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winner of the Chartered
winner of Building 2015 Art of
Suilding Digital Photography
competition, © Ata Adnan

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ROYAL AWARD

Dame Zaha Hadid receives the Royal Gold Medal for Architecture

On 3 February, The globally-renowned architect Dame Zaha Hadid received the 2016 Royal Gold Medal for architecture, the first woman to be awarded the prestigious honour in her own right.

Zaha Hadid is internationally renowned for her built, theoretical and academic work. Each of her dynamic and innovative projects builds on over thirty years of revolutionary experimentation and research in the fields of architecture, design and urbanism.

Given in recognition of a lifetime's work, the Royal Gold Medal is presented by the Royal Institute of British Architects (RIBA) and approved personally by Her Majesty The Queen and is given to a person or group of people who have had a significant influence "either directly or indirectly on the advancement of architecture". Awarded since 1848, past Royal Gold Medallists include Frank Gehry (2000), Norman Foster (1983), Frank Lloyd Wright (1941) and Sir George Gilbert Scott (1859).

RIBA President and chair of the selection committee, Jane Duncan, said: "Zaha Hadid is a formidable and globally-influential force in architecture. Highly experimental, rigorous and exacting, her work from buildings to furniture,

footwear and cars, is quite rightly revered and desired by brands and people all around the world. I am delighted Zaha has been awarded the Royal Gold Medal in 2016 and can't wait to see what she and her practice will do next."

Speaking this evening, Dame Zaha Hadid said:"I am very proud to be awarded the Royal Gold Medal, in particular, to be the first woman to receive the honour in her own right. I would like to thank Peter Cook, Louisa Hutton and David Chipperfield for the nomination and Jane Duncan and the Honours Committee for their support. We now see more established female architects all the time. That doesn't mean it's easy. Sometimes the challenges are immense. There has been tremendous change over recent years and we will continue this progress. This recognition is an honour for me and my practice, but equally, for all our clients. It is always exciting to collaborate with those who have great civic pride and vision. Part of architecture's job is to make people feel good in the spaces where we live, go to school or where we work - so we must be committed to raising standards. Housing, schools and other vital public buildings have always been based on the concept of



minimal existence – that shouldn't be the case today. Architects now have the skills and tools to address these critical issues."

Born in Baghdad in 1950, Zaha Hadid started her architectural journey in 1972 studying at the progressive Architectural Association in London. She joined her former professors, Rem Koolhaas and Elia Zenghelis, at the Office Metropolitan Architecture in Rotterdam, where she became a partner in 1977. By 1979 she had established her own practice in London - Zaha Hadid Architects - garnering a reputation across the world for her trail-blazing theoretical works including The Peak in Hong Kong (1983), the Kurfürstendamm office building in Berlin (1986) and the Cardiff Bay Opera House in Wales (1994).

Architects Datafile team get muddy for charity

On 9 April, the Architects Datafile team will be taking part in the Royal British Legion Major Series, a demanding 5K course full of military obstacles and thick mud!

All participants will wade through muddy streams, 'stench trenches' and negotiate 'vanishing bridges' and a number of other hurdles while raising money for the Kids Cancer Charity (www.kidscancercharity.org formerly Christian Lewis Trust).



Kids Cancer Charity

What our office based staff can expect on the day could not be more of a contrast to the day-to-day routines of publishing trade magazines and

websites. As a result, we are sure there will be great trepidation as the day arises, however, each member is fully committed to completing the event – finishing with a 50m water slide.

We have set a target of £1,500 to raise, so please give generously to this great cause by visiting:

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You can also text a donation by texting NETM99 £3 (or any other donation amount) to 70070.

future watch

Norman Hayden hears the case for more urban extensions put by LK2's Tom Drew



Iom Dre



All across the country there is a struggle going on to access facilities which support health, well-being, community and leisure. Developments in our industry have been rapid and it is vital that experts in the architectural sector keep a keen eye on them.

Already this year there have been a number of things affecting deprived areas, marking it a positive start to 2016.

To begin with, the Government has set out its objectives for a range of sectors – including education, housing and services. This is clear from the housing estate scheme and the recently-published Sporting Future strategy. It aims to create better access to high-quality open spaces for communities throughout the UK, helping to fight the obesity epidemic and other health issues facing the country.

One of the ways local councils and businesses can address this problem is through enhancing sport and recreation facilities, so creating modern communities as part of sustainable urban extensions.

At LK2, we believe that urban extensions are the future of modern living and town planning. Urban extensions, creating sustainable sports and leisure solutions, can benefit everyone – from local sporting institutions to governing bodies.

The LK2 team have been working on schemes – such

as the Stamford Sports Centre and Islington Football Pavilion – to pioneer urban extensions. Our work involves support, guidance and advice to developers and local authorities to create sustainable, efficient and rationalised developments.

But, you might ask, how can you ensure a development meets the needs of local people and will support the Government's objectives for the future of the region? One way is to cite official findings such as the 2015 Indices of Multiple Deprivation (IMD) – the latest report on relative deprivation in England – which generates statistics from ages, groups, schools, housing, health and services in deprived areas.

At LK2, we build on our knowledge of the retail, residential, education and sports sectors, and go the extra mile as we aim to transform communities, encourage participation in sport and create accessible ways for people to become involved. We dedicate a great deal of time, thought and experience as to how things can be arranged to suit all parties. For example, by producing a feasibility study or developmental appraisal to determine a project's viability, we look to enhance the proposals.

A key factor affecting wider community development is the emphasis on house building. At the beginning of this year, the Government commissioned the building of up to 13,000 homes on public land, but this only Continued on page 7...

events

CONFERENCES

RICS Building Surveying
Conference 2016
19 April, London
www.ciat.org.uk/en/media_centre/
news_and_events/events

Zero Carbon Design Conference 08 – 09 September, Birmingham

www.zerocarbonbuildings.world

COURSES

small projects

19 May, London

www.buildingcentre.co.uk/events

Handcrafted concrete for

EXHIBITIONS

Creation from catastrophe: How architecture rebuilds communities Now – 24 April, London www.architecture.com/WhatsOn

FESTIVALS

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

London Festival of Architecture June, London londonfestivalofarchitecture.org

ROADSHOWS

RIBA Manchester CPD Roadshow 07 April, Manchester www.architecture.com/WhatsOn



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represents a tiny proportion of the million houses wanted by 2020. So, this year, a £1.2 billion fund is being launched to help developers prepare under-used brownfield land for housing to fast-track the creation of at least 30,000 starter homes by 2020.

However, with this focus on house building, many firms, developers and planners often give little thought to community provisions, in particular sports facilities, which many would say should be higher up the agenda to tackle poor health and other long-term government goals.

This is often due to a lack of understanding of the community's needs and how significant benefits can be achieved. This sometimes results in a tendency to incorporate the bare minimum of facilities into a development – whether it is grass football pitches or a leisure centre, for example – which are seldom enough to alleviate deprivation and have an impact on falling participation rates.

As we have seen with our projects, planning permission will not be granted for new developments until appropriate agencies have considered the need to provide essential social and community facilities. Therefore, local planning authorities should involve all sections of the community in the development of local plans and planning decisions.

Where appropriate the necessary land or floor space required for social and community schemes should be reserved, or a financial contribution sought towards the provision of such facilities nearby.

The creation of urban extensions and facilities will inevitably increase local growth, through creating jobs and supporting businesses. Social and community facilities are an essential ingredient of local life – after all, they make an important contribution to community life.

It is vital for new developments to provide facilities which meet present and future needs. For example, the creation of childcare facilities in connection with a major employment development or community sports facilities as part of a large housing site. The requirement for facilities will change in relation to the size and nature of the development and the existing pattern of facilities in the area.

To support sports and recreation facilities on these schemes, we work alongside sporting organisations – such as, the Football Association, Football Foundation and Sport England – on a local and national level. Working with them is crucial to strengthening the proposed developments, but due to intricate and challenging planning policies, it can be a complex and difficult procedure.

Planning policies should be based on robust and up-to-date assessments of the needs for open space, sports and recreation facilities and opportunities for new provision. In analysing local strategies or creating a sports scoping study, LK2 feels it plays a vital role with developers and planners.

This relationship with national governing bodies and funding agencies is central when leveraging grant aid and other investment for a facility as part of a project's business planning element. In addition, our asset transfer expertise can enhance the ownership arrangements of a site to deliver a more



sustainable future through a proven management structure to satisfy funding bodies.

Creating urban extensions can provide facilities which seek to rectify existing local deficiencies. However, in some instances, proposed housing schemes may be exacerbating issues, too.

A local artificial football pitch might already be operating at capacity before new houses are located nearby, but the new development, sometimes through Section 106 agreements, can contribute to meet the anticipated increase in demand by installing a similar facility or enhancing the existing one.

It is important for experts to identify and determine the current specific needs and quantitative or qualitative deficits or surpluses of open space, sports and recreational facilities, in any given local area. Information gained from these assessments is used to determine what open space, sports and recreational provision would be required.

This knowledge, combined with our working relationship with national governing bodies for sport and other relevant agencies, means that LK2 confidently advise on the expected requirements in terms of sports facilities as part of an urban extension.

Working in conjunction with our architectural team, LK2 provides high quality designs and proposed layouts of potential facilities, and their synergy with the surrounding environment to be used in presentations, public consultations and sometimes even eventual plans.

As stated, the Government's objectives are clear: to increase access to high-quality recreation spaces and opportunities for sport and physical activity can make an important contribution to the health and wellbeing of communities. It can go some way to fighting the obesity epidemic and other health issues faced in this country.

We see urban extensions on all scales as the future of modern architecture and central to improving facilities and building communities, as they can resolve issues for sport, leisure, housing and education. Ultimately, these schemes can generate a positive change in communities and rekindle a sense of pride and excitement.

Tom Drew is Sports Development Manager at LK2 Sport and Leisure Ltd – lk2.co.uk

norman@netmagmedia.eu

'Urban extensions are the future of modern living and town planning... and can rekindle a sense of pride in communities'









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Four summer houses to join the Pavilion as Serpentine architecture programme expands for 2016



The Serpentine announced that, in tandem with the 16th Pavilion, it expands its internationally acclaimed programme of exhibiting architecture in a built form by commissioning four architects to each design a 25m² Summer House.

The four Summer Houses are inspired by the nearby Queen Caroline's Temple, a classical style summer house, built in 1734 and a stone's throw from the Serpentine Gallery.

In line with the criteria for the selection of the Pavilion architect, each

architect chosen by the Serpentine has yet to build a permanent building in England.

The Serpentine Summer Houses, sited one minute's walk from the Serpentine Gallery, will complement the world-famous Pavilion commission on the Gallery's lawn by offering visitors an unrivalled, first-hand experience of contemporary architecture by leading international architects from across the generations, within the historic parkland of Kensington Gardens.

Julia Peyton-Jones, Director, and Hans Ulrich Obrist, co-director, Serpentine Galleries, said: "After 15 years, the Pavilion programme has expanded. It now comprises five structures, each designed by an architect of international renown, aged between 36 and 93.

"The Pavilion, which will be situated on the lawn of the Serpentine Gallery, as usual, will be joined by four 25m²



Summer Houses designed in response to Queen Caroline's Temple, a classical-style summer house built in 1734. All projects have been thrilling to commission and will be equally exciting to realise. We cannot wait to unveil them all this summer."

The expanded scheme will be submitted to Westminster City Council Planning Office and District Surveyor's Office for planning later this month.

For a more in depth look, please visit www.architectsdatafile.co.uk and enter reference number 70842.

"Daredevil" takes the prize in Art of Building photography competition

A doctor from Bangladesh has scooped top prize in the Art of Building digital photography competition, run by the Chartered Institute of Building since 2010.

Daredevil by Ata Adnan received 29 per cent of the thousands of votes cast by the public to choose this year's winner. He said: "My wife is an architect and she has been a constant support throughout my photographic journey. To win such a renowned prize feels like a beautiful blend of the things that matter to us. I have always liked photographing architecture but particularly with a human element involved.

So when I saw that child suddenly get up on top of the bridge and start to walk on it I wanted to capture the moment as best as I could."

As well as the title of 'Art of Building Photographer of the Year,' Adnan's image has also earned him a cash prize of £3,000. Which according to the award-winning photographer he will donate a portion of to a Bangladesh charity that supports children in extreme poverty. This year, the judging panel included broadcaster, photography critic and editor, Sue Steward; award-winning photographer Matt Wain,



and Tom Ravenscroft, deputy editor of Construction Manager magazine.

For more details about the competition and to see this year's Highly Commended and Finalist line up please go to www.artofbuilding.org



Matt Greenhalgh

my view

In a critical look at town planning, cpmg's Matt Greenhalgh argues the need to transform 'spaces' into 'places'



Pedestrianised: Collin Street, Nottingham © Nottingham City Council

In studying and practising architecture in Nottingham for 16 years, I've seen the cityscape change dramatically. Urban planning, the opening of city spaces to facilitate the flow of footfall and the "human element" being considered in terms of the city's architecture, have all had an impact on the quality of the public realm.

Successful projects redefine the way buildings respond to the city context and provide a springboard to encourage public power in shaping a city and reimagining what it means to inhabit and live through a public space.

Within Nottingham, a number of innovative schemes have offered the potential to transform, or have transformed, areas – Cobden Chambers and the Market Square are two of the more high-profile examples.

New York's High Line is probably the most notable example of a city regenerating space with the public at its core. It did so by converting the city's unused rail tracks to create a publiclyinhabited space above the streets and a new perspective to the city has been achieved.

This is the right approach to urban regeneration and one which should be emulated across cityscapes in the UK, transforming an area to create a usable space. Not just a cosmetic facelift but giving a practical dimension, one which is a "place" for the public to appreciate and experience. What's so fantastic about transforming the public realm in this way is that it is community-driven being changed by, or for, the people it will directly have impact upon.

An example of this is the redevelopment of Trinity Square in Nottingham's city centre. This was an area which had been designed in such a way that it did not interact or connect with its environment. The public did not engage with, or inhabit, the space – preferring to skirt around the edges of the square.

The Nottingham and Derby Society of Architects (NDSA) championed a re-imagining of the square and proposed

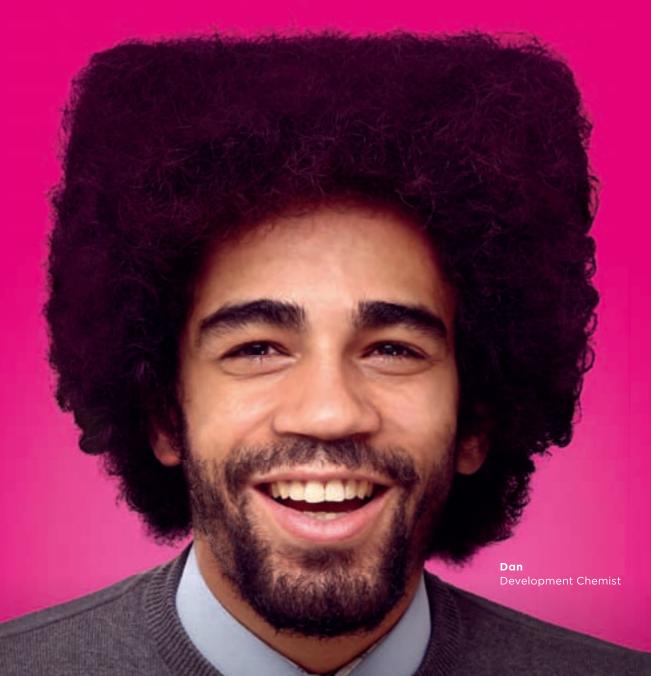
its redevelopment as an architectural project for students at Nottingham Trent University. The resulting ideas were presented to the public through student-run public consultations and the groundswell of support for these innovative and creative planning solutions were discussed in a public forum.

Acknowledging the need for improved public spaces, the city commissioned the redevelopment of the square which now, due to consultation's success, is a site in which markets, events and a thriving restaurant scene now flourish – proving that grassroots change is possible.

Town planning, in this community-driven sense, has historically not been high on the agenda when considering the long term view of how the city is shaped but the sheer number of new high profile public realm projects planned, or now underway, is testament to how the city is starting to readdress this. People vehemently want public spaces improved

Continued on page 12...

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'With confidence high, there is the scope to curate high-quality urban landscapes and give new purpose to spaces with a real human scale'

Transformed: Cobden Chambers, Nottingham



and it is great to see that this is beginning to filter through into action.

Importantly, with the recession not hampering development and with confidence high, there is the scope to curate high-quality urban landscapes and give new purpose to spaces with a real human scale.

In this sense, architectural societies have a real chance to build on the momentum being gathered and create a positive change – shaking the dated idea of 'old boys clubs' and bringing grass roots projects to the national stage.

The "Hidden Spaces" project in the West Midlands received national acclaim for opening up disused or lost spaces and buildings and showcasing the city's forgotten history and untold stories. The NDSA decided that it was time for the East Midlands to celebrate its own heritage and for people to make a physical mark on their city.

The "Nott Forgotten" competition in Nottingham, set to launch in April 2016, will focus around the idea of "improving the public realm". Sites in need of regeneration have been pinpointed and budding architects, students and members of the public will have the opportunity to submit designs to envisage how these forgotten spaces could be improved. The winning plans will come to life, thanks to RIBA's

national and regional funding and generous local sponsorship.

It has the potential to open the city up to new audiences and to those who may not have engaged with its architecture before. Nottingham Trent University has used the competition as a second-year degree module and it will be interesting to see how younger entrants' submissions differ from those of the industry's professionals. We hope that those free from commercial aspects or pressures will challenge what we see as usable – bypassing the constraints facing established architects.

It's not just societies who have the potential to transform spaces. Local, council-funded initiatives are becoming more common, creating environments for local businesses to thrive and grow. Nottingham's Creative Quarter is looking to host a festival centred on "creative place making" – drawing together the world's leading planners to challenge what the city is and what it has the potential to be.

In terms of redesigning the city in a meaningful way, sympathetic to the flow of people and traffic, Nottingham has struggled for years with the Broadmarsh Shopping Centre creating a physical barrier to the city's flow. Between the station and the city's retail and commercial heart stands the 1975 barrier, which

is finally on course to be redeveloped.

What excites me most, however, is the pedestrianisation of Collin Street, directly to the south of Broadmarsh, to create an urban park on what is currently the busiest arterial route for vehicles through the city. This represents a fine ambition and the park's relationship with the adjacent shopping centre and bus station is critical. Creating active frontages to the buildings bordering this new park will be central to the success of this place – transforming it into an integral part of the wider urban fabric, bustling with people and enriching the wider city context.

So, the future looks bright for tactical urbanism, placing social value on architecture and architectural landscapes and the potential for community-driven change in terms of city landscapes. The increasing "cafe culture", which has stemmed from the growing cosmopolitan living, has increased the need for meaningful places, increased pedestrianisation and the flow of retail and human interactions.

Matt Greenhalgh is an architect at East Midlands based cpmg and the current NDSA president, heading up the Nott Forgotten project (@Nott_Forgotten or visit the NDSA's Facebook page)

For features information contact Norman Hayden (norman@netmagmedia.eu) $\label{eq:contact} % \begin{subarray}{ll} \end{subarray} % \begin{subarra$

The year's best architecture images from the world's biggest photography competition — the 2016 Sony World Photography Awards



The power and beauty of architecture in all its forms is today highlighted on the shortlist of the world's biggest photography competition, the Sony World Photography Awards.

Recognising the best contemporary photography from the past year, the 2016 Sony World Photography Awards received a record-breaking 230,103

images across its Professional, Open and Youth competitions from 186 countries – a 33 per cent increase on entries on 2015 and the most in its nine year history.

With the shortlist, a panel of internationally recognised judges has identified exceptional work by talented photographers worldwide that capture architecture in all its variety with striking originality and beauty.

The shortlisted photographers from across the Professional, Open and Youth competitions will now compete to win their categories and the overall Photographer of the Year titles will be announced in London on 21st April. The photographers compete for a share



of a \$30,000 prize and each category winner receives the latest digital imaging equipment from Sony.

All shortlisted images will be shown as part of the 2016 Sony World Photography Awards Exhibition at Somerset House, London from 22nd April – 8th May and published in the 2016 edition of the awards' book.

