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incorporating Building Projects Magazine

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COMPETITION

# 2015 SFE facades competition opens for entries

Following the success of the inaugural event in 2013 the Society of Facade Engineering has called for entries for FACADE2015, the second international competition designed to recognise, promote and reward excellence in this increasingly important element of building design and construction.

Three awards will be presented: Facade of the Year 2015-New Build; Facade of the Year 2015-Refurbishment; and an additional category Outstanding Facade Innovation 2015. The winners will be presented in December 2015 at the prestigious Glass Supper conference and dinner that attracts the highest echelon of facades-focused architects and engineers from around the world. This year the venue is the celebrated 'Sky Garden' in the City of London.

International applications are welcome from individuals, companies and project teams. The prizes will be awarded by a

panel of judges that includes some of the foremost experts from the field of facade engineering and design to entries that demonstrate:

- A clear demonstration of excellence in technical design and/or research that has made a significant contribution to the discipline of facade engineering
- In the development of technologies, product designs, systems or buildings

The contribution may be demonstrated in the form of technical advances, innovations or advanced engineering systems that result in practical design solutions for the completion of a project. Entries can relate to projects that are agreed, under construction or completed.

Announcing the competition on behalf of the SFE, Competition Organiser Graham Hackley said: "The discipline of facades engineering has



come of age and there is a wider recognition of the technical engineering and scientific underpinning that is required to be able to push the industry to new heights and levels of achievement. Some of the world's most treasured structures are appreciated because of the key element of their facades.

"The SFE FACADE2015 Competition seeks to highlight the skills and vision that are creating the best of these projects."

All entries must be received by 2nd November 2015 and those shortlisted will be notified by 21st November 2015. www.sfecompetition.org

# £7 million St Andrews development will showcase 'most famous view in golf'

Visitors to St Andrews will be able to enjoy the most famous view in golf from some of the most luxurious accommodation in the country after Macdonald Hotels were this week granted planning permission for a 44-suite extension to the Rusacks Hotel, overlooking the 18th green at The Old Course.

The £7 million extension to the 128-year-old hotel in the 'Home of Golf' will also include a rooftop restaurant, bar and terrace, as well as glass-fronted suites allowing visitors to witness up-close the grandeur of golf's most historic course. Macdonald Hotels deputy chairman Gordon Fraser warmly welcomed the planning decision: "This is a tremendously positive announcement for our company and for St Andrews,"

The new restaurant, bar and 1,050sq ft roof terrace will all offer spectacular views over the Old Course and the West Sands, additions which the company is confident will achieve '5 Red Star' status for the Macdonald Rusacks Hotel.

Stephen Gallacher, member of the winning 2014 European Ryder Cup Team and golf ambassador for Macdonald Hotels, said: "I've seen the plans for this fantastic development at the Macdonald Rusacks Hotel and they are stunning. The group is committed to developing a truly world-class hotel in keeping with its fabulous location, overlooking the most famous hole on the most famous golf course in the world."

The extension to the hotel, which will also provide valet car parking on the lower ground floor, has been designed by Scottish firm WCP Architects and will be built using traditional materials in keeping with its location in the historic town of St Andrews.



# Major exhibition announced to solve the London housing crisis

New London Architecture, the think-tank behind the investigation into the capital's tall buildings boom last year, are now tackling the epidemic that preys on the minds of all Londoners: the housing crisis.

A landmark exhibition, featuring the results of a major international ideas competition backed up by new independent research, will investigate the true extent of London's housing crisis and how it can be solved. With a shortage of housing for a growing population, and rising prices across the capital, New Ideas for Housing will present the most innovative new housing solutions from London and abroad, and provide the capital's only in-depth look at the future shape of the housing market.

Providing enough quality, affordable housing is proving to be the biggest challenge facing the capital's populace; it is forming political policy on a national and local level and will be the main talking point of

the Mayoral elections. This issue goes beyond the construction of new homes and encompasses everything from population growth to densities, from the living wage to the recession.

The exhibition, New Ideas for Housing, will showcase the results of NLA's international ideas competition, set up in association with the Mayor of London, to find some of the most cutting edge housing solutions from the world's designers, architects, planners, developers, housing associations and decisionmakers. Open to all, the competition invited ideas ranging from policy changes, to new construction techniques and technologies, to design solutions, such as floating homes, self-build projects and pop-up housing. A selection of entrants will then be taken to the Greater London Authority to shape the future of London's building stock. The exhibition will also present results of new in-depth research, exploring the current state of London's housing market, while highlighting some of the most substantial housing schemes already currently underway across the capital.

In-depth research has shown that there are many factors that can be attributed to the crisis, including rapid population growth, land costs, rising rents, improved infrastructure, migration to the suburbs, and the need for those on low incomes to live close to work.

Peter Murray, Chairman of New London Architecture, added: "If necessity is the mother of invention, right now London should be experiencing a highly creative period as far as housing is concerned. But we aren't producing enough housing of the right kind in the right places."

New Ideas for Housing will run alongside an extensive set of talks, debates, site visits and seminars. A major public debate will also be hosted by the NLA in November.

# RIBA House of the Year award to be broadcast by Channel 4

The Royal Institute of British Architects (RIBA) and Channel 4 are pleased to announce a new TV series featuring the RIBA's prestigious award for the best new house. Grand Designs: RIBA House of the Year, to be broadcast weekly for four weeks from Wednesday 4 November 2015, will feature the longlist for the UK's most prestigious new house award and will reveal the shortlisted and winning homes.

The name of the prize, the

'RIBA House of the Year' award, replaces the previous title 'RIBA Manser Medal' with immediate effect, and with the agreement of the Manser family.

The RIBA House of the Year award is sponsored by specialist insurer, Hiscox.

RIBA President Stephen Hodder said: "I am delighted that Channel 4 is supporting the UK's most prestigious and rigorously judged prize for a new house. The series along with the prize's new

name will give even greater public understanding and clarity about the prize and its intentions – to reward and raise the bar for well-designed houses. We look forward to announcing the winner of the RIBA House of the Year in November."

The shortlist for the RIBA House of the Year award will be announced during the course of the series, with the winner to be announced on screen on 25 November.

## events

#### **AWARDS**

British Homes Awards

16 October, London britishhomesawards.co.uk

**Brick Awards** 

18 November, London www.brick.org.uk/brick-awards

#### **FESTIVALS**

London Design Festival

19 - 27 September, London www.londondesignfestival.com

#### TRADE SHOWS

#### Decorex

20 - 23 September, London www.decorex.com

#### 100% Design

23 - 26 September, London www.100percentdesign.co.uk

#### **UK Construction Week**

6 - 11 October, Birmingham www.ukconstructionweek.com

#### Healthcare Estates

20 - 21 October, Manchester www.healthcare-estates.com

#### Independent Hotel Show

20 - 21 October, London www.independenthotelshow.co.uk

#### Greenbuild Expo

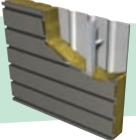
10 - 11 November, Manchester www.greenbuildexpo.co.uk

#### Sleep

24 - 25 November, London www.thesleepevent.com



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## RIBA Stephen Lawrence Prize shortlist announced

The Royal Institute of British Architects (RIBA) has announced the shortlist for the 2015 RIBA Stephen Lawrence Prize.

The prize, set up in memory of the teenager who was setting out on the road to becoming an architect when he was murdered in 1993, and sponsored by the Marco Goldschmied Foundation, is intended to encourage fresh architecture talent and reward the best examples of projects that have a construction budget of less than £1 million.

A South London house built around a pear tree; a fishing hut in Hampshire; a seaside stage and shelter in West Sussex; a 'living laboratory' built from rubbish in Brighton; a converted eighteenth-century threshing barn in Kent; a Wiltshire garden retreat and a low-energy house in Somerset feature on the shortlist:

- Acoustic Shells, West Sussex by Flanagan Lawrence
- Ancient Party Barn, Kent by Liddicoat & Goldhill LLP
- Brighton Waste House, East Sussex by BBM Sustainable Design Ltd
- Dundon Passivhaus, Somerset by Prewett Bizley Architects
- The Fishing Hut, Hampshire by Niall McLaughlin Architects
- Myrtle Cottage Garden Studio, Wiltshire by Stonewood Design
- Pear Tree House, London by Edgley Design

RIBA Stephen Lawrence Prize founder Marco Goldschmied said: "I am particularly impressed with the diversity of the projects shortlisted for this year's RIBA Stephen Lawrence Prize. Each has been expertly designed to work with rather than against the constraints of the

site, whether rural or urban. The shortlist proves that brilliant architecture can be executed on a smaller budget and clearly demonstrates the ingenuity of the profession today. We very much look forward to selecting this year's winner."

The winner of the 2015 RIBA Stephen Lawrence Prize will be announced at the RIBA Stirling Prize party on 15 October at the RIBA in central London.

The judges are Baroness Lawrence of Clarendon, Doreen Lawrence CBE the mother of Stephen Lawrence, Marco Goldschmied, RIBA Past President and Founder of the Marco Goldschmied Foundation, which established the RIBA Stephen Lawrence Prize in 1998 and Murray Kerr, founder of Denizen Works, which won the Stephen Lawrence Prize in 2014.

'SKY POOL'

# Plans unveiled for breath-taking Arup designed sky pool in Nine Elms

Plans for a breath-taking, suspended swimming pool named 'Sky Pool' have been unveiled for Embassy Gardens – the residential heart of London's newest neighbourhood, Nine Elms on the South Bank.

The stunning outdoor pool will link two residential buildings at the 10th storey - a world first - and allow residents to swim from one building to the next. The sky deck at the top of the two buildings incorporates a spa, summer bar and Orangery for residents to relax and take in the views of London icons which include the Houses of Parliament, London Eye and new US Embassy located next door. The pool is entirely transparent and structure free, 25 metre long, 5 metre wide and 3 metre deep with a water depth of 1.2 metre. Designed by Arup Associates, with specialist input from Eckersley O'Callaghan and aquarium designers

Reynolds, the experience is intended to be more akin to an aquarium than a pool, with glass that is 20cm thick.

The pool is the vision of Sean Mulryan, Chairman and CEO of Ballymore Group, working with the scheme's architects Arup Associates. Ballymore are responsible for the development of Embassy Gardens with their development partners Eco World. Together they are developing the second phase as Eco World Ballymore. Ballymore has a reputation for creating places and spaces that are more than just bricks and mortar, and this pool is testimony to this philosophy – creating an inspiring environment and giving a unique character to the development.

Embassy Gardens takes design inspiration from the Meatpacking District of New York with floor to ceiling windows and brick facades. The buildings that the pool link are part of the

second phase of the development which will be released to market this month, soon after the first residents have started to move in following the completion of phase one. This landmark development will see the creation of nearly 2,000 new homes, stunning landscaped gardens and a riverfront walkway threading from Embassy Gardens to Battersea Park, vibrant new bars and restaurants and al fresco and community spaces.











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# York Racecourse unveils world class redevelopment by Phelan Architects



York Racecourse, one of the best and most regarded racecourses in the UK, has undergone a £10 million redevelopment by Phelan Architects bringing it in line with some of the best equine facilities in the world.

Home to the Welcome to Yorkshire Ebor Festival, one of Europe's leading racing festival premier handicap races, the racecourse attracts 330,000 race goers each year and the owners, trainers and jockeys of the world's highest rated thoroughbreds.

Phelan's masterplan, driven by a need for improved equine and racegoer experience of visiting York, is the first comprehensive redevelopment of the Northern end of the site since 1908. The scheme comprises a new weigh-in building, complete with a fine dining restaurant, new saddling boxes and a new pre-parade ring; improved vet and wash down facilities and extensive works to the Champagne lawns improving both the view and utility of the original grandstand – the oldest sporting stand still in use in the world, the grade II listed John Carr Stand which dates from 1754.

Drawing on the materials of the racecourse with a palette of brickwork, timber and slate, Phelan has separated the equine buildings into clusters to express their different functions while

organising them in a stable yard arrangement, built around the perimeter of the new larger, flatter pre-parade ring, to provide a familiar and calming environment for the horses.

The most significant building and largest single element, the two-story weigh-in building, is on the eastern boundary.

Here, the ground floor has been designed with a glazed cloister along its western side to afford views to the preparade ring and demonstrate some of the theatre of racing as the jockeys and officials conduct their business. A timber construction differentiates the first floor whilst the roof is broken down into individual volumes to reflect the internal organization. Building forms are kept as simple shapes to minimize the scale and massing of the design and the main elevation, fronting onto the parade ring, incorporates a verandah with a decorative metalwork screen showing Yorkshire Roses and barber pole ribbon columns that provide a visible and recognisable motif of York Racecourse.

Pre and post race activities are separated to keep a very clear equine circulation with unsaddling taking place out of the public eye at the rear with equine showers around a dedicated wash down yard. Vet facilities are enhanced in

scale, with a stocks box and read access to both pre and post race activities.

Working around the racing calendar, the 2 and a half year project was completed in two phases with the main equine facilities opening in May 2014.

The second phase, which racegoers have enjoyed since May 2015 incorporates a new owners and trainers entrance building, a new Möet Pavilion with roof terrace, and extensive works to the Champagne Lawn included the opening up and framing of the John Carr building. The first of its kind, the building marked the start of a typology of grandstand buildings. Revealing and celebrating the historic building, Phelan's scheme incorporates an oversailing lightweight canopy structure to provide weather protection to the terrace.

James Brennan, head of marketing and sponsorship at York Racecourse said: "As one of the most popular and oldest theatres of British sport, it's vital that we continue to invest in the appeal of York Racecourse and the experience it offers and so look to continue its success. By breathing new life into the northern end of the course, while retaining its historic character, Phelan's scheme has ensured that we can continue to compete as a world-class sports venue ensuring the horse, the horseman and the racegoer are each given the best possible experience."



'Phelan's scheme has ensured that we can continue to compete as a world-class sports venue'

James Brennan, head of marketing and sponsorship at York Racecourse





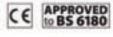
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## ISG Wins £59 Million Old **Bailey Scheme**



ISG has been awarded a £59 million office refurbishment scheme in London's Old Bailey by Blackstone, the leading global asset manager. This win further strengthens ISG's relationship with Blackstone, with the company also delivering office projects at the iconic Adelphi Building and One American Square.

Located opposite the famous criminal courts, the 1980s era building at 20 Old Bailey will undergo a comprehensive modernisation and upgrade programme, involving extensive structural alterations and internal remodelling, renewal of the frontal elevation and the addition of two further floors at roof level. On completion, the building will provide circa 240,000 sq ft of highspecification Cat A office accommodation.

The transformation of the building's facade sees ISG create a contemporary yet sympathetic new elevation, with stone, aluminium and glazed architectural treatments. Major structural work includes column strengthening to facilitate the installation of the additional floors at roof level.

ISG will also carry out wide-ranging remodelling works, infilling the existing square atrium in the centre of the building and creating a new, larger, rectangular atrium towards the front of the building. The new atrium will also extend downwards to ground floor level to maximise the volume of natural light entering the reconfigured building.

To further unify accommodation at 20 Old Bailey and create additional capacity at the sixth, seventh and eighth floors, ISG will extend these stepped back floor plates in line with the new facade. ISG will relocate and form a new main core, infilling two existing cores, a staircase and service risers to create more spacious open floor plates at all levels. The steel frame roof extension will be stepped back from the main facade and incorporate balcony structures across the two new levels. The project also includes remodelling three existing basement floors to provide cycle storage, changing, shower and locker facilities.

Stuart Deverill, ISG's Southern regional managing director, commented: "Blackstone has an enviable pedigree for acquiring under-performing property assets in prime London locations and re-positioning the space to create highlydesirable commercial office space. This highly specialised and logistically complex project plays to our significant strengths delivering central London heavy office refurbishment schemes and underlines our commitment to forging strong relationships and working in partnership with our existing customer base."





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## Osbert Lancaster's

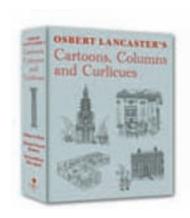
## Cartoons, Columns and Curlicues

#### October 2015

This beautiful boxed-set contains three long out-of-print and influential books by the great British humourist, Sir Osbert Lancaster (1908-1986) – Pillar to Post, the story of architecture through the ages.

First published in 1938 and described by Gavin Stamp as 'One of the most influential books on architecture ever published'; Homes Sweet Homes, a history of architectural interiors and a sequel to Pillar to Post, was first published in 1939, and Drayneflete Revealed, first published in 1948, which traces the development of one particularly typical (invented) English town. Fiona MacCarthy said: "Masterpieces of comic erudition... If you don't already know these books, you have a treat awaiting you. They sum up our architectural inheritance in a hugely entertaining and quite inimitable way."

Sir Osbert Lancaster (1908–1986) was a painter, a writer, a cartoonist, a theatre designer, an authority on architecture and design, and above all a great British humorist. His pocket cartoons depicting the aristocratic Maudie Littlehampton, her family and friends, which appeared in the Daily Express for forty years, recorded in his inimitably English way the life, news and opinions of the period. His books on architecture



and design were as witty as they were authoritative: in them he depicted buildings and interiors with an unerring instinct for the minutiae of stylistic change and recreated with irrepressible humour the way of life of the original inhabitants.

#### ВООК

## Naomi Pollock's Jutaku: Japanese Houses

#### October 2015

Jutaku: Japanese Houses, published by Phaidon in October, reveals the breadth and novelty of contemporary residential architecture in Japan through more than 400 houses.

'Jutaku' is the Japanese word for 'house'. The book illustrates an era of continuous experimentation, as Japanese architects of the 21st century abandon traditional and conventional style, size and shape to create homes the likes of which would not be found elsewhere.

An insatiable appetite for the new, combined with a heavy demand for space in densely populated cities, has resulted in a 30-year average lifespan of a Japanese house. It has become commonplace to buy a plot, sometimes as narrow as 1.8

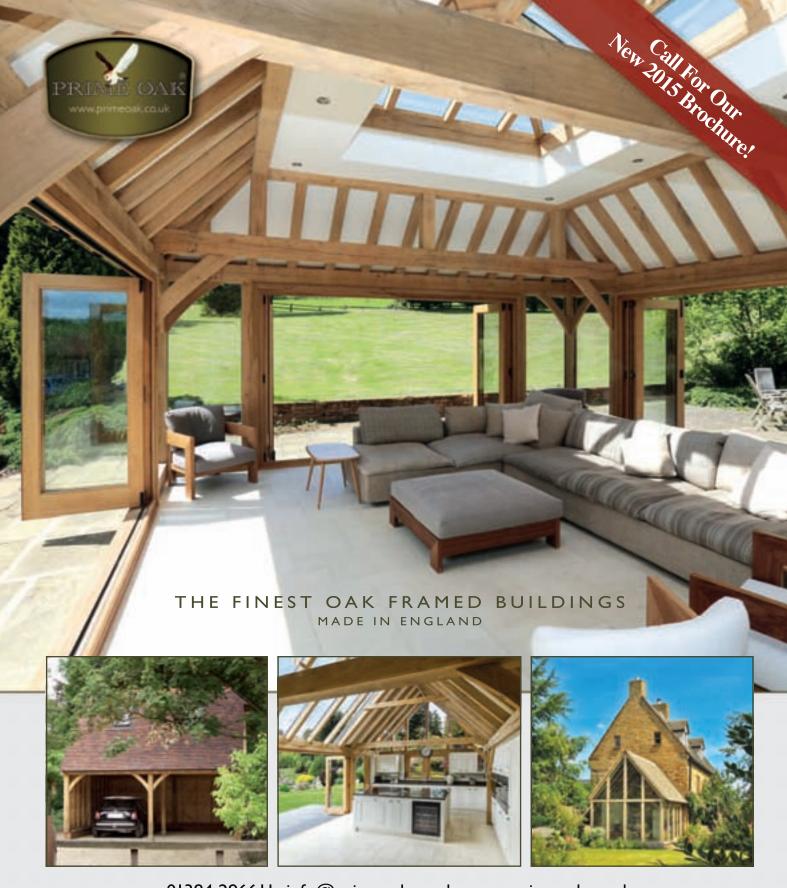
metres wide, and demolish what is there to make way for a custom-designed home. Architects are contending with exacting building requirements – such as the Sunshine Laws that restrict the amount of daylight a building can obscure – and substantial pressure to come up with a modern home in extreme conditions.

The result is an abundance of houses defined by contorted geometry – steeply sloping roofs, curved or tilted walls, stepped profiles and stacked interiors – and increasingly innovative use of building materials both old and new. There are glass-skinned crystalline creations, blocky apparently windowless houses skeletal, stripped-down buildings; and



houses that would look more at home on the lot of a 1970s sci-fi feature film.

Jutaku features over 400 houses – one image per house, one house per page – in a format that evokes the directness and immediacy of social media platforms such as Pinterest and Instagram. It includes the work of many of Japan's most-celebrated architects, like Shigeru Ban, Sou Fujimoto, Kengo Kuma, Kazuyo Sejima, Jun Igarashi and Shuhei Endo, alongside many talented, up-and-coming practices.



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# Calling all architects and building professionals — have you got what it takes to be a 2016 SPAB Scholar?

The search is on for up to four architects, building surveyors or engineers to become part of the SPAB (Society for the Protection of Ancient Buildings) Lethaby Scholarship 2016. This is a training opportunity like no other. After completing the nine-month programme, previous SPAB Scholars have gone on to become experts in their field – some are cathedral architects, some look after palaces, National Trust houses and English Heritage sites.

The Scholarship is open to architects, building surveyors and structural engineers who have completed the college-based part of their courses (e.g. RIBA Parts I & II for architects), ideally with two or three years work experience. The programme is organised and administered by the SPAB and will be of particular interest to early career professionals with a passion for historic building conservation.

Successful applicants will visit some of the country's most fascinating built heritage projects to deepen their knowledge of historic buildings and explore the challenges surrounding their conservation. The company's aim is to give its Scholars first-hand experience of conservative repair in action; they will be meeting professionals involved in the full range of building management issues, working on site and in workshops and studios throughout the UK. Scholars spend the first six months travelling from

'The Scholarship has been an amazing opportunity to learn about our built heritage and how we maintain it for future generations'

2015 Scholar Joanna Daykin

site to site together, in the last three months they study, together or apart, aspects of the nation's country houses.

If shortlisted, all candidates must be willing to attend an interview in London at their own expense. Commitment to the Scholarship is full time, including some weekends, and it is impossible to combine it with any other form of study or employment. Candidates should be aware that there will be long periods spent away from home. The programme runs from 14 March to 9 December 2016. There are no course fees as training and administrative costs are borne by the SPAB. Successful candidates will each receive a bursary in the region of £8,500 toward their basic travel and living costs.

SPAB is inviting applications now for the 2016 Lethaby Scholarship. For further information, visit the company's website.







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# 24 Savile Row – where art and architecture combine

The opening of 24 Savile Row celebrates a unique collaboration between art and architecture. Occupying a corner site between Mayfair's Savile Row and Conduit Street, the seven-storey mixed-use office and retail building is a work of art in itself, clad in 10,000 crystalline hand-glazed ceramic tiles and positioned on a decorative sand-cast bronze plinth.

Savile Row's unique tailoring heritage, in which the concept of the 'bespoke' was born, demands a setting of elegance and style where design is at the forefront. With this in mind, when EPR won the commission for the multi-million pound project in 2012, project leader Stephen Pey felt that the site warranted something truly distinctive: "The word bespoke was invented in Savile Row, where suits were 'to be spoken for' by a specific client. So, we knew we had to create a bespoke building, featuring material and design of the sort of quality to match and echo that tradition."

