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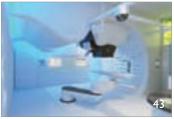
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Cover image: Cyrus Tang Foundation Headquarters Image © Qing Ai See page 10 Joint Publisher/Editor Simon Reed

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NEW EDITOR

Architects Datafile appoints new editor James Parker to lead title's future development

In its mission to continue to improve quality across the publication for readers Architects Datafile has appointed an editor with substantial construction sector experience to lead the magazine's content team and continue to bring you relevant, varied and engaging content.

James Parker was previously editor of Building Products, one of the longest established business-to-business magazines in the busy construction sector, covering product specification in depth for an audience including over 8,000 UK architects. He placed a focus on attention to detail and providing as much clarity as possible on the wide variety of construction products and methods which the magazine covered. James saw the title through the recession retaining its commercial base as well as gaining

plaudits for improving the quality of the magazine.

Previous to that James was a longstanding presence at the head of niche healthcare design journal Hospital Development which maintained a firm following amongst architects in the sector for several decades. He retains a keen interest in design for healthcare and more generally in promoting and championing the crucial role that architects play in ensuring buildings work for a wide range of users.

James will be leading a dedicated editorial team at ADF which will be scouring the UK's architectural scene to bring readers the latest buildings and ideas, including thought leadership from a wider range of sources to keep you abreast of current issues. From building

high-end homes to grappling with BIM, the new editor's role is to ensure that Architects Datafile offers a broad range of interesting subject matter, presented accurately and attractively. Not only that, but as a figurehead for the magazine, James will be reaching out to the industry from product manufacturers to architects across the UK to find out what they want from the magazine and how they can be a part of the title's continuing success.

James commented on his appointment: "I am looking forward to consolidating Architects Datafile's reputation in the market by bringing editorial quality to the fore and engaging with the industry. The magazine is well positioned to go from strength to strength in the coming months."

NEW CONSERVATION COLLABORATION

Sir David Attenborough opens namesake building

Sir David Attenborough has officially opened a new conservation campus named for him by abseiling down the living wall in the atrium. The building is the new home of the Cambridge Conservation Initiative, a strategic collaboration between the University of Cambridge and nine biodiversity conservation organisations. The radical remodelling and refurbishment, designed by Nicholas Hare Architects, is a working exploration of how to promote biodiversity and create new habitats in the midst of a busy city.

The living wall is irrigated by rainwater collected from the roof and is shaded by photovoltaic cells set into the rooflight above. A new green roof, which replicates the characteristics of the local Cambridgeshire chalk grassland, is an experimental area where researchers can study the colonisation of the different roof conditions by invertebrates, plants and birds. Sheltered rooftop courtyards



contain rain gardens linked to hidden reservoirs below their decked surfaces helping to reduce pressure on the City drainage system. Among the planting are bee hotels and bird and bat boxes. The two towers, which rise high above the roof, have roosts for raptors and boxes for bats and swifts. Live feeds from webcams monitoring the habitat areas can be

displayed on screens around the building. Sir David Attenborough said: "By bringing together leaders in research, practice, policy and teaching, we stand the greatest chance of developing the solutions required to save our planet. I am enormously proud that these collaborations are occurring in a building bearing my name."

WG+P design new fishing lodge within UK's largest angling site







Architectural practice WG+P (Waind Gohil+Potter Architects) have been appointed to design a new pavilion at Farlows Lake, the UK's top carp fishery. The site is in the heart of the Colne Valley in Buckinghamshire set within the green belt and covers over 25 acres of lake attracting many thousands of visitors a year.

The new lodge will replace a temporary building made from containers that currently sits on a peninsular surrounded by a group of lakes known collectively as Farlows Lake.

The brief for a permanent facility was to design a contemporary practical pavilion that could be delivered within in a tight timeframe and modest budget, yet continue to bring intrigue and refinement to this prime position bordering the lake.

WG+P's design is largely a pre-fabricated modular single storey timber structure that combines a natural and raw aesthetic approach with sophisticated detailing, a structure that will integrate into the surrounding trees and green belt.

A repetitive design form is arranged in a sweeping crescent with a light-weight metal roof 'floating' over the top. A limited number of materials are used for the building which also needed to incorporate a large tackle

shop, cafe, wash rooms and office space.

The glulam timber frame is designed to be prefabricated off-site along with the walls and roof which will arrive as pre-made/pre-insulated panels that are then craned into place. This on-site assembly of frame and unclad envelope will take under a month to construct meaning Farlows Lake can continue to fully operate for the majority of the Spring.

The design was allowed a 'lighter' touch given that visitors to Farlow's go primarily to fish and are familiar with braving the elements, so will not expect a warm retreat. This enabled a sustainable approach with minimal heating and thermal performance, which meant by developing an envelope that would usually be substandard by normal measure, less materials were needed for construction and single glazing appropriate. Furthermore, the lake itself can be used to heat the lodge by linking a heat pump to coils of pipe laid within the water.

WG+P Director, James Potter commented: 'A fishing lodge lends itself to being a simple timber structure but we wanted to bring elegance to the design along with refined detailing. It was crucial for the pavilion to sit comfortably and blend within the landscape, hopefully our design raises the bar for lodge design'.

events

CONFERENCES

Zero Carbon Design Conference 08 – 09 September, Birmingham www.zerocarbonbuildings.world

COURSES

Handcrafted concrete for small projects 19 May, London www.buildingcentre.co.uk/events

FESTIVALS

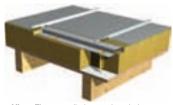
Clerkenwell Design Week 24 – 26 May, London www.clerkenwelldesignweek.com

London Festival of Architecture June, London londonfestivalofarchitecture.org

CORRECTION AND CLARIFICATION

In the article on page 14 of our Healthcare Design and Build Supplement, published in April, the stated job title of contributor Jitesh Patel is incorrect, being taken from information supplied to us and used in good faith. Mr Patel's correct title is Senior Development Manager, Kajima Partnerships and we apologise for the error. In the article on page 6 we would also like to clarify that the DSDC is not a charity in itself but is supported by a charity to which donations can be made via www.justgiving.com/dementiaservices.





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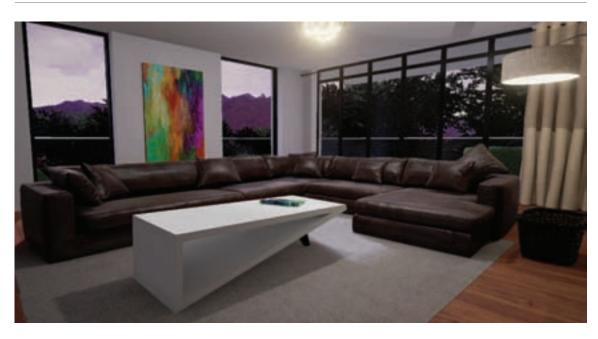


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future watch

Norman Hayden explores the world of virtual reality design



Virtual Reality (VR) brings the ability to walk through rooms

It's the current big thing, a must-have piece of kit reflecting the breathless growth of digital technology. We see virtual reality in special effects – from swimming with whales to fighting zombies – allowing you to become completely immersed in an experience.

And commentators argue, this will soon be a fixture in our living rooms as we play ever-complex games and watch more sophisticated movies – witness some scenes in the latest *Star Wars*.

Indeed, the gaming industry has been leading the way and many see virtual reality (VR) as simply for game playing. But when politicians wear the headsets for every available photo opportunity, then you know that VR has really arrived.

The concern in some circles, however, is that architects will be too slow to take up this transformational technology.

VR is the term used to describe a three-dimensional, computer generated environment which can be explored, and interacted with, by a person using a headset. That person instantly becomes part of this virtual world and is immersed within this environment. Whilst there, they are able to manipulate objects or perform a series of actions by moving their head and using a controller.

Whether it's 3D movies or video games, VR is increasingly common in our everyday experience. The on-screen action is complemented by the introduction of a 'special effects' fictional world, viewed as a fully-immersive involvement through the headset.

Media big hitters such as Sony have been developing the headset fully-immersive experience for some time while Samsung is releasing consumer versions of their virtual reality (VR) headsets this year.

With the BBC also predicting that 2016 will be the year that VR goes from niche to mainstream, where does architecture stand in relation to this revolution?

Worryingly, some observers feel there's a danger that it could lag well behind in exploiting its design potential and may take ages to catch up. Proponents of VR suggest that, unlike other industries, architects have been slow to grasp the nettle of this rapidly-advancing technology.

Progressives in the industry point to those architects who feel that viewing designs in fully-immersive 3D environments is very much for 'tomorrow's world' and stick to design forms that they know and are comfortable with. VR is here today and here to stay, they argue. As a result, the way architects relate to space has changed forever and there can be no comfort zones.

Given the rate of technological progress, this has come about relatively recently. For, it wasn't that long ago when flat hand-drawn plans by architects were all that clients saw and builders had to work on. These were followed by

Continued overleaf...



Typical of domestic properties to which VR can be applied

blueprints then this was superseded by computer-aided designs.

Now, the further step change sees 3D environments developed from architectural plans capable of being experienced through VR goggles or headsets.

What exactly does VR bring to the party? VR has a huge range of other useful applications, especially within the architecture and construction industry.

Its technologies take internet browsing beyond flat screens, enhancing architectural perspective through a new understanding of scale, proportion, light, materials and community orchestration.

Platforms in today's market such as the Oculus Rift, Gear VR, Google Cardboard, HTC Vive, and Hololens – combined with software like Unity or Unreal – open a whole new design field. VR, it would appear, has become the ultimate tool to explore the possibilities of space: to imagine what's possible, independent of the any constraints imposed by real spaces.

Current market leaders Oculus, burst on to the scene by releasing their first headset, the Development Kit 1, early in 2013 and after a second version a year later they were bought by Facebook in 2015 for an incredible \$2 billion, giving some indication to the potential of the technology. Their first consumer headset, with great improvements from the development versions, has finally been released. Rivals HTC and Sony are releasing their versions, too.

VR, supporters say, brings many advantages that simple flat plans or 2D computer images cannot provide. One of the greatest benefits is that viewing structures in this way allows for a greater appreciation of the sense of the scale involved. It also offers the opportunity to spot any issues with the structure before it's built – avoiding costly post-build alterations.

Using a technology as interactive as VR leads to increased levels of interaction with architects' designs. When 'walking' through a building, users can

open doors, turn on lights and even make stylistic changes to the interior. From a planning point of view, VR also offers architects a powerful tool to help gain local authority permission.

One of the fastest-growing UK practitioners are Plymouth-based TruVision – a recently-established collaboration of Joe Taylor, managing director, Conor Handley-Collins, sales and marketing, with Lewis Goodall and Gary Robertson, development.

In addition to virtual reality experiences, TruVision also offer clients many options to tailor projects including video walkthroughs for promotional purposes or bespoke interactions allowing the customising of a structure (see above image).

Overall then, where are we in terms of architecture and VR design? The industry has moved from sketches through blueprints to building information modelling and now VR. For some, VR certainly doesn't have to spell the end of traditional blueprints and CAD designs. They will probably stay a staple in the industry, supplemented by VR when projects require increased immersion to demonstrate designs effectively.

On the other hand, some observers predict that traditional methods will disappear and within a few years every architect will design using 3D goggles sending clients virtual models of their projects so they can walk through them wearing a 3D headset.

The message for practices up and down the land, appears to be clear: strap in and hold tight – the journey into space, the final frontier in architecture, is under way.

TruVision VR provide virtual reality walkthroughs of buildings and environments, allowing people to virtually walk around their new home before it's even built.

They have been involved in a variety of different projects including, most recently, a campus visualisation for Plymouth University, allowing students to walk around the university's facilities without even having to attend an open day.

As well as creating virtual homes, a variety of schools, cinemas and even super yachts have chosen to use VR ensuring every fine detail is correct, avoiding costly post-build alterations.

In the creation of these visualisations, TruVision VR use architectcreated files such as CAD, Revit and SketchUp before adding realistic textures, accurate lighting and interactive features. Beyond that, the interactive abilities of virtual reality headsets allow aspects of a building to be customised in real time, from the style of the kitchen counters and cupboards, to the furniture in your living room and the paint on the walls.

VR allows people to change interior design elements while inside their new project, seeing the effect of the changes immediately and creating the perfect space, so saving a lot of time and money.

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CASE STUDY

Tang Foundation Headquarters



November 2015, the Tang Foundation, an organisation dedicated to education, held the grand opening of its headquarters in Suzhou, designed by Woods Bagot. A place for collaboration and innovation, the headquarters has been designed to be a place where the "future" is born. The building has been donating to the top 21 universities of China, representing the latest innovations and technology that are driven by imagination. Different educational functions are all housed under one roof, creating an innovative approach that inspires, unites and stimulates the students mind.

Dedicated to education in China, the Tang Foundation's new Headquarters is a future-thinking space where innovation meets collaboration.

The Chinese headquarters building is a simple structure that houses all of the foundation's administrative functions, exhibitions, lectures and symposiums. Separated into two main parts: Education and Traditional Chinese Medicine, Woods Bagot was responsible for the interior fit-out of the educational facilities.

Delivering on Mr. Tang's mandate to create a space differentiated from that of a school or museum, Woods Bagot was careful to tailor the space to the students rather than government officials. One of the most important focal points of the building are the exhibits donated by the 21 universities that the foundation is sponsoring. They represent the latest innovations and technology where



imagination is the driving force behind. Woods Bagot also has a culture of Giving Back to the Community and approach Tang Foundation as a non-profit project. Given the different educational functions all being housed under one roof, an innovative approach is adopted to convey the message to students, hoping to inspire, unite and stimulate the young minds.

The Main concept for Tang Foundation Headquarters was to "inspire" – the mandate from Mr. Tang, the founder of the foundation.

The first impression is always important entering a building, the lobby is, essentially, the face of the building. It sets the tone for the rests of the spaces.

"After going through numerous design ideas regarding column treatments, we did not come up with anything that we were happy with until one day, we came across some young people on the street playing "Spinning tops." I was mesmerised by the motion and energy and came up with the strange idea of conveying that sense in the reception. Earlier sketches show different kinds of column enclosure and we were experimenting with different materials. At the end, we chose to use artificial stones because of its stability and durability." Says Godfrey Lam, senior associate of Woods Bagot.

The result is a feat of engineering and perseverance. The final form of the column enclosures, after numerous modifications, houses the reception desk, seating area and a reading area. The result is a dynamic sculpture that



juxtaposes with the serenity of the rests of the interiors.

The rest of the public space is an extension of the exterior courtyards. The wooden curvy walls, with the occasional bamboo plants conveys a sense of "quiet dynamic", juxtapose with the "hurricane" like column enclosures. There is a balance between calm and energetic, light and dark through the building.

The complex houses an auditorium that seats 400 at its maximum. Instead of designing it like a tradition lecture hall, the walls were lined up with sound absorbing panels and clear polycarbonate panels over the concrete wall, with LED lights behind which illuminates the whole wall. This gives the illusion that the wall panels are floating from the concrete walls behind, creating a sense of lightness that balances the activities housed within.

The library houses Mr. Tang's vast collection of books. Instead of using tradition book shelves housed in an enclosed space, we take the concept of "Lego" and conceive the whole space make up of giant lego blocks made out of acrylic that can be stacked in different configurations. The result is a library space that can expand or contract, stacked up high or low, according to the user's desire.

The whole project is conceived as a dynamic space, at different paces according to different functions. It is a place that is tailored to the users, not the institution. A place that we hope to foster imagination amongst the users, a place that they can truly enjoy.



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COMPETITION

Nottingham design competition will prove that architecture is 'Nott Forgotten'

National funding has been secured for an innovative new design competition which will have competitors' architectural ideas come to life in Nottingham city centre.

The Nott Forgotten challenge has been created by the Nottingham & Derby Society of Architects (NDSA) and will focus on five less cared for spaces in the Lace Market area of the city – located at St Mary's Gate, Wing Walk, Hollowstone, Adam's Walk and High Pavement.

Open to all architectural firms, universities and schools in the East Midlands, the society aims to inspire and involve the region's creative minds – no matter what age or discipline. Participants will submit designs to transform an existing site and the winning designer will see their work made into a reality.

Matt Greenhalgh, president of the NDSA, has big plans for the competition and is pleased that the Royal Institute of British Architects (RIBA) East Midlands has got behind the project.

"It's very rare that regional competitions like this get national funding, this shows how unique Nott Forgotten is. The RIBA has dedicated a substantial portion of its regional funding to support the challenge. This is a huge achievement and is a sign of the good work the society is doing in contributing to the local community.

"Nott Forgotten gives participants the chance to actually make a change to the landscape of their city – which is very unusual in a local competition and makes the design challenge a really special project," said Matt.

Almost 150 people attended a competition preview event in Nottingham to learn more about the chosen sites and the competition. Speaking at the preview evening, Kathy McArdle chief executive of the Creative Quarter, said: "The challenge that Nott Forgotten proposes is a medium-term intervention that can shift perception and the experience of space.

Intervention to make the Lace Market feel safer, brighter, enjoyable, inviting, colourful, tell a story, celebrate history will open up the space's social possibilities.

"Dream, imagine a design and make a design a reality for the public to engage with. This is a chance to imagine. Make the familiar landscape and streetspace shift in perception. Make it so that people never see it in quite the same way again."

Award-winning artist, Wolfgang Buttress, who will be judging the competition's entries, also commented: "I'm very exciting to be involved with the project and look forward to seeing the proposals."

The NDSA has been running for almost 154 years and this will be its first running of a regional competition. The society is keen to encourage participants, at whatever level of architectural expertise, to get involved and make a difference in their local area.

"It's crucial for the future of any industry to inspire the next generation and Nott Forgotten is a great platform to do this. It's a fantastic opportunity to showcase the good that architecture can do and for people, young or old, to make a real difference." added Matt.

Nott Forgotten, due to the nature of the project – as a physical change will be made to the city's landscape, requires regional support from businesses.

"We're keen to make the challenge a success but to do this we need financial backing.

"Suitable sponsorship packages are available, catering for SMEs up to large corporations, which give businesses the chance to increase brand awareness to those in the architectural industry, the East Midlands' professionals and those in the education sector – as well as feeding into existing potential Corporate Social Responsibility strategies," said Matt.



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my view

Clague's Karl Elliott considers the role of BIM as he advocates a change to the way buildings are procured

Karl Elliot

We are living in times when we are ever more demanding of information-rich experiences. And the fact that a gadget in the palm of our hand that can deliver this information is undoubtedly appealing.

Technology is clearly a force for change – if not always a positive one, then certainly an unavoidable one. The reality of this evolution in technology has been to reshape aspects of our everyday living and, in turn, re-shape our industries, from mining to aviation and food production, all with the promise of convenience and efficiency. We strive to make ourselves more and more competitive and the push has been a global one.

Of all the industries, construction is undoubtedly the largest and, perhaps, the most complex and demanding on people and resources. It is surprising that change in the UK construction industry has been such a long time coming despite there having been a number of catalysts for this change – including the Egan and Latham reports which laid bare a catalogue of failings.

So, here we are: Building Information Modelling – or "BIM" for those in the know – as the Government finally got its act together and mandated that publicly-funded projects costing over £6 million must be driven by BIM by 2016. It seems a long time since the first 3D CAD software was available back in the 1980s; however, the technology was simply not a commercially-viable proposition and it has taken 30 years for it to catch up.

But, from the start, there seems to have been a fundamental misunderstanding that BIM is 3D modelling and this has, in the large part, been driven by the software companies pushing their all-inone BIM solutions. In short, the software companies have been allowed to hijack



the definition. It is becoming more apparent that there is a great deal of regret in the industry that the term BIM is misleading and that, maybe, Project Information Management would have been a more appropriate label.

So, with the process of project collaboration and data management on the one hand and the promise of 3D CAD applications, that it is claimed will do the job for us, on the other hand, has the promise of something new simply overwhelmed our common senses?

You might be forgiven for thinking that BIM is overloaded with abbreviations that only make its comprehension unbearable for those trying to grasp its key concepts. You might also be forgiven for thinking that those people on the ground who are actually building these projects are too far removed from the processes that go on and that real collaboration is more often than not just a pipedream.

