

RIBA

J October 2015

The RIBA Journal

£8.95/€16/US\$18



Rock the casbah

Sink estate to civic pride in Colindale

32

Same but different

Tim Ronalds' invisible architecture at Wilton's Music Hall

16

Love thy neighbour

What is cohousing really all about?

54

Disruptive innovations

Technology to prepare for

58

Woman of the people

New president Jane Duncan sees strength in equality

85

Post-war passion

Guardian of the 20th century – Historic England's Elain Harwood

86

Rebel without a pause

How Ai Weiwei manages art, business and politics

95



Upgrade to the revolutionary Aerogel for astonishing thermal efficiency, capable of achieving A+ 21 Energy Rating and U-Value of 1.0

Manufactured in Great Britain from a premium grade aluminium for a secure, visually exquisite and maintenance free window

Aluminium's innate strength enables incomparably slim sightlines, allowing for less window and more light to be achieved

Unrivalled 1 week lead time, enabling more flexibility in scheduling as well as catering for clients on stricter time frames

Industry first internally and externally flush casement. Its timeless, classic finish makes it perfect for any property type

The Origin Window has now been launched with 2 industry firsts – a twin flush casement and the introduction of Aerogel.

It's in **our DNA...**

Contact us today for specifications and quotes

0808 168 5816

info@origin-global.com

www.origin-global.com



Bi-fold Doors

Windows

Blinds

1

Buildings



DENIS GILBERT

Comment 07

Good architecture remembers the art of hosting

Studio 08

Studio Weave's Midden Studio is a repository for architectural ideas

Photograph 11

Lard Buurman's shot from Johannesburg shows a different, urban Africa

House 12

Knox Bhavan makes an Edwardian terrace whole again, with a New York twist

On the cover

Peter Barber's figurehead housing block at Grahame Park estate, Colindale, by Morley von Sternberg

Theatre 16

Tim Ronalds leaves little trace of how Wilton's Music Hall's future was secured

Office 24

Ryder updates the local monumental style in Glasgow

Regeneration 32

Peter Barber's figurehead housing block launches Colindale's major regeneration scheme

MacEwen Award 40

What's your most socially aware project? Enter our competition now

Sustainability 43

Arup Associates' Better building for BSKyB sets a timber frame record

2

Intelligence



Q&A 53

NBBJ's Christian Coop – the man behind the shadowless tower

Housing 54

Cohousing is ever more popular, but what does it really entail?

Summit 58

What is the innovation that is going to turn your world upside down?

Clients 63

Increasing adaptation of heritage buildings means clients are looking to architects

Legal 67

Why contract administrators must be diligent with payments

Diary 69

Maria Smith loses herself in search of a different view of life

SIG Rooflines 73

Over the course of one month the grotto was 3D printed in large chunks, then assembled in just one day

Stephen Cousins on a project that could see an affordable revival of baroque design
ribaj.com/products/digital-grotesque

3

Culture



WILDEFRY

Comment 81

Why Hugh Pearman prizes Osbert Lancaster over all his books

Wiles & Wainwright 83

Oliver Wainwright reads the stories in Pyongyang's buildings

President 85

Jane Duncan calls for a new culture and attitude

Profile 86

Historic England's Elain Harwood has made herself the champion of post-war buildings

Exhibition 95

Ai Weiwei involves people in his art and his business to stay on top

Festival 99

Rotterdam's biannual architectural film festival opens this month

Obituary 103

Viréndra Sahai, architect, town planner and artist

Exchange 104

Opinion and comment from readers

Parting shot 122

Radcliffe Camera's elliptical stair, by Bill Toomey



RIBA #Enterprises IBP Magazine of the Year





The new V-epps pre-plumbed system. Engineered with ingenuity.

There are lots of obvious benefits of V-epps, the industry's first fully precision engineered, pre-plumbed panel system. It's fast and inexpensive to install for a start. But the ingenious engineering, well that's much less apparent; in fact it's completely hidden from view. High strength linear-bearing hinges provide smooth movement and allow panels to be positioned at different heights, with no gaps between panels. The innovative dowel-dock is designed for perfect panel alignment, while the adjustable zinc plated steel tie backs provide a bracing system for easier installation.

Order your brochure on 01474 353333 or visit www.venesta.co.uk



Vepps[®] Engineered Pre-Plumbed System

We know washrooms.

Venesta

The secret behind V-epps.

V-epps features 7 ingenious engineering secrets, including:



Panel Lock

We understand the need for added safety without compromised aesthetics. In stainless steel with a tamper proof security key opening, our panel locks are discreet and ensure maximum security.

Patent pending



We know washrooms.

Call 01474 353333 www.venesta.co.uk

10-year guarantee

We know washrooms.

Venesta

1: Buildings

'Step this way': The friendly invitation of your host, still a little formal as you arrive, welcoming you inside. Underlying the kind words an acknowledgement of the need for guidance and direction, a light hand on the shoulder, another outstretched, open-palmed, a human signpost. Way-finding never promised so much. And truly, it is only the smallest of spaces that are hosted in this way, homes, res-

taurants, an emporium of promise and mystery in some foreign souk; the outsize foam hands on greeters at the London 2012 Olympics pointed and high-fived their way to clarity at a grand scale. Architects promise and prompt with the more subtle clues of plan, materials and layers of light and colour, each written as an invitation and welcome. In an era of easy supergraphics remember, you are hosting. ●

Setting the tone:
Wilton's Music Hall.



ON RIBAJ.COM

'Dancing' sculptural ceramic white shirt collars, designed to accurately recreate the fine texture of real cotton shirts

Architects dress
Regent Street shop
windows:
ribaj.com/products/riba-windows

Midden Studio**Architect: Studio Weave****Words: Isabelle Priest****Photographs: Johnny Barrington**

Studio Weave's Midden Studio is a tiny 36m² repository of architectural ideas, full of commentaries and references, inserted into a remote sparse landscape on a landed estate on the west coast of Scotland. Far from being a simple artist's 'void' – one that fills, fittingly, the space within an ancient retaining wall for horse dung – this chapel to tinny-ness is far more than a one-line statement.

Perhaps this is down to the long incubation period – or the way it remained tied to local planning etiquette – but the process was protracted, allowing room to luxuriate in investigation and soak up local affairs. 'It has come out more finely tuned and mature,' explains project architect Eddie Blake, formerly of Studio Weave, now of Sam Jacob Studio.

Built for an artist whose work draws on the relationship of people with the landscape, it was commissioned through a personal connection in a patronal fashion – an established practitioner in drawing and digital work looking to support a developing architectural firm. The brief was open – it didn't even have a position on the site. Consequently, the first job was a feasibility study – a phrase which does not do the sensitivity of Studio Weave's initial investigations justice, sounding far too commercial and financial. Rather, the architect listened to the sounds of the sea and

stream, observed the colours of the granite, took in the views of the bay from the manor and explored forgotten structures.

In the end, the retaining wall of the midden for the nearby stables was identified as the site with the most beautiful composition of things – trickling water from the burn (stream), exposed rock and Victorian vernacular. In an area of scenic beauty, the architect set about refocusing the site, making incisions and light excavations to discover the extent of the old wall before drawing up plans.

The final form is an appreciation of the toughness of the landscape. Its twin peaks sit on top of the wall, cantilevering over the stream. The height and double ridge were determined in part by permitted development rights, but also by the layout within and Heidegger's concept of uncanniness. Its zinc cladding will weather directionally, becoming whiter and less metallic over time.

It is in the zinc that Blake most markedly imprinted his personal stamp. Working on it at the time of the Scottish referendum prompted him to think about the reigniting of Scotland's tradition of looking to Europe; the diamond and cross embossing is inspired by the 16th century Chiesa del Gesu Nuova in Naples – one of Blake's favourite buildings and thought to have influenced an extension to Crichton Castle near Edinburgh.

For all its external thought, however, Midden Studio is about being inside. Cold and hard on the outside, if you crack the building open, it is warm and cosy within. ●





Main image The studio's external zinc cladding and roof help it appear as a single object in the landscape.

Far left The interior is designed to focus the mind inwards on the work in hand.

Credits

Client Private

Architect Studio Weave

Structural engineer WebbYates

Main contractor Neil Weir

Zinc contractor HL Metals

Zinc fabricator VMZinc



Innovation is our motivation

Innovation is always front of mind for us and it's at the heart of everything we do. Whether through new product development, process improvement or service enhancement we're always innovating to keep moving forward.

EUROCLAD

Draw on our experience

Wentloog Corporate Park Cardiff CF3 2ER
02922 010101 • www.euroclad.com

[@eurocladuk](https://twitter.com/eurocladuk)

 confidex

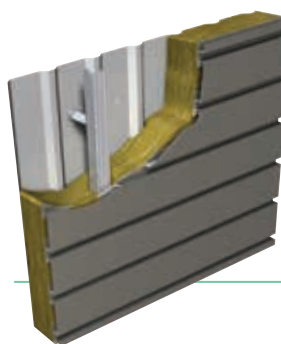
Colorcoat HPS200 Ultra, Colorcoat Prisma and Confidex are registered trademarks of Tata Steel UK Limited.

Innovation provides you with roofing and cladding solutions that are as ground-breaking as they are practical and as valuable as they are cost-effective. Put simply we innovate to provide products that are relevant and useful to you.

Our commitment to innovation delivers high quality, cutting edge manufacture and a raft of new products that provide added value through the combination of better performance and lower costs. Some of our recent product innovations include Vieo, Opus, sinusoidal cladding, Quattro, integrated solar panels, transpired solar collectors, and a more efficient stainless steel halter for standing seam roofs. Innovation also provides the highest levels of product performance and technical support, such as low U-values, CE Marking and BIM compatibility.

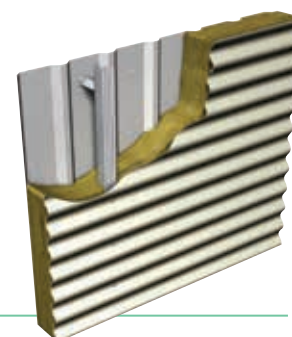
A culture of innovation is present throughout our supply chain, with Elite Systems using only Colorcoat HPS200 Ultra® and Colorcoat Prisma® from Tata Steel. These Colorcoat® products come with the Confidex® Guarantee offering extended cover for up to 40 years on Colorcoat HPS200 Ultra® and up to 30 years on Colorcoat Prisma®. Colorcoat® products are certified to BES6001 Responsible Sourcing standard.

Our two most recent innovations are the new Opus panel and sinusoidal profiled sheet.



Opus is the new plank panel that is available as part of an Elite system, a LINEAR Rainscreen and a LINEAR Rainspan system, as well as being ideal for use as a soffit plank.

Investment in state-of-the-art manufacturing machinery enables us to provide the increasingly popular sinusoidal profile on a short lead time and at a competitive price.





**Ernest Oppenheimer Park, Johannesburg,
South Africa, 2009 / 2012**

Photograph: Lard Buurman

Words: Jan-Carlos Kucharek

Part of the Louisiana Museum of Modern Art's current show *Africa: Architecture, Culture and Identity*, Dutch photographer Lard Buurman's images, gleaned from extended visits to 12 African cities, convey a sense of an urbanising continent at odds with western assumptions. 'People don't think of Africa as having a modern, urban culture, only a rural one. Anthropologist Filip De Boeck called

them "invisible cities",' he says. Buurman's book *Africa Junctions* aimed to dispel the myths, portraying the continent's cities as expanding so fast that maps and statistics are irrelevant when – or if – they are published.

Buurman's always been fascinated by public space, about how cities offer both anonymity and a chance for the individual to develop as part of a shared socio-cultural experience. He's worked in Asia, but thinks high rises are not the real story of global cities: it's what's happening at their feet in the squares and streets that, in his images, inevitably teem with people – the buildings a

backdrop to the sheer humanity. This shot is of a public square in Johannesburg city centre. In light of the current EU migrant issue, Buurman wished to convey that transience is not an isolated case but the norm.

'They're nearly all Zimbabwean refugees having to quit a church in the daytime before they can return to it again to sleep,' he explains. 'They're evading the police but seem drawn to this park's hillocks – maybe they're more comfortable to lie on.' His aim is to show migration not as a problem but a simple fact. 'It looks like a lot people at leisure but look closer – it is not always what it seems.' ●



London Brownstones, Dulwich, London
Architect Knox Bhavan

Words Eleanor Young

Photographs Dennis Gilbert

For the last two decades Knox Bhavan has been crafting the most beautiful homes. The materials growing out of the ground, forms projecting into the landscape, curves appealingly hinting at earlier, more hand made construction. Think of the Lake District at Rigg Beck or Holly Barn in Norfolk, which won the Manser Medal. Even in sought after Dulwich, in south London, this model has worked in the form of brick studded College Road.

Elmwood Road demanded a different, urban, discipline. A missing tooth in the smile of a long terrace of pretty Edwardian houses on the edge of Dulwich, the two-dwelling plot

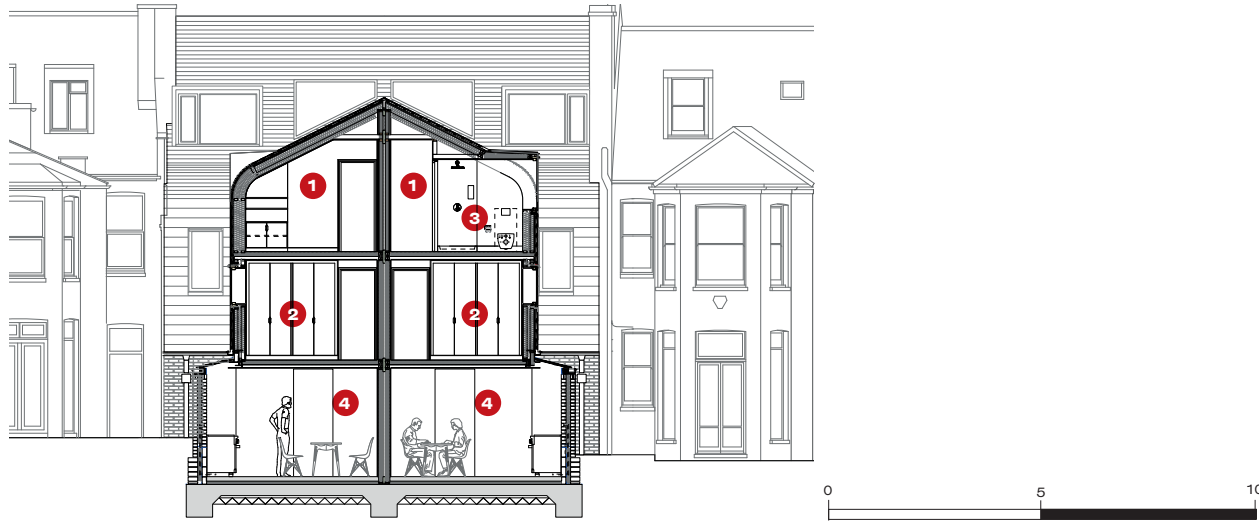
occupied by a 1950s block was asking to be taken on. When young solicitor Greg Falzon saw it for sale he thought of buying one of the maisonettes, but on hearing a developer had made a bid for both with the aim of building two new homes he grew more ambitious and bought both himself. Knox Bhavan added a twist of New York to that, dubbing the project Brownstones. Those elegant vertical slices of urbanity gave it permission not to ape the terrace, as so many do, but to bring it a distinct identity that fits the new way of living behind it with its stretching concrete floors and slipped section.

The building is marked out by its reddish brown armature of terracotta sandstone and subtle curves in the peeping gable-ends of its large scale dormer windows. It contains a pair of houses, facing the street with a double

bayed frontage. A single stone arch over the front doors ties the neighbours together just as it suggests to the casual eye that this is one spreading home. Instead of the painted white of the street's Victorian lintels and sills, these are picked out in white sandstone against the red, the windows frameless. At the centre of the frontage the deeper windows remind you that in Edwardian hands this section would have been recessed back to the main facade. Vents in the bays' narrow edges have far more chance of being opened for use than do the sash windows of the rest of the street. But inside, the pull-up shutters recall the physical sensation of sashes – and offer a great deal more privacy.

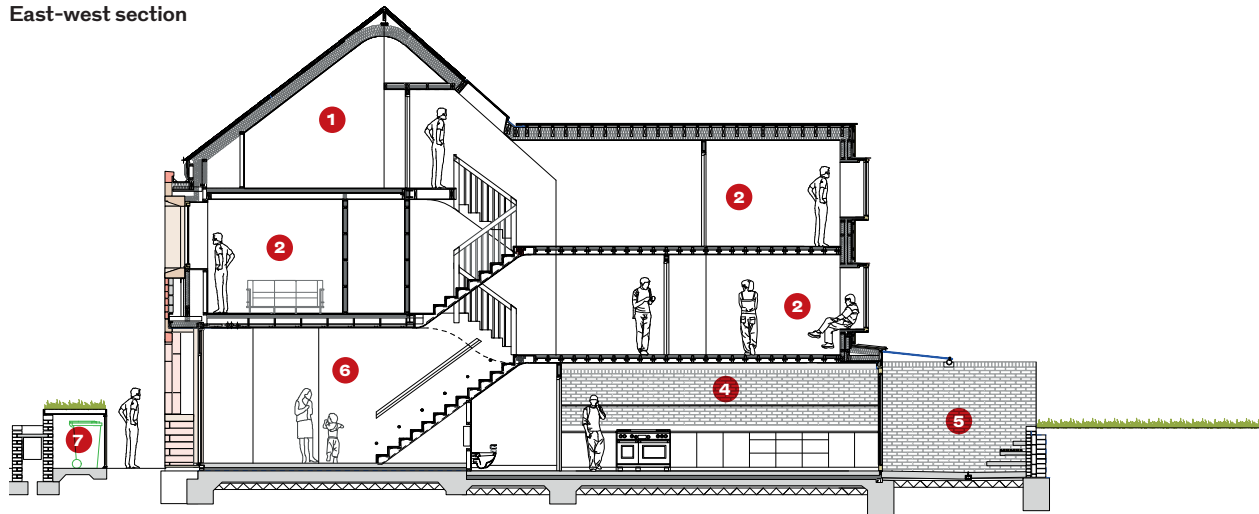
The adapted terrace model continues with staircase arrangement, rising from the hall at the front door where the two plans

South-north section



Opposite Two houses, a single composition.

East-west section



- 1 Master bedroom
- 2 Bedroom
- 3 En suite bathroom
- 4 Kitchen
- 5 Terrace
- 6 Living room
- 7 Bin store

ON THE PLUS SIDE.

Can achieve 0.18 U-value with PIR insulation
in a 100mm cavity without changing the
way you work. **Introducing EUROWALL +**

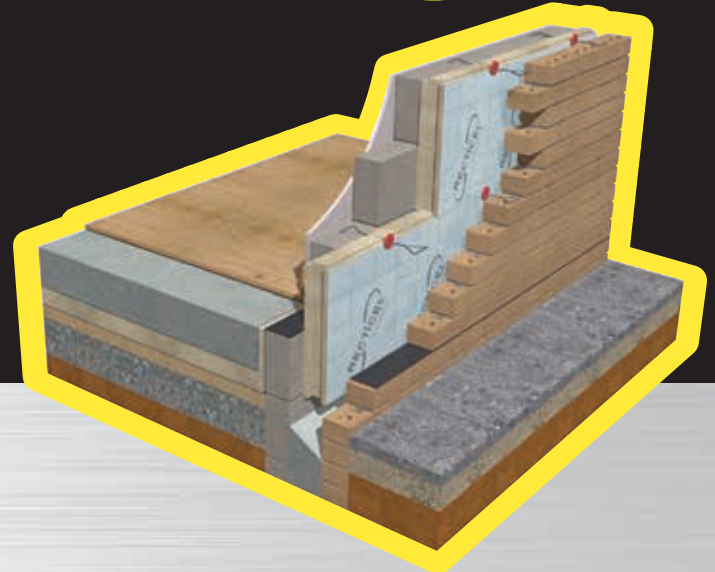
- ▲ Can help to achieve 0.18W/m²K U-value for walls under Part L 2013 England and 2014 Wales
- ▲ Compact design allows space for easier outer leaf brickwork installation
- ▲ Tongue and groove design improves thermal performance, moisture resistance and airtightness
- ▲ New facing technology resists alkali attack
- ▲ Easy-to-use cutting guides for straightforward installation

EUROWALL + It's all positive

EUROWALL[®] +

Find out why **EUROWALL +** should be your
PIRfect choice of cavity wall insulation board.

recticelinsulation.co.uk/eurowallplus
or call 0800 0854079





Left As on the front, the kitchen has layers of openness with a canopy and folding doors for different conditions.

Above A leftover remnant of the angles of the site in the roofline over the stairs.

Credits

Client Greg and Jenny Falzon
Architect Knox Bhavan Architects
Contractor Denis Kostenko Building Services
Structural engineer Price & Myers
Services engineer Paul Bastick Associates
Quantity surveyor Ian Thomson & Company

meet. But here the entry squeeze of those is offset by 3.08m high ceilings and opened up with storey-height double doors into the living room. Rooms at the back sit at half landings, the kitchen dug into the ground, but are nothing like as squeezed as the standard Victorian bathroom that traditionally occupies that position, and include a bay window asking to be inhabited.

The kinked site is evened up by gifting triangular slivers to the neighbours. This is clearest at the back, where bay windows angle their way out of the timber facade and a jagged canopy of zinc gives way to clear lines

of glass. This may have been about buildability – which certainly defeated the first contractor – but the curves, particularly the sensuous grand dormer of the top bedroom, are no doubt equally challenging. Modernism and systems building seem to have excluded curves in many buildings today (bar, of course, the planner-designed corner rotunda). Here, as with Knox Bhavan's more organic projects, those curves mark out the London Brownstones as product of a different sort of thinking in British architecture and a practice that is dedicated to make its details work in special, unshowy ways. ●

IN NUMBERS

200m²
gifa (per house)

confidential
project cost

£2,600
cost per m²

10.05 kgCO₂/m²
annual energy demand and emissions





Above H  l  ne Binet's images capture the colours and textures of Wilton's, forever scuzzy.



Above There's incredible restraint here: invisible mending and discreet additions driven by a tight budget. Nothing is superfluous.

in successive waves from the late 1970s onwards. The Docklands Light Railway, for instance, rumbles close behind it. The former News International across the nearby Highway was built on the site of the London Docks with their ranges of warehouses by Daniel Asher Alexander and John Rennie. But for the odd fragment such as Tobacco Dock, the low range along Pennington Street and some retained walls, the docks were demolished in the 1970s and the land later vested in the London Docklands Development Corporation. But this history explains why Wilton's is where it is: the docks and their East End hinterland supplied the audience for John Wilton's music hall of 1853, rebuilt in 1859. It was rebuilt again, largely unchanged, after a fire in 1877, but by then the East End was sliding into poverty, and in 1881 the theatre closed its doors, becoming a Methodist mission hall

(until 1956) and rag-sorting warehouse.

Inevitably it was slated for demolition in a 1960s development, being saved by protestors including poet-conservationist Sir John Betjeman. In 1970 comedian Spike Milligan got the BBC to film a variety show there and in 1971 it was grade II* listed. Various phases of holding repairs ensued and film-makers started to discover it. Live performance resumed in 1997 with a recitation of *The Waste Land* by Fiona Shaw. Broomhill Opera took up residency from 1999 to 2004, after which the Wilton's Music Hall Trust was set up under Frances Mayhew. Mayhew has driven the development of Wilton's ever since.

In his tender submission of 2006 Ronalds wrote: 'We understand from discussions with Frances that your aim is not to transform the building, not to carry out an academic restoration, nor to equip the hall

as a theatre space – but rather to do what is necessary to make the building safe, sound and useable,' adding prophetically, 'the constraint of economy can also help.'

I join Ronalds in the bar one evening, and we proceed round the theatre. He seems almost at a loss for words at first – how to describe a job that has taken so long, been so very fiddly, is incredibly rewarding but presumably massively unprofitable, and ends up, as intended, looking virtually unchanged? The auditorium with its barley-twist iron columns, for instance, looks exactly as it did. But behind the plasterwork and beneath the floorboards is sound insulation, fire-proofing, a proper heating and ventilation system, plug-in points for lighting rigs, data cables, and new timber and steel structure spliced in to hold everything together. Because it really was falling apart. There were joists, says Ronalds,

Who cares about rooflights?

We do.

As a company founded by an architect we are unique
in our ability to understand your needs.

Ranges of roof windows that enhance your project
inside and out.

Bespoke design service offering any shape or colour.

Speak to our technically-trained team.

Call **01993 833108** or visit **www.therooflightcompany.co.uk**



Quality is everything.

To us, at least. It's what we're known for - putting it above all else to deliver outstanding products customers can rely on. From aesthetically pleasing windows, doors and curtain walls that can add BREEAM credits to your creations, to an unrivalled understanding of the rigours of Passivhaus, Minergie, Achilles and more, we put everything we are into everything we do, with no half-measures. Every product we create has quality at its core, so that it's right first time, every time - or we don't create it at all. In fact, we're so used to delivering quality that it's become second nature.

So, to us...



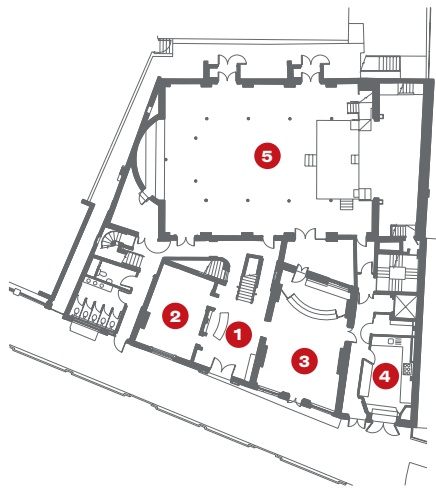
*Quality
is
nothing*

See what our quality means for you at
www.discoverquality.co.uk

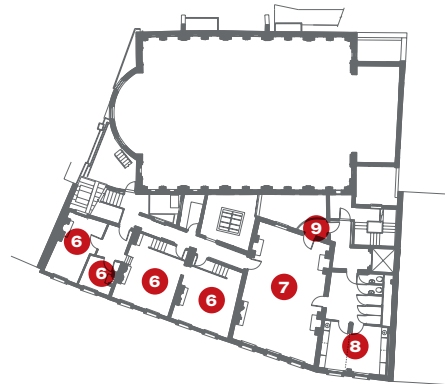


REYNAERS[®]
— at home —

Ground floor plan

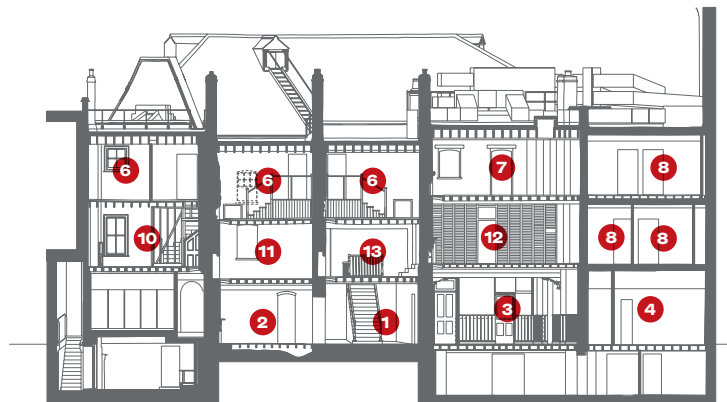


Second floor plan



- 1 Foyer
- 2 John Wilton Room
- 3 Mahogany bar
- 4 Kitchens
- 5 Auditorium
- 6 Offices
- 7 Studio
- 8 Dressing room
- 9 Balcony
- 10 The s Otudy
- 11 Champagne Charlie Room
- 12 Cocktail bar
- 13 Mezzanine
- 14 Gallery

East-West section



North-South section



IN NUMBERS

£3m
total cost

4
years of building work

162
years theatre has occupied site

30
years use as music hall

18
years since revival as theatre

Credits

Client Wilton's Music Hall Trust
Architect Tim Ronalds Architects
 (Tim Ronalds, Adam Goodfellow, Felix Lang, Jade Yianni)
Structural engineer Cambridge Architectural Research
Services engineer Max Fordham
Theatre consultant Carr & Angier
Acoustic consultant Ramboll
Quantity surveyor Bristow Johnson (Phase 2), EC Harris (Phase 1)
Conservation plan John Earl
Access consultant All Clear Designs
Main contractor Fullers Builders (Phase 1), William Anelay (Phase 2)

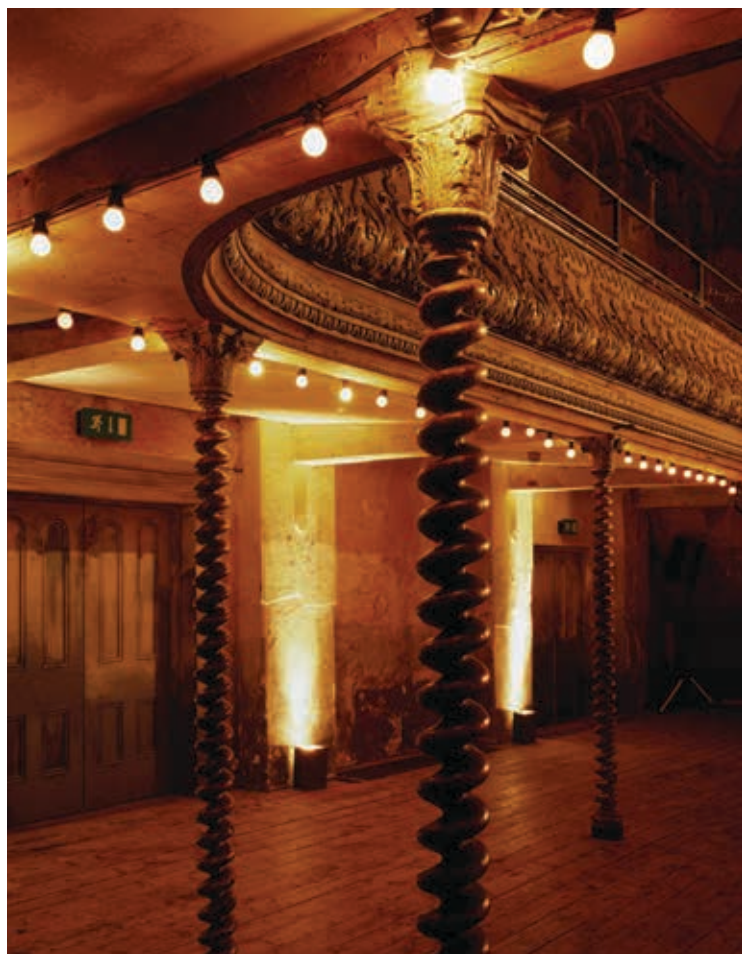
Suppliers

Phase 1

Slate roof, lead work SW Roofing
Steelwork, balustrade Specialist Welding Services
Salvaged floor boards Lassco
Acoustic external doors Clark Door Company
Cast iron floor grilles Cast Iron Air Brick Company
Ironmongery SB Ironmongery Solutions
Air handling unit manufacturer Fläktwoods
Attenuators Caice Design
Radiators Walney

Phase 2

Rooflights Standard Patent Glazing
Sarnafil I-Tech Roofworks
Lime plaster G Cook & Sons
Catering equipment Nelson Catering
Traditional masonry Stone Speights
Stone Dunhouse Quarry
Reclaimed floorboards West 7 Flooring
Light fittings Davey Lighting



Above The auditorium with its coiling iron gallery columns is a very rare survival of the old East End.



Above Theatricality and stage-set expertise inform the seemingly ad-hoc arrangement of interiors.

that structural engineer Philip Cooper described as ‘failing to arrive at the wall’.

