Schlüter®-SUBSTRATES
Anyone can try to sell you tile and stone, however our unique solutions provide a perfect substrate for a flat and even finish.
From advice to product, you can trust in Schlüter.
For product and technical support please call 01530 813396 or visit www.schluter.co.uk/architect.aspx

A picture of a finished floor would be good, but our advice at this stage would be better.
Sometimes truth...

...is stranger than fiction. Or, if Pokémon Go is anything to go by, they can be the same thing: the augmented reality app, downloaded over 100 million times, sends people wandering unknown streets in search of little virtual critters. But alongside vaunted health benefits – kids getting out of the house and exercising – are tales of them wandering into roads or being mugged at PokéStops for their iPods.

Interestingly too, the Frank Gehry Maggie’s Centre in Dundee, finding it was a local PokéStop, offered cookies to players along with information on the building and its work. It’s the kind of free PR firms pay a fortune for. And like Gehry’s Digital Project software, it’s another virtual world open to real-time interrogation.

Some deplore the game’s pointlessness; ostensibly offering a bigger stage on which to do increasingly little. But there’s nothing new in that – take Guy Debord’s Situationist dérive in the 1960s. In the allowing of random stimuli to generate a new experience of the city, you could say there’s little difference between them. But of course there is; you might feel the same sense of being lost but in Pokémon someone, somewhere, knows exactly where you are. And while the virtual game starts with a thrown ball, the other ended in Paris with some very real cobbles being hurled.

Jan-Carlos Kucharek, Editor
News

Not Judd column casings, Contour column casings... It looks like a Donald Judd installed in Leeds’ Kirkgate Market. Retail giant Marks&Spencer started life as a penny bazaar here in 1884, when it was one of the largest 19th century indoor markets in Europe. Contour Casings has made a design feature of the few columns that hold up the space frame roof of the sizable ‘1976 Hall’ with its vibrantly coloured, 4.5m high casings of 3mm aluminium sheet. An expressionistic touch to a hi-tech structure.

Bricking it There’s something strangely unnerving yet fascinatingly compelling about this detail from Hawkins\Brown’s latest regeneration project for Peabody. Seeming to hark from the work of 1980s art/architecture collective SITE, this ghostly form bursting forth from the brick is the work of sculptor Rodney Harris, commissioned to create the brick reliefs recalling existing residents’ memories. The St John’s Hill housing near Clapham Junction station in London is undergoing phased redevelopment of four to eight storey blocks that will ultimately double the residential density of the site; whether that number includes those who have already passed to the other side is not stipulated.

Welsh wins It’s a case of third time lucky for Chepstow-based practice Hall + Bednarczyk. Two time recipient of a Plaque of Merit in the National Eisteddfod of Wales Gold Medal for Architecture, last month the firm finally received the Gold Medal itself for its Llandegfedd Visitor and Watersports Centre near Pontypool. The award comes hot on the heels of winning the RIBA Wales 2016 Building of the Year – which in turn followed in the wake of being Highly Commended in the RIBA’s MacEwen Award earlier this year (RIBAJ February 2016). The building has an assymetrically curved zinc clad roof that appears to float over the café and watersport centre’s cedar clad walls. Facing out over the Dŵr Cymru Reservoir, it has transformed public access to and enjoyment of the Welsh Water site.

Fly ply It’s kind of IKEA meets Vitsoe shelving, with a price range that sits reassuringly between the two. Architect and designer Tim Williams, who cut his teeth as Office Sector Champion for BDP, has put his money where his mouth is, pooling expertise and entrepreneurial spirit with his Morfus SMART storage range, which launched recently. Designed in plywood and adopting a 600mm by 345mm basic module, the system can be configured as bookcases, a sideboard or archival storage, also using doors, drawers, crates and even casters. It’s available in a standard palette of nine colours or bespoke ones to order.
Back to the Future
Family-owned Danish furniture making company Fredericia has been around since 1911, making crafted, contemporary designs created with the help of internationally renowned designers. Its recent Spine collection, designed by Space Copenhagen, has two new additions. The Spine Lounge Petit is an elegant and comfortable lounge chair inspired by the functionalist ethos of famed 20th century Danish designer Børge Mogensen. Picking up on the same themes of restrained luxury is the Spine Daybed, which, with its piping detail, looks like a therapy couch for OCD minimalists. Complementing the soft, primal leather, timber frames are made more sophisticated in either lacquered oak or black lacquered. These future contenders for timeless design are all still handmade in Denmark – a fact reflected in its high-end price.

Nouvelle Vaghe
Newly added to the repertoire of Barcelona-based lighting firm Santa & Cole is its Vaghe Stelle light by architect Antoni de Moragas y Spà. Designed in the 1980s for Brasserie FLO, it’s the most recent addition to the firm’s ‘Classics’ collection. The polished brass finish with hanging star pendants was inspired by ‘Le Ricordanze’ by 19th century poet and philosopher Giacomo Leopardi, who wrote of the ‘vague stars of The Plough’. Should the new Herschel telescope correct that line in time, this light will lose none of its lustre.

Parametric porcelain
The untimely and sad death of Zaha Hadid has left Spanish firm Porcelanosa in the enviable position of being the only firm in possession of a full range of sanitary and brassware designed by the great architect. Its Noken Vitae bathroom collection, which launched last month, bears all the hallmarks of the office’s output, the concept of flowing water playing beautifully into ZHA’s aesthetic. The concept extends from toilet, bidet, sink and bath to brassware, vanity mirrors and shelving to create a range of porcelain that seems to melt in front of your eyes. Given that each piece is hand made and finished, it’s likely that, mourning aside, the cost will bring a tear to them too.

Fairly across the Mersey
Gone are the days when Liverpool Waterfront’s architecture was characterised by nought but the bold Three Graces – a number of buildings have sprung up alongside them, not least the Wilkinson Eyre Echo Arena and BT Convention Centre. Now, linked to these via a 35m sky bridge, are the £66 million Denton Corker Marshall Exhibition Centre and 216-room luxury Pullman Hotel, which opened fully to the public earlier this year. Kawneer’s AA®100 mullion-drained curtain walling, 451PT thermally broken framing system and AA®720 HI tiltturn windows helped create the distinctive facade in an attempt to keep the Liver buildings on their toes.
When it comes to rooflights we make thinking outside the box a habit.

This ethos has never been more clearly demonstrated than with our flagship range of terrace access rooflights, designed to unlock rooftop space and transform the dynamics of your building.

Continuously improved and refined over the last 15 years, our box rooflight range represents a fusion of technologies and engineering excellence combined to provide you an effortless transition between inside and out.

Thermal efficiency has been designed in by the use of thermally broken framework and low emissivity triple glazing as standard.

The beating heart of these products, the motor and drive system has been completely redeveloped with power being transferred to the front and rear of the unit simultaneously to ensure a smooth glide when opening and closing.

We've made it prettier too by perfecting glass to glass interfaces and minimising visible framework, the fit and finish is almost jewel like.

It’s more than just a rooflight, it’s an architectural sculpture in glass and metal and the key to achieving a view you never thought possible.
A cut above

There is something quite powerful about holding an object in your hands when discussing an idea. Two dimensional imagery is useful in discussing material and spatial ambience, but somehow an object makes the idea more tangible.

Choosing the method of creation is important to the design outcome as the objects we make derive their characteristics from a particular making process, which in turn influences the design. Nowadays we are spoilt for choice with a multitude of digitally controlled devices supplementing more traditional tools.

Computer controlled machines are allowing designers to explore ideas in physical form faster and more easily than ever, we can even make stuff while we sleep. Sadly the sophistication of Star Trek replicators is not quite here, but we are getting there: food, biomedical implants and human tissue have been printed, even super strong nano trusses the size of a match head.

I would definitely have prettier fingers had a digital cutting device existed when I went through uni. A friend uses the Silhouette Curio for some high-end model making tasks. The device is the size and cost of a desktop printer and contains a digitally controlled cutting blade that follows a vector path from Illustrator. It cuts almost any sheet model-making material less than 2mm thick and produces clean edges.

For thicker more durable sheet materials, a laser cutter is a great option. A cutting machine costs anywhere up from £6,500; the device is the size of a Saint Bernard and requires ventilation. The machine is amazingly versatile allowing scoring, cutting and engraving from vector drawings, and in the right hands model making magic is possible. A thorough knowledge of the material properties and corresponding laser power and speed is necessary to cut cleanly without burning the material or starting fires.

If lasers aren’t your thing, 3d printers might be, providing high levels of detail with .05mm accuracy for under £1,500. We have LulzBot and Ultimaker fused plastic filament printers in the office. They are primarily used for small hand sized massing and detail studies, and are often left running overnight. The detail in the print file needs to be adjusted to suit the final size of the print, with really thin objects thickened to prevent warping. An alternative to the plastic filament is the Form 2 SLA printer which solidifies resin using a laser.

If you are looking to make quick form studies from a solid mass and are not Michelangelo, then for under £5,000 a Roland 5 axis milling machine may be a viable option. The machine use a subtractive cutting process to remove material following a digital tool path. The tool path is generated through software creating a series of 3d vector lines around your digital file with a cutting speed, depth and step size appropriate for the chosen material. After a few passes the piece is at presentation quality.

As with any tool, understanding their quirks and limitations is essential to maximising design potential. •

Alan McLean is an architect at Bates Smart Architects in Melbourne.

Books
Buy at ribabookshops.com

Construction and Design Manual: Container & Modular Buildings
Cornelia Dörries & Sarah Zahradnik eds. DOM publishers 251pp PB £32
This new book on modular design addresses the zeitgeist head on, addressing both the need for serious solutions to the European refugee crisis and how higher quality modular construction can be achieved. It is no surprise, then, that most of the 25 projects outlined in this tome hail from Germany. The editors consider both polarities, looking at indulgent uses of container construction to produce eyebrow raisingly luxurious proposals concurrently with approaches to dealing quickly and affordably with mass housing to deal in an effective and humane way with the refugee issue. Cogently illustrated throughout with photographs, plans, sections and exploded axonometrics of both real and theoretical projects, and with an opening introductory essay, the book is well laid out as well as prescient.

Tall Buildings: A strategic design guide
Nigel Clark & Bill Price eds. 2nd ed, RIBA Publishing 477pp PB £40
If a week (or is that a day now?) is a long time in politics, then 10 years is an eternity for designers of high rise buildings, with constant innovations in BIM, structure and facade technology, construction logistics and vertical transportation methods. Produced in tandem with the British Council for Offices and the Council for Tall Buildings and Urban Habitat, this review of the latest developments in high rise is well overdue. The authors cite the advice and knowledge of over 30 experts to bring the reader up-to-date with current designs and practice, drawing on examples worldwide but most notably in Asia, where the typology is being pushed hardest. A good and very readable general overview of the subject, treating with equivalence the likes of Waugh Thistleton’s multi-storey timber Stadthaus in London with Ole Scheeren’s Singapore Interlace.

Autotelic Architect, Changing World, Changing Practice
Sumita Srira. Routledge 319pp 194pp PB £32
I had to look up the word autotelic – not a good premise for books that one tends generally to judge by covers. It means ‘having within itself the purpose of its existence or happening’, which may leave readers, on the face of it, none the wiser. Luckily, after Peter Murray’s wry state of the nation intro on the profession, the author starts attempting her own definition of the word in relation to the practice of architecture. This is eminently readable, giving me confidence for the rest of the book, which otherwise suffers from rather low production values. Perhaps that design strategy for the book is a comment on sustainable resource management, or is ironically symptomatic of how the designer’s influence seems to be increasingly written out of the process. In fact, maybe ‘autotelic’ is what the book actually embodies…
London Design Festival

A stalwart of the London design calendar, the London Design Festival (LDF) returns from 17-25 September to continue its mission of celebrating and promoting London as the design capital of the world and as the gateway to the international creative community.

