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Haworth Tompkins puts a public face on Liverpool's Everyman
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On the cover

Everyman Theatre by
Haworth Tompkins
Photo
Philip Vile



abc
Net average
circulation
27,613
Audit Period: 1/7/12 - 1/6/13

RIBA  Enterprises

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Reading Station, Grimshaw Architects

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Queensbridge Quarter, Levitt Bernstein Associates



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Architect:
Foster & Partners

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1: Buildings

The Liverpool Everyman Theatre has its name lit up in designer Jake Tilson's Merseyside Neon font, each letter nearly as tall as an Aintree pony. The trend for supergraphics continues. Architects have always wanted to show and tell. One of the disruptive developments of modernism is how much archi-

tectural vocabulary of the 19th century has been ditched in both style and building technology; the distinction between a colonnaded portico of a civic building and the developer's vernacular of Victorian housing has blurred. Look at the Scottish Crime Campus: public building or office block? It is both of course.

But any building type can now be inexpensively stuck together with a frame and clip on cladding. Any building can be designed as a shed. You just have to work out the correct signage. Is it a Venturi and Scott Brown duck? Or supergraphics? Or can a colonnade be pilastered (get it?) to the facade? ●

Wonder web: The steel mesh core
around which Eva Jiricna's spiral stair
at Somerset House is built, page 8



RICHARD DAVIES

Staircase, Somerset House, London
Eva Jiricna ArchitectsWords **Hugh Pearman**Photograph **Richard Davies**

Eva Jiricna is known for three decades' worth of exquisite staircases, usually with treads of glass. Her latest stair, however – engineered as so often with her projects by Matthew Wells of Techniker – is rather different. It's a more solid affair, as befits Somerset House in London, and is the latest phase of the continuing project to turn the whole of this Georgian one-time home of tax inspectors, naval captains and arts institutions into a cultural centre.

In fact it is the last of several projects there by the indefatigable Gwyn Miles, just-retired director of the Somerset House Trust who before that was in charge of the Victoria and Albert Museum's building programme. Miles, an honorary fellow of the RIBA, is one of architecture's great patrons. 'She is demanding and strict but extremely capable of getting the best out of people,' says Jiricna. 'Without her, her team and their support we may well have started the race but never finished.'

This staircase is at the north end of the west wing of Sir William Chambers' original complex, a place with some dauntingly daring precedents including Chambers' oval Nelson Stair. But the site of the Jiricna project was a nondescript 1960s stair put in by the previous tenants, the Inland Revenue.

For access, Miles wanted a proper circulation core including lift – this part of the building houses many of the 'creative industry' tenants in refurbished spaces that provide an income stream for the Trust. There was insufficient room for both stair and lift in the existing well, so it was decided to remove a stack of floors to make a wider shaft, bringing it up to the edge of the building. 'We were aiming at a simple and beautiful sculptural object floating freely in the space, enriched by elements of the original fabric, with the windows bringing in light,' says Jiricna.

For durability of treads and landings – this is an attached stair, not a true spiral – Techniker suggested Lafarge's Ductal, an ultra high performance fibre reinforced concrete originally developed for marine uses, which produces beautiful castings. The weight of the stair is taken by a central latticework newel tube in polished stainless steel. Curving balustrades in laminated glass have mirrors at the top and bottom of the shaft, making the stair seem endless.

Now in full use with only the odd bit of snagging to sort, it feels effortless, and somehow in the spirit of the building. It is a testament to the regard in which Jiricna is held that this intervention – requiring some radical surgery in a grade I listed building – overcame not only the very real technical problems and inevitable design rethinks but also the hurdles of conservation and planning consultation with relative ease. As client, Gwyn Miles has departed on a high. ●







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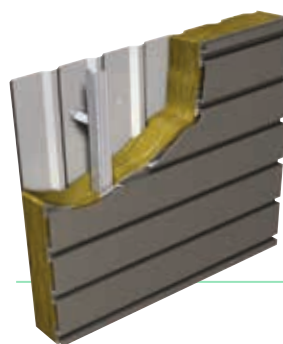
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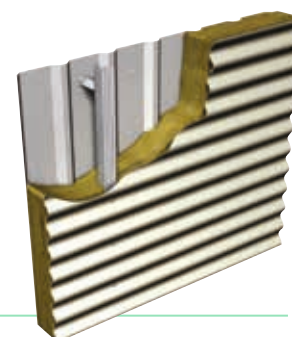
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Untitled: from the book 'Fictions'

Photograph Filip Dujardin

Words Jan-Carlos Kucharek

Filip Dujardin first caught our eye with his photo of a development in front of an infamous Antwerp high-rise that was so well-framed front-on, we were convinced the tower had been digitally manipulated. Not the case. 'When shooting real buildings I never use Photoshop,' he assured us, 'but I'm flattered you felt it strange enough to think so'. That

said, the flip side of his output is 'Fictions'.

Dujardin studied History of Art in Ghent, specialising in the work of inter-war modernist Jan-Albert de Bondt. But as director of the city's Royal Academy during the German Occupation, de Bondt was shunned as a collaborator after the war and never worked again. Dujardin's curiosity seems to stem from the fact that, like him, de Bondt couldn't practise – he admits he is 'a frustrated architect'.

So he makes up his architecture. Using photographs of bits of Ghent buildings and 3D

Sketch-Up, Dujardin creates his own anonymous places, that at first appear to be real, but then slip into fantasy. This is a rare portrayal of an internal space. 'You don't know if you're inside or out: there's holes in the roof, and the function of the concrete cubes isn't clear,' he explains. 'I started doing this because not every project I shot thrilled me and I wanted to explore architecture my own way'. His comment could be seen as an indictment of the profession – or its saviour: a desire to constantly 'look for the limits of the possible.' ●





Overt operation

There's nothing undercover about the imposing Scottish Crime Campus by BMJ Architects and Ryder Architecture, which brings the country's crime agencies under one roof

Words Eleanor Young Photographs Keith Hunter

The Scottish Crime Campus is the country's new national base for fighting drug dealers, fraudsters and terrorists. Once you have got past the various security barriers the atrium opens up ahead, light and unexpected in this concrete building, with oversized globe lights hanging from the ETFE roof. Unbidden impressions of Niels Torp's BAA Waterside near Heathrow spring to mind – its tall, light atrium that brings together office workers. Oversized steps dividing and linking this space recall Chipperfield's BBC Scotland HQ, down the road in Glasgow. Rarely has a building reminded me so clearly of other, particular ones. Yes, of course, the two

practices that conceived this building, BMJ Architects and Ryder Architecture, were influenced by and visited both those projects with their client, the Scottish government.

At the heart of both BBC Scotland and BAA Waterside lies the sense of bringing a workforce together, engendering co-operation and collaboration. It is a well worn path for forward-thinking corporates, and its use at the Scottish Crime Campus works well. And unlike the clutch of art schools that have also explored the concept (rather more excitedly) in recent years – Central Saint Martins, Manchester School of Art and the Mackintosh School of Art's Reid Build-

ing (RIBA March 2014) – this one demands more clarity and less complexity. Here, four volumes of accommodation lead off from the central atrium. There are high level bridges, but the diagram is simple. This is essentially an office building, as both a long term asset and a functioning work place. Even though forensic laboratories, complex high security operations and drugs storage must be accommodated, the four blocks around the central space are still basically offices in plan – though there are, inevitably, deep, highly-serviced parts whose function is not for public consumption.

The building started life during the

Opposite Bar code shading on the ETFE, and the rhythm of the internal facades to the atrium, make a varied space. In use it is populated with café-style chairs and tables – for informal but secure conversations.

Ground floor plan



biggest upheaval in Scottish policing for many years, when in 2012 the devolved government brought together eight police forces into one amid a series of other reorganisations. None of the services housed here – Specialist Crime Division and the Crown Office and Procurator Fiscal Service, Forensic Services for starters – belonged to any single police force but were housed in numerous offices, many of which could no longer cope with the demands of modern investigation techniques. And dispersed offices made cross-agency collaboration difficult for those dealing with organised crime.

So the Scottish government commissioned this £82m scheme, its largest directly procured building since the £414m Scottish Parliament, to lease back to its agencies and those which span the border with England, such as Her Majesty's Revenue and Customs. Given the financial climate and concurrent police upheaval, it is testament to the government and its architecture policy that this

is such a high quality building. The process was kicked off with an open architecture competition. BMJ teamed up with Gordon Murray Architects (which took the project to Ryder when the two merged) to add office credentials to its laboratory expertise and experience with police buildings.

The site was unpromising: the old Gartcosh steel mill in Scotland's central belt, eight miles out of Glasgow. Scottish Enterprise had worked on land remediation and installed infrastructure but it had, for too long, been a business park in need of some businesses. Professor Gordon Murray, Ryder partner and leader of the Glasgow office, who designed the shell and core for the second of the building's three contracts, was very aware that the Scottish Crime Campus is both an attractor and benchmark for the future of the site. The plan and facades spun out from the idea of DNA as the bar code of life, as well as an essential crime identification tool. →

The plan and facades spun out from the idea of DNA as the bar code of life, as well as an essential crime identification tool

Below The more intimate, wood-lined reception at the crux of the building before it opens onto the slate and air of the atrium.



Below The landscape picks up on the diagonals of the site and plan, here looking towards the main entrance.



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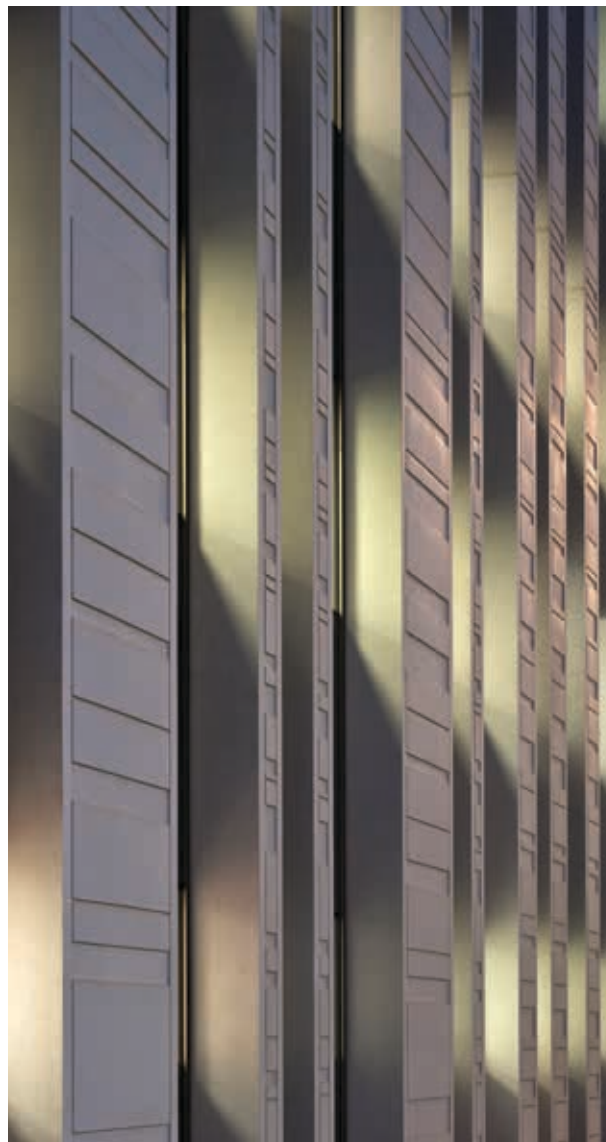


So the four blocks of the buildings map to the idea of the X chromosome and the patterns used throughout – on cladding, fritting and in the rhythm of the acoustic panels – reference a simplified bar code. The patterning is particularly successful externally, where two-piece stacked verticals of precast concrete alternate with windows (cheaper than curtain walling) in a rhythm using three different widths of each (and offering incidental shading). Indents in the form of the precast itself work with the same language of shadow and depth. At the base of the building the stone plinth draws up the geology of North Lanarkshire in slate form.

These heavy materials were important to Murray also to signify civic over commercial architecture, and embodied the 'rootedness' requested in the brief. Even so, the building looks undeniably office-like, thanks to security and the fact that its business park site and security distance it from the public presence that defines civic buildings. By the time a visitor arriving by car has reached the front door they will have already seen how the perimeter fence and protective bund isolate it from the new roads and station, the service yard out back with garages for vehicles to undergo forensic examination, and car park to the side; although the landscaping, picking up on the diagonals of the plan, is already coming into its own having been included in the first of the scheme's three contracts.

This three-contract form, chosen to fit with public budgets and so risk could be managed differently at each stage, meant that for a while the building's shell and core (completed under design and build) was eerily enclosed with no fit-out at all. It also meant the architects took on different responsibilities at different stages, with Ryder acting as client design champion throughout but novated to the contractor for the shell and core. The final contract, which encompassed M&E as well as fit-out, was a management contract to anticipate late changes as individual agencies got to grips with their spaces and what they needed from them.

The plan is designed so the campus can extend block by block east along the diagonal axis if needed. This is just the start of the process, but the Scottish government, devolution vote notwithstanding, is already exporting world class forensic expertise beyond the UK, with the added fillip of the most up to date equipment and its new home. ●



Top Detail of the precast panels which create a play of light and shadow, their depth also ensuring a layer of solar shading internally.

Above One of the outsize lights that add a luxury to the giant space of the atrium.

IN NUMBERS

£49m

total contract value

£60.5m

total project value (ex VAT)

£2,636.12

cost per m² (buildings only)

£338.62

cost per m² (externals)

20,800 m²

gross internal area

14,474 m²

net internal area

BREEAM Very Good

Form of contract

C1 Enabling: Traditional GCW 1

C2 Shell and core: Design + Build

C3 Fit-out and M&E:
Management contract

Credits

Client Scottish government

Client advisor Jeremy Smart

Associates

Lead consultant and fit-out

architect BMJ Architects

Design champion + shell and core

architect Ryder Architecture

Project manager Sweett Group

Cost consultant Thomas &

Adamson

Services engineer Wallace Whittle:

TUV:SUD

Structural engineer Arup

Landscape architect Ian White

Associates

Principal contractor

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C2: Graham Construction

C3: Balfour Beatty



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Magical mystery tour

It's darkly congenial and feels comfortably like it's been here for years, but it's new. Why does Haworth Tompkins' rebuilt Everyman Theatre feel so familiar?

Words: Hugh Pearman Photographs: Philip Vile





Main foyer of the new Everyman: pale boardmarked concrete, sawn oak floors, set off by Antoni Malinowski's ceiling drawings.

Left House of cards: Each aluminium shutter on the facade bears a water-cut portrait of a Scouser.


IN NUMBERS
£13.4m
 contract value

4,690
 m² area

406
 seats in default format

105
 portrait panels on facade

25,000
 bricks reclaimed from old theatre

29.3
 kg CO₂/m² predicted emissions

3
 bars, cafés and bistro

Left Steamship air handling: the theatre is naturally ventilated through these distinctive brick chimney stacks.

Given its track record in theatre architecture – from the late 1990s revamp of the Royal Court to its ongoing re-ordering and extension of the National – it comes as a surprise to find that the Liverpool Everyman is the first permanent newbuild Haworth Tompkins has done in this sector. Everything else has been adaptive or temporary. But here's the thing: the Everyman does not feel especially new. It feels pre-used, familiar.

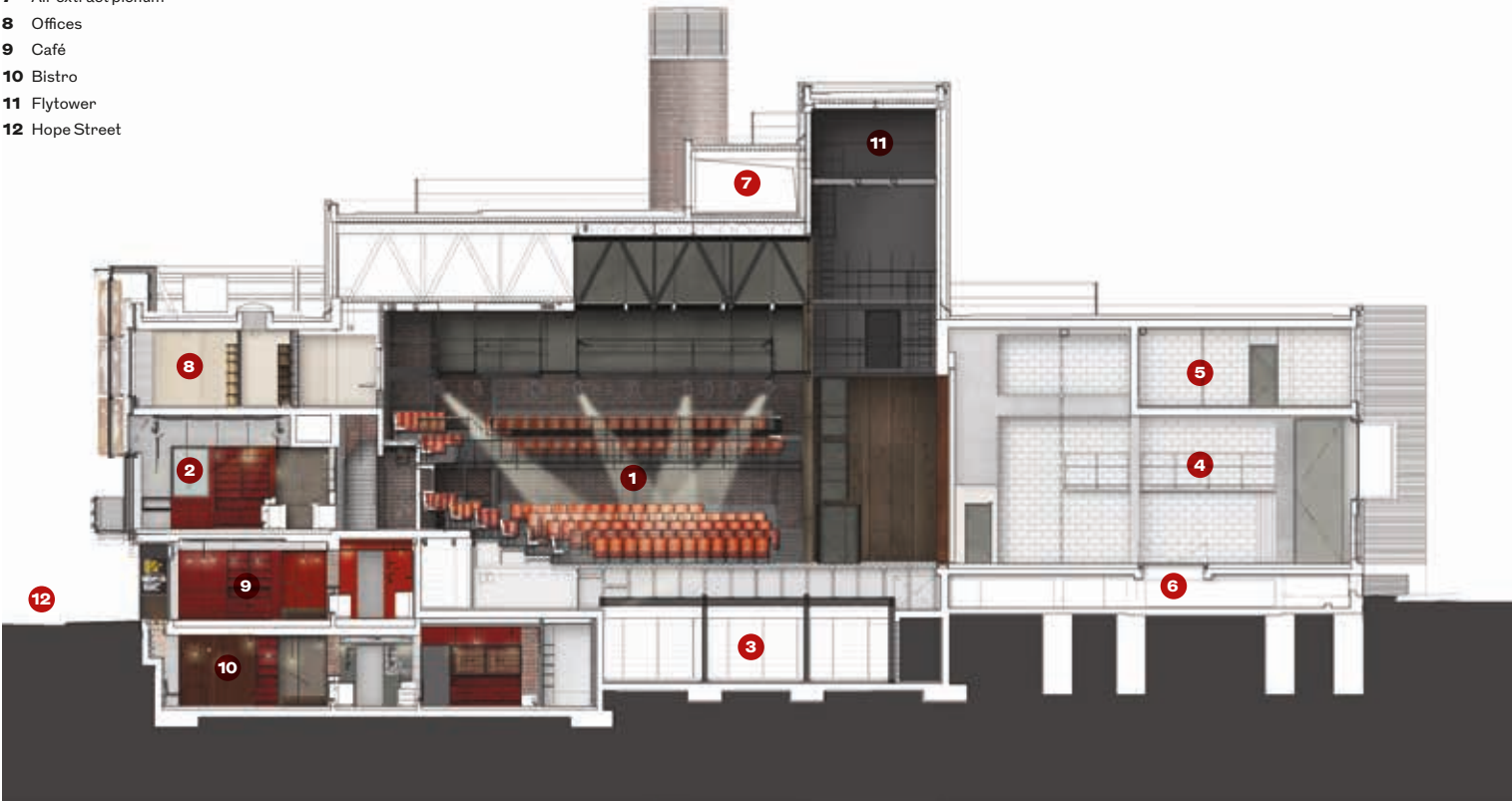
This is partly because we are now accustomed to the Haworth Tompkins architectural palette and 'neither new nor old' approach to theatres. HT's love of self-finished materials, of darkness, of rough old stuff left revealed and celebrated, a desire to show the sinews of the building rather than box in and plaster over. Above all, a way of working by implication rather than

overtly – a crepuscular glimmer from glazed bricks behind the bar rather than Folies Bergère mirrors, that kind of thing. Every detail considered and designed including furniture, signage and slightly Heath Robinson light fittings. The auditoria seats are always good; and there's the involvement of artists, including long-time collaborator Antoni Malinowski, whose richly-pigmented work adorns the foyer ceilings here.

This is a way of working that has served them well. When I arrived and sat down in the Everyman's foyer, I felt immediately at home. It's not a formula, though it's certainly a style. It's allusive: things often suggest other things. In this case, those other things are the industrial buildings of Liverpool with their loading bays, rough iron and timber doors, tough red brickwork. And – hang

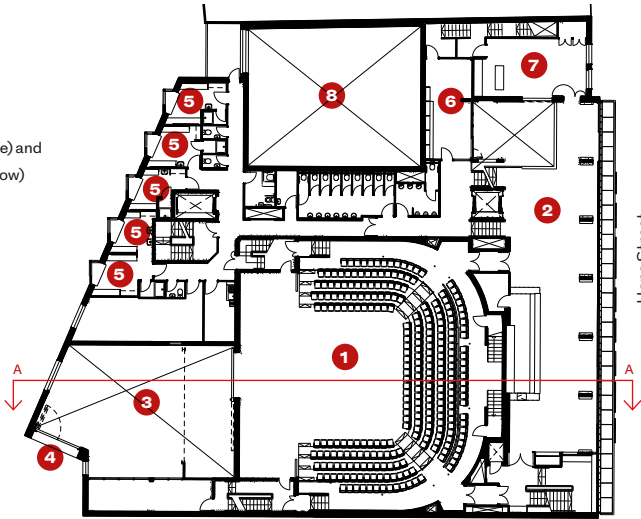
Section A—A

- 1 Theatre stage and stalls seating
- 2 Bar
- 3 Sub-stage
- 4 Workshop
- 5 Wardrobe
- 6 Air supply plenum
- 7 Air extract plenum
- 8 Offices
- 9 Café
- 10 Bistro
- 11 Flytower
- 12 Hope Street

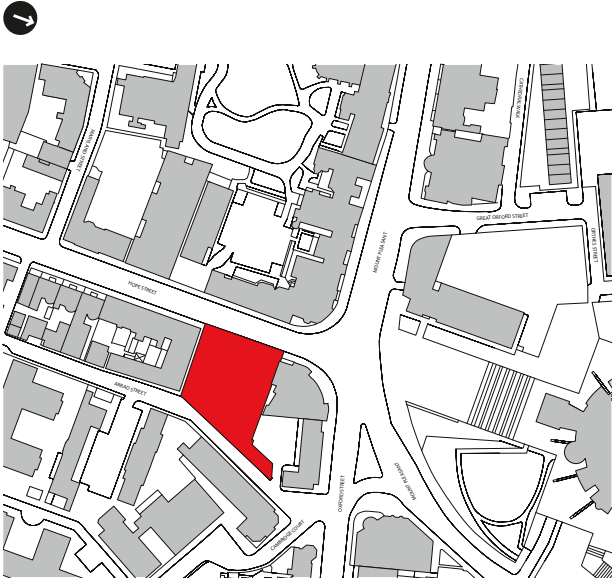


First floor plan

- 1 Theatre stage and stalls seating
- 2 Bar
- 3 Backstage area
- 4 Scenery get-in
- 5 Dressing rooms
- 6 Writers room
- 7 Function room
- 8 Rehearsal room (above) and community studio (below)



Site plan





on, from outside when you look across from the steps of Gibberd's Roman Catholic Cathedral at the end of the street – is that a row of ships' funnels on top?

This is a naturally-ventilated 400-seat flexible-configuration theatre, rated BREEAM 'excellent'. The four cylindrical air extract chimneys are in brick with a subtle spiralling pattern, topped with a band of dark metal louvres. Enough like ships' funnels to make you wonder. But that's where the expression of the natural ventilation system ends – it's not fetishised, or even apparent, elsewhere. Steve Tompkins consulted the architects of the two previous new naturally-ventilated UK theatres who happily shared their experiences – Alan Short (Manchester's Contact Theatre) and Wright and Wright (Hull Truck). The exposed boardmarked

concrete in the foyers has a creamy colour that derives in part from its use of a high percentage of cement replacement ash. Like the use elsewhere of natural cork flooring, this, plus its thermal mass, is another BREEAM plus point with a good aesthetic consequence.

Artistic director Gemma Bodinetz admits she issued contradictory instructions: on the one hand she wanted people to feel a connection to the old Everyman, on the other she wanted a total transformation of what the theatre could do. As Tompkins wryly remarks, since this project took 10 years from first appointment, there was plenty of time to refine the concept and the details. Three features of the previous Everyman are present and correct in the new one. First is the auditorium, which had an unusually large thrust stage with

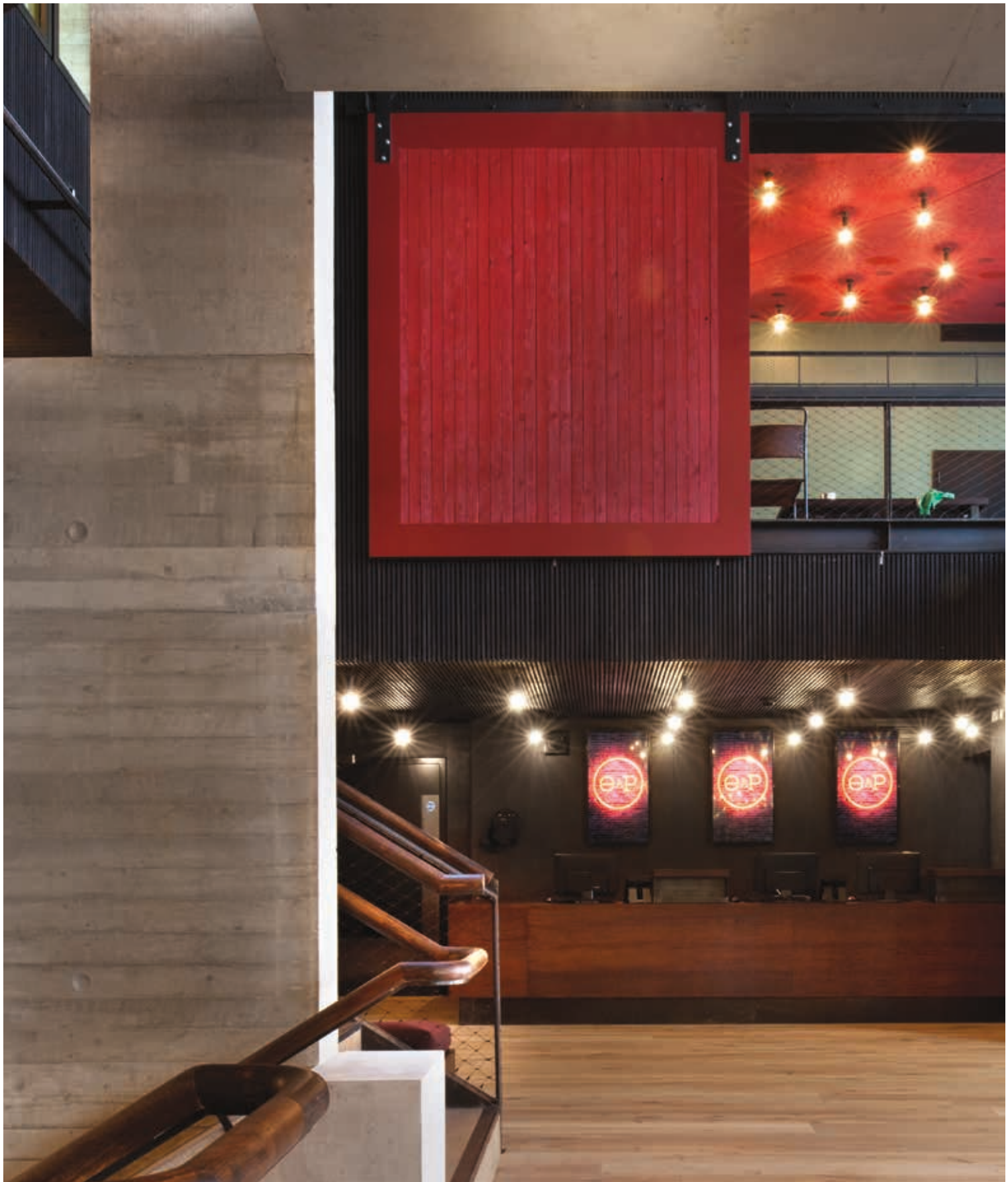


Above All new, but channelling the old: Reclaimed bricks from the old chapel/theatre line the auditorium. Gold/bronze seat fabric also recalls the previous theatre.

shallow rows of seating around it. It shouldn't really have worked – it's in no textbook of best practice – but it plainly did, so its dimensions have been replicated and two levels of seating provided. Second – the large basement bistro with its compartmented areas, which sometimes felt like a staff canteen for Liverpool University's nearby architecture school. This too is repeated, though more freely; with some daylight creeping in through pavement lights, a section that can be closed off for live music performances, and some very HT lighting – dozens of little counterbalanced mirrored shades, the wires running on pulleys across the ceiling to rows of lead-filled copper-pipe counterweights on the walls. And thirdly, the famous 1970s lower-case red neon 'everyman' sign outside, rethought by artist/

typographer Jake Tilson, now casts its glow back into the first-floor bar as well as out into the street.