Upstairs (and there is a new stone and timber staircase to aid circulation, adding to what is already a distinctly eccentric set of interlocking and just left-over spaces) previously derelict rooms have been brought into use – most notably a rehearsal room and more bar and entertainment space. There’s a workshop in the now damp-proofed basement.

If you ask, where’s the architecture in all this, the answer lies in what is not done, as much as in what is. It’s hard for a builder to know the level of finish, say, when there are no finishes apart from the odd bit of painted new matchboarding. ‘Everything possible was preserved: broken fireplaces, chaotic Georgian brickwork, rotten window frames, fragments of plaster; disused roofs; old railway track built into the works in 1859; pul-

leys and cables, pipes for gas lighting, wooden mountings in the wall, holes deemed charming and abandoned birds’ nests,’ notes Ronalds. Salvaged materials are much used, along with new ones, such as cast-iron floor grilles for air movement in the auditorium, that look entirely appropriate. Patch repairs are done in the correct materials. Nothing is pretending to be what it is not, but the overall feel is preserved wonderfully well.

All this was done in two phases without the theatre ever completely closing. Project architect Adam Goodfellow detailed the work mostly by hand, on a drawing board set up in the building. Two builders – one for the main hall, the other for the adjoining houses which are part of the complex – similarly went native. The ever-present Mayhew, who uses charm and persistence the way other clients use money, carried the whole thing along.

Mayhew joins us at the bar. She’s finalising the relaunch production of *The Sting*, and talking about how important it is not to cram in seats for commercial reasons: the sense of space, surprisingly in this tight little terrace, is one of the key attributes of Wilton’s, the oblique views through from one space to the next forming a sequence of steampunk tableaux. She’s a rare client, one who balances culture and commerce while knowing precisely what must not be lost: the ramshackle decayed Victorian-ness of the whole place.

In a way it’s a shame that Wilton’s is reborn just at a time when ‘shabby chic’ is a universally acknowledged decorator style. But this is not purpose-distressing, it’s the real thing, adroitly managed. Ronalds, by downplaying his visible architecture almost to zero, has proved exactly what a good architect, with an engaged client, can do. ●



Because the world is beautiful.

Create inside-outside living without the compromises with the world's first Integrated Doors. Beautifully designed doors, screens, shades and hardware integrated as one.

For more visit centor.com

centor®



reddot award 2015
winner

Upholding tradition

In a contemporary take on Glasgow's monumental vernacular, Ryder Architects' newbuild office and retail block in the city centre both fits in and stands out

Words: Isabelle Priest Photographs: Neale Smith

IN NUMBERS

18,175m²

Building total area

2000

person office capacity

360°

views

2.8m

clear floor to ceiling height

40

garaged car parking spaces

54

bicycle racks

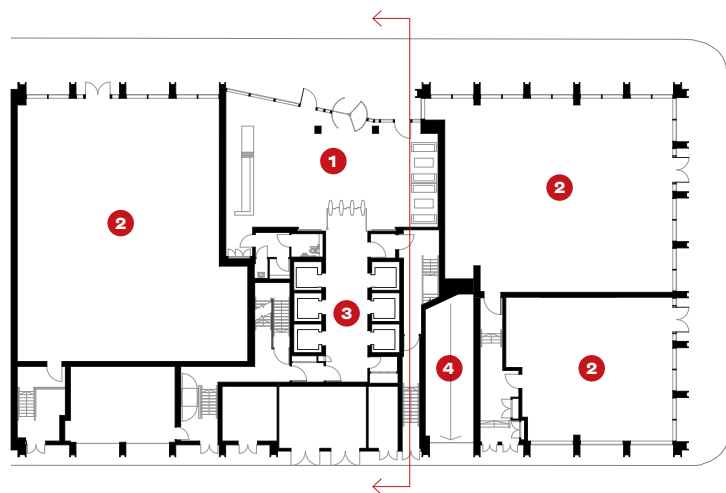
Below The new building is several storeys taller than the average.

Right View of One West Regent Street from West Nile Street.

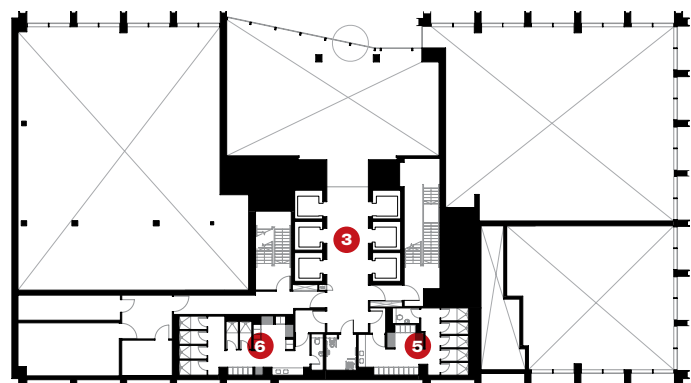




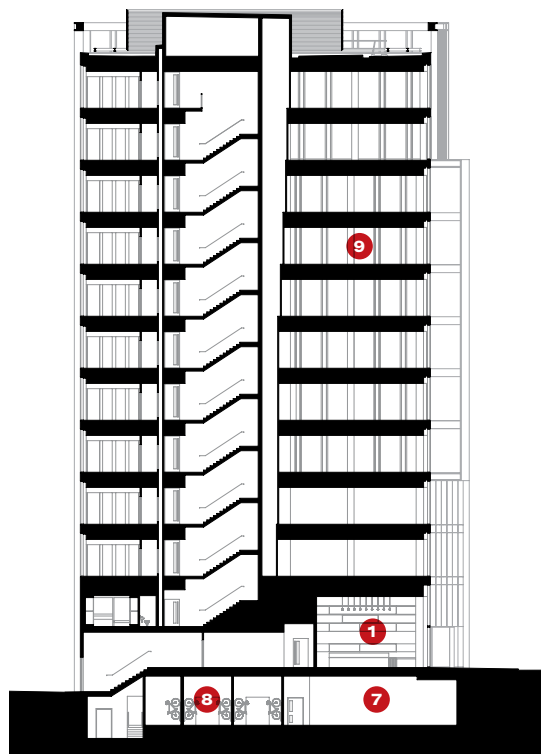
Ground floor plan



Mezzanine floor plan



Section



- 1 Entrance
- 2 Retail units
- 3 Lift lobby
- 4 Ramp to basement car park
- 5 Female changing rooms
- 6 Male changing rooms
- 7 Car park
- 8 Bicycle storage
- 9 Office

There is always a slight sense of remorse at the loss of a building, particularly a 1930s cinema, and especially when you are told that it closed in 2006 because of increased competition from a new Cineworld multiplex up the road. Yet it's worth risking more disappointment to go back and see the site, as in many cases – including Ryder Architecture's One West Regent Street development in Glasgow – the visit can put you at ease.

One West Regent Street is a smart 10-storey speculative office and retail development, lying just off Glasgow's main shopping street. Gordon Murray Architects, which merged with Ryder Architecture in 2011, started working on the project in 2006 when the whole city block was owned by develop-

er Duddingston House Properties. After a lot of urban analysis, visual impact studies and several proposals, including one in Portland stone, the owner decided to split the legal title to retain the architecturally interesting art deco cinema entrance and foyer, and sell the less desirable mammoth red brick back containing the screens.

During the sale, Ryder was approached by one prospective buyer – a joint venture between London companies Mountgrange Real Estate Opportunity Fund (MoREOF) and M&G Real Estate (formerly Prupim) interested in investing outside the capital for the first time. The developer asked the practice to design a speculative application within three weeks to help the firm decide

whether it would buy the land. The result was successful, pushing the limits in terms of capacity. The purchase went ahead and construction started on site in June 2013. But while it completed last June, the neighbouring art deco foyer building remains derelict and continues to deteriorate.

The risk of investing in Glasgow has paid off for the developer as all three of its retail units on the ground floor and most of the 135,000 square feet of offices above are now let, accommodating companies from lawyers and engineers to radio stations and construction contractors. Its success is partly a result of its expansive 29m by 52m open floor plates, which are flexible enough to be divided into two and four units, as well as the shortage of

Trovex Hygipod

The superior *joint-free*
wash station unit for
ultimate hygiene

The preferred choice for **healthcare** projects

Strong post-formed corners
provide an impenetrable edge;
giving bacteria nowhere to hide!

To see a working model email **sales@trovex.com**

The **Trovex Product Compendium**
showcases innovative, hygienic products for
Leisure, Education and **Healthcare**:

Request your **FREE**
copy today!



Leading the way in hygienic innovation

T 01707 254170 E sales@trovex.com

TROVEX®
www.trovex.com



Above Typical office floorplate.

grade A office space in the centre of Glasgow.

From the outside, One West Regent Street is a typical Glaswegian building – large in scale, solid and monumental. Yet at the same time, its architecture, like that of its neighbours, is controlled, acutely detailed and compelling. Ryder architectural director Stacey Phillips explains that the building took many of its architectural ideas from the exterior of the Frank Verity and Samuel Beverley-designed cinema foyer next door, the James Miller-designed building on its opposite corner and RMJM's glass and steel 2009 speculative office over the road. The latter, which was developed at the peak of the financial crisis and suffered some under-occupation in its early years, helped set the height of One West Regent Street, which is several sto-

reys taller than the average Glasgow block.

These close examinations of its surroundings allow the final design to be read in the round, from up close and afar, ensuring that the new building is rooted within its context while being aesthetically contrasting and complimentary. First and foremost the facade has been divided into two vertical sections and stepped back at the top to reduce its scale. Subsequently, it is also divided horizontally on the third floor by continuing the upper line of the cinema foyer around the urban block; a functional transition from retail and shared areas to private leased offices marked out in the spacing of the fins from 4m to 2m. Elsewhere the fins reference those of the art deco building in their regularity and width, yet in their new incarnation with full-height glaz-

ing infill, are more Mies van der Rohe. The bronze anodised cladding also fits comfortably between the blonde sandstone across the street and adjacent white buildings.

Inside, nevertheless, the developer wanted to bring a little of its London background into the design – incorporating a bike store, changing rooms, showers and lockers which are much rarer in this city. The building is entered via a two-storey atrium set slightly back from the street with an upper mezzanine containing the shared changing facilities. In plan the services, toilets, storage cupboards, lifts and two stairwells are set out within the building's single core, which has been centralised to free up the perimeter for 360° views and pushed to the south wall to minimise solar glare and allow for indul-



「SIGNATURE」

Inspiring, UK-manufactured flooring in a choice of uncompromising, endlessly versatile designs.
Unleash your creativity and turn your vision into reality with Amtico Signature.

View the collection at [amtico.com](https://www.amtico.com) or call 0121 514 8240 to find your local Sales Representative.



INSPIRING A VISION

The Finest Range of Sliding Doors, Pivots and Folding.
Sliding Doors available.



Project: Island Pavilion

Architects: Robin Snell Associates

Photography: Dennis Gilbert - View Pictures

Unit T, Aisecome Way, Weston-super-Mare, North Somerset, BS22 8NA
Tel: 01934 429 922 Fax: 01934 416 796
Web: www.finelinealuminium.co.uk
E-mail: enquiries@finelinealuminium.co.uk

FINELINE
ALUMINIUM



Above Upper storeys are stepped back from the street line to reduce massing.



Above The toilets are pushed to the south elevation, giving incredible views at upper levels.

gent views from the upper floor full-height windows in the toilets at the rear. The offices themselves are spacious and light at typically 13,000 square feet per floor. Only two columns interrupt the space as structure is focused within the core and external fins. From the core the floorplates extend between 12m and 14m in three directions.

Materially, the interior palette retains the neutrality of its exterior. Toilets on every floor, as well as all the internal doors, are finished with a walnut veneer that flows tonally with the bronze anodized external fins just visible from inside. Tiling has been kept to only two shades of a grey throughout and black Corian used for surfaces in the toilets. Bespoke staircase balustrades have also been

designed to echo the verticality of the facade in the same bronze anodised coating.

One West Regent Street is a refreshing and appropriate building. Ryder Architecture has taken its role as an urban designer seriously, creating a harmonious but much needed addition to the city on a site which was starting to linger in stagnation. It is a credit to the confidence of Glasgow's planners, who recognised the new directions needed in the city centre, and one that has become a precedent for three more schemes since.

Meanwhile, the old theatre is not forgotten, with Ryder commissioned by its new owner Carrick Properties to come up with a proposal for its development. A rooftop terrace is mooted, so the story promises a happy final act. ●

Credits

Client MoREOF and M&G Real Estate joint venture

Contractor Sir Robert McAlpine

Architect Ryder Architecture

Project manager, CDMC and cost consultant Doig and Smith

Structural and civil engineer Woolgar Hunter

Mechanical and electrical engineer AtelierTen

Fire engineering and Breeam consultant Atelier Ten

From the outside, One West Regent Street is a typical Glaswegian building – large in scale, solid and monumental

The in-betweeners

A triumvirate of architects is turning a failing estate into a centre with a sense of civic pride through grand gestures and sympathetic piecemeal interventions

Words: Jan-Carlos Kucharek

Studio 54 partner Charles Thomson tells me that he thinks the collective name for a group of architects is 'a pride'. I suggest it's 'a murder,' but Jestico + Whiles' director Heinz Richardson nails it with 'an envy'. I happily defer to their knowledge and experience – along with Peter Barber Architects they have been collaborating for the best part of eight years on the Grahame Park masterplan in London's northern suburb of Colindale and, over the course of the project's gestation, have had plenty of time to get to know each

other's strengths and foibles. Completed this July, Barber's development of 70 flats, retail and parking at the southern tip of the estate is, in a way, the figurehead of a £550m, 18-year regeneration by Barnet Council and the Genesis Housing Group of the 1970s former Greater London Council estate and turn it from one blighted with social problems into the de facto centre of the Colindale area, complete with retail, further education college and community facilities.

Genesis' openness to engaging not one





Peter Barber's newly completed housing for private sale is part of the first phase of the Grahame Park redevelopment and forms the eastern side of the new southern gateway square.
Left: The south elevation evidences Barber's picturesque urban form-making.

but three architects on the 500-unit first phase of the Grahame Park estate is to be lauded. The trio won the two-stage RIBA competition with its joint proposal for the first phase 2004 Pollard Thomas Edwards masterplan to kick-start the regeneration process to reverse the estate's run of bad fortune. Only 600m wide but running 1km south to north, Grahame Park's distended form can be attributed to the fact that most of it is built on the site of the World War II Hendon Aerodrome and so followed the line of the airstrip. Grahame Park's blocks are named after the planes that took off and landed here, while its mock Tudor former Officers' Club faces out north over the new public square that the architects created to act as a gateway to the newly incubating estate.

Opened in 1971, Grahame Park was designed according to Radburn principles, an interpretation of Garden City thinking that was developed in the US then sold back wholesale to the UK and Australia. Radburn was chiefly characterised by the reversal of traditional street patterns, with the backs of houses facing the 'service' road and their fronts of facing each other, with pedestrian lanes to access them, separating vehicular and foot traffic. With both isolated from each other and effectively unmonitored, it was not long before anti-social problems started and the design experiment was deemed a failure only a few years after it was instigated. Wandering the estate I'm keen to romanticise the trees that terminate the buckled concrete paving of its lanes and alleyways but Jestico + Whiles' Richardson points out that at one time you were as likely to come across a burned out car as a tree. Confusingly pulled away from the roads, housing was cast adrift in a swathe of grass and looked inwards rather than out, creating an unwelcoming landscape of parking yards and garages.

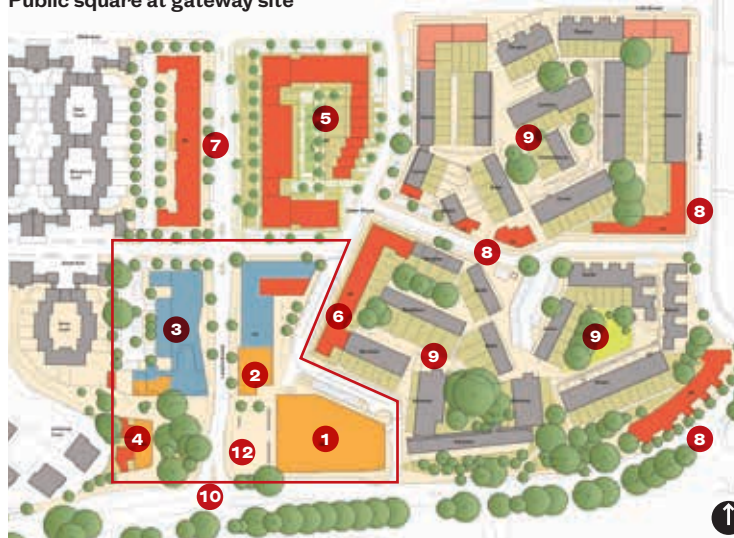
As part of the regeneration strategy, Barnet sought to make sense of an estate that, due to Thatcherite right to buy policy, was one third privately owned. Demolishing 1300 units, it also wanted to increase the suburban density, taking the 1800 home estate up to over 3400 – both social and for market sale. The architects proposed to connect the estate back to the streets that served it by stitching in the housing in a piecemeal fashion, while creating a new suburban centre for Grahame Park.

Peter Barber Architects' new market sale

Grahame Park masterplan area (gateway site shaded)

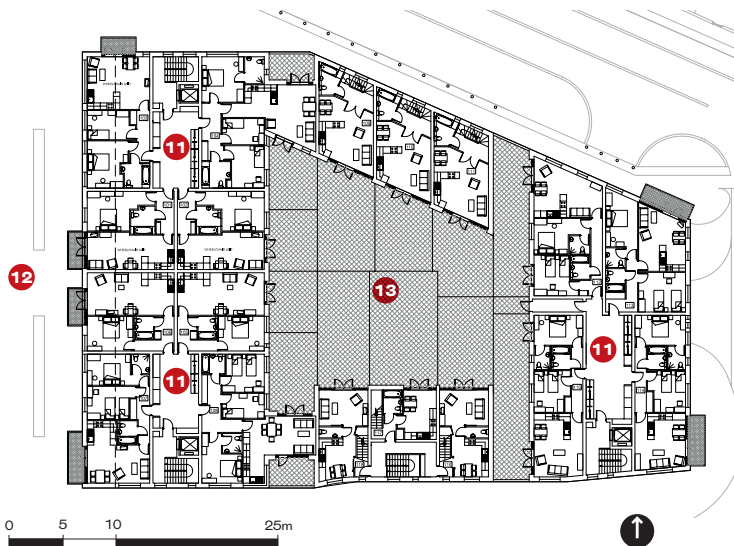


Public square at gateway site



- 1 Peter Barber housing (complete)
- 2 Jestico + Whiles tower to square
- 3 Barnet College HNW Architects
- 4 Retail area Peter Barber Architects
- 5 Low level social housing Jestico and Whiles
- 6 Social housing with gardens Jestico + Whiles
- 7 Housing and community facilities Studio 54
- 8 Infill social housing Studio 54
- 9 Existing Radburn housing blocks
- 10 New south north access route
- 11 Wide lobby to flats
- 12 New public square
- 13 Private gardens with supermarket below

First floor plan



Simple Sleek Stylish Safe Strong **Subtle**

Subtle.

Minimalist designs conceal unsightly riser doors and service cupboards.

Quadra concealed frame doorsets



Concealed frame doorsets

Riser door systems

Pocket sliding door systems

selo[®]

Experience simplicity.

tel 0845 054 6327
www.selo-uk.com

housing block and associated retail marks the start of this new urban centre. It is executed in a pale, sandy brick – counterpointing the dark, stock brick of the existing estate – that is part of a limited palette of materials which the three architects agreed on to maintain the homogeneity of the new stitching work they are carrying out. Barber's intervention is most interesting in the way it moves away from his signature 'modernist kasbah' work of white render and curved walls to work with a more conventional materiality and orthogonal planning. That said, with its elevation of projecting and recessed balconies and seemingly randomised fenestration, the housing still bears the imprint of the architect's earlier work.

A doughnut of housing effectively wrapped around and above a supermarket, the design was never really about the interiors, constrained as they are by space planning guidelines. But Barber says he did manage to convince Genesis, against the odds, to

adopt a different arrangement for every flat in the development. For him, it was always about creating a civic sense to the building, which accounts for the seven storeys to the east side of the square, the staggered, picturesque roofline angling away at the corners, and most obviously, what Barber calls his 'Minoan' smooth concrete columns, morphing from round to oval as they rise to create a semblance of grandeur for the ground level arcade.

This step back at ground level is key as it will be a pinch point when Jestico + Whiles' 13-storey residential tower goes up on the north side of the public square. Formal and material crossovers are evident in these two designs, as they were for Studio 54's community library to its west. This, unfortunately, was victim of central government funding cuts to libraries and is to be replaced by the new campus for Barnet College by HNW Architects; the visualisations for which look less sympathetic to the material ethos of the

The architects proposed to re-associate the estate to the streets that served it by stitching in the housing in a piecemeal fashion

Below: Studio 54's interventions involve stitching the existing Radburn principles housing back to the main roads on the estate.



Below Old and new are expressed through a different materiality.



Nobody likes gaps!

97% of roof windows are installed without a proprietary thermal collar to fill the gap between the window and the roof.

Keylite is the only manufacturer with an integrated thermal collar which expands to fill the gap, at **no extra cost**.



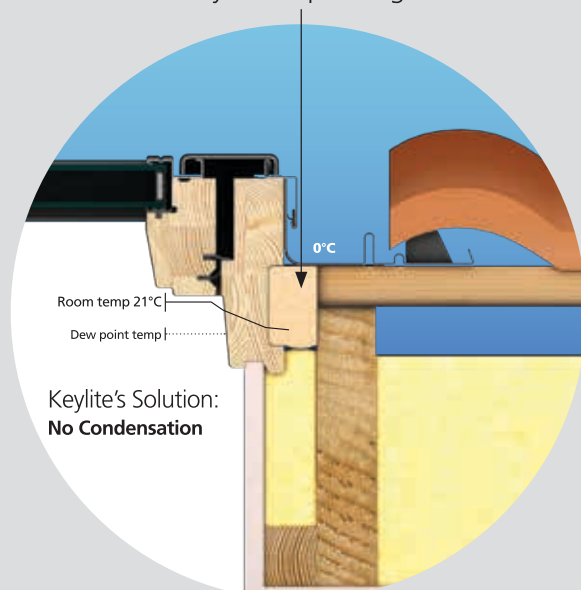
The Gap

fitted without a thermal collar



No Gap

fitted with Keylite's expanding thermal collar



Specify Keylite, the only roof window guaranteed to fill the gap



From balustrades, columns and porticos to pier caps, window surrounds and custom designs – our high specification cast stone designs provide affordable elegance to any project.

Browse our unrivalled collection **online** or **call** to request a catalogue.
haddonstone.com 01604 770711

original design than one might have hoped. Similarly, greater sympathy from Barnet's highways department to the architects' desire to run the paved stone square over the main access road north to create Hans Monderman-like shared space might have resulted in a more imposing urban space, instead of one bisected with a wide strip of black tarmac.

Beyond the formal rigour of the gateway site, things become more relaxed, with Jestico + Whiles and Studio 54 both picking up on Barber's aesthetic language and informing it with their own to achieve some of that all-important reinforcement of the street line with the Radburn blocks connected back to it. The approach is a worthy one – it is as if the old estate is finally being tethered to its site rather than floating around in it. The new social housing interventions are generally low

level but make an event of the corners – their curves here an indulgence on a site of uncompromising orthogonality. Barber points out that the existing homes are nearly 50 years old and have bedded in despite the social ills of the estate – the feathering of new development among the blocks is respectful and restrained. It might be an odd thing to say of a former sink estate, but each seems ennobled by the presence of the other. The grain of the original place is acknowledged and augmented, with routes through the site retained; its memory – a crucial aspect for those who have spent all their lives here – remains intact.

How much this variegated strategy of ad hoc regeneration makes it through to later phases of the development remains to be seen. Richardson and Thomson say the masterplan is still undergoing reappraisal and

modification, brought on as much through recession as planning. The process saw Jestico+ Whiles turn a public space and curved block proposal to the north of the new square into a doughnut form with private central gardens. But Barber's block makes for an encouraging start – an imposing, robust, complex form that strikes a strong civic chord, in marked counterpoint to the massive, generic volume housebuilder offerings to the south of it. And behind Barber, the sensitive pepper-potting of new development into the old is bringing a sense and coherence to those erroneous Radburn principles. This triumvirate of architects seems to be having an effect, safe in the knowledge that, despite three different egos, their agreed common formal language is helping to avoid making an architectural zoo of the new Colindale. ●

Below The new public square uses a shared materials palette while allowing the three architects to develop their own formal aesthetic.

Bottom Jestico and Whiles' first phase housing block uses a slightly harder aesthetic than Barber's.

Below Peter Barber's 'Minoan' columns is a considered detail that allows the block a civic grandeur where it meets the square.





Does it work for everyone?

Enter the RIBA MacEwen Award: Architecture for the Common Good

Hugh Pearman

The new RIBA MacEwen Award is a journalistic investigation. We want to find and publish the best examples in the UK and Ireland of projects with a clear social benefit, right across society.

This is a magazine award – free to enter, open to all – which recognises that an ethical approach is a key part of good design. We want you to nominate schemes: your own, or by others you admire.

Architects and their fellow professionals – especially engineers, landscape architects and town planners – have all the skills to make better places and thus better lives for people. Going beyond the basic brief is an almost instinctive part of what the best professionals in the built environment do. But at a time of great pressure on time and cost, in a system increasingly geared towards private profit more than public benefit, we feel it is time to reclaim some of that idealism.



Designing a better Britain: Hertfordshire County architects plan a primary school landscape in this John Panton photo of 1952.

The MacEwen Award – named after Malcolm and Anni MacEwen, respectively campaigning former RIBA editor and conservation-minded architect-planner in the post-war years – will be given to the project rather than an individual, recognising the collaborative nature of such schemes. An architect must be involved but it is cross-disciplinary, welcoming landscape, planning and engineering projects as well as buildings.

Entries must exist in built form. We are looking for – as examples – the best genuinely social, affordable and mixed-tenure housing schemes, much-needed community facilities, accessible workspace, great healthcare and support buildings, new or refreshed public space, enlightened conversions of previously redundant buildings, schools with wider community uses, projects that reclaim wasteland for temporary or permanent uses, and so on. Eligible projects can be community-led, developer-led, architect-led or any other variation. The key determinant is the palpable civic benefit provided. Surprise us!

The RIBA MacEwen Award enjoys support from key figures in the profession including RIBA president Jane Duncan who has described it as ‘magnificent’. She says: ‘One of the key things we need to be doing is talking more about our impact, our social role – because architects do drive changes in their local communities. Their work, their place-making, makes a difference.’

We want to celebrate the best examples of truly inclusive place-making, demonstrating that architects can indeed make people’s lives better across society. So join in: enter the RIBA MacEwen Award! ●

RULES

All entries must be sent electronically – details below. The projects must be in the UK and Ireland, and have been broadly physically completed within the two years to 1 September 2015. A phase of a longer-term project is eligible. Anyone may enter a project, but an architect must have been involved as part of the design team. The number of awards and commendations given will be at the judges’ discretion, and published in the RIBA Journal.

Information required via downloaded entry form

- Name, location and description of project (300-500 words) explaining the beneficial social impact of the scheme
- Date of completion (phase of larger project allowed)
- Credit list of consultants and clients
- Maximum of six images, to include photos and drawings. To be sent as JPEGs no larger than 6MB each via a file-sharing service – NOT as email attachments
- Entrant’s name, email and postal addresses, phone number and (if any) connection to the scheme.

Deadline for submissions

Monday 2 November 2015
Download the entry form at ribajournal.com

WORKING WITH YOU TO CREATE YOUR VISION

Architectural fabrications - Column casings - Safe surface temperature heating solutions

Scan or visit
contourcasings.co.uk/case-studies/

riba
product
selector



+44 (0) 1952 290 498

contourcasings.co.uk

It's time to *lower*
your expectations

PURe **0.93** ^{W/m²K}
DOOR SYSTEMS

Designed and patent pending in the UK, the PURe door system is the only aluminium door range to utilise structural PUR insulation, achieving **U-values as low as 0.93 W/m²K for our sliding folding door range**, when calculated as a CEN standard.

Offered with double or triple glazing, door options include **single** and **double**, **sliding folding**, **inline slide** and **lift & slide**, all of which are ideal for both new build and refurbishment applications.

Available in an **extensive choice of colours and finishes**, cradle to cradle **recyclable** and integrating with other Senior products including the **PURe window range**, PURe door systems provide the next generation of evolved products, to exceed current and meet future legislation.

Get ahead of the curve at www.seniorarchitectural.co.uk/puredoor



SENIOR ARCHITECTURAL SYSTEMS

Tel: 01709 772 600
E-mail: info@sasmail.co.uk
Innovative window, door and curtain wall systems

Head of better

It's not just the usual features that make Arup Associates' new building for Sky so sustainable – the huge timber frame cuts carbon use dramatically

Words: Stephen Cousins Photographs: Simon Kennedy



Above The north elevation of the BSkyB building at Osterley is as brash as the company – a clear statement of access.

When a building is assigned a catchy Americanised moniker, like Sky's new 'Believe In Better' building in West London, it's hard for us Brits not to grit our teeth and grumble. The likes of MacDonald's and Nike might use aspirational slogans to try to sell us burgers and trainers, but surely not architects and engineers with their buildings?

The good news for the broadcaster is that the 3,850m² new training and office facility, designed by Arup Associates, more than lives up to the positive branding. It is the UK's first multi-storey timber commercial office block, manufactured offsite using a simple kit-of-parts approach that enabled massive savings in embodied carbon. Located on Sky's huge

campus in Osterley, which is home to more than 4,500 employees, the building was delivered in a scant 12 months from concept to ribbon cutting.

The building is a BIM exemplar, while airtight construction and energy efficient servicing, including mixed mode ventilation, air source heat pumps and advanced rainwater harvesting, have helped push it beyond carbon neutral status.

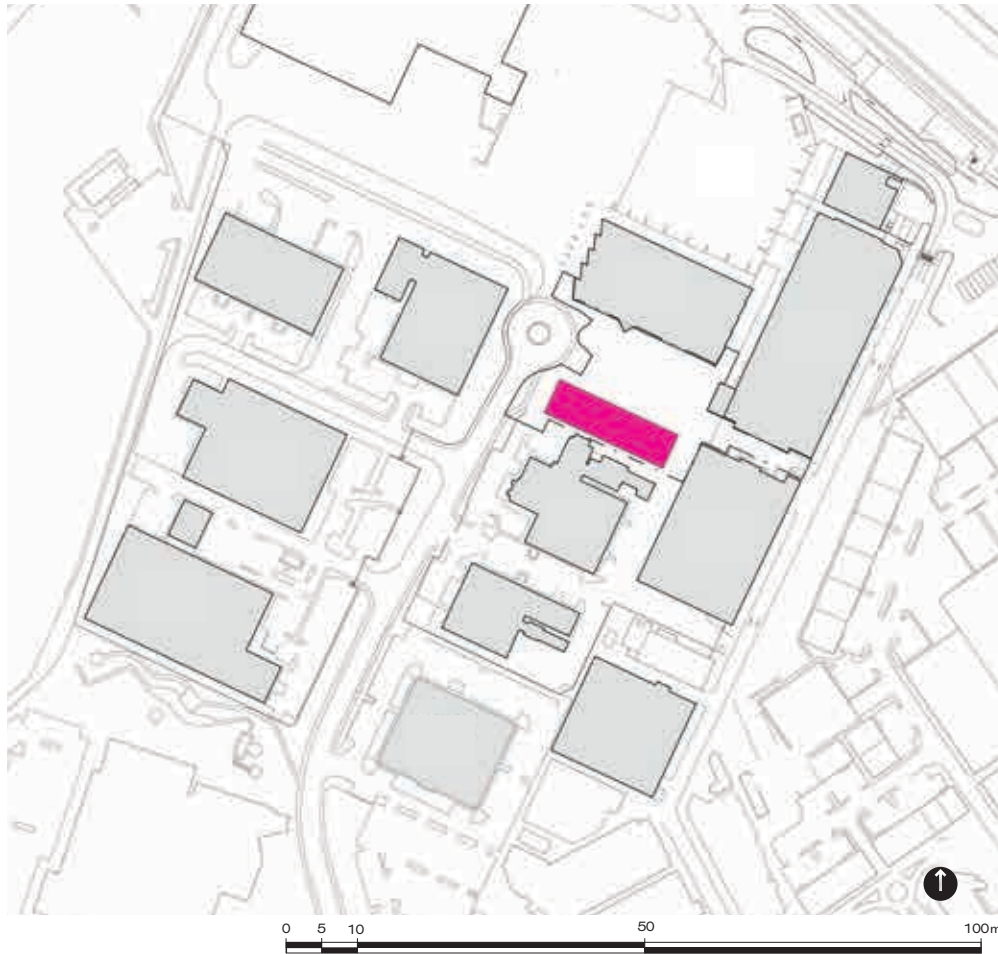
Mike Beaven, director and environmental engineer at Arup, says: 'A key story with this building is its sophistication. It hasn't been dumbed down to meet the rapid construction schedule; it does a lot with very few materials and systems. For exam-

ple, we managed to eliminate all the metal ductwork, fan coils and other services at ceiling-level, while achieving very low energy use and a high fresh air component. It's a low energy building, both operationally and in terms of embodied carbon: a symphony of components that work together in unison.'

