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**July
2015**



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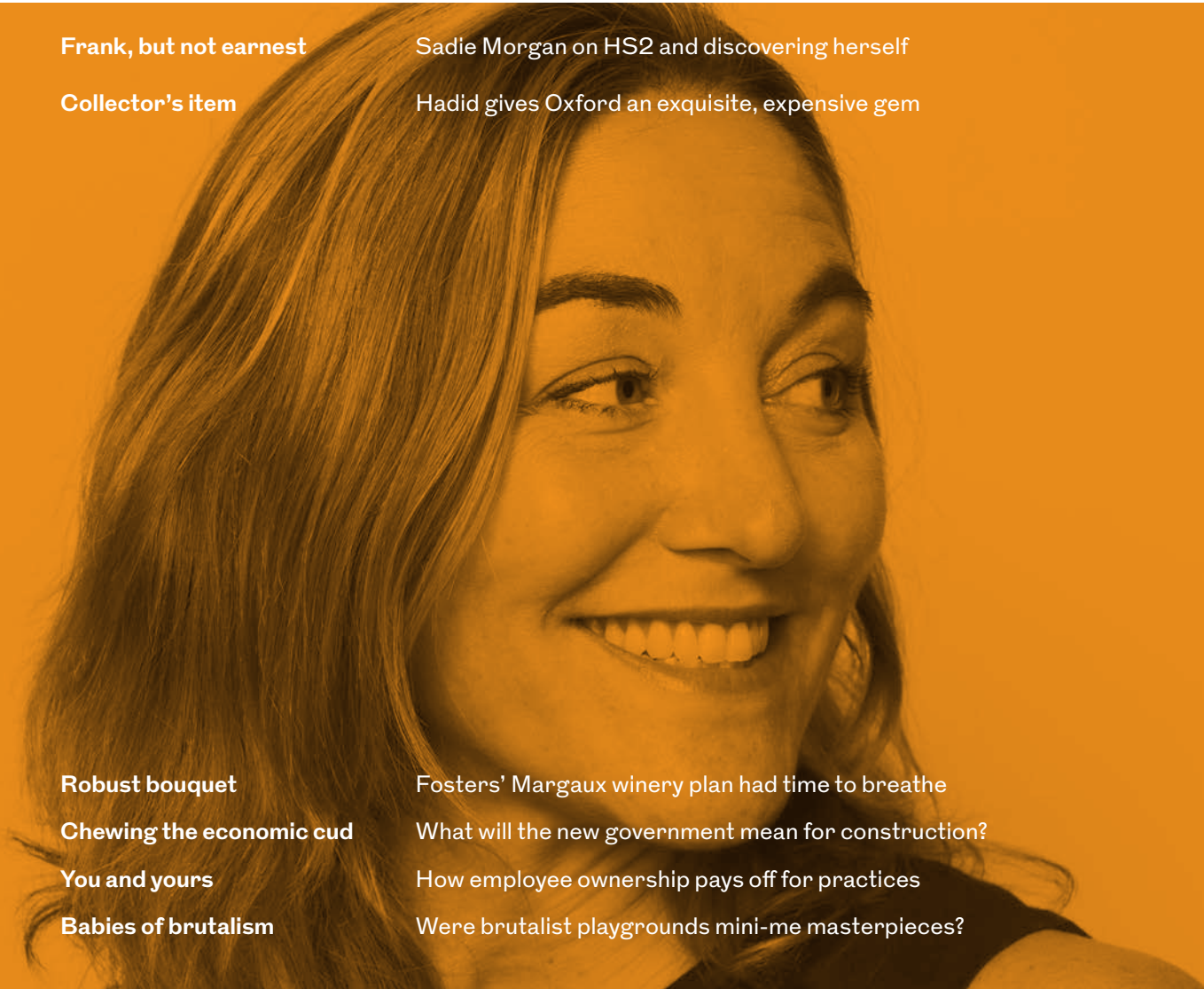
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Photograph
Wilde Fry



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1: Buildings

'You don't half look fat in that.' Well, of course, that's fine if you look half FAT and half Grayson Perry, as the most extravagantly bedecked holiday rental in Essex does. But most of us would shy away from fat, desiring a waistline flattered by design, rather than

flatulent and flappy in florals. If you take the slimline approach to architecture, the Special K stretch of the toe towards the lounge, where do you want the belt tightened? Should it be the budget with the 5/2 diet approach to value engineering? Or elsewhere? 'Nothing

tastes as good as skinny feels,' said model Kate Moss. Apply the philosophy to structure and massing, pare it down to sober stripped back trees and apply to the luxury of hundreds of premier cru vintages, as at Chateau Margaux. Understated indeed and not an ounce of fat. ●

Foster + Partners' lean new chai at
Chateau Margaux in Bordeaux.



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Sicilian Avenue, London

RJ Worley 1910

Photograph: Philip Vile

Words: Jan-Carlos Kucharek

Worley's curious diagonal of Edwardian flamboyance, cutting a strange, angular but wonderful path from Southampton Row to Vernon Place in London's busy Holborn, might not be everyone's idea of a perfect sub-

ject for a photo, but it entralls Philip Vile.

'It's a fine and discreet little gem of an avenue,' he says. 'And the angle means it reveals itself in a surprising and charming way'. Vile used that angle to good advantage in a picture that shows his insistence on allowing the viewer to engage with the whole image before settling on the subject; here, the lady in the fawn coat with her back turned to us, making Worley's Italianate distractions

a red brick herring. This cinematic approach to a photograph should come as no surprise given that Vile originally trained as a film maker and started out directing pop videos for bands like The Damned and Erasure. For variety he extends his work to interiors, product design and fashion – the depopulated cleanliness of some architectural photography goes against the grain; preferring chance and incidence to inform the image. ●



St Antony's College, Oxford
Zaha Hadid ArchitectsWords **Hugh Pearman**Photographs **Luke Hayes**

It had to happen sooner or later. Zaha had to build for Oxbridge, the only question being where, and on what scale. The college that eventually commissioned her is one of the newer, lesser-known graduate ones – St Antony's College in north Oxford, founded in 1957. It has consciously put itself on the map with this expansion of the University's well-regarded Middle East Centre which it hosts. The Investcorp Building, named after the company that paid the necessary £11m, is not big. It is expensively jewel-like. So, to quote Lord Hervey's famous dig at Burlington and Kent's Chiswick House, is it 'Too small to live in, and too big to hang to a watch'?

I think Burlington had the last laugh there, and so I think will Zaha and her team, led by project director Jim Heverin. This is a lovely little building. Of course, there are various niggles one could make. It's a tight fit in the available space, very tight. Perhaps the upstairs library is a little awkwardly-planned because of the way the building swoops round

a large mature tree at the front. For sure the flared trumpet-mouth of the glazed end facing the private world of the college complex shows bravura in action, facing due south and so needing very careful specification to reduce solar gain into the archive reading room it marks. And certainly, seen from the road outside, this externally mysterious silver form visually links two existing buildings while turning out not to connect to either, being a stand-alone facility. One could make hay with such criticisms, about function following form, about gesture architecture.

But that old argument will never end, and here I really don't care. The uses – library, lecture theatre, reading room, archive storage, administration – are relatively straightforward, bread and butter functions of any seat of learning. The expression of those uses here is about something else: high status and visibility, not just for the college but for the university as a whole, given the international reputation of its Middle East Centre. And this is just one of the most beautifully-crafted buildings I have encountered for a long time. You have to regard it as a collector's item.

That is important because architecture of this nature, and on this intimate scale, has to

Below The oak-veneered auditorium, with loudspeakers behind wall perforations.

Right Slightly matt stainless steel finish softly reflects surroundings.





be detailed to perfection. Given that nothing is ever perfect, the usual construction glitches are here kept to an absolute minimum, and those are confined to the odd corner of the interior. Bearing in mind that when I saw this building it was still not stocked or occupied – that happens over the summer break for the autumn term – I’ve almost never seen less obvious snagging to do.

It all starts with the very well made exterior, where the joints between panels of shimmering slightly matt double-curved stainless steel are to tiny, precise tolerances. No Gehry-like boilerplate aesthetic here, this is all about the exquisite detail. The skirt of this garment is delicately lifted on both sides – revealing smooth concrete on the college side, and glass on the public side, where there is a part-sunken gallery and function space.

The college context in which this sits is interesting, varying from the tile-hung Arts and Crafts aesthetic of some of the inherited older 19th century buildings to the polite

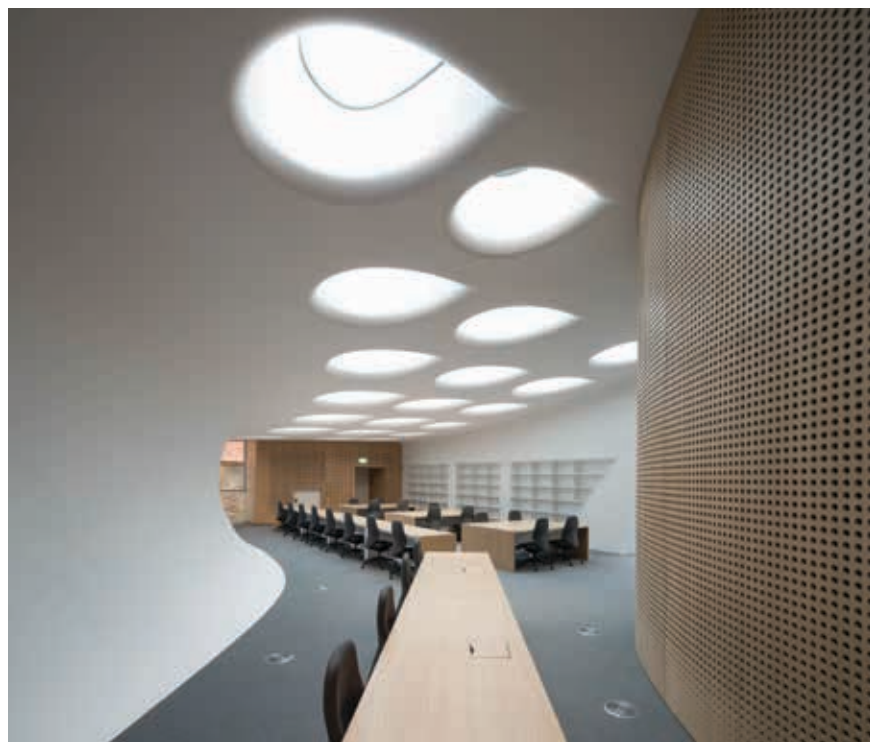
modern of Bennetts Associates’ twin 2013 entrance blocks, via the prime 1970 brutalism (impolite modern), of the Hilda Besse dining hall/bars/common rooms building by Howell, Killick, Partridge and Amis (HKPA) with its hooded window shrouds like chameleon’s eyes. There’s a dash of 1990s brick-and-slate semi-trad to be found here, too. In other words it’s the usual collegiate jumble, given a sense of enclosure and order by Bennetts’ planning but with only one standout building – HKPA’s – until now, when a second has arrived.

Zaha Hadid Associates (ZHA) trialled a number of materials for the Investcorp Building, including Corten oxidising steel and smooth plastic, but in the end the glimmer of slightly textured stainless steel won through. A very practical consideration ruled out Corten in leafy north Oxford: bird droppings. Once cleaned off it, marks remain which take a long time to re-oxidise. Given the huge and protected specimen

Sequoia tree at the front, round which the new building tiptoes, a hose-down building makes better sense. Aesthetically, it introduces another external material to the collegiate mix but in a relatively neutral way, clashing with none of the existing.

The University’s Middle East Centre – one of seven international research centres grouped at St Antony’s – wants to announce itself to the world. It may be away from the historic centre but it benefits from the university’s centre of gravity shifting towards it as the enormous redevelopment of the 4ha Radcliffe Observatory Quarter nears completion close by. You can see the care that has gone into the Investcorp Building, which beneath the skin is a composite structure engineered by ZHA’s frequent collaborator AKTII: in-situ concrete with a roof structure of concealed glulam braced portal beams. The 118-seat lecture theatre lies beneath the lawned courtyard behind, and uses precast concrete planks spanning 10m between re-

Below The library with its ‘soft’ ceiling and teardrop skylights.



Below Seemingly small from outside, it’s surprisingly spacious inside.



IN NUMBERS

£11m
construction cost

1,580m²
overall site area

1,127m²
GIFA

700m²
building footprint

£9760
construction cost per m²

118
seats in the lecture theatre

26
library desks

2,200m²
of rolling stacks

taining walls to make a column-free space.

Inside, what could have felt like a hemmed-in building is given a sense of spaciousness by the flared southern end rising to three storeys, fed by a curving stair with tight turnings, while the gallery/function room downstairs visually borrows the garden round the sequoia to gain a feeling of openness. The flare on the western, road side provides more space for the library but internally this feels a little odd: the space curls off and then just ends at a blank wall where you might expect to find a doorway. However, what attracts your eye in the library are two other things: a large window right up against the tile-hung building on the northern side, and an arrangement of teardrop-shaped roof-lights seemingly carved into the smoothly plastered ceiling. These apparently recall an aspect of a never-built Niemeyer project for the college alongside, sized to fit into the invisible, complex structure that lies beneath.

Back to function: all this amounts to an

extra 1,200m² of floorspace, plus the extra lecture theatre, for the centre. In research terms, perhaps the most useful aspect is the set of climate-and-fire-controlled rolling storage stacks for the centre's historic collection in the basement: previously storage was basic to say the least. But a lot of the work of the centre concerns public lectures and debates, and here Zaha's new building with its oak-veneered lecture theatre and break-out space takes on a public function: what she calls 'Global discourse and greater understanding of the region... a forum of research, understanding and global debate'.

It carefully avoids any stylistic reference to any particular part of the 'middle east' – as it should, given the many different cultures, religions and outlooks it serves. But, this being by Zaha, it is singular in itself. Lord Herve, thinking of houses and watches, would have to think along different lines: habitable jewellery, perhaps, or cyclopean furniture. ●

Drawings and more photographs on ribaj.com

Below From the street, it swerves smoothly round a specimen tree.



Below The building rises to three stories on the south elevation.



Credits

Client: Middle East Centre, St Antony's College, University of Oxford

Architect: Zaha Hadid Architects

Structural engineer: AKTII

Services and acoustic engineer:

Max Fordham

Facade consultant: Arup Facade Engineering

Facade supplier: Frener + Reifer

Main contractor: BAM

Landscape design: Gross:Max

Cost consultant: Sense Cost

Suppliers

Concrete: Thames Formwork

Timber linings: Cowley Timberwork

GRG linings: Hatmet

Staircase balustrades and steelwork: Lee Warren

Terrazzo flooring: Pandomo

Carpet flooring: Forbo

Rubber flooring: Nora

Cubicles and lockers: Thrislington

Auditorium chairs: Ascénder

Archive shelving: Brunzveel

Green roof: Bauder

Granite paving: Marshalls

Château Margaux, Bordeaux
Foster + Partners

Words Jan-Carlos Kucharek

Photograph Nigel Young

Any architect seeking evidence of money's corrosive potential need look no further than Norman Foster's Stansted airport. Granted, perhaps only those that passed under its vast, delicate 'floating' roof, supported by elegant steel 'utility piers' in the first few years might have got the clarity of original intent. The high-tech roof, information totems, electrics

and services integrated into its pier structures creating clear views through to the airside and runway and offered, for people ascending from the train platforms below or arriving by car, formal legibility rarely seen in the airport typology.

Cheap air travel, post 9/11 security and retail demands soon put paid to that view but the latest iteration, courtesy of owner Manchester Airports Group's £80m 'upgrade' beggars belief. The airside half of the airport has been walled off and security moved to the far left of the terminal, with passengers

kettled towards it via a huge hanging sign, throwing the strategy off-whack. Worse still, an expanded duty free area winds tortuously around the piers in a riot of tacky granite; above, the great signature soffit is obscured by a black suspended ceiling. It's just as well Foster doesn't fly budget; the sight would probably send him into a tailspin.

That corrosive potential was on my mind after I touched down in Bordeaux, but was quickly dispelled by a fine lunch at Château Margaux: a 2011 white with the starter, 2001 red with the main and the one 'the



City of London served the Queen at her 80th birthday' with the cheese. Lunch was in the honey-coloured stone dining room of architect Louis Combes' 1815 neo-Palladian pile, the centrepiece of a 262ha estate that's been producing some of the world's best wines since the 1600s. It was shared with a gregarious Alexandra Mentzelopoulos, daughter of owner Corinne, sanguine Paul Pontallier, chief winemaker here for over 30 years, and Fosters partner Taba Rasti. To our east, beneath a low, wide roof of local clay barrel tiles is Norman Foster's latest project, a 1200m²

chai or shed for the making of Château Margaux's whites; and a 1400m², 70m long underground concrete Vinothèque for the reds, hidden under the vineyard to the south, alongside the estate's drive.

Wine producers seem to have upped their game lately, with Gehry, Calatrava, Rogers and Foster building for them in Spain and Jean Nouvel in France. Also nominated for this year's Mies van der Rohe award was the radical landscape of a winery by Archea Associati for the Antinori, the family behind the renowned 'Supertuscans' (RIBA, September

2013). But as Pontallier points out, while Château Margaux had been looking to expand its historically sensitive site for years it wanted to ensure that any new building abided by its understated pedigree and avoided ostentation. Its motives were also very different from the Rioja and Chianti; here, there's no hotel or restaurant, neither souvenir or wine shop. The château, he emphasises, is a farming concern with a local labour force of 100 – but a select global clientele. Ironically Pontallier uses the word 'sobriety' to describe the aesthetic – keen that any design should not be



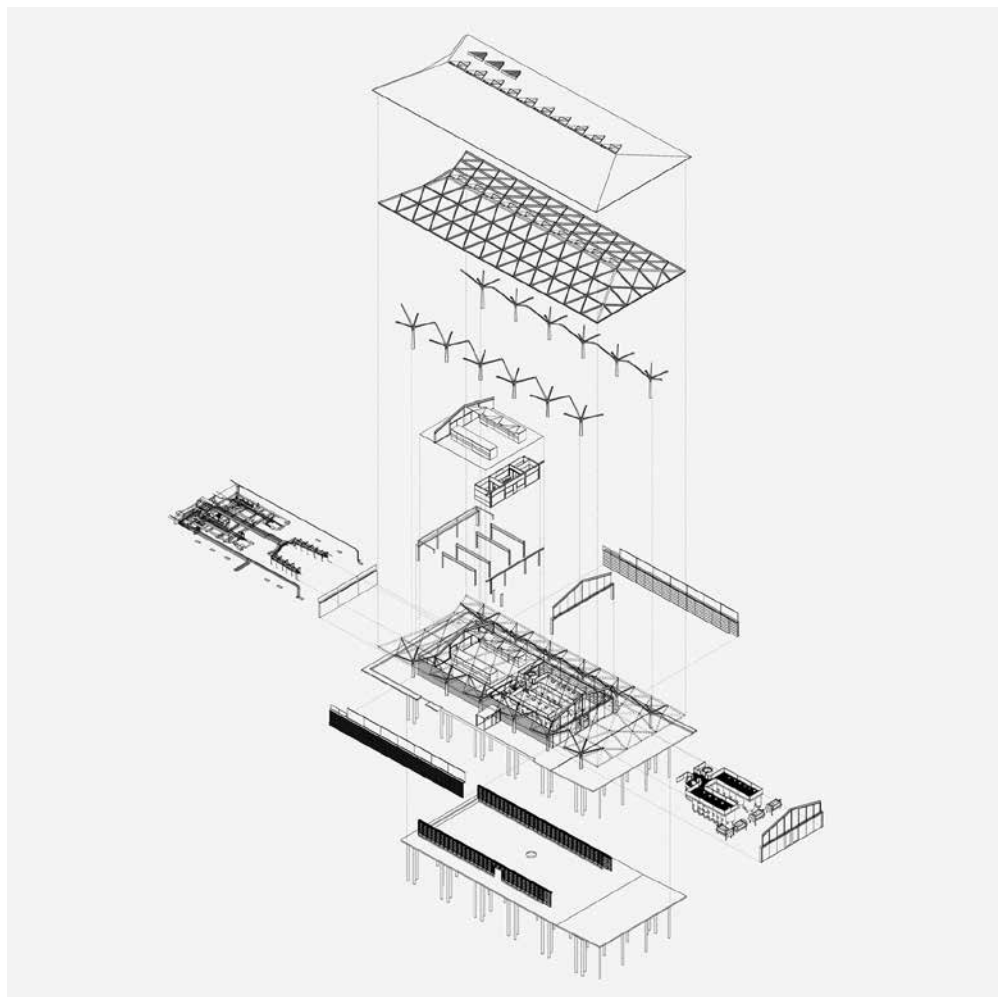


trophy architecture, but fundamentally utilitarian. It's the first new building on site since Combes completed the château in 1815.

Foster and the Mentzelopoulos family are personal friends; his family have holidayed there and the new chai was discussed informally before he was appointed in 2010. Since then, says Rasti, Foster's involvement has been consistent, with his many hand-drawn sketches appearing on hotel note paper from Brasilia to the Cipriani in Venice, derived from local barn vernacular, and suggesting the design was actively on his mind despite other, more palpable distractions.

If the Mentzelopoulos' worried he was going to come up with some high tech counterpoint to the early 19th century estate, they needn't have done. His proposal, adjacent to an assembly of stone estate buildings, doesn't break their eaves heights and melds almost seamlessly with the existing composition.

Like Stansted, it's all about the roof here,



Top left Foster's visualisation of the estate with new chai.

Above The chai frames the estate's vineyards perfectly.

Left Exploded axonometric.

except with the edges taken off. The eventual design of 12 organic welded plate steel 'trees', each with curved branches reaching up to engage with a steel diagrid roof, has an almost disarming simplicity. Numerous column and truss options were considered by the practice's in-house engineers, but only the diagrid met the requisite span of 20m while giving a structure of sufficient finesse, a demand that ruled out use of timber. Rasti explains that the roof does all the work of spanning and giving requisite stiffness, with the central glass-enclosed box below disconnected from it. From a distance Foster wanted the roof to blend in with the existing, so sourced recycled clay barrel tiles; but on approaching, the structure becomes uncanny not so much for what is there than what is not. Facing south, the first four steel trees help support a projecting roof canopy – a strange, bold gesture at odds with the existing walls adjacent. But it's no empty one – at

harvest-time this forms the 'grape reception', sheltering the fruit's initial outdoor processing from sun and rain – a physical reification of the tent hoisted annually in the neighbouring courtyard. Here you see the eaves detailing, where tiles project out and rain simply drops the 10m to a French drain below. And where the south side justifies the huge projection of this heavy tiled roof, on the other it cuts back and up, pulling north light into the mezzanine box and opening views to the landscape from its upper terrace.

This steel-columned self-supporting box, holding fermenting vats, barrel storage, R&D room and upper level wine tasting space, is the working heart of the shed and nestles beneath the diagrid's lime-washed timber soffit. You sense that Foster's wrestled with the corners: it's a Mies-lite detail, seeming to want to express its gravity as load-bearers but without any real load to speak of; but they do define the line of the box's two service walls

running either side of the vats, containing all the CO₂ fermentation extract ducts, feed pipes, electrics and monitoring equipment – all connecting back to the old building via a discreet glazed link. Externally, they are defined by oak slats echoing barrel staves, while internally they comprise stainless steel panels that hinge down, held by nothing more than metal wires attached to hooks.

This detail is part of the joy of this project and the polarised nature of its programme, acting as both a working building and a space for high-end hosting. So the high-spec framed glazed doors that elegantly slide or swing to access the craft-like detailing of the hosting level are offset below by a working factory floor. You'd expect the folding steel doors opening onto the canopy to be mechanical, but panels sit on wheels in runners, to be manually pulled across. Foster originally considered glass doors, but these industrial steel ones, perforated with small glass cir-



Above left The estate looking north, Louis Combes' château in the distance.

Left The upper level wine-tasting room looks past the vats below to the landscape beyond.

Above Industrial at first glance, the solid steel staircase is in fact highly engineered and well executed.

cles, tip their hat to Prouvé, and connect visually to the vineyards; its sleek, long bronze outer door pull contrasts on the inside with a workaday grouping of handles and grab bars. Cracked concrete floors, ripe for sluicing, were the best local contractors could realise and form a rustic base that sets off the beautifully engineered and spiral steel access stair to the vat head gantries, where balustrades are finished to the same level. Rasti speaks of the client's desire for mechanical rather than technological approaches from a facilities management angle, but one can't help but feel a desire for manual process is the default for an industry whose history can never fully be disassociated from the hands that picked the grapes or the feet that trod them.

This might not be the work of a man at the height of his powers but there's a soul to this building that I've not seen in the firm's output in a long while; a master architect enjoying the luxury of developing his concept over time. Unlike the firm's drive to set precedents for corporations like Apple or

Bloomberg, here he seems to reflect on old ones. Foster may have started with Stansted's roof but he's gone back – way back – for real inspiration. Past Prouvé's experiments with pre-fabrication, beyond Hector Guimard's steel engineering in turn of the century Paris, even further than Louis Combes' classicism. It's as if he's returned to the concept of Abbe Laugier's 1755 primitive hut, re-interpreting it for the modern day. It's highly considered, but notes of contingency dot the project, such as in the wire drop-down panels and folding doors. It's even in a node detail of the highly engineered, hand-welded branches meeting the diagrid roof, where one offsets to avoid an inevitable double-curve if structural logic were strictly adhered to. And as the family demanded, it sits demurely beside a wood, deferring to a landscape that's its only raison d'être. Like the wine business itself, its nature is grounded in the terroir; the work of an autumnal Foster – a meditation on land, time and production. ●

Credits

Client SCA Château Margaux
Architect Foster+ Partners
Structural engineer Ingerop
Collaborating architect A3A Cabinet d'Architecture
Mechanical engineer Secath
Wine making engineer Ingerop
Lighting engineer KEE
Lighting consultant Claude Engle Lighting Consultants

Contractors

Steel structure/glazing Seele
Roofing SECB
Roof edge GF3M
Timber cladding Legendre & Lureau
External doors/ rooflights Seele
Vats Serap
Concrete floor Vinci
Spiral stair/mezzanine BAU/Empty
Balustrades Realize (subcontractor)
Timber mezzanine floor BAU/Empty
Technical walls BAU/Empty
Internal glass partitions BAU/Empty/
 Jofebar System
Mezzanine box lining BAU/Empty

Below The tapering, branched structural trees are simple, fine and elegant.



Below With their steel doors retracted, the fermentation floor opens out for the vineyard's manual workers.





