

Products in Practice Sept/Oct 2015

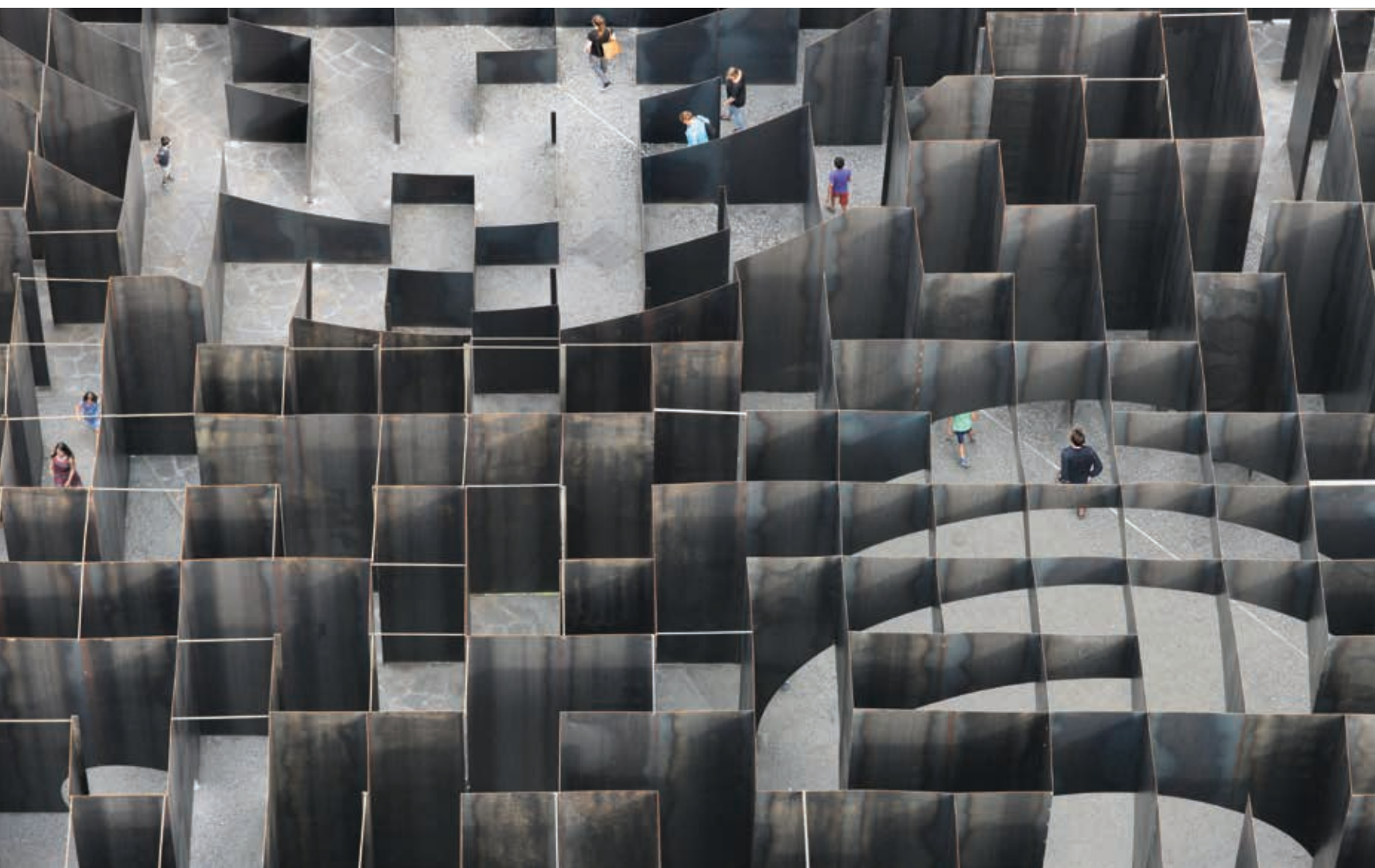
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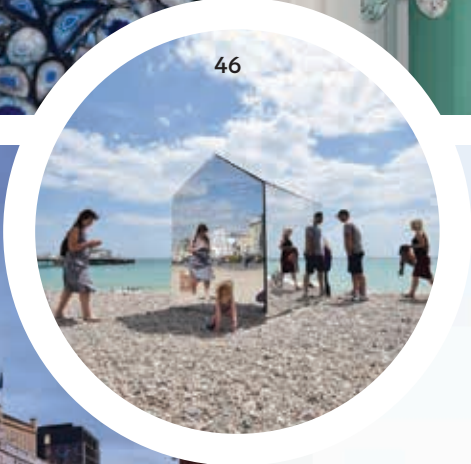
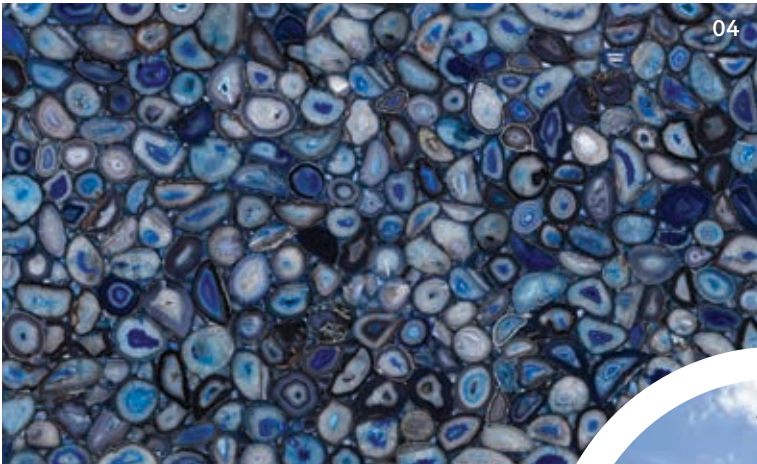


No surprise...

that last month Rafael Viñoly's 20 Fenchurch St won BD's 2015 Carbuncle Cup, sparking a media frenzy – including one critic's call for it to be bulldozed – as a line in the sand for developers. But why has this temple to Mammon been singled out? After all, it's but one of many to express London's supposed financial might. True, its bulbous form is deeply problematic; but close up, with its strange foreshortened curve, it has an allure that even I must concede. London

remains a city of trade; unable to lay claim to the classic, autocratic order of Hausmann's Paris or the historic and religious significance of Rome, where commercial interests appear as an appendix to a much bigger picture; London's forged on a myth of gold-paved streets. It's always been a commercial city, growing unbridled as its global influence and trade increased. Problem is these recent buildings and proposals – the Shard, Walkie Talkie, Garden Bridge,

and Nine Elms floating pool – are like the puff of a bubble before it bursts; hubristic forms that presage a fall because, as empty symbols, they're born of no cultural or economic truth. Like the Arcelor Mittal Orbit's cynical convolutions, soon with added helter skelter to pull in non-existent crowds, rather than the consolidation of city-state power these buildings purport to mark, the descent may be quicker than anyone imagined. ●
Jan-Carlos Kucharek, Editor



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Compendium

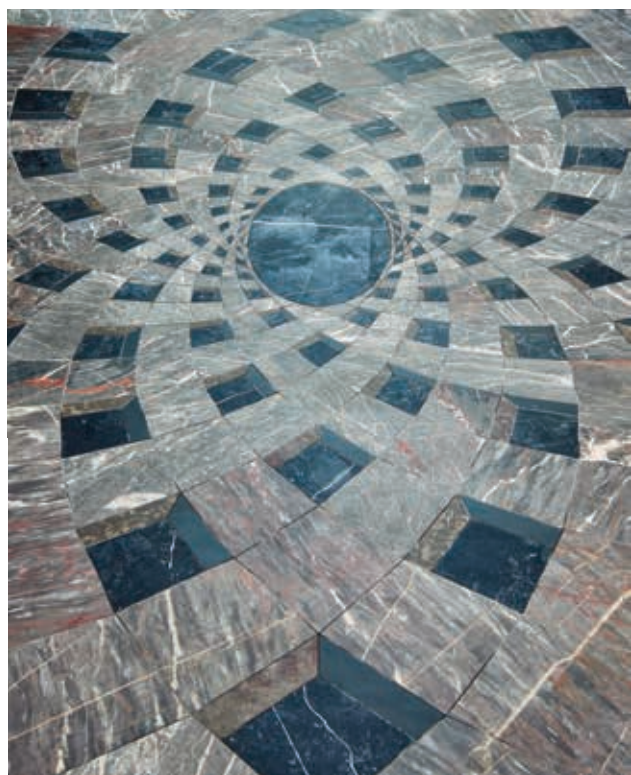


Wavin not drowning

You'd expect the Dutch to know a thing or two about water management, so it's no surprise that the design team for the 620-bed Maasstad Hospital in Holland chose plumbing, heating and drainage firm Wavin's Tigris K1 System. Its corrosion and scale-resistant properties specifically suit the composite pipes to health and hygiene applications, while an aluminium layer reduces thermal resistance – important when hot water flows run at up to 70°C.

Paper, stone, drippers

Formica Group has added 113 colours and textures to expand to over 600 its decorative laminates; creating 'a colour palette so wide even Jackson Pollock would have thought twice'. Strange, as most people thought 'Jack the Dripper' didn't even think once. The seemingly random nature of his drip art is reflected in another kind of 'random nature'; Formica's True Scale marble decors offer larger panels and less repetition on its eight life-like stone veins.



No stone unturned

The upmarket retail destination Burlington Arcade belies its humbler origins, built in 1819 by Lord George Cavendish to stop street urchins throwing oyster shells, rubbish and worse into his garden at Burlington House. He even set up the 'Burlington Beadles', originally soldiers from his own 10th Hussars, who still patrol it. In another archetypally English move, Britannicus Stone, which sources stone only from this Scept'r'd Isle's fair shores, recently supplied over 1000m² of Plymouth Moorcroft stone to carry out architect Jamie Fobert's design for the arcade's new marble floor. The 64,000-piece radiating, interlocking 3D design runs the entire 220m length of its floor, creating a bespoke catwalk for models as well as beadles.

Wheels of Justice

Spiral Cellars' floor-set concrete wine cellar went down as well as the booze at its launch in Putney – literally, with visitors able to access the cast steps to the cylindrical store below. But with its Bond-like electrically opening glazed hatch, could some drunken punter accidentally pay a visit to the 'bottle's base'? Ah, that, it appears, is a good old case of 'buyer beware'; a term well known to the lawyers and barristers generally installing them in their homes for marking their latest case victory. Caveat emptor? More like 'Cava's empty!'





Butt is it art?

Anyone wishing to see art imitating life need go no further than King's Cross Square by Central St Martins School of Art, where architect Ian McChesney was commissioned to design eight benches for the new 'public' space on the Argent development. The architect was inspired by the natural erosion he saw while walking the Cornish coast, and specified Cornubian coarse biotite granite. So the 4t, 8m long benches have the edges smoothed away like a million-year pebble to create an extended lozenge form. While very hard, it makes it 'an inviting material on which to sit and relax' says McChesney; although the idea of students simply sitting and relaxing anywhere ended with the death of the maintenance grant and free tuition.

UPCOMING

Timber Expo NEC Birmingham, 6-8 October

Construction Expo Kent Event Centre, Maidstone, 7 October

Eco Showcase Edgbaston Stadium, Birmingham, 13 October

Lean Construction Summit Birmingham Metropolitan College, 29 October



MATTEO BALDINI

Light work of it

Here at PIP Towers we're rather taken with the notion that architect Feix & Merlin spend most of their time jet-setting between London and São Paulo attending elegant soirées and high profile dinner parties rather than doing any work. So it was raised eyebrows all round when we discovered that they've foregone the air miles to produce the new white Massa marble pendants. It turns out the Dorchester, Wentworth and Charlotte have Brazilian curves, hand-crafted Italian style and a very English sense of decorum. Prices are a little 'Club Class', but pay peanuts and you get monkeys, right? Oh, I need to catch a flight to Rio – Taxi!

Aghast, Agape, Agate

Tired of travertine? Ambivalent about alabaster? Maudlin about marble? Maybe it's time to take the plunge and plumb for blue Agate. Ranging from sky-blue to cobalt, its astrological claims make it no surprise to find the translucent, iridescent stone on the walls of this spa. Apparently it increases energy levels, helps put men in touch with their emotions, heals your throat chakra and reduces stress, to name but a few of its ultramarine benefits. Italian stone firm Antolini now supplies it as part of the Precioustone collection, which includes quartz, Jasper, Mother of Pearl and even Swarovski panels. Can't see the Blue Agate doing much for your pranayamic breathing techniques though – prices are confidential but could possibly lead to a sharp intake of breath.





Roman hose

Considering the impossibility of Italians to do anything without a sense of sprezzatura, PIP was taken with Italian sanitary ware firm CEA's Camilla outside shower for those hot summer months. With its bright colouring and form, the Camilla irritatingly even raised the common or garden hose to new heights, via its aluminium stem and stainless steel support. For us Brits, summer might seem a long time ago now, but when you can trace your design lineage back to 27BC, for an Italian, the time's a mere drop in the ocean.

Facing up to the heat

Lincolnshire firm Carron has spent years sourcing old radiator models to bring them back reinvented for the 21st century. Some came from UK antiques fairs; one model I recall from its Grantham factory seemed to have been discovered lost in the back of an old barn in France. Luckily, leaks are a thing of the past here, with high grade iron ore, accurate moulds and casting producing far higher performance and heat distribution – even at lower running temperatures. Luckily, some things, like the anthropomorphism, don't change. Check out this 'Ornate' model – it looks surprised at its own efficiency!



Bundes the skin

One might sense a change in the zeitgeist when a reinsurance firm like Munich Re looks to refurbish rather than build new; although perhaps it's not such a surprise to learn that the firm looked to de-risk the project by getting longstanding Berlin firm Sauerbruch Hutton in to bring some colour to the proposal. Lithodecor's Airtec Glass ventilated rainscreen cladding was specified to create the new facade of small coloured vertical fins, defining the plan's sawtooth profile and enlivening the facade. The gold colour's more than skin deep too – the building was designed to achieve 'gold' certification from the German Sustainable Building Council (DGNB). For a probability-based business the only certainty is that we die; so, bucking the trend, it's nice to see at least one thing reborn.