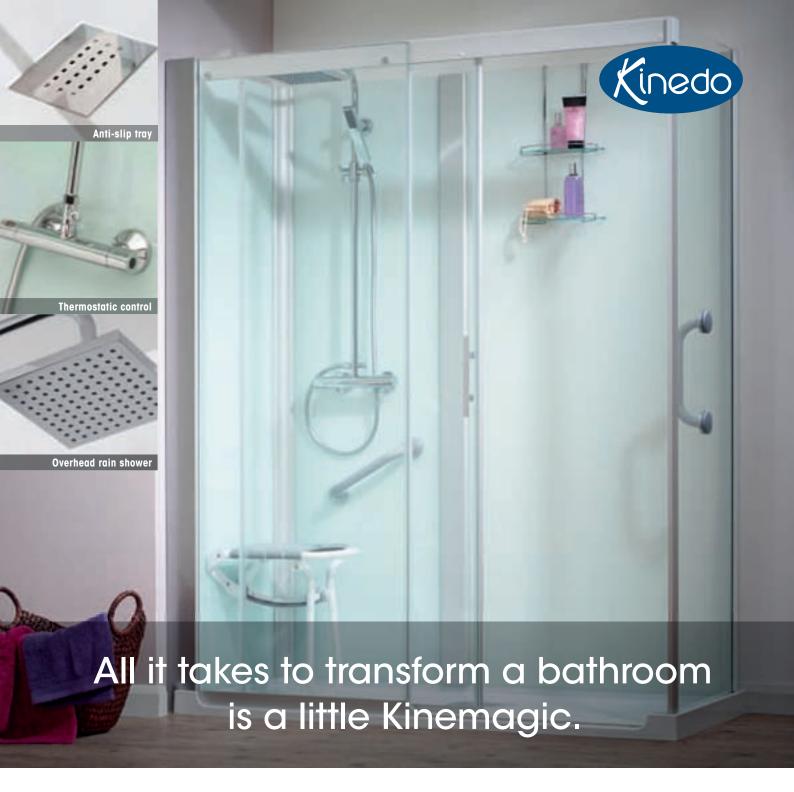
After all, we want to be able to connect with the specialists and the

craftsman so that their knowledge becomes a tangible part of the end product. But this isn't really possible unless the rules that govern their engagement are such that they have some incentive to be fully involved early on.

We also live in a world where the client is key and when the client is being dictated by capital instead of whole-life cycle costs, BIM might at first appear as an unnecessary complication to an already-expensive process that maybe they could do without. Equally, there doesn't seem to be any real 'buy-in' from the people that matter. But is this all just gripe from an industry that doesn't want to be told?

The fundamental change that has come about through the use of technology is one where we are moving away from a traditional 2D output to data-rich 3D models. As simple as this sounds, in some quarters there is fear that this is a shift away from drawing and an assault on artistic licence.

But can the architectural profession Continued overleaf...



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An architect's prerogative is to make buildings beautiful

'We need to be more efficient and innovative'

afford this nostalgia and is this what is preventing us from embracing modern procurement methods that are better suited to the age of data bytes? Does this change not open the door to a realm of possibilities we could only dream about 30 years ago – such as laser scanning, 3D printing and virtual simulation.

Whilst the architectural profession's prerogative has always been to make things that are beautiful, part of the fear perhaps is that we will become agents of the pre-packaged building design, where creativity is watered down by modular closed panel flat-pack style architecture.

In the middle of all this are the smart contractors who are starting to make the process their own, recognising the efficiencies in having component libraries and, of course, where they can offer savings profit will follow. Maybe the key driver for BIM will be the contractor who has whet his palette and can no longer see the future in

traditional procurement.

When they start to turn down 'non-BIM' fee bids in their numbers, maybe then we'll see everyone running to make 3D modelling their new art.

The opportunities that this new way of working brings us are considerable and extend way beyond the building process. We can collectively start to compare asset data sets and really start to consider the life cycle of the product at the earliest stages, right through to the end user experience.

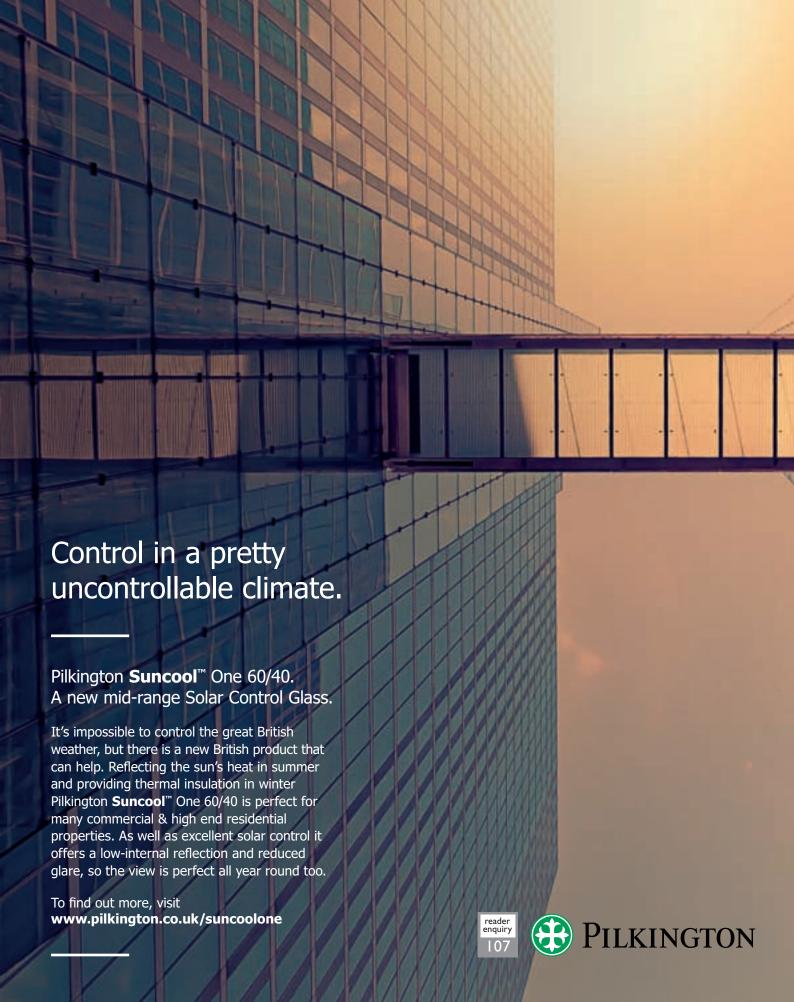
To secure investment in construction projects clients are more and more often demanding buildings that perform and work from the day of handover as predicted by the designers. But, while the clients are the key to driving forward their ambitions, they will need to be smarter in how they enter into the procurement of built assets and, not least, through the way they set out their requirements and expectations.

The key to BIM is collaboration and the key to collaboration is effective communication. To get the most out of it, the employers' requirements need to be stated at the beginning and, to some extent, they need to recognise early on what they want as an end product. What BIM then gives us is not only a methodology and a framework for this collaboration to take place, but also an effective vehicle to carry the information through the process.

BIM should guarantee that this information is reliable and where asset managers are concerned, data is king. We either allow technology to dictate how we think or we can embrace it and use it as the tool it is meant to be to push the boundaries of our thinking. The way we manage ourselves in the ever more complex ways of making things is essential if we are to be resourceful in these times of austerity.

To this end, we need to be more efficient, ever more innovative and, above all, smarter about how we manage ourselves so that we can effectively manage our resources. BIM is a vehicle for us to effectively manage the process so that the end product can be used reliably and allow it to be assessed, measured and compared with other assets in a bid to drive out waste from an industry that has been wasting too much for too long.

Karl Elliott is Managing Partner at Clague norman@netmagmedia.eu



Institution of Structural Engineers names 2016 Gold Medallist: Robert Halvorson

Robert Halvorson, SE, PE, FASCE, FIStructE, executive vice president of Halvorson and Partners (based in Chicago, Illinois) has been named winner of The Institution of Structural Engineers' 2016 Gold Medal.

The Institution, one of the world's largest membership organisations dedicated to the art and science of structural engineering, presents the award to recognise individuals who have made an outstanding contribution to the profession of structural engineering.

Bob, as he is known by most, is an industry leader in the structural design of high-rise buildings and long-span structures. Over the last four decades he has engineered more than sixty buildings of forty stories or taller, including Wells Fargo Plaza (formerly Allied Bank Plaza) in Houston, 111 West Wacker in Chicago, Torre Caja Madrid in Madrid, Burj Mohammed bin Rashid Tower in Abu Dhabi, and Hanking Center in Shenzhen.

Bob began his career with Skidmore Owings & Merrill (SOM), serving in

their Chicago, Houston, New York, and London offices, becoming the firm's youngest partner at the age of 31. Bob founded Halvorson and Partners in 1996, growing the firm to a staff of nearly seventy professionals within a decade. Under Bob's leadership Halvorson and Partners merged with WSP | Parsons Brinckerhoff in 2015.

Bob said of receiving the award: "To use the British expression, I am gobs-macked! I had no inkling or expectation of this award, and I was in shock for quite a while after being informed. Looking at the eminent past winners of the Gold Medal, I am very thrilled and honoured to be considered worthy. I very much look forward to giving my Gold Medal Address to members of the Institution in the summer."

Martin Powell, chief executive of The Institution of Structural Engineers, said: "The Gold Medal is our most prestigious award, recognised around the world as a mark of unique accomplishment in the profession. It was first presented in 1922, to Professor Henry Adams, and since



then recipients have included Felix Candela, Ove Arup, Oleg Kerensky and Edmund Happold.

"We are very pleased to add Bob to this distinguished list, recognising, among his many other achievements, his extraordinary creative ability and his unique contribution to the structural design of tall buildings."

For more information on the Gold Medal visit The Institution of Structural Engineers website www.istructe.org. Additionally visit hpse.com to learn more about Halvorson and Partners – a WSP | Parsons Brinckerhoff Company.

Construction innovation comes to LIFTEX

Energy-saving compact gearless lift motors, wireless lift controls powered by apps, explosion proof lifts, portable lifts and safety devices are just some of the innovative solutions being demonstrated by more than 100 exhibitors at the UK's only lift and escalator event, LIFTEX 2016 this month (25 -26 May, ExCeL, London).

"LIFTEX only takes place once every three years, so this is an ideal opportunity for architects, owners, managers, specifiers, installers, manufacturers and designers of lifts to see the latest ground-breaking technology in action" says Show Director Nick Mellor. "Products to save energy, prevent accidents and address crucial accessibility issues faced by many, will be available to view first hand. This is the place to be if you're looking to save time, money and energy on your equipment."

LIFTEX is free to attend. Highlights on the show floor include:

- Platform lifts, stair lifts and a portable platform lift from Terry Lifts. Its Melody 3 Platform Lift also has an added feature of automatic gates.
- Real-time servicing, maintenance and repair customer management portal from Apex lifts.

- MEC32 Lift Controller Microprocessor system which brings 32Bit processing to the lift industry from Digital Advanced Control.
- The first training programme in business administration for lift companies from Docensas S.L, unveiled for the first time in the UK.
- Energy efficient, compact gearless motors designed to eliminate the space and high maintenance challenges of conventional electric motor / gearbox and hydraulic systems, being shown for the first time in the UK by Lafert.

Historic restoration job awarded top spot among London buildings



A successful restoration of 18th and 19th century buildings comprising Wilton's Music Hall by Tim Ronalds Architects has won the capital's biggest prize for architecture, the RIBA London Building of the Year Award.

The restoration of was revealed as the winner of the award, which is sponsored by Marley Eternit, at a ceremony on 3 May, alongside 36 winners in the RIBA London awards. The judges praised the atmosphere created in the restored Wilton's as "seductive and unforgettable" with the architect's skill being used to give areas of the building an "archaeological character."

The sensitive restoration project took nine years from start to completion including raising funds and Wilton's remained open to the public throughout the duration of the building work.

Other projects among the winners named inclued a new home for ravens at the Tower of London; a Japanese take on the London terraced house; and a new centre of excellence for brain research.

The awards ceremony – attended by many of the capital's top architects and clients - was held at the Stirling Prize-shortlisted University of Greenwich Stockwell Street Building, which houses the University's Architecture Department.

There were a grand total of 181 entries for the RIBA London awards this year with 68 schemes being shortlisted and visited by one of four expert juries. The fact that each shortlisted scheme has been visited and thoroughly examined is a key reason for the RIBA's regional awards being widely regarded as the most rigorously judged awards scheme in the profession. Winners will now be considered for a RIBA National Award which will be announced on 6 July. The shortlist for the RIBA Stirling Prize will be drawn from the RIBA National Award-winning buildings later in the year.

For a full list of winners in the regional RIBA London awards go to www.architectsdatafile.co.uk





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ARCHICTECTURE SKILLS SHORTAGE IN BIM

'There are very few candidates with relevant BIM experience available to the market'

Matthew Gilchrist of Peace Recruitment



Skills shortage in BIM threatening projects

Construction firms across the UK need to take urgent steps to help combat the architecture skills shortage in BIM to avoid sabotaging project programmes, according to a leading architecture recruitment specialist.

Matthew Gilchrist of Peace Recruitment has warned that a lack of suitable architectural candidates with experience in Building Information Modelling (BIM) could potentially bring some construction projects to a halt unless action is taken now. This is a particular problem for the public sector, where it is now compulsory for companies to use BIM for centrally procured Government projects.

According to Gilchrist, recently voted Scotland's top recruitment consultant, this problem is being caused by short-term thinking among the majority of construction firms. Instead of planning ahead he said "they are only interested in looking for architectural candidates when they require them, and then are shocked when none are immediately available."

Gilchrist explained further: "There are very few candidates with relevant BIM experience available to the market. So construction companies need to find other ways to bridge this skills shortage, and the simple answer is to invest now in training for both new and existing employees, and reward BIM-

experienced employees both financially and professionally.

Gilchrist added: "I see the majority of firms being reactive instead of proactive when it comes to hiring architectural employees. Companies are still being cautious on recruitment since the recession, instead of looking at the bigger picture and planning ahead. However this is causing a shortage in BIM-experienced candidates, a problem that will only intensify if companies don't act.

"Construction firms need to start investing in architectural employees, whether that's training up existing employees, or hiring non-BIM experienced candidates and training them. It's vital they start to see the bigger picture and take one step backwards to take two steps forward if you like. There are lots of very talented architectural candidates out there without BIM experience, so firms need to lower their expectations and utilise these people. I know it is expensive to invest in training, but firms don't really have another choice. It may cost them money now, but how much value will it add in the future?

He concluded that it is also vital that companies look after existing employees, particularly those with experience in the field of BIM: "Anyone with BIM experience is in such high demand they could walk into another job tomorrow."

Feilden Clegg Bradley award for Red House's "celebratory" home for innovative free school

Studio Leader at Feilden Clegg Bradley Studios Andy Theobald has picked up RIBA South West Project Architect of the Year for his work on The Red House, the home of the forward-thinking Plymouth School of Creative Arts.

Plymouth College of Art opened the school in 2013 as a radical new kind of mainstream city centre 3–16 free school which fosters a "creative continuum of learning through art."

The Red House is also intended to be a catalyst for community regeneration in Plymouth's Millbay docklands, which ranks among the 10 per cent most deprived neighbourhoods in the country. The building offers agile, openplan studio spaces rather than traditional classrooms, supporting the school's teaching methods which are designed to inspire students and provoke staff to work in new ways. The school sees children and staff learning through making in all subject areas, across a broad and bal-

anced school curriculum. Close collaboration between the architects, contractor Kier Construction and Plymouth College of Art led to a creative and intricately planned design solution by Feilden Clegg Bradley and a project cost of £1,450 per $\rm m^2$. The building is a landmark that acts as a symbol of regeneration to visitors arriving in Plymouth, and will now be considered for a RIBA National Award which will be announced on 23 June..

Chair of the jury for the awards, Keith Brownlie commented: "Large colourful buildings are normally limited to out of town retail parks. When bright, saturated colour is thoughtfully applied to a full urban block the effect is mesmerising. This is not however a throwaway gesture – the pivotal location of the site between port and city and the school's wide community use make a celebratory building seems wholly appropriate. This is a complex and challenging project made to look rather effortless in practice."

Global architecture firm JTP moves head office to 19th century Docklands warehouse

Leading international architectural and masterplanning practice JTP (formerly John Thompson and Partners), is moving its head office to a listed former warehouse in the London Dock development in Wapping by developer St George.

The Grade II listed Pennington Street Warehouse is being sensitively restored to accommodate a variety of uses, including a number of routes providing public access to the site for the first time in over 200 years. The warehouse was built in the early 19th Century as part of the first enclosed commercial docks in the capital. JTP will be moving its London team of 90 staff into a new office interior which provides a contemporary design studio, whilst respecting the heritage of the listed building.

The 15 acre site is being transformed into a vibrant new neighbourhood with 1,800 new homes (486 of which will be affordable) and 180,000 sq ft of commercial space which will contribute to Wapping's growing creative quarter.

The development is set within 7.5 acres of landscaped open space, with a public square at its heart for events throughout the year and a new pedestrian boulevard and promenade.



Craig Carson, managing director of St George City said: "We are delighted that JTP will be the development's first permanent commercial occupier, joining 90 artists' studios. This fantastic vaulted building, steeped in history, is fast becoming a hub for creative businesses."

JTP's recent projects include the regeneration of St Clement's Hospital in Bow, Battersea Power Station, Bow River Village, The Hamptons in Worcester Park; West Hampstead Square; and Putney Wharf for St George.







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eng.109



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RIBA launches funding for new architecture research

The Royal Institute of British Architects (RIBA) is calling for applications from students, academics and practitioners interested in conducting research in architecture during 2016/17.

The RIBA Boyd Auger Scholarship aims to support applicants in their personal, professional and academic development within the architectural field, providing an opportunity for imaginative, original research, and travel.

In 2016, one scholarship worth £5,000 is available to individuals or groups of students and graduates for a

period of international travel (which can be during a period of international work experience). The RIBA Research Trust Awards are offering grants of up to £10,000 each, available to support original independent architecture research by practitioners, academics and recent graduates. The judging committee particularly welcomes applications from practiceled researchers.

The **RIBA** LKE Ozolins Studentship is worth £18,000 outside London or £20,000 in London annually to a student who wishes to pursue, continue or complete a higher degree

in research (PhD/MPhil or MRes) for a maximum of 3 years.

RIBA President Jane Duncan said: "The breadth of research that we are able to support through these schemes is incredibly valuable to the profession. Innovative and creative research enables members to argue their relevance and identify new opportunities. I am thrilled that this year we have nearly £100,000 to allocate towards research into architecture."

The deadline to apply is 2 June 2016. For more information, visit www.architectsdatafile.co.uk and enter reference number 36583.



international focus

Visit the website www.architectsdatafile.co.uk and enter the reference number for more information







Benoy is proud to announce its appointment to the Bahrain International Airport's new terminal development. Benoy, as Sub-Consultant to Hill International (Middle East) Ltd., is providing services for the Interior Design of the new passenger terminal building as part of the 'Bahrain Airport Modernisation Program'. The considerable expansion will increase Bahrain International Airport's capacity to 14 million passengers per year. Four times larger than the current airport, the future 200,000m² terminal will serve as a gateway to the Kingdom of Bahrain once complete in 2019.

Ref: 39914



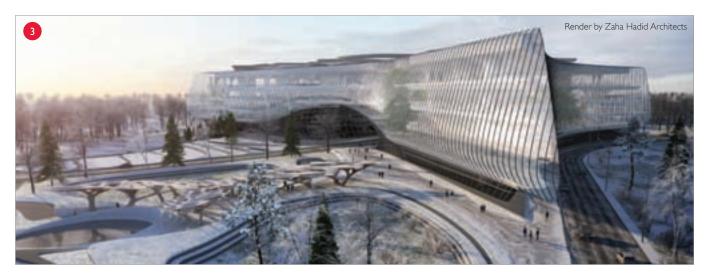
JOHNS HOPKINS MEDICINE ALL CHILDREN'S HOSPITAL, USA SKANSKA

Skanska has signed a contract with Johns Hopkins Medicine All Children's Hospital to build a research and education facility on the hospitals campus in Florida, USA. The contract is worth \$63 million which will be included in the order bookings for Skanska USA Building in the first quarter 2016. The 21,000 square metre facility will consist of research and laboratory spaces, an educational space that will have an auditorium with 400 seats, collaboration space, office/administration space and a biorepository. Skanska began construction in March 2016. The project is slated for completion in March 2018.