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No place like home

Manchester's Cornerhouse and Library Theatre have a new place to dwell – Mecanoo's Home. And actually, it's pretty... well, homely

Words: Phil Griffin

Dave Moutrey, chief executive of Home, Manchester's new venue for contemporary art, theatre and film, has traded in Cornerhouse, his battered 30 year old, red brick MGB-roadster-of-an-arts-centre, complete with leaking hood. With Home he has a big Ford C-Max (black, of course), with panoramic roof, 17 different seating permutations and literally dozens of handy storage compartments. How exciting is that? Manchester Metropolitan University now has the keys to the much-loved roadster, while the SUV's closest neighbour at Number One First Street – a building as evocative as its address – is AutoTrader.

Francesco and Ernst, from Mecanoo, are waiting for us in Cinema Two, keen to present the evolution of the new 6,500m² building.

It comprises seven boxes – two theatres, five cinemas – plus art gallery, restaurant, three bars, box office, bookshop, rehearsal and event spaces, and staff accommodation. All are deployed across three floors in a triangular configuration, wrapped in continuous facade, angles rounded, with a cantilevered notch where the doors slot in. Frankly, at £25m for the lot, these are Primark prices, and the considerable added value looks good and works.

How long the industrial aesthetic will stay in fashion anybody's guess. For the time being though, it is architecture's denim and Mecanoo's building reboots it as though it is this year's brand new trend. Home has fair-faced concrete, exposed soffits, engineered ply, big suspended pendant lighting, polished terrazzo floor complete with enough cracks

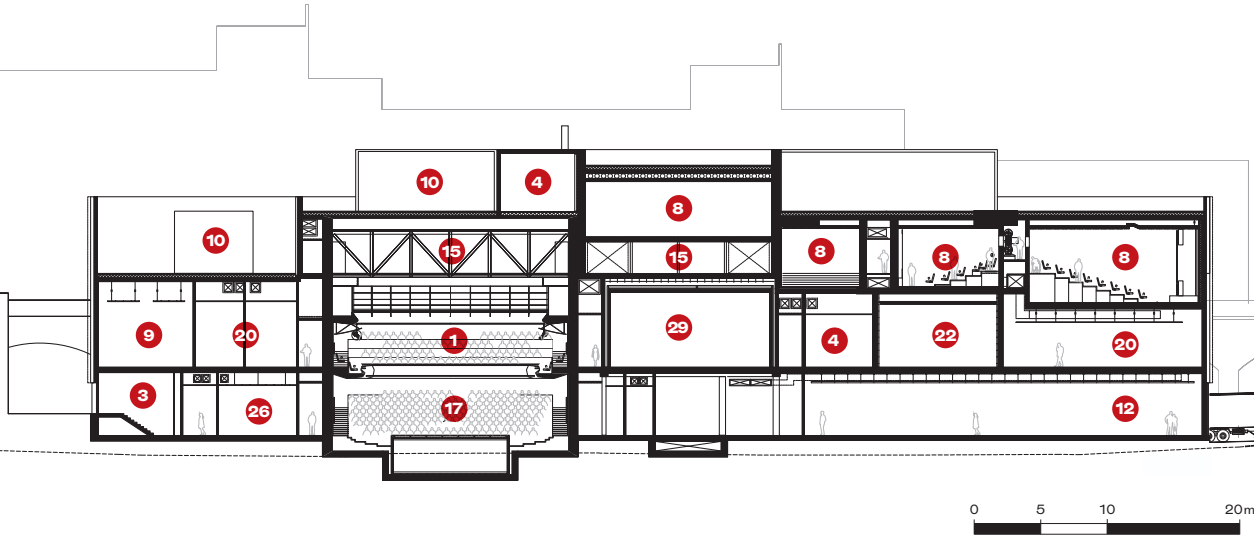


Restaurant first floor, G-plan sideboards and dark timber make even this large space surprisingly 'homely'

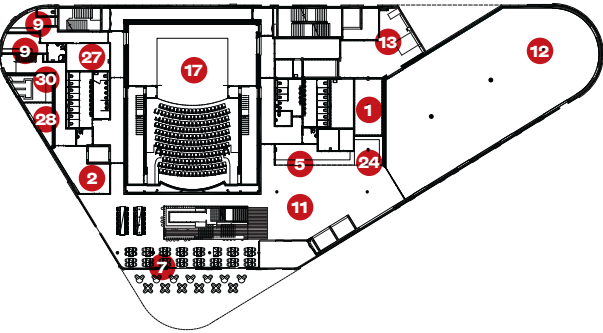
Opposite page An SUV of a building (black, of course).



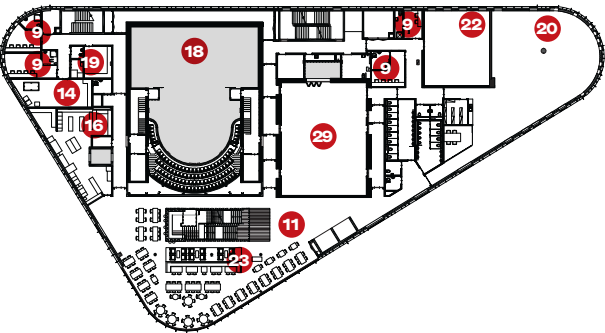
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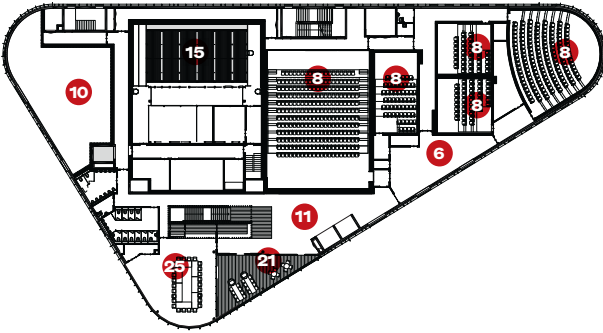
Ground floor plan



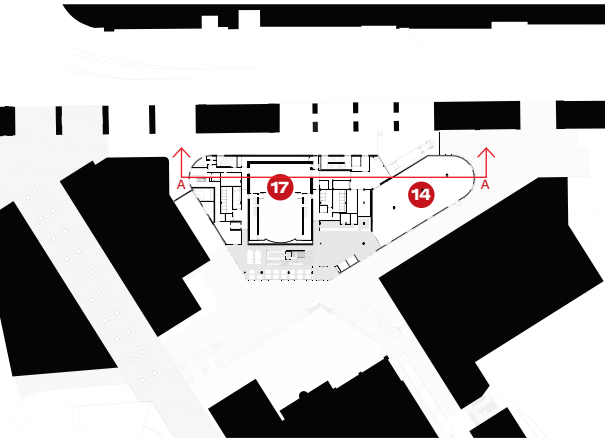
First floor plan



Second floor plan



Site plan



- 1 Art store
- 2 Bar cellar
- 3 Bar cellar access
- 4 Boiler room
- 5 Box office
- 6 Break out
- 7 Cafe/bar
- 8 Cinema
- 9 Dressing room
- 10 External plant
- 11 Foyer
- 12 Gallery
- 13 Get in area/loading bay
- 14 Green room
- 15 Grid
- 16 Kitchen
- 17 Main auditorium
- 18 Main auditorium (balcony)
- 19 Maintenance wardrobe
- 20 Office
- 21 Terrace
- 22 Rehearsal room
- 23 Restaurant/bar
- 24 Retail
- 25 Sponsors room
- 26 Stage management office
- 27 Stage manager
- 28 Switch room
- 29 Theatre
- 30 Transformer

to make it look pre-patinated. Architecture wonks may sneer at more ply, but they'd be wrong to. When the well judged bar and restaurant fit-outs have a healthy sprinkling of clientele, the vibe is good.

For over 30 years Cornerhouse cinemas, galleries and bars were a great draw for students and staff at Manchester Metropolitan University, just south down Oxford Road. Home will hope to see their affections transfer. It helps that the new building's aesthetic and atmospheric partner in town is the School of Art at MMU, by Feilden Clegg Bradley. This Stirling nominated art school is a model in restraint, cleaving to an already intelligent and detailed brief that sought to integrate students (clients) and learning disciplines in an open matrix.

Theatregoers, art house cinema buffs, visual arts punters, drinkers and eaters are front of house at Home. In the back rooms are actors, those of Manchester's venerable Library Theatre Company which was in need of a home (that word again). This brings about an uncommon condominium of a shared building. The main sitting room,

the space that rises through the building, defining its height and volumes, is the 450-seat theatre. It is a quirky affair, and draws character from that. Lined out in slatted ply, this time painted matt-black, there are two balconies above stalls, seating upholstered in a narrow palette of red and purple. Tall, thin and black, it recalls Goth girls in long dark coats with streaked out hair. It's a good look.

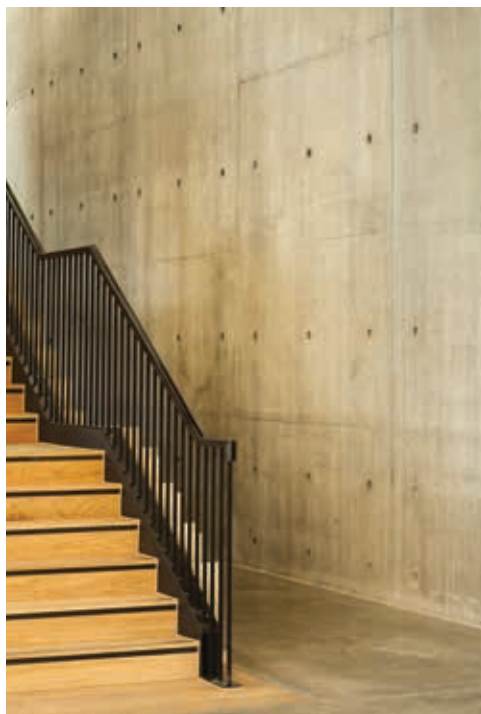
This main house hasn't opened fully to the public yet, so it is difficult to know how the rather formal deep raised apron stage will function, in the absence a fly tower and with constricted wings. No seat is more than 10m from centre stage, making for a giddy, Piranesian, slightly vertiginous space. On the first floor, across quite a narrow corridor from the main house, is a black box flexible space with an engineered oak floor and little else. Were there seats, there would be 160 of them. With more than the usual allocation of entrances and exits, the room appears to be almost more door than wall. This, apparently to maximise flexibility, helps get actors and performers on and off stage in as many ways as possible. Whatever lighting and other technical spec-

ification comes in here, it will be bespoke. For now, it looks like a good party room.

Performance spaces and five cinemas are all north of both the entrance foyer, and the public bars and catering that rise up through the building. The lift core, the right of the entrance, is lined out in naked ply while signage throughout is chunky, clear and legible. Cinemas are clustered at the top of the building around an unprepossessing lobby punctuated by doors. It's strange how clunky and featureless cinema can be, stripped of popcorn and pick 'n mix. Cinema One is 350 seats raked up to roof level, where it sits alongside projection boxes and plant room. Cinema Two is 150 seats raked out between curving walls, this being housed in one the rounded corners of the building. Walls and floors are grey; seats are the same block colours as the main theatre. This is neither Tooting Granada nor London Palladium, but the punters won't mind.

The ground floor bar is your entrance hall and drawing room and it takes the heavy traffic. It is left of the entrance door and follows the curving full height glazed wall. Strikingly, the bar itself slots beneath the first landing

Below How long will the industrial aesthetic persist?



PAUL KARALIUS (2)

Below Theatre auditorium, lined in black-painted slatted ply.



of Home’s pleasing staircase. Mecanoo and collaborator Concrete Amsterdam have cleverly turned a perceived disadvantage from Cornerhouse – a space consuming centrally located turning stair – into a characterful structure. The timber treads are generously wide and deep, landings broad, balustrade properly weighted. The stair turns and rises through the floors, with a mezzanine branch that bridges to the main house first balcony. Stairs are lined out in ubiquitous vertical slatted ply, allowing nosey views through to ground floor drinkers and first floor diners. In a building that pays the price of a mashed-up programme of uses and users, this staircase is the spine and signature. Deceptively simple, totally effective.

Bar and restaurant fit-out are Home’s second identity flourish. Tall folded aluminium stools join high bench tables, made from recycled Iroko hardwood laboratory benches on welded square-form uncoated steel frames. These are overhung by low-slung pendant lighting that slices the double volume space in two. Restaurant furniture includes G-plan sideboards and dark timber throughout. It is,

I cringe to say, comfortingly homely.

So, the SUV turned out to be a pleasant surprise, thanks, I think, to a patient and experienced design team. There are caveats: the tiny book and journals shop is an insult to literacy. The narrow slot to the theatre circulation feels positively back-of-house, and it is littered with mundane fire doors. A little more money and space here might have bought a better effect.

The Library Theatre and Cornerhouse are much loved, long-standing institutions in Manchester, but at Home you have no clue they ever existed. The Gallery space shares the ground floor with the bar and box office, and isn’t open yet, so I suspend judgement. But, for a building committed to visual arts not to have commissioned a single piece during its construction seems derelict. Have they not been to Liverpool Everyman? Notwithstanding, a building not necessarily in the right place, nor best sited for its purpose, turns out to be fresh in its detail, cleverly slotted together, and something of a pleasure to be in. ●

Manchester, by Phil Griffin and photographer Jan Chlebig, is available at mancunianbooks.com

IN NUMBERS

7,600m²

art and culture house

2

theatre spaces (500 and 150 seats)

5

cinema screens (250, 150, 60, 40 and 40 seats)

3

foyers

BREEAM Very Good

Credits

Interior architect Mecanoo in collaboration with Concrete

Client Manchester City Council

Project management MACE

Structural, electrical and mechanical engineer; fire safety, acoustics and building physics consultant BuroHappold Engineering

Design management and cost consultant AECOM Design Management

Theatre consultant Theateradvies / NL and Charcoal-blue

Main contractor Wates Construction

Below Slices of view from the stair. And occasional amazing shadows.



Below Tinted outlook.



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The house where Julie lay

A House for Essex, FAT's collaboration with Grayson Perry and its last project, surprises in unexpected ways

Words: Hugh Pearman. Photos: Jack Hobhouse





Main image Yes, this is real: a 'Taj Mahal on the Stour' fusing art and architecture.
Opposite In the main 'chapel' living space of the house, architect Charles Holland of FAT (now of Ordinary Architecture) and artist Grayson Perry in Julie mode.

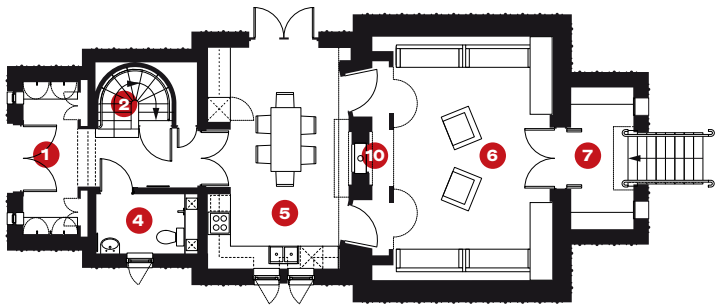
Is it like a fairytale, Grayson Perry and FAT’s House for Essex, I have been asked? You know, gingerbread house, big bad wolf, etc? Well, I’ve never been in a fairytale but I can certainly imagine this place in a Tim Burton movie. It would be a home from home for Helena Bonham-Carter. But in fact, when you’re there, it comes across as exactly what it is: a fusion of domestic architecture and art, with quasi-religious references. Perry’s sculptures on top, ceramics cladding the exterior and artworks inside, but also two bedrooms, bathrooms, kitchen, living room and Miele appliances in the basement.

Perry being a showman, he tends to steal the show. It’s hard for the cameras to point anywhere else. He is a natural TV presenter, hence the inevitable ‘making of’ film of the house project on C4. But Charles Holland, late of FAT, chartered RIBA architect and now of Ordinary Architecture, more than held his own with Perry at the launch of the house. Rightly so. This is not just an artist-produced design that an architect then steered through the Building Regs. Had it been left to Perry alone, as he confessed, it would have turned out a great deal more Game of Thrones-ish.

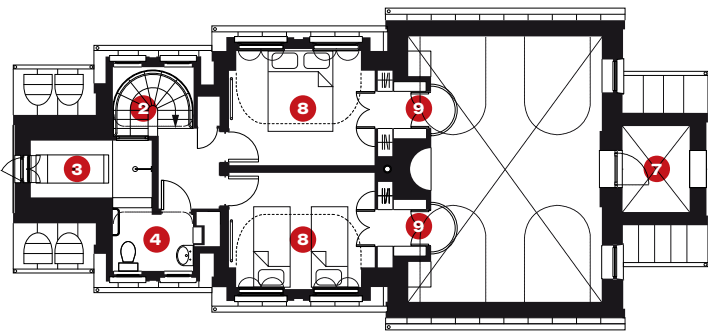
The two Essex boys were yoked by Living Architecture’s Alain de Botton even before there was a site to build on, and they went out together scouting for one. You might ask what de Botton had in mind, exactly. It’s this: he and Perry are fascinated – some might say obsessed – by the idea of a secular alternative to the consolations of religion. Not for nothing is the Living Architecture house in Devon being built by the monklike Peter Zumthor called ‘The Secular Retreat’. Perry is a narrative artist: this house is the culmination of a story he has concocted about Julie, an Essex Everywoman whom he elevates to sainthood. To understand the house, you have to understand the myth of Julie.

Her tomb is in the garden: a chest tomb placed at a height to make a handy bench. There are her dates: Julie Cope, 1953-2014. But there are no bones in the tomb. In Perry’s narrative she met a banal death by collision with a pizza delivery bike. Her grieving second husband built this house as a shrine to his beloved, ‘A Taj Mahal on the Stour’ as Perry puts it. It is a pilgrimage chapel, the end of a route that starts in Canvey Island during the great flood of 1953 where Julie was born, moving

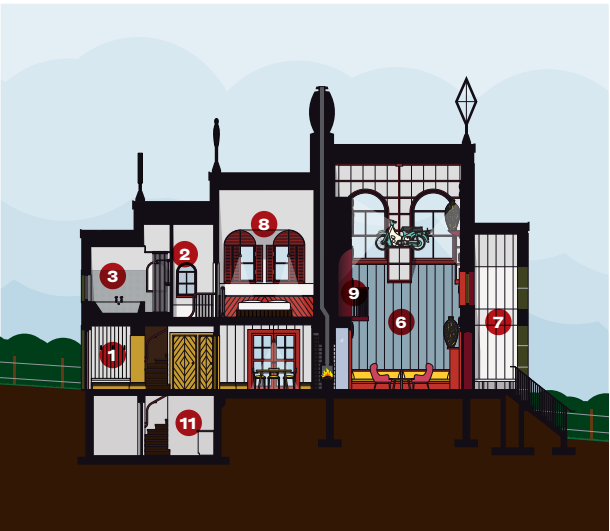
Ground floor plan



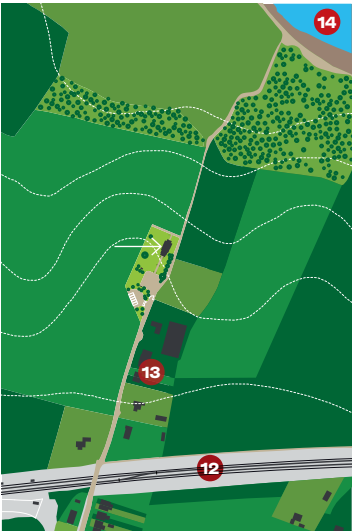
First floor plan



Section



Site plan



- 1 Lobby, storage
- 2 Stair
- 3 Bathroom
- 4 Toilets
- 5 Kitchen/dining room
- 6 Full-height living room
- 7 Porch
- 8 Bedrooms
- 9 Internal balconies
- 10 Two-way fireplace
- 11 Basement utility room
- 12 Railway line
- 13 Village
- 14 Stour estuary

Below View from the full height living room through the screen wall to the kitchen. Twin balconies are entered through wardrobes from the bedrooms. Perry's statue of Julie as deity dominates the space.

through various Essex towns she lived (Basildon, South Woodham Ferrers, Maldon, Colchester), to here.

'Here' is the end of a lane in Wrabness in North Essex – the kind of edge-of-village location, on a hillside overlooking an estuary, where you might expect to find a Wesleyan chapel if not a Viking ship burial. This chapel, however, is more like a giant expandable medieval reliquary or architectural Russian doll: in appearance it is four gradually larger houses telescoping inside each other, each with windows and dormers sized appropriately. In practical terms from south to north, the internal plan works out as follows: first (smallest) section: entrance lobby, bathroom over. Second section: hall, staircase, toilets. Utility room is in a small basement beneath these two sections. Third section: kitchen/dining below, two bedrooms over. Fourth (largest) section: full-height living space, overlooked by two small balconies from each of the two bedrooms, connecting through to kitchen/diner and sharing a fireplace with it. Finally the house steps down again with a high porch and steps leading down the hill towards the Stour.

That's it, plus many grace notes: for what might be described as a modern folly, it works entirely logically as a holiday villa. It is small, but (as was often the way with FAT) plays games with scale. Holland describes a whole range of internal influences for the enormous timber-lined living room he calls a chapel: including Russian wooden churches, Vanbrugh, Soane (especially in the use of mirrors and the mausoleum-like character) Lutyens, Loos, and Lord Leighton's house in Holland Park, now the Leighton Museum. That's a lot to pack into one room, even before you squeeze it all through a Pop sensibility. Take the famous pizza delivery moped, for instance, here suspended hanging high in the space and acting as a chandelier. But the references serve to highlight that the interior of this house is in effect two building types rammed together: relatively understated cottage at one end, richly bedecked chapel at the other. A complex permeable screen wall, painted rich red, separates the two.

The Leighton reference is telling, given that the artist worked with a leading architect of the time, George Aitchison, on his famous ceramic-bedecked



house. As for today's rural equivalent, this is how Holland describes his practice's working relationship with Perry: 'The most interesting thing about A House For Essex (and in this it is actually a pretty unique project for FAT too) is that the design itself is collaborative. It's not even us designing a space for Grayson Perry's art. It was a real joint effort to make something.'

Holland is clear that architecture and art are miles apart these days, which is what makes this project – the last under the FAT banner – so unusual. But then, FAT started out nearly 25 years ago by presenting themselves as both artists and architects. 'I do think there was something about FAT's "literacy" (if you could call it that) in terms of art practice that allowed us to discuss the project with Grayson as co-creators rather than as facilitators' says Holland. 'It's not a built piece of art or simply a kitsch fantasy but a real collaboration between art and architecture. The building stands as a statement in its own right and not only the sum of its narrative parts.'

The costs of this project are confidential, and Perry

likes to grumble that it lost him money, but he did say at one point that the cost of the architectural ceramics alone was around £200,000. Then there are the specially-commissioned artworks, the tapestries, the urns, the statue, the sand-cast aluminium sculptures and more. Beneath the external and internal skins it's a conventional blockwork construction but even so – well, Living Architecture's financial model is unlike any other company's in this kind of development. You can't imagine going to a bank to present a business case for this. On the other hand, booking is by ballot only and I'd be amazed if it isn't pretty much permanently occupied for years ahead, and that's some income stream.

One last thing: an impactful thing it may be, but like dazzle camouflage, it blends with the landscape from a distance rather better than an all-white house does. I noticed how its flanks visually dissolve into the hedges and cow-parsley: the golden brass/copper alloy roof is meant to do the same with regard to the local cornfields. We'll see. The strange thing is how unshocking it was, how quickly one became accustomed to it. Almost as if Julie always wanted it to be there. ●

IN NUMBERS

190m²
GIFA

2000
External tilework,
bespoke ceramic tiles

11.5m
Highest point

6m
Lowest point

£700
Starting cost for a two
night stay

Below Looking
from the kitchen - diner
to living room: ceramics
reappear.

Below right The north
porch, where the house
is most imposingly
chapel-like.



Credits

Client Living Architecture

Architect FAT

Artist Grayson Perry

Structural engineer Jane
Wernick Associates

**Environmental
engineer** Atelier Ten

Cost consultant KM
Dimensions

Landscape architect
Deakin Lock

CDM Anglia Building
Services

Main contractor
Rose Builders

**Specialist interior
Joinery, roof sculptures
and art installation**
Millimetre

Facade specialist
Szerelmey

M&E contractor SES

Structural steelwork

Derek Taylor Engineering

Roof installation Full
Metal Jacket

Suppliers

Exterior tiles

Architectural Terracotta
Ltd (Shaws of Darwen)

Timber framed windows
Mumford & Wood

Mosaic floor Paul Marks

**Internal steel framed
window** Crittall

Roof cladding Aurubis
Nordic Royal

Interior joinery TD
Joinery

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Road to recovery

A detailed health check of England’s NHS estate has revealed that energy efficiency measures could save enough over five years to fund 9000 heart bypasses. Treatment is already well under way

Words: Alan Short

The NHS is responsible for 18% of non-domestic buildings’ emissions in the UK, equivalent to a metered energy cost of £600m in 2011. To improve energy efficiency, the Department of Health NHS Energy Efficiency Fund (NHS EEF) provided £49.3m for over 100 energy efficiency projects delivered in 2013-14 to 48 NHS organisations in England. The objective was to retain the resulting benefits within the organisations for direct re-investment to frontline patient services. Cambridge University was appointed to manage the Fund and report on the outcomes. The final report, which I authored, has just been published; the collection of actual data continues.

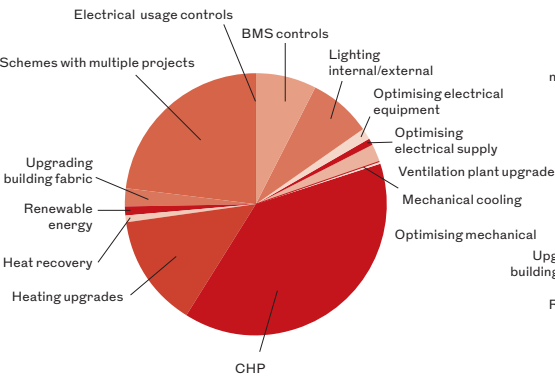
So where did the investment go? What savings have been made and how has that money been spent? A wide variety of projects was implemented: building fabric improvements; upgrades to mechanical and electrical services; low energy lighting schemes; switching away from fossil fuels and on-site energy generation. The pie charts (right) show the distribution of funding and expected energy savings in the first year, across different project categories. Interestingly, the figures show that investment and savings do not wholly align.

The £3.7m invested in building management system controls are projected to save £5.6m over five years and £10m over 10; lighting upgrades are expected to save £5.19m in five years and £9m in 10 from £3.9m initial investment are shown in the table opposite. Organisations securing multiple interlinked projects should realise

£17.97m in five years out of their combined £11.3m of initial investment and £29.4m in 10 years. Good organisation and forward planning will pay dividends.