EPR therefore devised a scheme that would pay homage to the historic setting in its creation of highend workplace and prime retail units, and also showcase the very best in contemporary design in the arts and crafts.

Inspired by local context, the Conduit Street elevation was carefully designed to reflect the historic plot widths, with added depth given through the facade's projecting and recessed window treatments and dark recessed reveals. This was further enhanced by the unique hand-glazed elevation, which was developed in collaboration with renowned London-based ceramicist Kate Malone, and draws on the Mayfair Conservation Area's natural grain in its choice of tones.

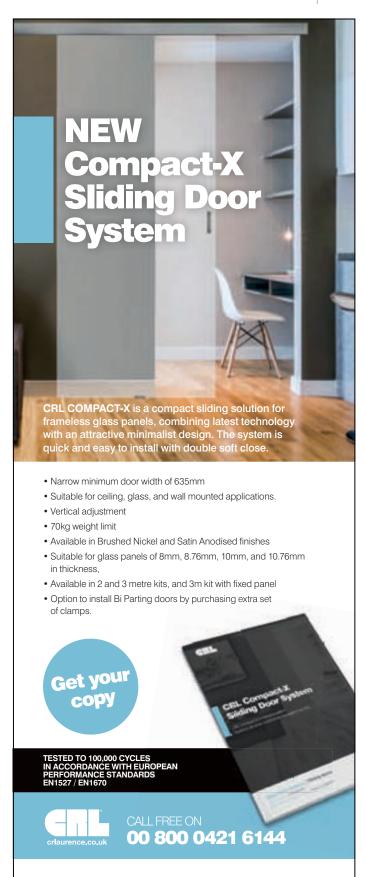
It is this use of Malone's



individually-crafted ceramic tiles on the main elevations that makes this building truly unique - where the cladding is art itself and the whole building becomes an ever evolving canvas as the tiles reflect and refract daylight, capturing differing moods and subtly changing the appearance and tone of the building, depending on the weather and time of day. To create this effect, Malone - in collaboration with EPR - researched and produced a series of bespoke handmixed crystalline glazes exclusively for this building to ensure that each tile has a unique appearance.

Sustainability was also a key factor in the design, which has resulted in a BREEAM Excellent rating. Among its sustainable credentials are its use of more than 1,000 sq ft of photovoltaics, a highly efficient VRV cooling system and its green/brown roofs complete with terraces. It is also one of the first buildings in London to be entirely LED-lit.

In recognition of its ground-breaking concept of combining art and architecture, craft and science, 24 Savile Row has been shortlisted for both the International Design & Architecture Awards 2015 Office Category and the London Design Awards 2015.



**BOLD NEW VISION** 

'The aim of our collaboration with Nissan is to highlight the magnitude of the challenge that we face in evolving our cities to meet change'

David Nelson, head of design at Foster + Partners



## Nissan and Foster + Partners charge ahead with bold new vision

- EV leader Nissan collaborate with world-renowned architects Foster + Partners to rethink the Fuel Station of the Future'
- Concept explores how zero-emission technology will influence future design
- Final concept to be revealed later this year
- By 2020, there will be almost one million electric vehicles on the road

Nissan's unwavering vision of a cleaner, safer and more user-friendly automotive environment takes another marked step forward with the announcement of a unique project to design and develop the Fuel Station of the Future in partnership with renowned international architects Foster + Partners.

The project brings together two brands famed for their innovative, bold design and desire to challenge conventions to offer a fascinating view of how fuelling stations will adapt in a rapidly changing world.

As undisputed leaders and market experts in EV design, engineering and manufacturing, Nissan is perfectly placed to establish a vision for the Fuel Station of the Future. The brand recognises that the refuelling infrastructure of the future represents the perfect opportunity to integrate and engage with local environments in an innovative way – potentially providing an energy and societal hub for modern communities.

The need for a sustainable and innovative refuelling network is becoming vital as the market shifts toward alternative sources like electric power.

The concept will be anchored at the heart of a world that is concerned with a zero-emissions society, connected communities, autonomous drive and the Internet of things. It will demonstrate the host of benefits brought by a smart EV ecosystem – not just in terms of mobility, but in harnessing the potential of battery storage and vehicle-to-grid systems.

Nissan will collaborate closely with Foster + Partners over the coming months to present its vision for the Fuel Station of the Future later this year.

The collaboration to conceive a bold new vision of the fuel station comes as the popularity of electric vehicles continues to increase. Sales of Nissan EVs rose by 33 per cent in 2014 and continue to climb, driven by the on-going battle to improve urban air quality. Adoption of EVs is reaching a tipping point, and projections suggest that current growth trends will only accelerate in pace.

Nissan has pioneered bringing ZE technology to the commercial mass-market. In 2010, the introduction of the Nissan LEAF – the first mass-market, pure EV launched globally – revolutionised the motoring world. It remains the best-selling EV in history, commanding almost a 50 per cent share of today's zero-emission vehicle segment.

'LEARNING THROUGH DOING'

# 'Learning through doing' ethos inherent in design of new University Technical College

Planning permission has been granted for a new University Technical College in Dagenham, ELUTec.

This new type of education facility aims to inspire young people in East London and Essex to become the next generation of talented engineers and designers. Students will combine practical activities alongside theoretical studies through a new way of teaching. Their educational experiences will equip them with the skills, knowledge and personal qualities they need to have a successful career in industry.

The college will be partially housed within the constraints of a former industrial unit to the north of the former Sanofi pharmaceuticals site. A new Cross Laminated Timber (CLT) structure provides a series of academic spaces over 3-storeys and a professional 'business like' frontage. The lecture theatre is



positioned centrally in the main approach elevation where it projects from the main facade to provide a single point of orientation.

The refurbished warehouses to the rear provide large volume, open plan environments akin to industry, allowing the students to experience industrial scale activity within the control and safety of an educational context.

The college, designed by LSI Architects, will be constructed by Kier and is expected to open in September 2016. Rupert Kitchen, partner at LSI Architects, commented that "the technically-rich project based 'learning through doing' ethos is inherent in the design, and as such the workshops will be 'on show' and visible on arrival with oblique views available from a Forum area.'

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enq.110

eng.111

# The 2015 Sunday Times British Homes Awards shortlists announced

"It gives me great pleasure to launch the design brief for 'Homes for Britain' — the 2015 Sunday Times British Homes Awards. The competition has a long track record of producing cutting-edge designs of real excellence and innovation across a broad range of categories. This year's competition, which challenges architects and designers to produce a standard house type suitable for Garden City type developments, with a focus on innovative designs which are both buildable and replicable, promises to continue in that vein. In the UK we have some of the most innovative and creative architects and designers in the world, and I have no doubt the competition will produce new ideas for homes which are of practical and lasting benefit".

The Rt. Hon. Brandon Lewis MP Housing Minister

Challenging convention and inspiring innovation The British Homes Awards have been pivotal in providing a catalyst for change in the way we design and construct our homes and in the process recognise, endorse and showcase exemplars of best practice.

#### The "Homes for Britain" Challenge

The 2015 Sunday Times British Homes Awards design competition invited submissions for designs for a standard house type suitable for planned Garden City developments, constructed with H+H UK's aircrete building materials.

The British Homes Awards have established a successful legacy in pioneering innovative solutions and technologies within the design and construction of new homes. The 2007 Award winning "Green House", (Green House picky?) built as a prototype on the BRE Innovation Park, enabled partner H+H UK to refine their Thin Joint Aircrete system to help the building achieve zero carbon emissions.

Gaining leverage from this experience and later from their involvement with the Government sponsored AIMC4 initiative (Application of Innovative Materials to meet Code Level 4) H+H UK have evidenced the benefits of masonry construction in terms of the enhanced energy performance of the building fabric.

Building on this trialled research the specification of

aircrete masonry was mandatory within the 2015 competition submission to demonstrate that modern, efficient, aesthetic and practical house designs are eminently feasible with masonry.

It is expected that the successful design submissions will form the blueprint for the UK's future housing stock and it is intended that the winning design, subject to a full build feasibility study, will be evaluated as a prototype house type for key high density new build sites by one of the UK's premier and most enlightened homebuilders, Redrow.

Chaired by Professor Robert Adam DipArch, RIBA, FRSA of ADAM Architecture, the panel of Judges have short-listed 6 concepts which are now on display until the end of October as an exhibition gallery at The Building Centre, Store Street, London:

Growing Home: waparchitects

Hanging Gardens House: Somorjay Tallis One Hundred Year Home: C.F.Moller The Arc House: McInnes Gardner

The Almond Place Scheme: Rodney Black Studio

The Garden Villa: Emrys Architects

These designs were presented for reader vote within Sunday Times "Home" on September 6th. and the design that secures the highest number of votes will be declared the winner.

Vote for your favourite at: www.thesundaytimes.co.uk/bha

## news bytes

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

WSP | Parsons Brinckerhoff appointed to Sheffield Meadowhall refurb... Ref: 55888

Goodman completes development at Aylesford Commercial Park, Kent... Ref: 15504

> Benoy's City Centre Me'aisem Opens in Dubai... Ref: 64834

## ArchiExpo presents the Second Edition of its i-NOVO Awards

ArchiExpo will launch the second edition of its i-NOVO Awards at Batimat 2015, to be held in Paris from November 2 to 6, 2015.

ArchiExpo's i-NOVO Awards will identify and reward products that improve industry standards through innovation. I-NOVO will highlight Batimat's most exceptional products across three categories:

Officially launched on September 2, 2015, this competition is open to manufacturers in the following areas: Building &

Construction, Interior & Exterior Fittings, Heating / Air Conditioning, Smart Buildings and Bathrooms.

Entries will be accepted from September 2 until midnight of October 13, 2015. The winner of each i-NOVO Award will be decided by public vote. Voting is open between November 2 and 6, 2015 at Batimat and on the web.

The winners will be announced on November 12, 2015. For more information please visit www.architectsdatafile.co.uk and enter reference number 81202.



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FAÇADES

#### LANDMARK BUILDING



# Atkins' architecture vision for Vingroup's tallest landmark building in Vietnam to become a reality

Construction has begun on the Atkins-designed Vincom Landmark 81 – a supertall skyscraper located in Ho Chi Minh City, Vietnam. Atkins is the lead architect working closely with Arup for the structural design, one of many global projects on which the two British design companies are collaborating. With an expected height of 460m, this building will be the tallest building in Vietnam once completed, adding a new iconic landmark to Ho Chi Minh City's ever growing skyline.

UK Prime Minister, David Cameron, said: "Arkins and Arup are leading the way in unlocking the potential for British businesses in Vietnam. It's a testament to their expertise that Ho Chi Minh City's skyline will be shaped by British design, as they work on Vietnam's tallest skyscraper. I'm pleased they were able to join me on my trade mission as we look to further export UK excellence and forge stronger links with the fast growing economies of South East Asia."

Atkins' scope includes architecture and landscape design. The 81-storey development is located in Vinhomes Central Park – one of the most prime locations in Ho Chi Minh City, Vietnam. Its frontage faces the beautiful Saigon River, and is conveniently connected via major road and water transportation. Featuring a modern and unusual architecture design that symbolises the diversity and fast-emergence of Ho Chi Minh City, this mixed-use development involves space for hotel, serviced residential apartment and retail. At the base of this skyscraper is a sumptuous shopping centre featuring the finest retailers under one roof for a top-class shopping experience. The 241,000m² development will also feature contemporary landscape design that merges natural beauty into this building.

The construction of Vincom Landmark 81 is expected to be completed in 2017.

**NEW HOSPITAL OPENING** 

## Jigsaw Building officially opens at Royal Bournemouth Hospital

The Stride Treglown designed Jigsaw Building, named after the Jigsaw Charity which partially funded the £5.7 million project, has officially opened at the Royal Bournemouth Hospital on behalf of the Royal Bournemouth and Christchurch Hospitals Trust.

The 21,000 sq.ft building will provide a centre of excellence for women's health, with leading facilities for oncology, haematology, gynaecology, breast care and early pregnancy, as well as cancer and blood disorders. Consulting and exam rooms and admin spaces for staff have also been included in the design.

Located between the Eye Unit and Derwent Suite for Orthopaedics, the BREEAM 'Very Good' building provides 2 floors of clinical and ancillary accommodation which is connected to the existing Nucleus hospital template, allowing patients to receive specialist out-patient care in a dedicated building that still forms part of the main hospital area.

With external and internal environments designed to be calming and friendly places where patients can feel at ease, the use of timber effect materials and complementing colours helps provide a domestic feel with a highly clinical finish. The extension is wrapped in variegated colour Trespa cladding on the first floor, punctured with ribbon windows, white brick to the ground floor and an undulated roof form to conceal roof top

plant. The company worked closely with the Studio-Mode Arts Co-ordinator to procure sympathetic artwork which complimented the interior design and met healthcare regulations.

Revitzo software was trialled during the design process, enabling the user to have complete control and walk around the proposed 3D environment. This was very successful and well received by the medical staff and stakeholders, with the Revit model generated to include all ADB components.

Working within the confines of an existing hospital site is always a challenge, but the design team, client and contractor worked together to reduce the effect of the construction works on the existing staff and patients. This team included the Stride Treglown Healthcare team, Worldwise Mechanical and Electrical Consultants, AKS Ward as Structural and Civil Engineers, BREEAM Consultant's Henderson Green, and Sound Advice Acoustics Ltd providing Acoustics services.

Jessica Ellis, Architect at Stride Treglown, commented: "We've worked well with the client, design team and the contractor to achieve a striking new out-patients facility for the Royal Bournemouth Hospital. It's been great to work with the Client and the Charity to utilise their money in the best way possible. The outcome will hopefully benefit the local community and provide the latest healthcare technology to patients".



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reader enquiry

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## international focus

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







The modernisation work of the famous Torre Arcobaleno at Porto Garibaldi has been completed. Dating back to 1964 and once upon a time an anonymous water reservoir on the site of the important FS Milano Porta Garibaldi railway station, the Tower was first renovated ahead of the football World Cup held in Italy in 1990, a project that turned a downtrodden public works into a highly recognisable urban beacon. Since then, the Torre Arcobaleno has been a highly significant building for the city, a distinctive symbol of Milan's colour and creativity, and has gradually become known as a major landmark.





THE NEW NATIONAL STADIUM, JAPAN ZAHA HADID ARCHITECTS

The New National Stadium in Tokyo, has been developed over two years, to be the most compact and efficient stadium for this very special location in Tokyo. Zaha Hadid Architects welcomes a new contractor bidding process for the New National Stadium to reduce costs and ensure value for money in terms of quality, durability and long-term sustainability. The New National Stadium can be completed in time to welcome the world to Japan in 2019 ahead of the Tokyo 2020 Olympic and Paralympic Games, and become a new home for sport for many future generations of Japan's athletes, sportsmen and women.

Ref: 65608

## exploring architecture

featuring the latest projects from around the world



#### INDIGO HOTEL, CHINA MOTT MACDONALD

Construction is underway on a new Indigo hotel in Yangzhou, China. Mott MacDonald is acting as mechanical, electrical and plumbing consultant on the project on behalf of Yangzhou Wansheng Industry Co., Ltd. Designed in the style of the Tang dynasty, the hotel will be operated by InterContinental Hotel Group (IHG) and provide 122 guest rooms. It will cover a total floor area of 18,000 sq m, split between a 9142 sq m three storey tower and an 8,505 sq m basement. Over 70 parking spaces will also be provided on site. The project is due to be completed in the third quarter of 2017.

Ref: 43699



## MALMÖ LIVE, SWEDEN SCHMIDT HAMMER LASSEN ARCHITECTS

The new 1,600 seat concert hall in Malmö Live opened to the public with a festive premier program on the weekend 28-30 August 2015.

The concert hall is the Centre piece of the Malmö Live complex, which also consists of a five star Clarion Hotel, Congress Centre, two restaurant's, sky bar and an additional flexible venue space, called the Cube. The complex designed by Schmidt Hammer Lassen architects totaling 54,000m² opened in May of this year and is fast becoming a cultural landmark in central Malmö.

Ref: 47040



#### CHÂTEAU MARGAU, FRANCE FOSTER + PARTNERS

Following a strategic masterplan, Foster + Partners has completed the first new visible building on the estate since the Château and the existing cellars were completed two hundred years ago.

In addition to a large new winery, the Nouveau Chai, the project includes a new Vinothèque, and the refurbishment of existing buildings and the historic Orangery – together, these provide state of the art facilities to support this leading wine producer in its continued quest for excellence.

Ref: 56986

# TIMBER EXPO

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# cpd focus

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Maintaining and improving professional competence, skills, abilities and knowledge

### REHAU'S RECENT PASSIVHAUS SEMINAR



The huge success of REHAU's recent Passivhaus seminar, held at the SS Great Britain in Bristol, illustrated just how much interest there currently is across the construction industry in the practical application of the technology. As new members of the Passivhaus Trust and with a number of Passivhaus certified products in its portfolio, REHAU hosted the event to demonstrate its ongoing commitment to the concept. REHAU is planning another similar seminar in the North West later in the year and will be exhibiting at the Passivhaus Conference in London on 20 October.

01989 762600 www.rehau.uk

enq. 115

#### 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

## 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. 116

## GUIDE TO SPECIFYING MODIFIED SCREEDS



This RIBA certified seminar from Ronacrete offers guidance on how to specify modified screeds successfully. It looks at the types of screeds available and the design considerations and installation methods that can affect your decisions on screed. Learning outcomes will provide awareness of design considerations, the importance of specialist contractors and recognised test methods, as well as an understanding of performance categories, surface preparation and screed depths. You can also pick up knowledge of suitable substrates, types of DPM and types of screeds available.

01279 638700 www.ronacrete.co.uk

enq. 120

#### **WHY WRAS**



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

01372 465655 www.hansgrohe.co.uk

enq. 117

#### FOUR GEZE UK CPD SEMINARS



GEZE UK, a company which offers four RIBA-approved CPD Seminars, has traditionally offered lunch-time training, but has now increased the sessions available to give chartered architects the flexibility to fit compulsory learning around their working day. The presentations offered which are designed to offer invaluable advice and guidance, include EN 16005 - Safeguarding Pedestrians from Accidents at Power Operated Doorsets; Glass Door Assemblies - Selection and Specification; Designing Effective Natural Heat and Smoke Ventilation and Removing Barriers to Access.

cpd@geze.com www.geze.co.uk/geze/cpd

enq. 121

## INTRODUCTION TO THE LIQUID ROOFING AND WATERPROOFING ASSOCIATION



The LRWA has launch its RIBA approved CPD, available online for specifiers, architects, and surveyors. "CPD's are crucial for anyone working in the construction industry," commented Terry Wain, LRWA technical secretary. The CPD should take around 25 minutes to complete and includes information on the history of liquids and the various ways in which LRWA aims to promote best practice within the industry.

0207 448 3859 www.lrwa.org.uk

enq. 118

#### **GREENING THE GREY**



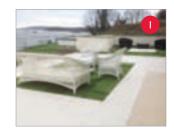
Scotscape is pleased to announce its CPD Greening the Grey, which aims to assist both specifiers and architects when designing and selecting living wall systems. It covers the benefits of living wall systems, good design, installation and maintenance, and the specialist irrigation required to achieve a successful living wall. Scotscape has developed a Fabric Living Wall System with integrated insulation, allowing specifiers to quantify the thermal benefits and energy efficiencies that this system brings.

020 8254 5000 annar@scotscape.net

## editor's focus

#### I. CASTLE COMPOSITES LTD

Extra20 Porcelain Stoneware from Castle Composites Ltd are ideally suited to flat roofs and balconies. One recent project involved the installation of Porcelain Stoneware on supports alongside Grassflex Interlocking Rubber Tiles. The results being a very happy client and a unique roof terrace with paving to match the stunning views. Extra20 Porcelain Stoneware is at the forefront of paving technology. If you are looking to achieve stunning aesthetics without compromising on slip resistance or maintenance Extra20 Porcelain Stoneware should be the choice for your project. For more information, please call Castle Composites, or visit the company's website.



enq. 123



#### 2. DUNSLEY HEAT LTD

The Dunsley Yorkshire will burn virtually anything. You can burn wood, coke, anthracite, bituminous coal briquettes, even in a smoke control area. Clean combustion means a genuinely clear view of the fire through the big, big self-cleaning window. Burning the smoke as well as the fuel means more heat for less fuel. That means less ash, less frequent refueling and much less hassle When burning wood, the Yorkshire Stove emits only about 1.2 grams of smoke in a whole hour, an ordinary stove might emit as much every 90 seconds, making the Yorkshire cleaner even than 'catalytic' stoves. For more information or to become a stockist please call Dunsley Heat. Alternatively please visit the company's website.

enq. 124

#### 3. GEZE

GEZE UK is once again supporting the Fire Door Safety Week campaign, 14-20 September 2015, which aims to engage and educate building owners and building users on how to use fire doors properly. The campaign is the brainchild of the BWF-Certifire Fire Door Scheme, and on its website offers help and advice to building owners, building users, facilities managers and contractors. From advice on simple checks to make sure fire doors are safe, including how to use a gap tester, to choosing a fire door installer, the website is an invaluable source of information. For more information about GEZE UK's comprehensive range of door and window control systems or CPD call the company or visit the website.



enq. 125



#### 4. SCHIEDEL

Schiedel Introduces the latest cutting edge addition to its range of products designed specifically for Air tight and energy efficient timber framed buildings. IGNIS PROTECT is the new CE approved wall pass thru' system used for SW connecting flue pipes up to the temperature class T450 and DW stainless steel System Chimneys up to the temperature class T600. The unique features of this product has helped the company win the Flueing and Ventilation Product of the year at the Hearth & Home exhibition in Harrogate this year. Ignis Protect is suitable for SW and DW connecting flue pipes passing through interior or exterior walls made of combustible materials and is available in both 90° and 45° versions.

enq. 126

#### 5. HEMSEC PANEL TECHNOLOGIES

From the company's beginnings in 1928, manufacturing ice cream and chill cabinets, Hemsec Panel Technologies has developed one of the most technologically advanced ranges of food safe, fire rated, structural, insulated composite panels for use in internal applications and external envelopes across multiple building sectors. HPT panels are lightweight, offer exceptional thermal properties, high levels of sustainability and environmental performance together with reduced on-site installation times. The company specialises in Cold Stores, Clean Rooms, External Roofing, External Cladding and Structural Insulated Panel (SIPs) builds, producing a wide range of insulation thicknesses to meet appropriate U-values.

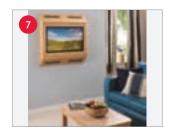


enq. 127



#### 6. PERCY DOUGHTY

The Vision Trimline range from Percy Doughty designed with the specific purpose of recreating the desire to use a fireplace as the central focal point of our living space. The innovative fires are skilfully engineered to allow a true trimless aspect. With no distracting frames or visible mechanical workings – just fire. Furthermore, 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. There is no need for an existing chimney making them both highly efficient and safe. This is all down to the clever features of the company's balanced flue system. All Vision Trimline fires use a specialised double wall concentric flue system.



#### 7.TOUGH FURNITURE

Tough Furniture specialises in designing and making furniture for care environments where challenging behaviour of various kinds makes conventional furniture unfit for purpose, poor value and potentially unsafe. The company pioneered the development of cabinets specifically to protect televisions, computers and other vulnerable items from challenging behaviours, using lockable screens of polycarbonate, an immensely strong plastic material. Its ligature resistant wall mounted flat screen cabinet has been very well received since its launch in 2014 and its fitness for purpose has been trialled and deployed in some of the most demanding of high-security accommodation. Search Tough Furniture on Youtube to see it in action.

enq. 129

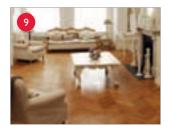
#### 8. POLYROOF

Polyroof has launched an intuitive new website that is focused entirely on providing users with relevant information as quickly and easy as possible. The new content is presented in a simple to navigate layout and there's no need for registration to access any of the information or services on the site.

