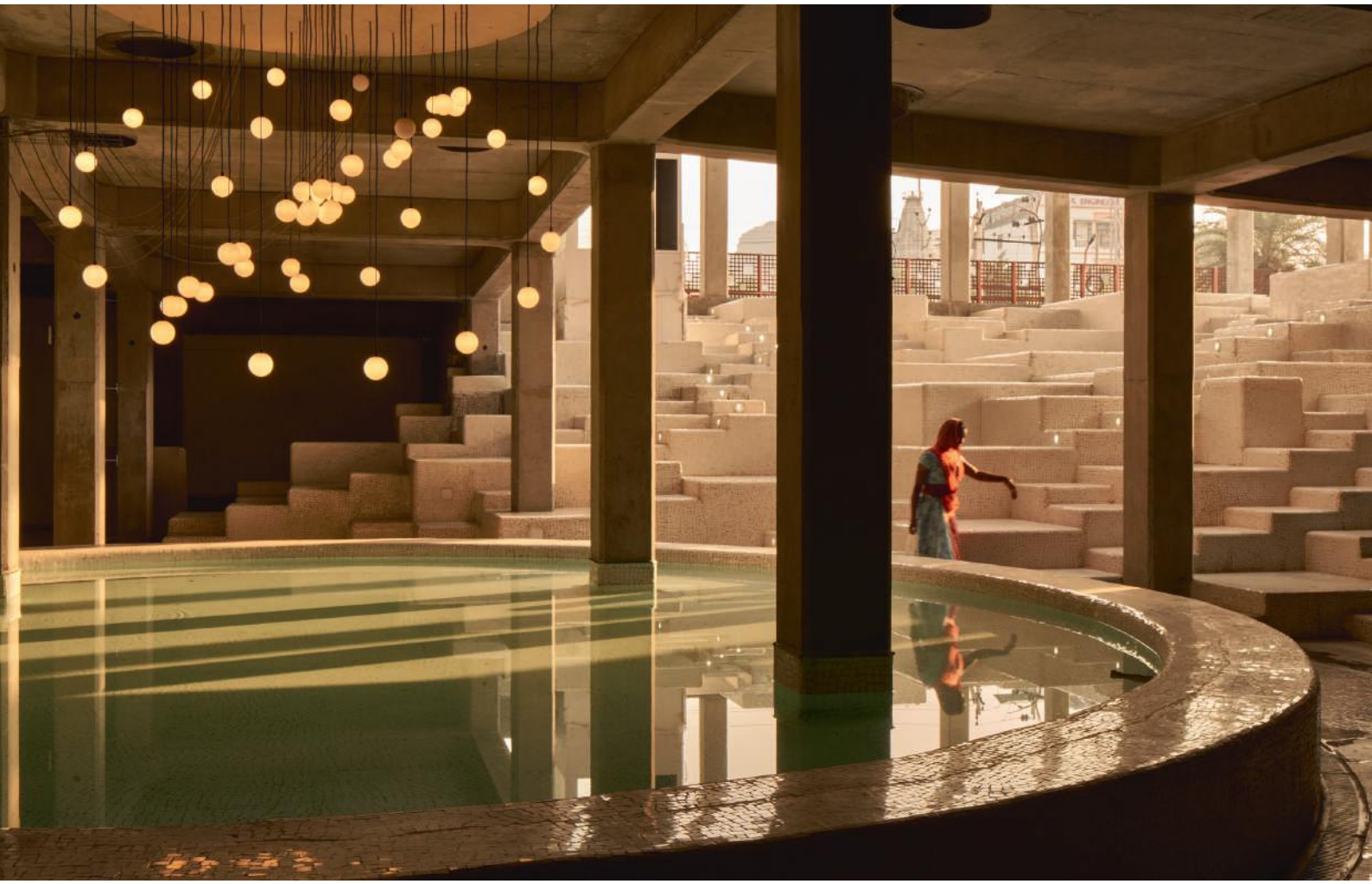
Roll forward to 2015 and to Third Space, an ambitious Udaipur public building, with Singhal's sister as philanthropic client. Singhal wanted to be involved, but needed help. So Buckland joined him, leaving his own nascent practice, and spent six months in India on the project. Third Space is spatially and materially inventive with a cool pool at its heart, a facade screen of marble cutouts, and above the atrium, woven cane sales for shading. Dezeen chose it as its most significant building for 2023.