Now in its 14th year, the ever expanding festival has spread its reach to encompass venues across the capital. With over 400 events and installations planned, expect visitor numbers for 2016 to exceed the 350,000 people, from over 75 countries, who attended last year’s festival.

While adding numerous new venues, the city wide celebration continues to focus on the core sites of the V&A and Somerset House. The commercial cornerstone of LDF, 100% Design, returns to London Olympia in Kensington from 21-24 September. It focuses on the theme of ‘Experience’, which considers the many ways in which design guides, frames and improves the ways we live, work and consume.

The historic grounds of Syon Park will host Decorex International over four days from the 18th, while Focus/16 is at Chelsea Harbour from 18-23 September. The London Design Fair will once again set up shop at the Truman Brewery from 22-25.

A major change to the 2016 line-up sees designjunction relocate to a new long-term home in King’s Cross with a show theme of ‘Immersed in Design’. The exhibition, spread over the 67-acre site, will see 10 custom-built exhibition spaces occupy Granary Square, a two-floor pavilion placed in Lewis Cubitt Square and specially commissioned installations and flash factories located in the Central Saint Martin’s building’s crossing space.

Brixton Design Trail has also been added to the schedule, joining the already well-established design districts of Brompton, Bankside, Chelsea, Clerkenwell, Islington and Shoreditch, where there are distinct concentrations of events that can easily be traversed on foot.

Along with the numerous exhibits, events and shows, LDF will see several architectural interventions across the city, with Alison Brooks Architects’ Smile on the Parade Ground of the Chelsea College of Arts set to be the highlight. Smile-shaped of course, the installation is a timber tube constructed from hardwood CLT curved to form a long, upside down arc.

For the festival’s other landmark project, ‘Mini Living’, a variety of third places that blur the boundaries between work and home will be presented around the city.

London Design Festival, at various locations in the capital, 17-25 September

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

MATTER OF MOTION by Maor Aharon
Is spinning the future of furniture manufacture? Described as an experiment in the relationship between materials, motion and shape, Matter Of Motion is a series of stools created using centrifugal force. Designer Maor Aharon adds polymer resins to a spinning mould to create these individual items of furniture, with the spun stools demonstrating that a simple shape can hold and convey complex content.

maoraharon.com

TURN TABLE by Nils Henrik Stensrud
Robust, industrial-looking side tables that you definitely wouldn’t want to stub your toe on, Turn Table is a limited-edition series made of recycled aluminium. A modern interpretation of a design classic? The table’s shape alludes to Bauhaus steel-tube furniture, produced in large scale in 1930s Norway, in particular to a table once owned by architect and assistant professor at the Norwegian University of Science and Technology, Nils Henrik Stensrud.

100percentnorway.com

POURED BOWLS by Troels Flensted
‘Frozen moments’ are not a new frosted cereal to be enjoyed from these bowls, but are how ceramist Troels Flensted describes his creations. The bowls are formed by pouring liquid casting material made from a mixture of mineral powder, water-based acrylic polymer and pigments. As the material flows together it creates patterns that are difficult to predict – it is these ‘frozen moments’ that make each object different.

troelsflensted.com

WOODCLOTH by Nathalie Dackelid
Often better in principle than reality, the potential of the extendable table can be found unused in numerous British homes. Being difficult to assemble/reassemble means many people don’t actually extend their extendable tables. Nathalie Dackelid’s Woodcloth could dramatically change this. Constructed from prisms of ash held together with rubber cord, this table, inspired by a caterpillar track, can be enlarged little by little – ideal for any situation.

dackelid-form.portfoliobox.se
Lower your expectations.

The world’s thinnest inverted roof insulation.

The need to conserve resources and save energy has never been greater. Meeting these demands and satisfying regulators, clients and designers requires innovative products that work harder and smarter. ProTherm Quantum® is a state-of-the-art balcony and terrace insulation system that meets the requirements of Building Regulations Part L, Part M and NHBC Standards Chapter 7.1.

A global leader in the manufacture of high-performance materials, Kingspan Insulation has worked exclusively with Radmat to develop Quantum® as the system choice for any inverted roof, terrace or balcony. To see how ProTherm Quantum® can improve thermal performance and deliver safe access within your design contact us or visit the website for further information: prothermquantum.com

www.prothermquantum.com
THE CHOICE
FOR PERIOD STYLE & LISTED PROPERTIES

Made entirely in England to the highest specification, Mumford & Wood achieve benchmark standards of performance and aesthetics. Every timber window and door is made from the finest quality engineered timber, providing ultimate longevity.

Conservation™ Range - Engineered timber windows and doors offering modern performance but with a traditional aesthetic.

Classic™ Range - These made-to-order slim double glazed products are available with a choice of profiles and feature individual 12-14mm slim profile units with true bars and a traditional external putty faced finish - perfect for period upgrade and replacement.

Heritage™ Range - Replicating original single glazed windows and doors to the finest detail, featuring true bars, a traditional hand-faced external putty finish and a choice of Float, Crown or Victorian glass - the natural choice for listed properties.

With a range of expert support and advice available, including a comprehensive NBSPlus, NBS BIM & CAD library, discover more by visiting our website.

British craftsmanship
T: 01621 818155
www.mumfordwood.com
Panama Canal lifts

What: ThyssenKrupp lifts
Where: Panama Canal extension

When the Panama Canal was completed in 1914, it handled 1,000 ships a year. By 2008, the annual figure had risen to 14,702 and the canal was creaking under the weight of demand. Its physical infrastructure lagged and it was threatened by competition from other routes, including the Russian North Sea Route and Canadian Northwest Passage as warmer waters in the Arctic Ocean open the passage for longer each year. The existing locks, which are in sets of two, had become constrained by their size at 33.53m wide, 320.04m long and 12.56m deep.

While expansion plans have been talked about since the 1930s, in 2006 President Martín Torrijos formally proposed the project to run another, wider waterway alongside the existing canal – coupled with a referendum on the issue – saying it would make Panama a First World country. A decisive 76.8 percent voted in favour.

The Grupo Unidos por el Canal, a consortium of Sacyr Vallehermoso of Spain, Impregilo of Italy, Jan de Nul of Belgium and Constructora Urbana of Panama, began construction in 2007. After two years of delays and 50 million m$^3$ of excavation, the expansion finally opened on 26 June. The new traffic lane has been created by a set of similar three-level staircase locks at both the Caribbean and Pacific ends of the 81km route. Each set has a total of nine water-saving basins to reuse water previously wasted in raising the ships through the 26m height difference.

At a cost of $3.2 billion, the new sets of locks double the waterway’s capacity and, at 55m wide, 427m long and 18.3m deep, provide access for the world’s largest ‘post-Panamax’ ships. Where a Panamax could carry 4,500 standard containers, these super ships manage 12,000.

As part of this work, the German firm ThyssenKrupp installed seven new elevators in concrete shafts for circulation around each site: one to access the control tower, the others split into pairs around each lock level change. Beneath the locks, the shafts link to cross tunnels 35m below ground level, and are complex as a result of the need to be watertight and completely spark-proof to avoid danger of explosion.

Peter Bjorn, vice president of new installation and modernisations, ThyssenKrupp Elevator in Latin America, explained: ‘If one of the boats sailing through the lock had a leak, the gases from that could accumulate in the cross-under tunnels. It is these fumes that could be catastrophically ignited by a spark.

‘This requires very specific components,’ explained Bjorn. ‘The technology existed already, through using more magnetic sensors rather than open contacts and by insulating the very small connections. Oil refineries, factories and mines have similar requirements.’

For ThyssenKrupp – as for the main contractor, which installed its own industrial parks to produce aggregates and prepare concrete mixes – logistics were the project’s biggest difficulty.

Between 10 and 12 installers were tasked to complete the project in five months to make up for previous time delays. This wasn’t a problem for workers near Panama City, but personnel on the Caribbean end had to be put up there. ‘There are no restaurants around the corner and during construction it wasn’t possible to get from one side to the other without taking a 30km drive,’ said Bjorn.
Modern salvage

A Belgian design and research collective is revolutionising demolition through large scale salvage and the sale of building materials

Words: Stephen Cousins, Photographs: Rotor
Construction materials and their impact on society have been a borderline obsession for the Belgian design and research collective Rotor for over a decade.

Its research at building sites, waste sorting facilities and second hand dealers has found expression in art, writings, conferences, and architecture, including the design for the Belgian pavilion at the 2010 Venice Architecture Biennale where materials or products salvaged from Belgian housing were displayed as art.

Concerns over the tearing down of large post-war buildings in the region, mostly offices and public service buildings, triggered a more practical application of the collective’s ideas and the spin-off business Rotor Deconstruction.

The firm employs a team of skilled craftsmen who go into modern and contemporary buildings before the wrecking balls to strip out any valuable building materials, components and historic items. These are repaired and cleaned for reuse in other buildings, or sold – at auction or on the firm’s web store rotordc.com.

Salvaging cuts the volume of demolition waste going to landfill. Diverting antique or iconic design items from the waste stream is a form of historic building preservation, and Rotor generates a healthy income from selling what would otherwise be treated as waste.

Just two years into operation, Rotor has completed around 40 deconstruction jobs, mostly in Belgium, plus a couple in France and the Netherlands. The largest project, on the 95,000m² BNP Paribas-Fortis bank headquarters in Brussels, yielded 230 tons of material, including false ceilings, granite tiles and 130 doors.

A key aim is to professionalise the practice of reusing building components, explains Maarten Gielen, founding member and designer at Rotor: ‘As architects and designers we always wanted to work with reclaimed material, but had a hard time obtaining it in a way that was compatible with the role. We found items on websites like Craigslist, but prices tended to change for no reason, there was no service like cutting to measure, no warranty, and by the time we convinced a client of an offer, it was gone.’

Rotor carried out research into the 100 or so dealers of second hand goods in the region to build a case for setting up the business. It found that most focused on selling rustic antique items to the domestic market, but almost none sold materials salvaged from large modern and contemporary buildings in the services sector – responsible for the bulk of demolition debris in metropolitan areas and one of the most active real estate markets to sell materials into.

The large number of post-war buildings being tabled for demolition in Europe gets too little concern, says Gielen: ‘In Brussels, buildings as young as 18 years are being bulldozed. At the very least, demolishing responsibly is more appropriate, and salvaging components can be the last opportunity to preserve them.’

Rotor decided that creating an in-house salvage team would reduce its reliance on demolition companies to source materials. Most Belgian demolition firms are reluctant to spend time identifying reusable materials and favour disposal as a simpler option, he adds.

Rotor Deconstruction exploits the varied background of the rotor collective – some technicians have backgrounds in stage design and are familiar with the practice of dismantling and re-erecting structures, item numbering and labelling etc. One is a legal expert, employed to set up the contracts, insurances and liability statements needed when working on large scale buildings. ‘Cut power on one floor and it might affect the sewage pump and the lower five floors will fill up with water, it is important we work in a very rigorous way,’ says Gielen.

Recovered items are either sold to dealers or the domestic market, but almost none sold materials salvaged from large modern and contemporary buildings in the services sector – responsible for the bulk of demolition debris in metropolitan areas and one of the most active real estate markets to sell materials into.

Concerns over the tearing down of large post-war buildings in the region, mostly offices and public service buildings, triggered a more practical application of the collective’s ideas and the spin-off business Rotor Deconstruction.

The firm employs a team of skilled craftsmen who go into modern and contemporary buildings before the wrecking balls to strip out any valuable building materials, components and historic items. These are repaired and cleaned for reuse in other buildings, or sold – at auction or on the firm’s web store rotordc.com.