Content includes BIM Objects, specifications, CAD details and much more – all of which is accessible without the need for registration. To get started with your flat roofing project visit the company's website today.

enq. 130





#### 9. THE NATURAL WOOD FLOOR COMPANY

The Natural Wood Floor Company's showroom is part of the company's UK headquarters in Wandsworth, London, located alongside a 24,000 square metre warehouse and distribution centre. The showroom has just been extended to 175 sq m, so there are even more display panels on view, along with a larger range of accessories.

With everything conveniently placed under one roof and over 250 thousand sq m of wood flooring in stock, most products are available for immediate collection or delivered by the next working day.

enq. 131

#### 10. CHILLI PENGUIN STOVES

Welsh design and engineering company Chilli Penguin Stoves produces some of the most efficient stoves currently on the market, gaining efficiencies of up to 82 per cent. It is a small owner run business established in 2001. Its first model the Hungry Penguin was a 5 kw stove with a small oven box which was sold directly to customers in the canal boat sector. The company now manufacture a range of 10 different models and sell through a network of over 70 stockists across the UK. It is committed to UK manufacturing and producing well designed, carefully manufactured quality products made to last from it's base on the beautiful Llyn peninsula, backed up by a 7 year guarantee.

enq. 132





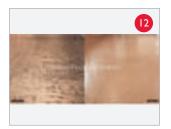
#### II. CHARLTON & JENRICK

Charlton & Jenrick is pleased to announce the introduction of the P9 to the Paragon P Series of gas fires. The P9 is the largest offering in the range and with a visible glass size of  $690 \, \text{mm} \times 690 \, \text{mm} (27 \, \frac{1}{4} \text{"} \times 27 \, \frac{1}{4} \text{"})$  is perfectly proportioned to fill a wide range of fire surrounds to dramatic effect. It is designed to fit into the majority of stone and marble fireplaces to create the perfect suite feature to suit any room from the traditional to the ultra modern. Using the Paragon bespoke burner the P9 offers a realistic flame picture and an impressive 81 per cent efficiency from a modest 7.6kW gas input. The fire features an infra-red battery operated remote control for ease of operation. The P9 comes complete with realistic logs and matt black firebox liners.

[enq. 133]

#### 12. HAVWOODS ACCESSORIES

Havwoods Accessories, the UK's premier supplier of flooring accessories and machinery for over forty years, has recently secured the exclusive distribution rights for the patented UV cured lacquer system UVElite for the UK and Republic of Ireland. UVElite uses ultra-violet light to quickly restore and provide an incredibly durable protection to wood and resilient floors, removing the need to close the affected area as with most renovation projects. UVElite minimizes operational downtime with single-day project completion and in all cases meets and exceeds customer's expectations. With curing times up to 28 days with solvent based systems, Havwoods Accessories are now offering UVElite as an instant solution.



# Reynaers drives industry partnership through Top Gear track experience

Reynaers has held a series of exclusive events for specifiers as part of its 50th anniversary celebrations. Six different "R-Cuisine" events, taking place from July until September, have been organised by Reynaers. Each event features an exquisite 10-course tasting menu and overnight stay in a luxurious hotel. Participants also get the chance to take part in the Top Gear 'Star in a reasonably priced car' track experience and battle it out against industry peers to earn a place on the leader board.

Paul Duffy, sales Director at Reynaers, said: "We're celebrating 50 successful years this year and wanted to thank our network of architects, main contractors and consultants for their support. They all understand the value of a premium brand and excellent customer service. This is the second year that we have run R-Cuisine in order to build partnerships with key specifiers in the industry in a unique environment. Last year was such a success in giving industry professionals and our partners opportunities to network and build lasting associations in line with our ethos 'Together for Better."

You can have a look at who is topping the leader board at: bit.ly/ReynaersTopGear



Currently architect Chris Pickup is number one driver in the industry with an impressive lap time of 1 minute 41 seconds – ahead of actors Matt LeBlanc and Rowan Atkinson. See more from the day at bit.ly/ReynaersRCuisine

0121 421 1999 www.reynaers.co.uk/

enq.135

#### Gerflor's new specification sales specialist



Experienced sales professional, John Nicholas, is the latest Specification & Sales Representative to join the dynamic Gerflor flooring group's UK team. He is responsible for technical sales across specification and distribution channels of public and private sector new build and refurbishment projects in the Midlands area. Having specialised in specification sales within the furniture and construction industry,

working for companies such as Remploy Furniture and 0Point8, John has engaged with architects, local authorities, contractors and end-user clients on small large to large scale contracts, especially in the education sector.

01926 622 600 www.gerflor.co.uk

ena.136

#### Air conditioning receives global design award



Mitsubishi Electric's range of Zen indoor air conditioning units has received global recognition for its stylish design, with the awarding of the prestigious Red Dot Design Award. The international award

highlights products and companies that deliver outstanding design and the judges commented that the Zen range: "presents a convincing symbiosis of energy-saving technology and minimalist, elegant design". The Zen Series is a wall mounted system that blends energy efficiency and quiet, controllable comfort, with a sophisticated, streamlined design. It is also the only air conditioning unit to be acknowledged by the Noise Abatement Society.

 $01707\ 282880\ www.library.mitsubishielectric.co.uk$ 

enq.137



#### First CE-Marked timber deck boards in the UK

John Brash and Co. Ltd is the first company in the UK to start CE Marking its entire range of timber deck board products. The CE Mark will apply to the Lincolnshire-based company's products, including JB Standard, JB CitiDeck and JB AntislipPlus, after completing training with TRADA for its C16 deck boards. The company had already achieved the CE Mark for its C24 decking through its work with BM TRADA. CE Marking is mandatory for any product covered by a harmonised European Standard. It requires a complete audit trail to demonstrate that its processes and products all meet specific standards of quality. John Brash & Co. Ltd's Chairman, Christian Brash, said that achieving CE-Mark status is a proud day for the company, which tirelessly works to drive up standards right across its range of timber products.

01427 613858 www.johnbrash.co.uk

#### Complete service helps achieve value engineered solution in hygiene



A unique service is helping local education providers achieve optimum effectiveness in value engineering for accessible toilet provision. The Department for Education has updated its Building Bulletin 103 Area Guidelines for Mainstream Schools, which, for the first time, lays down a minimum size and required equipment for a school hygiene room. However, few building services companies fully appreciate the breadth of equipment and associated ancillaries required, or have the capability and ability to supply, install and commission the raft of equipment involved. This puts strain on timescales and budgets. Clos-o-Mat is the only disabled toilet provider than can, in-house, provide a value engineered solution. It can, through one source, provide design advice, supply, installation, project management and on-going service/maintenance across all the equipment needed. "Because the room is a toilet, there is a misconception that any building services company can fit it. But it contains more than a WC; it has highly specialised equipment such as a hoist, a big changing bench, it needs electricity as well as a water supply, it needs load-bearing walls... if not understood, these cause significant delays and cost to the project," says Clos-o-Mat hygiene rooms/Changing Places project manager Kelvin Grimes.

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

ena 139

### Hauraton drainage channels used at Penarth Learning Community School

Penarth Learning Community School, Cardiff, South Wales, comprises a mainstream comprehensive school with 1,280 places, together with a Special Educational Needs (SEN) school, catering for 205 pupils with a wide spectrum of learning needs including those with learning and physical difficulties and those on the autism spectrum. Together with a learning facility, there is also a 1,500m² residential home, allowing 19 pupils to stay over at any one time to provide respite to their families. With the site being quite flat and the new buildings surrounded by block paved areas and asphalted surfaces, it was essential rainwater is drained effectively. Two Hauraton systems were chosen to drain surface water: RECYFIX\* PRO fitted with FIBRETEC\* C250, HEELSAFE 9mm slot gratings for the asphalted yards and car park and RECYFIX\* STANDARD SLOTTED CHANNELS fitted with symmetrical galvanised steel covers. Once installed this system provides an unobtrusive, narrow line of slots in the paved surfaces. Steve Wiseman, Hauraton's project engineer commented: "By using two types of channel the overall appearance of the block pavements and asphalted surfaces was enhanced with the drainage requirement fully met".



ena.140

01582 501380 www.drainage-projects.co.uk

#### Bauder Strikes Gold once again with Investors in People



Flat roofing specialists **Bauder** has once again been awarded the prestigious Investors in People (IiP) Gold status, which recognises high performing organisations that put its people at the heart of the company's success. This is the second time that the company, based in Ipswich, has been awarded the highest accreditation of Gold, an accolade that is awarded to only 7 per cent of applicants each year; which is particularly impressive considering over a third of the UK's workforce used IiP this year. Family-owned company Bauder, who deliver flat roof, green roof and photovoltaic solutions, possess a workforce of over 130 employees located throughout the UK and Ireland; however they are all frequently brought together to participate in many employee engagement and personal development initiatives. Earlier this year, the company also achieved, for the third time, a place in the Sunday Times Top 100 Best Small Companies To Work For, together with a 3 star status accreditation for outstanding workplace engagement. Commenting on the success Angeline Barnes, HR manager stated: "We truly believe our people are our greatest asset. The accolades provide us with a framework to benchmark and measure our practices and people strategies to ensure we continue to develop, improve and ultimately preserve our inherent cultural ethos."

01473 257671 www.bauder.co.uk

enq.141

#### Architects Datafile website



www.architectsdatafile.co.uk

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.

#### Door closer assures safer schools



Powermatic controlled, concealed door closers, from Samuel Heath, deliver a host of benefits to the education sector, meeting all relevant fire performance and accessibility requirements. Being totally invisible when the door is closed and having few parts on show, Powermatic is less likely to be vandalised,

thereby reducing maintenance costs and reducing the risk of a fire door being rendered ineffective by a damaged door closer. Concealment also helps to reduce the opportunity for self-harm, something that at least one local authority is believed to have recognised by switching to Powermatic. These factors make Powermatic an ideal choice for new build, refurbishment and improvement projects.

01217664200 www.concealeddoorclosers.com

eng.142



enq.143





## Reed all about it

The University of East Anglia's new Enterprise Centre makes large scale use of thatch as a carbon reduction measure, Mark Smulian reports

is one approaches the University of East Anglia's new 3,400 square metres Enterprise Centre, its surface presents something of puzzle.

Is the cladding wood, a light brown brick, or a straw colour painted on something?

In fact its thatch, from possibly the largest single job the thatching industry can have had in modern times.

The thatch acts as a rain screen on a building designed to meet both Passivhaus and BREEAM 'outstanding' criteria for energy efficiency.

UEA wanted a building that was both low carbon and made use of locally sourced materials, and East Anglia has plenty of reeds and a busy thatching industry, though it usually works on domestic projects.

It was a chance meeting in a pub that led to the project supporting an entirely new industrial thatch process.

The £11.6m Enterprise Centre will house small and start-up business that need to work with the university's academic staff and is near to, but not on, the noted 1960s modernist campus.

Its designer Ben Humphries, of architectural practice Architype, takes up the story: "The building needed to be exemplary for low carbon and to use locally sourced materials, so this led us to study what was available that was renewable and with low embodied carbon.

"We thought it would be great to do a contemporary take on thatch. It would make an incredible expression of low carbon because the rain screening is often the first thing you \*Continued overleaf...



#### Project details

Client:

University of East Anglia/ UEA Adapt

Low

Carbon Group

Architect:

Architype

Main contractor:

Morgan Sindall

Structural engineer and M&E consultant:

BDP

Life cycle cost analysis:

BSRIA

Landscape architect:

Churchman Landscape

Architects

Glazing and curtain

walling:

Protec / Kingston

Joinery

Passivhaus certifier:

BRE

Timber frame supplier:

Cygnum

Recycled newspaper

insulation supplier:

Warmcel

Glulam supplier:

Kaufmann

Larch supports supplier:

Inwood

**Insulated Floors:** 

Isoquick insulation

Thatch:

Stephen Letch

Fire Consultant:

Fire Ingenuity

Client side:

Patrick Watson, 3PM

Client side OS:

Keith Sharpe, Capita

Planning authority:

Norwich City Council



come across in a building.

"It just used hugely less carbon than anything else we found, indeed straw absorbs it."

Architype joined a bid team led by contractor Morgan Sindall, whose design manager Stuart Thomson happened to use the same pub as Steve Letch, a leading figure in the East Anglian Master Thatchers Association.

"One idea bandied around was that it would be interesting to extend the normal thatching season and make thatch in barns, then put it into wooden cassettes that could be craned into position," Humphries says.

"Steve thought this a bit strange, but liked the idea as in winter thatchers normally have to find other work."

The only conventional thatch in the building is on the roof, where light wells rise and these were clad in situ.

An enormous quantity of thatch was used by the industry's normal standards.

It is woven some 300mm thick and covers 1,332 square metres of walls and 364 square metres on the roof.

The effect of such a structure near to famous modernist ones by eminent architects like Denys Lasdun and Norman



Foster is to "create a building that shares those characteristics but is softened by the thatch with the use of alternate thatch panels and glazing on the walls so that when viewed from an adjacent park through trees it dematerialises the building a bit", says Humphries.

Although the site had been a storage yard, it is surrounded by sensitive areas to which the Enterprise Centre had to relate.

To its south is Earlham Park, a conservation area, to the west a dense bank of trees and a memorial garden next to the Grade 1 listed estate Earlham Hall, to the east the main university access road.

"We wanted it to relate in a low-key way to the memorial garden but to have a real presence from the university drive," Humphries says.

The building sits on a concrete slab and is built on a timber frame, locally sourced from Thetford Forest.

"There is not much structural timber in East Anglia but there is Corsican Pine," says Humphries.

"That is usually thought not to be good for structural use, but that is a bit of a myth, though it took a lot of hard work to persuade various parties involved of this.





"We've shown it works; hopefully others will follow as East Anglia has a huge amount of forest."

A Passivhaus building has to sit within a 'duvet' of insulation right round it, including underneath.

The original plan for a suspended timber floor had to be abandoned both because of cost and ground conditions so a concrete slab was instead laid on top of Isoquick insulation, which allows the building to be 'wrapped' without cold bridges.

This slab uses recycled steel, aggregate sourced from a demolished local mental hospital and ground granulated blast slag, a steel industry by-product.

This concrete proved to have another use when floor coverings were considered.

"If you're assessing carbon over 100 years one of the things that is really carbon intensive is floor coverings, so we used the concrete slab, polished and diamond ground it and there will be just a need to lacquer it occasionally."

Elsewhere in the building, linoleum made from linseed and hessian matting sits on recycled glass screed.

The building also makes use of some unusual recycled materials. Old benches from a chemistry laboratory were

found to be African iroko wood and used as part of external cladding facing the building's courtyard alongside some 20-year-old seasoned oak, which had been left unused for many years in a local timber yard.

Insulation in the walls is from recycled newspaper and sections of internal flooring at entrances are made from recycled tyres.

Seven locally sourced larch columns, each of about 7.5m hold up the canopy over the courtyard.

The team had wanted to use locally-sourced larch throughout the building but "the cost was prohibitive for the glulams, which was a real shame, but the Austrian glulam industry is very established, so we used that", Humphries says.

Four interior work pods on the first floor acknowledge local materials, being clad in nettle fabric, earth board, reed board and hemp and lime render.

A lecture theatre protrudes from the building into the courtyard and sits in a flint bed that acts as a sustainable urban drainage system.

The flint has been employed around the building as a landscaping material and as part of the drainage system.

Sourcing such a large quantity proved another procurement Continued overleaf...

## Major subcontractors

Groundwork and landscaping: Tangent M&E: Gowing & Hunt/ Norwich Electrical Scaffolding: Tubes Bauder roof: Voland Roofing Carpentry: DJ Ottoway Recycled glass screed: **Ecoscreed Trading** Concrete diamond grinding and polishing: Addex Group Solar shading: Taurus Littrow Dry lining, plaster and render: Grandline Plastering Paint: Total Decorating Lino/rubber flooring: Contract Flooring

Internal glazing: Wensum Glass Ironmongery: A C Leigh

Solutions

Photovoltaics: Evogreen









### 'The building will be one of the UK's largest Passivhaus projects to date'

challenge as local quarries were uncertain how much was available.

In another pioneering usage, the canopy's soffit and south facing wall use medite tricoya a wood grade MDF not previously used at this scale.

UEA was keen to have a durable roof, so a traditional felt one was chosen with in situ thatch on the light wells that break it up. Most of the roof is covered with photovoltaics.

Mechanical ventilation allows air in where needed, but the building relies largely on natural heat and ventilation and heating is minimal. In very cold conditions radiators of some 450 x 250mm heat rooms some 30 square metres.

A fixed brise soleil has been designed to deflect sun at both summer and winter angles.

It was important throughout the process to work closely with UEA's teachers, management and maintenance staff and students and the 'soft landings' approach was used with meetings of up to 70 people giving their opinions.

"Such meetings can be unwieldy but we found these incredible useful drawing on people with considerable experience of operating buildings for teaching," Humphries says.

"Soft landings means we will stay involved through completion and handover to ensure everything works."

The building will be one of the UK's largest Passivhaus projects to date.

Humphries says: "In Germany they have done buildings of this size for years so it's not a big deal really, though issue like heat gain are more complicated in a multi-occupancy building where everyone has to be aware of how to use it.

Passivhaus also posed a construction challenge. Morgan Sindall's contract manager Steve Brock says: "The attention to detail was the big difference.

"We always attend to detail of course, but the big thing here was getting the supply chain used to the idea that if something went wrong, like they put a hole in a wall, they should tell us and we'd put it right at that stage, you do not want to have fix things later on with this."

Using the concrete slab rather than timber floor altered the initial calculations but the building is recorded as using 443 kg CO2 per square metre over 100 years, a quantity Humphries says is about one quarter that of a conventional structure.

It secured a rating of 90.8 for the BREEAM 'outstanding' category at its design stage and aims for 92.8 for the construction stage.

While the Passivhaus standard is 0.6 air changes per hour at 50 Pascal, the Enterprise Centre has this down to 0.21.

Humphries believes that as technology and techniques improve for low carbon building so the industry will have to face the issue of embodied carbon in its materials.

"I think this building will hopefully be a catalyst and spur others to consider the materials we have," he concludes.

#### project bytes

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

> Port Talbot's £40 Million 'super school'... Ref: 98693

Lancashire School rises from the ashes... Ref: 36746



#### Tax relief available for Horne showers



Horne Engineering's Duŝo sport shower column is proving a highly popular choice for many new and refurbished leisure facilities across the UK. Its striking but minimalist design with easy-to-operate paddle and 60 second flow duration works a treat for individual and family showering. Key installations include the new Welsh National Sailing Academy, Ellesmere Port Sports Village and Widnes Sports Pavilion. The Duŝo is also becoming a staple in many local authority facilities operated by People for Places Leisure, Fusion Lifestyle, Brio Leisure and Everyone Active among others. Very easy to install and maintain, the Duŝo design also contributes to water and energy savings (with timed operation and integral 8 Litre/min flow regulator). It features on the Water Technology List and therefore is eligible for tax relief in the form of enhanced capital allowances. The Duŝo and selected surface mounted shower panels from Horne's 'recreation' range (including Equalities Act / DDA compliant models) will be displayed on Stand C72 at Leisure Industry Week, which takes place at the NEC on 22nd & 23rd September. Entry is free for leisure project specifiers including architects, facilities managers and owner-operators. For more information visit www.liw.co.uk/Exhibitor/Horne-Engineering.

01505 321455 www.horne.co.uk/Products/Duso

enq.145

#### Award winning roof refurbishment at the University of Edinburgh

Winner of the Single Ply Roofing category at this year's NFRC National Roofing Awards, the roof refurbishment of the Joseph Black Building was an extraordinary project completed by BriggsAmasco, using a Sika Sarnafil membrane. Renowned for its high quality and exceptional performance, the Sika Sarnafil system was befitting of the oldest building on the campus. As part of Sika Sarnafil's flagship refurbishment offer, its dedicated surveyors conducted a comprehensive roof survey to determine which system was suitable for the roof. This included gutters, slopes, an outhouse and dormer roofs that presented new problems to overcome daily. Sika Sarnafil Membrane S327-15EL in Patina Green was chosen to replace the old roof covering, as the local authority planning department advised that this product was an acceptable replacement for the original copper roofs on the listed building. Work to replace the roof included installing a new timber taper fall once the copper roof was lifted, to improve drainage, which was then covered with the mechanically fastened Sika Sarnafil system. The membrane was applied with standing seam profiles to replicate the original copper roof details. Flawless application of the Sika Sarnafil membrane across an area with complex detailing and upstands sealed the victory for BriggsAmasco at the tenth NFRC Roofing Awards.



ena.146

01707 394444 www.sarnafil.co.uk



#### ATAG provide lesson in economics



When Keele University decided to replace the heating and hot water systems servicing their IC1 and IC2 science blocks, the key criteria for the new systems were energy efficiency, low emissions and reliability, while achieving the lowest lifetime costs. After a careful appraisal of the various options available, they

selected ATAG XL boilers supplied by ATAG Commercial. Featuring ATAG's tried and tested 316 stainless steel heat exchanger technology, the XL gives a class leading efficiency of 109.3 per cent (EN677), achieved through seamless upwards modulation and this combined with NOx emissions which ATAG believe to be the lowest in its class makes this boiler particularly environmentally friendly.

01243 815770 www.atagcommercial.co.uk



#### Eastwood High School is delighted one year on



Eastwood High School just outside Glasgow offers a wide range of facilities for community use after hours. They wanted a flooring that looked fantastic, would be safe but be very hard-wearing and really easy to clean. They specified Tarasafe<sup>TM</sup> Ultra from **Gerflor**; a range of specialist slip-

resistant vinyl safety flooring. Now one year on the flooring looks fantastic and has met up to each and every challenge with the cleaning and maintenance being both easy and trouble free. Installing Tarasafe™ Ultra proved to be the right choice as it offers the safety flooring solution the school needed, providing an easy maintenance solution and hitting the green buttons they specified.

01926 622600 www.gerflor.co.uk

enq.149

#### University tools up with Kingspan TEK®



The University of Lancaster's new flagship engineering building is designed to achieve a BREEAM Outstanding rating, thanks in part to the excellent thermal performance and airtightness provided by the Kingspan TEK® Cladding Panel. The building, which has been

designed by John McAslan + Partners, has been awarded a BREEAM interim score of 85.8. The Kingspan TEK\* Cladding Panel was bolted to the building's concrete frame and forms the structural backing for the facility's brick facade. The Kingspan TEK Cladding Panel comprises OSB/3 facing either side of a fibre-free, insulated core and can deliver U-values of 0.20 W/m²K or better.

01544 387384 www.kingspantek.co.uk



#### Under floor air conditioning for Sixth Form



AET has recently been specified to provide an underfloor system for the new Sixth Form centre at Sir William Perkins School, Surrey. The AET Flexible Space system was specified by consultant; The Brinkfell Partnership, and an underfloor supply, high level return system (CAM-V) was selected for

maximum flexibility. A total of two zones within the Sixth Form centre will be cooled by CAM-V33 downflow units, with conditioned air supplied into the space by thirty one (31) TU4-AC standard fan terminal. Users will have personal environmental control of fan speed and temperature by using adjustment features of the Fatronic controller integrated into each fan terminal unit.

01342 310400 www.flexiblespace.com







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eng.152



### Fresh air - Fresh minds

onodraught helps to improve both air quality and learning at school with a comprehensive package of ventilation systems.

Cool-phase and Windcatcher systems from Monodraught have been installed successfully at Alderman Knight School to provide natural ventilation and natural cooling.