Ref: 34054

exploring architecture

showcasing the latest projects from around the world



SBERBANK TECHNOPARK, SKOLKOVO INNOVATION CENTRE, MOSCOW, RUSSIA ZAHA HADID ARCHITECTS

Zaha Hadid Architects has been selected to build the Sberbank Technopark at the Skolkovo Innovation Centre, Moscow, Russia. Considered to be Russia's Silicon Valley, Skolkovo will be home to the laboratories and campuses of Russia's fast developing IT, biomedical, energy, nuclear and space innovations. The I3I,000m² Sberbank Technopark will become the bank's cradle of IT innovations, accommodating the I0,000-I2,000 people working in Sberbank's information technology and marketing departments. Christos Passas, project director at Zaha Hadid Architects, said: "The necessity to innovate and collaborate is fundamental to Sberbank's operations. Our research into interconnected, multi-function environments has driven the Sberbank Technopark design".

Ref: 4747 I



IL CENTRO SHOPPING CENTRE, ITALY DESIGN INTERNATIONAL

IL CENTRO Shopping Centre boasts 92,000m² of GLA and is estimated to attract over 15 million visitors in the first year of operations. Design International formulated an indoor-outdoor city street concept where single shops were treated like stand-alone buildings (or 'Palazzos') within the shopping centre main building, and integrated in its innovative design tree-lined internal and external streets, squares, grand staircases, children and recreational areas, balconies, a multitude of restaurants and cafes and a great diversity of sight lines where shops and signages are always the ultimate focal point.

Ref: 62127



VRINDAVAN CHANDRODAYA MANDIR, INDIA THEATREPLAN

International theatre consultancy practice, Theatreplan, has been selected to provide auditorium, conference centre and technology design services for Vrindavan Chandrodaya Mandir (VCM), the world's tallest temple under construction in Vrindavan, Uttar Pradesh, India. Theatreplan will be responsible for auditorium planning including integrating interior design and acoustic requirements; conference centre design for government and ISKCON delegates; all associated technical infrastructure design including stage engineering, production lighting, sound and video integration.

Ref: 36512



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editor's product focus

I. IMPERIAL BRICKS

One of the UK's leading suppliers of the finest traditional handmade, wirecut and pressed bricks, Imperial Bricks specialise in producing a growing range with a strong focus on regional variations. Available in imperial and metric sizes, the bricks are perfect for the restoration, renovation and conservation of period properties, while offering an authentic look for new build projects. These bricks offer a great alternative to reclaims, being frost resistant, with sustainable supplies. Imperal Bricks' experts can assist architects with selecting the right product for each project through a brick matching service and specialist advice, with the ability to create bespoke blends and weathering using special processes to achieve the perfect match.



enq. 112



2. THE DECK TILE COMPANY

Levato Mono Porcelain paver system is designed for fast, cost effective installation over most surfaces including; single ply membranes, roofing felt and other delicate waterproofing systems. The 20mm thick porcelain pavers are also available in larger formats, are highly abrasion and stain resistant, fire and frost proof and achieve R11 slip resistance – required for outdoor use. With all its features such as height adjustable and slope correcting supports, high load bearing and 45kgs per m², over 40 finishes available (plus co-ordinating internal tiles) Levato Mono is the ideal system for balconies, roof terraces and piazzas – residential and commercial use alike.

enq. 113

3. MIKE WYE & ASSOCIATES

Glasscrete is the breathable, insulated floor from Mike Wye & Associates. The Glasscrete insulated floor system now joins the LABC approved systems supplied by the company.

A one-off certification process proving compliance with building regulations and standards across England, Wales and Scotland, LABC Registered Details helps ensure acceptance by local authorities, saving time and reducing bureaucracy. Mike Wye & Associates has sympathetic and sustainable systems registered with LABC to make life easier for you, including insulated limecrete floor systems and Secil Vit cork board insulation.

enq. 114





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enq. 115

5. POLYPIPE TERRAIN

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enq. 116





6. KETLEY BRICK COMPANY

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cpd focus

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enq. 118

WATER TREATMENT IN COMMERCIAL HEATING SYSTEMS



Without proper water treatment, commercial heating systems will fall foul of corrosion and limescale phenomena that can result in problems such as reduced energy efficiency, poor system performance, loss of boiler warranty, premature replacement of plant and components, and even complete boiler failure. Sentinel Commercial's CPD on water treatment in commercial heating systems will help participants to avoid all such issues. Following an in-depth look at how corrosion and limescale develop in and affect heating systems, CPD participants will learn how to apply best practice water treatment to both heating and hot water systems.

01928 704330 www.sentinelprotects.com UNDERSTANDING U.K BUILDING
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This CPD from Airflow Developments, specialists in air movement for over 60 years discusses the reasons why we need to improve indoor air quality in residential buildings and the Building Regulations that need to be adhered to for delivery of an effective, compliant ventilation strategy.

The course will cover the following topics:

- Building Regulations and how they apply to the specification of a ventilation system
- Understanding Compliance Guides and their place in the specification process
- Good, better, best From a simple extractor fan How Mechanical Ventilation with heat recovery can provide the complete ventilation solution
- A system is only as good as the ducting installation – The do's and don'ts of installing a system
- Sign off by Building Control is mandatory – How to comply

Advise clients on the aspects of a poor indoor environment that can effect occupant health and degrade the fabric of a building Explain the principle of operation of a Mechanical Ventilation with heat recovery system and where it will provide the most suitable ventilation solution. Fully understand that proper attention must be paid to the correct installation of ducting and the consequences in energy loss and fan performance when it is not. An overview of how to commission a fan system so that 'Installed Performance' standards are met and Building Control will sign off the project.

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enq. 122

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0161 627 4222 www.quantumflooring.co.uk

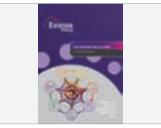
WETROOM DESIGN AND SPECIFICATION



The popular Wetroom Design & Specification CPD from CCL Wetrooms, guides Architects through the process of designing and specifying a watertight wetroom. The free, 45 minute technical presentation can be organised at a time to suit the practice and covers all of the key considerations of designing and specifying a wetroom. This includes wetroom design & layout, waterproofing, drainage, floor build up and installation. A section on how wetrooms can help meet the Lifetime Homes Standard is also covered.

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Evinox Energy has launched a Heat Network Design Guide and CPD Seminar for Communal & District heating systems. Packed with useful information, their Heat Network Design Guide contains all of the key factors to consider when planning, designing and delivering a communal or district heating project. The company's CIBSE approved CPD seminar provides the opportunity to explore this topic in depth and identify new ways to add value, performance and efficiency to your heat network project.

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The Workshop Tour from **Urban**

Front will run for just over an hour and incorporate the following Learning Outcomes:

A good understanding of how a contemporary hardwood door is manufactured; a better understanding of the types of hardwood and their benefits; a good ability to interpret CADs used for manufacture; a better ability to specify doors correctly; an understanding of the various issues related to making doors. The company also runs regular CPD's on specifying Hardwood Timber doorsets.

01494 778787 www.urbanfront.co.uk





Changing the options for accessible toilets

Making 'reasonable adjustments' to the built environment to ensure compliance with the Equality Act is being made easier with the launch of a new solution for 'away from home' accessible toilets. Space To Change toilets plug the gap between conventional (Building Regulations Approved Document M 2013) wheelchair-accessible toilets, and the 'desirable', additional, larger and better equipped Changing Places+ toilets. The concept enables venues that are limited financially and/or on space to meet the needs of up to three million British children and adults* who need changing and lifting facilities for their personal hygiene. It encompasses a 7m^2+ (3m x 2.5m min) wheelchair-accessible toilet that further includes an adult-sized changing bench and a hoist. Space To Change has been developed with leading Changing Places campaigners and Clos-o-Mat (one of Britain's leading suppliers of disabled toilet solutions at home and away).

0161 969 1199 www.clos-o-mat.com

eng.130



Steven Chandler Joins GEZE UK



GEZE UK has strengthened its presence in the East of England with the promotion of Steven Chandler to area sales manager for automatic doors. Steven joined GEZE in 2002 as project estimator and has more than 20 years' industry experience across technical, sales and estimating and customer support. In his new role, Steven will be responsible for increasing the company's

market share across the East Midlands and East Anglia. He will work closely with fabrication companies as well architects, specifiers and contractors to provide the right solutions for each project from across the company's comprehensive range of automatic door products.

01543 443000 www.geze.co.uk

enq.131

Saracen appoints project coordinator



Workplace consultant Saracen Interiors has appointed Georgina Roberts to take on the position of small works project coordinator, assisting the small works project manager with the inception and completion of small works projects. The role of project coordinator includes the monitoring and management of the performance and delivery of all subcontractors, taking on overall responsibility for the

efficient completion of works on site and the quality of the same. Georgina has a background in customer service, having started her career as a hot desk operator for MITIE. Saracen Small Works has grown considerably in the three years since its official launch, almost doubling its turnover year on year.

Polypipe makes Housebuilder Product Award



For the fourth year running, Polypipe Ventilation is pleased to announce it is a Finalist in the Housebuilder Product Awards Best Services Product category; this year for its Domus Green Line Rigid Duct Bends. The company won the award in 2015 with its Domus Radial Duct System and in 2013 with its Silavent

Green Line HRX Mechanical Ventilation with Heat Recovery (MVHR) system. With the move to more energy efficient air tight homes, effective ventilation in residential developments is an important necessity. This has helped evolve whole house, mechanically driven systems such as MVHR. However, if these are to perform efficiently, ducting needs to be an air-tight, quality end to end system, such as Polypipe's Domus rigid duct systems.

BD Office Architect of the Year Award



Bennetts Associates was named Office Architect of the Year at the prestigious BD Architect of the Year Awards at London's Excel. Hosted by Stephen Fry the event was held on the evening of Ecobuild's Architecture day. Speaking after presenting the award to the winners, Kaz

Spiewakowski, managing director of GEZE UK said: "We are delighted to have sponsored the Office Architect of the Year Award. The quality of all the practices shortlisted demonstrates just how much talent there is in the UK and it must have been a tough decision for the judges. We work closely with architects on a daily basis to help make their vision become a reality and have enjoyed being part of such a respected event that recognises their achievements."

01543 443000 www.geze.co.uk

enq.134

GEZE UK appoints Phil Mead



GEZE UK has demonstrated its commitment to the growth of its manual closers and window technology ranges with the appointment of Phil Mead as area sales manager. Phil will be responsible for managing key accounts and increasing new business across Kent, Surrey and within the M25 and City of London. As well as

manual closers and window technology products, his portfolio will encompass automatic operators and glass products. Speaking about his appointment, Phil said: "I have an extensive network of customer contacts, backed up with years of sales experience in a complimentary industry so I am looking forward to the challenge with GEZE UK. their projects utilising our extensive range of products."

01543 443000 www.geze.co.uk

enq.135

New business development manager



Leading British manufacturer **Keston Boilers** is pleased to announce the appointment of Mark Roberts in the role of Business Development Manager for the whole of the South Coast of England. Mark is responsible for liaising with a diverse range of Keston's customers in order to assist them in their selection from Keston's range of combi, system and heat only boilers, all of which come with Keston's promise of a simple, straightforward and hassle-free solution. Mark has been a powerhouse in the heating industry since leaving

school – he has progressed his career with companies such as Plumb Centre and Vectawarm before joining Keston in January.

Around two thirds of Brits wouldn't consider working in construction, says survey



Construction plays a major part in the UK economy, as well as providing much-needed housing and infrastructure to the country, but is that how the public sees the industry? At a time when the construction industry has a shortfall of talent, with an estimated 100,000 workers needed to cope with Britain's infrastructure construction demands, the findings of the survey show the gap between public perceptions of the construction industry and the reality. A YouGov poll of 2,000 members of the public, commissioned by Construction United, measured perceptions and found that the vast majority would never consider a career in the construction industry, with just 17 per cent saying that they would give it thought. The words Brits associate with construction may shed some light on this – when questioned, 68 per cent of the survey-takers described the work as 'strenuous', and 58 per cent saw it as 'dirty.' Meanwhile, only 11 per cent think the industry is 'exciting.' The industry, however is the driving force behind the biggest investment into British infrastructure since Victorian times. Construction United is a coalition of some of the industry's leading companies and experts, which flies the flag for all of the great things about the sector, while dispelling the myths and outdated perceptions that the public may have about construction.

 $@Construction Utd\ www.construction united.co.uk$

SE Controls feels the power with Bristol's Electricity House development

Electricity House, Crest Nicholson Homes' stylish city centre apartment development in Bristol is using an advanced smoke ventilation system from leading smoke and natural ventilation specialist, SE Controls, to help keep residents safe if a fire should occur.

Originally designed by acclaimed architect Sir Giles Gilbert Scott in the 1930s, the six-storey Grade II listed building has being converted into 85 luxury apartments, while ensuring that many of the original design features are retained or reinstated to enhance its art deco style.

The building's main atrium is at the heart of the SE Controls solution, as the smoke ventilation system is designed to vent smoke from the atrium in the event of a fire to ensure escape routes are kept clear.

To achieve this, SE Controls designed, installed and commissioned the system, which comprises 37 SHEVTEC* automatically controlled louvres,

which are manufactured and tested in accordance with BS EN 12101: 2. The SHEVTEC* louvres also incorporate 'fall protection' to increase safety, as well as using IP rated external motors, which are essential to allow easy access for future maintenance.

A further 21 low level air inlet louvres and linear door actuators also form part of the system, all of which are controlled by a series of OS2 control panels with integral battery back up and fully compliant with the relevant sections of the BS EN 12101 standard.

SE Controls' Business Development Manager, Stuart Coote, commented: "Electricity House is a landmark building designed by an iconic British architect, so we're delighted to have played a part in this project.

"Smoke control and fire safety is not only a core part of our business, but also an area we're very actively involved with via organisations such as the



Smoke Control Association, FIRAS and British Standards, to ensure that design, manufacturing, installation and maintenance standards are constantly being maintained. Although this is important for the industry, the real benefit is for residents who rely on our systems for failsafe performance, if a fire should occur."

01543 443060 www.secontrols.com

enq.138

REHAU engineer awarded prestigious status



Neil Baker (left), a Senior Engineer at REHAU, has become one of the very first engineers in the UK to achieve prestigious Chartered Technological Product Designer (CTPD) status. Demonstrating that the window and door industry can keep pace with the very best in the

UK, Neil has joined an exclusive group which includes the Director of Design at Jaguar and the Global Head of Claims, Standards and Insights at Dyson. Chartered Technological Product Designer status is a new initiative launched by the Institution of Engineering Designers (IED) following the granting of a licence from the Privy Council. It gives professional recognition, support and registration to product designers, putting them on a par with Chartered Engineers.

01989 762600 www.rehau.uk

enq.139

20th anniversary with The VEKA UK Group



2016 marks an important anniversary for South West home improvement specialists, Heavers of Bridport as it celebrates 20 successful years, fabricating and installing industryleading PVC-U window and door systems from The VEKA UK Group. The family-run company, established by master builder George Heaver, started life in 1960.

Today, the business mainly comprises the manufacture and installation of windows, doors and conservatories from The VEKA UK Group alongside a range of other home improvements. Dave Jones, Managing Director of The VEKA UK Group commented: "A systems manufacturer like ours couldn't hope for a better ambassador than Heavers.

01282 716611 www.vekauk.com

enq.140

New U-value calculator app



Kingspan Insulation is taking U-value calculations mobile with a free app for Apple, Android and Windows devices. The new application features over 6,000 calculations, all approved under the BBA/TIMSA competency scheme. The intuitive interface will be familiar to anyone who's used Kingspan's popular online U-value Calculator (www.uvalue-calculator.co.uk). With just a few taps, users can easily adjust everything from rafter depth to

masonry thickness. This makes it simple to find the right insulation product and thickness for a desired floor, wall or roof U-value. The mobile and tablet friendly app requires no registration and is suitable for use with the Building Regulations/Standards in England, Scotland, Wales and Northern Ireland.

 $01544\,387\,384\ www.kingspaninsulation.co.uk$

eng.141

Comar complete Prodrive HQ



Comar Architectural Aluminium Systems, with their approved fabricator Charter Commercial; recently completed a new build project for Prodrive's prestigious new headquarters in Banbury. Comar 5P.i. Top Hung and Casement thermally efficient

polyamide insulated windows were specified. These aluminium windows offer outstanding weather performance and reduce heat loss through the trademark P.i thermal break ensuring low U-values so energy bills are minimised. Comar 6 was selected due to its slim 50mm profiles which maximised the glazed area for natural day lighting.

0208 685 9685 www.comar-alu.co.uk

Tobermore deliver striking finish for new business quarter in Leatherhead

obermore world class products have been used to create the striking landscape at The Square, an exciting new business quarter in Leatherhead, Surrey. The Square was designed by HLM Architects and comprises four impressive office buildings ranging in size from 10,010 sq. ft. to 31,568 sq. ft. and totalling 68,851 sq. ft.

The Square is the first speculative development in the South East to achieve an EPC A rating. Managed by Workman with Tolent Construction appointed as main contractor, the buildings have been constructed with energy efficient design features and the latest technologies to minimise running costs.

The landscaping has been designed to reduce the impact of car parking on the external environment with the creation of an avenue connecting the main entrance to a central amenity space, produced with Tobermore's Manhattan plank paving. This has formed a focal point at the centre of the project.

Manhattan is a linear paving product that can be used to create unique landscape designs due to the long, slender product shape and the granite aggregate surface layer that produces a sparkling finish, similar to natural granite.

A mixed length Manhattan design was specified for The Square in a stunning random colour pattern consisting of Silver, Mid Grey and Graphite. The contemporary look created with this Manhattan design reflects the style of the modern new business quarter perfectly.

The scheme also benefits from the provision of 269 car parking spaces that have been formed with Tobermore's Sienna Duo block paving in the rich colour of Sandstone. Like Manhattan, Sienna Duo features a beautiful granite aggregate surface layer.

Tobermore's Shannon Duo block paving in the warm, blended tones of Heather has been incorporated on the walkways surrounding the four office buildings. Shannon Duo is designed with a smooth



surface finish, ideal for pedestrian use and wheeled traffic such as wheelchairs and office deliveries.

0844 800 5736 www.tobermore.co.uk

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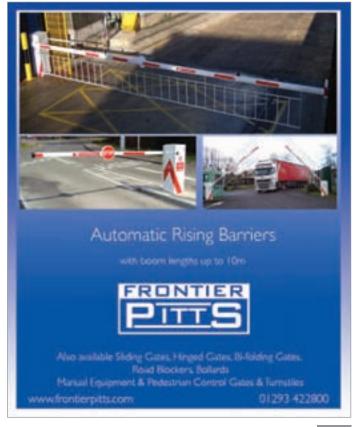


Luceco refurbish Navigation House lighting

Navigation House, the head offices for Wakefield & District Housing, have just completed a lighting refurbishment at their Castleford site. Significant savings have been made by replacing the existing T5 fluorescent luminaires with energy saving LED LuxPanels complete with dimming controls and Carbon Downlights, from Luceco, in circulation areas and corridors. LuxPanels are quick and easy to install with no maintenance requirements and no visible frame when installed in the ceiling grid, the High Efficiency LuxPanels have the additional benefit of 13 per cent extra visible light when compared with other LED panel luminaires. Carbon Downlights are an ideal replacement for compact fluorescent downlights, offering running cost savings of up to 60 per cent. Designed to retrofit ceiling cut outs of common compact fluorescent downlights, the Carbon is also supplied with interchangeable bezel options. With the project completed, CO₂ omissions have been reduced by over 22 tonnes each year and energy savings have been calculated at over £6,000 per annum. with additional savings gained from not having to replace failed fluorescent lamps.

