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Some salutation: Yoga’s newest cool spot

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The Africa Centre, London, by Freehaus Architects, photographed by Taran Wilkhu

‘Filigree webs hang precariously from stone slabs...’ ‘kaleidoscope of colours and Escher-like stairs...’ ‘a little bit Kitsch. What’s not to like?’!

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James Baker, Principal, BDP.

Elwick Place
Bay View, near the city of Mountain View in Silicon Valley at the southern end of the San Francisco Bay, is Google’s first purpose-built workplace campus. The tech firm has multiple projects under way, including the campus under construction at King’s Cross London, but until this year it had never built and completed an office from scratch. Bay View, a trio of buildings in 17ha of previously brownfield land, is the first phase of two in California to finish. The second is at Charleston East just up the coast on the opposite side of the NASA Ames Research Center. Together they form Google’s worldwide HQ.

Designed by Heatherwick Studio and BIG in a 50:50 split collaboration following Google’s invited competition, the Bay View project purports to have ‘three of the most sustainable workplace buildings in the world’. It’s environmental credentials centre on maximising renewable energy generation, minimising energy and water demands, and, more unusually, restoring the natural and wildlife habitat of this section of the bay – themes of ‘earth, rain and sun’, according to Heatherwick project architect and RIBAJ Rising Star Eliot Postma.

Inside, the project is inspired by Google’s core ethos of ‘focus on the user and all else will follow’. This evolved into a group of three buildings towards the urban end of the site, away from the water, set in a landscaped park. The two larger volumes contain workspace and offices, with the smaller building housing events and conferencing. The site connects to expanded publicly-accessible trails and cycle routes along the bay that give people new views of the creek and encourage more sustainable ways to get to work. However, as importantly, the building generates sufficient energy to power 2300 homes, with carbon emissions reduced by 48% and water usage by 90% (or 5 million gallons annually). Much of the hard work is done by the canopy roofs; to find out how read this online at ribaj.com/bayview.

Isabelle Priest
There have not been many refurbished offices shortlisted for the RIBA Stirling Prize. But Hopkins Architects 100 Liverpool Street is one of those leading the pack of high ambition refurbishments. 100 Liverpool Street takes the conversation on from the re-use of concrete frames and foundations – as seen in AHMM’s Stirling shortlist Angel Building for Derwent – to be a net zero carbon building, a first for property company and client British Land.

In all, six shortlisted projects have been announced by the RIBA: 100 Liverpool Street, London, by Hopkins Architects; Forth Valley College – Falkirk Campus, Scotland, by Reiach and Hall Architects; Hackney New Primary School and 333 Kingsland Road, London, by Henley Halebrown; Orchard Gardens, Elephant Park, London, by Panter Hudspith Architects; Sands End Arts and Community Centre, London, by Mæ.
Architects; The New Library, Magdalene College, Cambridge, by Niall McLaughlin Architects. There has been some controversy. The Architects Climate Action Network (ACAN) has drawn attention to the unnecessary demolitions that presaged 100 Liverpool Street and the house at Elephant Park, and to some materials use.

RIBA president Simon Allford said: ‘All six are…underpinned by their understanding of construction’s responsibility to mitigate and adapt to our climate crisis. From the reuse and upgrade of existing buildings to the conscious specification of low-carbon materials and technologies, and the thoughtful design of hybrid, flexible spaces – these schemes consider their environment and give generously to their community.’

He added: ‘These buildings were commissioned and designed to exemplary standards for their time. But the reality is that we’re not yet building sufficiently low-carbon schemes.’

But if sustainability and reducing carbon is a theme for the Stirling Prize shortlisters, so too is the creation of public space and how buildings foster social good. We see muscular, solid buildings delivering education, homes and community space.

In a way it is surprising that the two new practice names on the Stirling shortlist, Panter and Hall have been shortlisted for the RIBA Neave Brown Award for Housing 2022.
Hudspith and Mæ Architects, have not made it before. Panter Hudspith has a remarkable sensibility around materials and articulation, for turning walls into something far more. Round the back of Oxford's Westgate shopping centre the blank walls come alive; visit Lincoln's Collection Museum, also by the practice, and you will see a nuanced plan and feel the texture of the materials.

Alex Ely of Mæ Architects has spent years imbuing the London Plan with best practice on housing, and regenerating neighbourhoods with decent homes. Mæ's Sands End Arts and Community Centre is also in the unusual position of having already beaten all the London projects on the shortlist to claim London's Building of the Year in the RIBA Regional Awards. But who knows what discussions will sway the Stirling Prize jury?

Perhaps the list misses the wildcard of a younger practice or a remarkable tiny building, something a little more exciting and a little less worthy. Those projects are at least represented in the shortlist for the Stephen Lawrence Prize which includes two schemes by Surman Weston and appearances from Sanchez Benton, Gagarin Studio and Will Gamble Architects among others. Together they give a sense of the maturity and the innovation of British architecture today.

The shortlist for Neave Brown Award has also been announced.
Bayview is a 3-bedroom residential property in Aberystwyth, Wales that has been designed for striking effect, whilst remaining sympathetic to the history of its site.

Architects George + Tomos carefully designed the property to meet the clients modern and simple design brief. By raising the property to a two storey dwelling, the architects were also able to maximise light and improve views across the nearby harbour and marina.

Due to the increased height amplifying the building’s visibility, it was important that the chosen facade material would blend seamlessly into the site’s surroundings.

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Photography by Alex Upton.
Yoga studio design works at full stretch

Adrian James Architects has created a plywood-lined, copper-clad, sustainable haven of karma for Vishuddha Yoga Centre in Oxford

Words: Pamela Buxton  Photographs: Fisher Studios

Hanging upside down using ropes fixed into the walls, the client of the Vishuddha Yoga Centre eloquently demonstrates the prowess of the bespoke yet economical wall socket system that lines the yoga studio. It’s an example of the a-lot-with-a-little philosophy that underpins the creation of this low energy building, designed in Oxford by local practice Adrian James Architects.

A rare example of a purpose-designed yoga centre, the project has a great location alongside the River Thames in the Osney Island conversation area, close to the railway station. It’s an area that James knows well – his own house is nearby on the other side of the river, with his practice office just behind,
both self-designed. And like his own house, the yoga centre is notable for its prominent use of copper, employed at Vishuddha as standing seam rainscreen cladding and roofing. As a result, this intriguing infill development cuts quite a dash among the neighbouring terrace, the copper weathering down to contrast boldly with the pre-patinated green of the splayed copper window reveals. However this clearly contemporary intervention didn’t please everyone, and the development attracted deep opposition during the planning process from some neighbours.

Visiting not long after its opening, the 154 m$^2$ (GIA) centre presents as an instantly engaging and curious addition to the terrace. It replaces a modest, pitched-roof workshop that in recent times was the studio of sculptor Hugo Powell. Fortunately for the architect’s ambitions for a legibly new addition, the local planners were keen that the infill should mark the historic break in the terrace – and its different usage – rather than attempting to ‘mend’ it by fitting in. In any case, its immediate neighbours sport difference facade treatments of render and brick respectively – and the yoga studio adds a third all of its own.

As eye-catching as the riverside front elevation is, an equally important aspect of the project is how James worked with the client to create a sustainable, low-key bespoke facility in harmony with its...
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The brief called for a main studio for a maximum class size of 16, a small space for one-to-one sessions, and changing, shower and social spaces. An important underlying factor was the site’s flood plain location so close to the river. In response the ground floor is designed to be floodable, with a poured concrete floor and valves that allow water – but not rats – to exit through the house in either direction.

An initial three-storey proposal was withdrawn and reworked as two storeys, the final design falling into place with the decision to locate the 50m² main studio on the first rather than ground floor. All other facilities are located on the ground floor.

Stepping in off the pavement, the ultra-thick, well-insulated oak front door sets the standard for the high-performing building fabric found throughout. Both client James Pritchard and the architect were keen for the building to be as sustainable as possible in line with a modest budget and a truthful, no-frills yogic approach. As Vishuddha Yoga co-founder Pritchard says, it’s about ‘having a building that says what it is and doesn’t cover anything up’. This starts with a pared-back aesthetic, with bare insulated blockwork providing thermal mass, and birch-faced plywood removing the need for plaster and plasterboard. There are no skirtings and services are exposed. The roof structure is timber, and the copper is recycled.

The aspiration is to be zero carbon in operation for most of the year, perhaps with the need to top-up with small amounts of space heating in winter, but otherwise largely avoiding the need to take even renewable power from the grid. To achieve this, the building incorporates the maximum PV array possible for the site, as well as two Tesla Powerwall batteries and a large MVHR system. Pritchard has a background as a mechanical engineer and is an enthusiastic guardian of the low-carbon

---

Key
1 Yoga studio
2 Accessible WC + change
3 WC
4 Changing room
5 Meeting room
6 Social space
7 Garden
Buildings
Yoga studio

energy systems, the kit neatly tucked away in bespoke cupboards or in the case of the sleek Tesla batteries, wall mounted for all to see.

There is however a generosity of space where it counts. On arrival, yoga students enter a corridor wide enough to park six bikes with plenty of circulation space to spare. This leads to the pleasant, Scandi-chic kitchen and socialising space at the rear – the plan is to be able to accommodate a class of students for events or refreshments. In a nice nod to the sculptor who previously occupied the site, the small courtyard garden will feature one of his works, and a number of lights salvaged from his workshop have been incorporated into the kitchen.

A bamboo staircase leads to the main studio, which occupies the whole first floor. It is a beautiful, quirky space, adorned at one end by a bright mural depicting the river that lies nearby. The space soars to 4.1m at its tallest, lit by two front windows and roof lights in the plywood ceiling admitting soft north light. A slim rear window jauntily-angled in response to the pitch of the roof. A cellular steel beam enables hanging equipment. But the most practical elements are the aforementioned bespoke wall panels, where metal sockets to plug in bars or ropes at intervals up the wall neatly avoid any protuberances when not in use. LED strip lighting along the bottom of the wall can be set to different colours.

By creating such a bold infill, the architect has certainly – and commendably – seized the opportunity to make a distinctive contribution to the urban fabric rather than playing safe, a move that inevitably will not be welcomed by all. But James says the reaction since it completed is the most positive he’s ever had for a building. And Pritchard is also happy: ‘The building is more than we’d have hoped for – a magical place.’

Left The design’s honest, no-frills approach of exposed services and simple materials is in harmony with yogic principles.
Below Pre-patinated copper reveals contrast with the main rainscreen cladding.
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Veni, vidi, construi

Are there sustainability lessons to learn from ancient buildings? Stonewood Design does the Romans with a museum and reconstructed villa at The Newt

Words: Eleanor Young  Photographs: Craig Auckland
When it comes to low carbon ways of building, heating and cooling, there is a romantic but compelling idea that we can learn from the low tech methods of the past, of vernacular architecture. So a reconstruction of a Roman villa is surely one of those opportunities. To actually build such a villa, as Stonewood Design has done in Somerset, was a chance of a lifetime – and with it came the offer to do primary research in Pompeii alongside dedicated archaeologists and curators, and to source local materials the Romans would have used. There was a huge amount to learn.

To understand why the villa has been reconstructed you have to start in more recent times with the site and the land it sits in, which over the last few years has become The Newt, Somerset. The Newt itself is a phenomenon. Set in an old estate, it has been reinvented as a high end hotel and a garden-based day out with productive orchards and vines. It is populated with a collection of buildings by locally-based architects, including a new ‘tithe’ barn entry building and restaurant by Benjamin+Beauchamp Architects, and a gym and a gallery of bees by Invisible Studio. In a field under a green shed was the ruin of a Roman villa discovered in the 1830s, and the remains of a hypocaust – the underfloor heating you learn about at school.

What could be done with it? Would it remain as a group of half buried walls with signboard interpretation dotted around the field? Could it be an audio visual show like the Mithraeum below Foster + Partners Bloomberg offices in London? A museum? How could it be an experience – just as the rest of the Newt is an experience of the productive land? And so the idea emerged of a museum, and a reconstructed villa of the same scale and plan as the historic one.

The result is a lightweight pavilion perched over the best-preserved remains of the hypocaust and bath house, which take centre stage as the main exhibit. Pad foundations were inserted around significant archaeology. Architecturally it shares a lot with Stonewood’s garden museum here (RIBAJ October 2019) – dimensions, servicing along the back edge, glazing along another and a fairly free plan – although the top lit loos need mentioning. Lovely. But early work with the exhibition designer has made a more architecturally satisfying space. It is all electric, with no fossil fuels and originally aimed for carbon neutrality.
The plan for the villa was already set out in the archaeology. But taken across this development it reached 1.8kgCO₂/m² (regulated).

Quite why so much glazing is needed remains unclear, it seems to be a trope of The Newt. But the downsides are offset by solar control and four layers of glass, beautifully detailed. There appears to be barely a joint between the huge panes thanks to 5mm glass spacers replacing solid ones between layers three and four, so the silicone can be very thin.

The museum overlooks the recovered archaeological remains with huge timbers marking out significant walls below ground, ready to be climbed, sat on or puzzled at. Continue past the vines and there is the honey coloured villa with a criss cross pattern of lias stone tiles marking out its roof as a cut above the rest. When the remains were first discovered it seemed like a villa of a well off farmer, but evidence emerged that it may have been the residence of the Roman magistrate for the south west, who ensured roads were maintained, collected taxes and dispensed justice from the tin mines of Cornwall to the lead mines of the Mendips.

Much was learnt during the project from expeditions to Pompeii and other Roman villa reconstructions in Europe. Tricks for drainage, door details and decoration were picked up by Stonewood Design founder Nicola du Pisane. But there were also lessons on the importance of solidity and craftsmanship, and how tricky making a working hypocaust is – learnt as the project gathered pace at stage 4, on a visit that included the practice’s sister company Stonewood Builders and the quantity surveyor.