As part of the move to create a healthier, cost effective and more productive environment, the following systems were installed:

- Two WINDCATCHER X-Air 170 in the Main Hall
- Four ABS 350 Circular WINDCATCHER systems in the Meeting Room, Library, Sensory Room and small office
- One COOL-PHASE unit in the ICT Room

Matt Peplow, business & operations manager Alderman Knight School commented on the systems: "Throughout our school there were very few rooms that suffered with no ventilation. All of our classrooms either have openable north lights or external doors. However we did have an ICT Suite, an Office and a Meeting Room with no external windows so we decided to

utilise the Monodraught WINDCATCHER and COOL-PHASE systems within these spaces. The COOL-PHASE system that we have in the ICT Suite manages the temperature of the room very well and whilst you may lose an element of control that you get with Air-Conditioning, you are reducing the energy consumption that you are using to cool the space. We also had some WINDCATCHER systems installed in the Main Hall which is very useful when the Hall is packed up over a period of time. It makes a big difference in terms of the levels of CO<sub>2</sub> and quality of the air".

Data was collected from the COOL-PHASE unit installed between June 7th 2012 and March 30th 2015.

The Monodraught COOL-PHASE system has met the design criteria and specification requested providing fresh air, ensuring  ${\rm CO_2}$  levels remain within acceptable boundaries and keeping temperatures within acceptable level.

This has been achieved with a very low energy use at a cost of approximately £17 per year.

01494 897700 www.monodraught.com





#### NorDan timber windows bring energy efficiency to new Telford Priory School



The new Telford Priory School will open in September as a brand new build school in the PSBP programme, with windows and doors and curtain walling from NorDan, a leading Scandinavian producer for main contractor Shepherd Construction. This is part of NorDan's recently completed multi million pound programme with Shepherd Construction building six new schools and academies for Telford and Wrekin Council, with two more to be completed. Fully reversible Scandinavian aluminium clad timber windows from NorDan with a U-value of 1.2 W/m²K are supported by electronic actuators from business partners SE Controls, to manage temperatures in the classrooms in hot summers. Aluminium doors and curtain walling are also part of the full turnkey package. Through early engagement, NorDan embraced the collaborative approach promoted by Shepherd, providing valuable input to the design development process, identifying affordable solutions in support of the overall project budgets. Phil Hulse, general manager at NorDan's Leeds project management office said: "We have addressed the needs of contractors for window products to meet the high level of energy efficiency targets set under the PSBP, who recognise that our products are perfectly fit for purpose in this application".

01786 406380 www.nordan.co.uk

ena 1.54

#### Maestro chairs & Postura+ lab stools



KI has supplied Leigh UTC over 600 Maestro chairs and 205 Postura+ laboratory stools for the UK's future engineering and computer science workforce. KI's Maestro chairs were specified for the main hall in black, blue grey and cottonwood (white) polypropylene colours. Maestro is a contemporary, light and comfort-

able stacking chair making it a fitting choice for this particular space; its sleek appearance and colour choice makes an interesting and striking contrast against the backdrop of yellow and slate black colour scheme of the main hall. Postura+ stools were specified for the college workshops/laboratory. They're lightweight yet tough making it easy for students to come together for practical group work and class demos, the seats are easy to clean and highly durable.

#### NVELOPE supports new building at school



NVELOPE, the rainscreen cladding support specialist has supplied its NV3 system to a new build Maths and PE teaching block at Repton School in Derbyshire. The 'Repton Precinct', which replaces an old demolished building, features cladding support by NVELOPE's NV3 concealed, mechanical

fixing system. An original sandstone effect was achieved by installing TI Aerolite, while Trespa Meteon was used to create a more modern look. NVELOPE's NV3 versatile cladding support system was the ideal solution for this project, as the brackets bear the weight of the cladding, absorbing the dead loads and the wind loads, which allows for adequate expansion and contraction.



enq.15/

#### **Ventilation with the windows wide shut!**

www.sav-systems.com

AirMaster direct heat-recovery ventilation units are well suited to the ventilation of school classrooms. All potential sources of noise are thoroughly neutralised:

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# Encasement's smart casing solution for Winchester College

£4 million project to refurbish and extend Winchester College's New Hall building is using bespoke aluminium 'Forma' column casings, which were supplied and installed by Encasement to conceal structural columns while helping create a dramatic new entrance and foyer.

New Hall was originally constructed in 1961 as a venue for concerts, lectures and examinations for the school, which was founded in 1382 by the Bishop of Winchester, William of Wykeham, who was also the founder of New College Oxford.

The latest modifications to New Hall, which were designed by architects Barnsley, Hewitt & Mallinson (BH&M), not only incorporate a new feature entrance and foyer, but also substantial improvements to the main performance space with the inclusion of operable bleacher seats, new mechanical ventilation and changes in room geometry to enhance the buildings' acoustics.

Four of Encasement's 450mm diameter column casings are used as a main feature within the new entrance design and stand up to 5800mm high to conceal the structural steelwork that supports the front edge of the pitched canopy.

A further 16 casings were also supplied and installed by Encasement within other parts of the project, including the new glazed foyer area, with all 20 casings coated in a RAL 7015 grey PPC finish to integrate with New Hall's interior design scheme.

Every Forma aluminium column casing was manufactured to the architect's precise specifications by Encasement, which included header and skirting collars on all columns as well as special asymmetric header collars on the external casings, which were cut on site by Encasement to ensure they fitted perfectly with the sloping canopy.

Encasement's Managing Director, Martin Taylor, commented: "We have considerable



experience of providing a diverse range of casing solutions for both the private and state education sectors and we're delighted to have played a part in this project, especially as our products are integral to the visual appeal of the structure."

01733 266 889 www.encasement.co.uk

enq.159

#### Learn things differently with Formica®



A variety of surfacing decors within an educational environment improves cognitive ability. The new Formica\* Collection, with 113 innovative decors and over 600 decorative laminate solutions, provides specifiers with the materials to create inspiring and

practical learning spaces. Nine new Plain Colors to present a comprehensive palette of 120 colours; Plus Color, a unique toolbox, featuring 30 colours in eight exclusive surface finishes with 240 combinations; New patterns capturing the authenticity of fabrics, natural and man-made materials; True Scale marble decors, and four metal and engineered stone patterns; Exclusive textures including Linewood, Puregrain, Hammered, and the award winning Plex.

0191 259 3512 www.formica.com

ena.160

#### Funky classrooms with Jackpad foundations



Preston's Pod Living Ltd produces some fabulously funky eco classrooms, designed to inspire the children and teachers who work within them. What's more, they have a minus zero carbon rating and use sustainable building techniques – all of which makes Jackpad the perfect partner for providing eco-friendly foundations for the

buildings. Jackpads are made using 100 per cent recycled, 100 per cent recyclable and 100 per cent reusable plastics and steel which makes them an ideal partner for Pod Living's eco classrooms. The latest projects in Watford and Birmingham with which they have been involved are now inspiring children's learning.

0116 286 6966 www.jackpad.co.uk

enq.161

#### Polyflor's Expona Flow for Preston nursery



Polyflor's new Expona Flow range of high performance commercial flooring was used to create a fun and functional flooring design at Quwwat Islam Education Centre in Preston recently. Installed by Diamond Flooring of Bolton, seven designs from the Expona Flow range were selected to create the bespoke floor in the corridor of the

centre's Little Sparkles Nursery. The grey Luna and Storm colours were chosen for the base and border of the design floor, whilst the circular designs with striped, spotted and swirl patterns inside were created using the brighter Burnt Orange, Flaxen, Steel Blue, Meadow and Plum shades.

0161 767 1111 www.polyflor.com

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#### Lobby adds to sense of community



When the vicar of St James' Church decided to open The Sheriff Centre to house a Post Office, Cafe, stationery and retail shop and a children's soft play area, it was clear that the ramshackle wooden porch was not fit for purpose. As a result, GEZE UK was commissioned to install a sleek new purpose-designed glass lobby that allows members of the community to safely access the facilities. The lobby features bi-parting AP glass doors to create a visual connection

between the inside and outside spaces. ECdrives were chosen because they have been specifically designed for use in busy areas, allowing people to enter and exit a building quickly and safely. The drive uses GEZE's activation technology.

01543 443000 www.geze.co.uk



### A giant leap forward

With the BBC due to demolish the corporation's old Wales' headquarters in Cardiff there will be few major examples of the architecture of renowned Welsh architect Sir Percy Thomas in the principality's capital. One of those remnants is the Grade II listed National History Museum at St Fagan's on the outskirts of Cardiff, whose preservation order made a major £21 million renovation project a difficult challenge for the design and construction team. Steve Menary reports

he museum opened in 1948 and a visit to St Fagan's is a rite of passage for most Cardiff schoolchildren. With more than 600,000 visitors a year, the museum is one of the most popular visitors' attractions in Wales.

While those visitors came in search of history, the facilities needed to take a giant leap forward into the twenty first century.

"We are taking it back to its envelope, just the concrete frame and the brickwork, but it would have been much easier to flatten the lot and carry on," says Ian Davies, project manager for main contractor Kier on the work to the Percy Thomas-designed main building at the museum.

The design work started at the turn of the decade after National Museums & Galleries of Wales secured the then largest ever award – of £12 million – from the Heritage Lottery Fund with the Welsh government also chipping in with a grant of £7 million.

Work started on the main building on 27 November 2014 *Continued overleaf...* 

#### BUILDING

#### Project details

Project:

Welsh Natural History

Museum

Client:

National Museums &

Galleries of Wales

Architect (Gweithdy): Fielden Bradley Clegg

Architect

(Main building):

Purcell Miller Tritton

Project manager:

Focus

Cost consultant:

Focus

Structural engineer:

Arup

 $Land scape\ architect:$ 

TEP

Main contractor:

C 1.1

Consulting engineer:

Austin Partnership

Steel frame:

Hayes engineering

Concrete frame:

Stephenson

Mechanical &

electrical contractor:

CMB

Windows:

Hanson Facades



with such a massive demolition and strip-out package that brought into question the validity of listing the building at all.

For the design and construction team, this has provided a major challenge as attempts to provide virtually a new museum on a concrete frame erected in the 1960s from a Percy Thomas design that will be barely seen on completion of the £21 million make-over.

The plan was not just to completely revamp the building designed by Thomas himself, twice a former RIBA president who died in 1969, but to retain the existing concrete frame and silica brick, but also to build a new visitors centre, known as the Gweithdy, elsewhere on the site of the museum.

The refurbishment is a single project but two separate architects have been used for the two distinct elements. Fielden Bradley Clegg were signed up to design the Gweithdy, while the architect on the main building is Purcell Miller Tritton.

The existing building provided three main galleries: an agricultural gallery, a costume and textile gallery and another exhibition space known as Gallery One. The building also included a shop, cafe and restaurant and the main entrance that all needed a major makeover.

"It will create an exciting new visitor experience integrating national collections of archaeology and social history together in an open-air museum for the first time anywhere," says Mike Lee, associate at Focus.

A line-up of major contractors were shortlisted to price the project with Kier beating Balfour Beatty, Bouygues and Galliford Try to the contract – but only after value engineering by the company reduced the cost by £1 million.





The savings included reductions to the size of the car park to reduced mechanical and electrical work and the main building will now cost around £14 million.

For Kier, such a major retention job has provided challenges, particularly when integrating this with the new design from Purcell Miller Tritton.

With the architects' design needing to work around the listing, there is a mix of steel and concrete frames. On the new West Wing, there is a concrete frame to the first floor and a steel frame to the second floor.

Working around the old design meant that one of the first jobs when construction actually started was to carry out a ferrous rebar scan to work out how much vertical and horizontal rebar was in the existing concrete frame to then calculate how much weight the frame would take.

The answer was 400 kg per square metre. "And that's not a lot," says Mr Davies.

He adds: "Our main challenge was that the site surveys we had were all old and we had to relate them back to a new grid. Some of the existing buildings were not even square to each other.

"Opening up the old building was a big challenge and we were passing a lot of info back to the consultants. There was a lot of exploratory work while we have been trying to build at the same time."

Due to this complicated nature of the interface between the old frame and the new design, this produced a massive swathe of construction design portions (CDPs), which mean Kier take on board this element of the more detailed construction design.

Kier estimate that the CDPs cover about a quarter of the job. The CDPs ranged from a mechanical and electrical work such as security systems and rainwater harvesting to a louvred plant enclosure, cold rolled purlins and rails for cladding support.

While Arup are structural engineers across the whole project, with so many CDPs Kier employed a separate consulting engineer, Austin Partnership, to advise on this work.

The new design will provide a new metal deck Bauder system roof for the agricultural gallery, while a steel frame on the side of the existing building will provide a new space for the costume gallery plus a lecture theatre, toilets and better access.

Gallery One will be subjected to a soft strip out and refurbishment, while the old courtyard will be replaced by a new more distinct space in a striking part of Purcell Miller Tritton's design.

The old inside courtyard was wasted space and the design for the new courtyard will bring this space into use with a steel portal frame, glazing panels and feature roof lights will provide the lighting.

The design by Purcell Miller Tritton also included exposed concrete as a nod to the original Percy Thomas building. The architects also specified a 25mm protrusion on the header bricks

The original intention was to save some of the original bricks to rebuild the inner courtyard, but the bed joints were too damp to make this possible. Instead, a Flemish bond brick was sourced from Germany from the same manufacturer specified by Percy Thomas. Some of the original bricks have also been saved for repairs and infills on the exterior after the masonry is cleaned up.

Although there were two architects on the project, the rest of the design and construction team was the same across the project. "There was a lot of overlaps on the design team," says Kier's design manager John Richards.

Continued overleaf...

'Our main challenge was that the site surveys we had were all old and we had to relate them back to a new grid. Some of the existing buildings were not even square to each other'

Ian Davies, project manager

#### BUILDING



The Gweithdy will cost around £3.2 million and comprises a visitor's centre of two floors. A basement will house toilets and plant, while the ground floor feature the exhibits. Gweithdy translates from Welsh as workshop and Fielden Bradley Clegg's design specifies exposed beams from the steel frame. The frame will be attached to glue-lam beams, which have been specified not just as a part of the aesthetic but to form part of the support.

This is providing a challenge for Kier in ensuring the interface worked correctly, but the main construction

challenge on this section of the project has been coping with damp conditions and land drains across the site.

The museum features many examples of old Welsh buildings that were taken down brick by brick and rebuilt at St Fagan's. The Gweithdy is being built on the site of the old Celtic Village, which has bene relocated.

Once the steel frame and glue-lam beams are erected, Fielden Bradley Clegg's specification includes high performance composite Trimo panel cladding plus large swathes of glazing and curtain walling.

#### BUILDING PROJECTS



### 'The Gweithdy should be finished by early next year with the main building ready by late summer 2016'

Overall, the project is valued at £21 million with the construction costing £17.2 million and the balance of the cost coming from a fit-out project that will be commissioned separately by the client, but some of the exhibits will already be in the museum.

A number of standing stones, including a mill stone, plus a traveller's caravan and a hearse will be brought into the main building before Kier's construction team puts the doors on.

Construction of the Gweithdy began in January 2015. Work reaches a peak in November, when more than 80 workers will be on site. The Gweithdy should be finished by early next year with the main building ready by late summer 2016. Then, the museum will have facilities to match its standing as one of Europe's most popular visitors' attractions.

# Georgian palace conserved for Waterford's treasures

Waterford City boasts the finest collection of Georgian architecture in Ireland, outside Dublin. The 1743 Bishop's Palace was the residence of Church of Ireland bishops until the early 20th Century. Since then it has been a boys' school and council offices.





The City Council instigated a €2 million restoration programme, converting the Palace into a museum for Waterford's treasures which include elegant silverwere and glass.

Principal Architect John J. D'Connell stated: "The design paid particular attention to reinstating the original layout of the Bishop's Palace, and ensuring all the modern services are harmoniously integrated into the historic building. However, before the building could



act as a museum, extensive restoration was required."

in the past, the walls had been coated with cementitious render and plaster. This led to significant issues with damp over the years. The restoration included removing all cementitious render and plaster, replacing it with breathable lime harling externally and lime plaster finished with Earthborn Claypaints internally.

Project architect Audrey Farrell, of John O'Connell Architects Ltd, explained: "It is important for walls to be able to breathe. If water gets trapped inside by imporvious materials or finishes, it can cause issues within the wall and lead to plaster failure and/or paint to peel off. "Even when the original breathability of the structure is reinstated, it can take a year for moisture to slowly work its way out of thick stone walls. For this reason, breathable Caypaint on lime plaster is ideal. It facilitates the evaporation of moisture from within the walls, while remaining stable so that it does not flake or discolour."

Earthborn Claypaint's breathability is achieved by combining natural ingredients with advanced technology to maximise performance. It is also free from VOCs and all harmful emissions which enables it to comply with the stringent EU Ecolabel.

Caypaint was specified for all internal paintwork; joinery as well as walls, ceilings and cornices. Eleven shades were selected from Claypaint's paiette of 72 standard colours.

Museum Director Eamonn McEneaney said: "Claypaint's natural pigment colours are ideal, providing a welcoming, authentic appearance that is appropriate for the building and sets off the rooms and treasures beautifully."

The restoration was undertaken by BAM Contractors Ltd and the paint was supplied by Earthborn's national distributor for Ireland, Stoneware Studios.

Shortlisted for the Irish Georgian Society's Conservation Award, the Bishop's Palace is part of a trio of buildings known collectively as the Waterford Museum of Treasures.



For further information visit: www.earthbornpaints.co.uk www.stonewarestudios.com www.waterfordtreasures.com Keeping the exhibits safe at the National Civil War Centre in Newark

his magnificent Tudor Hall was built in 1529 by prominent local resident Thomas Magnus for use as a free school. Subsequently extended during the Georgian and Victorian eras the complex is now known as the Old Magnus Buildings and home to the National Civil War Centre.

Up until 2004 the buildings were in constant use, first as a school until 1910, then as the town's museum until 2004 when it fell into disrepair. Newark and Sherwood District Council was awarded Heritage Lottery Funding to restore and transform the Old Magnus Buildings into a new museum and National Civil War Centre continuing Thomas Magnus' vision for all to have access to education, the new museum will also be a centre for Civil War learning.

Home to many important historical artefacts and some graffiti dating back to early 1600s, security was high on the agenda when plans were first made for the buildings restoration. As the buildings are Listed any security measures taken had to be sympathetic to the buildings elegance and historical significance. The Architects Purcell and the Main Contractor Woodhead Heritage turned to Selectaglaze to provide protection to the vulnerable window openings. Secondary glazing is the ideal solution for Listed and historic buildings even when high security is required, as it offers performance in a fully reversible adaption which is accepted by most heritage bodies.

Selectaglaze treated 45 window openings with 6 different product styles including curved units in four different colours. Varying levels of security were provided, using products certified to Loss Prevention standard LPS 1175 level SR3 and those meeting the security standards of PAS24, all accredited to Secured by Design.

Secondary glazing can achieve a U-value of around 1.9, noise reduction of 42-45dB, and even



in its most basic form a barrier to potential intruders. Selectaglaze boasts a wide range of products that can provide these various benefits.

01727 837271 www.selectaglaze.co.uk

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# Mapei uses superior silicone coating system to help restore 13th Century castle



apei's Silancolor Paint system has been used to restore Benton's 13th Century castle, in Pembrokeshire, West Wales. The system was installed as part of a refurbishment to help protect the external stone-built surface.

Prior to installation of the system, the weathered external masonry walls were cleaned and a silicone



primer was applied to the original substrate. The Mapei system offers a one-stop shop system approach to facade repair with all materials being available from a single source.

Approximately 800m<sup>2</sup> of Silancolor Cleaner Plus, a protective, water-based cleaning product was used to clean the surface, as the previous coating and mortar were damaged due to coastal weather from the estuary below, moss in the mortar and an algae infestation on the North face from adjacent trees. Mapei's Silancolor Plus Primer, a silicone resin based primer in water dispersion was then applied to the outer walls of the building to help regulate the absorption of the substrate and protect the wall surface from further chemical aggression. To finish, a coat of Silancolor Pittura Plus, a water-repellent and breathable, protective decorative coating, was applied to provide a long-lasting protective coating to help prevent micro-organisms (such as mildew, mould and fungi) reforming on the external facade.

In addition, Mapei's Mapesil AC a solvent-free, acetic cross-linking, mould resistant silicone sealant, was used for the restoration of the cracks in the external facade. The project is now fully restored.

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#### Sentinel Commercial's cost, energy and water saving solution to limescale control



Healthcare facilities looking for a scientifically and independently proven cost, energy and water saving solution to limescale control should visit Sentinel Commercial at stand F21 at this year's IHEEM Exhibition in Manchester. The OEM-endorsed water treatment specialist offers KalGUARD, a widely specified and client-adopted limescale control system that uses Part L recommended electrolytic technology to treat incoming mains water without wasting water or requiring salt. By controlling limescale formation on heat transfer surfaces, internal pipework surfaces, system components and sanitary fittings, KalGUARD helps to maximise the longevity of system components and appliances, prevent premature repairs, replacements and unplanned maintenance, optimise water flow and pressure, and increase energy efficiency. In addition, systems that are free of limescale are easier to treat for legionella prevention – an ever-present concern in healthcare premises. When installed on a rising main before water storage tanks and booster sets, a single KalGUARD kit is able to permanently treat an entire system. This is important in healthcare buildings, which typically house extensive and complex water systems, and makes KalGUARD an attractive value engineering solution. In addition, KalGUARD's controller or additional pulse splitter can be linked to a site's BMS, enabling easy monitoring. KalGUARD systems can offer an ROI of less than 12 months.

#### Airglaz toughened glass for specialist display



Specialist glass processing company Romag has introduced a new toughened laminated glass range incorporating the highest levels of transparency and durability on the market. The company's new AirGlaz product combines special anti-reflective properties with maximum strength for bespoke

showcase applications in museums and galleries, as well as for use in display cases for high value items in historical properties. The new range has been created for use where absolute visual clarity and high levels of protection are priority considerations. AirGlaz is available in a range of thicknesses, with multiple size and laminate combinations for different and customised applications.

01207 500 000 www.romag.co.uk

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#### Supporting conservation for over 30 Years



There is now far greater awareness of the general principles of conservation and the need for minimal intervention, maximum retention of the original building fabric and preservation of its original aesthetics and appearance. At **Helifix** this is nothing new as these were the very principles on which the company was founded

more than 30 years ago and which have guided its development ever since. Helifix designed the first one-piece helical remedial wall tie, which has since formed the basis of its extremely successful range of special purpose stainless steel ties, fixings and reinforcement systems that now repair, strengthen and preserve masonry structures worldwide. Being slim, versatile, lightweight and flexible they are non-intrusive, but very effective and reliable.



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# Keynote speakers and theatre programmes announced at Healthcare Estates 2015



Healthcare Estates organisers, Step Exhibitions have announced the conference programme for this year's event; over 200 exhibitors showcasing the latest products and services and nearly forty 'free' presentations in five theatres on the exhibition floor from 20 - 21 October at Manchester Central

In the next few weeks they will be mailing out thousands of complimentary tickets to potential visitors to the exhibition. Last year saw 3,500 attendees enjoying networking with the 180+ exhibitors; organisers Step Exhibitions are predicting numbers to grow once again in 2015.

Manchester on the 20 & 21 October will see most NHS Trusts, the private sector, local authorities; consultants and suppliers meet to discuss the key issues impacting on the UK healthcare sector.