Pictured far left: Home of 40 thousand Buddhist monks in Sichuan province.
Copyright: ©Attila Balogh, Hungary, Shortlist, Open Architecture, 2016 Sony
World Photography Awards

Pictured left: Water tower in Uppsala, Sweden. Copyright: @Nils Olof Wendel, Sweden, Shortlist, Open Architecture, 2016 Sony World Photography Awards







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GARAGES I GARDEN ROOMS I ORANGERIES I HOME OFFICES I CONSERVATORIES I BARNS I STABLES

ena.104

international focus

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







International sports venue design leader HOK and Barcelona-based TAC Arquitectes have designed a new 10,000-seat arena for FC Barcelona. The New Palau Blaugrana is expected to open in time for the 2019-2020 FC Barcelona Lassa basketball season. It will replace the 7,500-seat Palau Blaugrana. It will be built on the current site of the Mini Estadi, a 15,276-seat stadium located across from Camp Nou, the home stadium of FC Barcelona. The design for the arena is flexible to accommodate different sporting events while meeting the requirements of Euroleague basketball.





ÇANAKKALE MUNICIPALITY URBAN RENEWAL PROJECT, TURKEY MUUM ARCHITECTS

Çanakkale Municipality Urban Renewal Project, designed by MuuM, wanted to organise a multi-purposed public space especially for social interaction and used as a gathering place of people from every stratum. The well-designed city park is the heart of habitat offering a sustainable environment to any sociocultural user profile. The philosophy behind this design proposal lies in the aim to increase engagement of social life facilities with other functional elements of the city to make a greater impact on the city where this change is reflected to the daily life of people.

Ref: 8585 I

exploring architecture

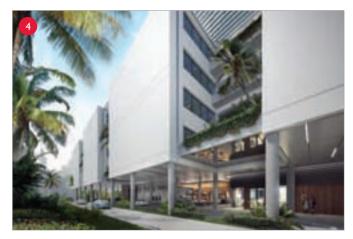
featuring the latest projects from around the world



NEW EXTENSION AT THE NORTON MUSEUM OF ART, FLORIDA, USA

The New Norton will revitalise and expand the existing museum, adding more galleries and visitor facilities, while restoring the original axial layout of the Museum, set within an exotic Floridian landscape. It seeks to enhance the experience of art by reinforcing the relationship between the building and the landscape and create a new social focus for the community. It also lays the foundations for the future growth of the museum to become one of Florida's leading cultural institutions. Lord Foster, founder and chairman, Foster + Partners, said: "The new extension of the museum represents an exciting opportunity to place the reinvigorated Norton at the heart of Florida's cultural life and to establish its international presence, allowing more people to enjoy the museum's very special collection."

Ref: 97606



INTERNATIONAL SCHOOL, HO CHI MINH CITY, VIETNAM BOGLE ARCHITECTS

Construction has started on Bogle Architects' International School in Ho Chi Minh City, Vietnam. The scheme will provide teaching facilities for over 900 students on a 1.15 hectare site adjacent to the River Saigon. The school is positioned on the site in direct response to the sun's trajectory – allowing daylight to enter from the north and south facades while restricting heat gain. The design is notable for its clarity – all the main facilities are arranged along a central spine or 'high street'. Classrooms are specifically located to optimise environmental conditions and improve students' wellbeing.

Ref: 49879



MULTIPLE APPOINTMENTS, PHILIPPINES BENOY

Benoy has announced its expansion across the Philippines by confirming five new appointments and completing two schemes in the Southeast Asian country. The firm's appointments are mainly concentrated in the Metro Manila area. Benoy Director Stephen Chow commented: "The Philippines is one of the strongest economies in South-east Asia and it has been an incredibly dynamic market for Benoy. Working in the region for more than ten years, we have seen the opportunities increase as the country grows and competes on an international scale.

Ref: 56316

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BIM modelling for the Supreme stairway and the Elite stairway is live on Bimstore.



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01494 778787 www.urbanfront.co.uk

enq. 107

SOLID SURFACES CPD SEMINAR



CD (UK) Ltd, the exclusive UK distributors of Corian® - Seminar structured as follows: Development of Solid Surface from 1960's to present day; Raw materials, adhesives and composition: Solid Surface characteristics and benefits; Manufacture: Sheet, Matrix sheet and shape product; Comparison of characteristics; From production to fabrication process; Properties of Solid Surface; Architectural and Design possibilities; Current applications; Environmental considerations; Support, warranty and service infrastructure.

0113 201 2240 www.cdukltd.co.uk

enq. 111

LOW CARBON GRP DAYLIGHT SOLUTIONS CPD



Hambleside Danelaw is pleased to announce the latest CPD seminar, Low Carbon GRP Daylight Solutions for the Metal Building Envelope. The RIBA approved seminar delivers an understanding of how rooflight configuration choices can impact on the overall contribution rooflights can make to the metal building envelope with particular focus on: Light transmission; Thermal Performance and insulation values; Embodied Carbon; Non-Fragility.

023 9235 4900 cpd.seminars@hamblesidedanelaw.co.uk

enq. 108

BREATHING LIFE INTO CITIES



Scotscape's CPD 'Breathing Life into Cities' assists architects and specifiers when designing and selecting living wall systems, and while considering other greening options for facades and roofs. It covers the benefits of living wall application, good design, installation, maintenance and the specialist irrigation required to achieve a successful sustainable living wall. Scotscape's fabric living wall system can be supplied with integrated insulation allowing specifiers to quantify the thermal benefits and energy efficiencies achieved by adopting living walls.

heatherp@scotscape.net www.scotscapelivingwalls.net

enq. 112

TWO NEW RIBA ASSESSED CPD SEMINARS FROM COMAR



In two RIBA assessed seminars, **Comar** outlines:

'Stand & Deliver: a Study of curtain Walling' – the design of curtain walling, it's properties and how it is used by specifiers. This seminar aims to offer an understanding of the points of HII in the NBS specification system, and how best to make use of it.

'Designing functions & reliability into entrances' — the issues that influence the function of main entrance design and technology. This seminar aims to offer an understanding of how user expectation influences door design and links this with hardware selection, entrance configuration and floor finishes.

020 685 9685 www.comar-alu.co.uk

enq. 109

INTRODUCTION TO THE LRWA



The Liquid Roofing and Waterproofing Association

announces the launch of its RIBA Approved CPD presentation, exclusively available online for specifiers, architects, and surveyors; allowing time conscious professionals the opportunity to gain CPD points without having to set aside a specific time during the working day to go out and attend a seminar. Specifiers who complete the CPD will also be able to understand the technical and financial benefits of specifying liquid applied roofing and waterproofing systems, as well as learning about the product and installation standards that have been set within the industry to ensure optimum performance is achieved.

0207 448 3859 www.lrwa.org.uk

enq. 113

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.

0844 327 6002 www.ccl-wetrooms.co.uk

NEW GUIDE TO MINIMUM ENERGY EFFICIENCY STANDARDS (MEES)



Mitsubishi Electric has produced a free, CPD-accredited guide to the Minimum Energy Efficiency Standards (MEES) which will come into force from April 2018. From that date it will be illegal to lease out a building with an EPC (Energy Performance Certificate) rating of Band F or G.The CPD Guide examines MEES in-depth, including what types of building are most likely to be affected and what exemptions may currently apply.

01707 282880 library.mitsubishielectric.co.uk

editor's product focus

I. SAINT GOBAIN PAM UK

If you are looking to add value to your property by specifying a strong, durable, lightweight and aesthetic alternative to plastic rainwater systems, then take a closer look at Saint Gobain PAM UK's Cyclone steel system. With no risk of shrinking or leaking, Cyclone has a no fade colour warranty of 15 years and will typically last for more than 40 years. It's longevity, and 100 per cent recyclability also means it has the lowest carbon footprint of any material, so it's the best choice for modern eco designed properties. Available in four standard colours black, white, silver metallic and dark grey Cyclone will provide kerb appeal for decades to come.



enq. 115



2. BIOETHANOL FIRES

bioethanolfires.co.uk supply flueless bioethanol fires to suit every project.

The company works closely with architects and interior designers to give domestic and commercial projects that extra dimension through the use of fire. It is able to provide comprehensive technical advice, drawings and inspiration and the company's range of fires include wall hung, free standing and built in models as well as indoor and outdoor fires. bioethanolfires.co.uk is a specialist in long length burners that create a really contemporary look and can offer bespoke sizes and finishes with Planika's FireLine Automatic range.

enq. 116

3. THE CAST IRON BATH COMPANY

Continuing its expansion from on-line retail to the high street, The Cast Iron Bath Company is very excited to announce the opening of its London showroom on 7 March 2016.

Following on from the huge success of its York showroom, the Islington showroom with be beautifully designed and will exhibit the full range of traditional style cast iron, copper, and bateau baths – alongside the company's handpicked range of complimentary tapware, showers, basins, sanitary products and accessories.



enq. 117





4. CRESS WATER SOLUTIONS

Reed-beds, ponds and wetlands, alone or in various combinations offer a now well proven means of treating sewage and a range of private, industrial, commercial and agricultural wastewaters where mains drainage is not available. They harness environmentally friendly natural processes in economical, low maintenance, sustainable solutions. Cress Water Solutions has considerable experience and expertise in the design, installation, operation and maintenance of these systems. Their passive, highly efficient vertical flow reed-bed systems range in size from those for single homes up to those for Hotels, Nursing Homes, Caravan Parks, large Visitor Centres and a busy Motorway Services Area.

enq. 118

5.WCI SEWAGE TREATMENT LTD

Specialist sewage engineers, WCI Sewage Treatment Ltd is regularly reminded that there are more myths than truths when it comes to private foul drainage.

Whether its the professional community or those that have been on private drainage for years, the regulations, the options and the maintenance of private drainage systems are poorly understood.

'What does a septic tank actually do' might be reasonably well understood but 'how often does a septic tank need emptying', on the other hand, is rarely answered correctly. If you have questions about private drainage, why not talk to the experts?

enq. 119





6. BENCHMARK DESIGN

The University of Birmingham is in the midst of an exciting redevelopment, including the landscaping of a rooftop courtyard. The objective was to create an area with planters that could accommodate small trees and seating grouped around tables. Elements from Benchmark Design's Campus range were brought together in several combinations to achieve a relaxed and social area. The planters are produced in 6061 aluminium with a simple return edge and plinth style base. The benches are framed in the same aluminium with iroko FSC-approved timber slats. The modular design of the Campus range gives the flexibility to select and configure elements for specific landscape solutions or simply use as stand-alone items.

7. FUNDERMAX

The first ever UK installation of FunderMax's unique m.look; A2,d0,S1 fire rated high pressure laminate cladding is currently drawing to a close at the new Port Talbot Railway Station. The extensive internal and external refurbishment of this 'live' station, has proved an ambitious yet highly rewarding project. m.look offers a whole new level of expression. Blending exceptional style and superior fire performance, this unique facade offers superb protection – with a fire classification of A2-s1, d0 according to EN 13501-1, giving greater peace of mind and design freedom. Where safety and innovation are key this clever HPL steps up to the mark. What's more, it can be used in builds in excess of 30 metres and boasts an extensive colour palette.



enq. 121



8. SCREEDUCT

Screeduct specialist floor trunking systems are manufactured in all types of steel, including galvanized steel, stainless steel, hot-dipped and aluminium. Providing service access via removable flush-fitting modular covers allowing the laying and protection of pipework, or power supply cabling, safely within the floor screeds. Having invested in the latest technology and machinery, Screeduct is one of the few companies able to plan, design and manufacture to a customer's particular requirements. The bespoke systems are tough, long-lasting and incredibly easy to install. Pictured is a recent project for Cardiff University where trunking with a recessed lid to receive a vinyl finish was required.

9. CAPITAL FIREPLACES LTD

Capital Fireplaces Ltd has introduced two ranges, Vision Trimline Gas Fires and Sovereign Stone Fireplaces, the innovative fires are skilfully engineered to allow a true trimless aspect or be complemented with a stylish Sovereign stone fireplace. Meticulous attention has been paid to the realisation of the fuel bed and flame patterns to ensure a perfect recreation of a natural living fire. The Sovereign stone and marble fireplace range has been purposely designed to produce substantial and eye catching models. The designers have created a combination of historical characteristics and have cleverly adapted the range to accommodate today's current trends.



enq. 123



ASSA ABLOY builds on its strengths



Reinforcing its capabilities in major projects, ASSA ABLOY UK Specification, a division of ASSA ABLOY, a global leader in door opening solutions, has appointed a new Specification Development Manager. Helping deliver solutions to the North West, Wales and the Isle of Man, David Emmerich (pictured) joins the team to further continue its journey and progress in first

fit solutions for major projects. Speaking on his appointment, David said: "This seemed like an ideal opportunity to join a progressive specification team, which has the pedigree and wealth of experience of a company like ASSA ABLOY behind it." David will join Specification Director, Allan Thomson's team, who commented: "We're pleased to welcome into the fold someone with a strong background in specifying solutions for major projects."

Norbord kicks off 2016 with new campaign



Following a busy 30th birthday year in 2015, Norbord's SterlingOSB brand continues in the same successful vein with a new campaign designed to optimise sales of the stalwart panel through builders' merchants in 2016. The industry-wide, national campaign again gives builders and merchants alike the tools they need to maintain the Sterling job in 2016 and encourage sales. Designed to

highlight SterlingOSB's prowess in a host of general jobs and construction tasks, Norbord's 2016 campaign comprises nationwide advertising and POS support along with PR activities in the media and in branch. Probably the most versatile wood panel product in the UK, Norbord's SterlingOSB can be found on nearly every building site in a vast range of different applications.

Crown Paints brings the best colour choice



Crown Paints offers the perfect partnership for specifiers wanting to access colour expertise and inspiration for their projects. Crown Paints' Colour Service Team brings together a wealth of expertise and initiatives. Accessed through Crown Paints' Specification Services, those include bespoke colour scheming and a library of sector-focussed colour

books for environments including healthcare, housing and education. Crown Paints also offers two CPDs – 'The Role Of Colour In Buildings' and 'Colour In Education'. Crown Paints also provides specifiers with useful content in the form of trends forecasting through its renowned Colour Influences programme.

0330 0240310 www.crownpaintspec.co.uk/ColourServices

enq.127

Schueco announces excellence awards for 2016



Leading sustainable building envelope specialist Schueco UK – in conjunction with RIBA Journal – is continuing its sponsorship of the Schueco Excellence Awards for Design and Innovation and is inviting submissions for the 2016 competition. Open to architects and fabricators across both the commercial and trade residential sectors, the Schueco Excellence Awards – now in their third year – have become firmly established as a major annual event celebrating the very

best in UK building design. Closing date for entries is midday on 4 April and the Excellence Awards Presentation will take place on 23 June.

01908 282111 www.ribaj.com/buildings/celebrate-collaboration

eng.128

CRL becomes an associate member of the Council of Mortgage Lenders



Structural defects insurance provider CRL has become an associate member of the Council of Mortgage Lenders (CML). CRL, which has eight offices throughout the UK and Ireland, elected to join the CML as part of its ongoing commitment to supporting good practice within the UK's property sector. In doing so CRL has become one of 90 associate members who collaborate, collect and share best practice on behalf of members with the organisations, government departments, and commentators who have an interest in the UK's £1.3 trillion mortgage market. Steve Mansour, CEO, CRL Management Limited, said: "CRL elected to join the CML as an associate member as part of its commitment to supporting the property sector generally. We intend to be extremely active associate members as we recognise the good work that the CML do in bringing the industry together, specifically in their role acting as the voice of the mortgage industry in the UK. CRL is committed to working with mortgage lenders to ensure that the best possible structural insurance options are available to all residential mortgage customers in the UK – regardless of the lender they choose. Through the CML, and its lender members, CRL hopes to continue to promote the interests of its customers."

0800 772 3200 www.c-r-l.com

enq.129

FDS Consult opens its doors to two new recruits



As part of its ongoing expansion, FDS Consult, a leading expert on fire engineering in the UK, has brought a further two Associate Fire Engineers to join its growing team. Both Granville Harris and Hayden Julian will be working on FDS Consult's impressive portfolio which includes The Corniche, a mixed-use development situated on the Thames' Albert Embankment. The pair have an extensive knowledge of the fire industry, having worked for the London Fire Brigade for a total of 60 years between them. Granville, who has also worked within London Fire Brigade's Fire Engineering Department and more recently at International Fire Consultants as a Senior Fire Engineer, will be working on design proposals alongside architects and designers to create the most appropriate fire safety strategy for each individual project. Carrying out similar tasks to Granville, Hayden Julian – who is based in the company's London offices – will also be working with FDS Consult's range of impressive clients including Berkeley Homes and Lend Lease to deliver tailor-made fire strategies. Gerard Sheridan, chairman at FDS Consult said "This is an exciting time for Granville and Hayden to join us at FDS Consult. Our project portfolio is growing at a substantial rate and our relationship with clients has never been stronger."

01322 387411 www.fdsconsult.com

Kawneer joins forces with Robertson Group



A leading UK architectural aluminium systems supplier, Kawneer, has won a place on the portfolio of approved suppliers to the multi award-winning Robertson Group. Robertson Group is a privately-owned portfolio of 18 individual companies directly employing more than 1,600 people in construction, infrastructure and support services throughout the

UK. Kawneer will support Robertson in this with comprehensive design expertise and training, inspections and warranties for the supply of curtain walling, window, door and unitised systems, from conception to completion and beyond through its extensive range of approved fabricators.

01928 502500 www.kawneer.co.uk

enq.131

The Innovation Zone provides perfect snapshot



The Innovation Zone is a new initiative being introduced at **The FIT Show** in April this year designed to channel innovation and energy at the show – and of course to allow creative and inventive types to have a drink or two while they are creating and inventing. With an exhibition

shell scheme designed and built around the only official bar at The FIT Show combined with an eclectic mix of exhibitors all looking for the atmosphere and buzz that this hall is designed to bring, it is anticipated that the area will become one of the busier and noisier sections of the event. The hall itself is actively participating as a Live demonstration module with the whole of the 314m^2 curtain-walled end section installed with SageGlass electronically tintable glass.

0845 0945 077 www.fitshow.co.uk

enq.132

Furnitubes – 70 years of design and innovation



Furnitubes International Ltd, a leading supplier of park and street furniture, celebrates 2016 as its 70th year in business and has launched new corporate branding to mark

the occasion. The company was started in 1946 by Jack Cluer and is still owned by the Cluer family. The key foundations remain in place to this day, as the company was built on a sensible alliance of traditional process and contemporary thought, values which continue to drive the company forward. The company regularly introduces its own designs for new products and street furniture ranges, including the popular new RailRoad modular seating collection in 2015. 2016 has already seen new products launched and the promise of further new developments, with a variety of products and interesting projects in the pipeline.

020 8378 3200 www.furnitubes.com

enq.133

Architects Datafile website



The Architects Datafile (ADF) website is an online provider of past and present products and news items for the architect or specifier. architectsdatafile.co.uk is a one-stop source for all the latest press releases providing any visitor with access to information about products and services that they may require. From the website, you can find links to digital issues that have live links to advertisers' sites, as well as daily email alerts to keep you as informed as possible.

www.architectsdatafile.co.uk

Current Denso UK Chairman, David Winn OBE joins the Company's 'Hall of Fame'

To recognise 50 years of service to his company, David Winn OBE (pictured), Chairman of the global specialist **Denso** anti-corrosion products manufacturer, Winn & Coales International, was presented with a recently completed portrait at the company's Christmas annual Dinner Dance in December 2015. The portrait, painted by renowned artist Hazel Morgan, was commissioned as a special gift to honour his long service which culminated in spending the past 25 years as Chairman. Being only the third Chairman in the company's 133 year history to-date, his portrait will take its place in the London headquarters boardroom alongside portraits of his two predecessors, founder Paul Winn (1883–1946) and Frank Coales (1946–1991). With 25 years already under his belt as Chairman David Winn is still going strong today and during his period of leadership the company has built upon the success of his predecessors and flourished into a truly international organisation with subsidiaries in the USA, Canada, South Africa, Australia and New Zealand. Adding to that an extensive network of loyal and longstanding agents and distributors, today the company is able to supply its product solutions to virtually anywhere on the globe.



VELUX® hits the road with national tour



A leading roof window manufacturer, the VELUX Group, is on the road to unveil its new white-painted roof window range to customers.

The VELUX 2016 Tour will visit 250 venues across the UK from until late July to give installers and suppliers a first look at the new white-painted roof window range, developed to meet contemporary demand for an alternative to traditional pine. Installers attending the event can win over £75,000 of rewards and prizes on the day including a brand new Vauxhall Vivaro van worth over £20,000, Makita Drill Sets and iPad minis.

Everyone who pre-registers at www.velux.co.uk/2016 tour and attends an event will receive an instant win scratch card with a guaranteed VELUX Reward worth between £5 and £50.

For every VELUX white-painted roof window bought in April and May, customers will receive £25 worth of reward vouchers, redeemable at M&S, Argos, Pizza Express, Thomas Cook and Ticketmaster.

The new white-painted roof window range from VELUX will be available nationwide from April.