Salvaging cuts the volume of demolition waste going to landfill. Diverting antique or iconic design items from the waste stream is a form of historic building preservation, and Rotor generates a healthy income from selling what would otherwise be treated as waste.

Just two years into operation, Rotor has completed around 40 deconstruction jobs, mostly in Belgium, plus a couple in France and the Netherlands. The largest project, on the 95,000m² BNP Paribas-Fortis bank headquarters in Brussels, yielded 230 tons of material, including false ceilings, granite tiles and 130 doors.

A key aim is to professionalise the practice of reusing building components, explains Maarten Gielen, founding member and designer at Rotor: ‘As architects and designers we always wanted to work with reclaimed material, but had a hard time obtaining it in a way that was compatible with the role. We found items on websites like Craigslist, but prices tended to change for no reason, there was no service like cutting to measure, no warranty, and by the time we convinced a client of an offer, it was gone.’

Rotor carried out research into the 100 or so dealers of second hand goods in the region to build a case for setting up the business. It found that most focused on selling rustic antique items to the domestic market, but almost none sold materials salvaged from large modern and contemporary buildings in the services sector – responsible for the bulk of demolition debris in metropolitan areas and one of the most active real estate markets to sell materials into.

The large number of post-war buildings being tabled for demolition in Europe gets too little concern, says Gielen: ‘In Brussels, buildings as young as 18 years are being bulldozed. At the very least, demolishing responsibly is more appropriate, and salvaging components can be the last opportunity to preserve them.’

Rotor decided that creating an in-house salvage team would reduce its reliance on demolition companies to source materials. Most Belgian demolition firms are reluctant to spend time identifying reusable materials and favour disposal as a simpler option, he adds.

Rotor Deconstruction exploits the varied background of the rotor collective – some technicians have backgrounds in stage design and are familiar with the practice of dismantling and re-erecting structures, item numbering and labelling etc. One is a legal expert, employed to set up the contracts, insurances and liability statements needed when working on large scale buildings. ‘Cut power on one floor and it might affect the sewage pump and the lower five floors will fill up with water, it is important we work in a very rigorous way,’ says Gielen.

Recovered items are either sold to dealers or the domestic market, but almost none sold materials salvaged from large modern and contemporary buildings in the services sector – responsible for the bulk of demolition debris in metropolitan areas and one of the most active real estate markets to sell materials into.

Concerns over the tearing down of large post-war buildings in the region, mostly offices and public service buildings, triggered a more practical application of the collective’s ideas and the spin-off business Rotor Deconstruction.

The firm employs a team of skilled craftsmen who go into modern and contemporary buildings before the wrecking balls to strip out any valuable building materials, components and historic items. These are repaired and cleaned for reuse in other buildings, or sold – at auction or on the firm’s web store rotordc.com.

Salvaging cuts the volume of demolition waste going to landfill. Diverting antique or iconic design items from the waste stream is a form of historic building preservation, and Rotor generates a healthy income from selling what would otherwise be treated as waste.

Just two years into operation, Rotor has completed around 40 deconstruction jobs, mostly in Belgium, plus a couple in France and the Netherlands. The largest project, on the 95,000m² BNP Paribas-Fortis bank headquarters in Brussels, yielded 230 tons of material, including false ceilings, granite tiles and 130 doors.

A key aim is to professionalise the practice of reusing building components, explains Maarten Gielen, founding member and designer at Rotor: ‘As architects and designers we always wanted to work with reclaimed material, but had a hard time obtaining it in a way that was compatible with the role. We found items on websites like Craigslist, but prices tended to change for no reason, there was no service like cutting to measure, no warranty, and by the time we convinced a client of an offer, it was gone.’

Rotor carried out research into the 100 or so dealers of second hand goods in the region to build a case for setting up the business. It found that most focused on selling rustic antique items to the domestic market, but almost none sold materials salvaged from large modern and contemporary buildings in the services sector – responsible for the bulk of demolition debris in metropolitan areas and one of the most active real estate markets to sell materials into.

The large number of post-war buildings being tabled for demolition in Europe gets too little concern, says Gielen: ‘In Brussels, buildings as young as 18 years are being bulldozed. At the very least, demolishing responsibly is more appropriate, and salvaging components can be the last opportunity to preserve them.’

Rotor decided that creating an in-house salvage team would reduce its reliance on demolition companies to source materials. Most Belgian demolition firms are reluctant to spend time identifying reusable materials and favour disposal as a simpler option, he adds.

Rotor Deconstruction exploits the varied background of the rotor collective – some technicians have backgrounds in stage design and are familiar with the practice of dismantling and re-erecting structures, item numbering and labelling etc. One is a legal expert, employed to set up the contracts, insurances and liability statements needed when working on large scale buildings. ‘Cut power on one floor and it might affect the sewage pump and the lower five floors will fill up with water, it is important we work in a very rigorous way,’ says Gielen.

Recovered items are either sold to dealers or the domestic market, but almost none sold materials salvaged from large modern and contemporary buildings in the services sector – responsible for the bulk of demolition debris in metropolitan areas and one of the most active real estate markets to sell materials into.

Concerns over the tearing down of large post-war buildings in the region, mostly offices and public service buildings, triggered a more practical application of the collective’s ideas and the spin-off business Rotor Deconstruction.

The firm employs a team of skilled craftsmen who go into modern and contemporary buildings before the wrecking balls to strip out any valuable building materials, components and historic items. These are repaired and cleaned for reuse in other buildings, or sold – at auction or on the firm’s web store rotordc.com.

Salvaging cuts the volume of demolition waste going to landfill. Diverting antique or iconic design items from the waste stream is a form of historic building preservation, and Rotor generates a healthy income from selling what would otherwise be treated as waste.

Just two years into operation, Rotor has completed around 40 deconstruction jobs, mostly in Belgium, plus a couple in France and the Netherlands. The largest project, on the 95,000m² BNP Paribas-Fortis bank headquarters in Brussels, yielded 230 tons of material, including false ceilings, granite tiles and 130 doors.

A key aim is to professionalise the practice of reusing building components, explains Maarten Gielen, founding member and designer at Rotor: ‘As architects and designers we always wanted to work with reclaimed material, but had a hard time obtaining it in a way that was compatible with the role. We found items on websites like Craigslist, but prices tended to change for no reason, there was no service like cutting to measure, no warranty, and by the time we convinced a client of an offer, it was gone.’

Rotor carried out research into the 100 or so dealers of second hand goods in the region to build a case for setting up the business. It found that most focused on selling rustic antique
Above Banking hall components – desks, windows, suspended ceilings – are all considered for recycling.

Right Deconstruction requires as much careful thought as construction to avoid damaging materials before they are resold.

Products In Practice September/October 2016
A class OC2 one layer render which acts as both base and coloured finish coats

01753 573078 | info.fassauk@fassabortolo.com | www.fassabortolo.com

Fassa UK Ltd
344 Edinburgh Avenue
Slough SL1 4TU
from parquet floors. Due to complexities of removal and preparation for resale, these are sent to a small timber company to recut and re-sand the boards in a way that creates a consistent product and authentic patina. ‘For reuse to be viable at a large scale you need all sorts of players. We try to rely as much as possible on existing infrastructures and services,’ says Gielen.

Having proved the concept works, Rotor is set to open a new office in Paris to exploit a stream of public and private buildings slated for demolition or refurbishment. The service is likely to attract organisations pursuing strict sustainability targets, but there could be more questions around public tendering than there are in Belgium, says Gielen: ‘Local municipalities still need to get on board with ideas connected to the circular economy and our way of dealing with demolition.’

Building an international salvage business is serious stuff for a collective that has always resisted conventional structures, preferring instead to straddle the roles of architect, artist, curator and researcher. So is Rotor Deconstruction just another facet of its art, or is it a business? ‘What’s the difference? Art is being run as a business these days, juxtaposing the two doesn’t make much sense. For us, every bit of research leads to more questions, as we pursue our intuitions, we do more and more diverse things,’ Gielen concludes.
“Reynaers are flexible, knowledgeable and helpful – a perfect combination for bespoke projects”

Melanie Humphreys
Architect

Unleash your creativity – tap into Reynaers’ proven track record of designing bespoke glazing solutions.

Explore them today at
www.reynaers.co.uk/bespokesolutions

Designing premium quality aluminium windows, doors and curtain walling for over 50 years
Specified

1 Gloucester Services doors
   Assa Abloy

If you’re wondering why the Brits in this pic are looking shocked, it’s because they’re sitting in the UK’s only pleasant motorway service station. Visitors to Glenn Howells Architects’ Gloucester Services risk further palpitations with the discovery that the stop-off is environmentally friendly, including doors from Assa Abloy UK, and simple comfort eating of a Ginsters Pasty, Hula Hoops and a Pepsi Max is not an option as its healthy fare is all from local suppliers. So, their price can be relied upon to induce a stroke; as will the high quality of door finish.

assaabloy.co.uk

2 Underfloor swing door operators
   Geze

Access to the arts… A community choir put together by local careworkers with an orchestra of former young offenders playing percussion instruments assembled from locally-sourced recycled materials. Or sometimes it’s just making an art deco door from a much-loved theatre open and close automatically so that people with mobility issues and/or young kids can get in and out of the concert hall more easily. Such is the case with Geze UK’s automatic under floor operator for the swing doors in the lovingly restored Liverpool Philharmonic Hall.

geze.co.uk

3 Hygidoor
   Trovex

In the contemporary NHS, pretty much any free space is up for grabs. I wouldn’t be surprised if cramped cardiothoracic surgeons at Essex’s Colchester Hospital had bagged this island bathroom for the next heart transplant. Luckily for the patient, the impromptu theatre would have magic bacteria-busting doors. Hygidoor doors have a vision panel flush with the easy-to-clean door-face and antibacterial PVC cladding with silver ion technology. And a handy lock for when off-duty surgical nurses are throwing a party inside.

trovex.com

4 Slimline windows
   Crittall

Darling! I lurve what you’ve done with your windows. You were looking a bit tired the last time I saw you – you don’t mind me telling you that, do you, darling? Hmmmm? You know I love you, don’t you? Crittall Slim Line, you say? Well, at least something is slim line, sweety! I’m joking, I’m joking. You’re so elegant now; by far my favourite arts centre… I mean Spence and I have been friends for ages. And if you fell from grace awhile, you’ve made a comeback in real style. Which is more than I can say for Warwick Arts Centre. You didn’t hear it from me but it’s time she had some work done…

crittall-windows.co.uk
5 Powermatic door closers
Samuel Heath

Mr Downey Jr, I have been asked to remind you that a car is waiting outside for you. I think it might be time to put down the Jim Beam, Mr Downey Jr, or I’m going to have to call the manager if you smear any more of those Big Macs over the duvet... Yes, I'm sure you can afford to replace all the duvets in the chain, but I really do need to change the room over. You should thank the fact that this performance is kept from the eyes of prying hotel paparazzi with Samuel Heath's Powermatic concealed door closers – a steel detail that might save the day for you – like Iron Man.
samuel-heath.com

6 Frameless sliding doors
Sky-Frame

A Special Edition Cadbury Creme Egg in Asda last week made me think gentrification had finally jumped the shark. Where to next? The answer is in the sublime Hopkins Yard House – with its infinity pond. I'm getting an image of decadent ducks sipping caipirinhas of a summer evening or gorgeous goldfish ordering extra flakes from room service at 3am. Is there a newt spa somewhere? Meanwhile, superlative sliding doors from Sky-Frame allows less fantastical human inhabitants to gaze luxuriously down on the scene of this Wallpaper*-like life aquatic.
sky-frame.com

7 Conservation windows and doors
Mumford & Wood

All Bremainers are looking for an upside to Brexit. I've got one. Surely, this crisis and the more serious mood signals the end of retro, of backward-looking irony and cutesy 'Kath Kidston' wartime gooeyness. The kind of dreamy reclaimed space presented as 'boutique' hotel such as Artist Residence London suddenly looks like it belongs to a bygone era, good and proper. But until the Four Horsemen are actually saddled up, Mumford & Wood will still have a market for its fine planning-compliant double-glazed timber Conservation box sash windows and doors.
mumfordwood.com

8 Tekno doors
Oikos

It took philosopher-turned-designer Wittgenstein a year to design the handles of his Haus in Vienna – a project that nearly induced a nervous breakdown for everyone involved. If you think that was a house for the gods, you're guaranteed to like these Tekno doors, which switch from noisome hinges to a smooth curve of brushed steel. You'll find no itty-bitty interlocking metal parts holding these puppies to its almost non-existent door-frame. Now I think about it, door frames are pretty ugly things as well... I wonder what Ludwig would have done about them?
oikos.it
At Origin, we pride ourselves on the quality that our precision engineered products can bring to a project.