Lord Carter of Coles, who chairs the NHS Procurement and Efficiency Board, and was last year commissioned by the Department of Health to examine the 'operational productivity' of 22 Foundation and non-Foundation Trusts across England to see how this 'productivity' might be improved – driving cost savings and higher efficiency – will discuss his team's work, and outline its findings, in the opening keynote on the second day of this year's Healthcare Estates conference and exhibition in Manchester.

The findings of Lord Carter's team's examination of how 'productively' the 22 Trusts are currently operating are summarised in an Interim Report published in June 2015 titled Review of Operational Productivity in NHS providers. The Report also sets out a number of 'early recommendations and next steps' to help the participating NHS Trusts, and indeed others, identify opportunities for efficiency gains and productivity improvements.

Alongside the potential to save £3 billion from 'hospital pharmacy and medicines optimisation', Lord Carter says in the Report that he believes £1 billion could be cut from both NHS estates and procurement management costs annually 'by adopting best practices and modern systems'.

#### Four dedicated streams

With four dedicated streams devoted to Estates & Facilities; Energy & Efficiency; Engineering and Planning Design & Construction the conference offers unparalleled oppor-



tunities for those working in the NHS to improve and develop working practices.

In a dedicated BIM session on Day One Dr Sarah Davidson of Gleeds continues the theme of the conference by looking at 'Government Soft Landings (GSL) – Driving Efficiency and Continuous Improvement; Aligning Design and Construction with Operational Asset Management and Purpose.'

#### Delivering an energy efficient estate

The Day One Energy & Efficiency streams presentations tackle the subjects of 'How to Deliver and Energy-Efficient Estate..... With No Funding' – a challenge many would believe impossible but explained by Kathryn Dapré NHS National Services Scotland. Kathryn leads the Engineering and Energy team within the Strategic Facilities Directorate of NHS National Services Scotland.

Kathryn's session is preceded by Mr Howard Jones director of Estates and Facilities – Royal United Hospital Bath, who will explain how 'Using Smart Tools to Make Hospitals Work Better.'

#### International flavour added

With over 65 sessions and nearly 100 speakers the IHEEM Conference offers delegates a unique opportunity to learn, catch up with colleagues and understand some of the significant challenges the NHS and new government have set.

Look out for



Aid Call has been a market leader in the production of wireless Nurse Call technology for thirty-five years. Over this time the company has developed an unwavering reputation for bringing quality yet affordable care solutions to hospitals, care homes and hospices countrywide. Aid Call invest heavily in the ongoing research and development.

Visit stand C29.

The organisers, Step Exhibitions have endeavoured to add an international flavour; Victoria Jones, director of creative arts, The Royal Children's Hospital Melbourne will present a session on Creative Healthcare in the Planning, Design & Construction stream.

#### More products, more choice

By experiencing the range of products on offer, you can be sure to make the right decision, Healthcare Estates exhibition provides you with every opportunity to see products demonstrated, essential in an industry where actually touching or using the product is part of the buying process.

With the whole industry together, Healthcare Estates is also the perfect place to network. The exhibition, conference, dinner and awards where customers and suppliers rub shoulders with their peers, competitors and future suppliers and employers is invaluable.

Visitors to Healthcare Estates will also benefit from discussions around the hottest topics of the moment and you can learn the latest methods to deal with specific issues you encounter in your job.

Healthcare Estates is open from 8.45 am each morning, Manchester is one of the most accessible places from most parts of the UK, and the easiest city to travel around. Booking your train ticket today could save you a lot of money, and once

in Manchester we are a just short walk from Piccadilly station and surrounded by hotels and facilities to make your visit worthwhile.

Entrance to the exhibition is complimentary and registration couldn't be simpler, online at www.healthcare-estates.com or you can turn up onsite and register for free.

The exhibition is attended by many professionals involved in the sector; management from the department of health, NHS estates, facilities, sustainability and procurement professionals, managers and buyers for private hospitals, nursing and care homes. You will also be mixing with visitors and exhibitors from NHS Trusts, Primary care, Ambulance trusts, mental trusts, care trusts, foundation hospitals, architects, consultants, main contractors, developers and government bodies and agencies.

Healthcare Estates features over 200 leading companies, showcasing the latest technologies, equipment and services specifically designed to improve healthcare environments and the patient experience. So make Healthcare Estates a date in your diary, we look forward to seeing you there.

Make sure you book today to get the most from your presence at the show at www.healthcare-estates.com

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### Everybody's going to **UK Construction Week**

Organised by Media 10, UK Construction Week will be held at the Birmingham NEC from 6 – 11 October (with the trade days from 6 – 8 October). UK Construction Week is the leading industry event for construction and building professionals, with overwhelming support from associations and trade bodies from across the industry, as well as big name exhibitors and hosts for its comprehensive seminar programme



ringing together nine shows under one roof, the event will feature the Build Show, incorporating Civils Expo, Timber Expo, the Surface and Materials Show, Kitchens & Bathroom Live, Plant & Machinery Live, Energy 2015, HVAC 2015, Smart Buildings 2015 and Grand Designs Live

Free to attend, the event will play host to 1,000 exhibitors and more than 55,000 visitors, giving exhibitors valuable

face-to-face time with active buyers, specifiers and decision makers from across the industry. For visitors, it provides the opportunity to speak to suppliers and manufacturers from a wide range of diverse industry sectors, all in one place.

UK Construction Week is also fully supported by the industry's leading trade groups and associations, some of which include the Construction Products Association (CPA), the National House Building Council (NHBC), the Building Research Establishment (BRE), the Royal Institute of British Architects (RIBA), the Renewable Energy Association (REA), the Royal Institute of Chartered Surveyors (RICS), the Society of British and International Design (SBID), the Timber Research and Development Association (TRADA) and the Zero Carbon Hub.

The Build Show, incorporating Civils Expo, runs from 6 – 8 October and is dedicated to the building and contracting areas of the construction industry. It will also include a dedicated section for civil engineering.

Timber Expo runs from 6 – 8 October and is one the most well attended events on the UK construction calendar dedicated exclusively to timber.

Continued overleaf...

#### Look out for...

With over 145 years' experience in the decorative aggregate industry,



Long Rake Spar

has gained national status as one of the UK's leading suppliers of hard landscaping products. The wide selection of products from worldwide sources and excellent customer service make them the ideal partner for decorative aggregates. Visit stand GRAND BUILD/B11.

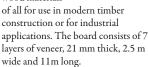
#### Koppers Performance Chemicals is



a leading manufacturer of innovative and highly effective timber preservative and fire retardant systems for the global timber industry. Synonymous with durability and protection, Koppers' brands Celcure®, MicroPro®, Exterior Fire-X®, Koppers FirePro® etc. are widely specified throughout the world. Please visit TIMBER EXPO STAND T3/305

### STEICO LVL





Visit stand TIMBER EXPO STAND T3/530

Sioo Wood Protection AB are the developers of a break-through wood protection process using silicon technology



providing a unique combination of benefits for the care of all types of timber. The Sioo treatment is environmentally friendly and provides a beautiful smooth natural finish. Visit stand TIMBER EXPO STAND T3/461

'UK Construction
Week is a fantastic
opportunity for us
to continue our
conversations with
professionals from
across the industry'

Matt McDermott, sales and marketing director at RICS

The Surface and Materials show runs from 6 – 8 October and will showcase the latest surface and material solutions for specifiers, developers and industry professionals looking for cutting edge innovations within the materials sector.

Kitchens & Bathrooms Live runs from 6 – 8 October and is a brand new event, dedicated to showcasing the leading brands at the forefront of design in the kitchens and bathrooms sector.

Smart Building 2015 runs from 6 – 8 October and is the only construction event in the UK dedicated to residential and commercial integrated building technology.

Energy 2015 runs from 6-8 October and is a brand new event at UK Construction Week for the energy industry, aimed at energy specialists, civil engineers, architects and other industry professionals.

HVAC 2015 runs from 6-8 October and is the UK's only dedicated exhibition for the heating, ventilation and air conditioning industries. Exhibitors will showcase better, faster, smarter, cleaner and more efficient systems for modern buildings.

Plant & Machinery Live runs from 6 – 8 October and will showcase the latest earthmoving, lifting, handling & demolition products.

Grand Designs Live runs from 8 - 11 October. Presented by design guru Kevin McCloud, it is based on the hugely popular Channel 4 series.

#### What's on at the show?

Working in partnership with prominent industry names and placing a firm emphasis on knowledge sharing, discussion and debate, UK Construction Week has organised a comprehensive seminar programme, providing a wealth of sector-specific information in the dedicated hubs.

In addition to this, there will also be a main stage seminar theatre that will tackle the bigger and broader construction industry topics and challenges, hosted by influential broadcast journalists John Humphrys, Krishnan Guru-Murthy and Steph McGovern.

The programme will commence with a welcome and keynote presentation from the government's chief construction advisor, Dr Peter Hansford, who will set out the priorities and plans for



Guest speakers John Humphrys, Steph McGovern and Krishnan Guru-Murthy

construction industrial policy over the next electoral cycle.

A series of speakers, including RICS' Jeremy Blackburn, CPA's Dr Noble Francis and CIAT's Gary Mees will discuss the economic environment and its impacts on the industry, considering how we can protect construction from potential economic weaknesses. The image of the industry as a whole will also be under the spotlight, with contributions from Brian Berry of the FMB, Christina Jackson from Amey and Tim Carey from Willmott Dixon. Among others they will consider how the industry has an image problem – governments do not value the construction industry as a key driver within the UK economy and it is not perceived by the public as a modern employer.

The skills shortage is the issue for Rupert Scott from TRADA, with Rob Pannell from the Zero Carbon Hub and Pauline Traetto from the BRE Academy. They are joined by Alex Birks from the CITB, Tom Storey of K10 and Bridget Bartlett of the CIoB.

The impressive schedule concludes on the final day with a panel discussion – joined by David Philp, Head of BIM Implementation, UK BIM Task Group, Department for Business, Innovation & Skills and AECOM – on the outlook for BIM in UK construction and building, with an update on BIM adoption and the next steps, how to enable SMEs to make the most of BIM and how it is currently working for contractors and house builders.

#### Look out for...

The
PAREXTHERM
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system form the centrepiece of the
Parex offering for UK Construction
week. Parex Render and EWI system
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and refurbishment projects and hold
key UK and EU accreditations. Visit

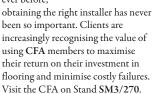
Duplexvent
Ventilation
with Heat
Recovery units
from Airflow
are Passive



approved and recycle over 90 per cent of otherwise wasted heat. With a triple filter system they help improve indoor air quality and save energy by reducing heating bills. Visit HVAC Stand H4/600.

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Flooring is a major element in most contracts and with more products to choose from than ever before,



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Ecological Building Systems will be



showcasing its range of diffusion open natural insulations and airtight and windtight membranes, tapes and seals to the timber industry. The company will be focussing on insulating CLT with GUTEX wood fibreboard insulation. The company will also be launching a new product, ELKA Strong Board. Visit Stand T3/240.

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Parex at Timber Expo Stand T3/460.

#### Hosted Buyers Scheme

The event will also provide the unique opportunity for key visitors to take part in a hosted buyer scheme. Designed to offer active buyers a structured and highly effective show experience, the scheme will allow buyers to efficiently cut through the 'noise' by going directly to the suppliers and vendors that are most able to meet their needs.

Following an in depth consultation to establish the buyer's requirements, the UK Construction Week team will organise a bespoke programme of hand-picked supplier meetings, seminars and networking events, all designed to help the visitor fulfil both their immediate and longer term project needs. This focused approach allows participants to get maximum return on the time they invest in attending the show. What's more, this service is completely free of charge.

#### Entertainment

Offering a complete business and networking package, UK Construction Week is will also be hosting a casino night in partnership with Construction Enquirer and a beer festival to help visitors and exhibitors relax and unwind at the show.

Taking place on the first night of the show (6 October), the casino night will be held at the newly opened Genting

International Casino at Resorts World Birmingham. Just a fiveminute walk from the doors of UK Construction Week and conveniently located to nearby hotels, the night offers a chance for visitors and exhibitors alike to relax with a few games of American Roulette, Blackjack, Baccarat or Electronic Roulette.

Opening at 12pm on each of the trade days (6 – 8 October), the beer festival will provide a more relaxed atmosphere in which to grab some refreshments and a bite to eat, or simply catch up with friends, colleagues and clients. With a wide range of traditional, local and rare craft ales on offer, plus a variety of entertainment and live music from across the UK, the beer festival will certainly be a welcome break at the end of a busy day.

Entry to the beer festival is free but early bird tickets are now on sale for £17.50, which includes three beers and a hot dog. Corporate packages are also available at £175 for a reserved VIP table for 10 people, including three beers and a hot dog each.

For more information including the full list of exhibitors or to register to attend, please visit www.ukconstructionweek.com or follow @UK\_CW on Twitter







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#### iDecking Revolution comes to UK!



Wallbarn is the exclusive distributor in UK for iDecking, the innovative new system for hardwood and composite decking and cladding. Wallbarn is iDecking UK. iDecking patented systems EasyClick & EasyChange are the simplified, super-fast, super-accurate ways of constructing timber decking and cladding areas for luxurious, strong and hard-wearing finishes. Advantages include: Install decking without any visible screws using just your feet; Change or remove deck boards without cutting or using screwdrivers; Avoid discolouration and splinters; Install decking and cladding 3 times faster than traditional methods; Create heavy load bearing deck systems without constructing softwood joist; Choose from a range of stunning finishes in composite material; Choose from a range of superior hardwoods including 100 per cent FSC\* certified timber; Use the most innovative, Eco-Friendly composite decking made from Rice Husk. The deck boards are grooved on the underside, fixing onto the metal battens beneath. They click into the specially designed fixing clips. No measuring or constant repositioning is required. Everything is pre-measured and manufactured in the factory. Once the system is delivered, it is impossible to go wrong and the boards always have identical spacing between them.

0208 916 2222 www.idecksysyems.com

ena 189

#### BMTRADA's Live-Zone at Timber Expo



BM TRADA is expecting that a packed programme of live demonstrations will draw the crowds at this year's Timber Expo show taking place at the NEC Birmingham between 6-8 October. The expanded show will give BM TRADA the opportunity to showcase its timber and fire expertise to a wider audience thanks to its expanded 100 square metre 'Live-Zone'. Taking pride of place on the stand will be a fully functioning timber strength testing demonstration model which tests the

strength of various pieces of timber – including timber samples containing knots, slope of grain and even pieces with holes in.

01494 569750 www.bmtradagroup.co.uk

ena.190

#### Resin flooring at Surface and Materials Show



Flowcrete UK will be joining the nation's construction industry when it gathers in Birmingham for the UK Construction Week, where it will showcase the visually appealing, highly functional resin surfaces that can be created within large-scale developments. Located on stand SM2/211 of the Surface

Materials Show, one of the nine shows taking place simultaneously during the event, Flowcrete UK will be on hand to discuss the flooring demands of the UK's most complex building projects and how resin systems can be tailored to meet a site's specific aesthetic, hygiene, safety and longevity requirements.

01270 753 000 www.flowcrete.co.uk

enq.191





#### PURe doors to open at The Build Show!



Following on from the success of its thermally advanced PURe window system, leading fenestration designer and manufacturer Senior Architectural Systems will be launching the innovative new PURe door range at The Build Show. Available as sliding

folding, in-line sliding, lift and slide, single and double patio door options, the new PURe range features the pioneering use of an enhanced thermal barrier manufactured from expanded polyurethane foam (PUR). When calculated as a CEN standard sliding folding door, the new PURe system can achieve U-values as low as 0.93 w/m²k. The new door range perfectly complements Senior's ground-breaking PURe window system.

the build show stand no B4/300

#### Metrotile to attend The Build Show



UK Construction Week, a huge event comprising of nine different exhibitions is happening very soon, and Metrotile UK is very happy to announce it will be part of The Build Show, running from the 6 to 8 of October at the NEC, Birmingham. Billed as "the UK's most significant event in construction for

decades", the Build Show will be attended by over 1,000 different exhibitors and also play host to free educational industry seminars. Metrotile will be attending, so be sure to come and meet the company to find out all about The Future Proof Roof and how it can benefit your roofing project with unmatched security, stunning aesthetics, rapid installation and a forty year guarantee.

01249 658514 www.metrotile.co.uk

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the build show stand r

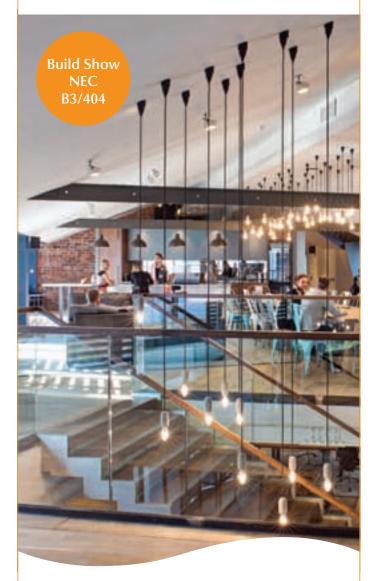




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#### Look out for



Like the construction market, Premier Guarantee (Stand B3/705) is on the up. That's why it has developed a highly competitive range of warranty schemes from new homes, to social, commercial or even private rental to help ensure you're covered. Add on to this its plan check and Building Control service and you can get the complete package with one point of contact.

enq.20



Plumis Automist is an established manufacturer of "best value" preengineered fire suppression solutions to facilitate contemporary open plan layouts for domestic/residential applications. Visit Stand B4/711 to see the latest developments including the new Automist SMARTSCAN system.

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The Icynene Insulation
System from Greentherm
(Stand B4/322) is a soft,
flexible, breathable, foam
insulation and air barrier
system. Sprayed as a liquid
Icynene expands to 100
times its initial volume in
seconds. Icynene's unique
formulation sets it apart
from other insulation
products offering many
advantages over traditional
insulation materials.

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# The Build Show is a must see on the trade calendar

As part of UK Construction Week, the largest construction trade event in the UK, the Build Show has been established as a must see on the trade calendar with an abundance of exhibitors signed up and a raft of prestigious event partners showing their support



aking place at the NEC in Birmingham from 6 – 8 October, the Build Show is free to attend and will provide a powerful opportunity for exhibitors and visitors to network, learn new skills, source new solutions, share recent successes and trade together as the market enters a new phase of prosperity.

In addition, the show will also incorporate Civils Expo – a dedicated section bringing together leading suppliers of the latest technologies, systems and products required in the civil engineering sector.

The show is also fully supported by the industry's leading trade groups and associations, some of which include the Federation of Master Builders (FMB), the Construction Products Association (CPA), the National House Building Council (NHBC), the Chartered Institute of Building (CIOB), the National Federation of Builders (NFB), the Home Builders Federation (HBF), Glenigan, the Building Research Establishment (BRE) and the National Federation of Roofing Contractors (NFRC).

#### What's on at the show?

As a result of the show's strong backing, its comprehensive seminar programme is bursting with high quality content that will make visiting well worthwhile, with the opportunity to learn new skills and get a heads up on developments in the industry.

The seminar content is split into three main streams: The Homebuilding Theatre, the Site Zone and the BIM Prospects Theatre. Visitors will also be able access additional content such as the Careers Centre in association with the House Builders Federation and a commercial vehicle test drive zone.

Another key attraction at the show will be the Infrastructure Hub, which will host the hottest topics for civil engineers, including the expansion of England's motorways and main A roads, the high speed railway system and the potential construction of new nuclear power stations. Experts from across the field will discuss these burning issues and how the industry will cope with the challenges ahead.

The BIM Prospects Theatre will feature a packed programme of seminar content examining how BIM can increase efficiencies, save time and reduce costs. Topics covered will include: practical delivery of COBie, delivery of International Foundation Class (IFC), making BIM work for product manufacturers, classification of products and making sure your business is ready for BIM Level 2.

Aimed at professionals in all areas of residential construction, the Homebuilding Theatre will feature high-level debates, discussions and presentations across a broad range of topics. Led by representatives from the Chartered Institute of Architectural Technicians and the Federation of Master Builders, the keynote session will kick things off with a lively panel discussion about the state of house building in the UK – looking at issues such as housing prices, shortages and possible solutions to the current crisis. Other topics under discussion will include opportunities in the build-to-rent and affordable

housing market, land supply, training, skills shortages, energy efficiency and overcoming the performance gap.

Focused on helping builders and contractors 'Learn to Earn', the Site Zone will offer a hands-on interactive experience with training, workshops and demonstrations about competing for and winning work, managing costs and cash flow and practical ways to save time and money on site. Sessions will focus on issues such as identifying high street lenders that will support builders, making the most of government funding and tracking down alternative financing sources.

On the second day, the workshops will look at winning business with a bidding workshop in the morning, followed by sessions on the repair, maintenance and improvement (RMI) market and a communications master class to give SME builders the lowdown on PR, marketing and social media.

The final day kicks off with a workshop about winning work in the public sector, before moving the focus to BIM and the impact and opportunities it can offer SME builders. The seminar programme comes to an end with a roundup of legislation changes including the Consumer Rights Bill and the CDM regulations.

For more information or to register to attend, please visit www.ukconstructionweek.com or follow @UK CW



#### Look out for



A supplier of added value building products for the home, ODL Europe's latest innovation, the Built in Blind will be showcased for the first time on Stand B4/317 at the Build Show. This UK manufactured, cordless, integral blind system, can be custom sized for Conservatories French doors, Bi-fold doors and Sliding Patio doors



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the build show stand no B4/322

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The Icynene Insulation System is a series of soft, flexible spray foam insulation products that delivers up to 50% greater energy savings when compared to other insulation products. Icynene is perfect for loft insulation, cavity wall insulation, drylining insulation, sound insulation and more.

Icynene is the only foam on the market successfully tested and certified for applications directly to the underside of breathable and non breathable roof membranes and felts and recently received BBA certification for this application. Icynene absorbs the lowest amount of moisture and has the highest level of vapour resistivity of any soft foam on the market.



# Improved colour coating on galvanised steel gutter systems

alvanised Steel is a great product for gutters and downpipes as its stylish looks are long-lasting. It doesn't fade. And now Rainclear Systems' Steel Gutters, downpipes and fittings, designed and manufactured by Zambelli in Germany, come with new 'robust' colour coating in a choice of 5 colours held in stock for next day delivery.

The lightweight and innovative easy dry joint design of the Zambelli Steel rainwater system make it easy to handle and fit.

With a 15 year product warranty and a life expectancy of at least 25 years, the 3 layer colour coated Robust system will provides trouble free performance

#### New ROBUST colour coated system

As the name implies, ROBUST is an innovative coating system that is extremely hard wearing. The

coating consists of three layers of protection comprising zinc corrosion protection, primer bonding coat and a 'Robust' polyester top coat. The surface coating is UV and scratch resistant.

The demand for steel guttering has never been higher with homeowners and selfbuilders looking for this stylish, premium quality rainwater solution at a price tag that is closer to premium uPVC than heritage Cast iron or Aluminium. For example, the complete rainwater system on an average 3 bed detached home could be supplied for around £300 +VAT.

Geraint Jones, Managing Director of Rainclear Systems, explains why: "These Galvanised Steel products are a very competitive alternative to uPVC ones, but the steel system looks and last better while offering clever design features which make it easy to fit; push-on stop-ends and rubber lined unions mean there's no need to use silicone; the fully adjustable outlets can be placed anywhere



within a 3m gutter length or you can purchase ready-made outlets if you find that easier."

The company's half round galvanised steel gutters are deeper than other comparable systems on the market giving them a 20 per cent larger capacity."

The steel system is made of highly durable, recyclable metal and comes in either galvanised or colour coated. The stocked colour coated shades are Black, Anthracite Grey, Dusty Grey, Grey White and Sepia Brown with next day delivery.