01952 238 100 www.luceco.com

enq.144



Washroom's contemporary makeover for Victorian office



Commercial washroom designer and manufacturer, **Washroom Washroom**, has given a Victorian office building a modern makeover with new washrooms installed as part of a comprehensive refurbishment programme. The building on the south side of London Wall, which has retained many of its period features following the refurbishment coordinated and managed by principal contractor PDC Construction Ltd, offers a number of modern office suites finished to a high specification. Washroom designed and installed new male and female washrooms as well as disabled facilities on several floors of the building, replacing the existing washrooms with a modern new design. Washroom's flush fronted Alto toilet cubicles, designed to provide a virtually seamless facade, were finished with an attractive dark wood effect Engineered Veneer to ensure a consistency of colour for each cubicle door. Laminated ducts were installed behind the toilets and urinals in a soft grey colour to complement the Engineered Veneer cubicle doors and complete the high specification design. For the vanities, solid surface Corian, which is available in a wide range of colours and can be cut to any shape and joined with inconspicuous seams, was used to create the individually shaped inset sinks. An increasingly popular choice for commercial washrooms.

All-inclusive range of interior fit-out and refurbishment solutions from Stortford Interiors



Stortford Interiors is a specialist interior architectural package contractor offering an all-inclusive range of interior fit-out and refurbishment solutions to commercial business environments nationwide. Through the supply and installation of ceilings, drywall and glass wall services Stortford Interiors satisfies the demands of Tier One and Fit-Out contractors. Its joinery division, Parkrose, compliments this offering with joinery and washroom solutions. A varied and comprehensive client base utilise Stortford Interiors experience and technical knowledge to meet their needs within the commercial office space sector and beyond. Stortford Interiors provides a diverse and varied mix of products and service solutions and facilitates interface management and de-risks delivery. Recent commercial awards include 4 Kingdom Street and the new HQ for Battersea Dogs and Cats Home. 4 Kingdom Street is a high-end commercial office building in the striking Paddington Central development, London where Stortford Interiors and Parkrose will install a broad package scope including metal pan ceilings, drywall door sets and joinery. The fit-out at Battersea Dogs & Cats Home is set for completion this month Stortford Interiors have sought best value to deliver high-specification cellular office and meeting spaces, reception and assembly rooms in the new building.

01279 714 600 www.stortford-interiors.com

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Enfield Council uses a major interior operation to move into letting office space

More than four decades after opening, Enfield Civic Centre is undergoing a major internal redesign courtesy of Pellings. Steve Menary reports

Pour decades ago, Enfield Civic Centre was at the cutting edge in the design of public buildings. The notion then of a local authority becoming a commercial landlord would have been largely novel. But then the original building was designed to cater for around 600 people.

That design also had some elements that would leave many in the architectural world incredulous.

Glass reinforced plastic (GRP) planters throughout the 10 floors meant that the council needed to employ an internal gardener.

And on the corner of each of the 10 levels are floor to ceiling glass panel doors. Today, those doors offer a view of central London architectural landmarks like the Shard – and also still open up.

"They're called smoke doors," says Matthew Mulvany, maintenance programme manager at Enfield Council. "They weren't designed for the Fire Brigade to get in from the outside, but to let the smoke out."

Mr Mulvany keeps a safe gap between the doors, which, if opened, offer a direct route to the ground floor.

Continued overleaf...



'The space evolves out of the central hub, which is more informal with softer seating'

Matt Godwin, project designer, Pellings









While the doors remain, the GRP planters are long gone. Just one remains in the office of the council chief executive, who, ironically, occupies what was once the room used by the borough architect.

Designed by Eric G Broughton & Associates and built by Costain, the original building was opened on May 6 1975 by Her Majesty, the Queen Mother.

In addition to some of the design 'innovations', the building was also filled with a then highly durable material that was also still all the rage in the 1970s: asbestos.

Around a dozen skips have been needed to strip out the

asbestos on each floor as a redevelopment that is turning the council from simply owning office space to leasing it.

The scheme is working from the top down and refurbishment of the ninth and eight floors have been completed, allowing the council to lease out this space to the Royal Free Hospital.

The project is also a chance for the council to change its working environment as part of an initiative, which was originally known as the New Ways of Working Programme but has since been rechristened Enfield 2017.

Work started in 2014 and on completion in August 2017,



the redeveloped Civic Centre will be able to hold around 130 people per floor. That number is dictated by fire access requirements, but as the project comprises the refurbishment of floors three up to nine that represents a big change.

Mr Mulvany explains: "Health and safety and conditions have been the big driver. There was extensive asbestos but the council was also looking to extract maximum value. It's about maximising the real estate." If you go into a place that's never 100 per cent occupied, then that's inefficient."

"It's a culture change. It's hot-desking but there are other areas too. It will be first-come first-served. It will need policing

by facilities management to stop people personalising space."

Matt Godwin, project designer at Pellings, is keen to emphasise that the design is not simply about cramming more people into a spruced up space.

Mr Godwin explains: "There are lockers that allow people to put things away. It's not just hot-desking. There are more traditional one-to-one desks on the outside. The hot desks in its truest sense will be in the front area."

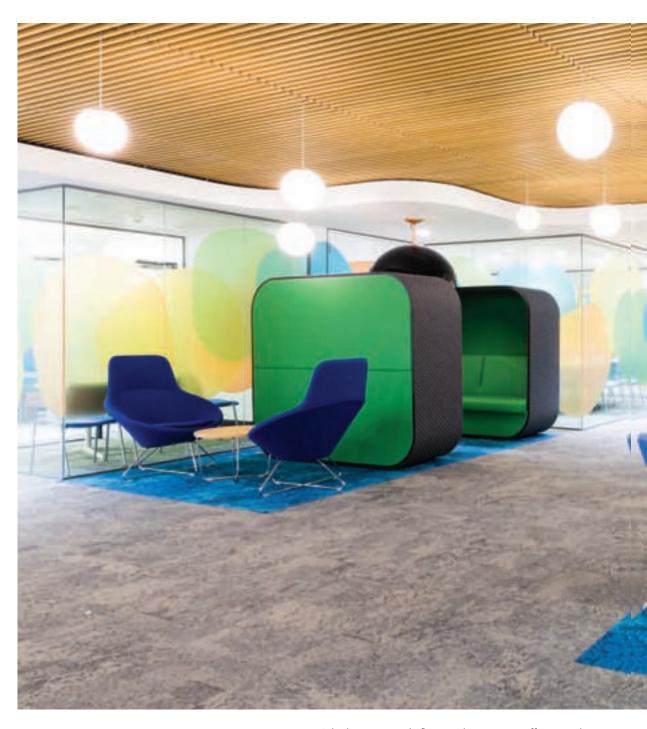
With the scheme looking to change the culture of working within the council, the interior design has been crucial in achieving this shift.

Continued overleaf...









'The idea was to add warmth and a feeling of informality, which works well with the curved plasterboard'

Matt Godwin, project designer, Pellings

The layout on each floor works on a ring effect. On the outer ring are desks, some shared but others with single users. Then a ring of more formal meeting space rings the central core, which comprises more informal meeting space with pods and carpets used to direct users. Mr Godwin adds: "The space evolves out of the central hub, which is more informal with softer seating. You can already see people using the sofas for a quick chat, then a more formal chat at their desk."





"We've also been careful with the acoustics. That was one of the requirements as work was done to determine which areas require privacy."

As a result, the glass partitions in the central core, which is decorated in primary colours including the number of the floor, is double glazed and stands more than 40 dB.

The design, particularly in this stylish inner core, is aimed at keeping sightlines free. Taller items, such as photocopiers, are

placed by the columns, while above all this hangs the central design feature: the ceiling.

Initially, an oak ceiling had been specified but this fell victim to value engineering.

Mr Mulvany adds: "I had to battle to stop the ceiling being value engineered out as it was fundamental to the design. What else can you do apart from focus on the ceiling?"

While the original European oak specification has been Continued overleaf...





changed, the client and design team are all pleased with the replacement from Hunter Douglas.

The system is comprised of cassettes of slats made of a West African wood, Ayous, which hang on wood dowels.

Mr Godwin adds: "The idea was to add warmth and a feeling of informality, which works well with the curved plasterboard."

Rigitone plasterboard featuring holes from British Gypsum is also used to create a distinct impact with lights from XAL and sound baffles from Ecophon.

"The lighting in the space is a lot less formal with bigger shades," adds Mr Godwin, who is based in Bromley. His team at Pellings also includes Donna Staples and Paul Kelly from another of the practice's office in Barnet.

Pellings has also provided contract administration services, while the project team has sought to source environmentally sustainable solutions for the materials wherever possible.

The stained Ayous used for the ceiling slats is sourced sustainably, while the blue carpet is manufactured from recycled fishing nets supplied from Interface's Urban Retreat range.

Mr Godwin explains: "Most of the materials we have chosen are about transparency. It's a reasonably new product and very good for what we are trying to do in the central core. We want to define the different zones but we want a softer transition between the spaces."

A bright colour scheme has been employed the changes between each floor. On the ninth floor, yellow, blue, green and turquoise are used. Move down a floor and one colour is replaced. That will continue as work moves down to the third and final floor included in the work.

The design was also careful to integrate access requirements. Mr Godwin adds: "We've future proofed it wherever possible as once you take out this plasterboard you have to take out large sections and we wanted to avoid unattractive access hatches. We've also tried to keep it as clean as possible."

This means that access to air conditioning units, or the need to add extra cabling in the mechanical & electrical work can be done without major upheaval.

As part of the project, research was undertaken into temperature variations and there was found to be a difference of four degrees in different parts of the same floor. "A lot of that was to do with solar gain," adds Mr Mulvany.

A DALI lighting management system has been used to provide a balance between natural light, whilst external works will also see work to the exterior, including the replacement of some glazing panels.

Mr Mulvany adds: "There was film on the glass but it was breaking down and the sun's rays were bouncing around and that wasn't keeping out the solar gain. A later part of the scheme will be to redo the mastic and reapply the film."

The building has 11 floors each of around 950m² in size. The eleventh, which is not accessible by lift, includes the plant room. A tenth floor was refurbished in-house under the supervision or Mr Mulvany, who explains: "Floor 10 was done as a trial. People liked that but we want to go from eight out of 10 to 10 out of 10."

With the council now a commercial landlord and not just the owner of a building, a 10 out of 10 rating will be needed to justify the rent but Pellings and the construction team in Enfield look on course to be achieving that already.

Project details

Project: Enfield Civic Centre Location: Enfield, north London

Cost: £8.2 million

Client: Enfield Town Council

Architect: Pellings Quantity surveyor: Stace

Mechanical & electrical consultant: TB&A

Contractor: ITC





Tessera Layout and Outline

Forbo Flooring Systems has launched a new low-level loop Tessera carpet tile collection, consisting of two ranges: Layout and Outline. With the directional design and 32 light-to-dark colourways of Layout and the eight organic linear designs in the Outline range, specifiers can create striking floor schemes to enhance a variety of workspaces. These new solution-dyed carpet tiles have a chunky texture that delivers a tactile and contemporary vibe. They provide a perfect flooring solution for commercial offices, having BREEAM ratings of A and A+ and meeting the SKA rating for M12 soft floor coverings for the office scheme.

Kingspan Kooltherm FM Pipe Insulation



The outstanding energy performance and environmental credentials of Kingspan Kooltherm FM Pipe Insulation have been used at the new Queen Elizabeth University Hospital. Specialist subcontractors Lagwell Insulation Ltd and McNicol Insulation Ltd installed Kingspan Kooltherm FM Pipe

Insulation on the hot and cold service pipework across the site. Kingspan Kooltherm FM Pipe Insulation achieves thermal conductivities as low as 0.025 W/mK and holds BDA Agrement* certification, LABC Registered Detail & Warranty, and is available as a downloadable BIM object.

01544 388601 www.kingspanindustrialinsulation.com

eng 150

33 Glasshouse Street refurbishment



AET Flexible Space, a leading provider of underfloor air conditioning is currently delivering equipment to 33 Glasshouse Street, London after receiving the order from Emico early this year. AET Flexible Space are supplying their space saving underfloor air conditioning to floors three to seven of the building. With underfloor systems, fully conditioned air is fed into the plenum by zonal

downflow units (CAM), which is then supplied into the workspace via fan terminal units (Fantile). The fantile units feature integrated controllers where users can personally adjust fan speed and temperature to suit their own comfort. Systems can be configured with underfloor or high level return.

01342 310400 www.flexiblespace.com

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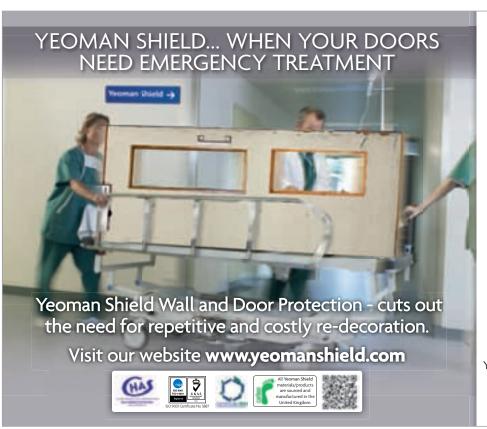
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Integrating cutting-edge technology into architectural design

Proton beam cancer treatment offers new hope for patients but also poses design challenges for architects Atkins. Jess Unwin finds out more

ntegrating cancer treatment technology that's as yet unavailable in the UK is the challenge for architects working on the £30 million transformation of a health care centre in Newport, Wales.

Celtic Springs Cancer Centre is to be the first place in the UK where cancer sufferers will be treated using proton beam equipment. This specialised form of radiotherapy hit the headlines in 2014 when Brett and Naghmeh King took their son Ashya from a hospital against doctors' wishes so that he could get the treatment overseas.

Atkins are the architects tasked with the design of a building that used to be a clinic aimed at weight-loss and aesthetic plastic surgery but which will become a state-of-the-art proton beam facility by 2017.

That will be achieved through internal refurbishment and modification of the existing building and two new specialist extensions – one to house a vault for the proton beam equipment, the other to accommodate a vault for a 'traditional' radiotherapy linear accelerator.

Mike Bool, the lead architect for Atkins on the project, says: *Continued overleaf...*





"The biggest challenge at the outset was working out with the client the best route to go down in terms of the proton beam and linear accelerator vault construction.

"There are several ways of doing it, including using precast high-density blocks or solid, in situ-poured concrete. The option we have decided to go with is an outer and inner precast concrete panel with a compressed aggregate infill. This forms overall radiation shielding that is up to three metres thick. We decided to go down this route because it is quick, not as weather dependent as in situ concrete and it allows you to lay cable ducts for services as the infill is being built up."

These special measures are necessary to absorb the radiation that is generated during radiotherapy treatment. Another element of design to tackle this hazard is the layout of the entrance to the vault. Mike explains: "It's a bit like a maze with an indirect shielded path you have to walk to get inside so that radiation can never escape directly. With a traditional square room with a door you would have to rely upon very heavy lead doors for shielding."

While patients are of course exposed to radiation on the treatment gantry, further protection measures include the fact that medical staff who are operating the radiotherapy equipment do so from another room that is 10m away.

Atkins is working with German company Pravida Bau, which specialises in the manufacture of the vault system that will be installed at the Celtic Springs centre. The aggregate infill method they use is known as Forster Sandwich construction. Pravida Bau has in turn been working with medical supplier IBA, which has developed the proton beam equipment.

Atkins' primary job, says Mike, is to integrate the new technology into the architecture as a whole but, he adds, the company is well positioned to do so with experience over the past decade of working on a series of standard radiotherapy suites across the UK.

He continues: "Proton beam technology has been around in other parts of Europe for decades so the technology is not new in a broader sense and has been widely tested. It is new to us here in the UK so it's a learning curve but the principles of shielding and vault design are the same as standard radiotherapy."

It is worth noting at this point that under existing regulations for radiotherapy equipment a radiation protection advisor has to be appointed for the project to give guidance on required levels of protection, and the government body National Resources Wales is also monitoring the project.

Work on the existing two-storey building is a different kind of architectural challenge. Mike says: "We're trying to create an open and friendly atmosphere that is not intimidating for patients and visitors."

The ground floor will contain a patients' waiting area, consultation rooms, diagnostic CT and PET CT scanner zones and anaesthetic recovery rooms. The first floor contains the chemotherapy treatment facilities and office accommodation.

Mike continues: "People may just pop in for an hour to have a scan or they may be coming for chemotherapy in a different part of the building – whatever it is, what we're trying to do is both create clear pathways through the building and a relaxing environment so the visit is as comfortable as possible."

For much of the ground floor, the spaces there will be taken back to base structure before refurbishment creates "more of a spa or hotel feel, rather than that of a hospital", according to Mike.

Nevertheless, there are special requirements: for instance, the CT and PET CT scanner areas require lead-lined walls. Mike says: "The existing structure wasn't set up to take the weight of lead lining so we're cutting out sections of existing floor slab and reinforcing these so that we can build dense blockwork walls. These blockwork walls can then carry

Continued overleaf...



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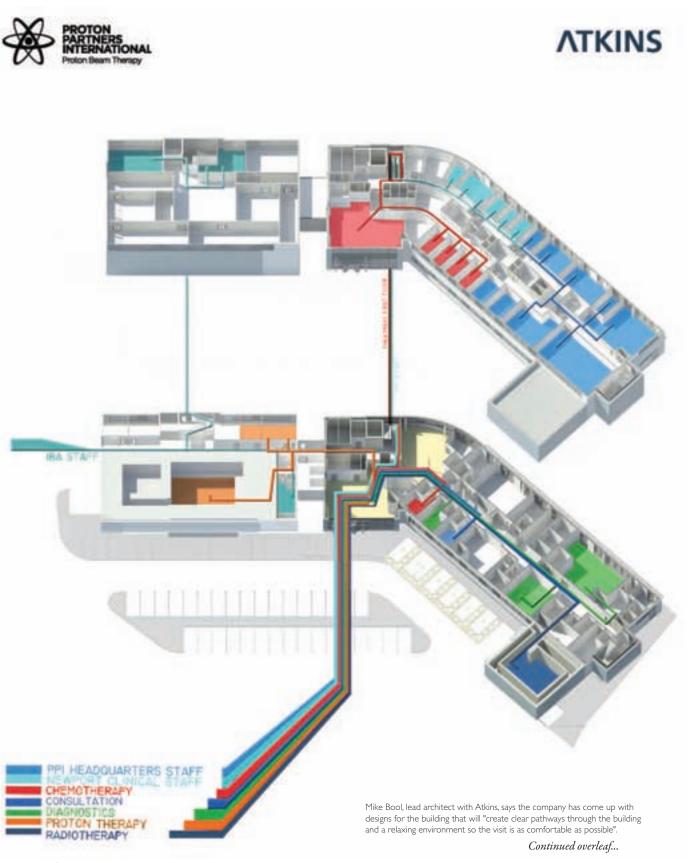
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'We're trying to create an open and friendly atmosphere that is not intimidating for patients and visitors.'

Mike Bool, lead architect for Atkins

The two extensions will increase the overall construction footprint by 40-50 per cent so how they fit in with the surrounding context needs consideration

an independent steel structure, which then carries the lead lining systems."

A review has also been carried out to make sure all the new spaces created follow Health Technical Memorandum guidelines – these are published by the NHS to set out minimums for space, ventilation and other environmental parameters. The rules also cover other aspects of service provision, including the appropriate sinks, floor and wall surfaces to be used to meet hygiene standards. Mike says: "All these issues need to be signed off by the Healthcare Inspectorate Wales if you want to treat NHS patients. It does take some consideration to get everything compliant."

With a project like this, another key architectural challenge is ensuring the new extensions work with the existing building – that they are "sensitive to the aesthetic of the existing building" as Mike puts it. That existing structure is steel framed with an engineering brick plinth at the base, composite metal panelling on the walls and roof, and aluminium windows and doors.

The two extensions – single storey for the linear accelerator facilities and three storey for the proton beam facilities – will increase the overall construction footprint by 40-50 per cent so how they fit in with the surrounding context needs consideration. Mike says: "We're looking to use similar





materials in the cladding of the extensions and the proton extension is three-storey like the existing building, which helps to tie in the building lines in terms of massing."