The plan was already set out in the archaeology. An enfilade of increasingly intimate rooms mark out the body of the house. There are no turns of corridors, the doors on each side of the room are the only way in or out of each space. The portico that operates more like a veranda links the rooms; the bath house is a less formal series of rooms each leading to each other, the kitchen opens up widely to the veranda, and there’s a study where accounts might be worked through. All this looks onto a pool and formal garden, set on the edge of a hill top where fresh air would blow through. The plan protects and mitigates against all weathers.

Thermally, though, the bath house is most impressive. A small fire of two or three logs burns gently in a dip below the building, warming the air of the

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IN NUMBERS

<table>
<thead>
<tr>
<th>confidential</th>
<th>total contract cost</th>
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<tr>
<td>660m²</td>
<td>museum area</td>
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<td>870m²</td>
<td>villa and outbuildings area</td>
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<td>1.8 kgCO₂/m² calculation</td>
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Above left The ceiling’s undulating timber gives the simple space rhythm and texture as well as a neat option for dealing with services.

Above right The museum perches over the remains of the original villa bath house.

Below On the route through the site the museum building gives visitors context and history before they start exploring.
hypocaust and so the floor of the rooms of the bath house. But more than that it warms the water of the hot plunge pool in the caldarium to a steady 38 degrees. The logs need to be replenished hourly and the tall 1200mm pilae stacks of terracotta tiles in the area below the floor keep the heat steady with their thermal mass. The warm air is vented through handmade clay flue liners or tubili rising the through walls (with back up steel flues) which radiate heat right up the building through the lime plaster on one side and 150mm of stone on the other.

Reducing embodied carbon was not an ambition on the villa project – the complexities of reconstruction and creation of an experience came first. But sourcing much of the heaviest
material locally for the villa did reduce its footprint. Roof tiles were originally intended to be ceramic but eventually the local Hadspen quarry was persuaded to supply the 26,000 tiles in blue and white lias. The portico columns, originally designed in brick and render, were converted to limestone – Ham stone and a more functional Doulting from the nearby Mendips – after an historic stone column was unearthed on site. You might think that sourcing locally was a historical necessity but there is evidence of marble dust from Italy making it to Britain for the most polished of frescos and of Mendip lead being valued far into the Roman empire – here lead lines the oak gutters. Using the structure as the final finish has become one of the clear rules of low embodied-carbon design. Here it is different, with lime plaster as the brick vault in the caldarium, acting as a cover up to some of the traditions of the countryside of Britannia for centuries. And perhaps there are a few simple lessons in low carbon design too. •

As with other reconstructions – at St Fagans National Museum of History and The Weald and Downland Living Museum – there is the sheer pleasure of seeing a different way of building: the rounded corners of lime plaster, thick lead-lined spouts into barrels, interiors without electric light but sconces for oil lamps on occasion, hand-forged ironmongery, wooden shutters and timber detailing on the roof, the benign presence of the portico.

The outbuildings have a more familiar form of timber and thatch with wattle and daub and, on the bakery roof, oak shingles – natural materials that sequester carbon, at least for now. This section acts as the visitor centre housing the treading of grapes for wine, a Roman street food stall, an eating barn and more loos. But they also act a reminder of the agricultural basis of this rural villa and the way the Romans existed alongside the traditions of the countryside of Britannia for centuries. And perhaps there are a few simple lessons in low carbon design too.
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Africa takes root in Southwark

The Africa Centre’s new home exudes the colours, sounds and atmosphere of the whole continent, along with a shop, exhibitions, restaurant and bar and events space.

Words: Isabelle Priest  Photographs: Taran Wilkhu

Beaded hanging lightshades, bulbous handmade terracotta pots, geometric patterned fabrics, woven and solid carved wooden stools, niches centred with anthropomorphic sculptures carved in black-stained wood, air bricks forming low separating walls, indigo and earth-tone clay walls that graduate in colour like a 360° savannah sunset around the room. Aesthetic languages from across the continent are drawn together at the new Africa Centre in Southwark, London. You can almost smell and taste it. By day, the sounds of the bush might echo in your ear, by night possibly the bustle of Accra or Johannesburg.

Bright red, yellow, blue and green curving winged dining chairs sprinkled on the pavement against the newly black-painted brick facade spark curiosity from the outside of the organisation’s refurbished home. The fabric of the street blends into the front of the building; paving sets lead to the entrance while granite blocks form the border of two asphalt patios. Between the flanges of a steel beam that fronts a newly added porch, capital letters welcome you to The Africa Centre.

‘It was important to make the welcome mat feel part of the street,’ explains the project’s architect Jonathan Hagos, co-founder of Freehaus (RIBAJ Future Winner March 2021). ‘We had a lot of conversations about transparency; being able to see in and out… The idea of a window the full height of the building is to use it as a banner for promotion.’

The Africa Centre is a 58-year-old organisation. It was founded in Covent Garden at 38 King Street, gifted in perpetuity by the Catholic Church to the people of Africa to promote non-governmental relations between newly independent African nations and to maintain informal cultural links between the continent and its diaspora. In its heyday it was a place of provocation via exhibitions, club nights, lecture programme and as a venue for important conversations and meetings leaders including archbishop Desmond Tutu and South African politician Thabo Mbeki.

However, by the early 2000s it had entered a period of relative dormancy. In 2013 it moved permanently to Great Suffolk Street, securing its financial future by leasing out the central London building and simultaneously putting itself into the borough with the largest black African community in London. Initially it moved into two railway arches and bought the four-storey, 1960s yellow brick former office building known as Gunpowder House – site of its newly refurbished home.

The idea behind the project has been for the organisation to become a cultural institution with a headquarters
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Buildings
Cultural centre

Right The stairwell now acts as a thermal chimney.
Below right and far right The warm sandy tones, the air bricks and the mix of furniture aim for a pan-African aesthetic.

to match, able to keep company with others such as the Jerwood, Young and Old Vic and Tate Modern. Freehaus was appointed in 2019 at RIBA Stage 3 – post planning approval which was achieved by MAP Architecture. The other change was that the renewed centre should also speak to a wider breadth of people.

‘The criticism previously was that the Africa Centre had been too Christian and West African,’ explains Hagos. Now, to improve its social sustainability, it is aiming to be more pan-African and inclusive of other religions, people from all regions and people who live in Africa, people who migrated and also those among the general public who might not have previously felt connections to the continent. It has developed five pillars of purpose: culture, entrepreneurship and innovation, education, intellectual leadership and community.

These pillars are manifested across the new building, which has only had its first phase completed, having suffered funding cuts during the Covid 19 pandemic. At ground floor are a reception and restaurant serving African fusion food, with a lounge and bar on the first floor and an exhibition space on the second. The two additional levels were not included in phase 1 but eventually the third floor will become a digital learning space in which to access the organisation’s archive, do training and connect with classrooms across Africa. Meanwhile the fourth floor will be a business incubator space that takes advantage of the existing roof terrace. The arches behind the building remain, one as the organisation’s office; the other is currently let to external businesses but will become a performance space.

The brief was to make the project a ‘uniquely African’ and ‘welcoming institution’. The Africa Centre took the
brave step to reuse Gunpowder House, yet this embedded the scheme with some challenging constraints. Each floorplate is quite tight at between 65 and 70m². The architect also had to work around the existing core and stairwell, ensuring contemporary building regulations were met. Externally the brick has been made good and painted black to change its character. Within that the architect has reworked the ventilation and heating strategies, including adding a heat recovery unit. The stairwell is now used as a thermal chimney. Meanwhile, the entrance has been opened up with more glazing to promote visibility and transparency. The portal frame acts both as a canopy for the entrance and a terrace for the first floor bar, creating a livelier and more dynamic facade where people can stand or sit alongside the canopy of the street trees.

On the ground floor Freehaus has extended 2m into a rear courtyard to create a more informal part of the restaurant so people can spill out front and back to give life to the street. Combined with the railway arches running alongside the back of the building, it’s possible to imagine the pedestrian passage between becoming a kind of Africa quarter filled with small businesses, social enterprises, food outlets and arts activities as the centre’s cultural and outreach programmes ramp up.

Inside, every step has been taken to get as broad mix of participants involved in the design as possible, including African-origin designers and makers. Interior design was done by Tola Ojuolape, joinery by Kenyan/Warrington couple Studio Propolis, art curation by Alexia Walker and brand design by Mam’gobozi Design Factory. The centre’s current exhibition is Sungi Mlengeya’s ‘Bodies in space’. This approach has created carefully overlapping themes and aesthetics.
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The gallery space on the second floor, reconfigurable by moveable panels.

Bright chairs signal a welcome on the first floor terrace alongside the trees.

Lots of opportunities here between the Africa Centre and railway arches.

against a solid architectural backdrop that includes beautiful details like terrazzo flooring for the first step to mark a threshold – an architectural device common in parts of Africa. The bar on the first floor is inspired by the sheer hedonism of Marvin Gaye’s album cover ‘I want you’ – a darker, moodier, sensual space. The huge mural on the way up the new steel rail stair – painted on plaster by Mozambican artist and poet Malangatana Ngwenya in 1987 – was removed from the original King Street site when the Africa Centre moved out and put into storage, funded by Nando’s. It contributes perfectly to the vibe. Upstairs in the gallery, movable panels inspired by John Soane’s house in Holborn can be opened and closed to create hanging space or close off the walls of horizontal glazing. The whole space is painted indigo, referencing the dye trade, and thematically connecting this space to the stairwell below.

As phase 1 only, there is still more due for this project, including a full building-height screen climbing up the facade from the first-floor front terrace, as well as the digital learning and business incubator hub. The beauty of the scheme being incidentally split into phases means that the Africa Centre is able to open partially, as a testing ground, before the organisation makes more decisions and ossifies its vision of itself in the now. The Black Lives Matter movement had already had an impact on its course during the construction period (it went on site in 2020). For example, some of the interiors are stylistically very powerful. It’s a question in my mind as to whether they’ll feel 100% welcoming to all the groups the centre is intended for. And as the screen on the facade wouldn’t add floorspace, it doesn’t feel like a necessary addition as the front already appears to work. We’ll have to keep our eyes peeled.
As you’d expect from West Fraser, the UK’s No 1 producer of engineered wood panels, we are committed to playing our part in reducing our emissions, and we are greener than you might think. But being carbon neutral wasn’t enough for us, we wanted more, we wanted to be carbon negative. We have been independently audited by Wood and independently verified and certified by the international EPD system Secretariat in Sweden and are proud that West Fraser’s UK-made products have been certified as being net carbon negative. This means we lock up more CO2e in our products than we emit making them. FACT.

Our products lock in 1.1 million tonnes of CO2e every year

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74% of our primary energy use is from renewable sources

99.5% of all raw material is used, with less than half a percent being wasted

All our products are FSC® certified and can 100% be recycled

Low energy LED lighting, with motion sensors, is being installed across our sites

We’ve reduced our air miles by 19% from 2017-2019

Our fleet of diesel company cars is being replaced with hybrid vehicles

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UK construction must comply with net zero targets to balance emitted and locked up carbon. Our products, all proudly made here in the UK, are net carbon negative and counter those that are not.

Find out more at uk.westfraser.com/carbon-negative
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UK construction must comply with net zero targets to balance emitted and locked up carbon. Our timber panels, all proudly made here in the UK, are net carbon negative and counter those that are not.

Carbon negative.
Positive future.

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Is it a private school? Or a care home? Mae Architects reinterpreted tradition at charity for the elderly Morden College to create a lively, sociable and stylish centre for its residential campus

Words: Jan-Carlos Kucharek Photographs: Jim Stephenson

Sitting in the more intimate north end of the restaurant next to the open terrace door, where a light breeze brushes past a dusty pink banquette seat before filtering into its main space, Morden College resident Jackie seems to have found her spot. From her vantage point, she can see other residents come and go and look beyond the colonnade to the south-facing terrace and garden. She recalls her own experiences of care homes from her youth: ‘A picture of the Queen on the wall, Emmerdale Farm on the TV, magnolia-painted lounges,’ she tells me before adding ‘but it’s different here. It looks so simple but then if you look, you can see it’s put together so thoughtfully.’ Jackie says she spent two years interviewing to get into this place and she’s going nowhere. After her success at this Oxbridge exam for the elderly, she’s earned the right to sit exactly where she likes.

Jackie tells me that most locals don’t really know what goes on at Morden College, sited out of view at the end of a drive on Blackheath’s eastern fringe. But while its sign gives off the air of a private school or university, it is something altogether different, as Mae Architects’ Alex Ely explains. Wealthy 18th century trader Sir John Morden, having amassed a fortune plying the spice routes, saw his own success in the context of many other merchant seamen who had lost livelihoods through storms, pirates or some other visitation, and decided to put some of his money to philanthropic use. He founded his almshouse in 1695 which, funded partially by the pious Lady Morden, also enshrined elements of emotional as well as bodily support, with an on-site chapel and dedicated chaplain. Now spread over two campuses, both offering safe harbour to those

Above The back-to-back triangulated roof creates volumetric complexity in the restaurant, while thoughtful window placement relates both to the garden and the canopy of trees.

Right The north main entrance references the Swedish modernists. All the building’s themes are legible here: the pavilion form, the colonnade and landscape engagement.
elderly encountering hardship in all its forms (one even dealing with respite care), an ongoing endowment means the Morden’s charity continues – and the chaplain remains to this day.

Mae’s John Morden Centre, the Blackheath campus’ day care facility, takes a lot of cues, says Ely, from the original grade I-listed almshouses, attributed to Christopher Wren but more likely the work of his master mason Edward Strong. Walking through a portico watched by stone statues of the benefactors, the two-storey quadrangle you encounter, run around by a stone colonnade, has a serene charm that belies innovations that would be modern even now. Ely highlights its timber-frame, brick-faced structure and double gable roof whose central gully takes run-off down to lead cisterns set below the quadrangle’s grass, which would once have provided rainwater for drinking and ablutions to the rooms.