0800 6444426 www.rainclear.co.uk

eng.206





enq.207

#### Is your structural waterproofing design robust enough for a warranty?



Are your structural waterproofing designs based on a waterproofing risk assessment that has been produced by a suitably qualified specialist? Have you appointed a waterproofing specialist at an early stage of the system design? Is your waterproofing expert qualified to CSSW standard? If the answer is no to any of these questions then a building insurance company is unlikely to issue you with a warranty. BS 8102: 2009 (Code of practice for protection of below ground structures against water from the ground) and NHBC waterproofing standards both now include recommendations that any waterproofing system designs are based upon a risk assessment that is appropriate for the property and its intended use, and produced by someone who is suitably qualified. INK Technical Services is an established company that helps housebuilders and architects meet the standards' requirements so insurance companies are satisfied that a robust waterproofing system is in place. The INK team includes CSSW qualified structural waterproofing surveyors. In addition to the production of waterproofing risk assessments, INK Technical Services offers a waterproofing design service; site inspections; reports on failed systems and proposals for remedial measures and approved contractor referrals.

01322 318846 www.inktechnicalservices.com

na 209

#### PT is an all-rounder



Capable of waterproofing and damp-proofing internal and external walls and vaulted ceilings, above and below ground, in new construction of existing buildings over a contaminated or damp background – Delta-PT is a versatile product that is one of the most popular from the extensive Delta Membrane Systems range. It is a high

performance polyethylene membrane which is extruded into a series of studs which create a continuous air gap behind the waterproof membrane. On the face of the membrane is a welded mesh that allows plasters and renders to bond efficiently to achieve dry and durable finishes.

01992 523523 www.deltamembranes.com

eng 210

#### lbstock showcases stunning use of glazed brick



The latest edition of **Ibstock's** inspirational 'Design' magazine is now available, showcasing the virtually limitless choice of colours, sizes and finishes from the UK brick maker's industry-leading glazed brick range. The new issue offers a comprehensive overview of the design possibilities achievable through use of glazed brick. It features a number of recent outstanding

building projects where the flexibility, visibility and vibrancy of this brick style have been used to stunning effect. The wide palette of colour options and finishes available, such as gloss, frosted and satin, is also detailed within the edition, highlighting the variety on offer. To obtain the latest issue of Design visit the website.

0844 800 4575 www.ibstock.com

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#### Thermix does the rounds



A more interesting edge on things? Rounded edges are gaining increasing popularity in modern architecture. At the new location of Ensinger Sintimid in Austria, this look was used to create a special ambience in the entrance area: By creating a quarter turn, the glazed facade entices guests into the building, which sports a white and silver grey theme in keeping with the global company's corporate design colours. The curved facade elements were produced by Wenna Glass in Linz. Every pane measuring 2,126 mm in length and between 845 and 1,940 mm in height was precisely curved to the required radius of 2,635 mm using a special hot bending technique. But there was a question mark over the process from the start. How to further process the Thermix brand warm edge spacers specified by the client to fit the triple insulating glass? Ensinger itself came up with some expert advice. After all, the German sister company has been producing and further developing Thermix since 1994. "We checked this using a simple bending process", explains Application Engineering Specialist Heinz Raunest. "It's actually sufficient to use a good manual roll former. With a few minor adjustments the plastic profiles can be precisely adapted to the required radius without any folds. The material with its integrated stabilizing wires stays reliably in shape."

+49 7032 819 674 www.thermix.de

ena 213

#### The ultimate flat roofing system

**Topseal** specialises in durable GRP roofing systems, which stands for Glass Reinforced Plastic, otherwise known as fibreglass. This superb material is perfect for roofing, as it's not only incredible strong but also lasts for a very long time and can be used in other applications such as balconies, walkways and stairs.

All of Topseal's roofing systems come with a 20 - 40 year guarantee, so you can enjoy peace of mind that your brand new roof is protected for years to come. Installations are carried out by the company's network of approved installers.

You can also be sure of product quality thanks to Topseal being BBA Approved. This guarantees that all products have been independently tested and verified.

Topseal's fibreglass roofing systems are perfect for all kinds of buildings from modern structures to historic properties and with colours to match RAL and BS4800 colour standards, you won't have trouble finding the perfect colour match for your roofing project.

If you need help planning your new roof or specification assistance, contact Topseal.

08000 831 094 www.topseal.co.uk



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Any size
Any colour
Many glazing options
Electric or manual vents
Structural aluminium sections



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#### Levolux grid covers cars in Leeds



Following a £9 million refurbishment project, the 50 year old Merrion Centre multi-storey car park in the centre of Leeds, has been dramatically revamped, including a custom Screening Solution from Levolux. As one of the UK's leading Solar Shading and Screening specialists, Levolux was invited to develop a custom Screening Solution for the multi-storey car park. The solution incorporates rectangular-section Fins, arranged

in a 'diagrid' pattern and horizontal aerofoil-shaped Fins. The unusual 'diagrid' arrangement of rectangular-shaped aluminium Fins, each measuring 200mm wide by 100mm deep. All Fins are engineered from extruded aluminium components that have been given an attractive, natural anodised finish.

#### Green VMZINC for Perthshire designer home



VMZINC PIGMENTO Green Double and Single Lock standing seams have been used on the roof and facades in Leadingham, Jameson, Rogers and Hynd's design of East Bankhead Farm, Monikie. Set in the open landscape of Meigle, Perthshire the house was designed as a contemporary barn with a

distorted roof that responds to the gently rolling landscape. The subtle zinc colour complements the rural environment while blending seamlessly with other envelope materials and has led to a Scottish Design Award for housing in a rural context and a RIBA Design Award.

01992 822288 www.vmzinc.co.uk

ena 218

#### Rodeca helps a Sacred Heart to beat again



Translucent cladding from Rodeca has breathed new life and light into a school redevelopment. More than  $700m^2$  of the manufacturer's polycarbonate panels have been used on two new buildings which form the new Sacred Heart School, a mixed Roman Catholic voluntary-aided comprehensive school in Camberwell, London. Cottrell & Vermeulen architect Paul Taylor said: "We specified Rodeca as it acts as a counterpoint to the overriding mass of the brickwork,

providing uniformity of lightness that can be provided in large areas. It is a key element in the project within the most important spaces in the school, giving the opportunity to provide large areas of diffused natural light to key spaces."

01268 531466 www.rodeca.co.uk

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#### Spectus Systems launches new website



Spectus Systems is inviting everyone to take a look at its brand new website after it has undergone a complete redesign with three core priorities: functionality, aesthetics and ease-of-use across a range of devices. The aim from the outset was to provide a better experience for professional, trade and homeowner visitors

while encouraging greater engagement and delivering a mix of product information, industry news and useful features. Basics such as drop-down menus on the new Spectus site are well researched and designed to be clear, simple and tailored to different users' needs. The site also includes a search facility with results listed in a scroll-through format. The overall appearance is clean, fresh and uncluttered.

01952 283344 www.spectus.co.uk



## London Olympic re-generation sees benefits of AkzoNobel





Regeneration today is about people, places and communities. It's also about ensuring that sustainable spaces are created where people want to live and work.

As a legacy of the 2012 London Olympic Games, the Kidbrooke Village regeneration in The Royal Borough of Greenwich by Berkeley Homes (Urban Renaissance) Ltd brought all these elements together in one showcase development. The regeneration would ensure that there would be the highest quality of architecture and design. And just as importantly it would require the highest quality materials which would stand the test of time.

The decision to award contracts on this high profile project would be down to levels of quality and professionalism of the chosen suppliers and contractors with London-based Architects Carey Jones setting extremely high standards all-round.

Carl Circus, UK Distribution Manager, AkzoNobel Wood Coatings said: "Kidbrooke Village is exactly the kind of project we have good technical knowledge of.

"After supplying colour charts and samples to



the Architects we were delighted that our Sikkens Cetol WP 562 and Sikkens Cetol WF 792 products were specified for this project." Carl Circus went on to also comment," as in many of our projects we were also instrumental in guiding the Architects toward a line of other quality suppliers who could furnish Kidbrooke Village with the timber manufacturer, timber machiner and the trade coater."

AkzoNobel is a leading global paints and coatings company and a major producer of specialty chemicals. Calling on centuries of expertise, it supplies industries and consumers worldwide with innovative products and sustainable technologies designed to meet the growing demands of our fast-changing planet.

Headquartered in Amsterdam, the Netherlands, it has approximately 47,000 people in around 80 countries and its portfolio includes well-known industrial wood coatings brands such as, Sikkens, ICLA and Zweihorn. Consistently ranked as one of the leaders in the area of sustainability, it is committed to making life more liveable and our cities more human.

Sikkens Industrial wood coatings are located on the Shadsworth Business Park in Blackburn, Lancashire, supplying the entire UK and Irish market through a nationwide network of established distributors, as well as through direct supply to some of the biggest manufacturers in the industry.

Dresser Mouldings in Rochdale would be the appointed coating company for the Kidbrooke project using approximately 60,000 lm of Metsa ThermoWood timber which also included off-site manufactured window infill panels. The final timber product was machined by Birminghambased Vincent Timber Ltd who would supply this cost effective but durable timber substrate.

Bill Gunn, Managing Director, Dresser Mouldings commented: "The Kidbrooke Village regeneration was one of many projects of this type we have been involved in. And it's also one of many where we have worked in conjunction with Vincent Timber." Bill Gunn went on to say, "We were involved in supplying an AkzoNobel coating system using a film build application applied to thermally modified timber.

The paint system consisted of three coats using

their base preserve Sikkens Cetol WP 562 plus two top coats of Sikkens Cetol WF 792 with all ends sealed."

He went on to add, "In total we supplied around 50,000 lineal metres of a cladding profile and roughly 3000 litres of paint was used on this project over an 18 month period during 2011 & early 2012."

Sikkens Cetol WP 562 from AkzoNobel is a waterborne, translucent base coat for constructions made of softwood and hardwood for exterior and interior. It has deep penetration with good run-off properties with excellent colouring and good levels of UV protection.

Sikkens Cetol WF 792 also specified at Kidbrooke Village is a water-thinnable, translucent, matt, base coat and finish for profile boards in a one pot, two-coat system for exterior and interior. It's ready to use, has high water vapour permeability, good weather resistance and good levels of UV protection

Bill Gunn also added, "One of the reasons for specifying and using AkzoNobel is down to the consistency of the paints and ease of application when applying many of the different types of coating choices available." He also added, "AkzoNobel and in particular Sikkens is a brand my customers trust and over the last six years AkzoNobel have been our number one provider of stains."

Carl Circus finally goes on to say, "We can supply coatings to give a wide variety of finishes and are very proud in our ability to work with all parts of the supply chain as the Kidbrooke Village regeneration project proved"

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



#### LABC approval for Celsius Solid Roof



Synseal's recently-launched Celsius Solid Roof system is now fully approved and registered by the LABC (Local Authority Building Control) under certificate number EW550. Construction of a completely new structure or replacement of an existing conservatory roof with a solid roof will involve a statutory obligation to submit a Building Regulations application. The fast-fitting Celsius

Solid Roof has been carefully designed with an all-timber core construction to provide a truly warm yet relatively lightweight structure that will not unduly stress existing conservatory window walling structures and foundations.

01623 443200 www.synseal.com



#### More colours for Global conservatory roofs



All colour options for Synseal's Global conservatory roofs and Global Summer hybrid orangeries are now available directly from stock, to reduce lead times for these popular aluminium and PVC-U glazed roofing products which are supplied as made to measure kits to thousands of industry installers through Synseal's

extensive network of fabricator partners. In addition to White, the stock colour range now includes Anthracite Grey, Black/Brown, Chartwell Green, Cream, Golden Oak and Cherrywood.

01623 443200 www.synseal.com

#### Sophisticated glass ventilated rainscreen cladding



The Airtec Glass system from Lithodecor combines the unique qualities of glass with the innovative technology of a ventilated rainscreen facade. The extremely resistant composite panels, which can be up to 32mm thick, consist of toughened safety glass bonded to a lightweight concrete carrier. The glass cladding can be used for

striking effect as the panes of toughened safety glass are available in numerous attractive colours and can even carry customised printing. Having passed all the necessary durability and fire protection tests, the Airtec Glass composite panels, up to 4.7m<sup>2</sup> in size, are hooked onto the frame with an invisible clip design.

01785 818998 www.lithodecor.co.uk



#### Trespa enhances Grosvenor Waterside



Grosvenor Waterside is a St James Group development in Central London consisting of six buildings adjacent to Chelsea Bridge. Trespa® Meteon® panels have been used extensively in this development, which is being transformed from its recent industrial use into a new public urban quarter. Trespa® Meteon® is an extremely

versatile panel that can be combined easily with other building materials to create stunning visual effects. The material's decorative surface also has excellent UV-resistance and colour stability which means it will not fade or discolour over time. At the same time, the product provides solidity and sturdiness, holding bolts, screws and other mechanical fixings.

0808 2340268 www.trespa.co.uk



#### Juliette Balconies from CRL



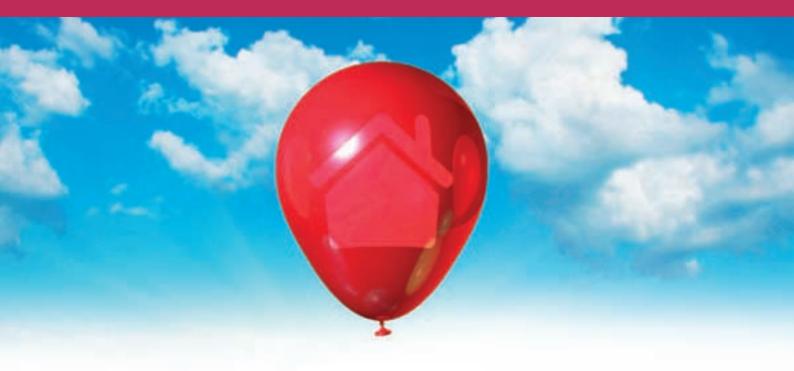
**CRL Juliette** 

CRL 48.3mm Diameter Cap Rail



crlaurence.co.uk

### PROBLEMS GETTING AIRTIGHT RIGHT?



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

Wraptite-SA was recently used in a CSH Level 5 construction, achieving an excellent airtightness test score of 0.87m<sup>3</sup>/m<sup>2</sup>/hr. No remedial work was required.

#### **WRAPTITE TAPE**

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

**Key Features** 

Airtight

Vapour permeable

No primer required

Lightweight and easy to insall





### DML completes London retail scheme

acade and shopfront specialist DML Group has completed a project at 1-8 Broadway in Ealing, London worth £820,000.

The Leeds-based company was appointed by the scheme's main contractor, Knight Harwood, for the 99,000 sq ft retail re-development scheme, which saw 27 small retail units being replaced with three stores – Morrisons, TK Maxx and McDonald's.

DML designed, manufactured and supplied the main facade on Ealing Broadway, which was made up from steel curtain wall screens from the first floor to the roof with large double glazed units weighing over 700kg. Below each frame were shop front screens fitted with pairs of automatic doors.

The company also provided shop fronts on the Springbridge Road side of the development along with terracotta tiling to the clock tower and louvres and frames for the roof plant rooms. Aluminium feature extrusions were specially made to DML's design drawings to both the Ealing Broadway and Springbridge Road elevations.

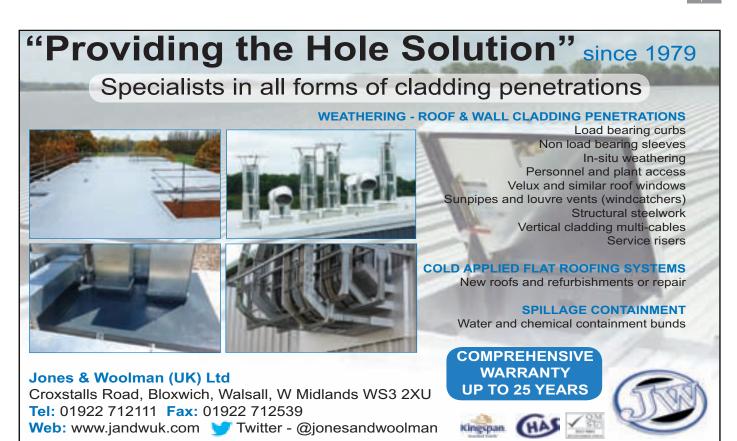
Chris Murray, sales and marketing director, DML Group, said: "We have worked in partnership with Knight Harwood to deliver a high-quality product that fits with both the modern aesthetic and feel of the development.

"DML has considerable experience in delivering large-scale commercial projects and we are delighted to have been appointed to this major retail scheme."



DML Group has two divisions: Drawn Metal, which provides bespoke metalwork and shopfronts and whose clients include some of the world's leading brands; and DML Architectural Systems, which specialises in external aluminium facades, cladding, windows, unitised and curtain walling and is a preferred supplier for several of the UK's largest main contractors.

0113 256 5661 www.dmlgroup.co.uk

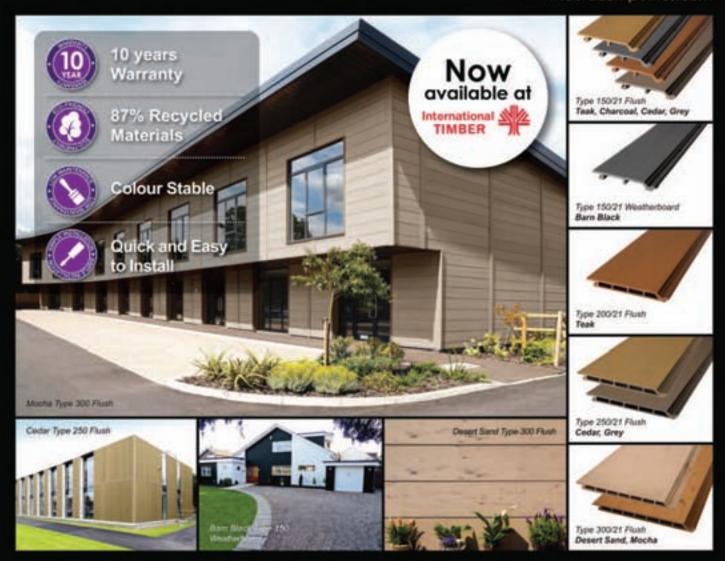


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Email: hardwood1@internationaltimber.com

#### Trafford Park (Northern)

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Email: hardwood2@internationaltimber.com

#### Parkend (South West & Wales)

Tel: 0844 728 0361

Email: hardwood3@internationaltimber.com

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# Decorative rainscreen cladding, your options

Rainscreen has come a long way since its initial Norwegian development in the early twentieth century; we can now choose between beautiful natural materials such as; timber and stone and man-made materials such as; re-constituted stone and high pressure laminate (HPL). By Steve Hough, regional sales manager, Omnis



long with budgets, there are many factors to consider when choosing the right rainscreen panel for your project, such as;

- Colours & textures does it offer me the design flexibility I need to meet my aesthetic aspirations?
- Technical flexibility does the material allow me to meet my technical design needs?
- Longevity does it have a long life expectancy?
- Resilient is it impact, graffiti and pollutant resistant?
- Green does it help me achieve my green ratings?
- Building regulations does it meet the necessary building and fire regulations?
- Low maintenance is it easy to maintain?

Here we are going to delve a little deeper into the type of rainscreen panels available.

#### Aluminium (ACM)

ACM panels are lightweight and provide you with the ultimate flexibility in terms of shape. If you're looking for waves, curves, domes, or any other kind of shape, these panels are a good choice for your project. You can pre-coat the panels, usually with PvDF prior to fabrication and then assemble on site to bring your desired designs to life. It also provides a perfectly flat, smooth finish which encompasses the building like a second skin.

#### Stone

A fantastic material which will deliver a high quality, natural finish. Choose from all types of natural stones including; Sandstone, Limestone, Granite, Slate, Marble and Norstone to name a few, each one with their own unique charm. Stone is usually more costly than other panel options and due to the weight of the product it can increases the install costs.

#### Fibre Cement

A very versatile and high performing cladding panel which has a decorative coating which is fused to the fibre cement sheet. Along with the impressive colour and design options, you can have through coloured boards, an iridescent surface; translucent and opaque coatings and visible cement textures.

#### High pressure laminate (HPL)

HPL is highly durable, aesthetically appealing and extremely resilient. They are usually manufactured using a high pressure lamination process incorporating natural fibres and double hardened acrylic resins. The feature which makes this panel unique is the ability to print on any designs you wish, along with this and the unlimited number of lightfast colour options, HPL offers maximum creative freedom.

#### Reconstituted Stone

These stone based panels provide a look which is almost identical to natural stone. Not only are these man-made panels more durable and impact resistance compared to real stone, but they are much lighter which has significant impact on install costs. Reconstituted stone cladding panels deliver on performance and also on aesthetics.

#### Terracotta

Very suitable to designs which require an earthy and natural aesthetic look, these clay based panels provide a raw and natural finish. Usually produced from ceramic material which is taken through the old-age kiln process of being fired at a relatively low temperature. The end result is a hardwearing panel with an expressive textured surface. Adding colour pigments to the process means that you can create the exact tone and shade to suit.

#### Timber

Timber is a sustainable choice due to it being renewable, recyclable, biodegradable and having minimal embodied Continued overleaf... 'Stretch your creativity by combining two or more materials, colours and designs to create a unique and breath-taking facade'



energy. There are many choices and variations of Timber options – from the softwoods such as the popular (due to its extraction method) Western Red Cedar to hardwoods like Oak. As it's a natural material it will weather over time, require a treatment and more regular maintenance than other panel materials. In addition to these there are thermally modified timbers such as ThermoWood, Accoya, and PlatoWood. These timbers are created using a (patented) process which typically involves thermally modifying the properties of the timber to improve its lifespan, strength, durability and stability. Timber panels offer great thermal efficiency, sound insulation and a beautiful authentic wooden finish.

#### Ceramic Tile

Manufactured in a large format panel process these panels can provide a high gloss modular glazed appearance and can represent the look of stone or quarried materials. Performance under impact can sometimes be an issue, however this is usually dealt with by bonding a glass fibre based mesh to the rear of each tile.

#### GRP (Glass re-enforced plastic)

This product lends itself to a building with a facade design that involves a repetitive 3D modular appearance. It is a versatile product which is often used when other materials cannot meet the required specifications such as fire ratings and durability.

It's manufactured by combining plastic and glass strands with pigmented thermosetting UV resins. The end result is an impressively strong, durable and attractive panel.

#### Fibrous Concrete

Used for many years, this panel has historically been installed as part of a structural load bearing system. In recent years we have seen the introduction of acid etched concrete panels and which again are pre moulded and tend to be load bearing as well. However a form of light duty concrete panels have now appeared on the market.

#### Design Freedom

So, as you can see you have a plethora of decorative rainscreen cladding panels to choose from, but you don't have to choose just one. Stretch your creativity by combining two or more materials, colours and designs to create a unique and breathtaking facade.

To help you pick the right panel for your next project it's worth getting a technical expert in at the very start. Use their technical and product knowledge to help you turn your design dreams into reality.

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## Demand-controlled ventilation by Renson®



or several years, Renson has been developing very successful ventilation systems. Its demand-controlled ventilation system with the Healthbox\* ensures the house is optimally ventilated, according to the resident's

activities. This ventilation system really can help homes reduce their energy consumption while creating a healthy indoor environment.

Renson's demand-controlled ventilation system combines the constant supply of fresh air through self-regulating vents and the extraction on-demand of polluted air thanks to the central extraction unit Healthbox\*. Dynamic sensors measure the extraction air 24 hours a day on CO<sub>2</sub> or humidity and/or VOCs and adapt the ventilation level to the needs of the residents in an intelligent way. In this way, the system makes a healthy indoor environment possible.