Set in plaster

Following its Thistle Magnetic Plaster, with which you could impress friends and family by seeming to magically 'move' your magnet backed framed pictures and timepieces randomly around the wall, British Gypsum launched its new 'Lifestyle Wall' (left) last month. Gyproc Habito, with its reinforced core, is five times stronger than standard plasterboard so you could even install your SkySports flatscreen TV on the wall without specialist fixings. Result.



Couer-ttrell and Vermeulen

Cottrell and Vermeulen has been helping Sacred Heart School in Camberwell, London to beat again with its new buildings. To bring a diffused natural light to the more important spaces and to counter point the general use of red brick, the firm specified Rodeca PC2540 and PC2560 wall panels in Kristall and Opal. If cleanliness is next to Godliness, the overriding use of the white tone will help guide impressionable young eyes to the skies instead of just their Skype.

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Greenbuild Expo

Held at the lofty Manchester Central events venue, Greenbuild Expo has developed quite a profile in the north of England since it launched in 2009. Picking up on the zeitgeist for sustainable solutions, the show claims to target visitors who are 'serious about sustainability', having pulled in an almost 50/50 visitor attendance from those in the commercial and domestic sectors. It's also based in a region with some of the biggest national challenges in relation to poor housing and fuel poverty; so it's a show in the white heat of the issues facing the construction industry today.

The exhibition seems to be building on former successes with an expanded programme at the 2015 event. Running alongside this year's show will be the Buildings and Energy Efficiency conference and exhibition, dedicated to energy reduction strategies for non-domestic buildings and dovetailing with the sustainability focus of Greenbuild Expo. The centrepiece of Greenbuild is going to be the new Future Cities Zone which will host a range of seminars looking not only at

A range of seminars will look at the way buildings perform in terms of sustainable procurement and energy use and at the technologies that help them work in the social arena

the way buildings perform in terms of sustainable procurement and energy use but also at the technologies that help them work in the social arena to help bind them into the fabric of the city.

Among the confirmed speakers at the conference are the National Energy Foundation's Luke Smith who will discuss low energy refurbishment in the social housing sector, and Salford University's Professor Will Swan looking at

retrofit performance. The university will also present the latest results from its own Energy House. Zero Carbon Hub will be looking at the root causes of the performance gap and giving advice on the latest Part F ventilation guidance – key if you want your buildings to respire as well as conserve energy.

Ruth Kerrigan could be intriguing in Integrated Environmental Solutions' seminar on the rollout of Glasgow Future Cities' Energy App. This allows users not only to input basic data and find out their property's energy use, it also suggests possible improvements and what more can be saved by adopting them. It collates the information on a city-wide level too, so that users can get a measure of how their property performs relative to other users as well as allowing an interactive 3D map to be built up over time about the energy performance of the whole city.

That should give Glaswegians something to smile about! ●

Greenbuild Expo, 10-11 November 2015, Manchester Central

PIP takes a look at a selection of products exhibiting at this year's show



Econoplate H series

Stokvis Energy Systems

We're all aware of occasions of individual sacrifice for the greater good but it turns out there's a business case for it too. Boiler manufacturer Stokvis is launching its H Series district heating system interface, which does away with individual boilers in flats and student housing in favour of a central plantroom, yielding better overall energy efficiency. Located in a kitchen or utility space, it draws its heat from the main flow to distribute it via heat exchange to the individual unit. Simple!

Stand A14

www.stokvisboilers.com



Hybrid range

Actis

Jay Z might have had 99 problems, but it seems that Actis has boiled things down to a mere eight reasons to convince you why you should specify its Hybrid range of insulation products. They are, in no particular order: overall thermal efficiency, thermal bridging, footprint, cleanliness, ease and speed of installation, cost and customer support. All well and good when you run it as a list but I imagine it'll give J-Hova his hundredth problem when he tries to rap about it.

Stand F18

www.insulation-actis.com



Multiboard range

Marmox

Unlike Marmite, the brown, sticky yeast-based, edible spread you either love or hate, Marmox would claim there's only something to love with its waterproofing, sound-minimising, thermal insulation and fireproofing products. On show at this year is its Multiboard range, 'equally suited to wetroom applications and for sound insulation elsewhere in the home'. In fact, why not combine both properties so you can belt out your favourite Celine Dion track in the shower, leaving the rest of the house blissfully unaware?

Stand C20

www.marmox.co.uk



Secondary glazing

Selectaglaze

There's not a lot to endear the visitor to the Wiltshire town of Trowbridge but there might be more now its County Hall has been refurbished to BREEAM Excellent, reducing overall energy consumption of the council estate by 40% – all by upgrading the existing walls and roof. Selectaglaze worked with Stride Treglown on the proposal, which involved creating 3.5m high hinged casements for the large council chamber windows, each weighing 100kg. With a bronze anodised finish they look every bit as robust as they are.

Stand B31

www.selectaglaze.co.uk

Technological evolution



Two years ago, when Palmer Luckey, the creator of Oculus Rift, released the DK1 (virtual reality headset) for developers, it was the beginning of a technological breakthrough for many fields including architecture/industrial design.

I was fortunate to buy the DK1 at that time and the first 3D model I decided to convert to virtual reality (VR) was a concept train I had designed a few months earlier. For the first time, I was able to see my design from every angle, like it was real.

VR gives you a sense of scale you will never get with a screen. Immediately, I was able to see what was wrong or good with my model, something I couldn't see before. The only thing that could compete with that would be a 1:1 scale model, which would be far more expensive, obviously.

This applies to architecture as well. For example, with the Oculus Rift, you could detect flaws or issues that you couldn't see on plans.

The other thing provided by VR is interactivity. For my second demo, I decided to convert

I think that in the near future every architect will use as standard 3D goggles when they design... and the next generation of architect/designers will be using VR and new real-time 3D tools

plans of Ty Hedfan, a house in Wales designed by Featherstone Young. I wrote a programme and was able to open the doors and turn on the lights. You can instantly change materials for the walls or floor, and the position of lights. Interactivity means you can experiment with a lot of different options — design, materials, lighting, weather — very quickly.

I think that in the near future every architect

will use as standard 3D goggles when they design. The next generation of architect/designers will probably use VR and new real-time 3D tools.

The next generation of 3D real time engine (Unreal engine 4, Unity) will use real time global illumination (like Vray or mental Ray). So you will get a photo realistic rendering or animation in just a few seconds.

Also, we could expect an empty room with positional tracking dedicated to VR in every architecture practice, for testing new designs.

Finally, you could invite your client to try your concept and choose different options or, if they cannot come, why not send your project to their smartphone? The Samsung gear VR headset has already proved that a smartphone can give a good VR experience.

Thirty years ago, computers and CAD software started to change radically the workflow for architects/designers. Now VR is going to fundamentally change the way we work again. ●

Olivier Demangel is design director and founder at IVR-Nation

Books



Sustainable Materials Without the Hot Air

Julian Allwood and Jonathan Cullen
UIT Cambridge. PB, 416pp, £24.95

Julian Allwood and Jonathan Cullen are both ensconced in engineering departments at Cambridge, the former heading up the Low Carbon Materials research group, so one assumes they know their oats. This follow-up to the Sustainable Energy Without the Hot Air tome, the book starts with an outline of the current situation, followed by the authors' own professional analysis for practical and achievable solutions for the future. The publication feels more like a state of the nation address to a lay audience than a book aimed specifically at architects, but it does manage to contextualise the construction sector within a wider debate about how society might be able to make and do more with less.



Integrating Care: The Architecture of the Comprehensive Health Centre

Justin de Syllas
Routledge. PB 193pp, £41.99

A kind of textbook about contemporary comprehensive health centres, this volume is not particularly academic or political. It argues that early 20th-century public health movement ideals have been revived in the past 15 years and explains the policies shaping them. Obviously including AHMM's Kentish Town Health Centre, but also showing nine other case studies (like the rather nice Waldron Health Centre), the book has clear sections and headings, making it easy to compare one centre to another. Useful for policymakers and architects, the buildings don't look as courageous as the earlier pioneers, but by integrating practical, clinical and social functions, their ambition is just as grand.

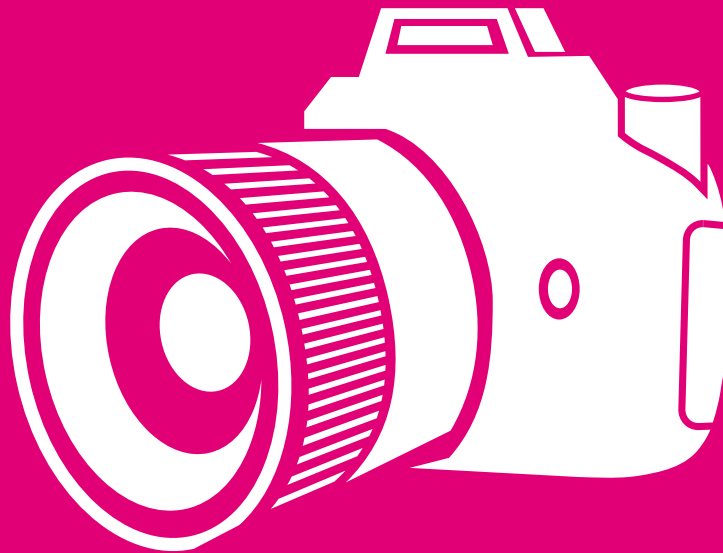


Superlux: Smart Light Art, Design and Architecture for Cities

Davina Jackson
Thames and Hudson. HB, 272pp, £32

By way of a memento mori, in the introduction to this Goldsmiths' research fellow's book on the proliferation of our city lighting, a small photo of Copenhagen's Strøget retail area by night draws attention to the fact that city regulations demand that light fixtures are low level to maintain dark, clear skies. Moving swiftly on, the book is a survey of 130 of the most recent international projects, shedding a lot of, ahem, light, on the industry as it stands globally. As you'd expect, the book is image driven with little text; but each project has a technical summary and a description of the lighting technology used. Sections are introduced by the author, with four detailed essays by experts interspersed through the book. By way of conclusion, the views of city lights from space have strange poignancy.

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Budget smart house



What: Solcer House

Where: Bridgend, Wales

With an energy export to import ratio of 1.75, Solcer House in Bridgend, south Wales, is the UK's first purpose-built, affordable solar energy smart house capable of exporting more energy to the national grid than it uses. A joint education-business partnership based at Cardiff University with Swansea University, the project started in the fourth year of a five year funding plan when it was decided to test out the group's 'buildings as power stations' idea. The team's hopes are pinned on the 100m² prototype as the answer to requirements for all new buildings to be zero-carbon by 2020.

Key to the building is the way its environmental technologies are integrated into its fabric and, at a total cost of £125,000, its comparable price to other three-bed new-builds. Moreover, says Swansea's Paul Jones, building more than one at once could bring that down to £100,000.

Built on land donated by Cenin Renewables, developed over six months with architect Ester Coma Bassas and constructed in only 16 weeks, its energy saving is organised into three parts: reducing demand, creating renewable energy, and thermal and electrical storage. The house is

75% autonomous when energy is used directly from either the renewable sources or from storage. It is made affordable by avoiding expensive green installations such as ground-source heat pumps in favour of off-the-shelf technologies from local suppliers and supply chains.

'Building low-carbon homes is generally perceived to be costly and difficult in this economic climate,' explains Coma Bassas. 'This integrates all these systems together as well as into the architectural design, showing what is possible.'

Focusing on solar powered technology, this integration has minimised the project's budget. With PV panels forming the fabric of the roof, there is none of the additional expense of the underlying roof with bolt-on technology. A thermal air collector has been built as part of the wall and the building's structure is prefabricated off-site using structural insulated panels. Meanwhile, heating is delivered through the ventilation system, again doubling up components and reducing expenditure.

It costs £25,000 more than your typical new-build house, but with projected savings and energy generation worth £1,000 a year, the extra construction costs can be recouped in only 25 years. Just a warning, though – M&E equipment might last only 15-20. ●

HOT-BED OF SUSTAINABILITY

Wales is styling itself as a hot-bed of sustainable design and technology. It is one of three countries in the world which has sustainability written into its constitution, is home to the Centre of Alternative Technology and the Ecodesign Centre, and research into green technologies has been going on at the Welsh School of Architecture for more than 30 years through the Low Carbon Research Institute (LCRI). It is using joined up thinking to spread risk in testing and developing new technologies by creating partnerships across government, industry and academia, as well as between universities such as with the Solcer project. The country outperforms England and Northern Ireland in reduced CO₂ emissions from recycling – with 84kg CO₂ equivalent saved per person in 2013/2014 compared to 67 and 65 in England and Northern Ireland respectively, according to the Recycling Carbon Index Report. And it's home to the world's second largest offshore wind farm, which can generate enough energy to power 400,000 homes.



Left Incorporating off-the-peg technologies, Solcer House shows that zero carbon homes can be affordable and mass-market.

Above PV panels are integrated into the roof structure, allowing the space below to be naturally lit.

Sustainable features

Foundations: Cenin low-carbon cement.

Structure/insulation: Structural insulated panels, 194mm thick, with BASF Neopor insulation with a U value of 0.14. External wall render brings this down to 0.13.

Photovoltaics: Asymmetrical south-facing pitch carries 40m² of PV providing 4.3kWp of energy. Supplied by GB-Sol.

Battery: Lightweight, wall-mounted lithium ion battery supplied by Victron Energy, comprising six batteries with a total 6.9kW/hr capability.

Transpired solar collector: Tiny perforations in the 17m² collector capture warm air from the sun. Air is drawn into the ventilation system and distributed round the building.

Heating, ventilation and hot water: Mechanical ventilation with heat recovery, with a 450W heat pump powered by the PV/battery – or from the grid when needed.

