January 2016 Contraction of the second state of the second second

Features in this issue

Roofing External Wall Flnishes and Renders Heating & Ventilation Stairs & Balustrades

International Focus

Special report Industrial Buildings Healthcare Build & Design

Show Preview Surface Design Show News Shanghai Tower becomes the second tallest building on the planet

Creation from catastrophe – How architecture rebuilds communities

www.architectsdatafile.co.uk



Taking Oak Framing to a new world...

At Carvalo we design and manufacture Oak Frames that work. Contact us today for a free consultation to find out more and win a free bottle of wine.



Oak Frame manufacturers employing the latest technology to deliver frames of unparalleled quality and design.

www.carvalo.co.uk | info@carvalo.co.uk 01244 564145



40

adf january 2016

incorporating Building Projects Magazine

contents

projects

features

27



Trash Talk: How to build a huge industrial plant and have people thank you for it

A beautiful industrial building? An environmentally friendly power station? A waste facility wildly popular with visitors? Check, check, check, with Suez's Suffolk Energy-from-Waste plant. Michael Willoughby reports

33 A refreshingly different view of mental health

Suburban Liverpool is home to a highly praised example of the new generation of sophisticated mental healthcare facilities that are emerging across the UK. Ray Philpott explores

45 STRUCTURAL ELEMENTS: ROOFING

Introducing Biosolar

Green roof and photovoltaic (PV) technologies are no longer mutually exclusive options with the introduction of biosolar roofs. By Tom Raftery, BauderSOLAR product manager

51 EXTERNAL ENVELOPE: WALL FINISHES & RENDERS

Beating the UK climate with correct render choice

By Steven Keitley, general manager, Parex Render Systems & Facade Solutions

59 HEATING & VENTILATION

Why is Hydronic underfloor heating the best solution for your project?

Underfloor heating is fast becoming the heating solution of choice for domestic and non-domestic buildings in the UK. By Antony White, technical director, Warmup Plc

69 INTERIORS: STAIRS & BALUSTRADES

Balustrading design – Practical implications

Harry Watson of SG System Products Ltd explores why it is so essential that designers spend time finding balustrading that fits the bill



www.architectsdatafile.co.uk

news & events	4	Industry News
	5	Events
	23	CPD Focus
		HEADLINES
	5	Broad Street House in Suffolk
		by Nash Baker Architects
	7	End of year bounce for
		architects in latest RIBA
		Future Trends Survey
	9	London's best new extensions
		announced in the shortlist of
		Don't Move, Improve!
	21	International Focus
	24	Editor's Product Focus
	40	Surface Design Show Preview
products	25	Appointments & news
	44	Groundworks
	44	Structural elements
	48	External envelope
		(incl. external fixtures)
	55	Insulation
	56	Heating, ventilation & services
	63	Interiors
	73	Disabled products & services
	73	Safety & security
	73	Landscaping & external works
		1.0
	75	Classified & directory



Joint Publisher/Editor Simon Reed

Advertisement Manager/ Joint Publisher Anthony Parker anthony@netmagmedia.eu

> Editorial & Production Assistants Sue Benson Mikey Pooley

Contributors Ray Philpott Michael Willoughby

> Sales Director Lesley Mayo

Sales Executives Suzanne Easter Ian Fletcher Kim Friend Steve Smith

Circulation/Reader Enquiry Service Jane Spice



netMAGmedia Ltd Cointronic House Station Road, Heathfield East Sussex, TN21 8DF

Advertising & Administration t 01435 863500 f 01435 863897 info@netmagmedia.eu www.architectsdatafile.co.uk

Press Releases editorial@netmagmedia.eu



Annual subscription costs just £48 for 12 issues, including post and packing. Phone 01435 863500 for details. Individual copies of the publication are available at £5 each inc p & p. All rights reserved

No part of this publication may be reproduced or transmitted in any form or by any mean, electronic, mechanical, including photocopying, recording or stored in any information retrieval system without the express prior written consent of the publisher. Although every effort is made to ensure the accuracy and reliability of material publisher an accept no responsibility for the claims or opinions made by contributors, manufacturers or advertisers. Editorial contributors to this journal may have made a apayment towards the reproduction costs of material used to illustrate their products. The manufacturer of the paper used within our publication is a Chain-of-Custody certified supplier operating within environmental systems certified to both ISO 14001 and EMAS in order to ensure sustainable production. Printed in England

Shanghai Tower becomes the second tallest building on the planet

Shanghai Tower has officially completed as the tallest building in China and the second tallest building in the world.

NEW SECOND TALLEST BUILDING

The tower was finished in late 2015 at a height of 632 meters becoming the third building in the world to achieve the "megatall" (600-plus meters) designation.

To commemorate this important milestone, Shanghai Tower has been added to the official CTBUH Current Tallest 20 poster which presents the world's tallest 20 buildings as recognised by the Council's Height Criteria.

The completion of Shanghai Tower is especially notable for pushing Chicago's 442-meter Willis Tower (originally Sears Tower), once the world's tallest building, out of the Top 10 list for the first time since it completed in 1974.

Willis Tower was among the Top 10 Tallest Buildings for 41 years, in which time the tower was overtaken by skyscrapers constructed primarily in Asia and the Middle East.

Given the rapid development of urban centres in these regions and the new heights that are being realised by contemporary tall buildings, CTBUH data projects that it will be less than five years before Willis Tower also falls out of the Top 20 Tallest Buildings.

As the third tower in the trio of signature skyscrapers at the heart of Shanghai's Lujiazui Finance and Trade Zone, Shanghai Tower embodies a new prototype for tall buildings.

Placed in close proximity to Jin Mao Tower and Shanghai World Financial Center, the new tower rises high above the skyline, its curved facade and spiralling form symbolising the dynamic emergence of modern China.

But its twisting form goes beyond just creating a unique appearance: wind tunnel tests confirm a 24 per cent savings in structural wind loading when compared to a rectangular building of the same height.

The tower's program is unique for being organised into nine vertical zones. Each of these "vertical neighbourhoods" rise from a sky lobby, a light-filled garden atrium that creates a sense of community and supports daily life with a varied program catering to tenants and visitors.

For more information visit www.architectsdatafile.co.uk and enter reference number 84225.

End of year bounce for architects in latest RIBA Future Trends Survey

The RIBA Future Trends Workload Index increased significantly in November, rising to +27 (up from +18 in October); this suggests that confidence levels within the profession have stabilised towards the end of the year. All nations and regions in the UK returned positive balance figures.

Large practices (51+ staff) remain the most positive about future prospects (balance figure +100), compared with medium-sized (11–50 staff, balance figure +32) and small practices (1–10 staff, balance figure +24).

By far the most robust of the sector forecasts throughout 2015, the private housing sector forecast was unchanged in November (+25). The public sector and community sector workload forecasts were also unchanged (balance figures -3 and +3 respectively); the commercial sector workload forecast increased to +14 in November (from +7 in October).

The RIBA Future Trends Staffing Index also recovered lost ground, rising to +14 in November (up from +9 in October). Only 2 per cent of practices expect to have fewer staff at the end of the next quarter.

Large practices continue to be more confident about increasing staff numbers (balance figure of +50) compared with either small (+10) or medium-sized practices (+33).

RIBA Executive Director Members Adrian Dobson said: "Commentary from our participating practices is generally upbeat as we look ahead to 2016. We have seen further evidence of increases in fee levels, as well as confirmation that practices are finding it is taking more time to recruit new staff with appropriate skills while the employment market continues to improve. A few practices sound a note of caution that increases in construction tender prices are leading some clients to question the viability of projects moving into the construction phase."

Broad Street House in Suffolk by Nash Baker Architects



Broad Street House is new build home in Suffolk by Nash Baker Architects. The house utilises a palette of natural and traditional materials to blend with the rural street scene, and the exterior uses oak cladding and handmade bricks (both locally sourced) to blend with the architectural character of the village. To create a more distinctive look, the bricks were laid in a variation of 'Monks bond' using white iron-free sand for the lime mortar which was sourced from the local Wivenhoe pit. "We wanted to ensure that the architectural expression would be contemporary and of its time whilst in its materiality being nevertheless reflective of local vernacular traditions."

The client's brief was to replace the incongruous pre-existing 1980's building with an exceptional contemporary home that was both sympathetic to the neighbouring properties, whilst still being of its time. They required an open plan living arrangement that on the ground floor would provide them with dedicated work rooms for their respective professional activities as silversmith and baker, and a first floor, that could take advantage of the natural daylight and the expansive views across the marshes to Orford Ness, and the coast beyond.

In contrast to the brickwork at the ground floor, the upper level appears lightweight, utilising ribbons of untreated oak cladding to wrap up and across a pitched roof. The oak cladding was sized to match the brick course dimensions, so that the two elements of construction have a complimentary design intent.

Internally, the house has a muted decorative scheme with exposed concrete ceilings complemented by a floor of whitewashed Douglas fir planks and fitted joinery made with lacquered birch faced plywood. Studio and office rooms occupy the left side of the ground floor layout, mirrored on the right of the rear reception room by an open plan kitchen area defined by a parallel wooden dining surface in walnut with expressed dovetail joints. The reception room opens out onto a red brick terrace and garden through a series of glazed sliding doors, mirrored on the upper storey where corresponding doors on the master bedroom and en-suite bathroom open out onto a covered terrace sheltered by the oak clad roof that gives spectacular views of the Orford Ness marshes and the Suffolk coast.

The careful specification of materials and technical detailing have created a dwelling which is sensitive to its historic setting, yet unashamedly modern.



events

CONFERENCES

Tackling Energy Demand and Management to Achieve Real Reduction in Non-Domestic Buildings 10 February, London www.ashden.org/conference/2016-arup

LECTURES

Royal Gold Medal 2016 – Lectures and masterclasses 01 – 02 February, London www.architecture.com/WhatsOn

SEMINARS

Knowledge, information and data: Practicing architecture in the digital age 21 January, Birmingham www.architecture.com/WhatsOn

TRADE SHOWS

Architect@Work 27 – 28 January, London www.architect-at-work.co.uk

Surface Design Show 09 – 11 February, London www.surfacedesignshow.com

kbb

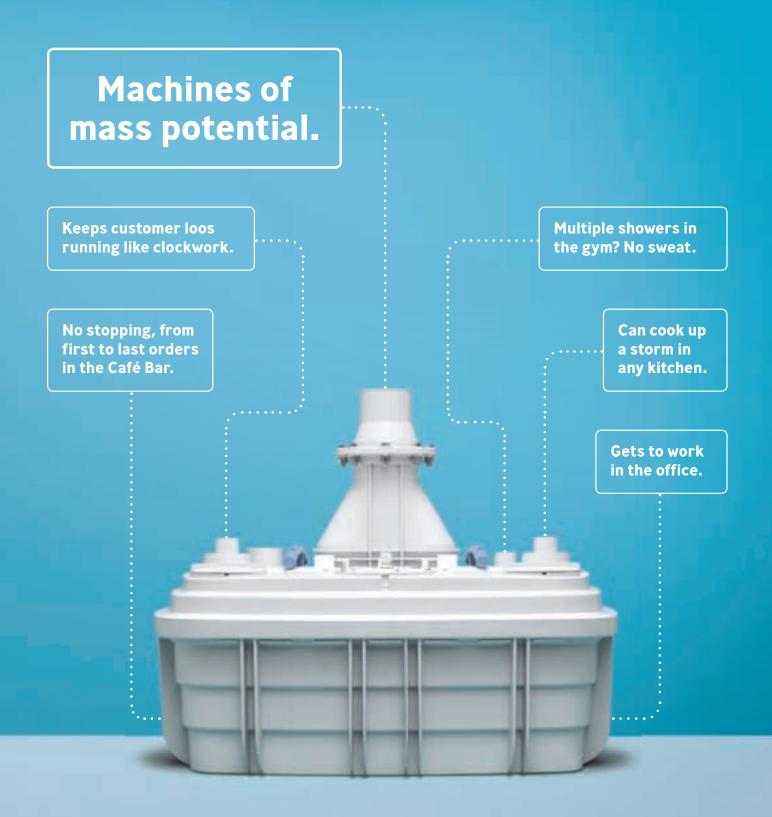
06 – 09 March, Birmingham www.kbb.co.uk

Ecobuild

08 – 10 March, London www.ecobuild.co.uk

WORKSHOPS

Floodand Coast 2016 23 – 25 February, Telford www.floodandcoast.com



Because Saniflo works where convention doesn't, our powerful new Sanicubic[®] XL lifting station can help you take on any commercial project and win. With up to 5 inlets, a 120 litre tank volume and 40m³/hour of pumping power, it's got incredible potential. *Just think of the possibilities*. **Visit saniflo.co.uk**



EVENT

London Festival of Architecture 2016

The annual London Festival of Architecture (LFA) – a month long, citywide celebration of architectural experimentation, thinking and practice – will return to venues across the capital throughout June 2016.