But, Ely adds, it was the form itself that proved inspirational; appendages comprising the chapel, dining hall and library, and a more contemporary social area bulge out curiously from its square. And while the new building with a long spine colonnade that serpentine around might not obviously speak of the same provenance, Ely says this approach arose from a number of constraints: a boundary wall to the south, car park to the east, a retained 1970s social hall to the west and demolished ad hoc café and art spaces between – plus an old Cyprus tree. ‘The site didn’t lend itself to the almshouse’s pure geometry but it did to the idea of a colonnade spine running along with pavilions appended along its length,’ explains the architect. The timber frame, colonnade, expressive roof and chimneys – here part of the natural ventilation strategy – these cues were all taken from the main building.’

There’s no doubt that the client was expecting a lot, not just because it was in the shadow of a grade I building, but because CEO David Rutherford Jones had whittled Mae down from an invited shortlist of five after having seen for himself the potential healing power of good design in Maggie’s Centres. ‘His view was that residents should come out of the building feeling better then when they went in,’ recalls Ely, but the charity’s choice of Mae stemmed from more than a belief that it would produce a building that respected its quality of life aspirations. Already engaged on a care home on the former Aylesbury estate, Mae also understood specific elderly care needs. While Morden College might have baulked at some of the more outlandish Maggie’s centres, Mae convinced it that it ‘wanted to do something contemporary and uncompromisingly modern but which felt of the place’.

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The charity felt residents should come out of the building feeling better than when they went in.

Above Looking through the restaurant back to the art room, which not only visually connects the two spaces but creates spatial complexity at the building’s heart.

Left The spine wall near the admin office, shop and wellbeing suite is set with timber seating, allowing residents to look at the garden and watch other residents come and go.
new **fino** collection. **think inside the box**

Working with Thrslington, **Bobrick**, the global washroom accessory brand, has created the Fino Collection. A beautiful line of washroom accessories designed for both high-end installations and to complement Thrslington’s range of washroom products. Crafted with high-quality satin finish stainless steel, seamless construction, well-defined edges and concealed hardware, Fino offers the perfect balance of function and design sensibility. Our low profile hand dryer is designed to be DDA/ADA compliant, so it takes up limited washroom space, but its exquisite cubist proportions make it the focal point of any washroom wall. Available in stainless steel with optional PVD or powder-coated options. For more information on our Fino collection please call us on 01244 520 677, or simply visit: www.thrislingtoncubicles.com/fino-accessories.
It’s a similar approach to Mae’s contemporaneous and 2022 Stirling Prize shortlisted Sands End Arts & Community Centre in west London (RIBAJ December 2020); designed at the same time, they can probably be considered sister projects. The CLT fins that so elegantly define the roof structure at Sand’s End here become the whole structural strategy, with massive CLT structural insulate panels making up the structural walls and pavilion roofs, each formed of two triangles back-to-back to generate the pleasing and lofty internal geometry, mitigating not only the building’s embodied carbon but the programme cost too, as it went up in next to no time. Unlike Sands End, there was no recycled brick used due to the need to blend in with the mixed-stock almshouse, but the lovely protruding and hit and miss brick detailing, while not low carbon per se, does have a patina, longevity and robustness that speaks of more ethereal notions of sustainability. The English garden bond running along the spine’s length all leads to the retrofitted 1970s social hall, which, given its self-conscious octagonal form, actually blends seamlessly into the pavilion ensemble.

Mae put thought into the sequencing of the building, with other spaces – such as a courtyard garden at the entrance – revealing themselves to users before they embark on their journey through the building, and at every ‘crank’ of the spine you will either enter a pavilion or be gifted a view out to the landscape through the glulam colonnade. On their journey residents will pass a GP health centre, a reception lounge, shop, welfare office and hairdresser, art room, restaurant and social hall. ‘We wanted a sequence of spaces where you’re always moving over thresholds and seeing connections,’ says Ely; ‘Weaving around site constraints, it could have been a jumble of architecture but building off the cranked colonnade, your journey shifts as you move.’ And he’s right, the crank introduces experiential complexity to what would otherwise be the simple lining up of spaces, layering the journey with the landscape outside.

And the bigger picture is augmented by details, with concessions to physical vulnerability invisibly stitched-in. On entering, my hand gravitated to touch a large timber glazing transom to realise if there’s a complaint about the art room, it’s that there’s not enough hanging space.

"Above left" The art room is so popular that other handicrafts are demanding time there.

"Above" The garden terrace, reached directly from the restaurant colonnade, sits at the foot of the Cyprus tree.
it was formed as a handrail; and oak seating is thoughtfully set into the spine wall to allow the corridor not only a space for individual rest but for meaningful interaction with others. With the art room eating an ‘L’ into the restaurant, not only does the actively turps-fuelled space become part of the ‘heart’ of the building, it adds spatial complexity to the restaurant, accentuating the double height volume to its chimney ‘vent’ as well as creating the more intimate spaces that Jackie prefers. A clerestory window frames the high canopy of the Cyprus tree while the adjacent colonnade lets the landscape stretch out away from you; striking concurrent dualities of view better experienced than described. At its simplest level there’s something thrilling about it – it’s like being in a tent.

Wandering back along the rear sensory garden path to the front past the colonnade’s sedum roof, it is only looking back along the building’s length to the west that you gain a sense of how embedded the John Morden Centre is in its landscape, sat as it is among beds of wild flowers and gradually building in height to the retrofit social hall and campus building behind it to create a satisfyingly picturesque composition. But it isn’t of course just about the building but the 300 residents that use it and there is no doubt that, despite a pandemic-delayed opening, the opportunities it provides for concerts, yoga, social evenings, art and sewing clubs, or simply sitting and hanging out with family and friends in the café, have been grasped with both hands. Its strange to use the word ‘abuzz’ for an elderly care facility, but it is; and with residents’ own artwork adorning its walls, the building carries the imprint of ownership. The sense here is of an active, vivid community in no way ready to retreat from life. It all makes for a fascinating addition that has catalysed the campus and charged it with potential; a new modus operandi that challenges Jackie’s own past perceptions of such places: ‘In the old days they used to have the same silky artificial flowers in all the care homes,’ she recalls. ‘But here, every one you see is real.’

Credits
Client Morden College
Architect Mae Architects
Main contractor Clive Graham Associates
Structural engineer Michael Hadi Associates
M&E consultant BOOM
Project manager Calford Seaden
Quantity surveyor Calford Seaden
Planning consultant Stanway Little
Landscape designer J&L Gibbons

Above The pavilion forms are crowned by their ventilation stack chimneys.
Below Looking west along the south face, the building creates a picturesque composition.
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What leaders of small and medium practices need to know about business resilience

How do you get the right systems and approaches to people in place to build a resilient practice? Experts discuss costs and competition, shocks and recruitment issues

'We're not taught as architecture students how to run a business,' states Paula Willmore of Willmore Isles Architects in Bristol. This is even though successful practice relies on business acumen as much as creative excellence. Indeed, the ARB requires architects to implement ‘effective systems’ and ensure ‘projects are regularly monitored and reviewed’ to ensure professionalism. Implementing effective systems – not only technological, financial or project-based, but also relating to people and how values are lived out – is essential to building a business that is resilient to change, whether within the practice, the industry or wider society. This important subject was tackled in the RIBAJ and Deltek seminar on business resilience for small and medium practices, to watch the
Businesses are organic and, if organic things do not grow, they die

scopes, inaccurate project costs and timeline forecasting were the most cited project-based challenges. ‘Busywork’ relating to sketching, site inspections and field reports were identified as problematic by 48% of UK practitioners surveyed.

With 45% of projects over budget and 66% behind schedule, more effective industry-specific technology systems are clearly needed. Deltek ArchiSnapper is such a solution, bringing coherence to project management, integrating timesheets, expenses, client relationship management and field reporting, accessible on multiple devices for use on site.

Miller reiterates that knowledge is power; understanding bottlenecks in the pipeline reduces their risk of recurrence. However, an ad-hoc or unscalable approach to IT, or a misalignment with company strategy, hinders resilience.

The Pulse study reveals the experience of employees at a range of career stages, not only from leadership level. And, as Kemp makes clear, at the highest, most abstract level of business planning – the company ‘vision’ – people should take centre stage. Kemp defines the vision as ‘a concise outline of what your practice aims to achieve for the future, providing direction and purpose for the business and its staff.’

Involving staff lets them help achieve the business goals; sharing information and decision-making encourages unexpected solutions. Training should align to individuals as well as to business plans and, crucially, ‘as a leader you should model the behaviour you expect’.

Willmore Isles is particularly invested here, with ‘growth and empowerment of our people’ forming part of the company’s values statement. In 2016, the practice became an Employee Ownership Trust (EOT), which Paula Willmore considers key to the business’s success. In an EOT, current employees own most of the shares, incentivising them to contribute to success while introducing accountability from the business to staff. ‘We want to live our values,’ explains Paula. ‘We want to have a work-life balance, support staff with career development and deliver high quality designs for our clients and their end users ... We need to look after our people and to do this we need to understand our business.’ Kemp emphatically agrees: ‘It’s all about the people – get them on board,’ he says.

The coming years are certain to be turbulent. But as Castle aptly concludes: ‘Resilience is about how to thrive in altered circumstances. Despite uncertainty, new opportunities emerge and, as an innovative profession, architects provide important services for a changing society.’


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In her opening remarks, RIBAJ publishing director Helen Castle outlines some of the repercussions of today’s political and economic climate on our sector: supply chain issues, skills gaps and talent crises, plus the financial pinch of high inflation and low economic growth. These adverse conditions were first reflected in April’s RIBA Future Trends survey, which fell 14 points to +5 – the biggest decline since lockdown.

To survive in such a climate, says Castle, practices must build robustness in a holistic way, that involves garnering a deep understanding of practical operations and financial position, and fundamentally invests in people.

Architect Mark Kemp of Place Architects in Cornwall is firmly in agreement. His book, the RIBA Good Practice Guide to Business Resilience, focuses on organisations and people in equal measure. ‘Growth is essential. Businesses are organic and, if organic things do not grow, they die,’ he begins. ‘You are in business to make money and, to do this, it is vital that you know your business in detail.’ His advice is pithy and straightforward to implement, beginning with the importance of clarifying four key statements: the business mission, vision, business plan and strategic plan. Together these inform a business’s day-to-day culture while aspiring to a realistically attainable future. He recommends a variety of methods for monitoring and analysing different business areas, which in turn lead to a more focused and relevant approach to resource allocation, marketing, identifying sectors in which to expand and so on. This knowledge mitigates risk: ‘It will help you to make judgement calls in the future, so that you can make decisions knowing the consequences.’

Megan Miller, director of product marketing at Deltek, defines in further detail the areas presenting the greatest day-to-day challenges for architects. Her Deltek Clarity and Pulse studies reported on technology, project management, human capital management and business development trends within the industry. Competing priorities, poorly defined
Flat roofs adapt for net zero

Tom Raftery, sustainability and PV manager at Bauder, shares his thoughts on how flat roof design is changing to meet the needs of a net zero future.

The UK government’s ambitious targets for net zero stages in 2030, 2035 and onwards to 2050, are strong drivers for designing future-proof buildings with a full decarbonised life cycle embracing design, construction, building management and ongoing refurbishment or deconstruction.

A flat roof is an integral part of many modern construction designs as it provides additional utility space for the building, whether for recreational, environmental, or functional facilities.

So how will you maximise a flat roof design to deliver net zero?

The primary function of a flat roof is to keep the building watertight and secure. Any materials and systems chosen for their circular or net zero properties must not detract from this, and all systems should meet the various construction standards.

Level one – Insulate, insulate, insulate
Reducing heat loss is one of the key pillars of a decarbonisation design; consideration is strategic as many current insulants with lower embodied carbon will increase the thickness and weight loading of the roof build-up, which will have an impact on the building’s structure and detailing.

Level two – Include energy generation
A solar PV array is central to adding the function of renewable energy to support the building and its running costs. To take it one step further, include a green roof to make a biosolar whole that will boost the energy generated by 6% over a standard flat roof PV array – and will create habitat spaces for small fauna and wildflower flora.

Level three – Attenuate stormwater
Add a blue roof to levels one and two so that a rooftop SuDS system can attenuate stormwater over any 24-hour period via a restrictive flow outlet – helping to prevent localised flash flooding.

Embracing a net zero future for construction lies within your design creativity, and bringing your flat roof designs to level three is the best response.

Above Noah’s Ark biosolar roof.
Below CAD illustration of a blue roof.

Ensuring the flat roof you design brings net zero into focus

Explore flat roof design considerations

Get in touch: bauder.co.uk/contact-us

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Four years ago we decided to formalise an annual programme of activity to promote equality, diversity and inclusion (EDI) – principles that have always been integral to our 10-strong practice. As a small office you’re always wearing a lot of hats and we felt it important to ensure that enough time was dedicated to supporting our EDI ambitions.

One thing we found useful was breaking our goals down into categories. We look at the practice through three ‘lenses’ – as an employer, as a consultant and as a knowledge-sharer – and have KPIs for each. Most activity in the third category is outreach, with an emphasis on young people who are under-represented in architecture.

We are leading workshops in schools with Open City. Others that take place in our studio, organised in partnership with Urban Learners and the Grimshaw Foundation, have been a real success. With Kingston University we offer a paid four-week internship, and through Arts Emergency provide work experience placements and mentorship. We also do CV and portfolio reviews, working with Paradigm Network, Built By Us and Black Females in Architecture to reach the right people. Feedback is heartening; sometimes people just need the confidence to apply for that dream job.

Although we contribute time, not money, it’s still a cost. We have priced it, but haven’t yet had to use the figure in bids that factor in social value; we’d rather evidence our commitment through our actions. Though I lead the work with a small team, everyone is involved which has its own benefits, informing our project work too. Ultimately it makes us better architects.
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How to validate sustainable design

Sustainable design must be measurable if it is to truly combat climate change. But there are plenty of ways to do this which, vigorously applied, will make a real difference.

Above To achieve holistic sustainable architecture, certain sustainability aspects cannot be prioritised at the expense of reduced standards elsewhere (middle diagram). Instead, all aspects must meet high standards, even when some themes are prioritised (diagram to the right).