It was an intense build, not without issues. The site culture was reactive and accompanied by people 'screaming at each other'. Singhal set up Saturday lunches for labourers and their families, taking time to listen to their troubles. At the same time, he and Buckland worked on Secure Sanand, a factory in Gujurat, and its curving recreation centre. 'It was 16-hour days,' Singhal recalls.

Above and right Studio Saar designed the Saxonvale masterplan with homes, work spaces and a riverside lido for the community-led group that has just won the site after a long battle.

Below Third Space was the first major project Singhal and Buckland collaborated on.

EDMUND SUMNER



EDMUND SUMNER

Above Third Space is a dramatic community building with spaces to learn and to hang out.

Singhal tells how, during this time, he separated from his wife and found the headspace for the idea of a practice. And so in 2021, Studio Saar was founded, as a Secure Meters subsidiary. 'It's become a thing,' says Singhal joyfully.

In India, the practice of 20 is 'incredibly challenged' by the amount of work it has for Secure, for the family and for the trust that runs Third Space. It is also setting up an urban planning team to inform the people of Udaipur about their city and its possibilities, for example through its secret step wells project – locating the wells that were traditionally used for marriages and festivals, as places to learn to swim or for women to relax. The practice is analysing them, looking at what conservation they need and how to make them financially sustainable. 'It is a Doshi kind of sense of responsibility,' says Singhal, referring to the RIBA Royal Gold Medallist, Balkrishna Doshi. 'From a long-term perspective that [planning work] will be a more important legacy than the things we have built.'

On the UK studio's part, there is one Secure fit-out project and some housing in Tamil Nadu. But the small team has been kept busy with the network in Frome and around the South West, thanks initially to the contacts of the owners of the Silk Mill Studios and loyal collaborators. 'We don't get phone calls out of the blue – it's all coming from our connections and networks,' says Buckland. The studio does, though, invest to develop new areas, from its idea of a repurposed department store in Taunton as a community space which won the £10,000 Davidson Prize to its work on the Mayday Saxonvale scheme.

On the books in the UK, Studio Saar has an art club, reworking a listed manor house, concept ideas for a regenerative enterprise, Higher Farm, and some housing in Devon. There is also the exciting prospect of a collaboration on the Mayday Saxonvale scheme – though that is not a given, despite all the work that has been sunk into securing outline planning consent on the compelling new quarter with housing, makers, a lido and space for an expanded school.

They are modest projects, alongside some loss-making ones. So how does it work financially? 'It would be impossible to be in a position where this firm is always making a loss,' Singhal explains. 'We do enough for Secure to break even. The fee for any other work goes straight to the bottom line.'

Yet the vision is a bigger one. 'We want to work on projects that move the story of architecture,' he continues. 'We want to work with clients

who financially can't work with architects, to be architects solving complicated problems in novel ways and changing the way architecture is practiced. All that is helped by the fact we are supported by Secure, and the rest of work for prime clients. It enables us to do things we might not be able to otherwise.'

One novel way is by marrying up UK-based expertise – engineering firm Webb Yates, and the Stonemasonry Company – with the many quarries near Udaipur. Secure's new printed circuit board (PCB) factory will have a stone staircase cantilevering out on both sides as it wraps around a stone wall, one for the outgoing shift of workers, the other for the incoming shift. Corbelled stone roofs, over the toilets and guard house, will be an investment in skill and learning, with the stone itself relatively cheap. Quarry waste also makes it into a number of Studio Saar's buildings as aggregate in the concrete. 'We want to show the world, or India, that building with stone is possible and cost effective,' says Singhal.