Windows: Aluminium clad timber windows supplied by Vellacine, incorporating Pilkington energyKare energy-efficient glazing.

Made



Lloyd Blewett
Sales manager



What: Samuel Heath

Where: Highgate, Birmingham

Coffin furniture, smoker stands, dinner gongs, fireplace grates, bedsteads and rose bowls... an edited selection of items from the archive in Samuel Heath's Birmingham showroom gives the lie to the perception that British manufacturing – particularly that of the Midlands – doesn't exist or, if it does, it is staid.

Samuel Heath is a traditional (that is long-standing) company with an impressive history of new product development. This, says sales manager Dr Lloyd Blewett, shows that the company has always been driven by the needs of its clients and market trends. The paraphernalia in the archive was – some of it almost unbelievably now – once considered essential. It is this approach that has allowed the firm to ride the storms thrown at it by the economy and city during its 195-year history.

Today, its focus is high-end door, window and bathroom hardware – items ranging from taps to handles and closers. Bathroom products such as Style Moderne are used in heritage settings, while bespoke collections have been created for clients including the Savoy Hotel in London.

The company still operates from the factory it built in 1840 in Highgate, Birmingham, an area which became famous for its metalworking industries. Its soot-blackened original red brick exterior conceals a thoroughly modern operation – rapid custom-made prototyping, CNC milling, co-ordinate measuring machine for quality control and clean rooms for assembly. The company prides itself on manufacturing each component of its brassware from scratch, which maintains its control over everything – testing, fabrication, delivery and of course quality. Its concealed door closers, the Powermatic and Powermatic Free Swing, for example, are specifier products – premium,

high-quality and long-lasting. The firm encourages people to think of its products for the whole service cost: zero-maintenance and 10-year guarantees.

But the key to the business is not the romance of manufacturing, rather that it can buy raw material at the same price as the Chinese. It adds value through quality, and wants to thrive for innovation and to remain an important part of the social fabric of the place. Employees are highly skilled and the firm invests in its people and their training – to fully train a polisher, for example, takes seven years. It also runs apprenticeships through Walsall Technical College to ensure it gets the next generation of CNC programmers and tool makers. And its investment extends beyond the local area to running RIBA-accredited CPD courses for architects.

As a result Samuel Heath is seen as a quintessentially English company, an image that is synonymous with quality abroad. This

Far left Style Moderne bathroom tap fittings.

Left View of a Powermatic door closer being used in an office.

advantage means it exports 40 per cent of its products and, as Blewett explains, the image of trade with the Chinese is 'not a one-way street'. Blewett also reveals some of the tastes of different regions – Americans tend to go for products that pay homage to the past, while Europeans prefer modern designs including Xenon.

Inherent in this type of British manufacturing, and Samuel Heath in particular, is the certainty that standards are robust – not only in terms of its products and the regulations it meets, but also in its environmental credentials: the raw material's recycled content, recycling of waste material, and the neutralising and proper disposal of the chemicals such processes inevitably entail. In a city once known for soot and smoke, these are just some of the positives that a changing, long-standing business can bring. ●

This editorial is supported by Samuel Heath samuel-heath.co.uk



1. THE STORY OF A CLOSER

The Powermatic and Powermatic Free Swing, Samuel Heath's third generation jamb-mounted concealed door closers, are characterised by a solid linking arm and variable door closing speeds. Evolved from the 40-year-old Perko brand, they are used in the healthcare, care, social housing, commercial, educational and hotel sectors for their minimalist aesthetic, adjustability, fire safety and cleanliness. Like the firm's other products, the closers are manufactured from raw material to finished product in Birmingham.



3. CNC AND HOT STAMPING

Once the design is confirmed, the closer goes into production. Samuel Heath manufactures them from a combination of steel, stainless steel and brass. Raw material arrives as solid rods from a local smelter 15 miles away. Most of a closer's 100-plus components are now made using one of 20 computer numerical control machines, but other products such as bathroom hardware can include more traditional methods like hot stamping and forging. Any waste is collected and returned to the smelter for recycling.



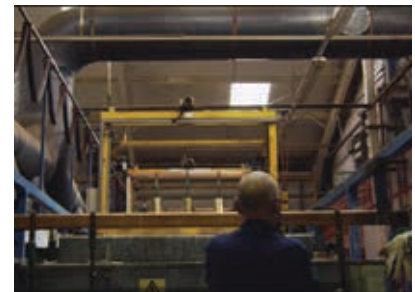
5. QUALITY CONTROL

While products are tested to meet European and international standards on fire safety and accessibility including BS EN 1154 and BS 8300:2009 at design stage, they are quality control tested throughout the manufacturing process. The closers are zero-maintenance products and so tolerances – especially for the components within the hydraulic core – are very low. Using a co-ordinate measuring machine, lengths and distances between features on parts are measured to within four microns where usual tolerances would be to eight microns.



2. DESIGN AND PROTOTYPE

The in-house design team works on improving existing and new products for design, performance and assembly. It also takes on bespoke commissions, particularly for door and bathroom hardware. Since introducing 3D-printed prototyping technology four years ago, the company says it can turn around a working resin prototype accurate to 0.1mm in 24 hours – a week faster than previous tool room prototyping. Each modification goes through vigorous testing for wear, repetitions and forces.



4. PLATING

The visible frame and door plates of the closer, as well as many of the company's other products are plated, with six finishes available including chrome, polished brass and bronze metal antique. Components ready for plating are attached to a rig and mounted on a programmed system to follow a cycle of chemical dips in the 41 tanks. Chrome plating, for example, is a three-stage process involving copper, nickel and chrome. Plating takes around one hour and 20 minutes. Samuel Heath's attention to detail is demonstrated by the way it plates its own screws for a matching finish and colour.



6. POLISHING AND ASSEMBLY

In the final stages, components are polished and assembled by highly trained employees. Assembly of a door closer's hydraulic core takes place within a controlled clean room to keep the system free of impurities that could later affect long-term function. The core is assembled in six minutes and mounted on a testing door for a final set of 25 closing actions before being fully assembled and sent out for delivery. Desired latching action forces and closing speeds of between two and 22 seconds are adjusted on site by experienced installers.

Theatre Royal, Glasgow

In a busy, Scottish city-centre theatre, conditioning the temperature as well as the sound – discreetly – is critical

Words: Jan-Carlos Kucharek Photographs: Andrew Lee



Speaking of Page\Park's newly completed £10m extension to Charles Phipps' 1867 Theatre Royal Glasgow, project architect Jamie Hamilton says that when the firm won the OJEU-run competition in 2011 against Nord, Caruso St John, Terry Pawson and Tim Ronalds Architects, the design was rather different to how it is now.

'The competition scheme was different in concept,' explains Hamilton. 'We emphasised the horizontal articulation, in principle to help the building turn the corner, but as the services strategy evolved during design development the emphasis moved to the vertical'. Whatever the post-win shift, Page\Park's bold and brassy new elliptical foyer space, designed to feed the refurbished Category A listed auditorium on four levels, still makes an event of the turn of Hope St into Cowcaddens St in the centre of the city. In doing so, the deeply articulated facade, formed of insulated steel ducts, becomes a physical manifestation of the air handling in a similar vein to Franco Albini at his seminal 1960 Rinascente in Rome – but here it's naturally ventilated.

Hamilton says that although the design of the foyer facade was inspired by the dramatic baroque balconies of 19th century auditoria and the staccato nature of a musical score, it was only after services engineer Max Fordham was appointed that the formal inspiration began morphing into a more technical approach. Internally, the programme remained the same, with the architect keen to emphasise the audience's journey from 'street to seat', providing full access to the 1400-seat theatre and fulfilling the client's desire to 'open up' the venue with a multi-use public foyer space. Linking all these levels is a grand staircase, as baroque in intent as the original theatre, but utterly contemporary in appearance.

While there's a lot of low-e glass evident on the facade, giving great views over the city for the foyer's users (although it accounts for only 40% of the total surface area) Hamilton explains that it's the externally expressed gold stainless steel air intake ducts that do the lion's share of the work; facing north west, the glass, deep set relative to them, is shaded from residual solar gain. Behind the ducts meanwhile is the ellipse of 1250mm by 300mm concrete piers defining the foyer space and supporting its 150mm thick concrete floors. With all that concrete you'd

The deeply articulated facade, formed of insulated steel ducts, becomes a physical manifestation of the air handling



Left New foyer rotunda with 19th century theatre to right.

Top Timber-clad ventilation ducts sit between concrete piers in the multi-level foyer space.

Above Staircase from ground-floor entrance.



McAteer Photograph

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think there was a thermal mass strategy, but Mark Palmer, senior partner at Max Fordham, says that's a bit of a red herring. 'It doesn't generally work for the typology. Here large numbers of people generate heat in short bursts, which required robust approaches to conditioning the space,' he says. He adds that the firm's many thermal models recommended responsive ventilation – hence the vertical ducts – so the building can be cooled during use and closed down to conserve heat while it is empty.

Installed in every second fin, the vertical insulated risers running up the facade provide a direct path for external air to pass into the duct where the frontage recesses at ground floor, and to be channelled via motorised dampers into the building. This air is fed into the space at each level via the alcove created between the concrete piers from behind bespoke birch ply panel joinery, forming the ellipse's inside face. 'There are convector heaters behind the birch ply bay grilles whose air mixes with the cold high-level incoming air a few feet above it, pre-heating and tempering it as it enters,' says Palmer.

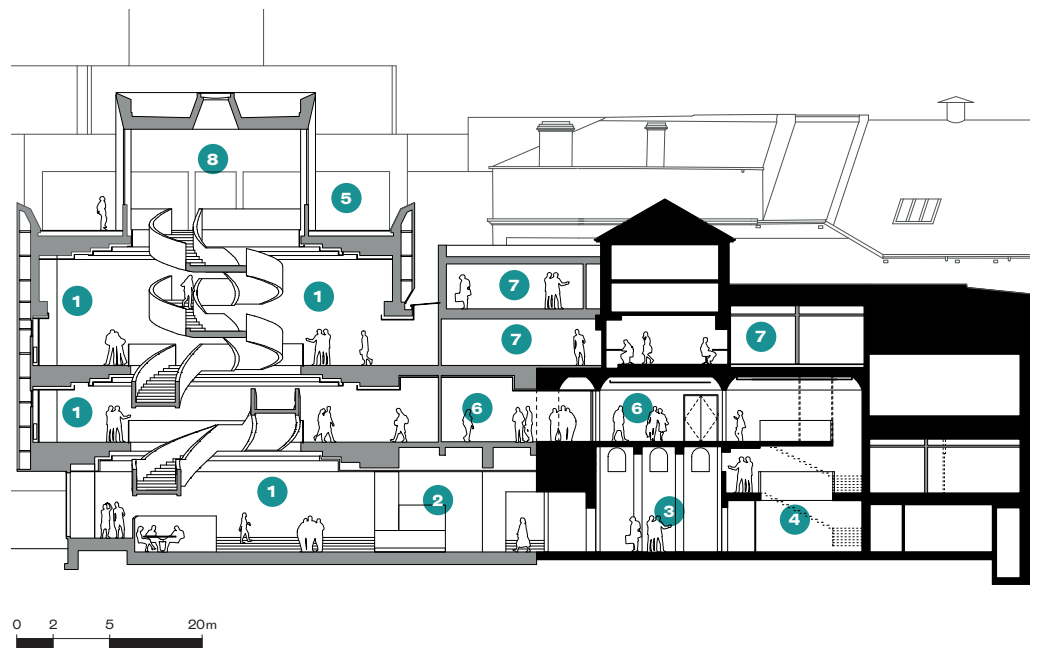
Hamilton explains that Kingspan rigid thermal insulation on the inside face of the ducts is there to keep it as close to the glass line as possible. Acoustic insulation lines the ducts, ensuring that noise from the busy city street (it's a major bus route) does not break into the foyer space. As it was, there was a demand for the glazing envelope and cladding to offer 33dB sound reductions across the facade. Hamilton adds that the acoustic attenuation within the fins is in the order of 10dB. 'It's all been efficiently integrated into the vertical duct element. Hidden behind the panel you can't see any heaters, dampers or louvres – it's all very neat,' he says. There are external benefits too: the ducts act as solar shading, to deal with the worst effects of solar gain from west light.

Branching off the concrete piers, each with its own unique geometry according to its position in the ellipse, radial trusses lead back to a chunky 1250mm by 1250mm concrete ring beam. This forms the base of the foyer structure's lantern and acts as the hanging point for the dramatic staircase. Hamilton says the necessary stiffness was achieved by making the stair strings from rectangular hollow sections, with each birch timber balustrade acting as a form of truss between floors. Timber acts acoustically here as well as structurally. With Jura limestone on the floors and concrete predominating, Page\Park needed to cut reverberation times. 'We wanted to take the edge off the hard finishes,' says Hamilton, 'so we augmented the timber of the stair using Bute fabric with acoustic foam behind it in the soffit.' A timber ring of lighting, fire detectors, alarms and PA systems running around every ceiling, plus fabric



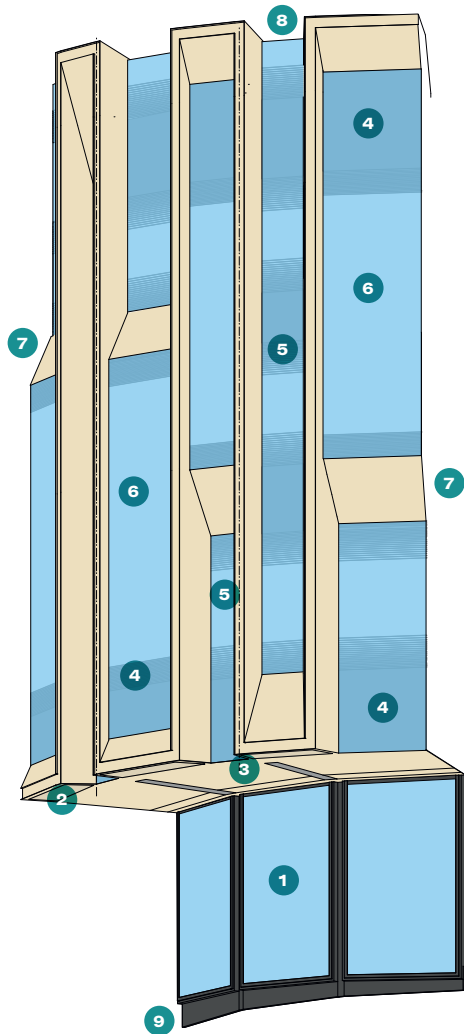
Above Theatre Royal looking west along Cowcaddens Road, the highly articulated vented facade running around.