A transformation of unprecedented urgency and scale is needed to get us through this climate emergency. Global temperatures are already 1.1°C above the pre-industrial baseline, and we’re trying to limit that to 1.5°C. Every rise risks unhinging ecosystems further, leading to more extreme events, more loss of lives, livelihoods, homes and cities, and devastation of the natural world.

Carbon neutrality can only be achieved if we stop using fossil fuels for the construction and operation of the buildings we design, and start using our available resources responsibly across the world. And it is not just CO2 that matters: every minute, we extract resources that exploit people and nature and can never be replenished.

Although we all know this, almost every architecture project continues to contribute to the climate crisis, and so to injustices and ecological breakdowns worldwide. We need drastically different architectural responses. Every single project needs not only to minimise but to reverse these damaging processes immediately and create a positive and restorative impact. This is essential to a climate emergency design approach.

At the core of such an approach are 10 themes. Energy and CO2 is one, but we believe we need to go beyond this, ensuring that projects consistently integrate high values in all areas of sustainable architecture (see diagram).

Designing sustainable architecture and zero-carbon buildings also means little if it is only achieved on paper and the standards are not met in reality, once these spaces are handed over to the users. ‘Performance’ means not just an energy and CO2 audit related to building and systems performance, but also to users’ wellbeing and satisfaction and its spatial and material performance. That is, does the design work as intended?

Our design decisions should be based on knowledge and the best available evidence, but we cannot claim our proposed designs are sustainable without evaluating them. While we cannot know for certain whether our designs work until they are built and used, we can do our best to validate them at design stage, testing and checking to see if our project meets the sustainability goals we set in earlier design processes. This needs to happen at different stages of the design to gain feedback on early decisions, helping to reflect, refine and improve it through iterations, as well as gaining useful feedback from others. It is not something to be done at the end of the design process, but as part of it.

Validation can be done through sketches, drawings, physical or digital models, simple rules of thumb and environmental software.

Rules of thumb, guides and checklists

In our book, Designing for the Climate Emergency, are key recommendation checklists to consider at different stages of the design process; these and other checklists can be used to validate your decision-making. Other rules of thumb and design guidance will help you.
develop your design (or that of others, or an existing case study) as well as evaluate it against these key criteria at different stages. You can use them to compare different design approaches and options to help you in decision-making. You can also use national building regulations and different sustainable architecture approaches (for example Passivhaus and nZEB, as well as sustainable design standards such as BREEAM, LEED, DGNB, the Living Building Challenge and the WELL Building Standard). They will help you to identify any neglected aspects and improve in these areas.

Some online tools can help you to undertake a life-cycle assessment (such as the Construction Material Pyramid, One Click LCA) or embodied carbon (for example FCBS CARBON or H:\B:ERT).

**Energy models**
Several programs exist to validate your design with advanced daylight studies, solar analysis, wind-flow analysis, predicted energy use, potential energy production from renewables etc. Some tools enable you to check the robustness of your design in future climates. Quick environmental software simulations include SketchUp, Revit or Rhino; SketchUp plugin designPH gives an initial prediction for building energy use.

More advanced environmental software simulations are used at later stages, as they enable more detailed design inputs. Typically these tools require advanced building modelling skills and building physics understanding. In addition to energy modelling, they usually also include validation of climate, daylight and artificial light, solar shading, comfort, airflow, heating, cooling, ventilation systems, renewable energy and life-cycle modelling. More accurate predictions are possible, if inputs are based on the proposed specification and use of the building, rather than uninformed design assumptions. Examples are DesignBuilder, Sefaira and IES and are Revit plugins for environmental and energy performance simulation. Rhino plugins allow the validation of daylight, glare, artificial light, thermal bridging (with Honeybee); solar radiation, shadow, renewables (with Ladybug); heat island studies (with Dragonfly) and advanced energy modelling, airflow, and indoor and outdoor comfort (with EnergyPlus). IESVE, which is LEED, BIM compatible and a plugin for Revit, is employed for detailed energy simulation – often used for regulatory compliance.

**Environmental software simulations**
Many energy models also enable the modelling of daylight, sunlight and shadows, solar radiation, wind flow and soundscapes (acoustics). These help you understand the existing site conditions as well as the impact of your proposed design intervention, and the advantages and disadvantages of different options. Simulation of the sun’s path around a site and the corresponding shadows is one of the most simple yet important validation tools you should use, as it is fundamental to many design decisions, and can be done in most 3D modelling software.

Equally, how much energy from the sun is incident on different parts of both site and building is useful to understand if outdoor areas are overshadowed, to test whether glazing is receiving high levels of solar energy and how effective shading is, and to see which parts of the building are best suited to solar panels.

Daylight is important in occupant health and wellbeing, and something your design can have a big influence on. It is relatively easy and accurate to validate using digital models, though be careful when using digital renders. Free daylight tools include the VELUX Daylight Visualizer, but simple daylight factor rules of thumb can also be applied.

Remember that these rules of thumb and simulations mean little unless you critically reflect on what the results mean – that is, how they should inform your decision-making and next design iterations. More accurate validation of sustainability intentions early on helps to reduce the performance gap once projects are built and occupied. The next steps would be to follow through projects to see if they work in reality (and fix those that don’t). Authors Sofie Pelsmakers, Elizabeth Donovan, Aidan Hoggard, Urszula Kozminska have just published Designing for the Climate Emergency focusing on sustainability and design for students.

We can do our best to validate our designs, testing and checking to see if our project meets the sustainability goals we set earlier.
Deep retrofit moves to site phase

Upskilling and circular economy principles come to the fore in our series following the deep retrofit of the Cambridge Institute for Sustainability Leadership stage by stage.

It is time to go on site. We have reached Stage 5 in the RIBA Plan of Works at the deep retrofit for the Cambridge Institute for Sustainability Leadership’s (CISL) Entopia Building. Stage 5 is all about manufacturing and construction and as the new home for CISL goes on site, the onset of the pandemic is an added worry to communicating new ways of working to those building the project.

The best guide to this stage is surely Peter Kelly, group director of sustainable operations at contractor ISG. He is a bit senior to be closely managing this sort of project, but when a colleague left he took a direct role on Entopia due to its technical complexity. It could have been a backward step but he has loved it. ‘Every decision was made with sustainability in mind,’ he says wonderingly. ‘It is the first time in my working life.’

We will hear about ISG’s and Kelly’s circular economy contribution shortly. And previous pieces give an idea of the...
early input of ISG and its team through the 55 week pre-construction contract.

But the big question is how ISG as a management contractor, entirely reliant on a network of subcontractors which are all small to medium sized enterprises, ensured everyone was on the same page? There were a series of strategies. There were training days, two videos of wall build-ups and mock-ups for air tightness. This up-skilling of local subcontractors fitted project ambitions to build regional capacity in sustainable construction: Stortford Interiors is now fully trained up to install the lime, cork and clay insulating plaster Diathonite. Daily meetings were held at the workface, getting both leads and operatives of subcontractors up to speed on airtightness and Enerphit.

Kelly knew that just issuing reams of guidance and drawings wasn’t enough; a stronger message would be one that people building the project could ‘see and read’. So ISG’s in-house visualisation team made some three minute videos of different aspects of the wall build up.

ISG’s site manager was responsible for the gateway process of inspections and test points with subcontractors, generating the usual slew of photos documenting junctions, hold points and installlations based on the inspection and test plan. There were plenty of such points; on the wall build up there was a stop after the first layer of Diathonite installation. A mock-up of the wall build-up early on, signed off by Architype and architect Feilden+Mawson and air tested, meant the process could be less inspection-heavy. The inspection could wait until the second layer of Diathonite was installed. It seems this worked, the building has now passed its airtightness test with a permeability of 1.33 m³/h.m² and an air change per hour of 0.6 ACH.

With BREEAM and WELL Building standards to hit as well as Enerphit targets, there was endless checking that any proposed substitute products – as Covid and Brexit disrupted supply chains – were bio-based with low VOCs and low embodied carbon. Significant decisions would involve meetings with Feilden+Mawson, Max Fordham and the client as well as a sign off from Architype and BDP. ‘It was not necessarily fast decision making,’ explains Kelly. ‘It was more making the right decision. And it was a huge breadth of iterations and conversations with subcontractors.’

Getting the sequencing right also had to be done from first principles. When do you upgrade the windows if you want to keep diesel bus and traffic fumes from the road out of the building? The old sash windows were kept in place until the last minute, then new ones installed from a scaffold. An air flush helped clean up the pollutants as shown by the before and after air quality test. Now basement intake and filters must continue that good work.

**Circular economy**

Kelly and ISG’s network had a big part to play in sourcing re-used materials and objects for the project. Of course it wasn’t as simple as grabbing something from a skip. First there was finding them and then ensuring they were checked and re-conditioned as necessary. There were three big items: reception desk, a steel canopy and lights.

A reception desk designed by Piercy&Company with Bill Amberg leather came up. Originally intended for the Copyright Building in central London, where ISG was doing a refit for Netflix, it was going to be skipped due...
to a layout change for the new reception area, but instead went back to its makers at Benchmark to be adapted for Entopia.

Kelly found a disused steel structure, from a film set near London. After a trip to Cleveland Steel in north Yorkshire and back to Cambridge it has been installed on Entopia as a PV canopy.

LED lights came from an ISG client who was stripping out a CAT A fit out. The complication was not only that the warranty would no longer be valid but that the lights would no longer sit within a ceiling system but stand proud under the soffit. But after inspection at its factory in Essex, manufacturer Specials Lighting Design, agreed to honour the existing warranty. This also gave the chance to add uplighters, take off end brackets and add wires to hang the luminaires.

These examples show the huge waste generated by discarding still-performing objects, sometimes after little or no use. ‘The circular economy has got to be how we do things in future,’ says Kelly. ‘We can’t just downcycle, there has to be a marketplace for perfectly reusable materials.’ One of ISG’s targets is an Ebay-style system for re-used materials but he admits there is a problem in scale.

The firm sent 30 questions to potential suppliers to try and understand the materials, how they might let off gases, and materials used for cleaning. As the invasion of Ukraine had kicked off, ply was already hard to get hold of especially with the added pressure of avoiding the use of Russian ply.

Melamine tea points were given a bio-based finish with bamboo doors (from Moso Bamboo) and recycled-plastic work tops (Durat); splashbacks included recycled tiles (Alusid).

The tables and desks give an idea of how the projects’ aspirations were extended to the interiors. There are five table top types over 35 tables – lino on ply, hemp on ply, solid wood, recycled textiles (from old uniforms) on sustainable composite board and a more industry-standard melamine as a control. These sit on second hand bases (65% of the furniture was sourced second hand from CISL’s own stores, those of the university and the open market). The tops will spark discussion in public meeting areas and their relative performance will be tracked by the practice. Some desks are being re-used but the new ones, in lino-topped ply, are sit-to-stand (WELL certification requires this from 25% of desks). Linoleum was also specified for the floor, rather than wood or engineered board.

An order of pressed hemp stacking chairs by Nomique accounts for much of the seating. Other chairs are second hand, some in leather, one re-covered in recycled ocean plastics, some in the hemp fabric Camira. Hemp was also the basis for the joinery – supplied by Cecene – with plastic carcasses all containing some recycled content.

Apart from the data gathering and assessment on products there were other challenges; due to European funding three quotes were needed for everything – which is almost impossible in the second hand market (the team had to negotiate a dispensation from the university for this early on). Sourcing second hand furniture was also affected by delays in decision making, where a lot could be sold in the time it took to get the OK to buy it.

Avoiding waste and reusing material sometimes meant reframing objects. Old orange tables were second hand, some in leather, one re-covered in recycled ocean plastics, some in the hemp fabric Camira. Hemp was also the basis for the joinery – supplied by Cecene – with plastic carcasses all containing some recycled content.

The circular economy has got to be how we do things in future. We can’t just downcycle, there has to be a marketplace for perfectly reusable materials.
Passionate about all that grows
The next generation in sustainable substrate cladding

Waste from the paper industry has been harnessed to create HONEXT, a sustainable construction panel that is the latest weapon in James Latham’s armour to help the industry’s battle against climate change.
With sustainability becoming a non-negotiable stipulation in contemporary design briefs, architects up and down the country are constantly hunting for the lowest-carbon material options available.

Putting this in wider context, NBS’s recent Sustainability Futures Report found in a poll that 88% of specifiers regarded environmental sustainability as an important project criteria, with 79% saying it was very important to them on a personal level.

So it’s no wonder we’re witnessing a sea change among UK architects towards green design, and a growing preference for building products manufactured according to circular principles.

One new, highly innovative material, recently launched in the UK, and solely available from leading materials distributor, James Latham Ltd (Lathams) is HONEXT®.

A carbon-neutral, 100% recyclable, high-performance substrate cladding for commercial and residential interiors, Honext is a pioneering product developed in collaboration between Universitat Politècnica de Catalunya researchers and Barcelona-based manufacturer, the Merino family.

Produced from waste fibres and cellulose residue from the paper industry, it’s a game-changing, lightweight construction panel, which upcycled this previously useless run-off material using a proprietary biotech process, to achieve a fully recyclable, non-toxic board.

Suitable for interior wall and ceiling linings, and other non-loadbearing applications, HONEXT is unique in its category as Cradle-to-Cradle Silver Certified, and its benefits extend far beyond its upfront sustainable attributes.

A high-performance material, it possesses strong thermal conductivity, vapour permeability, resistance to moisture and optimal acoustic performance. On this latter attribute, Honext panels are specifically designed to feature better sound absorption properties than traditional building materials, making them well suited to busy, noisy commercial environments.

The panels also promote better indoor air quality, as they contain no added VOCs and are Material Health Silver Certified.

HONEXT is already specified on a number of projects in Spain and continental Europe – its potential to help deliver sustainable and cost-effective design solutions increasingly being realised by specifiers globally.

In a recent, high-end retail project, the panels were used to replicate fluted concrete walls when concrete would have been extremely heavy, highly unsustainable, and very costly for application in a commercial unit.