01592 778225 www.velux.co.uk/2016tour

Decorative casing solutions – the inside story

If it wasn't for column casings and interior wall cladding solutions, building interiors would be considerably less attractive environments. Yet, as they are designed to integrate as part of the fabric of a building, their importance can often be overlooked or taken for granted by the building's occupants.

Very few people stand back to admire a laminated plywood column casing at a school or brushed stainless steel wall cladding in a prestige office building, yet they are key elements in interior design and integral to the aesthetics of countless building environments.

For column casings, at least, their role has been transformed from being a purely functional device for concealing structural steelwork to one of visual and decorative importance. From their initial use by a relatively small number of architects in the mid 1980s, column casings are now commonplace, with their aesthetic values and appeal being a key consideration alongside size and material during the specification process.

The demand for wider choice and increased aesthetics from architects, interior designers and specifiers have been key influences on Peterborough based casing and interior cladding company, Encasement, whose range has continually expanded and diversified during the past ten years to become one of the most comprehensive available in the UK.

Alongside the company's six individual ranges of column casings, its 'Vecta' system provides a



high quality solution for interior wall linings, bulkheads and reveals. Launched just a few years ago, the system has been widely used in retail, education and commercial buildings, such as Tesco, South Bank University and Prêt a Manger, as well as prestigious office developments, including Wellington House and the Carmine building in Paddington, London.

While Vecta has already gathered significant momentum, it is for column casings that Encasement is perhaps best known. The company's extensive range not only includes pre-formed plywood and glass reinforced gypsum (GRG), as well as a specialised fire resistant solution for use

with mezzanine floors, but also aluminium, stainless steel and glass reinforced polymer (GRP) casings for exterior projects due to their inherent weather resistance.

Interestingly, Encasement's 'Forma' metal casings and 'Polyma' GRP range are also widely used in interior applications, where the selection of finishes available, particularly in the Forma range, provides specifiers with an even greater scope of options and can be specified with diameters from 250mm up to 1000mm or as square, rectangular or even hexagonal forms.

Recent projects, such as Winchester College, Middlesex Northwick Park Hospital. University College London, the extensive Debenhams development at Cheshire Oaks and the restaurant area of the Mondrian Hotel perfectly illustrate the versatility of Forma column casing solutions.

At Winchester College, the casings are circular, at Debenhams, they are square and accommodate LCD display screens, while at The Mondrian Hotel, they are hexagonal and incorporate a perforated skin lined with acoustic foam to reduce noise and reverberation from the restaurant.

Alongside Forma, Encasement's 'Circa' and 'Quadra' pre-formed plywood column casings ranges were the first to be launched by the company and are still arguably the most popular, as they provide specifiers and contractors with an unrivalled selection of finishes, which includes plain, laminated or real wood veneers.







In addition, as Encasement is the UK's only supplier and manufacturer of pre-formed plywood pipe boxing and decorative casing products that holds an FSC* 'Chain of Custody Certification' from the Forest Stewardship Council, both Circa and Quadra are manufactured from FSC* certified plywood. This makes them automatically compliant with sustainability codes and environmental procurement policies.

Designed solely for interior decorative applications, Circa and Quadra casings are used in an extremely diverse range of projects, which underlines their versatility, ease of specification and the immense range of decorative finishes available to complement or contrast with a building's interior design scheme.

While Circa is available from Encasement as a plain casing for on site painting and decoration, by far the most popular casings are those finished with decorative laminates, which not only resist damage, scuffs and scratches, but also provides the specifier with a diverse palette of finishes from plain colours, wood grain and metallic, as well as textured and real wood veneers, to name but a few.

Circa and Quadra are used in almost every



building type from education, retail, hotel, sports and leisure, as well as the health sector and commercial office buildings. As a result the choice of sizes available is also wide, allowing specifiers to choose not only circular and square, but also extended circles and rectangular profiles, which use additional infill panels to give greater flexibility while ensuring they are still easy to install.

Recent Quadra projects include Farnborough's 6th Form Centre and the Dame Kelly Holmes Sports Centre, while among the many Circa installations, Gatwick Airport's South Terminal, Liverpool University and Gateshead International Stadium are major installations.

Encasement's Managing Director, Martin Taylor, commented: "Column casings provide a perfect mix of practicality and aesthetics and we've taken a lot of care to ensure our range meets both of these key criteria while ensuring that we always remain competitive and deliver high quality products. Our products are used in projects all across the UK in just about every sector of the construction industry and building type, often using different products from our range, which underlines the versatility of our casing solutions."

He added: "Our entire range has been configured to provide the widest possible choice as well as being easy to specify, which is why we offer next working day delivery as well as some very specialised solutions, such as the Metza range, which provides up to two hours fire protection for mezzanine floor columns.

"The Vecta interior cladding system enhances our building interiors offer and allows specifiers to source a range of specialised interior finish products from a single company with high levels of expertise and experience in this sector. We also have our own contracting arm, which enables us to offer a full supply and install service to support contractors."

Encasement's latest 'column casing solutions' e-brochure is available for download from the company's website and covers every product in the range as well as providing details on materials, sizes and finishes available alongside an extensive technical information section. Further information is also available from their website.

01733 266889 www.encasement.co.uk

Senior's PURe® windows put to the test



A new primary school in Derby has become the first completed project in the UK to feature the new thermally-efficient PURe* windows from leading fenestration designer and manufacturer Senior Architectural Systems. The innovative new aluminium window system, which is the first

on the UK market to benefit from an enhanced thermal barrier manufactured from expanded polyurethane foam (PUR), has been specified for use on the new Carlyle Infant School in Derby. Key to the specification of Senior's PURe* windows was the system's high thermal performance that not only gives exceptionally low U-values but also has the potential to dramatically improve the building's overall carbon calculations.

Looking at life from the inside with AkzoNobel



Blackburn-based firm **AkzoNobel** has garnered its substantial expertise into one new all-embracing brochure aimed directly at the interiors market. The AkzoNobel interior coatings ranges from across Europe have now been brought together into one new single brochure. The list of applications is varied as it is vast and ranges from furniture through to kitchen cabinets, bathroom cabinets, table tops, shop-fitting and flooring.

The breadth of technical knowledge and skills at AkzoNobel also delivers a host of available solutions including PU acrylic, PU Alkyd and Polyesters, through to Acid Curing, Waterborne, UV Curable together with Oils and Waxes.

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

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Eurobond Laminates wins Environmental Excellence Award



Eurobond Laminates Ltd triumphed at this year's Welsh Business Awards, winning in the coveted Excellence in Environmental Management category. Eurobond designs and manufactures a wide range of stone wool core composite panels that offer a single component construction for external fabric, internal walls and ceilings of a wide range of buildings. For over 30 years, Eurobond has been the supplier of choice across a range of sectors from retail developments, sports stadia, data centres, offices and factories to schools delivering building components that offer a combination of robustness and fire resistance, with a low environmental impact. The judges felt that Eurobond Laminates was a clear winner of this award from its philosophy of continual improvement, striving to manufacture and deliver the most environmentally responsible and sustainable products possible. This was substantially verified through investment in machinery, technology and its people. Simon Thomas, managing director of Eurobond Laminates said: "We are delighted to win the Excellence in Environmental Management Award at this year's Welsh Business Awards. As a business, we really strive to set the highest standards for environmental management, and make sustainable practices part of the company's culture."

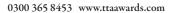
02920 77 66 77 www.eurobond.co.uk

eng.139

Get ready for the TTA Awards with a round of golf

The TTA Golf Day will take place at The Belfry on Saturday 14th May, the same day as the annual TTA Awards. This will be a great opportunity to meet up with industry colleagues for 18 holes of golf ahead of the big evening festivities. The PGA national course at Wishaw, Sutton Coldfield, is just a short distance away from the Awards venue. All the prizes for the day are sponsored by Mapei, to whom the TTA is very grateful. Tickets for the Awards and the Golf Day are available on the contact details below.

The TTA has also announced the finalists for all but three of the categories in the TTA Awards 2016. Faced with a large field of entries which were of a universally very high quality, the judges this year had a particularly tough job to select finalists in each category. But after a lot of hard work and very careful scrutiny of all the entries, the finalists' names are now in the spotlight. To see the full list of finalists, please visit the Awards website. This year's Gold sponsors include: Bellota Herramientas SAU, N&C Nicobond, Norcros Adhesives and Shackerley (Holdings) Group Ltd. Silver sponsors are Lithofin and Mapei, while the Stage sponsor is FILA Solutions.





enq.140

Harrow School has IAAF-standard running track



The re-built athletics facilities at Harrow School included an IAAF-standard running track, facilities for long jump, high jump, discus and all the main athletics events, plus a water jump for the steeplechase and an area for the pole vault event – a relatively rare feature in UK school athletics facilities. Hauraton SPORTFIX components installed at the Harrow School sports complex include; drainage channels around the edge of the running track, sand traps and soft kerb edging around the long jump pit and a water jump kit on the steeplechase track. At any time in the UK, rain can stop play and on tennis hard courts the build-up of water can take some time to run away if attention has not been paid to the surface water drainage requirement. At Harrow School tennis courts this is not a problem as a discreet drainage channel run located just below the net efficiently drains away any excess rainwater. Over the years Hauraton have built up a fund of knowledge, second to none, of how to drain sports areas be they soccer grounds, athletic tracks or tennis courts. Other components in the SPORTFIX range include; Electrical distribution shafts, Service channels for cable management, pitch dish edging components and drainage channels specifically designed for artificial turf pitches.

01582 501380 www.hauraton.co.uk

Monodraught Products support Cambridge University low energy cooling and ventilation strategy

The University of Cambridge is committed to reducing its environmental impact, with a dedicated Environment and Energy Section within Estate Management leading on carbon reduction and a range of strategic and operational initiatives.

In January 2014, Monodraught were asked to develop a low energy cooling and ventilation strategy for Greenwich House at Cambridge University, as part of a planned building refurbishment into a modern and efficient collaborative office environment.

Monodraught worked closely with David Bedwell and Partners to engineer a scheme which met not only the performance criteria stipulated by the University's strong sustainability ethos and standards, but also the thermal comfort levels expected by the building occupants.

Human perception of "comfortable" room temperature is subjective. It is based on a number of factors such as; air temperature, radiant temperature, humidity, individual metabolism and clothing. Not everyone will experience "thermal comfort" at 20°C-22°C and therefore occupants prefer to control their own comfort.

Cool-phase is a low energy cooling and ventilation system that creates a comfortable, fresh and healthy indoor environment and also reduces the running costs of buildings. It works upon the principles of adaptive thermal comfort, controlling temperatures within a "thermally comfortable" bandwidth and gives end users more flexibility in controlling their environment.

Monodraught installed the Cool-Phase systems and Windcatcher X-Air in a number of open plan office areas, several conference and meeting rooms, training rooms and a cafe area.

With the system's ability to record minute by minute data from an integral data logger, plus BACnet connectivity, Monodraught will return to site later in the year to extract this data and provide an audit of performance as part of its post-occupancy analysis service. The reporting system also allows the Estate Management team to track performance on an ongoing basis.

Cool-phase uses a thermal energy store utilising a Phase Change Material (PCM) in combination





with an intelligently controlled air handling unit to actively ventilate and cool the building. The Cool-phase system can radically reduce energy consumption by up to 90 per cent, compared to a conventional cooling system. Unlike conventional cooling approaches, Cool-phase uses no refrigerants making it an environmentally sound solution to cooling buildings.

Initial feedback on the installation has been positive and Monodraught look forward to working together with their partners on the project to provide performance data and



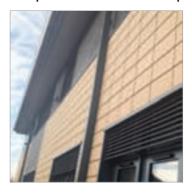
investigate future opportunities to help reduce energy usage and CO₂ emissions.

Monodraught has been at the forefront of designing and manufacturing low energy, low carbon and sustainable solutions for 40 years. The company is focused around three product sets in which we are recognised as market leaders; natural and hybrid lighting, natural cooling and natural and hybrid ventilation. For further information please visit the company's website.

01494 897700 www.monodraught.com



Bespoke louvres are a perfect match



Few brise soleil products can be supplied in a bespoke colour to match the design scheme of a building, but manufacturer **neaco** provided a rare exception for a new classroom at Fulford School in York as part of a £4 million upgrade designed by City of York Council and built by William Birch and Son.

neaco's advanced powder coating facilities are normally utilised in the manufacture of its balustrade products, but in this case they enabled the company to apply a precisely formulated colour finish to its louvres. neaco also supplied internal balustrade in the building's two stairwells.

Alan Thomas, senior architect at York City Council, said: "It was important to provide a design for the brise soleil that complimented the external appearance of the new building and this has been achieved. We supplied the specific RAL colour reference of the window frames and neaco were able to match the grey finish that has been used throughout the school. The end result is excellent, being attractive, functional and robust."

Colourful acoustics in action

Noise in sports, swimming-pool and leisure centres can often result in unpleasant echoes because it is reflected off hard surfaces and the water and exaggerated by the natural exuberance of the participants. In the new Eura sports complex in Western Finland, architects Heino & Niirainen have solved this problem and created pleasant acoustics by the extensive use of Troldtekt ultrafine panels on the ceilings and the walls. The most dramatic is in the large swimming pool which not only has acoustic panels between the ceiling ribs but links a multi-coloured wall of Troldekt panels on one side with a floor to ceiling glazed view on the other. The coloured acoustic panel theme is continued in the entrance hall which is dramatically coloured in red and in the dining area where blue dominates. In addition, the bowling alley has Troldtekt acoustic panel ceilings and more highly coloured acoustic walls. In some places the ceilings also house strip lighting which is recessed to create an unbroken ceiling surface. Made from 100 per cent natural wood fibres, Troldtekt panels are perfect for use in wet rooms and areas such as this due to their durability and ability to absorb and give off moisture. In addition, Troldtekt panels include high sound absorption, natural breathability, low cost life cycle performance and sustainability. Their sustainability was recently recognised with certification at Silver level within the Cradle to Cradle concept. Visit Troldtekt's website for more.



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Images © Paul Smoothy

Is it refurb or rebuild?

The Bartlett School of Architecture will move into its new 22 Gordon Street building this autumn, but its predecessor home will be lurking within, explains Mark Smulian

ow radically can a building be altered before it crosses the boundary from refurbishment to new build?

That question may be debated by architects for years to come as The Bartlett School of Architecture's new premises takes shape in the 22 Gordon Street (formerly Wates House) project in Bloomsbury, central London.

The concrete frame and floor slab of the original building remain, but that is all. From its scheduled opening this autumn, the Bartlett will have in effect a new building following a £20 million refurbishment of 22 Gordon Street.

The building, dated from the mid-1970s and while not life expired, had ceased to provide suitable spaces for the growing student numbers.

Building an entirely new school somewhere else was an idea entertained but rapidly discarded as the Bartlett School of Architecture is part of University College London (UCL) and needed both to be near the rest of the institution and also to retain its central London location close to concentrations of architectural and consulting engineers' practices.

Continued overleaf...





Its site though brought its own constraints. 22 Gordon Street is at the boundary of two very different conservation areas. To the west are large early 20th century buildings and to the east smaller 19th century and late Georgian ones and the London Borough of Camden's planners wanted something that would sit well with both but also have some gravitas in an area filled with imposing buildings.

For architect Hawkins\Brown there was the challenge not only of designing something suitable within these constraints but also it would be working for an architects' school where every member of staff is paid to have and express opinions on architecture. A demanding client indeed.

Senior lecturer Mark Smout, who has acted as a link between architecture staff and the project team, explains the problems to be overcome.

"Originally this was going to be a demolition and rebuild but we decided after talking to Hawkins\Brown that the amount of embedded energy in the existing concrete made it silly to demolish that and replace it with essentially the same thing, so we opted for a refurbishment that involved taking the building back to its core," he says.

"Something needed to be done because this is the highest ranked architecture school in the UK but it didn't look like that. There were leaking windows and occasional floods and it looked poor for open days or when prospective students came.

"We'd become a victim of our own success with more and more students wanting to come here and not having the space needed." Mr Smout says areas in which students present work were small and had been subdivided for other purposes, while the building lacked a gallery and adequate breakout and exhibition space.

Hawkins\Brown partner Euan Macdonald says that once refurbishment and expansion was chosen the question arose of how to use the space better.

An additional sixth floor has been added and the building's perimeter extended by 1.5m to in all add over 3,000 square metres of space to the 5,500 that Wates House originally had.

A library and the Bartlett School of Planning, formerly in the building, have moved elsewhere giving the architectural school an additional 3,500 square meters of usable space and primary use of its new home.

Issues emerged with the capacity of the original frame though, with a structural engineer advising it would be difficult to get the original substructure and superstructure to take much extra loading.

The solution was to use a special brick imported from Germany which is lighter than normal by being 75mm rather than 100mm, this also helped to meet the planners' requirement for a 'heavy' looking building with 'gravitas' despite the lighter materials being used, Mr Macdonald says.

By locating a gallery and exhibitions space on the ground floor the design is also intended to open up 22 Gordon Street to the world in way that Wates House had not been.

Mr Macdonald says: "The concrete frame is still there and the new part of the building is concrete and steel linked to the Continued on page 30...



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original frame, with steel extensions to upper floors and five steel columns inserted to create a double height gallery and support the existing building above. It is effectively a new building."

Wates House was hard to navigate, he says, with its staircases strangely located and "we have changed that so that when you come in there is a double height reception area and the staircase and lifts are in front of you," he says.

"It makes the building easier to navigate and the new building is arranged so that large lecture and seminar rooms and administration are on the ground and first floors and floors two-to-six are spaces for students to work in together with staff offices large enough for small meetings."

The basement accommodates workshop activity, offering space for making with natural light. Some mechanical and electrical plant is housed here, though the bulk of it is on the roof.

On the second to sixth floors spaces are designed for up to 20 students to work on projects, with partitions between these easily demountable if necessary.

Generally, staff are to the south of the building and students to the north with the staff rooms large enough to be used by two academics and still offer room for small meetings or workspaces.

Each of these student 'bays' is open to circulation routes above which services are exposed for ease of access.

"This was a serious challenge with the relatively low floor to ceiling height," Mr Macdonald says.

UCL hopes to secure a BREEAM 'excellent' rating for the new building, says Angela Clemo, UCL Estates' project manager.

To reduce energy consumption and CO₂ emissions, the building is connected to the university's district heating system.

It additionally uses a photovoltaic array on its roof, and an intelligent building management system monitors energy to minimise its use. There are also water-efficient appliances.

The design had to be mindful not only of the Higher Education Funding Council for England's carbon reduction target of 43 per cent by 2020 against a 2005 baseline, but also the requirement of central London planning policy for a 35 per cent reduction in carbon dioxide emissions above those of Part L 2013 of the Building Regulations for refurbishments of more than 1,000 square metres.

Once the refurbishment option was chosen, the question arose of how the school would function during the project. It had originally been intended that work would take place around the staff and students, who would stay as it morphed from Wates House into 22 Gordon Street.

This idea was dropped when it became obvious that the scale of the work would be such as to make teaching and research impossible around it, and so a temporary home became needed, which proved to be an architectural project in its own right.

Ms Clemo says: "While it was being built we had to decant the school, so we found a disused warehouse not far away to adapt for that. It was a shell and needed a lot of M&E work."

The design of the temporary building has though helped with the transition in the way staff use space, Mr Smout says.

"The temporary building, being a large open space rather than small offices, has opened up the way we work together ready for the new building," he notes.

The Bartlett School of Architecture is growing, Mr Smout says, with its present 750-800 student total likely to soon exceed 1,000. At present just over 500 are studying for Royal Institute of British Architects Part 1 or Part 2 qualifications and the rest are taking a PhD or one year master's degree course, the latter an area that is particularly expected to grow.

Continued on page 32...

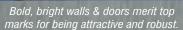


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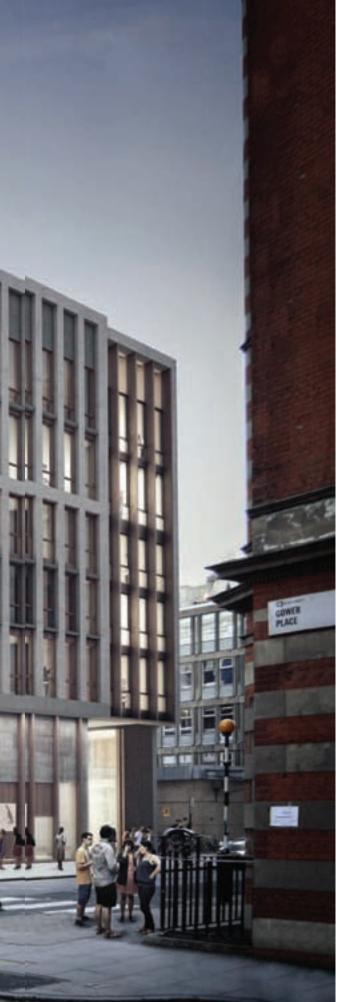
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In all, at present, there is almost double the number of occupants in the school for whom Wates House was originally designed.