However, he adds: "We are looking to put in some feature elements, like perforated panels on the outside of the proton vault, that are a bit more exciting than a standard commercial building, creating a vibrant, interesting facade rather than just a solid block."

The company that will run the Celtic Springs Cancer Centre, and two other proton beam centres that will open soon after it in Northumberland and London, is Proton Partners International Limited (PPI). The company's Chief Executive Mike Moran draws on personal experience in his determination to do something special with the interior design at Celtic Springs. He says: "My brother had breast cancer 18 months ago and it wasn't the best experience sitting in the waiting room while he had treatment. I want to avoid that and make sure we have a better patient experience."

There was a strategy behind the choice of building too. He reveals: "We made a very deliberate decision to take a building constructed for another purpose but which already had the appropriate planning consent for clinic or health centre use. Much of the power and water services are already present so we can provide the standard radiotherapy and chemotherapy *Continued overleaf...

The finished exteriors will feature designs that are a bit more exciting than a standard commercial building, creating a vibrant, interesting facade.





in the refurbished parts of the centre earlier as a result – before the end of 2016. The proton beam therapy takes longer to bring into commission, but that should be operational by 2017."

He continues: "We've always wanted a collaborative approach to the design of the building. This project brings together technical partners like IBA, among others, Pravida Bau and our UK-based main contractor John Weaver. We're also linking in with the University of Cardiff and the University of Liverpool on a research project.

"Throughout the design process, we've been benchmarking what's available, both through the NHS and privately, to establish what's best practice and what we need to do to have excellence throughout, which is what we're striving for."

Final word on the project goes to Mike Bool: "At Atkins we thrive on anything technical and challenging so a cutting-edge project like this is very much where we sit as a company – but, at the same time, on a personal level, it's rewarding to be involved in helping to provide facilities that we hope will save lives."

Project details

Main contractor: John Weaver Contractors

Vault construction: Pravida Bau Gmbh, using Forster Sandwich construction*

Medical equipment -

IBA Medical: Proteus one (proton therapy equipment)

Elekta: Linear accelerator

Philips: Digital CT/PET CT and ambient lighting

solutions

Facade/windows – Cladding: Kingspan Windows/doors: Schuco

Lead engineering specialist: Calder

Metal stud partition walling: British Gypsum

Blockwork: Tarmac Topcrete Standard Solid Aggregate Blocks (High Density block)



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Renson is innovation with a clear vision: ensuring the occupant's health and comfort, while taking energy efficiency and the added value of aesthetics into consideration. How can you optimise your design aesthetically and functionally? Thanks to the combination of ventilation, nightcooling, sun shading and outdoor solutions, Renson is creating healthy and comfortable living and working spaces, while energy consumption is reduced to a minimum.

The continuous supply of fresh air and the extraction of contaminated air through a demand-driven ventilation system enables people to breathe healthy air at all times. First, it is important to extract polluted air from rooms and ensure it is replaced with fresh air. As people themselves are not able to detect changes in air quality or too high concentrations of CO₂ or VOC's, it is important that the ventilation level can be automatically adapted. Through integrated, intelligent sensors in a central demand-controlled ventilation unit, the ventilation will only go to a higher extraction level

in those rooms where higher ventilation levels are required. This automatic adaptation saves 30 to 50 per cent of energy as compared with a permanent ventilation flow.

Ventilative cooling, also known as 'nightcooling', is the principle where cooler outside air is used to naturally cool down the house. Large natural air flows are conducted into the house via louvres. Outside sun control guarantees comfort at 3 levels: thermal, visual and aesthetic comfort.

Exterior window blinds allow the warmth of the sun to enter when required, but prevent unnecessary cooling costs on warmer days. Large glass panels are frequently chosen in contemporary architecture, while excessive sunlight can cause overheating, disruptive reflections on screens and discoloration of the furniture and decor. An efficient outdoor sunscreen – sun control blades for the frame, brise-soleil above the window, sliding panels or wind-resistant screens – enables the occupants to enjoy the sun at any time of the day. The systems stop the sun rays from heating the



interior, without disturbing the garden view.

Aluminium blades provide striking facades with straight continuous lines. The ventilation and sunscreen systems are hardly noticeable from the inside, while invisible door systems ensure that closed doors and walls appear as one, without any disruptive frames and hinges.

01622 754 123 www.rensonuk.net

ena.157

Energy efficient, intelligent ventilation system improves indoor air quality in care homes



Natural ventilation specialist **Passivent** has introduced *i*MEV Total, an 'intelligent' mechanical extract ventilation system that offers an automated, energy efficient approach to optimising air quality. It is suited to large, multi-residential properties such as care homes where refreshing good indoor air quality is important for occupant well-being. The humidity-sensitive ceiling mounted extracts are flexible and adapt to the ventilation needs of individual rooms, increasing extraction rates as required in different areas at different times, without affecting other areas where ventilation is not needed. With ventilation controlled by the demands of the room environment, no user intervention is required. *i*MEV Total includes a 'constant pressure' fan that runs continuously yet varies its speed according to the humidity levels of the different areas of the building by sensing the pressure in the ductwork. At night, when demand and humidity levels are low and the extract units reduce in open area, the fan speed reduces to the quietest minimum setting. With its constant operation and automatically adjustable fan speed, lower energy usage is achieved. Using *i*MEV Total, a lower level of background ventilation is required to comply with Building Regulations and Building Standards compared to intermittent extractor fans. The system can also be installed in student accommodation, apartments and hotels.

Popular commercial tap range extended



A popular commercial tap range has undergone a major design and functionality overhaul to ensure modern water saving efficiency and design credentials are met. The 'Performa' range by **Pegler Yorkshire** has seen amendments to the classic design as well as the range extended to provide further options for commercial specifiers, plumbers and end

users. The Performa range now includes new design Non-Concussive high performance tap which benefits from a flow rating of 3.8 litres/min whilst the auto shut-off function gives 12-15 seconds of free flowing water. The inner cartridge has been redesigned to provide a smoother operation and easier push mechanism. It also benefits from a multi-directional filter which is fully adjustable providing a flow of water suitable for a range of sinks and applications.

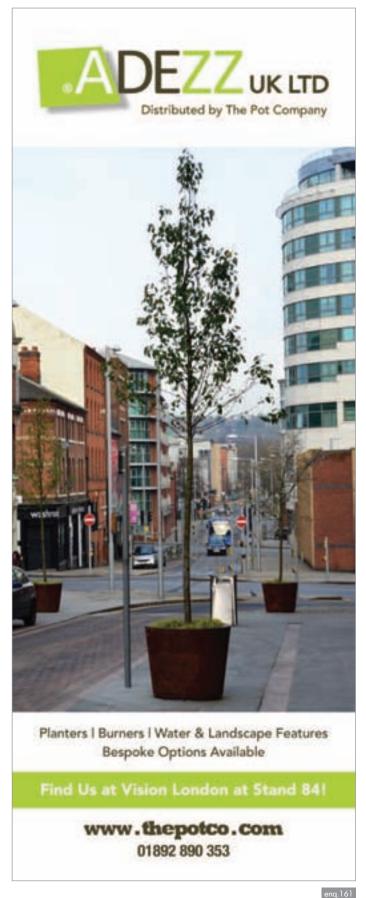
Lighting the way for an improved experience



Traditionally lighting has always been a huge proportion of a hospital's energy budget but with the rapid development of LED solutions that offer a greater level of performance and reliability Warwick Hospital was confident it could provide better lighting for less in three new wards. Working with

Tridonic partner, Century Lighting a lighting scheme was devised that delivers an optimum working environment, flexibility and comfort for the patients and thirdly meets the energy and cost efficiency criteria of the Trust.

01256 374319 www.tridonic.com



VMZINC exhibiting at Vision London



Zinc roofing, facade and rainwater system manufacturer VMZINC* will be returning to Vision London at Olympia Central on 7th and 8th June to discuss aspects of specification and sustainability. Products being exhibited include AZENGAR*, the first engraved rolled zinc finish shade of zinc available and

developed in response to feedback from over 400 international architects. Its matt finish is the lightest available and, being unaffected by fingerprints, is ideal for both exterior and interior use. PIGMENTO® Brown, the latest colour addition, will also be on display showing how it combines the texture of QUARTZ-ZINC® with a subtle shade of brown which is distinctive of the metal.

01992 822288 www.vmzinc.co.uk

vision landon stand no 40

ena 162

Gerflor delivers solution in Northern Ireland



Corriewood Private Clinic in Castlewellan, Northern Ireland is a well-managed healthcare facility that takes pride in responding to the individual needs of their residents at all times. When it came to producing this new build they wanted to ensure that the flooring would meet the high values they had already set for

the building. International flooring and interiors specialists Gerflor were chosen to deliver the high standard of flooring needed. A total of $2000m^2$ of Gerflor's Taralay Impression Compact and Tarasafe Ultra H_2O would be needed to fulfil this challenging project. The clinic wanted a flooring that would look warm and non-institutional, but at the same time deliver a non-slip safety solution.

01926 622600 www.gerflor.co.uk

enq.163

Polyflor helps to refurbish cancer care centre



Vinyl flooring from Polyflor was recently used to help refurbish Beechwood Cancer Care Centre in Stockport, Greater Manchester in time to celebrate 25 years of supporting cancer patients. Affinity255 heavy commercial luxury vinyl tiles in the Saw Mill

Oak design were installed in communal meeting areas at the centre free of charge by Manchester based flooring retailers Pauls Floors with help from other local fitters. Available in a variety of modern and traditional wood effect designs featuring authentic surface textures, tonal hues and grain detailing, the hard wearing Affinity255 collection of heavy commercial luxury vinyl tiles has been developed to create welcoming interiors that can cope with high levels of foot traffic.

01617671111 www.polyflor.com

ena.164

Forever white hygienic paint



The Forever White range from Everbuild – A Sika Company is expanding with the addition of Forever White Paint, a hygienic paint that protects against black mould growth in bathrooms and areas of high humidity. For use on walls and ceilings, Forever White Hygienic Paint is ideal for showers, bathrooms, wetrooms and kitchens and contains SteriTouch* Antibacterial Protection. Forever White Hygienic Paint is fast drying allowing two coats to

be applied in one day and dries to an exceptionally hard wearing finish that resists cracking and flaking. Highly versatile, this paint can be applied on a variety of substrates including concrete, brick, timber and ceramic tiles.

0113 240 3456 www.everbuild.co.uk



Vision London returns with over 120 speakers in its second year

Launched in 2015, Vision is the event for architects, specifiers, clients and suppliers. The place where these communities come together to discuss, debate and showcase the latest innovations and developments in architecture, design and the built environment. The event focuses on new and innovative building products and materials, providing ideas and solutions for new and inventive ways to achieve better building design solutions and comply with ever changing legislation



Building on the huge success of last year's launch event, Vision will return to London Olympia on 7-8 June, and promises to deliver even more educational content, practical solutions and innovative products for today's busy architect.

Through a series of seminars and case studies delivered by over 120 leading international speakers, alongside a carefully curated exhibition of cutting edge products and solutions, Vision is the meeting place for professionals connected to the built environment and a unique opportunity for suppliers to showcase their products.

The extensive CPD accredited seminar programme will cover the themes Future Materials & Systems, Technology Talks, Innovation in Architecture & Design, Building Health & Wellness, Smart Buildings, Building Modelling Information (BIM) and Offsite Construction.

The Innovation in Architecture & Design stream, sponsored by Marshalls, showcases a broad range of case studies and project types – from the new Alder Hey Children's Hospital to architect Flanagan Lawrence's acoustic shells on the Littlehampton seafront. The first day of seminars will feature one of the UK's most innovation-packed homes: SOLCER House in Bridgend, South Wales. This is a one-off demonstration house, designed and constructed as part of the Wales Low Carbon Research Institute's SOLCER project, which is led by the Welsh School of Architecture, Cardiff University, and supported by Swansea University's SPECIFIC research project and other partners.

The Building Health & Wellness stream, sponsored by Saint-Gobain, focuses on a number of innovations which are emerging to help measure and enhance wellbeing in buildings. Saint-Gobain have created the Multi-Comfort standard – a way of designing sustainable, healthy and comfortable buildings that also achieve the Passivhaus standard in energy efficiency. The first UK project built to the standard, a new sports and drama hall for King's Hawford Junior School in Worcester, designed by Associated Architects, is close to completion. As well as promoting high levels of energy efficiency and thermal comfort in the school, the standard focuses on audio, indoor air and visual comfort to create a quality learning environment for teachers and students.

Saint-Gobain technical director Mark Allen and Residential Sector Director Stacey Temprell will be outlining the Multi-Comfort concept and the story of the debut UK project as part of the Building Health & Wellness seminar programme on 7 June.

Continued overleaf...



The Future Materials and Systems educational stream at Vision will feature some of the very latest innovations that are starting to demonstrate their potential in construction, including robot construction workers, nanomaterials, and technologies influenced by nature. Nanoparticles added to construction materials, such as cement, concrete and steel are promising to deliver significant improvements, including greater strength, and are bringing new properties like self-healing and self-cleaning. In his presentation on 7 June, Dr Bojan Boskovic will consider how the use of carbon nanomaterials can open up new possibilities for sustainable design strategies, improve the nature of building structures and provide a new array of functions that can improve interaction between buildings and their occupants.

Full details of all other seminar streams are now published on the Vision website, where readers can also register for a free of charge visitor pass to attend the event, giving access to all seminars, the exhibition and networking events.

Vision has also agreed later opening hours for 2016 – as some busy Architects would like to visit the event in the early evening. Opening hours for Vision Late Night on the 7 June will be 10am until 9pm, with the exhibition continuing into the

evening after the main seminar programmes finish. Drinks will be served to all exhibitors and visitors from 5.30pm, who will be able to browse the exhibition, attend the popular Pecha Kucha sessions organised by the NLA and participate in other exclusive evening events to be announced.

Vision London takes place on 7/8 June at Olympia London. Over the course of two days, the event showcases today's most exciting materials, technologies, products, projects and thinking. To find out more about the educational programme visit

www.visionlondon.com

To register for your free of charge pass, which gives you access to the exhibition, all seminars and networking events go to

www.visionlondon.com/register

Look out for...

The Pot Company (stand 84) has been supplying planters and landscape features



to the gardening industry for over 30 years. At this year's Vision London at Olympia it will be showcasing the Adezz UK range featuring high end planters in materials such as corten steel, hardwood and fibreglass. Adezz are based in Holland and have been manufacturing high quality planters and features for over 20 years.

enq.166

Joseph Ash Galvanizing (stand 8) is a UK a leader of steel



finishing services including galvanizing, spin galvanizing, shot blasting and powder coating. It serves all types of customers from large construction companies and fabricators, to fencing and agricultural specifiers. When it comes to corrosion protection, the company provides the highest standards of quality and service available.

enq.167

Bluebeam Revu from QBS Software (stand 29) helps architects implement digital



workflows that span the entire project lifecycle, from site surveys and field reports to design review and punch. It is innovative solutions for PDF creation, markup, editing and real-time collaboration. Bluebeam solutions are used by the world's most document-intensive industries to improve communication, save time and reduce project costs.

Underground housing for LED drivers



Por more than 20 years GIFAS ELECTRIC has been producing Floor Pits used for the underground distribution of electrical power, compressed air and water. The use of solid rubber distribution boards, stainless steel housings, and gas pistons means that the system is completely maintenance-free.

The product was initially designed for use on market places and town centres for weekly markets,

Christmas markets, and many other open air events where electrical power is required. But as you can see from the photos attached this product has been used in many other places, including the Base Court in Hampton Court Palace, Corporate Headquarters, as well as for private dwellings.

NOTE: The Floor Pit is designed to be used in closed position. That is to say connection is made and the lid is closed again, leaving everything out of sight, out of mind. Load rating of lid D400 (40 T).

More recently GIFAS was asked to design the Floor Pit so that it could house LED drivers to run 3x12m high LED illuminated letters. Those letters





being R U N mounted outside of the Copper Box Handball Court at the London Olympics. A total of 70 x MeanWell CLG 150W LED drivers were used to power the 3 letters, and those LED drivers were housed inside of 5x GIFAS Floor Pits. What you see is of course are the illuminated letters, what you don't see are the 5x Floor Pits installed directly in-front of the 3 letters. Out of sight, out of mind.

www.gifas.de/2/home www.visionlondon.com



Aurubis Architectural Copper in Vision

Aurubis, will be exhibiting its latest range of copper surfaces and alloys on Stand 27 at Vision, Olympia London, from 7-8 June. Aurubis offers dedicated expertise in helping architects to realise their designs in copper with the added strengths of a major international group.

As the world's leading integrated copper group and largest copper recycler, Aurubis is redefining the material for contemporary architecture with the ongoing development of its 'Nordic' products providing straightaway surfaces that otherwise take years to develop in the atmosphere – particularly for facades. The processes involved are generally similar to those taking place naturally over time in the environment, utilising copper mineral compounds, not alien chemical processes.

Essentially, they bring forward environmental changes without taking away the integrity of copper as a natural, living material. All these surfaces form an integral part of the copper and are not coatings or paint. The material is easily bent and formed, and there are no limitations on the

length of copper sheet or strip because whole coils are treated on the production line, not just limited size sheets.

Nordic Brown pre-oxidised copper offers lighter or darker shades of brown, determined by the thickness of the oxide layer. Then, Nordic Blue and Nordic Green ranges enable designers to determine both the colour and intensity of patina with 'living' surfaces. As well as solid green, blue and turquoise patina colour, other intensities can be created revealing some of the dark oxidised background material. Aurubis' experts can also work with architects to develop specific levels of patination to meet design requirements or to match historically patinated copper.

Of course, copper alloys have also been used throughout history and Nordic Bronze and Nordic Brass (which can also be pre-weathered) are used for architectural applications. In addition, an innovative alloy of copper with aluminium and zinc – Nordic Royal – gives a rich golden through-colour retained over time, simply developing a protective matt finish without any



green or blue patination.

For more information on Aurubis products email: g.bell@aurubis.com or visit the website.

01875 812 144

www.aurubis.com/finland/architectural

vision london stand no 27

eng.171

SuDS latest at Vision London

nterpave will be hosting a presentation by SuDS guru Bob Bray at Vision, London Olympia, exploring innovative applications of permeable paving to optimise costs and land use for sustainable drainage, while offering imaginative designers new opportunities with water in the landscape.

Bob Bray's presentation The role of permeable paving in SuDS – an urban landscape with water is at 11.00 on Tuesday 7 June in the Product & CPD Theatre. Bob Bray is founder of leading SuDS project designers Robert Bray Associates and has written numerous local authority guidance documents and articles, and regularly lectures on the subject.

He will be reviewing the latest thinking on Sustainable Drainage Systems (SuDS) in urban design, now that SuDS are a planning requirement. In particular, innovative approaches to the use of concrete block permeable paving as an integrated, multi-functional SuDS technique will be discussed, including demonstrable water storage



using flow controls, minimising the need for additional storage features. The amenity and biodiversity possibilities of a gradual supply of clean water in the landscape for urban design will also be explored.

Visitors and journalists can also 'meet the expert' at Interpave's Stand 104 where Bob Bray will be available from 11.30 to 13.00. Interpave's stand at Vision will celebrate the transformative power of inspired hard landscape in our cities. It focuses on opportunities for new uses of water in

urban design, presented by government requirements for SuDS on developments and enabled by recent innovations with concrete block permeable paving. It will also showcase contemporary hard landscape designs with all types of precast concrete paving and kerbs, meeting the widest sustainability criteria.

Vision is the event for architects, specifiers, clients and suppliers. The event focuses on new and innovative building products and materials and provides ideas and solutions for new and inventive ways to achieve better building design solutions and comply with changing legislation. With hundreds of exhibitors, 160 speakers and 5000 visitors, Vision is the must-attend event of 2016 for the architecture, design and construction industries. Entry and access to all seminars is free of charge when you register in advance at: www.visionlondon.com/register.

Join Interpave at Stand 104 at Vision to find out more about SuDS and urban design.