The LFA has announced the appointment of Tamsie Thomson in the newly created role of Director. As Director of RIBA London since 2009, Tamsie has overseen and initiated a number of projects and cultural programmes that promote architecture and support the 12,000+ RIBA London members. These include the annual Architecture Open, Open Studios and Regent Street Shop Windows projects, as well as the Student Mentorship programme and the Forgotten Spaces project and exhibition. Tamsie previously taught architecture at the University of Brighton and worked for both the Civic Trust and Shelter.

LONDON FESTIVAL OF ARCHITECTURE LONDONFESTIVALOFARCHITECTURE.ORG

Commenting on her appointment, LFA Director Tamsie Thomson said: "I am incredibly excited to be given this opportunity to be Director of the London Festival of Architecture. Architecture is as much about humanity as it is about function and practical solutions. I think London's strength as the leading city for nurturing good practice and great design, rests with its people as well as its buildings. The LFA offers a really exciting opportunity to highlight this enormous pool of talent and ideas and how they impact on the city underpinning London's role at the forefront of global architecture."

The LFA programme is delivered with the support of New London Architecture and RIBA London, under the guidance of the LFA Board and Chair Patricia Brown. LFA highlights the key role that architecture plays in urban, cultural and social development, and its recognition as an instrumental force at national and international level.

In 2016 the LFA will explore the theme 'Community' and feature a programme of exhibitions and events organised by London's leading architectural, cultural and academic institutions and practising architects, designers, curators and community groups.

The programme will respond to the theme by exploring the central role that architecture plays in developing ideas of community, even questioning its very definition. How will the enormous changes faced by London's growth and the impact of issues such as climate change, technology, the under-supply of housing and record immigration affect the way we live and work together? How will we protect the existing in the face of the new and build real cohesive, sustainable places where people can live fulfilling lives, be cared for when they're older or sick and inspired when they're young. Architecture is the tool that can unlock our ability to create these communities for the long-term.

LFA is a time for speculation, public debate and new ideas. An open call for architects, artists, designers, curators and community groups to participate in the festival and respond to the 2016 theme, including the RIBA London Open Studios, will be announced this month.

news bytes

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

> HLM awarded BIM certificate... Ref: 75488

ADG Architects merges... Ref: 81439

CDG shortlisted for... Ref: 91956

> Workplace design trailblazer joins Maber... **Ref: 57310**

The Foundry's MODO software powers... Ref: 49526

RIBA President responds to Prime Minister pledge to transform sink estates

Prime Minister David Cameron has announced that some of the country's most run-down housing estates will be replaced with attractive and safe homes:

- Country's worst housing estates to be removed and replaced with safe and attractive homes for residents
- Comprehensive approach to estate regeneration to be created
- New £140 million fund to jump-start regeneration projects
- Prime Minister: Time to end 'decades of neglect' to aid social reform

RIBA President Jane Duncan said: "We welcome the Government's decision to look at improving the built environment in the most deprived communities in our country. We believe passionately that everyone has a right to enjoy and benefit from well-designed architecture.

"These community improvements, however, can't come at the expense of existing residents and see further reductions in the number of social rented homes at a time where there is already a desperate shortage."

For more, please visit www.architectsdatafile.co.uk and enter reference number 58207.

ALUCOBOND° plus

Certified fire characteristics - class B-s1 d0

THE ORIGINAL GERMAN QUALITY ACM with full bba approval and highest fire standards FOR CLADDING MATERIALS

BskyB Believe in Better Centre, London | ALUCOBOND® special colour | Architect: ARUP Associates | Fabricator: Sotech | © Simon Kennedy



3A Composites GmbH Sales Manager UK / IE Richard Geater +44 75 84 68 02 62 richard.geater@3AComposites.com **3A Composites GmbH** Specification Manager UK / IE Paul Herbert + 44 75 84 68 02 63 paul.herbert@3AComposites.com



THE ORIGINAL ACM

www.alucobond.com

London's best new extensions announced in the shortlist of Don't Move, Improve!

New London Architecture (NLA), the capital's centre for the built environment, has today announced the shortlisted entrants for Don't Move Improve! 2016, the competition celebrating London's best new home extensions.

Comprised of 33 nominations, the shortlist features projects from across the capital, ranging from a floating writer's hut in Enfield to a lantern-like extension in Richmond.

Now in its sixth year, the competition has received a record number of entries, demonstrating a strong desire for people to use the best designers to radically rethink the homes in which they live. Among those to make the final selection, David Kohn's Sanderson House features a sloping roof alongside a careful combination of materials and colours to create a vibrant and spacious new addition to the home. Two distinct styles remain closely connected to each other as a red brick facade continues the material palette of the existing house. Vivid interiors and porthole-like windows ensure that the Sanderson House is a modern interpretation of the traditional London home.

This connection between the old and new provides both a challenge and an exciting opportunity for designers when constructing an extension. House of Trace by Tsuruta Architects chose to highlight the lines of the existing building to help create a subtle merge between the original and brand new elements of the house, made of glass and brick.

Creating extensions in conservation areas proved to be a hurdle for many of this years' shortlist but resulted in some of the most inventive solutions. The Lantern by Fraher Architects features a vertical addition a listed residential building in Richmond. An American Black Walnut staircase wraps itself up through the building while vertical glazing creates a glowing effect at night. Properties are not only extended for extra living space but are quite often the result of a need for home working. The Cut and Frame House is the adaptation of a semi-detached home in Enfield to create a new work/live environment for the owners. Designed by Ashton Porter Architects for a children's book author and a therapist, the project was driven by the need for the owners to be able to both work at home but have their own separate areas. The resulting design is formed by a large floating frame with a moveable glass panel that can be adapted to create both internal and external working spaces. Large glass panels facing the garden area enable the house to have

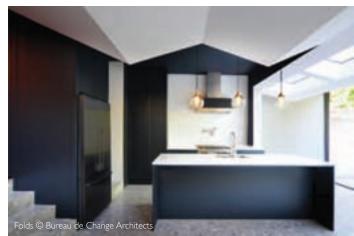
a close connection to the outside for family activities whilst still providing privacy and tranquility within the home for working.

Other nominations included Folds by Bureau de Change Architects which features a unique faceted roof, resembling a flat surface being folded back on itself and Grange Yard by Michael Trentham Architects – a tiny 30m² cantilever structure placed on an existing building.

The awards continue to seek out architectural innovation, from extensions on top of, underneath, on the side or back of buildings, to interior insertions, conversions, and garden studios. The shortlisted projects will now be featured in a three-month exhibition alongside the complete longlist of 84 projects that made up the first stage of the awards at NLA's central London galleries at The Building Centre, from January to March 2016. Winners will be announced at an awards reception on Thursday 21 January 2016 a public day on Saturday 27 February will give Londoners wanting to extend their homes the chance of free one-to-one advise sessions with shortlisted and winning architects.

For more information on the entrants, please visit www.architectsdatafile.co.uk and enter reference number 17487.







PARTNERSHIP

Ecobuild supports delivery of Infrastructure Revolution with new ICE partnership and zone for 2016

A new partnership between Ecobuild, the UK's leading event for the construction industry, and the Institution of Civil Engineers (ICE) has been launched ahead of the 2016 Ecobuild conference. The partnership will focus around a major new conference and exhibition centre – The Infrastructure Revolution Hub – which will enable industry to come together and discuss ways it can maximise the opportunity for growth, following Government's commitment to infrastructure as key economic driver.

At the heart of the Hub will be a large conference area which will debate the key issues for the infrastructure sector across the three days of Ecobuild. The Hub will also feature products and services key to this growth sector and the ICE genius networking bar, making it one of the key destinations at Ecobuild for infrastructure professionals looking to make connections with the people that matter.

The infrastructure seminars held in the Infrastructure Revolution Hub will feature the UK's leading contractors and industry experts. With a mix of keynote speakers and panel sessions, the seminars will focus on future challenges, opportunities and global best practice. Discussions will cover three overall themes - 'Creating the infrastructure of the future', 'Small cities', and 'Modelling climate change', including decarbonising urban infrastructure, energy generation, unlocking private capital, bespoke planning, collaboration opportunities, modelling demand of growing populations, and flood risk management and mitigation.

The partnership between ICE and Ecobuild follows Government's announcement of a National Infrastructure Commission – an independent body that will enable longer term, strategic decisions to be made on infrastructure. Government has also committed to investing £100 billion in new infrastructure projects in this parliament. The industry has a crucial part to play and the new Infrastructure Revolution Hub will bring the key players together to drive forward change and innovation.

Leading architect and member of the new National Infrastructure Commission, Sadie Morgan, will also be delivering a session on day two of the Ecobuild 2016 conference.

Nathan Baker, ICE's Director of Engineering Knowledge, said: "The societal benefit of effectively procured and managed infrastructure is immense. The need for increased collaboration, innovation and managing risk has never been higher than today. To create sustainable infrastructure, it is essential that we embrace new methods of working, increase the use of technology and new materials and develop a highly skilled, diverse workforce. The new Hub will help to bring these challenges and opportunities to the fore and encourage positive action to be taken."

Martin Hurn, Ecobuild Event Director commented: "The infrastructure sector is a key driver of construction industry growth with the Government putting a major focus on delivery of infrastructure pipeline projects, and the recent strong output figures boosted by the new Commission pointing to sustained performance. The new Hub will enable the sector to come together in 2016 and have the conversation around the shared agenda for delivery of the Infrastructure Revolution."

Ecobuild 2016 takes place at ExCeL, London from 8th to 10th March 2016. For further information about Ecobuild 2016 please visit www.ecobuild.co.uk.

news bytes

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

> wysiwyg R36 available... Ref: 74131

Historic England's new advice... Ref: 74405

> Infographic: the world's most expensive... Ref: 67734

Foster + Partners shortlisted for Palace of Westminster restoration and renewal

In a statement in the House of Commons, the government announced that Foster + Partners was included in a shortlist of firms who have pre-qualified for the restoration and renewal of the Palace of Westminster.

Lord Foster, Chairman at Foster + Partners said: "We are delighted to have been short-listed for the refurbishment of the Palace of Westminster. The building is an exceptional work of living heritage, a symbol for the United Kingdom and of democracy throughout the world. The opportunity of turning the magnificent 19th century architecture into a functioning 21st century parliament building within a UNESCO heritage site is one of the most exciting challenges in Britain today."





Our range of standard and bespoke canopies and walkways are the ideal solution for maximising any external environment.

We have over 50 years' of experience in creating innovative structural solutions from schools to retail parks and beyond.

Working directly with clients, architects, contractors and specifiers, we are completely flexible in design and can add value to the whole or part of the life-cycle of your project.

Canopies, walkways and sustainable buildings designed around you.

01243 55 44 55 www.fordingbridge.co.uk info@fordingbridge.co.uk





Birmingham's tallest office-led tower receives planning permission

Proposals including Birmingham's tallest office-led building have been unanimously approved by the city's planners.

Architect Broadway Malyan has designed the final phases of the £200 million Beorma Quarter development on behalf of property group Salhia Investments.

The proposals include a 30-storey mixed-use tower with retail space, 155,000 ft² of Grade A office space and 125 apartments, each of which will have a private winter garden with spectacular views across the city.

Also proposed are a seven-storey office building with 30,000 ft² of Grade A space and a 13-storey building with 69 apartments, four work/live units and ground floor retail space. At the heart of the development is to be a new public square called Orwell Place.

The first phase of the scheme – which included the refurbishment of the former Bullring Markets Coldstore building into an office complex and innovation centre as well as the development of a new Adagio hotel – was completed earlier this year.

Broadway Malyan's Birminghambased Director, Neil Rose, said the latest phases reflected Salhia's confidence in the city's long term prospects and the improving economic conditions.

Enabling works were set to commence on site December last year.