At the time of decision to refurbish Wates House the Bartlett's Dean, Professor Alan Penn, said: "Retaining the existing structure not only saves embodied energy, but adds a certain quirkiness to the design."

As students arrive at 22 Gordon Street for the 2016-17 academic year they will be able to use a building designed for modern needs in teaching architecture, in which the visible remaining parts of the original structure have, perhaps quirkily, been left looking intentionally somewhat 'distressed' and different from the new structures.

How many will realise that the ghost of Wates House lurks around them as they work in what will give every appearance of being a new building, yet which is not?

Project team

Client: The Bartlett School of Architecture,

University College London

Architect and lead designer: Hawkins\Brown

Principal designer: Hawkins\Brown and Turner

& Townsend

Project manager and contract administrator: Mace

Main contractor: Gilbert Ash

Glazing subcontractor: Lang Fenster

Brick supplier: Janinhoff

MEP subcontractor: JCP/Vaughn Engineering

Accommodation stair subcontractor/engineer:

CSI/Smith & Wallwork

Roofing subcontractor: Partnering Contractors

Concrete subcontractor: RMC Civil Engineering

Steel subcontractor: AIC Steel

Drylining subcontractor: Rose Drylining

Glazed screen subcontractor: Fendor

Masonry support supplier: Ancon

Planning consultant: Deloitte

Transport consultant: Iceni Projects

Structural engineer: Curtins Consulting

Mechanical and electrical engineer: Buro Happold

Fire and acoustic consultant: Buro Happold

Cost consultant: Aecom

Landscape architect: BD Landscape

Sustainability consultant: Expedition

Building control approved inspector: MLM

BREEAM assessor: Southfacing

Clerk of works: John Burke Associates

Planning authority: London Borough of Camden

Image © Hawkins\Brown and Forbes Massie





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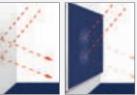
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Innova labs are inspirational, says world's youngest nuclear scientist

ew science facilities designed by a leading education interiors company have won the seal of approval – from the world's youngest nuclear scientist.

Stockport based Innova Design Solutions, alongside Cassidy + Ashton Architects and contractors F Parkinson, have created state of the art science labs and a collaborative research zone at Penwortham Priory Academy in Preston, the school where 13 year old Jamie Edwards became the youngest person in the world to create nuclear fusion in 2014.

Jamie, who's now studying for his GCSEs at the school, says the new learning space, which features cutting edge wet and dry labs and a flexible collaborative area will inspire students' passion for science.

"The lab where I did my experiment was pretty old and wasn't really equipped to handle modern science lessons," says Jamie, "so it's great to see how it's been transformed into an open plan space which encourages students to come in and explore science in breaks and lunch times."

The labs, part of a £750,000 investment project by the school, include a wet lab created using Innova's flexible Hot Corners design, which combines a working classroom and a practical laboratory in one space, and a dry lab with reconfigurable pod units which can be rearranged to accommodate a range of teaching styles.

An open plan research zone, complete with 'space age' themed break out area and sawtooth desking for ICT work offers staff and students the opportunity to work in groups or individually. Flexible furniture and glass screens which double as writing boards enable teachers to alter the space to suit their needs.

Melanie Laing, director of Innova Design Solutions said: "Penwortham Priory were looking for innovative, open plan learning spaces that



inspired students without placing any restrictions on the way they learned.

"We've worked with them to create a space pupils really want to spend time in – even outside of lessons – and we hope the new facilities will encourage students to explore their interest in science and maybe follow in Jamie's footsteps."

0161 477 5300 www.innova-solutions.co.uk

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KI's iconic Postura+ Chair



KI Europe's iconic Postura+ chair was the first one piece polypropylene chair introduced to the UK education market in 1996. The chair is ergonomically designed to promote good posture and provide exceptional comfort. Injection moulded in the UK from 100 per cent recyclable high

impact-resistant polypropylene, Postura+ is available in 15 colour ways and can be vertically stacked to 12 high. KI Europe is a local manufacturer of high quality furniture for workplaces and educational institutions.

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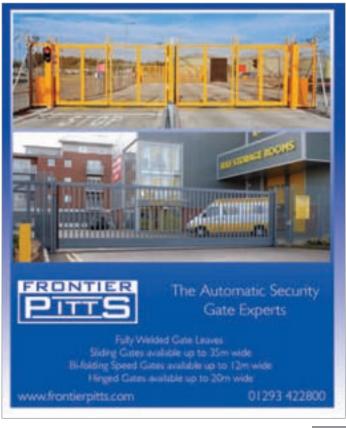
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Making the grade in the USA



The new Essex Technical High School in Massachusetts, USA harnesses the latest building technology, including a striking external Infiniti Fin solar shading solution from **Levolux**, to deliver a first class environment for students and teachers alike. To create the optimum environment for occupants, balancing light and shade, Levolux was approached to design

and supply a custom solar shading solution for the new school. By leveraging its unrivalled experience and expertise, Levolux developed a solution based on its popular Infiniti Fin system, with unique concealed fixings. The Infiniti Fin solution comprises horizontal aerofoil-shaped aluminium fins that are secured above and across glazed areas. A 400mm wide Fin has been used on the largest of four school buildings, which incorporates the school's main entrance.



School wins race against time with Kingspan



The Kingspan TEK Building System of structural insulated panels has been installed as part of a modern, energy efficient classroom block at Boyle and Petyt Primary School in the Yorkshire Dales, helping the school to meet its strict funding dead-

line with a 9 day erection programme. Kingspan TEK Building System panels incorporate a fibre-free insulation core sandwiched between two layers of OSB/3. The panels are pre-cut to each project's specification, limiting on-site alterations. This bespoke approach, combined with the panelised system construction, helped to ensure a fast and predictable installation programme. The high level of fabric performance provided should also help to minimise heating requirements.

01544 387 384 www.kingspantek.co.uk

Groupe INSEEC, a French business school with campuses worldwide, has recently expanded its central London campus, and designer Catherine White was commissioned to design a professional and welcoming interior, using Heradesign highperformance acoustic ceilings from Knauf AMF for the campus entrance, reception and meeting

rooms. Heradesign is an innovative range of ceiling tiles and wall panels manufactured from sustainably sourced wood-wool. Its distinctive textured surface can be matched to a colour of your choice to create truly unique interiors. INSEEC chose two colours to reinforce its corporate identity.

Heradesign makes a bold statement

020 8892 3216 www.amfceilings/heradesign

Degrees of excellence from Metal Technology



The new School of Veterinary Science at Surrey University, described as 'iconic' by Professor Christopher Proudman, features high rise curtain walling facade and door systems from Metal Technology. The company's System 17 capped high rise curtain walling was central

to creating the design aesthetic for the flagship development, providing a structure tailored to the desired look without compromise on performance and efficiency. The end result is a clear demonstration of System 17's limitless flexibility in design applications. Considered a highly cost-effective, quality engineered glazing solution, System 17 complies with current British Standards and provides exceptional standards of structural integrity, weather performance and thermal enhancement.

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Acoustic flooring helps create peace and quiet



2,500m2 of acoustic flooring from UK-based commercial flooring manufacturer Polyflor was chosen to help improve the acoustic performance of Northampton Academy as part of the secondary school's refurbishment project. The classic, wood effect American Oak design from the Acoustix

Forest fx PUR range was installed along corridors and staircases on multiple levels at Northampton Academy. Suitable for demanding, high traffic commercial environments like large schools, this acoustic floor covering produces an impact sound reduction level of 19dB, reducing the transfer of noise throughout this modern school building that accommodates approximately 1,400 pupils.

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Eye-catching and hard wearing flooring system



When The Royal College of Ophthalmologists decided to upgrade the existing floor of a lecture room, the new flooring system had to be hard wearing, easy to maintain and offer superior acoustics - Sika ComfortFloor was up for the challenge. The college required a replacement floor

that was noise absorbent, easy to clean and would offer long term durability. To meet these requirements, the specification of ComfortFloor Pro, a seamless, liquid applied flooring system from Sika fitted the bill perfectly. Sika ComfortFloor has become the first resin flooring system to achieve a BRE Green Guide Rating attaining an A+ the highest rating available.

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Bituchem's maintenance free material



Bituchem's specialist hard landscaping material has been applied to provide a new landscape for Hertfordshire University's College Lane Campus. As part of a major redevelopment project of the university's existing campus, Bituchem supplied around 3,000m2 of its bestselling Natratex Gravel to provide maintenance-free footpaths across the

campus. The project, headed by Bouygues UK, brings new and exciting facilities to the university that creates an inclusive living and learning environment on one campus. The overall scheme comprises both new building and refurbishment works that will bring over 2,500 new student bedrooms, social spaces, sports pitches and a campus gym.

Protan's vacuum system helps fill void



Property developer Downing has continued its reputation for innovation, through to the roof at one of its latest projects, the £60 million Beith St in Glasgow. To help accommodate the city's growing student population, Downing has built two 10-storey blocks delivering 701 student rooms. To

achieve optimum build speed, Protan's unique single ply roofing vacuum system has been installed. Contractor McKay Roofing recommended Protan's vacuum technology to help address Downing's requirements of a system that delivered speed of install, even at 10 storeys high, and the need to detail around over 30 service penetrations across the 1,750m² roof.

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Portakabin achieves construction industry first



The Portakabin Group has been awarded the £14 million design and build contract for the UK's first university technical college (UTC) to be built off site. Opening in September 2016, the Global Academy will provide academic and vocational training for 14-19 year olds who want to work in

the broadcast and digital media industries. Advanced off-site technology using a Yorkon building solution from the Portakabin Group will seamlessly integrate both modular and site-based construction. A significant proportion of the work will be completed off site at the Portakabin Group factory in York in order to meet the challenging programme for completion in time for the start of the 2016-17 academic year.

Comar rebuilds fire-hit infant school



Comar Architectural Aluminium Systems with its approved fabricator Anglia Fixing, completed an extended rebuild of the John Ray Infants School, which was burnt to the ground during a 12 hour fire. This project was completed using Comar 5P.i ECO Top Hung Windows.

The aluminium P.i and P.i ECO window and door systems use trademarked Polyamide Insulated (P.i) that provides exceptional thermal performance and reduces heat loss. Comar 7P.i Commercial Doors are a natural choice in a busy school environment and were selected for the main entrance and external doors. The doors and windows were hung directly into the Comar 9P.i Framing system which was also used to install a large glazed area to the school's front facade.

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Jeckells' shade sails at the Robert Kett School



Jeckells' shade sails were specified for a project at the Robert Kett School, Wymondham involving two tensioned canopies over an outside learning area. Jeckells fabricated the canopies, sourced the timber posts and organised full installation outside of term time. Ferrari Soltis 86 premium mesh material was

used due it its strength and durability and the fact that with this fabric Jeckells even managed to match the school's blue and cream logo colours. Jeckells has built up a reputation for the design and manufacture of quality shade sails with an almost unlimited degree of versatility in design, colour and materials.

01603 782223 www.jeckells.co.uk

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Relcross is number 1 at No. 1 Watson Street



The first thing that customers come into contact with at No. 1 Watson Street is the front door – operated by Relcross LCN 9000 door openers. No. 1 is Manchester's newest, specialist beer bar with 60 different beers on offer – 12 draught and 48 bottled beers

The bar was purchased by VCP Taverns in June 2014 and refurbishment started straight away with the main door controls being installed in February 2015 to replace controls that could not cope with the heavy winds frequently occurring in Warson Street

In these circumstances the REL 9140 can be an ideal door control. The door can be used as a fully automatic door with the opening cycle initiated by wall mounted push buttons. When not operated in this way the door can be set to "Push 'N Go" where an attempted manual opening leads to the automatic controller taking over to firstly open the door and then, after a set time delay, fully closing the door and holding it closed until it is next required. Should power be lost for any reason the unit simply operates as a manual closer. The unit has been tested successfully to over three million cycles.

01380 729600 www.relcross.co.uk

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New levels of efficiency at university



Atlantic Boilers has supplied an add-on condensing economiser to the award-winning Girton College Building at the University of Cambridge. As well as renewable energy technology, triple glazed windows and super insulation, the building benefits from the Atlantic Boilers' type T4 add-on condensing economiser which raised the peak efficiency of its pressurised gas boilers

from 84 per cent to 99 per cent GCV. The T4 boasts a seasonal efficiency in excess of 94 per cent GCV and is available for boilers from 95kW output to 6,470kW. It is compact for installation in existing boiler houses, and has a stainless steel smooth exchanger design for domestic hot water or swimming pool water.

0161 621 5960 www.atlanticboilers.com

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UltraTile creates bold Mediterranean design



Bellas nationwide are getting a fun and fab new makeover. Creating this colourful, quirky new Italian style dining experience is commercial wall and floor tiling contractors, The Great Northern Tiling Company (GNTC), using UltraTile ProFlex SP and ProFlex SP+ES adhesive

throughout the project. Both adhesives are S1 classified, can be laid at depths up to 20mm and are available in a choice of white or grey. The adhesives are suitable for fixing porcelain, glass, mosaic and natural stone tiles. They can be used on either walls or floors, internally or externally and with underfloor heating or on swimming pool installations. Billy Lockwood, GNTC states: "We use UltraTile products because of their competitive prices and their high quality performance."

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Big Foot Systems modernises rooftop support



Big Foot Systems has supplied bespoke support solutions as part of a full rooftop refurbishment of a University building. The company provided a non-penetrative, prefabricated rooftop support system that is simple, safe and secure as well as being a quick, versatile and economical

solution for supporting plant. The 3,500m² roof was suffering from age-related degradation, with ingress and loss of thermal efficiency. Big Foot Systems provided a bespoke solution that supported all of the plant, while being lightweight and non-penetrative. Joe Rose at Big Foot Systems said: "Big Foot Systems was really the only suitable route the contractors could have gone down. We provided both site support and technical input and the job went very smoothly."

01323 844355 enquiry@bigfootsupport.com

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Lyndon Design helps transform restaurant

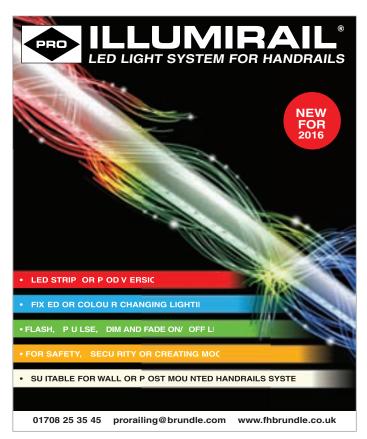


In addition to savouring an outstanding culinary experience, diners at the newly refurbished Michelin starred Number One restaurant, located within Edinburgh's prestigious The Balmoral hotel, can relax in opulence and comfort thanks to Lyndon Design's handcrafted seating solutions. A collection of Lyndon Design's classic two seater Albany sofas now adorn the elegant dining area; bringing a

soft and intimate feel to this esteemed venue and helping draw diners into luxury and comfort. Boasting a hardwood internal frame that is accompanied by a fixed CMHR foam seat and back for added comfort, the Albany sofas were specified in a striking fabric that blends beautifully with the Scottish warmth and charm of the restaurant's red-lacquered walls.

www.architectsdatafile.co.uk

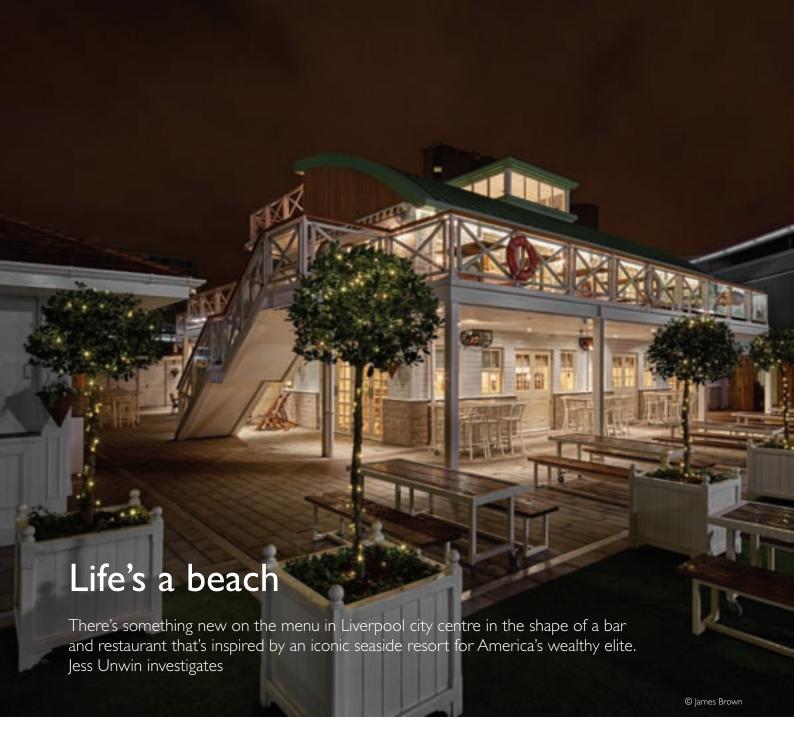




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A new bar and restaurant that's inspired by the idea of a beachfront summer retreat with New England-style architectural influences is a unique new addition to Liverpool's city centre.

The Club House, located in the city's Chavasse Park and a part of the Liverpool ONE shopping and leisure complex, recently opened its doors to the public for the first time.

Built from scratch for around £2.5 million, the 7,446sqft venue operates over two floors, including a first-floor terrace,

and offers seating for 200. In addition, a landscaped outdoor area can cater for another 400 people.

Its striking design allows visitors to imagine they could be somewhere in the Hamptons – the iconic seaside resort for America's wealthy elite in Long Island, New York. In reality, they are drinking or dining within a stone's throw of the Albert Dock – one of Liverpool's own famous landmarks on the Mersey river.

Their daydreams of white sandy beaches are only possible Continued overleaf...









after some very real-world construction challenges had first been overcome. That's because Chavasse Park is an elevated grassy area that actually sits atop a 2,000-space underground car park and also some of the shops along one side of nearby South John Street.

Concerns about the potential for damage to the car park, retail units and a membrane designed to protect those structures from rainwater had to be addressed before Liverpool's planning authorities would give the go-ahead to The Club House.

Project architects Paul Danson Imagineering and Brock Carmichael worked with civil and structural engineers Bell Munro to come up with a solution. Paul Danson explains: "It was a sensitive construction project from the point of view of not perforating the membrane. There was also concern

about the load from The Club House bearing down on the concrete-frame car park.

"So the engineers designed a huge lattice work of steel underground to ensure that the load is spread over the footprint of the building. The result is The Club House sits on that steel frame, with a concrete slab that goes on top of it, then it's all waterproofed. That work cost around £250,000 before we even got out of the ground."

With this vital preparation completed, work could get under way on The Club House itself – a design concept that Paul came up with in its entirety. "I wanted to develop a building firstly that would be a strong stand-alone design statement and secondly a destination landmark for the city of Liverpool. Not just another chain roll-out!

Continued on page 42...



LEVATO MONO porcelain paver system

The Levato Mono porcelain paver system is the pinnacle of external raised flooring technology; enabling the specification of lightweight, slip resistant and attractive raised flooring solutions, combining incredible technical properties with uncompromising aesthetics; making them the ideal choice for commercial and domestic use alike.

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- High load bearing and impact resistance
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- Ideal for balconies, roof terraces and piazzas, for both commercial & residential use
- Completely non porous
- Fire & frost proof
- Height-adjustable supports from 9mm up to 550mm











"I thought about a building which had a connection to the close proximity of the site to the sea without designing yet another yacht club, which the UK is littered with in various shapes and styles, yet something romantic and themed with a great history and strong story line."

He adds: "The way I design, there always has to be a story. My idea with this was that it's a building in the Hamptons facing a white sandy beach that perhaps used to be a boathouse, water sports club or something like that but which has been a family home for the past 30 years. The latest chapter of the story is that it's now been bought and converted into a stylish bar and restaurant."

Turning Paul's vision into reality began with the steel frame: "Unlike some other buildings, you could actually see the whole form of the house even at the steel frame stage," he says.



Progress was rapid and continued with the installation of a Metsec wall system – lightweight steel frames with cement board panels in between.

With sections put together offsite before being lifted into position, the Metsec approach helped to keep the loading force down by avoiding the use of blockwork. Steel is again used as decking to form the first-storey floor.

Crucial to recreating the New England architectural flavour was the reclaimed timber used extensively as exterior cladding. Paul reveals: "I sourced the timber from suppliers I know in Ireland. I particularly wanted old timber with paint on it. We repainted it without rubbing it down so that it looks like it has been painted many, many times over the years and been aged and weather-beaten by the sea – remember that's part of the story of this building."