#### Operate without errors

The Healthbox\* is installed in an unused corner in the attic or in a technical room. In the kitchen, bathroom, toilet or any other room where the polluted air is extracted, the user only sees an aluminium design vent. The fan is calibrated fully automatically and regulates itself so as to achieve the exact extraction capacity for each room.

This avoids the risk of adjustment errors, thereby ensuring a properly working ventilation system with a proper flow rate in each room. This automatic calibration also leads to significant time savings, as installation takes only a couple of minutes.

01622 754 123 www.rensonuk.net

ena 234





#### Freefoam launch new style woodgrain shiplap cladding



As part of the continuing development of its cladding ranges Freefoam has now launched a new smooth style 150mm wide shiplap cladding. Available in bright white and an attractive range of traditional woodgrain shades including Mahogany, Light Oak, Rosewood and Black, Freefoam has also added a new more contemporary colour finish, Anthracite Grey, to meet the demands of a developing market. PVC-U woodgrain cladding is a popular low maintenance option often used for dormer extensions and detailing on external areas. Freefoam monitor trends in the marketplace and have responded to the growing popularity of grey windows and doors by adding a new Anthracite Grey woodgrain option. The new 150mm Shiplap cladding features a modified right angle leg designed to fit perfectly with the new generic standard range of cladding trims launched earlier this year. Freefoam recognise the capital investment in stocking items with multiple trims so have developed an innovative generic range of cladding accessories that are designed to work with the complete range of cladding products from the narrow 100mm wide Open V cladding right up to the Fortex Pro 333mm wide double shiplap board. Freefoam work with world leading foil provider Renolit using the Exofol PVC film for all woodgrain products to provide a durable fade resistant product.

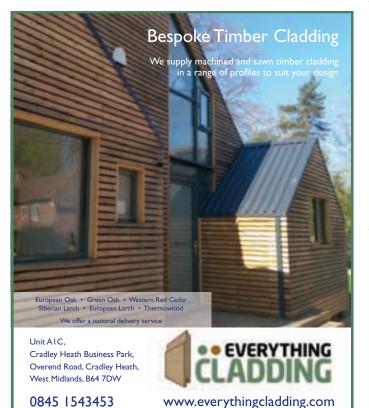
#### Powder coating rejuvenates a tired building

Powdertech (Corby) Ltd has recently completed a refurbishment project in the historic Cathedral Quarter of Lincoln. Danesgate House, built in 1963, and now used as student accommodation, was looking tired and out of place. The concrete cladding and windows needed replacing and better insulation was required. Aluminium cassette rain screen cladding consisting of 200mm planks in a clapperboard style was chosen to replace the concrete. Powdertech Corby Sales Director Richard Besant explained: "The existing red brick of the building was retained. The designers wanted the colour and pattern of the cladding to enhance this, and blend in with the historic buildings nearby. We were asked to source five shades of grey for fifteen batches of 200mm aluminium planks. We selected five from the Valspar range". In order to minimise disruption to residents, the refurbishments was carried out within a tight timescale. Powdertech Corby coated and delivered 2,500m² of aluminium across an 8 week period. The windows were replaced with larger, grey, double glazed slim-profile frames. The building now complements the surrounding architecture and the powder coating will last in excess of 20 years, benefitting residents and onlookers alike. To find out more about the transforming effects of powder coating visit the website.



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01536 400890 www.powdertechcorby.co.uk



#### Comar 5P.i Advanced Window System



Comar Architectural Aluminium Systems has announced it has incorporated the technology from its Comar 9P.i system into the Comar 5P.i window range, and is now launching the Comar 5P.i Advanced Casement and Tilt/Turn window system which integrates seamlessly into Comar 9P.i creating the option for standalone high performance windows. The brief to Comar's Design Team was to specifically meet

architectural demands; low U-values, matching slim sight lines for both the casement and tilt/turn, large glazing pocket for acoustic glass, secured by design and large sizes. For its contractor and fabricator partners, performance with built in fast-track fabrication and installation.

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

eng.239

#### Senior's guiding light



The new headquarters for Girlguiding North West England has been given a light and spacious new look thanks to a suite of products from leading fenestration designer and manufacturer **Senior Architectural Systems.** The new purpose-built facility features

continuous glazing across all facades. The use of Senior's thermally efficient SCW+ curtain walling has provided clean, crisp lines, creating an open and accessible layout which allows those inside the building a clear view of the outside areas. Senior's SPW600e windows, ideal for boosting interior ventilation and air circulation, also facilitate the flow of natural light. To complete the package, Senior's ground floor aluminium SFG shop front glazing system has been specified to integrate seamlessly with the SD commercial doors.

#### FAKRO roof windows for community church



Westhill Community Church in Aberdeenshire is a new, greenfield project. Its contemporary style was designed for maximum functionality and to encourage use by the wider community. 33 FAKRO roof windows flood the stage with natural light and illuminate buildings which form the sanctuary, foyer and offices. Products include FTP-V U3 Electro windows with rain sensor, EFW flat

roof windows and a FAKSV17 Smoke Vent window. Project Architect Mark Dysart, of McLean Architects, commented: "We specified Fakro products because of the excellent technical support and the option to specify matching zinc flashings. These were crucial to achieve a fully coordinated appearance".

01283 554755 www.fakrogb.com

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#### Enjoy the view with Kingspan OPTIM-R



Kingspan Insulation's OPTIM-R Balcony & Terrace System has been installed as part of the refurbishment and expansion of a detached, four bedroom villa on the beach front in Bognor Regis. Originally PIR insulation was specified for the balcony floor. However, the product thickness required to achieve the target U-value of 0.19

W/m².K would have necessitated either a step-up between the internal room and balcony, or ceiling heights to be reduced in the room below. The outstanding thermal performance of the Kingspan OPTIM-R Balcony & Terrace System allowed the U-value to be achieved with a far slimmer build-up.

01544 387 384 www.kingspaninsulation.co.uk/optim-r

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#### Prestigious London riverside offices uses Keraflo's Tanktronic to help ensure safe and healthy water



A new building situated on London's Victoria Embankment has installed the very latest in tank technology to manage its provision of potable (drinking) water. In common with most large commercial buildings, it is provided with cold water from the rising main via a basement tank, in this case a 24,000 litre capacity reservoir which guarantees uninterrupted supply to the building. Sub-contractors Imtech Group turned to Keraflo for a solution that would not only guarantee the safety of the water, but also a flexible supply within the shared building. The decision was made to install Tanktronic. Tanktronic is an electronic tank management system which provides a complete solution to monitoring water levels and temperature, as well as managing and controlling tank filling. It can be integrated into a building management system to alert the management team to any changes in the stored water. It also has a very useful calendar (holiday) setting so that the building management team can vary tank capacity to match demand. Its smart functionality includes a Repeater Panel, which enables control from up to 100 metres away (meaning tanks housed in basements or roofs can be controlled from the comfort of the management office) and the Battery Module, which provides up to two days of normal operation in the event of a power failure.

0118 921 9920 www.keraflo.co.uk

ena 245

#### LG launches new multi V S



LG Electronics (LG) has released its latest variable refrigerant flow (VRF) solution, the Multi V S. Designed specifically for small offices and retail stores, the compact, lightweight model offers effective heating and cooling as well as considerable installation flexibility. Multi V S neatly fits the gap between Multi Split systems and large VRF systems. LG's new VRF system boasts superior

energy efficiency, as evidenced by a 3.95 energy efficiency ratio (EER) in cooling operation and a 4.25 coefficient of performance (COP) in heating operation. The Multi V S is available here in the UK, now. For more information, please visit partner.lge.com/uk or you can email LG at HVAC.marketing@lge.com

01753 491500 partner.lge.com/uk

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#### Trios helps bus station improve efficiency



The installation of new air conditioning into an iconic bus station is helping keep office staff comfortable – whatever the weather. The existing air conditioning system had worked well since 2002 but was getting old and was using R22 refrigerant which is now banned, so the company was aware

that it needed to find a suitable replacement. Costas Ioannou, operations manager for Trios Compliance which was commissioned to update the station's services said: "The Replace system from **Mitsubishi Electric** can really help because it can often simplify the renewal of air conditioning by allowing us to keep all the existing pipes and wiring, this means we can swop over the indoor and outdoor units without having to dismantle and then reinstall all the internal piping".

01707 282880 www.replace.mitsubishielectric.co.uk

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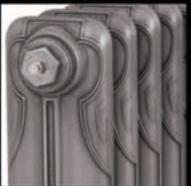
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#### True beauty requires no explanation!

The Vision Trimline range from Percy Doughty are skilfully engineered to allow a truly trimless fire. Combined with the meticulous attention to detail of the realisation of our fuel bed and flame patterns, ensure a perfect recitation of a natural living fire.

This year we have introduced new lines, and for the first time we are giving more flexibility with the TL73 mantel kit, enabling customers to create their own unique fireplace. This year the Vision Trimlines\* are equipped with an innovative double burner system. This clever feature staggers the flame pattern in two rows and gives an extra sense of depth and realism, whilst offering a more economical way to use your fire. What's more, we've teamed up with Capital Fireplaces, Heat Design, MAC and Tiletec, offering full UK and Ireland distribution. \*Single burners on the TL38, TL46 and TL73 models













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### The human element

Many new build properties are being designed without integral chimneys, and what with the likes of the "Passive House" movement, one could easily argue the future of the fire/fireplace could well be limited. However that's not the whole story, as SKAN reports

here remains in each of us, a basic "human" desire for a place to rest and relax. A place which is not only safe and comfortable, but where a sense of "wellbeing" can reside – The feeling you get when you are sat beside water, or lying on a sun-kissed beach or sitting around a warm/crackling fire on a cold dark night chatting with friends and family.

This almost "intangible" desire for "well-being" has driven gas and wood-burning stove manufacturers to provide innovative room heater appliances that are not just functional heat providers, but are beautiful by design, complementing a room's high class decor, while providing "flame-pictures" that are natural but often observed with some wider panoramic element to the design also, ensuring everyone can gather round and enjoy the experience.

It's not just the appliances that are changing. The positioning of these new desirable heating appliances, are also undergoing their own mini revolution. No longer just confined to a standard floor mounted hearth position on an outer/party wall, but now elevated and wall mounted, or simply free-standing and some even ceiling mounted!

Alongside the "free-thinking" positioning of the heating appliance is the requirement for wider/multiple viewing angles. This in itself has spawned an increased use of vision windows and principally glass in and around the fire. As soon as the word "fire glass" is included in the mix, selecting the right glass type/form for each application can then become quite complex. Standard fire retardant glazing standards were developed to stringent "protection" protocols, with a very clear time/casement specification to allow the safe evacuation of occupants from a fire situation. These standards are therefore somewhat at odds when considering the glass within a fireplace application.

The demands of glass within a fireplace are somewhat different. Clearly there's usually heat involved but often at much reduced levels. But exactly how much heat? And which fuel is being burned? These and many other factors can vary wildly dependent on the design brief. Although glass manufacturers business remains strongly rooted within the prime OEM wood burning stove and gas fire manufacturing sector, glass manufacturers are receiving an ever increasing number of requests coming from architects and end customers wishing to use ("how they describe") "fire glass" but in more "one-off"/specialty fire/fireplace installations. Possibly used as



a glass fire-guard (in-front of the appliance), or as a glass hearth-plate (underneath the appliance), sometimes as rear-glass-wall-panels (behind the appliance), and some glass to "frame" the appliance."

Then there is the more functional requirements. A good example of this can be where the draw on the pre-existing chimney has been compromised creating the instance where smoke can "spillage" of the combustion by-products can plume from beneath the lower edge of the gather/inglenook. The "fix" here is to use a transparent "thin glass strip" to extend the front lip of the "gather"/inglenook to improve the overall "draw" of the system.

Finally, there are the really challenging dual purpose decorative and functional applications for glass such as the *Continued overleaf...* 

#### 'As the never-ending drive for fuel efficient homes continues apace, maybe we shouldn't be so surprised that the needs for fires and fireplaces are changing too'

2-sided fire appliance, where a secondary piece of glass sits beside the appliance, often retained within a wall/cavity, just like a window casement. We've seen these designs employed both on internal/party walls but also within external walls, thus allowing for the appliance/fire to be viewed from outside the building too! Each application is so very different, there is no simple/generic set of "off-the-shelf" solutions

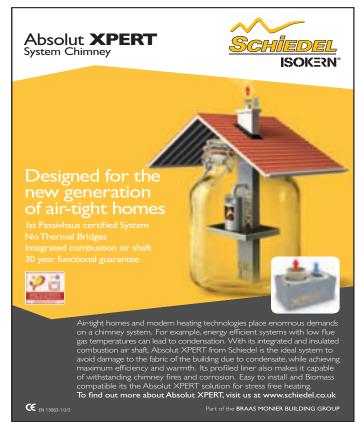
The above is a typical story that many different sectors within the fireplace market can relate and support. From stove manufacturers to raw material providers, from installers to stove shops, the current trend is most definitely toward higher value "bespoke installations", which in turn is pushing the industry to offer more unique solutions, and from all areas of the fires/fireplace industry.

As the never-ending drive for fuel efficient homes continues apace, maybe we shouldn't be so surprised that the needs for fires and fireplaces are changing too.

The sense of "wellbeing" has always been a very personal matter for each of us and maybe this change is simply just an expression of this individuality?









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#### Hotel Miramar uses Smart Fire UK



One of Bournemouth's top hotels has turned to Smart Fire UK to reinvigorate its empty and redundant fireplaces. The Miramar wanted to give their old and disused fireplaces a new lease of life. After seeing Smart Fire's range of bio ethanol fuelled fires displayed at a

trade show, hotel bosses knew they had found the perfect solution to their needs. The Edwardian hotel had the fireplaces installed last year, placing the bio ethanol burners inside the original fireplaces. As the existing fireplaces had their chimneys and flues blocked up, it was thought impossible to re-fashion them back into working fireplaces. However, because the EcoSmart fires are clean burning and produce no fumes, they were seen as the perfect alternative.

0207 384 1677 www.smartfireuk.com

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#### DRU Maestro luxury gas fires with Eco Wave



DRU is one of Europe's leading manufacturers of contemporary gas fires and wood stoves. The Maestro range, which will become available in autumn 2015, is its most advanced selection of gas fires yet, featuring a sophisticated new integrated burner, log set and the company's exclusive Eco Wave control system.

The newly designed burner system creates the most authentic wood fire that DRU has ever produced, with high and dense flames dancing around the realistic logs. In addition, the Maestro gas fires feature new Clear View non-reflective glass fronts, which further enhance the illusion of a real log fire.

0161 793 8700 www.drufire.co.uk

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#### Timóleon underfloor heating - the last word in glamping



Little Coombe Farm, down on the coast of Devon, is considered to offer the most comfortable and glamorous form of camping – or Glamping – possible: with two pairs of cedar clad yurts providing every creature comfort in a woodland setting overlooking a beautiful river valley and just in case the West Country weather isn't warm enough, there's even Timóleon's underfloor heating to keep the glampers comfortable. Timóleon's LowBoard system – part of the manufacturer's well proven range – has been installed to deliver controllable warmth within accommodation where radiators would look as out of place as a staircase. While the construction of the LowBoard panels helps keep overall floor depth to a minimum, Timóleon's Technical Design Service created an installation layout to respect the circular floor plan of the Yurts, able to deliver maximum efficiency from minimum pipe lengths. The seven pipe runs totalling 360 metres in length are connected back to one of Timóleon's Axios compact manifolds which measures just 615 x 415 x 100 mm; and that is able to deliver a flow of 310 litres per hour. The system is designed to have a flow temperature of 550°C and a return temperature of 450°C; optimizing boiler performance. The LowBoard system has been laid over a suspended timber floor construction that has insulation within the void depth, while 22 mm thick wooden flooring covers the pipework that still allows good thermal transmission.

#### Putting the cosiness into a home

With home fuel bills continuing to rise, many households are turning to alternative energy sources in a bid to save money and according to HETAS, the regulatory body for stove installations, there has been a five-fold increase in the number of wood burners being installed annually when compared to 2007. A wood burning stove can be great addition to a home, as it undoubtedly becomes the focal point of family living during the long cold winter months. Therefore, when specifying a stove, aesthetics, quality and efficiency must work beautifully together. Distributed in the UK by Specflue, TermaTech is one of the leading suppliers of wood burning stoves in Northern Europe. It has made a number of improvements to its range over recent years that have resulted in enhanced environmentally-friendly combustion, easier operation, better heat distribution and minimal maintenance. Combine these with efficiency levels above 82 per cent and an increased choice of artistically designed stoves, supplied in a variety of finishes, such as steel, soapstone and Indian sandstone, there is no doubt that the humble wood burner is now positioned as a worthy appliance when considering alternative heating sources. For more information visit the company website.





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### Charlton & Jenrick

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#### An innovative inset wood burning stove



The Hergom Stilkamin wood burner is an inset stove that offers a flexible heating solution thanks to its sliding glass door, which slides smoothly upwards for an unobstructed view of the flickering flames within. Exclusive to Eurostove in the UK, this contemporary design is available as a foursided model for a sleek wall-mounted look or a

three-sided frame that sits neatly on a granite or slate base. The perfect refuge on a cold winter's day, Stilkamin will add warmth and distinction to any home. Available in four sizes, the pioneering Stilkamin sliding door stove is built from steel with a refractory brick chamber, and cast iron base.

01934750500 www.eurostove.co.uk

#### Bespoke solution for aspirational ventilation



The ability to engineer bespoke solutions has enabled air movement specialists Gilberts of Blackpool to play a vital role in helping a leading healthcare IT provider achieve a new headquarters building for the future. The Phoenix Partnership aims to increase its staff levels

from 200 up to 650 over the next few years, thus it is creating a new, £ multimillion, 85,000 sq ft head office. They turned to Gilberts to help deliver the natural ventilation element. Senior Mechanical Engineer Steve Riley said: "Gilberts is recognized as having a proven track record in natural ventilation. They were able to offer us the bespoke manufacturing required, cost-effectively: the ventilators range in size up to 1.9m x 1.5m, providing maximum airflow characteristics".

01253 766911 www.gilbertsblackpool.com

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#### Electrorad introduces colour match service



Electrorad continues to demonstrate its supremacy with the launch of a bespoke colour matching service that is now available for its best-selling Aeroflow range. This service is the first of its kind available in the UK. The new service offers customers the opportunity to match Aeroflow radiators to any RAL colour, enabling these contemporary models to harmonise with a

specific design or scheme. The end result provides the perfect compliment to any decor. Alongside this bespoke service, the Aeroflow range also offers reliability guaranteed, being zinc galvanised and powder coated. Not only does this ensure that it absolutely can not rust, it is also backed with a 30-year warranty. Aeroflow is available via a nationwide network of electrical wholesalers.

#### Pentair completes anniversary campaign



Pentair's Thermal Building Solutions reached the finish line of its Raychem 40-year anniversary campaign with the final Formula E race in London in June 2015. The campaign started in September 2014 and was dedicated to Pentair's innovative self-regulating technology under its established Raychem brand. Pentair coincided this with the

Formula E races worldwide and held events, online games, competitions and promotions to develop a closer relationship and collaboration with its global customer base. As part of this initiative, Pentair also invited customers, installers, engineers and distributors to submit their ideas to Open Innovation Awards to make Raychem products even easier to use. A large number of suggestions were submitted, from which only five were shortlisted.





# Prestige Johannesburg office development stays cool with SE Controls

new prestige office development in Sandton, Johannesburg is using a combined smoke and natural ventilation system, involving automatic window vents in the building's elliptical glazed central tower, which is actuated and controlled by an integrated solution from SE Controls Africa.

Located in the Sandton business area, which is regarded as one of South Africa's prime commercial locations, the R208 million (£10.7 million) Capital Hill development combines seven floors of office space with residential apartments, as well as covered parking for almost 400 vehicles.

Designed by MWLF Architects, the building not only provides high quality business facilities and residential accommodation, but is also highly energy efficient and is constructed to achieve a 'Four Green Star' rating from the Green Building Council of South Africa.

As part of this process, the building's 12 storey

elliptical central tower features a fully glazed external facade within an aluminium lattice structure, which incorporates an automatic window and vent opening system to provide natural ventilation and overnight cooling, as well as smoke ventilation in the event of a fire.

To achieve the necessary level of versatility and control required for the automated vent system, SE Controls supplied 49 SECO N 24 25 twin chain actuators with a 350mm stroke length together with 7 SHEVTEC control panels and manual control points (MCP), which were networked using the company's OSLink network cards. An external weather station was also installed to provide an information feed on ambient conditions into the system.

In normal operation, the windows open and close automatically, to provide cooling and a supply of fresh air, but in the event of a fire this is over-ridden and vents are opened to allow smoke



to be vented, enabling escape routes to be kept smoke free.

01543 443060 www.secontrols.com

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For more information visit: www.zmart.zehnder.co.uk

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E: enquiries@zehnder.co.uk

always around you



# Vortice product development focus on indoor air quality

his month sees the launch of a new heat recovery unit, the HR250 Neti which is the second in the last 8 weeks from European market leader Vortice. The company has been selling MVHRs for many years, but promised further new product development this year for this sector.

General Manager Kevin Hippey said: "As far as architects, specifiers and developers are concerned, our research suggests that there are four key areas which are of greatest importance to them, high thermal efficiency, low noise emissions, low specific fan power and ease of installation."

These features were all built into the design of both new MVHR units launched by Vortice this year as well as the key consideration of product impact on indoor air quality. For decades, the indoor air that we breathe has been taken for granted however with new builds becoming more airtight reducing indoor air pollutants is becoming more important.

Kevin Hippey continues: "Europeans spend at least 90 per cent of their time indoors, so their exposure to air pollutants largely depends on their indoor exposure. These pollutants include volatile organic chemicals (VOCs), gases such as nitrogen dioxide, ozone and carbon monoxide, particulate matter and fibres, and biological particles such as bacteria, fungi and pollen. The Clean Air Act of 1956 largely dealt with severe exterior air quality issues but attention now needs to focus on the air that we breathe inside our homes."

Pollutant sources include outdoor contaminants from traffic and industry, which enter buildings by infiltration and through ventilation systems. Indoor contaminants include burning fuels, candles, tobacco, cleaning products, electronic equipment, toiletries and pets. The pollutants impact on health depend on their toxicity, concentration and exposure period and range from odour to irritation to serious toxic effects. The 2006 revision of the Building Regulations



concerning ventilation (ADF) set performance criteria for several air pollutants, including VOCs, nitrogen dioxide and carbon monoxide.

Both new Vortice MVHR units include filtration on the supply side of the MVHR system to try to prevent as many external pollutants as possible from entering the home. Properties in inner cities are particularly vulnerable to these, with high volumes of traffic or industry close by. Vortice offers a range of filter options with both MVHR units in order to remove small particulates.

01283 492949 www.vortice.ltd.uk

enq.269





ena.270

#### Compact high pressure laminate finds its feet



Hundreds of metres of compact grade High Pressure Laminate from **Abet Laminati** has been used to innovative effect at the new £20 million Shree Swaminarayan Sidhant Sajivan Mandal Temple in Kingsbury, London designed by Loates Taylor Shannon Architects. As part of the design, Brent Plastics supplied

Abet Laminati's Decori Minimi 567 and 568 in 0.9mm in a Mandarin texture and 807 in compact grade in a SEI texture from the Colours range. The Decori Minimi range offers a mottled effect decor created by the electronic processing of a number of small textures. As with all the finishes from Abet Laminati, the range meets or exceeds all European and British performance standards for resistance to wear, heat, moisture, impact and scratching.