North/South section

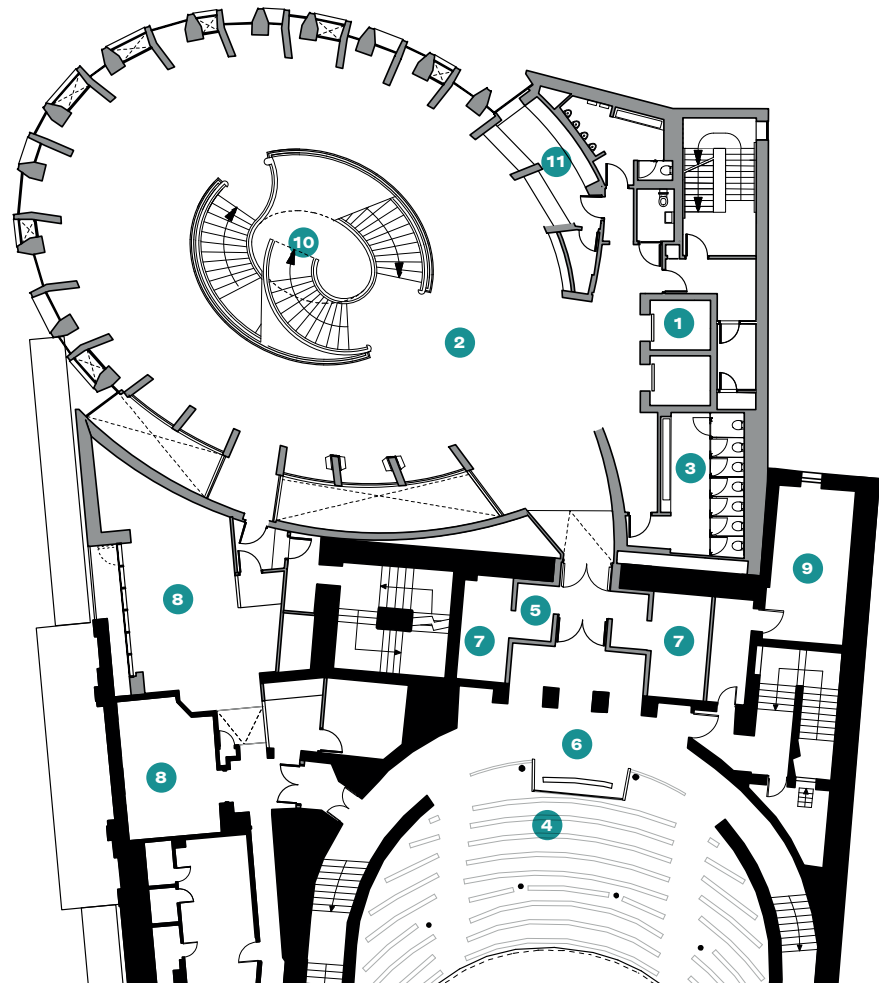


- | | |
|------------------------------|----------------|
| 1 Foyer space | 5 Roof terrace |
| 2 Box office | 6 Events space |
| 3 Existing foyer | 7 Offices |
| 4 Existing auditorium beyond | 8 Lantern |

Facade detail



Second floor plan



- 1 Full height double glazed units in curtain walling
- 2 Perforated metal soffit as natural ventilation intake
- 3 Downlights in recessed soffit
- 4 Fritted spandrel panels
- 5 Clear glazing 'in' position
- 6 Clear glazing 'out' position
- 7 Sloped metal panels
- 8 Continuous glazing forms balustrade to terrace
- 9 Metal cladding separates glass panes and makes up site slope

- 1 Lifts
- 2 Foyer
- 3 Toilets
- 4 Existing auditorium
- 5 Acoustic lobby
- 6 Wheelchair area
- 7 Cloakrooms
- 8 Office
- 9 Plant
- 10 Stairs connecting to foyer levels
- 11 Bar

panels with acoustic foam behind them, further reduce reverb times on all levels. Scottish Opera's own team of carpenters performed the expert joinery. Meanwhile, at the top of it all the lantern is part of the ventilation strategy and acts as a fire reservoir, with actuators opening to allow exhaust air (or smoke) out at high level if needed. Heat exchangers were initially considered here but, given the building's intermittent use, could not be justified.

Despite its novel approach to ventilating the foyer space, it seems the system is working well; Mark Palmer notes that contrary to most passive ventilation systems that end up overridden by users, the facilities team likes the heating and damper ventilation system. 'Because old theatres don't tend to have good ventilation, theatre

staff are instinctively attuned to anticipating what the heating or cooling demand might be and planning for it,' he says, and they've taken to the system like ducks to water. The vent ducts also deal with the number of openings that natural ventilation strategies usually demand, which affects U-values. 'There have been a lot of advantages to separating the lighting element from the natural ventilation,' he notes. 'You can install blinds for instance and the ventilation still works perfectly.' And for a space whose potential as a theatrical event in itself rather than the prelude to one is only now being realised, Palmer thinks that eventuality is being given serious consideration. 'Because when you walk in it's an incredible space; far more than the client – indeed anyone – imagined.' ●

Architect Page \ Park Architects
Client Scottish Opera
Structural engineer Arup Scotland
M&E consultant Max Fordham (including lighting design)
Quantity surveyor Capita
Project manager tX-2
CDM co-ordinator CDM Scotland
Main contractor Sir Robert McAlpine
Acoustics Sandy Brown Associates
Fire engineer Atelier 10
Access consultant Adapt

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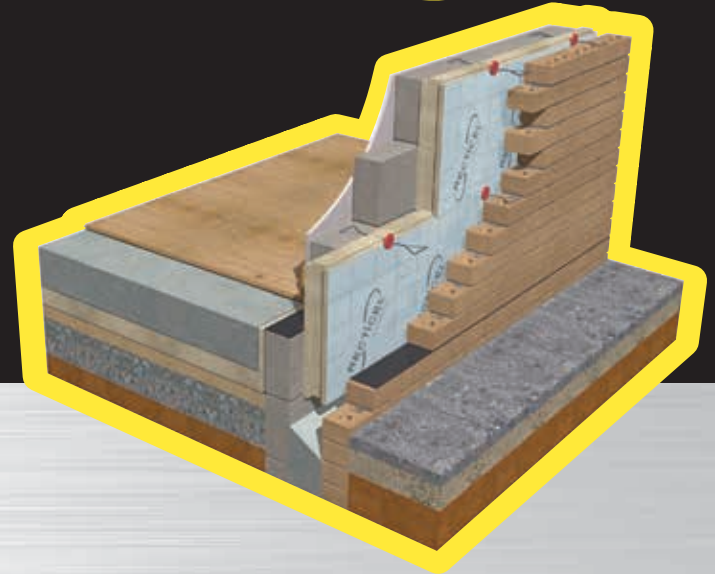
- ▲ Can help to achieve 0.18W/m²K U-value for walls under Part L 2013 England and 2014 Wales
- ▲ Compact design allows space for easier outer leaf brickwork installation
- ▲ Tongue and groove design improves thermal performance, moisture resistance and airtightness
- ▲ New facing technology resists alkali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

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2



1



3



4

1 Optim-R panels Kingspan

As the holiday season draws to a close, temperatures fall and wind speeds rise, turning our thoughts to insulation for the winter ahead. Only a spread of holiday snaps remain to conjure memories of that week in Bognor. As luck would have it, this balcony with a sea view and the pool below combines both considerations, fitted as it is with Kingspan's OPTIM-R balcony and terrace system, which offers a U-value of $0.19 \text{ W/m}^2\text{K}$ without imposing a step or lowering the ceiling on the room below. Ah, peace of mind on the recliner with Danielle Steel and a marguerita... kingspaninsulation.co.uk

2 Perinsul Foamglas

Summer isn't all about vacations of course, and this poor headless chap is sweating away in the heatwave manhandling Perinsul HL – a high density block made of recycled glass which eliminates structural thermal bridging and rising damp at the floor-wall base. He's obviously had his hols – looks more of a surfer than a sunbather – and now he's paying off the bar bills ensuring his project is rot, insect and vermin resistant with Foamglas's blocks. But if his mind is on the future, he could have a care for now – I wouldn't want to be there when he takes off those boots at the end of a the day. foamglas.co.uk

3 Gypsum fibreboard Fermacell

On a more sober note, the season was blighted by a fire in a Plymouth home that was being refurbished. The blaze was contained by Fermacell boards which prevented it spreading to other properties. Gypsum fibreboard had been selected for its fire resistance and light weight, and the story only goes to show that the 'silly season' as Fleet Street calls it, is by no means guaranteed to be all fun and frolics. Hopefully the family that fortunately escaped unscathed are holed up somewhere safe, while Fermacell and the contractor restore the shine to their home. fermacell.co.uk

4 Breather membrane TLX

If wandering round the inside of old churches, camera in hand, is your ideal R'n'R when on leave, then St Mary's in Walkley, Sheffield, has had some added excitement with a tricky re-roofing project. TLX Gold, a 2-in-1 breather membrane, slipped into the 40mm gap beneath the new tile battens to keep worshippers, and tourists, warm on the pews while they contemplate their sins or the internally-exposed wooden rafters above. I say, Mr Hatch, did you enjoy last night's evensong? Altogether now: 'Breather me, breath of God...' tlxgold.co.uk



5
XEnergy
Dow

Britain may have been at play in our ever warmer climate, but work went on for Dow, whose latest flame retarded, XPS roof insulation product is making its mark. XEnergy, set to replace the firm's Styrofoam Roofmate SL-A, has a Global Warming Potential of less than five and Hyde Park's luxury Riverwalk residential development will use 3500m² of the product. Looking at the publicity shot, either someone's working very hard in the cellar or Herman Munster's celebrating the end of the holiday season by cutting everyone a slice of Morticia Adams' slab cake.
building.dow.com

6
ArmWin calculator
Armacell

Bearing in mind the sad fact that the family holiday – not just at Christmas – is also noted for its prevalence of fallouts, those parents who are *absolutely* sick-and-tired of the teenagers being glued to their handsets 24/7 can get their own back with Armacell's ArmWin. Available for all phone types, Thing here is showing the updated professional insulation thickness calculator app – surely much more interesting than the kids' Snapchat etc. And as it can be accessed anytime, any place, anywhere, you'll get that Martini frisson too to remind you that you're enjoying yourself.
armwin.armacell.com

7
Hybrid insulation
Actis

At last! A snap of this summer's holiday cottage on the Isle of Wight – sea view, rural tranquillity... Well, it looks idyllic now but when Phil Clabburn was self-building his low-cost-living home there would have been no port in the storm. But now he's done, his serotonin levels are high, largely thanks to Actis' Hybrid insulation. More than 70 rolls were delivered to line the timber home, and with the bedrooms dropping no more than one degree without heating, all Phil needs is some jungle wallpaper and a UV lamp for that year-round holiday feel.
insulation-actis.com

8
Walltite spray foam
BASF

So we've reached the end of our reminiscences of summer vacations, and the office calls us back to the reluctant trudge along the rat race rut. But for those who really want to live the dream, this floating office in Penryn, Cornwall, offers some hope. Built on a ferro-concrete barge tethered by the quay, the rooms have been insulated with BASF's Walltite spray foam to keep occupants snug all year round. Not quite sea spray but a hell of a lot warmer, and with views of the sun dappled Carrick Roads in any season, they'll be living in clover. For us though, it's 'adios, amigos'.
walltite.basf.co.uk

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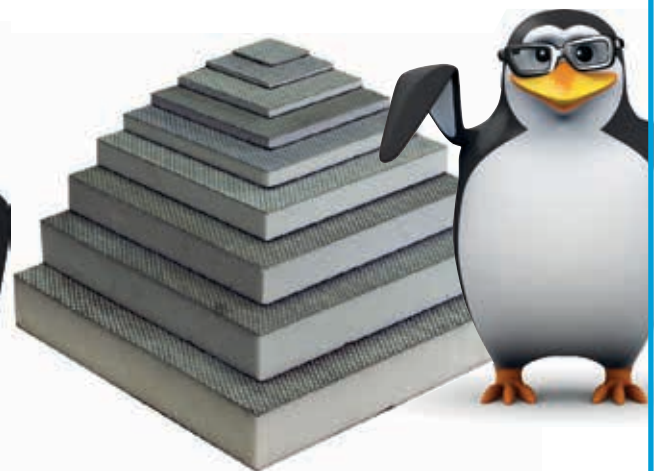
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Designing out stress on paediatric wards

Growing understanding of the impact of paediatric environments on patients has seen a huge shift in hospital design for children

Words: Pamela Buxton

It's been 10 years since Hopkins Architects completed Evelina London Children's Hospital, widely seen as pioneering in the design of paediatric environments. Fuelled by a broader NHS trend towards specialisation of hospitals, a number of major new paediatric hospitals and expansions are now under way, embracing the non-institutional, patient-centred and art-rich approach typified at Evelina.

Alder Hey Children's Health Park in Liverpool, conceived by BDP as part of a flowing landscape, opens in October. The recently completed South Glasgow University Hospital, by IBI Group, includes the 256-bed Royal Hospital for Sick Children, while Avanti Architects' 8000m² extension and refurbishment of Sheffield Children's Hospital is under construction.