At ground-floor level, the exterior cladding to windowsill height is textured block stonework that creates what looks like a stone plinth to the building and maintains the look of an American beach house.

Doors and windows were designed and manufactured by Liverpool-based company Charles Evans and were again inspired by Paul's research into the Hamptons look. On the first floor, strips of new oak cladding, vertically aligned, sit between the vertically aligned reclaimed timber and the eye-catching roofing.

Divided into two curved sections, the roofing is another of the signature design elements that help The Club House conjure up images of beach and waterside buildings. It is put together using a Kalzip roof system, comprising a powder-coated aluminium. Paul says: "We chose that because of the curvature that we needed. It's quite a sharp curve that's important to the Hamptons beach look. It has an organic feel and is both key to the overall design and to softening the edges too."

Between the two main roof sections, at the centre of the building, is a structure that's part conning tower, part watchtower at a yacht club or harbour. Paul says: "The tower is part of the theatre of the building and adds to the mystery of its purpose – it has something of the lifeguard station about it but it also wouldn't look out of place on a US airfield." Customers can't ascend the tower and instead the space has been used to display a spectacular chandelier.

Yet another thematic feature is the first-floor terrace, which is an extension of the overall steel framework of the building. Despite the convincingly authentic look, the boards are an example of the increasingly popular Millboard decking system. This British-made self-maintaining and wood-free product is made from a polyurethane resin blend with a resilient surface coating that's anti-slip even when wet. The terrace railing is of course adorned with several life belts.

Finally, granite paving, astroturf and small trees in Versaille tub planters set the landscaped scene for the outdoor eating area. Unusually, the main kitchen is also located outside in a stand-alone structure that is clad in whitewashed tongue and groove timber so that it fits in perfectly with the exterior ambiance.

Inside, Paul has let his imagination off the leash. The former TV set designer (he worked on *Brideshead Revisited* and *The Adventures Of Sherlock Holmes*) also created sets for pop stars Lisa Stansfield and Kid Creole in the 1980s and has travelled the world working on projects that included a *Star Trek* attraction for Paramount film studios in Las Vegas.

Odd artefacts and pieces of interest hang from the walls and ceilings. There's a letter from St James's Palace, a picture of the Titanic passenger list, a stag's head, a stuffed crocodile and a chandelier made from champagne flutes. There is outdoor sports, hunting and fishing paraphernalia, there are beach posters painted onto the walls and also miscellaneous items meant to remind visitors this is a venue that's supposed to feel like it was once a family home.

The Club House is owned by pub group New World Trading Company, which is also responsible for the Smugglers Cove in Liverpool's Albert Dock and the Oast House in Manchester. Paul Danson was the project architect for both those bars.

Chris Hill, New World Trading Company's managing director, says of The Club House: "There was a great deal to consider approaching a project of this scale but above all we set out to really make a statement for Liverpool with the design of the building and creating a destination landmark for the city.

"After two years in the planning the wait is over and we've been unbelievably excited to reveal the concept. The feedback following the launch has been phenomenal, our customers have really engaged in the romance of the building and it's a great addition to what's already on offer in Liverpool ONE."

Continued overleaf...



'The feedback following the launch has been phenomenal, our customers have really engaged in the romance of the building'

Chris Hill, New World Trading Company's managing director

Project details

Wall system:

Metsec

Doors/windows

joinery:

Charles Evans

Exterior/interior

glass:

Architectural & Interior Glass (AIG)

Reclaimed timber:

Wilson's Yard,

Northern Ireland

Roof:

Kalzip

Decking:

Millboard

Internal/external

lighting:

Tyson Lighting

Main contractor:

Charles Evans

Project managers:

Till Asset

Management

Architects:

Paul Danson

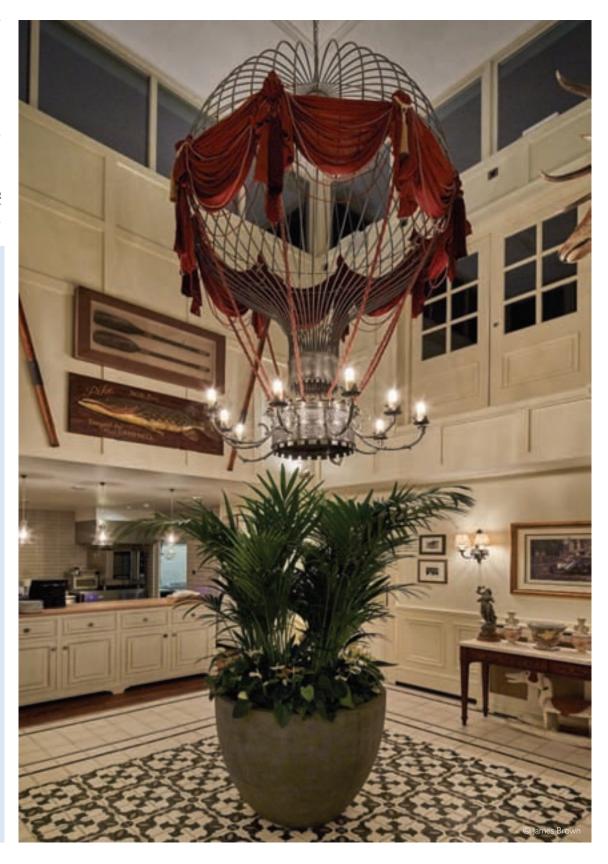
Imagineering /

Brock Carmichael

Civil and structural

engineers:

Bell Munro





Unlearn 'Double Glazing'

Paul Godwin, managing director of The FIT Show, appeals to the architectural community to take another look at the domestic home improvement window market



shun us; that you liken us to Blackpool holidays, TOWIE, and Burberry checks. Double glazing was responsible for the creation of the sold-on-the-doorstep home improvement craze back in the '70s and perhaps for those out there of that vintage you may be forgiven for continuing the association with stone cladding, lean-to conservatories and GRP Doric columns.

We understand it if PVC-U glazing is not included in the syllabus on the way to your March or BSc and that mock Georgian bars or leaded lights may not be the path to architectural glory; and that many of you feel it is outré in anything other than estates three bed semis.

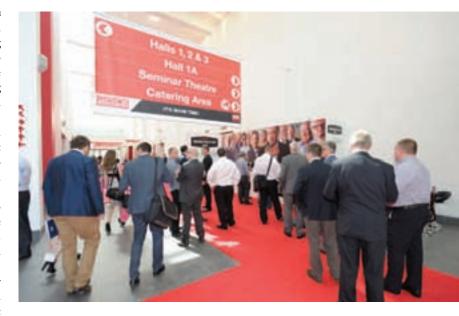
But then we also know that many of you are compelled to commit mortal sin and embrace the devil, even if the ultimate cardinal architectural faux pas of woodgrain foil is eschewed. Residential builds and upgrades are commercial bread and butter for many practices.

I am guessing that even if you have been responsible for writing a spec that includes aluminium or PVC-U windows and even composite doors you will not have looked that closely at the market recently. As for visiting a whole trade show on the subject... well that would be expecting too much.

But perhaps it is time that you did because the domestic window, door and conservatory industry has come a long way since those heady days of double glazing salesmen kicking off their shoes and ransoming poor Mr. and Mrs. Jones into signing the order.

In recent years the industry has become as professional as any other component sector that you are likely to draw from. Of necessity, driven by regulations and competition, products have improved in terms of performance, aesthetics and innovation and the people driving these changes are committed professionals, even at the retail level.

I am guessing that if you are involved with the design of anything residential then you will have been pleased to include bi-folding doors. These are very much a product of the double-glazing industry and, fortunately, are selling in droves thus creating something of a mini-boom for the home improvement industry and indeed, for the architectural community. Couple that with the desire for composite doors – traditional appearance but with the performance of modern materials – and the fact that many first and even second generation window replacements are way past their sell-by date and the industry is



enjoying itself at the moment, if not to the levels of the halcyon days of the '70s and '80s.

Pretty much everything the industry churns out these days is of high quality and innovation is high: there is now a huge choice in bi-folding doors – have you seen the hinge-free versions now available? And keyless, connected door and window security systems may at last make it into the wider market instead of being restricted to high-end developments or the domain of geeks. And vertical sliding sash windows are now close to perfectly replicating period originals, paradoxically even including imperfections.

If you have not looked closely or even glanced in the general direction of this section of the window and door market lately then there will shortly be the ideal opportunity for you to apprise yourself of all that is great and good, at an exhibition called The FIT Show. A moniker few in the window industry question anymore, it stands for Fabricator Installer Trade and from its origins as a forum for the hard-core of the industry it has now evolved into a highly effective product showcase and should be the destination of anyone buying or specifying such products.

Taking place on the 12-14 April at The International Centre, Telford, an unexpected gem of a purpose-built exhibition *Continued overleaf...* facility, around 180 exhibitors will be showing literally thousands of windows, doors, conservatories, glass systems, hardware and everything in between.

Highlights include SageGlass, an app controlled, electronically tintable glass, for which the manufacturers, part of the giant Saint-Gobain group, have replaced the whole of a glass wall of the exhibition hall to create a real-world, permanent demonstration of the product. Visit their UK partner Clayton Glass in the Innovation Zone for details or attend the seminar session each day.

Another product, described recently as "A product that truly re-invents the window" by the judges of a glazing industry award, offers a remarkable alternative approach to traditional glazing as well as a stunning finishing touch for contemporary dwellings. Lumi is a complete range of customisable, matching frameless windows and bi-folding patio and residential doors. The triple glazed units bonded to an internal GRP subframe give tremendous strength, performance and looks, especially on a wide span of bi-folding doors.

At least three brand new, ground floor up conventional window systems will also be seen for the first time at The FIT Show, which by the very nature of such things have been produced to reflect current but also anticipated performance requirements and regulations. As such they offer an excellent benchmark for anyone wishing to take a look at just how far the industry has come. Go to Profile 22 and Residence 9 for these.

The FIT Show is free to attend and offers an excellent seminar programme with a number of sessions that might conceivably benefit architects and other professional specifiers (though sadly, without the incentive of CPD points this time round). And actually, it will provide a pleasant and unpressured environment in which to see just how far 'double glazing' has advanced. We hope it will also change a few perceptions; disguises are optional.



The FIT Show takes place on the 12 - 14 April at The International Centre, Telford. To register for free, fast access go to www.fitshow.co.uk/23/reg

Synseal return to the FIT Show in style



Synseal Group will be returning to Telford on 12-14 April in style, with the largest stand at FIT Show 2016. Synseal's display on stand 348 in Hall 3 at this year's event will give visitors a chance to get fully updated and appraise the sheer breadth and quality of Synseal's product range. Synseal will

be launching several new products at the show, which are sure to be of interest to fabricators and installers alike. These include the much anticipated WarmCore aluminium window system, the Masterdor solid timber Craftsman door range and a sneak preview of the stunning new thermally broken Lantern roof, all of which have been design engineered for today's demanding consumer.

01623 443200 www.synseal.com



Carl F Groupco to capture smart lock sector



The FIT Show 2016 is the launch platform for SmartSecure, an exciting new brand from a leading UK hardware distributor, Carl F Groupco. Featuring the high quality, German manufactured FUHR 881 multitronic fully motorised multipoint locking mechanism, the technology supports the major trend towards smart home advancements. As a long-standing supplier to the hardware industry with strong technical capability, Carl F Groupco is spearheading the smart

brand to provide a comprehensive solution with a range of advanced automation options that combine simplicity with sophistication. Optional access control systems include SmartConnect easy for convenient door opening using a smartphone. Visit Carl F Groupco to view the latest hardware lines.



The Architects Datafile (ADF) website is an online provider of past and present products and news items for the architect or specifier. architectsdatafile.co.uk is a one-stop source for all the latest press releases providing any visitor with access to information about products and services that they may require. From the website, you can find links to digital issues that have live links to advertisers' sites, as well as daily email alerts to keep you as informed as possible.





Clark-Drain launches High Max cover for multiple sectors

lark-Drain launches new version of its D400 High Max series - designed with Water Companies, Local Authorities and Highways Contractors in mind. The manhole cover will satisfy the heavily trafficked needs of UK road networks.

Fash Shahidi, Clark-Drain's key account manager at Clark-Drain comments: "Choosing covers which help to prolong surface wear and skid resistance life is an important consideration for organisations interested in 'value improvement' based around total cost of installation and whole life costs, particularly in the Water, Highways and Environmental sectors."

Premature failure in the bedding material is often cited as the main factor contributing to poor performance of installations. Fash continues: "Product design plays a massive role in extending product life. With High Max it was important to incorporate an understanding of dynamic loads.

Finite Element Analysis and 3D modelling was used in the design of High Max to evaluate how these were dispersed under heavy load stresses to minimise the impact on the bedding. A tread pattern with 25 per cent more density than the minimum requirement specified in EN 124 and 40 per cent greater tread height than rival manhole covers all contribute.

"What is needed is a new way of delivering the best possible performance for the installation. We have engineered High Max to meet these needs by providing exceptionally good durability, safety and flexibility in use."

To offer multiple applications with one frame design Clark-Drain has developed High Max to accommodate five accessory options (boltin sealing plate, low leak plate, safety grid, Glass Reinforced Plastic (GRP) sealing plates and prison grills). Manual handling is also a key design consideration. Health and safety is



supported by High Max as the product has a double triangular design with four key holes enabling a two person lift. The problem of disengagement is also reduced with non-slip safety key holes compatible with long handle lifting keys and other mechanical lifting devices.

Manufactured from ductile iron and Kitemark certified to BS EN 124 the High Max series exceeds the required 400kN loading for D400 class and includes design features which make it a valuable low maintenance option.

01733 765317 www.clark-drain.com

enq.177



Sustainable drainage systems are important

Millions of homes and businesses are at risk from localised flooding. The challenge for planners and contractors demands a completely integrated approach from design to installation. Planning Practice Guidance issued by the DCLG in support of the National Planning Policy Framework answers the question on why sustainable drainage systems are important as follows: Sustainable drainage systems are designed to control surface water run off close to where it falls and mimic natural drainage as closely as possible. They provide opportunities to: reduce the causes and impacts of flooding; remove pollutants from urban runoff at source; combine water management with green space with benefits for amenity, recreation and wildlife. Water management specialist JDP's technical department uses cutting edge technology, accurate rainfall data, topography reports and advice for projects involving surface water management to ensure operational efficiency, effectiveness, legislative compliance and manage increased volumes of surface water.

0800 195 1212 www.jdpipes.co.uk





enq.180



Septic Tanks vs Sewage Treatment: How to choose the best solution

By Dave Vincent, Kingspan Klargester's operations director. Kingspan Klargester is one of the UK's marketing-leading brand offering a full range of waste water solutions

It's estimated that around 10,000 people became self-builders last year – and numbers look set to grow swiftly over the next few years, following moves by the Government to make good its pledge within its election manifesto and double the number of self-build properties by 2020.

The majority of these new homes will be built off-mains, which means that services and waste water will need to be managed within the bounds of the property.

Dealing with waste (notably our own) of course is not always top of a self-builder's agenda. As a nation, we are still hamstrung by embarrassment when it comes to discussions involving waste water, which is probably why the first solution is often, unfortunately, the only solution. And it's a fairly safe bet that first solution suggested will be a septic tank.

Septic tanks are a typical private drainage solution and the most common off-mains solution typed into Google.

For some homes, given the right ground conditions and the addition of a reed bed, they are indeed all that's needed. But, despite their ubiquity across the UK, septic tanks are not always the best, or indeed legally the correct, solution for the property or its local environment.

Worryingly, reports of sewage pollution incidents are increasing, the vast majority of which are caused by inappropriate installations of septic tanks.

The legal responsibility for the waste lies with the property's owner who, in the event of causing local pollution, is at risk of prosecution under The Public Health Act 1936, and facing the prospect of a heavy fine and a large clean-up bill.

Recent changes to off-mains legislation in England and Wales have made off-mains drainage installation a less cumbersome and bureaucratic process, but this should not be mistaken for permission to act irresponsibly, and personal liability remains unchanged.

Legal Requirements

As UK Building Regulations make clear, whenever possible houses must be connected to the main sewer, if necessary using a sewage pumping station. If a property cannot be connected to a mains sewer even with a pumping station, then waste water can be managed within the property's boundaries typically using a septic tank or sewage treatment plant.



The first step, therefore, should be a site inspection by a suitably qualified expert. This would be arranged by either the architect or the home-owner.

Their advice is vital because choosing the wrong solution is a disaster waiting to happen – think over-flowing toilets and blocked drains.

But effective sewage treatment certainly need not be unpleasant. Top-end sewage treatment plants produce clear – and odourless – overflow that is environmentally acceptable. Owners can even discharge the resulting effluent directly into watercourses, without affecting the water quality or wildlife, dependent on appropriate location and outflow quantity and Regulator approval. What's more, they don't cost significantly more than septic tanks when you consider both installation and maintenance (see chart overleaf).

Septic tanks on the other hand do not treat waste, they simply produce soluble waste from solids which is then discharged and filtered through the ground, usually requiring

Continued overleaf...

Performance/Cost Comparison

	Septic Tank	Treatment Plant
Treatment efficiency	20-30%	90-95%
Sercive cost/year	£0	£200
De-sludge cost/year	£75	£75
Electricity cost/year	£0	£100
Purchase and estimated installation cost for 4-bed house	£5,200*	£5,750**

- * based on 3,800 litre septic tank and a 45 metre soakaway
- ** no soakaway required

(Note: these estimates are based on typical installations and will vary dependant upon ground conditions and site profile, indeed on poorly draining sites where large soakaways are required, treatment plants are often less expensive.)

a reed bed. In the wrong location they can contaminate groundwater – our drinking water essentially – as well as streams, ponds and rivers. If the ground conditions don't allow efficient filtration, then sooner or later the owner will know about it.

As part of the initial site assessment the ground should be tested to check its potential suitability as a drainage field before a decision is made about which drainage option to go with. If the area has poorly draining soil or is subject to flooding, or if the water table is less than one metre below the septic tank outlet, then a treatment plant is the only feasible option.

EPP2 Explained

Once the decision has been taken to install private drainage the homeowner must apply for a permit to discharge into groundwater or surface water, under the Environmental Permitting (England and Wales) Regulations 2010 (known as EPP2), revised in January 2015 with the introduction of new binding rules.

Not everyone needs a discharge permit – under EPP2 owners of a small, domestic sewage tanks or plants may, under certain circumstances, be exempt. Instead they must comply with various conditions including:

- following the industry guidelines on the installation of septic tanks and sewage treatment plants
- incorporating manufacturers' operational guidance, the British Standard BS6297 regarding soakaway design
- complying with British Water's advice regarding de-sludging and servicing



Most importantly homeowners will only be exempt from requiring a discharge permit if they have also installed a product that has been performance-tested and certificated in line with European Standards (EN12566). If uncertified product is used, then they will have to apply for a permit.

While there is no longer any need to register a septic tank, keep records of maintenance or notify the Environment Agency if the discharge ceases, homeowners still need to make sure their system is working well and not causing pollution.

And if there is any doubt as to the suitability of the garden to filter waste water, then we recommend your clients take the prudent course, protecting themselves and their families by installing a sewage treatment plant.

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Founded in 1992, Cress Water Solutions are Accredited specialists in the design, installation, operation, maintenance and refurbishment of reed-beds, ponds and wetlands for off-mains drainage solutions. Our environmentally friendly, economical, low maintenance systems provide highly effective treatment of a wide range of polluting wastewater effluents from single homes to large visitor centres, hotels, housing developments, microbreweries, land-fill sites and more. We also provide bespoke rainwater harvesting and water recycling systems, potable quality water purification, water management, natural SUD Systems, and landscaped water features. We offer a lasting quality product on a nation-wide basis.

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ena.185

Kemper System underwrites roof refurb success at Royal & Sun Alliance

emper System's Kemperol V210 has been used yet again to repair the roof of Royal & Sun Alliance's headquarters in Horsham following the success of a project to refurbish the building's balconies last year.

Within the central part of the building there were three individual roof areas, covering a radius of 400m². These areas were overlaid to address leaks in the existing single ply membrane. Roofing contractor, All Angles Roofing, carried out the six-week project on behalf of principal contractor, RCL Services, including repairs to the existing insulation.

The scheme follows on from three previous projects, spaced over two years, to repair three balcony areas, covering a total of 710m², on the same building where water ingress was putting refurbished areas below at risk. Several attempts to repair the roof with other systems had failed to address the issue, but Royal & Sun Alliance has no further leaks thanks to the Kemperol V210 overlay.