Continuously striving to push the limits of style, security and thermal performance, the Origin Window is certainly no exception to this. It’s beautifully designed, expertly manufactured, and features a stunning internal and external flush casement for a clean, elegant and timeless finish.

Constant development, investment and innovation ensures that the unique DNA of our products and offering remains unmatched, giving us the confidence and capability to provide an industry-leading 20 year guarantee, and an industry-first one day lead time on doors and seven days on windows.
At Origin, we pride ourselves on the quality that our precision engineered products can bring to a project. Continuously striving to push the limits of style, security and thermal performance, the Origin Window is certainly no exception to this. It’s beautifully designed, expertly manufactured, and features a stunning internal and external flush casement for a clean, elegant and timeless finish.

Constant development, investment and innovation ensures that the unique DNA of our products and offering remains unmatched, giving us the confidence and capability to provide an industry-leading 20 year guarantee, and an industry-first one day lead time on doors and seven days on windows.

The Origin Window - beautifully designed, expertly manufactured, and now available on a 1 week lead time. Contact us today for specifications and quotes. Call 0808 168 5816, email info@origin-global.com or visit origin-global.com today.
As part of Europe’s leading supplier and manufacturer of heat emitters, MYSON is the only place in the UK where you can get a complete range of products and services for commercial and domestic applications.

LST
THE UK’S LEADING LOW SURFACE TEMPERATURE RADIATOR

Ideal for commercial projects where safety is key, such as schools, nurseries, hospitals, nursing homes and other social housing projects. The MYSON LST complies with NHS Estates Health Guidance Notes 1998.

NEW EXTENDED RANGE NOW AVAILABLE
offering the slimmest panel LST on the market

Rounded edges to minimise injuries

Surface remains under 43°C to eliminate burns

Easy access for cleaning, maintenance and decorating

For a quote, forward your plans or schedules to specifications@myson.co.uk

T: 0845 402 3434

Part of Rettig ICC Europe’s leading manufacturer of heat emitters.
Green, natural hospitals are good for your health

Sustainability, flexibility and nature are helping hospitals achieve a preventative approach to care

Words: Josephine Smit

'Overcrowded and clapped-out buildings in need of a makeover, if not a bulldozer.' That was how NHS England chief executive Simon Stevens described much of the NHS estate in The Telegraph recently. Behind that statement lie the continuing financial woes of the NHS, where deficit is commonplace, and funding shortfalls and high levels of service demand are causing trusts to keep services running by using money diverted from capital projects.

Sustainability is therefore key to the NHS’ own wellbeing. Its future depends on reshaping health and care services to meet social, environmental and economic resources to cope with growing patient demand. Its strategy for the future puts a greater emphasis on prevention and wellbeing, while dismantling barriers between GPs and hospitals, health and social care, allowing care services to become more localised, and supported by specialist centres of expertise.

Although much of this is ultimately aimed at reducing hospital visits, buildings still matter, says Jerome Baddley, unit head at the Sustainable Development Unit (SDU), which is backed by NHS England and Public Health England. ‘They’re an important part of the overall system and are resource-intensive.’

As well as being significant users of energy, hospitals have a broad influence on the environment, says Baddley. ‘They not only provide healthcare, they are often the biggest procurers and employers in the areas they serve, so they can have a positive effect on wider determinants of health and can be a catalyst for wellbeing. For example, by promoting sustainable travel, a hospital can limit local air pollution’.

A new report from the SDU highlights the potential for both new and existing health buildings to deliver broader benefits through an integrated approach. ‘There are huge opportunities in hospital infrastructure, particularly if trusts look beyond the hospital boundaries,’ says Baddley. One example of that approach is a community energy scheme developed by the University Hospitals of North Midlands NHS Trust. It is looking to raise £450,000 of ethical funding to buy and install 1,200 solar PV panels at seven hospitals, producing sustainable electricity for their use, a return for investors and a community fund to alleviate cold and damp in local homes occupied by fuel poor residents suffering lung and other health conditions.

Bench-to-bedside

Royal Liverpool and Broadgreen University Hospitals NHS Trust has a different way of maximising the sustainable impact of its new Royal Liverpool University Hospital. ‘This is a building the size of a small town in a city,’ says David Lewis, partner with NBBJ, which is working with HKS on its design. Under the slogan ‘Transforming healthcare, regenerating the city’, the 94,000m² acute hospital is designed to engage with its context, notably linking the city centre to the nearby Kensington area. An accompanying health campus will be built on the adjacent site of its 1970s predecessor. ‘That will help in the area’s regeneration, creating wealth,’ says Lewis.

This is part of a shift in hospital ethos, he adds. ‘The idea that a hospital is a place that you go to only when you are ill is changing. We’re seeing a move towards wellness, and a trend for hospitals and science buildings to come together.’ The trend, described in the terms translational medicine or bench-to-bedside, brings universities and their medical research teams physically closer to patients.

Today a ward; tomorrow outpatients

Changing healthcare practices and patient demand have made resilience and flexibility key design priorities. The 12 storey Royal Liverpool has 646 bedrooms above its 19 operating theatres and acute services. The two are separated by a 6m high floor of building services, which also provides access for a potential fleet of robots, helping to make the hospital ‘robot ready’.

Social space has to be part of the mix, as it is for offices and other buildings, says Lewis: ‘The days when an atrium was frowned on for using clinical space are gone’. In Liverpool, the staff restaurant is in not dark corner but on the top floor.

A new report from the SDU highlights the potential for both new and existing health buildings to deliver broader benefits through an integrated approach. ‘There are huge opportunities in hospital infrastructure, particularly if trusts look beyond the hospital boundaries,’ says Baddley. One example of that approach is a community energy scheme developed by the University Hospitals of North Midlands NHS Trust. It is looking to raise £450,000 of ethical funding to buy and install 1,200 solar PV panels at seven hospitals, producing sustainable electricity for their use, a return for investors and a community fund to alleviate cold and damp in local homes occupied by fuel poor residents suffering lung and other health conditions.

Bench-to-bedside

Royal Liverpool and Broadgreen University Hospitals NHS Trust has a different way of maximising the sustainable impact of its new Royal Liverpool University Hospital. ‘This is a building the size of a small town in a city,’ says David Lewis, partner with NBBJ, which is working with HKS on its design. Under the slogan ‘Transforming healthcare, regenerating the city’, the 94,000m² acute hospital is designed to engage with its context, notably linking the city centre to the nearby Kensington area. An accompanying health campus will be built on the adjacent site of its 1970s predecessor. ‘That will help in the area’s regeneration, creating wealth,’ says Lewis.

This is part of a shift in hospital ethos, he adds. ‘The idea that a hospital is a place that you go to only when you are ill is changing. We’re seeing a move towards wellness, and a trend for hospitals and science buildings to come together.’ The trend, described in the terms translational medicine or bench-to-bedside, brings universities and their medical research teams physically closer to patients.

Today a ward; tomorrow outpatients

Changing healthcare practices and patient demand have made resilience and flexibility key design priorities. The 12 storey Royal Liverpool has 646 bedrooms above its 19 operating theatres and acute services. The two are separated by a 6m high floor of building services, which also provides access for a potential fleet of robots, helping to make the hospital ‘robot ready’.

Social space has to be part of the mix, as it is for offices and other buildings, says Lewis: ‘The days when an atrium was frowned on for using clinical space are gone’. In Liverpool, the staff restaurant is in not dark corner but on the top floor.

A new report from the SDU highlights the potential for both new and existing health buildings to deliver broader benefits through an integrated approach. ‘There are huge opportunities in hospital infrastructure, particularly if trusts look beyond the hospital boundaries,’ says Baddley. One example of that approach is a community energy scheme developed by the University Hospitals of North Midlands NHS Trust. It is looking to raise £450,000 of ethical funding to buy and install 1,200 solar PV panels at seven hospitals, producing sustainable electricity for their use, a return for investors and a community fund to alleviate cold and damp in local homes occupied by fuel poor residents suffering lung and other health conditions.

Bench-to-bedside

Royal Liverpool and Broadgreen University Hospitals NHS Trust has a different way of maximising the sustainable impact of its new Royal Liverpool University Hospital. ‘This is a building the size of a small town in a city,’ says David Lewis, partner with NBBJ, which is working with HKS on its design. Under the slogan ‘Transforming healthcare, regenerating the city’, the 94,000m² acute hospital is designed to engage with its context, notably linking the city centre to the nearby Kensington area. An accompanying health campus will be built on the adjacent site of its 1970s predecessor. ‘That will help in the area’s regeneration, creating wealth,’ says Lewis.

This is part of a shift in hospital ethos, he adds. ‘The idea that a hospital is a place that you go to only when you are ill is changing. We’re seeing a move towards wellness, and a trend for hospitals and science buildings to come together.’ The trend, described in the terms translational medicine or bench-to-bedside, brings universities and their medical research teams physically closer to patients.

Today a ward; tomorrow outpatients

Changing healthcare practices and patient demand have made resilience and flexibility key design priorities. The 12 storey Royal Liverpool has 646 bedrooms above its 19 operating theatres and acute services. The two are separated by a 6m high floor of building services, which also provides access for a potential fleet of robots, helping to make the hospital ‘robot ready’.

Social space has to be part of the mix, as it is for offices and other buildings, says Lewis: ‘The days when an atrium was frowned on for using clinical space are gone’. In Liverpool, the staff restaurant is in not dark corner but on the top floor.

A new report from the SDU highlights the potential for both new and existing health buildings to deliver broader benefits through an integrated approach. ‘There are huge opportunities in hospital infrastructure, particularly if trusts look beyond the hospital boundaries,’ says Baddley. One example of that approach is a community energy scheme developed by the University Hospitals of North Midlands NHS Trust. It is looking to raise £450,000 of ethical funding to buy and install 1,200 solar PV panels at seven hospitals, producing sustainable electricity for their use, a return for investors and a community fund to alleviate cold and damp in local homes occupied by fuel poor residents suffering lung and other health conditions.

Bench-to-bedside

Royal Liverpool and Broadgreen University Hospitals NHS Trust has a different way of maximising the sustainable impact of its new Royal Liverpool University Hospital. ‘This is a building the size of a small town in a city,’ says David Lewis, partner with NBBJ, which is working with HKS on its design. Under the slogan ‘Transforming healthcare, regenerating the city’, the 94,000m² acute hospital is designed to engage with its context, notably linking the city centre to the nearby Kensington area. An accompanying health campus will be built on the adjacent site of its 1970s predecessor. ‘That will help in the area’s regeneration, creating wealth,’ says Lewis.

This is part of a shift in hospital ethos, he adds. ‘The idea that a hospital is a place that you go to only when you are ill is changing. We’re seeing a move towards wellness, and a trend for hospitals and science buildings to come together.’ The trend, described in the terms translational medicine or bench-to-bedside, brings universities and their medical research teams physically closer to patients.
its green roofs, a link to Sheffield’s district heating system, interstitial blinds to manage solar gain, and low impact building materials and site approaches. ‘It’s not showy,’ says Finch.