Here, the HONEXT sheets were bonded together, deeply grooved and painted, to create a lightweight, sound-absorbing wall that looks identical to fluted concrete.

Demand for the material is also growing in the commercial office sector, where its sound absorption capabilities are being realised by fit-out professionals. In a recent workspace project for Spanish construction firm Construcia, HONEXT panels were specified for suspended ‘sound islands’ and ceilings to improve interior acoustics.

HONEXT met all the client’s requirements for a cradle-to-cradle certified solution, as well as achieving optimal acoustic levels and a comfortable and pleasant working environment.

More sustainable and easier to work than many other panelling materials, Honext is a game-changer, particularly for applications such as retail fit-out, exhibitions, set decoration and staging, as the product can be shaped, painted, bonded and laminated, offering a greater degree of flexibility for architects, designers and specifiers.

Building on other recent forward-thinking initiatives, including the Carbon Calculator and Digital Showroom, the introduction of HONEXT represents the latest step in Lathams’ aim to be the country’s most innovative and eco-friendly materials distributor.

It’s yet another proof point of Lathams direct support of the UK’s specification community, helping them meet every green layer of their design briefs.
NEW

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Dulux Sterishield Dual Active is not a substitute for appropriate cleaning regimes and hygiene practices, including suitable ventilation. *See National Standards of Healthcare Cleanliness 2021 Report.
How to make timber buildings viable

Insurers claim a hybrid approach is the secret to delivering mass timber buildings, but what types of structure work, and how can architects ensure projects are underwritten? Stephen Cousins investigates

Increasing reliance on engineered wood for mass timber construction is an inevitable consequence of the drive towards net zero as design and construction teams turn away from carbon-intensive materials and methods.

Materials like cross laminated timber (CLT), laminated veneer lumber (LVL) or glulam are low embodied carbon, lightweight, versatile and offer a high degree of precision, but they don’t easily fit into long-established construction classes – and prohibitive regulations, including the ban on combustible cladding in new buildings over 18m, stifle their application.

The mass timber dilemma goes to the heart of established insurance principles of risk assessment, and as a result multi-storey projects often struggle to secure cover or find themselves back at the drawing board looking to concrete or steel as an alternative.

A research paper, Insurance Challenges of Massive Timber Construction, carried out by RISCAuthority on behalf of 24 insurers including Aviva, Axa and Zurich, argues that the best way forward for the industry is to take a hybrid approach to building structure.

Exploiting a combination of conventional and modern building materials and methods, it says, helps limit financial losses to satisfy the needs of insurance risk control as well as meeting carbon reduction targets.

Piercy&Company’s Berkeley Square. A hybrid structure of steel and exposed CLT will lie behind the facade.
Difficult environment
Insurers are reluctant to underwrite mass timber projects mainly because timber lacks the inherent resilience of steel and concrete. Combustibility is a key concern, but according to the report, water damage is more important, as leaks tend to occur more often and timber is more susceptible to damage to finishes, delamination and structural deterioration.

Jim Glockling, director of RISCAuthority and technical director at the Fire Protection Association, says: ‘In a multi-storey environment, escape of water is a massive area of loss. It can’t be underestimated how important that is to the insurer. Masonry and concrete are resistant to escape of water; massive timber isn’t.’

This is confirmed by Andrew Waugh, director at engineered timber pioneer Waugh Thistleton Architects: ‘Increasingly we find insurers are primarily concerned about long term water ingress – leaking taps and flooded bathrooms. This means demonstrating that leak detection systems are installed, detailing adequate water proofing, and ensuring that our client hires a competent contractor.’

A fundamental maxim of insurance is ‘you can’t insure what you can’t quantify’, and a shortage of research and knowledge on the impact of fire or water on composite wood materials adds to the perception of risk.

The report states that massive timber building designs are being proposed ‘at a form and scale that is running ahead of current scientific understanding, testing and research’, which therefore cannot fulfill insurers’ requirements for information.

Glockling comments: ‘If an LVL or glulam beam has had water dripping on it for a number of years through a leaky roof, how easy is it to adjudicate on whether it’s still structurally capable or not?...you still can’t get people to sign off that a certain amount of fire or water damage in mass timber buildings isn’t meaningful to structural integrity, which generally means structure has to be replaced, adding to the expense.’

Designers must understand that simply aiming to achieve compliance with building regulations is pretty meaningless to the insurer

CASE STUDY: 38 BERKELEY SQUARE
An innovative hybrid steel/exposed CLT structure was developed for the recent construction of 38 Berkeley Square, a nine-storey office block in Mayfair by architect Piercy & Co.

Through a first principles ‘deterministic’ approach to proving fire performance, including detailed calculations and upfront design, the project team was able to meet the requirements of the London Fire Brigade, approved inspectors and insurers.

Specialist contractors, including structural timber contractor B&K, were engaged during pre-tender stages, Sweco Building Control regularly assessed design proposals, and a timber calculations specialist crunched the numbers to demonstrate that the building would not present an increased fire risk.

Structure reimagined
The research highlights various hybrid measures implemented on successfully-insured projects. These include using concrete cores in mass timber buildings to vertically route services and house plant and electrical intakes, which can improve building stability, reduce combustible void challenges and make access safer for firefighters.

Similarly, locating all bathrooms and kitchens within concrete cores can reduce the potential for escape of water damage and can support built-in drain-to-safe features.

Furthermore, building the first floor in concrete can protect against arson or accidental fire during construction and improves resilience to flood. Alternating CLT floors within concrete or steel-framed buildings can preserve a higher level of ‘insurance relevant’ compartmentation, says the report, improving building stability under fire and supporting fire fighting activities.

‘Light timber structures are really a loose collection of voids, so it’s difficult to argue that a CLT version of that same building wouldn’t be better,’ says Glockling, ‘especially when structures are designed to be more tolerant of escape of water, either by installing specialist devices, or designing the structure to shed to a safe place.’

He adds that to realise insurable mass timber structures designers must first understand that simply aiming to achieve compliance with building regulations ‘is pretty meaningless to the insurer’.

Current regulations and the framework for the specification of construction materials, methods and safety systems, are developed to ensure structural stability for enough time to complete evacuation, but after that time has elapsed, there is no further expectation for the building to resist fire.

The RISCAuthority study details 26 insurance-relevant design features that affect overall building insurability, divided into six principal categories covering building occupancy and use, scale, structure and fabric, other risk factors, and fire and water mitigations.
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‘Architects should take those opportunities to address these within the RIBA design phases and build in whatever measures they can,’ says Glockling.

**Experienced team**

Construction issues such as long term movement or visual cracking can be avoided if a contractor team with sufficient knowledge and experience of pulling together different materials is appointed.

Greg Cooper, managing director of Derby-based Hybrid Structures, explains: ‘We have the experience, knowledge and test data; we know what works on projects, what details meet requirements in terms of robustness, and how things are manufactured and go to site. It’s all about bringing together a full turnkey solution, rather than looking at everything in isolation.’

Concise detailing of junctions, connections, and interfaces to ensure they meet acoustic, fire and durability requirements during construction and operation is key, he adds.

Unfavourable market conditions experienced by engineered timber in recent years have galvanised a number of other initiatives striving to unlock construction through research, design innovation or cross-sector collaboration.

Recent research carried out by the Timber Accelerator Hub, run by the Alliance for Sustainable Building Products, has investigated the barriers preventing wider uptake of mass timber, how to overcome difficulties obtaining insurance and negative perceptions about fire performance and prohibitive regulation.

The New Model Building project, led by Waugh Thistleton Architects with UCL and Buro Happold, aims to create a pre-warrantied standard design for a six-storey mass timber housing block.

The UK needs to move quickly to catch up with other countries already backing engineered timber construction, says Waugh: ‘The rest of the world is changing its building codes to promote the use of engineered timber and is using public procurement to encourage the construction of timber housing, schools and hospitals. Building in timber is still the only viable way to reduce the carbon burden of construction.’

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**CASE STUDY: 6 ORSMAN ROAD**

6 Orsman Road in Shoreditch, designed by Waugh Thistleton Architects, is a six-storey commercial office supported on a steel frame with a CLT core and floor slabs. Steel takes the principal gravitational loading, while the slabs and core act in diaphragm to take shear forces.

The project achieved a 70% reduction in carbon emissions over traditional steel and concrete and its weight was reduced by 60%. Construction was also significantly faster and less expensive than the concrete steel equivalent.

Above CLT floor slabs with steel at Waugh Thistleton’s Orsman Road.

Left CLT core at Orsman Road.
Liquid
Fluidity in form and function.
How Jodrell Bank got another saucer

Julian Gitsham, principal at architect Hassell Studio, and Christopher Matthews, associate director at structural engineer Atelier One, explain the philosophy and structural engineering behind the thin, concrete-domed roof of the First Light Pavilion at Jodrell Bank, home of the famous Lovell radio telescope.

What was the thinking behind the creation of a domed pavilion at Jodrell Bank?

Julian Gitsham: This building is a visitor centre, a museum and an exhibition space to tell the story of Jodrell Bank and radio astronomy; it is the first place that visitors arrive at. The idea was for the building to connect time, the earth and the sky. We also wanted it to be a landform and for people to be able to assemble on top of it to take in the views – even though you cannot build above a certain height to prevent interfering with the telescope.

We worked with Atelier One and exhibition designer Casson Mann from the very start. We conceived the dome as a concrete shell to maximise flexibility for the exhibition design. It is super-thin, super-high-performing and it is 76.2m diameter including the earth berm, which is exactly the same diameter as the dish of the Lovell telescope.

Describe the form of the building

JG: We orientated the entrance directly south because Teresa Anderson, the director of Jodrell Bank Centre for Engagement, wanted it to have a meridian line slot at local astronomical noon. It lines up directly with the meridian line.

We wanted the aesthetic to be pared back with nothing superfluous – exposed concrete walls and concrete floor; it’s the same functional approach Lovell took with the telescope. The domed roof is formed from a 200mm slab, an insulation layer, a drainage layer, and then the soil build-up with the green roof on top. The building is single storey.

The team at Hassell and I worked closely with Casson Mann on the flow of visitors. The idea is that on entering the building visitors are orientated through the exhibition design and into the space dome auditorium, which is like a massive planetarium. You leave the building on
the trajectory of the sling shot of Apollo 11 around the moon, which directs you to the Lovell Telescope. Plant is housed in a cut-out at the back of the mound while the café is in a cut-out on the east.

Is the dome a shell-structure?
Christopher Matthews: It’s basically a thin-form concrete shell structure. If you had a perfect dome with a perfect boundary [and no cut-outs] with a ring-beam around the base you could have built it with no internal supports. What we’ve ended up doing with this dome, which is quite rare, is have it working partly as a self-supporting dome and partly as a bending stiff structure by supporting it on the curved central wall that runs between the auditorium and the main exhibition space. Professor John Chilton from University of Nottingham advised us from his knowledge of past shell structures, giving us a potted guide of the pitfalls of dome design.

Why use concrete?
CM: Burying the building makes it ideal for a dome form and that lends itself to concrete. Our aim was then to minimise the volume of concrete required. The overall roof diameter is 50m, but the maximum span between supporting walls is 20m. Because the concrete roof works predominantly as a dome, the thickness of the roof slab was only 200mm which, considering we’ve got 20m spans, is remarkable.

Is the concrete reinforced?
CM: Yes, but we’ve refined the reinforcement design by subdividing the dome into reinforcement zones depending on the forces present. In areas away from the supporting points the structure works purely as a shell in compression, so you need less reinforcement, but in the areas where it rests on supporting walls you get some bending, so in those areas there is more reinforcement. The way the structure works meant we didn’t rely on a high grade of concrete.

What foundations does the building have?
CM: If we’d been able to use piles to take the high trust forces at the edge of the dome then it would have been easy but, because the site is almost a bog with a very high water table and very soft soil, we had to design the floor of the building to act as a giant raft.

The concrete roof, concrete supporting walls and concrete floor are all tied together to form one contiguous structure. That means you have to consider the entire envelope as one to be able to show that it works, which is why it is actually tricky to analyse.

How was the roof constructed?
CM: We did the engineering up to RIBA Stage 4 and then main contractor Kier delivered the final construction drawings. Because we designed this as a monolithic structure you couldn’t have any movement joints so Kier had to be very careful about the prevention of cracks as the concrete set and shrank. Kier cast the dome on a mould of CNC cut polystyrene void formers placed on a scaffolding deck. The entire roof was cast in one continuous pour to prevent shrinkage cracking. They started at 7am and poured 381m³ of concrete in one day, which was remarkable. Kier not only managed to get the thickness constant but by using a team of sweepers and polishers they gave the roof an amazingly uniform finish.
Salaries and supply lag in post-lockdown reset

Demand is outstripping architectural availability and inflation is higher than growth, leaving practitioners 3% poorer, reports Aziz Mirza

The cost of living crisis has brought pay, recruitment and retention issues into sharp focus. As the economy gears up post-lockdowns, skills and labour shortages have emerged in response to a serious mismatch between demand and supply across all parts of the economy. Our Architects’ Workload Survey has shown new enquiries returning to pre-pandemic levels, with a particular boost in residential and commercial workloads.

While demand for architectural services is rising, the number of available architects has held steady. ARB figures show that the number on the register has stood still for two years, so pressures are mounting – more work, the same number of architects. Recruitment and retention are under strain.

That is important because two out of three architects are now salaried employees in private practices or other private or public sector settings. Average pay for private practice salaried staff has increased by just 2% this year; pay in the public sector is up by even less than this, as shown by this year’s RIBA / The Fees Bureau Architects Employment & Earnings Survey.

Coupled with the cost of living crisis this creates three potentially contradictory effects. The first is that some architects may become concerned about their finances; and as living costs make job security paramount they conclude this is not the time to move jobs, so they stay put. The second thought is that some architects may look to move to better paid positions, creating a recruitment surge. Thirdly, some architects may take on work as freelancers in addition to their main paid job, or move from part- to full-time employment.