There's a fourth thing too, a material. When the old theatre was demolished – it had been a 1970s frontage grafted onto the 19th century Hope Hall Chapel – 25,000 of the chapel's bricks were salvaged, and these have been re-used very visibly throughout the interior, making new walls in front-of-house and auditorium alike. Obviously this recycling boosts the new building's eco-credentials and, again, thermal mass, but as importantly it provides a tangible link back to the old place. It's been well done: you could think you were in a conversion again. Tompkins' use of materials such as rough-sawn oak floorboards and sliding screens made of painted left-over concrete shuttering timber



Credits

Architect Haworth
Tompkins

Client Liverpool and
Merseyside Theatres
Trust

Theatre consultant
Charcoalblue

Structural engineer
Alan Baxter &
Associates

Service engineer
Watermans Building
Services

Acoustic engineer
Gillieron Scott
Acoustic Design

Collaborating artists
Antoni Malinowski, Dan
Kenyon, Jake Tilson

Contractor Gilbert-
Ash

Project manager GVA
Acuity

Quantity surveyor
Gardiner & Theobald

CDM co-ordinator
Turner and Townsend

Access consultant
Earncliffe Davies
Associates

Suppliers

**Concrete formwork
and internal
joinery, linings etc**
Mastercraft

Structural steel
Pudsey steel

Roof Sika Sarnafil

Brick Daas Baksteen/
Modular Clay Products

**Facade portrait
screen** James & Taylor
Windows and glazing
Schueco

**First floor sliding
doors** Fineline

Large acoustic doors
Clark Door

**Steel stairs and
architectural
metalwork** Metaltech
Timber flooring
Hakwood

Bespoke light fittings
Mike Stoane Lighting

Auditorium seating
Kirwin and Simpson

Stage lighting and AV
Northern Stage

**Stage engineering
and rostra** Stage
Technologies

Lifts Knowsley Lifts



Left Overlooking the foyer is an events room which can be closed off: the sliding screen is made of lengths of timber used in the concrete shuttering.

Above At the rear, new brickwork, angled dressing room windows and – at last – a proper truck-sized get-in.

adds to the sense of history. Learning from theatre practitioners perhaps, he is making permanent scenery.

What you won't be aware of from the audience are all the technical improvements: there's now respectable flying-space for scenery, proper tension-wire access beneath the technical grid, a stage in modular sections with a deep sub-stage beneath, big wardrobe and wigs workshop, good daylit dressing rooms, a proper backstage where scenery can be built, and a full size get-in that the theatre never had before. The site now extends right back to the street behind, where the theatre expresses itself through a new brick-built range with dressing room and green room in it, and stage door below. In new local red brick with dark mortar, it sits well with its neighbouring industrial buildings. At one point the theatre management considered buying more land to get a larger footprint: Tompkins persuaded it to keep things tight, in the tradition of city theatres, and focus spending on the things that mattered.

There seems to be plenty of room anyway, to the extent that there is also a full-size rehearsal room above a community studio of the same size, a writer's room and function room overlooking the foyers, separate café and bar as well as the basement bistro, and even some so far unallocated office space on top. Tompkins started to worry that the building might look too big from outside,

and designed a set-back bay at its south end to shorten the apparent length of the main facade.

That facade is interesting. It's largely glazed and faces south-west (though with a large former convent opposite), so there was a need for shading. At the same time the theatre needed to advertise itself. Well, the famous neon sign does a lot of that job, which allowed for a different approach. The theatre ran drop-in photography studios across the city for its supporters. A selection of these photos of people by Dan Kenyon – the Everyfolk, you might say – was scanned and reproduced in watercut semi-abstract form on solid aluminium moveable shutters. There are 105 such portraits, one to each shutter, each of which can be manually moved from inside via a gleefully mechanical system which itself gives depth and texture to the facade. So the people of Liverpool become the facade of the Everyman. It's a corny concept of course, but it's deftly handled. And anyway, a theatre IS all about people, so why not?

New theatres often have a sense of slight strain about them, of trying too hard, of showing off, of design fingers being crossed. Not here. Every last detail may have been considered, but it's done in a relaxed way. You really do sense that the architects not only understood this place, but enjoyed making it. 'It's about the language of shadow,' says Tompkins. 'The glint in the darkness.' ●

Aquatic spectacular

Relieved of its controversial wings, Zaha Hadid's Aquatics Centre has broken free as the cresting wave it was always meant to be

Words Stephen Cousins Photographs Hufton + Crow

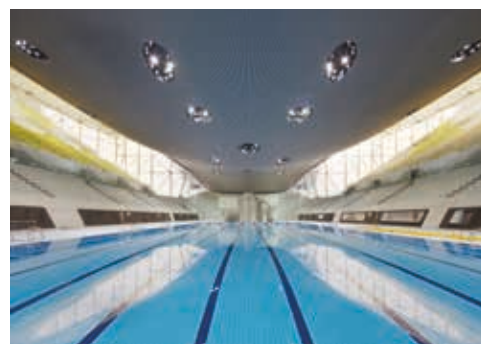


It is only now, some 18 months after the London 2012 Olympic Games ended, that the Park's most show stopping architectural attraction has been revealed.

The billowing wave-shaped roof of the London Aquatics Centre, spanning some 120m and held up by just three concrete supports, is a true feat of engineering, which remained largely concealed during the Games due to the presence of the two box-shaped spectator stands clamped to either side.

These have now been replaced, as part of the building's comprehensive transformation into legacy mode, by two huge faceted curving glass facades which flood the interior with light and give the impression that the dipping and diving roof hangs in mid air.

This 'floating' effect is enhanced by the thin self-supporting frames of the facades, made up of trussed steel alloy columns and slim-section transoms and mullions, which cantilever at a 15 degree incline and have no



Left The dramatic curve of the Aquatic Centre roof is further accentuated by the new glazed walls beneath, making it appear to float above the Olympic pool.

Inset left The same view while in Games mode.

permanent physical connection to the roof.

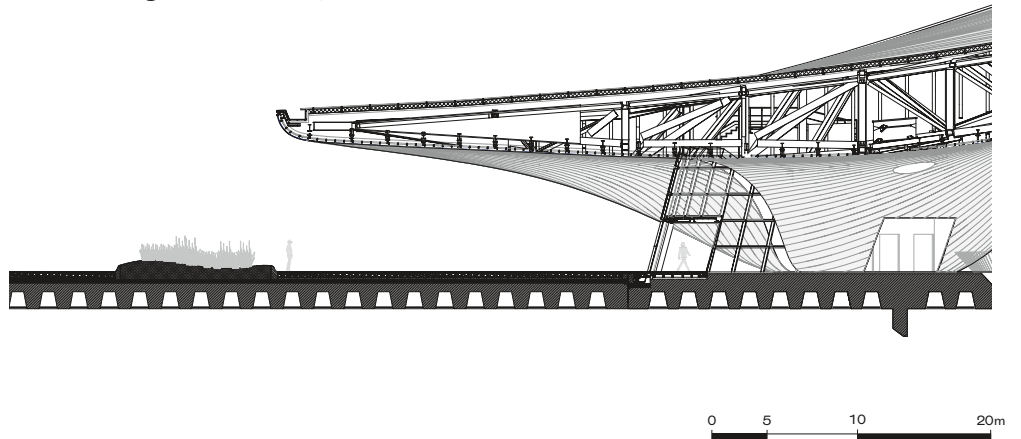
'The glazed walls were critical to our concept for the legacy transformation,' explains Jim Heverin, director at Zaha Hadid Architects (ZHA). 'We wanted an immense amount of daylight in the pools to give people the impression they are swimming outside, or in a pavilion in a park. Importantly, the Aquatics Centre's main focus is no longer as a venue, so the architecture had to become more transparent and encourage people to come in and swim. There's very little use of local community sports facilities in East London, so the glass was key to creating an attractive and open building to ensure people don't feel intimidated by this type of space.'

The Aquatics Centre reopened to the public on March 1, giving visitors the chance to experience the thrill of leaping from an Olympic diving board or swim in the pool used by the athletes for just £4.50 a ticket.

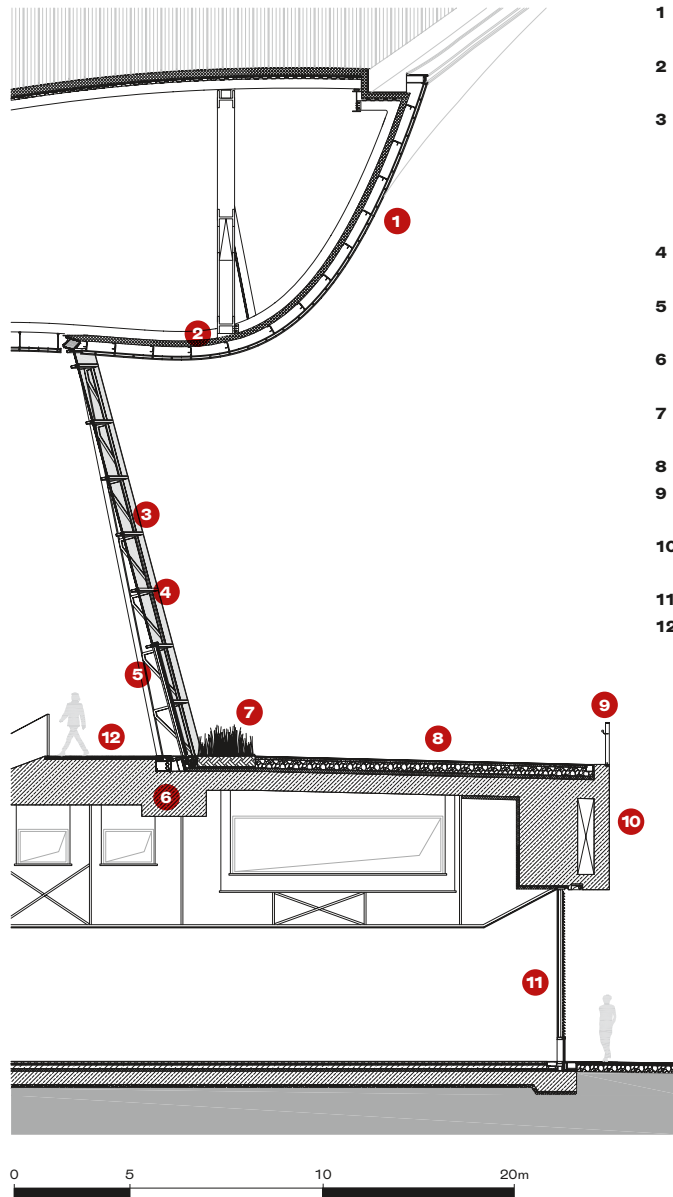
The transformation began at the end of last year when the stands on the east and west elevations were peeled back to reduce the building's seating capacity from 17,500 to 2,500 and make way for 628 panes of double-glazed laminated glass – 314 on each side. The two facades, supplied and installed by Austrian contractor Seele, are conical in shape and cover a total area of 2,800m².

The glass walls had to accommodate movements in the roof, which is similar in design to a bridge and stands on giant bearings that allow it to slide. This creates huge dead load deflections of between 285mm and 435mm which are resolved using a clever 3D joint concealed in a box within the shadow gap at ceiling level. The joint is fixed separately to the facade and roof, and allows the roof to move in two directions. Flexible

West/east longitudinal section (part)

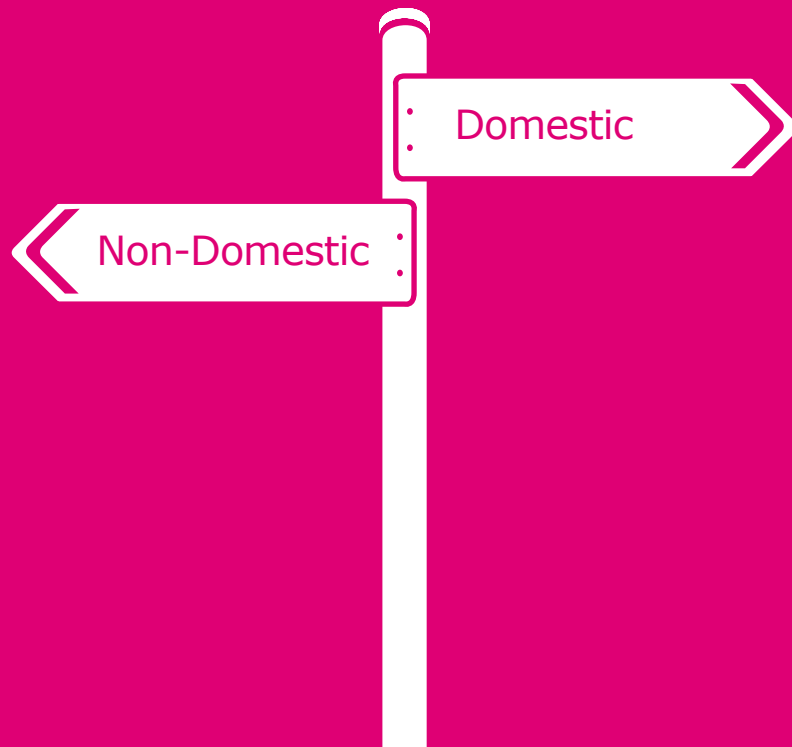


Section



- 1 Pre-weathered FSC certified red louvre rainscreen cladding and soffit lining
- 2 Steelwork to follow curvature of roof and ceiling
- 3 Toughened and laminated glass panels. Facade structure of aluminium mullions and transoms with cappings. Top junction to roof on airtight waterproof insulated membrane to allow for roof deflection
- 4 Steel profile truss system curtain wall glazed facade
- 5 Aluminium framed double glazed sliding door inclined at 15°
- 6 Drainage and heating trenches at foot of facade
- 7 Planted grass soft landscape with 200mm earth build up
- 8 Asphalt hard landscaping
- 9 Perimeter metal balustrade with continuous s/s handrail
- 10 Plain, smooth finish GGBS fair-faced concrete
- 11 Anodised aluminium louvres
- 12 Resin finished screed

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'Due to the amount of movement in the roof, we knew that support for the glass facade itself would have to come from the deck, located behind the permanent seating,' says Heverin. 'Although ZHA isn't known for expressive structure, a series of cantilevered steel truss columns, spaced at 6m intervals, provide enough support for the 74,235kg of glass in each facade, as well as wind loading, while increasing transparency compared to conventional solid steel columns.'

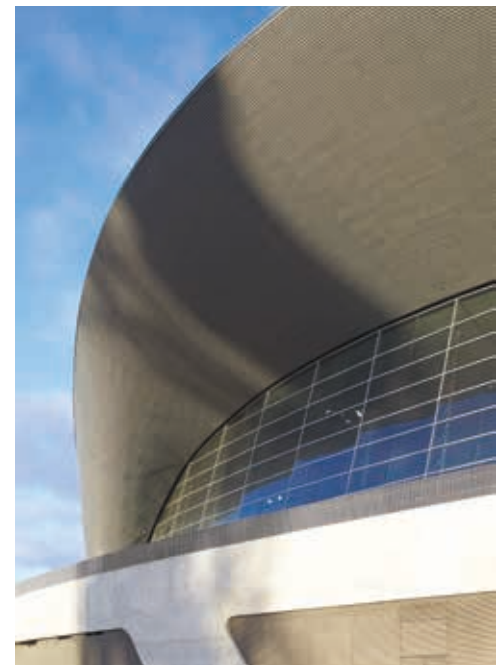
The columns stand on large steel base plates, needed to support the sheer length and weight of the cantilever. Inclining the facades means that they meet the roof well back from its edge, which has the effect of blurring the edges of the building and enhancing the sense that the interior swimming pool space connects to the outside. A drainage trench runs along the outside of the

facades and a heating trench on the inside.

ZHA spent a long time rationalising the facade design. Initial plans which introduced movement into the facade itself were rejected in favour of a more straightforward infill design that would not compete with the roof for attention. The simpler design allowed the team to drive efficiency into manufacture by increasing the repetition of glazing panels, which was considered key to making the legacy scheme stack up financially.

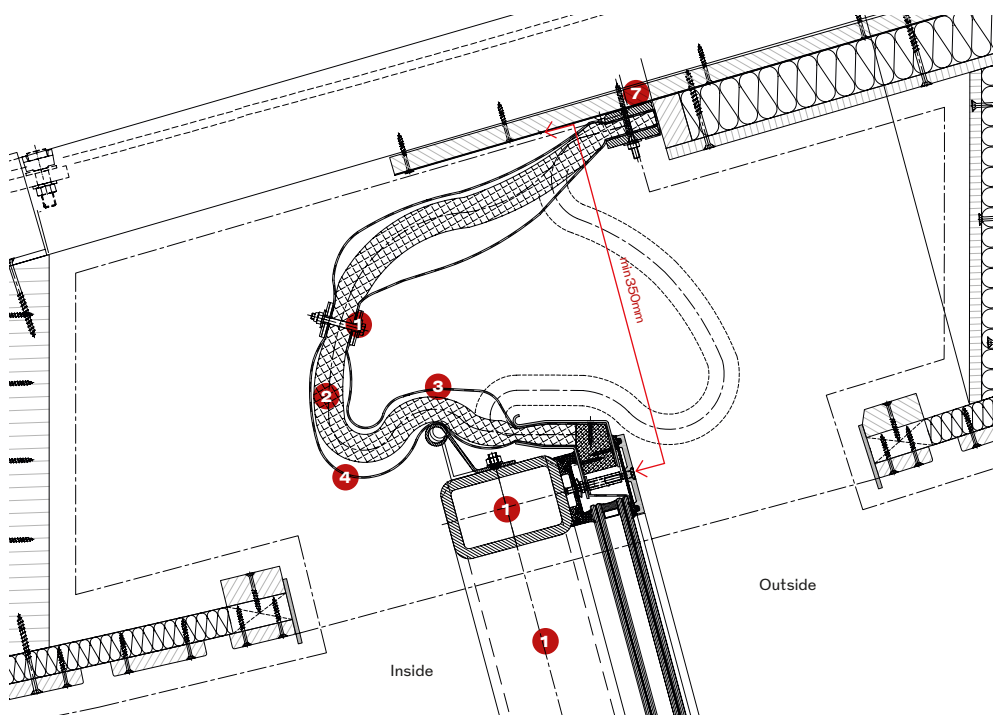
Although most glazing panels are identical in size – around 1.5m by 3m – variations were required at the tops of the facades to adapt to the more complex curving roof geometry. Top panels are smaller and partially concealed inside the deep shadow gap in the timber ceiling to give the impression that the roof directly butts up against the glazing.

In legacy configuration, the Aquatics Centre is a BREEAM Excellent project. →



Above Clever detailing at the glazed wall/roof soffit interface gives the impression that the glass meets the roof seamlessly.

East/west detail section by Seele of the legacy side glazing and roof soffit interface.



- 1 120mm by 80mm by 10mm hollow steel section
- 2 30mm insulation
- 3 1.5mm waterproof membrane
- 4 Vapour barrier
- 5 2mm aluminium sheet acts as insulation 'clamp'
- 6 Double glazed upper infill panel to soffit as part of 3mm wide glazed facade wall, angled at 15°
- 7 Vapour barrier by others

The facade panels' U value of $1.4 \text{ W/m}^2/\text{°C}$ is low compared to regular double glazed units, and their air permeability value is no more than $5 \text{ m}^3/\text{hr/m}^2$. 'The sheer size of the space means it experiences a lot of solar gain, which to an extent balances out thermal heat loss through the facades,' says Heverin.

A closed circuit radiator system in the trussed framework, developed by Seele and based on ZHA's initial concept, circulates hot water to create a constant temperature across the surface of the glazing, reducing the risk of condensation and down draught.

In addition, the glass panels feature a screen-printed dot matrix pattern, which varies in across each elevation, to help control daylight levels and restrict potential glare, particularly around the diving boards. The pattern is invisible externally and can only be seen from the pools close up.

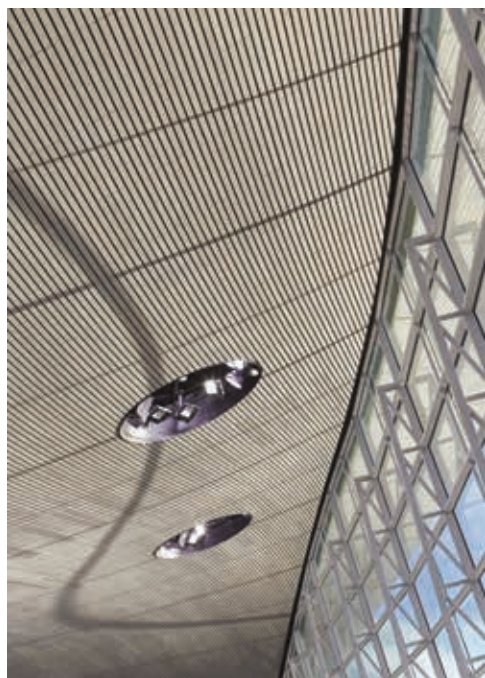
ZHA was criticised in the run-up to

the Olympics for the box-like design of the temporary seating stands, but without the unique phasing between Games and legacy modes the spectacular glazed facades and soaring roof on show today would never have been possible, explains Heverin: 'Games mode required a completely column free space to enable uninterrupted views from the spectator stands. This gave us the opportunity in legacy mode to emphasise the roof as spanning the entire site. If you were designing a swimming pool from scratch you would simply use columns to support the roof, but that wasn't an option here.'

The finished building is hard to fault. The facades have an precision engineered beauty that is reminiscent of Joseph Paxton's Crystal Palace or William Barlow's train shed roof at St Pancras; their clean horizontal lines in dynamic tension with the dramatic sculpted roof above. ●

Design Zaha Hadid Architects
Sports architect S+P Architects
Structural engineer Ove Arup & Partners
Services Ove Arup & Partners
Fire Safety Arup Fire
Acoustics Arup Acoustics
Facade engineer Robert-Jan Van Santen Associates
Lighting design Arup Lighting
Maintenance access Reef
Security consultant Arup Security
AV + IT consultant Mark Johnson Consultants
Access consultant Access Design
CDM co-ordinator Total CDM Solutions
BREEAM consultant Southfacing
Quantity surveyor and project manager CLM
Main contractor Balfour Beatty (UK)
Facade contractor Seele
Glass supplier Tvitec
Timber sub-contractor Finnforest
 Merk GmbH
Concrete sub-contractor Morrisroe

Below The complexity of the roof form required bespoke detailing where the glazing met the soffit.



Below The new south facade in legacy mode is as elegant as its Games mode predecessor was clumsy.



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Eye Line 2

RIBA
J

Enter the RIBA Journal's drawing competition

When we launched Eye Line last year, 250 of you entered, from all over the world. Clearly our idea – that this award should recognise the pure art of architecture, as distinct from functionality or buildability – struck a chord. And it was notable that everyone from well-known practitioners to as-yet-unknown students entered. Of course: the

one thing that unites all architects of all persuasions is the depiction of a concept. And if that depiction takes on a life beyond its subject matter, so much the better.

Last year's overall winner was Tom Noonan, part 2 graduate at Hawkins\Brown, with his extraordinarily detailed and intriguing work 'Reforestation of the Thames

Estuary' a manifesto design which verged on both the obsessive and sublime. Tom joins us as a judge this year. Also on the panel are artist Susanna Heron, artist and architect Narinder Sagoo of Foster + Partners, architect and visiting professor Alan Dunlop and RIBA Journal Editor Hugh Pearman.

Rules

The rules are very straightforward. As last year, we want to find the best representations of a building design or concept through visual means. Any medium is allowed – hand-drawn or via keyboard, collage or any combination or overlay of methods. It can be ultra-detailed, close to abstraction or photo-realistic, whatever: it's up to you. The work must have been produced within the three years up to April 2014,

and must not previously have been entered for Eye Line. Entries should be two-dimensional artworks – we will not consider movies, photographs of models or strong relief – but within that constraint we will judge all methods and media equally. There is a maximum of three individual pieces per entry. Size of the original work is irrelevant, but we cannot handle originals and so require a digital version of the work in medium-resolution JPEG form for entry.

Send via a file-sharing service such as Dropbox, Hightail or similar.

Do NOT send email attachments and do NOT send original artwork. Please make sure you include your email and postal addresses and phone number with your file transfer message.

Send to eyeline@ribajournal.com
We shall devote the August issue of the RIBA Journal to this, in which we will publish the winners.

Deadline for submissions:
Monday 9 June

Late June: Judging and shortlisting.
August: Special issue of RIBA Journal, winners published, celebration party.