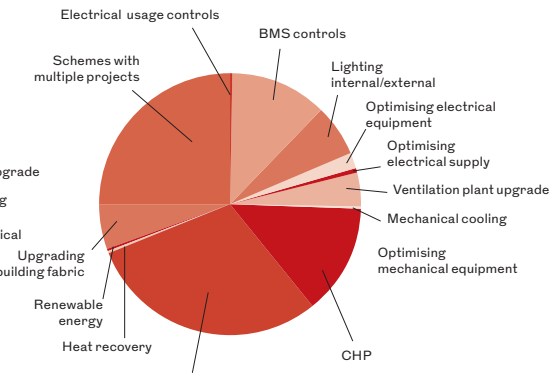
The projects were expected to reduce the entire NHS building energy related carbon footprint by approximately 2.4% (2012 data), saving 160.5m kWh a year. Discounted sav-

Figure 1: Allocation of funding by project type



Total value = £49m

Figure 2: Predicted energy savings in kWh by project type in the first year



Total value = 160 Gwh

Figures excluding additional funding are strictly based on EEF investment

ings add up to £69.8m in the first five years of operation, equivalent to 63,800 tonsillectomies or 9,000 coronary heart bypass grafts.

Other than carbon savings and the immediate cash-releasing benefits, some less quantifiable, but no less significant, benefits accrued from the original investment. These were very diverse, from using savings to buy new diagnostic equipment and so increase patient throughput, to releasing land for a new pathology laboratory following the removal of a defunct underground oil tank.

Studying efficiency

Thirty one case studies have provided richer insights into the implementation of the EEF. These include combinations of projects by type (lighting case studies, CHP, electrical optimisation projects' case studies), and four singular cases, three of which involved significant investment in multiple projects. The fourth project involved a unique EEF project combination covering electrification of the vehicle fleet, purchase of tele-conferencing facilities and installation of solar photovoltaic panels. The case by case exploration consisted of interviews, conversations and site visits with trust estates staff who had led project implementation.

Southend University Hospital NHSFT was among the case studies analysed in detail. The organisation was well prepared to bid, having an energy masterplan in place. It won funding of £1.6m for 17 interconnected projects of building energy performance, including works on the heating, ventilation and air conditioning systems, thermal insulation of the envelope, and lighting. The hospital used the EEF works as an opportunity to make wider improvements on several wards and the restaurant, while minimising disruption and economising on contractor costs. Managing so many separate projects presented complications, especially during the handover stage when the project manager's contract ended. The hospital noted the difficulty of getting access to patient-occupied areas and highlighted the need to engage with stakeholders early over shutdown periods. Southend was one of the few hospitals with formal post-project evaluation procedures in place, comprising surveys across hospital staff over the 24 months following the completion of the works.

Salisbury NHSFT, was awarded £800,000, for improvements which include

Project type	Predicted energy savings against EEF investment
BMS	<div> <div>£3,688,000 investment</div> <div>£5,588,437 (5yr) expected returns</div> <div>19,352,491 KWh pa expected saving</div> </div>
CHP	<div> <div>£19,105,000</div> <div>£23,243,690 (5yr)</div> <div>21,927,944 KWh pa</div> </div>
Electrical usage controls ¹	<div> <div>£22,000</div> <div>£253,650 (5yr)</div> <div>676,560 KWh pa</div> </div>
Heat recovery	<div> <div>£453,000</div> <div>£714,646 (5yr)</div> <div>195,048 KWh pa</div> </div>
Heating upgrades	<div> <div>£6,841,000</div> <div>£10,311,822 (5yr)</div> <div>47,685,074 kWh pa</div> </div>
Lighting internal/external	<div> <div>£3,907,200</div> <div>£5,186,552 (5yr)</div> <div>10,256,388 KWh pa</div> </div>
Mechanical cooling	<div> <div>£125,000</div> <div>£245,014 (5yr)</div> <div>505,274 KWh pa</div> </div>
'Multiples'	<div> <div>£11,296,000</div> <div>£17,971,739 (5yr)</div> <div>40,048,606 KWh pa</div> </div>
Optimising electrical equipment	<div> <div>£628,000</div> <div>£1,095,353 (5yr)</div> <div>2,817,119 KWh pa</div> </div>
Optimising electrical supply	<div> <div>£446,000</div> <div>£430,612 (5yr)</div> <div>1,070,000 KWh pa</div> </div>
Optimising mechanical equipment ²	<div> <div>£126,000</div> <div>£466,715 (5yr)</div> <div>0 KWh pa</div> </div>
Renewable energy ³	<div> <div>£550,000</div> <div>£458,843 (5yr)</div> <div>696,212 KWh pa</div> </div>
Upgrading building fabric	<div> <div>£1,065,000</div> <div>£1,692,237 (5yr)</div> <div>8,642,602 KWh pa</div> </div>
Ventilation plant upgrade	<div> <div>£1,059,000</div> <div>£2,164,967 KWh pa</div> <div>6,717,994 KWh pa</div> </div>

- EEF funds invested
- Expected returns
(total discounted value over five years)
- Expected kWh saved pa

¹ Trust confident of predicted figure, derived from pilot prior to submission, introducing PC management software reducing idle time and inactivity by shutting computers down, payback predicted in five months. Note this is a small project of £22,000.

² Project reported £0 energy savings expected at submission however since implementation £7,000 savings have been seen in the first month

³ Figures based on original wind power project but due to planning refusal for a turbine, solar panels were substituted and are in place.

IN NUMBERS

£69.8m
savings in first five years
of operation

£3.7m
investment in BMS
control systems

£10m
saving on BMS control
systems over 10 years

£50m
EEF investment in
retrofit from 2014

LED lighting, high efficiency chillers and solar panels; all delivered to schedule due to careful pre-planning. Changes to the building envelope and improved LED lighting have improved the quality of the patient and staff environment. Heat obtained from the CHP facilities is partially used to improve the pool temperature (used for therapy and exercise), which is especially useful since it is a non-seasonal benefit for patients. Retrofits are anticipated to save £158,000 and 12m kgCO₂ of emissions annually.

Within the EEF scheme, 20 projects contained lighting upgrades. This included large schemes that only involved lighting, such as a £1.7m job for upgrading 7000 lamps and those where lighting was part of a wider programme. Total investment in lighting was approximately £8m. While LEDs are expected to return significant energy savings in a like-for-like comparison with existing lamps, several factors influence the cost-benefit analysis of these schemes. These include auxiliary costs such as replacement of fittings, removal of asbestos and ceiling improvements. The key cash-releasing benefit of the lighting schemes is the reduction of energy use, although lower maintenance costs are probably an additional benefit. The main non-cash benefit is the lighting quality, improving conditions for patients and staff.

Future issues

The analysis of the EEF projects and their implementation revealed issues for the future. Drawn from the findings were recommendations to policy makers and stakeholders involved in similar processes:

- Energy efficiency knowledge and skills available to organisations may vary dramatically between external consultants and in-house staff with different levels of energy efficiency understanding. NHS organisations should review the relative cost of bringing in external expertise against the savings available from an in-house capacity to diagnose energy performance and to deliver effective strategies. Moreover, engaging with university building science research departments

provides a great chance for improvements, especially for University Hospital Trusts.

- Existing data at the scale of individual buildings is almost absent. The available data is too high level to permit meaningful diagnostics and post-intervention comparison. Organisations need to collect more detailed information, especially since monitoring equipment is increasingly affordable and data analysis tools increasingly user-friendly.

- The process needs time to unfold to ensure successful outcomes. The EEF timetable rendered unviable all applications requiring external permissions. For example, organisations were unable to secure the necessary permissions for renewables installations in the EEF timescale. If policy-makers want to encourage the use of renewable energy sources across the NHS estate, they must allow enough time for negotiations with local authorities.

- Timely clustering of interconnected projects should be encouraged: it can maximise returns and minimise disruption to patients.

Ideal formula

The researchers believe the successful formula is: collect data at as fine a grain as possible; understand the building stock; improve the building fabric, lighting and controls; then – and only then – pursue renewable energy sources to satisfy the healthily reduced demand. To be in line with the 28% carbon emissions reduction required by 2020 compared to a 2013 baseline, an emissions reduction of 0.1628 MtCO₂ annually is required (around 4% savings every year). An investment of nearly £50m in the Energy Efficiency Fund from 2014 is expected to reduce emissions by 0.1006 MtCO₂e. Therefore investment in retrofit projects achieving around 1.6 times the EEF savings every year would save this level of emissions. There is everything to play for. We are nearly two thirds of the way there. ●

Alan Short is professor of architecture at Cambridge University and author of the NHS Energy Efficiency Fund Final Report

Retrofits at Salisbury are anticipated to save £158,000 and 12m kgCO₂ emissions a year

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2: Intelligence



Designing &
building it

Jacob Low



The co-founder of JaK Studio, who won the 2013 commission to design a bespoke mobile recording booth for the BBC/ British Library's 'Listening Project', talks about why he enjoyed creating a space for talking

So how does it feel to see your mobile booth design completed?

I don't want to gush, but it's really nice to be involved with the Listening Project. It's amazing to be connected with something that'll travel the country recording people's stories and experiences to be archived for future generations – and as a result we wanted it to be something iconic and individual. It spent a couple of days outside the BBC and the British Library before going to Glasgow. I think it's going to the Shetlands next...

You said you designed it with a partner and based it on an Airstream caravan?

That was the starting point, yes, but it came as much from the shape of a speech bubble. We also wanted its interior to be domestic and familial rather than industrial in look. We've worked with design consultant SeymourPowell on previous projects and with its specialisations in the automotive industry its involvement seemed like a natural fit. We designed it quickly but it took nearly two years to finesse – and for that the help of the specialist fabricator Spectra, who's done everything from trailers for Formula 1 to horse boxes, was invaluable.

Isn't it just a souped-up caravan?

Far from it! There were a lot of technical demands. Beyond the desire for it to be really comfortable so interviewees would feel at home it had stringent, studio-like acoustic demands, with microphones installed next to the seating area. We even managed to get over Health and Safety and install a gas-fired stove for added ambience! The polycarbonate skin of the facade has coloured LED strips set behind it that work like a graphic equaliser, as we wanted to make the act of conversing within externally palpable.

Offices in London, Sarajevo and Dubai. You seem very international...

Actually there's fewer than 10 of us, two partners and a small team here in the UK and our creative director and two others in Sarajevo – and Dubai as an outpost for our Middle East design work. We met via work collaborations over the years – I first met co-partner Kenan 18 years ago and we're in our tenth year as JaK Studio.

So after building a mobile intimate space, what's your idea of a permanent one?

Hmm... that's a difficult question. It's very rare for a public space to have the intimacy of a home. I'd have to say the Princess Victoria pub on Uxbridge Rd because it's a good old London pub, it's my local and they might give me a free pint if they get a heads-up!

AUNTIE'S ALL EARS

The Listening Project, one of the station's most listened-to shows, is a Radio 4 initiative launched in 2012 in partnership with BBC Local Radio and the Nations, in which people across the UK volunteer to record a conversation with someone close to them about a subject they've never discussed intimately before. The conversations are being archived by the British Library and used to build up a collection of voices capturing a portrait of the UK in the second decade of the millennium. JaK Studio's design for the Listening Booth was selected as part of an international challenge by the RIBA in 2013. The brief was to create a warm, accessible environment where people would feel relaxed, uninhibited and comfortable opening their hearts up to the nation. The need to engender a 'home from home' feel was a fundamental part of the design brief.



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

External
management

All change

The RIBA NBS economic panel gathered at Portland Place as the new government took the reins and talked forecasts, rates and the risks of growth

Adrian Dobson and Adrian Malleeson

AMa: We are meeting just after the general election, and with a majority Conservative government. I had expected to be talking about the instabilities that come with a prolonged period of coalition forming; but no.

Looking at the industry data, the RIBA Future Trends survey remains upbeat, and the latest Construction Products Association data is also positive. But the latest from the ONS shows construction output has formally slipped back into recession.

So let me open by asking: what is the true state of the market?

RS: The underlying trend feels like one of quite strong growth. The political certainty the election gave us will help. As for the ONS data, even if it's correct, we can only be seeing a quarterly slowdown; it doesn't feel like renewed recession.

NF: I'd agree; there is growth, not recession. There's lots of evidence for this. Cement sales, for example, are up 8% year-on-year;

ON THE PANEL

Sue Foxley, research director at ThinkBarn (SF)

Noble Francis, economics director,
Construction Products Association (NF)

Aziz Mirza, director, Fees Bureau (AMi)

Simon Rawlinson, head of strategic research
and insight, EC Harris (SR)

Richard Steer, chairman, Gleeds Worldwide (RS)

Hosts

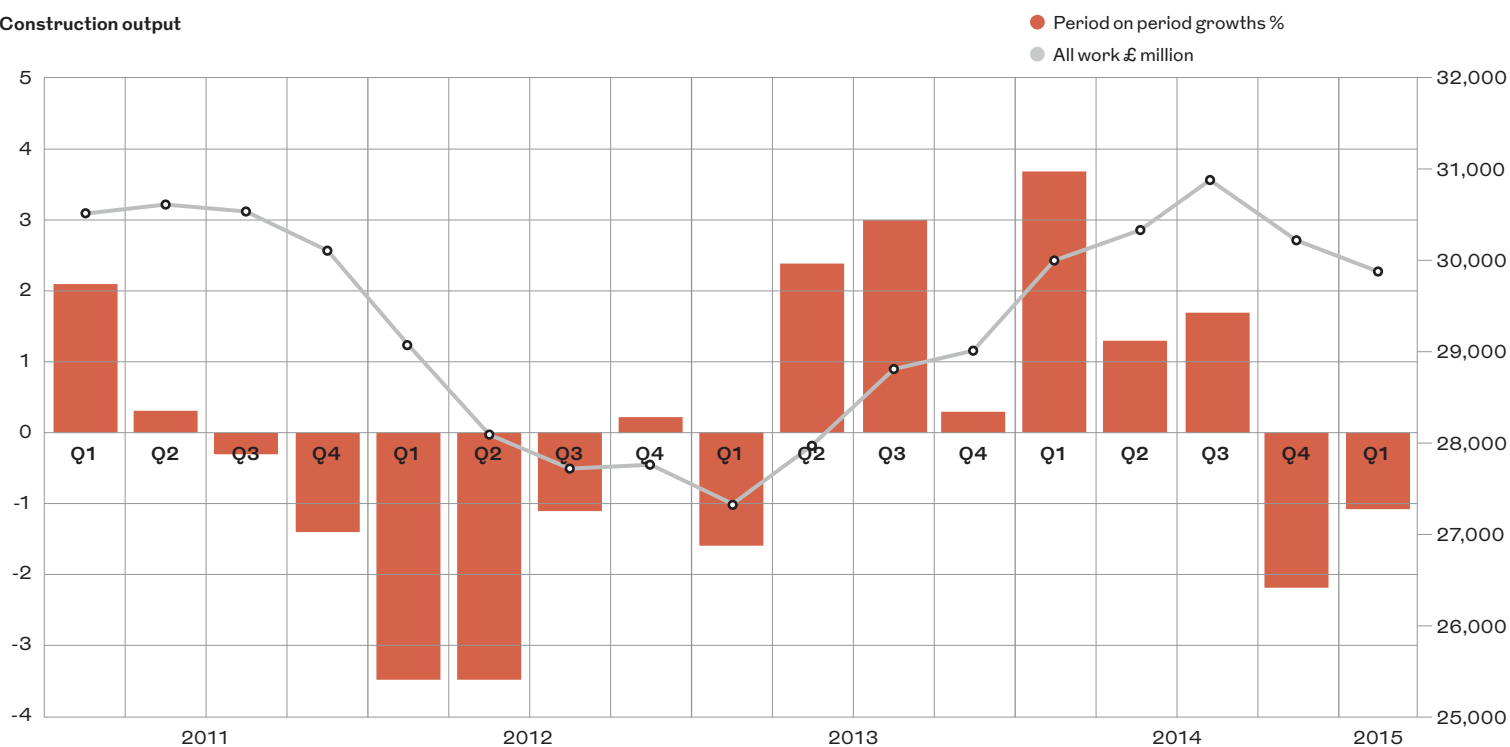
Adrian Dobson, director of practice, RIBA (AD)

Adrian Malleeson, head of research and analysis,
RIBA Enterprises (AMa)

they are shifting a lot of product. Construction employment has increased. The CPA data shows slower growth, but still growth. This is in line with other industry surveys; they are all positive and show growth in Q4 2014 and Q1 2015.

So something doesn't add up with the most recent ONS data. Take housing repair, maintenance and improvements data, for example, they suggest there has been significant price deflation, but also that demand in the sector has been growing strongly. The ONS picture of two consecutive quarters

Construction output



Chained volume measure, seasonally adjusted, 2011 prices. Source: Office of National Statistics

of falls overall in construction output just doesn't seem right. However, the ONS says it will revise the data in June, so hopefully this will go some way to addressing the concerns.

I think it's a growing sector, and we'll continue to see growth in the coming years.

SF: House sales slowed before the election as people waited to see what would happen. But with the clear result, more certainty and stronger growth will return. Over the last year we've seen a rise in the average for office rentals. The market backdrop is broadly positive.

AMa: Let's turn to the downside – what are the risks to growth in the design and construction market?

RS: The EU referendum will undoubtedly have an impact. Why would a German bank commission a major UK office fit-out if we might leave the EU in two or three years' time?

SF: The referendum is a risk; business investment levels in the UK remain relatively weak, and this won't help confidence to invest. We expect the global economy to expand over the next couple of years, but the EU question may dent short term UK growth.

AMa: Is the EU risk just one of uncertainty?

Do we think there is a realistic chance that the UK will leave the EU?

RS: I'd hope that there isn't a realistic chance of the UK leaving. I couldn't envisage us having the same construction industry if that was to be the case.

SR: For UKplc the overall impact would be significant, but perhaps not so much for the construction industry as for financial services and manufacturing.

AD: When it comes to architects, the key export markets for UK architectural practices at the moment are the Gulf region and South East Asia. Any talk of emerging markets closer to home, is often Turkey rather than the EU.

Perhaps the referendum may turn out to be beneficial in the longer term if it puts to rest all the speculation and uncertainty about the UK's position in the EU.

AMa: Are there any other downside risks?

SF: The cost of living and doing business in London is an issue; it's an increasingly unaffordable location. Labour-intensive activities are looking at alternative locations. London makes sense as a global hub but increasingly not as a service production centre.

AD: In many ways England looks increasingly like a super-city region centred on London. This is perhaps partly fuelling the devolution/independence debate and driving the ideas behind the northern powerhouse concept; a desire to create a healthier balance. Are we likely to see central London emerge as more of a 'front end' centre for global architectural services?

SF: That seems likely; productivity is believed to be rising more quickly in rural areas, due to the strong growth in knowledge-intensive industries. In fact, there are forecasts that productivity in rural areas will grow faster than urban ones. We can see high skill activity starting to relocate, but still having a foot in the capital, particularly for a global market presence.

SR: Looking globally, I think the residential market in China is a ticking bomb. Can it really sustain these levels of growth? China is an increasingly significant investor in the UK, so what happens there is doubly important to us.

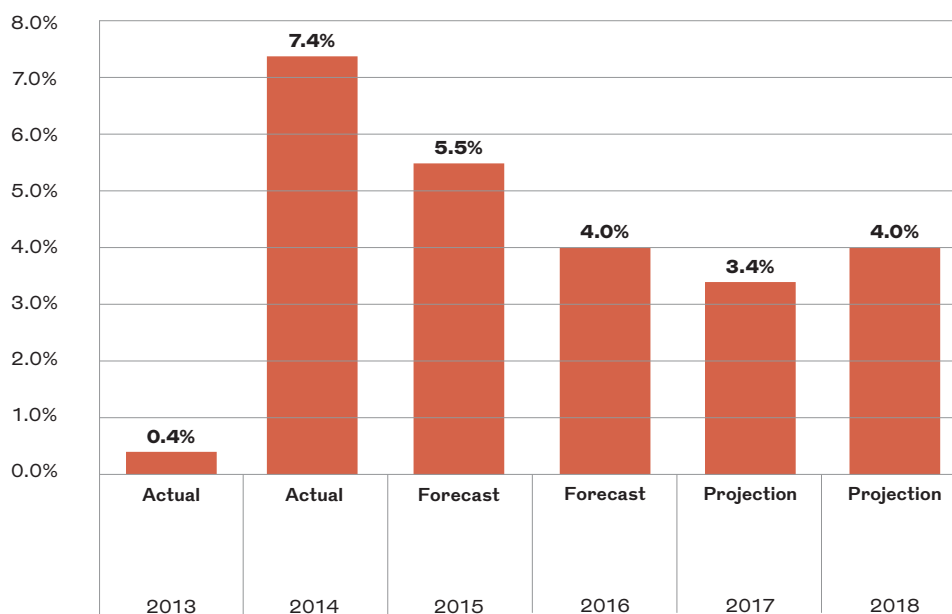
Interest rate rises in the UK keep being put off, but I think a rise in US interest rates will happen within the next six months, which makes a rise here more likely.

AMi: UK interest rates are likely to rise, but we might expect them to peak at around 2%, in the next cycle. It seems that the low interest rate, low inflation scenario is set to continue for some time. The Eurozone economy is also now beginning to improve.

NF: A separate risk is on the supply side. Do we have the skills and capacity to meet growth forecast in the short and medium term? So far that has primarily been in housing, but if other sectors start to recover more strongly, we will need different skill sets in professional services, contracting, and on the products side. If we can't meet this demand there is a capacity issue and inflation risk.

AMa: What do we think the effects of the Conservative government are likely to be on construction? Infrastructure spending seems to be quite a priority. There is the right to buy for Housing Association (HA) tenants. Then there is 'build to rent' and the commitment to the release of government land.

Construction output forecast

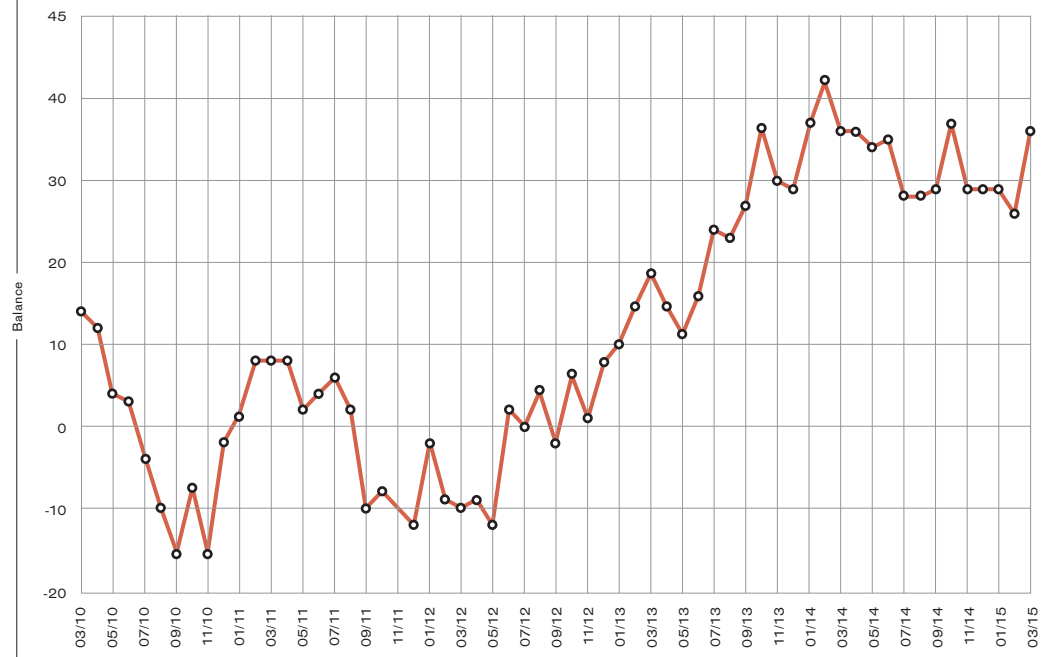


Source: Construction Products Association. Construction Industry Forecasts 2014-2018. Spring 2015 edition.

If we are to create stability we need a more balanced house building sector

How do you expect your architectural workload to change over the next three months?

Source: RIBA Future Trends Survey



SF: Well, the release of government land has proved disappointing in the past.

NF: ...and what proportion of this land is actually in the places where development is needed and people want to live? It sounds sensible, but I question the practicality.

SR: There is a commitment to 200,000 low cost starter homes. There is a real risk of creating 200,000 sub-standard homes.

NF: It's surprising that the homes pledge is as high as it is in a market where the government only controls 20%.

SF: If major cities get more powers they may develop social housing more proactively.

NF: If we are to create stability we need a more balanced house building sector; say 30-40% of the total market that is not based around the major private house builders but through increased public housing, or a greater contribution by SME house builders.

SF: We need more social housing, but right to buy could become a real problem for housing associations. It makes the buildings they own vulnerable, and so difficult to borrow against for investment. The cost of finance may become too high for associations to invest in new stock.

SR: It's all a bit broken. It's true that right to buy will make it more difficult for HAs to get the credit ratings they need. It might be better to just free them from regulation.

NF: The government doesn't see regulation as a good thing, but it can drive innovation.

SR: There isn't much evidence of a real commitment to supporting sustainability; a deafening silence on low carbon at present.

AD: Sustainability is a core component of the Government Construction Strategy.

RS: I think the strategy will quietly disappear; it wasn't measurable anyway. It seems the public sector just wants to build cheaper.

NF: I can see the July budget bringing even greater austerity in the short term. It was expected to focus on welfare cuts, but this is always more difficult to achieve than anticipated. They turn to elements of capital investment to meet their targets. Public sector spending, especially at local authority level, is going to be tight for the next five years.

SR: The brakes are meant to come off public sector capital spending in 2018. Until then, the commitment is to expand capital investment at the rate of GDP growth. The idea of a single public estate is quite interesting,

where public agencies come together, to use public assets more effectively and change the way services are delivered. Greater Manchester is in the vanguard of this. George Osborne has personally aligned himself to it as part of the northern powerhouse initiative.

SF: It could work well with the right structure.

NF: Local authorities should be better placed to work out what public land can be developed. It needs genuinely devolved powers though.

SF: Regional planning is necessary too.

AMa: Considering these issues, what are your tips for those working in architecture and construction during the next five years?

RS: Architects should have plenty of work.

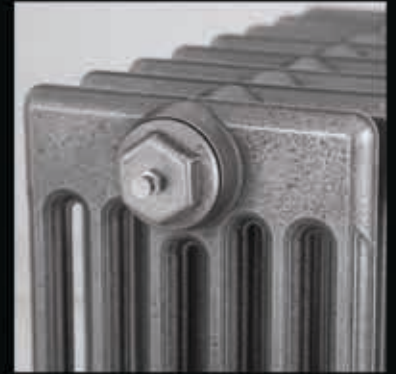
AMi: Architects need to find ways to raise fees to realistically sustainable levels.

SR: Focus on the growth areas: further and higher education, research. Accelerate the promotion of your talent; the recession has left management gaps.

SF: The build to let market will grow.