All Angles Roofing having cleaned and prepared the existing roof surface applied Kemper System's D primer. The installation team then laid the Kemperol V210 resin in a single wet-on-wet process that ensures complete saturation of the reinforcement fleece. Once cured the resin forms a seamless, elastomeric waterproof membrane that bonds directly to the substrate.

Mike Baulu from All Angles Roofing said: "We

have carried out numerous programmes on this building over the past few years and the balcony areas had proved a particular challenge.

"A year after being refurbished using Kemperol V210, the balconies are performing well with no signs of any leakage, so R&SA had no hesitation in using the same system for this new roof area."

019 254 45532 www.kempersystem.co.uk

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Sika provides total corrosion management



Over the past four years, Southwark Council has invested £326 million into ensuring every one of its homes is warm, dry and safe (WDS) by 2016. At the Four Squares Estate in Bermondsey, South London, **Sika** has supplied a Total Corrosion Management solution – including over 60,000m² of Sika Ferrogard

903+ corrosion inhibitor. Easy to apply and cost-effective, Sika Ferrogard 903+ penetrates the concrete to provide a protective layer around steel reinforcement while maintaining the aesthetics of the structure. To provide a final layer of weather protection, SikaGard was also applied.

01707 394444 www.sika.co.uk

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Seaside special



For many years **Delta Membrane Systems** has been highlighting the suitability of its basement damp-proofing systems for use in flood renovation of damaged properties, or for use in new-build properties at risk – and this is the case for a house in Burnham Overy Staithe in Norfolk. The area is

at risk from flooding, and regularly floods during spring tides and winter storms. The new structure features thick reinforced concrete external walls that are designed to stand up to the worst of the weather, with a number of Delta products ready to offer a second line of defence. Products used include Delta MS500 and Delta PT to the internal faces of the walls prior to plastering.

01992 523523 www.deltamembranes.com

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Is there an easier way to specify your garage door?



Garador introduces EasiQuote, a brand new pricing and specifying garage door service. When specifying a new garage door for an opening, it can be all too easy to make a mistake. So Garador, the UK's leading manufacturer of garage doors, has come up with a solution – a new pricing and specification service called EasiQuote. Thanks to this brand new service, obtaining quotes for Garador garage doors will be really quick and easy. So how does it work?

- 1. The builder visits their local merchant to buy a garage door where they can obtain an EasiQuote form.
- 2. The builder then fills in the form with the details and returns it to their local merchant.
- 3. The merchant then sends the form to Garador's EasiQuote team.
- 4. The Garador team return an updated form via email/ fax to the merchant branch, with an accurate price It's that simple! The great thing is the form provides a clear format for the builder to follow, so the merchant has all the information they need to provide the right door, at the best price possible. The Easi Quote service covers all Garador garage doors. To find out more, please contact the Garador EasiQuote team

01935 443709 www.garador.co.uk

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reader enquiry



Steel windows add style to London home



Creating a striking aesthetic, steel windows were chosen by a homeowner in South London to form the rear 'walls' of both a new basement area and ground floor extension during the year-long renovation of their 1900 house in

Fulham. The windows were supplied and installed by **Steel Window Association** member, Steel Window Service and Supplies. Manufactured from W20 sections, the windows were hot-dip galvanised and then finished with a factory-applied polyester powered coating in RAL 7021 black grey matt. They were installed on site by Steel Window Service and Supplies into openings prepared by the contractor, Noble Structures, and fitted with 16mm double glazing units. The product, therefore, meets current part L building regulations.

Lumi wows the crowds at exhibition



According to **Apeer**, the recent Selfbuild and Improve Your Home Exhibition in Belfast was the busiest and most exciting to date, attracting over 18,000 visitors to a new venue at the Titanic Exhibition Centre. The consumer facing show was of particular significance to Apeer as it marked the first official launch of the G-15 Award

winning Lumi system in Ireland, and as such the company seized the opportunity to unveil the full range of its cutting edge 'frameless' products on its stand. In the meantime, final preparations are under way for Apeer's next 'show stopping' stand at the International Centre, Telford for the FIT Show in April, where the full range of Lumi products will be drawing the crowds on Stand 208, Hall 2.

028 2563 2200 www.apeer.co.uk

enq.194

GEZE creates elegant entrance for tree house



The Patricia Thompson Building for Maggie's Cancer Centre in Oxford has been designed around a tree house concept providing an oasis of calm amongst the trees for anyone affected by cancer. The main entrance to the building, is approached via a land

bridge and features a pair of integrated all-glass system (IGG) swing doors each powered by a TSA 160 UFO underfloor operator from GEZE UK. The IGG system was specified because the profile and fittings are integrated invisibly between the panes of glass so there are no bulky or visible elements on the surface of the glass. the TSA 160 UFO is concealed under the floor meaning that neither the operators nor the doors detract from the overall design of the centre.

01543 443000 www.geze.co.uk

enq.195

GEZE UK is 'The Automatic Choice'

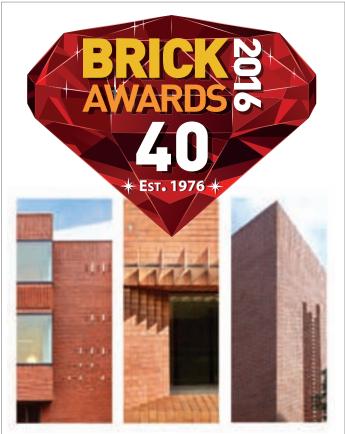


GEZE UK has published a new technical guide to provide contractors, fabricators and architects with the information they need to specify the most appropriate and effective automatic operator. Easy-to-use, 'The Automatic Choice' brochure encompasses GEZE's extensive range of sliding, swing, revolving and folding doors including the latest Powerturn swing door drive and the Slimdrive range. This is supported by information and advice about how to specify the right products when taking in to

account accessibility requirements, sustainability and industry regulations. 'The Automatic Choice' brochure is available to download from GEZE's website.

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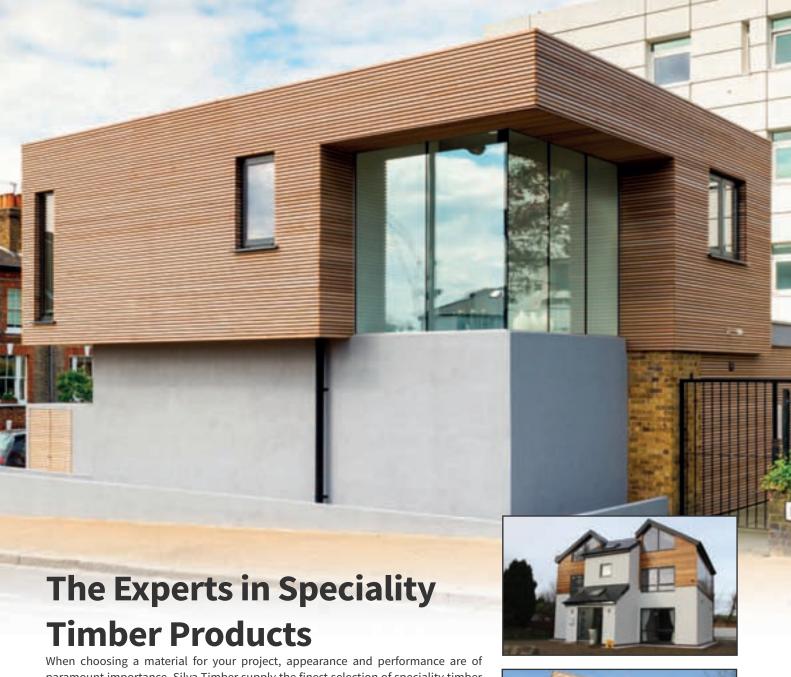
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Prot-ecting the build and environment



BAM Construction has built two new fire stations, at Birley and Parkway, for the Service. The stations feature a combination of single ply and green roof, constructed by FCB Roofing using **Protan** VB250 vapour control layer topped with Protan SE membrane on the flat roofs, and G membrane to

create the green roof. Protan SE, available in 1.2mm, 1.6mm and 1.8mm, is developed to cope with even the most extreme weather conditions without detriment: it is certified to \leq -30°. Hot-air welded at joints and mechanically fixed to the roof, the membrane achieves durability in excess of 30 years, with air leakage controlled/minimised in line with latest Building Regulations.

01925 658001 sales@protan.co.uk

enq.199

Pyramid Profiles moves to Halo



L-R: Dave Goggin, John

A Walsall-based trade fabricator of PVC-U windows and doors, Pyramid Profiles has announced its move to using Halo profile as well as other VEKA UK Group products after 20 years of working exclusively with another systems supplier. The family-run company now manufactures a wide range of Halo products, including the chamfered System 10 and sculptured Rustique profiles; conservation and heritage

favourite, FlushSash; and The VEKA UK Group's innovative Imagine Patio and Bi-Fold Doors. "We'd been looking for some time for a systems supplier to help take our business forward; not only through superior products but a great support package too", explains Pyramid Profiles' Managing Director, Paul Bailey.

01282 716611 www.vekauk.com

enq.200

Senior launches Aluminium Series 2 system



Leading fenestration designer and manufacturer Senior Architectural Systems has launched a new aluminium window system that offers enhanced aesthetics, improved thermal performance and flexible solutions for a variety of site installations.

The new Aluminium Series 2 casement window has been developed to provide exceptional design flexibility. Featuring attractive slim sightlines due to the inline vent arrangement, the new system can accommodate a variety of glazing widths from 28mm to 44mm depending on weight. Designed to perform as good as it looks, the new Aluminium Series 2 system boasts impressive thermal credentials and has the potential to achieve U-values as low as 0.95 W/m²K when calculated as a CEN standard commercial window.

Worldwide House remodelled with APLs help



Worldwide House on the Western Estate in Bracknell stood unoccupied for a long time. Clearly in need of a facelift, architects Cube Interiors specified Architectural Profile Limited's products and systems to set about the remodelling process which centered around the provision of a stunning new entrance feature. The result is exceptional and the

building is now occupied. The system used was an APL Slimwall™ Aluminium Rainscreen produced in a robust and totally weather resistant Alucobond flat panel composite material. Slimwall™ brings many system performance benefits to the project which not only encompasses budget but energy performance, speed of construction and maximisation of internal working area.

0118 927 2424 www.archprof.co.uk

enq.202



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Play the light: Trespa® Meteon® range extended with Lumen

respa has announced the launch of its new Trespa* Meteon* Lumen range. Architects and designers can now play with the composition of light reflection on exterior facades, allowing natural light to be creatively introduced as a design element. It can be reflected, scattered, enhanced or muted according to architects' and clients' wishes.

"Trespa" Meteon" Lumen changes the way designs are perceived, it changes how people interact with structures and how buildings interact with their surroundings," says Lucas Stevens, design expert at Trespa. "With Trespa" Meteon" Lumen, you can play with the compositions of light reflection on your facade, within a single colour. This new diversity of finishes enhances design creativity and ensures facades will truly stand out."

Trespa® Meteon® Lumen is available in three variations across eight colours. Each of the three

Lumen variations is available in grey, black and white and several terracotta tones.

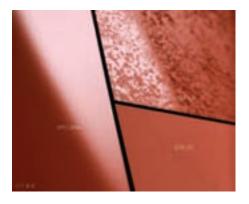
'Diffuse' removes glossiness, reflection and texture, resulting in instant tranquillity. Scattered light gives facades a smooth, subdued appearance.

'Oblique' has a pleasantly uneven matt-andgloss surface that brings a natural, weathered look to any facade.

'Specular' reflects its surroundings, adding liveliness with deep colours and gloss. Buildings become seamlessly integrated into their environment.

Based on decades of leadership and setting new trends in facade solution design and aesthetics, Trespa* Meteon* Lumen represents a logical next step for the Trespa* Meteon* family. Trespa is the first choice of exterior panelling for many leading architects, who insist on quality, reliability and durability.

Trespa® Meteon® is a decorative high-pressure



compact laminate (HPL) with an integral surface manufactured using Trespa's unique in-house technology, Electron Beam Curing (EBC).

The blend of up to 70 per cent natural fibres and thermosetting resins, manufactured under high pressures and temperatures, yields a highly stable, dense panel with good strength-to-weight ratios.

Trespa* Meteon* stands out in vertical exterior wall coverings such as facade cladding, balcony panelling and sunblinds.

See what Trespa® Meteon® Lumen can do: order your samples today.

0808 234 0268 new.trespa.com

enq.204





enq.205

New celsius solid roof installation video on-line



Synseal has launched a new and informative "Celsius Solid Roof Installation Guide" video on the company's YouTube Channel. The 10-minute video production features two highly experienced specialist roofing engineers Matt Williams and Gary Woods from the Synseal Technical Services

department, working as a team to fit the Celsius Solid Roof above existing PVC-U window frames to mimic a typical UK conservatory retrofit-style installation. Fully approved and registered by both the LABC and LABSS for installations in England, Wales and Scotland, the Celsius Solid Roof features an all-timber construction with Kingspan TEK structural insulated panels (SIPs).

01623 443200 www.synseal.com

enq.207

Schueco's ADS HD door range



The uniquely wide choice offered by the **Schueco** ADS HD range of thermally insulated aluminium doors means that whatever the project, there will be a door that fulfills both the aesthetic and performance specification perfectly. These stylish, superior quality doors

can accommodate single, double and triple glazing up to 55 mm thick, giving them excellent thermal efficiency together with real flexibility in use. Typical applications include education, health, leisure and retail buildings as well as offices and high-end residential developments. The Schueco ADS HD range is available in single and double leaf configurations, inward or outward opening, and rebated frames. For further information please email mkinfobox@schueco.com.

01908 282111 www.schueco.co.uk

enq.208



Westbury Joinery holds its own in PAS24 test

Westbury Windows & Joinery products recently passed PAS 24 British Standard tests in accordance with Part Q security regulations introduced last year. The tests, which are conducted in a UKAS approved laboratory, involve a mechanical onslaught during which pistons, chains and a sandbag-style wrecking-ball are used to strike, push and pull the product imitating a break-in. Following that, a physical test ensues in which a person, armed with several tools, attempts to force entry, attacking any part or component of the product they choose including frames, locks and glass. Westbury Director John Mumford explains: "This testing is tough and each product was vulnerable to up to 7 hours of testing, but I'm pleased to say that all of our products passed. We spent a lot of time researching before manufacturing our new range and the resulting attention to detail in assembly has played a significant part in enhancing security performance [...] We have been able to build a superior product that the PAS24 tests are no match for."

01245 326 510 www.westburyjoinery.com





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21st Century aluminium facades from ALM



he alu-fx* Patina 'Timeless Collection' from ALM (HM) fills a gap in the metal facade and roofing markets by providing aluminium with a 'high end aesthetic' at low cost. The vast array of colours available in traditional aluminium has always been too numerous for distributors to stock and the lack of similarity to more subtle hard metal finishes has limited its design scope.

By contrast, the six finishes in the alu-fx range are all available from stock at ALM and Jamestown Metals in Scotland. They include oxidised and semi-oxidised steel, brushed and textured black, grey and bronze finishes which replicate preweathered zinc, oxid copper, steel, bronze and anodised aluminium.



At 0.7mm thick and with an installed width of 530mm the weight per m² is just 1.9kg. This makes it up to 60 per cent lighter and, consequently, 50-75 per cent lower in cost than other metals. The product is lead, chrome and isophorone-free, has a life expectancy of up to 60 years and a Class A1 Fire Classification (EN13501-1). All finishes

are suitable for both flat or curved standing seam roofing and cladding. Thicker gauge sheets for shingle tiles and non-supported panels are available on request.

07000 256467 sales@associatedlead.co.uk

enq.211



Cradle to cradle: Making sense of sustainability

Cradle to cradle sustainability is one of those terms which has been bandied about for some time now, but what does it actually mean and how can it be applied in reality? John Dunnington of Euroclad looks at how to ensure your metal roof system is sustainable from cradle to cradle

he phrase 'Cradle to Cradle' was coined in the 1970s by Walter R. Stahel but was popularised by McDonough and Braungart's book of the same name, published in 2002. According to the Dictionary of Sustainability the term essentially means that all material inputs and outputs can either be recycled or reused with no loss of quality. In contrast, cradle to grave refers to a company taking responsibility for the disposal of goods it has produced but not necessarily putting the products constituent components back into service.

A holistic approach to cradle to cradle sustainability looks to minimise the environmental impact of the production of components, manufacturing processes, transport, installation, use and end of life. It would also include a life cycle assessment of environmental impact categories such as global warming, resource depletion, embodied energy, eutrophication, acidification and volatile organic compound emissions.

So how do you guarantee that your metal roof or wall system offers Cradle to Cradle sustainability which encompasses all of these various elements?

The first step is to source CE Marked products which are produced in the UK to an Environmental Management System accredited to ISO 14001:2004 and a Quality Management System accredited to ISO 9001:2008; ideally from a manufacturer that has achieved or is committed to achieving the BES 6001 standard for Responsible Sourcing. This will ensure you are purchasing high quality products, manufactured in an environmentally accountable way from responsibly sourced materials and will result in lower transport costs and emissions than imported products.

Materials form a big part of the overall sustainability of a roof or wall cladding system. Steel and aluminium are the most common materials used in metal building envelopes and, despite the energy associated with the initial manufacture of these materials, they offer significant advantages when considering the entire product life cycle.

The type of system used can have a major impact on the sustainability of an external building envelope. Metal built-up roof and wall assemblies are engineered to be quickly constructed on-site delivering faster project completion. Site



assembly allows for optimal transport loads which can reduce disruption to local communities and cut down CO_2 emissions.

Installed performance of a roof or wall is critical to the cradle to cradle philosophy in the context of construction. Thermal performance that can not only achieve but exceed building regulations and will contribute significantly to achieving an energy efficient building, particularly when it is combined with good air tightness.

By selecting a mineral fibre type of insulation - such as stone wool or glass wool, which maintains its U-Value over time – you can ensure the thermal performance of a building's roof remains constant throughout its life.

At the end of a building's useful life the cradle to cradle circle closes and the end of life options need to be considered. Built-up metal roof and wall cladding can be deconstructed with relative ease and the steel or aluminium external and liner sheets can be recycled. Mineral wool insulation cores contain zero ozone depleting substances, have low global warming

Continued overleaf...



'A cradle to cradle approach can deliver a sustainable metal roof solution that doesn't cost the earth'

potential and no added greenhouse gases. This means that the insulation can be dealt with easily. Mineral wool does not have to be treated as special or hazardous waste and can be completely recycled into virgin product.

The M&S Store at Cheshire Oaks is an example that shows how metal roofing can be an integral part of a sustainably-focussed building. This Marks and Spencers flagship store is the 2nd largest M&S store in the UK and is their greenest store, using the latest innovations to reduce environmental impact.

The roof is a built-up metal system, which combines minimal environmental impact with impressive looks. It is comprised of $11,000\,\mathrm{m}^2$ of multi-waveform standing seam roof, glass wool insulation and curved liner sheet. The aluminium roof reflects excess heat and 100 per cent of the aluminium is from a recycled source. It also helps to achieve outstanding air tightness in the store of less than three $(3\,\mathrm{m}^3/\mathrm{hr/m}^2\ @50$ pascals).

By sourcing a cladding system which is able to tick all of the boxes, it is possible to protect your pocket as well as the planet. A cradle to cradle approach can deliver a sustainable metal roof solution that doesn't cost the earth.

enq.213



The durable cladding solution from Lathams

Accoya*LathamCLAD – the modified, highly durable and dimensionally stable certified timber cladding – is available from all eight of James Latham's timber depots.

Created from sustainably sourced wood and completely non-toxic, Accoya® LathamCLAD is a revolution in wood technology and is suitable for cladding, siding and facades where aesthetics, less frequent maintenance, dimensional stability, durability and insulation value are key factors.

And with a 50-year guarantee when used externally, Accoyas's versatility makes it ideal for use in residential, commercial and industrial structures.



The translucent link

The Equinix UK flagship centre in Slough now has a new 8,000m² LD6 data warehousing facility. This connects the two sister data centres via hundreds of dark fibre links and has become the fastest-growing data centre campus, including one of the world's largest Internet Exchanges. Structura UK Ltd was commissioned to install Kalwall translucent cladding to form the link between two buildings. The Kalwall not only diffuses attractive natural daylight into the interior but its 0.56 W/m²K U-value optimises thermal performance and prevents solar heat gain. It also helps to obscure vision and retain privacy in some parts of the facility. This use of Kalwall is part of Equinix's commitment to reduce energy consumption and enjoy a smaller carbon footprint than other data facilities of its kind. Kalwall eliminates shadows and glare and the stark contrasts of light and shade. The system also enhances simplicity by eliminating the need for blinds, curtains or solar control. Even on cloudy days, the interior is bathed with natural daylight, which means less artificial lighting and, because Kalwall is highly insulating, energy costs are reduced.

alsecco ceramic slips specified for stations



Chiltern Railways has launched the first new rail link between a major British city and London in over 100 years and built two new stations – Bicester Village and Oxford Parkway. alsecco's external wall insulation system with a ceramic slip and render finish was specified by CJCT Architects for the

iconic station facades. CJCT Architects had experience of working with alsecco and had specified the same system with a ceramic slip on a recent project. Basic 4 was chosen due to the system's ability to realise the curve of the feature glazed brick slip wall while also achieving a watertight building early in the construction process, through the use of a Fermacell cement particle board.