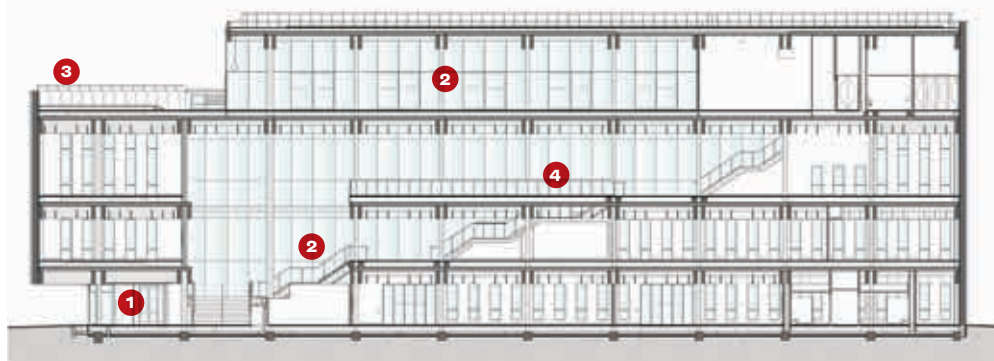
The project began when Jeremy Darroch, CEO of Sky, asked Arup director Declan O'Carroll to design a new flexible temporary building for the site. The architect had designed the energy efficient Harlequin 1 Sky HQ on the campus, with its ambitious naturally-ventilated TV recording studios.

Darroch said he wanted the new building completed within a year, before the corpora-

Site plan and position on BSkyB campus



Cross section



- 1 Entrance reception
- 2 Stair atrium space
- 3 Roofterrace
- 4 Breakout space



tion's 25th anniversary. But just four weeks after starting to develop the brief he changed tack and asked Arup for a permanent building, delivered within the same timeframe.

O'Carroll comments: 'Sky is a very demanding client and can be incredibly challenging, but at the same time it is very supportive of doing innovative things, as long as you provide evidence of why they are worthwhile. The constraints of the programme led us to the pioneering use of an off-site manufactured timber frame and a very early procurement route.'

The Believe In Better building is multi-use and spread across three storeys. On the ground floor are educational facilities for the 50,000-60,000 school children that visit the campus each year as part of the corporation's community outreach programme. The three floors above accommodate training facilities, used by 90% of Sky's internal staff training across all disciplines, plus office and break-out space, and a restaurant.

Rectangular in plan, the building stands on the south side of a new plaza. Thematically, it was conceived as a glass-fronted 'stage set' where staff and visitors, 'the actors', can be seen from the plaza, the 'auditorium', wandering up and down a cascading social stair that stretches across the facade. 'The stair is a unifying gesture, that links the three storeys and makes the building easy to navigate for users, many of whom will never have visited before,' says O'Carroll.

Simple timber

The primary glulam timber frame is fully exposed and set out on a regular 6m by 8m grid, designed to enable super-flexible and adaptable interior uses. Floor plates adjacent to the main atrium provide break-out spaces that can be used as offices, or for training or informal meetings, while cellular technical training and teaching rooms placed along the south-facing rear elevation, can be expanded into double, triple or quadruple-size spaces, using special folding screens.

Glulam beams and columns, simply bolted together, form the timber structure, along with cross laminated timber (CLT) floor planks, and 2.5m wide, two storey high, prefabricated cladding cassettes that plug into the frame. The cassettes were delivered to site complete with preformed window openings, insulation, membranes, and internal plasterboard and, once installed,



Phase change plasterboard – thermal mass without the weight

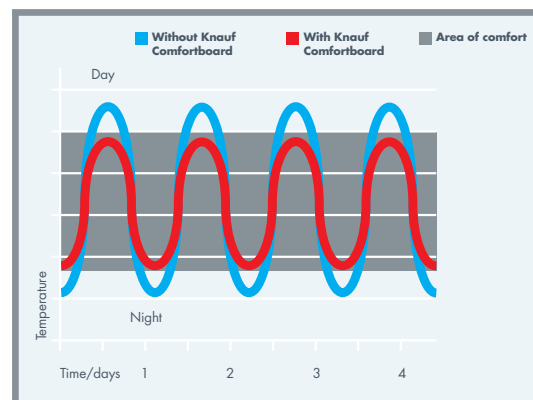
Knauf Comfortboard

Knauf Comfortboard, with built-in phase change material, is a revolutionary new plasterboard which significantly reduces or completely avoids the energy consumption of conventional air conditioning and heating in new and existing buildings.

And because it's plasterboard, Knauf Comfortboard is lightweight and quick and easy to install, giving all the benefits of thermal mass but at a fraction of the weight.

So for long-term energy savings and a more comfortable interior environment, use Knauf Comfortboard.

www.knauf.co.uk



KNAUF

Build for the world we live in



Above The staircase is designed to facilitate orientation for users and it's many visitors. It also creates a dramatic face to the square.

provide Passivhaus-level U-values.

Heavy reliance on timber accelerated the build programme, and eradicated the need for wet trades on site and their associated concrete setting times, reinforcement and formwork installation etc. Timber is also much lighter than precast concrete.

'The idea was that building in very repetitive lorry-sized sections would be fast to deliver and erect,' says Timothy Snelson, associate director and structural engineer at Arup. 'A concentrated CLT core helps stabilise the structure and enabled the open plan layout.'

Thanks to carbon sequestration, the use of glulam and CLT, manufactured by Austrian supplier Binderholz, enabled a rock bottom embodied carbon measurement of $-325\text{kgCO}_2\text{e/m}^2$ for the superstructure. This compares to an estimated $+150$ for composite steel, $+99$ for concrete and -44 for a composite steel frame and CLT structure.

Timber massively helped offset embodied carbon in other building elements, such as the facade, foundations, services and finishes, leading to an overall score well below that of other sustainable buildings, says Snelson: 'A decent sustainable building can deliver under about $350\text{kgCO}_2\text{e/m}^2$, and anything below that is getting into green building territory. We ended up below $-130\text{kgCO}_2\text{e/m}^2$ – a complete step change for the industry.'

Operational savings

Cutting operational emissions was also key to overall energy performance. The building's main picture window facade faces north, to minimise solar gain, and features a series of deep structural aluminium fins to increase solar shading. On the other facades, vertical strip windows with deep internal reveals restrict heat transfer and solar glare.

A mixed-mode ventilation system makes use of fan-assisted air supply plenums in the floor voids and intake louvres in the facades to draw warm buoyant air from perimeter spaces into the atrium and extract it at high level. An adiabatic cooling system sprays water over incoming air to provide energy-efficient cooling without using conventional chillers. At peak temperatures, this can be supplemented by DX coolers when the ventilation system switches from natural to artificial mode with heat recovery, and building occupants are asked to close windows.

'The atrium stair encourages buoyancy, drawing air up towards the returns at roof

TILES | STONE | WOOD



DOMUS WOOD

"When we first discussed the supply of timber flooring for Foyles, our specific finish requirements were not available in their existing product range. Domus worked quickly to develop a finish which precisely met our visual requirements. We also had the benefit of their excellent technical support throughout the duration of the project."

- James Parkin
Lifschutz Davidson Sandilands

Project: Foyles Book Store, London

ENGINEERED TIMBER FLOORING NOW AVAILABLE

DOMUS

domustiles.com

DOMUS WEST_1
23-25 Eastcastle Street
London, W1W 8DF

DOMUS CLERKENWELL
50 Great Sutton Street
London, EC1V 0DF

DOMUS BATTERSEA
60 Queenstown Road
London, SW8 3RY

SURFACE



surfacetiles.com

SURFACE ISLINGTON
316 Essex Road
London, N1 3PB

SURFACE SURREY
Unit 3, Central Avenue
West Molesey, KT8 2QZ
(featuring the Outlet Store)

INSIDE OUTSIDE LIVING.



The frameless insulated sliding doors by swiss manufacturer Sky-Frame blend naturally into their surroundings. So it is hard to say where the living room ends and where the view starts: **SKY-FRAME.CH**

SKY-FRAME

level, and eradicating the need for return ductwork on each floor,' says Beaven. 'At the same time the building scavenges heat from pretty much everything: there's no boiler and air source heat pumps continuously recover energy for heating and cooling.'

Partial user control of natural ventilation formed part of a WELL Building strategy for the facility – an Arup specialism for holistic sustainable design – intended to boost occupants' physical and mental wellbeing by improving access to natural air and daylight, and improving levels of fitness and health.

Ann Marie Aguilar, associate director for wellbeing and sustainability at Arup, comments: 'Sky's corporate values are a major part of the vision behind the project. It emphasised a focus on sustainability, social engagement and creating a space where the employee and the occupant are strong elements in the overall programme.'

Renewable energy is supplied by a PV array on the roof, an on-site wind turbine, and a biomass combined heat and power system will be connected in the near future. Water use will be 63% less than in a conventional commercial office, owing to super-efficient washroom fittings and a pioneering Flow-Stow rainwater recovery system, designed by Arup, that channels unfiltered rainwater directly from a rooftop reservoir into toilet cisterns adapted to store rainwater.

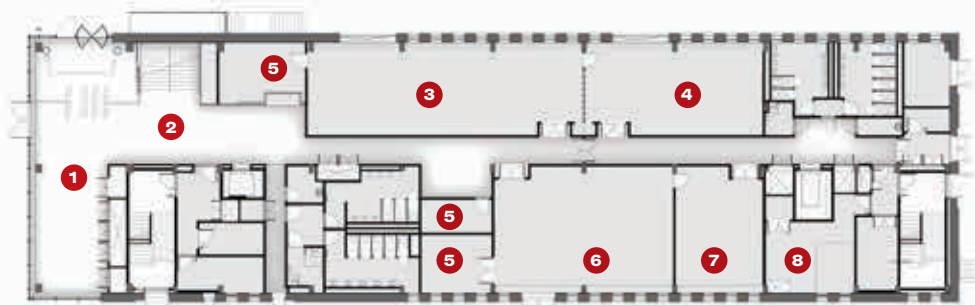
'Toilets on all floors flush using raw rainwater,' says Beaven. 'The system is gravity-based and requires zero energy and zero pumping. If there is no rain for several weeks it can be supplemented with mains water.'

Human architecture

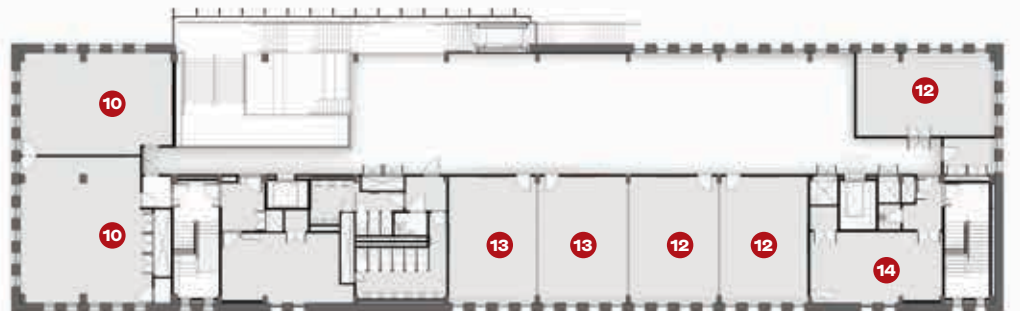
That such a complex integrated environmental system was achieved in a scant three month design period is hard to comprehend. Even so, this technical rigour should not detract from what is a very human piece of architecture, says O'Carroll: 'The aim was to create a series of beautiful, dramatically different volumetric spaces. We built model after model to get the proportions right because we knew that the timber structure was the architecture, it was completely naked and exposed. As a result, the timber almost descales the building, giving it a sense of materiality, you see the warm texture of wood almost everywhere you look.'

It's a positive message even the most cynical Brit can believe in. ●

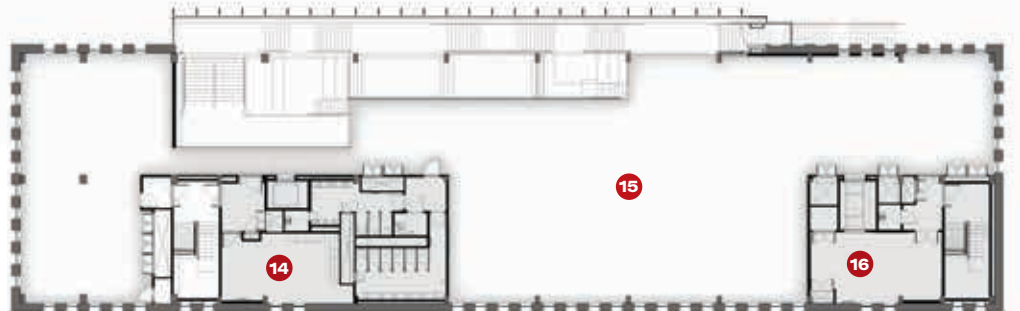
Ground floor plan



First floor plan



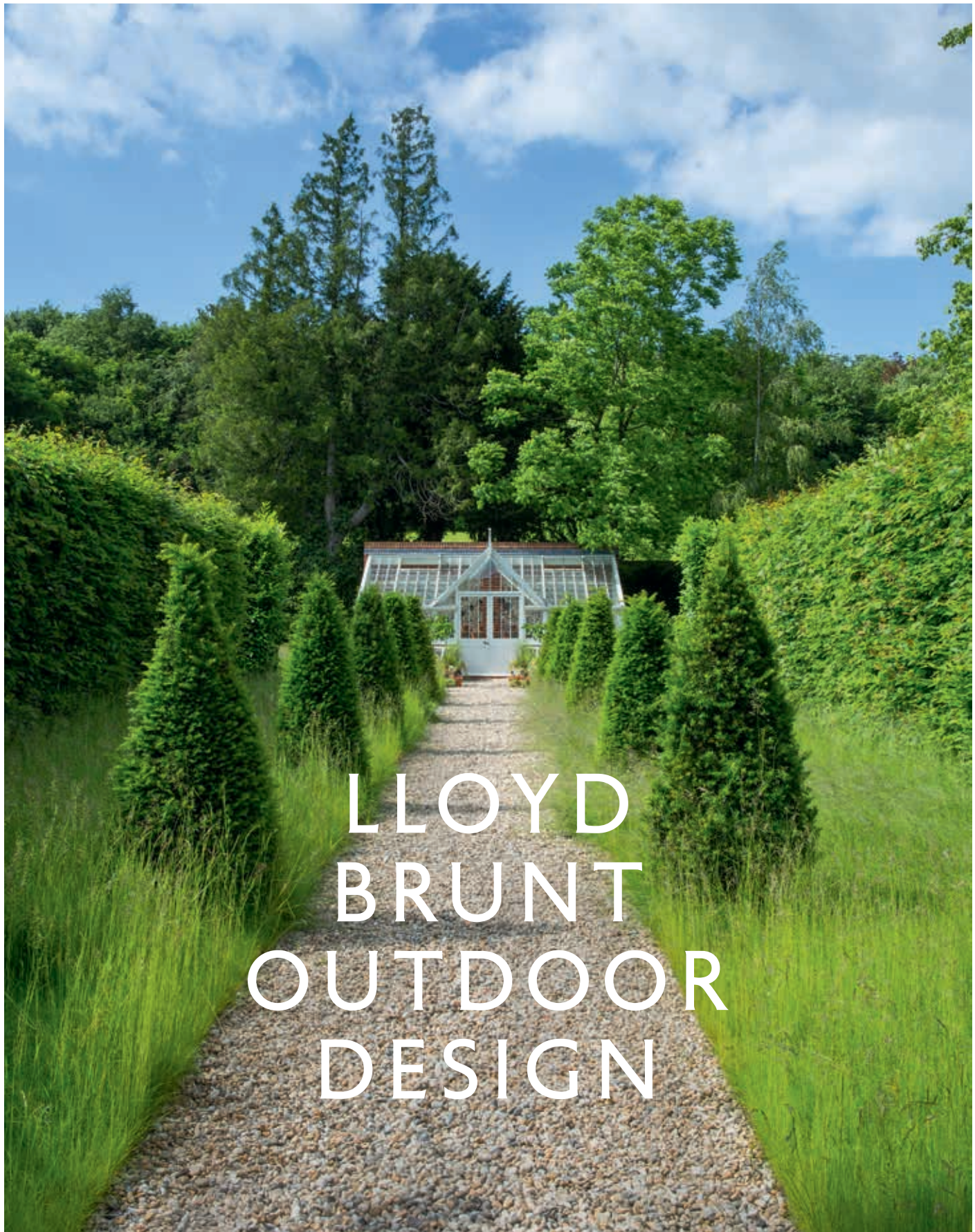
Second floor plan



- | | |
|-------------------------------|----------------------------|
| 1 Lobby | 9 Plant |
| 2 Atrium | 10 Creative thinking room |
| 3 Careers workshop | 11 Fibre data room |
| 4 Careers presentation | 12 Training room |
| 5 Store | 13 Technical training room |
| 6 Sky skills induction | 14 Oasis |
| 7 Sky skills holding | 15 Office |
| 8 Optical data and fibre room | 16 Meeting room |







LLOYD BRUNT OUTDOOR DESIGN

Landscapes working with architecture

FLAT ROOFS THINK **BAUDER**

YOUR FLAT ROOF PROJECTS
DELIVERED, MONITORED, GUARANTEED



GREEN ROOFS
& MAINTENANCE



WATERPROOFING
SYSTEMS



PHOTOVOLTAIC
ENERGY

- PROJECT BRIEF • DESIGN • TECHNICAL CALCULATIONS • SPECIFICATION
- APPROVED CONTRACTORS • SITE MONITORING • SIGN OFF • GUARANTEE

BAUDER
FLAT ROOF SOLUTIONS

0845 271 8800 • [get in touch](#) • [bauder.co.uk](#)

2: Intelligence



External
management

Christian Coop



The London design director of American commercial architect NBBJ is behind two media-spotlight grabbing ideas – the shadowless skyscraper and the Circle Line travelator. Has he any more whacky schemes up his sleeve?

You have offices all over the US but only two overseas – in London and Shanghai. Do you feel like a very American outfit?

So who was responsible for the whacky skyscraper and the Circle Line travelator ideas?

Is there a department there just thinking this stuff up to get press?

What's the bread and butter work like then?

Any more bonkers ideas in the pipeline?

There's about 700 of us in all but although most are in the States we don't feel peripheral. The firm is tech savvy and we're very highly networked with a lot of cross-fertilisation of ideas. We feel we have independence while knowing we can rely on specialist expertise from the US when we need to call on it.

That'll be me, although as a commercial practice we like being ideas led – and that is pushed by the US offices. They work with the likes of Amazon, Samsung and Google which means they do get challenged by their clients. The firm likes to push evidence-based design and has invested in the skills and technologies that allow us to employ it. Both of these ideas came out of the NLA's 'Capital Ideas' initiative which allowed us to stretch our imaginations.

Not at all: we have PR people both here and in the US to increase our profile. It was just a happy accident that this got picked up by the national press and we had loads of online hits. The ideas are a bit out there but they follow our company ethos of using computational design to try and make better buildings generally.

We're trying to develop a new typology at Addenbrooke's hospital in Cambridge called the Forum – it's a joint venture by the hospital trust and developer John Laing. The Forum campus is a new typology – a private hospital, education centre and retail space where the hotel supports the hospital and the education centre. AstraZeneca is basing itself here and the new centre is going to offer the possibility of clinical provision, teaching and conference facilities. It's private money but it's on NHS land – paying for the lease of the site and supporting the clinical teaching provision.

Well, we've been looking at the possibilities inherent in the mass takeup of computer driven cars and think we can meet the housing need for the next 25 years by using the existing street network and land – like car parks – to meet the needs of an increasing population. The OECD has modelled it and thinks the city has a 30% redundancy as a result of transport automation. It's also a fantastic opportunity to future-proof our creaking infrastructure – big ideas with big effects!

ONLY ON RIBAJ

'The most important alignment is with staff'

Business insider
Peter Murray of
Stanton Williams:
ribaj.com/intelligence/peter-murray-stanton-williams

'It is important to keep a momentum going as ... even personnel changes among stakeholders can impact the process'

SPT's David Gardner
on Glasgow Subway's
modernisation:
ribaj.com/intelligence/david-gardner-glasgow-subway



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

Designing &
building itWhere people
live

Different kind of living

Cohousing is getting trendy. But what is it exactly? How does it work? And what's in it for stakeholders and architects?

Isabelle Priest

With only 19 completed projects describing themselves as cohousing in the UK, amounting to around 250 total units, it's a housing model which has received a disproportionately large amount of coverage in British media over the past few years. Like any slightly alternative form of housing at the moment, it's billed as a major potential solution to the housing crisis – meaning the affordability of housing crisis. True enough, according to the UK Cohousing Network, interest has spiralled. There are now an estimated 75 groups actively proceeding or searching for development opportunities across the country, in both rural and urban locations. Yet it is still quite a mystery how cohousing actually works. So what is it? Where has it come from? What examples are there? And how does it work from the perspective of architecture?

What is it?

A cohousing community is an intentional grouping of typically between eight and 40 households, created and run by its residents. Each household has a self-contained, personal and private home – and sometimes garden – but residents come together to manage and maintain their homes as part of a community with fixed boundaries and usually a common house in the centre of the site. The community regularly takes part in activities as a group and shares facilities and belongings. Activities may include meals, gardening and parties, while shared facilities could be central workshops or libraries as part of the common house, and car and bicycle pooling. Of the UK's cohousing communities 17 were

accommodated in existing buildings, sometimes with a new-build element. However, they are increasingly designed and built from scratch on a plot agreed by the group in order to facilitate wider objectives such as environmentally friendly living and safe outdoor communal play spaces for children.

The idea behind cohousing is, as Monica King from the Bridport Cohousing Group explains, 'primarily about having a support and social network of people to live alongside', yet other benefits can include being able to have smaller houses, as infrequently used areas such as guest bedrooms can be designed into the communal house instead, making the private houses more affordable. Many groups are intergenerational but some are welcome for people meeting specific criteria – such as Pollard Thomas Edwards Architects' designs for St Luke's in Muswell Hill and Featherstone Lodge for people entering the third age, and its OWCH scheme in High Barnet for older women. Unlike other similar schemes such as communes, residents do not necessarily have common interests or belief systems, and do not share assets or gain incomes from the community.

Born in Denmark

Although intentional communities have existed in various forms in the UK, cohousing proper is thought to originate from Denmark in the 1960s. A group of 50 families was inspired by the article 'Children should have 100 parents' by Bodil Graae to build a purpose-built cohousing community in Sættedammenn. Since then, governmental, legal and financial support and structures have enabled it to proliferate as a housing type

there and in the Netherlands, with hundreds of communities already established and five percent of people in Denmark now living in cohousing. The US also has more than 130 sites and many others are in development around the world. The UK's first cohousing community was developed in the 1980s by 20 public sector workers at Thundercliffe Grange, an 18th-century mansion in Rotherham. Recent high-profile developments in the UK include Springhill, Stroud, designed by Architype and completed in 2003, LI-LAC in Leeds by White Design, completed in 2013, and Lancaster Cohousing by EcoArc and Copper Lane, London, by Henley Hale-brown Rorrison, both of which were completed in 2014.

Difference is good

'Every cohousing project is different and that is part of the point,' explains Meredith Bowles from Mole Architects, which is working on the Cambridge K1 and Oxford cohousing schemes. In the UK, with the exception of K1, cohousing communities emerge almost exclusively from grassroots organisations and groups of friends. So while the UK Cohousing Network now advises different frameworks, structures expand and formalise over time in many different ways and directions – not even decision-making arrangements are necessarily the same. Bridport Cohousing, for example, has opted for a structure based on Dutch sociocracy which works through consent and looking for objections, while at Cannock Mill in Colchester decision-making is flat lined through consensus. Fundamentally, though, a group of residents buy a plot of land together and see to its financing, design,

'The market has been woken up by K1 in Cambridge. We're getting positive interest from councils, and a number of housebuilders are looking into it too'

construction, management and membership. They may register as companies limited by guarantee, industrial and provident societies or community interest companies.

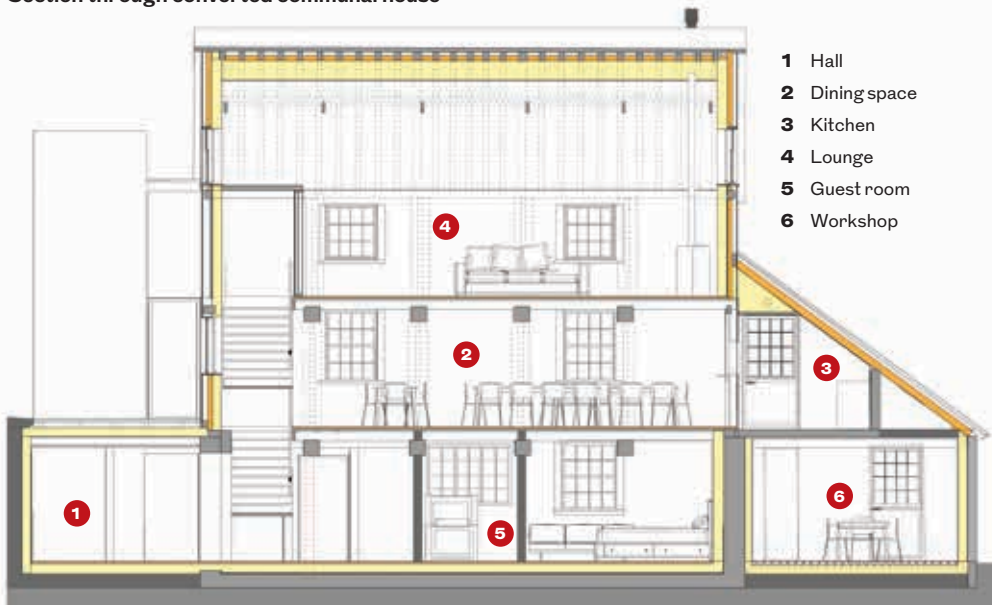
Nevertheless, as a process that relies on goodwill and voluntary time, seeing a cohousing group (which mostly lacks professional experience in construction) through to the end is a long process, with groups like Enlinca in Cambridge still yet to put down roots since being founded in 2000. The average process takes five to 12 years from start to finish. As a result the UK Cohousing Network is also encouraging councils, housebuilders and housing associations to start schemes of their own. 'It's a market which has been woken up by K1 in Cambridge,' explains Jo Gooding from the UK Cohousing Network. 'We are getting positive interest from councils including Sheffield, Newcastle and Plymouth, and a number of housebuilders are looking into it as a possibility too.'

Client and designer

Cohousing groups usually choose their architect jointly. Most have been commissioned for their locality, such as Barefoot Architecture for Bridport, or by personal connections, rather than by competition or tender. However, some architects including PTEa and White Design are becoming known for their experience in the sector. More unusually, Anne Thorne from Anne Thorne Architects was one of the original members of the group at Cannock Mill Cohousing in Colchester, and is drawing up the scheme.

With such a multi-headed client, which like Bridport may also include a housing association, designing a scheme that meets the

Section through converted communal house



CANNOCK MILL COHOUSING, COLCHESTER

Cannock Mill Cohousing is a 23-home scheme planned on the site of a mill outside Colchester in Essex for people over 55. It was started by a walking group unexcited by the prospects of housing for older people while they were caring for ageing parents.

'Finding a site and buying it was a lengthy business,' explains architect and member Anne Thorne. 'We were looking for a site within 90 miles of London. We asked local authorities and agents, but eventually

found it through Rightmove.'

All the homes will be owner-occupied on 999-year leases on land owned by the cohousing group. The group obtained a loan through the Community Build fund which will be paid back when residents move in. Dwellings are designed to lifetime home standards and laid out in a beautiful landscape around the mill, which will become the communal house with kitchen, dining space, two guest bedrooms and library.

Below Visualisation of the former mill site. Special emphasis is placed on green space with cars pushed to the boundaries.



needs of its residents is one of the most challenging aspects of cohousing. Yet for many groups this is also the most exciting part and the most established. Frequently the group has already drawn up an agreed wish-list before the architect gets involved. At Bridport, this was divided into luxury (eg freshwater swimming pool), desirable and essential (eg natural light). Architects then establish the design further through a collaborative process; organising a series of up to six workshops and then working with families to customise specific needs or fittings within each home as necessary after a house preference allocation ballot.

'The variety of plans is kept to a minimum to keep costs down,' explains Thorne. 'It has been an interesting journey, encouraging people to understand the risks and take them.' At LILAC, cohousing resident Paul Chatterton explains that 'every workshop with White Design was followed by a group debrief'. Meanwhile, at K1, design was decided not as a group but through meetings with selected committee members representing a particular workstream – for example, landscape, houses and communal house.

Nothing's perfect

From all perspectives the underlying problem with cohousing is that it takes so long. 'It's like living on tectonic plates,' explains Bridport's King. Over time, members pull out, frustrated by the process or need to move on with their lives. What is particularly noticeable is the fact that it soaks up so much free time, leaving it an impossible impracticability for those who are time poor and perhaps also for those who would benefit the most – such as young families. Quite often it is led by retirees like King, who spends about four days a week on the project, financed by her pension. The repercussions and risk for architects and other construction professionals is cash flow, being paid in chunks for work or waiting until completion.

Gooding believes that many of these issues could be resolved with greater government participation – helping groups find land, or opening up financial resources and professional intermediaries. She feels existing efforts such as Right to Build, Self-build and Custom Housebuilding Act as well as the Community Rights and Localism Acts have been too bureaucratic, transient and meaningless without local level resourcing. ●

BRIDPORT COHOUSING, WEST DORSET

Bridport Cohousing in West Dorset is a 34-unit scheme in an area of Outstanding Natural Beauty. At least 40 percent of the homes will be offered as shared ownership or affordable rents by a housing association, which is also funding most of the build. The cohousing group has a purchase option on 1.8ha as a community land trust at an agreed price if planning permission is obtained. Barefoot Architecture was commissioned after one of the members went to a house designed by director Sam Goss for his father as part of

an eco home open day. The design follows the contours of the land, with all buildings focused on the lower 0.8ha to protect views. The homes face south and are set in a cleverly managed watery landscape of swales and an amphitheatre that doubles as a sink in heavy rain. Residents put down a two per cent deposit and if they pull out the money is returned to them once a new member joins. Owner-occupier homes will sell at 80 percent of market price, with the remaining 20 percent retained by Bridport Cohousing to ensure homes are not sold on the open market and remain affordable.