NF: Look to the key growth areas: private housing, commercial and infrastructure. ●

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Internal
management

We're all in this together

New tax breaks encourage wider employee ownership of businesses. Would it pay off for you?

Robert Postlethwaite

Ownership of architects' businesses has tended to follow the same model as other professional practices, concentrated in the hands of relatively small number of directors or partners. However, wider ownership forms are now emerging as a popular alternative for such organisations, where a collaborative culture and clear shared purpose are core. Several firms now view employee ownership as a key part of their strategy. New government tax incentives are also encouraging companies in all business sectors to consider employee ownership. What does employee ownership look like, how is it created and how can you evaluate whether it might be right for your firm?

It isn't just higher profile firms such as Make and consulting engineer Arup that are employee owned. A significant number of others are now looking at employee ownership as an alternative to more conventional approaches, many having already made the transition or being in the process of doing so. Reasons vary. Some practices with owners wishing to retire find there are few, if any, interested buyers. They may also be concerned that the team culture they have built up over many years might not survive a merger. Ambitious founders of new practices will want to attract the best talent and encourage people to stay over a long period. Fundamental to all successful businesses, arguably more so

for architects, is the need to foster a highly collaborative working style, mutually supportive and with a clear shared purpose. The quality of design and its impact on the built environment will be as critical motivators as the desire for financial success. It's of little surprise then, with research showing that employee ownership improves business performance, that a growing number of practices see giving everyone a stake in the business as most compatible with their goals.

Employee ownership comes in several models. The starting point is typically for at least 25% of the practice to be owned by or on behalf of the employees as a whole. This can take more than one form.

Buying in

One is individual share ownership, where employees acquire personal shareholdings which they typically sell on leaving, making a gain if the practice's value has grown. Statutory tax reliefs can significantly reduce both the personal cost to employees of acquiring shares and also any taxation on subsequent growth in their value.

While individual share ownership is favoured by some employee-owned firms, others do not anticipate significant growth in their value, reducing or eliminating the scope for employees to make an investment gain. It can also be time consuming to administer. An alternative form of employee ownership involves shares being held in trust on behalf of the employees. This is how both Make and Arup are owned, as well as John Lewis, in each case as to 100%. The benefit to employees has several facets, each of which is intended to connect to a benefit to the company. It creates a performance incentive, and organisational benefits such as building a participative and transparent culture which helps create fulfilling roles and a successful practice.

Two new statutory tax reliefs, introduced in 2014, are intended to encourage more companies to become employee-owned. The first, for existing company owners, enables them to sell a majority stake to an employee trust completely free of capital gains tax. The second enables any company majority owned by an employee trust to pay annual bonuses to its employees free of income tax.

Taken together, these incentives open up a new succession route for existing practice owners and enable employees to receive a

A growing number of practices see giving everyone a stake in the business as most compatible with their goals

higher net share of any future profits. A new employee trust acquiring an existing practice would typically be funded from that practice's profits, often in instalments over a period of years. In the meantime, they can generally continue their involvement in the practice, including as directors. Any income tax free bonuses must be paid to all employees on the same terms, although differing amounts can be paid depending on length of service, hours worked or their pay.

Horses for courses

Employee ownership is not a panacea and may not suit every practice. Some firms may feel that only a small number in their team are experienced or committed enough to take on the responsibilities of ownership. Nor does one size fit all. A firm may understand its benefits but want to retain stronger financial incentives for its management team, in which case it could combine employee ownership with higher level rewards (including through more significant shareholding or share options for management team members).

In architecture new materials, construction techniques and societal and environmental demands mean that building design evolves. Is there a case to consider a similar evolution in how your practice is owned? ●

Robert Postlethwaite is managing director of employee-owned law firm Postlethwaite.

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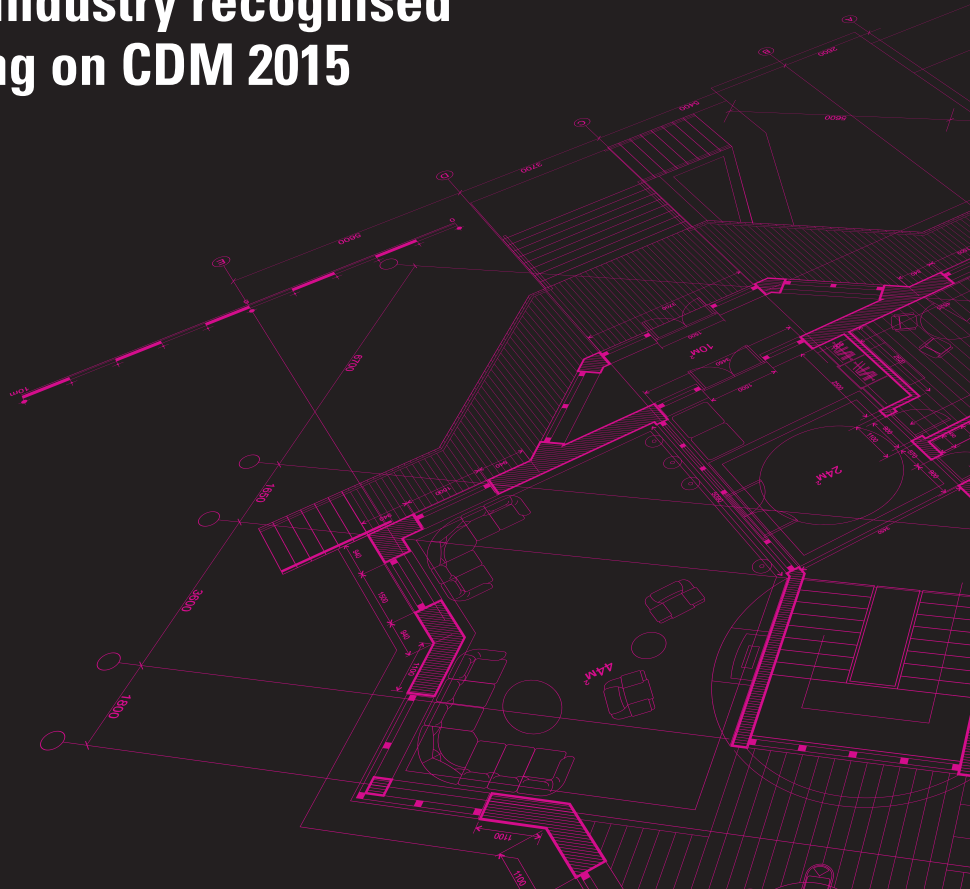




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Internal
management



External
management

You better start swimmin'

Times are a-changing. How can the profession keep up?

Richard Brindley

Whatever aspect of human endeavour or global dynamics you look at, the rate of change is speeding up exponentially. The five main drivers for change – Social, Technological, Environmental, Economic, Political – spell a STEEP learning curve for the profession.

Social

A population explosion and rapid urbanisation means we need to double the capacity of our global built environment by 2100. And demography is also changing, with a rapidly aging and shrinking society in the developed world as the emerging world gets younger.

What does all this mean for architects and the RIBA? There are great opportunities to create solutions for our built environment with more capacity that is also sustainable, resource efficient and flexible to serve the needs of our rapidly changing society.

The RIBA is addressing these issues and changing its education system, membership offer and knowledge base to be relevant to the 21st century profession. It has also launched an active equality/diversity/inclusion campaign to help the profession better represent and understand the society it needs to serve.

Technological

The industrial revolution transformed the world in 150 years, but the digital revolution's tsunami of disruptive change is taking a fraction of that time. Can we keep up with it? Better still, get ahead and use it to our advantage?

Architecture is becoming a global digital commodity. What was once done with pen, paper and drawing boards is transforming to clouds of BIM data. Construction is moving from site assembly to factory construction and on to insitu 3D printed solutions, with intelligent materials and systems that respond to the 'internet of things'.

The traditional role of professions, as the guardians and purveyors of specialist knowledge, becomes less relevant with this freely accessible knowledge. Now architects need to interpret all this information – as ethical 'synthesisers of knowledge'. Professional boundaries will blur as design teams are made up not of architects, engineers, surveyors and technicians, but creatives and coders of data working in collaborative supply chains with developers and constructors.

Environmental

Climate change and scarcity of essential resources such as water, food, land energy and minerals fundamentally affect the built environment, which accounts for about half of our increased release and use of carbon.

The great opportunity and challenge for architects is to transform our existing buildings and to create new resource efficient, zero carbon and resilient built environments – that can recover from the upheaval of natural disasters and economic/political change. This will require a new set of skills, design approaches and the education of clients and users. The RIBA is already preparing and supporting the profession for this with more focus on sustainable design, improving building performance and the recent international summit on creating resilient cities.

Economic

Over the next 10 years, 90 per cent of the world's construction growth is predicted to be in emerging markets, but this only accounts for 8% of UK architects' workload. If the RIBA and its members are to retain their impact and high regard globally and continue to be at the forefront of design innovation, they must be a bigger part of these markets.

This has led to an increased focus on internationalisation at the RIBA, helping members to work overseas and setting international standards for professional qualification and ways of working. RIBA validated schools are now educating more international than UK students and looking to build

Over the next 10 years, 90 per cent of the world's construction growth is predicted to be in emerging markets

international membership and professional networks for all architects who share and promote RIBA's professional values. This means UK-based architects are part of a globally renowned and influential institute and professional fraternity.

Political

The global political landscape is also changing. Cold War dynamics are gone, replaced with new uncertainties and conflicts. There is political and ideological turmoil across north Africa and the Middle East while China and other emerging powers are asserting their influence in resource rich parts of the world.

The UK's international military and manufacturing dominance is diminishing. If UK plc is to prosper as a world leading knowledge economy this needs to be replaced by 'know-how' advantage and influence. The creative industries are now the most valuable sector for UK export earnings, with London as the global hub for architecture. This is another great opportunity for the RIBA and its members to be at the global forefront of innovation, expertise and professionalism.

Our future?

Only architects, with their lateral thinking skills, creative problem solving abilities, breadth of knowledge blended across arts and sciences, holistic and synthesising viewpoint, social awareness and the sense of professional responsibility to tackle this STEEP learning curve and the great challenges it throws up. The future will be different. Our profession, with the RIBA, can help make that difference positive, and prosper. ●

Richard Brindley is outgoing RIBA executive director of membership and profession

Procurement
& contractsExternal
management

Bound in

If you want to keep lawyers out of your dispute, a third party decision can help – but be sure you record how binding it is

Douglas Wass

Resolving disputes by court or arbitration can be time consuming and expensive so parties often seek quicker and cheaper methods.

This can include agreeing to refer disputes to an independent third party (such as a lawyer or construction consultant) for a decision. The parties may agree that the decision will not bind them but will be used as a basis for settlement discussions; will be fully and finally binding; or will bind them temporarily – which means they will be bound to comply with the decision by, for example, making a payment decided by the third party. However, either party may refer the dispute to court or arbitration for a final decision.

Each type of decision can resolve disputes far more cost effectively than court or arbitration proceedings and can sometimes lead to parties preserving commercial relationships that would otherwise be lost.

However, the recent case of *Khurana and Khurana v Webster Construction* highlights the importance of the parties clearly recording the extent to which they have agreed to be bound by the third party decision.

In this case, Webster was engaged by the Khuranas to undertake works to their house. There was a dispute about the final account. As the contract was with residential occupiers for works to a dwelling house, Webster did not have the right to refer to an adjudicator for a temporarily binding decision in accordance

with the Housing Grants, Construction and Regeneration Act 1996. Nevertheless, the parties agreed to refer the dispute to an adjudicator and to be bound by the decision.

The adjudicator decided a substantial sum was due to Webster. The Khuranas then began court proceedings in relation to the dispute determined by the adjudicator. Webster applied for the Khuranas' claim to be dismissed on the ground that they had agreed that the decision of the adjudicator was 'binding' on them.

The Khuranas argued that the adjudicator's decision was temporarily rather than finally binding and so were entitled to have the dispute finally resolved by the court; and that the agreement to refer to an adjudicator was unenforceable because, in breach of the Unfair Terms in Consumer Contracts Regulations 1999 (UTCCR), it was unfair and not expressed in plain intelligible language.

The court rejected the first argument because, objectively construed, the correspondence between the parties evidenced an agreement that the adjudicator's decision would be finally binding on them.

It also found that the agreement did not breach the UTCCR: it had been individually negotiated and there was no economic or legal imbalance between the parties. It held that the Khuranas knew they could not be forced to use adjudication and did not feel pressured into agreeing to it, and while adjudication's short timetable and inability to recover legal costs were disadvantages, it was proposed to save both parties time and money. Webster had proposed adjudication in good faith and there was nothing intrinsically objectionable about the procedure, particularly since adjudicators are required to act fairly and apply the law. Finally, the language was sufficiently plain and intelligible.

Clients often ask architects for advice on how to resolve disputes without incurring the costs of lawyers. It can be quick and cost effective to instruct an independent third party to provide a decision which the courts will usually be reluctant to find unenforceable. However, the parties should ensure that they clearly record in writing whether the third party's decision is intended to be non-binding guidance, temporarily binding or finally binding. Failure to do this can lead to the type of time consuming and expensive court proceedings parties hoped to avoid. ●

Doug Wass, Macfarlanes LLP

The Khuranas argued that the adjudicator's decision was unenforceable because it was unfair and not expressed in plain intelligible language

IN PLAIN ENGLISH – BETTERMENT

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Internal
management

Can we count on your vote?

Maria Smith has a sense of déjà vu in a nightmare crit



Maria Smith

Last night I dreamt I was at a crit held in the format of a televised election debate. There were six candidate-students and they were each wearing enormous coloured ties: blue, red, orange, purple, yellow and green respectively. They were very insistent on showing me and my co-critics their projects and asked that after the crit we vote which we like best.

After a little scuffle for attention, a confident, blue-tied student addressed the room. Blue began their presentation by talking over a series of boring photos of people doing things seemingly unrelated to their project's context which they authoritatively explained represented a world where few can afford houses and the country's less affluent all live in cars issued by state-subsidised Automahouse Associations. The student's proposal was therefore to convert a series of motorway service stations into franchised drive-thru human services that offer cheap, on demand education, healthcare and childcare, seven days a week, 30 hours a week. The critics contested the out-of-town locations of these service stations but Blue retorted that broadband provision would be near-universal so not to worry and that the services would be surrounded with mature trees to minimise their impact on views of the British countryside for people that live in houses.

The second student, Red, had fallen into

the classic trap of researching until far to late in the year. They talked us through a series of delicious maps and nostalgic photos of bus travel throughout the ages. They then showed a stop motion animation that gratuitously described how giving power to cities and regions across the country to regulate their bus services would solve social inequality and teenage pregnancy. In a surprise twist they described how this scheme would be funded by a Mansion Tax and proceeded to present a design for a classicist mansion that was sufficiently expansive to generate a tax yield that would fund one bus for Sunderland. The critics were baffled as to the student's principles that their comments were reduced to variations on 'I read a book once'.

The Orange student proposed ten new garden cities for sites earmarked for airports. The garden cities were prefabricated in such a way as to allow fast deployment on any site proposed for a new airport, or expansion of an existing airport. A love child of parametricism and town codes, the layouts of the garden cities were defined by an algorithm where the number of trees was defined by the number of people was defined by the number of mental health clinics was defined by the number of classrooms was defined by the number of midwives was defined by the happiness quotient was defined by the number of trees. The resultant proposal was a surprisingly familiar post-war low-density housing estate on the outskirts of Eastbourne. The critics argued between themselves over their own failed practices and the student slipped away unnoticed.

Purple, who delivered his entire presentation clutching – and in the clutches of – a pint of ale, bumbled triumphantly about a pub with a huge car park on a brownfield site next to a hospital. The beer was proposed to be very, very cheap due to the profit made by the parking charges for foreign vehicles. British vehicles parked for free and got a free beer for every hour's stay. The critics were deeply divided but all agreed that it wouldn't even stand a chance without the unfathomable purple charisma of the presenter.

The fifth student, in radiant yellow presented a shiny, idealist yet relatively achievable affordable housing scheme. The units were generously sized with plenty of bedrooms, and sensibly laid out on a newly available site in Faslane. A coastal management plan that created loads of jobs complemented

The critics argued between themselves over their own failed practices and the student slipped away unnoticed

the new neighbourhood. The critics found it hard to argue with so paraded out the old 'cut a long section that interrogates the relationship between the natural resources and their economic imperatives'.

Green, the final student, wowed the critics with a blinding proposal to strip London of its status as cultural and administrative capital of the country and instead anoint the railway network. Government and commercial offices, school, hospitals and innovative think tanks would all be located on trains that traversed the country on a nationalised network powered by renewable energy. The housing crisis would be instantly solved as surplus housing in previously undesirable locations would suddenly become close to the capital's station nodes. Converting large areas of Westminster into flood plain would save the environment. The critics all loved it, proclaiming it might just work but you'd have to change everything.

Suddenly the room swished around and I was the camera. The rude glare of the lights animated the candidate-students' ties and a hysterical genie appeared to comment on everyone's outfits. Ballot papers flew in like possessed paper aeroplanes as a quiet train hissed I aitch ess two I aitch ess two I aitch ess two and I woke up sweating to find everything exactly as it was before. ●

This autumn, Maria Smith will be working with The Cass, London Metropolitan University



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3: Culture

Role call

Is the profession losing its sense of public interest?



Hugh Pearman

In 1974, around half of the UK architecture profession was still employed in the public sector. At the peak of public employment, there were complaints from readers of this magazine that private architects were unfairly discriminated against. In 1973 the breakaway Association of Consultant Architects had been set up in an attempt to redress this perceived imbalance. And yet, when in 1974 the RIBA published 'The Crisis in Architecture', written by former RIBA editor and RIBA director of public affairs Malcolm MacEwen, this was not the crisis he was concerned with.

The profession, said MacEwen (and as a man of the Left he meant public as much as private), had lost touch with the people it was meant to serve. It had become too focused on protecting its own interests, producing buildings and environments that were increasingly unpopular with the public. This was in the aftermath of the Ronan Point disaster, when the high-rise, often system-built response to housing need was increasingly being called into question. The private sector equivalent of Ronan Point was London's Centre Point, built

A sense of unease
has returned.
Where is the social
engagement, I
get asked?

and kept empty by its developer, allegedly for tax reasons. This was the time of prime minister Edward Heath's famous quote (in another context) 'the unacceptable face of capitalism'.

Architects of all stripes had become hate figures and had to shoulder their fair share of the blame for what had gone wrong, argued MacEwen. The profession had to recalibrate itself, return to its founding principles, eat humble pie and start again. The RIBA agreed: 'The public interest cannot be indefinitely sacrificed to political muscle, commercial greed, and the profession's reluctance to rock its own boat,' wrote then editor Roger Barnard.

The Institute followed up. It did recalibrate itself. Community architecture came out of this; so did the idea of Portland Place as a public architecture centre. Architecture became determinedly low-rise, even for a while neo-vernacular.

Today the profession is not bilaterally split between public and private sectors as it was then – it's 98% private. But a sense of unease has returned. Where is the social engagement, I get asked? Are not architects now designing the cityscapes of wealth and exclusion, ignoring the needs of ordinary people? Is it true that architects can only design what their clients ask them to, or can they use their influence to change things for the better?

Well, of course they can, and they do: go to architecture.com and check out the RIBA's campaigns for better housing, community-oriented planning, designing for health in an ageing population, better schools, sustainability, flood resilience and – most recently – role models to encourage greater diversity in the profession (RIBA, June 2015). Architects have all the skills necessary to make a better world, but we need to keep saying and doing it. I'm with MacEwen and Barnard when it comes to the architecture of public interest. They were instrumental in giving the profession its conscience back, reminding us that architecture is for everyone, not the few. Let's remember that. ●

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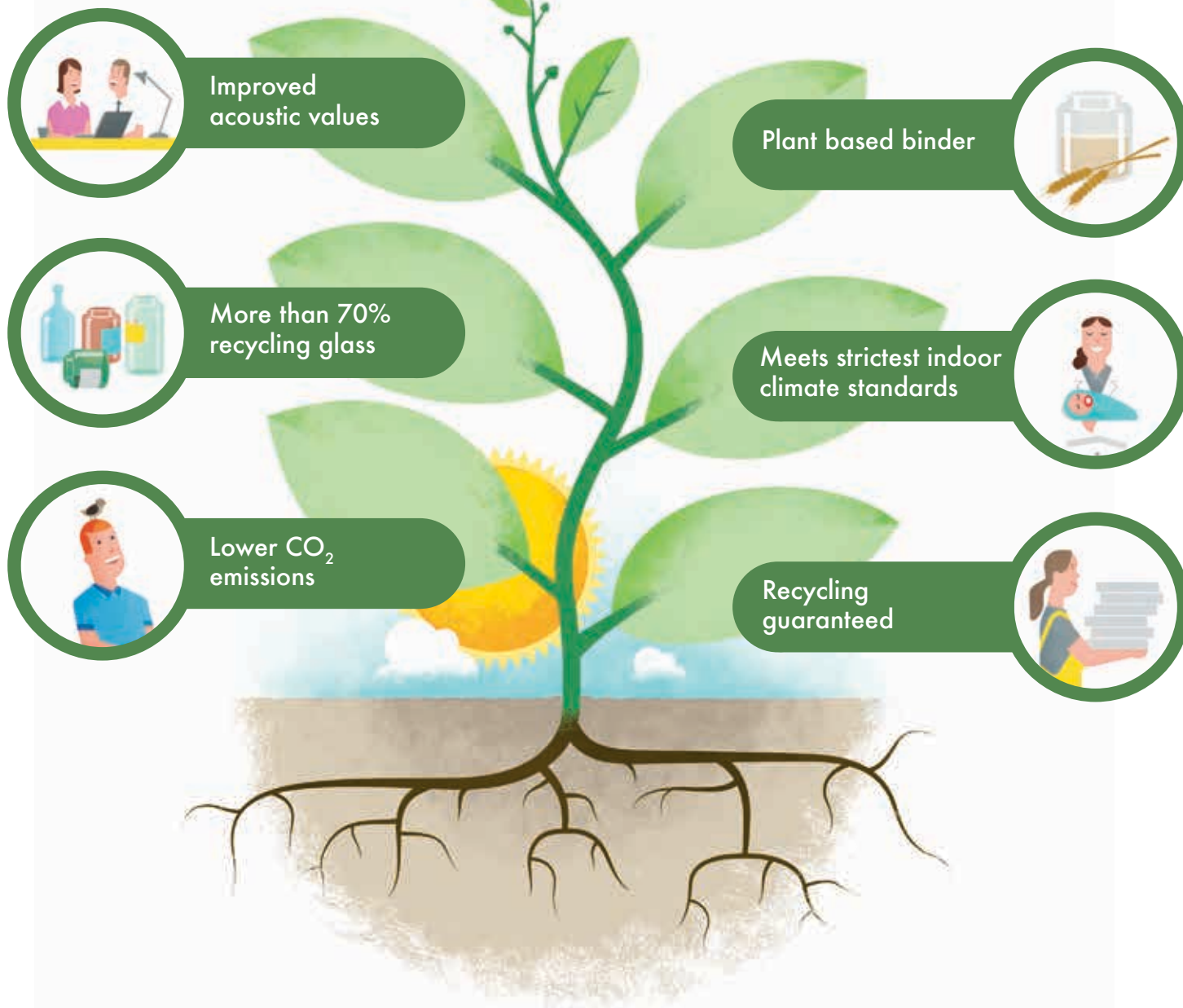
Jake Dyson
<http://is.gd/humancentric>

The strangest exhibit must surely be landscape architect Martha Schwartz's bronze bagel, presented in a velvet-lined box like some precious artefact

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Corporate campuses are not what they'd have you believe



Will Wiles

The corporate campus started life as a preparation for war. All the boskiness and radiant modern architecture masks the fact that they began as a vital component in an elaborate weapons system. The grass, trees and glass and steel aren't even a disguise but the way the system works. Lakes and shady lawns at one end; craters and wastelands of ash at the other.

Among the first corporate campuses were those designed in the 1950s to house southern California's defence contractors. These were the companies building munitions for Cold War America, but while they had the lucrative contracts they still needed to attract the best minds. In 'Spaces for the Space Age', Stuart W Leslie, a professor of science and technology at Johns Hopkins University in Baltimore, shows how this desire to lure the brightest employees to California shaped the corporate campus archetype. American architects William Pereira and Charles Luckman designed landscaped low-rise office complexes that showed off the sunny climate, and synthesised the West Coast modernist houses of Richard Neutra and others. The corporate headquarters intermarried with suburb and university.

Skip forward 60 years and we have a new generation of Californian corporate campuses on a scale that make the birthplace of the Atlas missile look like the home of a family firm producing heritage jam: homes for the 21st century's information technology giants. Norman Foster's new headquarters for Apple, under

One gigantic office floor: open, transparent, flexible. Once you're inside.

construction in Cupertino, does bear a strong resemblance to the ring-shaped General Atomics building. But the purest expressions of the form are the new headquarters for Facebook and Google: the nerve centres of the networked world. Part of these companies' mystique is their well-rewarded staff surrounded by toys and comforts to see them through the long, long day administering what is essentially a global bureaucracy of unprecedented size and complexity. The best and brightest are already working there, or want to.

So what do the palaces of this new elite say about their priorities? The same message recurs: flexibility. Facebook's Frank Gehry-designed expansion to its Menlo Park complex is the world's largest open-plan office. 'We want our space to feel like a work in progress', said Facebook's Mark Zuckerberg, reported by Dezeen, taking the trademark Silicon Valley tone of sinister optimism. 'When you enter our buildings, we want you to feel how much there is left to be done in our mission to connect the world.' One gigantic office floor: open, transparent, flexible. Once you're inside.

Google's plans for a new headquarters at Mountain View, however, make Menlo Park look as modern and flexible as a Glasgow tenement. The campus, designed by Bjarke Ingels and Thomas Heatherwick, has a Frei Otto-like canopy strung over demountable structures that can be reconfigured by robot cranes. It's a plug-in fantasy worthy of Archigram or Kisho Kurakawa. Again the watchword is flexibility, keeping options open.

Buildings can help, or at least not hinder, a company's evolution, but they cannot necessarily determine it. A flexible building does not guarantee a flexible company. The Pompidou Centre in Paris and the Lloyd's Building in London were both designed to have flexible internal layouts, and over the years they have fossilised. Flexibility may be a desirable virtue, but it is more a wish than a plan – what Facebook and Google hope for. And in that you can see the fear that must creep across corporations blessed with that kind of phenomenal growth, that astonishing rush to omnipotence: the creaking, the nagging stiffness in the joints, the sense of not being quite as nimble as they once were. It's the clearest possible sign that the companies entrusted with building the future have no idea what that future may be ●

Will Wiles is a journalist and author. Read him here every other month

HI, I'M BARRY FROM ACCOUNTS

Another feature of the open-plan, flexible office is its alleged ability to generate accidental meetings and chance encounters between colleagues, which in turn lead to more creativity, new ideas, innovative collaborations and so on. It's a theory used to justify all sort of programmatic elements such as single entrance lobbies and shared recreational facilities, and the kind of charming bit of low-cost blue-sky unorthodoxy that clients might enjoy hearing. But is there any actual evidence that it works?