At Alder Hey children’s hospital in Liverpool, however, a range of technology including heat pumps, combined heat and power, and photovoltaic panels generate around 60% of power consumed. ‘They’re all straightforward systems, but there aren’t many hospitals that have them all at the same time,’ says Ged Couser, architect director with BDP.

Alder Hey Children’s NHS Foundation’s 60,000m² PFI hospital caters for 270,000 patients a year, with six wards containing 270 bedrooms, a critical care unit, 16 operating theatres, A&E and outpatient departments. The hospital is described as a health park, which expresses more than a green setting, says Couser. ‘We developed the concept with the client – social, environmental, and the ability to get into the fresh air.’

The building’s three ‘fingers’, extending out from the atrium concourse, connect with the park to maximise daylighting, views and fresh air, although the building does have air conditioning. Open play decks at the end of each ward bring nature close. ‘They give patients access to the outside, while maintaining the comfort of the ward behind,’ says Couser. The visual connection with nature continues through the building with glazed sliding bedroom doors. The doors were developed for this project with doormaker Axis, which now markets them under its Flo-Motion R brand, so are large enough to allow access to beds and equipment, while being easy for children to open and close.

Well designed health buildings can transform the patient experience. Art also plays a part; lead project artist Lucy Casson has created artworks and designs for signage and glass balustrading. BDP is now working on another healthcare building in Liverpool, the Clatterbridge Cancer Centre, which will apply lessons from Alder Hey. This includes landscaping, although Clatterbridge’s urban building has winter gardens and landscaped terraces instead of a park. ‘Projects like these are showpieces, but some elements can be incorporated into other projects,’ says Couser.

**Energy and wellbeing**

Eco-features in new hospitals vary but they share a common aim: to limit energy consumption and promote wellbeing. Sheffield’s extension is naturally ventilated, with bedrooms having louvres that can be operated by the building management system or patients. ‘Often hospitals are sealed, but this gives users control and makes the bedroom a more pleasant and domestic place, while giving children a safe way of operating ventilation,’ explains Finch.

The extension’s eco-credentials come from floor, with a roof terrace that gives city views.

Single bedrooms are more flexible than open wards, as they can be occupied by men, women or children, while locating office space alongside more technical areas can facilitate later conversion. ‘We do a lot of proof of concept,’ says Lewis. ‘We show clients how layout options can produce efficiencies, like reducing walking distances for staff, and there’s a neuroscientist on our team who outlines behavioural factors.’

At Sheffield Children’s Hospital the new wing is also designed for change. Avanti Architects has planned the extension in modules, so an outpatient department can become ward space, or single bedrooms turn into consultant rooms. ‘It’s an approach that we’ve used elsewhere,’ says Avanti director Duncan Finch, notably citing projects in Northern Ireland.

The wing contains a reception area, outpatient department and wards, as well as a two-storey children’s ‘play tower’. Delivery is scheduled for this year, followed by a refurbishment of part of the existing hospital.

The NHS trust aims to refurbish the rest of the building over time, and the extension will aid that, explains Finch. ‘The existing hospital provides accommodation in a single line, but the addition makes it circular so allows for upgrading. It makes better use of the existing building. For true sustainability, it is important to facilitate change.’

**35 WAYS TO SAVE ENERGY**

The SDU estimates that energy efficiency measures in health facilities across England have produced cumulative savings since 2007 of around £1.85 billion. ‘Over time it gets more challenging. We will need to be more creative in identifying and valuing the wider returns from more complex or expensive capital projects, although there is still low hanging fruit,’ says Jerome Baddley, the SDU’s head of unit.

Its report, Securing Healthy Returns, highlights the benefits of integrated thinking and provides 35 examples of proven effective measures that could collectively deliver savings of 1m tonnes of carbon and £141m a year by 2020. More than half of these 35 interventions relate to buildings (see table below).

Current government grant funding of £320 million for district heating could make this an attractive option, with hospitals providing anchor loads. Although district heating is a big investment, it could also attract match funding through local enterprise partnerships.

Combined heat and power (CHP) offers major savings but factors including decarbonisation of the electricity grid and supply or price fluctuations could change the picture in the future. Hospitals procuring gas CHP may also need to plan over the longer term for diversification to low carbon fuels, such as green gas. And CHP can have a broader impact and health value, says Baddley. ‘It offers potential to feed into or start a local district heating network, linking to fuel-poor or hard to heat housing, turning a health infrastructure investment with a short term financial and environmental return into a community infrastructure project with lasting social value and health returns.’

**ENERGY AND COST SAVINGS**

<table>
<thead>
<tr>
<th>Measure</th>
<th>£000s saved in 2020</th>
<th>£000s saved in 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined heat and power</td>
<td>3,750</td>
<td>26,400</td>
</tr>
<tr>
<td>Biomass boilers</td>
<td>28,400</td>
<td>4,690</td>
</tr>
<tr>
<td>Solar PV</td>
<td>2,690</td>
<td>1,030</td>
</tr>
<tr>
<td>Variable speed drives</td>
<td>10,300</td>
<td>3,930</td>
</tr>
<tr>
<td>Staff energy awareness and behaviour change</td>
<td>75,100</td>
<td>21,500</td>
</tr>
<tr>
<td>Lighting controls</td>
<td>2,250</td>
<td>862</td>
</tr>
<tr>
<td>Optimising existing building management systems</td>
<td>14,100</td>
<td>3,440</td>
</tr>
<tr>
<td>High efficiency lighting</td>
<td>18,800</td>
<td>7,190</td>
</tr>
<tr>
<td>Optimising office electrical equipment</td>
<td>11,100</td>
<td>4,250</td>
</tr>
<tr>
<td>Temperature set points – 1°C</td>
<td>46,200</td>
<td>6,260</td>
</tr>
<tr>
<td>New building management systems</td>
<td>28,200</td>
<td>4,440</td>
</tr>
<tr>
<td>Heating upgrades</td>
<td>28,200</td>
<td>2,470</td>
</tr>
<tr>
<td>Decentralisation of hot water boilers</td>
<td>18,000</td>
<td>2,430</td>
</tr>
<tr>
<td>Boiler plant optimisation</td>
<td>2,050</td>
<td>278</td>
</tr>
<tr>
<td>Building fabric</td>
<td>11,400</td>
<td>1,578</td>
</tr>
<tr>
<td>District heating</td>
<td>27,900</td>
<td>3,780</td>
</tr>
<tr>
<td>Boiler replacement</td>
<td>6,160</td>
<td>834</td>
</tr>
<tr>
<td>Solar thermal</td>
<td>2,350</td>
<td>319</td>
</tr>
</tbody>
</table>
Designed and manufactured in the UK, Powermatic controlled, concealed door closers deliver exceptional performance as well as a host of benefits that surface-mounted closers cannot match:-

- Superior aesthetics
- Reduced risk of vandalism
- Suitability for anti-ligature applications
- Compliance with relevant fire performance standards for one-hour and half-hour fire doors
- Enable doors to meet accessibility requirements
- Perfect for hotels, healthcare, education, care homes, sheltered accommodation, commercial and many other situations.
- Available in standard and Free Swing models

Visit our new website: concealeddoorclosers.com

Tel 0121 766 4200  info@samuel-heath.com  concealeddoorclosers.com
John Constable’s 1816 painting of Wivenhoe Park outside Colchester might appear slight—ly less picturesque were he to have painted it today. The house and grounds of Wivenhoe, the 18th century estate of the Rebow family, experienced some far from delicate adjacencies in 1964 when architect Kenneth Capon of Architects Co-Partnership designed the uncompromising University of Essex, adding what Capon himself termed ‘something fierce’ to the park’s bucolic setting.

Loathed by many at the time, the brutalist campus of low academic courtyards and residential towers was a futuristic expression of Britain’s ‘white heat of technology’. As the 20th Century Society informs us, references abound: Kenzo Tange in its courtyards, Kahn’s Philadelphia labs in the towers and even Buckminster Fuller’s Dymaxion House in the university’s Hexagon building.

Amid this brutalist melange, architect Patel Taylor was commissioned in the early 2000s to drive forward the masterplan for a campus of over 10,000 students. Its 2006 £6m Ivor Crewe Lecture Hall, a bold stainless steel drum set into a low hill, attracted an RIBA Award as well as the ire of Prince Charles. Most recently, by the side of the campus lake, the practice chose a complementary rather than counterpointing approach to its latest additions. Completed last October, the firm’s new £26m university library extension and Silberrad Student Centre anchors the original Albert Sloman library onto the site. Deferentially designing the low, long student reception building with its shifted grid facade of Ancaster Weatherbed limestone and huge overhanging roof, Patel Taylor has also created a noble external covered social space from which the lake vistas can be better appreciated by mortar-boarded graduates.

While their whoops here might cause no offence, managing the internal acoustics for both buildings was something the design team needed to get right from the outset. The brutalist architecture might realise grand spaces, but in emulating it, the firm was working with a lot of hard surfaces that would need attenuating. Furthermore, they wanted to make the acoustic strategy an intrinsic part of the design rather than an afterthought compromising it.

It may have been the very solidity and material legacy of the building that drove the acoustic decisions Patel Taylor made – and the fact that the university’s chief librarian was old school, very much of the opinion that the library be a library in the traditional sense of the word; an academic space for quiet study.
HERADESIGN® acoustic solutions

- Excellent sound absorption, up to $\alpha_w$ 1.00 (class A to EN ISO 11654)
- Impact resistant (class 1A acc. EN 13964 Annex D)
- Customised colour options (RAL, NCS, BS or StoColor)
- PEFC and FSC certification available
- Class 0 building classification as standard (EN 13501-1 B-s1, d0)
- 5 different face patterns
- Different thickness and edge details to suit various applications
Originally, the university client had wanted a single integrated building to both extend the Sloman library and create a new student centre. But given that, in terms of acoustics, the two purposes were in opposition to each other, sound considerations in fact dictated the form of the whole design.

‘What we proposed in the end was to split the brief in two and create a dedicated student centre facing north out over the lake and simply extend the library block westwards to accommodate the additional stack requirement,’ says Patel Taylor associate Roger Meyer. He explains that the limestone panels and vertical fins of the Silberrad Centre were as much picking up on the staccato fins of the existing courtyard blocks as the concrete of the new extension was that of the original library.

‘The clear design principle of splitting the buildings had an acoustic impetus,’ he adds. ‘One’s about a quiet place with spaces to be noisy and the other’s a noisy place with spaces to be quiet.’ The final expressed aesthetic for both blocks was ultimately informed by this overarching consideration.

The desire to deliberately steer away from the modern concept of the library as a multimedia space and to treat it as a quiet space for serious study drove much of the design. Patel Taylor was staying true to Capon’s vision, keen on bare concrete expression not only as an aesthetic but as part of the thermal mass strategy in this naturally ventilated extension. With soffits exposed, full-height spaces in the stack rooms and plenty of reverberant space, Meyer says they made two assumptions: that the volume of books would mitigate some of the ambient sound and that the main space would be self-policing – students would not actually make noise when in it, obviating the need for more soundproofing.

Sound was an issue on the north side of the library, where study spaces come up against a four-storey atrium next to the ventilated glass wall. Here Patel Taylor used some ingenious detailing to not only attenuate but hide services too. The balustrade is configured as a single long desk in oak, black fabric lining hiding acoustic insulation, and a dressed detail of vertical oak slats in front. Desk spaces are delineated with a discreet brass inlay detail, and there are even heating ducts installed in it. ‘At the interface of the atrium space and the library proper, we had to develop a strategy for this area,’ explains Patel Taylor associate Myshkin Clarke Hall. ‘The oak slats and insulation deal with attenuation locally. The details were all about tactility – we wanted the attenuating materials to be touchable. In a self-policing acoustic space it was about trying to deal with a generated noise at source.’