Left Arranged in the lower 0.8ha, the scheme is densely organised around water management.

Right Plot-based dwelling types are of uniform height with a further storey in a pitched or gabled attic where required.



K1 COHOUSING, CAMBRIDGE

K1 Cohousing in Cambridge is a circa 40-unit, mixed tenure cohousing project designed to be near Passivhaus standards. It is the most unusual scheme under development in the UK. It was an initiative led by Cambridge City Council in 2010 for a plot of land in the north of the city after plans by a commercial housebuilder for it fell through. Cambridge City Council recruited professional advisers and consultants to help

put together a client brief, held workshops and finally put its development out to tender. The tender was won by TownHus, a British-Swedish collaboration, which is now finalising and building the scheme.

Meredith Bowles from Mole Architects explains: 'The group and council have employed professionals throughout the process. The loss of control is countered by the fact that the project will actually happen. But it has added a premium that works out about an extra £3,000 per home.'

THE ART OF HEATING



BESPOKE.
CLASSIC.
ELITE.

The Ornate, Hammered Gold

For Stockists Contact:

T: 0808 129 2224 | E: sales@carron.uk.net | W: www.carron.uk.net



External
managementInternal
management

Offering a lead

Things change fast nowadays. What lies ahead for the profession?

Eleanor Young

The office is getting up to speed on Revit, you have experimented with 3D printing models and you have a phone full of apps. But in this digital world the most invisible innovation can suddenly surface and change a professional landscape. What will it be next? As the young leaders of architecture gather at the Whitworth in Manchester for the Design Leadership Summit on Disruptive Innovation, we asked some of the speakers to scan the horizon. Here they outline their ideas, pinpoint the innovations of the future and tell us how architects will have to adapt to make those innovations work for them, construction and their clients. •

MIND THE INNOVATION

MARKO BALABANOVIC,
INNOVATION DIRECTOR, DIGITAL CATAPULT

Disruptive innovation is your bread and butter. But what is it?

It is not what everyone thinks. This is innovation that sneaks up on you – and more particularly on a marketplace of established, successful businesses. Along comes something small. They dismiss it. But then it grows and turns their world upside down. In the hotel industry it was the idea of sleeping on someone's couch – big hotel chains see it won't make money and would be complicated to deliver but it grows into Airbnb.

What's on the horizon?

At Digital Catapult we have a mission to help the UK economy by assisting start ups and academic research and development to scale up. What is changing fast is the way we manage cities. That tends to be about infrastructure, for example devices on each litter bin being connected to a network so the bin lorry can more efficiently stop and empty full bins only. But it is most exciting from the ground up.

Where is it happening now?

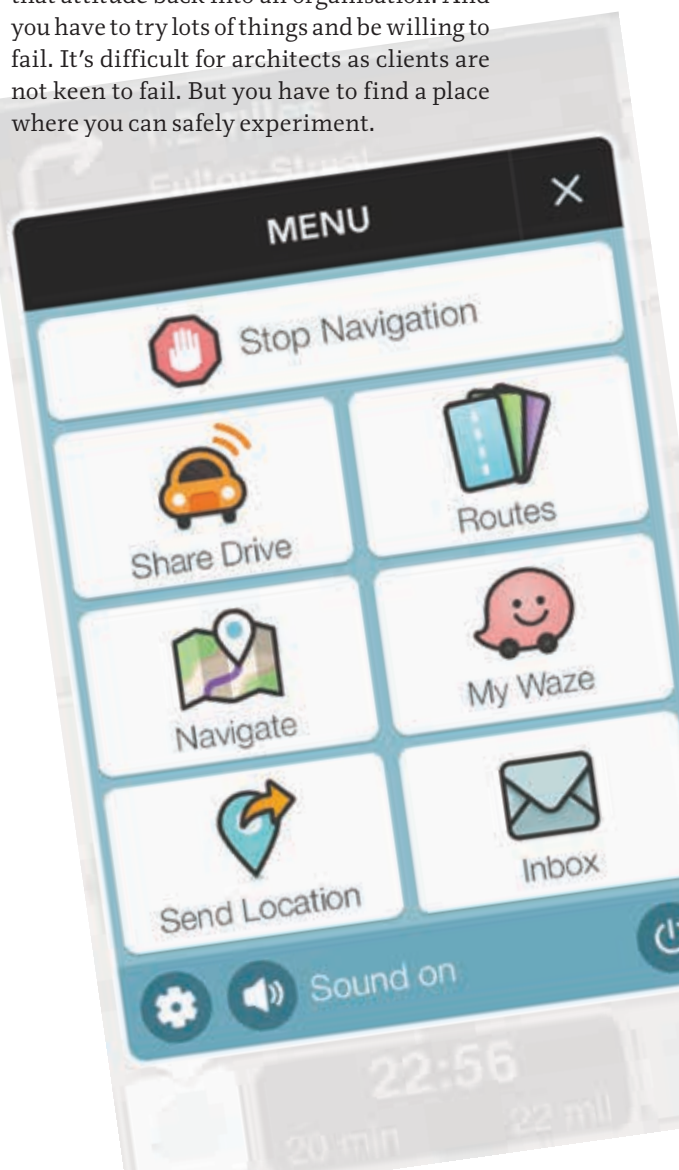
Waze is a traffic app based on users' journey data and user reports, now owned by Google. If an area clogs up it can reroute users. It has partnered with the city of Rio for traffic management now and through the Olympics. Of course, the very detailed information about citizens that is essentially owned by big US corporations raises lots of questions. But it could also be used for so many things.

How must architects adapt?

By using feedback intensively. Apps and games developers tap into detailed feedback data. They adjust things in real time – you can see that in the level of expertise in a game you are offered. The rule is to use feedback and 'don't listen to the HiPPO' (that is the highest paid person's opinion). One interesting direction to explore is how people use

spaces. There are rich sources of data which could inform designs and tell architects if things are working as planned.

It's not easy to come up with innovations: big companies tend to buy them up or set up internal innovations groups such as the one I ran at lastminute.com. But it is hard to infect that attitude back into an organisation. And you have to try lots of things and be willing to fail. It's difficult for architects as clients are not keen to fail. But you have to find a place where you can safely experiment.



You have to find a place
where you can safely
experiment

DATA DANCING TO DESIGN'S TUNE

WOLF MANGELSDORF,
PARTNER, BURO HAPPOLD

Form follows data. Pithy title but is it true?

What I want to explore is how engineering parameters play a role in finding form in architecture. And not just in structures. There are also environmental and people-focused parameters and we have been exploring this with various architects. Form follows data but data is just another way of say parameters; in fact we still need strong designers – architects and engineers – to edit the parameters and make sense of them.

What's on the horizon?

There is parametric design. Engineers have always designed to parameters, such as structural performance, heating and cooling and compound ones, like wellbeing, that encompass more: light, air, glare, temperature, views out, wayfinding... It is not about optimisation for individual parameters but about compromise. I like that word. And it is never

just pushing a button to set the algorithms going. Design is a creative process.

Where is it happening now?

On the competition for Beijing Airport with Zaha Hadid Architects and ADPI we used a whole range of building engineering parameters, from how we can move aircraft around to how we use light to guide people to their aircraft stands as well as all the structural parameters.

How must architects adapt?

It is often said that takes an architect three seconds to draw a line, and an engineer a day, or two, to check it. Unfortunately structure and climate data are often just used for verification. That's the wrong way round. Data and information should be used in a creative process, not just for checking.

Data and information should be used in a creative process, not just for checking

Beijing Airport drawn up with a multitude of parameters and algorithms, and some strong design.



PRECISION, VALUE AND TRUST

NEIL THOMPSON,
HEAD OF DIGITAL RESEARCH AND INNOVATION,
BALFOUR BEATTY**You want us to build in real time. Surely we already do that?**

As an environmental engineer at BDP I was at the end of the drawing process and that is even before the contractor gets involved. Now with BIM we fill out a spreadsheet that goes into a digital suitcase and is passed on. What we need to be doing is contributing to a central repository of information that is granular and real time so everyone can use it.

What's on the horizon?

The summit's future leaders will see increasing mechanisation in their lifetimes. We have automated vehicles and drones but they're small scale. What about when you can build a school with robots? We have to make infor-

mation transfer more precise to allow that.

It has been impossible to capture that early process of decision making – the assumptions that a room was designed around – which could easily be ignored in a contractor's change of design that might then require a new environmental system, all resulting in a greater energy gap. But the abundance of computing power now puts it within reach.

We also need a shift from the pseudo-digital world of replicating paper processes to making fuller use of digital capabilities. And we have to understand the value of the information we, in construction, generate for others.

How must architects adapt?

By trusting. When internet banking was first around you would still check that your transfer had taken place. Now we don't think twice about using our phone or contactless to pay. We are at that mid stage of not quite trusting the digital process in construction at the moment, like pressing send and calling

Being able to see what is happening in buildings is about thinking what data is available to us, and using it

up to check. But we need designers who will participate in the digital workflow.

Being able to see what is happening in buildings is about thinking what data is available to us, and using it. We no longer need an intern standing around for two weeks with a clipboard. There is public sector information available under Open Government Licence and from EE you can access phone user information – they track the activity of users. Add that to climate change and find out how movement changes on a rainy day or use it alongside your BMS data.

TURN DATA INTO KNOWLEDGE

GEORGE MOKHTAR,
ASSOCIATE DIRECTOR, TURNER AND TOWNSEND**You are talking about future proofing our data. What does that mean?**

As technology develops, and our industry with it, there is a much greater demand for data that can stand the test of time. We should be thinking about what happens to data beyond our own appointments. Data is brutal and objective, if we are to make this industry transition a success we must adopt standards, test our information and start thinking about how we will work together.

What's on the horizon?

Data has to be organised into information which should in turn be converted into knowledge. Over time, having real objective knowledge about how an asset is used and to what level of success, can give clients real insight. Not only can this support processes like whole lifecycle costing, but analysis across a portfolio of buildings can help clients make better informed decisions on capital investment plans to create efficiencies and develop the right brief.

More exciting still is how we access and interact with data; this is changing. We see

more and more accessible and cost effective solutions for ubiquitous systems, not just from your desktop and mobile but wearable devices too. I look forward to passively interacting with the built environment through technology on a building, or even city, scale.

Where is it happening now?

There are many emerging examples of great BIM projects. I find a common characteristic is shared knowledge, clients just want to be assured that they have asked the right questions and are getting the right answers. Our response to drive this is our DaTTum BIM

process, setting the standards, managing them collaboratively and making sure we are on track to provide the team and the client with confidence in BIM. Because we have structured data, we can feed this back to the team as an interactive dashboard in a way that allows us to understand the impact of change, the quality of the model, or even the compliance against project design standards. You can see your data as it grows and really start using it proactively, making better informed decisions on the fly, which is better for everyone.

What must architects do to adapt?

All these possibilities are underpinned by people and culture. Historically designers and contractors produce asset or design information to meet our own deadlines and achieve our own deliverables. Now we should be working to gain efficiencies through producing information others can link into and interface with better. This all comes back to the basics of thinking ahead, understanding each other's processes and being transparent and collaborative to get better and faster.

Now BIM tools are commonplace, the last major barriers are the adoption of standards, the perception of data longevity and the fundamental change in process and interaction that comes with disruptive innovation. ●



Passivhaus by Kingspan






The new Kingspan Passivhaus has been designed by HTA Design LLP in collaboration with Potton.

The idea behind the design of the housetype was to defy the stereotype that Passivhaus will not work with generous openings and a form that deviates from the typical boxy design with small windows.

Visit **www.kingspaninsulation.co.uk/passivhaus**



Further information on the Kingspan range is available on:

-  **+44 (0) 1544 387 384**
-  **literature@kingspaninsulation.co.uk**
-  **www.kingspaninsulation.co.uk**

Pembridge, Leominster, Herefordshire HR6 9LA, UK

® Kingspan and the Lion Device are Registered Trademarks of the Kingspan Group plc in the UK and other countries. All rights reserved.

Stylish. Durable. Unique.

Authentic visuals with a unique identity and a natural feel, Eternal's high tech PVC wear layer and PUR Pearl finish are key to the collection's ability to keep its as-new appearance, even after years of intensive use.

Transform your space with Eternal design vinyl sheet
www.forbo-flooring.co.uk/transform14



FLOORING SYSTEMS

creating better environments



Find us on



Eternal®

44922 natural geode &
43002 fog sparkle



Context



Designing &
building It

Adapt and survive

With clients using adaptation to help heritage buildings pay their way, architects are coming into their own, as a recent RIBA round table found out

Matt Thompson

The UK's built heritage bears witness to our political, artistic, industrial and scientific history. In that sense, it is culturally and socially valuable. But it is also big business. In 2013, companies based in listed buildings contributed £47 billion to GDP and produced a 'heritage premium' of over £13,000 per occupying business per year compared to the average. Meanwhile, the heritage-based tourism economy added £14 billion to GDP in 2013. As the designers who help to keep these buildings alive, architects are clearly an important part of this success. The latest RIBA for Clients round table meeting asked heritage clients what they look for.

Work on heritage buildings tends to fall into two blurred but useful categories: conservation and repair, and adaptation. Conservation is mostly about preserving the historic built fabric, and is typically constrained by limited funding. But adaptation attracts investment because it allows sensitive redesign and changes of use with modern materials and styles to breathe new life into the building.

According to the round table panellists, sympathetic adaptation is gaining traction, even in the most traditional circles. Look no further than 2014's Stirling Prize winner – Astley Castle. It brilliantly rejuvenated a ruin, giving it a new use and a sustainable future for the Landmark Trust.

At the grander end of the sector, many clients think of themselves as mere custodians, with the buildings as the real client. In stark contrast to other sectors, the needs of the building outweigh those of occupiers, owners or financial stakeholders. John Sell, chairman of the Joint Committee of National Amenity Societies, said, 'Value comes from giving the building what it needs, not what that particular owner at this moment needs.' The happy upshot of this is that suitably competent architects are greatly valued.

At the more humdrum end, however, it's a different story. According to Judith Cligman, director of strategy and business development at the Heritage Lottery Fund, private owners of, for example, the many thousands of modest 19th century grade II listed terraced houses fear that architects might be 'expensive and inaccessible'. However, Alastair Dick-Cleland, conservation manager at the Landmark Trust, said that thanks to TV shows about sympathetic adaptation 'people are beginning to see that there are serious risks in not using an architect.'

Move to adaptation

Not surprisingly, the discussion focused heavily on technical skills. Conservation and, less exclusively, sympathetic adaptation, require a rare understanding of fabric, crafts, culture, history and context. However, clients are increasingly turning away from pure conservation to adaptation to ensure their buildings' economic sustainability. In this paradigm, deep conservation knowledge can be traded off against creative invention, architects' stock-in-trade. But there's a balance to be struck. As Cligman said, 'An architect who isn't particularly a conservation architect can do that job – if they're sensitive.'

The RIBA's conservation register and the Architects Accredited in Building Conserva-

tion scheme provide quality assurance that clients look for but it seems they are not yet widely depended on. Dick-Cleland again: 'I wouldn't say we rely on accreditation, but we do want the technology and knowledge that it demonstrates.'

Dale Sinclair, director of technical practice at Aecom, predicted that digital innovation will bring profound changes in the next five years. Hugh Feilden of Feilden & Mawson Architects thought BIM in particular brings significant opportunities: 'Somebody has to own the model and its design and management, and it tends to be the architect.'

While new technology has its place, clients recognised the value of old-fashioned draughtsmanship. Janet Gough, church care director, Church Buildings Division of the Archbishops' Council, loves it as a way to share ideas, and says: 'I want you to sketch by hand on these really exciting projects.'

Indeed, drumming up excitement through knowledgeable, passionate leadership is critical. Dick-Cleland wants architects to 'really fight on our behalf to get the right result for the building'. This is important. Clients face difficult decisions and, according to Gough, they need 'thoughtful,



'People are beginning to see that there are serious risks in not using an architect'

Alastair Dick-Cleland, Landmark Trust



'An architect who isn't particularly a conservation architect can do the job – if they're sensitive'

Judy Cligman, Heritage Lottery Fund

engaged and exciting architectural input. You need to teach us how to be good clients.'

It seems, though, that some architects fall short of the mark. Sell said, 'I don't think all architects are good at explaining the significance of the building in a way clients understand and get enthused about.' He identified a misplaced fear of losing the client as inhibiting 'productive dialogue'. Jonathan Carey, Insall Architects, sees the same timidity in some clients, however: 'They don't understand that criticism can be constructive.'

Teams work best

Either way, how architects engage with not just their clients but other project team members really matters. Christine Sillis, director of estates at the Girls' Day School Trust, said, 'Architects are used to leading but actually we need better team players.' For Sell, this is not just about hitting deadlines and budgets. 'Good conservation projects are ones where everybody – the contractor, the design team and the client – share the same values. That's the perfect collaboration.'

Stakeholder consultation is critical for long-term success. Cligman said: 'We need architects who can have that dialogue, think creatively and understand the building and the needs of people'. Opinions differed about

how well architects achieve that aim. While Crossrail's David Keeley thinks that by and large they succeed, Sillis feels architects can 'go native' and start treating stakeholders as the client – a huge frustration for her.

When it comes to tracking the programme and budget, Sillis finds that architects only tell clients what they want to hear. 'I would rather they told me it was going to cost more or take longer.' Budgets are flexible, though. Dick-Cleland warned that being too open about costs can 'kill off' a project without properly developing the brief and considering the business case. In reference to Astley Castle, he said, 'If our trustees had known what the final bill was going to be on day one they would not have done it.'

As in other sectors, heritage clients want architects who listen. In Keeley's experience, architects have 'very set ideas and don't take criticism well'. Sillis agreed, often finding a need to 'rein in' architects, while Gough had had 'issues' with architects who refuse to conform to the client's way of doing things.

Clients also admitted their own limitations, implicitly acknowledging unrealistically high expectations. They want architects to supply solutions for untouchable spaces. As Gough wistfully accepted, this may be 'looking to architects to achieve the impossible'. ●



'I want you to sketch by hand on these really exciting projects'

Janet Gough, Church Buildings Division of the Archbishop's Council

TOP TIPS FOR THE HERITAGE MARKET

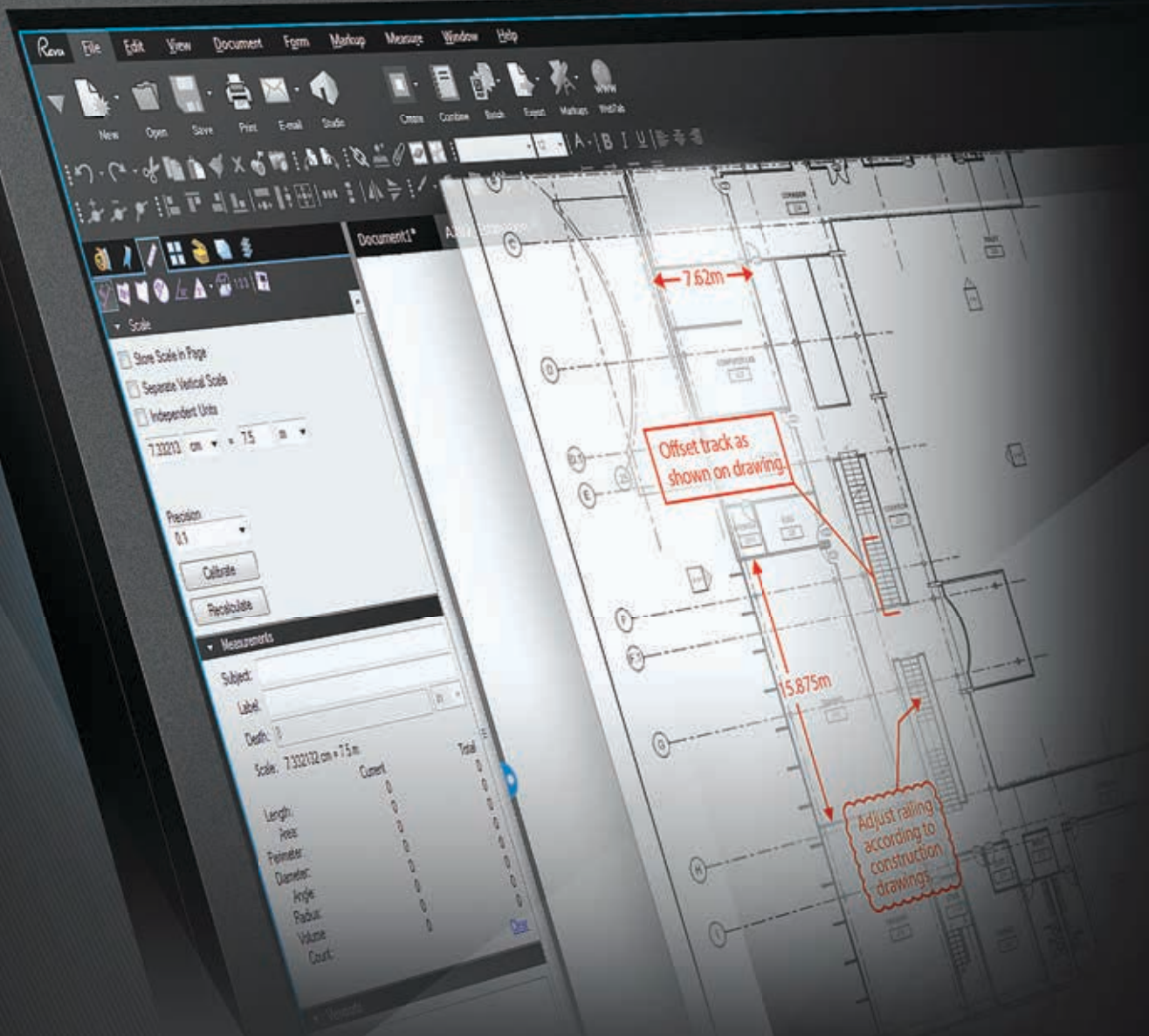
1. Focus on the needs of the building by demonstrating your technical conservation competence as well as your creative design skills.
2. Listen to clients' needs but do not shy away from potentially difficult constructive dialogue.
3. Rethink the brief creatively – even on conservation projects – in case there is a better long-term business case that benefits the building.
4. Engage the client through passion, education and traditional draughtsmanship.
5. Foster teamwork and collaboration during design by agreeing a common vision and leadership.
6. Embrace digital innovation, especially BIM, to add extra value for clients.

RIBA CLIENT ENGAGEMENT PROGRAMME

The RIBA's Client Liaison Group is running a series of round table discussions to listen to and understand external perceptions of the profession and the value architects bring to the project team, and ultimately to identify the tools needed to promote architectural services in these sectors successfully. Feedback from interviews with workplace clients is included here; and 60 second clips of one-to-one interviews are available on architecture.com. See others from this series at ribaj.com

DISCOVER

A NEW WAY TO DIGITISE YOUR WORLD



Imagine taking your measurements digitally, editing and annotating your PDFs while tracking comments in one place and collaborating seamlessly with project partners around the world.

Bluebeam® Revu®, your digital solution for simplifying design workflows.

Download a 30-Day Trial Today!

bluebeam.com/digital



DURAVIT



JUST ADD YOU.

ME by Starck. Sleek lines, iconic shapes, pure aesthetics, sustainability and durability. An ideal, adaptable design that emphasizes your unique personality. More information available at duravit.co.uk and duravit.me.



Procurement
& contracts

It pays to be clear

Contract administrators should always be diligent with interim payments even if other parties aren't

Doug Wass

Recently a number of employers have found themselves paying significant sums to contractors either because of failings by their contract administrators (CAs) or because they have themselves been unaware of 'pay less' requirements. The case of *Henia Investments Inc v Beck Interiors Ltd*, in which I represented the claimant, provides important guidance for architects who act as CAs about payment applications and pay less notices under the JCT Standard Building Contract (2011 edition) – the Standard Form.

Applications for payment

Three requirements dominate this part of the Standard Form: a contractor may make an interim application for payment up to seven days before the due date of each interim payment; the CA must issue an interim certificate setting out the sum due to the contractor within five days after the due date; and the employer may issue a pay less notice up to five days before the final date for the interim payment, specifying the sum that it considers due to the contractor and the basis on which it is calculated.

The employer must pay the full sum included in an interim application if the CA does not issue an interim certificate and no pay less notice is issued for the employer. This is regardless of whether or not the contractor is entitled to the sum it has claimed.

Unfortunately, in several recent cases employers have had to pay contractors sub-

stantial sums, either because CAs have failed to issue interim certificates, or employers have not appreciated the need to serve a pay less notice because the contractor did not make clear that a document was intended to be an interim application, or to which due date it related.

In the *Henia* case, the court determined that if a document submitted by a contractor is to take effect as an interim application 'it must be clear and unambiguous that an application relating to a specific due date is being made [so that] the parties know what to do about it and when.' If it is not clear, it will not be a valid interim application; no payment will be due to the contractor if the CA does not issue an interim certificate' and there will be no need for the employer to serve a pay less notice in response.

Pay less notices

Beck argued that pay less notices can only be used to deduct sums (such as liquidated damages for delay) from the amount stated as due in the CA's interim certificate or the contractor's interim application. It claimed, therefore, that the pay less notice served on behalf of *Henia* was invalid because it calculated the sum due to Beck by reference to the employer's valuation of the works. The judge disagreed. Pay less notices can be based on the employer's valuation and include deductions.

Practical impact

While CAs can take some comfort from this case, it is important that they issue interim certificates in respect of each due date, whether or not the contractor submits an interim application. They must also advise employers to issue a pay less notice if either: an interim certificate has not been issued in respect of a due date and there is reason to believe the contractor may claim that a document it has submitted is an interim application for that due date, or if other sums should be deducted by the employer.

A CA failing to take those steps may find their employer seeking to recover any resulting losses from them. Generally, employers will not suffer material losses as they will be able to recover overpayments from the contractor. However, substantial claims may be made against CAs if contractors become insolvent before any overpayments are recovered or where material legal costs are incurred. ●

Douglas Wass is a partner at Macfarlanes LLP

Pay less notices can be based on the employer's valuation and include deductions

IN PLAIN ENGLISH: COLLATERAL WARRANTIES

These are contracts entered into between the members of a professional team, the contractor and the sub-contractors and third parties (such as tenants, purchasers or funders of the development). The consultant, contractor or sub-contractor warrants that they have complied with the terms of their appointment, building contract or sub-contract and often give a copyright licence to the third party allowing them to use documents the consultant, contractor or sub-contractor has created for the development. The warranty allows the third party to recover losses they incur in the event that the development is defective.



Creativity meets its Material.

HI-MACS® is the perfect Solid Surface material for an architect to use when creativity is required! The unique mouldability and virtually seamless jointing coupled with its translucency and a 15 year warranty mean that HI-MACS® can be used in a wide variety of sectors including any Residential and Commercial projects.



Information and samples can be obtained from:
Alex Gray, phone 01892 704074, e-mail ukoffice@himacs.eu

himacs.eu 



External
management

Double life

Maria Smith transcends the boundary between doing and consuming



Maria Smith

When writing about society's involvement in cultural activities, researchers distinguish between participation and consumption. Going to Glastonbury, for example, is to consume culture, whereas joining an am-dram society is to participate.

For some – for me – a conflict tends to arise when one is both participant and consumer. If you start to write, reading becomes different, if you start to play music, listening becomes different. So as an experiment, I decided to give up living in a building.

To do this, key lifestyle changes were necessary. I needed to shower in swimming pools and friends' houses and offices, and of course, I had to give up sleeping. The nights therefore became a terrifyingly blank canvas needing impregnation with new activities.

As is traditional, I began with walking. At snail's pace I tramped the city, zoning out as I crossed the blurry boundaries from inner to outer London and back again. I drifted until the automatic pitching of my metatarsals conjured a Photoshop filter of a trance, making me feel I was encapsulated in a visualisation. The experience peeled the images

of buildings from their bulks. Elevations and wide-angle renderings were strewn about my peripheral vision like discarded Post-its bearing contact numbers for sales reps.

Loss of sleep itself was no problem, but loss of dreams was beginning to wear heavily on my spinal chord. So I decided to spend some time in the past to regenerate. This was excellent both from a practical point of view, and in aid of the experiment. I could sit on a bench for hours and my corporeal manifestation would wait there for me while I travelled. I spent most time in the garden of my childhood home. After the inevitable period of nostalgia interspersed with misguided fears of the neighbour's dog, I began to build with the fervour of a three year old in the body of a 33 year old. I rebuilt the wall that had been blown down in the hurricane. I built a column high into space. I tore down the corner of the house and reconfigured it into a shrine. I could both see the house anew with my disgustingly trained eyes, but also design interventions with a technical understanding freed from the albatross of reference. It was more exciting than a hot day in a paddling pool with shop-bought ice-lollies.

Six months had now passed and the experiment was a tremendous success. No longer a consumer of buildings, I was able to conceive them with unbridled aplomb. But something was still missing. The walking had reset my relationship between two dimensions and three. The time travel had recalibrated my relationship between technique and precedent. But I was still too self-aware, still suffering a paralysis of aesthetic scruples. I needed to free myself from the compulsion to assess, to decouple the looking of drawing from the looking of assessing. But I couldn't just close my eyes, there was only one solution; I must inhabit somebody else.

Again, as is traditional, I chose a human of the opposite sex. The man I chose would need to be able to take the looking of assessing off my hands, would need to be of a disposition that wouldn't notice my presence in his consciousness, and of course, would have to work a night shift. So I loitered around 24 hour printing services to find a suitable candidate. It didn't take long. On my third night staking out, I saw him, dashing about with a disquieting passion. While he was hunched over changing an image drum, I slipped in.

I don't mind telling you, that first night was electric. His gait was a dance with the

I couldn't just close my eyes, there was only one solution; I must inhabit somebody else

hyped energy of a rave contained by a stubborn show of shame like a naughty child staring at the floor in livid defiance. His movements as he folded and piled and stapled and spray-mounted were rhythmic and sure, and while unfamiliar to me, I could follow them with ease. It was simple enough to have him print the designs I worked up during the day, during my ordinary life. He saw them for me, appraised them for me so I didn't need to. My days were an orgy of creation and my nights a riot of insight. I stayed a little too long with this man. I nudged right up against the line of inseparability, until one day; at the end of the ninth month I birthed myself from him.

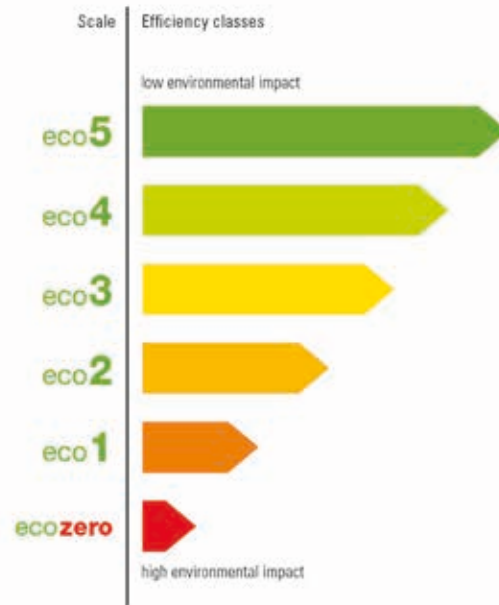
I would recommend the experiment. Perhaps one day it will become a requirement for qualification; a Part Four. That is not to say it doesn't come at some cost. The regrowth of an entirely new skin is certainly tiresome, as is the adjustment back to sleep. But the disjunctures produced are well worthwhile. I am forever a split pea now, able – in short bursts – to write without reading, to sing without listening, delaminate critique just a little, just enough. ●

Maria Smith is an architect and teaches a course at the Cass

Eco-building just got easier

Energy efficiency is top of the construction agenda, but a plethora of regulations and classifications can complicate any 'green' assessment of products. Kerakoll's GreenBuilding rating aims to help professionals sifting the options

RATING CLASSES UNDER THE KERAKOLL® ECO GREENBUILDING RATING®



ECO mark GreenBuilding Rating® found on every package and in the technical documentation of the products in the Kerakoll® ECO range





Far left Researchers at work in Kerakoll's GreenLab where R&D is carried out.