Get sending in your work right away, don't wait until the last minute.
We want to celebrate the art of architecture.

eyeline@ribajournal.com



Phase change plasterboard – thermal mass without the weight

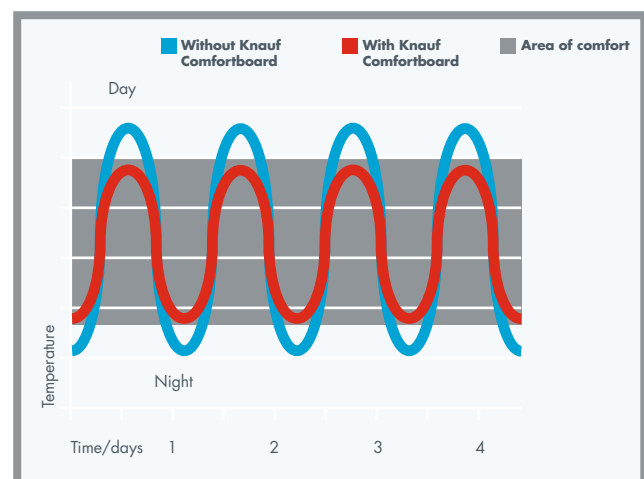
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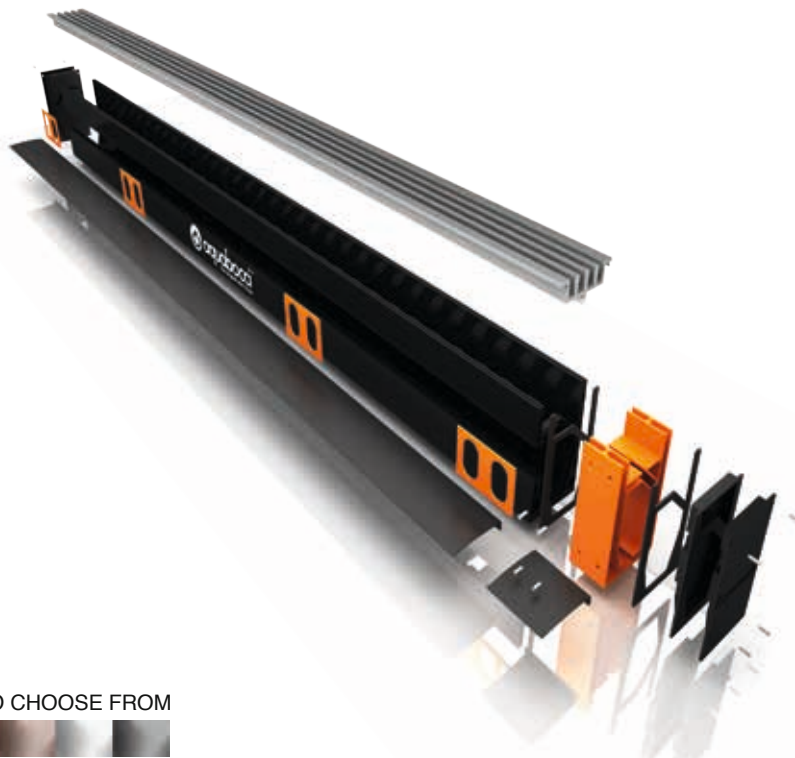
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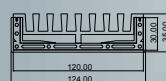
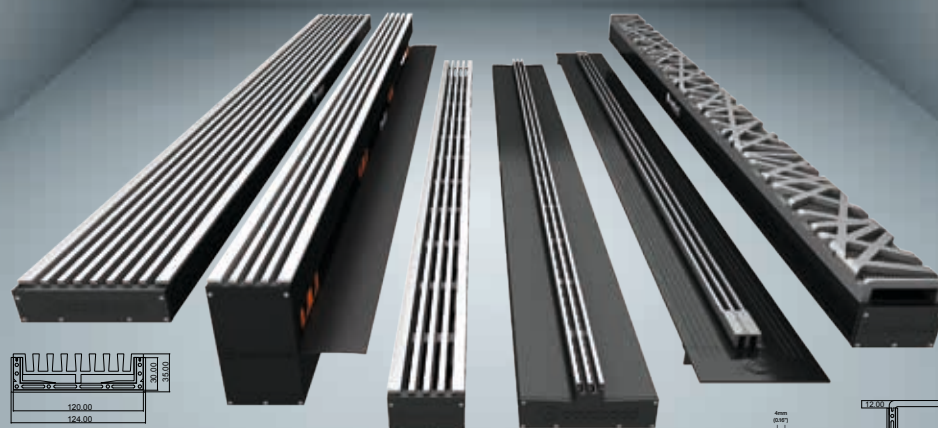
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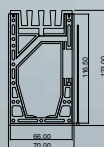
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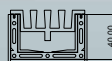
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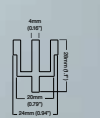
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THRESHOLD



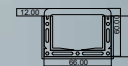
S66



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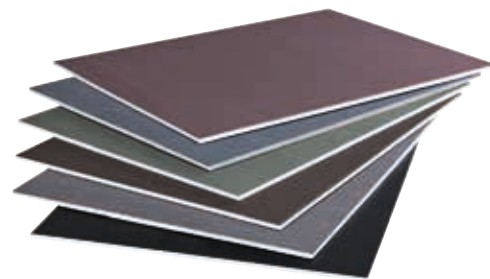
Architect: Denton Corker Marshall Architects – Photographer: Peter Cook Photography

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2: Intelligence



Compliance



Climate

Peter Caplehorn



New Part L regs come into force this month. We give Building Regulations Advisory Committee panel member and technical director at Scott Brownrigg Peter Caplehorn a penny for his thoughts.

How far will the incoming Part L regs bring the UK to a zero carbon future?

They demand different things in England, Scotland and Wales, but the big thing is that key recommendations of the consultation weren't taken up. Effectively, these latest regs seem to diverge from the trajectory we need to get to a zero carbon 2016, which is disappointing. And how this all fits in with the recent EU commitment to cut emissions by 40% by 2030 remains to be seen.

So if we're diverging, how do we make up the compliance gap between now and 2016?

Part of that would be in the term 'zero carbon'. We stopped talking about a definitive 'zero' a while back, so it's open to interpretation – which is a handy get-out clause. And there's always 'Allowable Solutions' to take into account – carbon offsetting, linking to district heating systems, yet-to-be-developed technologies etc – that might give us wriggle room in the meantime...

Aren't these just a smokescreen though?

Sometimes the right general direction of travel has to be enough. I'm trying to think more pragmatically. We've improved things like airtightness considerably. Contractors are building better and getting installed fabric to perform better. We've achieved a lot, but need a stronger show of political will to deliver the crucial push.

So who helped water down the regs this time round?

I know big house builders lobbied the government hard and probably had their ear. There was a concern that during the recovery excessive Part L performance demands would stifle economic growth in the housing sector. The government would have been wanting to balance decarbonisation with all-important growth.

Can we ever put a positive spin on using less?

It's deeply engrained culturally. Even sustainability seems to have a selfish gene. People think more about return on their PV outlay, for instance, than the bigger idea of cutting primary energy demand. It's more about personal gain than collective moral responsibility. Maybe if we realised that and approached it from that angle, we might make more inroads into promoting a sustainable UK. People need to see what's in it for them.

Like the Green Deal?

We need the UK to buy into it but let's face it, it hasn't sparked the national imagination. The government needs to act to reverse the sense of stall and stagnation. And its financing has to be not-for-profit: this 8% interest on loans is silly frankly. The political thinking needs to be far more 'big picture' – which means don't expect anything to happen before the next election! ●

APRIL RULES

New Part L (Conservation of Fuel and Power) Building Regulations come into force on 6 April 2014 and will apply to all developments not yet submitted as a building notice, full plans submission or initial notice before this date. This allows for the 'build out' of projects without unnecessary revision to specification part way through the planning/construction process – as long as the Building Regulations application begins before April 2015. Amendments differ for England, Scotland and Wales.



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

External
managementInternal
management

Success begins at home

Our exclusive analysis of the RIBA Business Benchmarking report shows that as practices feel the effects of recessionary thaw, working to internal standards is vital to flourish

Caroline Cole

This year's RIBA Business Benchmarking report, just released, highlights again the duality of the architectural profession.

The vast majority of practices are tiny, local, serve a residential market and focus on the challenge of running really very small, hand to mouth operations: more than half of the businesses in this survey consist of fewer than five people. However, most architects work in a handful of practices with more than 20 headcount, where the business challenges, client base and project types are completely different. Both business models are representative of the architectural profession and yet each could not be more different from the other. Between the two extremes, the medium sized practices look both ways, operating in the domestic world that suits the hands-on service provided by small practices, while also competing in the world of corporate and public sector clients, whose risk aversion and process driven procurement routes favour larger firms.

Yet many of those running smaller practices want to break into the markets that prefer larger scale practices. If they are to succeed, the learning curve will be huge: of course, the architectural challenges will be new and stimulating but it will be their ability to rise to the business challenges and shrug off 'small practice mentality' that will determine their long term success.

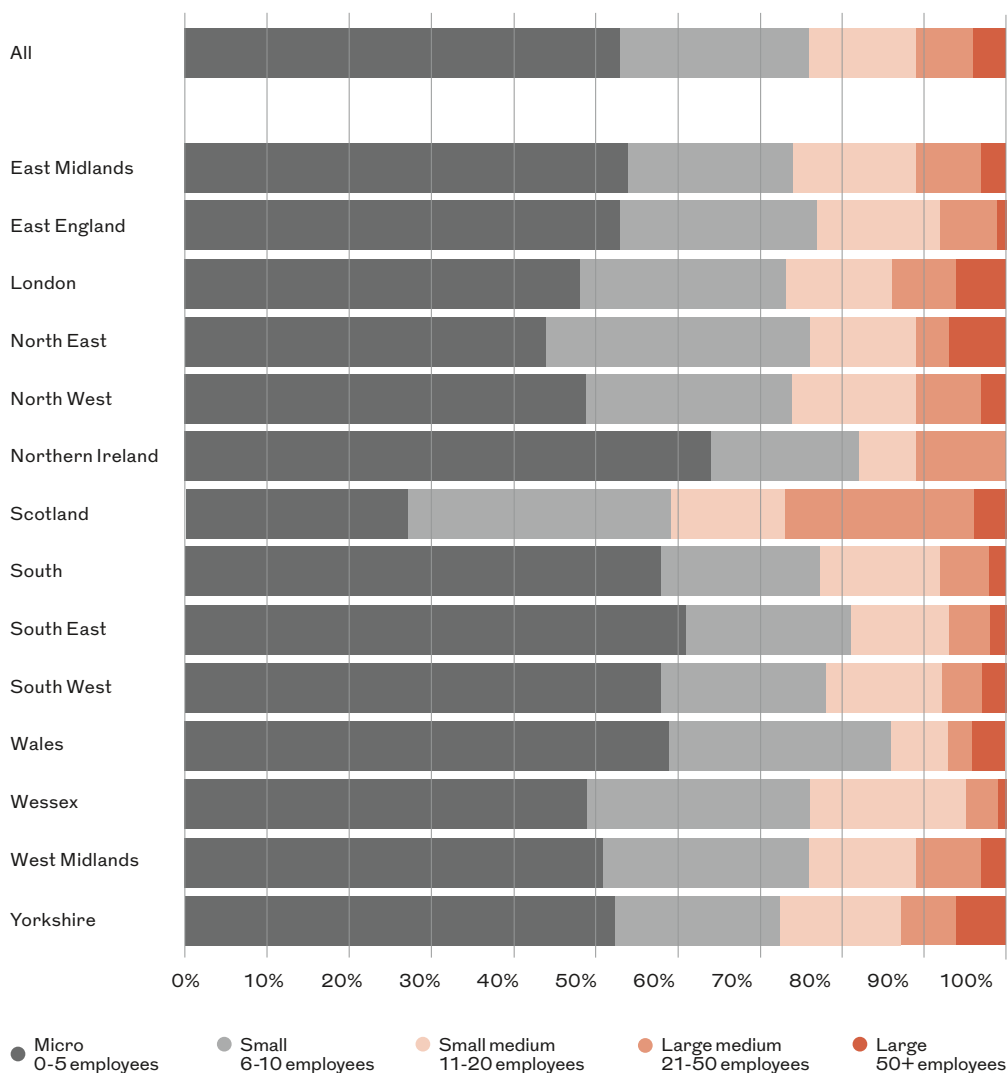
Given the diversity of the market place, those in charge of each practice need to know

what kind of firm they want to create. If the vision is to run a small, local firm, then the business ingredients of marketing, finance, technology, staff and clients will be quite different to that required in a large, international business with major civic and public sector clients – and it will be different again for any practice between these two extremes. Either way, simply being a good architect is unlikely to be enough. To run a successful and fulfilling architectural business, someone in the practice needs to focus on the strategic vision and have both the skills and the passion to develop the business side of the venture.

Measuring beyond money

If architecture were simply about making money then it would be easy to set a string of business benchmarks based on financial

Practices by size and region



performance. However, each practice has a subtly different vision of its future and therefore its own version of what business success looks like. For this reason, the Colander benchmarks in this survey are limited to six core measures, addressing simple business targets that any well-run practice should hope to reach: profit as a percentage of turnover, salaries as a percentage of expenses, percentage of headcount that is non-fee earning, marketing expenditure as a percentage of turnover, jobs won as a percentage of jobs chased, and maximum percentage of turnover from any one client sector or client.

Marginal profits

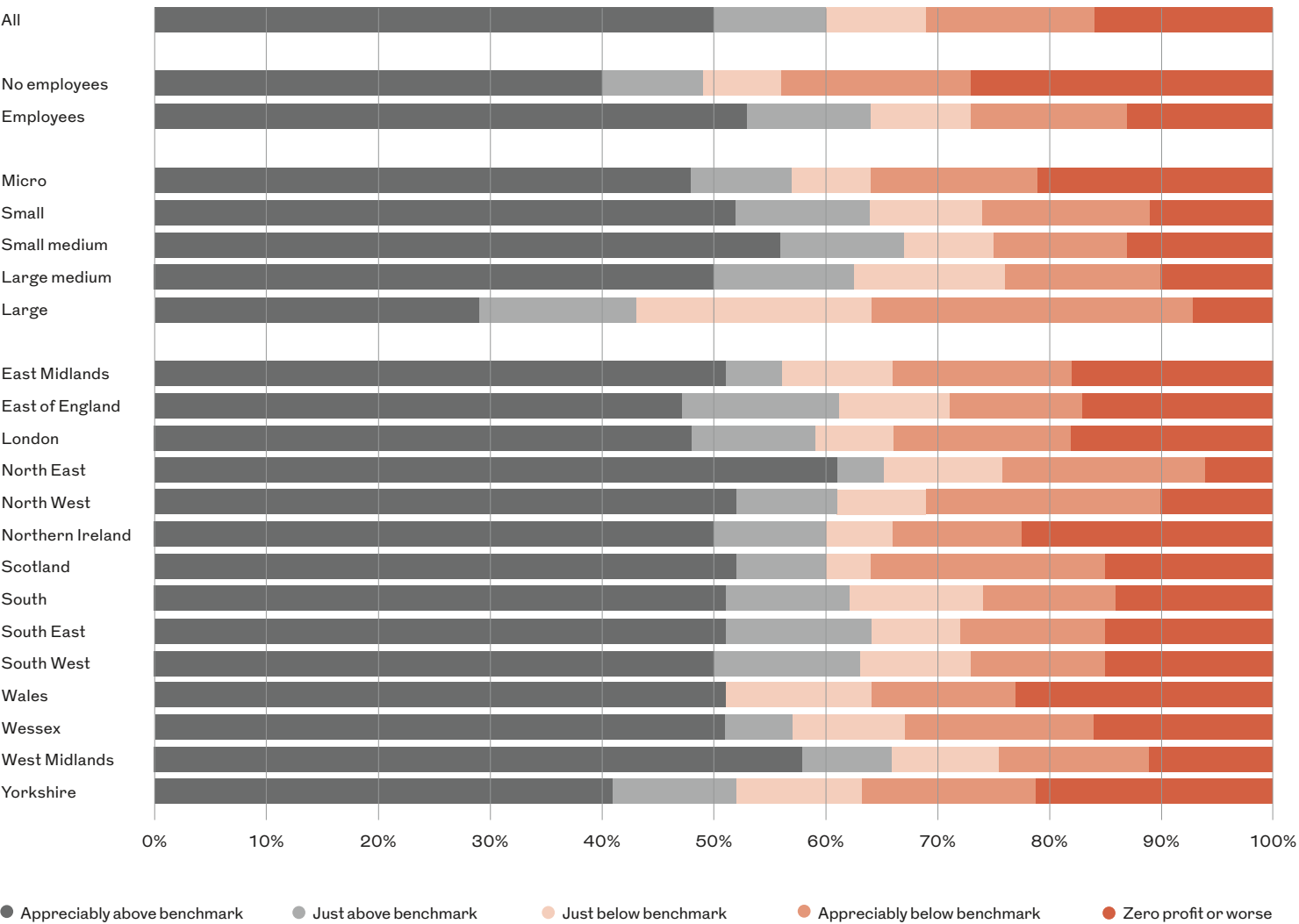
Across the country, practices average a healthy profit margin of just over 20%. However, this figure conceals some worrying

Given the diversity of the market place, those in charge of each practice need to know what kind of firm they want to create. Simply being a good architect is unlikely to be enough

variations in fortunes, especially at the larger end of the spectrum: almost 60% of the largest practices do not meet our benchmark for profitability, which is set at 15%; more than a third fail to muster even 10% profit. The percentage of practices falling below this benchmark is lower for smaller practices but in all, 40% of RIBA chartered practices fail to meet this important benchmark. Of course, some practices perform very much better than this; just under half achieve profit margins that exceed the benchmark by 20% or more, and this includes almost 30% of the largest firms. So it is possible to return vigorous profits regardless of practice size.

Of course, in real money, larger practices' profit is considerably higher than even the most profitable smaller firms: the handful of those with more than 50 people account for

Practices by profitability (benchmarked at 15%)



more than 40% of the profit achieved by the entire profession.

Salary spends

Colander has set a benchmark of 70% of expenses going on salaries, excluding bonuses and other ‘add-ons’. Bearing in mind the economic climate recently, it is not surprising that the average remains low: 68%. However, this is higher than last year and should continue to rise as the recession eases.

Practices that fall below this benchmark should review their business strategies: unless they are poor payers, they may be working with too few or too junior staff; alternatively, elements of their ‘other expenses’ may be too high. By contrast, if a high score against this measure is matched by a low turnover and profit per fee earner, then the practice may be over-resourced or top-heavy.

Non-fee earner headcount

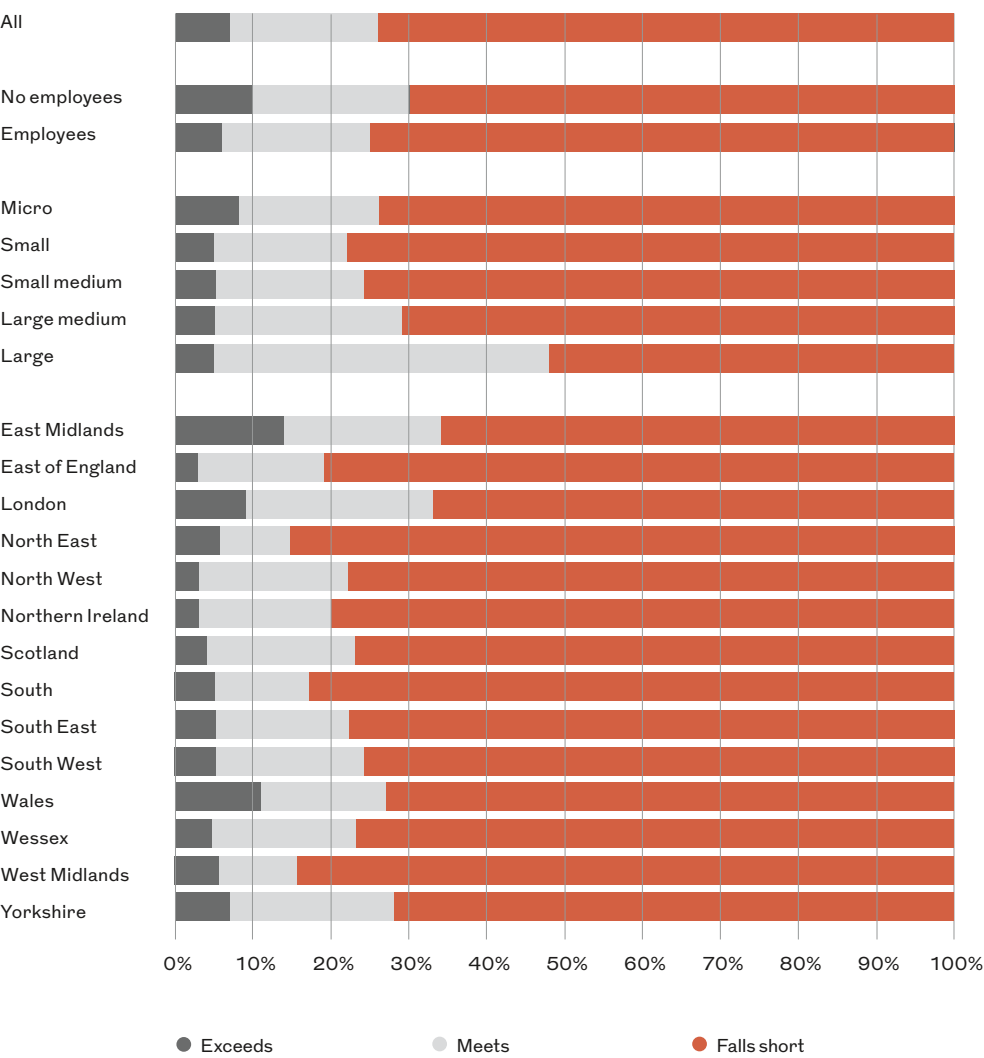
With the increasing use of technology, it is tempting to save on non-fee earning salaries and use junior fee earners to undertake admin and support functions that should be done by non-qualified staff. Assuming that architects earn more than admin staff, this is clearly a nonsense and is almost certainly a factor in the low average turnover per fee earner achieved by smaller practices.

Having too many support staff is inefficient – but so is having too few. Colander has set a benchmark of one non-fee earner for every five fee earners. Excluding those firms that have no employees, just over a quarter of RIBA chartered practices fall within 5% of this benchmark. Understandably, small practices tend to fare particularly badly against this measure.

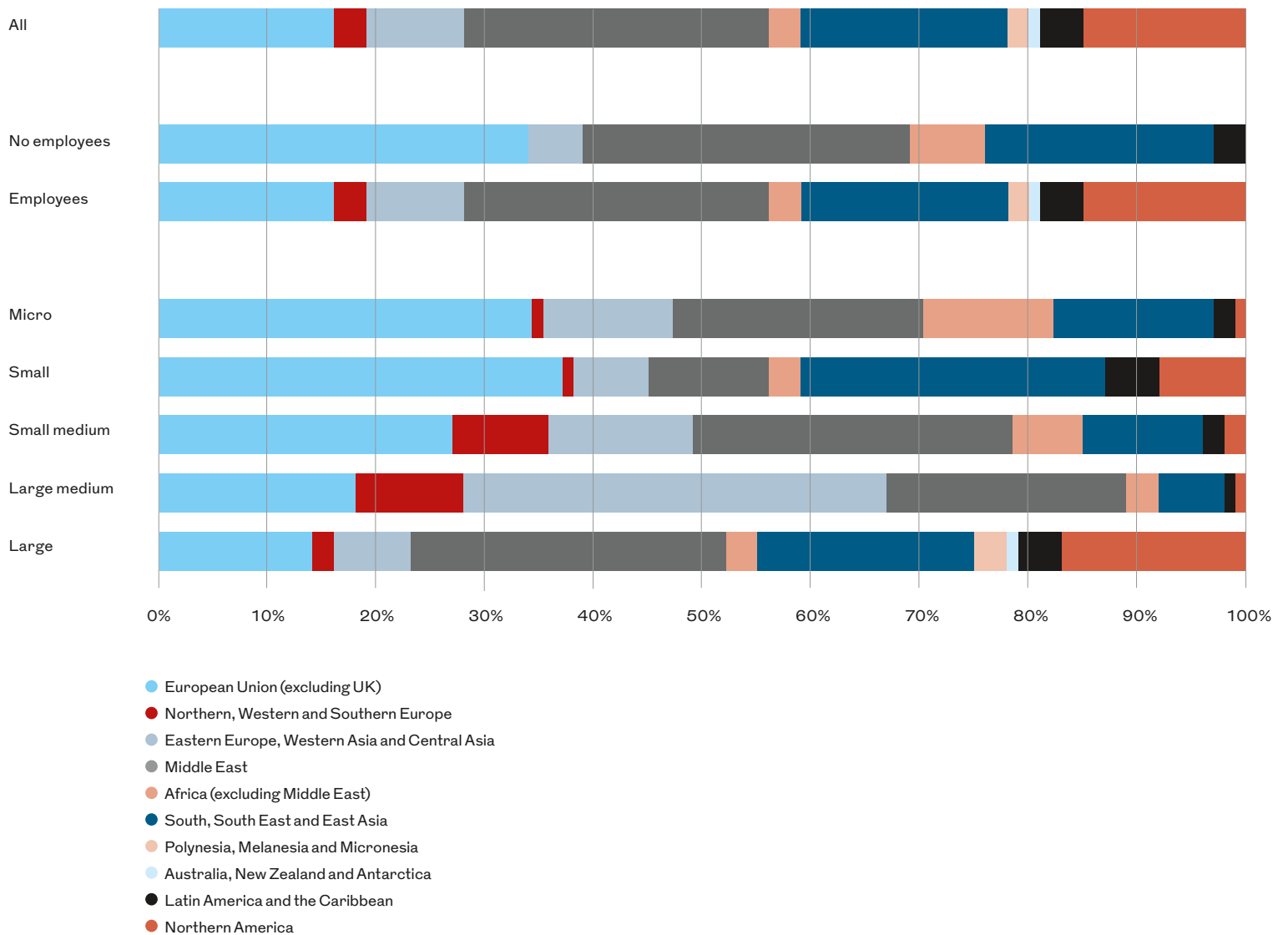
Just under 40% have dedicated accounting

It is tempting to save on non-fee earning salaries and use junior fee earners to undertake admin and support functions. Assuming that architects earn more than admin staff, this is clearly a nonsense

Practices by marketing spend (benchmark 2%-5% of turnover)



International work by location



INTERNATIONAL WORK

International work is increasingly important to RIBA chartered practices: 16% of their total income comes from projects outside the UK. The vast majority of this is earned by practices with more than 50 people – overseas work accounts for more than a quarter of their income – however, the large practices are by no means the only ones to benefit from UK design's high global profile: last year, 20% of practices earned fees from international projects.

The Middle East; South, South East and East Asia; the European Union (excluding UK) and northern America each contribute 15% or more of the profession's overseas

income. The focus for smaller practices is the European Union (excluding UK), while the most productive region for larger practices is the Middle East.

Private corporate clients supply 60% of international income, while 15% comes from the public sector; 8% from domestic clients and 7% from not for profit organisations. In line with client types in the UK, smaller practices gain a large percentage of their international income from domestic clients, while the larger practices gain more from private corporate clients.

Mixed-use projects and offices account for the highest percentages of income earned on international projects.

Smaller practices gain most from residential projects; medium-sized firms focus on retail, sports and leisure while for large practices, mixed-use and offices dominate.

Just under half of the practices working on international projects earn fees from a full architects' service. However, the main emphasis is on front end services: over 60% earn fees for design services to planning only, and over half from feasibility studies and master planning; for larger practices the percentage is over 80%. It is worth noting that more than half of the practices working on international projects earn fees from consultancy and advisory services.

staff; 20% have dedicated IT staff and 16% have dedicated marketing staff.

Sell yourself

When it comes to marketing expenditure, conventional advice varies hugely: anything up to 20% of turnover! Determining factors include the size of the business, its maturity, the markets in which it is working, how established it is in those markets and the speed at which it hopes to grow, if at all.

On average, RIBA chartered practices spend 2% of their turnover on marketing, just hitting our benchmark of 2% to 5%. This includes the salaries of dedicated marketing staff but not time spent by fee earners pitching for new work. It is appropriate to maintain existing visibility or achieve steady growth. For practices looking to grow more rapidly the percentage could well rise.