0116 232 5170 www.paving.org.uk

vision london stand no 104







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Vent-Axia's Sentinel Kinetic Advance



Leading ventilation manufacturer Vent-Axia is delighted to have been commended at the Energy Show 2016 Product of the Show Awards in Dublin, Ireland. The company gained recognition in the Best Energy Efficient Product category of the awards for its unique, best in class Sentinel Kinetic Advance

Mechanical Ventilation with Heat Recovery unit. Vent-Axia's Sentinel Kinetic Advance impressed the judges through its exceptional energy efficiency and app control. Designed for air tight thermally efficient new build residential and light commercial properties, the Advance is the best performing MVHR unit in its class and offers near silent, energy efficient and high pressure operation.

0844 856 0590 www.vent-axia.com

enq.302

LG celebrates MCS approval



LG has received MCS approval for its Therma V High Temperature heat pump. This model of the popular Therma V range of air to water heat pumps from LG can deliver hot water at up to 80 degrees C. The new high temperature version of the unit is ideal for projects where replacement of an older heating system with an air source heat pump is required and other energy efficiency measures are not feasible. The LG High Temperature unit is ideal for combining with hot water cylinders or thermal stores and has already been

successfully linked with other renewable technologies including solar PV.

HVAC.marketing@lge.com partner.lge.com/uk

ena.303

Windmill turns to silicate paint

In the conservation village of Barnham, a traditional Suffolk windmill was converted into a home after World War II. Originally built in the 1820s, the local brick is soft and the windmill has suffered with damp for much of its life.

Damp rising through the bricks from the ground should have been able to evaporate away - instead, it was sealed in the wall by the exterior coatings and acrylic paint inside. The build up of moisture eventually caused blown paint and damage to walls.

The owners decided there was only one solution. Remove all coatings from the exterior, then apply a breathable masonry paint. Earthborn's Ecopro silicate masonry system is water based, oil and acrylic free, making it virtually VOC free and very environmentally friendly. It gives the same breathability as limewash but is far superior in terms of longevity and ease of use. Together, the primer and paint form a chemical bond with the underlying mineral substrate. This produces a very hard wearing, water and weather resistant barrier, but it is also highly breathable, so

earthborn'



safeguarding the windmill's fabric for future generations.

Ecopro Silicate Masonry Paint is available in 24 standard shades and bespoke colours can be produced by Earthborn stockists such as Celtic Sustainables which supplied this project.

For further information visit: www.earthbompaints.co.uk

0.0

GOLD! For best sustainable development

nce an infill brownfield site, 400 Caledonian Road has recently been transformed into an energy efficient mixed use project.

Igloo, specialists in sustainable property development bought the site back in 2012; the plan was to create a sustainable, low energy, eco-focused scheme consisting of apartments and commercial studios.

Situated in a conservation area, the restoration of the Victorian townhouse had to be designed with care as the exterior could not be altered. To meet the footprint requirements laid out by Igloo, the townhouse needed an alternative solution to make it a peaceful and warmer property.

Sitting right next to a busy train route in and out of central London, noise was a problem as well as draughty original Victorian windows. Therefore, John Sisk, Igloo's main contractor for this project, approached Selectaglaze for a solution based on a good working relationship developed over a number of years and projects.

Selectaglaze installed six slim line units from its

Series 20 range which is a discreet solution ideal for heritage projects. Secondary glazing traps an insulating layer of air which can markedly reduce heat loss and reduces energy wastage.

As well as reduced energy bills, the installation of secondary glazing reduced the ingress and egress of noise. When there is a gap of at least 100mm, 45dB can be achieved. On this project, Selectaglaze used 6.8mm Stadip glass, which is an acoustic laminate. It absorbs sound aiding in creating a peaceful living environment amongst bustling city life. This was even more important given the site sits alongside a busy train line in and out of London.

As testament to this project, Igloo was awarded GOLD for the best sustainable development at 'Whathouse? Awards 2015'

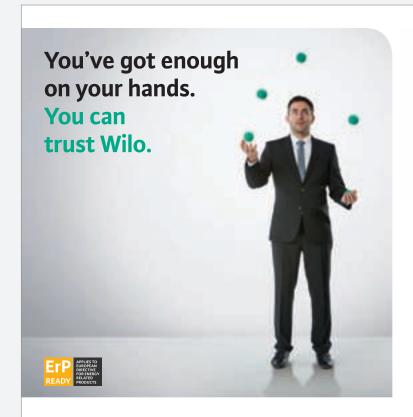
Established in 1966, Selectaglaze has vast experience in working on all building types from Listed offices to new build hotels.

Selectaglaze will be presenting their RIBA approved CPD at Vision London, Olympia; Stand No: 22 on the 7-8 June.



01727 837271 www.selectaglaze.co.uk

ong 305





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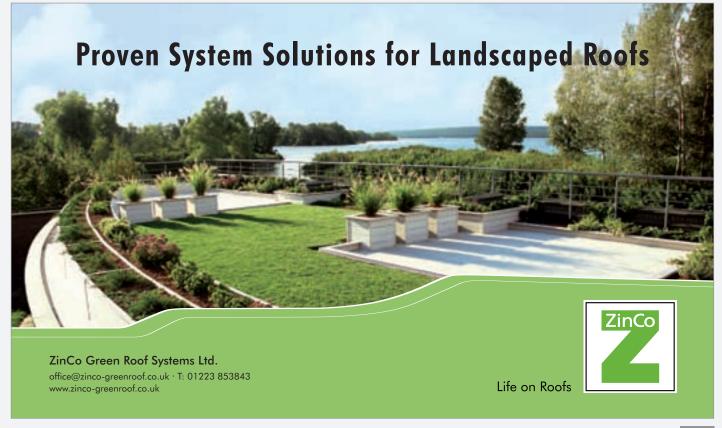






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enq.308





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enq.307



Architects, builders, planners, and surveyors, are you aware of the harm being done to the environment and the costs involved when hiring a chemical loo? For any project on a site without facilities, use an 'Eco-T'. No chemicals, no smells, no hazardous waste, no waste at all and no water. When you've finished construction, flat pack the 'Eco-T' and take it to the next phase or new site, economically & environmentally sensible. Contact Ecotoilets for information.





For the creation of walkways and terraces on rooftops Elefeet® is the perfect base for paved areas and decking. The Elefeet® pedestal range is completed by various accessories to solve details like thresholds, corners and wall connections. Solutions with Elefeet® allow surface water to drain away quickly and provide excellent aeration underneath the stilted surface layer. Elefeet® is a ZinCo brand – your supplier for system solutions on urban structures.



More and more architects are turning to JJI-Joists when they are looking to design to Passivhaus standards where a high degree of insulation is required, as the 9mm web allows maximum insulation and avoids cold bridging. The solid web also reduces energy lows through the structure, an important part of Passivhaus principles. JJI-Joists offer a complete floor, wall and roof solution for architects - to find out more please visit the company website.

enq.310

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WEB: www.jamesjones.co.uk/ewp EMAIL: jji-joists@jamesjones.co.uk





Long Rake Spar has expanded its product selection of Scottish Pebbles and Cobbles to include a further four additional product sizes. The addition of the 8-14mm and 14-20mm pebbles as well as 30-50mm and 100mm+ cobbles complement the already established best-selling sizes of 20-30mm pebbles and 50-75mm cobbles. These are a recognised industry favourite, the addition of these new sizes providing more choice from this popular range.



The Biodigester 'T' range caters for 6-42 people and larger Biodigesters are available for up to 2000 people. All Biodigesters are suitable for variable loading. The 'T' range Biodigester has been tested to EN12566 Pt 3 and has a CE Mark. Owners are impressed by the limited maintenance required, infrequent emptying intervals and the 'Odour Free' totally aerobic process. Contact **Burnham Environmental** Services Ltd for more details.



T-T Pumps Ltd prides itself on being able to offer a range of products and services to suit the customer's application. By innovating and combining its multiple divisions, T-T provides solutions for high rise buildings to create the desired water supply. T-T now offers a range of WRAS approved booster sets, which boost water to maintain a constant flow and pressure, while offering valves which protect against the damaging effects of built up air pressure.

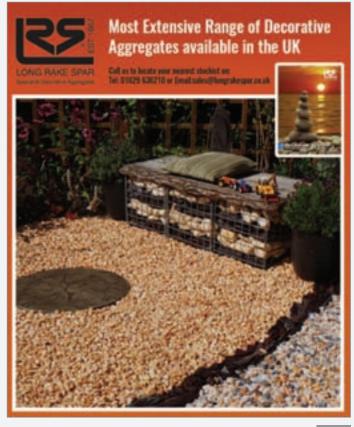


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Sika provides a sure-footed solution



Social housing is home to more than four million UK residents or approximately seven per cent of the population, so every refurbishment requires careful planning to minimise disruption and inconvenience. During the regeneration of balconies and walkways at a housing block in Dunfermline, Scotland, Sika's fast curing Sikafloor® Pronto flooring system ensured the repair works could be carried out quickly, efficiently and with minimal impact on residents

during the harsh winter weather. For a visually attractive, watertight and non-slip finish for the walkways, as well as a fast-curing application to minimise downtime, Sikafloor* Pronto provided an ideal solution for the contractor and client.

0800 1123863 www.sika.co.uk

enq.173

Architects Datafile website



www.architectsdatafile.co.uk

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IKO Polymeric launches pre-fab Armourdek roof panel



IKO Polymeric, has officially launched Armourdek, a pre-fabricated long spanning roof deck for fast track installation. Factory finished with BBA certified Armourplan PVC or Spectraplan TPE single ply membrane, Armourdek is ideal for high performance waterproof roofing. With excellent thermal and acoustic properties it offers superb air tightness and its 'zero waste' manufacturing approach means no material used goes to landfill. It can be used in all construction sectors and is suitable for steel, concrete and timber frames. The way it's made means big savings in time and resources to construction projects. For example, as the single ply membrane is applied to Armourdek in the factory the panel can simply be delivered and craned into place on site, minimising the need to install a separate roofing system. This saves a significant amount of time – and with available sizes up to 12m x 4m, installation can be as quick as 1,000m² per day! IKO Polymeric offers a full service from initial consultation through to specification and design and on-going monitoring and maintenance. An explainer brochure for Armourdek is available which highlights all the benefits and includes technical drawings and load tables. For more information on Armourdek please contact Kevin Bowsher, business manager of IKO Polymeric's Specialised Products Division.

01257 488000 polymeric.marketing@iko.com

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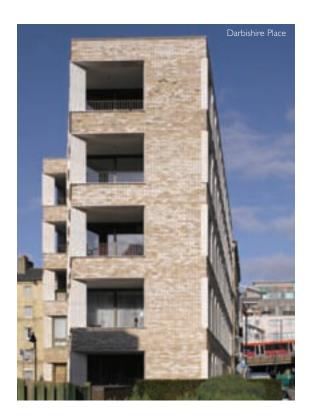
t 01952 750 816

e sales@imperialbricks.co.uk











Brick, the hero of our built environment

Just because a material was developed 9,000 years ago does that make it old fashioned? Apparently not, as brick is enjoying something of a renaissance. The Brick Development Association explains further

o those of us who work in the industry the continuing popularity of brick is not surprising on the grounds of pure functionality. Ideally suited to our damp marine environment, brick remains weatherproof for generations, needs no maintenance and its colour does not fade over time.

Given the unarguable performance of the material, the choice to use anything else will generally be made on aesthetic grounds and the sheer variety of options naturally leads to experimentation.

Year after year surveys are produced reinforcing brick as the preferred building material for house buyers across the UK, but we can also see evidence of its use for the positive advancement of urban design.

A great example of this is located in the heart of Clerkenwell, East London. The Turnmill building is a seven storey structure comprising offices amongst a context of ornate brick warehouses and directly opposite the old Sessions House.

The choice of brick colour in this structure echoes the hues

of the stone of the old Sessions House. The quality of the brickwork detailing is exceptionally high, this coupled with the selection of the thin linear brick and the slender column design gives a modernistic framework using a traditional material in a uniquely innovative and attractive manner. This building is a testament to the successful and fruitful relationship between designer and developer. The subtlety of the building and its deceptive simplicity and avoidance of visible movement joints show the depth of thought in the design of this building.

Although extremely welcome, architectural landmarks will only ever account for a relatively small percentage of the brick used in our urban environment. It is the overwhelming preference for brick in domestic architecture that accounts for its ubiquity in our living environments.

The Darbishire Building, designed by Niall McLaughlin architects, is a fine example of a well-executed residential development, firmly rooted within the London Vernacular. The Whitechapel-based social housing block offers a reinterpretation

Continued overleaf...

of classic masonry, built in place of an original Victorian Peabody building which was damaged during World War II. The block brings a modern, re-energised feeling to the area.

The block was built to fit effortlessly into the surrounding area, while maintaining a priority for creating an affordable environment. The building is simple and direct, without fuss, frivolity or fancy, yet there are moments of architectural delight which become apparent. For instance, the window surrounds subtly project and taper precast architectural stone trim, and bring sensitive articulation to what would otherwise be a less interesting building. Two zones of stacked corner balconies are designed with a bespoke precast tapering blade column, which accentuate the relationship of the building users to the public realm they face.

We must also remember the huge contribution this material makes to restoration. An interesting example of a residential refurbishment project is The House of Trace.

The House of Trace, a private family home, designed by Tsuruta Architects was developed keeping a memory of the original building, but simultaneously allowing for the new build to form its own identity.

Older facets of the house were preserved or recreated in the architecture creating an interestingly sensitive approach to the refurbishment of an end of terrace house, reinventing the type through approach to the new and retained material, both on a diagrammatic and a detail level. Instead of treating the existing



building as a blank canvas, the architects viewed the project as a picture to be expertly restored.

Recent projects recognised at the Brick Awards served every purpose from the construction of educational and religious buildings right through to homes and commercial establishments. This fact alone shows the influence brick still holds; its repeated specification by architects demonstrates a lifelong relationship of respect. The universal appeal reveals a simple truth, brick's involvement in architecture isn't going anywhere.

Foundational to excellence, suitable for a huge array of different projects and capable of bridging the gap between the past and present, brick is certainly a key component to great architecture.

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Achieving the impossible with Sika Sarnafil

n a complex new build roofing project that was deemed almost impossible, Contour Roofing stepped up to the challenge with a Sika Sarnafil membrane to achieve truly stunning results.

32 Ewart Grove, a Paul Simon Homes residential development minutes from Wood Green tube station, required a high-performance roof with a striking aesthetic result to match the contemporary luxury flats within. Located in a prominent position at a fork in a road, the roof can be seen when travelling up to the building, as well as from the upper floors of surrounding buildings.

With its extremely intricate design, including two barrel roofs and a large, unique triangulated tower at the front, the project presented a real challenge. Originally the specification for the 400m^2 area called for a metal roof but the cost implications of this meant that another solution was needed, and fast.

It was thought that such a complex roof design could not be done, especially with the time and

budget available. However Jonathan Woods, director at Contour Roofing, alongside senior contracts manager, Lee Clift, sought to prove that the roof could indeed be covered using a high quality single ply membrane, if the correct product and level of expertise were applied.

Jonathan and Lee met with the architect and the director of Paul Simon Homes to discuss amending the roofing specification. Jonathan explained: "With our previous experience of Sika Sarnafil products, we knew that we could get the perfect finish within budget. In partnership with Sika Sarnafil we quickly presented a new bespoke specification; an adhered system using Sarnafil G410-15ELF Lead Grey with a polyester fleece backing as the main roof sheet for a flawless result and Sarnafil G410-15EL Lead Grey for all the detail work flashings."

The installation was very challenging, with various shapes, details, upstands and intricate sections to cover.

Sikalastic was used for the guttering when



the space was just too tight for single ply, demonstrating the compatibility between Sika's various roofing products. Both the Sika Sarnafil and Sika Liquid Plastics systems were awarded a 20 year guarantee.

The project impressed the judges of the upcoming NFRC UK Roofing Awards and has been shortlisted in the Single Ply category. The winners will be announced later this month.

01707 394444 gbr.sarnafil.sika.com

enq.180



Well fixed for fastenings

A leading construction connector manufacturer Simpson Strong-Tie has released an all new 'Nails and Screws' brochure for Spring 2016. Featuring a host of new products, the Nails and Screws edition consists of four sections: structural screws, corrosion resistant fastenings, Quik Drive collated screw systems and fastenings for use with construction connectors. As the range has been fully tested and CE marked, the brochure also includes mechanical properties as well as loading and performance information. Simpson Strong-Tie Sales Director, Jon Head explains: 'We've significantly boosted our nails and screws portfolio to provide for just about every building application from steel frame construction to drywall installation. Our Nails and Screws brochure is packed with solutions to make life easier for building designers and installers alike – whether they work with timber, steel or concrete'. The brochure is available on request from the company website.

01827 155600 www.strongtie.co.uk

enq.181

Maximum benefits from MAXX



With the new additions to the MAXX family, **Delta Membrane Systems** offer a range of products that bring to the market the most secure basement pumping systems for type C (cavity drain) waterproofing. Specifically designed for the basement waterproofing industry, MAXX technology takes an 'intelligent' approach in the design of

the product range, resulting in optimum functionality, high levels of efficiency and ease of installation and service. Included in the range are the DMS270 for ground water and surface water applications, and the DMS269 for foul water use. Also available is the PowerMAXX which can run a standard V3 pump without mains power for up to four days, depending on the number of cycles per hour.

01992 523523 www.deltamembranes.com

ena.182

Sika provides airtight solution



Sika-Membran has enabled thousands of windows to be installed at a spectacular London dockland development with an airtight seal to ensure its residents enjoy the perfect living environment. The versatile joint sealing system was specified for New Providence Wharf, a stylish residential complex in Canary Wharf, the heart of the capital's dynamic business and

financial district. Sika-Membran, from global building product manufacturer Sika, is a versatile EPDM synthetic rubber waterproofing membrane, designed to provide an efficient method of sealing construction gaps in building facades.

01707 394444 www.sika.co.uk

Ruukki supply fire-tested panels



Ruukki have supplied SP2D PIR UK sandwich panels for the construction of the new, luxury Park Regis hotel, Birmingham. Ruukki's SP2D PIR UK composite cladding panels, which are ideal for facades that must combine thermal insulation with appealing appearance,

are both fire-safe and energy-efficient due to their low thermal conductivity and concealed-fixing joint design. Prior to construction in the Park Regis hotel building, the panels were BS 8414 fire tested for specific use in the construction of a modern, multi-storey hotel building. The SP2D PIR UK panels were subjected to rigorous BRE Fire Performance and Thermal Insulation testing that verified their full compliance with the strictest fire and buildings safety regulations.

0121 704 7300 www.ruukki.co.uk

enq.184

Levolux touches down at the ESA



The £12 million Roy Gibson building, which will host the European Space Agency's (ESA) UK branch, has been fitted with an adaptable solar shading solution, courtesy of Levolux. Following a challenging brief, Levolux developed a custom solar shading and screening solution, applied internally and externally. A combination of external Venetian blinds and curved Aerofoil Fins have been incorporated into the facade, providing

shade to office areas and the building's reception and conference wing, respectively. In total, Levolux supplied and installed 411 external, motorised Specialist Venetian Blinds, against glazed openings to office areas. The external blinds feature 60mm wide, perforated, roll-formed aluminium slats.

New Flat Bar sliding shutter



An ultra-slim solar control system has been created by **Hunter Douglas** to meet the demands of the most modern of building designs. The beauty of the Flat Bar shutter's aluminium frame is that it is as unobtrusive as possible – even the powder-coated screws used to attach the fins are powder-coated to ensure they blend in with the overall design. At just five millimetres thick,

the minimalist Flat Bar shutter is at least 50 per cent thinner than existing alternatives and has been created to meet the aesthetic requirements of architects.

01604766251 www.hunterdouglas.co.uk

enq.188

New catalogue for Freefoam



Freefoam announce the launch of a brand new Product Catalogue. The new version contains the complete range of Freefoam products including PVC-U and PVC-UE fascia, soffit, rainwater systems, exterior cladding, interior panelling and decking. With over 2000 product items a clear concise catalogue is essential for Freefoam stockists to promote the range and its A5 compact format is ideal for building profes-

sionals roofline fitters and roofers to keep a copy handy with all the product information they need. Designed to showcase the entire Freefoam range the catalogue is divided in to product categories with specific colour coding to make finding ranges quick and easy.