Left The Pavello House for which Kerakoll UK supplied building chemicals and technical support for the tiling.

Example of an ECO GreenBuilding Rating® Label on Kerakoll® technical documentation



As everyone who works in the industry knows, there is more and more emphasis on building in an environmentally friendly and sustainable way. However, many different regulations need to be looked at for different aspects and no overall coherent approach to classifying products according to 'greenness'.

Kerakoll's GreenBuilding rating, which with its Eco products range won the Tile Association award for best environmental initiative in 2011, was developed in reaction to this lack of a single standard as an objective way for professionals involved in product specification to evaluate a product's overall ecological and environmental characteristics.

At the beginning of this century Kerakoll established a technical committee to look into the effects of building materials on the environment and human health, and the relevant regulations and assessment systems. The committee began working with well-known research institutions at a European level, including the European Commission Joint Research Centre and France's CSTB (Technical Scientific Centre for Construction).

Certified by SGS

The GreenBuilding rating came out of this work as a system for assessing building

products to give an objective evaluation of how green they are. It has been certified as reliable and accurate by SGS, the world's largest inspection, certification, control and analysis organisation.

Revised in line with the latest knowledge

The rating is continuously revised and reviewed to ensure that it encompasses the latest knowledge, techniques and testing methods, keeping it up to date with the latest environmental thinking.

The criteria are based on existing regulations and methods of measuring environmental damage – for example the GEV Emicode, where Kerakoll has undertaken to reach or better EC 1 Plus for all its products.

Contributing to LEED and BREEAM

The rating encompasses all the BREEAM and LEED criteria that apply to the building chemicals industry – including energy use in production; the health and well-being of both operator and end user; air, water and transport pollution; and environmental impact throughout the product's life cycle. This means that it can be used to support the project's accreditation points, and improving clarity on sustainability values. ●

KERAKOLL
The GreenBuilding Company

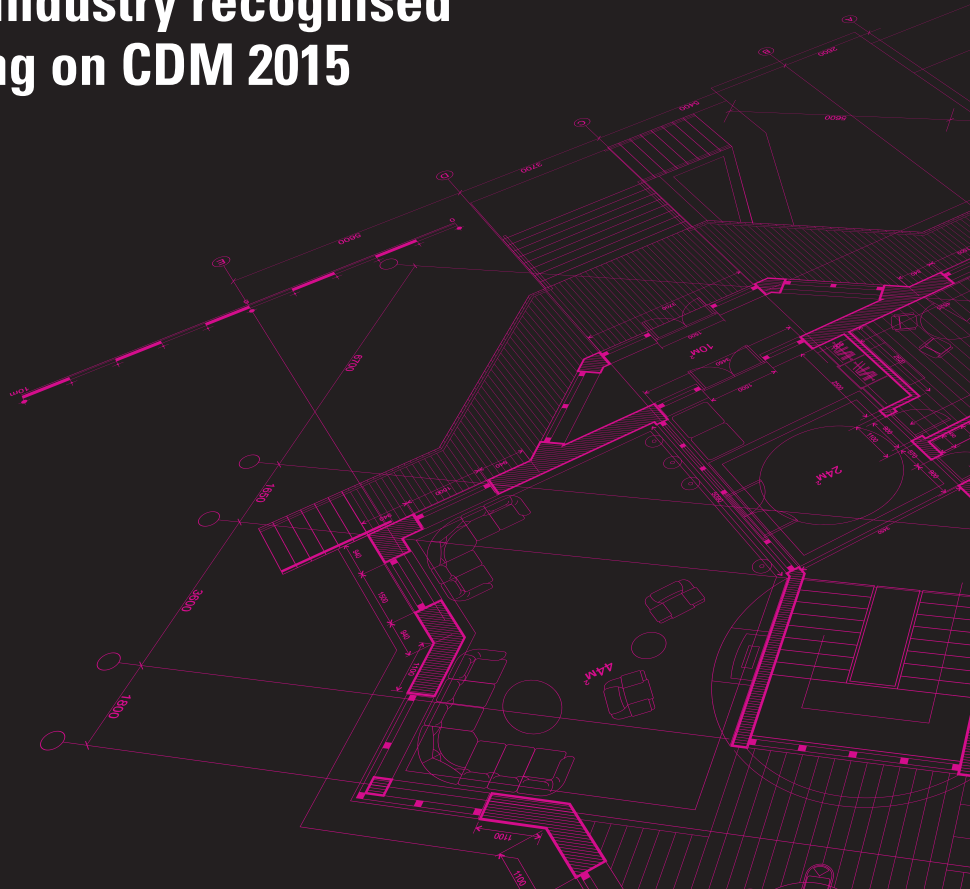
Contact Details
Kerakoll UK Ltd
Unit 4, The Croft,
Buntsford Gate Business Park,
Bromsgrove B60 4JE
info@kerakoll.co.uk
01527 578000



ARE YOU READY TO BE A PRINCIPAL DESIGNER?

**APS membership gives you industry recognised
advice, guidance and training on CDM 2015**

**FIND OUT MORE AT
www.aps.org.uk**



Wildflowers rule OK



Peppa Pig World is a 1.2 hectare attraction in Paultons Family Theme Park in the New Forest National Park in Hampshire. The 930m² main building is its first all-weather attraction, housing George's Spaceship Play Zone, retail and visitor facilities.

A huge barrel-shaped roof covers the steel and glulam structural frame, designed to mirror the contours of the landscape, rising to eight metres at its centre. A wildflower roof is a key element of the building's sustainable and carbon-neutral design by HPW Architects. Completed over four years ago, it is flourishing thanks to the clever choice of 32 indigenous plants and a computerised irrigation system. The wildflower turf covers the entire roof and from the rear, where the building is partially under a bund created using earth excavated from the site, it appears to emerge directly from the ground.

Gary Wilburn, HPW's director of design and sustainability, says: 'With the site in a national park, and in the green belt, we had to do something pretty special to get planning permission for a 10,000sq ft [930m²] building. As a result, from the southerly aspect all you can see is a mound of earth covered in turf.'

Seven large wind catchers with built-in PV panels, positioned along the spine of the roof, are a key element of a strategy for 100% natural ventilation.

HPW specified a wildflower turf developed by Hampshire specialist James Hewetson-Brown, using only species native

to the New Forest area, such as wild red clover, bird's-foot-trefoil and yellow rattle. The turf was grown in a compost mix over a membrane to create a root-like mat with an instantly mature effect, ready to be transferred to the building.

The green roof build-up was designed by Steve Vincent, project designer at Verdicto, manufacturer of Verdiroof green roof systems, and supplied by SIG. It consists of a warm roof construction laid over a single-ply membrane. Designing it to cover the large and steeply pitched barrel, and to a tight budget, was arguably the biggest challenge, says Vincent: 'The traditional method of building using staggered weathered-in battens would have sent the costs over budget. Instead, a structural retainer was installed at the overhanging eaves to take the majority of the weight during construction.'

Rows of Norwegian-style sacks, filled

Above Peppa Pig World's main building from the front, neatly tucked under its wildflower turf roof.

Below Excavated construction soil was used to create a bund on the rear elevation that almost hides the building.



with soil and stacked upwards from the eaves retaining girder, form the principal load on the roof. Traditionally, biodegradable hessian sacks are used, but here a non-rot plastic mesh was required to help maintain the roof's structural integrity. Further support was provided by a counter-balancing mesh sheet, laid over the top of the sacks and over the barrel of the roof from one eaves to the other.

'The wildflower turf was laid over the counterbalancing mesh sheet and roots through it into the growing medium bags to complete the structure and make it structurally sound,' Vincent explains.

A series of self-cleaning 'dripline' irrigation pipes embedded above the sacks, and under the vegetation, link into a rainwater harvesting system. Excess water is drained off through the external steel columns at the edge of the eaves and stored in a man-made lake at the rear of the building.

In dry periods, a 60mm, pressure-regulated piston pumps the water from the lake back up to the dripline. The system is computer-controlled, enabling the dripline to be activated or disabled in different parts of the roof as required.

The result, even after four years of growth, is an award-winning, nectar-rich landscape that continues to attract bees and other insects as well as encourage biodiversity across the whole park, and the only maintenance required is a 'strim' once or twice a year. ●

Walk on the wide side

There can be no leaks in the vast expanse of flat roof on Make's 5 Broadgate development



JOHN MADDEN

Make Architects' 5 Broadgate is a true ground scraper – a rare breed among the City of London's high-rise towers. Despite a mere 12 storeys of offices, its generous width ensures it yields over 65,000m² of high-spec office space, including four football pitch-size trading floors topped with some 7,500m² of concrete-decked roof and terraces.

Ensuring that this unusually expansive flat roof was waterproof was an absolute priority. A joint venture between British Land and Blackstone, 5 Broadgate will be occupied from next autumn by financial services firm UBS.

'When you're dealing with a project of this scale and its complexity of interfaces, water ingress is a real concern,' says Make's Ben Stuart, who was package architect for roofing, basements, structure and services. 'We had to have robust and reliable detailing delivered by contractors who could assure the highest standard of workmanship within the given timescales.'

To ensure optimum yet cost-effective waterproofing that would last a minimum of 30 years, Make worked closely with the contractor BriggsAmasco on an inverted roof system where IKO PermaTEC hot melt waterproofing was specified.

Following buildability reviews with construction manager Mace, other roof build-up options, including warm roof, were discounted because of concerns over protection of the waterproofing during construction. An important benefit of the inverted roof was that it could be installed more quickly than other systems as well as being easier to protect.

A third option was an inverted roof with cold-applied liquid plastics rather than hot melt. This was rejected for most of the main roof covering because of its shorter lifespan (20 years) and higher cost. The extra time required for hardening was also less viable in the context of the roof programme as a whole.

The speed of the hot-melt waterproofing meant Stuart was able to complete sequential quality inspections safe in the knowledge that it would then be protected immediately following the installation of the insulation and subsequent pouring of the concrete slab.

The waterproofing is part of a 600mm roof overcladding build-up consisting of a 200mm concrete slab, a 7.5mm hot-melt rubberised bitumen membrane, a 200mm thermal extruded insulation and drainage mat, and a 150mm floating slab.

The architects were advised that proper

Left 5 Broadgate is unusually low-rise for a City building but its huge footprint means there's a lot of roof to keep watertight.

installation was vital to the success of hot-melt waterproofing and therefore increased the number of quality inspections as well as agreeing sequential sign-off inspections with Mace. This was particularly challenging for specialist contractor BriggsAmasco as installation took place in mid-winter, requiring temporary protection to ensure a dry surface.

Installation began with an independently monitored peel test before the rest of the application went ahead. First, 'latents' were ground off and the area cleaned and primed before the hot melt was applied. Twenty-four hours later, the waterproofing's bonding was tested to check that it could withstand an attempt to peel it off.

The PermaTEC system consists of high penetration primer, two coats of the 3mm PermaTEC waterproofing membrane with a PermaFLASH-R reinforcement layer in between, and the PermaGUARD-F protection sheet. All these layers were applied before the installation team began work on the next, adjacent area – unlike many cold applied liquids there is no need to wait until each hot melt layer hardens.

Leak testing

After 15 minutes, the roof was ready for the next stage. Electronic leak testing was carried out to identify any problems and localised repairs made. This was followed by installation of extruded polystyrene insulation board – Roofmate SL-A – then the IKO Plasdrain 6 loose-laid drainage mat. This was all topped by the overslab of 150mm poured concrete with pavers and ballast used in areas of light traffic.

For the roof of 5 Broadgate, the most challenging aspect was designing waterproofing solutions for about 100 vertical roof penetrations by perimeter structural steel elements and posts/columns.

Here, Make helped the contractor develop the most robust approach to a tailored 'pitch pocket' which was able to deal with each



situation. Typically, a concrete upstand of 50mm was constructed around the vertical penetrations. This acts as a first line of defence and lifts the waterproofing detail out of any standing water. Then, a minimum of 50mm galvanised formwork was bonded into hot melt to form a pocket around the penetration, and the pocket filled with more PermaTEC hot melt, with protective felt on top. A key advantage of using a hot melt pitch pocket is that it remains soft, so when the steel expands in the summer, the hot melt will be able to move with the column.

Special solutions

For six tricky cross-brace connections, a special solution was required for the junction between columns and cross bracing, which might be susceptible to pooling water despite a pitch pocket detail. The solution was IKO Polimar EC/UV cold-applied liquid waterproofing around the connection plate over the PermaTEC pitch pocket.

The crucial area to solve was the 15m spliced support truss. An unexpected issue was that the bolts connecting the splice plates were cast into the structural slab at the perimeter, and so required a rethink of the waterproofing detail. The solution was a bespoke cover with base flashing over the truss followed by the PermaTEC hot melt system then a complete covering of liquid waterproofing. This was subjected to a 48-hour flood test to ensure complete water tightness and created a successful hybrid system of hot melt and cold liquid applied plastics.

Such bespoke hybrid responses to the challenges of the various roof penetrations were essential.

‘The success of the roof waterproofing was a team effort, including contractor, architect and construction manager, in order to manage the complexity and maintain the high standard of workmanship,’ says Stuart.

Conceived as a single cast element with glazing confined to necessary areas, it was awarded a BREEAM Excellent rating at design stage with the roof achieving a U-value of 0.20. This helps contribute to 5 Broadgate’s energy conservation levels being nearly 50% better than regulations require. ●

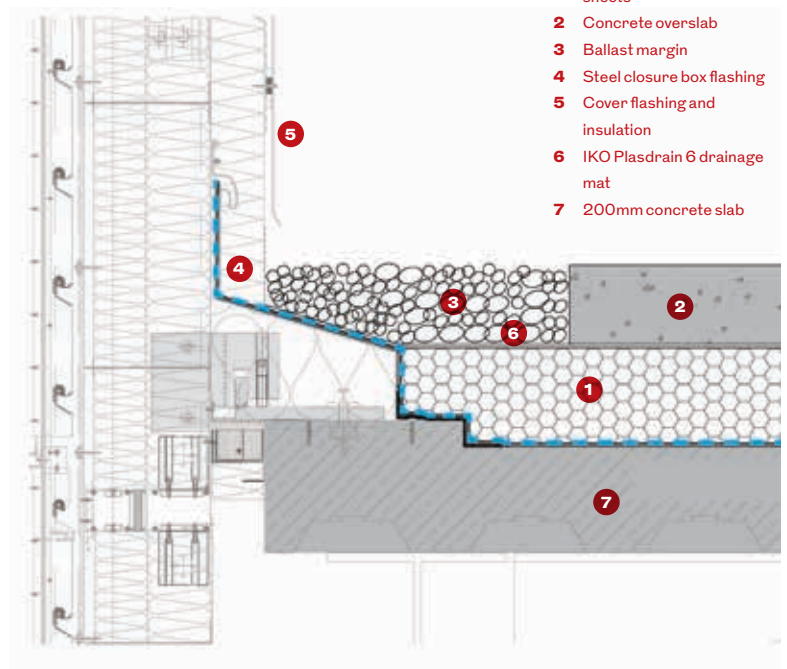
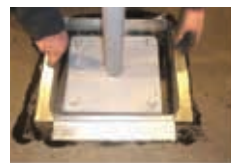
Right The scope of 5 Broadgate’s roof.

Below right A cold-applied membrane was used around the cross-bracing connection. This is cheaper than a pitch pocket and much simpler to apply in a tight area.

Below Pitch pockets used for all vertical penetrations. In sequence, from top: Minimum 50mm galvanised metal formwork bonded into hot melt. This is then secured with more hot melt or mechanically fixed. Filled with PermaTEC hot melt. Protection felt then covers the pitch pocket.



SIG Design & Technology offers a complete and impartial design and supply service, which covers all eight steps to help create the perfect roof. It designs flat roofs, green roofs, and zinc, copper and stainless steel roofing and cladding. Find out more at www.singleply.co.uk or call 0845 869 4887



Let's have some hush

Meeting BB93 guidance on noise levels in schools is so much easier if you get expert advice at the outset, says Martin Jones

Silence is golden in schools – or at least something to aspire to. Concentration levels diminish rapidly in noisy environments, so mitigating such distractions in educational settings, beyond the inevitable din of the kids themselves, is enshrined in regulation.

Guidance note BB93, governing acceptable noise levels in schools, carries with it the weight of Part E of the Building Regulations and meeting it satisfies Part E4 of the code. It's well known to Martin Jones, managing director of Colchester-based acoustic consultant Pace Consult, which has worked on 'countless schools' UK-wide to help ensure that architects meet BB93 guidance.

'Table I of BB93 advises maximum indoor ambient noise levels across school accommodation,' Jones says. 'The document also advises that rainwater noise from roofs should be no more than 25dBA over the maximum 35dBA ambient noise in a classroom, so no more than 60dBA in total.' A 5dBA relaxation on this is permitted if the building is naturally ventilated, to allow for the necessary external openings. The requirement applies to independent schools as well as public sector ones.

Jones notes that the fashion for exposed soffits and servicing, doing away with suspended ceilings, makes meeting the demand all the more onerous for architects, so early consultation on the acoustic implications of design is all the more critical. 'The main advice I'd give an architect on roof design is to make sure that you ask questions early to ensure you build the required attenuation in before pricing, as retrofitting it can prove costly,' he says. 'Perhaps you've lifted a roof from another design, which will need modifying; early consultation means that we are in a position to model it to make sure that it meets BB93.'

Jones has worked on schools with the likes of Wilmott Dixon and Kier, among many other large contractors. He notes that while there are different approaches, both have a strategic preference for generic, tried and tested approaches for roof design, shying away from novel designs that may not work in the field, or come with significant extra costs. He adds that when part of a design and



build team, architects may find themselves having to toe the line in this regard.

Kier London's preference is for concrete frames as there are thermal mass benefits and a 150kg/m² concrete roof gives automatic compliance with one credit under BREEAM's acoustic demands, which are currently 20dBA over guidance. Wilmott Dixon seems to prefer lighter steel frames, which demand more careful roof detailing from architects to ensure standards are met. The firm has also looked to cross-laminated timber design which needs the linings to really perform acoustically and inevitably 'ends up with a chubbier footprint', Jones says. But for all of them, where roofs are engaging with high performance areas such as music or drama rooms, 'BB93 can go out of the window

Ask questions early to ensure you build the required attenuation into the design before pricing, as retrofitting it can prove costly

and these spaces can often need specialist attenuation to ensure performance'.

Acoustic consultants' input seems key to successful specification here. Jones cites a case where a 3.6 second reverberation time in a 12m high school hall (over 2s more than guidance) was put down to a poorly performing roof: £100,000 worth of acoustic tiles were added, reducing reverberation time by a mere 0.3s. 'It turned out the sound was reflecting wall-to-wall and the roof was performing fine,' he says. This can only be accurately modelled using 3D ray tracing such as the market leading Odeon software which Pace Consult applies to its projects. It's a striking example of the importance of his advice about talking to the experts. 'You want an open dialogue with the acoustician on your roof from the very outset,' he says. ●

SIG Design and Technology provide a range of certified roof build-ups to meet BB93 requirements. Go to <http://bit.ly/BB93acoustics> for more information.



Above Pace Consult managing director Martin Jones.

Left Wilmott Dixon's £30m Hope Academy in Newton Le Willows, Merseyside. With 1650 pupils and some ceilings 15m tall, it proved an acoustic challenge for Pace Consult. Architect: Riverside Architects.

8 steps to a '#PerfectRoof'

RiverWalk by Stanton Williams Architects

1



The Right
Products

2



Design
Expertise

3



Meet the
Regulations

4



Confidence
in Supply

5



Experienced
Contractors

6



Monitored
Installation

7



Full
Guarantees

8



Planned
Maintenance

We take the risk out of roof design

- Complete and impartial roofing and cladding design service
- We help you choose the right products for your project
- Our design and technical support is PI insured
- Monitored installation and full system guarantees
- Design for low maintenance and a happy client
- Tap into our roofing design expertise absolutely free
- Follow our eight steps to learn how to achieve the '#PerfectRoof'

**We take the risk out of roof design for you. Find out why at
#PerfectRoof or visit www.singleply.co.uk/perfectroof**

SIG DESIGN
TECHNOLOGY



www.singleply.co.uk

Tel: 0845 508 0295

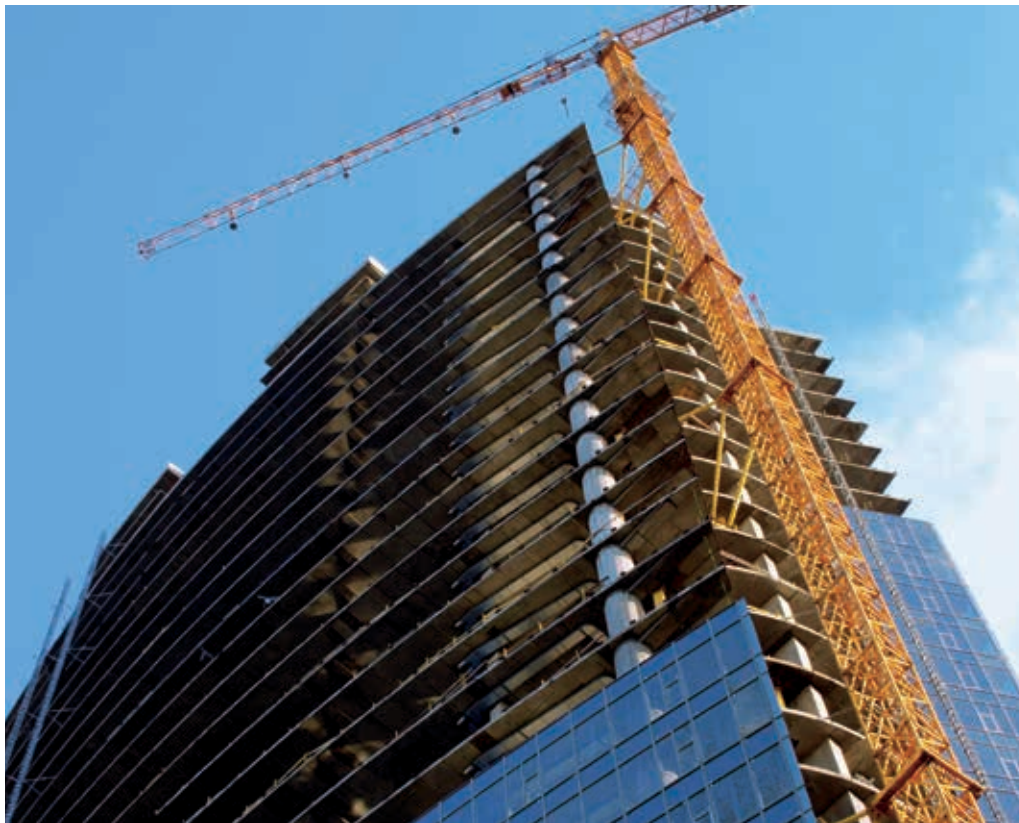
talk to us on:   

FLAT ROOFING
GREEN ROOFING
ZINC & COPPER ROOFING

How to Design in Fire Safety

The Building Centre, Store Street,
London WC1E 7BT

9 November 2015, 08.50 to 11.45 am



Join us at this free-to-attend, RIBAJ and Hilti morning briefing as we explore how firestop design can be better integrated into the life cycle of a project, and more importantly the key role it plays in saving lives and assets when a fire breaks-out .

As highlighted in our recent round table, fire safety is a major concern for all who are responsible for the design and specification of buildings. The causes of fire are varied and unpredictable, and often outside the control of the designer. What can be controlled however, is the effect of fire once it has started by a combination of active and passive fire protection systems.

The morning seminar will discuss how the correct specification and installation of firestop products, carrying the right levels of testing and certification can improve and contribute to current design thinking to make buildings the safest possible environments against fire.

Five key case studies from leading architects, across building typologies including commercial, healthcare and tall buildings, will be presented to illustrate best practice and products in firestopping. ●

For more information go to:
www.ribaj.com/events/how-to-design-in-fire-safety

Totally Stoked.

Exhilarating new Public Realm at Stoke-on-Trent.



HARDSCAPE
Inspire : Select : Supply



For further information on paving products, accessories and bespoke granite benches used at Stoke-on-Trent Public Realm please visit:
www.hardscape.co.uk or telephone 0845 260 1748 or email: enq@hardscape.co.uk



Concord



Organic Response Sensor Node

OFFICELYTE LED WITH ORGANIC RESPONSE®

LIGHT WHERE AND WHEN NEEDED

Officelyte with integrated LED and Organic Response wireless technology, delivers the ultimate in cost savings and longevity. As well as turning lights off in unoccupied areas, or dimming down in low activity zones, the Organic Response Sensor Node in each luminaire wirelessly communicates with its neighbours to ensure automatic group-wide adjustment to occupancy and ambient light, guaranteeing user-comfort and maximising energy efficiency at all times. Outperforming T5 fluorescent and rated up to 90lm per circuit watt, Officelyte is one of the most efficient LED modular fittings on the market. Available in 3000K, 4000K and minimum CRI 80, the Officelyte LED's satin acrylic diffuser provides perfect, homogeneous illumination. There are two sizes and two output options equivalent to 2 x 24W T5 and 1 x 55W T5 TC-LE fluorescent modules.



Winner of the Lighting Controls category

3: Culture

Keeping perspective

Osbert Lancaster's pertinent and insightful drawings prick the bubble of self regard



Hugh Pearman

Oh, to have been at the Architectural Review in the late 1930s! There you would have rubbed shoulders not only with a somewhat conflicted John Betjeman, but also Osbert Lancaster, brilliant visual satirist who, on moving to the Daily Express, invented the front-page pocket cartoon as practised today by the likes of Matt in the Daily Telegraph. Lancaster went on to draw some 10,000 cartoons over 40 years featuring two main characters who filtered everything happening in the world: minor aristocrats William and Maudie, Earl and Countess of Littlehampton.

But Lancaster never forgot architecture. After his first satirical tome in 1936, *Progress at Pelvis Bay*, he chose just one place to epitomise the changes fast happening in architecture and town planning. *Drayneflele Revealed* of 1949 purports to be an illustrated history of a historic town that is gearing up for the forthcoming Festival of Britain (and which is the seat of the Littlehamptons).

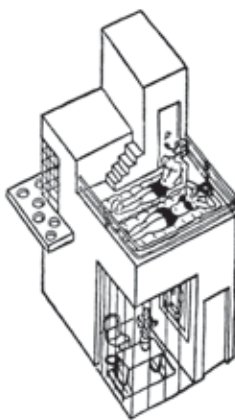
'Vast mammoths and sabre-toothed tigers prowled through the tropical under-

growth where now stands Marks and Spencers,' Lancaster begins, and you are instantly hooked. From here to 'the Drayneflele of Tomorrow', his words are as skeweringly to the point as his illustrations. Everything historic but for the church and a gatehouse marooned on a roundabout is swept away to make a Corbusian Ville Radieuse of tower blocks and dual carriageways. Of course Lancaster also gets Corb's drawing style spot on.

I always keep one of Lancaster's key books at hand, the 1938 *Pillar to Post: English Architecture Without Tears* is the work that starts with off-kilter descriptions of the well-known historic styles and gets gradually more fanciful as we enter the modern era. It was he who devised the terms Edwardian Baroque, Stockbrokers' Tudor, Bankers' Georgian and Bypass Variegated – and also Pseudish ('actually our old friend Pont Street Dutch with a few Stockholm trimmings and a more daring use of colour... it has sunk a little in the social scale and occasional examples are now to be found alongside some of our more exclusive bypasses').

This encomium is prompted by the fact that three of Lancaster's key works have been republished: *Drayneflele*, *Pillar to Post* and *Homes Sweet Homes* of 1939 are now available in a £40 boxed set by Pimpernel Press entitled *Osbert Lancaster's Cartoons, Columns and Curlicues*. The set occupies less space than the average architectural monograph, but contains pretty much everything you need to know about architecture. If I cleared all the hundreds of architecture books off my shelves, I'd be happy to keep just *Pillar to Post*.

Why am I telling you this? Because architecture often takes itself far too seriously. Yes, making a better world is a serious business. But Lancaster, wonderfully accurate and thoroughly mischievous, pricks the pretensions of humourless professionals of all kinds. They didn't much like their foibles being exposed back then, and I can tell you they don't like it much now. We always need observers who can twist the knife a little. ●



Corb sunbathes on the roof in Lancaster's vision of 1930s modern living.

ONLY ON RIBAJ.COM

Does this represent our hopes, dreams and aspirations to reach the top? Is it a stark reminder of the difference in living standards and the widening gap between rich and poor within the capital?

Barnaby Barford,
creator of the V&A's
Tower of Babel:
ribaj.com/culture/tower-of-babel



Groupama Arena, Hungary

Lines of OPTIMA Baffles offset against each other provide a striking visual.



Martela HQ, Poland

OPTIMA Curved Canopies bring an extra wave of dimension to the interior.

Yes, we can do it.

Whether you want to celebrate curves or linear designs, Armstrong's range of baffles and canopy solutions are not only stunning visually but simple to install. Delivering the ultimate in design flexibility.

www.armstrong-ceilings.co.uk/projectgallery
www.armstrong-ceilings.ie/projectgallery



Inspiring Great Spaces™



Affairs of status

Pyongyang takes its architecture very seriously



Oliver Wainwright

'Let us turn the whole country into a socialist fairyland!' urges one of the 310 official patriotic slogans published by the Democratic People's Republic of Korea this year. Let us usher in a great golden age of construction,' declares another, 'by thoroughly applying the Party's idea on architecture!'

Despots tend to have a thing for buildings, and North Korea is no exception. Indeed, its stance on the built environment is a good deal more sophisticated than many dictatorships, coming complete with a 170-page treatise, *On Architecture*, penned by former leader Kim Jong-il himself. The text reads a little like one of Prince Charles' outbursts, a mix of straightforward common sense and unbridled lunacy, written with a keen sense of urgency.

'Architects must make strenuous efforts to create masterpieces,' Kim exhorts, explaining that the leader's statue must be at the centre of all architectural creation as the fundamental driver for urban development.

'The leader's statue must be erected in the best part of the heart of the city, where people can look up at it from every spot in the city, and as large a crowd as possible can gather,' he says. 'This is the basic condition for harmonising all the city's architectural space with the focus on the leader's statue and ensuring that the statue plays the leading role in the architectural formation of the city.'

After spending a week in Pyongyang this month, I can vouch that his word has been followed to the letter. Utterly flattened by US bombs during the Korean War, the city was

The leader's statue must be erected in the best part of the heart of the city, where people can look up at it from every spot

entirely built from scratch from 1953 according to the principles set out by the founder of the North Korean dynasty, Kim Il-sung. It is a typically Soviet conception (built largely by Russian-trained architects) of grand axial boulevards terminating in monumental public buildings, a painting or statue of the leader enshrined at the centre of it all, their grandeur magnified by theatrical forced perspectives and marching colonnades. But from the 1980s onwards, things begin to get a lot more interesting, with some wildly experimental structures. The national ice rink, completed in 1982, could be a distant cousin of Frederick Gibberd's Liverpool Metropolitan Cathedral – Paddy's Wigwam interpreted as a steroidal concrete teepee. Then there's the gargantuan May Day stadium, its vaulted metal shell billowing like a parachute caught in full flight, recently refurbished and optimistically adorned with the Olympic rings and FIFA logos. And of course the magnificently evil Ryugyong 'Hotel of Doom' looms above it all, a pyramidal spaceship begun in the 80s, and recently clad in mirrored glass, but which remains a concrete ruin within.