Winning work

Colander has set the benchmark for winning work at 50% of the projects chased. Of the practices in this survey, 70% meet this benchmark; on average firms win just under 60% of the projects they chase. These figures include repeat business (which accounts for almost 40% of new work) and projects won through direct, uncompetitive approaches.

Given that over 40% of practices say that they win 70% or more of the projects they chase, it is disappointing to see that there remains no correlation between success at winning work and profitability.

Risk and reliance

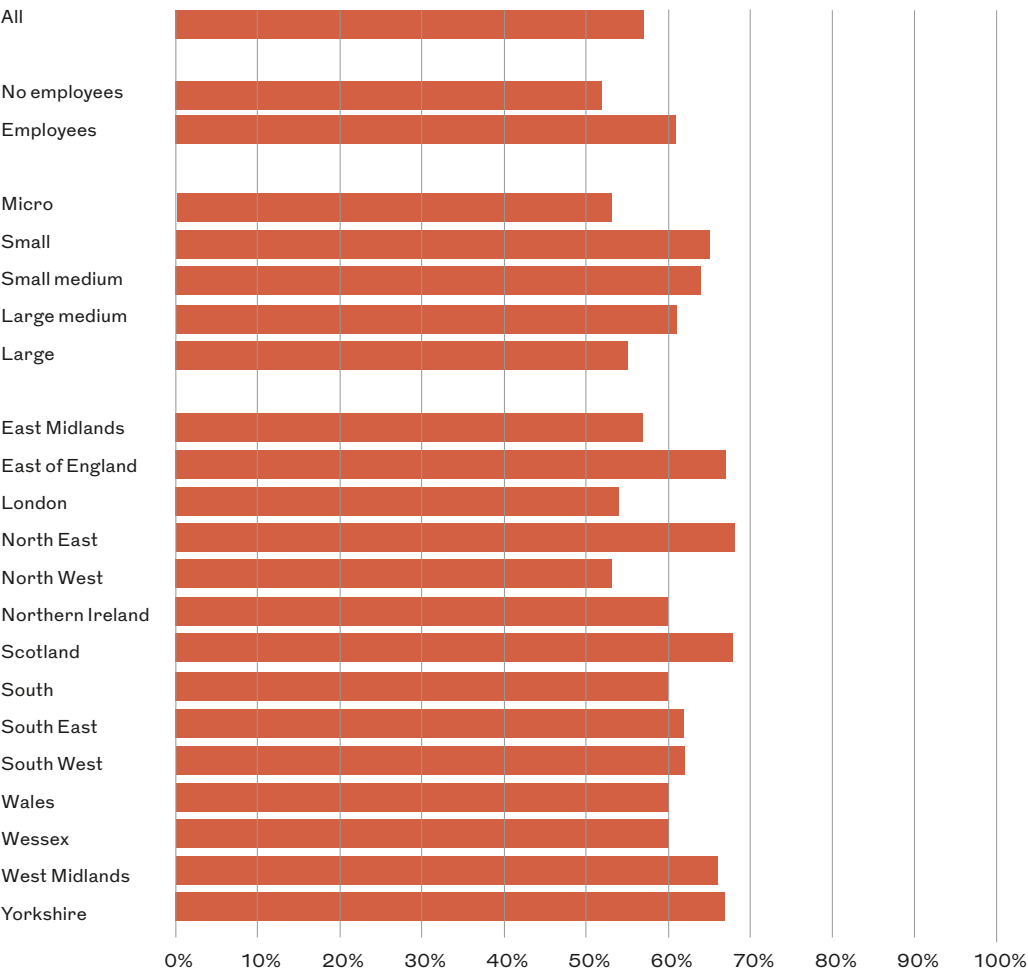
As in previous years, our benchmark suggests that no more than 40% of turnover should come from any one sector (or from any one client for small practices). This is about risk aversion: most practices can just about survive the loss of around 40% of their business; any more becomes a serious struggle.

On average, practices in this survey work in 7.6 sectors. However, this apparently varied workload masks a worrying reliance on single sectors, as most practices, regardless of size, fail to meet the benchmark. For large practices especially, meeting it should be a vital part of a risk management strategy. ●

The RIBA Business Benchmark report is an independent report based on returns by RIBA chartered practices and written for the RIBA by Colander Associates . www.colander.co.uk
Caroline Cole is director of Colander Associates

Given that over 40% of practices say that they win 70% or more of the projects they chase, it is disappointing to see that there remains no correlation between success at winning work and profitability

Jobs won as a percentage of jobs chased



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Where people
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Motorway madness

The new high speed roads slicing through Glasgow may serve the Commonwealth Games well but their legacy will be to bypass and divide the city

Hugh Pearman

London managed to stage the 2012 Olympics without feeling the need to complete its long-abandoned 1960s 'inner motorway box' of which only eastern and western fragments were ever built. By investing vast amounts in an upgraded and extended Underground and Overground rail system plus commandeering the short high speed run to Stratford International station (and not forgetting those controversial 'games lanes' on the roads) London's predicted traffic chaos did not happen. Glasgow does things differently. With the impending 2014 Commonwealth Games acting as a spur to the regeneration of the east of the city, its own ancient postwar plans for a very anti-urban motorway box were dusted down and completed, while public transport



Above A proper place: RMJM's Athletes' Village is a real community in the making.

CITY LEGACY

has received only a relatively modest boost.

Thus the M74 from England was controversially extended through the south of the city, heading west to link up with the M8 just south of the Clyde. This was proposed as long ago as 1945 when the planners, as usual, decided to continue the demolition and clearances begun by the war. Finally opening in June 2011, this extension cost £440m. Then a second road, the Clyde Gateway route (also known as the East End Regeneration Route), was built to link the completed M74 across Glasgow's East End where the main venues of the Commonwealth Games and the Athlete's Village – for once a place which actually does feel like a village – have been built. However this big road has a further phase to go which will make it a link between the two motorways. Therefore it is strategic

rather than local and, in economically-crippled and depopulated Dalmarnock which it passes through, acts as all such big roads through cities act – as a dividing barrier.

Perhaps this contentious burst of road-building would have happened anyway, eventually, along with all the ground-preparation going on in the Clyde Gateway area (the marketing schtick borrowed from elsewhere). There, the contaminated traces of old industry are made palatable for the big sheds of today's businesses. The new roads have nothing 'urban' or local about them, apart from their purpose in connecting the big sheds with their markets.

The Games, then, provided the necessary excuse because the Scottish government saw better motorway connections across the city as strategically important for Scottish busi-

Smashing these roads through poor post-industrial local communities has, of course, been far from popular, and makes knitting together new communities more difficult



ATKINS

Above At last public transport gets a look-in: upgraded Dalmarnock Station by Atkins.

nesses, which is not the same thing as local 'regeneration'. Work began in 2008, months after the city was awarded the Games in preference to Abuja, Nigeria. Smashing these roads through poor post-industrial local communities has, of course, been far from popular, and makes knitting together new communities more difficult. There has also been a small investment in public transport, specifically the £11m refurbishment of nearby Dalmarnock railway station by Atkins and new cycleways out east from the city centre, but nothing to compare with London's huge rail infrastructure splurge in time for 2012.

The legacy of the Games will focus on the distinctly horrible £113m Emirates Arena, right opposite Celtic Park football ground across the London Road, but weirdly turning its back on it. This huge lumpen silver-grey



3D REID

Above A great facility in an alarming shell: the Emirates Arena and Sir Chris Hoy Velodrome share a single megastructure by 3D Reid.

thing – far from the finest work of its architect 3D Reid – sits in a sea of car parking and is effectively at least three buildings in one: the Sir Chris Hoy Velodrome, the main sports arena and associated sport halls, and a lot of office space for various Glaswegian and Scottish sports organisations. There's also a gym and spa. The device of an over-sailing roof grid to tie them together visually is a dismal failure. But the facilities inside are first-rate and the legacy started well before the Games themselves, with the building in use for the Glasgow public for the year before.

Other sports facilities are mostly a matter of refurbishment and adaptation of existing buildings, such as the Tolcross International Swimming Centre. By common consent, the most successful architectural legacy of the Games will be RMJM's Athletes Village, a

place where you would actually want to live, in a low-rise, low-energy landscaped setting leading down to the Clyde. This is a clever reworking of what are essentially standard house types – very different from the huge precast apartment blocks of London 2012 with their varying surface treatments.

Of the 700 homes at 'The Village' built by the City Legacy consortium, 400 are for rental through three housing associations and 300 are for private sale. Southerners (and many Scots) can only dream of four-bedroom town houses starting at £175,000 as they do here. With their district heating system, Homezone layout and SUDS-based landscape strategy, these homes have a chance of becoming the kind of real resilient community that the roaring new roads discourage elsewhere in Glasgow's East End. ●

A photograph of a modern bathroom interior. It features a dark, glossy vanity unit with a white vessel sink and a tall, chrome faucet. A large, rectangular mirror with a textured frame is mounted above the sink. On the vanity, there are several bottles of toiletries. To the right of the vanity is a white armchair with a wooden frame, holding a stack of folded grey towels. The floor is made of light-colored wood, and the walls are white. The lighting is soft and even.

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Design by Philippe Starck

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Where people
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Climate

Battered but unbowed

Windswept and blown off the rail network, Plymouth is undaunted, with big plans for growth

Eleanor Young

While households across the south west were watching the forecasts and flood levels with real anxiety, in Plymouth the weather damage has become a political and economic issue. Since waves took out the sea wall and train line below the red cliffs in Dawlish, the rail journey to Plymouth was extended: it became entirely reliant on the A38 with train passengers on a coach transfer. With floods creating earlier closures further up the line, the resilience of the network is being ques-

tioned. The latest two month closure came at a particularly bad time for Plymouth, which had just won a place on the government's City Deal. It wants to concentrate on attracting new businesses and growing existing ones with its new spending powers.

But first it has to go back to the government to lobby for the very infrastructure on which it so depends. Plymouth City Council leader, Councillor Tudor Evans, has been campaigning for rail investment in the south west to be considered as seriously as HS2. 'We need an additional, fast 21st century resilient rail route to put us on a par with the rest of the UK, not a heritage restoration project,' he says. One business leader has estimated the economic loss at between £2m and £20m a day for businesses in Devon and Cornwall relying on the railway. Connections to the south west by both rail and road slow down when you reach Exeter, where the motorway network ends and the train starts to wind its way towards Plymouth. The city lost its airport in 2011 and though a council decision on it is expected in 2015, Newquay or Exeter are now the closest airports.

That makes it harder to argue, as Councillor Evans has done, that the city is undergoing a resurgence. Announcing £130m of development last September, he said: 'We are back in the spirit of post-war reconstruction in the city.' There are indeed some significant plans there. The £130m announcement took in a new £21m History Centre, the conversion of the civic centre into a hotel and the building of a new grandstand for Plymouth Argyle at Home Park. In recent years, the back drop to the city's iconic bombed-

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new employment space

60,000m²
refurbished work place

30
new marine and engineering
businesses

£21m
public money investment
phase one

out Charles Church has also dramatically altered as Drake Circus shopping centre (the deserved first winner of BD's Carbuncle Cup) took centre stage. But these high profile cultural and leisure projects are just a side show to the main event of the city: everything that comes under 'Prosperity and affordability' in the consultations for its 2031 plan.

Government figures show that wages and 'output per worker' in the south west are significantly below the average (output per worker is £32,000 a year, as opposed to £45,000 across the UK), although its unemployment is also lower than the UK average. For many years Plymouth survived off the back of the Royal Navy, which was long its largest employer. The naval base in Devonport defines the western edge of the city – where ships and guns were once built and, latterly, submarines refitted. Plymouth's

Ocean city: Plymouth meets the water



- 1 South Yard
- 2 Princess Yachts
- 3 Royal William Yard
- 4 Ferry Port
- 5 Millbay
- 6 Hoe Park
- 7 Barbican
- 8 Shopping area

0 250 500m

branding as 'Ocean City' nods to this history and the marine businesses that grew alongside it, such as Babcock Marine and Princess Yachts.

Ironically, given Plymouth Sound and the estuaries of the Rivers Plym and Tamar that bind the south and east of the city in a blue belt, access to the water is limited, predominantly by naval land use and the topography. So although Princess Yachts has outgrown its base, finding space to expand along the water's edge is tricky. An essential plank of the City Deal – which is really devolution lite that gives cities more freedom in the spending of their money – is a £21m public sector investment in old Ministry of Defence land at South Yard along the deep water of the River Tamar. This is to become a production campus for the marine industries, offering the hope of 1,100 new jobs from 2015 onwards, over the 32,400m² of the first tranche of land.

From the nearby developments at Urban Splash's Royal William Yard it is also clear how more sympathetic and open ownership of the land along the shore, bringing together business, leisure, living and the sea in a historic setting, can create quite a different outlook to the city. Further into the centre at Millbay this has been less successful so far at an urban level, but developments are moving apace. Here, Bristol-based Ferguson Mann

ROYAL WILLIAM YARD: A MODEL WATERFRONT REDEVELOPMENT

The solid Georgian naval buildings that edge the Plymouth waterfront have been redeveloped by Urban Splash into apartments, restaurants and offices. One of the early moves was to cut a new staircase through the huge perimeter stone walls to link the South West Coastal Path with the previously inaccessible parkland west of the site. A boardwalk around the perimeter also makes the waterfront more accessible.

Along with the staircase, Devon-based Gillespie Yunnice Architects has done a huge amount of the conversion work and recently got planning permission to convert the complex's central building into a hotel and a graduate arts space, to house artists completing their studies who might want to continue having a Plymouth base.



Architects kicked off the housing development with its 'Cargo' award-winning flats in 2009. Overlooking the ferry port, Millbay also has a new marina which opened last year, along with the building that served the America's Cup World Series yachting race in 2011. A new free school, Plymouth School of Creative Arts designed by Feilden Clegg Bradley Studios for project sponsor Plymouth College of Art, is on site, steel framed and with the cladding starting to go on.

Kerb stones are being laid for roads in the next phase of Millbay's development under The English Cities Fund, of which the Homes and Communities Agency is a major part. This will also help to increase links along the city's shoreline from the Barbican in the east, along the Hoe around Millbay and to Royal William Yard. Linking west beyond that, to Devonport, will be a taller order, but it is a long term aspiration from Patrick Abercrombie's Plan for Plymouth in 1943, through to the Mackay Plan of 2003, drawn up by MBM Arquitectes of Barcelona. It seems likely it will also make it into the city council's plan for 2031, which is still being drawn up.

The Mackay Plan also set out a vision of growth for the city to raise its population from 241,000 to 300,000 by 2026. That this is happening can be seen not just in the centre but also on the outskirts of the city. On

the northern edge is Bickleigh Down Eco Village, a 91-house development designed by London-based Zedfactory. Almost beyond the city's administrative limits, but essentially an urban extension, is Sherford, which developer Red Tree promises will be a new market town complete with high street, schools and doctors' surgery. It received outline planning last year, along with £32m of government money, and the intention is that the 5,500 new homes will be built out over the next 20 years, starting on site later this year. This project includes a significant amount of space for businesses which will bring employment opportunities.

There are still many things to puzzle over for planners, councillors and interested architects. How to retain students and boost the under-represented 30-40 age group so they consider Plymouth their home? How to keep the small west end shops alive? How to bring together Devonport and Plymouth? And most topical of all is the fundamental question of how to make most of the city's outstanding marine geography when land linkages to the east depend, for the moment at least, on the modest dual carriageway of the A38. ●

This article was written with the assistance of Graham Devine, LHC Architecture and chair of RIBA Plymouth

SHERFORD: EXTENDING THE CITY

The rural South Hams borders Plymouth to its west, and its housing growth will be concentrated in the new town of Sherford, some of which lies just over the border with Plymouth. This project of 5,500 houses had an original masterplan drawn up by the Prince's Foundation through Enquiry by Design, before Bristol-based ESHA applied its Poundbury knowledge to the scheme, including preparing a dwelling pattern book. After being stalled for some years, the Homes and Communities Agency put in £33m to spend on initial infrastructure and, now with outline planning secured, a consortium of Taylor Wimpey, Bovis Homes and Linden Homes are preparing to start on site later this year.

BEN PENTREATH



External
management

Help for the small guy

Adoption of the EU Procurement Directive should start to level the playing field for small firms

Russell Curtis

Few practices who have bid for public work would disagree that the existing methods of procuring consultancy services are in desperate need of reform. The use of arbitrarily high turnover requirements, nonsensical levels of professional indemnity insurance and an obsession with box-ticking both discriminate against smaller practices who are perfectly capable of undertaking the work and place a huge burden on larger practices bidding for projects of a larger scale.

Many in our industry mistakenly blame this overly bureaucratic approach to procurement on the European Parliament. While the OJEU process obliges procuring authorities to put in place robust and transparent methods for buying services, it is in fact the UK's implementation of European regulations that is largely responsible.

Winds of change

The RIBA's 2012 report *Building Ladders of Opportunity* set out recommendations for how the government might make the way public bodies procure professional services more efficient, cost-effective and fairer.

As we progress into 2014 and the eco-

nomie recovery starts to gain pace, there is at last a sign that things might be changing for the better. On 15 January, the EU adopted the latest iteration of its Procurement Directive. This introduced many positive changes for SMEs (a broad classification which actually includes 97% of UK practices) through the reduction of barriers to entry. Having lobbied hard for fundamental changes to the law, the UK government has committed to adopting it before the summer. By aligning UK public procurement regulations more closely with the rest of Europe, a rebalancing of the procurement landscape should see work won by those best placed to deliver it.

The government has indicated that it intends to make minimal changes to the directive, so the previous tendency to gold plate the regulation will no longer be allowed; procuring bodies will not be able to apply their own arbitrary qualification requirements, which will now have to be more consistently applied. In a further bid for transparency and convenience, all procurement exercises will need to be carried out electronically within the next four-and-a-half years, improving visibility and access.

Significantly reducing the burden of pre-qualification questionnaires (PQQs), the new directive allows for self-certification, meaning organisations can bid for work having declared their capability to do so. Quite how this will work in practice remains to be seen, but it has the potential to streamline the more bureaucratic aspects of the bidding process. That the directive also encourages the acceleration of procedures (and the UK's are some of the most drawn-out in Europe) can only be a cause for celebration.

Whole life performance

One of the pivotal recommendations of *Building Ladders of Opportunity* was that procurement processes should take into account life-cycle performance; an important victory for those who believe that the success of any tendering process extends beyond the cost and quality of the finished product. Likewise, embedding sustainability as a fundamental aspiration in all stages of the procurement process is a positive move.

An important aspect of the new directive is that the EU has given national governments flexibility to determine their preference on aggregation: the grouping of multiple lots into larger contracts. While many pro-

That the EU directive encourages the acceleration of procedures (and the UK's are some of the most drawn-out in Europe) can only be a cause for celebration

curing bodies argue that this creates efficiencies of scale, there is no doubt that it seriously limits access to public sector work for smaller firms. The UK already has one of the most aggregated markets in Europe and any steps taken to spread the work more widely across all sizes of practice must be welcomed. However, it is not yet clear whether the UK will make it optional or mandatory.

Changes to the financial assessments used by contracting authorities in the selection process will help lower barriers for smaller firms. First, the use of turnover as a measure of suitability becomes an optional, rather than mandatory, requirement. Secondly, where it is used, turnover thresholds can only be applied to double the contract value.

While there is a great deal to celebrate, only time will tell how the public procurement landscape will change in response. Transposition of the directive into UK law is likely to take until the summer. Quite how it will filter down to the local level, and whether it will bring about a consequential change in below-OJEU tenders, can only be speculated upon, but – for now at least – it looks like we're moving in the right direction. ●

Russell Curtis is a member of the Construction Leadership Group and director of RCKa



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Is all going according to plan?



One year on, how is the RIBA Plan of Work 2013 performing in practice?

Adrian Dobson and Dale Sinclair

Last May's launch of the RIBA Plan of Work 2013 was a major step in the evolution of the core process map for the construction industry. It introduced a number of changes, including five key issues.

First, the overall structure was rationalised into eight rather than 11 stages, to reflect more accurately the way that the industry functions in the 21st century. New pre-project (strategic definition) and post-occupancy (in use) stages were introduced, reflecting the need to consider a project within the context of the client's broader business objectives and the whole life cycle of the building.

Thirdly, the provision of task bars enables the Plan of Work to be customised to suit different procurement methods (including tendering) and to provide flexibility in relation to the timing of planning applications.

Two key management roles are clearly defined: the project lead, responsible for managing all aspects of the project and ensuring delivery in accordance with the programme; and the lead designer, who manages and co-ordinates the design, including integrating specialist subcontractors' design. Finally,

there is new emphasis on the collective responsibilities of the collaborative project team, encompassing the design team, client and contractor, in successful project delivery.

There has certainly been a huge amount of interest in the RIBA Plan of Work 2013, with more than 70,000 unique visits to ribaplanofwork.com and nearly 20,000 downloads of the overview document already. Many visitors have gone on to produce bespoke versions of the plan to suit their own practice and project needs. Briefing sessions in the RIBA nations and regions have attracted some 1,500 attendees, and there have been more than 50 bespoke briefing sessions for practices, major clients and contractors.

FAQs

Now seems an appropriate time to address some of the common questions arising as the RIBA Plan of Work 2013 begins to be used.

Can the 2013 plan readily be deployed on smaller, simpler projects being procured in a traditional way?

Yes, it is straightforward to produce a bespoke version mapped to a traditional approach, with the planning application submitted at stage 3 (developed design) and tenders sought at stage 4 (technical design) on the basis of full design information. The RIBA's Small Project Services schedule, mapping the architect's services to the plan, is designed for use with the RIBA Agreements and can be downloaded free from ribabookshops.com.

Will we need to change our fee structures to reflect the changes in the Plan?

The RIBA anticipates that fees for stage 0 (strategic definition), stage 1 (preparation and brief) and stage 7 (in use) will normally be on a time charge basis. The fees for any project need to reflect the resources required to deliver the agreed services as well as profit and added value. The new stage 3 (developed design) requires the development of a fully co-ordinated design, including structural and building services elements, and so can be considered to go beyond the old stage D. This suggests practices will probably need to charge more of the overall project fee at stage 3.

The task bars enable customisation of the Plan of Work, but can we add our own text and guidance for clients?

The plan provides a framework for the pro-

Many visitors have gone on to produce bespoke versions of the RIBA Plan of Work 2013 to suit their own practice and project needs

ject process. ribaplanofwork.com defines core objectives and activities at each stage as well as several levels of additional guidance. At the moment customisation is limited, but we will respond to feedback and intend to provide even more flexibility in future. This is likely to include a free text box so practices can insert specific additional content.

There is often pressure to submit a planning application as soon as possible, as it can be crucial for obtaining funding and releasing value. Can the 2013 plan accommodate this?

Yes, a key feature of the new planning task bar is that it recognises the importance of pre-application activity and provides flexibility for applications to be made at the end of stage 2 (concept design) where appropriate. It is of course important that the client understands that the advantages of an earlier application need to be balanced against the risks inherent in moving to planning on less information and design certainty.

The RIBA Plan of Work 2013 sets out the activities to be undertaken at each stage and identifies key roles, but does not specify who does what. What assistance is there to manage this on larger, more complex projects, with several members of the design team?

The RIBA has published the Plan of Work Toolbox, which can be accessed free of charge at architecture.com. This includes a design responsibility matrix and multi-disciplinary services schedule which can be used in the management of design responsibilities. ●

Adrian Dobson is RIBA director of practice
Dale Sinclair is RIBA vice-president, practice and profession, and director at Dyer



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Team Dream

The Olympic Park romped home to defy the pundits. It's a team thing

Adrian Malleeson and Koko Udom

Two years on from the Olympics, we can look back with a warm glow and the sense of pride the event gave us. But to learn lessons, it's worth looking a little further back.

In 2010 and 2011, we were still reeling from the construction crash of 2008. Some doubted whether the UK construction industry was capable of delivering the promised Olympic Park at all, let alone on time and on budget with the environmental and legacy promises fulfilled. The Daily Mail repeated the view that 'London 2012 is doomed to fail', while others claimed that 'over budget and late' was the norm for UK construction.

But there was the Olympic Park on 27 July 2012: on time, on budget, and delivering what was promised. So what went right?

The answer, clearly, is a lot; but we wanted to know whether contract selection and use was a factor. During qualitative research with those involved in the Olympic project delivery, we found that collaboration was a hallmark of the project. Collaboration was embedded not just in the contracts and dispute resolution processes, but also in attitudes and working practice. There was a strong sense of shared purpose and pride.

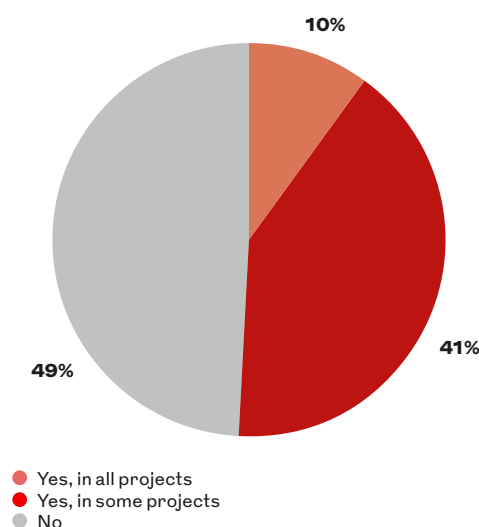
The Olympic Games was the UK's most high-profile construction project of recent years. It brought with it intense media scrutiny, and a significant number of 'Freedom of Information' requests about all aspects of the project, which needed managing and placed an additional burden on the team. But it also helped engender a collective responsibility, a shared desire to demonstrate excellence.

Project structure

From the outside, the company structures behind the delivery of the Olympic Park could look complex. The Olympic Delivery Authority (ODA) had overall responsibility for the Olympics. It appointed CLM to construct the Olympic Park and its associated infrastructure. CLM was itself a collaborative venture of Mace, Laing O'Rourke and CH2M Hill. In turn, CLM appointed, among others, teams of contractors and architects. However, this arrangement was both clear and successful to project team members. Indeed, many praised the role of CLM and the associated delivery structures. This may be due to collaboration being built in to the delivery mechanisms from the outset.

Good planning also played a part. The major sub-projects were timetabled to finish well in advance of the Games' start, leaving enough time for in-use testing. This collaborative delivery led to real benefits, bringing the project in on time and under budget, with cost savings to budget of over £500m.

Collaboration beyond 2012: Did you adopt any collaboration techniques in projects that started in 2012?



Source: NBS National Construction Contracts & Law Survey 2013

Contract use

The ODA appointed CLM on a 'heavily amended' NEC3 professional services contract, although changes were mostly procedural, changing neither the balance of risk nor the emphasis on collaboration. This worked.

At the next stage down, the NEC3 suite of contracts was the preferred standard form, (although some works used JCT contracts). NEC3 contracts were not used 'off the shelf', however. The standard form of contract was amended frequently and significantly. Typically, a large number of NEC Z-clauses were added. Those on the client, or CLM, side suggested amendments were necessary for smooth running of administrative processes, covering forms of indemnity, intellectual property rights, freedom of information and consistency of branding. Those appointed by the client, however, feel the amendments were there, in part, to transfer risk away from the client. Collaboration did not overcome all traditional differences.