The same palette of oak slats and bare concrete soffits is present in the three-storey concrete framed student centre, but with reception, breakout and student social spaces abounding here, the noise load was far more onerous. This meant making the attenuation more robust. The

Right In the student centre, the necessary mechanical ventilation kit is masked in line with the attenuating oak slat detailing elsewhere.
Geberit Acoustics

Silence installed.

Noise reduction in sanitary installations.

Geberit’s reliable and innovative sanitary and piping systems provide the ultimate solution for better acoustics. We cover the complete solution, from supply through to sanitary and drainage, to ensure that everyone gets a good night’s sleep whenever water passes through the building. For acoustically optimised sanitary installations, find out more from the experts. → www.geberit.co.uk/silence
oak slats were used to demarcate permanent areas, bringing qualitative parity to the main library space. However, Meyer says they had to consider future flexibility of the space: ‘It’s more cellular in nature and it was also about the idea that, with temporary enclosures, things could be ripped out and changed.’

He explains that environmental and aesthetic reasons means they ‘gave primacy’ to the concrete soffits here and were averse to any sort of acoustic foam render covering them, so instead, they went for hanging acoustic baffles directly from the soffits.

Aesthetic decisions even covered these however. Acoustic panels were specified in three shades of grey to complement the soffits and baffles were staggered along ceilings and ran to different lengths to create a variegated effect.

The absorbency is reflected on the floor, where raised floor carpet tiles are used throughout. Only in the student reception main entrance and first-floor corridor, which have a more civic feel, are these replaced by granite, giving the acoustics a more ‘live’ feel.

Where acoustic requirements were particularly onerous, such as in multi-media, TV/podcast recording and campus radio studios, soundproofing was addressed locally with thick, high performance dry lined walls. Facing west to the landscape, internal secondary glazing is even installed at an angle to mitigate reflected sound. There was a higher demand for acoustically dampened mechanical ventilation here too, service runs and kit discreetly masked with a visually permeable oak slat ceiling that covered ducts while still allowing views through to those concrete soffits.

Flexibility might be built into the student centre, but even in the library, despite the emphasis on permanence, the possibility that things might change was accounted for in the design. It’s most evident in the student breakout spaces, which are so well isolated with concrete, glazing and thick dry-lined walls giving 50dB RW sound reduction that they can be used for social events, alluding to how the library might change as a space in the future. Less obviously, there are as yet unused data and IT boxes cast into the concrete floors of the library.

‘This was very much a traditional library being built in modern times but we always had to consider multi-media flexibility,’ says Clarke Hall. ‘As the university evolves it may well move from one paradigm to another.’
I highly approve of Rockfon’s Tron-inspired ceiling at Rawlins Academy College, Leicestershire, where the fitness studio’s been designed for better acoustics to aid students’ human interactions in larger spaces. Although their high-tech look could pander to youngsters’ inability to differentiate between virtual and real – I mean, they’re already combing the countryside for pretend animals. Perhaps being forced to watch Hunger Games, Transformers and Tomb Raider on repeat could coax them back into the real world...on second thoughts, maybe they’ve got the right idea.

I am really trying to get a sense of perspective, here in Newcastle’s Jesmond apartments, but I’m all bent out of shape. There is so much to take in, I can’t do it all at once. My view is getting seriously out of line. Everything is closing in where it should be opening up. Maybe I am looking at things the wrong way, and my overview is undone? Perhaps Stephen Hawking would put this corridor perspective down to folds in the space/time continuum. Either way, with Knauf’s Thermatex ceiling planks, in this space no one can hear you scream.

Another post-Brexit benefit: pop-up restaurants, like this NOMA in Barangaroo, Australia. Surely a world where the very foundations of society – trust in expertise – are compromised is not one in which disposable fine-dining can continue to be a thing? How is that concept possible? But with that will go all the satire about the latest ridiculous trend, which seems to be the only thing humourists can turn their hands to. Thank God then for Troldtekt’s acoustic ceiling, which helps temper noisy diners’ incessant yammering about jus.
5 Acoustic panels
CMS Danskin

Whether or not legendary Leeds band the Kaiser Chiefs tickles your ear buds, sturdy acoustics are a must for wild living rockers. Think Jesus and Mary Chain, the Who, and the naughty Beach Boys keeping the neighbours up all hours. Here, Ricky Wilson is putting CMS Danskin’s panels through their paces, unusually static as he rolls out the band’s latest hit, presumably before a serious night on the tiles. Alas, according to NME, he prefers to relax watching actor John Nettles, who he’s painted often, in oils. ‘I imagine Midsomer Murders is much like heroin,’ he mused.
cmsdanskin.co.uk

6 Q Booth
Framery

We’re back in the post Brexit world of separation, separation, separation: now office managers are rediscovering the Thatcherite maxim of no such thing as society. These soundproof booths from Framery will usefully cut out the hours employees waste discussing the footie or footsie they enjoyed last night – or grumbling about the management. And with users able to customise their capsule, trips to the tea point (another gossip spot) won’t be needed. With a duct you could probably even vape in them. Singing or smoking, even fewer reasons for Elvis to leave the building.
frameryacoustics.com

7 StoSilent Direct
Sto

The most fearsome challenge of the Mornington Crescent edition of the Mensa test, the simple question attached to this image is: When the picture is divided down the centre, can you spot the critical differences between the two sides of the perfectly symmetrical view? (Hint: it’s not the control room or fuchsia panel, obvs – this is Mensa!) The select few that answer correctly receive some StoSilent Direct, probably presented by Paxman, to insulate effectively against noise with a pristine /f_inish; enabling them to hone their brain power in peace to ever greater levels.
stosilent.com

8 Acoustic baffles
Soundtect

So I got out my Kylie Jenner lip kit and Gemma Collins hug-me-where-it-matters spanx and I asked him, all husky-like, to take me down the local arty gastropub ‘cos I knew they’d done it up and put in acoustic baffles styled in Bridget Riley’s cappucino period to keep the mood subtle – ‘cos subtle’s essential when you’re pulling – and it was all candlelight and prosecco and I thought, I’m in there, til people arrived chewing each other’s ears off about van Gogh, but you know what, despite their racket I heard him say those three little words loud and clear: Soundtect acoustic baffles.
soundtect.com
Watergate Hotel, Washington

Ron Arad stays true to Moretti’s brutalism in his hotel revamp, while injecting a sense of the political intrigue the site has been party to

Words: Jan-Carlos Kucharek  Photographs: Julian Gilhespie

The Times They Are A’Changin’ indeed. Robert Venturi, in ‘Complexity and Contradiction in Architecture’, identified Italian modernist Luigi Moretti, living in Rome and trained in the classical tradition, as a progenitor of the post-modern style that rose in 1960s USA. Moretti’s 1949 Il Girasole – a delicate, bijou, luxurious apartment block in Rome, ‘poised between tradition and innovation’, inspired Venturi’s broken pediments and nuanced asymmetry at his Vanna Venturi House, which became as much the poster boy of the USA’s new indigenous identity in 1964 as Bob Dylan himself was.

So how post-modernly ironic that in 1962 it was Moretti who was appointed to design the Watergate complex, a 4ha development of high-end apartments, offices, hotel, gardens, pools and shops in the USA’s centre of power Washington DC – like a cultural prophet being flown into their adopted hometown – on a stupendous scale. The private realm of Hollywood celebs and the political elite drinking in its bars and terraces, Watergate’s vast, sweeping concrete curves, overlooking the Potomac river, were to become known to the wider world via the 1972 political scandal that took its name and ruined a president. Although the complex fell from grace and into disrepair, when Ron Arad was asked in 2012 by new owner Euro Capital Properties to design the Watergate Hotel’s new public spaces as part of a $125 million refurb, he must surely have felt the burden of history on his shoulders.

Or perhaps not. Ron Arad practice director

Above Tubular belles: Arad’s copper, brass and bronze tubes use rich materials to complement Moretti’s luxurious brutalism.

Above right The Next Whisky Bar. Named by Arad and bearing his signature on its 2,500 whisky bottles.

Centre right Rich materials simply applied.

Below right Moretti’s decadent curves are reflected throughout the public interior.
Asa Bruno, whose father had worked in the diplomatic corps, used to visit the complex as a teenager and recalls its ‘pervasive, overarching masterplan’ and brutalist high spec then very much as he does the Barbican Centre’s now. ‘Moretti used classic, primitivist forms in a big way here,’ says Bruno, ‘and our challenge was to honour that aesthetic with something contemporary but timeless – we wanted to avoid anything that might be thought “trendy.”’

In a way, they were helped by the building’s 1960s engineering – a behemoth of concrete, its curving plan was beset with thick columns supporting cantilevered terraces and a section of low ceiling soffits. With little budget for structural works, Arad’s remodelling of the lobby interiors involved no transfer structure but some breaking out of the ground floor slab down to basement level to create 5m high volumes and open up views down to new bar and restaurant levels and the Potomac river beyond.

Concrete informed the choice of internal finishes too. Arad wanted not only to reflect the physical curves it subtended but the robustness of its materiality. ‘Our decision was to go for a palette of solid, durable materials and run them the length of the internal walls. We went for tubes of bronze, brass, copper and steel in their elemental forms, feeling that if these could visually dominate lobby and circulation spaces by curving their way through them, guests would be less aware of the low ceiling heights,’ explains Bruno. It’s a diversionary tactic that Nixon would have been proud of.

In the whisky bar meantime, at the time infamous for furtive, smokey, late-night politico meetings, Arad was keener to bring a fresh spirit to proceedings. Perhaps it’s a comment on the warped transparency of big government, but the choice to create intimate bar spaces formed of 2,450 Arad branded whisky bottles, with all their refraction and reflection, is a gesture that both tips its hat to the past as well as being contemporary and materially indulgent. Named ‘The Next Whisky Bar’ after Arad favourite The Doors’ 1967 ‘Alabama Song’ lyric, even the name recalls that bygone, permissive era.

Even the walls here are steeped in politics, passion and intrigue, beyond Nixon to Elizabeth Taylor and Monica Lewinsky; and Moretti himself was briefly imprisoned after the war for his fascist past. ‘It’s our first US commission and a refurbishment of a historic building by a great European architect,’ Bruno concludes, ‘And for Ron its scandalous air just makes it all the better.’
Specified

1 Glass Radiators
Aestus

I don’t mean to be rouge*, but what do you see when you look in the mirror every morning? Do you feel like a vermilion buck or would you like to see more clarity in your skin tone? Are you filled with optimism, pretty in pink, with rosy outlook in the morning, or are you often left feeling a bit red-faced about how your life turned out? There’s cerise-on in my madness: glass radiators from Aestus come in four different finishes, kinetic, mirror, classic and satin, heating that doubles as looking glass. Mmm, looking hot.