Contributors sought for international architecture conference in Leeds

The sixth International Conference on Competitions (ICC), examining experimentation within architecture competitions, will take place at Leeds Beckett University later this year and is calling for research papers to be presented at the prestigious event.

Dr Maria Theodorou, senior lecturer in architecture at Leeds Beckett University and organiser of the conference, explained: "The purpose of ICC 2016 is to offer a window into current interdisciplinary research on the topic of architecture competitions."

Architecture competitions are open calls to compete for the best design or idea in response to a brief presented by a client through an agency, such as the Royal Institute of British Architect (RIBA). Buildings created through a competition process include the Royal Armouries, Wembley Stadium, and the Millennium Bridge in the UK; and, internationally, the Centre Pompidou in Paris and the Sydney Opera House.

Dr Theodorou added: "In recent years we have, alongside the standard process of architecture competitions used for the procurement of buildings, seen, and continue to see, a surge of competitions which do not seek to produce a building or an architecture structure, but aim instead to raise awareness and pinpoint current social, political, technological issues in our cities; these aim to entice experimentation by reformulating and resetting the very terms and conditions within which a problem is posed or arises."

Taking place from 27-29 October at Leeds Beckett University's Rose Bowl, followed by a visit to London, the ICC 2016 conference will include a professional organisations' panel discussion and is supported by RIBA Competitions and the UIA (International Union of Architects).

This year will be the first time that the ICC is held in the UK. As with previous ICC conferences, architecture competitions will be considered as a complex research topic rather than as a mere practical activity in which architects and architecture students take part regularly. The history of competitions, their organisational, legal and conceptual framework, the role of clients and professional organisations, are all aspects which will be put under scrutiny by researchers and practitioners. The specific focus of this year's conference is to frame the various aspects of competitions within the concept of experimentation.

Dr Theordorou said: "We are looking for papers that aim to broaden our understanding of the category of experimentation, with and within architecture competitions, by examining, historically or otherwise, the various types of competitions, the effects of architectural representation 'idioms' deployed, as well as the social, financial and political motivations and impact competition might have or had in the past.

"We aim to cover all aspects of architectural/design competitions' experimentation and merge in the ICC2016 UK both a practice-oriented and theoretical approach to the subject by opening up this call for papers to independent actors/various entities as well as to professionals and scholars in the field. During the conference all voices can be heard and debated."

To submit an abstract, please see www.leedsbeckett.ac.uk/icc2016/ for details. The closing date is 3 May and all abstracts will be printed and published online.



design | construct | perform

08-10 MARCH 2016 EXCEL LONDON

Evolving with the building industry Here's what's NEW for 2016

New show layout

 (\land)

- 1,000s of innovations from over 800 exhibitors
- The latest thinking at the conference, covering hot topics - Homes, Architecture & Next Generation
- CPD accredited learning hubs -Building Performance, Design, Energy, Infrastructure Revolution, Digital Building and #BuildCircular
- Ground breaking interactive features and product showcases

Register for your FREE ticket: www.ecobuild.co.uk

Co-located with resource



EVENT

Creation from catastrophe – How architecture rebuilds communities

27 January-24 April – The Architecture Gallery, RIBA

Destruction and devastation present unique opportunities to radically rethink our environment. Creation from Catastrophe – how Architecture rebuilds Communities, sponsored by Ruskin Air Management, explores the varying ways that cities and communities have been re-imagined in the aftermath of natural or man-made disasters. Creation from Catastrophe poses questions about the fragility of architecture, our relationship to nature, and the power of architects to instigate change.

Through an eclectic array of drawings, photographs, film, books and models, the exhibition asks whether we are facing a paradigm shift in the way that cities and communities recover from destruction – from top down planning to a ground up approach. Original material will be brought to the UK for the first time, from architects working across the world, including Pakistan, Japan, Chile, Portugal and Nepal.

Starting with 1666 London, the exhibition takes the viewer on a journey through 18th century Lisbon, 19th century Chicago, 20th century Skopje, ending up in current day Nepal, Nigeria, Japan, Chile, Pakistan and USA. The exhibition will feature ten projects. Key historical works from the RIBA Collection will be on display for the first time, including the five original plans for rebuilding London after the Great Fire of London, which has its 350th anniversary in 2016. The exhibition will weave a narrative about the shift from a tabula rasa approach (blank slate) created by a sole author, to a more collaborative way of working that relies on local expertise, materials and community spirit. The latter approach inevitably results in an altered role for architectural authorship with architects acting as community facilitators, educators, builders and designers.



Ideas for rebuilding Hoboken, New Jersey after Hurrican Sandy © OMA

A series of talks and events by architects featured in the exhibition will take place throughout spring next year, including Yasmeen Lari, Pakistan Heritage Foundation; Kunlé Adeyemi, NLE and Henk Ovink, OMA and Special Envoy for International Water Affairs for the Kingdom of the Netherlands.

Curated by freelance curator Jes Fernie with assistance from Stephanie Sutton, Curatorial Programmes Coordinator at RIBA, the exhibition is designed by Aberrant Architecture, a young, London-based practice run by David Chambers and Kevin Haley. The exhibition design boldly reflects the changing approach to rethinking cities after a disaster, through use of a Perspex grid structure and cork, and includes a viewing platform from which visitors can assume an elevated view of the material on show.



Sir Christopher Wren's Plan for Rebuilding the City of London after the Great Fire of 1666 © RIBA Collections.jpg



Women's Centre, Darya Khan, Pakistan, designed by Yasmeen Lari © Heritage Foundation of Pakistan.jpg



01384 296611 | email: info@primeoak.co.uk | www.primeoak.co.uk

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

enq.104

LEVATO MONO porcelain paver system

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

Bristol Airport East Terminal extension



- 20mm porcelain pavers 40x80 45x90 60x60 75x75 30x120 40x120 60x120
- Floating floor' installation over single ply membranes
- Eternal product zero maintenance required offering massive over-life savings
- Highly abrasion and stain resistant
- Highly slip resistant ; R11 and achieved up to +65 wet in the BS pendulum test
- Lightweight 45kgs per m²
- High load bearing and impact resistance
- Timber & stone effects ; 40+ finishes available
- Ideal for balconies, roof terraces and piazzas, for both commercial & residential use
- Completely non porousFire & frost proof
- Height-adjustable support from 9mm
- Height-adjustable support from 9mm up to 550mm



enq.105

t: 0845 2700 696 e: info@thedecktileco.co.uk

Stanton Williams shortlisted for high profile Swiss laboratory

Stanton Williams, the London-based multi-award winning architectural design practice, is the only UK practice to be shortlisted in an international design competition to create a new physics building for ETH Zurich, one of the leading European universities for technology and the natural sciences.

The competition calls for design proposals for a new 15,000m² laboratory and research building for the University's Hönggerberg campus located just outside Zurich. The campus is being developed as a masterplan and the new building will be located on the north west of the site.

Providing specialist facilities for work at the forefront of physics research, the building will include laboratories, teaching spaces and offices. In addition, the competition requested proposals for a potential second building adjacent to the physics building, which could potentially be part of a phased construction programme. Stanton Williams is working with Swiss architecture practice Stähelin Architekten and its team includes S+B Baumanagement AG Olten, ZPF Ingenieure AG



and Jobst Willers Engineering AG. Among the other shortlisted teams are architecture practices: mlzd Architekten, Harry Gugger Studio Ltd, Boltshauser Architekten AG, EM2N.

The winning scheme will be announced in June 2016.

bptw secures approval for final phases of Rectory Park regeneration

bptw partnership has secured planning approval for the latest stages of the Rectory Park Estate regeneration in Northolt, Ealing. Phases 3 and 4, which form part of the large scale regeneration by Network Housing, will see the delivery of 289 new homes and a community hub.

bptw partnership, the architecture practice behind the competition winning masterplan and ongoing delivery, have created a modern mixed-tenure scheme with a direct design focus on landscaping and open-spaces to compliment the estate's proximity to the neighbouring Northolt & Greenford Countryside Park.

Chris Bath, Associate at bptw, commented: "Our design has been centred around creating a vibrant residential neighbourhood with high quality homes and attractive community facilities at the heart of the regeneration. Our level of focus on the detail of the design coupled with an inclusive approach to community consultation has been particularly welcomed by residents. The provision of well-designed, distinguishable building entrances, elements such as saw tooth house roofs, balcony cladding panels, and variety in brickwork colours and textures have helped to create a unique local character. We have worked closely with Landscape Architects Tyrens to vastly improve accessibility throughout the estate and place a strong focus on the design



of the public realm which has been crucial to the place-making strategy. We have been involved in the project from the outset, working closely with the existing residents, so are delighted that Phases 3&4 have been approved with ongoing support from Ealing Council."

The 449 home redevelopment has so far seen 160 homes completed, with feedback from residents heavily informing the latest phases of the scheme. The new mixed tenure homes will be delivered in a combination of 1-4 bedroom properties designed to achieve Code for Sustainable Homes level 4. Now being marketed as Mandeville Place, construction on Phases 3 and 4 is expected to commence early in 2016.



Garden Rooms, Orangeries, Windows & Bi-Folds Call: 01384 279933 - Email: info@montpelierjoinery.com - Visit: www.montpelierjoinery.com

enq.106



BOOK

Generative Design: Form-finding techniques in achitecture

Asterios Agkathidis – Available February

Generative Design by Asterios Agkathidis and published by Laurence King is an inspirational guide to generating form, one of the most fundamental and rapidly evolving aspects of architectural education and practice.

In recent years, computational tools have introduced innovative form-finding techniques, revolutionizing architectural design and production. These offer new design paths to architects by breaking with predictable relationships between form and representation in favour of computationally generated complexities, thus enabling the development of new topologies. This attractive, pocket-sized book uses 12 different architectural projects to explore how generative design processes can integrate digital as well as physical design tools and techniques to produce innovative forms that cohere with structural and material principles, performance and context.

Illustrated with drawings, computer images and models, this stimulating, accessible handbook of ideas provides a guide for students as well as inspiration for practising architects.



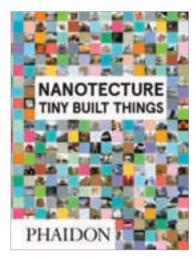
BOOK

Nanotecture: Tiny Built Things

Rebecca Roke – Available March

Nanotecture: Tiny Built Things, published by Phaidon, brings together 300 small works of architecture from the last decade.

It features pavilions, installations, sheds, cabins and tree houses, homes for dogs, cats and bees, and portable inflatable and flat-packed structures, each accompanied by a colour image and short text.



Nanotecture encompasses playful works from Paul Smith's shed for the London Design Festival 2014 to Sou Fujimoto's Bränden Bus Stop, as well as projects that respond to challenges of space, ecology and human relief.

These include the bespoke forested rooms of the eco-tourist Tree Hotel complex in Sweden and Winfried Baumann's Instant Housing for disaster situations and the homeless.

The book illustrates how internationally established and emerging architects embrace the freedom to experiment with materials and design concepts when working on a small scale.

Projects that address social challenges include the GRID housing system (Carter Williamson Architects), which was devised following the Banda Aceh tsunami.

The flat-packed design can be transported to disaster areas and erected within four hours. Other transportable structures such as Wheelly (ZO_loft Architecture and Design) and I-Gloobox (Georgi Djongarski) provide assistance to the urban homeless, confronting the basic human need for shelter and security.

A growing awareness of the ecological impact of the construction industry is a consideration for other projects in the book.

With the density of urban living increasing throughout the world, projects such as the Tree Hotel complex in Sweden attempt to impact minimally on their site and allow guests to engage with the natural environment as much as possible.

Greater attention is often focused on how materials are used in small-scale works of architecture, where the space is occupied more intimately.

Each project in Nanotecture is coded according to 66 predominant construction materials, from plywood and recently developed composites such as printed concrete and bio-plastics, to hula hoops and other repurposed objects. The book is organised into five chapters of progressively larger works: micro, mini, midi, macro and maxi.

As flexible as your imagination

Designed and manufactured in Sweden, a Gartec Platform Lift is the most aesthetically and technically advanced available today.

and Home Lifts

RIBA Certified iCPD. delivered at your own

offices - now booking!

Look out





Call 01296 397100 or visit www.gartec.com



Leading the Platform Lift Industry

NEW Compact-X **Sliding Doo** ystem

CRL COMPACT-X is a compact sliding solution for frameless glass panels, combining latest technology with an attractive minimalist design. The system is quick and easy to install with double soft close.