01604591110 www.freefoam.com

enq.190

Sailing Centre features Metalline



Metalline, who manufacture and supply a range of high quality insulated panels, rainscreen cladding, metal pressings and bespoke fabrication, have been specified on the recently completed Sir Ben Ainslie Racing – Americas Cup team base on Camber Quay in Portsmouth. The iconic shape and design

of the building was the brainchild of architects HGP and above the boat housing and hangar area the building features a stacked floor appearance that has been extenuated with the use of Metalline's curved and flat Ultima insulated panels in a natural silver anodised finish. The building, which spans over $74000~\rm{ft^2}$, featured over $400~\rm{square}$ metres of Metalline's superior grade.

01543 456 930 www.metalline.co.uk

enq.185

W30 – the slimmest steel windows



Designed for energy efficiency, W30 steel windows from **Steel Window Association** members are the slimmest steel options currently on the market which comply to all current Part L building regulations. For domestic applications, the W30 system is C-rated by the BFRC and, if required, a B-rated window can now be offered.

Each C-rated window incorporates an 18mm double glazed unit, comprising 4mm soft coat low e glass and 4mm clear float sandwiching a 10mm krypton gas-filled cavity with a warm edge spacer bar. In addition to the outstanding overall thermal performance of the window, the W30 is double weather-stripped to improve weather tightness and thermal efficiency while a chamfered aluminium beading system secures the double glazed units.

'Steeling' the scene with AkzoNobel



When Tameside Council decided that an industrial estate they owned in Ashton-Under-Lyme needed some crucial rejuvenation they turned to Blackburn-based **AkzoNobel** to provide the coatings solution they were seeking to re-fresh the units on the estate. AkzoNobel would be providing

their SteelSeal coatings system to help create a more vibrant look to the tired-looking Charlestown Industrial Estate on the outskirts of Ashton-under-Lyme. The industrial units on the estate would need re-painting in order to breathe new life into the look of the buildings. It would be a project that would suit AkzoNobel's SteelSeal Primers and SteelSeal Topcoats perfectly.

01254 687950 www.sikkens-wood-coatings.co.uk

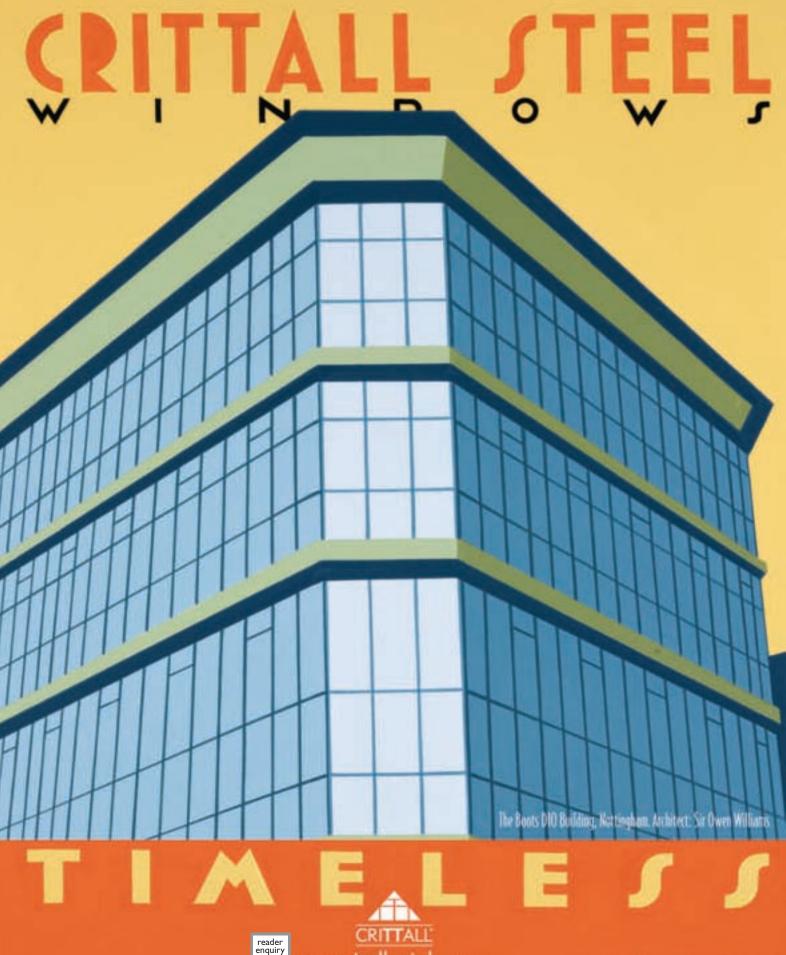
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www.architectsdatafile.co.uk



Push the envelope with Rainspan

ainspan from Eurobond Laminates offers clients, architects and contractors a perfect structural support for rainscreen systems, offering ease and speed of installation to create a weather tight building envelope early on in the build programme.

Combining the benefits of a composite panel and the flexibility of varying aesthetic rainscreens, Rainspan provides greater freedom for architectural expression, ensuring that challenging designs are easily reproduced and can create unique building externals suitable for a range of building types, from one-off iconic designs to modern commercial developments.

Recent high profile projects include the bronze-clad flagship Waitrose store in Chester which links the old industrial canal district with the new Central Business Quarter, and the RIBA award winning Graphene Institute, Manchester located at the University of Manchester's main campus on Booth Street West with its unusual envelope design and an outer veil of perforated black stainless steel, creating a strikingly polished appearance.

All Eurobond panels are manufactured with a non-combustible stone wool core which has been tested to BS EN 1364 Part 1 to ensure 'built in passive fire protection' and can achieve 2 hours fire resistance (integrity and insulation). With low environmental impact, excellent thermal performance and high recycled content, Rainspan will positively support a BREEAM assessment.

As a proven modern method of construction, Rainspan can also provide significant cost and time savings over alternative methods. In order to substantiate likely cost savings for Rainspan



compared to traditional blockwork and jumbo metal stud back walls, a third party cost comparison was commissioned with independent cost consultant Faithful and Gould. Rainspan systems were found to be the most cost effective method of construction with cost savings of up to 40 per cent per m². Panel systems can also be constructed faster, leading to the possibility of significant savings in construction programmes and Rainspan's capability for long, fire-rated spans means that secondary steelwork costs can be kept to a minimum with fewer intermediate fixing supports.

Rainspan is manufactured from Colorcoat* pre-finished steel by Tata Steel made in the UK and certified to BES 6001 Responsible Sourcing standard. Both Colorcoat Prisma* and Colorcoat

HPS200 Ultra® surpass requirements of Ruv4 and RC5 as per EN 10169:2010 proving outstanding colour and gloss retention and corrosion resistance. Rainspan is available with the NRG option which comes with Colorcoat® High Reflect pre-finished steel by Tata Steel for the internal steel face that can the improve daylight factor by 10 per cent and provides ≥ 85 per cent reflectance, reducing the amount of energy required.

Eurobond has a dedicated team of technical services and support engineers, with expert knowledge to provide guidance at all stages of the design and construction process to ensure the breadth of creativity offered by Rainspan delivers buildings that exceed expectations.

02920 776677 www.eurobond.co.uk/rainspan







Schueco door systems meet security standards



As part of an ongoing programme of security testing to PAS 24, leading sustainable building envelope specialist Schueco UK reports an increase in the number of its sliding door systems that meet this police-approved standard. Newly qualifying systems include Schueco ASS 70.HI lift/slide double track, bi-parting and triple

track doors, as well as the slide-only versions. Schueco ASS 70 FD and ASS 80 FD.HI sliding/folding doors have also been successfully tested. With the recently introduced Building Regulation AD Q and the continuing demand for improved security, this announcement will be welcome news for both specifiers and fabricators looking to deliver ultimate peace-of-mind to clients.

01908 282111 www.schueco.co.uk



Online presence for CMS Window Systems



CMS Window Systems is celebrating the relaunch of its company website with a new, on-brand responsive design, coinciding with the business's tenth anniversary. The new design launched at the beginning of

March, and was created by Glasgow-based strategic design and branding agency D8, whose portfolio includes contracts with Greenpeace, Glasgow School of Art, and the BBC. In addition to its attractive, eye-catching layout, the new design is fully responsive – meaning that the CMS website will look and work just as it should whatever device it is viewed on. In addition to its cutting-edge functionality, the new website features an extensive portfolio of case studies, which can be filtered by project type and the products used for simple, intuitive navigation.

01324841398 www.cmswindows.com



A seamless finish from Metal Technology



Advanced architectural aluminium systems from Metal Technology have underpinned the transformation of Clifton House from 1960s office block to state-of-theart student accommodation. Metal Technology's System 17 Silicone pointed and High Rise curtain walling was used extensively thought-out the project. The end result

is testament to System 17's limitless flexibility and aesthetic appeal whilst meeting all structural requirements and delivering high levels of thermal and weather performance. Metal Technology system 5-20Hi+ tilt and turn windows were used with turn lock handles providing additional safety in their operation. System 5-20D Hi+ high performance thermally enhanced doors were also specified.

028 9448 7777 www.metaltechnology.com



A synergy of past and present



Tracing its roots back to the Domesday Book, the leafy suburb of Edgbaston has long formed a meeting place between the traditional and modern, the urban and rural. These monologues provided Nicol Thomas Architects with the inspiration for the design of a new retirement village, absorbing and

reinventing the local vernacular with a carefully chosen palette of colours and textures, including ROCKPANEL* Woods. The blend of traditional and modern is right at the heart of the ROCKPANEL Woods range. While barely distinguishable from real wood, the boards are manufactured from basalt.

01656 863210 www.rockpanel.co.uk





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Westbury launches brand new product in London

recently launched their latest product, a brand new range of windows and doors that focus on excellence in both form and function, at The Building Centre and at their new office and showroom in Lambeth.

Company Director John Mumford has spent two years researching the latest technologies and materials in order to design and manufacture a product with the quality credentials to satisfy both customer and construction legislation, now and in the future. He explains "We are driven by the desire to make windows that still look great 20 years down the line so our focus has been to design this product to a standard, not a budget. We are the only timber window and door manufacturer in the UK to build our products with a 115mm deep frame, and doors and sashes 68mm thick. We've combined technical features of continental design with British heritage aesthetics

resulting in a range that looks traditional but has fantastic high-tech specifications"

Westbury's new and improved windows and doors are designed for double, triple and acoustic glazing in the same profiles and all available with traditional, deep moulded sashes, doors and glazing bars. They are fully certified PAS24 tested and Part Q compliant, extremely weather resistant with double welded continuous gaskets, and have whole product U values as low as 1.0 W/m²K.

Westbury take pride in the fact that their products are totally British made in their technically advanced premises in rural Essex, right next door to their head office and flag ship showroom. Having just opened a second showroom in London, and updated their exhibition stand at the Building Centre, they welcome both specifiers and end users alike at any venue.

To find out more about the product, or to arrange a visit call or email info@westburyjoinery.com.



01245 326 510 www.westburyjoinery.com

eng.199



Wave of Green on Waitrose Roof

The new £14 million Waitrose superstore located in Bagshot, Surrey has been designed with the environment in mind; featuring a continuous sea of green vegetation on its large wave shaped roof that helps replace the green space lost to the building's footprint and minimise its overall impact on the surrounding landscape. The client wanted this new build development to serve as a benchmark for sustainability for the local area and this was achieved through the installation of over 4,800m² of Bauder's high quality, low maintenance sedum blanket, which is highly visible even at ground level. Prior to the project commencing plans were shared with the local community at public exhibitions to gather feedback, which was extremely positive and in full support of the development. The new roof features Bauder's premium root resistant bituminous waterproofing system, which includes a highly efficient 120mm FA-TE insulation to satisfy building regulations. An irrigation system was also installed to ensure the plants have sufficient levels of water to flourish throughout the year.

0845 271 8800 www.bauder.co.uk



Bespoke solution for Goodwood Aerodrome



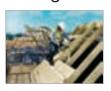
Hunter Douglas used its engineering and creative expertise to design a unique solution for a £1.6 million prestige building at Goodwood Aero Club. To complement this ultra-modern, sleek look, the architects commissioned Hunter Douglas to design and manufacture 24 fully automated and

motorised external roller blind systems, each measuring $7.5~m^2~(80.7~ft^2)$ for the predominantly glass-fronted building. The motorised external roller blinds are protected from high winds with automated wind sensors, while each section has its own remote control for the corresponding group of blinds. They also supplied a master remote control to control all the blinds simultaneously

01604766251 www.hunterdouglas.co.uk

ena.201

SterlingOSB Roofdek: the perfect roofing panel



For durable, high quality roofing, Norbord's SterlingOSB Roofdek offers reliable and effective performance. Made from tongue-and-grooved OSB board and sanded to give a smooth surface, Roofdek is designed specifically for flat roof decking and pitched roof applications. Its tongue-and-grooved

edging ensures structural rigidity and removes the need for noggins or dwangs to provide support along the edges. It also prolongs the life of the roofing felt by removing wear and tear caused by movement between adjacent boards. By orientating the strands carefully in numerous layers, the resulting board is stiff and strong in all directions. And unlike softwood ply there is no risk of knots, splits or voids being included in the finished panel.



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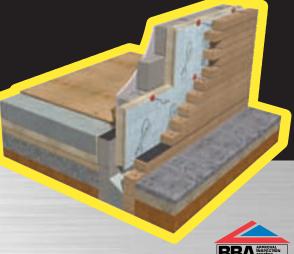
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EUR WALL +

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recticelinsulation.co.uk/eurowallplus or call 0800 0854079







Kingspan pipe insulation is a work of art



Kingspan Kooltherm* FM Pipe Insulation has been installed in an exposed to view application at an iconic arts college, providing considerable time savings and subtle, high quality aesthetics courtesy of its theatre black vapour barrier jacket. Building services have been left exposed within the interior spaces, reflecting the building's industrial, brutalist design and allowing ceiling heights to be raised within the existing rooms. To compli-

ment the internal pallet of whites and blacks, whilst also delivering excellent energy performance, M&E contractors EIC specified Kingspan Kooltherm* FM Pipe Insulation with a matte, theatre black aluminium foil facing.

01544 388601 www.kingspanindustrialinsulation.com

enq.204

A trip to the dentist for Gerflor!



Aura Dental in St Johns Wood, London is a team of dentists offering a range of quality treatments. Their patient-centred specialist dentists provide a modern approach to cosmetic dentistry. It would be their extremely high standards that would also determine the

quality of their recent refurbishment of the new practice. The flooring for this high profile dental practice refurbishment would be placed with international flooring and interiors specialists Gerflor. In fact, some $120m^2$ of Gerflor's Creation 55 Luxury Vinyl CLIC System was specified for the vast majority of the practice. Colour-wise the project would see a mixture of both Portobello and Norwegian Slate used, which complimented the overall design beautifully.

01926 622600 www.gerflor.co.uk

eng 205

Response to ErP directive



With the ErP directive setting minimum performance criteria for ventilation becoming effective from 1st January 2016, Vortice has reviewed and responded to these changes. The ErP Directive, which is European legislation, applies to products which can have an effect on energy consumption throughout their life

cycle, from manufacture, through use, and until the end of their life. With ventilation systems falling under this category, Vortice has set out changes within many of its fan ranges to ensure all products are fully ErP compliant. Products that do fall within ErP also now have to carry an energy efficiency class rating which gives information about the energy efficiency of the product.

01283 492949 www.vortice.ltd.uk



Architects Datafile website



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THE ART OF HEATING











Shining example of contemporary design

Vicaima has just launched a collection of door models as part of its Dekordor 3D range. Incorporating aluminium inlays in 5 contemporary designs, Vicaima has captured the current vogue for metallic embellishment which is one of the themes of international interior design for 2016. The new inlay models are available in a choice of 5 Dekordor 3D finishes so can provide contrast and scope that is sure to command attention. Dekordor 3D, with its horizontal embossed finish creates an innovative and thoroughly modern door appearance which is ideally suited to a multitude of applications from homes to hotels and from offices to community buildings. The Dekordor 3D Aluminium Inlay collection is available in a choice of 5 contrasting face finishes including, Grey, Black, Oak, Camel and White and inlay models include both vertical and horizontal designs so present plenty of diversity. All doors are FSC certified for environmental peace of mind.

01793 532333 www.vicaima.com

enq.21₁



Have an open mind on door design

Homeowners, interior designers and architects all agree that doors are more than just a commodity, they are central to the character of any home. James Dean, head of marketing for Todd Doors, explores further

front door is the first thing anyone sees when approaching a property and is a good reason to spend that little bit extra to create a positive impression. Spring is an ideal and popular time of year to undertake home renovations. Setting out a detailed specification for which doors to include should be made early on in the planning stage to ensure that the desired outcome for the look and feel of the property is achieved. Before renovation begins, stop and think about what you are trying to achieve with each room, as the right choice of door can make a big difference. Luckily, trends in interior fashions move a little slower compared to trends in the fashion industry, but each year key colours and themes push through. The hottest door trends for 2016 are inspirational and all about statement making and bold colours. But how do you open a home to the latest looks?

Doors don't need to be boring

When it comes to door colour trends, 2016 is a year that celebrates expressions of personality and individual style through the use of bold colours such as purple, green, yellow or blue. However, lovers of classic white doors shouldn't be worried as white is undoubtedly the hottest colour trend in 2016. Besides, it's always worth emphasising that having a strong foundation of white doors in a home allows greater opportunity for regular updates, dipping into decorating trends as they come and go. Simplicity means versatility – a new look can always be created around a few timeless pieces.

Light up your home

Glazed doors are becoming increasingly popular and are expected to become even more so thanks to their beautiful design and extra light permeability. A big contribution to this trend over the last few years is the improved insulation qualities of the glass being used and the inclusion of materials that provide protection against fire. Making the most of the natural light in a room not only makes the room feel brighter and more airy but can also have a positive emotional impact. There are many glazed door options to choose from, adding as much or as little light as you want. Bright, well-lit rooms will help to create an amazing look; giving any home an elegant, yet fresh, spring atmosphere!

The sky is the limit when it comes to design

Bespoke doors are one of the biggest emerging trends in interior design. Working with door companies at the design stage of a



project will ensure that you can get exactly what you want. The use of beautiful and unique interior doors is a fantastic way to complement the character and feel of a home. Transforming interiors is all about adding an individual's stamp and style into their home and there is no reason why this can't be done with internal doors too. Just let your creative juices flow and order or design specific doors for each project you work on.

The bigger the better

The bigger the door, the better – oversized doors are among a few designs that have been attracting a lot of attention lately. Doors with extra width or height are becoming a big trend in decor. They come in innovative shapes and sizes, designed to fit the most unusual door frames. This works particularly well in old houses with high ceilings and it doesn't need to be a mansion! If your aim is to achieve a dramatic look and an impressive focal point, oversized doors are perfect for the job. *Continued overleaf...*



Stylish and environmentally friendly

Responsible sourcing is a very current topic of conversation around those who regularly purchase timber or timber products and of course timber doors fall clearly into this category. There are an ever increasing number of eco-build projects under way and specifiers need to be assured of the provenance of the timber products they purchase. Consumers too are becoming more aware of the need to protect the planet and its resources and this is reflected in buying choices for home interiors. One way to help this plight is to only buy timber doors from companies who demonstrate a dedicated obligation to protect the environment. All companies who purchase timber products

must comply with European Union Timber Regulations which make it illegal to source any timber products from factories that are not able to prove the origin of their timber. But it's worth looking out for those companies who have sought and gained certification under the stringent rules of the Forest Steward Council (FSC) and the Programme for the Endorsement of Forest Certification (PEFC). These certificates symbolise sustainable forest management, environmentally friendly material sourcing and socially beneficial forest management. The companies are out there if you look for them and it will not limit your choice of door style or finish as there is a huge range available to suit all budgets.