*aother colours available. aestus.co.uk

2 Cladding
Reed Harris

Behold: Switzerland for study as potential post-Brexit model. We are talking a certain ‘Je m’en fous’ modernism: clean lines, calmness, neutrality (no surprises, there). Lighting is concealed, the tread on the carpet soft. Wealth is generated through precision craft and spent without clamour or vulgarity. How does the UK measure up? Well, Reed Harris has demonstrated the Great British knack of giving the well-heeled client what it wants, here in the form of Honed Levante Strata Oscuo and Maximum Nero Supremo cladding. No feeling the Brexit pinch for them.

reedharris.co.uk

3 Arte linea
CP Hart

There’s a lot of talk talked around the three-legged stools – of sustainability (economic, environmental, social) lean culture (leader standard work, process performance, process adherence) asset management (built capital, natural capital, human capital). And so on (and on). But CP Hart’s Dama design from Arte linea shows that two-legged proposals are viable if you screw something to the wall. The symbolic learning outcome for those in corporate social policy development is clear: get rid of one of the legs and screw something to the wall.

cphart.co.uk

4 Bathtub
Kaldewei

Nothing is as bracing as an empty steel enamel bathtub such as this alluring anthracite model from Kaldewei. That is why they feature in the rooms of the new Losinj Hotels & Villas in Cikat Bay, Croatia, where they complement the spa’s new hot and cold skin-cleansing treatment. As well as a chill-pressed buttock bath purge, the venue offers a toaster facial light grilling (to eliminate blackheads, greybeards and whites) and a skin-pore hydrate and moisture lift, where clients sleep between a humidifier and a dehumidifier while reclining in a large pool of Evian water.

kaldewei.co.uk

Products In Practice September/October 2016
Essential titles from RIBA Publishing now available as eBooks

STAINLESS STEEL
Surface Water Drainage Channels
From balconies to courtyards, the city to the pool, minimal slot drains to feature facades. Durable, easy to clean and distinctive. Standard, made to measure and bespoke products.

We offer a comprehensive range of stainless steel drainage systems, a wealth of experience and full design service to support the specifier from concept to completion.

T: 01952 588488
E: sales@componentdevelopments.com
www.componentdevelopments.com
@CDstainless
3D printed tables match chairs
Morgan
Rio tables, designed by studio Integrate and Morgan Studio, have a glass top over a 3D printed ‘face-work’ basket and solid timber legs. Partner to the Rio 3D printed chairs, they are a unique application of 3D printing in commercial furniture, developed by architect and new technologies designer Mehran Chareleghi in collaboration with Morgan. Morgan will be on stand A19 at the London Design Festival.
www.morganfurniture.co.uk

Self-supporting room in a roof
Recticel
A next generation, self-supporting room-in-a-roof system for pitched roofs has been launched by Recticel Insulation. The product, L-Ments, comprises cable gap, breather membrane, counter battens and integral structural timber in one FIR insulation panel as a single lightweight cost-effective modular roofing element. The future-proof system has been designed for ultimate thermal performance.
www.recticelinsulation.co.uk

Debut for handmade tile range
Marley Eternit
A complex reroofing project in Reigate, Surrey is one of the first to use the Canterbury handmade clay tile range from Marley Eternit. Loxleigh Canterbury clay tiles were used for the 270m² roof, a complex design of multiple slopes, swept valleys and hips. Canterbury tiles are made of locally sourced Etruria Marl, in three colours: Chailey (orange), Loxleigh (antique) and Burford (brown).
www.marleyeternit.co.uk/clay

Bespoke seating is box office hit
Lyndon Design
As the network of Everyman cinemas expands across the UK, Lyndon Design continues to furnish each with bespoke seating that is vital for creating the intimate and luxurious environment for which Everyman is renowned. A collection of two-seater sofas and armchairs feature in each venue. Lyndon also supplies fitted walnut shelves to the back of each seat to act as personal tables above the carpeted footrests.
www.lyndon.co.uk

Keeping cyclists safer
Charcon
Charcon, the hard landscaping division of Aggregate Industries, has made and supplied 24,000m² of Eco Countryside Cycle Kerb for the London Mayor’s flagship Cycle Superhighway 2 (CS2). The contract follows major investment by Transport for London to make the route safer for cyclists and other road users. The design has a bull-nose edge along the carriageway, capable of withstanding vehicular impact.
www.aggregate.com

A must-see film
David Clouting
Interior Film from David Clouting is a CE Certified self-adhesive, decorative film made by LG Hausys that can be applied to almost any room surface including wood, metal, plasterboard, plastic and melamine, offering excellent flexibility and adhesive. Interior Film is available in a range of innovative designs. It is also IMO/ MED certified for use in the marine sector. View on BIMSTORE.
www.davidclouting.co.uk

Discreet integrated technology
Tillman Domotics
Now celebrating its sixth anniversary, integrated technology specialist Tillman Domotics works on high end residential and commercial projects both in the UK and globally. An innovative building in London’s Mayfair, this luxury sales and marketing suite for developer Clivedale relies on Tillman Domotics’ discreet state-of-the-art technology to help impress its clients.
www.tillmandomotics.com

Four-star finish for garden rooms
Fermacell
When modular timber construction specialists Carbon Dynamic were asked to supply garden units for a four-star spa hotel in Scotland, there was only one wall and ceiling finish they were prepared to use, and that was Fermacell. The company’s square-edged gypsum fibreboard panels have been used to line 13 modular 26m² garden lodges at the luxury Kingsmills Hotel in Inverness.
www.fermacell.co.uk

Reliable glazing for mega school
Kawneer
Architectural aluminium systems from Kawneer, chosen for their reliability, feature in one of Wales’ largest schools, Kawneer’s AA 300 capped curtain walling and low/medium-duty swing and series 190 heavy-duty entrance doors were specified by frequent Kawneer users architects Scott Browning throughout the Gateway to the Valleys (Coleg Cymunedol y Dderwen) secondary school in Bridgend.
www.kawneer.com

Keeping cyclists safer
Charcon
The house at the BRE Innovation Park will be one of the first to use the House Quality Mark (HQM). The Acme tiles have a ‘Very Good’ BES 6001 responsible sourcing accreditation, an A+ rating under the BRE Green Guide and low embodied carbon.
www.marleyeternit.co.uk/clay

Tiles help towards zero bills
Marley Eternit
An zero bills home by architect Zed Factory uses Acme clay plain tiles from Marley Eternit to help meet strict sustainability criteria. The house at the BRE Innovation Park will be one of the first to be assessed under the Home Quality Mark (HQM). The Acme tiles have a ‘Very Good’ BES 6001 responsible sourcing accreditation, an A+ rating under the BRE Green Guide and low embodied carbon.
www.marleyeternit.co.uk/clay

Bespoke seating is box office hit
Lyndon Design
At the network of Everyman cinemas expands across the UK, Lyndon Design continues to furnish each with bespoke seating that is vital for creating the intimate and luxurious environment for which Everyman is renowned. A collection of two-seater sofas and armchairs feature in each venue. Lyndon also supplies fitted walnut shelves to the back of each seat to act as personal tables above the carpeted footrests.
www.lyndon.co.uk

Self-supporting room in a roof
Recticel
A next generation, self-supporting room-in-a-roof system for pitched roofs has been launched by Recticel Insulation. The product, L-Ments, comprises cable gap, breather membrane, counter battens and integral structural timber in one FIR insulation panel as a single lightweight cost-effective modular roofing element. The future-proof system has been designed for ultimate thermal performance.
www.recticelinsulation.co.uk

Debut for handmade tile range
Marley Eternit
A complex reroofing project in Reigate, Surrey is one of the first to use the Canterbury handmade clay tile range from Marley Eternit. Loxleigh Canterbury clay tiles were used for the 270m² roof, a complex design of multiple slopes, swept valleys and hips. Canterbury tiles are made of locally sourced Etruria Marl, in three colours: Chailey (orange), Loxleigh (antique) and Burford (brown).
www.marleyeternit.co.uk/clay
Strength and beauty combined

Compac

Unique Calacatta from Compac is a stunning pure white quartz worksurface featuring powerful grey veins characteristic of marble. The natural hardness of quartz comes with a waterproof, hygienic finish offering even greater resistance, and long term high performance. This makes Unique Calacatta ideal for intensive use areas such as kitchens and bathroom surfaces, floor tiling or wall cladding.

www.uniquecalacatta.com

University challenge winner

Serge Ferrari

Scape student housing in east London, by Stephen Marshall Architects, uses Stamisol Color membrane from Serge Ferrari. Project architect Jess Pauli says: ‘Because the panels were 50% perforated we needed a membrane that was waterproof and UV stable and had a suitable surface spread of flame rating. We were unable to find any manufacturer other than Serge Ferrari who made such a membrane."

www.sergeferrari.com

BBA certificates for warm roofs

VM Zinc

Vimzin’s ‘Structural roof using FIR or mineral board insulation’ BBA certificate has been extended. This along with Vimzin’s certificate for ‘Compact Roof build-up’ are the only ones available from a zinc roofing manufacturer. The system is fixed with special screws and clips to steel or plywood decks on buildings with humidity classes between 1 and 4.

www.vimzinc.co.uk

Bathtub range extended

Kaldewei

Kaldewei has extended its Meisterstück Collection of freestanding bathtubs with fully enamelled paneling with models for corner and wall installation. The Meisterstück Centro Duo and Meisterstück Conoduo bathtubs are now available with two and three-sided fully enamelled paneling. The bath waste fitting is pre-installed by the factory, so a base or pedestal is not necessary.

www.kaldewei.co.uk

Portholes plus fire integrity

North 4 Design

North 4 Design’s Dorglaze® Portholes and Vision Panels are designed to create light and visibility in doors and walls while providing fire integrity and DDA options. Engineered from stainless steel, they are supplied as a complete glazing system for simple fitting. They offer internal and external solutions, a choice of glass and metal finishes, a bespoke design service and a selection of ironmongery.

www.north4.com

Efficiency at attractive price

Hansgrohe

The latest Hansgrohe Crometta range includes overhead showers, hand showers, shower sets and showerpipes. Specially created for the entry level segment, Crometta combines water efficiency, sustainable technologies and premium design at an attractive price. The range is WRAS certified and the energy-saving EcoSmart models have a reduced water flow of six or nine litres per minute.

www.hansgrohe.co.uk

Don’t skimp on tile profiles

Schluter

When careful consideration has been given to the sanitaryware, taps, shower, lighting, and tile or stone covering in a kitchen or bathroom, why leave the tile profiles to chance? Hundreds of options for finishes, textures, materials and colours are available with Schlüter-Profiles. The full range combines functionality and design solutions, suitable for both residential and commercial projects.

www.schluter.com

New washrooms are classic case

Kennill

Thirty Kennill Classic Cell floor to ceiling cubicles were specified by Associated Architects for washroom areas in a refurbished six-storey office building in Leeds. Classic Cell has 42mm smooth surfaced welledd doors with special inlays that give a high degree of privacy and noise reduction. The architects chose Kennill’s aluminium ‘handle bars’ for the door furniture, which houses LED vacant/occupied indicators.

www.kennilluk.com

No slip-ups at Streetly

Gerflor

Gerflor’s Taralay Impression Control was specified for the refurbishment of Streetly Academy, a sports college in Sutton Coldfield. Architects Gould Singleton required a finish complying with the Health & Safety Executive’s pendulum slip resistance test, giving a low slip potential of greater than 34, and a surface roughness measurement, again giving a low slip resistance greater than 20.

www.gerflor.co.uk

Sleek look for bathrooms

Duravit

C-bonded is a new technical solution developed by Duravit for bathroom wash basin and vanity units. Manufactured with millimetre precision, the ceramic of the washbasin is fitted to the furniture, with both materials appearing to bond seamlessly as a single unit. The company says this completely new appearance produces an exceptionally sleek looking washing area.

www.duravit.co.uk

Products In Practice September/October 2016
Shadow play at Canary Wharf

Dornus

Dornus provided bespoke size 3D Kaza Concrete "Tre" tiles for the London HQ of a leading audit company in Canary Wharf. Tre’s faceted design by Levi Pignatar has a dynamic interplay of depth, light and shadow. Four symmetrical Tre tile designs can be used to create endless architectural surfaces. Exclusive to Dornus in the UK, the Kaza Concrete collection is made of reinforced, coloured, fire-resistant concrete.