#### Inspiring graphic tiles



Launching at the 100% Design Show 2015, Solus Ceramics' Ultra is a unique new range influenced by concrete textures and contemporary, urban colours. Themed around a modern palette of soft greys, Ultra provides designers with a choice of four chic colours that evoke a hip and trendy mood. Available in two square sizes in both a matt and polished finish; the tiles can be used effectively across floor spaces and fixed to elegant staircases. Interestingly, the range

also includes an exciting variety of decorative hexagon tiles. Coloured with shades that are complementary to the four plain tiles, the decors can be paired with them or used independently to create eye-catching schemes.

01217530777 www.solusceramics.com

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#### Radiators - in glorious colour!



As well as having the widest range of radiator designs and sizes available in stock Stelrad now offers what it believes to be the widest range of colour options too, many in a choice of 35 colours. From stylish pastels to forceful sepias, greys, blacks and metallic. Full details of the colourful designer lead options available from Stelrad can be found at www.stelrad.com. You can also call or

email for brochures and information, or follow Stelrad on Twitter or on Facebook.

0844 543 6200 marketing@stelrad.com



#### Methven taps into design



Following the successful launch of its stunning Aio shower range, Methven, the global designer and manufacturer of premium showers and tapware, has extended the collection with the addition of complementary tapware. The new tapware range is manufactured from Eco Brass\* – a revolutionary high quality, high strength

material which is lead and heavy metal free, providing enhanced corrosion resistance and therefore preserves water quality. Aio tapware is characterised by sophisticated simplicity, with an integrated lever and body design combined with precision engineering. The tapware collection features a variety of models, designs and sizes suitable for all water pressure systems.





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### MSW from GEZE UK

EZE has enhanced its Manual Sliding Wall (MSW) system eradicating the need for a swing door end panel so all the leaves can be hidden from sight when not in use.

The company has developed SmartGuide technology, which allows the leaves to glide easily around corners and be stored away, making it ideal for creating large open entrances or for spaces that need temporarily dividing.

MSW offers a solution that's both aesthetic and functional and is designed for use in high traffic, public locations such as retail environments, airports, offices, conference rooms, hotels and restaurants. It is modular in design, giving architects the flexibility to tailor the design to the environment. Walls are lockable when closed, giving utmost security and can be fully or partially opened as required ensuring ease of access for all.

The SmartGuide carriage features enhanced rollers and guiding, which allows individual sections to be moved with the minimum of effort. The switching guide side on the carriage means that a swing door end panel is not required because

all the leaves can be moved and stored within the stacking area.

A choice of three profile designs is available to complement the decor. Classicline profiles fit directly on to the glass at a slight angle and have a profile height of only 107 mm; Pureline profiles can easily be combined with existing systems and have a modern, angled design; while Protectline provides increased protection against glass damage such as that caused by cleaning machines.

The covers are designed to be clipped in place after the leaves have been installed meaning no drilling is required. They are available in a variety of finishes and colour schemes to reflect the interior design.

Alternatively if an all-glass solution is required, MSW can be combined with GEZE's integrated all-glass system (IGG). The beauty of IGG is that it invisibly integrates the profiles and fitting system between the panes of glass. The inside of the pane is printed at the edge of the glass so that the fitting technology is hidden and there are no visible or bulky parts on the glass surface.



Andy Howland, sales director of GEZE UK explained that MSW can be used to create a sweeping and inviting entrance. He said: "Thanks to the SmartGuide technology, MSW can be opened up completely to create an expansive open entrance or partially opened to create a flexible space. Alternatively, MSW can be installed internally to create an attractive partition wall to temporarily separate different areas.

"For entrances, leaves usually feature glass to allow a clear line of site, while internal partitions can be screen printed to reflect the interior design or an organisation's corporate identity."

01543 443000 www.geze.co.uk

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#### www.apolloradiators.co.uk



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#### New trends added to range of stock



With the addition of new trends in terms of colours, and surface finishes, RENOLIT has expanded its stock range of RENOLIT EXOFOL products. The new introductions include the popular anthracite grey in combination with "smooth 2" a light surface finish with improved scratch resistance, and four shades of the recently launched Elegant Ash to complete the 2015 stock portfolio. This highly detailed, elaborate woodgrain structure is available in three different shades of grey, known as Balmoral, Buckingham Grey and Kensington Grey and a light beige, Windsor; with a matt finish giving it the feel of freshly painted wood. These new releases have been included in the 2015 range swatch which have, since last year, combined all three product quality grades of RENOLIT EXOFOL films. The total number of designs available remains constant at 92, because RENOLIT has taken some of the less frequently used colours out. In addition to the complete range swatch the new Elegant Ash colours Balmoral, Windsor, Buckingham Grey and Kensington Grey are further illustrated in a separate mini-swatch, and a printed z-card which acts as colour & design quick reference guide is available with optional showroom free standing or counter top display holders. A4 samples of all colours and designs in the range are also available on request.

0167071822 www.renolit.com/exterior/en/sample-ordering

ena 281

#### An open and shut case for in situ testing



Door hardware specialist HOPPE UK is urging ironmongers, contractors and architects to fully consider the real-life door conditions before specifying door closers. When receiving a call from a customer who believes that a closer is not achieving its advertised opening force HOPPE UK inspect the closer on site. First it checks first whether the closer has been fitted

correctly and then they examine hinges, seals and the rest of the door's hardware. Invariably it is found that the closer has not been tested with this whole package. The answer, of course, is to test the closer in situ. The company is pleased to offer on-site samples to ensure that the closer plus a full technical back up service to advise on the best product to use for an individual application.

01902 484 400 www.hoppe.co.uk

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#### Knauf AMF helps create creature comfort



A state of the art veterinary clinic has opened in Stockton on Tees. Architect practice Jane Darbyshire & David Kendall (JDDK) were appointed to design the new building and they chose **Knauf AMF Ceilings** to provide aesthetic solutions and acoustic control. Oak Varioline ceiling tiles were installed

with a black shadow line grid. Varioline is a modular ceiling tile available in a choice of different wood patterns in popular colours: Oak, Ash, Larch, Birch and Cherry. Varioline is a demountable ceiling and can be fitted with either exposed or concealed grid systems. The ceiling offers excellent sound absorption and is suitable for areas with high levels of humidity.

020 8892 3216 www.amfceilings.co.uk

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Tel: 01425 611112 Fax: 01425 617773 sales@fivestars.ltd.uk

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#### Door selection made easy with Vicaima

Choosing the right interior door can often seem like a daunting task, especially when there is so much to consider. Performance, fire certification, dimensions, assembly options, budget and of course the ever important creative design all play a key role in the decision making process. Now Vicaima make the job so much easier with the publication of its new Interior Door Selector brochure. Full of inspired interior door designs, Vicaima's new priced brochure really does offer something for everyone. Available both in printed format and for download via its website, this 50 page booklet sets out product ranges in a clear and concise format. Each section includes quality colour imagery to illustrate the range design potential, together with easy to reference individual door pictures to ensure the chosen door is right for you. As you would expect from such a leading interior door specialist, a comprehensive choice of constructional core options from lightweight hollow core to 1 hour fire rated doors are offered for most ranges, with each one being available in both imperial and metric sizes. Specification of the right Vicaima door has also been simplified with a clear order code and availability indicator, so that you can plan accordingly.

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01793 532333 www.vicaima.com

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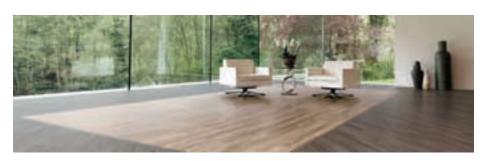
### Karndean adds new on-trend designs to Da Vinci commercial flooring collection

ne of the UK's market leaders in luxury vinyl tiles, Karndean Designflooring, is launching new wood designs, available from September, as part of its long standing Da Vinci range.

The Da Vinci collection, popular in commercial environments for its narrow wood effect planks, deep bevel and smooth finish will be further enhanced with twelve trendy, new 'modern rustic' designs.

Heavily influenced by the trend towards reclaimed and repurposed materials in commercial spaces, the 36" x 3" distressed planks replicate the unique look that comes from the transformation of wood over time.

The twelve new planks are split into two groups - the first group is made up of seven designs, including four modern limed planks and three classic oak looks, whilst the second group features three burnt and smoked designs alongside two



worn, aged driftwood looks.

The 0.7mm wear layer ensures the floor is able to cope with the intense demands of commercial projects and is easy to maintain, whilst offering the appearance of vintage products and a slip resistance rating of R10.

Inspired by natural fibres and textiles, the soft muted tones of the four Limed Oak designs are enhanced with a striking lime-washed finish, accentuating the unique grain details of each plank.

With the slim line planks ensuring that even the smallest of spaces can be enhanced and in larger areas an impressive impact can be created, the design possibilities with this collection are truly endless.

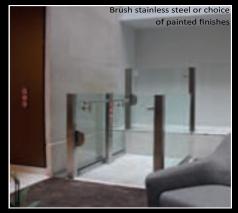
Available with a commercial guarantee of 20 years, the complete Karndean Da Vinci collection will now feature 20 wood and seven stone designs.

01386 820 100 www.karndean.com

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The Contract Flooring Association 4c St Mary's Place, The Lace Market, Nottingham NG1 1PH. Fax: 0115 941 2238

### Choosing the right floor covering

With an increased focus on infection control and healthy living environments the Care Sector is faced with a number of opinions and options when it comes to choosing the right floor covering, as Danfloor reports



he use of carpets is sometimes discarded on the basis of cleaning and maintenance and replaced by hard flooring and vinyl which is perceived to be better from the perspective of infection control.. However this isn't always the case as there are multiple benefits of using carpet within a care setting and if a quality carpet, which is manufactured with the care sector in mind, is specified then carpet can often have many more functional and practical benefits than hard flooring solutions.

Common misconceptions with carpets is that they are not efficient in assisting with infection control, that they retain dirt and are difficult and expensive to clean. All of which shouldn't be an issue with a quality, healthcare specific, carpet that is installed with an effective cleaning and maintenance schedule.

Antimicrobial treatments which can be applied to carpets should be considered when selecting carpets for healthcare environments. The advanced technology deactivates harmful micro-organisms when they come into contact with the carpet fibres. The treatment inhibits the growth of mould, fungus and bacteria, including the likes of MRSA, which can contribute to unpleasant carpet odours and the spread of infection. It is a revolutionary technology that guarantees optimum freshness and hygiene for floor coverings, even after intensive use and frequent commercial cleaning.

Floor finishes should also help to improve your indoor environment, which is particularly important where recovery

is of paramount importance. Research suggests that recovery times can improve when an individual is cared for in an attractive and therapeutic environment.

The installation of carpets can improve the health and wellbeing of individuals who live and work in these environments by helping to create a healing environment. One way in which they do this is by improving the acoustics of a room. Corridors within care homes and hospitals can be noisy places during the day and night but by installing carpet, as opposed to a hard flooring solution, much of the sound within a room is absorbed thereby reducing sound reverberation. Carpets also help to improve the acoustics of a room by reducing impact noise. This relates to the control of sound from one space to another and helps to create a calm and peaceful environment.

Compared with a hard flooring finish carpet adds a warm and welcoming feel to any room and provides a soft cushioned layer for extra underfoot comfort. Studies suggest that carpets, when compared with vinyl, can reduce injuries caused by slips, trips and falls. It's also been proven that gait speed and step length is greater in older people walking on carpeted areas than on vinyl. Carpets also have an added advantage of improving energy consumption due to a lower level of heat conduction. It is estimated that up to 30 days of heating can be saved by installing carpets, resulting in a 4-6 per cent energy saving and a consequent reduction in energy costs.

Carpets can also help to improve indoor air quality and in Continued overleaf... 'Compared with a hard flooring finish carpet adds a warm and welcoming feel to any room and provides a soft cushioned layer for extra underfoot comfort'

turn contribute to a healthier living environment. The trapping of dust particles within the carpet fibre, until the carpet is vacuumed, reduces the amount of airborne particles and allergens that can re-circulate and cause discomfort for allergy sufferers. With hard flooring solutions these dust particles tend to become airborne more often with the circulation of air within a room or corridor.

The total life cycle costs of installing and maintaining carpets has been proven to be more economical than those of hard flooring solutions. Various studies and reports state that the total life cycle costs of hard flooring solutions can be up to two times higher than those of carpet (depending upon application and intensity of use).

Research also suggests that on an annual basis cleaning times for hard surface floors is 2 ½ times longer than what is required for carpets and that cleaning supplies for vinyl floors are up to 7 times more expensive than those required for cleaning carpets. Therefore maintenance time and cost saving benefits can also be achieved with the installation of carpets as opposed to hard floors.

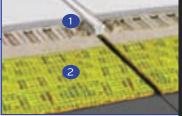




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#### Pictured above:

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





# Mapei wood floor system specified at The Beaumont Hotel, Mayfair



apei's complete wood floor system has been used to install oak flooring at a new hotel in Mayfair, The Beaumont Hotel. Grand in style, the elegant hotel, which has a distinct Grade II listed Art Deco facade, was developed by Grosvenor Britain & Ireland, in partnership with renowned restaurateurs Corbin & King. The interiors were designed by Richmond International and fitted-out by Chorus.



Traditional fumed oak herringbone wood flooring was specified alongside Mapei's eco system and installed, by AJK Wood Flooring, throughout all suites, bedrooms and public areas.

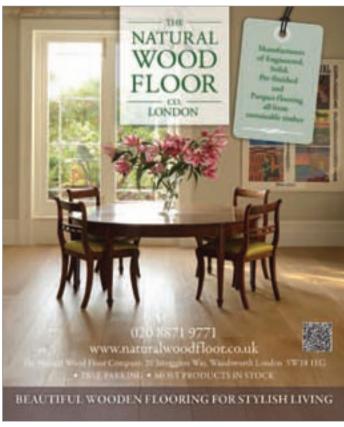
The hotel's 1920's Manhattan-style interior features over 1,300m² of FSC and PEFC-certified Weitzer Fumed Oak Parkett, which combines a classic design with a stunning dark aesthetic. To prepare the subfloor, Mapei's low VOC primer –



Eco Prim T – was specified to improve the adhesion of levelling compounds. Mapei's Ultraplan Renovation screed was then applied, prior to installation of the engineered flooring using Mapei Ultrabond Eco S955 1K– a single component isocyanate and solvent-free, sililated polymer-based adhesive.

0121 508 6970 www.mapei.co.uk

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#### Expona Flow helps RSPB visitor centre



Vinyl flooring from Polyflor's new high design and high performance Expona Flow range was recently installed in the refurbished visitor centre at RSPB Bempton Cliffs nature reserve near Bridlington, East Yorkshire. Around 240 m<sup>2</sup> of Expona Flow heavy

commercial sheet vinyl flooring in Honey Beige was installed throughout the visitor centre's exhibition area and gift shop. The collection includes 50 wood, stone and abstract designs in a 2 metre wide sheet format with a 2mm gauge and a 0.7mm wear layer. The Honey Beige design is from the Infinity collection in the Expona Flow range and was chosen to complement the surrounding coastal environment of Bempton Cliffs.

01617671111 www.polyflor.com

enq.297

#### Carpet ranges shape up with the Skinny Plank



Heckmondwike FB, one of the UK's leading fibre bonded carpet manufacturers, has released an exciting new tile shape for four of its best selling carpet ranges. The Skinny Plank, designed to inspire specifiers and designers in the office and commercial sectors, is

Heckmondwike FB's first rectangular tile. It is available in all of the colours in the company's Array, Night Sky, Iron Duke and Broadrib ranges. The new Skinny Plank range replicates the size and shape of contemporary planked flooring, but with the aesthetics and comfort of fibre bonded carpet. The overall effect is stunning, creating a modern, vibrant interior that is available in a wide choice of colours from these four popular ranges. Heckmondwike FB is well-known for the excellent value, durability and high performance of its products.

#### Gerflor take table tennis club to a new level!



When the Drumchapel Table Tennis Club in Glasgow needed a suitable flooring solution they turned to international flooring and finishing solutions specialists **Gerflor** to supply a sports flooring product that would not only deliver to the highest standards, but would also look great. The ideal

choice would be Gerflor's Taraflex™ Eco-Fit System.The Taraflex™ Eco-Fit system is suitable for sports, community projects and is ideal for use over existing sports floorings, where there is no risk of rising dampness such as resin, parquet and PVC. Taraflex™ is also versatile enough to be used in various multi-specialist applications and affordable for many new projects and refurbishments.

01926 622600 www.gerflor.co.uk

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#### New solution from Norcros Adhesives



Norcros Adhesives' latest addition to its Ultim8 range of ready-mixed tiling adhesives is Ultim8 M+, a solution for fixing acoustic matting or decoupling membranes to a wide variety of surfaces. Often installers can improve the acoustic performance of a floor installation with the addition of an acoustic mat, but fixing the mat down can be time-consuming and not always totally reliable. Ultim8

M+ is designed to provide an effective fix on a wide variety of substrates, including plywood and raised access flooring, with the requirement for minimal surface preparation. Ultim8 M+ is available in a 15kg tub and shares the brand identity with the rest of the Ultim8 range of ready-mixed adhesives from Norcros.

01782 524 140 www.norcros-adhesives.com

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#### Polyflor celebrates 100 years in Manchester



UK flooring specialists, **Polyflor**, is celebrating a century of manufacturing in Manchester, where this family-run company was born and is still flourishing as a global business. Over the last 100 years the expansion of Polyflor's parent company James

Halstead PLC has been managed by four generations of the Halstead's own dynasty of entrepreneurs in Bury, Greater Manchester. Since pioneering the development of homogeneous vinyl flooring in 1950s, Polyflor has become the UK market leader for commercial vinyl floorcoverings with dominant market share. Now Polyflor manufactures a wide range of high quality and high performance flooring products, from safety flooring to luxury vinyl.

0161 767 1111 www.polyflor.com

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#### New Promat website



**Promat UK** has announced the launch of its new website, which details its extensive passive fire protection offerings for the construction industry. It provides a valuable central reference for architects, specifiers, consultants, builders, specialist contractors and many other professionals involved with building

fire protection. Links to additional Promat sites provide comprehensive content for tunnels, glass, marine, oil & gas and high performance insulation. The new site focuses on the wide range of services and products available from the company, covering a multitude of applications including structural steel, ceilings, floors, roofs, partitions, concrete deck upgrades, glazing and fire-stopping.

01344 381350 www.promat.co.uk

eng.302

#### Facades & fire safety compliance bulletin



Choosing the best route to compliance with fire safety Building Regulations can be a major challenge. To help address the complexities of the regulations, and some of the misconceptions surrounding the use of insulation in rainscreen and masonry facades, **Kingspan Insulation** has released an in-depth technical bulletin, focusing on applications on buildings with a habitable storey 18 metres, or more, above ground level. The

full technical bulletin can be downloaded from a page dedicated to facades and fire safety on Kingspan Insulation's website. The dedicated page also provides an at-a-glance explanation of the issues and the different approaches to compliance.

01544 387 384

www.kingspaninsulation.co.uk/routestocompliance

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# Latest IWA 14 impact tests from Frontier Pitts Frontier Pitts Ltd is the British manufacturer of security gates, automatic barriers, bollards, blockers and turnstiles.



Frontier Pitts Ltd is the British manufacturer of security gates, automatic barriers, bollards, blockers and turnstiles. With a long standing heritage combined with worldwide portfolio, it designs, manufactures, installs and maintains perimeter security equipment. As a founder member of the PSSA, Frontier Pitts still remains a leading British manufacturer with the most verified products in the

world under the product verification scheme. The company now showcase a further SIX exciting new products impact tested within the last 20 months. Four of these products have been impact tested under the new International IWA 14-1:2013 specification. IWA 14 combines the vehicles and energies from the other impact test specifications around the World.







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### Securing access

Jonathan Burke, marketing manager of Abloy UK, discusses the options for architects looking to specify systems that offer easy access and egress while ensuring maximum security, and explains how electric locks can offer a compliant and energy efficient solution

hen it comes to specifying access points in public buildings – especially emergency escape doors – it is imperative that the safety of the people who use the building is the main concern. However, there must also be measures in place to ensure the required level of security is achieved.

Access control and security are two major concerns when it comes to buildings that are used by the public, such as offices, schools and hospitals. It's important to have fluid access, however the safety of the people in the building is also paramount.

In the event of an emergency such as a fire, there needs to be a reliable exit route that allows a quick and easy escape, so ensuring the correct locking solutions are installed at access points is key.

There are safety advantages to be gained by opting for an electric locking system – such as a motorised or solenoid lock – rather than choosing door magnets.

This is because there can be fire risks associated with installing a magnet on a door which is used as a fire escape, as they require special arrangements in order to guarantee they are fail-safe at all times in the event of an emergency. For example, some door magnets require an alarm or 'request to exit' mechanism to allow someone to exit, so there could be delays for people needing swift egress in an emergency situation.

#### Standards and compliance

When it comes to choosing a complaint solution, electric locks also meet standards EN179 Emergency Escape for when the building occupants are aware of the building environment, and EN1125 Panic Escape for environments used by the general public.

In addition, motorised and solenoid solutions satisfy the needs of both fire doors and emergency and panic situations where a mechanical means of escape is required.

Motorised locks are also ideal for emergency exits as they do not feature a handle – which is the most vulnerable part of a door - making them a hands-free solution.

This can improve the flow of people, which is especially useful when a swift and smooth exit is needed for a large number of people, meaning motorised locks are often considered a safer alternative to solenoid variants.

Continued overleaf...

#### **Ensuring efficiency**

As well as providing a superior level of security, electric locks are also a more energy efficient solution when compared with magnetic locks. Although door magnets may have a smaller initial cost, they need a constant supply of electricity to power the magnetic field that ensures the door stays closed.



#### 'Motorised locks are also ideal for emergency exits as they do not feature a handle – which is the most vulnerable part of a door'

Alternatively, solenoid and motorised locks only require electricity to open or close the door. As doors will be closed for a far greater amount of time than they will be open, electric locks will use considerably less energy than their magnetic counterparts.

To put this into context, 13 door magnets use around the same amount of electricity as a kettle being constantly boiled all day. In comparison, electric locks will only require around 10-20 per cent of this amount of energy to operate for the same amount of time.

#### Secure solutions

With this in mind, companies offer a selection of compliant security solutions that are ideal for panic and escape doors. Ranges of electric locks include motor and solenoid locks, which are the most effective forms of electric locking.

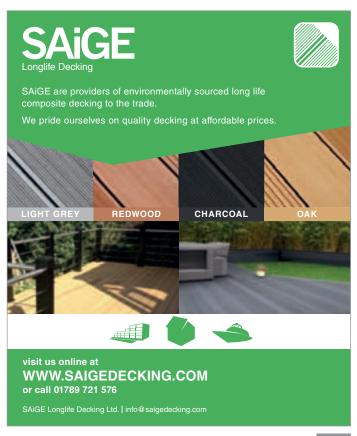
So architects looking for safe and efficient access control systems should opt for electric locks rather than door magnets, in order to provide a compliant solution that will ensure the occupants of a building are able to exit swiftly in the event of an emergency.



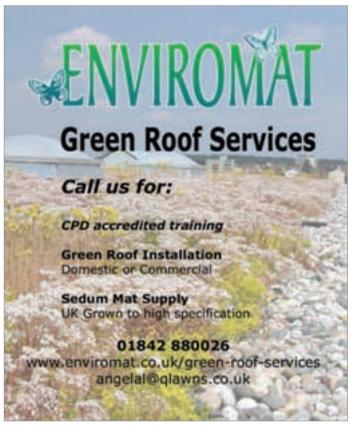




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