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Attention to detail

A small majority is likely to see the Tory government focus on regulation – the profession will feel the effect



Stephen Hodder

It is fair to say that the outcome of May's general election took a lot of people by surprise. A contest that was expected to be too close to call delivered a majority for the Conservatives, an unprecedented increase in support for the SNP and misery for Labour and the Liberal Democrats. As the new government sets out its plans for the next few years, I thought I should share some of the RIBA's thoughts on what the administration's policies might mean for architects and architecture.

The first and, I think, most under-reported point I'd like to highlight is that the new government isn't going to mean more of the same. The move from a coalition government with a large majority to a single party government with a much smaller majority is going to have a profound impact on both pol-

icies and procedures. I expect to see much less grand parliamentary procedure and a lot more focus on changing regulations and addressing how they are implemented. I have a feeling that the outcomes from all this could lead to some interesting discussions within the profession.

I'd like to welcome Greg Clark to his new role as secretary of state for communities and local government (DCLG). One of the last government's final acts was to move responsibility for architecture from the Department for Culture, Media and Sport to DCLG. I hope that this change, coupled with the return of Brandon Lewis as housing and planning ministers can help integrate the role of architecture into the department's work.

With a number of very thorny issues in need of urgent attention the department will certainly need a bit of luck: tackling the housing crisis, severe resource pressures in the local authorities and a growing imbalance between areas whose economies have seen a recovery and those which continue to struggle are formidable challenges. It's already clear that one element of the new government's solution to these issues is its commitment to regional devolution.

The RIBA has strongly supported moves to give power and resources to local leaders and we are keen to see how the cities in the first wave of that process adapt to greater powers and responsibilities in areas like housing, planning and transport. In my own area of Manchester, will greater devolution deliver more schools, more homes and a stronger role for architects? How will plans for a 'northern powerhouse' affect the profession? I will be engaging closely in these debates and I'll be keen to hear from members about what is and isn't working.

One impact of the move to devolve power is that a number of national initiatives that the RIBA has called for are likely to move further down the priority lists. It will be interesting to see the role Whitehall will play in tackling issues like strategic planning, housing standards and the role of design in policy making. I think that we'll increasingly be looking to address these issues at a local and regional level.

Closer to home, nominations for RIBA council have now closed. You can find out more about the people standing for RIBA council elections on page 68. ●

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BRUTALISM FOLLOWS MACKINTOSH

Since opening in 2014, the RIBA's Architecture Gallery has gone from strength to strength. The recent Mackintosh exhibition got excellent reviews and far exceeded its audience target. The latest exhibition promises to be even more exciting. Hot on the heels of being nominated for the Turner Prize, architectural co-operative Assemble has worked with Simon Terrill to recast (in foam) some of the ground breaking play structures that accompanied iconic post-war housing developments, using RIBA's collections as inspiration. The Brutalist Playground is open from 10 June to 16 August at RIBA 66 Portland Place. More information at architecture.com

One impact of the move to devolve power is that a number of national initiatives that the RIBA has called for are likely to move further down the priority lists

Sadie Morgan, chair of HS2's design review panel, is much more than a personable manner wrapped round a steely core. She's the real thing – which is good news for all those who will be affected by HS2

Words: Eleanor Young Portraits: Wilde Fry

Heart and mind

It is a truth universally acknowledged that a railway is a civils project where design is merely the dressing on the engineering.

But on a spring day earlier this year High Speed Two announced both its Design Vision and the chair of its design review panel: Sadie Morgan. While the Mrs Bennets among us might have hoped design would be at the heart of HS2, it hardly seemed likely. It is still awaiting final parliamentary approval in 2016. For years it has been more preoccupied with the National Trust, Chilterns locals whose Area of Outstanding Natural Beauty will be sliced through by the barely-stopping line and a well argued campaign of councils pointing out that there is not a watertight business case for the £42.6bn budget. Camden, where it lands in London, is resisting – though Birmingham Council has welcomed it with open arms and a Glenn Howells masterplan – with talk generally of route variations and disruption.

Sadie Morgan has set her sights higher. 'If it is going to happen we have to make sure

it absolutely the best it can be,' she says, 'My aspiration is to do better than both Crossrail and the Jubilee Line extension. We will look at bridges, viaducts and, yes, stations. Personally my interest lies in the bit in between, the sound barriers, fences, and later the trains. That is what will affect most people.'

For her that doesn't mean limiting the panel to gateway reviews on stations but delving deep into the process. She has an open brief to test designs against the Vision. Her first question is how to embed design in the organisation of 900 plus and growing fast – with a major Birmingham office opening later this year. In the first few of her three day-months she has been looking at the processes for design and will go back to the board with recommendations soon, including perhaps creating an additional design role within HS2.

This is perhaps not quite what you would expect from one of the three founding directors of de Rijke Marsh Morgan. In its 20 years the practice has surprised and thrilled with

its unorthodox materials and solutions: an early ETFE roof enveloping the courtyard of a brightly reworked Kingsdale School, Dulwich, was its first large project. Morgan ran what was the practice's first new build – and the practice office for many years – Centaur Street for Roger Zogolovitch. Since then Clapham Manor School caught the imagination of many, Woodblock House demonstrated an out-there humour and the blingy gold and CLT Tower of Love café and wedding chapel at Blackpool was perfectly matched to the place. In the last few years Morgan sees the practice's inventiveness being applied more to the plan, pointing to the increase from 10% of homes with dual aspect at outline planning on its Art House flats in King's Cross to 80% in built form. And she has been leading on several commercial and housing projects. But it is not just nimble thinking that has brought these jobs. Morgan has applied herself to this sector, she has been on the BCO Cycle Challenge and this year cycled to



'I thought, I have a skill.
Though not necessarily the
one I thought I had'



MIPIM (yes, she is formidably active too).

Was it these projects that gave her the harder hitting credibility to win the HS2 design chair role against some very august competition? She thinks not, feeling that they weren't even looking for practitioners; the interviews didn't touch on practice at all. Perhaps it is more of a surprise that they didn't come up with a veteran of design review, especially given the involvement of ex-Design Council chief executive David Kester, who led on Design Vision – including Morgan, before she was appointed, as one of his extensive group of contributors. The suggested panel members were also not the usual suspects. 'I was very honest, I was not as diplomatic as I could be,' she admits.

Paul Finch, who chaired the London Olympics design review panel for Cabe, warns of the need to watch out for decisions that affect things down the line: fundamental engineering and siting issues. 'But even with the best will in the world there will be things that are just wrong,' he cautions. 'You have to be prepared to say so straight and, in extremis, pick up the phone to the boss.' Morgan's red phone connects her direct to transport secretary Patrick McLoughlin, but she is not expecting to raise any useless alarm. Instead, in a very directed single-minded way, she is setting about creating the conditions for good design and only plans to pick up that phone if something slips through the net.

It is indicative of a very collaborative approach that she applies to practice. 'Funny, friendly and tough at the same time,' is how one of those collaborators describes her. In person Morgan has a warm smile and is immensely clubbable in a very down to earth way. She puts that down to her upbringing in the Sevenoaks commune her grandfather founded, where all ages and types of people lived closely together. It was a social experiment with an emphasis on care in the community. As well as an easy manner with young and old it has given Morgan and her partner – in life as well as practice – Alex de Rijke and their teenage children what she calls a 'millionaire's lifestyle' in a beautifully tended landscape, swimming each morning in one of three pools, though without a penny of property equity to their name. It is fundamental to Morgan's understanding of herself.

Other things she has learnt more slowly. She has had a tempestuous stint at the Architectural Association, starting as honorary treasurer where she helped, with then president Alex Lifschutz, to mop up the financial and contractual fall out of a major fraud. She was encouraged to stand for president and became the Association's youngest at 43. 'When I took on the presidency I realised I was quite good at it! I ran the meetings on time and we were getting things done,' she says. She had always dodged public speaking – 'I had a couple

of hideous experiences'. So the thought of a presidential address at the AA's graduation with an academic as well as student audience left her in trepidation, but she knew she had to master it. 'At some point I realised there were so few women,' she says. 'So I started to practise.' For the AA presentation, 'I decided to say something important to me and talked about my father and his AA certificate. And when I had finished there was not a dry eye in the house.' It was a revelation. 'I thought, I have a skill. Though not necessarily the one I thought I had.'

While she talks with assurance and purpose about the tasks ahead on HS2, she needed a certain urging to believe it was something she could do when she was sent the daunting job description. She has plenty of confidence in the practice but is disarmingly candid about her own lack of confidence. This isn't just a personal thing. 'I like to think that continuing to do good work outside my comfort zone will encourage younger women to go for it,' she says. 'If I had started believing in the value of myself earlier I could have been more useful.' She was delighted recently to win a CBI First Woman Award.

She talks warmly, with a confiding air. We laugh at the choice of dress for the photo – one with geometry to make your eyes and the camera go a little squiffy, or the stripes that are eventually settled on. She has the same gift with more serious matters, drawing people in. At the request of the ministry of transport she attended the Academy of Urbanism Congress in Birmingham. After the presentations by mayor Sir Albert Bore and other worthies, hers was remarkably particular and full of delight. Taking the themes of the HS2 design vision of people, place and time she sprang on the stage holding her notebook, apologising that she would not be talking about trains – to those hoping for that. She ended with a picture of an apparently naked de Rijke in the bath under the sky in dRMM's sliding house, and a plea: 'We need thinkers and philosophers to question things in a way that is quite unexpected to HS2.'

Her ready smile and a little skip in her ballet pumps could fool you into underestimating Morgan, but her naturally inclusive character, clear strategic thinking and a grounded core that can talk straight without confrontation is just what a project like HS2 needs. There's no unwarranted pride nor prejudice here. ●

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CEILINGS

Education and reality

Igloo's Chris Brown considers the value of architecture and education in this extract from *Radical Pedagogies*

By Harriet Harris and Daisy Froud

Igloo is a UK company that is widely respected for its intelligent and creative approach to development. Locating much of its work in regeneration areas, the company regularly experiments with new models and approaches, and is at the vanguard of the implementation of 'custom-build' housing in the UK. If you were to ask the average small-to-medium design-led UK architecture practice to name the top three developers they would like to work with, Igloo would almost certainly be among them.

Chris Brown, chief executive of Igloo, therefore seemed a good person to talk to about the ways in which the architectural education system does and doesn't prepare young professionals not only for today's development context, but also for the directions in which development and procurement models are heading.

What does Igloo look for in its architects?

We tend to choose younger architects and more design-led firms, in the pursuit of design quality.

This is encouraging news! But how do you understand 'design quality' in real terms?

Good design comes from finding the right project-to-architect fit. We spend a lot of time looking at what architects are doing. We do have a blacklist of architects we wouldn't ever work with. The 'Carbuncle Cup' shortlist, for example, would tend to indicate the type of architects we're not interested in! When it comes to style, we're not wedded to any particular one, although our preference is towards a contemporary vernacular. We'd only specify a style in the brief if there was a good reason for it.

What you say busts a few myths about clients not really understanding design and therefore not being able to make informed design decisions.

Good design drives value outcomes. We believe we get financial value out of good design. We choose firms that value good design for that reason, but we are aware that we occupy a 'niche' in the development industry. Our approach also often involves hiring firms that are local to the project, because in effect they are stakeholders in the community along with the users.

It sounds like you see good architects as fundamental to your business model. Why don't all developers think that way?

There seem to be two main directions in current development: standardisation and mass customisation. Most developers' focus on design is primarily about maximising floor space and minimising cost. This is being compounded by huge pressure towards standardisation – in schools, housing, hotels, retail and offices – which really marginalises the architect. We've witnessed how key London schemes have issued architects' briefs that limit them to simply wrapping buildings, for not much money either. However, new design and build models – such as cus-

The 'Carbuncle Cup' shortlist, for example, would tend to indicate the type of architects we're not interested in!

tom-build – are proving that you can actually have both an element of standardisation and considered design. This niche is innovating faster than others.

Could you tell us a little more about how architects add value to the process within current development models?

One interesting development is that firms that are designer-maker led, as opposed to simply design-led, or even purely profit-led, are experimenting with different ways of financing projects that are innovative from a development point of view. Assemble, for example, is a very interesting practice. Or indeed, in Igloo's own custom-build process, the architect works with the builder to create a 'base design' – a process that proves to be cost effective and results in a product that is easy to manufacture and construct. The architect is then the interface with the end customer, and customises the base design to meet their needs. It's a direct relationship.

Should architects perhaps focus on acquiring skills to operate more like developers?



Daisy Froud



Harriet Harris

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WINDOW COVERINGS

Architecture and development make use of very different parts of the brain, or require different types of brain. Few people are able to do both really well. Architecture is an incredibly complicated skillset to learn. It would be hard to be both architect and developer, with the exception of small projects. What architects tend to lack that developers possess is a greater understanding of – and interest in – the marketplace, of the factors that shape this and the way these interact.

Does this mean that what we teach in schools of architecture, with their design focus, is indeed fit for purpose? Or are there some skills we are failing to impart?

Not all architects seem to have the ability to understand how a building is used. As clients, we assume architects have that knowledge. But they don't. They don't seem to have any real evidence base. You do need someone in the development process who can get into the mind of the user and find out what they want. In terms of the architect-developer territory battle, developers can't do it either. It's a big concern.

Understanding, but also communicating, how buildings are used covers everything from how a user feels in a room to how the architecture influences their well-being. Architects also tend to be really bad at urban design, but they all think they are really good at it! This leads me to reflect: if they'd been educated effectively, they would know what they do and don't know.

What would you say is the most important skill that architects lack?

Ability to listen to the customer. Whether we breed it, or whether it's always been there, there's a generalised arrogance among architects that they know best. Maybe it's true of all professions but it's particularly true of architecture. When you are designing for customers who have different needs from the same building, they need design professionals to help draw their ideas out.

You mentioned innovation in development. Are architects sufficiently schooled in innovation?

Hmm. Entrepreneurship is lacking, I think. Architecture students need this. But can you really teach entrepreneurship? I question whether you can teach someone to have



If they'd been educated effectively, they would know what they do and don't know

a spark of an idea, and then the dedication to see it through.

Schools are increasingly committed to civic engagement. Is this becoming evident in practice?

As a trend, community-led development has a long way to go. This could be a new role for the architect – the skills to recruit and manage a volunteer community workforce. A Rod Hackney 'community architecture' type approach.

How should the education system encourage students to think about their role in this changing development context?

What architects are asked to do these days is incredibly complicated. No one person can know everything there is to know about architecture any more. The core of the architect's role has become the ability to assimilate and comply with a huge amount of regulation, everything from Building Regs to planning, particularly in the UK. The next level of skill up from that is to be able to steer your way through it all, bending the rules to make them work for you. The level above that is having the creativity to produce a building that is beyond compliant: delivering the best outcomes for the client and for wider society. Architects have a professional obligation to wider society, even if it's not in the brief,

which is often a selfish document.

Theoretically, when you are making all the design decisions on the screen, you have to have all this information in your head. This is complex. For that reason the best architects are working in interdisciplinary teams, so that is something that we need to be shaping young professionals to be able to do. Some of our most successful architects have become really good at doing that.

Do you have any suggestions as to what would be a radical alternative to the way schools operate now?

I think some kind of 'framework' education – three years basic, five years in practice, then a final course leading to professional accreditation – might work. I know that schools are trying to give students more community or practice experience within the standard education. However, although I think that's a good idea, you do need to have formed some kind of framework about how the world works before you can really benefit from those experiences. Touch-points to place your experiences against.

My other suggestion is about WHAT is taught. Speaking from my development perspective, it's interesting that, when it comes to economics, all UK universities teach neo-classical economics, as if it were the only way of understanding the world. But there are different models and ways of framing economic problems and these too should be taught. There's a parallel here with architecture schools. They all seem to teach from the point of modernism, even if there are variations on that. But architecture should be contextual. It should respond to its immediate environment. This seems not to be the view of most architects, who think their buildings should be distinctive, photographable from every angle. It would be great to see a different mindset encouraged.

Great. Thank you very much!

Oh yes, and since this is going to be published, could you just make it clear that the Stirling prize should be given to the client as well as the architect. Because the client relationship is key to the success of a project! ●

See review of *Radical Pedagogies* on ribaj.com
This is an abridged extract from '*Radical Pedagogies: Architectural Education and the British Tradition*' edited by Daisy Froud and Harriet Harriss, published by RIBA Publishing

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FAÇADES

Hard play areas

Did the ambiguous abstract forms of brutalist playgrounds fire children's imagination or thwart their activity?

By Maisie Rowe

The Brutalist Playground, at the RIBA's Architecture Gallery, draws attention to an almost-forgotten fragment of architectural history: the puzzling brick and concrete play spaces that were embedded in the landscape of post-war housing estates. With designs by architects such as Erno Goldfinger and the Smithsons, these surreal sculptural forms were works of art in their own right. They evoked crags, castles and rockfalls; one looked like a scary oven. These are mini-me masterpieces of post-war architecture; the babies of brutalism, by-products of an architectural imagination unburdened by the constraint of making houses.

'This is a condensed brutalism', says Joseph Halligan of Assemble, which designed the installation. 'We can see the fun the architect is having in making these amazing structures. These things are great and shouldn't be forgotten.' In other work, Assemble is engaged in the bottom-up process of creating a new adventure playground from scratch, led by children and hard-wired into the local community. So it is interesting that, in responding to images and drawings from the RIBA archive, the Turner Prize-nominated collective and the artist Simon Terrill should have chosen to replicate, at full scale, elements of the architect-imposed playgrounds at Churchill Gardens, Balfron Tower and Brunel Estate.

While the architecture and landscapes of modernism are said to speak of optimism and re-making the world anew, it is hard to imagine such spaces sustaining a real and vi-

These are mini-me masterpieces of post-war architecture; the babies of brutalism

brant play culture. Penny Wilson, a play advocate who spoke at the events surrounding the launch, says of these spartan and claustrophobic spaces: 'Although they must have done, we haven't found any evidence – photographic or anecdotal – of children actually using and playing in these spaces'.

Their architects claimed the ambiguity of these abstract forms encouraged children's imagination, but the environments were irrevocably fixed, their immutability thwarting the child's need to change, adapt and co-opt their surroundings. The only way to change this landscape was to vandalise it. Without swings, roundabouts or ropes, these playgrounds stayed still. It was the child that

Above Churchill Gardens, 1956.
Below ... and as re-interpreted in granular foam at the RIBA.



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The Brutalist Playground is a new commission by Turner Prize nominees Assemble and artist Simon Terrill, exploring post-war design for play.

Although the value of Brutalist residential buildings today is much debated, this exhibition shifts the focus to the equally important playgrounds found at the feet of these structures, offering a renewed understanding and critique of the architects' original designs and intentions.

architecture.com/brutalistplayground
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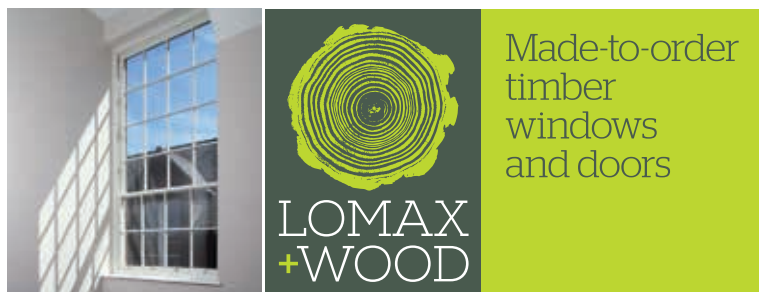
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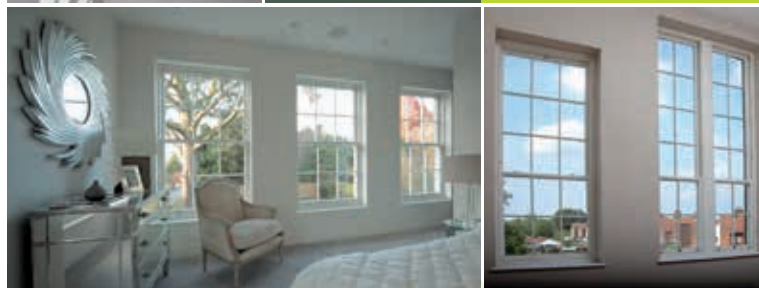


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Left Just mind your head as you run up these steps.

moved, testing gravity in clambering play that would today be called 'parkour'. Sealing the earth with their concrete, nothing grew or changed with the seasons; they precluded the mud cake-mix or hole-digging.

Nevertheless, with the hyper-real synaesthetic eye of childhood, I half-remember the compelling appeal of these curious forms, the way they called you to clamber, invited interrogation; they nominally belonged to the child, yet remained alien and inexplicable.

This was the era that saw the introduction of adventure playgrounds, a concept imported from Copenhagen by Lady Allen of Hurtwood, a founding member of the Landscape Institute. In doing so, she articulated that it is in these gloriously messy environments – with their dens, walkways, animals, tools, waste materials and fires – that children find the freedom, self-expression and self-determination denied to them elsewhere.

A closer comparison can be drawn with the 800 play areas designed for Amsterdam by Aldo van Eyck between 1947 and 1978, where we also find sculptural cast-concrete forms and unmoving equipment. But these were inserted into the existing fabric of the city, threaded like beads of child's-eye interest along the city's thoroughfares. The Dutch examples might seem the equivalent of our brutalist playgrounds in terms of play value, but they were arguably better integrated into the world (some were on traffic islands) and more adapted to their social context.

It is very hard to design for play because play is an incredibly complex set of behaviours, determined by the child



Above What's this? Real children at play, and no grazed knees either.

The architect and artist's creative step, of replacing cast concrete with foam, turns these structures into what Assemble's Jane Hall describes as 'the ultimate in soft play'. She says: 'Recreating them in a different material allows us to get away from the obsession with their materiality and see them as forms. They are the antithesis of what we think play should be today. What makes them so interesting is that they provoke discussion about how we should design for play.'

Now that these brutalist gems are mainly discredited, threatened or demolished, it is easy to fall into trap of debating the success or failure of the modernist project. But this misses the point. This exhibition doesn't attempt to supply answers; in fact, its tacit admission, says Assemble's Amica Dall, is that 'it is very hard to design for play because play is an incredibly complex set of behaviours, determined by the child'.

But the conversation it provokes, at the centre of the British architectural establishment, about architecture and design for children, is timely and welcome. As the architect Dinah Bornat says: 'The legacy of these spaces is the fact that we are here today, talking about children playing in the built environment, a discussion that is mostly lacking in the way we talk about architecture.' ●

Maisie Rowe is a landscape architect
Brutalist Playground, to 16 August,
RIBA, 66 Portland Place, London, W1
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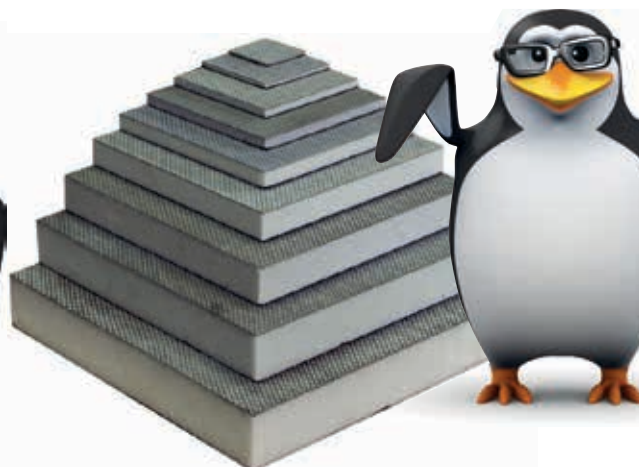
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Voting is open from 29 June - 20 July.

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(6 Seats)
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Andrew Gibbs
Anthony Lloyd
Antonio Pisano
Brian Godfrey
Dale Sinclair
Dan Benham
Elena Tsolakis
Elsie Owusu
Helen Taylor
John Watts
Jonathan Ball
Lisa Raynes
Mark Benzie

Mark Percival

Nigel Bird
Paola Boffo
Paul Iddon
Peter Kellow
Roz Barr
Simone De Gale
Stuart
Macdougald-Denton
William Adams
(Election Required)

Regional Seats

North West (2 Seats)
Ewen Miller
Richard Wooldridge
(Uncontested)

South West

(1 Seat listed
as Wessex)
Andrew Bourne
(Uncontested)

South (1 Seat)
Jennifer Forakis
(Uncontested)

Yorkshire

(2 Seats)
Daniel Kerr
Gerard Bareham
Mark Hodson
Ruth Donnelly
Satwinder Samra
(Election Required)

North East

(2 seats)
Nicola Watson
Timothy Bailey
(Uncontested)

Wales (1 seat)
Jonathan Jones
Richard Parnaby
(Election Required)

East Midlands

(2 Seats)
Dominic Kramer
Mark Jeremy
(Uncontested)

Associate Seat

(1 Seat)
Albena Atanassova
Emma Kirk
(Election Required)

Student Seat

(1 Seat)
Fadi Obaid,
Lillian Ingleby,
Michael Brown,
Rebecca Illingworth,
Sabrina Berariu
Simeon Shtebunaev
(Election Required)



Derek Walker

1929 – 2015

Chief designer of Milton Keynes who represented a diverse and inclusive approach to architecture



Derek Walker, who has died aged 86, was best known as the chief designer of Milton Keynes. Born in Lancashire, he possessed the combination of both utopian romanticism and pragmatism embodied in both counties. A chance encounter with critic Herbert Read in a York bookshop sparked an interest in archi-

tecture that was nurtured at Leeds University. This was followed by further studies in town planning in Philadelphia, which provided exposure to the progressive forward thinking and urbanism of the post war United States. This amalgam of English and American sensibilities informed much of his design thinking.

He returned to the UK in 1960 and began a very successful award-winning career in private practice, but in 1969 joined the Milton Keynes Development Corporation as chief architect and planner.

At Milton Keynes, Walker developed the low density masterplan set out by Llewelyn Davies. He was ahead of the curve on sustainability; a fifth of the city's area was allocated to open green space and by 1973 two million trees had been planted in Milton Keynes linked with 180 miles of 'redways' – bridleways, cycle tracks and footpaths.

Walker's concept was for a 'Forest City' to create a city greener than the surrounding countryside, which had been ravaged by Dutch elm disease and agricultural clearance, but presented a clean slate to define a new language for the city, which would rely on the landscape as much as the architecture to define the urban form.