The profession is likely to see all three effects occur over the next year. What is not yet clear is whether any one of them will dominate; but it is wise to be prepared for all three. We can see evidence of the third effect already with the ARB figures showing the pool of talent is static – architects who were not working have joined the workforce. Last year, 2% of architects were unemployed and another 1% were not working for other reasons. By April this year, the

KEY FINDINGS

- Architects’ average earnings on 1 April 2022: £43,650
- 6% rise on last year
- Average earnings failing to keep up with inflation
- Fewer architects working part-time
- Extremely low number of architects unemployed or not working for other reasons
The proportion of architects who were unemployed or not working for other reasons had, in total, fallen to less than 1%. Similarly, fewer architects are now working part-time. The proportion of part-time male architects edged down from 11% to 10%, but the fall was far more dramatic among female architects, 19% of whom now work part-time, down from 24% last year. Overall, the proportion of architects working part-time has dropped from 15% to 13%. This is in line with historic figures; 13% of architects worked part-time in 2015, for example, so it looks unlikely that the level of part-time working has much further to fall.

That means that the profession has little or no spare capacity. The last time unemployment was this low was between 2003 and 2008. The other measure of productivity is to examine under-employment; last year 8% of employees in private practice reported they were under-employed; this year, the figure is just 4%. These statistics suggest a rapidly approaching tsunami of pressures for employers. Relief may come from hiring more technicians, Part 1 or Part 2 graduates.

But if an employer values its architects, retention and recruitment policies will need to adapt. In fact, it is likely that retention will become the new recruitment strategy. There will be a focus on benefits and working conditions. The greatest benefit is flexible working – both working from home and flexible hours. WFH has the potential to score well in broadening diversity and inclusion. It helps with work-life balance. Architecture is well placed to take advantage of a blend of remote working balanced with creative team days at the office or another venue. Recruiters are aware that WFH is no longer a desirable add-on; it is becoming an expectation among job seekers. Flexible working is the single biggest benefit employers can offer.

Other benefits may be seen as more marginal – pension contributions, life assurance, medical insurance. What is unexpected in this year’s survey is that far fewer architects are receiving

These statistics suggest a rapidly approaching tsunami of pressures for employers
these benefits this year than last. The proportion of architects whose employer pays for their RIBA subscription has fallen from 89% last year to 83% this year; slightly fewer pay the ARB subscription, down from 87% to 79%. Employers paying medical insurance has fallen from 27% to 18%; providing a company car has halved from 17% to 8%. As this is probably cost-cutting in response to the pandemic, it is likely that architects will look to reinstate these benefits over the coming months. Those figures are for all architects across all sectors; but similar or larger falls are reported by salaried architects working for private practices. Even among private in-house architects, who have traditionally received the most generous benefits, provision of a company car has fallen from 42% last year to 22% this.

Benefits are valuable both for retention and for recruitment. But so is pay. Staff will expect a salary to keep up with inflation. Currently, inflation is over 9% but wage growth has been 6%. That is a real fall of 3%. Worse, if we look just at salaried architects, salaries for those working in private practices have increased by just 2% while public sector architects report a rise of less than 1%. These are real-term falls. We are likely to see more widespread public sector strikes in the coming months, resulting in greater attention being paid to the need to resolve pay pressures caused by the cost of living crisis. Surely the calls for inflation-matching pay increases will become loud and widespread.

Aziz Mirza is a director of The Fees Bureau

The annual RIBA / The Fees Bureau Architects Employment & Earnings Survey is a research survey conducted by The Fees Bureau among RIBA members and excludes members based overseas. A sample of members was invited by email to complete an online questionnaire form in May to August 2022. We are very grateful for respondents’ willingness to provide their earnings information and for continuing to support the survey. A full report on the survey, Architects Earnings which includes detailed tables and charts, is available to buy from The Fees Bureau, see www.feesbureau.co.uk

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Why acoustics matter and how to specify them

Jan Woldanowski, national ceilings manager at Knauf UK & Ireland, explains why acoustic ceiling and wall treatments are not just about absorbing as much sound as possible.
The importance of good acoustic design in buildings cannot be understated. According to a 2020 report from the European Environmental Agency, one million healthy years of life are lost every year due to the effect of noise.

Acoustics should be considered from the early design stages, but to specify the most effective solutions it is imperative first to understand the difference between sound and noise.

**Sound or noise?**

Sound is defined as vibrations that travel through the air as an audible mechanical wave – sound wave – into our ears. As sound moves in all directions, the acoustic treatment of a room is about defining the movement of sound.

Sound is regular, with pattern, whereas noise is irregular and is considered unwanted sound. Creating acoustic comfort is about removing unwanted noise.

There are several different ways to affect sound: absorption, reflection and diffusion. Reverberation time – the length of time sound takes to fade away after the original source of sound has finished – is also important.

Reverberation time can be reduced by absorbing some of the sound in the room using acoustic ceiling and wall treatments.

**Defining the type of sound required**

However, acoustic solutions are not just about absorbing as much sound as possible. Choosing the right acoustic material means finding a balance between absorbing and spreading sound. For example, in a classroom the sound should reach all students – even those at the back, without the teacher having to shout.

It is important to look at the outcome when defining the acoustic environment. What type of sound is needed in the end? Is total silence required for concentration, or do people need to interact? That is where the correlation between reverberation time and the level of sound in a room can help define the end result.

Reducing reverberation time is an important consideration when designing offices, schools and leisure buildings, where good acoustic treatments can create an environment more conducive to concentration and learning.

In fact, a study from the Danish Technological University by Pawel Wargocki in 2014 found that acoustic ceilings can improve students’ ability to identify words correctly by up to 35%.

Good acoustic solutions are equally important in office settings. A study by David M Sykes in 2004 showed that a good acoustic environment can reduce stress levels by up to 27% and error rates by up to 10%.

Traditionally, acoustics have been synonymous with mineral wool due to its sound absorbent quality. However, Knauf acoustic systems can do more than this.

All Knauf acoustic boards and tiles are manufactured using gypsum. They absorb up to 90% of the sound that hits their surface and can also diffuse noise through their perforations.

**Sustainable acoustic solutions**

During the specification process a balance must be found between managing the acoustics of a space and using products that help improve the building’s environmental performance. Knauf acoustic ceiling products can meet both these requirements.

Gypsum is natural, durable and recyclable. Knauf acoustic systems contribute to BREEAM and LEED credits by reducing building material life-cycle impacts. Repurposed gypsum boards are used in the production of acoustic ceilings, which contain up to 30% recycled gypsum.

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How can we empower the people who use streets, cafés, squares, schools and the rest of the important buildings and places that make up our built environment? As increases in the cost of living bite, we need towns, villages and cities that give users agency, creating opportunities for play, for conversation, for community. Over the years the RIBAJ MacEwen Award has recognised projects that give users a chance to be part of the process of design and making. It has rewarded schemes that help clients to support those in need – like at last year’s winner, the engaging Nourish Hub designed by RCKa that tackles issues connected to food and healthy eating (above) – and to go beyond that to serve a wider public, to enliven a street and create a sense of place. We are looking for architecture that builds dignity and joy, and puts the people who live, work and play in and around it in the driving seat.

The RIBAJ MacEwen Award is our way of getting to the heart of responsible architecture. We call it ‘Architecture for the common good’ because it celebrates those built projects which are of wide and demonstrable social benefit. It brings together the well-known with the up-and-coming, the national with the local.

And it’s time to enter MacEwen 2023!

DEADLINE: 2PM, MONDAY 31 OCTOBER
RIBAJ.COM/MACEWEN-AWARDS

THE MACEWEN AWARD is named after Anni and Malcolm MacEwen. She was an urban planner who pioneered a conservation-based approach to regeneration in both town and country, he was a campaigning journalist and former editor of this magazine.

We are delighted to be supported by BDP, a multi-discipline practice that has always been guided by a strong social ethos.

As with all RIBAJ awards, it is free to enter and aims to reach previously under-represented parts of the profession.
Talent should be recognised

RISING STARS
2022

ENTER NOW

We are on the hunt for the movers and shakers of tomorrow. Should you or someone you know be entering RIBAJ Rising Stars 2022 in association with Origin?

We want construction's rising stars, those reaching for the sky in architecture and the built environment.

Have you found a unique niche to set up in practice? Have you developed a new way of really consulting the community? Spoken out for fairness in the profession? Initiated systems and checks to make your company green? Rethought designs to make a project feasible as material costs rocket? Found a way to support Ukrainians in need? Or delivered an amazing collaborative project against the odds?

The best early-career professionals have brought to their teams the agile thinking and resilience needed to come through the pandemic and cost of living crisis, and readied them to grasp new opportunities.

Whether your talents lie in design, management, clear sighted thinking or working with teams on site, in education or in forging your own collaboration network, we want to hear from you.

To be eligible architecture graduates needed to have completed either RIBA Part II, or equivalent, no longer than 10 years before Wednesday 7 September 2022. Other professions need to have completed their professional qualifications within 10 years of 7 September 2022.

Deadline Wednesday 7 September 2022, 14.00 hrs

Winners will be profiled in the RIBA Journal and on ribaj.com and invited to an exclusive Class of 2022 round table.

ribaj.com/enter-rising-stars
Having won last year’s Scottish Landscape Photographer of the Year, and being the category winner at the British Photography Awards, Dylan Nardini knows a thing or two about landscape; and given what he does as a day job, perhaps it’s not so surprising. For the last 29 years, Hamilton-based Nardini has been a freight train driver—and so from his cab has witnessed sunrises and sunsets in virtually every part of Scotland and northern England.

‘I’ve seen everything – at all times of day and in all kinds of weather’, he says nonchalantly, ‘and I’ve realised that being in the landscape on my own is one of the best feelings.’ In fact, the train driving became as absorbing as meditation, where Nardini, silently passing through some sublime Scottish landscape, would observe and consider it, perhaps returning later to capture it.

This photo is of an altogether different journey, recorded on a pocket Sony after he’d dropped his car off at the mechanic in Motherwell and was walking the two miles back home. Around him was the town’s run-down residential housing, undergoing painfully slow regeneration, and in the distance, looking down on it all, the copper clock tower of the town’s old Co-operative Building on Dalziel St. Nardini was struck by both the colour and the twisted geometry of the garage doors but also noticed the roof felt slumped over the flank wall; solid block and hand-painted goalposts presaging the open ones just round the corner. — Jan-Carlos Kucharek
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Tour Elithis, France © Elisabeth Leblanc
Sitting in the park, surrounded by a desert of bleached white grass, I contemplate other worlds without greenery. Where biodiversity may only exist at microbe scale. I have heard on the radio how stars explode and about the huge nuclear forces that have thrown elements into the universe, elements that eventually became life on earth – but nowhere else we know of.

The climate emergency focuses us on the fragility of the systems that sustain us on our own planet, but it can be helpful to zoom out. Over the summer a Martian House has landed in Bristol. Its design has been informed by artists, local people, space scientists and architect and Antarctic specialist Hugh Broughton Architects, along with Pearce+, a small team that spun out of HBA. From the ground up it puts the challenge of existing in such a hostile environment: buried to protect its occupants from radiation.

Inflatable formwork and algae would be the raw materials to turn one of Mars’ few known resources, regolith, into a solid masonry-style carapace. It is very limited compared to the materials whose strength and protection we use, from the output of the oil age to mined metals and stone and the living crops of hemp and timber.

The Martian House demands that the Existenzminimum (minimal subsistence dwelling) is utterly pared down. In local workshops favourite objects and what to leave behind cropped up along with privacy (and its impossibility). On Antarctic bases agricultural zones have been co-opted for relaxation. ‘People book into the hydroponic growing spaces,’ says Owen Pearce of Pearce+. So the Martian House is topped with a hydroponic living room to make the most of the nourishment of plants at a psychological level.

The Martian House mirrors what is happening in sustainability, which is about both grappling with technical challenges and all the social and cultural issues alongside; with climate justice and biodiversity among the themes fighting for a place as we try to work out what, beyond cutting carbon, might mitigate climate change.

That is reflected in the buildings and areas we are covering in this magazine. There is the technical, with plenty of personality thrown in: we profile German physicist Hans Joachim Schellnhuber, who has brought us the concept of a temperature tipping point, Sofie Pelsmakers and team detail ways to test that your design is truly sustainable, and we examine how to design mass timber buildings that are insurable. And we look at buildings aiming to be low carbon that will make you feel good and deliver community wide benefits, with a yoga centre in Oxford and Mæ’s home for the elderly in London’s Blackheath.

Finally, if you want to do a bit of your own star and planet gazing and think big thoughts, turn to page 60 for the Jodrell Bank Observatory.

Calling interplanetary craft

Could alien landings help us understand the climate emergency better, asks Eleanor Young

Martian House, the base using repurposed landing craft to support life on Mars.
Action stations in the House of Architecture

The RIBA's Biennial Action Plan covers balancing the books, PII, climate and more, says Simon Allford

Last month we published the organisation’s 2022-23 Biennial Action Plan, which has been set by the RIBA Board, with support, strategic advice and guidance from your elected representatives on Council, the staff team and other members.

With 10 clear priorities – from balancing the budget to seeking solutions to the PII crisis – it will enable the RIBA to focus its outputs and deliver key objectives: to support architects, to promote architecture and to cultivate excellence.

The House of Architecture underpins all our thinking for the next two years: a programme to inspire members, professionals, students and the public through engaging, audience-focused exhibitions and events, delivered physically and digitally. The programme includes the essential refurbishment of our long-term home, 66 Portland Place, led by Benedetti Architects, to create an accessible, low carbon house of culture and debate. Many of you will have also seen that in five years’ time our partnership with the V&A will draw to a close. This is an exciting, once in a generation opportunity to consolidate and showcase RIBA’s vast, growing collection (over 4 million artefacts, currently housed across five sites) – and share with a much larger public audience.