01785 818998 www.alsecco.co.uk

enq.216

AluK brings aluminium expertise to London



AluK (GB) is continuing its exciting business expansion with the launch of the AluK Design Studio in the City of London. Its new design and product demonstration space will open to the public on 11 April, as the company

continues to grow in the UK and develop its prominence within the aluminium building systems sector. AluK will host an open day on 7 April. The Design Studio, which houses dramatic 7m high curtain walling displays and many other full size aluminium window and door systems, will enable customers to interact with AluK products and discuss design and installation with a team of Architectural Project Managers and engineers. Their aim is to help customers to visualise AluK products in situ and support design decisions before specification.

01633 81 04 40 www.alukdesignstudio.co.uk/launch

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ena.218

Windows do not only belong in walls

omeowners, interior designers and architects all agree that one of the most modern – and exciting ways – to maximise natural light in a property is through a skylight.

Putting in a skylight can add value to your home, flood your rooms with natural light, lower your energy bills, improve ventilation and add a dramatic aspect to your living space.

Ideal for flat or sloped roofs, loft areas, rooms with vaulted ceilings and conversions of protected buildings where planning permission is an issue, they are fast becoming a popular choice for people seeking visual impact.

But how do you go about making a decision on design and specification? And more importantly, who can you rely on to do the job properly?

Light up your life

There was a time a skylight was simply a square pane of glass that could be pushed up to let in air. Not anymore.

Now many are designed to open automatically if the temperature gets too high, and to close when it rains.

They also come in innovative shapes and sizes, designed to fit the most awkward and difficult of spaces.

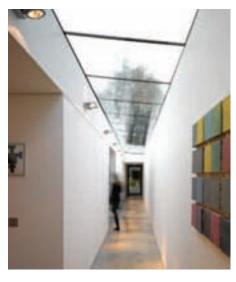
Sunsquare offers around 165 different skylight combinations, ranging from triangle-shaped designs and pyramid shapes to one in the form of an L shape. And in recent years it has designed and fitted everything from a tiny opening above a kitchen space in the countryside right through to a 66 metre-long skylight for a house in London's Oxford Street.

The company has even created an entire landing made of walk-on glass.

Choose wisely

The key to getting the right skylight for the right space is to seek the help of an expert.





Think about how you use the space, where the sun rises and sets and what you hope to achieve by adding the extra glazing.

Where you can't reach a rooflight to open it manually, you should look at options to control it automatically.

And on buildings in conservation areas, you can appease local planning officers by choosing designs that sit flush and are therefore more discreet. There are several rooflight choices for flat roofs, ranging from domes, pyramids and arches to straightforward flat rooflights. All units can combine opening elements, either hinged or sliding.

And there are many sizes available, with bespoke designs to suit even the most difficult of spaces.

Safety as well as style

Of course, as well as picking a supplier with an eye for design, you will also need to look for a fitter with the right safety credentials.

After all, best practice installation will mean your investment pays dividend.

Sunsquare is the UK's first flat roof skylight manufacturer to be awarded the BSI Kitemark.

In order to achieve such an accreditation, the business, based in Bury St Edmunds, has had its entire product range put under rigorous testing for air permeability, weather tightness and extreme wind loading.

The process took two years but it was worth the effort.

After all, now the company's manufacturing methods have set a new standard in an industry which had been self-protecting, self-governing and self regulating.

Peace of mind

Sunsquare wanted to achieve the Kitemark – despite many industry objections – to challenge the more apathetic and poor quality manufacturers who were happy to install dangerous or shoddy fittings without any comeback.

The Kitemark is the world's most recognised symbol of quality craftsmanship and safety. If you are looking for a seal of approval and a stamp of trust, Sunsugare is one of the best in the business.

Its credentials tell customers that they are getting a superior product and that it will be installed properly and according to a list of quality control measures.

Make it count

Believe it or not, adding a rooflight could add as much as £40,000 to the value of your home.

The financial benefits of a rooflight installation don't end with adding value to your bottom line either.

Increasing the amount of natural light coming through also means people have less need to use lamps and overhead lights in dark rooms during the day, therefore cutting back on electricity usage.

They can also bring warmth into a room, reducing the use of central heating.

The sky's the limit

Sunsquare's clients range from self-builders to architects for high-end residential, commercial and public projects including schools and hospitals.

All choose the company for its expert knowledge, attention to detail and unrivalled reputation.

It is one of the best in its industry but Sunsquare doesn't see this as a reason to become complacent – The cmpany constantly tour the world looking for best practice and processes.

As such Sunsquare is one of the first ports of call for people looking to bring light into their lives.

01284 846599 www.sunsquare.co.uk





Is ventilation being overlooked in the drive for improved home energy efficiency?

Using high performance insulation within the fabric of a building is key to meeting increased energy efficiency demands. But as designers look to enhance the air-tightness of new properties, are they paying enough attention to ventilation? As Rob Warren, head of technical at Celotex explains, it appears UK house builders are becoming increasingly hot and bothered on the issue of overheating in homes

hanges to Part L for the Conservation of Fuel and Power have been in place since April 2014 and require new dwellings to further reduce CO₂ emissions by 6 per cent over the previous standard set in 2010. However, Approved Document F, covering ventilation, was last amended in 2010 and not updated in line with Part L so are the current regulations adequate for modern houses?

Overheating due to solar and internal heat gains has seen wide and often simplistic coverage in the press including even suggestions of deaths caused by overheating this has led some to erroneously put the blame on insulation. However, despite the fact that overheating can be a problem, particularly in loft spaces, it is a more complex issue than insulation alone, and well-installed insulation could even help reduce overheating if a whole-house approach to building design is employed.

The Green Deal, for all its flaws in terms of the delivery mechanism, was a valiant attempt to try and encourage homeowners to invest in much-needed energy efficiency improvements. However, it had many issues with implementation and sensationalist headlines in the media highlighting a supposed link between the Green Deal and overheating such as 'OAPs could die in Green Deal Homes' were very unhelpful. Again while airtightness does have a bearing on overheating, the causes of the problem are far more complex than simple measures taken to increase the efficiency of the building fabric.

In fact, building experts understand the dangers of a simplistic look at the issue which might suggest that higher levels of thermal efficiency as are implicit in new standards such as the Fabric Energy Efficiency Standard (FEES) or Passivhaus automatically lead to overheating. In reality a well insulated building can make it easier for occupants to maintain a comfortable temperature whatever the season, but only if that shell is well designed in the context of its site, and properly constructed to include an appropriate ventilation strategy. Insulation is important for keeping a building cool as well as



keeping it warm. As an example overheating can also be seen in top floors and attics of older buildings without insulation where hot roofs radiate heat into a dwelling. While modern blocks of flats do not suffer from this, they can have poorly designed communal heating which proves to be the main cause of overheating.

Aspect & orientation

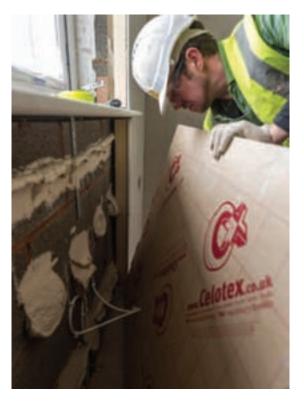
There are potentially more problems in flats than houses; a study by the Good Homes Alliance of 1000 housing professionals early in 2014 found that most respondents had Continued overleaf... identified problems of overheating in either new build or converted flats. Increasing accommodation density by cramming a lot of small residences into one building can lead to design issues causing overheating which are hard to resolve once a building is constructed, including single aspect and lack of cross ventilation.

The fundamentals over whether a building will overheat in summer or when the sun is strong; are to do with key design factors including how many windows a house has, whether they are all openable and whether they are largely south facing. It is a given that a building with a single aspect facing south will be more susceptible to overheating than a triple-aspect building.

As well as several examples of poorly designed apartments, the study identified two housing projects one of which was suffering from overheating due to problems caused by heating systems for which the solution of passive ventilation was proposed. Another project had a large southern aspect, insufficient roof insulation and only the lower half of windows were openable, and as well as installing new windows, a solution proposed included adding external shading, glazing film and insulation to sloping ceilings.

Thermal mass

If a design does not properly integrate thermal mass, i.e. the ability of the fabric to retain heat and emit it over time, with adequate ventilation it may contribute to overheating. In many homes the thermal mass properties of dense building materials are limited due to not being directly exposed to the interior, however heat absorbed can still be re-emitted during



'We need to design and build in a way that takes into account the effect of both external and internal heat gains that can lead to overheating'

summer months causing uncomfortable temperatures. This is particularly the case if a building is a single aspect and lacks cross ventilation or several openable windows, and some form of solar shading will be required. Another solution is night purge ventilation to cool thermally heavy materials and therefore the building, and enable them to absorb heat as temperatures rise the following day.

Solar shading & external detailing

Particularly in the case of south and west elevations, reflective and 'smart' glass and solar shading can make a dramatic contribution to reducing overheating, and a lack of it can be a major cause. However, if windows aren't able to be opened because of issues of noise, pollution or security, then this can practically work against a designer's intentions, so choice of site has to be paramount.

In its 2012 report Understanding Overheating, the NHBC Foundation admitted that passive solar design strategies which attempted to capture solar heat and reduce space heating load in winter could, once thermal standards increased, see increased overheating. However, it added that appropriate measures could be considered by designers to mitigate this on new builds, or retrofits were easy and practical to achieve. The NHBC highlighted design measures including recesses, overhangs and balconies integrated into elevations to provide shading, as well as the increased urgency of looking at such measures in urban sites with space constraints with urban development continuing at a fast pace.

The NHBC commented: "Designers should consider building orientation, glazing area and types of construction to avoid overheating. Design features and strategies such as purge ventilation and solar shading must also be explained to occupants to ensure that these are effective." These are straightforward building precepts which all good housing designers and developers should already be employing, but the issue has thrown them into the spotlight.

There are many issues beyond the fabric of the building to consider when it comes to tackling overheating in housing, including its ventilation strategy, orientation and initial choice of location. While the issue remains a challenge for the industry, the problems are not insurmountable and are down to simple building physics. If we want more thermally efficient building envelopes as well as comfortable buildings then we need to aim for a fabric first approach which includes insulation such as high-performance PIR, however, at the same time, we need to design and build in a way that takes into account the effect of both external and internal heat gains that can lead to overheating.

RENSON® Sun control Comfort tailored to each season

o save energy is one of the key challenges in new construction and renovation. And windows play a vital role in this process. Thanks to large glass panels, a low sun ensures pleasant warmth during winter, which means there is less need to use heating. However, the sun can also influence the indoor climate less positively. Excessive sunlight can cause overheating, disruptive reflections on screens and discoloration of the furniture and decor.

An efficient outdoor sunscreen – sun control blades in front of or a brise-soleil above the window, sliding panels and wind-resistant screens – enables the occupants to enjoy the sun at any time. These systems stop sun rays from heating the indoor air, without disturbing the view of the garden. In fact, all Renson outside sun control products guarantee comfort at 3 levels: thermal, visual and aesthetic comfort.

Horizontal shading offers the ideal solution for

managing heat entry through sunlight. Mounted above windows, they do not disturb the outside view. Renson's brise soleils with aluminium blades type Icarus or Sunclips (pictured) provide a good source of shade when the sun is high during summer months. In winter – when the sun is low – they allow solar warmth entering the house, limiting energy use by heating systems.

Where disturbing light should be avoided during the whole year in addition to overheating during summer, vertical sun control blades in front of windows however provide the best solution. In places where visibility is of minor importance, one can opt for a fixed version of the Renson Icarus or Sunclips blades. But several movable systems are available as well to open and close when more or less shading, light and transparency is required.

In reply to the growing demand for aesthetic, multifunctional facade elements, Renson also offers a range of sliding panels, called Loggia.



These systems consist of a solid aluminium frame, fitted with aluminium (Loggialu) or wooden (Loggiawood) blades or an integrated wind tight screen (LoggiaScreen4Fix). Manually moving blades can be opened or closed according to the desired level of shading and privacy.

01622754123 www.rensonuk.net

eng 222

Redland launches first Dry Verge for 15x9 tiles



Redland's new products, the Rapid Verge and Ambi-Dry Verge for Redland 49 tiles and Fenland Pantiles, have the roofing industry covered, being the first dry verges created specifically for use with these tiles. As with other Redland products, the dry verge systems have been designed to assist contractors. This

verge is quick to install and can be adapted on site to fit either the left or right hand side where typically two separate units would be required. Available in the full range of colours to match the corresponding tile, the dry verges are specifically designed to fit the 15x9 tile range. Colours include: Grey, Terracotta, Brown and Red in the Ambi-Dry Verge and Slate Grey and Rust in the Rapid Verge.

08708 702595 www.redland.co.uk/fixings

enq.223

Choose Freefoam for even more colour choice



Freefoam, a leading manufacturer of a wide range of innovative products for the building industry in UK, Ireland and Mainland Europe, has announced the addition of even more products to its already extensive colour range of fascia and soffit. All colours are now available in an 18mm thick Square Leg Fascia in 150mm and 250mm

wide boards and also a 10mm thick General Purpose Soffit Board in 175mm and 225mm wide boards. With the increasing popularity of Grey window frames and guttering Freefoam has also introduced the 250 and 350mm General Purpose Board in three shades of grey, Storm Grey, Dark Grey and Anthracite Grey.

01604 591110 www.freefoam.com

eng.224

Thin-Joint Venture



H+H's Thin-Joint System of aircrete blocks and Celfix Mortar is a key element in the construction of a Passivhaus development of 16 semi-detached houses and 12 sheltered accommodation apartments on the Isle of Wight. External walls of homes on the Cameron

Close development are constructed from H+H's 200mm thick thermally efficient Celcon Plus blocks. These are enhanced externally by an additional 230mm thick layer of phenolic insulation on the houses and 150mm thick layer on the apartments. H+H's Thin-Joint solution is ideal for Passivhaus construction because the combination of accurately dimensioned Celcon Plus blocks with 2mm thick Celfix mortar joints helps to minimise air leakage through the external walls.

01732 880520 www.hhcelcon.co.uk

enq.225

Knauf offer innovative ThroughWall Solution



Collaboration between Knauf and strategic industry partners has produced a unique innovation for the facades market, the Knauf ThroughWall Solution. The ThroughWall Solution combines quality Knauf products that give Knauf the unique advantage of being able to specify the facade infill panel through to the internal partitions. The most significant benefit of the ThroughWall Solution is Knauf being able to offer the specifier a single point of contact to provide the complete

Knauf technical specification. Design details can now be provided by a single source. This allows for accurate design drawings so that contractors will know exactly what to expect in construction.

01795 424499 www.knauf.co.uk

Calling all chocoholics!



Where better to live than in a place called The Chocolate Works? This prestige development of 1-4 bedroomed homes and apartments is built on the site of the former Terry's Chocolate factory only minutes away from York racecourse. Unfortunately, the waft of chocolate orange

is unlikely to reach you these days, but **Vortice** will ensure that your energy efficient home will have superb air quality due to its range of intermittent extract fans. Both ranges are unobtrusive, modern in their design and are energy efficient. The Punto Filo is ideal to mount directly through a wall whilst the Vort Quadro is suitable to be ducted to a roof tile. Ease of maintenance is also a key feature on the Vortice fans with the Vort Quadro having an easily removable washable filter.

01283 492949 www.vortice.ltd.uk

enq.227

Hybrid benefits simply explained



A new infographic from Mitsubishi Electric highlights the benefits of adopting a Hybrid approach to VRF (variable refrigerant flow) air conditioning. Hybrid VRF uses water throughout the majority of the system to transfer simultaneous heating and cooling to different rooms yet still offers two-pipe heat recovery, lower annual maintenance costs and the full flexibility of design and operation that the company's systems are synonymous for. Mark Grayston on behalf of the company explains: "This

new system does away with the need for leak detection whilst also delivering higher sensible cooling throughout the building".

01707 282880 hybridvrf.co.uk

eng.228

New FlexTouch remote controller



AET Flexible Space, a leading provider of Under Floor Air Conditioning systems has recently launched the new FlexTouch controller, offering even more indoor environment control for occupant users and facilities managers. The FlexTouch is a mountable controller which offers users an alternative way to easily adjust the temperature and fan speed of fantile units. The FlexTouch

controller has already been adopted by clients at City Gate House and 55 Baker Street where AET's service and maintenance team have retrofitted the controllers to existing installations. Available in black or white, they are proving a popular option where accessing the floor recessed fantile controller may be restricted.

01342 310400 www.flexiblespace.com

enq.229

Raychem single-pipe trace-heating cables



Pentair Thermal Building Solutions, an electrical heat-tracing specialist, offers single-pipe trace-heating cables that are fully compliant with the recently updated UK standards for hot water systems released in September 2015. The BS8558:2015 standard highlights single-pipe systems with electrical self-regulating heat-tracing cables as a suitable and efficient technology for substituting secondary return pipework when hot water recirculation is not practical. To meet this need,

Raychem self-regulating heat-tracing technology is suitable for commercial and residential buildings, in conjunction with the primary flow pipe network. This solution provides immediate hot water at the tap, without the use of a water recirculation system.

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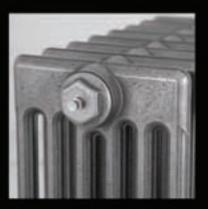
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Efficient and eco-friendly: The Hergom stove



When it comes to choosing a new wood burning stove, there are many elements to consider, from performance and efficiency to quality, design and materials. With the new Hergom Heritage stove, from **Eurostove**, the emphasis is on creating a unique exterior finish with all the features you'd expect from a leading brand. As a natural product, soapstone is environ-

mentally friendly as well as having excellent thermal properties. Teamed with the cast iron frame, it offers a traditional look packed with modern technology. The Hergom Heritage comes with an advanced dual combustion system and AirWash glass self cleaning technology. Along with the front door, it also offers the convenience of side loading and has a ceramic deflector for enhanced performance.

01934 750500 www.eurostove.co.uk

enq.237

Homeowners choose Jaga heating



Long gone are the days when homeowners were limited to standard steel-panelled wall radiators as their only heating option. Subtle, stylish radiators have become far more accessible. Not only that, they can significantly enhance both heat output and a building's energy performance. The residents of Kenilworth Cottage in

Cheltenham, the Wheatley's, decided on the Jaga Mini Canal. Installed in unobtrusive floor alcoves available from just 90mm deep, the Mini Canal's heat emitter is hidden under attractive roll-up grilles that naturally incorporate the radiators as part the room's interior decor. They selected a natural wood finish from more than 25 aluminium, wood and stainless steel grille options available.

01531 631533 www.jaga.co.uk

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The importance of movement joints in floor tile installations

Pluctuations in temperature and moisture cause movement in the subfloor and lead to cracks transferring to the tile covering, or worse, cause a loss of bond between the covering and the substrate which can result in overall damage to the surface covering. For this reason, industry standards state that all tile and stone installations should include the use of movement joints.

In many circumstances movement joints are overlooked, however, a lack of movement joints can be a contributing factor to many different types of failure. Furthermore, if you do not include movement joints in the specification liability for any resulting problems could fall to the architect, even if the problem doesn't directly relate to a lack of movement joints, as it's the architect's responsibility to specify the type of joint and location of them.

The question, however, is how do you provide the movement joints necessary to ensure a durable installation and what movement joints should you use?

Movement joints need to go through the tile and screed covering and therefore need to be designed at specification. Understanding the types of movement that can occur, namely drying shrinkage, differential movement, deflection movement, structural movement, moisture movement and thermal movement, will help when deciding which type of movement joint will best counteract the resulting stresses.

In floors there are two basic types of movement joints, structural and non-structural. Both types will be subject to different movement patterns, for example, whether movement will occur from the tiled covering through to the floor slab or just in the tile and screed covering, and this will affect the



type of joint needed to prevent damage.

Pre-formed joints can accommodate roughly 15-20 per cent of their movement zone. The Schlüter*-DILEX range of movement joints offer complete protection and are available to specifiers in a wide selection of materials, colours, and movement capability.