- Narrow minimum door width of 635mm
- · Suitable for ceiling, glass, and wall mounted applications.
- Vertical adjustment
- 70kg weight limit
- · Available in Brushed Nickel and Satin Anodised finishes
- Suitable for glass panels of 8mm, 8.76mm, 10mm, and 10.76mm in thickness,
- Available in 2 and 3 metre kits, and 3m kit with fixed panel
- Option to install Bi Parting doors by purchasing extra set of clamps.



enq.107

international focus

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





MALL OF SCANDINAVIA, SWEDEN BENOY

Benoy is proud to announce the opening of its latest project, Mall of Scandinavia. This landmark scheme, located in the Stockholm district of Solna, is the largest retail development in Scandinavia with 101,000m² of retail and leisure accommodation and a varied mixed-use component of offices, residential apartments and rooftop 'Town Houses'. Benoy's design of the building and commercial planning, in conjunction with local Swedish architects Bau, is complemented by the Interior Design from Swedish agency Wingårdhs and Paris-based Saguez and Partners.



TRANSFER TERMINAL, ARNHEM CENTRAL STATION, NETHERLANDS UNSTUDIO

The new Transfer Terminal at Arnhem Central Station in the Netherlands is the result of an ambitious 20-year project – masterplanned by UNStudio – to redevelop the wider station area; the largest post-war development in Arnhem. The 21,750m² terminal features a dramatic twisting structural roof geometry, which enables column-free spans of up to 60m in the transfer hall. Taking references from the continuous inside/outside surface of a Klein Bottle, UNStudio aimed to blur distinctions between the inside and outside of the terminal by continuing the urban landscape into the interior of the transfer hall.

Ref: 5647 I

Ref: 60037



20 HECTARE URBAN REGENERATION PROJECT, TOKYO, JAPAN CONRAN AND PARTNERS

Conran and Partners has completed a 20 hectare urban regeneration project, Tokyo's single largest development in the last 10 years. The scheme, located on the south-west edge of the city alongside the Tama River, comprises a total of 400,000m² of retail, office, leisure and residential building, as well as a new city park. The first phase of the project, launched in March 2011, was made up of 260,000m² of mixed use development including two department stores, a retail galleria, an office building, three residential towers ranging from 28 to 40 storeys, as well as two low rise residential buildings, providing a total of 1,000 apartments.

Ref: 76805

Ref: 48699



OFFICE CENTRAL, ISTANBUL, TURKEY ALPER DERINBOGAZ

Office Central, designed by Alper Derinbogaz, is a mixed use complex that generates suggestions of a nature relevant to public on a master plan scale. Interpreting the concept of public space based on urban spaces, Office Central exhibits an outward-oriented attitude in contrast to the inward-oriented trade centers of today's buildings. The proposed program consists of offices, residences, hotel, retail facilities and a cultural centre. The architectural approach of the scheme attempts to merge the proposed environment with the existing urban texture in relation to its scale and relative street network.



SZCZECIN SUMMER THEATRE, KASPROWICZA PARK, POLAND FLANAGAN LAWRENCE

Flanagan Lawrence has designed an acoustically-optimised outdoor performance space for Szczecin Summer Theatre. The brief called for design proposals to maximise the flexibility of the 1976-designed theatre for a variety of performances and to add a new roof to enclose both the stage and the audience. The underside of the roof covering the stage and front of auditorium will enhance and project the acoustic for orchestral events. This is achieved by a roof which is structurally-independent of the existing arch, and is formed by a curved truss which serves as the edge beam to a single cable net structure.

Ref: 47519

'It has been incredibly rewarding for us as architects to see the delight on the pupil's faces'

Max de Rosee, director of De Rosee Sa



Architects bring Roald Dahl's Underground Village to life in Buckinghamshire School

Much-loved children's author Roald Dahl was the inspiration for a new dining hall and after school facility in Buckinghamshire's Prestwood Infant School.

The author – who lived locally – had already apparently based the head teacher Miss Trunchbull in his popular book Matilda on a former real-life head teacher at the school.

Architects De Rosee Sa and PMR turned to the pages of Dahl's books again for the new dining hall – and this time drew from the story of Fantastic Mr Fox. The cunning character inspired them by declaring he intended to make "A little underground village, with streets and houses on each side – separate houses for badgers and moles and rabbits and weasels and foxes."

The £158,000 colourful new building is called Little Hall and will also be rented out as a facility for the local community, bringing in much-needed revenue for the school.

It has playful features such as a small one-to-one teaching space and two WC's painted to depict a fox's den, a bush with berries and lastly Mr Fox's tail. A large plywood bookcase runs the full length of the front of the building with window seats for reading. Each class of pupils in the building is named after an animal and matched with a window or doorway, to signify their part in the 'underground village.'

The dining hall contains a kitchenette and a servery for the provision of hot school meals for up to 96 children, as well as refreshment facilities for the after-school club. The project itself was as a result of the government's Hot Dinners initiative.

Little Hall has six skylights allowing plenty of natural daylight as well as sustainable internal plywood and concrete flooring. Contractor for the project was RIR Construction Limited.

Head Teacher Nicola Raher said: "We are absolutely delighted with our new Little Hall, there was much excitement amongst the children on the first day of term when they learnt they were going to have their lunch in the new building."

Max de Rosee, director of De Rosee Sa said he enjoyed the reaction of the pupils when they went to explore their new facility: "It has been incredibly rewarding for us as architects to see the delight on the pupil's faces. Design has great potential to inspire and it is our job as architects to push that agenda."

FIRERETARDANTUK FIRE retardant for WOOD -IR PROF Eco Friendly **Clear & Odourless** Water Based Non Toxic No Solvents ٠ Apply with Brush or Spray Euro-class B-s1-d0 Internal or External Use HR Prof Also tested to BS 476-6 & BS 476 part 7 Classification Reports & Certificates Pine, Spruce Scottish & Siberian Larch, Western Red Cedar, Oak 1 0800 7833 228 L sales @ fireretardant.k.com W www.frenetardant.k.com

adf architects datafile



REGISTER ONLINE FOR...



In-print magazine • Digital magazine Newsletter • Daily digests

www.architectsdatafile.co.uk

enq.109

cpd focus

continuing professional development

Maintaining and improving professional competence, skills, abilities and knowledge

SOLID SURFACES CPD SEMINAR



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

0113 201 2240 www.cdukltd.co.uk enq. 110

TWO NEW RIBA ASSESSED CPD SEMINARS FROM COMAR



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

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

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

020 685 9685 www.comar-alu.co.uk eng. 113

TRIDONIC LAUNCHES CIBSE CERTIFIED CPD PROGRAMME



Tridonic launches CIBSE certified CPD programme for lighting technology, its uses and associated legislation. Each module will help specifiers and architects understand developments in lighting technology, their impact on energy saving, staff performance and patient wellbeing. The modules are: Emergency lighting; LED Module technology; LED Driver technology; Human Centric lighting; Digital Lighting control; LED Lifetime and Lumen maintenance. For more information or to book attendance at a CPD session, please contact Tridonic.

07970 816591 simon.blazey@tridonic.com

URBAN FRONT NEW WORKSHOP TOUR 2015



The Workshop Tour from **Urban Front** will run for just over an hour and incorporate the following Learning Outcomes:

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

01494 778787 www.urbanfront.co.uk

PREVENTING STRUCTURAL DAMAGE BY ELIMINATING WATER INGRESS THROUGH SERVICE PENETRATION



Interflow has launched a CIBSE accredited CPD programme highlighting the importance of protecting below ground structures against water from the ground. The programme illustrates how various service duct sealing products aid compliance with BS 8102 - code of practice. As the UK distributor for DOYMA, FRANK, HKD and Konex, Interflow combines in-depth knowledge with precision German engineering. The CPD programme focuses on how this combination helps to develop strategies for dealing with groundwater and earth-borne gasses.

01952 510050 sales@interflow.co.uk

JAMES LATHAM OFFERS TWO RIBA APPROVED CPDS



James Latham offers two CPD seminars. Both been developed in conjunction with the RIBA and offer a unique opportunity for all construction and design professionals to gain up-to-date knowledge and enhance personal proficiency as well as earn CPD points from the UK's largest independent distributor of sheet material and timber products. The performance door blanks CPD focuses on five key learning aims and addresses the concept and significance of performance door blanks. The Acrylic Based Solid Surface CPD seminar provides a greater understanding of this versatile material

0116 257 3415 marketing@lathams.co.uk eng. 115

UNDERSTANDING U.K BUILDING REGULATIONS RELATING TO RESIDENTIAL VENTILATION AND VENTILATION WITH HEAT RECOVERY



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

The course will cover the following topics:

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

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

01494 525252 www.airflow.com enq. 116

editor's product focus

I. CREAGH CONCRETE

Spantherm, a pre insulated concrete ground floor system, tried and tested and already being used in 80 per cent of new homes across the Netherlands, delivers the benefits of factory prefabrication to the challenging world of groundworks. The innovative Spantherm system has been brought to the UK by Creagh Concrete, with thousands of properties already benefitting from the factory insulated precast units' impressive specifications. Spantherm is suitable for the residential market and some commercial projects, and carries BBA accreditation as well as being CE marked. The composite slab combines structural concrete and high performance Expanded Polystyrene (EPS) insulation to provide a superior thermfloor. enq. 117





3. HAMBLESIDE DANELAW

2. GEC ANDERSON LIMITED

GEC Anderson Limited, has released details of an exciting new 'wet zone' concept. Available now, the new wet zone option enables specifiers to include a pressed recess anywhere within the stainless steel worktop area. Typically, the recess would be formed around sink bowl(s) but it can also be used to create lowered areas for other applications. For example, to locate chopping boards or to act as a general catchment area. The pressed recess detail is 3mm deep and can be formed in any size and position. It has a variable corner radius with a minimum radius of 10mm. Managing Director Martin Tye, comments: "This is an exciting new development that enables customers to specify wet zones, of any shape and size." enq. 118

Fast becoming the specification choice of a growing number of Housing Associations, Hambleside Danelaw's Dryseal is the unique component based fibreglass or glass reinforced polyester (GRP) roofing system. Unlike 'wet lay' systems, the Dryseal system is supplied pre-cured and ready to install. All Dryseal GRP trims and membrane are manufactured under strict BS EN ISO 9001 and 14001 quality and environmental controls and then supplied via the company's network of fully trained Approved Contractors for installation on site. Dryseal is one of the most advanced GRP roofing systems available and comes with an insured guarantee which covers the water tightness of the system for 20 years, with an expected life of 30 years. enq. 119





4. Q-RAILING

Ahead of the government's requirements for all submissions for public building contracts to use Building Information Modelling (BIM), Q-railing's Easy Glass® systems are now available as BIM objects. They can be downloaded from the Q-railing website. Before a particular building component can be included in a BIM, it has to be modelled as a BIM object. Q-railing has done that for its Easy Glass® Slim, Easy Glass® Pro and Easy Glass® Max glass railing systems. Other systems will follow. The BIM objects are compatible with the most common modelling software, Revit and ArchiCAD, The BIM objects hold 3D modelling information, drawings and important product data.

enq. 120

5. ECOSCAPE UK

enq. 121

Made up of carefully selected recycled plastics and reclaimed hard and softwood fibres, Ecoscape UK's composite decking ranges are a sustainable alternative to timber decking that pulls the positives from both wood and plastic while eliminating the drawbacks of 100 per cent timber or PVC products. Ecoscape composite decking boards reach the highest accreditation for anti-slip in BS79.76 testing while also being splinter free. The boards are also virtually maintenance free, requiring just a periodical clean - ideal for high traffic or hard to reach areas. The innovative makeup of the boards also provide unparalleled strength and durability and it is 100 per cent recyclable. Ecoscape provide an extensive 20-year guarantee and UK wide delivery.