While the overarching objective is to balance the budget, we have also protected our £100 million endowment generated by the sale of our specification information business, NBS. We can use this to generate and distribute annual funds to support membership-led initiatives – think RIBA pop-up exhibitions and events for members and the public organised by our branches and chapters worldwide. The Member Hub – our virtual, dynamic platform for members – is helping us to better understand your needs with your input on the guidance and support you want, such as a ‘Practice in a Box’. This is our plan to pull together toolkits to help practices thrive and deliver low embodied and operational carbon design.

In terms of gathering member insights, RIBA Council task and finish groups are working hard to provide council and board with direction to ensure the best allocation of resources, based on the issues that matter to you.

For example, our education and equality, diversity and inclusivity teams are working closely with our finding and accessing architecture group to look at expanding initiatives to connect local practices and schools to help children consider a career in the built environment. They are looking at new structures of validation that will facilitate the emergence of more accessible earn and learn programmes.

Our PII group is progressing its review of professional risk and market conditions, initiated by visionary past president, the late Marco Goldschmied, and working with insurance industry experts to scope out a radical new model to serve practices and their clients. Our climate council task and finish group is collaborating with other built environment organisations while a similar group is looking at our relationship with the ARB. Both I and board chair Jack Pringle regularly meet with its chair and chief executive.

In terms of changes to RIBA’s staff team, we are recruiting a new chief executive and have already appointed a number of executive directors, including those who will be heading up our commercial, membership, and architecture programmes and collections pillars. This is part of a major internal restructure that develops a leaner, high-performing team. This also crucially allows us to bring the operational deficit down from an unsustainable £8 million per annum to zero by the end of 2023.

In summary, the biennial action plan is designed to help staff and members collaborate to achieve the task at hand. We need to ensure that everything we do is done well, and provides value to members and society. This may mean doing less, but better, and ultimately achieving more – through harnessing the extraordinary talent of you, our members.

Finally, before I sign-off, I would like to send my congratulations to Muyiwa Oki, the RIBA’s next president, who led a commendable campaign with an electoral manifesto focused on the future of the profession. I look forward to working with Muyiwa as president elect before I hand over the baton in September 2023.
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Vipers in the concrete jungle

Right-wing sympathisers are infiltrating architectural criticism to peddle reactionary views online, says Will Wiles

Reactionary architectural opinions are a big hit online. They often build huge followings pushing out pretty pictures of half-timbered houses jettied over cobbled lanes, Hanseatic gables, Oxbridge Gothic, neoclassical Paris. So far, so harmless – and you can find plenty of modernist versions as well, with the same rotation of Paul Rudolph and Yugoslavian monuments. This is just the background jungle; we are looking for the viper.

Sometimes the chocolate-boxy accounts have an edge: a polemical thread, air of disquiet, a message. It is hard to distinguish at first but they have avatars taken from paintings or classical sculpture and over the pictures of Heidelberg or Mont-St-Michel they pose the question: Why don’t we build like this now? Dramatic contrasts are drawn: a picture of (say) the Royal Crescent in Bath is set against (say) micro district housing in Volgograd and we are asked why, when everyone loves the former, so much of our environment looks like the latter? Appeals are often made to inarguable objective standards, which no one could dispute: beauty, timelessness, the human scale. Why can’t we go back? What went wrong?

These are rhetorical questions – they like to explain the answer, generally (on Twitter, at least) in windy, pompous, multi-tweet threads. They don’t quite explain all of it – there are some blanks the reader is left to fill in for themselves, but we are left with an important outline: we were led astray. A villainous caste of malign experts and assorted perverts decided to uproot our culture and history to impose a global order of placeless, soulless concrete, glass and steel to make us obedient socialists, or consumers, or (somehow) both.

While they pretend to historical literacy and flatter their readers as enquiring minds seeking truth and beauty, these accounts are generally striking for their incredible, wilful ignorance and incuriosity about why these shifts and ruptures came about. Some may be pretty harmless, but some certainly are not. They pose as enlightened bearers of deep wisdom while spooning out puddle-shallow sentiment. Anyone with a little understanding of the 20th century will detect something whiffy in this back-to-the-old-ways posturing, and you don’t have to delve too far into many replies and retweets to see a large number of very sinister nationalist, racist, and outright neo-Nazi followers sharing this kind of content. But, disturbingly, many regular social media users don’t go in for that very basic diligence and will happily share a few pretty pictures with some seemingly erudite commentary attached without looking too deeply. And some, without thinking too deeply, will be led down a very murky path. That’s the intent. The blanks in these aesthetic manifestos are there so as not to frighten anyone. They aim to create a general sense that a precious shared European patrimony has been stolen from trusting, right-minded folks by this malign outside force. Believe that, and the mind is ready to accept more blunt and racist far-right messaging.

Arguing is pointless, and so is sharing this rubbish to dunk on it, because it’s engagement they want. This isn’t really about architecture, and when I criticise these accounts I’m not attacking classical or traditional architecture. They don’t care. They aren’t interested in promoting better building; the only style that matters to them is paranoid. It’s all just a means to set up a sinister stage play in which odious rootless cosmopolitans are undermining the pillars of European civilisation and polluting all that is beautiful and true. You don’t have to know too much European history to know what happened last time those beliefs were widespread. Retweeter, beware.

Will Wiles’ new novel, The Last Blade Priest, is out now from Angry Robot Books

HUNGER GAMES
Architects may be dismayed at how often this sort of online nonsense points the finger at them for the evils of drab modernity. As I say, arguing directly with these suspect characters can be counter-productive. But their existence does point to an appetite for intelligent architectural content online, and explanations for how the world looks the way it does. This indicates ways that architects might fruitfully find a following online – without the sinister dog-whistles.

Left When is a half timbered building also a Trojan house? Dome Alley, Cathedral Close, Winchester, Hampshire.
Hans Joachim Schellnhuber has spent 30 years at the forefront of scientific research into the effects of runaway climate change. Now he believes he has the cure: make buildings – lots and lots of them – from wood. ‘Everyone says there are no silver bullets but I guess we found one’, the 72-year-old physicist tells me via Zoom from his office at the Potsdam Institute for Climate Impact Research, which he founded in 1993 and led until 2018.

The premise is straightforward. Cutting greenhouse gas emissions will not keep global warming within the target of 2ºC. Some help comes from natural biosinks – the seas and forests that take up CO₂ – but they are overwhelmed, so we need artificial biosinks too. We have 1bn ha of degraded land that could be replanted with trees, but as forests mature they start to emit as much as they absorb. That’s where the buildings come in. By harvesting timber to make cities, we can lock up vast quantities of carbon for the long term while promoting forest growth. Build enough, and global warming goes into reverse.

How much timber are we talking about? By planting and maintaining 500bn trees, and constructing 2bn timber buildings over a couple of centuries, the atmosphere could be returned to a state not seen since the Industrial Revolution. ‘Of course it will not happen this way,’ Schellnhuber concedes, ‘but if only half of that is achieved we can still save the world.’

To help catalyse that transformation Schellnhuber has founded Bauhaus Earth. Formally launched in 2020, the think-and-do-tank is jointly led with architect Philipp Misselwitz. Earlier this summer, its first big conference took place in the Vatican. (Schellnhuber is climate advisor to Pope Francis, as well as European Commission president Ursula von der Leyen, who gave the keynote). Pritzker Prize-winners Shigeru Ban and Francis Kéré were among a starry cast of architects in attendance.

This new role as a passionate advocate for climate-friendly construction is just the latest twist in Schellnhuber’s varied career. ‘People boast that they made a perfect design of their life trajectory,’ he says. ‘This is rubbish. We are all driven by accident or incident.’ Growing up in Bavaria, Schellnhuber – known as John – had a love of nature and broad interests in culture, philosophy and politics. Excelling at mathematics, however, he pursued an academic career in theoretical physics. ‘It sounds arrogant,’ he says, ‘but everything else seemed too simple’.

Working at the University of California he was drawn from quantum mechanics into the emergent field of chaos theory. ‘Today it has a more respectable name: non-linear dynamics of complex systems’. Back home in the late 1980s he began to receive requests to model complex phenomena in the natural world, from tidal flats to the consequence of Gulf War oil fires. Another ‘accident’ nudged him fully into environmental work. After German reunification the scientific landscape of the DDR had to be reorganised, and an impressive Potsdam campus was earmarked for climate research – a subject that was just beginning to creep onto the political agenda. Schellnhuber was invited to be founding director. ‘Data was scarce but I instinctively felt

It felt like there were some big threats out there, but that they were so far away we had time to avoid them
this is the defining issue of the 21st century’. Initially, however, there was little sense of urgency. ‘It felt like there were some big threats out there,’ he recalls, ‘but that they were so far away we had time to avoid them.’ That confidence did not last. Helping Angela Merkel prepare to host the first UN Climate Change Conference, COP1, in 1995, Schellnhuber began to reframe the climate question in terms of outcomes to avoid at all costs. ‘In this way I discovered the idea of ‘tipping points’ in the earth’s system’. Our planet’s vital organs, such as the Antarctic ice sheets, Indian monsoon or the Gulf Stream could suffer irreversible harm, with devastating knock-on effects.

The first IPCC report in 2001 estimated that these might occur at 6°C warming. By the time of the Paris Agreement in 2015, Schellnhuber’s ‘tipping points’ were central to its argument, and his ‘guardrail’ figure of 2°C accepted as the safe limit. ‘But we know that danger really starts where we are, at 1.2°C,’ he says. ‘We will probably lose all coral reefs at 1.5°C. We already have a weakening of the Gulf Stream. So now it is really time to panic’.

Warming at the upper end of the predicted range would mean the end of civilisation, as coastal cities vanish and large regions of the earth become uninhabitable. ‘Nobody should imagine that you could manage the migration of three billion people without bloodshed and the collapse of social systems’. Until quite recently, he says, such suggestions were ‘taboo’. Today there is some variety of opinion among colleagues about timescales, but the basic analysis is broadly accepted: ‘Concern has increased exponentially over the last decade’.

Although the message is alarming, it’s delivered without apparent sensationalism. In conversation Schellnhuber is matter-of-fact, with a wry sense of humour and a nice turn of phrase. While public roles have sometimes required opinions on political issues to be carefully worded, he remains refreshingly candid. ‘Scientists still have the privilege to speak freely,’ he says. ‘I never felt that my three roles as a basic researcher, a policy advisor and a communicator required
a split personality’. His ability to translate complexity into simple concepts – ‘tipping points’ and ‘carbon budgets’ – has been vital in broadening public understanding. ‘It’s OK to express yourself in simple terms if you’re right’, he says, ‘but that’s the most challenging of tasks.’

Timber as the ‘silver bullet’ is another easy-to-grasp concept, though perhaps lacks a suitably snappy catchphrase. Schellnhuber is using ‘the forestry-construction pump’ and ‘the co-transformation of built and planted environments’.

‘It’s a narrative based on human agency, which is why people love it’, he says, ‘but it’s founded on very sober analytical work’. Instead, he says, carbon can be converted into things of real value. And unlike visions of sustainability predicated on scarcity, his offers abundance. ‘The more you do, the better’.

That’s not to say we should replace existing buildings. Retrofit makes sense if bio-materials are used. But there’s a misconception that Europe is now ‘complete’. Germany needs 400,000 new homes every year. Wood should be the default option. The real prize, however, is in the Global South, where perhaps 80% of buildings needed in the coming decades don’t yet exist. ‘If they build as we have done, it’ll be the end of our climate story’.

There are, of course, enormous challenges to overcome – technical, industrial, cultural – all of which Bauhaus Earth aims to address. The impetus behind it was another ‘accident’, says Schellnhuber: ‘2019 was the 100-year anniversary of the original Bauhaus. I thought that if all those people were reborn they would see the world going down the drain, and do something about it.’

For Schellnhuber, the Bauhaus provides a powerful example of both cross-disciplinary collaboration and design addressed to social purpose. We are at the end of the age of ‘extractivism’ – the fossil-fuel-based era that has shaped our political and economic systems. He believes that building more sustainably should be indivisibly linked to commitments to equity, justice and inclusion, and to beauty. That’s why the Vatican conference was called Reconstructing the Future for People and Planet. Bauhaus Earth has been busy on other fronts, too. There are plans for a base in Potsdam; a temporary pavilion should open in 2023, preceding a permanent structure. A material research lab will soon open in an old Berlin gasworks. Others will follow. Also completing this year is a new Barcelona Pavilion, constructed on the site of the original. Nascent initiatives include a successor to Germany’s International Building Exhibitions, working with partners to showcase innovative bio-construction in different parts of the world. It aims to show and seduce, not just tell.

To be effective, such ideas need to trickle down to parts of the construction sector where architects have little involvement. Is that realistic? ‘I tend to think in terms of ecosystems’, says Schellnhuber. ‘What we do can infect others. Most processes in nature and society are highly non-linear.’ The original Bauhaus is a case in point.

There are promising signs that Bauhaus Earth could exert an outsize influence. This month, Schellnhuber will address the G7’s sustainable urban development ministers. Already, his concept has prompted political action: inspired by Bauhaus Earth, Ursula von der Leyen has instituted the ‘New European Bauhaus’ – an integral part of the European Green Deal to make the EU climate neutral in 2050. A good start.

Going on past behaviour Schellnhuber has low confidence that we will do what’s needed to avert disaster, but remains positive. ‘Of course it is a tall order, but we are hopefully a part of a new global movement’, he says. ‘We can live better, and turn the built environment from climate villain into hero. I cannot give you a better story than that’.

The Bauhaus provides a powerful example of both cross-disciplinary collaboration and design addressed to social purpose.
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To slow climate crisis we must change our assumptions. Anna Liu explains how Flourish takes five outlooks and offers alternative ways to be.

Flourish: Design Paradigms for our Planetary Emergency compels every one of us to act for our planet, at each and every scale, from the individual to the planetary. To do so, we must understand, challenge and change our own current mindset.

Read this book from the beginning to the end, surrender yourself to the inspirational words and deeds from thinkers and doers around the world. Each chapter is anchored with at least two voices, from sociologists, psychologists, linguists, cognitive neuroscientists, physicists, biologists, to anthropologists, artists, architects, historians, engineers, economists and activists.