Dispute procedures

There was a widespread willingness among project team members to prevent disputes happening in the first place, rather than resorting to contractual procedures. Where possible, potential disputes were resolved at the time they were encountered, rather than being allowed to become formal. Dispute prevention was not just contractual, but came from a shared sense of purpose and collaboration. Where they did arise, Dispute Resolution Boards, actively engaged in the project from the very start, helped minimise any escalation. Independent Dispute Avoidance Panels for each discipline also helped reduce escalation.

So we can look back at the delivery of the Olympic Park with satisfaction. It was one of the biggest demonstrations of UK construction excellence in most people's memory. The collaboration that underlay its success was evidenced in the choice of contracts and dispute resolution procedures; realised in a shared ownership and pride in the project. Now we're moving to the buildings and venues being successfully converted and re-used, contributing to a better east London. ●

Full research report available at thenbs.com/

Adrian Malleeson is head of research, NBS

Koko Udom is head of contracts and law, NBS

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in association with the RIBA Journal

This month sees the launch of the Schueco Excellence Awards for Design & Innovation in association with the RIBA Journal.

Welcoming the award, Mike Lane, managing director of Schueco UK Ltd, said: 'At Schueco, we have always liaised very closely with both architects and our network of fabricator-partners, and we have long been conscious of the need to reward and recognise their work and to provide a platform dedicated to promoting their achievements.'

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The judges, RIBA Journal editor Hugh Pearman, AHMM's Paul Monaghan, ex-RIBA president Sunand Prasad and Deborah Saunt of DSDHA, will be looking for creativity, innovation and collaboration using Schueco systems to deliver excellent buildings. ●

Categories

- Education building
- Health building
- Commercial building
- Small project
- Individual house
- Residential development
- Sustainability
- Specialist contractor
- Schueco special merit award

Deadline for entries: 9 April 2014

Awards lunch: 19 June 2014, Tate Britain

Award winners will be published in a special RIBA Journal awards supplement in July 2014

For more details on how to enter and terms and conditions, visit www.ribajournal.com

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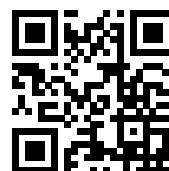
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External
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Procurement
& contracts

Lost for words

Without a formal contract implied terms come into play. It's a complex area

Angus Dawson

Negotiating professional appointments and building contracts can take up a lot of time at the start of a project. There is good reason for this however, as it ensures that the parties' rights and obligations are clear and evidenced in writing from day one. But what happens when there is no formal agreement in writing or the agreement does not address all the issues? How are the parties' rights and remedies of contracting parties established?

Terms can be implied into contracts either by statute or at common law (ie developed over the years by the courts).

The main statutory implied terms which apply to construction contracts come under four acts.

The Construction Act requires construction contracts (including building contracts and professional appointments, but excluding such agreements with residential occupiers) to include specific arrangements for payment and the settlement of disputes by adjudication. If the parties' own terms do not comply with the Act, default payment and adjudication terms will be implied.

The Supply of Goods and Services Act implies terms into contracts relating to the provision of goods and services. In contracts for the provision of services, the person pro-

viding the services must exercise reasonable skill and care and complete the services within a reasonable time. If the contracting party is to provide materials, these must be of satisfactory quality. In the absence of agreed payment provisions, the employer is to pay a reasonable price for the goods or services.

Under the terms of the Sale of Goods Act, the contractor must use materials of satisfactory quality and ensure that goods are reasonably fit for purpose (if any particular purpose is made known to the contractor).

The Defective Premises Act applies to works to residential properties. It requires any person taking on work for or in connection with a 'dwelling' to see that the work or services are carried out in a workmanlike and professional manner – to ensure that the property will be 'fit for habitation' when completed. This has been covered fairly frequently in these pages in the past few years.

Opt out

Although terms can be implied into contracts, in some circumstances it is possible to contract out of them; it depends on the terms. For example, you cannot contract out of the Construction Act.

Outside the world of terms implied by statute, the common law will imply terms in certain circumstances. Examples of these are an implied obligation on an employer to allow a contractor possession of the site in good time and not to hinder the contractor in the performance of its work.

However, the courts have made clear that they will not imply certain obligations into a contract. They will not imply an obligation for a contractor to work regularly and diligently by reference to a contract programme.

There is no implied term that a building will be fit for purpose if it is built in accordance with plans prepared by the employer.

There is no implied term that the employer will give the contractor uninterrupted possession of the site.

The world of implied terms can be a bit of a minefield. While it can give parties protections in certain circumstances, the courts will not always imply terms that may, to one party, seem obvious. The solution is to make sure that you have clear contractual terms. It should then be possible to avoid potentially expensive and unnecessary disputes about the nature of contractual obligations. ●

Angus Dawson is a partner at Macfarlanes LLP

Although terms can be implied into contracts, in some circumstances it is possible to contract out of them; it depends on the terms

PERIODIC PAYMENTS

To Housing Grants, Construction and Regeneration Act 1996 as amended by the Local Democracy, Economic Development and Construction Act 2009 – the Construction Act – imposes specific requirements on construction contracts in two specific areas: payment and adjudication. Since 2011, it has applied to oral contracts as well as those in writing, but not to those with residential occupiers.

Under the Act a construction contract must include provisions for periodic payment unless it is expected to run for less than 45 days. Where the payment provisions in the Act apply, the contract must provide for the issue of payment certificates (by either the payer or payee) setting out the proposed sum for the contractor or consultant for the period in question, plus the basis for the payment. If the payer proposes to pay less than the sum certified, it must serve a pay less notice, setting out what it proposes to pay.

Construction contracts must include adjudication provisions which comply with the Act. Adjudication is a short form dispute resolution procedure under which the adjudicator is generally required to make its determination within 28 days of referral. Where the contract does not include Act compliant adjudication provisions, these will be applied under the statutory Scheme for Construction Contracts.

Internal
management

Fool's Errand

How to be a better fool this
April Fool's Day



Maria Smith

As a general rule, architects really, really hate looking foolish. We hate it so much we usually err on the side of sombre to prevent any confusion that the appearance of joyfulness may cause. After all: 'any fool can be happy'¹.

Why are we architects so loth to play the fool? Is it a lack of humour? Low self-esteem? Is it essential that the client be the fool in this relationship? Well, one great thing about architects is that if we decide to do something, we do it properly. So here is a seven-step plan to transform our foolishness from a weakness to a strength; to transform ourselves into great foolish architects.

The first step is to accept that we are fools. Anyone who can't do this immediately should go and pull an all-nighter or two preparing a detailed design for a project they're not being paid for, haven't been commissioned to do, and that nobody will ever cast more than a cursory glance over. If they don't return twirling the baton at the front of humanity's parade of fools I'll eat my hat².

Step two is to accept that we need help to become better fools. Most of our current foolishness is a garden variety: 'if at first

you don't succeed try, try again'³, where we toil endlessly polishing turds. Or we heed: 'who's the more foolish: the fool, or the fool who follows him?'⁴. Well, getting a part one to come in at the weekend to change the font on all our drawings might prove we're not the biggest fool, but it's no way to escape our own foolishness, however big our package.

Step three is to ask for help. We architects tend to think we can solve problems all by ourselves; teach ourselves anything. But 'he that will be his own master... must often have a fool for his scholar'⁵. So let's all delete those CAD files that contain our secret alternatives to the contractor's fabrication drawings, and set aside our big and pig headed ways.

Step four is to make an inventory of our foolishnesses. We design bespoke components when perfectly acceptable proprietary ones are readily available. We go to public consultations for a scheme we're not involved in to criticise and humiliate its designers. We have secret online identities for trawling blogs and hating everything ever designed. We forget that 'the greatest fool may ask more than the wisest man can answer'⁶.

Step five is to confess our inventory, so long as our confession causes no further harm. Well to be honest, most confessions probably would. Chanting, 'a fool and his money are soon parted' whenever preparing fee proposals is probably best left in the past. Nevertheless, 'it is remarkable how many fools have money to part from'⁷.

Step six is to fully shed that part of our ego that prevents us from being better fools. There is the 'it's easier to let [fools] have their way, then trick them when they're not paying attention'⁸ school of thought. This suggests we let the project manager think it was their idea to change the phasing to what we proposed in the first place. It's certainly true that sometimes, in order to let a good idea prevail, we have to give up taking credit for it, but that is not to fully strip ourselves of that ego. We must un-button, un-zip, pull over and down, step out; be naked and free. We must be comfortable with the risk of appearing foolish in order to properly collaborate. This isn't about letting the QS think we don't understand negative numbers, or telling the structural engineer that terms like slenderness ratio turn us on, this is about vomiting our raw, ridiculous, undigested ideas into the big design cauldron: this is about collaboration that's productive like a chesty cough.

We must un-button,
un-zip, pull over and
down, step out; be
naked and free. We
must be comfortable
with the risk of
appearing foolish in
order to properly
collaborate

The seventh and final step is to be willing to help others find their inner fool. Remember, 'children and fools speak true'⁹. Is there not equal value in both having a great idea and in recognising one? Or at the very least, are they not useless without each other? So let's hire some interns, pay them a living wage, and encourage them to un-don their black graduation auras. Let's tell them they won't always be right, they don't need to know everything, that there is nothing more dangerous than not knowing what you don't know, and that plumbers often know more about plumbing than architects and that's ok.

We live in a topsy-turvy world where health and safety has gone mad, students have become customers, and cheese has negative connotations. As architects our job is to design for this nonsense place we call home and we must do better at speaking its gobbledygook language. 'A common mistake that people make when trying to design something completely foolproof is to underestimate the ingenuity of complete fools'¹⁰. ●

- 1) Clive Barker 2) Dean Koontz 3) William E Hickson
- 4) Obi-Wan Kenobi 5) John Thornton
- 6) Charles Caleb Colton 7) Edgar Guest
- 8) Christopher Paolini 9) John Lyly 10) Douglas Adams

Maria Smith is a director at Studio Weave

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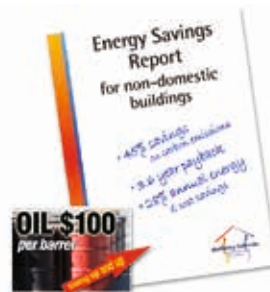
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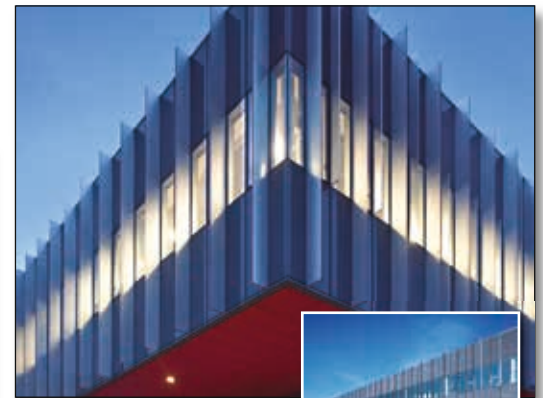


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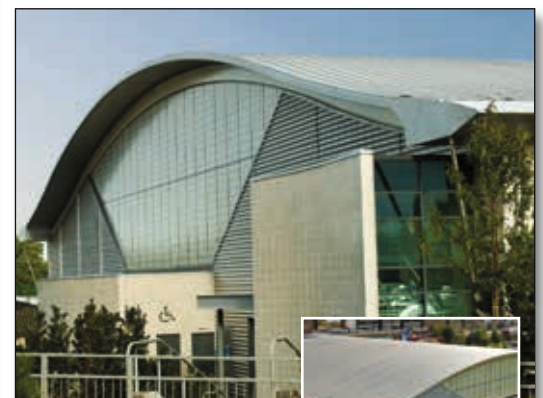
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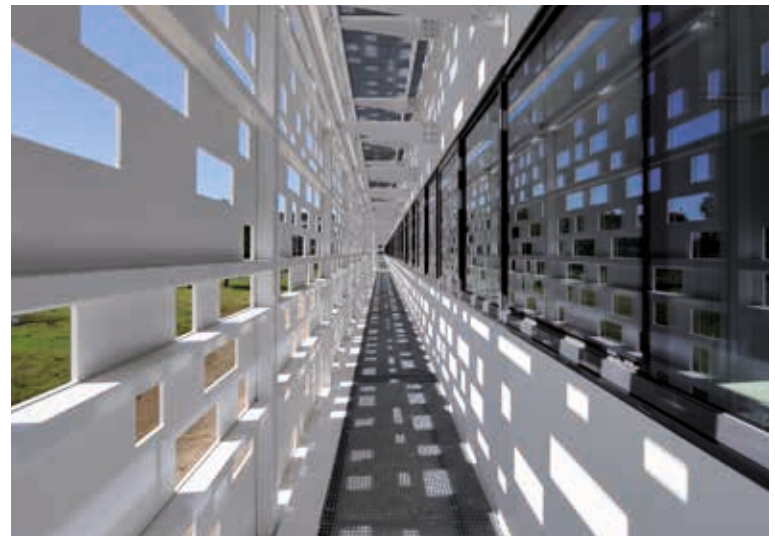
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3: Culture

Points of View

Is there a third way for criticism?



Hugh Pearman Editor

Pevsner and Betjeman, Banham and Nairn. There was a time (and it is with us still) when public architecture critics could be divided by head and heart. Those who deal in reason and function, and those who deal with emotion. Thus Courtauld academic Pevsner is stereotyped as the dry cataloguer of buildings, the 'Herr Professor Doktor' as his emotional rival, Betjeman, described him. And, we are told in Gillian Darley and David McKie's excellent biography of Ian Nairn, this author of the *Architectural Review*'s famous 'Outrage' issue of 1955, did not get on at all well with the technologically-minded Peter Reyner Banham, his AR colleague and academic. Probably because there's rarely room for more than one big-beast polemicist in the same room, doubtless because Banham looked optimistically forward while Nairn felt a permanent, melancholic sense of loss, certainly because their flights of fancy had entirely different trajectories, but also because of that age-old divide which cleaves British culture: the trained versus the untrained, the professional versus the amateur. The ordained, essentially, versus the laity.

There's probably little more to say about

Objectivity was never Nairn's strong point – but at least he would tell you, as Pevsner would not, whether a building was worth going to see

Pevsner vs Betjeman, though I'm sure that won't stop people saying it. Nairn has had a thorough airing lately, due not only in the Darley/McKie book, but also because of a recent BBC Four TV programme which, like the books, considered him warts and all and gave us generous clips of his 1970s films.

Nairn, famously, was a drunkard – killed by drink at 52 – and a loner. Not a joiner. Not one to stick to the script, and he appears seldom to have had a script anyway. He begged to be allowed to work with Pevsner on the *Buildings of England* and given their utterly different approaches, it's amazing he lasted for about one and a half volumes before bailing out. Objectivity was never Nairn's strong point – but at least, as Alec Clifton-Taylor observed, he would tell you, as Pevsner would not, whether a building was worth going to see. Yet for all his passion, he never saved a single endangered building in his lifetime.

Nairn had his little TV tics – the suit, the mackintosh, the convertible Morris Minor – but could never be defined as a manufactured personality. Nor could Banham, though he cultivated his visual appearance assiduously – the rabbinical beard, the cowboy attire, the Moulton bicycle. Both men now seem very quaint to me. Nairn as the man who had a long emotional and physical breakdown on air, Banham (still the untouchable prophet for many) a trend-chaser, trying to sound hip, prone to grandiosely misguided predictions. Read him on airport terminals and chuckle.

I speak as one of the laity, the untrained. But one thing struck me as odd, when I started out in this trade and both men were still alive: everyone in my business seemed to want to be either the next Nairn or the next Banham. Some still do. That speaks volumes for their achievement and influence; but I wondered then and still wonder now: is there no other option? No other available mindset? ●

Ian Nairn: Words in Place by Gillian Darley and David McKie, published by Five Leaves Publications, £10.99.

Half the people doing equivalent roles to mine at Heathrow are women. That's more than I can say of my experience in an architectural practice

Karen Rogers
p70

Tim Tinker's Heygate Estate has become the local classicus of modern ruins lust, but isn't it troubling that it's only been 'discovered' when emptied of council tenants? The Heygate hurts

Christopher Woodward
p75

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Wednesday 30th April 2014

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Bad timing

Herbert Wright clocks on



Herbert Wright

It looks like an obelisk rendered by a cubist, it chimes the hour and yet it is out of time. The brand new 25m-high asymmetrical clock tower of Dixie State University, Utah, by local architect VCBO, should be finished this month. It's the latest in a typology that once proliferated around the world, but which architecture has almost forgotten.

Who needs a public clock when you can whip out your mobile phone to check the time? Some may remember when we relied on wristwatches. Every now and then, when they stopped or had been left in the bathroom, those with a schedule suddenly needed that otherwise-ignored network of public clocks out there. Few things would be more annoying than a stopped public clock.

Mediaeval time had drifted vaguely with the sun across the sky until the hour was pinned down, at least locally, by mechanical clocks on churches. But the church's time was to pass. Perhaps Newton and Descartes' rational universe, defined by absolute time and space (a sort of infinite über-Miesian matrix), had something to do with it. Certainly by the 19th century, the state controlled public time. Clocktowers proclaimed prosperity from town halls and authority across empires. The real time lords, however, were the railway companies, whose timetables depended on nationwide consistency, their termini making the clock-tower sublime. In the early 20th century,

Perhaps time in the public realm should reflect the long term, and make us stop and think before it falls away like sand

US capitalism took clocks to new heights on skyscrapers. As for academia, the peak was Birmingham University's Aston Webb-designed Chamberlain Clocktower (1908), aka Old Joe, which is four times higher than Dixie State, and higher even than St Stephen's Clocktower, aka Big Ben.

But public clocks have had their time. True, the world's second tallest building happens to be the Abraj Al Bait's clock tower in Mecca, completed just two years ago, but this 601m-high monster designed by Dar al-Han-dasah Architects is an exception, a symbol of Saudi custodianship of Islam. Stylistically, it is pure postmodernist bling, in this case a weird style mash-up of Charles Barry with Islamic and Soviet wedding-cake architecture. Outside Arabia and the Far East, historicist PoMo is just sooo yesterday. A twee little clock on a gabled roof was one of the architectural clichés of the eighties. At 200 California Street, San Francisco, a metal-plated PoMo clocktower is being reclad in beige just so it won't look so dated. The city demolished a unique 57m-high digital clock tower in 2005 for luxury condos. 'Go ahead, mark my day', local cop Dirty Harry might have said to architects. Nowadays they get the bullet.

The problem with passing styles and developers' plans is short-term thinking. Perhaps time in the public realm should reflect the long term, and make us stop and think before it falls away like sand. The Long Now Foundation is building a monumental clock-work clock that should tick for 10,000 years, but though it will be accessible, few will see it in its Texas mountain location. Long-term clocks need renewable power to futureproof against the collapse of the grid. Laura Williams' Aluna project proposes a 40m-wide tide-driven timepiece for the Greenwich Meridian- it would tell not the time of day, but 'Moon time', related to its phases and position. Stonehenge has functioned as an astronomical clock for five millennia.

Perhaps the next time a cluster of towers is proposed, we should configure them to cast special shadows or throw slits of light at key times like moonrise, solstices or tax return deadlines. And to shake up short-term thinking occupants, and save them looking at a clock, let's play with mass-damping technology so that on the hour, the tower cores physically go 'BONG!' ●

Trained physicist Herbert Wright is an architectural writer, historian and art critic

WATERY GRAVE

Foster+Partners' Crossrail station and retail complex is emerging at Canary Wharf. Its end evokes a great fish with jaws open, and its side suggests an ocean liner berthed beside the offices. Good to challenge the estate's unremitting blockiness, pity about losing yet more open dockwater.



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Continental Shift

Istanbul's Marmaray rail tunnel links Asia and Europe, but there's a cost

Anne Marie Galmstrup

Many visitors have a romantic view of Istanbul, influenced by the city's beautiful landscape, topography, views over the Bosphorus, the historical peninsula with its crooked streets, and magnificent landmarks. But Istanbul is also a mega-city of about 15 million people, and its rapid urbanisation over the last 10 years has stretched it more than 90 km east and west over the Bosphorus.

Istanbul's development of vehicle infrastructure has not kept up with the demand for private cars, resulting in huge traffic congestion. So any incentive to provide better public transportation is a positive step.

More than 2 million citizens a day cross the Bosphorus. Until a few months ago, the only way to make the cross-continental journey was by one of the two bridges or one of the many commuter ferries that zip back and forth. The Marmaray Tunnel is key to Istanbul's expanding public transportation network – although its full potential is yet to be realised as some of the connecting metro lines are still being built. But the greatest scepticism for the project lies elsewhere.

The new Marmaray link – named after the Sea of Marmara and 'ray', Turkish for rail – is part of a \$4.5 bn, 76km long mega-project launched by the government in 2004. The underwater portion of the project, the Marmaray Tunnel itself, is the first to connect Europe and Asia, and is 1.4 km long. This is relatively short compared with the 38 km Channel Tunnel, but where that runs

The Marmaray Tunnel is key to Istanbul's expanding public transportation network and is the first to connect Europe and Asia

40m below the seabed, the Marmaray is 60m below sea level, making it the deepest submerged tube tunnel ever built.

From an advanced engineering viewpoint, this is quite an extraordinary achievement. Public scepticism towards the safety of the tunnel is also understandable, especially in a country full of conspiracy theories. Some people doubt the resilience of the engineering and electrical signalling system, a concern reinforced when a technical failure unexpectedly shut the tunnel down on its second day of operation. Others worry about the tunnel running parallel to a large earthquake fault line in a high seismic risk city.

Moreover, is it important to understand the Marmaray Tunnel project in a larger city planning context. It is one of a number of mega-projects for Istanbul, including plans for a third airport and a third bridge over Bosphorus north of the city. These are large engineering schemes which will undoubtedly favour a northward growth of the city.

Understandably, Istanbul, like other major cities around the world, wants and needs these huge projects. Public transport is not yet fully efficient and improvements should be welcomed. But there is a fine line between wanting to illustrate this progress with advanced engineering and protecting the city heritage. Rich historical layers and natural beauty give Istanbul its identity, so architectural masterplanning must be considered in parallel with engineering infrastructure plans; and urban planning alongside public transport. Hubs like the Marmaray stations must be not only a means of getting from A to B but also inviting destinations that allow people from different segments of society to interact, as the Bosphorus ferries do today. ●

Anne Marie Galmstrup is partner and principal, Henning Larsen Architects, Istanbul

IN NUMBERS

13.25m
population

\$301bn
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1930
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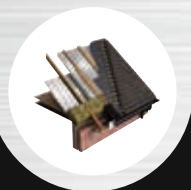
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Lacking the clout of the big boys, Frome in Somerset is making things happen itself

Pippa Goldfinger

Frome is a hilly market town on the edge of the Mendips in east Somerset. During its heyday in the 16th-18th centuries it was a wool town, a heritage reflected in steep roofed weavers' cottages, coaching inns and grand chapels in unprepossessing local limestone.

Frome's proximity to the Somerset coal-fields drove 19th century foundries (the London embankment's Boadicea and the Old Bailey's Justice were cast here) and helped establish the Butler & Tanner printing press which still employs over 100 Fromies, but Victorian parts of the town cannot match the grandeur of that earlier epoch. Today, Frome is an interesting mix of '70s suburbia on the outskirts of a handsome market town.

We're now enjoying a bit of a hipster influx with Steiner families (see below) from all over the country. Our work hub is oversubscribed; new cafés and vintage shops flourish. Disappointingly, the creative, upbeat nature of Frome is poorly reflected in its newer buildings: the non-architecture of dreary housing estates and land-hungry supermarkets.

The South West has seen a big take-up of neighbourhood and community led planning as small towns and villages seize the opportunity to take control of their architectural destiny and the results are, well, interesting.

Frome's Neighbourhood Plan established that we want developments to leave enough space beside our eponymous river for a continuous path, that all housing developments create community space to enhance our friendly and lively town, and that employment sites should be retained in the town centre to prevent us from becoming a drab dormitory town servicing Bath and Bristol.

Recently a community interest company, the Carley Development Trust, was formed

If this example of local ingenuity succeeds in outwitting corporate interests it would be the biggest community right to build project in the country

to propose an alternative to the gormless supermarket application for a large ex-industrial site in the town centre. If this example of local ingenuity succeeds in outwitting corporate interests it would be the biggest community right to build project in the country.

We have some good contemporary architecture, including NVB's elegant extension to Rook Lane Chapel, Jeremy Gould's light and airy GP's surgery, the beautifully remodelled music/community venue, the Cheese & Grain by Bruges Tozer and soon the Steiner Free School designed by FCB Studios.

Alternative methods of regeneration include the hugely successful Frome Independent – a monthly market spread across the town centre combining artisan, food and flea markets. It is a great example of how the use of space between buildings can rejuvenate a town that lacks the means or power to build.

As a small town we have to make things happen ourselves. RIBA South West talks are mainly held in larger towns so we've established an Architecture Club. We've already hosted Charles Holland, Owen Hatherley, Liza Fior and Hugh Broughton (below), with talks by Geoff Rich, Shankari Edgar and Tanya Ross coming up. Talks are well attended – surprisingly by mainly non-architects.

Frome has always been a lively town and we're building on a culture of participation to shape its future. Wish us luck! ●

Pippa Goldfinger is an independent town councillor who founded Architecture Club Frome @pippagoldfinger, @archclubfrome

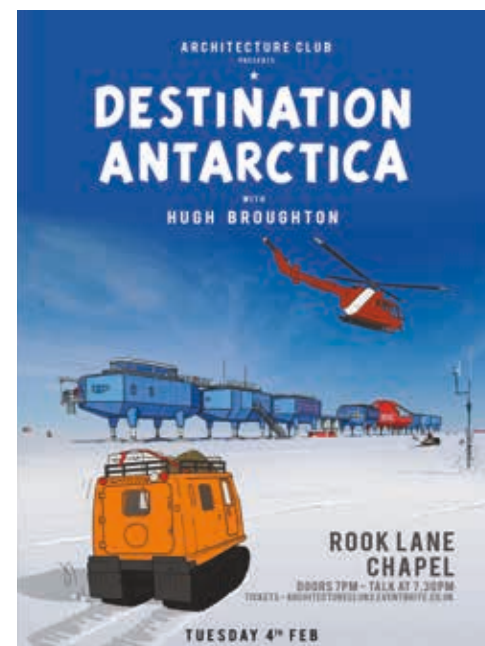
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26,203
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6th
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52,500
Roman coins found here
in 2010

685
AD – Saxon foundation



Right A centre for discussion of architecture: poster for Frome Architecture Club talk designed by Matt Wellsted.



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You can help the RIBA bring diversity into our struggling student population

Stephen Hodder

Promoting and supporting architectural education is an intrinsic part of our Royal Charter. But for many students in the UK, degree education is becoming largely unaffordable. The length of architecture courses, the introduction of fees and the need for specialised materials, printing and essential study visits, make architecture one of the most expensive professions to join. This is a very different situation from the one I and many of you experienced during our education.