The Central Milton Keynes and Central Area Housing grid squares, both of which could be seen as American influenced planning concepts, which completed the overall planning matrix of landscape and infrastructure. The modern, almost Miesian, 'downtown' central area saw its main shopping centre grade II-listed in 2010.

Walker recruited the best talent he could to his 200

strong internal team. Many, such as Ed Jones and Jeremy Dixon, part of the AA cadre known as The Grunt Group, went on to form successful practices of their own. He also brought in design consultants including Norman Foster, Henning Larsen, Edward Cullinan, and Ralph Erskine.

Behind Walker's often mischievous ringleader persona was a serious extremely well read mind and a steely determination. He often talked of the hard work and nimble-footed bloody mindedness needed to deliver such a large public scheme. He conceded that the initial utopian optimism was difficult to sustain as 'opportunistic political doctrines are not the right foundations for building for the future and it is misguided to believe that private interests and market forces will look after our environment.'

The ethos of the place and time was captured in the spontaneous team photograph of the entire planning and architectural group photographed in a tree, and in the film of Lee Scriven's book '3 Curley Wurlys and 106 Roundabouts'; both perfectly capture the love, affection and inspiration that everyone who came into contact with Derek Walker experienced.

While the achievement of MK is perhaps Walker's defining work, he later formed a very successful international architectural practice, designing projects in particular in the Middle East and Asia.

Walker's increasing appeal to a younger generation of architects amused him. He represented a diverse and inclusive approach to architecture, with people at its core and tackled the messy complexities of commercial and political reality head on. But it also was a true reflection of his capabilities of both practitioner and teacher. Through teaching as Professor of Architecture and Design at the Royal College of Art and visiting professorships to a number of American universities such as UCLA and University of Pennsylvania, he taught and inspired a generation of younger architects now firmly established in architectural practice.

Derek Walker is survived by his third wife Eve Hapold, and sons, Matthew and Alex, from his first marriage. ●

Graham Haworth

A longer version of this first appeared in *The Independent*

In Memoriam

MATT CARAPIET
ELECTED 2011, MAIDSTONE, KENT

DAVID GEORGE NELDER
ELECTED 1962, NEWTON ABBOT, DEVON

TREVOR WILKINSON
ELECTED 1967, YORK

NORMAN MARTIN CASELY
ELECTED 1977, OSWESTRY, SHROPSHIRE

JOHN RICHARD YARWOOD
ELECTED 1979, NEWPORT, SHROPSHIRE

MICHAEL RUPERT FREDERICK CASEY
ELECTED 1977, KINSALE, CO CORK

ROBERT ALAN GAYLORD
ELECTED 1979, LONDON

STUART ALAN BULMER HEPPELL
ELECTED 1947, EXETER

MARGARET ELIZABETH LOIS SUSAN MOZDZIERSKI
ELECTED 1948, GUERNSEY, CHANNEL ISLANDS

LIONEL GEORGE COHEN
ELECTED 1943, MOUILLE POINT

BRUCE MARTIN
ELECTED 1947, YORK

DAVID HOWARD CLIFFORD PURSEY
ELECTED 1959, BRIGHTON

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Exchange

Denys the Dragon

Your article on Haworth Tompkins' alterations and additions to the National Theatre (RIBA, April 2015) brought back fond memories of my three years in Lasdun's office from 1986-88.

To describe Denys as a (then) feisty 70 something year old would be to sell him way too short. Embroiled in a public stoush with The Prince of Wales on pretty much everything to do with architecture, Denys could be heard bellowing from time to time from the top floor of his multi levelled office by the river in Pimlico. Legend had it that he had knocked out cold at least two employees who had dared to disagree with him; one down a flight of stairs to boot. One day he caught me working on one of my own projects in office time. It was a competition in Italy – La casa piu'bella del mondo. I'm not sure how long he had been watching me do this before he moved very close to my ear and said quite loudly: 'Is that one of ours!?' After I'd removed myself from the ceiling I explained what I was working on. 'Come at see me at 5pm in my office' was his reply. Convinced this would be my last day there, I packed up my desk and went to his office. 'What was that you were working on?' 'A competition to design a house in Italy.' 'If I ever catch you doing that again during office hours you're out.' 'Yes Denys.' 'Now, go and get me your scheme and if you like, I'll critique it for you and review it again for you when you think you're done. I looked at what you'd drawn and always think it's a good idea to put the front door at the front, don't you?'

The subsequent crit sessions remain among my most cherished possessions as an architect. A dragon? Maybe. But only fire-breathing for all the right reasons.

Sean Godsell, Melbourne, Australia



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Space oddity

The feature on Patel Taylor's Barking pensioner houses (RIBA, May 2015), shows designers' paradigms.

Having designed similar small single storey dwellings for neighbouring Newham many years ago, I think architects need to be sensitive to avoid patronising clichés. Why would older people want to be accommodated in 'almhouses' with a backward nod to Arts & Crafts and, worse still, for those still familiar with WW2, be accommodated in a dull row of crematoria?

If these are intended to attract older people to downsize they would need to be in pretty dire housing at present. Architecture is a visual art, iconography has implications, and who would put red carpeting in a blood clinic except someone led by their subconscious?

Patrick Hogan
Beaconsfield, Bucks

Coping badly

I was dismayed to see that the fatal detail of brick-on-edge copings is still being pursued by Patel Taylor for Barking Council.

Quite apart from the brutality of the practice's scheme with its ridiculous and profligate dummy chimneys, I am appalled at this brick detailing which will inevitably and rapidly decay, until large areas of efflorescence and moss growth take hold, leading to unsightly discolouration and spall and – unless the cavity trays are cleverly conceived – internal dampness.

I learnt a long time ago that the fetish of brick-on-edge, much loved by the brutalists, simply does not work or stand the test of time. One only has to look at the photographs in the feature to see that damp mapping and efflorescence is already starting its cancerous march. By contrast – the tops of the 'chimneys' with conventional copings – with overhangs and weatherings, are devoid of the problems lower down.

I guarantee that photographs taken in just a few years' time will be testament to my words.

When will they ever learn?

Peter Bowker
Retired



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SCHÜCO



**Schueco
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The judges

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Specialist Contractor Award

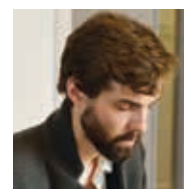
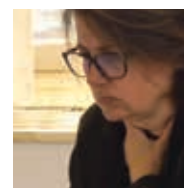


Hugh Pearman is editor of the RIBA Journal, architecture critic of The Sunday Times and writes for many other media. An honorary fellow of the RIBA, he is also visiting professor in architecture at the Royal College of Art.

Paul Monaghan is a director of Allford Hall Monaghan Morris, which he co-founded in 1989. His key projects include the BBC Television Centre masterplan and the new Scotland Yard headquarters for the Metropolitan Police in Whitehall.

Joanna Bacon is managing partner of Allies and Morrison. Her key projects include the BBC Media Village, the Royal Festival Hall refurbishment and the ongoing 100 Bishopsgate, a 40-storey tower due for completion in 2018.

José Silva Hernández-Gil is an associate at Duggan Morris, which he joined in 2010. He was lead architect on Ortus, which won the top award at the 2014 Schueco Excellence Awards, and is finishing a PhD on the work of James Stirling.



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RIBA Journal on
behalf of **Schueco UK**

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Cover image
Dun Laoghaire Lexicon
library and cultural
centre designed
by Carr Cotter
Naessens Architects.
Photograph: Ros
Kavanagh

Variety and flexibility

There is no such thing as a tell-tale Schueco 'look'. There is certainly a systemic design, manufacturing and specification approach underlying the ranges on offer, but these serve to enable good architecture, not dictate it. Looking through the entries and the winners in this year's Schueco Excellence Awards, what's striking is how very adaptable the various Schueco building envelope systems are in the hands of the best architects and specialist contractors. As judges, we simply found ourselves appraising good buildings, and the matter of what components they were made of quickly faded into the background.

Some of the buildings entered mix it up more than others. Some keep things calm, some go a bit wild. Some make extensive use of the Schueco systems available, some are more pick-and-mix. We looked at new builds and radical refurbishments, very large and quite small buildings. Again: great variety.

The architects who designed these buildings range from small UK firms to international superstars, and their designs respond to their contexts in very different ways. Showy or shy, the thing they all share is originality, inventiveness and a gratifying attention to detail.

So, given this variety, how do you decide on the overall Schueco Excellence Award, the best of the best? This year cultural and civic buildings made an impressively strong showing, and we are delighted to highlight a building which not only symbolises one country's emergence from economic crisis, but is also a calling card for a fine practice I hope we'll be hearing much more of.

Hugh Pearman

Chair of judging panel



DENNIS GILBERT (2)

Winner

Dun Laoghaire Lexicon library and cultural centre, Dublin

**Entrant: Carr Cotter Naessens
Architects**

Judges were highly impressed with the 'exceptional' Dun Laoghaire Lexicon library and cultural centre designed by Cork practice Carr Cotter Naessens Architects. The 6,327m² building, which overlooks Dublin Bay, won both the sustainability category and the Overall Schueco Excellence Award.

The centre officially opened in April, some eight years after the architect won the project in competition. According to director Louise Cotter, a key priority was longevity, with a 60-year minimum design life for the components and 100 years for the building structure. This drove the choice of high quality materials and products that would weather well such as granite, brick and brass, as well as extensive use of Schueco curtain walling and window systems.

The building and its associated park also help improve connections between Dun

Laoghaire and its harbourside, which had become isolated from the rest of the town, partly as a result of a 6m change in level down to the seafront. The €29.5m development creates a new civic heart in this previously neglected area.

Judges admired the elegant use of the Schueco system. 'It's a beautifully made, beautifully crafted building that looks like it'll be here for a long time. An excellent piece of architecture,' said judge Jo Bacon.

There are three main applications of Schueco systems. Schueco FW 50+ SG structural glazing system was incorporated into the brick elevation on Haigh Terrace. The composition was designed to address the scale of nearby terraces with clearly legible storeys emphasised by granite banding. This has glazed-in, motorised and inward opening vents (Schueco AWS 70.HI) and customised,

bronze anodised aluminium brise soleil.

Above the main entrance, Schueco's AWS window system is overclad with patinated brass cover plates to tie into the brass entrance portal. Windows are flanked by louvres inset into the Schueco frame.

The same overcladding technique and AWS window system are used within the granite park elevation facade. Here, the aim was to make the frames as unobtrusive as possible in order to maximise views of the sea. Sidelights and a frameless glass louvre system are incorporated into Schueco Jansen VISS SG sections supported on a steel framework. These VISS sections were also used to accommodate the large assembly of sea-facing windows.

The architect says that Schueco technical support helped the design team and specialist contractor by providing customised solutions with the required technical performance and aesthetic appearance.

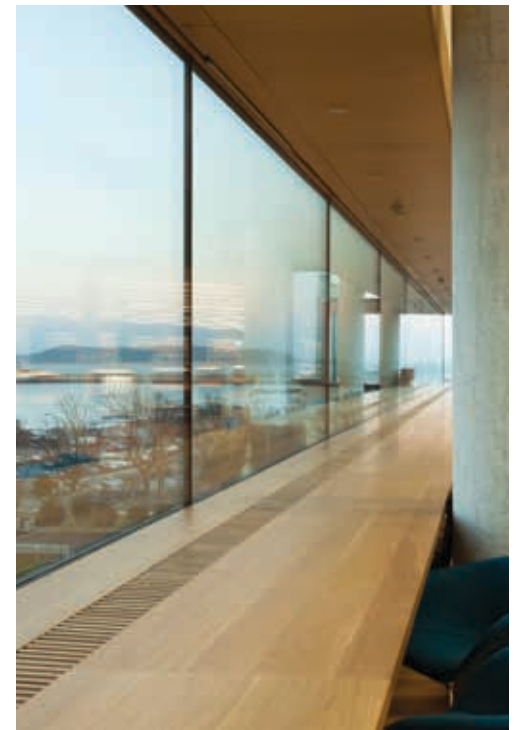
Mainly naturally ventilated, the mixed mode building uses mechanical ventilation

in the art gallery and auditorium. Natural ventilation is maximised with the help of exposed thermal mass, solar shading and high floor-to-ceiling heights. An array of 11 roof cowls incorporate a heat transfer system for heating and cooling. The concrete frame contains up to 50% Ground Granulated Blast Furnace Slag (GGBS), reducing the amount of Portland cement required. New materials were chosen for durability and low maintenance costs.

The library building is the biggest project completed by the practice to date and has proved hugely popular locally, particularly with teenagers and older people.

'It's a small miracle it happened,' says Cotter. 'There's not another library like it in the whole country.' ●

Client: **Dun Laoghaire Rathdown Co Council**
Architect: **Carr Cotter Naessens Architects**
Main contractor: **John Sisk and Sons**
Facade consultant: **Billings Design Associates**



ALICE CLANCY



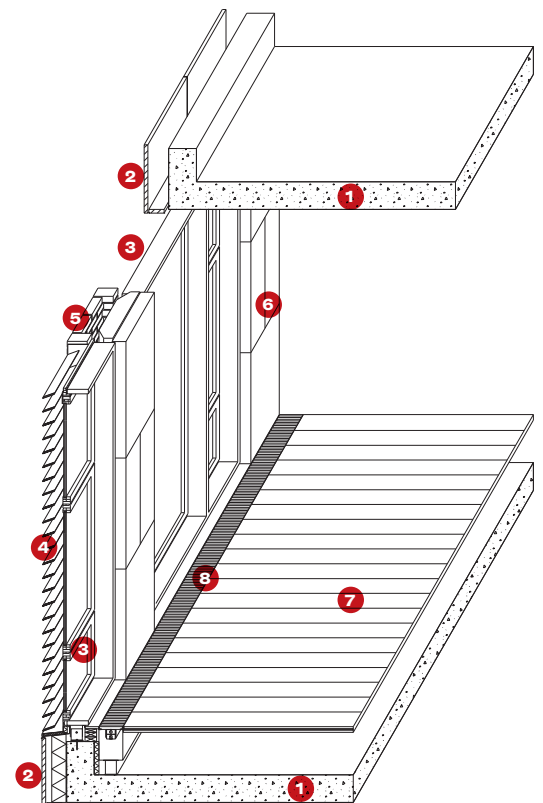
Main image Haigh Terrace elevation, combining Schueco structural glazing and vents within a brick and granite facade composition.

Left The Lexicon's glazed prow faces Dublin Bay.

Above right Unobtrusive framing maximises sea views from the library.

Isometric section of Haigh Terrace elevation window

- 1 In situ concrete structure
- 2 Stone cladding on support system
- 3 Schueco FW 50+ SG window system
- 4 Bronze anodized aluminium louvres
- 5 Brickwork cladding
- 6 Timber wall cladding
- 7 Oak flooring
- 8 Trench heater



Winner Turnmill, Clerkenwell, London

Entrants: Piercy & Co; FK Group

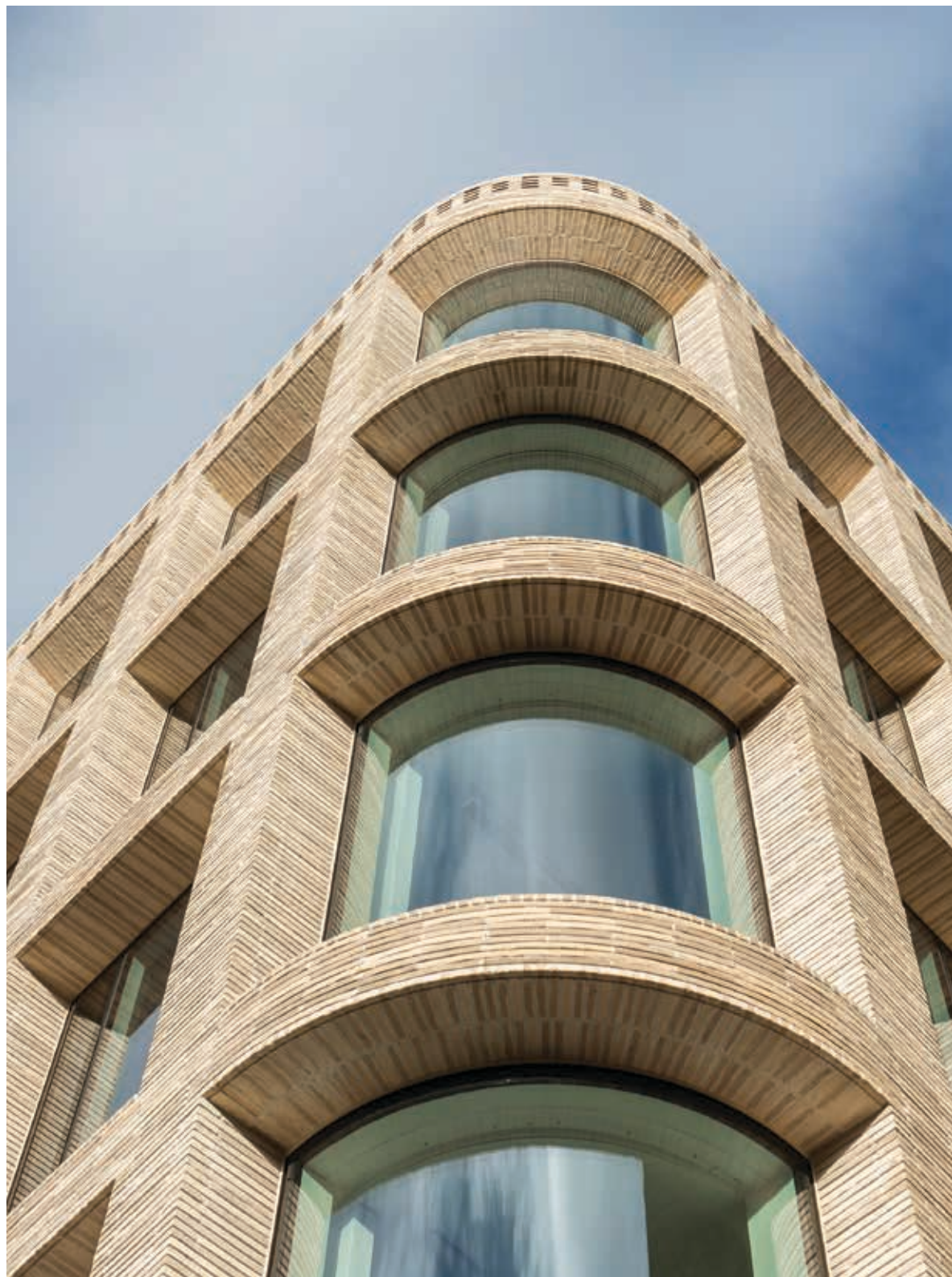
Designed by Piercy & Co, the Turnmill office building in Farringdon has been widely praised for its fine detailing and extensive use of Roman format brick. Another key feature was the careful integration of glazing into this distinctive brick fabric.

According to Piercy & Co director Henry Humphreys, the architect, with the help of facade consultant Montresor Partnership and specialist contractor FK Group, went to extreme lengths to get a 'crisp, minimal' interface of brick and windows. 'Many of the building's windows were designed for use with mullions that form the full extent of the window reveal internally,' he said.

This entailed using the Schueco FW 50+ system with a bespoke 300mm deep extrusion rather than the regular 200mm to match the overall thickness of the adjacent stud wall construction. All exposed aluminium is bronze anodised. The architect also designed a bespoke 'U' channel between the brick and glass around all windows from ground to fifth floor level. 'There was a real emphasis on manufacture and quality of fabrication,' said Humphreys.

Schueco AWS 114 window system was adapted for the full height flush glazed silicone bonded opening lights. Because these were too narrow and heavy to incorporate concealed side arms in existing framing systems, the standard opening system was adapted to incorporate discrete recessed butt hinges and bronze anodised perimeter 'leg' profiles. This involved six new dies to create the new vent and two bespoke mullions.

Schueco ADS 70 HD doors were chosen for their large opening widths and durability. The other notable application of Schueco systems was the incorporation of 5m high curved shopfronts – some of the biggest produced in Europe – into the south west corner of the ground floor. This was achieved using a bespoke composite mullion comprising painted, mild steel flat fins fixed



Right Bespoke extrusions and a bronze anodised finish facilitate crisp and minimal glazing details.

Far right Turnmill combines extensive use of Roman format bricks and Schueco systems.



HUFTON + CROW

to standard profile Schueco FW 50+ mullions.

According to FK Group, working with Schueco meant the group could meet the requirements for high quality in energy saving, security, automation and design.

Judges were fulsome in their praise of what has been achieved in a speculative office building in such a sensitive location.

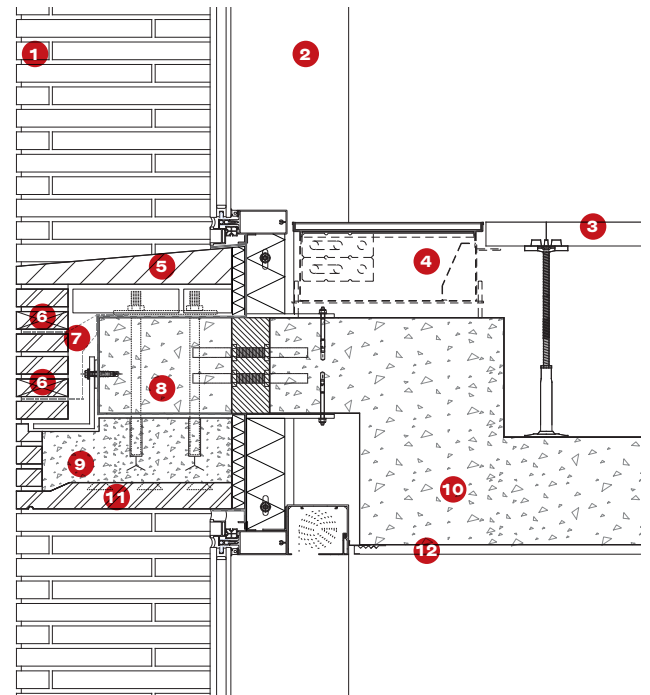
'I really like Turnmill. It had such a long planning battle but produced a very elegant Clerkenwell building,' said Hugh Pearman.

'It will stand the test of time,' added José Silva, while Paul Monaghan expects the building to be a lasting influence on others.

Commissioned by Derwent London, it provides 6,550m² (70,500ft²) of office space with basement and ground floor restaurants. ●

Typical slab spandrel section detail

- 1 Dogleg brick
- 2 Bespoke mullion to full reveal depth
- 3 Raised floor system
- 4 Perimeter trench heater
- 5 Sill brick special
- 6 Weep vent
- 7 Mortar matched cavity tray
- 8 Reinforced concrete beam
- 9 Brick faced precast lintel
- 10 Concrete primary structure
- 11 Flat soffit brick special
- 12 Projection plaster



Client: **Derwent London**

Architect: **Piercy & Co**

Main contractor: **McLaren Construction**

Specialist contractor: **FK Group**

Facade consultant: **Montresor Partnership**

Commended Bonhams Headquarters

Entrants: Lifschutz Davidson Sandilands; Colorminium



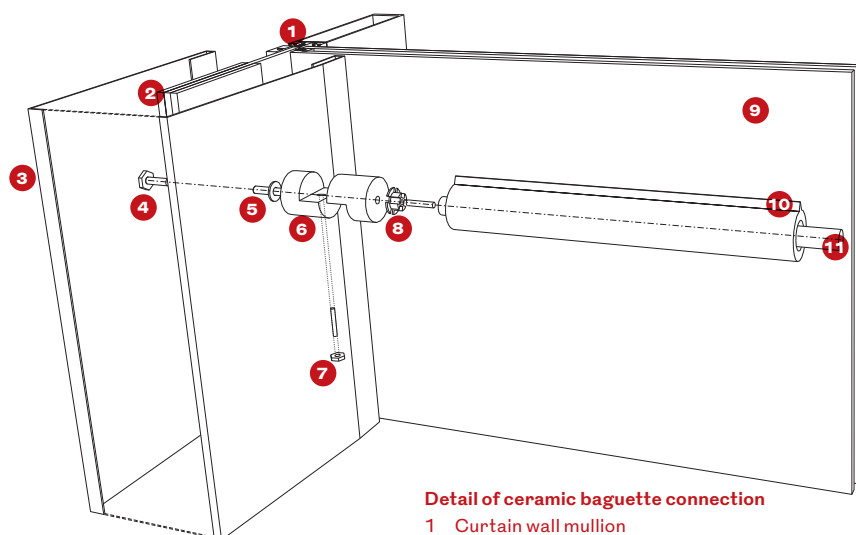
HUFTON + CROW (2)

Lifschutz Davidson Sandilands had the tricky task of consolidating a hotch-potch of seven buildings into a coherent new international headquarters for auctioneer Bonhams in the heart of Mayfair. As part of the £30m project, the architect retained two buildings – the listed 1936 Blenstock House to the north of the site and 101 New Bond Street – and created an entirely new building by redeveloping five more Bonhams properties to the south overlooking Haunch of Venison Yard. Colorminium was specialist contractor for this complex project.

Schueco FW 60* SG system was a

key part of this new element, forming a distinctive wall of glazed lift shafts on the Yard elevation. Colorminium reinforced the transoms with steel to cope with the glass weight, with structural cleats taking the loads back to the mullions and onto the adjacent structure. This elevation allows daylight through to the three salerooms behind and was detailed to achieve a precise and engineered appearance that expresses the modern face of Bonhams, while referring back to different ages in its history, says Lifschutz Davidson Sandilands.

‘Making the entry facade out of lifts



Detail of ceramic baguette connection

- 1 Curtain wall mullion
- 2 Proprietary support bracket
- 3 Extruded anodised aluminium capping
- 4 Countersunk fixing through mullion coverplate to support bracket
- 5 Neoprene spacer
- 6 Polished cast stainless steel connection to mullion
- 7 Countersunk fixing
- 8 Proprietary threaded baguette fixing
- 9 Fixed double glazing panel edges fritted to conceal SSG connection
- 10 Glazed ceramic tube with extruded lip to prevent pigeons perching
- 11 Stainless steel anti-fall bar

Left A glazed lift wall fronts the new Bonhams building in the Haunch of Venison Yard.

Below Horizontal terracotta 'baguettes' soften the verticality of the lift shafts.



is very, very clever and not at all easy to achieve,' said judging chair Hugh Pearman.

The composition of the lift shaft elevation recalls the tripartite glazing of a Victorian building that previously occupied the site. In addition, vertical stretches of Portland-coloured precast concrete between the lift shafts refer to the Victorian stonework of the retained Bonhams building on New Bond Street. These are combined with horizontal terracotta 'baguettes' which form distinctive brises-soleil over the glazing and soften the verticality of the lift shafts. The baguettes' deep red colour evokes the Art Deco faience tiling of another Bonhams building, the Blenheim Street entrance of Blenstock House.

'We looked at the two existing facades and took what references we could for the third, new building,' said Lifschutz Davidson Sandilands project director Martin Kiefer.