'A children's hospital is not an adult hospital with murals on the walls. But most children's hospitals were just that,' says Alastair Gourlay, director of asset management at Guy's and St Thomas' NHS Foundation Trust (GSTT), who was project manager for the Evelina.

With its creative use of colour, natural light, planting and connections to landscape, Evelina led the way in creating a less clinical hospital environment focused on reducing stress all the way to the door of the operating theatre.

Gourlay sees such improvements in paediatric design as part of a trend of generally improving healthcare environments.

'Hospital design is becoming more patient experience oriented. There's much less hospital-as-a-machine going on and much more focus on what it feels like to be a patient,' he says.

Children's hospitals present 'terrific' opportunities for architects and designers, says Christopher Shaw, chair of Architects for Health.

'You have to put yourself in the mind of a child and of a parent. That's such a creative place... In



The sculptural 'playtube' in the foyer of Sheffield Children's Hospital creates a heart for the 8000m² building and a play space at every ward level.

terms of design, a lot can be done,' he says.

So what are the specific issues for designers of paediatric environments? The main additional requirement that has become the norm over the last decade is overnight accommodation for relatives in the same room – generally pull-down or sofa beds. Another is wider provision of play areas, in waiting rooms and on wards.

Stress relief

A more profound change has been the emphasis on creating less stressful environments for both the child patient and for families and friends who may accompany them – an extended entourage

specific to children's hospitals.

Central to this is the increasing understanding that atmosphere is key to patient stress and aiding recovery. Though not exclusive to children's hospitals, this is particularly important to that age group and their parents.

'In waiting areas, if the child is distracted and happy and playing while they are waiting, the parents are more relaxed,' said Gourlay. 'The key thing is that children are running around and having a good time. That's much better than sitting in a quiet waiting room.'

This thinking may result a generous and engaging reception/centralised waiting area with cafés and play areas that encourage children to be active and provide vital distraction – an arrangement that also allows hospitals to make more intensive use of their consulting rooms.

BDP director Benedict Zucchi found his school design experience highly pertinent for children's healthcare projects.

'A characteristic of children's hospitals is that each patient brings a lot of people with them – parents, siblings, grandparents... so you need to think not just about them but others too. You need more space and need to make waiting areas attractive,' he says, adding that to get this generosity of space the environment must work harder by doing more than one thing.

At Alder Hey, for example, the key element is the 90m-long 'heart space', a public hub overlooked by clinician meeting rooms on upper levels. This multi-purpose concourse is the main waiting and circulation area, and incorporates communal services, cafés, a performance area and space to play. In doing so it embodies, says Zucchi, the most positive aspects of a shopping centre in terms of buzz and convenience. Crucially, those approaching the hospital will be able to 'sense' its relaxed atmosphere through glimpses inside, reducing stress before entering. 'Out of a very utilitarian brief we managed to get a very generous space,' he says. 'Every square metre is justified.'

At Sheffield Children's Hospital, Avanti is aiming to create a pleasant and lively atmosphere in its new entrance atrium, which incorporates a sculptural 'playtube'. 'People are expecting more of their institutions... You're looking to create something lively to raise the spirits,' says Mary Reid, senior interior designer at Avanti. 'Our thinking was to make it feel

Below Morag Myerscough's Reception at Bart's Royal London Children's Hospital brings aspects of fun and colour to young patients.



The aim of the piece was to help to bring some joy to the patients and parents with colour and fun that would be warm and welcoming

creating an attractive ambience at children's hospitals, particularly in new builds where architects have been able to collaborate early with the artists. As BDP's Zucchi says, 'the arts programme can be the highlight of the building' – and just one way that the environment can be designed to help take the minds of patients, and their families – off why they are there. At Alder Hey, for example, concourse artwork includes interpretations of Roger McGough poems by calligrapher Pip Hall.

This distraction factor is eloquently demonstrated at Royal London Children's Hospital where Barts Health NHS Trust's arts organization Vital Arts commissioned six artists and designers to create site-specific artwork for wards and circulation routes. 'It's well-documented that children visiting hospital find it very frightening and having good quality design and art provides an uplift in the quality of experience,' says Vital Arts acting director Catsou Roberts. But this should not, she says, be anodyne 'happy-happy' art, adding that Vital Arts is committed to ambitious, high quality work that enhances patients' and visitors' cultural experience: 'You have to take a risk and push boundaries.'

At the Royal London Children's Hospital these highly engaging interventions include Morag Myerscough's Come On In, a vibrantly colourful and ornate hand-painted installation on the ward walls, inspired by a trip to Delhi.

'The whole aim of the piece was to help to

bring some joy to the young patients and parents with colour and some fun that would be warm and welcoming,' said Myerscough.

Current thinking in ward design in children's hospitals reflects general healthcare trends as well as presenting particular considerations. Although the effect of environment on patient recovery is notoriously hard to quantify, healthcare design expert Roger Ulrich's well-documented research on the beneficial effects of views of nature is increasingly referenced in hospital design. At Evelina, Hopkins maximised views to the external landscape, and at Alder Hey BDP is ensuring that every child will be able to see green space from their room.

Seeing and sociability

Sociability is another factor. According to Christopher Shaw, it's important that the design helps keep language and social interaction going, and give children the feeling of choice – in organising their bedroom, where they eat, etc.

Ward design at Alder Hey, where 70% of the patients will be in single rooms, encourages visibility and sociability with full height glazing, shallower rooms to avoid isolation from the corridor, and mini-'heart' play spaces – one per eight bedrooms – plus covered balconies for socialising.

At Sheffield Children's Hospital, windows go down to the skirting 'so that even a crawler can see out,' says Avanti's Reid.

'Visibility is perhaps more important with children, with more visibility into corridors,' she says, adding that as ever in all hospital environments there needs to be a balance between privacy, dignity and observation.

What of the future? Child patient numbers are significantly increasing – at the Evelina for example, GSTT is preparing to appoint a design team for a 50% expansion. Alastair Gourlay of GSTT expects increasing use of digital technology, for example meeting consultants via Skype, to mean that hospitals of all kinds move beyond purely architectural solutions. 'The way healthcare is going is less about the buildings – more and more we'll be relying on technology to support healthcare systems,' he says.

Meanwhile, however, as footfall increases it's more important than ever that the physical design of paediatric facilities – distracting, playful and engaging yet robust, efficient and clinical where it matters – is up to the job. ●

quite different from a normal hospital when you entered, and to really signify that it was for children...We wanted it to be very colourful and not too intimidating with lots of activity.'

The main tools are light, views and colour – Sheffield uses more colour than any project she's been involved in, and isn't limited to more public areas. Even in clinical spaces, she adds, Avanti tries to find space for a colourful intervention – if not on the wall then perhaps a brightly-coloured floor, or maybe a spotty laminate on the plumbing duct behind the clinical basins.

Tone is vital – University of Sheffield research found that even children as young as seven found hospital environments too babyish, according to Reid. 'Children have become much more visually articulate and you have to go with that,' she says.

'It has to embrace all ages,' says Pamela Bate, a partner at Hopkins, which is designing a Research and Education Building at Alder Hey. And while sociable, energizing spaces are hugely important, they aren't all that's appropriate, she adds: 'Teens have different demands. They might like a dark space to go into.'

Catering for all ages

Catering for different ages of children and not neglecting teenagers is a key issue through both the provision of recognisable spaces for them – as at Alder Hey – and the imagery used. Wall illustrations, designed by Neasden Control Centre for the Royal London Hospital's children's dental ward, incorporate teenage-focused urban images and skateboards for example, as well as imagery to appeal to younger patients. At South Glasgow, the need to appeal to all children including teenagers was partly behind an art/wayfinding programme using Corian organised by art consultant Ginkgo Projects.

'One of our provocations to ourselves was: What's a Goth going to think about this,' says project manager Chris Fremantle, adding that while you might not always appeal to everybody, 'you can ensure there's something for everyone'.

The artwork, created by a team including artist Rachel Mimiec and designer Graphical House, drew on interviews with staff to create landmark installations to assist in circulation in addition to providing the welcome aesthetic distraction of the designs and their integral text.

Art is playing an increasingly vital role in



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Detailing for the Stirling

The Stirling Prize might be all about the big picture, but for the contenders, it's the details that make the whole

Words: Stephen Cousins

Buildings competing for this year's RIBA Stirling Prize include a cancer care centre in Lanarkshire, an architecture school in Greenwich, an art gallery in Manchester, a secondary school in Wandsworth and housing in Tower Hamlets.

The shortlist is notable for eschewing the flamboyance of last year, when schemes

including the London Aquatics Centre and the Shard were nominated, in favour of buildings with economic, exceptionally well-crafted design, tailored to the needs of their communities. The winner will be revealed by incoming RIBA president Jane Duncan, who also heads up the judging panel, on October 15.

Below McLaughlin's obsessive, pared-back design approach is as manifest here as it is on any of his more high end work.

WINDOWS

NorDan N-Tech 1.2 sash

Darbishire Place, Tower Hamlets, London

Architect: Niall McLaughlin Architects

A contemporary reinterpretation of the traditional five-storey mansion block, designed to replace a building taken out in World War II by a V2 bomb, Darbishire Place is built from brick with deep precast reveals framing large windows and balconies.

NorDan composite windows were specified in line with the preference of client Peabody Housing, which used them on previous schemes. Internal timber frames are clad in aluminium, painted warm grey, on the outside to increase durability and minimise maintenance. NorDan also supplied full-height glazed balcony doors and modified windows on the scheme's central staircase, with actuators to enable smoke egress in case of fire.

Tilo Guenther, associate at Niall McLaughlin Architects, commented: 'In a heavily regulated sector like social housing, particularly around the Lifetime Homes standard, NorDan provided a flexible design with handles at the right heights for occupants, easy to clean glazing, and good thermal performance with an overall U-value of around 1.4 W/m²K.'





DOORS

Skyframe

Maggie's Cancer Caring Centre, Lanarkshire

Architect: Reiach and Hall

Eight Skyframe double-glazed sliding doors open out onto terraces, courtyards and gardens at Lanarkshire Maggie's, in line with the brief to create an air of calm, relaxation and contemplation. The system has minimal frame visibility and a completely level threshold detail; the base frame sits within the depth of the floor so internal and external floor finishes stand flush.

This helped designers meet Building Control's maximum upstand depth for exits and makes the building very accessible, even for disabled users. In fact, it is possible to walk through the entire building without encountering any threshold plates or other obstacles.

Reiach and Hall associate Laura Kinnaird said: 'The system is easy to move manually, compared to some sliding door products, which fitted with our ambition to give the scheme a domestic, user-friendly feel. The product was available in a range of finishes that suited the Maggie's project, including a mirror polished overclad, but in the end we went for a white powder coating. We like that fact that opening the doors different amounts across the scheme allows users to temper breeze flow quality through internal and external spaces.'

Above Skyframe's minimal framing has increased not only visibility but, with its level threshold, accessibility too.

Right Understated and robust ironmongery choice at Burntwood helped the school's layered geometry stand out.



DOOR HANDLES

Aspex UK

Burntwood School, Wandsworth, London

Architect: AHMM

Defined by its deep-set precast concrete facades, Burntwood School is a large 2,000-pupil all-girl school and one of the final buildings procured through the BSF programme. It is the last of seven BSF schemes by AHMM, which won the project with main contractor Lend Lease.

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www.powerturn.geze.com



BEWEGUNG MIT SYSTEM



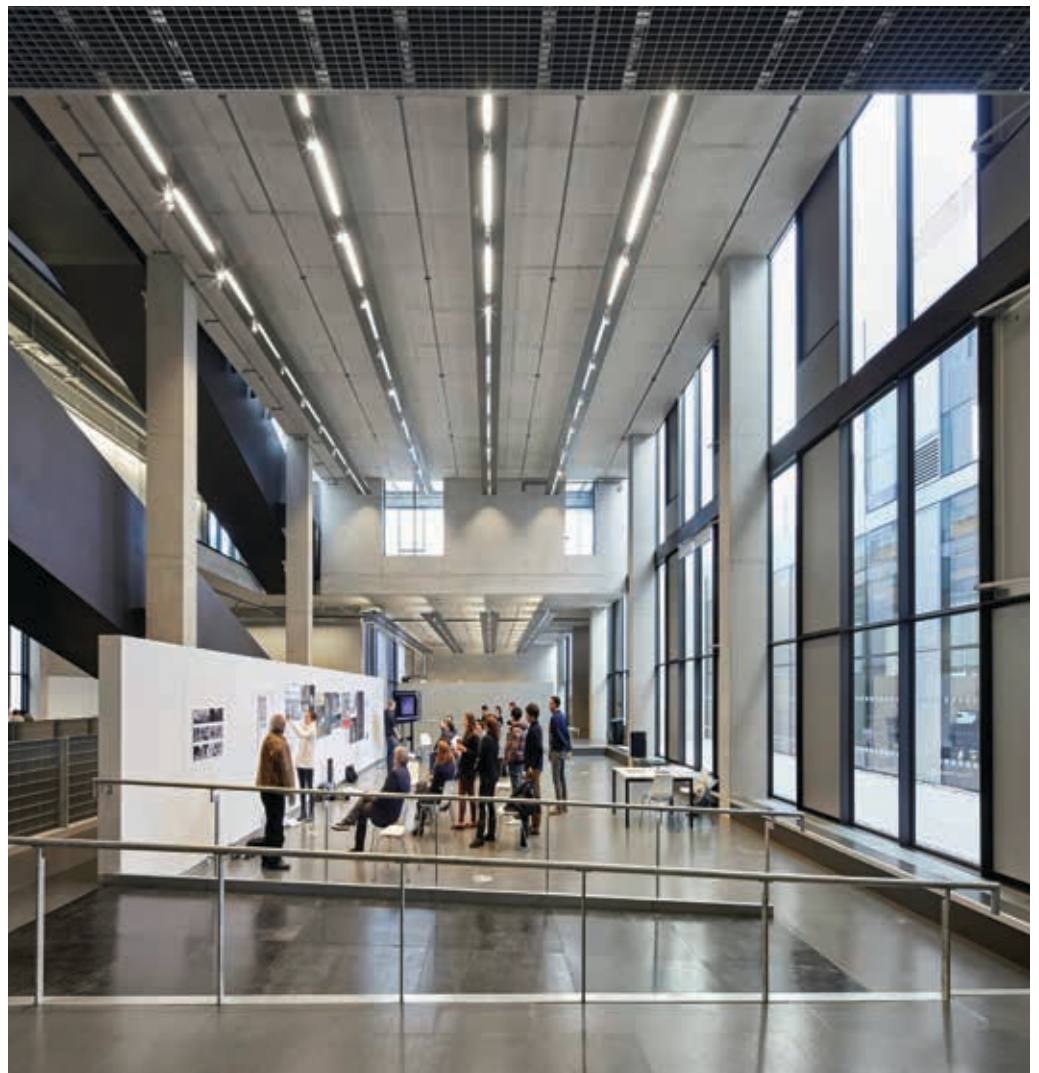
Above Aspex UK provided the optimum mix of aesthetics with affordability.