Against this backdrop I worry that students from poorer backgrounds or different family circumstances may not be able to enter the profession.

In 1997, the RIBA Education Fund was set up to ensure that the study of architecture remains financially accessible to all. Its purpose is to alleviate the financial hardship of

architecture students, widen participation in architectural education, and reduce student drop-out rates. To date, generous gifts from individuals, the Doric Club, legacies, companies and charitable trusts have enabled the Education Fund to distribute grants to those students in greatest need of support. Since its establishment the fund has provided over £480,000 to support over 380 students of architecture in the UK.

An additional trust with similar objectives exists as a restricted fund within the RIBA. Known as the Walter Parker Trust, it was created from a legacy donated in 1927. Since last September, the income of about £10-15,000 per year from this trust has also been used for student hardship.

Demand from students has increased year on year. In the 2008-09 academic year, the fund received 50 applications: by 2011-12 that number had tripled – the highest ever.

In the 2012-13 academic year, £105,500 from the RIBA Education Fund and Walter Parker Trust was awarded to 102 students enrolled in schools of architecture across the UK on the grounds of financial hardship. This is the highest ever amount of money to be allocated in one academic year. All of this is managed by the RIBA Education Trust Funds Committee with the support of the Institute's staff.

There are, however, challenges ahead. The fund needs to be sustainable in the longer term to respond to increased demand as student finances become ever more restricted. We also need to raise awareness of the funds among students. And importantly, rather than only being of use to existing students who are running out of funds, the Education Trust Funds Committee would also like to be able to offer funding schemes to encourage more students from less well-off families to qualify as architects. The committee has been considering a bursary scheme that encourages more of these students to progress to Part 2 courses.

So an effort is being made to ensure a sustainable fundraising strategy; a strategy I wish to give my full support to. An annual appeal is one component of this strategy and included in this month's journal is an RIBA Education Fund leaflet. Becoming an RIBA Education Supporter will make a difference to the lives of many architecture students and I hope it is something you will consider. ●

@HodderPRIBA

LIBYAN LINK-UP

Last month the RIBA signed a historic memorandum of understanding with the Libyan Board of Architecture and Libyan Institute of Architects, in a bid to boost the profession there. The institute is looking forward to working with both organisations to improve design and construction skills, education and standards in the country.

The signing took place during the RIBA's third international conference, held in partnership with UKTI in early March, where partnering was the theme. 66 Portland Place welcomed visitors from France, Portugal, Malaysia, Libya and China among other countries.

COUNCIL ELECTIONS

Nominations open on 1 April for the next president-elect and for seats on RIBA Council. If you would like to stand please check architecture.com/elections from 24 March for full details.

In 2012-13, £105,500 from the RIBA Education Fund and Walter Parker Trust was awarded to 102 students – the highest ever to be allocated in one academic year

Pilot's daughter, architect and client design lead Karen Rogers has helped deliver Heathrow's new Terminal 2 with tenacity, adroit management and a touch of maternal control

Words: Jan-Carlos Kucharek Portrait: David Vintiner

Out of the cockpit

Icy gusts blow through the new Terminal 2's 'Transition zone', but it feels warmer standing next to Karen Rogers; something I can't put down just to the vicarious comfort of her thick velvet coat. Perhaps it's her affable unguarded nature that puts me instantly at ease. I'm here to ask about her role as landside design leader for Heathrow, but I could just as easily be seeking her advice on my personal life or finances, and you feel she'd be just as open in her response. Rogers sees me shiver. 'It's covered but open as we don't want to encourage people to dwell here,' she says. 'It's a 30m zone separating the car park and drop-off from the main facade of the terminal.' So effectively a security buffer then.

By contrast Rogers, supporting the client on the project, seems quite happy out here – the landside part of the terminal is her domain, and she's in good company. Above us, attached to the central columns that hold up the 20m capacity terminal's huge translucent fabric covered wave-like steel roof, is artist Richard Wilson's impressive 'Slipstream'. The £2.5m sculpture is the result of his four-second filming of a stunt plane twist and turn through the sky, traced and modelled in 3D. Of riveted aluminium, the

shiny, corkscrewing form runs in flux for 70m, weighs more than 70 tonnes and is the artistic centrepiece of the reinvented terminal. Responsible for getting this built, as well as the space that holds it, Rogers' eyes were as firmly on the pragmatics as Wilson's were on the skies. She had to assure the security team the sculpture wouldn't be a security hazard; achieved, I'm informed, by internally tethering so it 'fails safely' into its 21 'cassettes'. She mentions a design meeting where a security consultant asked why Slipstream couldn't be made out of paper. 'Wilson put the lid back on his pen,' she recalls, 'closed his sketchbook and said slowly, "It can – only not with my name on it..."' In a design role governed by committees, rules and regulations, it's at times like these that Roger's tenacity and negotiation skills came in handy. 'When I started here, I wanted to create a stunning front door for the terminal,' she says, a remark that links the visionary with the prosaic, a clue to the nature of her client design role.

Appointed in 2010 as part of a small design team heading up a major £2.5bn terminal infrastructure project for client Heathrow, it turns out that Rogers, 50, had no previous airport experience at all ('ironic',

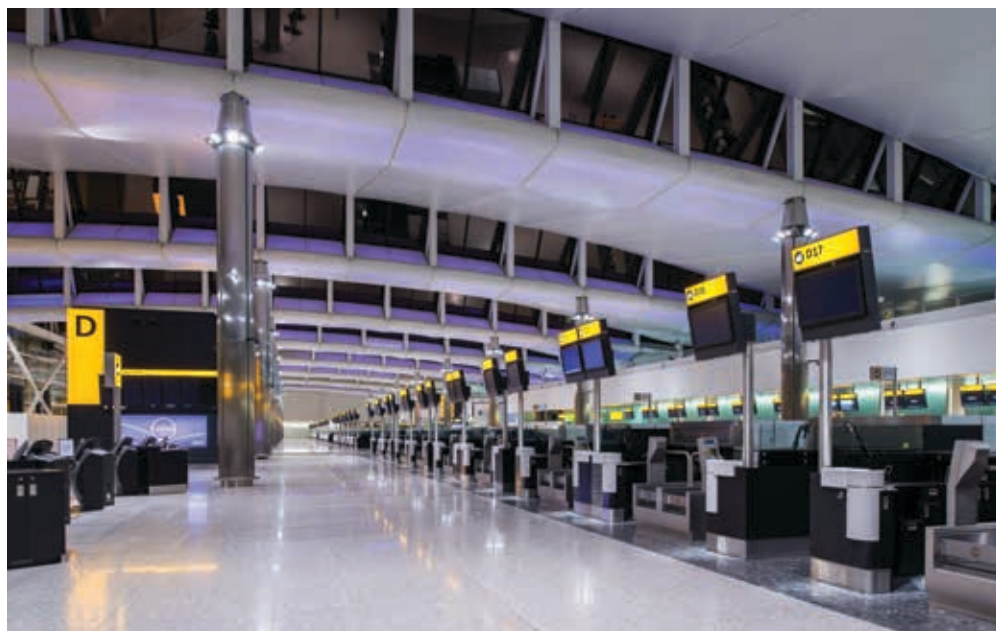
she notes, given her father was an RAF pilot who had sat her, as a child, in the cockpit of a Vulcan bomber). Rogers recounts her experience before her current role in pithy vignette. She worked at BDP for 10 years on big projects, notably mixed-use housing for developer Ballymore with director Tony McGuirk, 'a fantastic designer who handed me the coordinating role', and for 10 years before that at Sheppard Robson as part of the executive architect team for Tate Modern with Herzog & de Meuron, 'who have a great product and a great relationship with Nick Serota... but while Sheppard Robson was great, I did sense a glass ceiling'. Before that she was at Jestico + Whiles, which was so much fun it's where she met her partner; caveating the comment with 'so one of us was going to have to go...'

Rogers thinks landing this role had more to do with her particular skills than direct experience of the sector. She admits it took her about six months to get her feet under the desk and start to understand the Heathrow acronyms – a few of which she fluently reels off for me – and then a protracted OJEU procurement process; but once done, it became more about balancing stakeholder objectives with design team aspirations and the day to



Karen Rogers on the departure level walkway of the cavernous 'transition zone' into Heathrow's new Terminal 2. The fabric covered steel structure forms a translucent roof that runs through to the depths of the airside baggage hall.

It's always been about the departure experience rather than arrival, because that's where retail value is. Unlike T5, we've tried to make it exciting for both



Above With the huge media screens concentrated in the transition zone, the ticketing hall seems remarkably clean and uncluttered. Studio Fractal's lighting strategy, set within the fabric roof, will ensure the ceiling colour changes subtly over the day.

day realities of working with the contractor. They were working to a Foster+Partners masterplan and when Spain's Ferrovial took over BAA, Spanish architect Vidal & Vidal was appointed to work the design up. Rogers admits it's not been plain sailing: most recently architect Pascall + Watson came in to get the snagging done for its 4 June handover. The whole process, she says, required negotiation. 'It was all about having complex building experience, but more than that a real force of personality. Despite any issues between the teams, you always have to be able to bring people to the table and work with them.' And did she bring femininity too? 'I suppose so – although I'd prefer to call it plain common sense,' she adds. '(BDP's) Richard Saxon always said I treated contractors like my sons! But that aside, half the people doing equivalent roles to mine at Heathrow are women. That's more than I can say of my experience in an architectural practice.'

So standing with Rogers in the Kubrick-like white expanse of Terminal 2's new check-in hall, whose fabric ceiling will subtly change colour over the course of the day, you feel she's satisfied with what's been achieved – it's definitely different to Terminal 5. Odd-

ly, this space feels more 'old school'; cleaner, more intimate, with less obvious branding competing with the space. Rogers is philosophical about living in the shadow of RSHP's behemoth. 'Everyone realises the significance of T5 and the awards it's won, but I think we have succeeded in using a common palette of materials to create a completely different aesthetic for T2; I'd even say we've gone further.' In what way? 'Well, it's always been about the departure experience rather than arrival, because that's where retail value is. Unlike T5, we've tried to make it exciting for both. We've pushed the huge media walls into the transition zone, so inside there's just clear, state of the art self check-in, bag drop and airside areas. But the baggage halls here are cathedral-like and instead of arrivals being pushed out of a narrow exit, they get to see "Slipstream" from below rather than above. I'm happy to call it the world's next best terminal.'

I ask Rogers if we're to expect the same problems that plagued T5 when it opened, but she thinks not. 'We've been through a six month familiarisation process and it's going to be a soft start. Only 17 Star Alliance flights will come in on the first day, with airlines

moving in over the next few months, slowly bringing it up to its 20 million capacity. It's not going to be a "Big Bang" like it was at T5: that's a lesson learned,' she explains. And if it turns out it isn't, Rogers has been trained to get out on the terminal floor and muck-in with clip-boards, trestle tables and the tea.

As for the future, she seems torn – there's still a lot to do here. Terminal 1 is yet to be demolished and T2B Phase 2 constructed in its place, and when asked about the third runway, she thinks the desire to maintain Heathrow's status as a global hub will force the argument. 'To build Boris Island would take 15-20 years, and while it's a nice idea, the UK would have lost its edge,' she feels. So while she misses the social life and energy of the city and would 'like to be involved on some significant urban regeneration project,' perhaps she feels her skills are still needed here, at one of the UK's most valuable bits of commercial real estate. 'Who knows? Once Terminal 1's gone it might be time for Terminal 6!' she concludes cheekily. And as she disappears back to her small office tucked behind a subterranean lift shaft, you get the feeling she won't be swapping landing lights for the bright city lights any time soon. ●

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Living death

Ruined buildings have lives all of their own – and hold the stories that their beholders impose on them

Christopher Woodward

Every architect should visit this exhibition: a ruin is the skull beneath the skin of architecture. Stare first at John Constable's *Hadleigh Castle* (overleaf): a six foot canvas of black broken stone, flecked white and grey with seagulls and Thames shore sludge. It was the first picture he painted after his wife's death, returning in memory to a place to which he'd walked with her in their youth. It is the Tate's ruin masterpiece, a study of loss and breakage which is one of the saddest pictures ever painted.

After a John Martin – a lot of John Martin goes a very little way – confront the Wilson sisters' photograph of a World War Two Nazi bunker in Normandy (overleaf). It's the iconic image of the show, dislocating this piece of cruel concrete from place, time and moral context, like a chunk of asteroid.

And look for the Gustave Doré's illustration of an essay by Thomas Macaulay, in which the historian speculated how a New Zealander might one day sit upon a broken arch of London Bridge to draw the ruins of St Paul's, exactly as tourists from Britain – the latest in a long line of 'new Romes' – drew the ruins of the Forum. To Victorian Britain the new colony promised to be the super-race of the future, and 'the New Zealander' became an imaginary witness in journalists' architectural debate. How will posterity judge the worth of what we build?

That is what the 84-year-old John Soane asked in the view he commissioned of Joseph Gandy's imagined *The Bank of England*, Soane's lifetime's masterpiece. The complex is presented as a bird's eye cutaway. It is a

meditation on the future of the new Rome, yes, but it is not 'overgrown', as the Tate's staff suggest: old, blind Soane's assertion is that only the Bank, the bridges and St Paul's are built well enough to tell the future what a great city London once was.

In fact, of course, the Bank was knocked down and the flimsy stucco terraces of his rival John Nash survived. We might call Soane's ruin fantasies 'the passive-aggressive' in architecture: he first depicted the new-built Bank as a ruin after he had lost a libel case against rivals who mocked his work. Ruins are political, and also personal: into their absences we project our private thoughts and doubts. →



Left The skull beneath the architecture: John Armstrong's *Coggeshall Church, Essex* (1940) from his work with the War Artists' Advisory Committee.



This exhibition is the latest in a series drawn from Tate's own collection, and the lack of the obvious is more than made up for by surprises such as John Latham's design for sculptural mounds of coalfield waste in 1976, a masterpiece which might have been. Our coal-mining heritage has vanished more quickly than the medieval monasteries because it is too painful and divisive a presence, suggested the ecologist Professor John Rodwell after the last slag-heap self-seeded as an oak forest was flattened to become a B&Q.

But ruins should be divisive to live. The fate of abbeys divided Catholic and Protestant as they were rediscovered by artists and poets. At the beginning of the 18th century ruined abbeys were quarries of building stone. By the time of Turner's study of Tintern Abbey in 1794 ruins had become 'picturesque', and peopled with picnickers. Our own time has seen a similar aesthetic shift with industrial decay becoming photogenic, beginning in 1966 with Bernd and Hilla Becher's British Council-funded tour of industrial relics. At Broadway Market in Hackney I can buy rust patches to stick on my bike.

I wonder if artistic cleverness has leapt ahead of moral debate. I flew to see Detroit's ruins and had three of the most exhilarating but disturbing days of my life. Recently, the residents who are invisible in the coffee table books of what's been dubbed 'Detroit ruin porn' have stampeded into artists' sightlines with placards proclaiming 'We live here'.

The most interesting intellectual contribution to ruins lust in recent years is by a sociologist Alice Mah, whose interviews with residents in derelict neighbourhoods in Gateshead and Niagara, Canada, exposed a loyalty to place and kinship much deeper

than the visual. Mah suggests a theory of proximity: to enjoy a ruin we require distance from the pain and failure, whether it is the wealthy tourist on a day-trip or a GCSE student curious to trace a dead grandfather's footsteps through the black, broken factory.

In Britain Tim Tinker's Heygate Estate has become the local classicus of modern ruins lust: on a Sunday afternoon you will meet fashion stylists, video makers and – above all – artists. I've played there, too, but isn't it troubling that it's only been 'discovered' when emptied of council tenants? Where did they go, and why? The Heygate hurts.

Such ruins also challenge us to think about past, present, and future: how long will the estate's glitzier replacement last? Who will dismantle The Shard? We build bigger buildings than ever before, and we abandon these more quickly than ever before. If a planning application had to say how a building would be dismantled, it would be more terrifying, I suspect, than the ever-tighter demands of BREEAM ratings. Architecture is in denial about its afterlife, but in a new environmental age I wonder if it is time to re-visit Christopher Wren's dictum that all architecture should aim to be eternal. Should all architecture aspire to ephemerality? ●

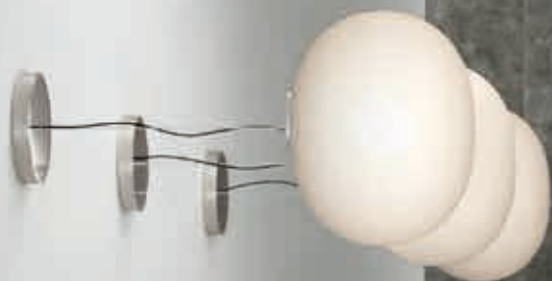
Christopher Woodward is director of the Garden Museum in Lambeth, London, and author of *In Ruins*

Above Jane and Louise Wilson's *Azeville* (2006), a dislocated chunk of proto-Brutalism from Normandy.

Below Sketch for 'Hadleigh Castle' by John Constable, 1828-9.

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Sad storeys

Away from swaggering success, the neglected and forgotten can inspire most

Douglas Murphy

The old maxim that 'history favours the victors' applies particularly well to architecture. The history of architects and their buildings is a story of great (almost always) men, rising to the challenges of their times and translating the will of their epoch into space. But there's also a whole world of blocks and stop-pages which have their own history, from unbuilt schemes such as Tatlin's Monument to the Third International, or lost, lamented buildings like the old Euston Station. This droopier history – romantic, lamenting – has its own, ironically rather successful, niche.

Bleak Houses offers another take on the problem of triumphalism. Architect and historian Brittain-Catlin is a Pugin scholar, and has frankly had enough of the bullying and gladiatorial style of architectural criticism inaugurated by the Gothic crusader, and which dominates to this day. He thinks we should seek out the neglected and failed in architectural history, not in the noble, heroic sense, but rather in a more pathetic manner – he wants us to look at architects who were losers, forgotten, unable to change to shifting fashions, singled out by critics, or buildings which are poor, neglected, ill-treated by history. The grand goal is that looking into these worlds might point a way for ghettoised architectural history to connect more with the public and the way they see buildings.

The Gothic revival is where Brittain-Catlin begins his melancholy tale, asking us to empathise with such losers as George Basevi who, unable to adapt to the new style, was smashed by the Puginites. Later, a similar fate befell Edwardian baroque and neo-Georgian architects like Horace Field, who found themselves adrift in a world switching to modernism. Elsewhere the author asks us to consider the architects, traditional and modernists alike, whose careers suffered because they were far too disagreeable, such as Erich



Below The 1998 Jerwood Library, Trinity Hall, Cambridge, by Freeland Rees Roberts. Ignored by the critics, its very neglect makes it interesting.

Mendelsohn, or far too agreeable and so unable to impose their genius on the world. Sad little buildings of no real merit hold, for him, potential great tales of personal struggle and disappointment, which might appeal to the reading public more than what he calls 'the attack language of the architectural critic'.

One fascinating aspect of Bleak Houses is its focus on sexuality; again and again the losers are marked out by their furtive homosexuality, clearly stated or implied. Brittain-Catlin often sees their professional agonies as inseparable from the personal: dying childless, unmarried, even sued for restitution of conjugal rights. Throughout the book, the notion of the 'dainty' or 'effeminate' is put in direct contrast to the 'cock-swinging' machismo of mainstream architecture, whose denouncement of 'sentimentalism' Brittain-Catlin feels must be countered.

There's an almost Waugh-like sensibility here, and I was frequently reminded of Jonathan Meades contrasting Pevsner's dry-as-a-bone description of the chapel at Madresfield Court with Waugh's rhapsodic depiction in *Brideshead Revisited*, the latter winning hands down as a way of communicating a sense of the space. This analogy holds because much of the book focusses on the delicacy of aristocrats, and draws from more conservative sources – David Watkin, Roger Scruton – that will definitely not be to some tastes. It also downplays modernism's connections to the Left, painting it as just another applicable style. But these quibbles grate less than they might, for Bleak Houses is no manifesto but a charming, witty and highly personal take on the state of architectural writing. ●

Douglas Murphy's new book *Last Futures* will be published by Verso in 2015



Sad little buildings of no real merit hold potential great tales of personal struggle and disappointment, which might appeal to the reading public more than 'the attack language of the architectural critic'

Bleak Houses: Disappointment and Failure in Architecture
By Timothy Brittain-Catlin
MIT Press, £15.07

KEITH DIPLOCK

The Light Choice



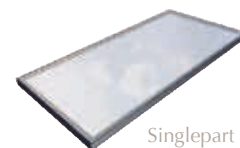
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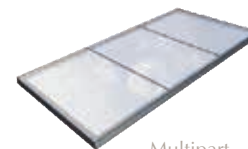
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William Howland

1943 – 2013

Award-winning designer of public housing and schools who rejected political compromise to forge a second career as a developer in Ibiza



My friend Will Howland died in October. He was an architect of two careers – first in public service and second as an independent architect/developer.

The son of a Coventry builder and his wife, he put aside a promising tennis career to qualify as an architect at Birmingham School of Architecture in 1968.

Will joined the Birmingham City Architects' Department under Bill Read's leadership in 1971 and his passion and vigour were soon recognised; he was rapidly promoted. His attention to detail was more than a match for the constraints of local authority housing and a string of awards followed. Will was especially proud of Belgrave Middleway Sheltered Housing, which was recognised with his first National RIBA Architecture Award in 1987.

With the collapse of wholesale redevelopment, urban renewal became the order of the day. Will moved into the design of new schools, where he made his most lasting impact on the city. Perhaps the best example is the Nelson Mandela school – awarded the RIBA President's Building of the year in 1989 – and over his career the department became one of the country's most awarded public offices.

In 1991 the planning and architecture departments were brought together with Les Sparks as director. He and Will shared the same enthusiasm for urban design, place-making and high quality distinctive architecture. Together they established a new enlightened culture for the organisation and further raised its public reputation. He was also involved in introducing the inter-disciplinary Birmingham City Council Design Review Panel.

Career success brought promotion to head of archi-

tecture at Birmingham Design Services, but political compromise was not part of Will's vocabulary and he resigned in 1997. But he had many other strings to his bow: he won a Churchill Scholarship to travel to America in 1991; and was an external examiner at Birmingham School of Architecture and visiting critic at the Sheffield school. He chaired the Turn End Charitable Trust at Haddenham, Bucks, an exemplary grade II* listed Aldington/Craig housing development of the 1960s. Will was also an RIBA Assessor for a range of design awards, chair of British Steel Awards, and chair of RIBA Housing Design Awards for the London area.

William met Caroline Barnett in 1963 and they had a son and daughter. They separated in 2000. Binky Durrant became his partner (and later his wife), and so began the second part of his career. Living and working together in Ibiza, they designed and built their own casa on a steeply sloping site near Sant Antoni. Its success led them to build the larger Codolar house with a local builder/developer, a generous modernist structure with magnificent views overlooking the sea.

Their own house exemplifies Will's approach to architecture. A simple rectangular two-storey structure, carved into to form a protective colonnade at ground floor level and with a line of bedrooms above. Local materials are used effectively and the whole building is perfectly detailed. Good architecture comes from gifted people, wherever they live and whoever pays them. Will was a big man, literally and metaphorically, but was also caring and competitive, and loved to combine these qualities in games of petanca. A ready wit and enquiring mind led him to tackle the Times crossword daily.

Will was diagnosed with cancer in 2011. He is survived by Binky, and Caroline and their children, Florence and Matthew. ●

Tom Jestico

In Memoriam

KENNETH HALSTEAD EVANS
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SIDNEY KING QUARRESS
ELECTED 1951

ROBERT EWING LOWE MCCREADY
ELECTED 1953, GREENOCK, RENFREWSHIRE

KENNETH SCOTT
ELECTED 1953, SCUNTHORPE, SOUTH HUMBERSIDE

EDGAR CHARLES JEFFERY
ELECTED 1954, BROADWAY, WORCESTERSHIRE

GRAHAM PETER PARKMAN
ELECTED 1955, SOUTHAMPTON

CHARLES DEREK HOLMES
ELECTED 1959, HEXHAM

RONALD GEOFFREY SHAW
ELECTED 1961, YORK

DAVID ARTHUR WILLIAM UTTING
ELECTED 1968, WHITSTABLE, KENT

FREDERIC JAMES ALEXANDER GILMOUR
ELECTED 1970, CRIEFF, PERTSHIRE

JOHN FAIRHEAD
ELECTED 1974, MALDON, ESSEX

PETER DENNIS BEAR
ELECTED 1976, LONDON

ALAN CHRISTOPHER BENNETT
ELECTED 1987, BRENTFORD, MIDDLESEX

DEREK ACTON STOW
ELECTED 1951, LONDON

ALFRED RIGBY
ELECTED 1960, LONDON

JAMES BRYANT ACKLAND
ELECTED 1948, BRISTOL

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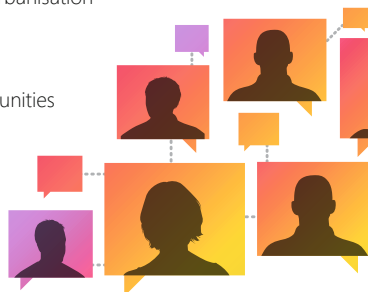
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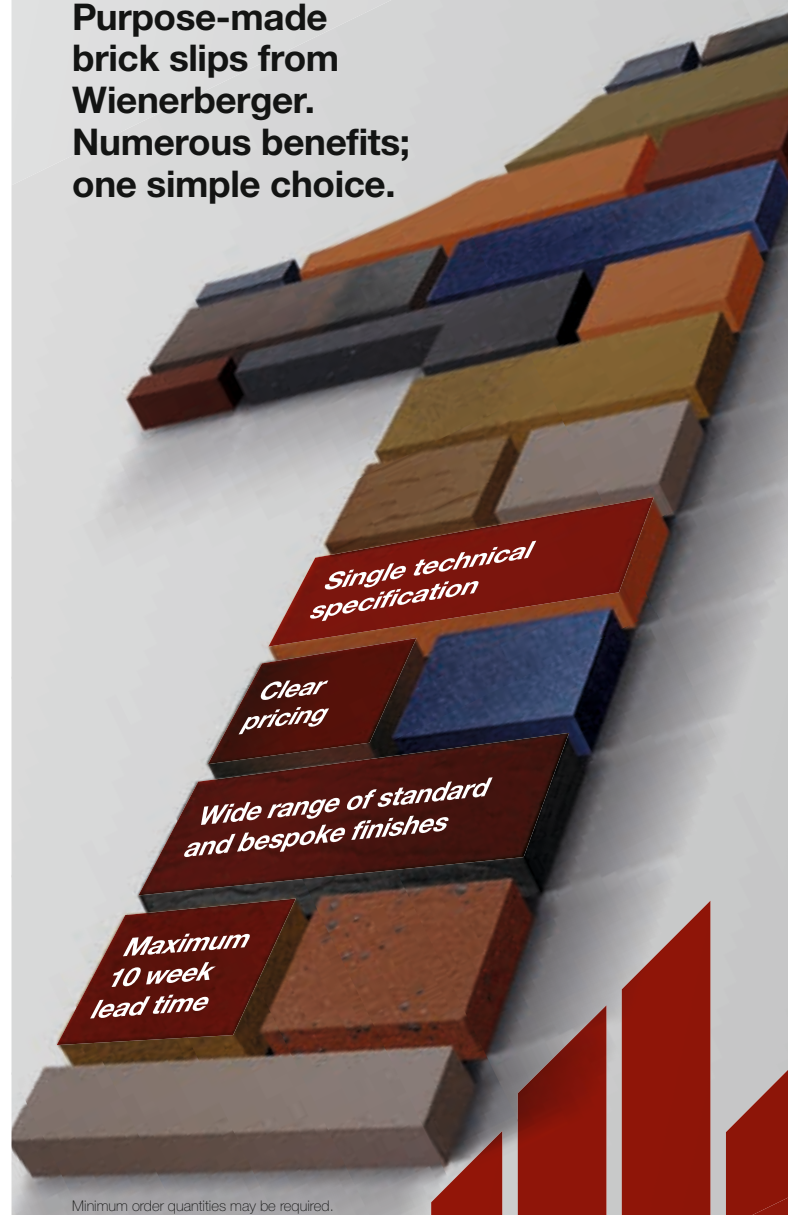
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Feedback freedom

How extraordinary that in your March issue you should publish such an unsatisfactory rant against Arb by Rob Ellis on this page - especially considering that it is headed 'Culture Feedback'.