www.domusgroup.com

Vertigo as a good thing

Marley Eternit

A roof extension in London has used an innovative fibre cement slate, specifically designed for vertical application, to create a distinctive dormer conversion. The project is one of the first in the UK to use the new Vertigo slates from Marley Eternit. Vertigo consists of 600mm by 300mm slate-like panels that can be quickly fixed onto battens. The fibre cement slates perfectly adapt to the contours of the building.

www.marleyeternit.co.uk/vertigo

New ratings help specifiers

Rockpanel

Rockpanel Group has again displayed its commitment to sustainability as all 16 certified construction elements with Durable and Durable ProtectPlus facade boards received best-in-class Green Guide Ratings of A+ from BRE Global following a rigorous life cycle assessment process. These improved ratings allow specifiers to achieve maximum credits within the materials section of the BREEAM assessment.

www.rockpanel.co.uk/aplus

It’s a wrap for zero carbon homes

A Proctor

Wraphite-SA self-adhering vapour permeable air barrier was specified to achieve a highly efficient building fabric for a terrace of five zero carbon homes near Hastings Castle, designed by eco-architect ZED factory and partner the Zero Bills Home Company. The homes are built of prefab heavyweight timber frame panels with Wraphite-SA self-adhering vapour permeable air barrier applied on site.

www.proctorgroup.com

Trapezoids for Tin House

Rooflight Company

Henning Stummel worked with the Rooflight Company to specify six individually sized bespoke trapezoidal rooflights to sit on top of each of the pavilions that make up the practice’s award-winning Tin House. Measuring up to 220mm x 160mm, each rooflight incorporates edge-to-edge glazing and concealed motorised actuation. The external frame of each matches the terracotta colour of the cladding.

www.therooflightcompany.co.uk

Adding warmth to Maggie’s

Aurubis

The new Maggie’s Cancer Centre in the grounds of The Christie Hospital in Manchester is roofed in Nordic Bronze from Aurubis Architectural, part of a palette of materials giving Foster + Partners’ design its sense of warmth. The roof rises in the centre to create a mezzanine level, naturally illuminated by triangular roof lights, and is supported by lightweight timber lattice beams.

www.aurubis.com/finland/architectural

Ensuring safety on the stairs

Gradus

Premier Inn is installing Gradus’ RXT521 double channel PVC hard- nose stair edging as it renovates some of its properties. The edging comprises a PVC-u channel and riser, providing an all-round visual contrast for guests ascending and descending stairs. The insert extends around the leading edge of the profile to ensure that foot contact is always made with the slip-resistant element of the stair edging.

www.gradusworld.id

Grey is the sought-after shade

Junckers

Junckers has launched a new, solid hardwood floor in grey, the most sought-after shade for floors in the design industry today. Vista Grey is a subtly textured floor made in solid oak, combining pale grey with white tones to enhance the natural grain structure of the timber. Vista Grey is a wide board floor with 140 or 185mm wide planks in Junckers’ signature long-length planks.

www.junckers.co.uk

SBD windows for lifetime homes

Aluk

Aluk SL52 curtain walling, SBDW TBT (tilt before turn) window, SBD balcony door and GT55 TB entrance door systems were specified for all 555 low rise lifetime homes at Orchard Village, Rainham, in the London Borough of Havering. All windows and doors compiled to the Secured by Design (SBD) initiative, with the Aluk DT55 TB believed to be the first SBD accredited aluminium commercial door system.

www.aluk.co.uk

Slates help make families at home

Marley

Keppler’s E5 Am Ronald McDonald House in Glasgow has used blue-black Rivendale fibre cement slates from Marley Eternit across 85km² of roof to help create ‘a home from home’ environment for families of children being treated in the Royal Hospital for Children. Rivendale has a carbon footprint of 13 CO₂e /m² (600 x 300 slate at 100mm lap) and achieves the best environmental rating (A+) in the BRE Green Guide.

www.marleyeternit.co.uk/rivendale

call: +44 (0)20 7496 8338 or email: clive.waite@ribaj.com
Win a trip to Dubai
Polypipe
Three couples are being given the chance to win a trip of a lifetime to Dubai courtesy of Polypipe Terrace in conjunction with its new ‘Tail Buildings’ campaign. The competition is open to architects, specifiers, contractors and installers. Entrants are required to visit the website below and answer the following questions: The Burj Khalifa in Dubai is currently the tallest building in the world – but how high is it?

www.polypipe.com/tailbuildings

Sleeping with the lions
Akzo Nobel
London Zoo’s new lion enclosure visitor experience was a perfect project for leisure building designer Fineleg and coatings manufacturer Akzo Nobel to highlight their quality and innovation. Fineleg made and supplied 10 timber frame en-suite bedroom lodges to sit alongside the Land of the Lions project. They are individually coloured using AkzoNobel’s Sikkens Cetol WP 771 one-pot system coatings system.

www.sikkens-wood-coatings.co.uk

Exceptional energy performance
Comar
Comar Architectural Aluminium Systems, with approved fabricator English Architectural Glazing, was awarded the contract to design, fabricate and install the windows at Whitbread’s new Premier Inn in Stratford City, London, designed by Bennetts Associates Architects. The Comar SP1 window system provides exceptional thermal performance in a market where energy efficient designs are paramount.

www.comar-abu.co.uk

Easy fix clay pantile
Marley Eternit
Breakthrough innovation is combined with a traditional aesthetic in Marley Eternit’s new easy-to-fix Lincoln clay pantile. Lincoln features a classic S-curve profile and thin leading edge, and is as simple to install as a concrete roof tile. It can be used to a minimum roof pitch of 17.5°, giving it a great deal of versatility on a wide range of projects where a traditional pantile appearance is required.

www.marleyeternit.co.uk/lincoln

Turn on the heat any time
Vasco
The ideal bathroom towel warmer is a dual fuel radiator which works on the central heating system and also has an electric connection, giving the option for year round warmth even when the heating is switched off. Vasco’s towel warmers offer exceptionally high build quality with invisible weld seams and extensive colour choice, plus outstanding efficiency and extremely economical heat control.

www.vasco.eu

Working in the light
Structura
Designed by Darston&Blanch architects, this stunning 25,000m² facility is the new production HQ for Airdale International Air Conditioning in Leeds. It’s a great example of the way in which the highly insulating Kalwall® translucent daylighting system is used to flood the interior with diffused daylight. Falwall panel unit windows are also incorporated to control glare and solar heat gain, without the need for blinds.

www.structura-uk.com/Kalwall

UK schemes in glossy new book
Hunter Douglas
Three UK building projects feature in a glossy coffee table book of dozens of striking buildings involving Hunter Douglas innovation. New Impressions contains images of 81 schemes from Abu Dhabi to Sweden and North America to Russia. The UK schemes are the Library of Birmingham, the Haven Point leisure complex in South Shields, and the Pavilion residential property in Coldingham Bay, Scotland.

www.hunterdouglas.co.uk

Playing with floor design
Tarkett
A digital design campaign by Tarkett engaged architects and designers across Europe with its ‘Floor is the new Playground’ concept. The campaign encouraged users to play with floor patterns and create designs using Tarkett’s Luxury Vinyl Tile (modular vinyl) ranges and evolved into a game of design tag! Some chose to collaborate to produce inspiring floor designs.

floorisnewplayground.tarkett.com

Honours for The Edge
Kawneer
A building clad in Kawneer’s unitised curtain walling has won top honours in the global BREEAM Awards 2016. The Edge, the new headquarters for Deloitte in Amsterdam, made use of 17,000m2 of a re-engineered, custom-made Kawneer curtain walling solution, won the office new construction category against four other projects in the organisation’s 25th anniversary awards.

www.kawneer.co.uk

Frameless shower door option
Aqata
The Spectra SP458 hinged door with inline panel is a contemporary frameless corner option from luxury shower enclosure manufacturer, Aqata. Created from 8mm clear toughened glass and featuring beautifully designed chrome handle and hinges, the Spectra SP458 is suitable for both shower tray and wetroom applications. Every shower enclosure and screen comes with a lifetime guarantee.

www.aqata.co.uk
**Sign Up**

Sophie Steed, director at Squire and Partners, gives us three of her specification favourites.

**WHITE GLASS**
In many non-residential projects we produce in-house graphics or artwork to create interest on what would traditionally have been white plasterboard walls. In recent years we have specified white painted glass panels, which provide a superb background for graphics, signage and artwork. In our headquarters building for UNISON, it was used to display bespoke navigation graphics throughout the building. The patented product we specify is not toughened but has a foam backing creating impact resistance whilst remaining very thin, making it ideal for small spaces such as lift cars.

**COLOURED STAINLESS STEEL**
The range of coloured stainless steel on offer has increased dramatically over the last 10 years. I first specified black stainless steel for art and design units in Howick Place, Victoria. Traditional brushed stainless steel lift doors are no longer favoured for design-led projects where ‘standard’ materials won’t work with the concept, but the colours now available make it more viable. Black stainless steel for lift doors, reveals and 4m high entrance doors to the galleries at Howick Place afforded the warehouse aesthetic we wanted, and contrasted perfectly with the weathered Corten panels.

**TERRAZZO**
Terrazzo is a great alternative to concrete floors as a durable material which is easy to repair and refurbish. We have used it for entrance and reception spaces in residential schemes, for a clean contemporary look as an alternative to stone or marble. Cement or resin-based terrazzo can provide a seamless finish, avoiding tile joints and creating a ‘carpet’ effect to a floor area. Existing terrazzo can be repaired and refurbished with excellent results. In our project at 8 Greencoat Place for Derwent London, we used precast terrazzo stair treads fixed to a folded metal base, and used it in our own office.

**SMILEY’S PEOPLE**
God knows we could all do with something to smile about nowadays, but Alison Brooks is forcing out a real grin with her gargantuan ‘Smile’ installation for this year’s London Design Festival. The 34m long, 3.5m high curved Tulipwood structure is more Cheshire Cat than Chelsea College of Art, beaming away in the school’s Footstein Hopkins Parade Ground. But since sponsor American Hardwood Export Council is touting it as one of the most important innovations in CLT panels in the last 10 years, involving not only Stirling Prize winner Alison Brooks Architects but world famous engineer Arup, it probably has good reason to look so damn smug.

**METHOD IN MADNESS**
Rural Energy’s recently-installed biomass boilers at Welbeck Abbey in Nottinghamshire are unlikely to run out of fuel any time soon, with the 18th century 4th Duke of Portland having planted hundreds of oaks because he thought the species was dying off. His son, the eccentric and reclusive 5th Duke, also used them because he thought the species was dying off. His son, the eccentric and reclusive 5th Duke, also used them because he thought the species was dying off. His son, the eccentric and reclusive 5th Duke, also used them because he thought the species was dying off. His son, the eccentric and reclusive 5th Duke, also used them because he thought the species was dying off. His son, the eccentric and reclusive 5th Duke, also used them because he thought the species was dying off. His son, the eccentric and reclusive 5th Duke, also used them because he thought the species was dying off. His son, the eccentric and reclusive 5th Duke, also used them because he thought the species was dying off. His son, the eccentric and reclusive 5th Duke, also used them because he thought the species was dying off. His son, the eccentric and reclusive 5th Duke, also used them because he thought the species was dying off.

**THE SPAR PAVILIONS**
What price art? Anything, it seems. It’s not so much that this year’s four small Serpentine pavilions are up for sale – the traditional means of balancing the annual commission’s books – it’s where they’re being advertised that’s interesting. Cue the architect’s favourite estate agent’s website The Modern House, a chance to click guilt-free through impressive 20th century property porn. But since most of the site’s punters are looking for a roof over their head – albeit a predominantly flat one – how long will it be before these roofless £100K pavilions are ‘under offer’? Will Julia Peyton Jones get gazumped? Will Hans Ulrich Obrist be available chain-free? Watch this space!