Below Burntwood's statement precast concrete feels contemporary yet retro.



were the three main factors that influenced the choice of the door handles for the scheme, explained Lukas Ochendal, project architect at AHMM: 'The budget limited the choice of handles available and looked back at previous schools we had designed. We wanted the design of handles to be simple and involved with the architecture, rather than distract from it. Their robustness was equally important, as we needed them to represent the longevity of the school.'

With these factors in mind, two types of handle were specified across the scheme, a 19mm-diameter satin stainless steel lever handle and a 600mm by 19mm straight pull handle, both supplied by Aspex UK.



HUFTON AND CROW

WINDOWS

Schueco/Montanstahl

University of Greenwich Stockwell Street Building, London

Architect: Heneghan Peng Architects

A steel-framed curtain walling system lining the building's internal courtyards was adapted for several one-off double glazed windows installed in the stone street facade.

Slender steel profiles, custom made by Austrian manufacturer Montanstahl and painted with the extremely hard wearing German paint used on railway trains, were integrated into the Schueco curtain walling system.

Steel profiles were specified, over more commonly used aluminium, to emulate the slim mullions and transoms seen on classic modern buildings, to maintain very clear sight lines, as well as create a dynamic contrast between the solidity of the stone facade and the expansive transparency of the windows.

All windows include opening elements; some are controlled automatically via the BMS, while those in the library are opened manually

to give users control over their environment. Here the glazing doubles up as an acoustic absorption system.

Glen O'Brien, architect at Heneghan Peng, commented: 'This is a school of architecture and we wanted the materials to speak for themselves. The steel acts structurally and is visible, whereas aluminium systems often conceal a steel structure under cladding. There is a language of concrete and steel in the building's interior and the steel in the glazing system uses the same metallic paint as on main stairs and elsewhere.'

Above Steel-framed curtain walling brings further finesse to this modern building woven into Greenwich's historic centre.



WINDOWS

MBM

Whitworth Art Gallery, Manchester

Architect: MUMA

MUMA was tasked with introducing high levels of transparency to this Victorian gallery, which had virtually no windows overlooking the surrounding parkland. A new open promenade was introduced, as well as a range of penetrations through the existing building fabric.

MUMA partner Stuart McKnight said: 'The brief asked us to make the collection more accessible to the public and this window to the Study Centre, on the north side of a new courtyard garden, enables visitors approaching the gallery's main entrance to see scholars working with the artworks inside.'

The window is south-facing, so to preserve the building's passive approach to environmental control, a very deep reveal was cut into the brickwork to shield against the intense midday sun. The reveal continues on the inside using oak joinery. Meanwhile, stainless steel fins built into the external brickwork and projecting out above the window act as a brise soleil, protecting against the sun as it dips towards the west.

A Schueco AWS65 window system forms the basis for a bespoke fabrication to MUMA's design by MBM of Germany. Glass was supplied by Eckelt Glass Solutions / Saint Gobain and features a Sunex high performance coating and UV controlling interlayer designed to protect artworks in the Study Centre. Additional protection for light-sensitive art is provided by translucent blinds, concealed within the reveal.

'The window provides a spectacular low-framed view across the courtyard towards the Learning Centre, with the transparent glass box of the café above it and the trees visible beyond,' added McKnight. ●

Left Aalto-esque brick detailing makes a feature of MUMA's reveal to the Whitworth's study centre.



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Costed

Jonathan Monaghan of Monaghan Hardware considers ironmongery costs

When it comes to choosing architectural ironmongery, you need to understand how that hardware will be used and what it might be subjected to.

In commercial or public buildings, a door may be opened and closed many hundreds of times a day, which will influence the chosen quality of any ironmongery items with moving parts that should be used. In the residential market, considerations tend to be more around budget and style. From hinges and latches to locks, closers, lever handles and even doorstops, the products that need to be considered is vast.

While architectural ironmongery is not directly covered by building regulations, it is subject to more than 58 British and European standards. Its effectiveness may also need to

be taken into account to meet Part B (fire safety), Part M (access to and use of buildings), Part E (resistance to sound) or other regulations.

The Construction Products Regulations require some architectural ironmongery to be CE marked. This applies to all essential door hardware products used on fire, smoke and escape doors and where there is a harmonised European standard. These products must have a Declaration of Performance made available to architects so they can ensure that the product's performance will be appropriate for its intended use.

But there are also many products which cannot be CE marked – for example, lever handles, pull handles and door bolts. These can still be used on fire and smoke doors, so long as

there is documentary evidence to support their application.

To be guided through these complexities, many architects work closely with a qualified architectural ironmonger. Look out for the letters RegAI after their name, which indicates the highest qualification available through the Guild of Architectural Ironmongers.

The ironmongery listed below has been selected as suitable for internal use on a mid to high quality project on which the architect is responsible for the detailed design. It specifically excludes the lower quality offerings often found on the internet and in some retail/DIY outlets. ●

Jonathan Monaghan RegAI is managing director of Monaghan Hardware

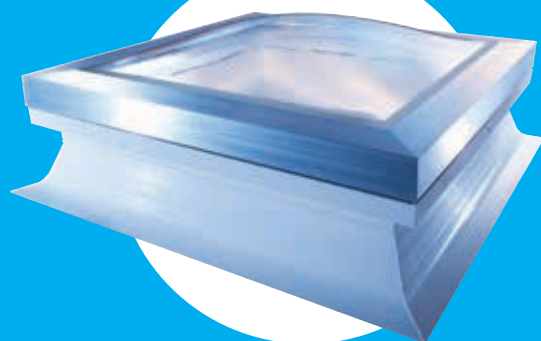
The items listed represent the two ends of the quality/price spectrum of acceptable and frequently used products. Prices are correct as of Q2 2015 and exclude VAT.

Architectural ironmongery for architect-led residential projects	
Hinges	
75mm SSS washered hinge (35-40mm door)	£1.50 ea
100mm ball bearing hinge (44mm door)	£2.00 ea
Concealed adjustable hinge (44mm door)	£50.00 ea
Latches/locks	
75mm tubular latch	£3.00 ea
75mm tubular bathroom deadlatch	£5.00 ea
75mm heavy duty large case latch for unsprung levers	£12.00 ea
75mm heavy duty large case bathroom lock for unsprung levers	£14.00 ea
Lever handles	
Modern solid stainless steel levers	£30-£80.00 pr
Designer chrome levers on brass	£30-£250.00 pr
Architectural ironmongery for commercial projects	
Typical 'door type' rates:	
'Contract' single leaf pack, self closing, push-pull	£150.00 set
'Performance' single leaf pack, self closing, push-pull	£350.00 set
Hinges	
100mm stainless steel ball bearing hinge	£2.50 each
100mm stainless steel concealed bearing maintenance free hinge	£14.00 each

Locks	
60mm case euro-profile dead/sash lock with suited cylinder & escutcheons	£30-£70.00 set
Door closers	
Silver En2-4 backcheck door closer	£45.00 ea
Concealed high efficiency cam action door closer	£150.00 ea
Lever Handles	
Contract stainless steel levers (or pull handle)	£10-£30.00 pr/ea
Modern solid stainless steel levers/pull handle	£30-£80.00 pr
Stainless steel push plate	£6.00 each
Panic Devices	
Silver single door panic bolt	£60.00 each
SSS single door touch bar panic bolt	£320.00 each
Accessories	
Think about doorstops, fire door signage, extra keys, hooks on toilet/office doors – not expensive items but important finishing touches that make the building work for its occupiers.	



Intelligent from every angle -
intelligent by design

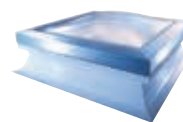


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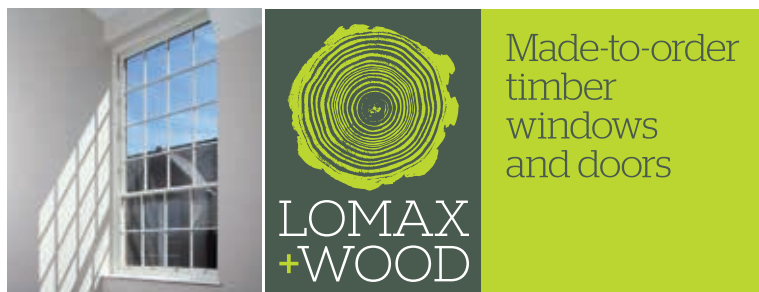
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Specified



1
Marlon Clickfix
Brett Martin

It's delightful, as the dark days of winter draw on, to see the continuing brightening of Birmingham and the Black Country. Gone are the smoke stacks, industrial strife and the Bull Ring, replaced by a revitalised and happening city centre. And at Jaguar Land Rover's plant, Brett Martin's Clickfix polycarbonate glazing panels both give light and are light, offering thermal efficiency, weather tightness and fire performance while illuminating the plant floor below where operatives whistle while they work. Heaven knows what Red Robbo would have made of it. brettmartin.com



2
Slimdrive SL door operators
GEZE

If you thought this was one of those high end, West End, retail outlets that feature so heavily in these pages, look again. It's our old friend the Bannockburn Visitor Centre, the most precious building in Scotland celebrating as it does the definitive routing of the Auld Enemy. Geze supplied the automatic sliding doors with Slimdrive SL operators, which sport safety devices to prevent any entrapment of fingers etc. To reach perfection, all that the doors need now is to be fitted with an Englishman detector, which as they enter plays the welcoming ditty: Ner ner ne ner ner... geze.co.uk



3
Conservation windows
Mumford & Wood

Well, Alice has certainly grown up a bit since she fell down that rabbit hole, and it looks like she's still on the 'eat me' enlargement cake. All that partaking might have left a wild look in her eyes but she's wearing well... That window on the cottage she's squeezed in to is pure Mumford & Wood – Victorian-style sashes with spring-balance operation and curved fanlights. But of course, this is nothing so absurd – it's Grayson Perry's fantastical A House for Essex, which is decked out in all sorts of flashback references. Slip Inside This House and Feed Your Head, as they said in the sixties. mumfordwood.com



4
BSI Kitemark
Sunsquare

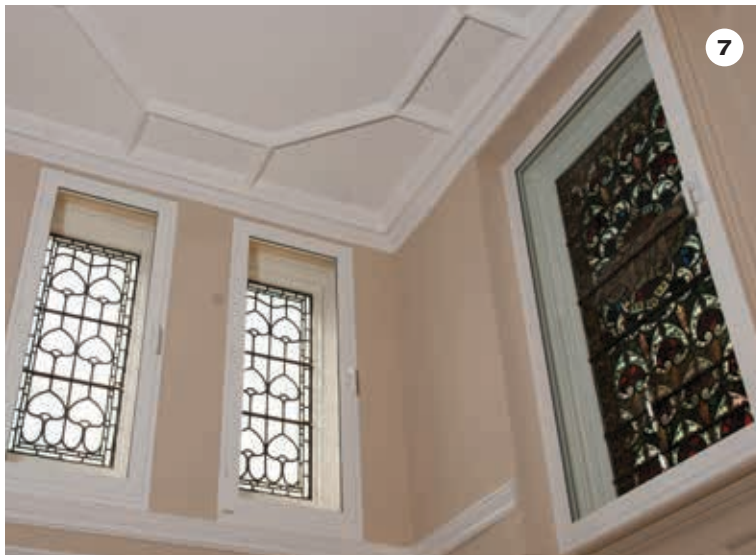
If you're sitting in the kitchen, wondering if anyone ever actually cooks in it, your eye might wander upwards to the kites flying in the sky above. And as you gaze through that rooflight, you could spot not just a kite but a kitemark – though only if it is a Sunsquare flat roof skylight. The firm has set an industry standard with the hard-won BSI accreditation, meaning that as you open the Prosecco and unwrap the quinoa salad, you can rest assured that the untouchably pristine new kitchen is safe beneath it. As are you and your guests too, of course. sunsquare.co.uk



5



6



7



8

5
Innovare doors and windows
IQ Glass

When your project is slotted in to one of those seemingly unrealistic wedges of a London street, light is supremely important. Spiral House in Balham is one such, using Innovare bifold doors and windows, and structural glass rooflights, from IQ Glass to open up its spaces. With an 11m long uninterrupted view of the sky, the temptation for its occupants, when they arrive, will surely be to spend much of their time on their backs, staring into space and wondering what's out there, giving every excuse for long lie-ins or days in the recliner instead of slaving in the office. We are not alone...

iqglassuk.com

6
WICTEC 50
Wicona

Imagine a world without humour or joy, the dull repetition of reality unadorned by fantasy or imagination. At the first sign of frivolity a latterday Inspector Regan would be behind you with the cuffs: 'Up against the wall, Tinkerbell, you're nicked!' It's a far cry from this civilised reality, where even a necessarily serious side of life – Police Scotland's administration HQ on the Clyde – boasts around 5000m² of Wicona's WICTEC 50 structurally glazed curtain walling, to bring contentment to the officers and staff inside. Who needs jokes? Happiness lies within.

wicona.co.uk

7
Secondary glazing
Selectaglaze

Times are tough for heritage, as the saintly march of sustainability brings ever more stringent building regs, sacrificing even for the grand old mansions up the hill to redevelopment. But Colchester's lucky Greyfriars – Georgian home, then nunnery, school and college – has been saved and restored as a luxury hotel. The ticklish problem of the historic window, insulation's arch enemy, has been gratifyingly solved with the use of secondary glazing by Selectaglaze, to make the elegant originals efficient. Can you spot the overhead view of four kneeling Franciscans at prayer in there?

selectaglaze.co.uk

8
GEODE-MX Visible Grid
Technal

We all know magic is really all around us, it's just muggles that can't see it. JRR Tolkien's creatures of Middle Earth might well pass Stockport's Strata Campus as they float downriver to the Undying Lands, the enchanted Rivendel falling away to reveal the future – gritty realism filled with 21st century business blocks. But that verdant elven world is recalled in the green glazing on Strata's The Codeworks, where Technal's aluminium curtain walling systems have helped achieve a life-enhancing A-rated energy efficiency. Can real life be magical? We'll see.

technal.co.uk

Labyrint, Belgium

Young practice Gijs Van Vaerenbergh uses thick sheets of mild steel to create a mind-bending experience on a former mining site

Words: Jan-Carlos Kucharek

Photographs: Filip Dujardin

Website DesignCurial's recent global ranking gives the UK three of the best mazes in the world. The top accolade, however, goes to Hawaii's Dole Plantation, whose pineapple-shaped offering is also the world's biggest.