The sole criteria for inclusion of correspondence should be relevant comments on articles in the Journal and/or contributions to debate about the art of architecture today.

Keith Harndent, Exmouth, Devon

Chin up

The Architects Registration Board is the UK's statutory regulator of architects. In my experience, Arb staff apply the regulations with enthusiasm and zeal.

As a regulatory body it has no discretion to deal humanely with persons such as architects, who, on the whole, tend to be irregular in their general approach to life, but happy with their chosen lot.

My Mum used to tell me 'What can't be cured, must be endured' - so wise up Rob, put your Arb fee on direct debit, and forget it with confidence. Thank you, though, for



brightening up my day with this.

Bob Reynolds RIBA (retired)

Shape up

Your editor's note of November 2013 said that 'the RIBA Journal was not previously or originally A4.' Perhaps not, but it was A4 for 43 years, from May 1960 to January 2003. The format is ideal for carrying and filing, and I wish you would return to it.

I continue to commend you on the revamped Journal, the choice of articles, the balance of text and illustrations and the quality of presentation.

Paul Velluet, Twickenham

Net loss

For many years, the RIBA's RIBANet, an online members forum, provided a valuable point of contact for a core group of regular users who shared knowledge, expertise and advice in a constructive and supportive environment. Its closure in February was poorly publicised, and it seems unfathomable that the RIBA couldn't offer this any more. It was particularly valuable for people in small practices or based abroad, and offered excellent CPD.

RIBANet maintained a rigorous emphasis on professionalism and informed knowledge, mixed with robust debate. Now over 60 of its users have moved to a new home, set up by one of their number, at www.architectnet.org.uk, free to use and open to all registered architects.

Nicholas Weedon, London

I was so pleased to see ABK's seminal Cummins Engine Factory in the Journal's 'Parting shot'. Not sure about the attributed date though!

John McAslan

The attributed date was 1900. Whoops, that should have read 1980 - Ed

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STRENGTH AND BEAUTY

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Touchy feely

Pattern, texture and symbolism at FCB Studios' Tudor Grange Academy 88

Just the job

Peter Barber turns to brick for Thames Reach Employment Academy 90

Potted history

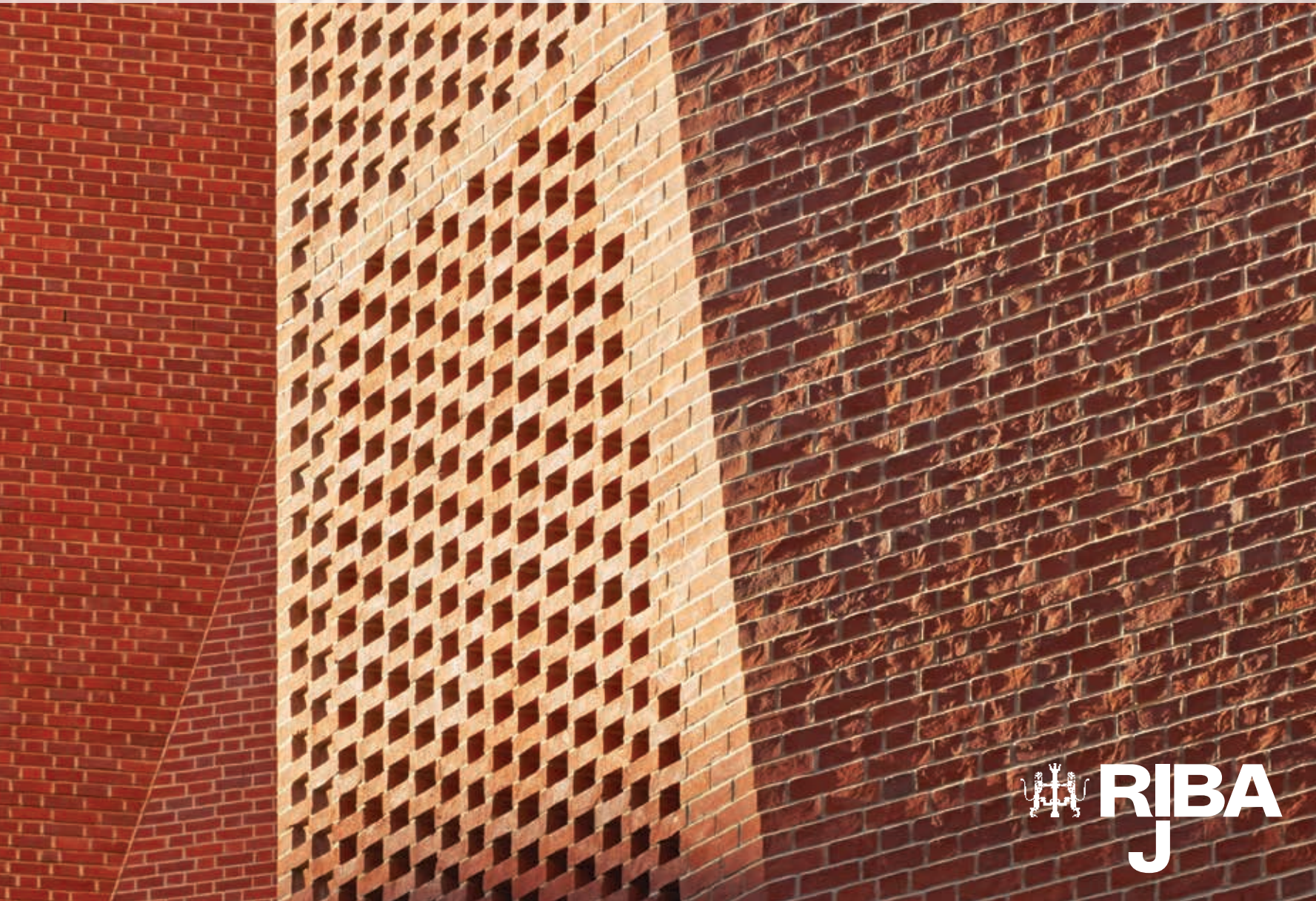
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Strength, beauty and new ideas

Here's just one reason that brick is starting to appear in increasingly ambitious buildings, used in ways not conventionally associated with the material: this is a human-scale modular component that works both structurally and aesthetically. It can bear load – a lot of load – and need no further embellishment, since you can create your own patterns and textures with it.

Not that the texture thing is a new idea. Remember how Ralph Erskine, in his Ark building in Hammersmith, took ridged bricks that were meant to act as a key for render, and expressed them just as they were, as a facing material on the support columns? Or the way other architects of that generation just loved using hard blue-grey engineering bricks which, again, were never really originally intended for visual effect? The increasing difference today is that the material in all its variety of colours, textures and densities is once again being used, quite literally, to its strengths. It's odd, after all, for a material with such great compressive strength to be used non-structurally: the challenge is to find ways of using it as it wants to be used that are predictable and cost-effective.

In this supplement on structural brickwork we look at the ways various leading architects have engaged with this most enduring building material in very different settings. How best can it be panellised, how to achieve best practice in thermal efficiency, how can it work in conjunction with lightweight structures? Published in conjunction with the Brick Development Association's Structural Masonry Day on April 3, this publication will, we hope, stimulate your own ideas.

Hugh Pearman
Editor, The RIBA Journal

Cover: LSE Student Centre by O'Donnell + Tuomey. Photograph by Dennis Gilbert/View
Produced by The RIBA Journal on behalf of the Brick Development Association

All for one and one for all

Pattern and texture characterise FCB Studios' Tudor Grange Academy, its bricks symbolising individuality within a whole

Photographs Craig Auckland

Some 300,000 bricks make up the imposing elevation of Tudor Grange Academy in the north of Worcester, designed by Feilden Clegg Bradley Studios.

FCB Studios was brought in to redevelop the former breezeblock and concrete Elgar Technology College, refurbishing 30% of the buildings and constructing a new 100m wide, two storey teaching block for the 1100 pupils. This was built using a stretcher bond of Ibstock's Coleridge Yellow Multi, with elevations patterned by punch hole windows.

'Worcester has a very strong tradition of brick buildings and the decorative use of brick, so we sought to add to that in the facing material,' says project architect Sam Goss.

The new main building runs north-to-south with classrooms arranged around the perimeter, and large open-plan areas in the centre. These can accommodate groups of up to 60 students in teaching/break-out space. A two-storey lecture theatre is positioned at the main entrance plaza. Generous glazing gives views across the 4.2ha school grounds and beyond to the Malvern Hills.

The building has a deliberately collegiate style with two stretches of brick colonnades on the western elevation: the larger seven-pier space encloses outdoor seating for the adjacent dining hall, while the other leads off from the science teaching spaces (one of the academy's specialisms).

Brick variation provides texture and patterning. A Flemish brick bond is combined with graded projections of headers growing to half a brick and rising to three storeys at the principle entrance on the south-eastern facade. Shadows of these projections provide further, changing animation of the facade throughout the day. Towards the entrance, they are cantilevered on a steel frame to create a covered space.

On the west, windows are recessed within



a series of brick piers in the brick facade, which varies accordingly to a single or two brick-thick skin. This reinforces a verticality to offset the horizontal form of the building.

The projections add extra complexity to the build, with brickwork contractor Kier Moss carrying out several trials first.

Various types of bricks were considered including a dark engineering brick but FCB preferred a redder stock with more texture and variety. The practice also specified a recessed mortar joint to further articulate the shape and colour of the brick.

'We wanted it to be a locally sourced and supplied material to support local brickwork contractors and perpetuate the culture of craft. By getting bricklayers to do something atypical, the project extended their knowledge and skillsets,' says Goss.

The architect also enjoyed the metaphorical connotations of brick.

'Brick is a timeless material that is evocative and representative of other things. Individually, bricks represent pieces of society coming together to form a collective whole greater than the parts. And there's something quite poetic about that.' ●



Left and above Projecting bricks add texture to the elevation of Tudor Grange Academy.

Right Colonnade, one of two within the 100m wide west elevation (**far right**).





Keeping context

Peter Barber made a rare foray into brick to extend and refurbish Thames Reach Employment Academy, mixing traditional materials with contemporary methods

Photographs Morley von Sternberg

As master of the crisp, rendered form, Peter Barber is not generally known for his work in brick. But when it came to refurbishing and extending a distinguished Arts & Crafts-era listed building for the Thames Reach Employment Academy in south London, contextual brick seemed most appropriate.

'I'm always interested in an architecture that looks heavy and grounded, even when working in render. I like the idea of a building with a look of permanence about it,' says

Barber, who enjoys the resulting patchwork of old and new brick and the addition of new picturesque forms.

The project was to provide training and advice facilities for homeless and long term unemployed people at the Poor Law Guardian building in Camberwell, designed in 1904 by ET Hall, architect of the Liberty & Co store on Regent Street, among many other buildings. The new addition needed to work well with the original, refurbished building as well as

providing appropriate accommodation and spaces that might facilitate informal, chance encounters with the clientele.

The architect suggested removing a deep extension at the rear of the building and creating an L-shaped courtyard flanked on one side by a rebuilt wall to the existing structure. This wing contains a café run by clients training in catering industry skills. Opposite, a wing of new accommodation houses workshops for training in skills



Opposite A new courtyard, formed at the rear with a mixture of new and old accommodation, is the heart of the new training and employment advice facility.

Above New brick is incorporated into a rebuilt rear wing, which now houses a café.

Left An exedra completes the courtyard.

Far left A new tower contains office and garage facilities.

such as bricklaying and carpentry, beneath classrooms and lecture space.

Facing south, a brick domed structure described by Barber as an exedra, Mihrab recess or, less exotically, an external break-out space, completes the courtyard. Assisted by window seats, an inset terrace and deep reveals in the new wing, this new courtyard has become the social focus of the Academy.

The existing building was characterised by turrets and mini-towers to the east. Barber

added a four-storey tower at the north end, providing office accommodation above a ground floor garage and backing onto the rear of the niche in the new courtyard.

While the front of the original building used a red brick, the rear utilised Cambridge Whites which the architect responded to with Wienerberger St Ives Cream Rustica brick.

‘There is a re-emergence of brick as a material but a lot of what is used is quite hard and engineering,’ says Barber. ‘I was interested

in a complex brick that was quite rustic with immense variety of colour that looks old fashioned, as if it could be a local brick.’

Construction is a mixture of traditional masonry and contemporary methods, including bricks bonded onto a fibreglass carrier for the vaulted brickwork.

The project also involved restoring the original red brick and stone facades of the main building, which was for many years occupied by Southwark Council. ●



Above Zig-zag patterns in the bus station's brick plinth are a reference to the coal seam beneath the site.

Left Textured headers are combined with stretchers in the elevation to the bus drivers' accommodation, which slots in beneath the bus station's projecting canopy (**below**).



Rich seam

Grimshaw drew on local references, including the area's mining heritage, for its Stoke Bus Station

Grimshaw Architects conceived its new Stoke Bus Station as a sparkling 'found' object in the landscape, inspired by such diverse references as the Staffordshire Hoard of gold and silver metalwork, and a coal seam running beneath the site.

A key component is the wall of local Staffordshire Slate Blue Smooth brick. This forms a curved plinth along the 120m long elevation of the toroid-shaped building. This is topped with an aluminium roof, which extends into the adjacent square as a canopy.

The plinth acts as a retaining wall to form the outer edge to the bus station, situated alongside a roundabout in the Hanley district on a major route into the city centre. Bus bays line the glazed inner edge, with passenger facilities housed within the concourse in-between. Drivers' accommodation is situated in an orthogonal block at the entrance of the concourse, in the same blue brick.

As well as dealing with the level changes across the site, the brink plinth with its zig-zag pattern is a reference to both the coal seam and the local tradition of craftsmanship. This helped to embed the building in the local context and create a sense of place, says project architect Diarmuid Bradley.

The linear brick pattern is achieved with stack-bonded variations of stretchers and headers, and with variations of either flush, stepped-in, or stepped-out brickwork. The form was a challenge to the bricklayers, requiring eye-adjustments to achieve the curve. In total, the project used 60,000 Staffordshire blue bricks, 19,500 special bricks and used a further 15,000 glazed bricks internally.

Even if passengers are oblivious to the poetic references to found objects, coal seams and treasure hoards, they can at least appreciate the much-needed shelter provided by this new city landmark. ●

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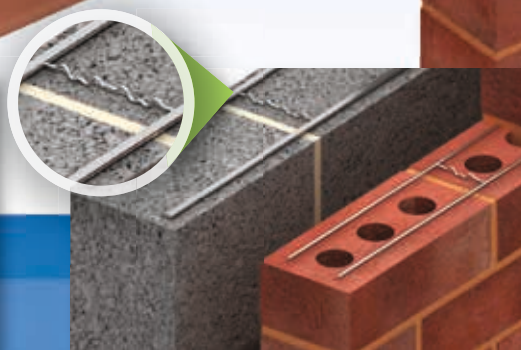
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What's new

Alexis Harrison and Deborah Lazarus of Arup on five emerging directions and innovations in brickwork

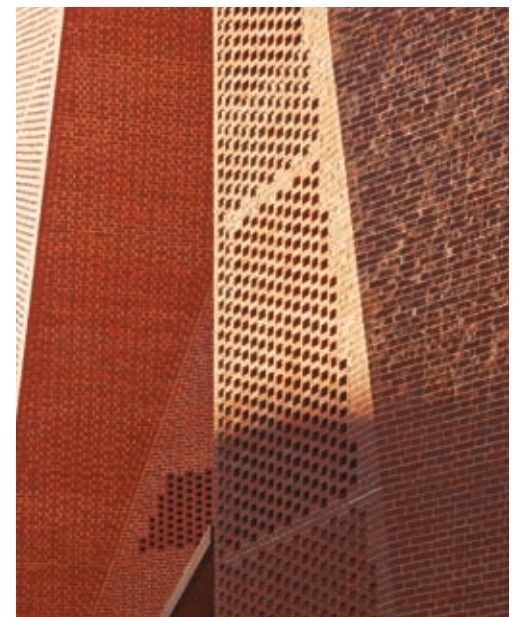
1 Thermal performance

A brick with very good thermal performance is the real Holy Grail, and increased emphasis on thermal performance puts this quest higher up the agenda. Nowadays, you just couldn't design a building where the floor slab is supported by the masonry facade because of thermal bridging, so a clear thermal break is required between masonry materials.

Thermal brick products have been around in mainland Europe for 20 years or more but are only now starting to be used more widely over here. While their complex labyrinth of perforated patterns gives greater thermal efficiency, their porous ceramic body is not very durable. Therefore these bricks are normally rendered, which means they lose their aesthetic quality.

2 New fixings

Greater thermal performance requirements have led to increasingly thick insulation zones of up to 250mm, leading to much wider cavities. This places more emphasis on how the masonry is fixed back to the structure. We've been looking at different materials for brackets including advanced composites rather than stainless steel.



Screened brickwork at O'Donnell + Tuomey's Saw Swee Hock student centre at the LSE.

3 Patterning

We're getting many more requests from architects to look at different brick patterns such as textured corbelling, brick-faced soffits, and in particular, perforated screenwalls like those used in O'Donnell + Tuomey's LSE Student Centre in London (left and above). There is generally a return to heavier masonry (or at least, the illusion of it) and more desire to use brick, but in a less traditional way to give texture and pattern. Dutch architecture has long been an inspiration for this.



IMAGE COURTESY OF THE LIVING

4 New brick materials

It's not mainstream yet, but the sustainability agenda is driving in all sorts of research into different brick materials, such as compost waste, for example. Even fungi are being used – grown in straw and their mycelium fibres used to form bricks that are then heat treated to prevent further growth. Pioneers of this process claim the bricks are water, fire and mould resistant.

Organic bricks produced using corn stalks and living root structures will be used to build The Living's Hy-Fi, the winning design of MOMA's 2014 Young Architects Program. The temporary structure will be built at MOMA PS1 in New York in late June.

STRENGTHS OF STRUCTURAL MASONRY MADE EASY BY NEW GUIDES

Masonry's structural performance is often ignored by the default selection of a steel or concrete frame, writes **Professor John Roberts**. But masonry units perform exceptionally well technically, aesthetically, and sustainably, and the material's inherent strength in compression can often be used to great effect. Newly published advice notes should help this.

Following last year's update, the BSI has published a new national annex to Eurocode 6, and the masonry and concrete industries have together produced three new guides entitled *How to design masonry structures using Eurocode 6*. These – an overall note plus items on vertical and lateral resistance – cover everyday structural design issues and are available as free downloads from the eurocode6.org website. They are intended to make the basic design of unreinforced masonry more easily understood by structural engineers.

The International Masonry Society, Institution of Structural Engineers and Thomas Telford Ltd have additionally produced design guides for masonry buildings designed to Eurocode 6. Professor John Roberts is chairman of the UK panel for Eurocode 6. www.eurocode6.org

5 Prefabrication

This isn't a new innovation, but the economic drivers are now starting to work better for some types of prefabricated brickwork. Not only is prefabrication safer, it is also much quicker – which is a particular advantage if site access is limited and the programme is very pressured. The disadvantage is the effect of the panels on the elevation – joints between them have to be either disguised or accepted as part of the composition.

There are good and bad examples. Precasting, where half a brick is cast into a

concrete panel, provides a robust solution, but there are many other systems that use thin brick slips bonded onto a backing substrate. Despite their technical approvals, such systems will have a very limited lifespan.

Recent use of adhesive mortars has enabled the creation of prefabricated off-site brickwork. Much of this market is given to large areas of repetitive brickwork, such as freestanding boundary walls, but facade applications will become more common, and robotic methods for creating the panels open up fantastic opportunities.



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Chewing the cud

Speakers from the BDA's Structural Masonry Day on April 3 talk brick

What is your favourite structural brick building?

Hopkins Architects' Inland Revenue Centre in Nottingham, with its prefabricated brickwork columns.

Paul Rogatzki, head of design and technical services, Hanson Building Products

Layer Marney Tower in Colchester is a staggering robust Italianate early Tudor house demonstrating brick's structural qualities, durability and warmth.

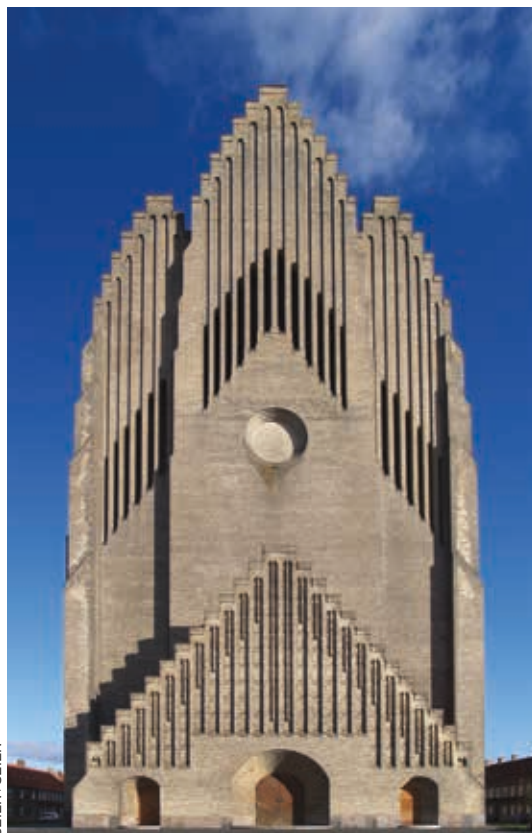
Simon Hay, CEO, Brick Development Association

The Pantheon, Rome.

Geoff Edgell, director, Lucideon

There is no one building that captivates me more than a Georgian townscape. If I had to single out a 20th century building, then Grundtvig's church in Copenhagen (pictured) illustrates the more creative use of brick.

Richard Hill, associate, advanced technology and research, Arup



SEIER+SEIER

How high could you build a self-supported masonry structure?

I would have thought 40m was approaching practical limits. It would depend on the compressive strength of the brick and the use of bed joint reinforcement and mortar strength.

Simon Hay, CEO, Brick Development Association

If we are talking about a building where the walls support the floors, then realistically 10 storeys in order to keep the walls to a sensible thickness. 15-20 storeys could be achieved if we accept thicker walls but clearly this depends on location. Seismic loads will influence how adventurous you could be.

Richard Hill, associate, advanced technology and research, Arup

What innovation in brick technology and construction would you most welcome?

The development of thin joint, adhesive brickwork to improve structural masonry properties – particularly in lateral load strength – and resistance to rain penetration.

Paul Rogatzki, head of design and technical services, Hanson Building Products

A facing brick as a block which, in a single unit, provides support insulation, an external finish and internal thermal mass.

Simon Hay, CEO, Brick Development Association

Greater use of advanced techniques such as reinforcing and prestressing to extend the range of structural forms that can be achieved. This may well only happen through greater emphasis in structural engineering degree courses.

Geoff Edgell, director, Lucideon

Over the years, thermal/moisture requirements have driven us to employ cavity walls and to separate the structural frame from the facade. I would welcome ideas that allow us once again to use the brick facade as part of the structural system.

Richard Hill, associate, advanced technology and research, Arup

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E: projects@parksidegroup.co.uk

In two RIBA assessed seminars, Comar, one of the UK's leading aluminium systems companies, outlines:

Title 1: Stand & Deliver: a Study of Curtain Walling

The design of curtain walling, its properties and how it is used by specifiers. This seminar aims to offer an understanding of the points of H11 in the NBS specification system, and how best to make use of it.

Title 2: Designing Functions & Reliability into Entrances

The issues that influence the function of main entrance design and technology. This seminar aims to offer an understanding of how user expectation influences door design and links this with hardware selection, entrance configuration and floor finishes.



T: 01709 572201

E: info@stelrad.com

W: www.stelrad.com

Title: An introduction to serial feed radiators

The CPD covers the basics of radiator technology, how parallel feed radiators work, the concept of serial feed technology, why it's so energy efficient, and the positive effects of serial feed technology on the rest of the heating system.



C: Sarah Longhurst

T: 01483 468 000

E: info@iguzzini.co.uk

W: www.iguzzini.com

Title 1: No Light? No Architecture.

Title 2: Better Light for Life

Title 3: CO2 Relighting: The Route to Sustainable Lighting

Title 4: Detailing the Dark

Title 5: LED: Lighting the way Forward

iGuzzini specialises in architectural lighting and prides itself on its modern concepts which adhere to current environmental issues whilst retaining maximum cost effectiveness.



C: Gareth Dixon, Russell Calder

T: 44(0)207 940 0000

E: gareth.dixon@havwoods.co.uk

E: russell.calder@havwoods.co.uk

Title: The use of wood flooring in sustainable architecture

Provides an understanding of the ecological benefits of specifying wood and the main legislation involved; different types of wood flooring construction, installation methods and the difference between oiled and lacquered finishes together with indicative cost comparisons.



Specification Managers:

Ian Lomas T: 07799034852

E: ian.lomas@kingspan.com

Darrin Andrews T: 07880400227

E: darrin.andrews@kingspan.com

Title: Introduction to Raised Access Floors

A 40 minute face to face presentation. This CPD covers the following points:
Introduction to Kingspan Access Floors
History of raised access floors
What is a raised access floor system
Features/Benefits of raised access floors
Applications, Finishes, Installation, Specification guidance, System selection and criteria
Summary.



E: marketing@marleyeternit.co.uk

W: www.marleyeternit.co.uk

T: 01283 722588

Title: The Fibre Cement Building Envelope

Attendees will be introduced to fibre cement as a building material for both roofing and facades. They will also develop an understanding of how fibre cement benefits designers and specifiers and how it can help achieve higher Green Guide ratings.

To book your CPD please visit:
www.marleyeternit.co.uk/cpd



C: Cristiane Kopp

E: cpd.contact@uk.roca.net

Title: 1 Shaping the Bathroom Space of the Future: New Solutions and Key Considerations

This CPD covers the issues and innovations that are influencing bathroom design, such as sustainability, new technologies and groundbreaking product solutions. The 45-minute session also addresses a number of often overlooked aspects, such as materials, ways to meet restrictions when planning a bathroom and managing the life cycle of the space.