6.THE DECK TILE CO

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

enq. 122

7. SENSORBILITY LTD

Feature bathroom lighting is becoming more desirable, but until now the choices of switching have been severely limited. Sensorbility has therefore developed the new Bathroom Switch controller, with dimmer and timer variants, allowing bathroom designers far more flexibility when it comes to lighting design and operation within bathrooms. The variations of the new controller include simple on/off switching, ramp-up dimming, ramp-down switch-off and time delay switch-off. It can be wired to the company's Bathroom Switch Sensor Pads, which can be placed behind most materials such as ceramic tiles, wood, plastic, glass, and even metals.

enq. 123



8. MEZZANINE FLOOR ENGINEERING LTD

Glass partitioning offers commercial working environments an unparalleled sense of space and privacy whilst creating clean modern interior architecture. MFE Glass Partitioning, part of Mezzanine Floor Engineering Ltd, offers clients a diverse range of partitioning solutions. It specialises in the application of glass products in office environments to cater for its client's needs. With over 20 years' experience in the interiors sector MFE has an edge over the competitors by being able to pass on knowledge and expertise. The company's service is based upon performance from order to after sales care as it endeavours to provide clients the best possible experience.

enq. 124

9. RUSKIN AIR MANAGEMENT

Ruskin Air Management's Airolution service provides complete natural ventilation solutions for commercial buildings including system design, supply of equipment, controls, installation and commissioning.

Airolution is different to anything currently available on the market because every component of the system is tested together to ensure the final system meets the design brief and aspirations of the building owner and operator. For more information, please visit the company's website.

enq. 125

Altro Floors announce acquisition of Debolon in Germany



Richard Kahn, chief executive of Altro, has announced to its staff, customers and suppliers, the acquisition of Debolon, manufacturer of premium vinyl flooring based in Dessau, Germany. "This acquisition is fully aligned to our Company Purpose, our core values and fully supports our Company vision and strategy. Both Altro and Debolon have very similar family cultures where its staff, its customers and its suppliers are a key focus. Sustainability, innovation, quality and customer relationships are central ideals in both businesses. Coming together in Germany will mean that we can offer an even wider product portfolio and choices to our customers, incorporating higher design flooring and hygienic walling systems. With increased levels of support and wider availability of local stock, we believe this will provide an enhanced customer experience." Altro is a UK based manufacturing company, selling premium flooring and hygienic walling systems for the construction and transport markets globally. They are family owned and run since 1919. Debolon is a German based manufacturing company selling premium vinyl flooring globally to the construction market. They are family owned and were founded in 1929.

01462 489516 www.altro.co.uk

Northcot Brick project wins building award



Northcot Brick's flagship building project, the Whitworth, in Manchester, has won the highest accolade in the 2015 Brick Development Association Brick Awards. The £15 million redevelopment was the outright winner of the 'Supreme Award' as well as

the 'Best Public and Education Building'. Northcot Brick, a manufacturer known for its advanced colour-matching expertise and traditional bench-mould techniques, created a bespoke 'Whitworth Blend' which reflects the original dark red bricks of the Edwardian building. Michael Brown, managing director of Northcot Brick said: "We are delighted to be associated with such a prestigious project, which is widely recognised as a masterpiece of modern architecture."

01386700551 www.northcotbrick.co.uk

Vandersanden wins prestigious export award



Belgian brick and pavers manufacturer, Vandersanden Group, has been awarded the inaugural Voka Limburg prize for export. The company was recently crowned winner at a gala dinner hosted during International Entrepreneurship week in Belgium. The export award

aims to recognise all export industry sectors, from services to manufacturing and encourage other Belgian companies to participate in international business development and markets. Wilfried Lenaers, director of sales & marketing commented: "It's a great honour to be identified as a leading manufacturing and exporting company by Voka. Our focus has been brand awareness, building long-term relationships, creating a tailored organisation and constantly developing our teams."

01954 268075 sales@hoskinsbrick.com



eng.126

Kingspan sets responsible sourcing benchmark



As part of its forward thinking approach to responsible sourcing, Kingspan Insulation was one of the earliest adopters of the BES 6001: Responsible Sourcing of Construction Products standard. Now the firm has gone even further, becoming the first insulation manufacturer

to have its products certified as 'Excellent' under BES 6001. The rigorous standard, developed by BRE Global, provides a detailed framework of the processes which must be addressed to ensure responsible sourcing of construction materials. The certification provides clear, independent assurance that Kingspan Insulation products have been produced with constituent materials which meet the highest levels of responsible sourcing practice.

01544 387 384 www.kingspaninsulation.co.uk/sustainability

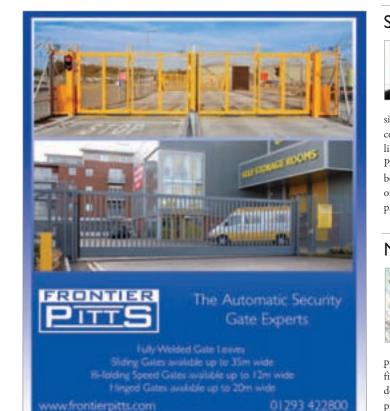
Investors in People Silver Award for Polypipe



For its continued dedication to managing performance, delivering continued improvement and creating sustainable success, Investors in People awarded Polypipe Terrain, a leading UK plastic piping manufacturer, with its sought after Silver Award. To achieve the Investors in People Silver

accreditation, Polypipe Terrain had to demonstrate best practice across areas outlined in the Investors in People framework. The framework focusses on 9 key indicators, with Polypipe Terrain required to consistently outperform its peers when measured against the criteria. Lee Dawes, finance director at Polypipe Terrain, said: "To be awarded the silver award was a brilliant achievement and is a testament to the hard work of everyone in the team."

01622 795200 www.polypipe.com/terrain



Andy Jones joins Synseal

newly-created position of Group Sales & Marketing Director, reporting to Chief Executive David Leng. A prominent and well-known figure in the fenestration industry, Andy needs little introduction having enjoyed 13 successful years at Edgetech UK, most recently in the role of Managing Director. In 2014, Andy brought the whole industry together to discuss the thought-provoking "Triple Glazing Question",

Andy Jones has joined the Synseal board of Directors in a

a challenging debate. "I've enjoyed every minute of my time at Edgetech," says Andy. "However, I am excited to be joining Synseal and look forward to getting stuck in and meeting my customers and new colleagues."

01623 443200 www.synseal.com

Silva backs campaign to wipe out illegal timber



Silva Timber Products has become the first company in its field to pledge its backing for a campaign demanding tougher action against the trade in illegal and unsustainable timber. The firm has joined WWF-UK's Forest Campaign, which aims to put pressure on governments and the EU. Silva joins more than 40

British companies which have signed a three-point pledge to: Buy timber and timber products from sustainable sources by 2020; Support the call for the EU to close loopholes in current timber regulations and therefore close the market to illegal timber; Support the call for the British government and the EU to move to a market in sustainable timber and timber products by 2020. Managing director Nick Taylor (pictured) said: "This is an amazing campaign to be part of".

01514 953111 www.silvatimber.co.uk

Saracen appoints Bethan Davies



Saracen Interiors has appointed Bethan Davies as project manager as the dedicated workplace consultant continues to grow its client base across the UK. Bethan has worked for a range of international consultancies on a series of projects, including domestic and commercial interior design commis-

sions. A qualified quantity surveyor, as well as a skilled designer and project co-ordinator, she has experience of costings and cost analysis, planning, supplier liaison and purchasing. Joint Managing Director of Saracen Interiors, Michael Page is pleased to welcome Bethan to the team: "It's great to have Bethan on board. She's already made an impact, bolstering the support that we are able to offer existing clients and playing a key role in our ongoing business development plans and activity." Bethan is delighted to be joining Saracen.

Norbord plant enjoys safety star recertification



Norbord's South Molton plant has been awarded unconditional recertification of its Norbord Safety Star - only the second time a mill has received such a high level of safety certification. Maria Collett, H&S manager, said: "The auditors were very positive regarding the improvements to our site, our EHS

programmes and our safety culture since they last visited in May 2012. Since our first Safety Star audit, we have improved guarding in the Cabedecor/Lamination department and enhanced many of our other safety practices." The plant is now promoting the initiatives as best practice to Norbord's other three mills - in Cowie and Inverness in Scotland and Genk in Belgium. Maria added: "It's a continuous process and we are always looking for ways to improve".



Trash Talk: How to build a huge industrial plant and have people thank you for it

A beautiful industrial building? An environmentally friendly power station? A waste facility wildly popular with visitors? Check, check, check, with Suez's streamlined Suffolk Energy-from-Waste plant. Michael Willoughby reports

espite the many environmental benefits of EfW plants, they often face local opposition and get dubbed "incinerators." As recently as September, a 400,000 tonne Veolia scheme in Hertfordshire was refused planning by the Communities Department following a threeyear battle.

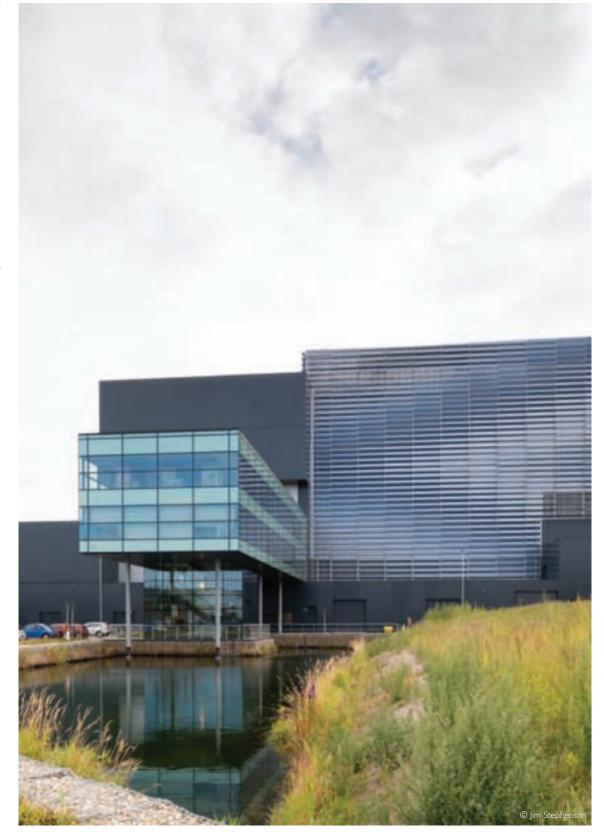
So, in planning for a plant overlooking Suffolk's Gipping Valley, an area of nature reserves and waterways, Suez

(formerly SITA) could be expected to make an effort. Instead, it pulled out all the stops, creating a fully-landscaped, BREEAM Excellent-designed, CABE accolade-laden gem of a building.

The £180 million plant in question burns around 269,000 tonnes of black bin (residual) waste annually to produce power for 30,000 homes – approximately the size of Lowestoft, the county's second-largest town. And, as well as *Continued overleaf...*



'Office workers have stupendous views over the Gipping Valley, while workers inside the boiler room are also treated to more of the outside with large ETFE pillows sitting in the roof to let in as much of the light as possible'





providing power, metal which survives the intense heat of the process is recycled. The resulting "ash" or bottom waste is used as a building aggregate.

Finally, heat from the energy-generation process could be used to turn Suffolk into one of the UK's most important tomato-growing regions. All this is a win for the county, as residual waste would previously have ended up in landfill.

Finding a balance

They asked multi-award-winning architect, GRIMSHAW, to create a balance between "industry, nature and community."

The team followed two main principles when designing the plant to reduce volume and to hide what was left in plain site. So they created larger, distinct volumes in order to reduce the overall scale of the plant and to improve architectural appearance.

Secondly, the bulk of the building was hidden more traditionally by the use of both landscaping and – radically – helping the vast boiler hall structure disappear into the countryside and its sky.

A dual-layer cladding system with a semi translucent inner skin softens its appearance against the sky, and a bespoke horizontal louvre system on the outside alters the appearance of the building depending on angle of view and time of day. The design also draws upon the architecturalindustrial heritage of the area and the image from Paper Mill Lane shows how the structure glimmers in the sky.

When the plant is seen in all its glory, those approaching find a mass set back from the entry point and taking advantage of the new landscaping. Immediately visible is the glimmering boiler hall and the glazed office accommodation, projected and suspended, above the forecourt to provide safe segregation of pedestrians and vehicles.

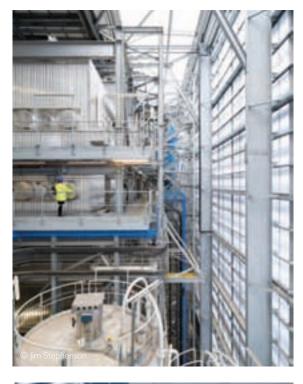
These elements are arranged to create an open front and a closed back, hiding the less-desirable parts of the energy facility.