01530 813396 www.schluter.co.uk

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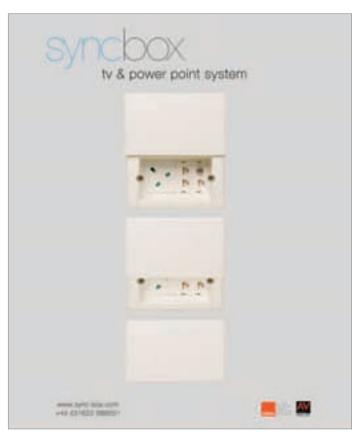
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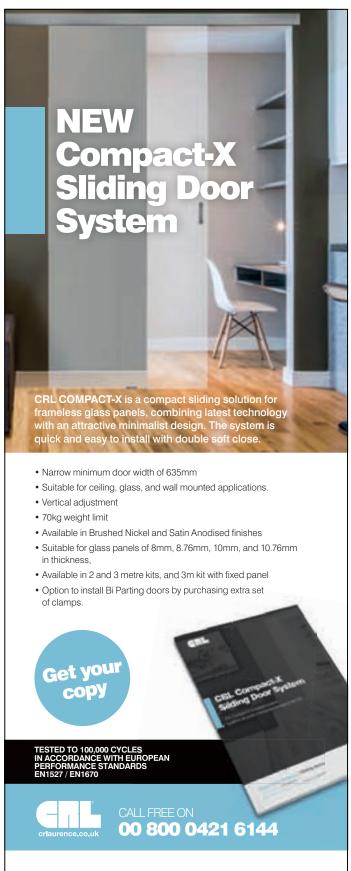


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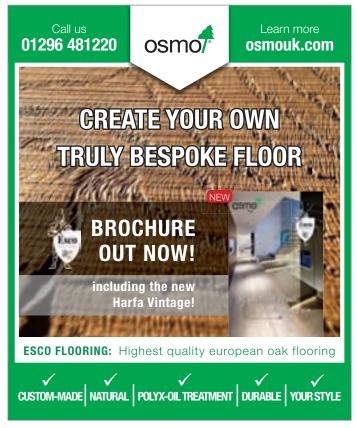
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Selecting the right flooring and contractor for your property

Designer Contracts MD, Peter Kelsey offers his expert opinion on how to select the right contractor and the right flooring products for any property



hen it comes to flooring coverings across the contract sector the 'who' to use is as important as 'what' to use.

It goes without saying that using a reliable contractor is vital to the success of an installation along with a swift service. The ability to supply a variety of floorcoverings within budget and that are technically appropriate to ensure a safe and inclusive environment are vital to any property.

So in selecting a contractor, opt for a company able to offer a wide selection of affordable – yet durable floorcoverings to suit the nature of the property.

Careful planning and consideration should be taken before any flooring selection is made. Flooring that can be easily cleaned is essential for a busy care home for example. Practical options and slip resistant vinyls should be considered for any wet areas. Where appropriate the product should be slip resistant and suitable for occupants with bare feet and in the case of social care, where their carer is likely to wear shoes when assisting in and around wet areas.

Flooring has changed in the last couple of years but carpet is still an ever-popular choice of floorcovering with 'greige' – a mixture of cooler beiges and greys – being a common choice for new build properties, where it sits comfortably with modern interiors.

The advanced manufacturing techniques used for vinyl tiles and laminates mean it's difficult to tell the difference between these and the real thing, yet they're much easier to maintain. Their hard-wearing nature makes them a popular choice for families with young children and pets.

So in high traffic areas, such as hallways and kitchens, luxury vinyl tiles and fashionable laminates continue to grow in popularity as a practical alternative to real wood, stone or ceramic tiles.

Having access to the most up to date products and being aware of new and innovative products, often in advance of them being introduced to the industry, is important for any contractor.

Continued overleaf...



One ground-breaking product is a new waterproof laminate, which could be ideal for rented properties. The joints are fitted with a protective, waterproof coat (Hydroseal). This coat stops water from penetrating into the joints, so that it sparkles on the floor instead.

The joints are pressed into the surface structure right from the first production step. This not only makes the laminate floor waterproof, but it also ensures that the design, colour, and structure of the planks blend subtly into the joint. This is perfect where previously those renting out properties were reluctant to use laminate floors in bathrooms, kitchens and other areas susceptible to moisture.

Individual rooms and apartments should be approached in a completely different way. Noise disturbance in some properties can be a real problem if the room above has not had suitable flooring fitted. Softer flooring – and underlay options should be considered – as it could save a great deal of hassle in the long run. And high traffic entrance areas will require a thicker wear layer and surface protection to increase the longevity of the product.

There are regulations and requirements that should be considered when selecting flooring products. R10 is the German DIN Standard slip resistant test (ramp test), which is the accepted test method for Europe. However in the UK HSE guidelines prefer the Pendulum Test, providing a classification of 36+ when dry, wet and contaminated. So if a floor is going to be prone to product spillage – shampoo, shower gel or general bathroom related products, it will need a low potential for slip (>36) with a surface roughness of >20 microns as outlined in BS7976-2.

Ease of installation is incredibly important. Time is money so contractors should be able to replace and install flooring to tight deadlines. As well as new properties, some older properties have to be upgraded to comply with modern needs and changes in regulations.

Whatever the property, it's important to build trusted relationships, so completing work as soon as possible means a swift and efficient turnaround for all.

enq.249



Polyflor presents Expona SimpLay



Polyflor, one of the UK's commercial and residential vinyl flooring specialists, has recently launched the Expona SimpLay PUR range of loose lay luxury vinyl tiles as the latest addition to the Expona family of premium vinyl floor coverings. The Expona SimpLay collection for heavy commercial interiors offers authentic reproductions of beautiful natural materials presented in an adhesive-free, ready to lay product designed to reduce installation time. Living up to the Expona brand's reputation for offering

high design flooring, the new range includes 38 stunning designs featuring a variety of both traditional and contemporary wood, stone and textile effects.

01617671111 www.polyflor.com/exponasimplay

enq.251

Fila launches silicone and glue remover



Surface care specialist Fila is introducing a new treatment to its aftercare range. New FILAZERO SIL removes new and old silicone, glue and sticky label residue. It can safely be used on absorbent and non-absorbent surfaces, including stone, grout, porcelain and ceramic, marble, glass and metal. FILZERO SIL also removes candle wax and resin.

The ready-to-use treatment has a highly viscous consistency, making it ideal for application onto walls and vertical surfaces, as well as countertops and floors. The formula stays in contact with the treatment area and reduces the risk of it running off onto other materials. Hardened deposits are dissolved within 20 minutes.

01584 877286 www.filasolutions.com

eng 252

Polyx®-Oil 2K pure ideal for retail flooring



The eco-friendly wood and finishes expert, Osmo UK, offers Polyx*-Oil 2K Pure, a two-part hardwax oil that has been designed for professional use where surfaces are subjected to high traffic. As well as providing more robust protection, the two component system includes a hardener which rapidly reduces the drying and curing times; a major advantage for many care home and healthcare practices. Polyx*-Oil 2K Pure is the ideal solution for high-traffic

areas, due to its much tougher and hard-wearing results, where regular waxes wouldn't provide an adequate long-term solution. Polyx*-Oil 2K Pure enhances, protects, and can even refresh the appearance and performance of flooring, while providing an easy to clean and maintain surface.

More Polyflor BIM Objects launched



Polyflor, a leading commercial and residential vinyl flooring manufacturer, has launched even more downloadable Building Information Modelling (BIM) Objects. After releasing Phase 2 of its BIM offering in June 2015, the recently launched Phase 3 sees more of Polyflor's latest products added to their portfolio: the new Affinity255 PUR range of 2mm gauge luxury vinyl tiles and the relaunched Polysafe Wood fx safety

flooring. Other Polyflor ranges available as BIM Objects include Polysafe Apex safety flooring for commercial kitchens, Standard XL homogeneous sheet vinyl flooring and the specialist Polyflor SD, Finesse SD and OHMega EC ranges.

0161 767 2551 www.polyflor.com



SCHOTT glass approved for "premier league"



SCHOTT's fire-resistance glass products PYRAN® S and PYRANOVA® received UK approval for use in the timber doors of six major door blank manufacturers. The assessment, completed by BM TRADA, covers SCHOTT's glass for use in timber doors for the fire resistance classes E 30, E 60 and E

90 as well as EI 30 and EI 60. SCHOTT PYRAN® S and PYRANOVA® glass are now approved for use in timber door blanks from six major door blank manufacturers, i.e. Falcon, Halspan, Blankfort, Pacific Rimwood, Egger and Moralt. The test result marks a milestone: A 90 minute approval in timber doors is a first for monolithic fire-resistant glass when glazed with timber beads.

01785 223166 www.schott.com/pyran

Solus Ceramics new tile range



Solus Ceramics has launched a brand new and exclusive range of futuristic, three-dimensional wall tiles that challenge the idea of traditional interior design and decor. The new Dimensional range features stunning space age and contemporary patterns that enable the cre-

ation of wonderful abstract feature wall designs. With varying three-dimensional designs, the imaginative decoration allows architects and designers to create an array of complex patchwork arrangements or regular repeated patterns. The range is available in a chic core palette of grayscale colours including white, off-white, grey and black. In addition to the central monochrome colours, the Dimensional range is also available in two gold and silver metallic versions.

01217530777 www.solusceramics.com

Bespoke ceiling design for barn conversion



An early 20th century barn that underwent an extensive conversion features an intricate solid wood feature grill panel ceiling, custom-designed and made by the expert Hunter Douglas team. Hunter Douglas was commissioned to manufacture and supply 245m² of the

grill panels to create an individually designed ceiling that softened the industrialstyle roof of the 600m² single-storey building. Using ayous solid wood stained to look like oak, the aesthetically attractive fire-retardant grill system comprises 35mm x 35mm slats with 17mm gaps. The panels were fitted at different angles and orientations, to create the required aesthetic effect and a patented clip is used to secure the panels to the sendzimir galvanised steel suspension rails.

01604 766251 www.hunterdouglas.co.uk

Incava bath



The new Meisterstück Incava bath from Kaldewei was created in collaboration with industry designer, Anke Salomon. The distinguishing features of the fully enamelled, freestanding Meisterstück Incava is its ultra narrow rim and the unique, conical contour of the

enamelled panelling. Both lend the bath an extraordinary lightness. The contrast between the softly shaped interior and the geometric exterior creates a new kind of elegance thanks to the delicate tension between straight and gently curving lines. A waste and overflow cover, enamelled in the same colour as the bath, is indicative of the designer's eye for detail and emphasises this steel enamel bath's consistent materiality. It is an unmistakable designer object for the bathroom.

Telescopic ladder for ancient abbey

01480 498053 www.kaldewei.co.uk

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Providing access to storage spaces within the choir vestry, a bespoke MWE Vario telescopic library ladder has been supplied and installed by D R Services at Wymondham Abbey in Norfolk. Thanks to swivelling head technology and rollers, the 2.7m high Vario ladder slides smoothly on a 25mm stain-

less steel runningrail. It is able to move conveniently across the corners along curved sections of the rail to access any of the cupboards on each of the three walls without needing to be lifted off. Before it is climbed, the base is simply pulled away and the telescope action allows it to stand at a safe angle. All the ladder components are stainless steel including the stringers and the flat treads.

01279 445277 www.drservices.co.uk

Remmers installed at distribution centre



A selection of **Remmers** flooring systems have been installed at the new Food Distribution Centre for Pallas Foods in North County Dublin. The new €45 million facility includes two warehouse areas totalling 33,000m², half of which is dedicated to refrigerated storage areas as well as 2,500m² of high

specification office space. Over 3,000m² of Remmers flooring materials were used in the facility including Remmers Crete RT, a heavy duty polyurethane screed, to the refrigerated storage areas. Remmers Ceramix coloured quartz was applied to the canteen and wash room areas, and Remmers Floormix aggregate was incorporated as a binder to its Epoxy CR Color, a chemical resistant coating.

01293 594010 www.remmers.co.uk

Looking for a whitewashed floor?

Bona White is a new wood floor primer designed to produce an on-trend bleached look when used in conjunction with a Bona polyurethane lacquer. The intensity of 'whiteness' is dependent on how many coats are applied. This client wanted a whitewashed look to their original Victorian floor boards to tie in with the soft greys of the kitchen. This was achieved by the application of two coats of Bona White under two coats of Bona Traffic HD lacquer.

The works were part of a complete renovation of a Victorian town house in Bath and were carried out by Bona Certified Contractor, TWF Bath Ltd, who specialise in the restoration and fitting of traditional wood floors. Before treatment, the TWF team filled large gaps using reclaimed pine wedges and then sanded the floor to 100 grit abrasives. Smaller gaps were filled using Bona Mix & Fill, which is mixed with sanding dust from the floor to ensure the filled areas blend in with the rest of the surface. The floor was then sanded using 120 grit abrasives before the application of the first coat of Bona White. The floor was then abraded



using a Bona Scrad Pad to remove any grain raising from the surface before the application of the second coat.

To produce a highly durable, easy to maintain finish, two coats of Bona Traffic HD lacquer were applied. Traffic HD is Bona's toughest lacquer. The very low VOC content and low odour mean there is no need for homeowners to vacate their property while the works are being carried out and there is no lingering smell.

Its fast cure time means the floor can be in full use just 12 hours after treatment – making it an

ideal choice for commercial floors too where there is little available downtime for renovation. TWF's clients chose the Matt version of Traffic HD for their kitchen floor. Silkmatt and Extramatt sheens are also available.

As a Bona Certified Contractor, TWF Bath is part of Bona's network of highly trained wood floor specialists – independent wood floor companies who have received extra in-depth training in the use of Bona's wood floor finishing products.

01908 525 150 www.bona.com

ena.263

Everbuild – A Sika Company hold Schönox distribution rights



Everbuild – A Sika Company is thrilled to hold exclusive distribution rights to the leading Schönox brand, a name that is synonymous with quality products for the building and renovation industry. A leading supplier to the German market for many years, Schönox develops and manufactures quality products for installing all types of floor tiles and coverings with the range including levelling compounds, floor adhesives, primers and waterproofing membranes. The Schönox brand is exclusively available to order through Sika Everbuild alongside its current product range. The range includes Schönox ZM Rapid, a rapid setting self-levelling compound allowing coverings to be laid after just 90 minutes; Schönox iFloor System, a revolutionary new system that incorporates a unique rollable adhesive giving clean and fast installation and Schönox Durocoll a multi-purpose, high quality, reinforced dispersion adhesive, ideally suited for use with problematic, high movement soft floor coverings in internal areas. A Schönox catalogue is available featuring the full product range as well as including some complementary products from the current Sika and Everbuild brands. For further information on the Schönox range contact your local sales representative or call direct.

0113 240 3456 www.everbuild.co.uk

eng.265

Retail legend protected by Advanced Panels

The UK's newest Harvey Nichols, which recently opened in Birmingham, is protected by industry-leading intelligent fire panels from Advanced. Advanced's benchmark MxPro fire panel range has been specified for its flexibility, reliability and ease of use. The fully integrated 4 loop MxPro 4 panel covers the entire Harvey Nichols store, which is located in the famous Mailbox development, and the complete installation comprises 555 components including an MX4010 repeater unit, 123 heat and smoke detectors and 88 sounder beacons. Andy Lyall, spokesperson for Fire Bright Solutions, the project installers, said: "It was an easy choice for us to use the MxPro 4 control panel on such a prestigious project. We have always found the Advanced range to be of high quality and easy for our engineers to configure". The store is set across 45,000 square feet, organised as an 'all in one floor' retail layout combining women's and men's fashion, beauty and hospitality on the ground level and a mezzanine for the beauty treatment rooms. MxPro is the fire industry's leading multiprotocol fire solution, offering customers a choice of two panel ranges, four detector protocols and a completely open installer network that enjoys free training and support.

01670 707111 www.advancedco.com



New concept for powder coating services



Powdertech (Corby) Ltd has launched its new powder coating service – the Landscape range.

Eight carefully selected colour palettes have been created using tones and textures to reflect different landscapes, both natural and man-made. The colours are individually named, invoking an image of the landscape they represent.

"This comes as a direct response to discussions we regularly have with clients." said Sales and Marketing Director, Richard Besant. "Our Landscape range has a distinct personality, grouping and naming tones and textures that share an affinity or together create a particular style."

All powder coatings have colour codes, usually RAL or BS. With over 3,000 colours available, Powdertech says its clients want more help when choosing colours for their projects. Landscape evokes an emotional response and builds a tonal picture with exactly the right shades and textures.

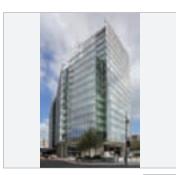
"We are confident that 'Landscape' will be a popular range and a useful resource for our clients" said Richard Besant. The Landscape range is available now and can be viewed on Powdertech Corby's website.

01536 400890 www.powdertechcorby.co.uk

eng.267

FDS makes it to magic 1,000 project marker

For many businesses just making it through another year is a huge milestone. For award-winning smoke ventilation contractor Fire Design Solutions (FDS), however, a much bigger target has been on the horizon for the past few months. The company has topped off one of its most successful years ever by being appointed to its 1,000th project since its inception in 2002. The project in question, based in Romford, will see the firm install its natural smoke ventilation systems in a new residential block on the former site of the Harold Wood Hospital. Founded by experienced fire engineering consultants Andy Riley and current Chairman, Gerard Sheridan, the last 14 years have seen FDS continue to develop its core service offering of designing and installing innovative mechanical smoke ventilation systems. FDS' growing team works with many of the country's biggest residential and commercial property developers, and has been involved with landmark projects including The Place – which acts as News UK's headquarter building – London's 800 apartment Riverlight development and New Capital Quay, a prestigious residential project which saw FDS install its pioneering Firesmart intelligent control system. Speaking of FDS' 1,000th appointment, Chairman Gerard Sheridan said: "Our focus remains firmly on our clients and ensuring that their needs are met."



ena.268

01322 387411 www.firedesignsolutions.com/1000-projects







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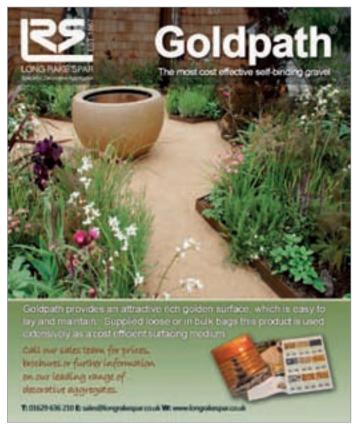
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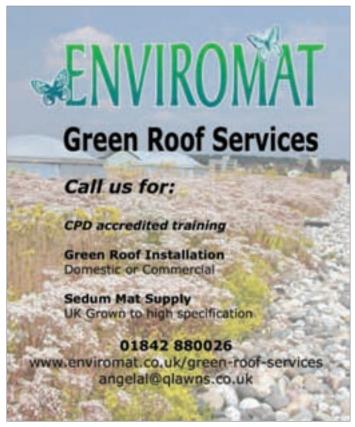
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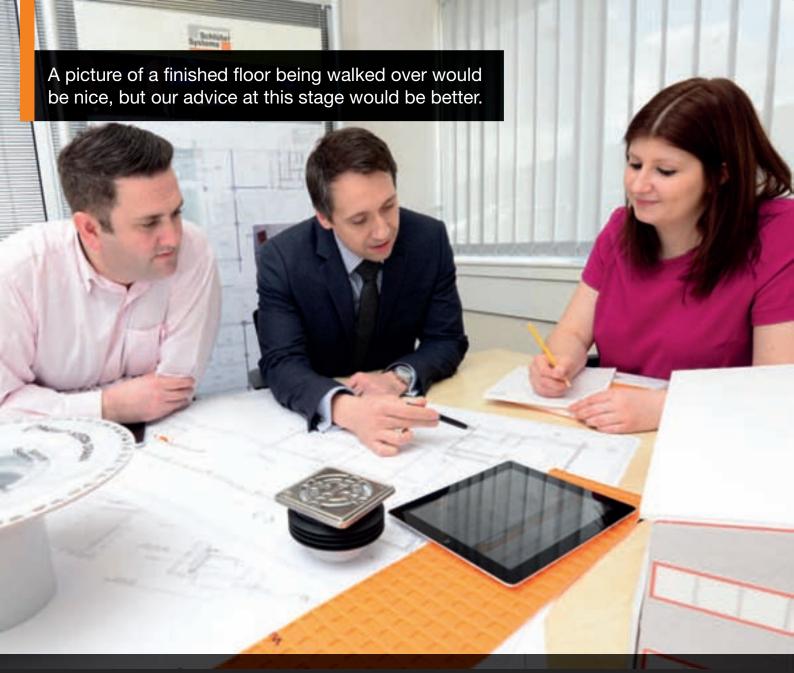


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