In 1989 Pyongyang hosted the World Festival of Youth and Students, a kind of socialist youth Olympics, for which it built an entire new urban quarter. The sports buildings included a gymnastics arena shaped like a set of dumbbells and a badminton stadium modelled on the arc of a flying shuttlecock.

It is a kind of representational architecture that today's Supreme Leader Kim Jong-un is clearly keen to continue. On our tour we marvel at his new Dolphinarium, a building shaped like a big white whale, where Chinese dolphins perform tricks. There are a cluster of tapering orange and green apartment towers shooting up on the riverfront, to house university academics, designed 'in the shape of an intellectual's brush' our guide tells us. The new cylindrical Changjon Street apartment towers, nicknamed 'Pyonghattan' by foreign diplomats, could be a stack of coins – perhaps a symbol of the huge amounts of Chinese cash now flowing into the city, which is fast seeing it change from a sleepy time-warp to something resembling the outskirts of Shenzhen. The dream of a socialist fairyland is certainly well on its way, as long as you don't look too closely behind the shiny new facades. ●

Oliver Wainwright is architecture critic at the Guardian. Read him here every other month and at ribaj.com

CUTTING EDGE DESIGNS

Kim Jong-il appears to have been an enthusiastic champion of participatory design and public consultation: 'We must encourage the masses to take an active part in the work of architectural creation,' he wrote. 'We must adopt various methods such as the masses' joint evaluation or assessment of draft design plans and make it a rule to assemble their opinions, analyse them, sum them up and incorporate them in architecture.' He failed to add that anyone who didn't agree, like the architect of the new Pyongyang airport which his son and successor Kim Jong-un took against, would be swiftly executed.

INSPIRE YOUR SENSES

PORCELANOSA PROJECTS WITH KRION



PONCELET CHEESE BAR - BARCELONA, SPAIN
ARCHITECT: ESTUDI(H)AC
BAR MATERIAL: KRION BY PORCELANOSA



PORCELANOSA Grupo

PORCELANOSA

TILES · BATHROOMS · KITCHENS · HARDWOOD

www.porcelanosa.com

MIDLANDS 01217 466 464 · NORTH WEST 01925 237 807 · SCOTLAND 01415 331 000
SOUTH EAST 0192 381 5200 · WESTERN 01179 597 151 · YORKSHIRE 01302 304 713



Diversity or bust

Making the most of all the people available to the profession will help us meet the changes ahead



Jane Duncan

I am of the firm belief that a new culture and attitude is needed for our profession to navigate the changes coming towards us.

These are not just the plethora of technical and technological changes, but global and societal responsibilities. Much more is going to be expected of our profession in business, in our contribution to our own and the wider world communities, and towards the stewardship of the environment.

We are at a pivotal point in the place of architecture within society and within the construction industry. It is no longer simply a question of creating fine buildings; we now need to demonstrate an equal level of social responsibility and economic engagement, and an ethical stance which delivers what our clients, stakeholders and the industry

Only 12% of architects in leadership in the UK are women despite parity in student numbers

seek from us. The answer is leadership.

Innovative solutions to complex challenges are what we, consciously or not, create every day of our lives as architects. We are in effect paid to think, analyse, create and communicate these solutions. But the best design decisions are the product of challenge and innovation, not necessarily of consensus and acceptance. And the most successful practices rely on diversity of thought to create innovative ideas and offer broad and ambitious services. This can only be achieved within a working culture where differences are valued, encouraged and respected.

Our profession can no longer afford to ignore the financial benefits of gender equity and social diversity. Workplace diversity can make architects' businesses more productive and profitable. Profitable businesses can afford to pay their staff well, treat them flexibly and allow them to feel valued.

Diversity in leadership positions within practices is also vital. There is substantial proof, from a wide body of research, that gender-diverse executive teams and company boards achieve better financial performance than those whose boards are dominated by men – but only 12% of architects in leadership in the UK are women despite parity in student numbers. This attrition must be stopped.

As president of the RIBA I want to be part of a step change in the diversity of our profession. Our Role Models project is an important start in challenging perceptions of architects. Those 12 individuals challenge stereotypes of who an architect is and will, I am sure, inspire others to consider our great profession and stay within it after training. But we must do more. The government is consulting on the introduction of gender pay reporting for all companies over 250 employees. The threshold it has set means that very few architects will be included. In our response to the consultation, the RIBA has called for the limit to be lower. We need to identify and dismantle the barriers that stop people aspiring to become architects or cause them to leave during or after training, and better information on pay in our profession can be part of this.

I want concrete actions to increase diversity in our profession to be one of the lasting legacies of our next strategic plan. Please join me. ●

@JaneDuncanPRIBA

TO HERE FROM PALLADIO

The latest exhibition in the RIBA's Architecture Gallery captures the enduring legacy of Andrea Palladio. Designed by Caruso St John, the exhibition includes never-before exhibited works from the RIBA Collections and original designs spanning nearly 500 years. Seen together, the exhibits demonstrate how a historical collection and contemporary practice find common ground.

Palladian Design: The Good, the Bad and the Unexpected is open until 9 January at the RIBA, 66 Portland Place. More information at architecture.com

An ever growing pile of buildings to catalogue and consider for listing keeps Elain Harwood, Historic England's chief post war buildings investigator, busy – and enthralled

Words: Hugh Pearman Portrait: Wilde Fry

Spirit of inquiry

As photo shoots go, this one begins badly. Elain Harwood, Historic England's chief post war buildings investigator, has suggested Patrick Hodgkinson's listed and renovated Brunswick Centre in Bloomsbury as a backdrop. Fine – except that when we turn up, this being late August, an all-out seasonal downpour is in progress. Harwood dashes off to see if we can get into the dry at a friend's flat, but no-one at home. Finally the newly-refurbished Curzon cinema, buried in the development's plinth, comes to our rescue. Of course we can shoot in there, they say, bringing us free coffee as we settle into the anachronistic Bibendum armchairs. In compensation Ziggy Stardust, released the year

(1972) the Brunswick Centre was completed, is playing on the sound system. Game on.

This is the period, says Harwood, that is now intriguing a new audience. Brutalism used to be the most niche of niche enthusiasms; now it is mainstream, especially for the rising generation. She's just published a massive, 700 page book, 18 years in the making, *Space, Hope and Brutalism – English Architecture 1945-1975*, a fruit of her long career at the organisation formerly known as English Heritage (EH). It's not the only fruit: from another publisher comes the third edition of an equally in-depth Harwood book, *England's Post-War Listed Buildings*. There are more than 500 of them, on a further 600 pages.

This is what has come of the programme first started by EH in the late 1980s, and Harwood has been key to the process throughout, there and through the 20th Century Society. She is a unique, largely self-taught, one-woman repository of knowledge on the subject.

It all started uncertainly, she reminds me. She'd studied history at Bristol at a time when Berthold Lubetkin – a local resident – was being rediscovered. 'That's where I first got interested in walking around and looking at buildings.' Then it was on to the building conservation course at the AA, where she later taught the subject and so gravitated to a job at EH. Reading Lionel Esher's *A Broken Wave* got her interested in the social-build-



As individual as you are!
German quality sinks and mixer taps



Our Passion for leading edge design and manufacturing perfection can be traced back to our German pedigree. We are proud of our reputation for quality and attention to detail. If you have an eye for perfection and love to stand out in a crowd a BLANCO kitchen sink and tap will be your natural choice.

To view our full range of products including sinks, taps, lighting, cooker hoods and induction hobs please contact us to make an appointment at our showroom in St Albans. Open 10am-4pm Monday-Friday.



Tel: 01923 635 200
info@blanco.co.uk
www.blanco.co.uk

BLANCO
GERMANY

By 1996 a raft of big studies had been done. I'd become the specialist – the listing inspector for post war – and it was up to me to write them up. I thought I'd better start back at square one

ing programme of post war governments from the 1940s to the 1970s. After 1987, when post war buildings were first deemed eligible, EH put forward some 70 buildings for listing – and only 17 were accepted by the government of the day.

At that time – I remember it well – there was strong establishment resistance to ANYTHING newer than the 1930s being listed. People used to joke about motorway service stations being so recognised, as if this was an obvious impossibility. The first post war building to be protected in 1987, Sir Albert Richardson's Bracken House offices and printworks for the Financial Times, was a stylistic throwback to the stripped-classical 1920s. As the 1990s dawned, so did a new approach. 'After that initial rebuttal, Baroness Blatch – who must have been minister of state for about five minutes – said that we had to do the thing properly, and gave English Heritage some money to do it,' says Harwood. This was when EH's Postwar Steering

Group was set up. 'A whole raft of big studies were done. By the time they came to an end in 1996, I'd become the specialist – the listing inspector for post war – and it was up to me to write them all up. I thought I'd better start back at square one. But other things got in the way over the years.'

That writing-up – endlessly modified as the listings programme expanded – is now finally revealed in the form of *Space, Hope and Brutalism*. This too, however, is just a step along the way as Harwood (now senior architectural investigator at Historic England) and her colleagues are constantly undertaking new thematic studies which eventually yield new crops of listings – most recently libraries, which led to a grade 1 listing for Sandy Wilson's long-in-the-making British Library at St Pancras. Earlier studies included churches, one-off houses and office buildings. Listing was especially useful for post war churches, she explains, as this allowed grants to be released for often much-needed

Below Before Foster and Rogers went high-tech, they built the Creekvean house in Cornwall as a mid-60s Team 4 project.

Below right Brutal but sweet: the Liverpool Sugar Silo by Tate and Lyle engineers, 1955-7.



repairs, and helped prevent some churches closing. But they were all Church of England: now a separate study is being done into their Roman Catholic equivalents.

So it's been a lumpy kind of process – given the resources available, everything can't be considered all at the same time. On her to-do list are universities, New Towns, and then the buildings of the 1980s-1990s post-modern era. 'Whatever you think about that architecture,' she observes, 'There was some very good town planning involved.' Something else has changed over the years too: the perceived power of the designation. The first overtly modernist building of the era to be listed, the Brynmawr Rubber Factory of 1946-51 by Architects Co-Partnership, scarcely benefited from all the publicity and campaigning: despite its grade II* designation it stayed derelict for years and was finally (but for a few fragments) demolished in 2001.


Today, a listing designation is usually

seen as salvation from looming demolition and its absence a death knell. Consider the saga of Preston Bus Station by Keith Ingham of BDP – finally listed after repeated attempts and now proposed for restoration and partial new use – as opposed to the council housing of Robin Hood Gardens in Poplar by the Smithsons, refused listing despite top-level support and now being prepared for the wrecking ball. It can seem very random, what gets saved and what doesn't.

This brings us back to that sometimes knotty subject – the perception of brutalism. For Harwood, the change of mood goes back to the controversial demolition of two key buildings by the Owen Luder practice – the Tricorn Centre in Portsmouth and the Treaty Centre (better known as the 'Get Carter' carpark complex) in Gateshead. Once they were gone, observes Harwood, people began to regret their passing. At around the same time the World Monuments Fund suddenly

sounded the alert about three endangered brutalist buildings – the Hayward Gallery on London's South Bank, John Madin's Birmingham Central Library, and the Preston bus station. Well, the Birmingham Library is going the same way as Robin Hood Gardens but, says Harwood, the saving of Preston – listed by then architecture minister Ed Vaizey – was an important moment.

She's now a PhD – done with her alma mater, Bristol – on the subject of the post war building of the South Bank complex. The books are her way of sharing the knowledge she's gained, 'putting back some of what I've taken out' as she puts it. And there's been one great satisfaction in dealing with this period in architecture. 'Most of the original architects were still around. I met nearly all of them – just, they were dying off.' She pauses, remembering Bristol, 'Though I missed Lubetkin. And it would have been nice to have met some of the other Tectonites.' ●



'Whatever you think about the architecture of the 1980s-90s, there was some very good town planning involved'



The NEW White Book System Selector

Find system solutions and BIM data

We've updated our White Book System Selector to help you find the perfect specification solution even more easily.

Product and system information, dwg CAD files, test reports, NBS clauses and Revit BIM files for all our system solutions can be downloaded online. This tool uses enhanced performance filters, such as fire integrity or acoustic insulation to search for the ideal solution to meet your project requirements.

New for 2015 is a 'My Projects' area which gives you the ability to store specifications by construction project for future use. We've also refined the search criteria and added the flexibility to download full or part details for a system.

For more information, visit british-gypsum.com/select or call our Technical Advice Centre on 0844 800 1991.

british-gypsum.com/select





RILD - Royal Devon & Exeter Hospital

TM/ & Forticrete

>> Concrete block masonry <<



FINISHES: Fairface / Shot-blasted /
Splitface / Burnished / Polished

Forticrete

>> Concrete block masonry <<



Architectural Masonry

I search for the realness,
the real feeling of a
subject, all the **texture**
around it...I always want
to see the third
dimension of something...
I want to come alive with
the object.

Andrew Wyeth

Texture is a beautiful thing...

Forticrete



Fairface
Shot-blasted
Splitface
Burnished
Polished

FINISHES: Fairface / Shot-blasted /
Splitface / Burnished / Polished

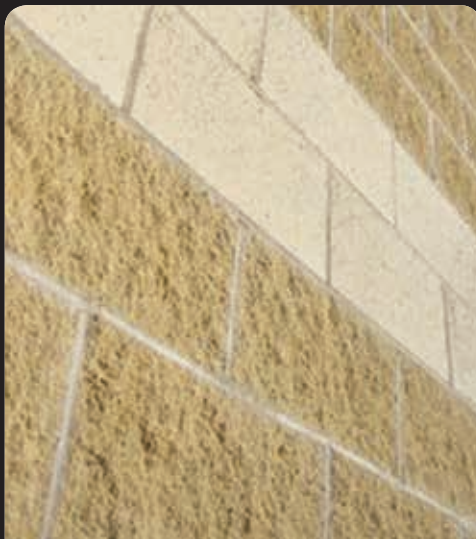
Forticrete

>> Concrete block masonry <<



Clapham One / London

TM/ & Forticrete



FINISHES: Fairface / Shot-blasted /
Splitface / Burnished / Polished

Forticrete



Asha House / Loughborough

Forticrete

>> Concrete block masonry <<



He who knows how
to appreciate colour
relationships, the
influence of one colour on
another, their contrast and
dissonances, is promised
an infinitely diverse image.

Senia Delaunay

The beauty of colour...

Forticrete



Florence Brown School

Forticrete

>> Concrete block masonry <<



Dispel the myth

There is increasing recognition of the environmental benefits of many of our products, which allow energy consumption to be reduced.

The benefits of using concrete products in new homes building are recognised within the Code for Sustainable Homes and the Green Guide to Specification, where constructions that use masonry are awarded an A or A+ rating.



Innovative products that
DON'T cost the earth



Forticrete



FOR MORE INSPIRING IDEAS
VISIT US ON



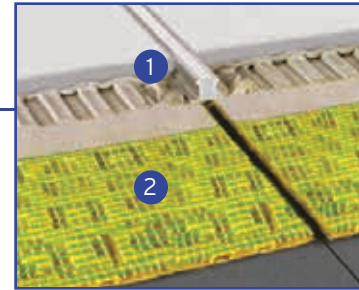
TM / TAYLOR MAXWELL®
The mark of choice.

#inspiredmasonry

info@taylormaxwell.co.uk
taylormaxwell.co.uk/facades

Create beautiful tiled flooring for your clients' residential projects

Our Bespoke Movement Joints and CI+ Anti-Crack Matting will ensure your project conforms to UK Building Regulations and doesn't crack due to the problems caused by underfloor heating systems



Dural Movement Joints and CI+ Anti-Crack Matting

Avoid cracks in your tiled flooring

Our Movement Joints accommodate the movement caused by thermal expansion and contraction of the subfloor (due to the underfloor heating systems). The joints distribute the stresses evenly between the subfloor and the floor covering, making them ideal for residential developments with underfloor heating systems.

They are designed to exceed BS5385 and can be specified in any RAL colour - perfect for your installation.

Our CI+ Anti-Crack Matting absorbs the pressure and movement within the subfloor and prevents the stresses from being passed on to the tiled surface.

Dural UK Telephone 01924 360 110 | Email info@dural.co.uk | Web www.colouredmovementjoints.co.uk www.cimatting.co.uk www.dural.com

Pictured above:

- 1 Bespoke Movement Joint
- 2 CI+ Anti-Crack Matting



**Commercial
Lifts and
Home Lifts**

Designed and manufactured in Sweden, a Gartec Platform Lift is the most aesthetically and technically advanced available today.

For further information or to request a RIBA certified CPD seminar, please call **01296 397100**, or visit **gartec.com**

GARTEC
An Aritco Group company



fish P.J.L.
Health & Safety Consultants

CDM 2015 Training

Do you have the necessary capability, skills, knowledge and experience in...

The Principal Designer role

The Client role

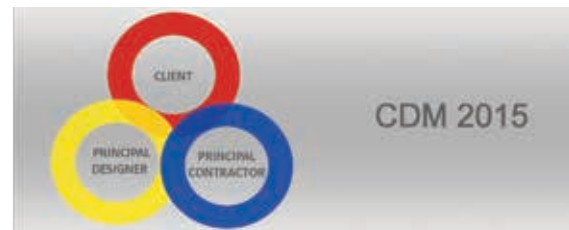
Specific role courses delivered to you with real life practical examples tailored to your own business.

We can run the courses on a private basis, at a venue of your choice or within your own premises on a date that suits you.

Experienced CDM trainers are able to offer training and advice to all sectors.

Delegates will be taken through the main changes, what impact they have and how to implement and manage them.

Half day course starts at £550 +VAT for up to 10 delegates



Additional CDM Consultancy service also offered with templates for delivery of service. To book or to discuss all your CDM and health and safety needs:

Call 020 3542 8625 or E-mail: contactus@fishpjl.co.uk www.fishpjl.co.uk

Man of the people

By skilfully involving others in his art and his business, Ai Weiwei plays the great democrat

Hugh Pearman

This is a preview of a phenomenon as much as of an exhibition. The Royal Academy's autumn blockbuster on the one Chinese contemporary artist everyone has heard of has had a huge build-up since it was announced in 2014. Never mind the art, what about the personality? Would the artist be given back his passport by the always-suspicious Chinese authorities, or would all the planning of the exhibition have to be done remotely? Having got his passport, would he be granted a visa by the British authorities? If so, what kind of visa? And so on.

As we now know, he got his passport back AND got the British visa, but not before some numbskull in the Passport Service had at first turned him down for the full version on the grounds that he had been a convicted criminal in China (he was not, he was detained for 81 days by the authorities and finally released without charge). It took the home secretary, Theresa May, to bang heads together on that one. All splendid publicity for the RA, which under its artistic director Tim Marlow, a professional broadcaster and critic, has anyway been trailing the show through endless unctuous blogs of the 'making of...' variety, and a teaser film clip of an interview with Ai by Marlow in which he names his influences – Duchamp, Jasper Johns, Warhol – and declares, to nobody's surprise, that his art and his politics are inseparable.

From all these preliminaries we learn things such as the fact that his main studio compound is overrun with cats, one of which is called Garfield, another 'meetings cat', who lies on the table during meetings. We learn he (artist, not cat) likes to have such meetings early in the day, that sometimes he eats in the studio and sometimes at a restau-

The crowdfunding was clever because it played to the idea that this is in some way democratic art



Left Marble security surveillance camera, 2010, becomes art.

Below Ai in his most factory-like studio – a gift for the camera but how great is the art?

rant, and that he has one particularly large studio, a former factory, which lends itself well to atmospheric portrait shots of the kind that adorn the RA's poster for the exhibition.

There is more. Despite all this advance publicity and the global fame of Ai Weiwei, it seemed at one point that the RA was short of sponsorship funds for one aspect in particular of the show: an installation of eight of his famous 'trees' in Burlington House's Annenberg Courtyard. Nothing daunted, the RA launched a global crowdfunding campaign for £100,000. The appeal featured photos of good-looking mostly young people holding placards of Ai's sayings, as if he were some modern-day Confucius. 'From the mountains of rural China to the heart of London, join the RA in creating an incredible piece of public art with Ai Weiwei,' went the sell, which was complete with incentives for various levels of support: £5 got you a wink from



AI WEIWEI

HARRY PEARCE/PENTAGRAM, 2015

Garfield, £150 a selfie from his master, and so on upwards. It worked: when the appeal closed on August 21, it had raised £123,577 from 1,319 backers.

This was clever because it plays to the idea that this is in some way democratic art – see, the world chips in to help, so keen is it to see the work of this wise, great, wealthy, oppressed, photogenic man at the RA!

How things have changed since I wrote about Ai Weiwei in this magazine in January 2004 – an issue guest-edited by Herzog & de Meuron, who at the time were working with him on their design of the 'Bird's Nest' stadium in Beijing for the summer Olympics of 2008. Then, he was less well known while H&deM still seemed fresh. I wrote with fascination about Ai's 1995 piece that involved the deliberate dropping and smashing of a 2,000-year-old Han Dynasty urn (an act photographed and duly reproduced in our pages then, and which reappears in the RA show). Today, of course, both artist and architects are world superstars but with one important proviso: Ai remains stubbornly in China – despite the evident hostility of the authorities towards him, including the forced demolition of his Shanghai studio in 2011. He has built a surprising amount of relatively small-scale development in Beijing, in his parallel career as an architectural designer, though his art, we are told, is never exhibited in China. Hence all the passport/visa business. Given the regime's past treatment of him and his family, he shows undoubted courage and determination in staying.

But does all this make him a good artist, as opposed to a clearly successful one? There is a rising swell of opinion to the effect that he is not, particularly: that his is essentially Western conceptualism as he learned it during a youthful spell in New York, and that he does not bring much to the party that his heroes from Duchamp onwards have not done long before. In other words – as with Salvador Dali in his day, say – are we being seduced by the carefully-contrived persona, in this case helped along by our Western-liberal inclination in favour of the political rebel? This, after all, was why he was made an honorary RA in 2011: solidarity.

I'll be amazed if this is not one of the RA's most popular shows. And while I might not go quite so far as the ever-enthusiastic Marlow ('One of the most important artists in

Are we being seduced by the carefully-contrived persona, helped along by our Western-liberal inclination in favour of the political rebel?

the world today... a creative phenomenon that is at once radical, political, architectural, historical, poetic, materially inventive and transformative') for me Ai does bring something new to the table – in particular the commentary contained in his work. This is sometimes obvious (two cameras carved from marble, one a security camera of the kind he is constantly watched by, one a video camera of the kind Ai uses right back at them) sometimes oblique in a Cornelia Parkerish kind of way (twisted concrete rebar from the 2008 Sichuan earthquake straightened by hand and laid out so as to resemble a landscape). And I'm expecting the courtyard full of crowdfunded trees – in which Ai grafts new 'trees' onto discarded lumps of felled ones – to be quite an experience.

And finally: magnificent craft skills should be on show. Ai Weiwei depends on teams of others labouring to make his works, realise his ideas. Even more than his admired Warhol with his prodigious output, he runs a Factory. Director or dictator? You decide. ●

Ai Weiwei is at the Royal Academy, London, until December 13, full price £17.60



AI WEIWEI (2)

Above 'Straight', 2008-12. A more oblique work by Ai, these straightened rods of rebar were salvaged from the Sichuan earthquake
Below IOU wallpaper, 2011-13, made by Ai in response to donations to help him pay a £1m fine.



Value engineering



Byron House, Nottingham Architect: Church Lukas Contractor: Vinci Construction Specialist Contractor: Alucraft

When you specify a Schueco system, you're getting more than just unrivalled choice and the engineering excellence needed to reduce CO₂ emissions. You're getting the in-depth system knowledge and technical expertise that can deliver great design and unbeatable thermal and acoustic performance at an economic price. We call it value engineering; you may call it simply the best system solution on the market. **www.schueco.co.uk**

SCHÜCO

AIRTIGHTNESS SIMPLIFIED



Wraptite-SA

An excellent airtightness result can be difficult to achieve. It doesn't need to be. Our new Wraptite-SA delivers a vapour permeable external air barrier using only one component.

Installing an internal air barrier is a labour & cost intensive process, having to accommodate electrical, lighting, heating & drainage systems often incorporating proprietary sealing components. Using an external air barrier greatly reduces the amount of time spent on difficult detailing, and with less to go wrong, there's less chance of encountering expensive remedial works too.

Wraptite-SA was recently used in a CSH Level 5 construction, achieving an excellent airtightness test score of $0.87\text{m}^3/\text{m}^2/\text{hr}$. No remedial work was required.

WRAPTITE TAPE

Fully bonds to all standard substrates, suppressing air leakage around junctions, openings and penetrations. It is also suitable for permanent airtight sealing of membrane overlap.

Airtight right with Wraptite

For more information on Wraptite please visit:

www.proctorgroup.com | wraptite@proctorgroup.com



Celluloid city

Rotterdam's strong architectural identity is about more than buildings – it has a film festival to match

Isabelle Priest

Rotterdam has a thriving architectural culture. It is home to world-renowned practices OMA, MVRDV and Erick van Egeraat. Projects by masters JJP Oud, Jaap Bakema, Wim Quist and Weil Arets line its streets and in the past year it has opened de Rotterdam, the Markthal and a new station. It is a playground for architects in a country full of Golden Age cities. It has Het Nieuwe Instituut (formerly the NAI), holds a biennale, and this year's Architecture Film Festival Rotterdam (AFFR) will take place on 7-11 October.

A biannual event founded in 2000 for the European Capital of Culture, AFFR has grown into the world's largest architecture film festival with 80 screenings taking place over four days and more than 6000 visitors in 2013. 'Filmmakers have a different take on the city,' explains festival manager Wies Sanders. 'AFFR encourages architects and planners to look differently at urban environments.'

2015's theme is Global Home – about how the feeling of home is changing; from the migrants entering Europe to the online phenomena of AirBnB and couch surfing. Film highlights include Moving Home, about houses on the brink of collapse in former coal mining regions of Germany; Andermatt, which charts the transformation of a Swiss village by an Egyptian billionaire; and The Chinese Mayor, about a mayor's mission to save his city. For the first time it will also spread beyond Rotterdam with live streaming of the headline film Concrete Love (see below) in Denmark, Chile, Spain, Italy, South Africa and New York. Other highlights include an interactive installation involving bicycle-powered screens, an intensive pro-



'The family sometimes suffered a bit because of my work. But maybe my work suffered because of my family as well'

gramme of introductions, Q&A sessions, talk shows and a lecture by Steven Jacobs, author of *The Wrong House: The Architecture of Alfred Hitchcock*. Here are our three other recommendations.

Concrete Love: The Böhm Family (2015)

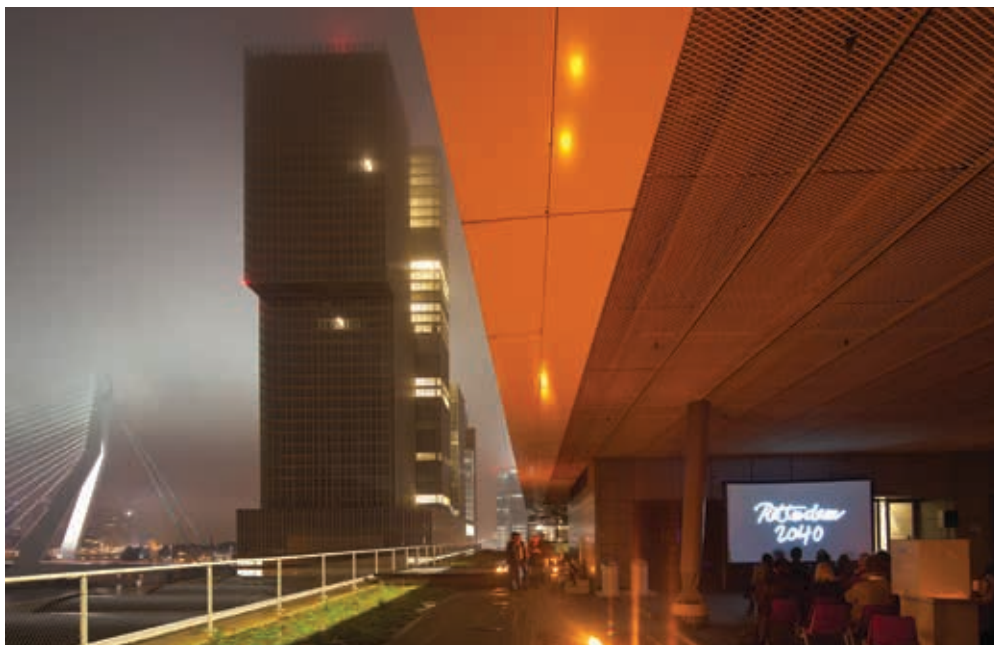
Concrete Love is a heart-warming film by Maurizius Staerkle-Drux about the Böhms, the three-generation family of pre-eminent German architects with a fourth in training. Told through the everyday life of its oldest, most famous member, the film follows Gottfried at home and on his travels aged 93, meandering through his reflections on the past, and relationships and work in the present. It tells of the joys and struggles of ordinary family life, as well as those of parental approval, sibling rivalry and differing ideologies when its members are equally committed to creating an architectural legacy. 'The family sometimes suffered because of my work. But maybe my work suffered because of my family as well,' explains Gottfried.

The film starts with Gottfried looking out over Cologne from a ferris wheel pointing out which Böhm built what, and continues through subjects including the importance of his wife Elisabeth in his work, his memories of war, fatherhood, the depressive state of architecture in Germany, and the difficulty of competitions.

It is shot through intimate and stirring interviews and stunning filmic explorations of architectural work. Dealing with love, loss

Below Rooftop screening overlooking OMA's de Rotterdam and UNStudio's Erasmus Bridge.

Left Poster for Concrete Love.





and friendship, the film gains energy from archive footage, incredible charcoal drawings and a determination to keep going.

Modern Ruin: A World's Fair Pavilion (2015)

'World's Fairs are meant to be ephemeral' – fleeting, faux facsimiles of the future that should be quietly forgotten before their predictions of flying cars, teleportation machines and the brotherhood of man fail to materialise. Matthew Silva's Kickstarter-funded film explores what happens when they're not. His film is a love affair for a building in need of love – Phillip Johnson's Googie-style New York State Pavilion, constructed for the 1964 World's Fair, that wasn't really a World's Fair at all. After the Fair, it was used as a concert venue and roller rink before following the well-trodden path to disuse and disrepair.

The building is known for its flying saucer-like observation towers and elliptical bicycle wheel roof. This is supported by concrete columns and was originally draped in fibreglass with rose-tinted windows. Yet these are long gone and now it is a big top without the tent.

The film tells the story of those who grew up alongside the building, and who are now trying to preserve and re-purpose it. Romantic as this is, it's hard to watch without thinking of the fates of Britain's own white elephants.

Concrete Stories (2014)

Concrete Stories by Lorenz Findeisen tells of the modernist dream that swept Europe after the war – that panel-based, prefabricated, concrete architecture could serve as an agent

In the heart of former communist East Berlin, lifetime residents are driven out to make way for tourists and must-have apartments

of social change. It tells how the idea straddled the ideological divide, affecting both East and West.

In a case of art imitating its subject matter, the film is a tapestry of archive footage of glimmering new buildings of tomorrow, tied together by interviews with current residents who muse over the dreams of yesterday and realities of living in the blocks today.