Office workers have stupendous views over the Gipping Valley, while workers inside the boiler room are also treated to more of the outside with large ETFE pillows sitting in the roof to let in as much of the light as possible.

Up in flames

But enough about humans, what is the journey of a piece of rubbish to its fiery (useful) end. Suffolk operates a three-level system whereby recyclable, organic and residual waste are separated. It is the latter which arrives in large trucks which are immediately weighed on a special bridge. The lorries come into the "tipping hall," and reverse-tip their truckloads into a hopper 37x15x26m. The trucks continue around the one-way system back to the bridge to compare their before and after weight. The bridge method allows factors like fuel-weight to be overcome.

Meanwhile, the trash in the pit is mixed around by a vast grabber, just like the one featured in Toy Story 3. The claw moves the future fuel around so that it is sufficiently aerated to reach the required 850-1,000° C as it is burnt on a grate. *Continued overleaf...*









That temperature helps to keep emissions from the factory down to a required level (important even though a sophisticated emissions control is in place.) The hot gases from the furnace heat water into steam to drive the turbine – which generates electricity headed for the transformer in Stowmarket to be distributed over the National Grid.

The leftover "bottom ash", which is more like clinker, is taken on conveyor belts to be sorted and the final goodness is extracted from it: ferrous metals are removed with a magnet and taken for recycling. The remaining solid material is graded from pebble through to rock size and used as aggregate by local building companies. Even though the plant only opened in the autumn, the material sits under a road serving a new housing development in nearby Stowmarket. The finer (fly) ash is converted into aggregate for low-carbon building blocks.

The water which turned the turbines, meanwhile, is turned back into water in two condensers and goes through the process repeatedly. New water is drawn from the three ponds sited at the front of the project, which also adds to the environmental quality of the landscape.

As well as the tree-planting and ponds on the new estate is a 3/4 acre wild flower meadow, which will get up to full impact in a couple of years' time. Also to come is the plant's heat-providing capacity. At the moment, the heat taken out of the steam as it is condensed is not used for anything. However, the plant is CHP-enabled, so when a suitable project comes along, it can become fully efficient. Such sharing of energy is common in Europe and gaining traction in bigger cities. But, heat being hard to store, a project and a large one, would need to be nearby – and there's not a whole lot else of sufficient size going on in the region.

On the other hand, Suez is working with local agricultural businesses to plan a vast complex of tomato greenhouses. If successful, the £30 million project would cover 50 acres and supply 7,500 tonnes of the "apple of love" to hungry UK markets.

Suez is partnered with the County Council and The Greenery, a regional distributor of salad produce. But, final go-ahead, along with 200 jobs, rests with the growers' ability to fund the project.

"We have played our part, but we are not horticulturists!" says a spokesperson for Suez.

In addition to this, SITA Trust provides funding for community and environmental improvement projects within a three-mile radius of the site. So far 11 projects have received £240,000.





'As well as the tree-planting and ponds on the new estate is a 3/4 acre wild flower meadow, which will get up to full impact in a couple of years' time'

An unlikely attraction

Visitors to the plant, who consist mainly of school children, but include curious adults among them, are handsomely rewarded for their efforts.

The visitor's centre, designed by Cutty Sark Visitors' Centre-designing practice, DesignMap, has already welcomed 2,000 through the doors, possibly keen to learn about EfW and recycling and to play games that put them in charge of matching a supply of electricity to demand, sure. But I expect most want to go on a tour of the plant, right through the centre, and look right down into the flames of the boiler through a special viewing door.

With regard to its sustainability accreditation, the team is waiting for approval of its BREAAM Excellent rating. However, its architectural design quality is not in doubt.

In 2010, design watchdog, CABE stated: ""We commend the client for demonstrating their commitment to high quality design in industrial architecture in the scheme presented. The design team's approach to site organisation and built form is exemplary, not least in its effort to ensure the development is specific to its brief and its context.

"We welcome the discipline and honesty in the approach to the form, massing and expression of this facility. The design is both unique to the brief and specific to the place. We welcome the efforts to express the functionality of the building and give a sense of the processes within."

A beautiful industrial building? An environmentally friendly energy plant? A power station popular with visitors?

The project proves that industrial buildings can, indeed, be memorable and that people want to see (and read about) what goes on inside them.

Project details

Planning applied for: 2008

Facility opened: December 2014

Capacity: 269,000 tonnes of waste a year from Suffolk

households and some businesses

Architect: GRIMSHAW

Cost of the building: £180 million

Main contractor: CNIM/Lagan

Visitor centre designer: DesignMap



Polyflor gets a piece of the action



Decorative Polysafe safety floor from UK vinyl manufacturer **Polyflor** was installed at Royal Bournemouth Hospital's new Jigsaw Building where the Oncology, Haematology and Women's Health departments are now based. 2,600m² of

Polysafe Wood fx PUR and Polysafe Modena PUR sheet vinyl safety flooring was installed on the £5.7 million project. The design-led safety flooring with built-in slip resistance was fitted throughout circulation areas, corridors, treatment rooms and reception areas. The use of the high clarity timber effect Polysafe Wood fx in American Oak and neutral toned Polysafe Modena in Gypsum with its micro-granite decoration helped provide a homely and less clinical environment.

Architects Datafile website



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

0161 767 1111 www.polyflor.com

enq.136 www.architectsdatafile.co.uk

Yeoman Shield New Guardian Handrails prove a hit at Bradford Royal Infirmary



Bradford Royal Infirmary became the first to take delivery of 2 of **Yeoman Shield's** new Handrail products for the ENT Out Patients Clinic and Service Corridor. The Hospital were finding that the walls in the service corridor were starting to become damaged and marked from impact caused by carts and trolleys. As part of the service corridor is sloped it was decided that both a hand and protection rail would be required in this instance. Yeoman Shield were able to offer a solution with their New Guardian Twin Handrail consisting of an upper 50mm dia. Handrail (available in a PVCu, Timber or Stainless Steel option) and a lower protection rail (either 200mm or 125mm deep) mounted on a solid MDF or Aluminium core. The system offers the support of a handrail coupled with the protection rail which by sitting slightly forward of the upper rail, not only protects the walls from impact from wheeled equipment and passing footfall but will protect the handrail also, saving valuable time and money on redecoration and replacement costs. The New Guardian 50mm dia. Handrail in an attractive Timber finish was installed along the ENT Out Patients Clinic corridor providing support for those who require it moving along the passage way.

0113 279 5854 www.yeomanshield.com/new-handrails





A refreshingly different view of mental health

Suburban Liverpool is home to a highly praised example of the new generation of sophisticated mental healthcare facilities that are emerging across the UK. Ray Philpott explores how its design contributes to a better patient experience

lock View Hospital in Walton represents a step-change in improvement to mental healthcare in the North West of England.

Located on the site of the now demolished Walton Hospital, the 80-bed, five-ward facility has been designed by the architects at specialist practice Medical Architecture.

Taking its name from the old hospital's fully renovated Grade II listed Clock Tower, it provides emergency and inpatient care for people with mental health issues including dementia, anxiety and depression. Carefully designed to foster recovery and well-being, with input from user groups, it is essentially a sequence of low pavilions with semi-private and secure gardens interlinked by more prominent treatment rooms and offices.

Patients benefit from en-suite, individual rooms in a complex that maximises natural light, contains its own unique and original artwork and features attractive inner courtyards and attractive landscaping.

More than 200 people work at the £25 million hospital, which has attracted positive comments from politicians, journalists and celebrities.

Continued overleaf...





Clock View's entrance acts as a lantern, illuminating the approach

Project details

Architect: Medical Architecture Client: Liverpool and Sefton Health Partnership, Mersey Care NHS Trust Main contractors: Farrans, Heron Brothers Structural and services engineer: Arup Landscape architects: Camlin Lonsdale, Tony Danford Artwork direction: David Mackie and Heather Parnell Interior Design: Medical Architecture

User engagement

Medical Architecture had been evolving the project for many years with clients Liverpool and Sefton Health Partnership (LSHP) and Mersey Care NHS Trust, as part of a drive to upgrade and replace outdated mental healthcare facilities in the area.

Work leading to business case approval commenced in 2009, with planning approval granted January 2011. Main contractor FHJV, a joint venture between Farrans and Heron Brothers, completed the work in 22 months and Clock View opened its doors last year.

Mersey Care took a highly proactive approach to user involvement in design development, with carers and user representatives contributing to the design team and arts group meetings.

"This approach was highly significant in guiding the development of both the planning strategy and building design," says Medical Architecture founding Director Christopher Shaw.

"The user/carer viewpoint gave us a real world outlook, adding authenticity to design features and grit to some of the value-engineering. More subtly, a user presence ensured the design team made technical decisions that could be both understood and justified."

He adds: "We worked closely with Mersey Care and its Clinical Project Director, Modern Matron Noirin Smith, which meant resolution of detailed design went hand-in-hand with service and operational planning."

Working with clinical users to agree final room and equipment layouts took many months longer than planned but were pivotal in building a sense of ownership.

Materials and structure

There were continual capital and revenue cost pressures on the project. Mechanical and services engineering systems were greatly simplified and planned photovoltaic and solar thermal systems were too costly.

The central ventilation plant with heat recovery was reconfigured to a hotel-like arrangement with individual vents and no recovery. The planned green roof was omitted and single-ply membrane used.

However, the planned building fabric cost effective and resilient, super-insulated timber panel cassette system was retained.

Dry construction using off-site timber panels and metal studwork for internal partitioning – combined with in-situ concrete – provides robustness and acoustic performance while allowing fast construction and an early first-stage mechanical and electrical fix.

The main entrance features deep structural veneer laminated (SVL) timber spandrels with curtain walling. The external finish is white acrylic render, this is low maintenance and maximises the reflection of daylight in courtyards. Solid hardwood windows punctuate the elevations and add warmth and a non-institutional feel to the design.

Site challenges

The site had been occupied by redundant medical buildings and, although well located, it posed a number of challenges for the architects.

It is fairly constrained for the car parking and accommodation required, while the L-shaped site geometry made organisation awkward. The change of level across the site, with a large in-situ concrete retaining structure already existing at the rear, limits the aspect. It also has an unprotected boundary on two sides destined for future residential use.

In response, the design evolved from a building of separate elements to a linked pavilion-type layout. It has a single, controlling entrance point going into a two-storey spine that connects the single-storey pavilions. The spine contains *Continued on page 36...*



BUILDING

POWERMATIC^{*}

Concealment when you want it Performance where you need it



Designed and manufactured in the UK, Powermatic controlled, concealed door closers deliver exceptional performance as well as a host of benefits that surface-mounted closers cannot match:-

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

Visit our new website: concealeddoorclosers.com

Tel 0121 766 4200 info@samuel-heath.com concealeddoorclosers.com

SAMUEL HEATH



Fast facts

Project cost: £25 million Build time: 22 months Site size: 22,735m² No. of windows: 250 Wards: 5 Bedrooms: 80





The interior is designed to allow light to flood in where possible and to offer views of attractive, landscaped courtyards and outside spaces



central facilities, offices and shared therapy areas and also encloses the retaining structure at the rear of the site.

This provides opportunities for standardised layouts while offering a degree of customisation for different care groups. Other advantages include:

- residential wards separated from therapy spaces to encourage meaningful, self-directed activity
- garden spaces between buildings
- maximum natural light on the floor plan
- familiar, residential-scale, single-storey ward pavilions with 'front doors'.

Distribution routes for food and linen are external, albeit under sheltered cloisters to reduce floor area, and provide a degree of separation between patient and service flows. The 17-bedroom wards are in back-to-back pairs where possible to enable reduced staffing during evenings and weekends.

Interior design

"Psychiatric hospital interiors are too often the product of unmoderated risk management that can result in a joyless and institutional setting," says Shaw.

"Interior design makes a huge difference to the quality of experience for patients, staff and visitors. It embraces safety, communicates a professional caring ethos and gives a sense of self-worth and dignity to service users and healthcare professionals alike.

"Design quality and the inclusion of art became increasingly strong drivers."

Landscape Architects Camlin Lonsdale worked alongside Medical Architecture's landscape team to provide a thoughtful and enjoyable group of therapeutic garden spaces.

An arts initiative, co-curated by the Trust's Berenice Gibson and Tate Liverpool, devised a creative brief with the aim of embedding works in the environment rather than applying them as an afterthought.