While strangely shaped fruit may not have been the inspiration for Belgian firm Gijs Van Vaerenbergh's large, pop-up installation in the former industrial city of Genk, the fruit of their labours – 'Labyrint' – is definitely strangely shaped, certainly as mazes go.

Formed out of thick sheets of mild steel, echoing the primary industries that turned the quiet Flanders village into a town of 70,000 people within 60 years, the mind-bending convolutions occur not just in plan but in section. Installed in the central square of C-mine, a new arts complex carved out of the old mine buildings by architect 51N4E, Gijs Van Vaerenbergh's rusting temporary edifice is as much an art piece as it is architecture.

'The labyrinth is well known trope, like a house or a dome, and is based on the idea that everything is identical,' says partner Arnout Van Vaerenbergh. 'But we liked the idea of transforming the closed box form and opening it out to the square, or of making some parts





Far left Labyrinth is a maze not just in plan but in section.
Left and below The site is a former mine whose old headstocks offer an excellent view of the meanderings beneath.



closed and others open; of introducing ideas not only of confusion, but also clarity or surprise.'

The result is a maze form with subtended arcs carving great swathes out of its 5m high walls, creating mini-plazas within the space or concentric viewing holes through whole planes of the 73mx 73m square. On entering, tensions become apparent between what is expected and what is presented, between the courtyard and installation, between the idea of a toy puzzle and a piece of urban design.

In Belgium the young firm has developed a reputation for installation design and a penchant for experimental architecture. It came to international prominence with its 2011 'Reading Between the Lines' project in rural Limburg, a chapel form built of horizontal plates of steel that looks solid or dissolves according to where you view it from. Van Vaerenbergh says: 'It picked up on how we like to transform formal tropes, but abstracted to give it room for interpretation.' It is a mere landscape intervention but some saw it as a critique of Christianity or a comment on the emptiness at the core of a secular society. Like the perception of the installation itself, it could be both or neither of these.

The architect resisted lighting the structure as technical requirements would have compromised its raw simplicity

Van Vaerenbergh refuses to be drawn on readings for this latest work but you exit where you enter (so go nowhere) and there is no centre point or goal, so the whole thing becomes an experiential study on the idea of a journey without purpose. But you can still lose yourself within its 1km of steel wall; something that could be considered a health and safety concern, being in a public square and effectively unpoliced. It turns out the firm did all the risk assessments and the decision was made to keep it open 24 hours a day, despite being unlit. People are apparently negotiating it at night with no damage done. The architect resisted lighting the structure as they were averse to the idea of turning it into an evening 'event' and technical requirements would have compromised the design's raw simplicity.

The structure will sit in the square until the year's end or until runoff starts to taint the cobbles with rust, whichever's sooner. Viewed from the top of the old mine headstocks, visitors will continue to mill about below, but only those at this vantage point will be able to make sense of their meanderings. 'It's like the Great Architect,' thinks Van Vaerenbergh in conclusion. 'We all just want to play God.' ●

Specified



1 Furniture Hi-Macs

Plunging into the demanding world of art can be a stressful experience for the footsore culture vulture, who would perhaps rather rest their weary body in a soothing spathroom. But at Yasmine Mahmoudieh's Augeo Art Space in Palazzo Spina, Hi Macs helps visitors unwind with this sinuous 'functional structure'. Is it a seat? Is it a bar? Is it a 'state of fluid dynamism'? Actually, it's all three, swooping and transforming itself from one to another as it flows through the space, leading you to find first the culture and then – aah, bliss – the spa beyond.

himacs.eu

2 Kitchen drawers Valcucine

A kitchen without drawers is like Paul Hollywood without Mary Berry – charmless and irritating. Luckily, Valcucine has come up with Genus Loci, a drawer that knows its potential. Styled to sit either discreetly flush in their slot or with a jaunty projection, they are now deep enough to stand a bottle upright inside and feature a back panel that will conceal anything unsightly such as the dishwasher or power sockets. Now, if they could only make a space to hide the bottle and keep others' thieving hands off the cook's tippie, I could rustle up the frangipane in peace.

valcucine.com

3 Ceiling tiles Armstrong Ceilings

Armstrong Ceilings is proud to announce that in its contract to supply South Glasgow University Hospital with tiles and various suspension and dry wall grid systems with bespoke Axiom perimeter 'solutions', it diverted 35 tonnes of mineral ceiling tile off-cuts from landfill. The final resting place for the off-cuts, once back at the factory, isn't detailed, but patients at the hospital can at least rest assured that this is no Soylent Green operation – we're talking mineral tiles here and they don't end up eating – though anyone who's consumed hospital fare may beg to differ. armstrong-ceilings.co.uk

4 Bathroom collection Galassia

We all love to relax in the bathroom and it's the space that is least likely to suffer the style over practical living that some high end designs impose. But of course relaxation requires soothing surroundings, and if your dream closet is elegant too, then Galassia's Dream collection has the full Colgate smile... and then some. Dream is a 'total look' of accessories and free standing pieces made of melamine, Corten, PEFC wood and other class materials styled into an Italian pamper-ready experience. Who needs the rest of the house – this is divinity supreme. Caio, bella! ceramicagalassia.it

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Flexiflow makes dramatic office Altro

Innovative Altro FlexiflowTM resin flooring is providing a practical and attractive solution for one of Brighton's most unusual and striking offices. Ben Adams Architects said: 'Altro Flexiflow was ideal for this project. It's tough, flexible, and can withstand movement other resin floors cannot. It's designed to recover from scuffs and knocks, and it's visually appealing.' www.altro.co.uk



New expansion joint covers Gradus

Contract interiors specialist Gradus has collaborated with Jointmaster, a division of InPro Corporation to launch a range of expansion joint covers. Gradus JointMaster[®] profiles protect expansion joints from dirt and debris to create a safe transition between floor coverings for pedestrian and wheeled traffic, and conceal visible joints. The range has four cover types and several profile options for each. www.gradusworld.com



Gym gets lightning quick install Gerflor

Gerflor stepped up to the plate when the Gym Group wanted a loose-lay, durable floor installed with minimum fuss and downtime at its Bolton gym. The smart Gerflor GTI range has a 2mm wearlayer and 6mm thickness overall and easily copes with constant footfall to bear the heaviest static loads, while in the changing rooms Tarasafe Ultra H20 replaced two separate Gerflor products. www.gerflor.co.uk



Setting the tone for students Interface and Dulux Trade

Interface, manufacturer of global modular flooring, and paint maker Dulux Trade have helped bring to life the industrial inspired design of student accommodation at the University of Northampton. Interface's nature-inspired Urban Retreat range echoes the earthy notes of the paint colour scheme in the reception and seating areas, and supplies an eye-catching and hardwearing surface at the entrance. www.akzonobel.com



Rustic floors with a dynamic touch Kährs

Kährs has a new collection of 10 rustic oak wood floors. Part of the Supreme Range, the Småland Collection features a dynamic timber surface with knots, graining and cracks. Its very rustic, undulating appearance has a range of finishess, which create a multi-faceted surface. The collection is suitable for contract and residential uses and can be installed over underfloor heating. www.kahrs.com



Grand design's problem-free tiling Kerakoll

Kerakoll was involved with both client and architect for the tiling specification at this modern, eco-friendly house featured on Grand Designs. The demanding project needed frequent onsite technical support, with external and internal wall and floor tiling and wet room style bathrooms with tanking. The internal floor was tiled over underfloor heating on a calcium sulphate screed. www.kerakoll.co.uk



Finishing touch for office canteen Polyflor

Polyflor's vinyl flooring was recently used to create a fresh, modern look for technology firm Analog Devices in Co Limerick, Ireland. 500m² of Classic Mystique PUR sheet vinyl flooring in Silver Mist 1430 and Nocturne 1380 in the office canteen provides a neutral base for the bright furniture and food serving stations, while 300m² of Expo-na Design PUR luxury vinyl tiles was used for office tea and coffee stations. www.polyflor.com



Anti-static floor for Toshiba Flowcrete

Flowcrete Asia has collaborated with Toshiba Medical Systems to provide a specialist conductive floor finish for its new diagnostic imaging systems manufacturing base in Malaysia. The client required a flooring system with surface regularity and consistent uniform conductive readings and Flowcrete's Flowshield ESD Conductive, part of the anti-static range, passed with flying colours. www.flowcreteasia.com



Ultimate waterproofing protection BAL

New from BAL, Tank-it is a rapid-setting tanking system for internal or external waterproofing. Ready to tile in only 90 minutes, it offers complete protection for showers and wet rooms, plus commercial installations such as terraces, balconies and areas of total immersion (pools, spas and hot tubs). With no priming required, BAL Tank-it produces significant time and cost savings on key installations. www.bal-adhesives.com



No slips in dementia-friendly ward Polyflor

Polyflor's safety flooring was recently installed throughout Ward 29, a £2.5m new dementia-friendly facility at Manor Hospital in Walsall. Wood fx PUR, Hydro and Vogue Ultra PUR were used throughout the ward to help keep patients, staff and visitors safe by reducing the risk of slips and falls. Wood fx PUR safety flooring in Classic Oak 3107 was used in the bedrooms, reception and corridors. www.polyflor.com



The long light walk Structura

This dramatic link bridge at the Queen Elizabeth Hospital Birmingham, designed by BDP, is formed with Kalwall, pierced at intervals with clear glazed full height windows. The highly insulating cladding admits natural diffused daylight to create an attractive ambience without shadows or glare, while providing privacy. Kalwall is increasingly specified for refurbishment of aged cladding and rooflights.

www.structura-uk.com/kalwall



Kalwall is a good sport Structura

The Kalwall highly insulating system plays an increasingly important role in new sports buildings, such as SportsDock at the University of East London Docklands Campus. It not only diffuses natural daylight but creates perfect playing conditions by eliminating glare and shadows – so has no need for blinds. Kalwall is also widely specified for refurbishment of aged cladding and rooflights.

www.structura-uk.com/kalwall



New general secretary for EPIC EPIC

Engineered Panels in Construction (EPIC) is pleased to announce the appointment of its new general secretary, Martin Hardwick, following the retirement of longstanding director Peter Trew. Martin has helped to drive industry engagement with stakeholders, is a keen advocate of sustainable practice, and has helped develop and deploy industry metrics, targets and regulatory documents.

www.epic.uk.com



Sacred Heart beats again Rodeca

More than 700m² of Rodeca polycarbonate panels have been used on two new buildings at the new Sacred Heart School in Camberwell, London. In the sports and assembly halls the panels are used as a clerestory feature, and in two lightwells in the new teaching block, they form a double-wall construction of 40mm PC2540 panels in Kristall finish. They are also used in an activity studio and elsewhere.

www.rodeca.co.uk



Shedding light for council staff Kawneer

Curtain walling and doors by leading aluminium systems supplier Kawneer were specified for a refurbished landmark building for their quality, architectural detailing and technical support. AA[®] 100 zone-drained curtain walling and series 190 heavy-duty commercial entrance doors were installed over nine months at the £8.3m new offices of Eastleigh Borough Council in Hampshire.

www.kawneer.co.uk



Heritage-look tiles for luxury home Redland

Redland tiles have been installed on a luxury three storey house facing the Surrey downs. Owner James Taylor wanted to build an eco-efficient home and a strong and durable roof was paramount. He specified the Rosemary Clay Craftsman tile in the Albury finish – a traditional warm dark reddish clay with natural textures to create an aged heritage look – for both the roof and vertical tiling.

www.monier.co.uk



Check-in checks out at green B+B Kingspan Insulation

Visitors to Devon can enjoy a truly sustainable stay at the fully certified Totnes Passivhaus B&B, retrofitted with products from the premium performance Kooltherm range. When insulation had to be laid over the existing floor slab, the firm's K3 Floorboard delivered a U-value of 0.20 W/m².K without reducing headroom, while 180mm thick K5 External Wall Board was fitted to the walls outside.

kingspaninsulation.co.uk



Estate gets a brighter identity Weber

Saint-Gobain Weber's EWI (external wall insulation) has been specified in Camden Council's Denton Estate refurbishment. Application of weber.therm XM, a lightweight, render-protected EWI system has created a smooth, render finish and a bright, welcoming facade, while 12,000m² of weber.therm XM EWI has raised thermal performance from a U-value of 1.40W/m².K to 0.28W/m².K.