In the UK, the firm is preparing for growth, reworking its space and building a warm culture with a larger team. Leaving the Frome studio, Singhal hugs each colleague before he hops into a car and his driver whisks him off to the airport.

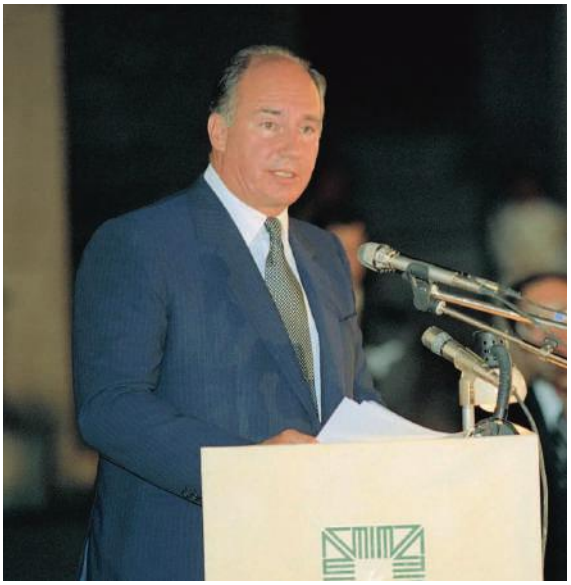
BHARAT RAMAMRUTHAN

STUDIO SAAR

'We want to work on projects that move the story of architecture, solving complicated problems in novel ways'

Above The steel of Studio Saar's Cowshed in Rajasthan is 80 per cent reused, with reclaimed bricks making up the floor.

Before establishing Studio Saar, Singhal and Buckland were working together on the Secure Meters factory and recreation buildings in Gujarat.



AGA KHAN DEVELOPMENT NETWORK

The spiritual leader of the Shia Ismaili Muslims was an important champion of architecture

Prince Karim Al-Hussaini, Aga Khan IV, 1936–2025

There is no other discipline in the world that touches all levels of society – from leaders to commoners – and has a more direct impact on the quality of life of every individual than architecture. And in the realm of global leadership, few voices have been as consistent and compelling in championing the transformative power of architecture as His Highness Prince Karim Aga Khan IV. His perspective on architecture transcended mere aesthetics, positioning it as a fundamental force in shaping human experience, preserving cultural identity and fostering societal progress.

From the age of 20, when he became the 49th Imam (spiritual leader) of the Shia Ismaili Muslims in 1957, one manifestation of his hereditary responsibilities was a deep engagement with development to enhance the quality of life not only for his 15 million followers but for society at large. And he identified architecture as an important means to that end.

His engagement with architecture started with building schools and health facilities in the most remote places in Asia and Africa, as well as creating high-quality projects in the developing world. He saw the lack of dialogue and understanding between the various parties involved in projects, and tried to reach his development goals through promoting research, dialogue and identifying examples of excellence.

In the 1970s, he embarked on some major projects, including the Ismaili Centre opposite the V&A in South Kensington, designed by Hugh Casson, and the Aga Khan University and Hospital in Karachi, by Tom Payette. In 1977 he established the Aga Khan Award for Architecture which became an important voice in expanding the understanding of architectural discourse of the time, championing the social and community side of architecture – today an increasingly integral part of the discipline. The 15 winners of the initial 1980 awards juxtaposed conservation, slum upgrading, engineering, heritage and contemporary architecture, and advanced technology, representing a plurality of approaches. This was complemented by other activities, including the establishment of the Aga Khan Program for Islamic Architecture at MIT and Harvard – where Aga Khan IV had himself studied after early schooling in Switzerland.

The award – now in its 16th triennial cycle – has continued to promote new realities of architecture from different parts of the world. Engagement in preserving neglected historic

Top left His late Highness Karim Aga Khan IV at an Aga Khan Award ceremony in Cairo.