The film shows that similar architectures have had very different trajectories, and how the vision of the doctor and labourer living as neighbours in identical apartments chatting about Chekov over their morning cha has got lost along the way. In France those who can't afford to live elsewhere are driven into the 'banlieues', while in the heart of former communist East Berlin, lifetime residents are driven out to make way for tourists and must-have apartments.

The concrete blocks thrown up 50 years ago may not fit today's notions of beauty, but they did represent an idea for a better future. As the epilogue says, 'Beauty is not an alternative to old, but novelty is.' ●

Architecture Film Festival Rotterdam, 7-11 October, LantarenVenster, Otto Reuchlinweg 996, 3072 MD Rotterdam, the Netherlands

Left Still from Concrete Stories about prefabricated postwar housing.

Below Pilgrimage Church by Böhm as featured in Concrete Love.

Bottom Geng Yanbo looks out over his city in a still from The Chinese Mayor.





Exclusively designed by Gino Venturelli



NEW TARALAY IMPRESSION CONTROL

SAFETY IN NUMBERS

SAFETY IN WOOD

SAFETY IN DESIGN



The Taralay Impression Control flooring consists of a Safety in Wood and a Safety in Design offer.

This brand new collection is ideal for hardworking places and has been developed specifically for an extensive range of contract applications. If you're looking for inspiration and a tough safety flooring that offers both slip resistance and outstanding performance, then look no further.

CONTACT US NOW FOR FREE SAMPLES:

☎ 01926 622600 @ contractuk@gerflor.com 📧 www.gerflor.co.uk

Gerflor[®]
theflooringroup

nora **nTx**

It's a question of time

nora nTx is a revolutionary self-adhesive moisture tolerable flooring system that reduces installation time and dramatically lowers the total cost of your project.

- ✓ Fast and simple laying in just a few steps
- ✓ No need to interrupt your daily work
- ✓ No drying or waiting time
- ✓ Can be used immediately after laying



- ✓ Suitable for new builds or renovation
- ✓ Complete system from a single supplier
- ✓ Minimised downtime
- ✓ Works perfectly even with high residual moisture levels

nora systems UK Ltd | Tel.: 01788 513160 | info-uk@nora.com

nora[®]




**MUMFORD
& WOOD**
EST. 1954



British craftsmanship

www.mumfordwood.com



BRITAIN'S FINEST TIMBER WINDOWS & DOORS[™]

Virén Sahai

1933 – 2014

Architect of care and vision whose work spanned the post-war, post-colonial years



Attending primary school under a mango tree in Uttar Pradesh, Virendra Sahai's class was learning by rote Wordsworth's 'Daffodils' when Virén had the temerity to ask, 'Please sir. What is a daffodil?' 'Stupid boy, don't you know what a daffodil is?' replied the teacher.

Virén was shocked to realise that the teacher had

no idea either. It was his first indication that if he were to succeed in life he would have to leave India.

Virén qualified in Delhi and was employed as a draughtsman with Francis Blomfield, who had been resident architect to Robert Lutyens in the city. He then travelled to Rangoon, Burma, to work on low cost indigenously housing, and save money for a passage to England.

Arriving penniless in London in 1954, with only a letter of introduction to Raglan Squire & Partners in Eaton Square, he found the RIBA did not recognise his Indian qualifications. While working as an architectural assistant at Laing, he enrolled for a Certificate of Architecture at night school at The Polytechnic, Regent Street. His life was changed within days of his arrival not just by the climate and culture of post-war Britain, but by the power of the works of art he saw in his first-ever visit to a museum – the Tate Gallery. He was so moved by the works of Henry Moore, Matisse, Turner and Cézanne that he also enrolled to study painting at evening classes at the Central School of Arts, and had a one-man show while still a student.

In 1962, he took advantage of the boom in construction of post-colonial architecture for recently independent countries, working in Nigeria for Fry Drew & Atkinson as resident site architect for the stadium at Kaduna, and also in Tunisia. Continuing with British pioneers of the modern movement, he worked with Yorke, Rosenberg & Mardall, and later Architects Co-Partnership (ACP). For the latter he was site architect for the Wolfson Building for Trinity College Cambridge – a striking brick-clad ziggurat for 90 undergraduate rooms built within a college court. Meanwhile he studied at The Polytechnic, Regent Street for his diploma in town planning.

His consuming interest in the design of urban spaces drew from his 1969 town planning diploma thesis – an analysis of the design history of London squares.

Appointed regional architect for the NHS Southwestern Regional Health Authority in 1974, Virén startled his management by insisting that he have a drawing-board in his office, and using it. He was responsible for the development of an alternative to the traditional hospital 'street' and Y plan surrounding the nurses' staff base, developing, after extensive consultation, a regional standard ward plan for acute patients.

Now based in Bristol, he objected to the closure of the architecture department of Bristol University in 1984 and became founder chairman of the Bristol Centre for the Advancement of Architecture, which was set up to support the involvement of the public and educators and reach out to everyone with a concern over the built environment. It initiated practice-based post-graduate education and research and survives as the highly successful Architecture Centre.

Appointed chairman of the NHS advisory group on estate management strategy, Virén grappled with the NHS bureaucracy and its historic legacy of excessive ageing building stock in the wrong place and of the wrong type, unrelated to current demography and clinical practices. At one meeting, top-heavy with senior management, he said, with a grin, 'What we need is fewer chiefs and more Indians.'

Virén was rewarded for his public service in 1985 with an OBE, and was appointed head of architecture, service engineering, surveying, and landscape, for Cambridgeshire County Council in 1987. In 1993 he became leader of the Urban Design Group for Cambridge Futures, proposing a strategy much commended by Lord Rogers.

Throughout his working life, Virén always devoted one day a week to painting, and in retirement it became his main occupation. Even though he loved European culture and philosophy, Virén nevertheless retained some Indian traits. He loved cricket and took great delight in trying to explain the Hindi concept of 'ASH', which loosely translates as 'How pleasant it is to do nothing and to rest afterwards'.

He is survived by his wife Ingrid, whom he married in 1966, his son Erik, and grandchildren Liam and Zara. ●

Michael Alford Andrews

In Memoriam

DEREK ALFRED RUTHERFORD
ELECTED 1955, REDHILL, SURREY

GARETH THOMAS
ELECTED 1978, CARDIFF

ROBERT PETER WARD
ELECTED 1988, COLCHESTER

JOHN CHARLES MITCHELL
ELECTED 1954, YEovil, SOMERSET

TIMOTHY BENNETT
ELECTED 1974, HAMPSHIRE

To inform the RIBA of the death of a member, please email membership.services@riba.org with details of next of kin

Exchange

Only feel the love

Your MacEwen Award: Architecture for the Common Good, is a vital theme at a time when architectural practice has been all but subsumed by the free market and, as we all chase the bottom line, we're left with next to no 'surplus' to divert to our vocation – the raising of the business of habitation to an art and a social good. But is an award really the most effective way of encouraging architecture to be seen, both inside and outside the profession, as a public good? Can an award genuinely contribute to a process of updating the professional status of architecture to reflect its public role?

To deliver more than the narrow private objectives that their scant fees typically afford, architects must be prepared to dedicate most of their waking hours to their vocation, and have the energy and creative resources to make things happen outside orthodox procurement and planning routes (and perhaps a private income).

It is all very well relying on architects to go the extra mile 'for the love of their vocation' but, in practice, if a gift is not reciprocated (or, at least, appreciated) – and make no mistake, the work architects do gratis is a gift – the giver will eventually give up. It's no wonder that many architects are more interested in the approbation of their peers than public service. After all, when architects no longer have a public role – that is, they are not paid from the public purse – they have to rely on their professional constituency to 'feel the love'.

I feel that we architects need to be part of a wholesale ideological shift from the neoliberal consumer-led orthodoxy which is the legacy of Mrs Thatcher and to develop a new language for the way we discuss the practice of vocations and the role of public service within the economy. To this end the RIBA should focus on its role as a learned institute and encourage new grassroots organisations to take the initiative when



Follow us on Twitter @RIBAJ
Find us on Facebook &
Instagram

We welcome letters but retain the right to edit them:
letters@ribajournal.com
RIBAJ, RIBA Enterprises,
66 Portland Place,
London W1B 1AD

it comes to developing – and lobbying for – architecture's social agenda.

Tobias Davidson, London

Historic viewpoint

Eric Lyons, a contemporary of Malcolm MacEwen, used to say 'Architecture is a social art'.

Visit his buildings and learn.

Peter Murray, London

Back to school

I was intrigued to see an editorial in a recent edition of Country Life magazine headed 'Time to design an architecture A level'. The salient point being made was that the public was largely incoherent in expressing its sometimes passionate opinions on architecture, and that the use of 'lofty technical terminology' by architects and historians was part of the problem.

It expressed the laudable view that we need to start thinking and talking about architecture much more than we do at present, and one way of doing this would be to make it an option in the school curriculum, perhaps as an extension of History of Art, or an A-level subject in its own right.

I have no problem with this suggestion in principle, except to speculate that it might lead to the use of a spurious AI (arch) qualification, much like the 'architectural designers' who operate on the fringes, and to the detriment of our profession.

Brian Collins, Middlesex

Out of context

I must express my frustration on reading your piece on the industrial shed extension in the Cotswolds (p10, RIBAJ, August 2015).

Why was there no view of the entire ensemble, including the existing house on the site? Was the architect entirely uncaring, or simply shy about the juxtaposition of new and old? And what of the context to the wider rural landscape?

I thought the Journal covered architecture. This includes the wider environment, you know – the success or failure of any design cannot be judged on your tight formatted, limited imagery.

John A Fidler, California

Tweetback

One reader fondly recalled BDP's Keith Scott, subject of September's obituary:

David Maxwell @

DavidMaxwell3

Keith was chairman during my time @bdp_com. An inspirational leader who influenced and motivated a young engineer.

...Another approved of our launch of the RIBAJ MacEwen Award for socially-beneficial buildings...

Flora Samuel @Flora Architect

Feels like a zeitgeist thing. So many tweets about society and collaboration everywhere. Hope so.

...while our review of a new biography of Sir George Gilbert Scott seemed to resonate in the north-west...

Love Bootle @LoveBootle

@RIBAJ @thevicsoc Who wouldn't want to give Scott a special cuddle for such genius?! Just me? Nah, thought not.

...and we managed to get human and animal users into our September cover story about York Racecourse.

Carrie Behar

@Carrie_Behar

@RIBAJ Nice to see a building photographed with its users present for a change!

PREMIER
LOFT LADDERS

The preferred choice

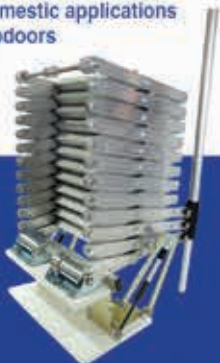
Premier Loft Ladders are the preferred choice of architects and building industry professionals throughout the UK, and their range of COLUMBUS Treppen stairways leads the way in engineering quality, design, technology and energy efficiency, making Premier the foremost supplier of concertina style aluminium and folding or sliding style wooden loft and access ladders. Our stairways have a wide range of options including flat roof access, fire resistant trapdoors, electrical operation (concertina stairway) and vertical access.

BIM modelling for the Supreme stairway is now live on Bimstore

bimstore.co.uk

Contact us on:
0845 9000 195
01394 214413

E: sales@premierloftladders.com
W: www.premierloftladders.com



FoamStone®



if you
can draw it
we can
make it

Architectural freedom to design...

2.4m lengths plus ANY shape delivered in four weeks

Used worldwide, SYTEX UK manufactures 2.4m lengths of architectural FoamStone plus any architectural detail. Easily installed either during or after construction. Approved by Councils and Conservation Officers.

- **durable**
- **robust**
- **lightweight**
- **BBA tested**
- **approved**

Strong SYTEX FoamStone

Perfect for use on:

Timber-frame, brick, block, render, external insulation, new build and restoration.

2.4m lengths of...

- Banding, string courses and cornice
- Window surrounds
- Heads and sills
- Copings

PLUS

- Quoins
- Keystones
- Brackets and corbels
- Reproduce period features

Call now for a quotation

01483 771 301
www.sytexuk.co.uk



- BBA tested
- British engineering
- Manufactured in the UK



Education and experience

With school rebuilding on the agenda again, recent projects show how Ruukki is continuing to support the education sector

With the new government now settled in, the Priority School Building Programme (PSBP) continues throughout the UK. The PSBP's challenge is to rebuild or refurbish 260 schools deemed to be in the worst condition. With a value of £2.4 billion, the initiative is on schedule to rebuild all 260 by 2017.

Leading contractors and architects continue to opt for the Ruukki brand, which offers energy efficiency, recyclable materials, and a wide choice of finishes, colours and shapes.

RIBA award winning work

For Oaklands College project in St Albans, architect AHMM opted for the Ruukki PIR panel overlaid with Ruukki Design Palette S10 and other diverse rain screen materials. AHMM recognised the benefits of these panels, which combine a low thermal conductivity ratio and good fire performance, offering the long term benefits of reduced heating costs and increased fire safety.

Ruukki Forma is a complete facade system consisting of the firm's cladding products fixed on top of the Ruukki® energy panel system, available in a wide range of aesthetic shapes, materials and colour options. As standard, Ruukki Forma makes construction easy and delivery includes all required

components for a complete wall installation.

This scheme is the first of a larger project for the Smallford Campus of Oaklands College. The two-storey, atrium-centred block accommodates almost 6,000m² of new teaching spaces for art, fashion and design, entry level programmes for pupils with learning difficulties, and general teaching facilities. The horizontality of the blocks' facades is interrupted by generously-sized windows and brightly-coloured ventilation panels which reference the green belt landscape that they overlook. The project won an RIBA London Region Award in 2013.

Aesthetically pleasing design

Harris Academy has tested Ruukki's systems to the limit, with its requirement for cost effectiveness, energy efficiency and design to sit alongside the main school building, a locally listed structure dating from the 1920s. The architect Nicholas Hare, and contractors BAM Construction and SD Samuels, used Ruukki's flat panels – which were unusually supplied in short sheet lengths to meet the project's complex specifications.

The PIR panels were chosen due to their non-combustible structural mineral wool core; they also absorb noise well and

provide excellent fire safety as required by educational buildings. This last consideration made them an excellent solution for both facades and internal partition walls.

A clear choice for the sector

Continuing to be considered the architect's external cladding supplier of choice, Ruukki has ongoing projects at Abingdon & Witney College working with forward thinking contractor Tego, and a number of primary schools coming up. Another project with Tego was Denham Schools Project, including Great Denham and Short Town Schools in Bedford: both feature Ruukki flat panels and used Micro Rib Silver systems.

Stratford Schools Project included Stratford School Academy, Pardes House Primary, and Harris Academy Greenwich/Eltham (detailed above) where Ruukki SP2D flat panels have been used in a silver finish.

Continued support and funds

A further £2 billion has been allocated to fund the next phase, the school rebuilding and repairs programme for England, which runs until 2021. Schools minister Lord Nash said: 'As part of this government's commitment to social justice, we want all children, no matter what their background or where they live, to have access to the best possible schools and to learn in an environment that gives them the knowledge and skills to succeed in modern Britain. These new school buildings will provide modern, fit-for-purpose facilities for pupils and staff for many years to come.' ●

Product information can be found from www.ruukki.com/energypanels and details are available from www.ruukki.com/facadesystems.



Above Oaklands College
by Rob Parish / AHMM
Architects
Left Harris Academy,
Eltham.

RUUKKI
LIVING. WORKING. MOVING.

A 6x4 grid of 24 architectural images. The images showcase a variety of small-scale structures and interior spaces. Top row: a modern grey house with a large vertical opening; a black and white sketch of a house with a large arched window; a small black studio with a person working at a desk; a close-up of a grey textured wall; a wooden house with a person standing outside; a modern house with a steep gabled roof and large windows. Second row: a colorful 3D rendering of a house with yellow, green, and grey sections; a yellow house with a sign that reads 'I WILL ARISE AND GO NOW'; a bright yellow cube with a central grey square; an interior view of a room with a wooden floor and a wall of small square openings. Third row: a house with vertical wooden slats; a person standing next to a large window in a brick building; a modern house with a large white rectangular feature on its facade; a sketch of a house with a person standing outside; a white 3D rendering of a house with a stepped roof. Bottom row: a white silhouette of a person standing in a dark space; a modern house with large windows and a dark facade; a close-up of a wooden interior with a white wall; a dark, complex geometric structure in a field; a large orange sphere with a blue band and a small blue square.

Boxes of delight

This was a delightful thing to do. Architecture thrives on constraints, on doing as much as is possible within the parameters set. And here we set some deliberately tough parameters. Our ideal mini-building – which for inspiration looks to Le Corbusier’s tiny, perfectly planned 1952 ‘Cabanon’ holiday hut at Cap St Martin, Roquebrune, on the French Riviera – had to be equally compact, and had predominantly to use the sustainable SterlingOSB product of our sponsor, Norbord. We also set a cost ceiling.

What’s good about this is that such a widely used, basic element of construction seldom gets to be used as a primary, visible structural material in buildings. So there was our challenge – to make the everyday special. To adapt the famous phrase of Louis Kahn about brick: ‘What does the board want to be?’

The best entries, of course, were those that understood the physical properties of the material and cut and assembled it accordingly. There’s little point in trying to defy the laws of physics. Some architects took the brief and deconstructed it, making an already small thing into a tiny complex. Several, of course, noted that while we set a maximum plan area we set no height limit, so allowing a mezzanine – though cost as much as structural integrity ruled out too many mini-skyscrapers.

It should be fully functional and weatherproof, we said. No sculptures or follies, basically. It had to have ‘enough space to sleep, eat and work, and have at least one door and one window’.

Sir Nikolaus Pevsner maintained that a mere building was a bicycle shed while architecture was Lincoln Cathedral. Well, I think we’ve proved here (as did Corb) that a basic shed-habitation can also yield architecture of a high order. So thank you, architects, for responding so well to our challenge.

Hugh Pearman

Editor, RIBA Journal

The Norbord team is delighted with the success of this exciting competition with the RIBA Journal. These creations using SterlingOSB have been a great way to celebrate the 30th birthday of our product.

Yes, it’s been 30 years since Norbord first pressed SterlingOSB at the factory in Inverness yet, despite having been around for three decades, it’s never lost its edge when it comes to strength and innovation. For this reason, 2015 has been a year of reinforcing our message: why it just has to be SterlingOSB for a whole host of construction tasks.

Strong, durable and incredibly versatile, it really does give plywood a run for its money – in fact, it goes a long way when you’re on a tight project budget as it’s upto 45% cheaper.

We would like to thank everyone involved in the competition, not least the architectural community.

Karl Morris

Managing director, Norbord Europe

Produced by
the RIBA Journal
in association with
Norbord SterlingOSB

Supplement editor
Josephine Smit
Design
Richard Krzyzak
Sub-editor
Gail Novelle

Cover images, from-
left, top row:
**Davide Roth, Adrian
Banks, Alan Sylvester,
Vivian Chan, Tim
Finnis.**

Second row:
**Andrew Henderson,
Andrew Roelofs,
Anthony Cole, Stuart
Roberts, Ben Rumer.**

Third row:
**Philippa Bannister,
James West, Luis
Gomez-Lanza
Romero, Nick
Weston, Elena Lamba.**

Fourth row:
**Edward Martin, Peter
Dagger, Frank Pullen,
James Barnett, Janet
McDougall.**

A Cabanon for today

What do a rural retreat, a city micro-home and a temporary shelter for one of the world's disaster zones have in common? All were among the very different interpretations of the brief in the RIBA Microarchitecture Award, organised in association with Norbord.

The judging panel had to choose from nearly 40 incredibly diverse entries, extending from the highly desirable to the extreme. After hours of deliberation and debate, they narrowed the list down to five, ultimately awarding the top honour to I-shed, designed by Davide Roth. Entries by Vivian Chan, Demian Erbar, Martin Johnson and Geoff Denton, and Nick Weston were recognised with commendations.

The competition was inspired by Le Corbusier's Cabanon, a 3.66 x 3.66m wonder that Corb designed and built as his own holiday home in Roquebrune-Cap-Martin on the Cote d'Azur in 1952. Architects were challenged to come up with a fresh interpretation that would be sustainable, affordable, weatherproof and buildable from a kit



Le Corbusier had little more than a bed, bookshelves and a work table in his Cabanon, but some competition entrants squeezed in as much as they could.

of parts mainly made from Norbord's SterlingOSB, showcasing the versatility and strength of a material that is often concealed from view. The cabin also had to be commercially viable, with the budget for the build set at a fairly modest £10,000.

Some responses to the brief unsurprisingly evoked other forms of compact living, including the canal boat, the railway carriage and the caravan. Roth's winning design was compared to a flying machine, lightly resting on the ground in readiness for takeoff.

Entries ranged in form from the basic box to the many faceted and even the globe. Curved walled designs were admired but fairly swiftly ruled out of the honours by the judges, as Karl Morris of Norbord Europe advised that such flexibility was beyond the capabilities of SterlingOSB. Some entrants built upwards, adding sleeping platforms, or in one case a rooftop sun-deck. Others created completely separate ancillary accommodation, leading the judges to debate whether such additions were truly in the spirit of Corb. The panel was, however, repeatedly impressed by the ingenuity with which entrants folded furniture up, down, in and out of the limited space available to squeeze in kitchens, living space, work desks and, in one instance, a library of bookshelves.

The need to maintain buildability and keep the rain out of a structure made using a material that is not inherently weatherproof put entrants' inventiveness to the test. They clad the SterlingOSB in cedar shingle, polycarbonate, zinc, EPDM and much more. The practicality and simplicity of EPDM appealed to the judges, and featured in the commended designs by Chan and Weston. Tent-style canvas coverings were also popular with entrants, with Johnson and Denton's Bothie notable for the way the concept had been thought through.

In the end the judges had to choose one winner. All five shortlisted entries had admirable qualities, but I-shed stood out for its innovation and inspiration. As architecture and as a holiday retreat, it's a worthy contemporary Cabanon.

THE JUDGING PANEL

Hanif Kara, design director
and co-founder, AKT II



Philip Marsh, director,
dRMM



Karl Morris, managing
director, Norbord Europe



Hugh Pearman, editor,
RIBA J



Andy von Bradsky,
chairman, PRP



Cindy Walters, director,
Walters & Cohen



Winner I-shed

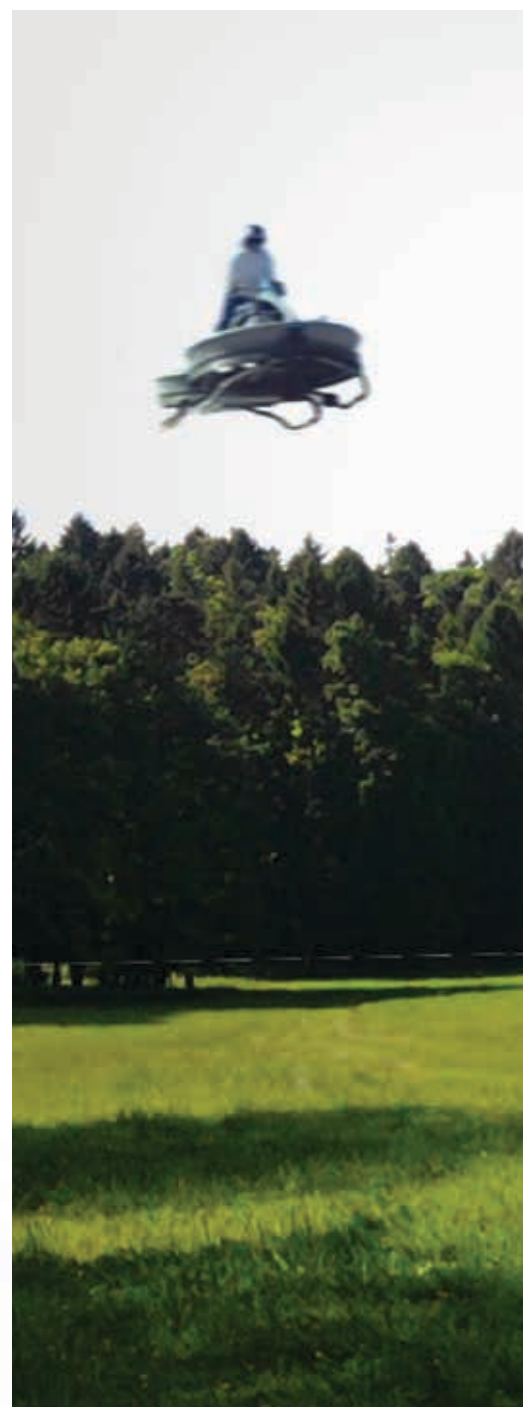
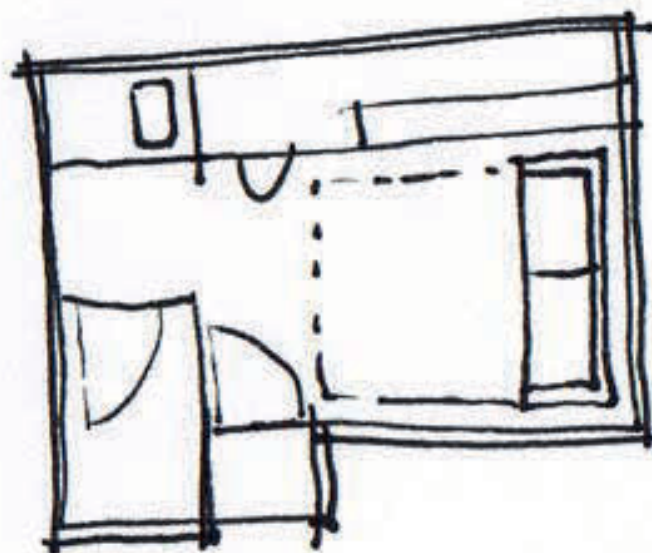
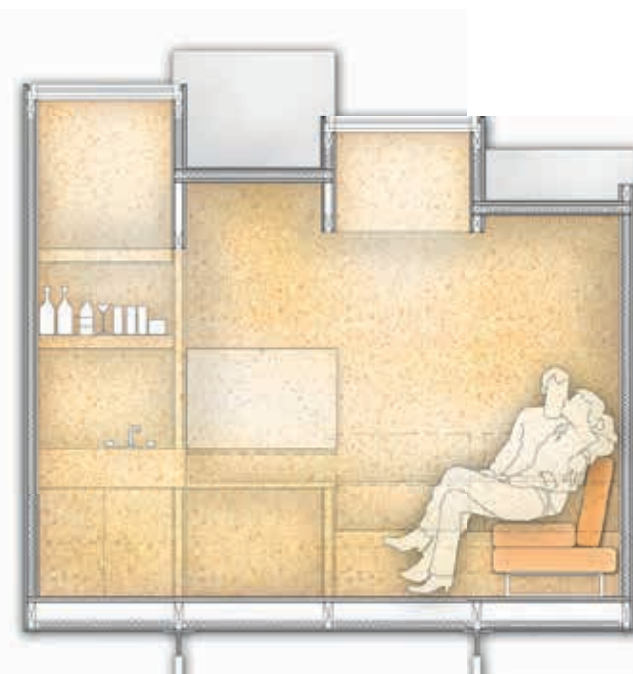
Davide Roth

'A series of stone blocks' is how Davide Roth describes his dark grey, windowless I-shed. Sounds austere? Perhaps, but this cabin intrigues the visitor, tempting them to step inside and discover the comfortable space and view of the sky.

Designed for remote rural areas, the cabin treads lightly on the landscape, cantilevering from centre supports while the entrance volume provides lateral stability. Dark grey aluminium cladding is intended to help the façade merge with and reflect its context, while the absence of windows ensures privacy for inhabitants and frees the cabin from constraints of orientation.

The cabin is made from timber profiles reinforced by SterlingOSB panels, with insulation boards between the structural elements. Components arrive on site pre-cut and numbered for ease of construction. The SterlingOSB-clad entrance steps up to the SterlingOSB interior containing bathroom, sofabed, shelves, desk and kitchen. Four skylights are set at differing levels.

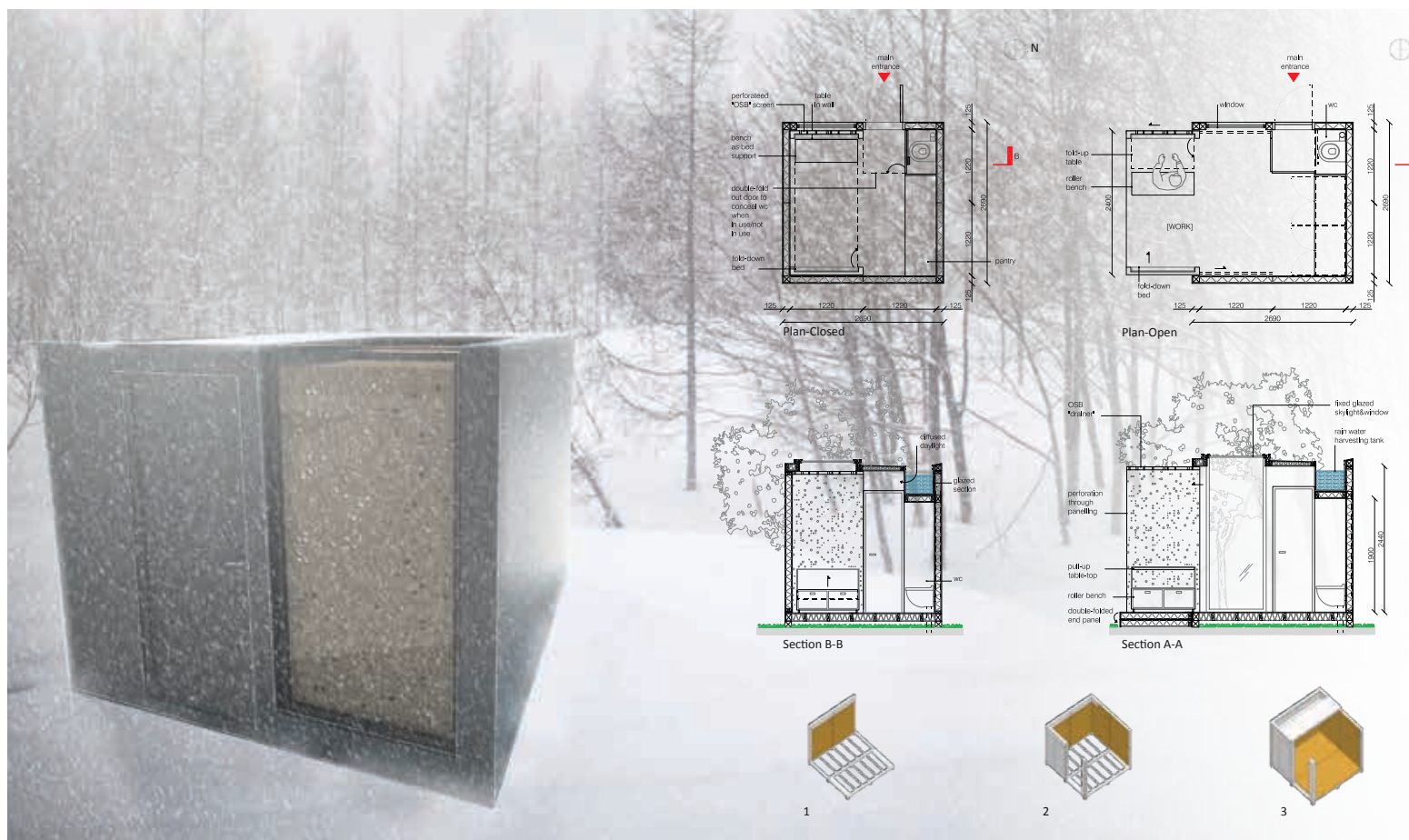
The judges readily agreed that I-shed should be declared the winner. 'It is an extremely intelligent design,' said Andy von Bradsky. 'It is the one that walks into the future, spatially and in other respects,' added Hanif Kara. 'You can imagine being in here and looking up at the stars.'