C: Tim Hayes

E: tim.hayes@quantum-ps.co.uk

T: 0161 627 4222

Title: Step on it: How Stair Nosings Help to make Stairways Safe and Meet Building Regulation Guidelines

A 40 Minute face to face presentation. This RIBA Core Curriculum CPD covers; How to pick the correct Stair Nosing plus how building regulations and the Equality Act affect the specification of a stairway.



E: filaUK@filasolutions.com

W: www.filasolutions.com

Title: Cleaning, Sealing and Maintaining Natural Stone Surfaces

Fila specialises in surface care solutions. Its new CPD will assist in the specification of suitable products, in terms of both the substrate and surface finish. It also outlines the importance of correct maintenance and associated lifecycle costs.

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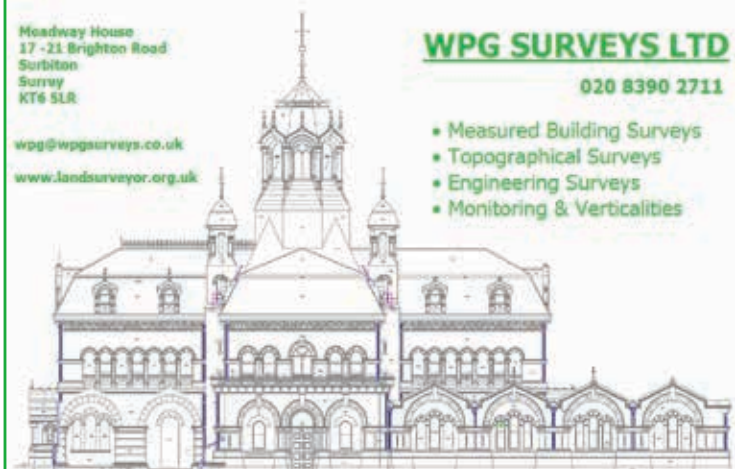
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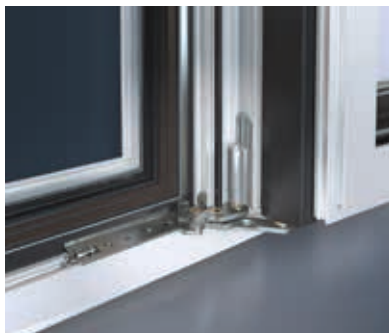
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Schueco AvanTec SimplySmart concealed fittings are a real advance

New from the UK's leading building systems specialist, Schueco UK Ltd, is AvanTec SimplySmart, a comprehensive range of concealed fittings for all types of Schueco aluminium inward opening windows – tilt/turn, side-hung and bottom-hung. Developed as a response to the architectural trend for uncluttered minimalism, the Schueco AvanTec SimplySmart range successfully combines contemporary design with functionality in use and includes a world first: a fully concealed fitting which allows a window to open a full 180° (previously, 90° was the maximum possible angle of opening). All Schueco AvanTec SimplySmart fittings offer clean lines and advanced engineering complemented by a variety of stylish ergonomic handles and finishes with or without key-locking. The fittings can support vents with a maximum size of 1700 mm wide x 2100 mm high and 1000 mm wide x 2500 mm high and there are specific fittings for tilt/turn vents weighing up to 130 kg, 160 kg and 200 kg. Now, even large opening windows with heavy triple glazing or sound insulation units are possible.

e: mkinfobox@schueco.com

w: www.schueco.co.uk



ASSA ABLOY specification tool kit launched at Ecobuild 2014

Specifically designed to meet the needs of individual sectors, such as healthcare, education and commercial, ASSA ABLOY Security Solutions showcased the latest tools for the construction and specification market and offered consultancy advice across a broad range of projects. The ever-growing tool kit for specifiers now includes BIM objects, NBS plus specification writing and a range of CPD seminars.

w: www.assaabloy.co.uk



Architects create Breeam 'excellent' research facility using Equitone

EQUITONE [natural] and [textura] from Marley Eternit have helped create the award-winning BREEAM 'Excellent' research facility at Swansea University. The Institute of Life Science building (Phase 2), won the BREEAM Wales Award thanks, in part, to Marley Eternit's EQUITONE architectural fibre cement facade material.

t: 01283 722588

w: www.marleyeternit.co.uk



Gerflor's fast track Eco-Fit™ overlays existing wooden sports floors quickly and easily

Whitburn Community Education Centre, west of Edinburgh, is delighted after the installation of two Taraflex™ sports floors replaced their ageing wooden surfaces. Gerflor's exclusive Eco-Fit™ System meant the new easy-maintenance floors could be laid quickly over the existing ones, reducing closure time and loss of income.

e: contractuk@gerflor.com



Hunter Douglas

Hunter Douglas has supplied a solid wood ceiling system for the £400 million project to transform Reading railway station into a 21st century transportation hub. The Hunter Douglas solution features a solid wood linear open system, finished in Siberian Larch, that was installed as a series of rafts spanning across the new 110m long covered pedestrian bridge over the tracks and platforms.

w: www.hunterdouglas.co.uk

t: 01604 766251



Tarkett chosen to help reduce injuries

FOLLOWING trials an NHS hospital is hoping to reduce trips and falls in its dementia ward by installing Tarkett flooring. Conducted by the University of Portsmouth, the Hip-Hop Flooring Study discovered that installing Tarkett's Omnisports flooring was likely to reduce the injuries suffered by older people when falling over due to its shock-absorbent foam backing. The Omnisports range is commonly used in sports halls but it was found that the same shock-absorbing properties that help prevent injuries to sports users also benefits dementia patients and the elderly at risk of falls. As a result of the study, Portsmouth Hospital NHS Trust has now installed 1600sqm of Tarkett's Omnisports Training 5mm flooring in the treatment bedrooms of the hospital's four acute wards, which care for frail, older patients. The Omnisports Training 5mm flooring also comes with an R9 slip resistance rating and the shock-absorbent foam backing reduces noise helping to create a quieter, calmer environment for dementia patients. TV broadcaster and patron of the Alzheimer's Disease Society, Fiona Phillips, officially opened the renovated wards on Friday, January 31.

e: uksales@tarkett.com

t: 01622 854 040



High-tech isolators help new Schueco Jansen Janisol HI range to achieve ultra-low 'U' values

Steel systems specialist, Schueco Jansen, has just introduced a range of steel windows and doors that can achieve ultra-low 'U' values thanks to a newly developed isolator made from glass fibre-reinforced polyurethane. The thermal efficiency of the new Janisol HI systems is matched by high structural strength making them ideal for a wide variety of applications. The Janisol HI steel window is available with turn-tilt and side-hung opening vents or fixed glazing, achieving impressive U_w values of 0.8 W/m²K and 0.69 W/m²K respectively. The dimensions of a standard 90 mm deep opening vent can be up to 2800 mm in height with a total weight of up to 180 kg. Different infill unit thicknesses up to 67 mm allow the use of triple-glazing and burglar-resistant glass, while its slimline external face-width and a wide variety of coating options mean that a Janisol HI steel window can meet the highest possible specification for both functionality and design. The Janisol HI steel door combines mechanical stability with high thermal insulation properties in one single steel profile system, so it is especially well-suited for locations such as heavily trafficked areas in busy public buildings.

e: mkinfobox@schueco.com

w: www.schueco.co.uk



Be sure to specify an MCS 012 approved mounting kit

By the end of March 2014 any mounting kit used to install solar panels on a pitched roof must comply with the Microgeneration Certification Scheme's MCS012 as one of the main eligibilities to qualify for the Feed-in-tariffs. To ensure that it was ready for the introduction of this scheme, the BBA invested in a new test rig so that the weathertightness and resistance to wind uplift tests could be performed. So to avoid a rush of applications as the deadline approaches, the BBA advises that manufacturers make contact as soon as possible.

In addition to MCS012, the BBA can provide product approval to the requirements of the other Microgeneration Certification Schemes (MCS):

Solar Heating Collectors (solar thermal systems), Solar PV (photovoltaics), Micro and Small Wind Turbines, Heat Pumps, Biomass Micro CHP (combined heat and power).

For more information and a quotation contact the BBA;

e: customerservice@bba.star.co.uk

t: 01923 665300



New specification guide from Profile 22

A new specification and technical guide is now available from Profile 22. The 48 page reference book and accompanying CD is a valuable index for architects and specifiers when specifying Profile 22 PVC-U systems. The new edition gives insight into the company's new products, technical updates, accreditations and services, and includes the latest addition to the range, the much-heralded fully reversible window.

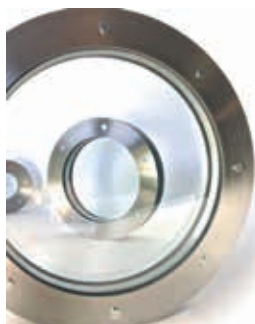
w: www.profile22.co.uk



Glazing solutions mix old and new at iconic eye hospital

A stunning glazed atrium, glass bridges and curtain walling are bringing together a grade II listed building with a brand new biomedical centre of excellence on the site of the former Royal Eye Hospital in Manchester. The Advanced Facades division of Saint-Gobain Group company GLASSOLUTIONS has won the £2.5m glazing design contract for the Citylabs building, which is part funded by the European Regional Development Fund.

w: www.glassolutions.co.uk



Porthole vision panels for doors and walls.

Philip Watts Design offer a wide range of porthole vision panel kits in a variety of shapes sizes and materials.

From simple single glazed aluminium circles, to high specification 1 hour fire rated DDA compliant double glazed stainless steel lozenges. Manufactured in the UK, bespoke shapes, sizes and finishes are easily accommodated.

t: 44 (0) 115 926 9756

w: www.philipwattsdesign.com



Mono Supercar on Pole Position with Flowcrete's Showroom Floor

The Mono supercar has been given a platform for success in its new Liverpool showroom with a glistening black floor that evokes the elite sophistication of the ultra high performance vehicle. BAC, the British company behind the Mono, installed 82 m² of the decorative flooring solution Rustik Glamourstone which creates a natural effect with a sleek lustre and light reflective finish.

e: uk@flowcrete.com

w: www.flowcrete.co.uk



Lomax + Wood features in 'hot asset' modern mansion

High performance fenestration by specialist manufacturer Lomax + Wood has been specified by leading property developer The Cherwell Group, London SW11, in the design and construction of a fabulous modern mansion in SW19. The property, providing a staggering 8,000 sq. ft. of internal space, is of Edwardian villa style co-joined to accommodate two individually designed home.

w: www.lomaxwood.co.uk



Multi-coloured Elekta Steel panels will brighten up any building entrance.

Urmet are now pleased to be able to offer its customers entry panels in many different colour finishes. Up until recently, only stainless steel versions of Elekta Steel, its popular vandal resistant version of the IP digital panel Elekta, were available.

Now, using the European RAL colour matching system, end-users, consultants and architects are able to order their entry panels in more than 200 different shades

e: sales@urmet.co.uk



Opportunity knocks for James Latham

With the Government's Code for Sustainable Homes Scheme (CSH) target for all new houses to be zero carbon by 2016 now less than two years away, James Latham is offering a complete door kit solution which has been certified as passive house compliant by the renowned Passive House Institute in Darmstadt (Germany).

Steven Dennard, James Latham's Group Door Manager commented,

"Passive house is the world's most advanced standard of energy performance and, coupled with the Government's CSH scheme, it is influencing the way we design, build and live in our homes. With this in mind, James Latham sees the real potential for this highly bespoke product being the retrofit market as it offers a recognised solution in creating more energy-cost efficient properties."

The complete kit includes; a processed 3-part Meranti frame, Ironmongery plus a 98mm thick door blank supplied part-processed/CNC'd for the double-rebate detail along with lock and hinge fixings.

w: www.lathamtimber.co.uk, e: marketing@lathams.co.uk t: 0116 257 3415



Architectural seals reimagined – Lorient's new AURA® range

For almost 35 years, Lorient has been designing and manufacturing the highest quality sealing systems for performance doors across the world. Today Lorient is unveiling a new and exciting range of contemporary architectural seals under the brand name of AURA®. The AURA® range embraces a discerning selection of drop seals, perimeter seals, door bottom seals, threshold plates and ramps.

w: www.lorientgroup.com



Levolux keeps "The Wilson" cool

The Wilson - Cheltenham's Art Gallery & Museum - has opened to national acclaim, featuring a unique solar shading solution from Levolux. The solution comprised fixed, tubular ceramic Louvres, applied horizontally to the building's south-facing façade, along with internal Slimlock double roller blinds. These help to maintain optimum conditions within the building. t: 020 8863 9111 e: info@levolux.com w: www.levolux.com



Deeping School 6th form block Cambridgeshire

Comar Architectural Aluminium Systems, with their approved fabricator PAGE Group (Peterborough) Ltd recently completed a new build 6th Form centre at the Deepings School in Cambridgeshire. This additional building is part of an expansion programme for the original school which opened in 1958. The school is a Business & Enterprise specialist and attained its academy status in 2012.

w: www.comar-alu.co.uk



Junckers Updated Flooring Classic at Winning Property

The winner of the 2013 RIBA Stirling Prize for Architecture, Astley Castle, features Junckers 22mm solid Oak Single Stave Blocks parquet floors, in an extraordinary building. The property, which is available as a holiday let through Landmark Trust, is housed in a Grade II listed building has a rustic, elegant interior where Junckers' updated version of the traditional parquet floor completes the scheme beautifully.

t: 01376 534700 w: www.junckers.co.uk



Flight Safe: the stylish answer to shower safety

In response to market demand, Mira Showers – the UK's market-leading manufacturer of showers and showering accessories – has developed an anti-slip version of its ever-popular Flight Low shower tray, the Flight Safe. Meeting and exceeding the highest standards of slip resistance, this tray incorporates two integral finishes – Mira Safe anti-slip and the anti-bacterial BioCote®.

w: www.mirashowers.co.uk



Heckmondwike release new Array colours

Heckmondwike FB, one of UK's leading commercial fibre bonded carpet manufacturers, is making it even easier for specifiers to create art in carpets by expanding its popular Array carpet tile range with six exciting new colours. The six new colourways include Copper, Marble, Peacock, Violet, Emerald and Fuchsia, which brings the number of options within the Array range to 12.

w: www.heckmondwike-fb.co.uk/newarraycolours



Armstrong Ceilings

Ceiling canopies from Armstrong were specified for a new community church for their aesthetics, acoustics and green credentials. Some 52 of Armstrong's Axiom Classic square canopies and 14 triangular ones, each comprising white mineral Dune Supreme tiles within a Prelude exposed grid, feature over 1,500m² of the auditorium of King's Church, Amersham. Byrom Clark Roberts had used Armstrong Ceilings on a church before – the LifeChurch in Sale, Manchester, but the one for King's Church was developed to incorporate LED lighting into some of the square canopies.

Architect Ian Caveen said: "I came up with the ceiling cloud idea when designing a church in Leeds. We had used Armstrong Ceilings on a previous scheme but for this one, sustainability was a key issue, so the Axiom canopy was a given.

t: 0800 371849

w: www.armstrong-ceilings.co.uk



Concord Lights Up the Old Palace at Hatfield House

The Old Palace at Hatfield House, one of England's most historic country houses, now boasts modern lighting to enhance its magnificent Grade One listed features. Designed by the award winning Gardiner Design Associates, the new lighting scheme features Limburg pendants from the Concord product portfolio and Lumistrip Linear LED strips from Lumiance, both part of the Havells Sylvania family. Built in 1485, the Old Palace is one of the foremost examples of medieval brickwork in the country. King Henry VIII acquired the building in 1538 and used it as a nursery for his three children. The young Elizabeth I learnt she was to become Queen while sitting under an oak tree in the grounds. Now Hatfield House and the Old Palace are a fascinating visitor attraction and filming location and a unique venue for conferences, events and weddings. The new lighting scheme reflects the Old Palace's current usage and is sympathetic to the building's rich architecture and design. The new scheme was conceived when the emergency lighting in the Old Palace was upgraded in line with the latest regulations. Gardiner Design Associates has taken the opportunity to introduce modern luminaires into the traditional setting with the addition of the pendants and wall lights, and the LED strip.

w: www.concord-lighting.com



Hidden interlock makes Ashmore the desirable tile

Marley Eternit's Ashmore interlocking tiles have been specified for a gated community of luxury apartments and duplexes on one of the most desirable roads in Royal Windsor, as sales of the product continue to grow. Kebbell Homes chose the Ashmore tiles for 18 Bolton Avenue because they give the appearance of a traditional double lap plain tile but offer the cost and time saving benefits of an interlocking tile. Sales of the Ashmore tile have been consistently growing for a number of years and Gavin White, marketing product manager at Marley Eternit, believes there are three main reasons for its popularity: "Many housebuilders and developers are looking for a premium finish at a lower cost and as well as the material savings, the Ashmore tile also offers significant cost savings on labour time. Secondly, the hidden interlock means it has significant speed of installation benefits with a fitting rate of 17.5 tiles per m², compared to around 60 tiles per m² on plain tiles. Finally, it can be used on pitches as low as 22.5 degrees, which means it offers greater design versatility."

t: 01283 722588

w: www.marleyeternit.co.uk



Lyndon Design drives the transformation at Volkswagen HQ

Several of Lyndon Design's high-backed Arthur seats have been delivered to the head offices of Volkswagen Group UK in Milton Keynes providing a contemporary alternative to the formal business meeting environment.

Arthur's unusual cushioned high-back provides both a sense of privacy as well as comfort and the low, soft seat helps to provoke the current trend for intimacy within corporate meetings.

t: 01242 584897 w: www.lyndon.co.uk



Morgan - Sublime Serenity at Sea

Morgan, the design-led British furniture manufacturer, has supplied a range of superb seating for the award-winning Crystal Serenity cruise ship. Furniture pieces from the Seville, Hampton, Como, Siena, and City collections from Morgan all take pride of place within the Crystal Penthouse Suites and seating from Morgan's original Oslo collection features in the Lido Café, perched high above the waves on Deck 12.

w: www.morganfurniture.co.uk

e: info@morganfurniture.co.uk



Dorma makes a grand entrance at Cambridge shopping centre.

At the Grand Arcade shopping centre in Cambridge, the upgrade of two main customer entrances had to meet exceptionally high performance standards. Specified to improve internal comfort levels for customers and reduce energy costs for retailers, a series of automatic swing doors from industry leader DORMA proved the perfect solution. Designed by architects Chapman Taylor and built by Coulson Building Group, the £220 million Grand Arcade originally opened in 2008. With concerns about heat loss from the premises, owners Universities Superannuation Scheme re-appointed Coulson to install two new entrances – featuring toughened glass and DORMA ED 250A automatic closers to minimise energy loss. Taking just two weeks to complete – with all works completed out of hours between 11pm and 6am – the specification and installation of DORMA ED250A has helped to improved thermal performance and functionality whilst retailers' energy bills will be significantly reduced. "DORMA ED250A automatic swing doors were chosen because of their high performance standards and installation options," said Robert Addison, Assistant Project Manager at Coulson Building Group. "The doorsets have been well received and generated large amounts of praise – with members of the public even stopping to congratulate the team on a successful, trouble free installation."

w: www.dorma.com



Lintec Graphic Films

Leading specialist film supplier Lintec Graphic Films has added a contemporary twist to Skype's new headquarters at Grade II listed gothic landmark in London. The office is now adorned with iconic logos of famous bands, brands and people as part of a radical refurbishment job. The company's Vitrographic range has the flexibility and high quality to bring glass manifestation designs to life with pin-point accuracy.

w: www.vitrographic.com



Grespania, new 20mm thick outdoor tile.

The new 20mm porcelain stoneware tile from Spanish company Grespania offers an innovative technical and aesthetic solution for exterior paving applications where drainage and access are key. With high breaking strength, it requires no bonding materials and can be laid directly and securely on grass, gravel or sand beds. Easy to install, clean, remove and re-use, it also offers a frost-resistant, anti-slip and sustainable option.

w: www.grespania.com



Carea Cladding fits the bill inside and out at new £36m Tresham College

At the new £36 million Tresham College on the Corby Campus in Northamptonshire, Carea Acantha cladding created a stylish and decorative external façade and internal walling system whilst helping to deliver outstanding levels of sustainability and energy efficiency. Designed by architects Bond Bryan and delivered by BAM Construction, the landmark project has seen a dilapidated site in the town centre replaced by the new purpose-built 16 acre site. One of only 12 colleges in England to receive support in the final round of funding from the Learning and Skills Council, the new Tresham College was built to provide an inspirational learning environment for thousands of students.

With this in mind, Carea cladding was installed internally and externally by specialist contractor Apex Roofing to complete the stunning aesthetic – whilst offering superb thermal insulation, protecting the building against changes in temperature and eliminating thermal bridging. Providing excellent thermal efficiency and comprising around 95% natural minerals – Acantha proved a highly sustainable choice. Carea Acantha composite stone panels are designed for building ventilated facades with insulation and non-ventilated facades without insulation.

w: www.carea.uk.com t: 0121 222 2366



Smartply introduces drybaker to its OSB3 range

SmartPly has launched SmartPly DryBacker, a SmartPly OSB3 modular panel designed for non-structural metal stud wall constructions. Manufactured from exterior resin cross-structured material, synonymous with the SmartPly brand, DryBacker benefits from fast, easy installation and secure anchorage of fixtures and fittings wherever a new partition wall is needed.

w: www.smartply.com



Burgers, beer...and Sterling OSB

Norbord's market-leading Sterling OSB has been given a starring role in the design of a fashionable new eatery in Exeter, Devon. Cornish design collective, Hooperberg, chose the sustainable wood-based panel for use as internal cladding at the Hub-Box, a diner-restaurant that specialises in "gourmet burgers, hotdogs and craft beers". The original Hub-Box started out as a pop-up restaurant housed in a converted 40ft shipping container.

w: www.norbord.co.uk



Alumasc Rainwater Provides Solution for Luxury Edinburgh Housing Project

Beautifully engineered aluminium gutters and downpipes from Alumasc Rainwater, have been used at Edinburgh's latest award-winning prestige housing development. Built by CALA Homes, Trinity Park is an exciting development of stylish two and three bedroomed apartments, three and four bedroomed mews homes and five bedroomed Villas.

w: www.alumascrainwater.co.uk



Sterling OSB has Modular Buildings covered

Norbord's Sterling OSB is the panel product of choice for Caledonian Modular, one of the UK's leading suppliers of modular off-site manufactured buildings. Delivering projects from school and offices, through to medium and high rise hotels, student halls and residential blocks, Caledonian Modular offers flexible and bespoke designs that allow the use of a variety of finishes to exactly meet the client's needs.

w: www.norbord.co.uk



Jansel Square, Aylesbury

The A. Proctor Group have supplied ProfloorDynamic Batten system to Jarvis Contracting Ltd for a re-development at Jansel Square, Aylesbury. The prominent site had been derelict for a number of years and was being redeveloped to provide 20 affordable homes for the client, Vale of Aylesbury Housing Trust. Profloor Dynamic Batten provides excellent levels of impact and airborne sound insulation. The unique dual foam not only provides the performance characteristics but enables minor irregularities in the surface of the sub-floor to be taken up. Profloor Systems are designed to meet the requirements of the Building Regulations and Robust Details for impact and airborne sound. Solutions are available for timber and concrete floors on both new build and refurbishment projects.

For further information on our Profloor DynamicBatten System or any of the other product ranges, w: www.proctorgroup.com



Faber Blinds, creating Solar Shading solutions conforming to the newly revised EN131120 standard.

Child safety is a key aspect of the complete range of Faber Blinds solutions and the company, now part of the Hunter Douglas group, is one of the few commercial blind companies that conform to EN13120.

If you have premises or are planning a project where children under the age of 42 months are present or are likely to have access you must install blinds which are compliant with the child safety requirements of EN 13120. Although the lawful requirements may be implemented at a later date, we all have a moral obligation to sell, produce and install our blinds in the safest way possible. For that reason, it is Faber Blinds Limited policy to comply with the new regulations from March 2014. This applies to all public buildings and the publicly accessible areas of commercial buildings.

Faber Blinds is a member of the British Blind and Shutter Association (BBSA) and fully support the Make It Safe campaign which is endorsed by The Royal Society for the Prevention of Accidents (RoSPA) and the Child Accident Prevent Trust (CAPT) and referenced by many other organisations.

t: 01604 766251 e: info@faberblinds.co.uk w: www.faberblinds.co.uk



Automatic Systems launches SlimLane SC (Short Cabinet) and SlimLane 944 Inlane speed gates

Automatic Systems, a world leader in the automation of secure entrance control, has enlarged its SlimLane speed gates product range. SlimLane 940, 944, 945 and 950 are now also available in a short cabinet version to provide a reduced footprint. The new SC version has a cabinet length of 1274 mm (floor space) versus 1640 mm for the standard one. SlimLane with standard and short cabinet are complementary products tailored to the needs of the market. SlimLane SC has been developed in response to the increasing issue of lack of space. It offers an ideal solution without compromising on Automatic Systems high-performance detection system and safety features. The new SlimLane 944 Inlane (single door passageway) offers now greater flexibility in terms of configuration potential at a competitive price. Its fast closing/opening movement ensures maximum throughput in a very compact footprint. SlimLane is one of the best in class speed gates thanks to its security features, which include a high-performance detection system, electromechanical locking and anti-panic operating mode, and its IP connectivity. This product exists also in standard or short cabinet version. The SlimLane range of speed gates has a very slim and modern design perfectly suited to any type of interior architecture such as office buildings, head offices, banks as well as public administrations.

t: 01604 654210 w: www.automatic-systems.com



PHOTOGRAPHER: JOHN PANTLIN / ARCHITECTURAL PRESS ARCHIVE / RIBA LIBRARY PHOTOGRAPHS COLLECTION

80-90 South Hill Park Hamstead, London, 1952

Numbers 80-90 South Hill Park, Hampstead, are a group of six terraced houses designed in late 1952 by Stanley Amis, William Howell – later to form Howell, Killick, Partridge and Amis – and Gillian Howell for themselves and four other families. The houses, all slightly different in layout, have a very deep plan and a narrow frontage of only 12 ft, almost identical to that of the units in the Unité d'Habitation in Marseilles. This turned out to be a happy coincidence for the architects, who had been experimenting with the Modulor approach in the early 1950s and had visited the Unité in a semi-finished state of construction. Le Corbusier's building therefore became a

reference point for the choice of room depths and for the dimensions in general. It also provided the perfect example for the design of the double-height living room overlooking Hampstead Heath – shown in this photograph by John Pantlin – that is the defining element of five of the houses. Before the project was completed in 1956, the architects went on to work on the Alton West estate in Roehampton for the LCC, applying Le Corbusier's design concepts on a larger scale. ●

John Pantlin: photographing the mid-century home is on display at the Geffrye Museum, London, until 29 June.

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RIBA Journal
www.ribajournal.com
Published for the
Royal Institute
of British Architects by
RIBA Enterprises
The Old Post Office, St
Nicolas Street, Newcastle
upon Tyne NE1 1RH
Printed by Acorn Web
Offset Ltd in association
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