Artists David Mackie and Heather Parnell were selected to develop a number of works for the project. Cargo-themed images reflecting local maritime heritage are closely woven into the design and feature prominently as one moves through the building.

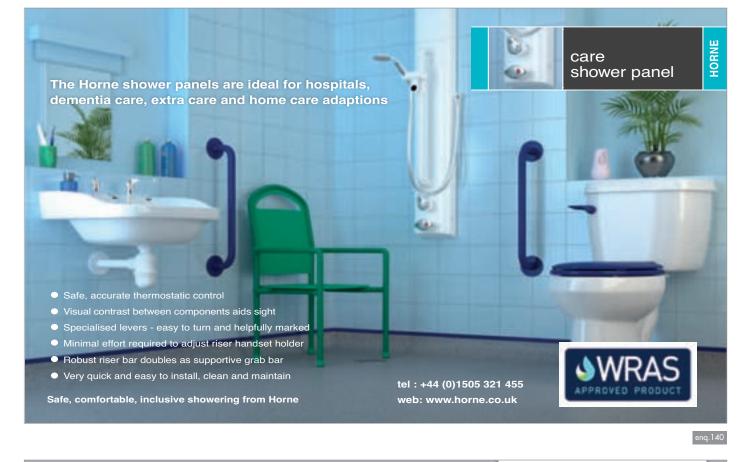
Shaw adds: "Furniture and fittings were selected at an open day organised by the Medical Architecture interiors team at Aintree. Manufacturers were invited to exhibit modern, friendly and non-institutional furniture for those who were to work in the building to select. The results speak for themselves."

Welcoming entrance

Clock View was conceived as a beacon, acting as a catalyst for the regeneration of a run-down part of town, and stands in complete contrast to its surroundings – highly visible, bright and clean.

The placement and design details of a hospital entrance make a vast difference as to how mental healthcare relates to the individual user, visitors, people who work there and, more broadly, to the whole community served.

Continued on page 38...





enq.141





www.architectsdatafile.co.uk



'Clock View was conceived as a beacon... the new building is a complete contrast to its surroundings, highly visible, bright and clean'

Christopher Shaw, founding director, Medical Architecture

Clock View's entrance acts as a lantern, illuminating the approach. Recycled dockside granite benches with thoughtful embedded bronze settings by Mackie and Parnell provide reassuring stepping stones on what may be a very difficult personal journey toward the entrance and form an intrinsic part of the recovery pathway when leaving.

"First impressions really matter," explains Director Bob Wills, Medical Architecture's project lead. "The relationship between individuals and their health service is preconditioned by the arrival experience before meeting any receptionist or clinician.

"In the case of mental health this is doubly important, given the debilitating stigma surrounding mental illness."

With almost 70 per cent of recorded assaults against NHS staff occurring in mental health or learning disability settings Medical Architecture incorporated design features aimed at significantly reducing the potential for violent incidents.

The architects used spatial form, along with calming daylight and views, to reduce stress. The environmental design prevents overheating and provides pockets of cooler spaces, while dead-ends have been eliminated. Carefully designed acoustics with attractive and varied finishes minimise anxiety.

Effective space

In design for mental health there is sometimes a natural tension between orthodox clinical planning and good design when it comes to circulation.

Movement and transition space in mental health is functional. Working closely with the client, the design team has been able to achieve the right balance of dedicated activity space and purposeful circulation.

The hospital features circulation with rooms on one side only and windows with a view. This has recently become the norm as the benefits of a therapeutic setting have become valued. Furthermore, the hospital's ring-shaped circulation layout leads to ward staff being immersed in the patient setting rather than controlling from a single observation point.

Gardens and courtyards are an essential element of the therapeutic environment. Safe and self-directed access means the range of activities and quality of experience can be widened, speeding recovery.

Wills says: "A carefully shaped landscape provides for a range of activities and therapies reducing the sense of containment and fostering wellbeing. We believe Clock View provides a stunning example of positive interaction between landscape and buildings to support better mental healthcare."

He concludes: "Ultimately, at every level we have strived to ensure the hospital's design enhances the experiences of patients and the staff who care for them."



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.

Gerflor to 'wow' at Surface Design Show



In February, London's Business Design Centre will see international flooring and interiors specialist Gerflor showcasing its brand new 2016 collection of high quality contract and residential flooring solutions. The Surface Design Show provides the perfect backdrop for Gerflor to shine a light on their vast array of flooring innovations. Led by innovative Chief Designer Gino Venturelli, the Gerflor Design Centre

has a dedicated team of talented designers who are constantly researching into, and exploring up-and-coming new trends. A glittering example for 2016... and hot on the heels of considerable market success is Gerflor's brand new Taralay Impression Control. See, touch and discover all the latest products from Gerflor.

01926 622600 www.gerflor.co.uk surface design show stand no 306

Heradesign continues to innovate and excite at Surface Design Show



At last year's Surface Design Show, Heradesign from Knauf AMF Ceilings made an impact on architects and designers for the visual energy and contemporary warmth it adds to their interiors. Visit Stand 100 at The Surface Design Show to find out why. Heradesign is a range of sustainable, wood-wool based ceiling tiles and wall panels, which are cost effective and easy to install. The visible wood fibres give Heradesign its naturally textured finish. The panels are robust to ensure longevity. Design possibilities are endless, Heradesign is available in a wide range of sizes, edge details and unlimited colours. To create memorable interiors, Heradesign can be fitted as a suspended ceiling, hung as rafts or fits, or directly onto walls and ceilings. Heradesign can be specified many colours including these from popular systems such as RAL, NCS or StoColor. It's not just about looks, Heradesign goes further by providing outstanding sound control, A1 fire protection and superior environmental credentials. High sound absorption will control unwanted background noise and ensure speech can be heard, contributing to a comfortable acoustic environment. The team at Knauf AMF are ready to help you find the perfect acoustic and aesthetic solution for your interior design. They look forward to welcoming you to Stand 100 where you can find out more.

0191 518 8600 www.amfceilings.co.uk/heradesign



Products: RPG Absorbor suspended ceiling panels (shown); FlutterFree acoustic timber to foyer ceiling; bespoke curved canopies; 1600mm diameter acoustic discs & RPG Harmonix diffusers in FRG (shown on wall).

Call: 01303 230944 www.rpgeurope.com RPG Europe is a trading name of Acoustic GRG Products Ltd.



stand no 368 FIL

FILA to launch two new stain removers at SDS 2016

Surface care specialist, Fila is launching two new stain removers to the UK market at SDS 2016, stand 368. New FILAZERO SIL is designed to remove new and old silicone, glue and sticky label residue, while FILANO RUST removes oxide deposits. Both treatments feature a highly viscous consistency, making them ideal for application onto horizontal and vertical surfaces, for maximum results and minimum waste. The removers will be available from FILA stockists from January 2016. Designed for absorbent and non-absorbent surfaces, FILAZERO SIL dissolves hardened deposits within 20 minutes of application. It can be used to remove silicone and sticky residue - as well as candle wax and resin - from stone, grout, porcelain and ceramic, marble, glass and metal. FILANO RUST removes oxide tarnish from stone, marble, granite, agglomerates, porcelain and ceramic, terracotta and concrete. Its non-acid formula makes it particularly suitable for delicate surfaces, including polished marble and limestones. Both new treatments are safe to use in domestic home and contract environments, and are offered alongside FILA's award-winning wide range of surface care solutions.

01584 877286 www.filasolutions.com/en

2016 will see the biggest and best Surface Design Show to date



Returning to London's Business Design Centre between 9-11 February, the 2016 Surface Design Show will be the largest and most exciting show occupying both the ground floor and all of the mezzanine level for the first time

2015 saw 5,586 professional and trade visitors, an unprecedented increase of 49 per cent on the previous year. 80 per cent of the audience came from architectural, interior design, lighting design or multi design practices with five per cent of these visiting from abroad.

Event Director Christopher Newton said: 'The overwhelmingly positive comments from exhibitors at Surface Design Show 2015 along with the huge increase in visitor numbers has led us to extend the show and introduce some new and exciting categories and events. Surface Design Show 2016 looks set to be our biggest and best to date".

The show has become the destination for industry people to see, touch and explore the latest materials for the built environment with like-minded designers, architects and suppliers.

In 2016 there will be over 150 exhibitors. Already confirmed are RAK Ceramics, James Latham, Grestec Tiles and Concreate all of whom are returning from last year. New exhibitors for 2016 include Velstone, Soundtect, Lumiscopic, Green Interiors and Bokart.

Nicole Freiter from Grestec Tiles said of Surface Design Show 15: "We saw a great number of potential new clients attend our stand at the show and have set up many meetings and sample requests on the back of exhibiting. It was the perfect platform for us to interact and build relationships with the right industry contacts".

Surface Design Show 2016 will be full of new ideas and firm favourites, refreshed to provide our specifying audience with a unique visiting experience. The packed programme of events and entertainment will include the Preview Evening Live Debate and the ever popular PechaKucha Evening – an informal and fun presentation of inspirational slides.

Future Thinking is Surface Design Show's annual look at the future of materials, highlighting colours, topics and surface trends for 2017, new for 2016 will be Surface Spotlight Live curated by Sally Angharad. The two sector spotlights highlighted will be Health + Wellbeing and Retail Design sponsored by Concord featuring materials that make a significant contribution to both areas.

New for 2016 is Stone Gallery which has been introduced to reflect the importance of the rapidly growing stone market in the UK. Hosted on the mezzanine level, the gallery will focus on natural stone from across the world.



Since 2013 the Surface Design Awards have been recognising and celebrating outstanding examples of progressive design and the use of innovative surfaces in projects both in the UK and internationally. In 2015 the Awards received 181 entries in 11 categories – a 62 per cent increase on 2014 with a third of all entries coming from outside the UK. The 2016 Judging Panel will be Co-Chaired by Sarah Featherstone of Featherstone Young and Theresa Dowling of FX Magazine with a judging panel that includes names from some of the most prestigious design practices in the UK.

The awards presentation will take place on Thursday 11th February during Surface Design Show.

As Health + Wellbeing is one of the focuses at Surface Design Show 2016, the organisers have adopted Maggie's as this year's chosen Charity Partner. Maggie's provides free practical, emotional and social support to people with cancer and their family and friends. Surface Design Show will be helping to raise funds for the new Maggie's Centre in Leeds designed by Heatherwick Studio.

The Surface Design Show is on 9-11 February at London's Business Design Centre. To find out more please visit: www.surfacedesignshow.com

Look out for...



Acoustic GRG (stand 128) is a specialist manufacturer of acoustic architectural linings; including acoustic timber, fabric wrapped panels and bespoke products. Manufacturing the RPG range of diffusers and absorbers, Acoustic GRG is also an exclusive distributor of BASWA acoustic plaster and Clipso stretch ceilings and walls. Recent projects include Winchester College (pictured), Church Studios, UCL and The Shard.

Innovation from ROCKFON on display at Surface Design Show

Renowned for their high quality acoustic ceiling and wall solutions, ROCKFON continue to push the boundaries of design and technology to help realise the exacting vision and demands of today's interior environments. The ROCKFON team embody unrivalled expertise and knowledge when it comes to finding the perfect acoustic and aesthetic solutions. They look forward to welcoming you to Stand 154, and to discussing how ROCKFON can help turn your design into a reality.

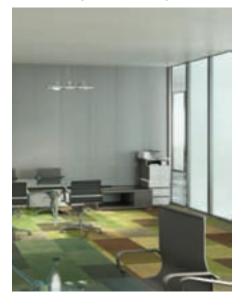


The company has been chosen as a Commercial Interior Surface finalist at the design awards and have been selected to feature at Surface Spotlight Live for Health + Wellbeing within the Surface Design Show. Here we preview some of the highlights featured on Stand 154

ROCKFON[®] Blanka[™]

A visibly smooth, highly durable matt ceiling that is the manufacturer's whitest ever. ROCKFON Blanka offers outstanding light reflection and light diffusion which optimise the uniform spread of natural light.

An anti-static coating makes the tile resistant to dust and easy to clean. Its non-directional surface means ROCKFON Blanka can be fitted in any direction, saving time and reducing waste.



ROCKFON® Mono Acoustic®

Smoother and whiter than ever before, new generation ROCKFON Mono Acoustic features an improved, seamless monolithic finish, fantastic acoustics and total design flexibility.