'It is an extremely intelligent design... It is the one that walks into the future, spatially and in other respects'

Commended Slide + Hide Vivian Chan, Studio Verve Architects

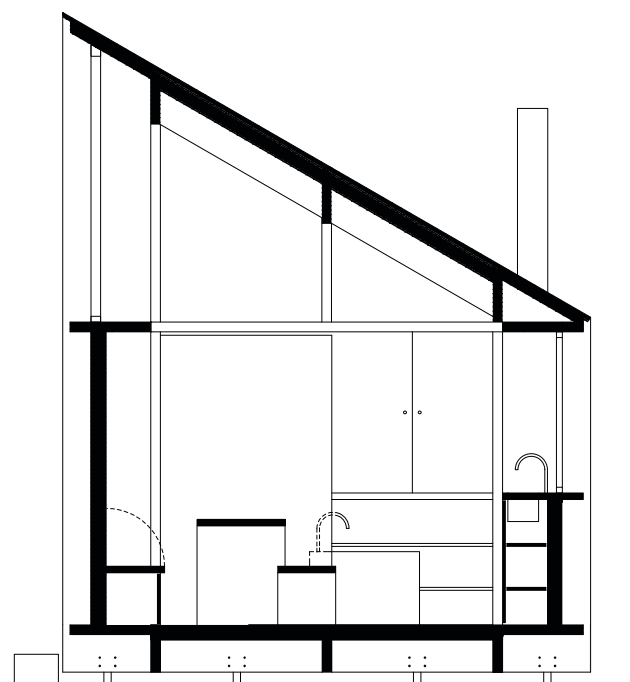


Slide + Hide does exactly what it says. Vivian Chan's off-grid rural retreat incorporates a slide-out 'drawer' section that transforms a winter hideaway into an 8.64m² summer space complete with veranda.

In winter mode the cabin withdraws into itself, revealing only the black EPDM rubber exterior, which covers SterlingOSB structural insulated panels. In summer it opens up to the sun, its end wall folding down and a three-sided SterlingOSB drawer sliding out. The contrast between the dark winter exterior and the light summer veranda is emphasised by perforations in the surface of the latter. 'It looks equally good in both closed and open versions, and the perforated surface is a clever idea,' said judge Philip Marsh.

The cabin contains a fold-down bed and table, box bench and WC, with the toilet flushed by harvested greywater. Rooftop photovoltaic panels supply the single LED light point and power socket.

'It looks equally good in both closed and open versions, and the perforated surface is a clever idea'



'Beautifully planned in the way it works, both internally and externally'

Commended Writer's Cabin

Demian Erbar,
Demian Erbar Architects

This cabin tells its own story as the articulation of its plan is visible from a distance in the distinctive fins of its SterlingOSB frame. It captivated the judges, with Cindy Walters describing it as 'beautifully planned in the way it works, both internally and externally'.

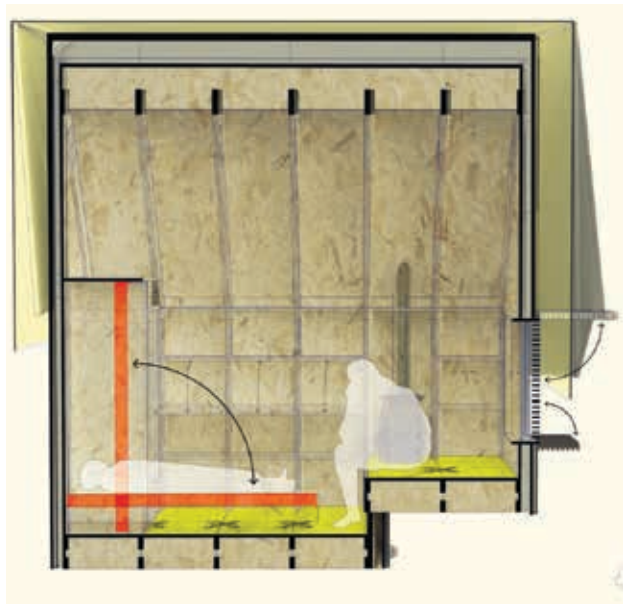
The frame is combined with wall panels made from rigid insulation sandwiched between two sheets of SterlingOSB. Sanding, light staining and a transparent matt coating are the finish for the exterior, expressing the irregular surface pattern of the SterlingOSB. The structure is topped by a Cabanon-style mono-pitched roof.

As well as contributing to the cabin's aesthetic, the fins divide the internal space into three equal bays housing the entrance and a wood-burning stove, a small seating area, and a washroom with circular tub. Cupboards, shelves, worktops and the fireplace tuck into the frame's recesses, with windows above flooding the cabin with daylight.





'In summer you could
remove the tent to
give a pure structure'



Commended Bothie

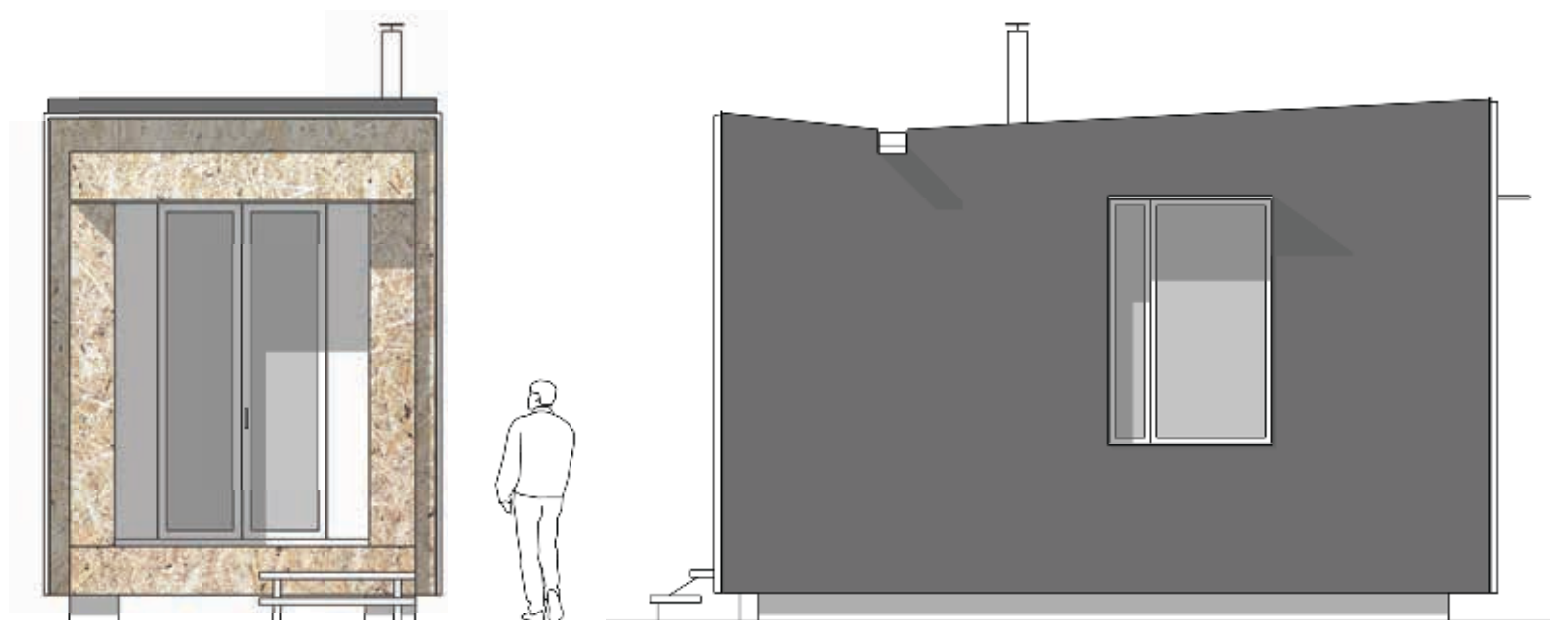
Martin Johnson and Geoff Denton,
White arkitekter

Part cabin, part tent might be a fair description of the Bothie. Its pitched roof has a protective canvas layer, albeit one that is held away from the roof by metal fixings to allow it to dry out after rain showers.

The design – intended for forest or city rooftop – works, said Cindy Walters, 'Because as long as you have something to shed the water, the rest of it can be made of OSB. In summer you could remove the tent to give a pure structure.'

That structure has a double layer of 22mm SterlingOSB sections at 600mm centres. Floor, walls and roof are made from interlocking prefabricated cassettes, comprising two layers of SterlingOSB with wood fibre insulation between them. Fittings – including double bed, seating, table and kitchen – fold away into the structure.

Internally, the SterlingOSB is white oiled and then waxed, while externally it is simply stained and varnished.



Commended Flat Pack Cabanon Nick Weston

All-round practicality in its plan, application of SterlingOSB and construction sequencing earned Nick Weston's design a commendation and the judges' praise.

Karl Morris quickly recognised the commercial potential of the concept, commenting, 'It is a design that is very much of the real world. I could see it selling as garden office space.' Cindy Walters saw another application: 'It could work incredibly well for disaster relief.'

The cabin is designed as a kit for assembly by a DIY enthusiast rather than a team of

experts. The build process involves installing a concrete base, securing SterlingOSB floor, wall and roof modules in position, wrapping rigid insulation boards around the structure, and covering it in an EPDM membrane.

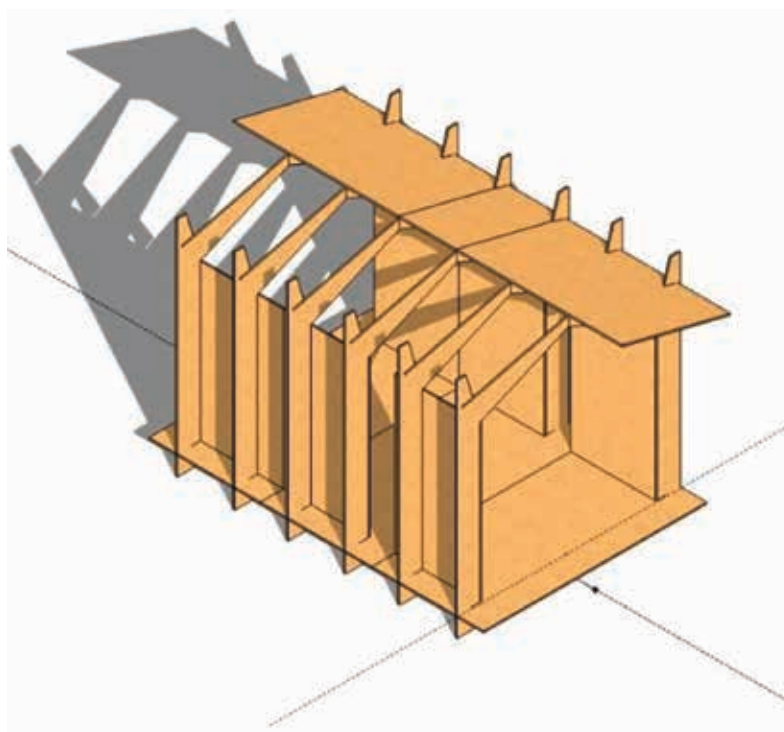
The SterlingOSB is exposed throughout the interior and is visible externally on the inner soffits and reveals of the entrance.

Two windows and a folding door complete the cabin, which contains a fold-down sofabed, table, WC, shower and kitchen. Simple, elegant and, the judges agreed, beautifully detailed.

'It is a design that is very much of the real world. I could see it selling as garden office space'

19no sheets of OSB Gordon Carswell

'The form is inventive, the design exploits the potential of the material and the purpose – as a shelter for disaster relief – all make it stand out'

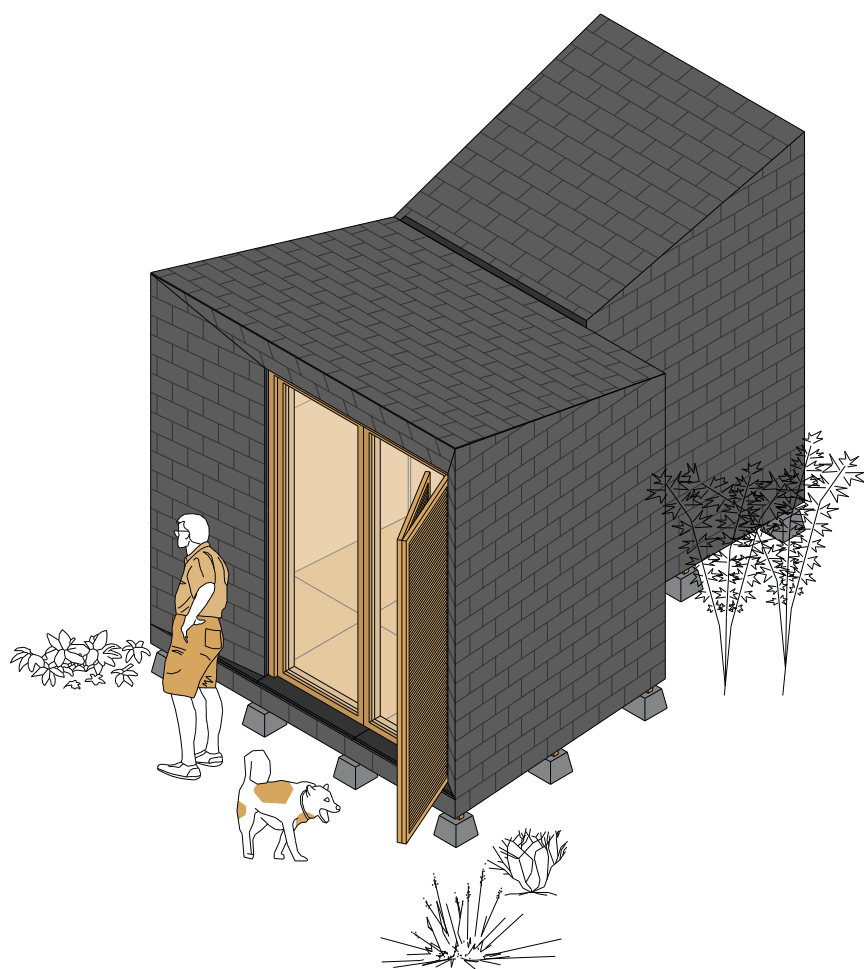


Margot's Cupboard

Edward Martin, De Rosee Sa Architects

'This is a mini-library. It provides a place of retreat in the city'

Brixton Butterfly James West



'It's a clever solution and the drawing is lovely'

Geode House Luis Gomez-Lanza Romero



'Well thought through, versatile and perches on the landscape'





FSC® certified and precision engineered yet aesthetically appealing with excellent energy efficiency. Specify SterlingOSB.

Another example of how
Norbord makes it better



Norbord make it better

www.norbord.co.uk



The mark of
responsible forestry

30 YEARS
OF BUILDING SUCCESS
with SterlingOSB®

Find out more about SterlingOSB.
Call our sales team on 01786 819 225
or visit norbord.co.uk



Ian Jones
T: 01270 753000
E: ian.jones@flowcrete.com
W: www.flowcrete.co.uk

Title: How to Avoid Screed Failure

This seminar covers the different types of floor screeds and their applications. Participants will learn about causes of failure as well as how they can specify the ideal screed solution.



C: Rowan Storey
T: 01642 710 719
E: cpd@nymas.co.uk

Title: Accessible Washrooms: Challenges in Design

This new CPD from NYMAS explores the subject of the ageing population, and raises awareness of innovative solutions for the design of accessible washrooms. Key topics include 'Stylish Compliance' and 'Infection Control'.



E: training@schluter.co.uk
T: 01530 813396

Title: Integrated Solutions for Wetrooms with Tile and Stone Coverings

Schlüter-Systems popular waterproofing and wetroom range will be explored and explained in this RIBA-accredited CPD seminar. The session will provide all the information and knowledge needed, from an integrated approach, on the solutions for wetroom installations at design and specification stage. Run during lunch breaks from any business premises requested, the training session is being offered free of charge with lunch included. The seminar includes a 15 minute question and answer session and participants will receive a certificate upon completion. Please quote reference number **Ref: R9WT10** for priority bookings.



T: 01372 465 655
E: expertise@hansgrohe.co.uk
W: www.hansgrohe.co.uk

Title: 'Why WRAS'

Hansgrohe has a new RIBA approved core curriculum CPD about WRAS (Water Regulations Advisory Scheme) called 'Why WRAS'. Content discusses the importance of compliance to ensure successful project specifications and explores the risk of non-compliance which can have far reaching implications across all the stakeholders. The Regulations apply to all commercial buildings such as hotels, large housing projects and offices. Hansgrohe has over 800 WRAS approved products across a wide range of collections, award-winning designs and price-points.



T: 020 685 9685 W: www.comar-alu.co.uk
E: projects@parksidegroup.co.uk

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

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

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

Title 2: Designing Functions & Reliability into Entrances

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



Title: External Wall Insulation Systems

On Thursday 29th October, Sto will be holding a breakfast CPD at the Werkstatt, London.

8:00 a.m. Registration + breakfast
8:30 a.m. 45 minute presentation:

What is an external wall insulation system?
What are the benefits of using EWIS?
Meeting and exceeding Part L of the Building Regulations
Building to Passivhaus standards

9:15 a.m. Q&A

For more information contact;
E: george.green@ridgemountpr.co.uk
T: 0208 392 0500



T: 01543 443000 E: cpd@geze.com
W: www.geze.co.uk



GEZE is a world leader in manual and automatic door and window control systems, and natural smoke and heat ventilation. We offer 4 RIBA approved CPD seminars:

Title 1: Designing Effective Natural Heat and Smoke Ventilation

Title 2: Safeguarding Pedestrians from Accidents at Power Operated Doorsets - EN 16005

Title 3: Removing Barriers to Access

Title 4: Glass Door Assemblies – Selection and Specification

In addition to the traditional lunchtime CPD we offer a breakfast CPD: 7am -10am, or a tea-time session: 4pm - 7pm.



T: 01788 513 160
F: 01788 552 812
E: info-uk@nora.com
W: www.nora.com/uk

Title: Rubber Floor Coverings - a product with fascinating properties

Our iPad based, interactive seminar looks at the technical and aesthetic aspects of specifying resilient floorcoverings, the properties of rubber and the quite unique design impact that can be made to any interior.



T: 01934 429922
F: 01934 416796
E: enquiries@finelinealuminium.co.uk
W: www.finelinealuminium.co.uk

Title: Glass as a Material in Construction

This CPD presentation highlights the development of glass as a material in construction, looking at current and future applications including the history, technological advances in glass and understanding the impact of new developments on design.



Affinity2^{ss} - Heavy commercial LVT in a brand new specification

Polyflor is pleased to announce the launch of their innovative Affinity2^{ss} range of high design, heavy commercial luxury vinyl tiles which have been created to work in perfect harmony with vinyl sheet flooring ranges. Featuring an eclectic mix of 16 authentically reproduced wood plank designs, the 2mm gauge Affinity2^{ss} collection offers straightforward installation alongside 2mm vinyl sheet flooring, providing a beautifully seamless flooring solution that flows throughout any commercial installation.

www.polyflor.com



Meditre Tricoya Extreme makes the grade at UK's most sustainable commercial building

Timber products have been instrumental in the delivery of The Enterprise Centre at the University of East Anglia (UEA) – set to become the UK's most sustainable commercial building. During the construction of a covered walkway at the flagship development, Meditre Tricoya Extreme was installed to provide a durable and attractive finish to the external ceiling face.

www.meditretricoya.com



Knauf's artful expertise speeds Merseyside college build

Technical support and acoustic expertise from Knauf has enabled architects BDP and contractor Vinci to deliver a school that provides an exciting mix of learning environments and social spaces despite being built to a tight budget. After being introduced to the project by Vinci, Knauf's technical support team worked with the acoustic consultant, Red Acoustics, and the architect to choose the appropriate wall and ceiling constructions to deliver the desired acoustic performance.

www.knauf.co.uk



New Business Development Manager for Mumford & Wood

Steve Purcell is returning to Mumford & Wood from September. In his new role Purcell will be responsible for new business development across the UK with specific emphasis on architects and specifiers in London and the south east. This is a historically strong region for the company and from where a significant proportion of sales originate. Purcell previously worked for Mumford & Wood as national sales manager and regional sales director.

www.mumfordwood.com



Lucideon Publishes Guide

An innovative antimicrobial coating Lucideon has published a new guidance document, 'Creating Comfortable Conditions in Buildings'. Written by Dr Geoff Edgell, Director and Consultant at Lucideon, the guide discusses the shortfall of current incentives for sustainable and energy efficient housing, and the potential of a 'whole-house' comfort rating to aid the efficiency of homes. The guide highlights Sustainability and energy efficiency factors which need to be considered.

www.lucideon.com/construction



Modern open cell ceiling system from SAS International sets new aesthetic standards

SAS International has developed open cell ceiling System 810 Tricell, which is an aesthetic development of the well-established Trucell System. Tricell offers specifiers an alternate cell pattern for an impactful, unbroken and monolithic appearance. System 810 Tricell is ideal for public spaces such as airports, shopping centres, leisure facilities and commercial offices, due to easy airflow management and rapid smoke extraction, crucial in high traffic areas.

www.sasintgroup.com



Heradesign offers first class acoustic performance

Heradesign ceiling rafts were installed at Singapore Airlines' (SIA) new Premier Lounge at London Heathrow Airport. The lounge offers an exceptional level of comfort and privacy so business and first class passengers can relax in sophisticated surroundings. Architects Bramble Design Limited (BDL) were appointed to design the interior using SIA's corporate style and ensure that all materials selected complied with Heathrow's stringent requirements.

www.knaufamf.co.uk/heradesign



W Sitch & Company Ltd

Already established in the trade by 1776, the Sitch family moved to their current premises in the 1870's from where they continue to specialise in the reproduction and renovation of antique lighting, be it the repair, rewiring or renovation of your own light fitting, or by offering you one from our selection of thousands of antiques or one of our reproductions which are made on the premises following traditional techniques. or further information please visit us at

48 Berwick St, London W1F 8JD.

t: 020 7437 3776

www.wsitch.co.uk



Coverlam by Grespania

A new residential block in Krakow, Poland by Arch-Icon benefits from a smart ventilated façade featuring versatile, high-performance Coverlam technical porcelain slabs by Spanish manufacturer Grespania.

Measuring 3x1m with a slender 3.5 mm profile, Coverlam tiles are lightweight so easy to transport and install (and to replace if needed), while offering superior resistance to thermal shock, fire and UV damage.

w: www.grespania.com



WATCO rescues the power-float floor from shot-blasting, etching and grinding

How do you preserve the beauty and durability of a power-float polished, concrete floor while also protecting it from dust, stains and general wear and tear? Industrial strength flooring products company Watco has the answer. The company's highly acclaimed in-house technical and manufacturing teams have developed a unique solution: Powerfloat Sealer - the only product specially designed to be painted directly onto power-float concrete floors without requiring prior shot-blasting.

www.watco.co.uk



Kawneer systems are changing the face of Swansea bay.

Architectural aluminium systems by Kawneer are featuring on what is believed to be currently the largest construction project in South Wales. Kawneer's curtain walling, windows and doors are being installed on Swansea University's £450m Bay Campus site which is being delivered by leading regeneration specialist St. Modwen. The project comprises a 1,000,000ft² development on the shores of Swansea bay, including 465,000ft² of academic space and 1,462 student residences, associated retail space, and on-site infrastructure.

www.kawneer.co.uk



Get funky and functional with Gerflor!

When the Whitehaven Sports Centre in Cumbria wanted to re-utilise an existing area of the main sports hall they turned to flooring specialists Gerflor to provide the solution. The designated area that would need to be re-designed and converted was a former squash court. Gerflor would be required to deliver a loose-laid solution over the existing timber floor without the need to remove it. Recreation 45 from Gerflor was specified as well as Isolsport underlay to isolate the material from the old existing timber.

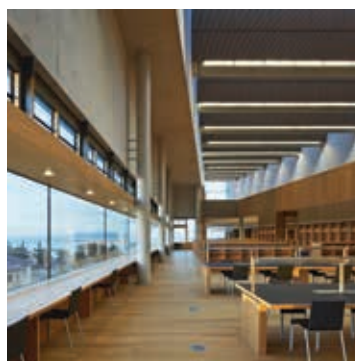
01926 622600 www.gerflor.co.uk
e: contractuk@gerflor.com



New Eurocell website simplifies specification

Designed to act as a resource-rich and time-saving tool for busy construction professionals, the new Eurocell website has a wealth of features to make specifying windows, doors and roofline quicker and easier. Building on research findings that manufacturers need to make more information readily available to specifiers*, the new site includes windows BIM models, an interactive Continuing Professional Development (CPD) video and template specifications to download, to name but a few features.

www.eurocell.co.uk



Junckers Solid Wood Floors for Award-winning Library

Architects Carr Cotter & Naessens specified Junckers Wide Board Oak for the multi award-winning dlr Lexicon building in Dun Laoghaire. The new library and cultural centre is housed in a spectacular wedge shaped building set quayside. As the quality, durability and low lifecycle costs of materials are key considerations for public buildings, a Junckers solid hardwood floor was the ideal choice.

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



Leaderflush Shapland Laidlaw's new website is now live.

The new website has been built to provide an optimal viewing experience and boasts extensive product information about Leaderflush Shapland Laidlaw's range of integrated doorset and ironmongery solutions. The website was developed following extensive research and features a new 'let's specify' section helping customers specify the right solutions for the right application. The technical section has the latest information on BIM, CPD seminars, NBS Specifications, Declaration of Performances and the latest literature.

www.leaderflushshapland.co.uk



Kawneer projects win a hat-trick of RIBA Regional Awards

Three projects featuring glazing systems from Kawneer have won RIBA Regional Awards. The £2.54million mixed-use Alconbury Incubator Building (pictured) won an award in the East for executive architects Allford Hall Monaghan Morris. The second Kawneer project to win was the £30million John Roan School in the London Borough of Greenwich by John McAslan + Partners. The third Kawneer project to win was in the South East, for the £20million BREEM "Outstanding" WWF-UK headquarters in Woking by Hopkins Architects.

www.kawneer.co.uk



Kawneer are proud to be working with the Berkeley Group

Following an extensive review process, leading architectural aluminium systems supplier Kawneer has been accepted onto the supply chain of the award-winning house builders the Berkeley Group. Kawneer will provide the Berkeley Group with comprehensive design support, training, inspections and warranties for the supply of curtain walling, window, door and unitised systems, from conception to completion and beyond through its extensive range of approved fabricators.

www.kawneer.co.uk



Kawneer systems Central to new city business area

Work has just begun on the installation of architectural aluminium systems from Kawneer on an office building at the heart of the redevelopment of Cardiff city centre.

Two types of Kawneer's curtain walling – AA®100 capped and zone-drained and AA®100 SSG (Structurally Silicone Glazed) mullion-drained – and two types of doors – AA®545 swing and series 190 heavy-duty entrance doors – are being installed at One Central Square.

www.kawneer.co.uk



nora - Bob Champion Research and Education Building

nora systems have provided 2,700 SQM of its noraplan® sentica and noraplan ultra grip floor coverings and accessories, including skirting and adhesive, to the new Bob Champion Research and Education Building in Norwich. Architects Hawkins Brown required a hard wearing, durable floor which would provide comfort underfoot and ease of maintenance. The dense surfaces of nora floorings require no coatings and are therefore exceptionally wear resistant; this makes them extremely robust and resistant to laboratory chemicals.

www.nora.com/uk



Comar Transforms Grove House

Comar Architectural Aluminium Systems recently completed a change of use building refurbishment on Grove House, Ealing, London. The building was a 1980's unused former teaching facility and has now been transformed into 100 self contained studios for students. This building conversion was completed using Comar 5P.i Tilt & Turn and fixed light windows, Comar 6EFT curtain walling to the main entrances and stairways, Comar 7P.i Doors for the entrances with Comar 9P.i Framing used for the side lights.

www.comar-alu.co.uk



BILL TOOMEY / ARCHITECTURAL PRESS ARCHIVE / RIBA LIBRARY PHOTOGRAPHS COLLECTION

Radcliffe Camera Oxford, 1748

The Radcliffe Camera was originally known as the Physic Library, even if the accessions it received until 1811 were of a mixed nature, and did not consist exclusively of books, but also busts, statues, marbles, coins and other objects. It owes its current name to John Radcliffe, a notable Oxford doctor, who at his death in 1714 left the funds to build a new library, close to the Bodleian. A number of architects, including Christopher Wren, John Vanbrugh and Thomas Archer were considered, but eventually only Nicholas Hawksmoor and James Gibbs were invited in

1734 to submit plans. Hawksmoor came up with the idea of a rotunda – his model for the building is preserved in the Bodleian – but it was Gibbs's design that was selected. The building, completed in 1748, is the earliest example in England of a circular library. It consists internally of two storeys – which are now both reading rooms of the Bodleian – connected by the elliptical staircase shown in this photograph, which highlights the fine wrought-iron balustrade and decorated plaster ceiling. ●

Valeria Carullo

Editor
Hugh Pearman

Executive editor
Eleanor Young

Senior editor
Jan-Carlos Kucharek

Assistant editor
Isabelle Priest

Sub-editor
Alysoun Coles

Art editor
Patrick Myles

Advertisement manager
Richard Tomlin
+44 20 7496 8329

Business development
manager
Midge Myatt
+44 1902 851 645

Advertisement executive
Clive Waite

Production manager
Pete Songi

Director of
RIBA Services
Jonathan Stock

Telephone
+44 20 7496 8300
Fax +44 207 374 8500
firstname.surname
@ribaj.com

RIBA Journal
www.ribajournal.com
Published for the
Royal Institute
of British Architects by
RIBA Enterprises Ltd
Registered office:
The Old Post Office,
St Nicholas Street,
Newcastle upon Tyne
NE1 1RH. Registered in
England 978271

Printed by Acorn Web
Offset Ltd in association
with Logical Connections



SonaSpray Acoustic Decorative Finish

SonaSpray K-13 Special recycled acoustic decorative finish specified by Studio TILT, applied directly to 900m² of concrete slab to reduce noise reverberation & increase ceiling height over original ceiling grid system throughout offices & Customer Care Centre. Full range available from textured to plaster smooth.

BIM objects & RIBA approved CPD's now available



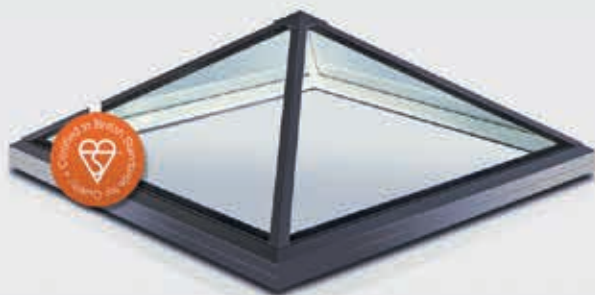
01474 854 902



www.oscar-acoustics.co.uk

OSCAR
ACOUSTICS

Which one would you trust?



The only skylight range to be awarded
Kitemark quality certification

Sunsquare high specification flat roof skylights

Sunsquare Limited offer a range of skylights including solutions for fixed units, hinged opening with both electrical and manual opening mechanisms, rooftop access and walk-on skylights. Sunsquare Limited. sales@sunsquare.co.uk.

For more information **telephone 01284 848798** or visit **www.sunsquare.co.uk**



The first skylight manufacturers to be BSI verified and awarded a Kitemark.



Sunsquare.
Believing in better since 2004.