www.netweber.co.uk



BioSOLAR's green synergy Bauder

Flat roof manufacturer Bauder last month launched BioSOLAR, its revolutionary solar PV mounting system for biodiverse or extensive green roofs, at the European Biosolar Roof Conference. Designed primarily for new builds to meet planning and BREEM requirements, the integrated system addresses the misconception that green roof and PV technologies are mutually exclusive.

bauder.co.uk



Kingspan insulation strikes gold Kingspan Insulation

Kingspan Insulation's manufacturing facility in Pembroke, Herefordshire, has been awarded World Class Operation Management Gold. This latest award reflects the hard work of staff at all levels within the firm. One of the biggest manufacturing successes has been on the production line for its premium performance Kooltherm insulation range, cutting waste by 70% in the last eight years.

www.kingspaninsulation.co.uk



Part Q closes on non PAS24 doors Eurocell

From 1 October the new build sector is closed to doors and windows that do not meet the requirements of PAS 24. The latest addition to the Building Regulations affects any doors and windows that provide access to the dwelling. The move has been welcomed by Eurocell, the UK's leading manufacturer, distributor and recycler of window, door, conservatory and roofline products. www.eurocell.co.uk



Doors open council to everyone GEZE

GEZE has supplied its Slimdrive EMD-F electromechanical swing door operators for wooden doors at Derby City Council's renovated grade II listed offices. More than 200 reliable and efficient manual and automatic door operators were needed for the project to ensure ease of use and allow electronic locking for security reasons. At just 7cm high, the EMD-F operator is extremely discreet. www.geze.co.uk



Chain of Custody certification Lomax & Wood

Lomax + Wood, the Essex-based designer and supplier of high performance timber windows and doors in the Kensington & Chelsea range, announces FSC® – Forest Stewardship Council – Chain of Custody certification FSC® C126169 in compliance with BM TRADA. This certification ensures these made-to-order timber products originate from responsibly sourced forests. www.lomaxwood.co.uk



Safe closers for health Samuel Heath

Powermatic concealed door closers are increasingly popular throughout the healthcare sector thanks to their many health, safety and hygiene benefits. Totally concealed when the door is closed, Powermatic offers few surfaces on which dust and potentially harmful detritus can accumulate. Their low mounting height also simplifies inspection and cleaning procedures. www.concealeddoorclosers.com



Authenticity with security Mumford & Wood

The ever expanding Conservation Secure™ collection of period-style timber windows and doors by Mumford & Wood now includes an option in which the pre-tensioned spring balance is hidden from view to maintain authentic styling. The product is also fully security tested to PAS24:2012 to achieve Secured by Design accreditation, while allowing quick, easy and efficient maintenance. www.mumfordwood.com



Learn whenever it suits you GEZE

Chartered RIBA architects can now learn at any time of day thanks to breakfast and tea-time CPD seminars from GEZE UK. The compulsory learning includes EN 16005: Safeguarding Pedestrians from Accidents at Power Operated Doorsets; Glass Door Assemblies: Selection and Specification; Designing Effective Natural Heat and Smoke Ventilation; and Removing Barriers to Access. www.geze.co.uk



Flexible, safe and looking cool Kemmlit

Scottish Widows Investments has selected Kemmlit lockers for its new London offices. Architect Morrow & Lorraine specified the Type S2Z lockers which offer integrated air duct ventilation and clothes hanging/drying facilities. Manufactured from galvanised sheet steel with a scratch and abrasion resistant stove enamelled finish, the lockers can be configured to provide a range of options. www.kemmlituk.com



A sustainable case at UEA Smartply

More than 11,000m² of SmartPly OSB3 has been used in the construction of the structural timber frame at the University of East Anglia's landmark Enterprise Centre – the UK's first commercial building designed to achieve Passivhaus and BREEAM Outstanding certification. SmartPly OSB3 helped it reach Passivhaus standards with an annual primary energy demand of <120kWh/m²a. www.smartply.com



Metsä adds to Timber Expo Metsä Wood

Metsä Wood, the UK's leading supplier of timber materials for the construction industry, is to exhibit at Timber Expo from 6-8 October at the NEC. The show promises to provide a real forum for discussion of the most pressing issues facing the sector. Supplying innovative solutions for many years, Metsä Wood is an industry heavyweight at Timber Expo. www.metsawood.com



Aluprof Develops the Slimmest of Aluminium Windows Aluprof

Steel windows have long been admired by specifiers for their slim lines and unobtrusive looks. Aluminium systems companies have tried to replicate the 'steel look' with varying degrees of success – until now. With a fixed light and opening light aluminium face width of just 32.5mm Aluprof's new 'MB Slimline' window offers good looks and high thermal performance. The 'MB Slimline' system is suited to projects where slim lines are crucial to the appearance of the building. www.aluprof.eu



Spiral stair aids Westminster view Canal Engineering

CANAL Architectural was enlisted to open up and expand the upper floor of this penthouse in Parliament View apartments in central London, and fabricate a glass and stainless steel feature spiral staircase to provide a stunning access solution. Low-iron glass treads and balustrade panels on the stainless steel structure allowed the natural light to flow throughout the apartment.

www.canal.eu.com



Decorative film for any occasion David Clouting

Interior Film from David Clouting is a range of self-adhesive, decorative films manufactured by LG Hausys. Rooms can be transformed in hours with minimum disruption. Interior Film can be adhered to most substrates including wood, metals, plasterboard, plastics and melamine. Designs and finishes include: Exotic woods, leather effect, textured metals and natural stone. Interior Film is CE certified.

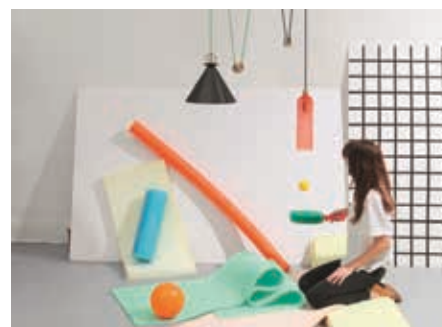
www.davidclouting.co.uk



New website makes matching easy Bushboard

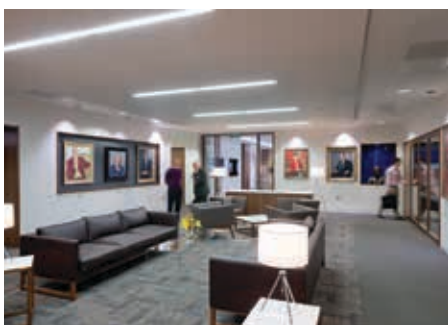
UK worksurface manufacturer Bushboard has launched its brand new website. With an emphasis on design inspiration and engagement, it includes a new interactive Design Studio which allows designers and home owners to pair all Bushboard's designs with different door options to reach their ideal kitchen style. Ideas can be saved, printed and shared via email or social media.

www.bushboard.co.uk



What's next in surface materials? IDS

For an insight into what's next in surface materials and the key trends shaping the future of design, Spanish surface materials specialist Finsa and UK distributor IDS are presenting Finsa's latest international Trendbook 2015-2016 at an exclusive interactive event at the Saint Gobain Innovation Centre, 95 Great Portland Street, on 21 October. Register for a session at: a.bainbridge@finsa.com



Transformation for psychiatrists Lyndon Design

Lyndon Design has played a key role in helping renovate the grade II listed HQ of The Royal College of Psychiatrists in central London with an array of handcrafted seating. Furniture in the stylish member's lounge, which takes in meeting rooms, workstations, a council room and the College's fine art, now includes the Orten and Callisto seating collections, together with the Metro occasional table.

www.lyndon.co.uk



Harmony of comfort and versatility Lyndon Design

Reflecting the crossover trend in hospitality and corporate interior design, the Albany seating and coffee table collection from Lyndon Design is versatile furniture, without sacrificing comfort and aesthetics. Designed inhouse and available in lounge chair and sofa options, Albany's elegant, compact and stylish design lends itself to informal and formal space, measuring 1165cm by 715cm by 360cm high.

www.lyndon.co.uk



Browsing just got better Showerwall

To enhance its customers' online browsing, the decorative water-proof panelling system supplier Showerwall has made its website responsive to mobile devices. The site is now compatible with all leading smartphones and tablets, and is packed with information including a comprehensive overview of the product range, installation instructions and videos, and technical data.

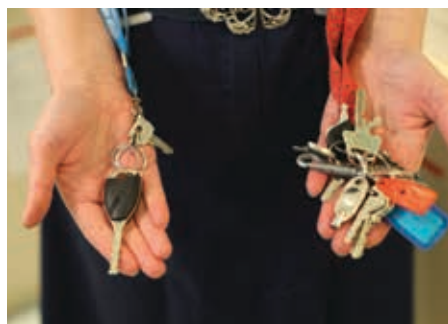
www.showerwall.co.uk



Brand new specification manual Twyford

Twyford has launched a brand new specification manual that provides an easy reference guide to its entire product portfolio and supercedes the previous commercial guide. Hard copies are available on request and a digital version can be downloaded. The manual lists products by categories, with each page containing full technical details, associated products and unique features.

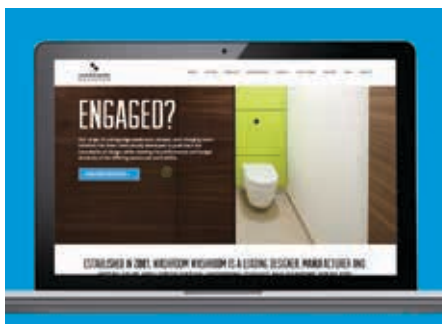
www.twyfordbathrooms.com



Locking solutions at Patient First Abloy UK

Security expert Abloy UK is exhibiting at Patient First in November, with representatives on stand H05 to discuss the systems that make it the leading manufacturer of keyless locking integration for the healthcare sector. Abloy will be promoting web-based security management solution, PROTEC2 CLIQ, which allows remote management of electronic master-keyed sites from anywhere in the world.

www.abloy.co.uk



New website aimed at specifiers Washroom

Washroom design and manufacturer Washroom Washroom has launched its new look website designed specifically with architects and specifiers in mind. Completely refreshed and easy to navigate, the site features a new toolbox section with all the tools needed to create unique washroom and changing areas across a range of sectors. There are details of colour and finish options and information about Washroom's design facilities.

www.washroom.co.uk

Sign Up

Simon Astridge, director of Simon Astridge Architecture Workshop, gives us three of his specification favourites



BIRCH PLYWOOD

We are always for looking for materials [especially for walls] that avoid the time consuming processes of plasterboarding, skimming and decorating. The clients of a residential private house wanted a contemporary material, but also one that was warm, and had an atmosphere. We chose birch faced high grade plywood for all walls, floor and ceilings – for its availability, price and relatively simple installation. The boards were nailed to a structure and the holes filled with plywood dust; then sanded and sealed in a matt clear varnish lacquer.

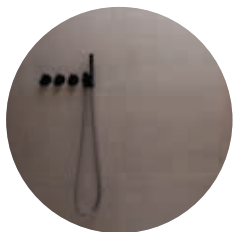
simonastridge.com/Plywood-House



GRAPHITE PANELS

The wide range of Bulthaup finishes from Kitchen Architecture gives flexibility and opportunity to experiment and tailor products to individual projects. Our project for a subterranean wine tasting outlet in Putney, London, was based on the atmospherically-lit wine cave. Kitchen Architecture's laser welded laminate Graphite panel finish was the perfect fit. Panels were used for floating shelving, worktops, kitchen door fronts and back panels; the smooth joints of the Graphite allowing for displays with maximum output.

simonastridge.com/Wine-Tasting



PORTLAND LIMESTONE

Traditionally used throughout London for buildings such as St Paul's Cathedral, we have used Portland Limestone on projects for wet shower areas, bespoke stone basins and cistern tops. The material has a softness and beautiful depth that cannot be found with some porcelain tiles on the market. Most wet areas for the Plywood House were supplied by Wrights of Campden, which quarries and supplies the material. It needs to be sealed correctly before use and over time leaves a beautiful patina of water marks.

simonastridge.com/Plywood-House

...Sign Off

Jan-Carlos Kucharek enjoys three of this issue's out-takes



THE UNFORGETTABLE IRE

Did you know Ireland uses 473 barrels of oil every five minutes? 5Cube installation on Dublin's dockside by de Siún Scullion architects is a black cube of StoVentec glass holding the exact amount of liquid to make the statistic 'physical and tangible'. Inside a mirror kaleidoscope draws your attention to the sky, from which it powers itself. Built in the shadow of U2's recording studio, this idea's purity puts the band's former activism in the shade. After allegations about band members' tax affairs, multi-millionaire Bono last May backed Ireland's low 12.5% corporate tax rate; proving it's not just Irish based petrochemical firms laughing oil the way to the bank.



LAND BLUBBERS

'Meditation and water are wedded forever' said Herman Melville in Moby Dick. In a possibly less elegant meditation, something did get beached this summer on the shores of Worthing to get the mind thinking. This cubic mirror form by ECE Architecture is a temporary installation the town can reflect on. In fact, Worthing is reflecting a lot – as a Transition Town with an 'energy descent plan', it's working out how to adapt locally to a world without oil, the discovery of which could be what saved the sperm whale from extinction in the first place. Imagine doing a 'Cap'n Ahab' – losing your leg and your mind just to get your hands on all that precious ambergris...



BLUBBER TO RUBBER

Speaking of which, Birmingham's National Sperm Bank has a novel use of rubber – on the roof! No accidental leaks here now, with Sika's 'Decothane Ultra' membrane used in this 'sensitive' refurb that 'caused no disruption to the building's vital' parts. Sika's Sarah Spink says the 'product holds up against vigorous testing and can be trusted in niche environments.' As the bank had to keep working, the sperm's 'volatile' storage conditions were kept consistent using a cold applied layer, avoiding any 'hot works'. 'Speed and the lowest level of disruption were key,' concludes head of estates and facilities' Warren Hubbard, 'Removing staff was not an option.'

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A picture of how our profiles look would be great,
but our advice at this stage would be better.



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