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Lyndon Design seating - a box office hit



As the network of Everyman boutique cinemas expands across the UK, Lyndon Design continues to furnish each venue with a bespoke range of seating that is vital for creating the intimate and luxurious cinema environment for which the Everyman brand is renowned. A collection of two-seater sofas and armchairs made from a variety of coloured fabrics includ-

ing velvet with fully upholstered timber frame, and complete with foam and feather deluxe seat cushions, are featured throughout the Everyman venues. To complement its high quality upholstery and to further enhance the cinema experience, Lyndon Design also supplies handcrafted fitted walnut shelves to the back of each seat to act as personal tables above the carpeted footrests.

Bringing bathrooms to life



The Water Studio is Hansgrohe's new hub of inspiration, excitement and resource in Clerkenwell, London. It is a collaborative space for the international architect and design community and for anyone serious about creating show-stopping bathrooms. Visitors can discover more than 200 products from the Hansgrohe and Axor ranges of mixers and showerheads. A unique Test Rig

allows you to measure and compare flow rates of different products and there will be a programme of interactive events throughout the year.

01372 465655 www.hansgrohe.co.uk

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Tailor-made solution for Essex University



Creative solutions for the ceiling of the impressive, new £26 million Student Centre at the University of Essex demonstrates how far **Hunter Douglas** will go to keep true to an architect's vision. The design for the ceiling at the new Silberrad Student Centre at the university's Colchester campus saw the team devise a creative solution to

accommodate the $70 \mathrm{m}^2$ solid wood open linear European oak ceiling. As well using a patented clip used to secure the panels to the sendzimir galvanised steel suspension rails, the panels, which appear to float, required specially made metal fixings to accommodate the non-standard width.

01604766251 www.hunterdouglas.co.uk

enq.219

Heradesign is rated outstanding



Valley Invicta Primary, Leybourne Chase, is a new school built in the heart of the Kent countryside. Innovative Heradesign ceiling and wall panels from Knauf AMF were chosen for this contemporary building. Architect Mark Nolan of Lee Evans Partnership explained why: "I was looking for acoustic panels that provided high sound absorption and offered something different aesthetically. Heradesign has more than satisfied these requirements. The baffles and wall panels look fantastic." Heradesign is a

versatile product that can be fitted as a suspended ceiling, hung as rafts or fins, or directly onto walls or ceilings to create truly unique interiors.

01915188600 www.amfceilings.co.uk

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Polyflor's Affinity255 flooring is picture perfect



Luxury vinyl tile flooring from **Polyflor**, the UK's commercial and residential vinyl flooring specialist, was recently used to help give a fresh new look to JOL's café at Redhouse arts and cultural centre in Merthyr Tydfil, Wales. Wood effect Affinity255 PUR luxury vinyl tile flooring was installed by local

flooring contractor Kevin Hamer Carpets as part of Merthyr Tydfil Housing Association's project to refurbish parts of Redhouse, an arts, cultural and creative industries centre situated in the Grade II listed Old Town Hall. With its rich hues and authentic grain detail, the popular Huckleberry Oak design was chosen for installation in the JOL's café area and throughout refurbished gallery spaces.

0161 767 1111 www.polyflor.com



Reeve spreads its wings



This month Reeve Wood have been supplying their floors to international clients. The company is incredibly proud of the beautiful new parquet floor which has just been laid at the Embassy of Sweden in London. Made from our Prime grade Ash, it is a 70 x 350mm herringbone parquet, coloured in Reeve White and finished in the matt

version of our high traffic protection. They have also supplied Kurt Geiger's first store to open in Riyadh, Saudi Arabia (pictured) with a 14mm bandsawn oak floor. To order a samples, please contact Reeve Wood.

01553 776 835 www.reevewood.com





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01215 222848 www.simonswerk.co.uk

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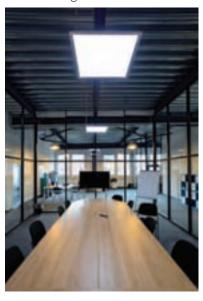
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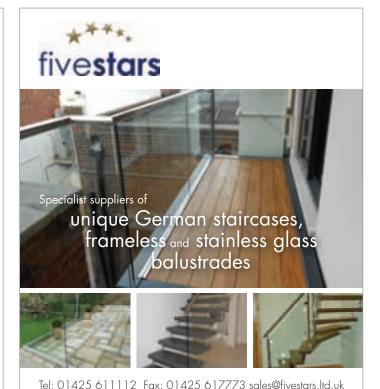






Lighting catalogue with style shots available on request

0208 123 7914 modernlightingsolutions.co.uk



www.fivestars.ltd.uk

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Polyflor helps community centre



Forest fx PUR vinyl flooring from **Polyflor** was recently used to create striking design floors at The Pavilion on the Park, a youth and community centre in Eastleigh, Hampshire. Forest fx PUR vinyl flooring was installed by Tildan Construction in the centre's Park View Cafe

and Woodpecker Hall function room. Specified by architects Michael Weakley Associates, Forest fx PUR vinyl sheet flooring in the warm Rich Cherry shade was selected for the installation. Available in a variety of modern and traditional wood effect designs featuring authentic surface textures, tonal hues and grain detailing, the hard wearing Affinity255 collection of heavy commercial luxury vinyl tiles has been developed to cope with high levels of foot traffic.

01617671111 www.polyflor.com

enq.228

Accessible guidance



With the growing need to make homes adaptable so occupiers can remain independent, and in their own homes, new guidance is aiming to help get it right. 'Design Guidance & Considerations for a Domestic Accessible Toilet/Wetroom' has been produced and published by Clos-o-Mat.

The white paper gives advice to ensure that all aspects affecting the functionality and practicality of a bathroom, wetroom and toilet, as occupier needs change, are considered. Robin Tuffley, Clos-o-Mat marketing manager explains 'Our white paper covers all the details to think about to ensure a successful adaptation, which meets the user's needs and so achieves best value for the provider.'

0161 969 1199 www.clos-o-mat.com

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Facing up to an ageing population



Lower birth rates and better life expectancy are contributing to an ageing population. By 2050, the average age of European citizens will increase from 39 to 49 years. By 2060, 53 per cent of the population are expected to be elderly and dependent. To comply with DOC M building regulations, premises providing accessible showering and WCs should incorporate a turning space for wheelchairs, support rails to enable transfer to and from wheelchairs, and a wall-mounted shower seat. All equipment, e.g. shower controls, hair dryers and mirrors must be accessible from a seated position. **DELABIE** offers a complete range of grab bars, shower seats and accessories for accessible bathrooms, toilets and showers. Available in white and blue, they provide a visual contrast with most wall finishes. Durability is paramount, since equipment in public places must withstand intensive use. DELABIE support rails and shower seats will support an adult's weight without pulling away from the wall. Meeting Doc M requirements is straight forward since DELABIE's special packs comply with safety requirements, offering ergonomic designs which also meet DOC M's spatial needs. The objective is to allow everyone – disabled people, older people or those with reduced mobility – easy access and maximum safety.

01491 824449 www.delabie.co.uk

eng.230



"Designing Bathrooms for People of Varying Ability" - CPD Seminar

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Changing the options away from home

Architect Vaila Morrison explains why appropriate toilets away from home are essential for disabled people

In an ideal world, everyone would be able to access life beyond their front door with the same degree of ease. But unfortunately we don't live in an ideal world...yet! Planning, building and financial constraints influence everyone's ability to do everyday things when away from home – pick up the groceries, go to the shops, enjoy a cup of coffee, go to the toilet – things that play a crucial role in everyone's lives.

We go to the toilet on average eight times a day, so if you are sending any time away from home, you will need to find a toilet. Most people don't even give this a second thought, as there are toilets everywhere you go, even at temporary events. Legislation is very clear about adequate numbers of toilets for different building types, and occupant capacities – if you are able to use a standard toilet cubicle, that is. For many, the type of toilet available – or unavailable – is a pivotal consideration as to where they go.

The recent Lords Select Committee report into the impact of the 2010 Equality Act highlighted that "Many restaurants, pubs and clubs are difficult to access, with many not providing basic facilities such as a disabled toilet." Under said Act, 'service providers' are required to make reasonable adjustments- including to the built environment- to address issues that would put a disabled person at a 'substantial' disadvantage.

The Act calls for reasonable adjustments to be made before the need arises. Although most public buildings will give access to a standard wheelchair loo, if you need any degree of help to go to the toilet, the majority of these toilet facilities just don't provide enough space, nor the right equipment. It's an issue that affects up to:

- 1.5 million wheelchair users
- One in 10 people who have either bladder or bowel incontinence
- 1.5 million people with a learning disability
- 1.2 million people living with stroke
- Up to 100,000 amputees
- 30,000 children with cerebral palsy
- 13,000 people with acquired brain injuries
- 100,000 people with multiple sclerosis
- 350,000 people with a neural disease that means they need help with daily life
- 75,000 people affected by spina bifida

As a mum to a child with complex needs, I know from personal experience just how much impact appropriate toilet





facilities have on our decision to go somewhere – or not. It influences even when and where we do our weekly shop.

You wouldn't expect a parent to put their baby on a public toilet floor to change a nappy. Indeed you may not even put your handbag down on one, But for the adults and children who are unable to stand, and need assistance to be cleaned or changed as part of their personal care regime, that is the reality they face. That is the reality my daughter faces. Either that, or we stick close to home, cut our trip short, or don't go at all.

Changing Places toilets were conceived to address this issue, and have had great success. There are now over 850 open across the UK. Changing Places are provided in addition to conventional Document M type wheelchair-accessible toilets, and provide at least $12m^2$ of space – enough to accommodate the user and up to two carers – a hoist and adult-sized changing bench.

It would be fantastic if Changing Places were installed everywhere the public go. For large new buildings e.g. transport *Continued overleaf...* hubs, shopping centres, venues, there is no reason for that not to be the case: after all, the need has been identified and a best practice solution has been set out in BS8300:2009. If we as building designers and procurers do not take up that best practice, then are we not choosing to exclude members of our society, their families and carers?

However, it has to be acknowledged that Changing Places do require a significant amount of space and to many smaller individual retailers, hospitality and entertainment venues that we go to regularly – the supermarket, the cinema, the coffee shops, the restaurants – the degree of space and cost required can be quite a commitment in proportion to the building capacity, and particularly difficult to achieve within the constraints of existing building fabric.

So, Changing Places campaigners, with the help of one of Britain's leading accessible toilet solutions companies Clos-o-Mat, have come together to produce additional, new guidance. The new Space to Change campaign sets out principles on how the standard wheelchair-accessible toilet specification could be upgraded to provide something closer to a Changing Places toilet, but without such a large increase in floor area, simply adding an adult-sized bench and hoist.

In face, Space to Change actually provides a workable solution to what is already described in Building Regulations Approved Document M 2015 Section 5: "Toilet accommodation needs to be suitable for all people who use the

building... where there is space for only one toilet it is of wheelchair accessible unisex type...in large building complexes such as retail parks there should be one wheelchair-accessible unisex toilet capable of including an adult changing table".

As an architect passionate about inclusive design, I'm hoping that we can encourage out clients to see it as a positive step to upgrade their facilities. To make those reasonable adjustments. Make their buildings welcoming and inclusive. Often the focus of discussion can be negative, clients are concerned about cost and loss of area. However, the nominal expenditure will be quickly amortised by the potential increase in patronage by disabled customers and their friends and families, if the facility is effectively promoted. People like us, people with greater accessibility needs, want to get out and about and enjoy our built environment, spend money, as much as the next person.

Research tells us that already, up to 20 per cent of the average business' customer base is disabled, and the purple pound represents £80 billion to our economy. We will go to the supermarket, shop, restaurant, leisure centre, tourist attractions, where we know that our children, friend, partner, parent can be changed comfortably. We will stay there longer, and therefore spend more money.

As designers, we need to be thinking about toilets more – in order that everyone else (families like mine) can stop having to think about them so much!

enq.232





enq.233

Decking modified to assist visually impaired



neaco provided a bespoke modification to its Techdek aluminium decking system as part of a bridge specification at the Grand Canal Dock development project in Dublin. Using the renowned design versatility of the company's technical team and state-of-the-art precision engineering facilities at its Malton factory, neaco

developed a unique grille surface which features tactile strips to alert visually impaired pedestrians when they are nearing a step. Providing a high architectural aesthetic, Techdek is extremely versatile and can be used in many other applications, including staging, modesty screens, solar shading, maintenance galleries and roof access walkways.

Striking Brett Landscaping solution



Hull Trinity House, a charitable organisation which has served seafarers and their families in the area for over 600 years, has successfully regenerated part of Hull's Old Town, using hard-landscaping materials supplied by **Brett Landscaping**. 900m² of Alpha Antique in Brindle was installed with its distressed aged look

blending beautifully into any surrounding, whilst its subtle tones evoke a warm ambience making them ideal for period settings such as Hull Old Town. Alongside the Alpha Antique, white marker blocks were also used to denote parking spaces, all of which was installed by the main contractor, C R Reynolds.

0845 608 0570 www.brettpaving.co.uk

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Stepping up: easy-fit low level light



Timeguard's new range of super-slimline, LED step lights make it easy to add decorative and safety lighting on steps and decks. And because they are slim enough – 27mm – to be surface mounted there's no need to dig out the wall or make holes in decking. The surface mount back plates provide for fast terminal block connection, making them

even quicker and easier to install. The double-insulated luminaires do not require an earth. Delivering from 20 to 24 Lumens of cool white light the new dark grey and white polycarbonate Timeguard Step Lights have the good looks and guaranteed durability that property owners will welcome indoors or out. Electrical wholesalers are now stocking square, oblong and round versions in both colours.

020 8452 1112 www.timeguard.com

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The GeoMet collection introduces Bench Two



Sui Generis, has launched a new design, 'Bench Two', to its contemporary **GeoMet** collection. Bench Two is a bold addition offering a chunky, curved and smooth-lined design, which is ideal for urban environments, recreational spaces and large scale commercial interiors and exteriors. The bench can be used as a one-

off seat or can be grouped to create playful breakout areas, which is ideal for applications looking to create an ultra-modern finish, such as schools and colleges, sports venues, gyms, art galleries, exhibition and conference spaces, reception areas etc. Bench Two can be created in any BS/RAL colour from sport yellow to tangerine and red to lime green. The seat is also available in a new Pop Art finish.

01206 798 798 www.grpgeomet.co.uk

enq.238

New RECYFIX® MONOTEC drains car park at the new Travelodge Western Super Mare



Hauraton Ltd introduced the RECYFIX® MONOTEC, their new high capacity channel system in January, with the new Western Super Mare Travelodge being the first installation of the system in the UK.

The MONOTEC channels installed in the Travelodge's 47 space main car park have a nominal grating width of 100mm, with an overall height of 380mm and are suitable for a loading category of up to Class D400. The channels provide a cross-section of $355.5cm^2$ and have a high attenuation volume.

The RECYFIX* MONOTEC's one metre long channel component is of a sturdy monolithic design where the HEELSAFE grating and the tongue and groove linking system are integral to the channel moulding. The whole unit is made of tough, virtually unbreakable polypropylene (PP) formulated to be very resistant to daily temperature fluctuations from frost conditions to strong sunlight, including the Ultra Violet (UV) spectrum. PP is naturally resistant to de-icing salt. Complying with the requirements of EN 1433, the PP is given its UV resistance by adding just sufficient carbon black as a stabiliser so that the structural strength of the material is unaffected and a consistent appearance is maintained.

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THE SAILMAKERS

Cover all bases using engineered fit-for-purpose canopies

Canopies UK Managing Director Jason Eastwood says that specifiers need to beware of seemingly cost-effective off-the shelf options for canopies, and discusses the importance of site-specific calculations for bespoke fit-for-purpose solutions.



Research suggests that many leading canopy manufacturers apply surprisingly little engineering acumen to the design, build and installation of the canopies they supply to customers. This can result in maintenance and performance difficulties, additional remedial costs and poor aesthetics – all much sooner than anticipated.

With canopy suppliers aplenty offering fast installation on seemingly cost-effective 'off the shelf' product solutions however, specifying a walkway, entrance cover, or semi-permanent building extension can appear quick and easy.

But with product and installation quality, longevity and performance all of key of key importance in the specification of shelters which will offer a long service life, shouldn't the canopy you choose be engineered specifically for the building you are designing?

Alarmingly, there are very few canopy manufacturers that currently engineer their products on a site-by-site basis, which means the product you choose most likely hasn't been

designed, manufactured or installed for the building it will be attached to, or the ground it will sit in.

Site specific calculations

To engineer a canopy for a specific project, your chosen manufacturing partner should conduct a comprehensive site survey consisting of a number of site specific calculations. These measurements will determine how your canopy should be both manufactured and installed in order to optimise performance, longevity and visual appearance.

Site specific calculations take into consideration factors such as wind speed and snow fall, pre-existing trees and roots, drains, sewage and terrain type. If the canopy is to be attached to a building, other factors include the age, strength, height and construction of the wall in question.

On the following page we will take a look at these considerations in more detail.

Continued overleaf...

Battling the elements - wind speed and snow fall

It will come as no surprise to learn that coastal towns are subject to more wind than inner-city suburbs, and that the most northerly parts of the UK experience more snow than the Midlands. But did you know that there's actually a myriad of variables at play when calculating wind speed and snow fall?

In addition to basic wind speed and snowfall measurements local topography, town terrain, site layout and altitude are just some of the additional which should be calculated when designing a canopy that will withstand the natural elements.

Problems underfoot

The footings of a typically canopy structure would sit around 800mm deep, but could go down as far as one metre if the shelter requires additional support due to high winds or other factors.

There are a number of below ground variables which can affect how a canopy should be erected in order for it to perform at its best throughout its warranty period and beyond. Here are two key points:

Ground type

While many urban areas benefit from good solid ground with a healthy clay content, historic landfill sites for example don't offer the same construction-perfect ground. Furthermore, rural ground can be loose and not conducive to standard footings, which is where alternative foundation structures such as pile and beam systems come into play.

Below ground obstructions

Drainage systems, pipes, cables and tree roots are just some of the obstacles site specific calculations will identify. By positioning the vertical posts of the canopy in accordance with any pre-existing obstructions and using steel to reinforce the structure where necessary, it is possible to avoid expensive utility re-routing works.

Off the wall

For cantilevered, wall hung canopies, site specific calculations will determine whether the wall is strong enough to take the weight of the shelter. With specific tests designed to mimic the weight of a canopy, a trained surveyor can ascertain whether additional foundation supports will be required in order to safeguard the canopy, the building and its users.

Canopies that are engineered for purpose often have longer and more comprehensive guarantees. Specifying bespoke built shelters needn't cause unnecessary work for architects and designers if the right manufacturing partner is used.

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New guide from Polypipe brings entire range together for first time



Por companies that are famous for offering a broad range of products backed by technical expertise, bespoke solutions and sector knowledge it can often be a daunting task to create one central document that provides detail while being easy to use.

That's exactly what Polypipe, one of the UK's leading manufacturer of sustainable drainage and water management products, have aimed to

capture with the launch of their new Civils and Infrastructure Product Guide.

Designed to provide quick, easy access to every product and service available from Polypipe Civils, the guide offers a simple overview for each are of the company's offering along with a more in-depth analysis of each product's applications and functions.

While the company's popular cable protection, Ridgidrain and Ridgistorm-XL piping and geocellular Permavoid and Polystorm ranges will be familiar to many designers, engineers and ground workers, it is perhaps the Fabrications section that will be of most interest to those already familiar with Polypipe.

Not only does the section provide a succinct overview of the benefits of working with Polypipe to create an engineered drainage solution, it also brings together a number of unique product fittings – including RIDGISTORMCHECK flow control chambers and RIDGISTORMACCESS manholes together for the first time as one product 'family', making the specification of unique systems through Polypipe's Technical Services Team even simpler than before.

Emma Nicholls, Marketing Manager at Polypipe, said: "At Polypipe we're conscious of the role that we play in the construction of some of the UK's largest infrastructure, civil engineering and residential developments. Because of this, we understand that there is a real need for our customers to build faster than ever before, and we want to be a key partner.

"While we've always strived to do this by promoting the many benefits of working with plastic over traditional materials and selecting engineered solutions over 'one size fits all' systems, we feel there is a real need to provide detailed technical information in a way that is easy to digest."

01509 615100 www.polypipe.com/civils

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