Each baguette is supported on a split, stainless steel casting of matching diameter. The fixings are screwed to a bespoke, tapering aluminium extrusion with concealed bracketry off the primary curtain walling mullion. This extrusion for the window reveals was crucial to achieve the desired crisp finish.

Schueco ADS 65 HD pivot entrance doors were used within the lift elevation. For the adjoining spur building that runs alongside the Yard, Colorminium devised an alternative to the unitised system originally specified by using Schueco FW 50* SG flush stick work curtain walling with FR 60 fire rated glazing.

The new headquarters incorporates offices, salerooms of double and single height, and warehousing. As well as conservation area considerations and complex party wall issues, the design team had to contend with the construction of a Crossrail station below the site. When Crossrail works are complete, the yard will become an outdoor space for art overlooked by the Bonhams restaurant and bar.

Judges were impressed with both the harmonious integration of the various buildings and the precise detailing.

'It's an amazing transformation for Bonhams... a most elegant solution that is very crisply detailed,' said judge Jo Bacon. ●

Client: **Bonhams**
 Architect: **Lifschutz Davidson Sandilands**
 Structural engineer: **AKT II**
 Main contractor: **Knight Harwood**
 Specialist contractor: **Colorminium**
 Mechanical and electrical: **Mott Macdonald**
 Quantity surveyor: **Gardiner & Theobald**

Winner

Library of Birmingham

Externally, the Library of Birmingham is instantly recognisable by its stunning filigree facade, created by a combination of thousands of overlapping aluminium rings that form a shining veil over the glazed facade. This combination suited the design intent of architect Mecanoo, which wanted to achieve plenty of natural light without the appearance of a glass building.

As visitors enter the building, one of the most memorable spaces is the double-height foyer. Housed beneath a 11m deep cantilever, it was conceived as a key part of the architect's strategy to extend public space into the generous entrance, and enhance views both into the library and out to Centenary Square.

Here, the facade was created using Schueco FW 60° SG toggle glazed curtain walling system and Schueco AWS 75.SI tilt/turn windows. The glazing system was fixed against steel rectangular hollow section (RHS) mullions, with external glazing caps. This forms a strong contrast with the intricacy of the metal veil above, which the architect says refers to Birmingham's long tradition of craftsmanship and to the historic metalwork structures in the city.

'The stacked boxes of the Library of Birmingham sit on a transparent plinth formed of a double-height glazed facade – a calm, refined ground condition from which to enter the exciting sequence of internal spaces, and a deliberate contrast with the ornamentalist upper levels,' said judge Hugh Pearman.

The 35,000m² Library was shortlisted for the 2014 Stirling Prize, with judge's citing both the glittering filigree screen and its bold and transformative addition to the city. ●





Left Double-height entrance with filigree facade above and amphitheatre below.

Above The glazed plinth is a foil to the decorative flamboyance of the rest of the facade.

Client: **Birmingham City Council**

Architect: **Mecanoo**

Main contractor: **Carillion**

Winner JW3 Community Centre, north London

Entrant: Colorminium

The facade of the JW3 Community Centre presented a real challenge. As well as fulfilling architect Lifschutz Davidson Sandilands' ambitions for a light and elegant pavilion-like appearance, the building needed to be highly blast resistant.

Set back from the busy Finchley Road, the JCC development comprises a multi-use, three storey pavilion and a residential tower. Specialist facade contractor Colorminium took advice from a Northern Ireland blast consultant to create a robust facade by adapting the Schueco FW 80+ blast resistant system, which was used with a special bronze finish along the two road-fronting facades. This involved a grid of stickwork with steel blast baffles built into the slab around all bracketry connections. All flashing details and perimeter pressed metal were designed to complement the architecture without comprising the integrity of the blast-proof system.

'A high level of complexity was required to take the architectural intent for the facade and make it perform well to the required blast standards as well as making it look good,' said Colorminium construction director Kieran Mallinson.

'To make it more complex a number of the apertures had large sliding doors, banks of louvres and opening vents built into the system... Incorporating the various different elements proved immensely challenging to provide a facade that is aesthetically stunning but safe,' added Mallinson.

An extensive range of new dies had to be designed for all pressed metal and feature cover caps. Vents were overclad with bronze patinated sheet. To provide solar shading, banks of sliding, perforated bronze panels were installed in front of the glazing in some parts of the main facade and in the residential tower.

As well as blast-rated curtain walling at the front of the Centre, Colorminium installed standard Schueco FW 80+ curtain walling, Schueco ASS 70 FD folding/sliding doors and Schueco AWS 65 windows to rear elevations.

'Given the huge security aspects, to achieve that level of elegance in a blast resistant facade is quite something,' said judging chair Hugh Pearman.

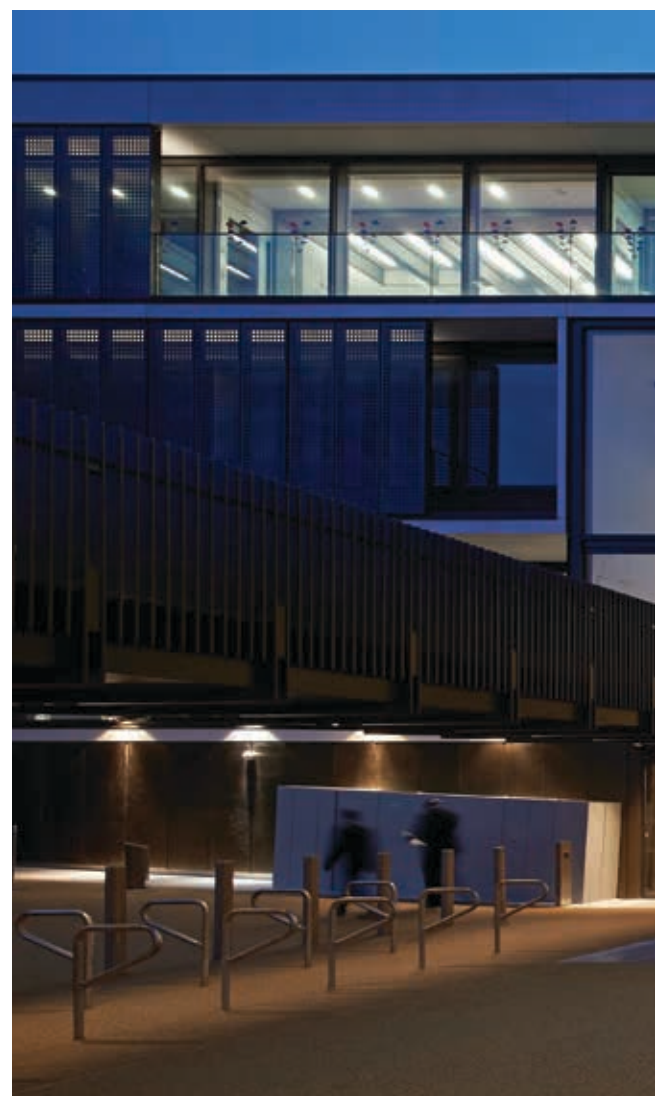
Judges also admired the calm and restrained nature of the building which, as Jo Bacon commented, is 'not trying to show off'.

'It looks simple but at the same time is quite rich,' added Paul Monaghan, who enjoyed the deceptively playful facade.

The JW3's main pavilion building accommodates various uses including a nursery, café, auditorium, screening room, and multi-purpose hall with space for 300 seated guests. An adjacent nine storey tower provides residential accommodation.

The project recently won a Civic Trust Award 2015. ●

Client: JCC Ventures
Architect: Lifschutz Davidson Sandilands
Structural engineer: AKT II
Main contractor: BAM
Specialist contractor: Colorminium



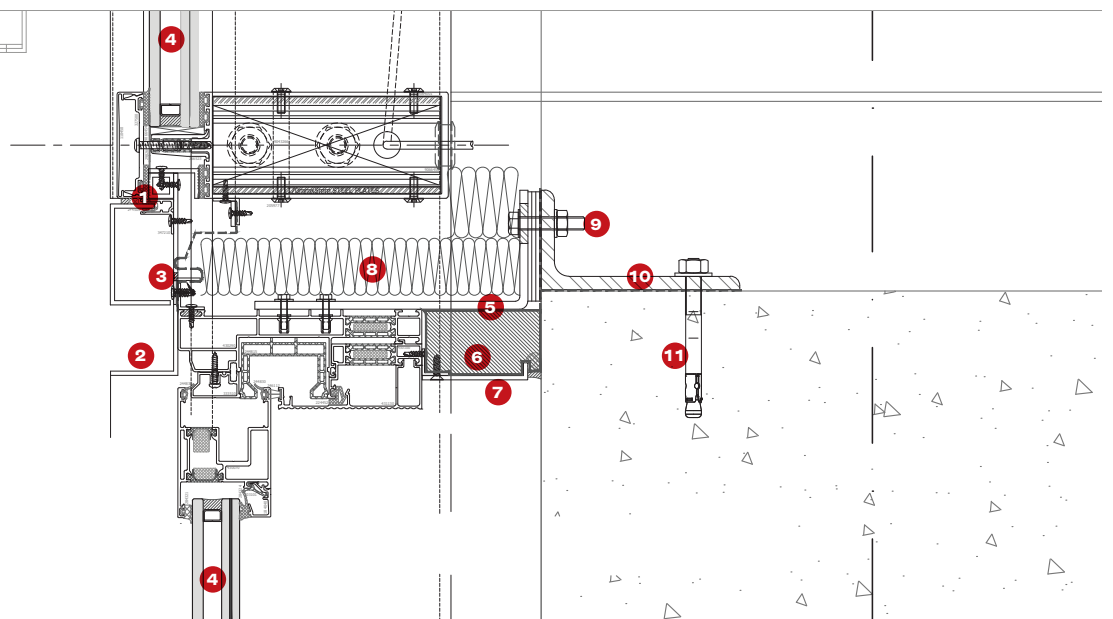
Above JW3's main pavilion elevation was designed to be highly blast resistant.
Left Pavilion detail showing perforated bronze shading panels.



PHOTOGRAPHS: HUFTON + CROW

Pavilion ground floor door head bracket detail

- 1 Aluminium box fixed to angle
- 2 Aluminium channel
- 3 EPDM fixed to head of frame and clamped into curtain wall angle
- 4 Glazing
- 5 Aluminium bracket
- 6 Compression fit linear gap seal
- 7 Aluminium angle
- 8 Mineral wool insulation
- 9 Hex head machine screw with nuts and washers
- 10 Rolled steel angle fixed into concrete for head restraint bracket to doors
- 11 Fixings into concrete



Commended

Uppingham School Science Building, Rutland

Entrant: Orms

Designed by Orms, Uppingham School Science Building is the final phase of the 800-pupil boarding school's Western Quad masterplan.

Arranged around a grassed quad, the 4180m² building is conceived as physically and intellectually connecting science with sport, art and mathematics.

'The intention was that it wasn't just a silo for teaching sciences. It needed to be a building that was open and welcoming to the rest of the school,' said Orms associate director Colin McColl.

This strategy was achieved with the help of Schueco systems, used extensively in combination with pre-cast stone elevations

inset with panels of local Clipsham stone. In all cases, according to McColl, the installations were the result of intense discussions with contractors and suppliers to achieve bespoke results with minimal visual fixings while using standard systems. 'These systems have a lot of options you can work with,' he added.

The most spectacular of these is the anodised aluminium 'jewel box' element. This contains the learning resources centre and has a double height viewing window overlooking the Western Quad. This striking feature was achieved using Schueco FW 50+ SG with 175mm mullions and flush transoms, and with a bespoke fritting



pattern to provide solar shading to the south.

Another key installation was the pair of projecting bay windows on the south elevation. Orms specified Schueco FW 50+ SG 150mm mullions and transoms with 15mm mitred internal capping, and incorporated a Schueco AWS 102 side-hung opening vent behind a separate bespoke aluminium perforated screen. This slick, minimally detailed aesthetic was also used for other laboratory areas in the building.

Schueco was specified to form the rooflights in the building's main atrium above a central spiral stair. These use the Schueco FW 60+ SG system with 250mm mullions and are discreetly strengthened with inner steel plates to support a suspended Foucault Pendulum. In the glazed colonnade, flush Schueco FW 50+ SG glazing acts as a foil to the masonry.

Uppingham School's investment in the new science building strategy is working – already more female students have opted for science and there has been a 30% rise in school applications.

Judge Paul Monaghan praised the building for a good composition 'well done and elegantly detailed'.

The £14m Science Centre recently won the RIBA East Midlands Building of the Year award. ●

Client: **Uppingham School**

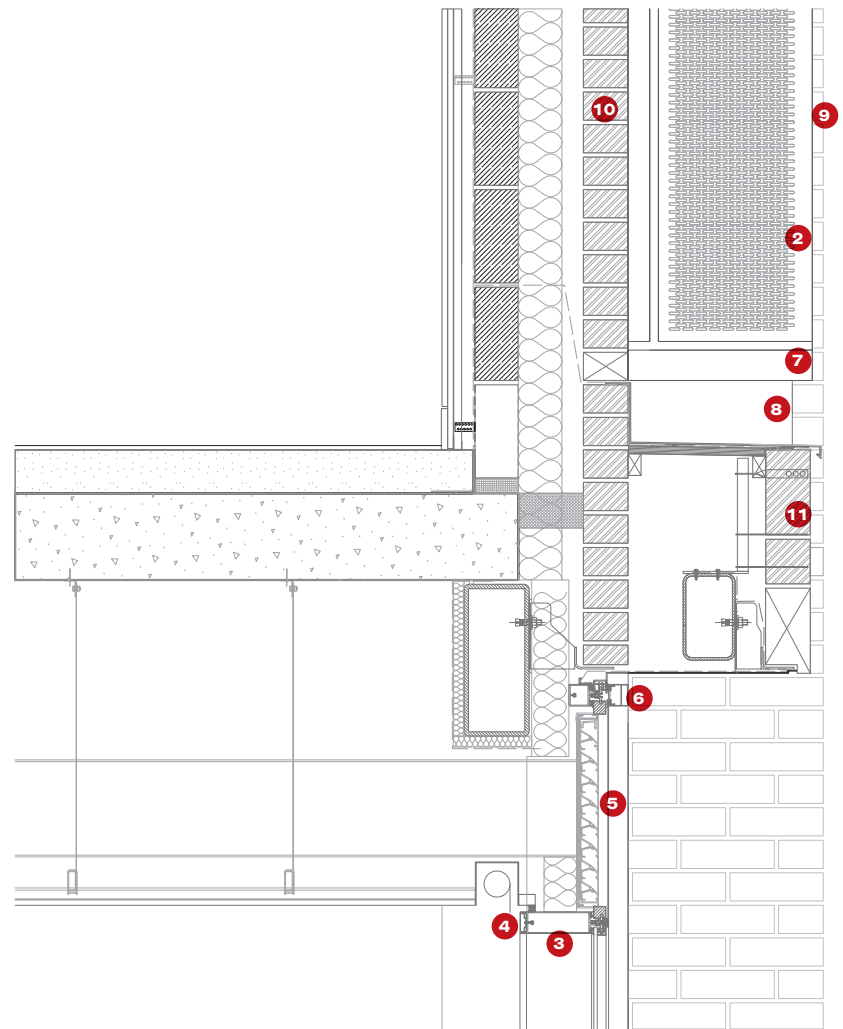
Architect: **Orms**

Structural engineer: **Brookbanks Consulting**

Main contractor: **Bowmer & Kirkland**

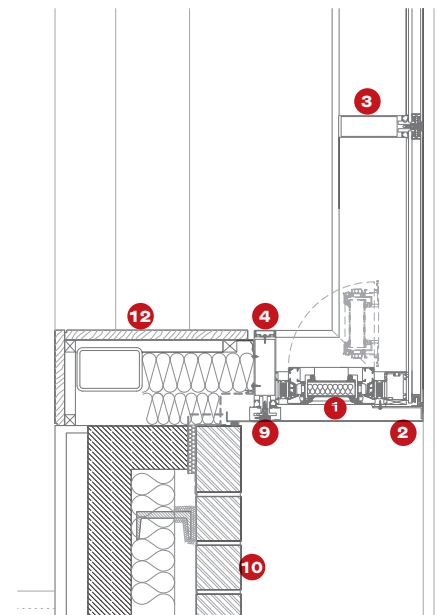
Left Schueco FW 50+ SG forms the anodised aluminium 'jewel-box' element of the new Science Building.

Below Detail of the west elevation of the quad.



South elevation (top) and plan detail

- 1 Schueco AWS 75 side hung opening vent
- 2 Perforated aluminium panel
- 3 150mm Schueco FW 50+ SG mullion & transom
- 4 15mm mitred internal capping
- 5 Aluminium louvre system faced with perforated aluminium panel
- 6 45mm mitred perimeter capping
- 7 Powder coated sill flashing
- 8 Powder coated aluminium feature flashing
- 9 Powder coated aluminium closure trim
- 10 English Cross Bond brickwork
- 11 Soldier course feature lintel
- 12 Timber window linings



Winner Dorsett Shepherds Bush Hotel, Shepherds Bush, London

Entrant: English Architectural Glazing and Flanagan Lawrence



NICK GUTTRIDGE

Once the biggest film palace in Europe, the former Pavilion cinema on Shepherds Bush Green had lain empty for more than 20 years before being reborn as a 320-room hotel. When architect Flanagan Lawrence was appointed to convert the Art Deco landmark, the main issue was how to bring light into the upper part of the grade II-listed building without disrupting the distinctive roll top roofline.

'Most of the building on all four sides was solid brick so the challenge was to create window openings while keeping its form and materiality,' said Flanagan Lawrence design director Jason Flanagan.

The solution, developed with English Architectural Glazing (EAG), introduced a

new glazed roof that integrated translucent and glazed elements including a bespoke transom that provided a stepped line to the external glass face in a shingle form. This was achieved using curving Schueco FW 50+ mullions and introducing a bespoke, fabricated, structurally glazed carrier frame to deliver the differential between the raking face of the glass and the curved face of the mullion. These were used with bespoke triangulated Schueco FW 50+ V8 transoms.

The proposal was tested on an off-site test rig. All fabrication was carried out in house by EAG to achieve the design intent for a seamless integration from the barrel roof to the standard curtain wall to the lower

bedroom floors. This enabled the architect to bring natural light into the new hotel rooms and is used in combination with a distinctive veil of bespoke, colour-matched terracotta baguettes on Schueco brise soleil brackets. These baguettes deliberately mimic the original brick that the new façade was replacing, which was a condition of planning. The sleek barrel roof ensemble allows uninterrupted panoramic views as well as controlling heat gain and loss via the insulated translucent roof panels.

Elsewhere in the building, the architect used Schueco AWS 60 windows on the front elevation and Schueco FW 50+ curtain walling for the café glazing.

According to Flanagan, the complexities of the listed building meant that the detailed design of the building envelope had to be developed relatively early to satisfy English Heritage and planners. This had the knock-on benefit, he added, of being able to 'lock down' the high quality of the facades from day one.

The 15,135m² hotel opened last July. Judges appreciated the considerable challenges of converting such a 'pig-difficult' building within the planning constraints and particularly applauded the 'inventive' use of the terracotta veil in front of the glazing.

'It's quite something to convert it into a hotel – for 20 years it sat there as an eye-sore. This is well resolved within the constraints they had,' said judge Paul Monaghan.

'It's certainly a landmark that contributes to the public realm,' added Jo Bacon. ●

Client: **Dorsett/Kosmopolitan Hotels**

Architect: **Flanagan Lawrence**

Structural engineer: **Expedition Engineering/URS**

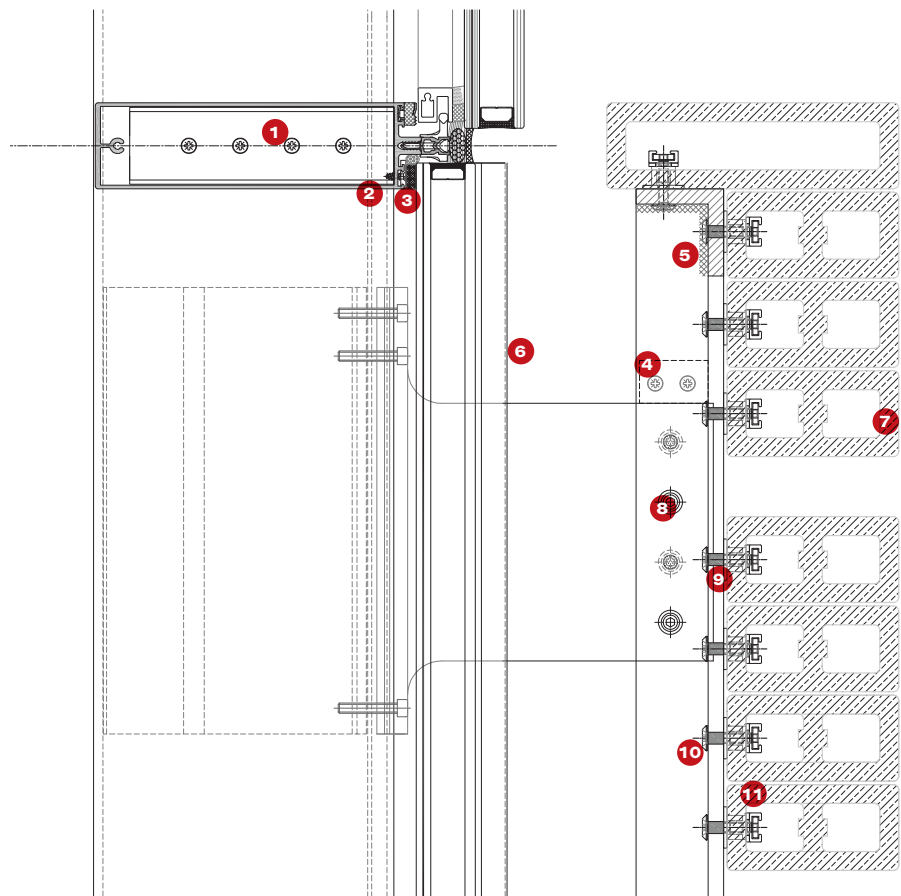
Main contractor: **Ardmore**

Specialist contractor: **English Architectural Glazing**



Left Introducing light into the distinctive roof and the brick facade was a key part of the former Pavilion cinema's conversion into a hotel.

Right The roll-top roof before the refurbishment.



Terracotta louvred facade detail

- 1 Transom
- 2 Anodised finish flat bar
- 3 Structural silicone
- 4 Aluminium frame levelling block
- 5 Aluminium angle welded joint frame
- 6 Line of mullion cover cap
- 7 Terracotta baguettes
- 8 Socket head
- 9 Brise soleil bracket
- 10 Socket head with washer tightening torque
- 11 Aluminium flat anti-falling device



CHRIS DYSON (3)

Winner

Calvin Street, Shoreditch, London

Entrant: Chris Dyson Architects

Judges enjoyed the Tardis-like nature of Chris Dyson Architects' 600m² residential warehouse conversion in Shoreditch. From the outside, there is little hint of the spacious, light filled properties created by the architect, which has fashioned three luxury apartments, including a copper clad rooftop duplex extension, from the run-down Victorian warehouse.

According to Orms partner Gideon Purser, the aim was to 'celebrate the heritage and character of the host building wherever possible' while bringing in as much natural light as possible. This involved creating a deep internal courtyard with a living wall for the ground floor flat and a terrace for the first floor apartment.

'The client was interested in creating generous, bright spaces out of a challenging, deep plan, and had a strong interest in details, fittings and sympathetic materials,' he said, adding that securing planning permission had been a considerable hurdle given its location in a conservation area.

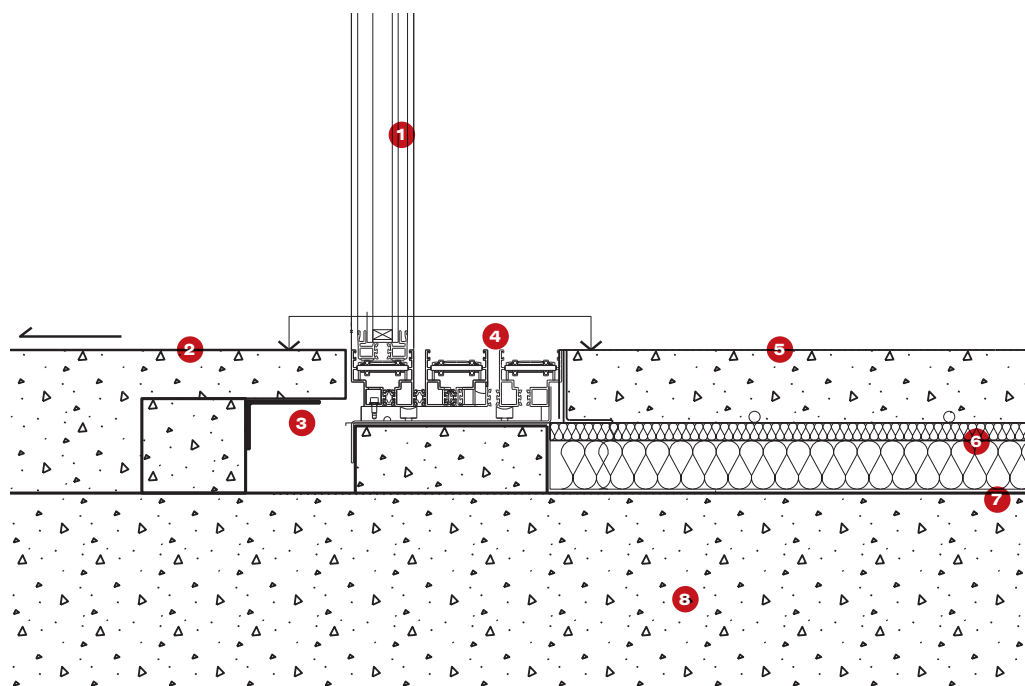
Schueco systems were used on the ground, first and penthouse levels, chosen for their high performance and also, added Purser, because they complemented the refurbished original Crittall steel windows. Schueco AWS 70 with a powder coated finish was used to create floor to ceiling glazing around the ground floor courtyard. A movable corner post where the Schueco ASS 70.HI sliders meet enables residents to



Left A moveable corner post allows the ground floor flat's rear elevation to open to the newly created courtyard.

Top Sliding Schueco doors open to the rooftop garden.

Above The former warehouse, with copper-clad rooftop extension.



Sliding door interface with ground section detail

- 1 Clear double glazed sliding units
- 2 Polished concrete courtyard floor
- 3 Drainage slot at base of door
- 4 Frame flush with floor finishes
- 5 Polished concrete interior floor
- 6 Insulation
- 7 Levelling screed
- 8 Existing slab

open up the kitchen/living space completely to the outside.