If you are at all unclear about the facts of the climate challenges, the first chapter outlines them in a clear, succinct way. Unequivocal data, on our recent past and our imminent future, reinforce the authors’ point about the urgency of the present, for example: the past 35 years’ production of more than 50% of our total historical greenhouse gas emissions, the past 50 years’ extinction of two thirds of the non-human animal biomass by humans, the 2050 predicted 140 million climate migrants resulting from the 3°C temperature rise.

The authors, Sarah Ichioka and Michael Pawlyn, endeavour to dismantle five myths, or paradigms, of our time, layer by layer, scale by scale, to create a new paradigm of action, courage, and hope. Given the urgency of our crisis, they propose we target the two highest leverage points outlined by American environmentalist Donella Meadows’ 12 leverage points. These relate to the most fundamental roots of our systems: to transcend paradigms and cultivate new ones.

The crisis is environmental, humanitarian, planetary, created by our own actions and inactions, built on a mindset with these five entrenched paradigms. These relate to: ourselves, nature, time, other human beings, and growth. Ichioka and Pawlyn demonstrate their sources and how they are now obsolete, damaging, and unfit for purpose. In their place, Ichioka and Pawlyn propose five new paradigms.

**Myth 1** About ourselves: We are powerless

**Regenerative paradigm 1** Possibilism

Human beings should become ‘possibilists’ (Hans Roslings, public health expert). Pessimism, scepticism, conservatism, and cynicism are simply not acceptable options. Human ingenuity has time and again prevailed in the face of the most extreme challenges. The building industry’s reform in the past decades has been woefully slow. As architects we are well-placed to be among the leading possibilists. We are adaptive problem solvers and solution-makers, and possess a diverse set of tools capable of effecting change.

**Myth 2** About nature: We are separate and opposite to nature — its conquerors, owners, profiteers, rulers

**Regenerative paradigm 2** Co-evolution as nature

Human beings are all expressions of nature.
Even the most artificial human endeavour is ‘handiwork just as it is in the handiwork of the spider or the bee.’ (Freya Matthews). As architects we should design and think as nature would. Using biomimicry in design emulates not what nature ‘looks like,’ but ‘nature’s logics’ – its holistic systems.

**Myth 3** About time: Time is a commodity, speed is of the essence

*Regenerative paradigm 3* A longer sense of time

Roman Krznaric’s ‘legacy mindset’ requires thinking long term, and being accountable to future generations. Rather than short term gains, consider the ‘big here’ and a ‘long now’. (Brian Eno) Architects must stretch our thinking beyond the lifespan of buildings: compel ourselves, our clients, our team, our contractors to imagine the future of what we build, for hundreds of years to come. In doing so, we shall all become ‘good ancestors’ (Roman Krznaric) to our grandchildren, and our grandchildren’s grandchildren.

**Myth 4** About other people: Survival of the fittest, we are all self-interested, competitive with and separate from other human beings

*Regenerative paradigm 4* Symbiogenesis

Each of us is integral to the existence of others (Freya Matthews). New species emerge through symbiogenesis (Lynn Margulis, evolutionary biologist), rather than purely Darwinian competitive differentiation. ‘Common welfare’ has long been a ‘pre-condition for one’s ultimate well-being’. (Alexis de Tocqueville, political theorist) Government investment is one example of ‘collective action’, in technology, education, infrastructure. As architects we should become ‘super collaborators’ with engineers and scientists, with the wisdom of vernacular architecture, and with the many initiatives emerging from grass-roots communities.

**Myth 5** About growth: Economic and development growth are the priority

*Regenerative paradigm 5* Qualitative planetary development

Just as an overgrown organism in time debilitates itself, perpetual growth leads to planetary illness. Care should replace growth as the primary aim, ‘nurturing the foundational connections of Society.’ (Kate Raworth). As architects we should commit to circularity, ‘localise production and globalise knowledge.’ ‘We should conceive buildings as a mass of metals, minerals and synthetic materials, alongside other planetary resources, evolving within the limits of their technical and biological cycles.

The Anthropocene, sometimes called ‘Capitalocene,’ is for Glen Albrecht the ‘new abnormal’ in which ‘planetary distress… uncertainty, unpredictability, genuine chaos… have clearly resulted from human dominance of the planet. He ‘wants this period in history to become redundant as soon as possible.’ To varying degrees we have all accepted, passively and complicty, something that in fact should be seen as an anomaly, rather than an inevitability, in human civilisation. In thinking this way, we can give ourselves more agency, to catapult ourselves out of this lethargic and unquestioning state, as consumers, architects, global citizens, and become the much-needed ‘possibilists’ in these tumultuous times.

Our current economic, political and societal systems have remained wedded to that which was put in place in a bygone era, one that had only just begun to understand nature. Consumerism and Darwinian free-marketism have been entrenched since. Our present era – digital, post-industrial, post-colonial – has learned invaluable lessons, and now possesses more advanced tools than ever for understanding nature. The newfound insights and tools on nature’s intelligence and intricacies should amplify our responsibility and bolster innovations towards nature-informed, nature-inspired, nature-driven, regenerative architecture. •

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Exchange

Liability, restructuring, House of Architecture – where is the RIBA going?
I found the response of the RIBA woeful and dismissive of the damaging and inequitable changes in liability law, given successive governments’ culpability in the cladding scandal, as demonstrated at the recent Grenfell public inquiry.

My early concerns have now been borne out. The RIBA’s own briefings now warn of dire consequences for the profession. The RIBA’s failure to highlight the consequences of changes in law and to engage with architects is significant. The reaction by the RIBA now is too little and too late.

Compounding this failure is the restructuring of the RIBA, which has led to the P&O-esque replacement of loyal and highly competent staff with inexperienced new personnel, whose roles have not been communicated to local RIBA branches or members. These changes have taken place without consultation, behind closed doors, with no information as to the institute’s objectives.

The outcome of this is to leave grass root members substantially unsupported while you and the HQ pursue grandiose plans for a ‘House of Architecture’, further promoting the perception of a London-centric profession. Surely if architecture is to be better understood by society as a whole, we should be focusing on our activities across the country, not just at Portland Place.

I have been an RIBA branch committee member continuously since 1987 and branch officer for all bar four years since 1989. I am appalled by the incompetence and contempt displayed by my professional body on these critical aspects of members’ working lives. I must ask why, if the RIBA HQ has such little regard for its members or the branch structure, the institute should expect those members to freely contribute their time? Therefore, after 35 years of service to the RIBA, I have, with considerable sadness, tendered my resignation from my branch committee.

David Burley, Burley Partnership, Devon

Thank you for your letter – your concerns are noted.
I must however stress the huge amount of work we continue to undertake with member representatives, the ARB, government, and insurance industry experts to support the implementation of the new building safety regime and promote improved levels of professional and regulatory confidence. To be clear: the changes to the Defective Premises Act were a direct response from a determined minister to provide owners and leaseholders with a route of redress when their home is ‘unfit for habitation’.

Our priorities now include the development of a principal designer certification scheme, and a comprehensive review (initiated with the help of late past president Marco Goldschmied and led by RIBA Board and Council member, Jennifer Dixon) of professional risk and PII market conditions. The latter will examine a range of measures, from the standardisation of PII proposal forms and policy wording, to enhanced professional risk management techniques.

I am also sorry to hear that you feel regional teams and members have been disproportionately affected by the RIBA’s restructure – I can assure you that’s not the case. The chair of Board and I were insistent on the need for proportionality. The organisation had grown organically and unstrategically over time, and operations had to be streamlined. The new structure encourages greater collaboration and shared expertise. It is leaner, more agile and will enable staff to provide more efficient support to members, wherever they are based.

I hope you managed to read Jack Pringle’s recent Board Bulletin, which provided an explanation of the rationale (to tackle the organisation’s significant capital deficit and operational losses) – please also search ‘transforming RIBA’ on architecture.com and read my ‘Memo to members’ for regular updates. This month’s RIBA Journal column (page 74) also provides an update on the House of Architecture programme.

The overarching aim is to ensure and optimise RIBA’s future; to rebuild an efficient organisation that has the capacity and capability to tackle the challenges we face – from seeking solutions to the PII crisis, to facilitating low-carbon design, to supporting students and opening up the profession.

The House of Architecture is neither grandiose nor London-centric. It focuses on our charter commitments to support architecture by sharing discourse at our long-term home with our global membership, digitally.

To become a 21st century Institute of Ideas we need all members to become more engaged in the debate as to how best to build our long-term low carbon future. We will continue to harness, capture and share your insights and intelligence, as that is our raison d’être.

Simon Allford, RIBA president

Correction
In RIBAJ May 2022, the RIBA Regional Award winning Wood Quays (p54) was incorrectly credited as being designed by Bere Architects. It was in fact designed by architecturall ltd with Bere Architects.
RIBA Books

Visit our online store, or drop into the bookshop at 66 Portland Place to get your hands on the latest releases for September 2022: the award-winning 21st Century Houses, a Good Practice Guide to Business Resilience, and House Goals: Design with architects, transform your home.

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Notice of RIBA Annual General Meeting

The RIBA Annual General Meeting will be held on Tuesday 27 September 2022, 14:00 to 15:00 (BST) to accept the RIBA Annual Report & Accounts to 31st December 2021 at RIBA, 66 Portland Place, London, W1B 1NT and online.


To attend the AGM, please register www.architecture.com/agm2022 no later than 12.00 on Monday 26 September 2022. When you register, please indicate whether you wish to attend the meeting in person or online.

Whilst all RIBA Members may attend the AGM, only Chartered Members are entitled to vote.

Yours sincerely,
Graham Devine,
Honorary Secretary

RIBA Academy Core CPD available to book

The 2022 RIBA Core CPD Programme is now available to book on RIBA Academy.

Meet your annual CPD requirements by purchasing a Club Ticket. This will secure your space on each of the 10 Core CPD topics, and gives you a significant saving compared to pay-as-you-go events.

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Obituary

Marcus Fairs
1967 – 2022

Marcus Fairs, the founder of Dezeen who has died suddenly aged 54, was a visionary whose work was rooted in his passion for old-school story-driven journalism, but who could equally draw from a seemingly endless well of brilliantly progressive and pioneering entrepreneurial ideas.

Fairs launched Dezeen from his spare room in 2006. It quickly became one of the most popular platforms in the global design industry, creating a new model for online design publishing that left much of the media scrambling to catch up.

Born in Germany, Fairs was interested in both writing and design from an early age, studying 3D design at the University of Wolverhampton. He travelled extensively after graduation, when he met his future wife and Dezeen co-director, Rupinder Bhogal. He joined Building Design in the late 1990s, later becoming deputy editor at Building magazine.

His status as an influential and effervescent fixture in the design world was cemented with a three-year tenure at the helm of Icon magazine, launched in 2003. He built a stellar editorial team (he always had a knack for hiring the best people) and in perfect tandem with the energy of London in the early 2000s, brought personality, humour and edge as well as genuine inquiry and rigour to the often slow-moving, industry-focused world of architecture publishing. Portraits by world-class photographers made it to the front cover.

Featured buildings became, and stayed, iconic.

After a fall-out with the magazine’s owners, Fairs turned his creative energies to blogging. Where the monthly magazine cycle had afforded few opportunities for breaking news, the internet allowed an immediate response, and being first with stories contributed greatly to Dezeen’s early success. With millions of followers globally, being ‘on Dezeen’ soon became a byword for success among many architects and designers.

Fairs’ commercial acumen was evident in numerous ventures developed around the Dezeen brand, from a jobs site and awards to videos for design-world clients. As editor-in-chief he was always at the centre of things – seeking the story of the day, the person of the hour – and always moving forward. Whenever he felt the site was becoming stale or predictable, another idea would emerge: events, talks, a series of critical essays, a hot list, an earth prize, books, a podcast, a virtual members’ club in the metaverse. Dezeen’s quality and innovation won armfuls of awards and in 2017 Fairs’ contribution to architecture was recognised with an honorary fellowship of the RIBA.

As well as building his own star-studded career, Fairs was instrumental in the launch and success of hundreds of others, from budding journalists to photographers and curators. At a small gathering a few days after his untimely death, the conversation among friends and colleagues returned repeatedly to his resolute willingness to give young people a chance, to be their champion.

Fairs also used his position to support countless small architecture and design studios, and the industry at large. In the first weeks of the pandemic, with backs against the wall as stock markets crashed, and advertisers, buyers and employers all over the world pulled commitments, Dezeen launched a Virtual Design Festival that gave a platform to designers, institutions and brands who were otherwise at a loss of how to communicate. Uniquely positioned to help, he did.

He is survived by his wife Rupinder Bhogal, his children Jordi and Millie Fairs, his parents David Fairs and Georgina Ledward, and his sister Elly Fairs, and will be tremendously missed by so many of us whose lives he changed.

Beatrice Galilee is a critic, curator and executive director of The World Around
Ludwig II became King of Bavaria in 1864 at the age of 18. But shortly afterwards, Bavaria became part of a new unified German Empire with his cousin Wilhelm I as the Kaiser, and Ludwig’s role became more symbolic than powerful. Increasingly withdrawing from everyday affairs, he became fixated with the idea of divine rule and obsessed with the French King Louis XIV. He commissioned the construction of three extravagant palaces – performative spaces in which he could act out his fantasies of sovereignty.

The only one of these palaces to be completed was Schloss Linderhof, a miniature Rococo fairy tale. Its grounds were filled with theatrical backdrops to the King’s whimsies, including a Venus grotto, lit by electricity, in which Ludwig was rowed in a shell-shaped boat while listening to Wagner. This dramatic cascade, photographed by Edwin Smith in 1966, descends from the Music Pavilion to the Neptune Fountain.

Ludwig spent vast amounts of money on these fantastical projects, which led to accusations of insanity and ultimately his deposition from the throne in 1886. He was found drowned only days later.

Justine Sambrook
architectural acoustic finishes

SonaSpray fcx in ‘The Market’ 22 Bishopsgate

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