Below The Ismaili Centre, Toronto, opened in 2014

MOEZ VISRAM / AGA KHAN DEVELOPMENT NETWORK

AGA KHAN UNIVERSITY

urban centres and in creating new urban spaces led to the formation of the Aga Khan Historic Cities Programme, which has implemented iconic projects in many cities including the Al-Azhar Park in Cairo, Humayoun's tomb complex in Delhi, and the Babur Gardens in Kabul.

Going through the list of architects and others involved in the various programmes listed above, one notices that most of the leading architects of the late 20th and early 21st centuries have been involved in various capacities, whether as award jurors, steering committee members, winners, teachers or practitioners, and each contributed to the cause of making a better built environment, so central to Aga Khan IV's vision.

To take just a few examples, Fumihiko Maki designed three projects for him, including the Aga Khan Centre in King's Cross, London, while Arata Isozaki designed universities in central Asia. Henning Larsen designed a headquarters for the Nation Media Group in Kenya – one of the numerous enterprises established by Aga Khan IV around the world (the agencies of the Aga Khan Development Network alone have annual expenditures of around $1 billion). Bruno Freschi and Charles Correa were responsible for Ismaili Centres in Canada, and Raj Rewal delivered one in Lisbon, Portugal. All testified that his vision led them to designing their projects in different ways to how they had worked with other clients. Another important project is to be completed later this year: the Ismaili Centre in Houston, USA, designed by Farshid Moussavi Architecture with engineer Hanif Kara of AKT II.

For Aga Khan IV the essence of architecture was deeply intertwined with the concept of pluralism. He believed in architecture as a powerful medium for intercultural exchange and understanding. 'We shape our built environment – and then our buildings shape us,' he was fond of saying, expressing the sentiment that architecture is not a passive backdrop but an active participant in the human story.

During his lifetime, Aga Khan IV offered a compelling blueprint for how architecture can address some of the most pressing challenges of our time, creating spaces that not only shelter but elevate the human spirit.

Farrokh Derakhshani is director of the Aga Khan Award for Architecture and an International Fellow of the RIBA.

RAHIM KARA / AGA KHAN DEVELOPMENT NETWORK

Top Aerial view of Al-Azhar Park, Cairo, in 2006.
This image The Ismaili Centre in London was inaugurated in 1985.

IN MEMORIAM

Margaret Elizabeth Rix
ELECTED 1948, TUNBRIDGE WELLS

John David Bennett
ELECTED 1959, MIDDLESEX

Anthony John Toseland
ELECTED 1962, HERTFORDSHIRE

Ivan Stephen Marcar Simon
ELECTED 1964, LONDON

John Greig Flannigan
ELECTED 1981, VALENCIA

Richard Edwin Handley
ELECTED 1989, CHEPSTOW

Andrew John Burton
ELECTED 2004, WIRRAL

Paul James Matthews
ELECTED 2002, CHESHIRE

Richard Patrick Connell
ELECTED 2003, GLASGOW

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RIBA COLLECTIONS

Modernist isolation wing by Burnet, Tait and Lorne at Hospital for Infectious Diseases, Paisley, 1936

One of the most notable recent acquisitions of the RIBA Collections is a large group of images representing what is left of the photographic archive of Sir John Burnet, Tait and Lorne. Scottish architect John Burnet (1857-1938) opened a London office in 1905 with fellow Scot Thomas Tait (1882-1954), who had recently joined the practice. When Burnet retired due to health problems in 1930, Tait became the principal designer of the company, which became one of the most prominent and successful of the interwar period. Designed soon after its renowned Royal Masonic Hospital in London, the Hospital for Infectious Diseases in Paisley opened in 1936 and consisted of an administration block, ward pavilions, a nurses' home and other ancillary buildings. The cubicle isolation block in this image was, like all the hospital buildings, finished in Brizolit, a fine-textured cement render designed not to crack, and enlivened by blue, yellow and black tiles. After the hospital closed the site was redeveloped. Its buildings, which are Grade B listed, have been converted into flats. ●

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