The same system was specified for two large sets of sliding doors opening onto the rooftop garden on the set-back penthouse levels of the extension, which was designed using materials that are deliberately differentiated from the host building. Two Schueco tilt-and-turn windows are also set into the copper box to align with the existing windows.

Meanwhile, on the first floor, Schueco's Janisol Arte steel framed system was used for the terrace door to match the style of the Crittall windows.

The building was given a significant thermal upgrade using an insulated external render which allowed the existing brick

internal walls to be exposed.

Judges were impressed with the mix of conservation and new build and its elegant detailing.

'For a refurbishment, this looks really, really precise,' said José Silva.

'It's a transformational project that very successfully takes an interesting existing facade with small openings and creates a plan that allows big openings which make well-lit spaces,' added Jo Bacon. ●

Client: **Chapman Button**

Architect: **Chris Dyson Architects**

M&E engineer: **Martin Redstone Associates**

Main contractor: **Clara Vale**

Specialist contractor: **Park Aluminium**

Winner Reid Building, Glasgow

School of Art Entrant: Dane Architectural Systems



IWANBAAN (3)

With its translucent, almost ghostly appearance, Steven Holl's Reid Building for the Glasgow School of Art couldn't be much more of a contrast to the sandstone of Charles Rennie Mackintosh's renowned building opposite.

Extensive glazing, achieved primarily using Schueco Jansen VISS steel profile system, was a key part of the five-storey building's design, with the American architect aiming to bring as much natural light as possible into the studios inside.

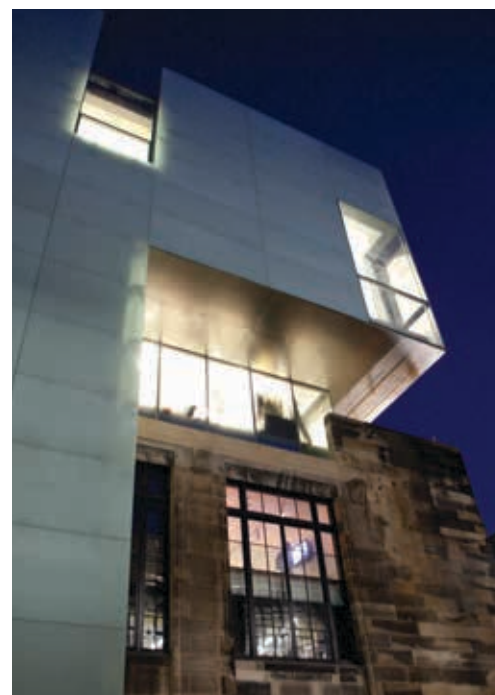
'It was quite a complex job,' said Dave Hardie of Dane Architectural Systems, adding that the weight of mullions up to 12m long led to considerable logistical challenges.

The brief was for an industrial look with large, flush glazing panels used alongside a matte white, laminated glass cladding system with associated stainless steel brackets. One of the most distinctive installations was the 'glass shelf', a 7m high array on the top of the north facade. This was achieved using a stick

system with prefabricated mullions that were craned into position and glazed in situ. The system was adapted by Dane with bespoke toggle plates to give the flush finish specified by the architect. Double-glazed units weighing up to 700kg were developed with a light grey edge seal to mask the 20mm silicon weather seal between the units.

On the south facade, the Schueco Jansen VISS system forms a set-back glazed screen, with 12m long mullions unsupported in one span. The contrast with the surrounding context is particularly apparent on the west elevation, where the Schueco Jansen VISS system forms a crisp glazed corner as the new building wraps around and above the retained stone Assembly building.

One of the more unusual applications of Schueco's systems was to create what the architect termed 'driven voids' – cylindrical shafts through the building which terminate as roof lights wrapped in stainless steel rainscreen. Here, Schueco AWS 70.HI forms



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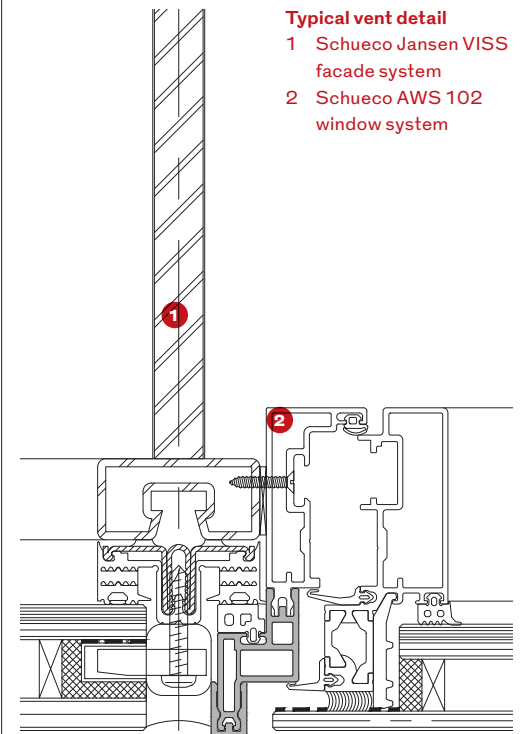
structurally glazed, automated opening vents that are controlled by the building management system.

The facade and roof lights underwent stringent weather and impact testing at the Vinci Technology Centre UK before installation.

Judges appreciated the difficulty of achieving such a 'brave' facade, both technically and in such a sensitive location, and liked the translucent quality that the building had when illuminated at night.

'You're on a hiding to nothing opposite Mackintosh,' said judge Paul Monaghan. 'But this is head and shoulders above the rest.' ●

Client: **Glasgow School of Art**
 Architect: **Steven Holl & JM Architects**
 Facade consultant: **Arup Facades**
 Main contractor: **Sir Robert McAlpine**
 Specialist contractor: **Dane Architectural Systems**



Typical vent detail

- 1 Schueco Jansen VISS facade system
- 2 Schueco AWS 102 window system

Top far left The Reid Building extensively features Schueco Jansen's VISS steel system.

Below far left The crisp glazing of the new contrasts with the retained Assembly building.

Above left Generous glazing fills the studios with light.

Left One of the 'driven voids' that bring light into the heart of the building.

Winner The National Graphene Institute, Manchester

Entrant: Lakesmere Group

With its distinctive perforated steel veil, the National Graphene Institute presented a considerable challenge for cladding and curtain walling installer Lakesmere Group.

Designed by Jestico + Whiles, the £61m research facility is dedicated to the development of graphene, the world's thinnest, strongest and most conductive material.

The facade incorporates a flush inner skin created using a metallic silver cladding panel system, Schueco AWS 60 windows and Schueco FW 50+ SG structural glazing systems. Combined with this is the mirror-polished black veil which wraps around the various elements of the building to provide a unifying texture and shape, with expanses of cut-outs providing both clear views out and window cleaning access. The veil also features a graphic representation of graphene's chemical formula, with Lakesmere working with its supply chain to ensure that this was clearly visible on each steel panel.



Commended Business Design Centre, Islington, London

Entrant: Clear Line Maintenance

Introducing glazing to the gable ends of the Business Design Centre (BDC) while it remained fully operational was a considerable logistical challenge for specialist facade contractor Clear Line Maintenance.

Built in 1860 as the Royal Agricultural Hall, the grade II-listed centre needed new curtain walling to replace opaque corrugated panels which had been used latterly to cover the 20m high gables. According to project architect Simon Powell, the intervention returns the gables to their original intent, transforming views inside and out.

Schueco FW 50+ double glazed, thermally insulated curtain wall system was specified for the new gables. Installation was tricky because the centre remained in use throughout and neither its own roof structure, nor that of the adjacent building, was strong enough to bear the scaffold assembly. Instead, Clear Line installed an alternative solution, designed by



Above Gable end of Business Design Centre before refurbishment.

Right The reinstated glazing restores the original architectural intent.

the architect, welding eight support brackets – four at each end – to the main steel columns. These cantilever out to support the scaffolding.

'Access was the main challenge, as well as the logistics of manoeuvring materials into place,' said Clear Line's David Holden.

The delicate installation was completed

Lakesmere collaborated with its subsidiary glazing specialist McMullen Facades to deliver the curtain walling before installing the veil, which is attached to a carrying system screwed into the base cladding.

According to McMullen Facades project manager Steven Cox, the most challenging part of the job was the main entrance. Here, a triple height flush entrance screen of hung curtain walling stretches 10.5m high, and is created using the Schueco FW 50⁺ system with feature flat cover caps alongside Schueco ADS 65 bonded glass doors.

Another key feature is the seven-tier screen on the east elevation which uses Schueco FW 50⁺ with a T-shaped profile to

create a saw-tooth effect down the facade. This forms an atrium, rising 9m up and over the roof, and continuing as horizontal saw-tooth roof lights with a standard box section. These roof lights used three Schueco AWS 102 SHEVS vents fitted at the base of the screen and linked back to the building management system.

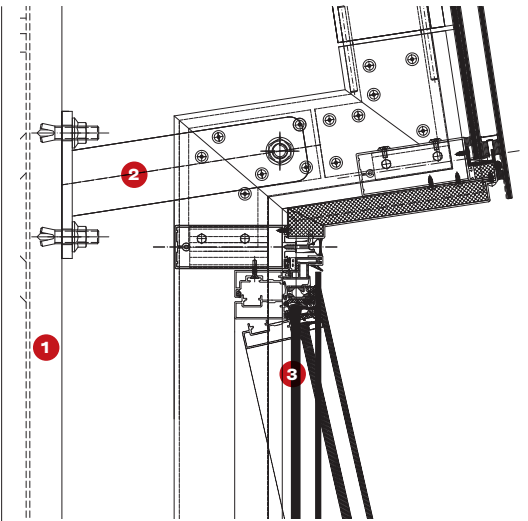
Judges liked the consistency of detailing. José Silva admired the 'complex layering of cladding and inner skin' while Paul Monaghan liked the 'calm and elegant' use of black and the effortless resolving of junctions.

'The overall effect of the layered facade both breaks down the mass of the building and creates intriguing visual interest,' added Hugh Pearman. ●

Client: **University of Manchester**
Specialist contractor: **Lakesmere Group**
Main contractor: **BAM North West**
Architect: **Jestico + Whiles**

Far left A layered facade incorporates Schueco systems, metallic cladding and a perforated steel veil.

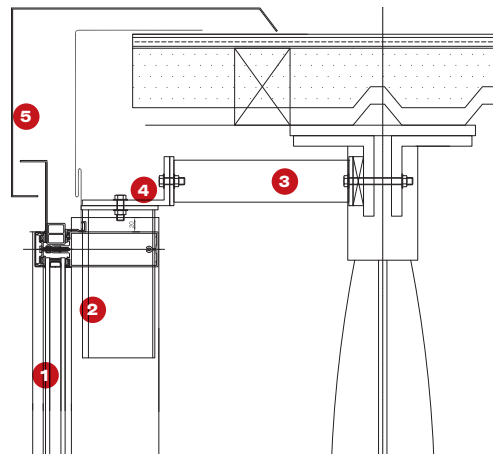
Left Corner detail, with tiered screen to the right.



Tiered screen detail

- 1 Structure
- 2 Painted steel bracket
- 3 Schueco FW 50⁺ curtain walling system

HUFTON + CROW



Gable glazing detail

- 1 Schueco FW 50⁺ curtain walling system
- 2 Close fit insert fixing spigot
- 3 Circular hollow section with end plates
- 4 Angle bracket
- 5 Roofing fascia

with minimal disruption to operations. Perimeter interfaces with the roof conceal and accommodate the substantial structural movement. The project also involved refurbishing structural wrought ironwork and overseeing site waste management, which ensured that 75% of materials removed from the facade were recycled. The steel brackets have been retained to support gantry walkways and assist in future maintenance.

Judges admired the nicely detailed glazing solution and its positive impact on the building. Motorised blinds allow for full or partial daylight passage into the hall.

'It's an elegant piece of glazing, kept simple and done well,' said Jo Bacon. ●

Client: **Business Design Centre**
Specialist contractor: **Clear Line Maintenance**
Structural engineer: **Howard Cavanna**
Architect: **Simon Powell Architects**



Schueco Excellence Awards 2015 for design and innovation



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W: www.marleyeternit.co.uk/cpd

Title: Playing by the Regulations for Roofing CPD

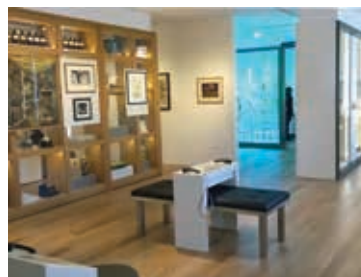
Gain an understanding of how Building Regulations (Approved Documents) and recent revisions to BS 5534 affect roof design; identifying changes to fixing, mortar bedding and underlays.



Moving forward - new President for the GAI

The Guild of Architectural Ironmongers (GAI) AGM and Conference was held mid-May; both business and celebration were on the agenda. Maria Powell, Managing Director of the Lorient Group was appointed Guild President for the next two years. Maria took up her tenure with immediate effect; and paid tribute to the valuable contribution of outgoing President John Jefferies during his term of office.

w: www.lorientuk.com



A Solid Oak Floor for New Museum.

Junckers solid oak flooring has been installed at Bethlem Royal Hospital's Museum of the Mind. Architects Fraser Brown MacKenna have improved and re-organised the space with an interior scheme featuring Junckers Wide Board Oak flooring and white surfaces to act as a backdrop to the museum's permanent collection. Hardwearing and easy to maintain, Junckers solid wood floors are ideal for public spaces, even high traffic areas.

t: 01376 534 700
w: www.junckers.co.uk



GEZE UK supports the very best of Scottish Architecture

Leading door and window control system manufacturer, GEZE UK has reinforced its commitment to supporting the very best of Scottish Architecture by sponsoring the RIAS/RIBA Awards for Scotland 2015 Dinner for the second time. The Awards seek to recognise architectural achievement in Scotland and winners were announced at a glittering awards banquet at The Balmoral Hotel, Edinburgh on Wednesday 17th June.

w: www.geze.co.uk



Breathe of new life into historic Leicester market area

A ceiling created and installed by world-leading architectural products manufacturer Hunter Douglas has helped to transform the historic market area in Leicester. They supplied and installed a 470m² solid wood linear open ceiling in fire-treated FSC Siberian larch for the technically complex. The system was installed between specially engineered glulam beams and to achieve the desired reverberation time of 2-2.5 seconds, which provides the "buzz" of a market environment.

w: www.hunterdouglas.co.uk



Duravit - Individuality and Comfort for the Bathroom

The new ME by Starck collection puts the spotlight on individuality. Created by the French designer, Philippe Starck, this unique collection satisfies the desire for pure aesthetics and focuses on the essentials. With its minimalist design, it places the person and their sense of style at the centre of the bathroom. Working perfectly in all interiors, it allows a vast choice of individual designs. Washbasins, toilets, baths, urinals, shower trays and accessories all form part of this unique collection.

w: www.duravit.co.uk



Crown Paints Launches BIM Objects

Crown Paints has added Building Information Modelling (BIM) to its suite of services for specifiers. The new service can be accessed via a link from Crown Paints' Specification website, www.crownpaintspec.co.uk or by visiting the paint manufacturer's profile on the well-recognised National BIM Library www.nationalbimlibrary.com/crown_paints BIM Objects have been added, to enable users to integrate Crown Paints' products into a digital model.

w: www.crownpaintspec.co.uk



Contour help to remember 'The Few'

The National Memorial to 'The Few' in Kent, occupies a special place in the hearts and minds of all those who have visited this moving site. The Wing is the Battle of Britain Memorial Trust's new building at this site. Contour were then specified as the manufacturer tasked to develop a series of innovative solutions to overcome some arduous design challenges. All the column casings were manufactured, including those with 5 degree angled tops, in-house by Contour using the company's technical expertise combined with its advanced CAD facilities.

w: www.contourcasings.co.uk



The ideal surfaces for inclusively designed bathrooms

Bushboard's Nuance range of waterproof laminate wall panels are unique in being suitable for level access showers and wetrooms making them ideal for inclusively designed bathrooms. The large format panels can be fixed floor to ceiling flush with an in-line shower tray or a tiled floor. The panels are easily installed and jointed with no extrusions providing a watertight and decorative surface with near invisible joints that enhance the aesthetics.

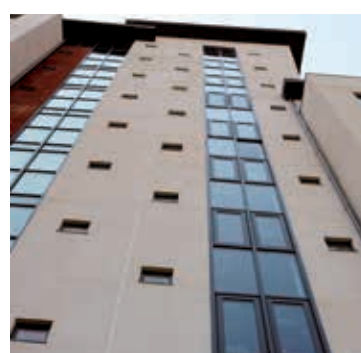
w: www.bushboard.co.uk



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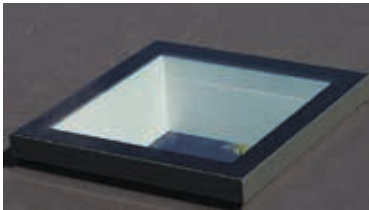
48 Berwick St, London W1F 8JD.
t: 020 7437 3776
w: www.wsitch.co.uk



Windows for the next generation of solutions

Integration is the key factor which underpins the latest new product launch from Comar Architectural Aluminium Systems. Comar announce they have incorporated the technology from their Comar 9Pi system into the Comar 5Pi window range, and are now launching the Comar 5Pi Advanced Casement and Tilt/Turn window system which integrates seamlessly into Comar 9Pi creating the option for standalone high performance windows.

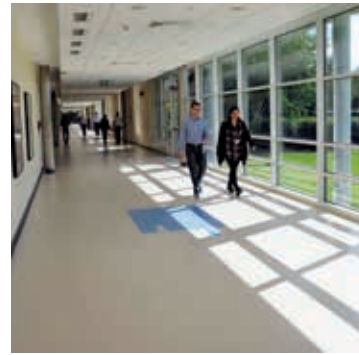
w: www.comar-alu.co.uk



SkyVision

SkyVision Fixed for flat roofs maximises light influx and thermal efficiency. Uniquely, the standard double glazed unit has been impact tested to the highest safety standards TN66/67 Class 1 to protect those carrying out roof maintenance and cleaning. SkyVision Ecoline is the most energy efficient model of the SkyVision family with a U-value of 0.65 W/m²K for the entire unit, boasting robust and highly insulated triple layer glass.

w: www.vitral.co.uk



Hewlett Packard 'attracted' by Gerflor solution

Hewlett Packard were concerned about the amount of downtime required to strip and remove the existing floor, then prepare and lay a new resilient PVC or linoleum sheet in a heavily trafficked area in constant use. The onsite facilities management company chose international flooring and interiors specialist Gerflor to supply the flooring solution. Gerflor's commitment to technological improvement means Attraction® can be laid quickly without closing premises and over sub-floors with minimal moisture problems.

w: www.gerflor.co.uk



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w: www.sikkens-wood-coatings.co.uk
t: 01254 687950



Twyford's Energy Collection specified for 762 new homes

Taylor Wimpey has specified products from Twyford's Energy Collection for five prestigious housing developments in North Yorkshire and Teesside. The 4 and 5 bedroom homes in the Acklam Hall development have been designed sympathetically using materials and colours to complement the mansion and to conform with English Heritage. Each bathroom and en-suite will feature e100 washbasins and toilets, with the optional upgrade of an e100 vanity unit in high gloss white or grey ash wood.

w: www.twyfordbathrooms.com



Battle of Britain visitor centre roof gets royal approval

The Battle of Britain Memorial, located at Capel-le-Ferne in Kent, is a monument to aircrew that flew in the infamous Battle of Britain in 1940.

A new addition to the memorial site is the state-of-the-art visitor centre called 'The Wing'. Vital to the success of this new building was its flat roof, which is highly visible and plays an integral part in creating The Wing's overall appearance.

The building consists of three main roof areas, with one central core roof separating the adjoining two wing shaped sections, totaling over 700m² in all. Bauder's anthracite coloured Thermofol single ply membrane was specified for the waterproofing because it is long lasting, visually appealing and allows for no physical penetrations of the roof. The system build-up also included Bauder's 160mm PIR insulation for superior thermal performance, ensuring the roof achieved the required 0.16 U-Value.

w: www.bauder.co.uk



New handmade clay tile launched

Marley Eternit has launched a new range of premium handmade clay plain tiles to help create stand-out roof designs for high quality housing developments and sensitive refurbishments.

The Canterbury range provides a genuine handmade appearance that specifiers are looking for in today's market. Architects, developers and home owners alike are fast rediscovering the beauty of natural handmade clay tiles which are created by skilled craftsmen in the same time-honoured methods that have been used for hundreds of years.

The tiles are available in three rich colours with soft edges and fully formed nibs - Chailey, a vibrant orange, Loxleigh, which boasts an antique appearance due to its semi-sanded finish in red and grey shades and Burford, a red-brown tone in a fully sanded texture.

To request a brochure or samples, please contact 01283 722588 or visit www.marleyeternit.co.uk/handmade



Twyford extends its bath range to complement the Energy Collection

The double-ended Athena and the single-ended Aspect have been launched by Twyford to complement the Energy Collection of ceramics and furniture and offer the flexibility to specify an all-in-one suite. Both feature a new, contemporary square internal design which matches the square basins and can be fitted with Twyford's innovative, new twin-skinned Endurance front and end panels for added robustness.

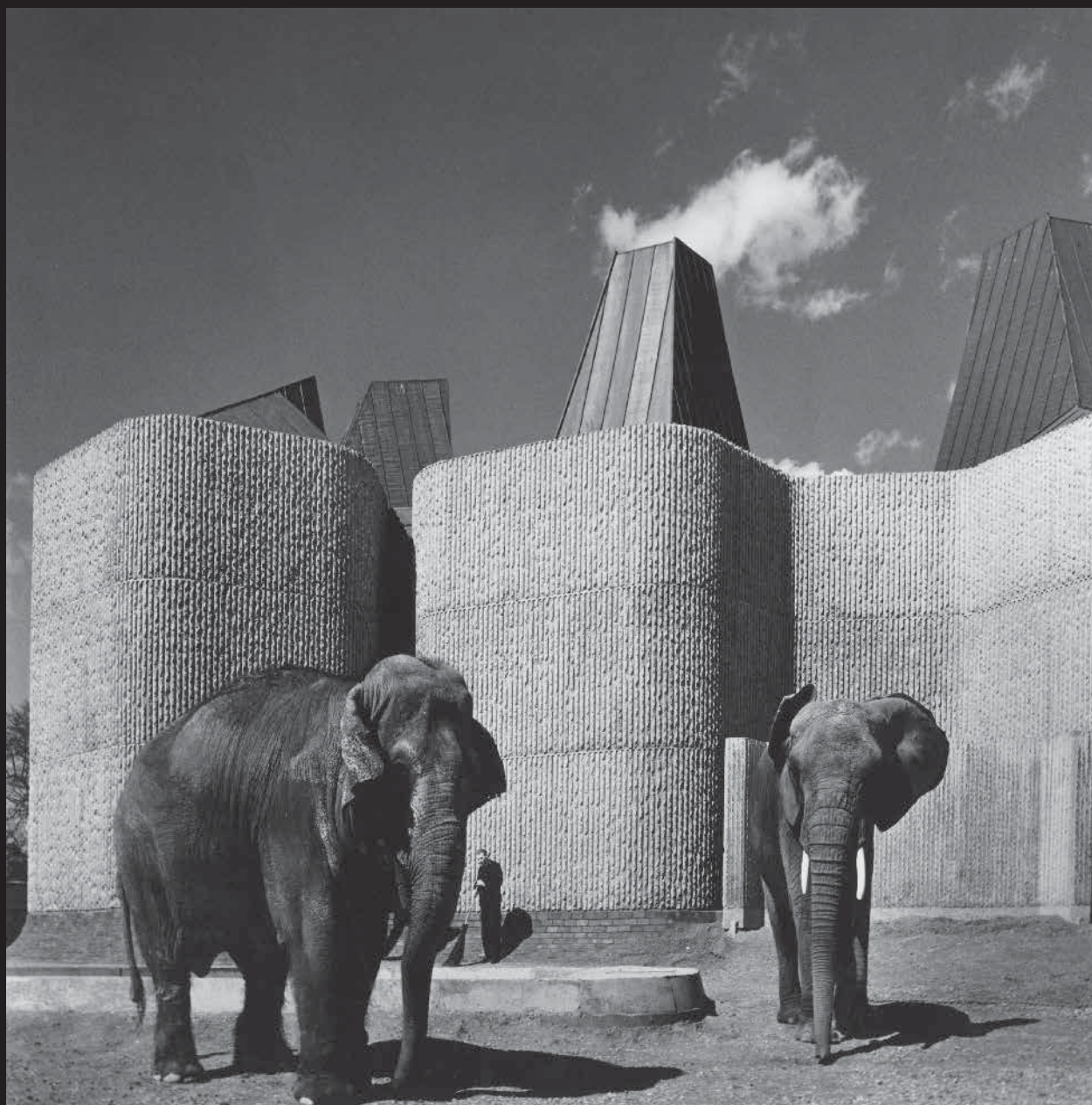
w: www.twyfordbathrooms.com



Ground-breaking healthcare innovation

Rada has won a prestigious international design award for its ground-breaking new healthcare hand washing and shower technology range. As a globally renowned standard for design, the iF Design award is testament to Rada's world-class product design and recognises the contribution the new range will make to the healthcare industry. The winners are chosen by world leading industry experts, who closely inspect, analyse and test each contribution.

w: www.therooflightcompany.co.uk



Elephant and Rhino House London Zoo, 1965

Tecton's Penguin Pool, with its sinuous ramps conceived by Ove Arup, is widely regarded as the star of London Zoo's architect-designed animal houses. But the Zoo has much more to offer architecturally, largely thanks to Hugh Casson's involvement. Casson was drafted in to design a 'new zoo' in 1956, following his success with the Festival of Britain. The Zoological Society had begun to realise that architecture could create a more appealing and dramatic visitor experience and Casson was employed to devise a plan combining the classicism of Decimus Burton's 1836 Giraffe House with Lubetkin's clean, modern lines. Cas-

son's Elephant and Rhino House, completed 50 years ago, has been described as 'zoomorphic new brutalism, marvellously expressive of its inhabitants'. A series of brick pens arranged about a central viewing area, it is clad in elephantine pick-hammered concrete and topped with conical copper roofs. The building is one of the few that can be definitively credited to Casson. He played a more advisory than practical role in his practice Casson Conder and Partners, contributing occasional conceptual drawings but leaving the day-to-day work to Neville Conder. ●
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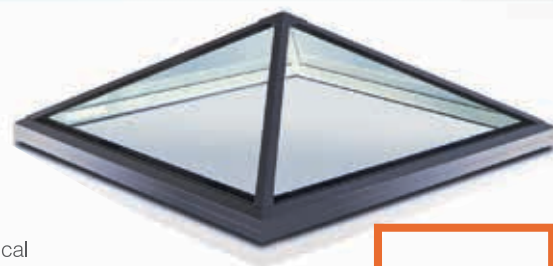
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