Available in white or bespoke colours, the system can be installed on either a suspension grid or directly mounted on existing ceilings and walls, whether flat, sloped or curved.

ROCKFON[®] VertiQ[®] wall absorbers

A popular range of attractive wall absorbers, ROCKFON VertiQ enhance the acoustics in a space where a traditional suspended ceiling is not viable or where additional acoustic control is desired.

ROCKFON VertiQ has a modern surface with a tough moiré structure which ensures excellent impact resistance and durability, making it ideal for use in areas of above average wear and tear.

ROCKFON[®] Color-all[®]

ROCKFON Color-all has a smooth, durable matt finish. The Standard range of ceiling and walls tiles are available in 34 exclusive colours. ROCKFON Color-all Special can be manufactured in an unlimited range of colours. ROCKFON use the Natural Colour System[®] to enable the grid colour to match to the specified ceiling tile – offering the opportunity to create the most exacting design.

ROCKFON® Eclipse®

These attractive, frameless acoustic islands offer excellent sound absorption performance and are available in square, round, other geometric shapes and custom formats for maximum design freedom.

Choose from matt white or an unlimited number of custom colours. ROCKFON Eclipse are quick and easy to install and can be fitted on their own or to provide additional sound control when a traditional suspended ceiling cannot be installed.

They're perfect for thermal mass installations as allow air to circulate freely.



All ROCKFON ceiling and wall solutions are made from stone wool and provide excellent performance in terms of fire safety and humidity resistance. Their products are dimensionally stable at up to 100% relative humidity and can be installed in temperatures ranging from 0°C to 40°C allowing installation before windows are fully sealed. All products carry a 15 year guarantee and are fully recyclable.

For information and advice call: 0800 389 0314, email: info@rockfon.co.uk visit: www.rockfon.co.uk

surface design show stand no 154

Latham set to dazzle at SDS 2016

ne of the UK's biggest independent decorative panel distributors James Latham, is gearing up for Surface Design Show 2016 (stand number: 208) where it will unveil a number of exciting new surface materials many of them exclusive - that promise to create plenty of interest among visiting Architects and Interior Designers.

New and exclusive to James Latham, Super Matt is a range of highly durable, finger print resistant, MFC decors from Kronospan Italy that are set to change the market.

Offering eight 'on-trend' colours, Super Matt reduces the need to be constantly wiping away unsightly finger marks and smears on surfaces.

James Latham will also unveil its brand new and inspiring range of Losan Real Wood Veneers, that allow designers to create environments with stunning effects and finishes which bring a particular depth, texture and individuality impossible to achieve with artificial materials.

Developed over time to give a superior grade with maximum consistency, these real wood veneers - which are all from FSC certified stock include such on trend species as Smoked Figured, Crown and Rough- Cut Eucalyptus as well as Cracked Oak, Smoked Larch and Satin Walnut.

Now available exclusively through James Latham and unlike anything else on the UK market, XyloCleaf is an innovative and highly textured range of decors which includes a variety of wood grains, linens and other unique materials.

With over 60 colours and patterns in MFC and more than 20 in HPL laminate, all of which come with ABS edging as standard, the XyloCleaf collection is suited to premium design schemes within the retail sector and is perfect for furniture, fixtures and wall panelling. In addition, it is also popular for high-end commercial, leisure and hotel specifications.

Another new product for this year and again exclusive to James Latham in the UK is KYDEX* the exceptionally durable thermoplastic sheet that will enhance virtually any commercial, healthcare, retail or educational styling theme.

Supplied in a wide range of colours, textures



Super Matt from Kronospan is finger-print resistant and available in eight, on-trend colours

and patterns, it offers designers the ability to create an almost unlimited variety of flat and three-dimensional effects and it can be formed to compound corners and contoured edges, minimising the need for moulding. Even brand logos and messages can be embossed into the material.

Other products on Latham's stand will include; HI MACS[®], Valchromat, Décor Eco, Kronospan and Egger.

noraplan° valua from nora systems combines two

aspects, warm colours and natural surface structure,

giving rise to cosy atmosphere in every room. Seen

in this context, this criteria is decisive in interior

design in all areas. The feel good factor is growing

in importance, with the trend turning towards authentic materials. With noraplan[®] valua you can

turn your floor into a natural, flowing environment

that leaves a long lasting impression so your space

looks inspired forever. nora will be exhibiting at the

Surface Design Show Stand no 240.

0116 257 3415 www.lathamtimber.co.uk

surface design show stand no 208

Osmo to attend Surface Design Show 2016



Osmo UK, the eco-friendly wood and finishes expert, is delighted to announce that it will be exhibiting at the Surface Design Show 2016 at the Business Design Centre in London. Visitors to stand 330 will have the chance to see Osmo wooden flooring and high quality wood finishes. Osmo will be exhibiting its ESCO wood flooring range, as well as its renowned wood finishing product, Polyx*-Oil. ESCO offers

with Osmo Polyx*-Oil. Visitors will be able to view the collection based on nine solid oak flooring styles. Requiring no additional coating or finish, Osmo's ESCO flooring is favoured by architects and interior designers and provides the ideal solution for anyone looking for a stand-out wood floor.

urface design show stand no 330



nora systems at the Surface Design Show



01788 513160 www.nora.com/uk ace design show stand no 240



adf website

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



www.architectsdatafile.co.uk



Proven System Solutions for Landscaped Roofs



ZinCo Green Roof Systems Ltd. office@zinco-greenroof.co.uk · T: 01223 853843 www.zinco-greenroof.co.uk



Life on Roofs

Introducing Biosolar

Deciding between a green roof and photovoltaics (PV) has been a question faced by many industry professionals over recent years when designing a flat roof; however these two technologies are no longer mutually exclusive options with the introduction of biosolar roofs. By Tom Raftery, BauderSOLAR product manager

What is biosolar?

A biosolar roof is the successful combination of biodiverse and extensive green roofs with photovoltaic systems, delivering a duality of technologies for environmental advantage and increased profitability for building owners.

What are the benefits?

Biosolar roofs deliver all the benefits of green roofs and solar power in a synergy of technologies that maximises PV output and the footprint for the green roof:

- Cooling effect of vegetation increases solar output by up to 5 per cent
- Green roof element can act as ballast so waterproofing is not penetrated
- Entire roof can qualify as biodiverse green roof by maximising area for vegetation
- Shade tolerant species thrive under PV creating a more diverse flora and fauna community

What are the applications?

Although designed primarily for new build applications where this synergy of solutions is often required to meet planning and BREEAM requirements; a biosolar roof system can also be retrofitted on many existing roofs without the need for any structural modification to the building. The construction industry has long been calling for rooftop solutions that include a duality of technologies for environmental advantage, and a biosolar roof delivers just that providing reciprocal benefits from the PV module and green roof components.





Biosolar systems typically use the substrate and vegetation to provide the ballasted installation mechanism, removing the need to penetrate the waterproofing to secure the mounting units to the roof and simultaneously making the most of the available area for vegetation, enabling the entire roof to qualify as a biodiverse green roof. The front edge of the PV panels above the finished green roof level, allow light and moisture to reach beneath the panels whilst ensuring the mature vegetation does not shade the panels and can be easily maintained. The mixture of sunny, shaded and sheltered areas give a matrix of different habitats that allow a broader range of plant species to thrive, and a rich foraging environment for pollinating insects.

A biosolar roof solution also delivers advantages to the building, as the cooling effect of the vegetation and water held within the green roof system preserves the ambient temperature around the PV array, which in turn can increase the solar efficiency (studies in Germany have shown that solar panels work best with a temperature of around 24°C).

What are the challenges?

The integration of PV and green roof technologies requires skill and expert understanding and there are already many examples of where biosolar roofs have been poorly designed and installed. *Continued overleaf...* 'The construction industry has long been calling for rooftop solutions that include a duality of technologies for environmental advantage'



Designs that do not perform optimally for both technologies are often as a result of people assuming that the solar panels require more technical input then the green roof. Getting the green roof element wrong can mean the vegetation is forced to grow around the panels, which results in shadowing and therefore reduced energy generation. For many PV systems shadowing on one panel can subsequently have a detrimental impact on the overall performance of the entire string of modules.

Switzerland, Germany and various other European countries have already proven that when planned, designed and installed well, solar and green roofs can improve the performance of both elements. There are many local authorities in the UK requesting that new developments seek to, where suitable, incorporate PV and green roofs into their designs, however not many are yet calling for biosolar technology, which is something that must change for this combined system to truly take off and become commonplace.

Future of biosolar

Back in September, London's Deputy Mayor for Environment and Energy, Matthew Pencharz opened the inaugural 'European Biosolar Roof Conference' at London City Hall. The event featured many expert speakers from across Europe, who are already successfully delivering biosolar technology, which gave architects, landscape architects, developers and suppliers invaluable insight on how to effectively implement and manage a biosolar roof project.

The European Biosolar Roof training programme was also launched at the event and will be delivered across Europe to support the delivery of biodiverse, energy resilient and climate adapted cities. The primary objective of the conference was to ensure that green roofs and solar roofs are no longer considered as an either-or option, but delivered together in perfect harmony; and if the initial feedback from the event is anything to go by, biosolar roofs look set to become an integral part of future building construction in major cities throughout the UK very soon.

enq.154



Wallbarn

Address: Unit 16 Capital

Business Centre, 22 Carlton Road,

South Croydon

TD MEGAPADS FROM WALLBARN

TD Megapads from Wallbarn are the best way to construct timber decking on podium decks, flat roofs, balconies, terraces and walkways.

The timber joists are placed onto the weight bearing pedestals, which can tolerate 800kg each. The joists are housed between the lug fittings for secure placement. A framework of timber joists is constructed and the decking boards fixed to the frame.

As all the timber is lifted off the surface, surface drainage is improved and slip hazards reduced. None of the timber is subject to standing water, improving its lifespan.

Installation is super-fast and straightforward. The plastic pedestals have large base plates which spread the weight evenly, avoiding point loading on the sub-deck.

Call Wallbarn today on 0208 916 2222, email sales@wallbarn.com or visit www.wallbarn.com

Sika Trocal provides peak performance



At a new-build family home, shortlisted for the Grand Designs RIBA House of the Year awards, the high quality application of 200m² of **Sika Trocal** Type S waterproofing membrane has helped to provide a watertight finish for a complex roof system featuring seven pyramids and a vaulted

rooflight. The entire roof build-up consisted of S-Vap 500E vapour control layer, insulation, tube fixings and Trocal S waterproofing membrane. Cold bridging was minimised with the use of the tube fixings to secure the insulation. The entire roof build-up consisted of S-Vap 500E vapour control layer, insulation, tube fixings and Trocal S waterproofing membrane.

01707 394444 www.sikatrocal.co.uk



Optimise efficiency in roof design



A bespoke software service allows designers and installers of flat roofing to optimise efficiency from design to installation. From basic data, **Protan's** Proplan package will produce an autoCAD 2D or 3D visualisation of the proposed roof, detailed specification of materials,

the quotation plus manufacturing and site assembly details. The system embraces detailing such as corners, perimeters and penetrations, providing accurate estimating of the total roof cost, and allows comparison between systems. So the designer and contractor can obtain the most efficient way to build the roof, with optimum logistics, installation and virtually zero on-site wastage.

01925 658001 customercare@protan.co.uk

www.architectsdatafile.co.uk

Kemper System provides odourless roofing solution for Kent schools

wo schools in Kent will be making a more watertight start to the new term thanks to roof refurbishment projects using Kemper System's solvent-free Kemperol 2K-PUR waterproofing system.

St Columba's Catholic Boys' School in Bexleyheath and Ashford Oaks Primary School in Ashford have both invested in upgrades to their roofs, installed by specialist roofing contractor, Capital Roofing.

A 14-week programme at St Columba's has involved overlaying the entire existing roof surface with a warm roof build up from Kemper System to improve the building's thermal performance and provide effective waterproofing.

Capital Roofing used the existing mineral felt and spray applied rubber surface as a vapour control layer, making minor repairs and preparing the surface before installing Kemper System's PIR insulation board.



Kemper System's Kemperol 2K-PUR odourless, solvent free waterproofing system was then used to complete the roof overlay scheme. Capital Roofing applied Kemper System's D primer before applying the cold-applied liquid resin. The system's reinforcement fleece was cut to size and shape on site to ensure accurate detailing around skylights, gutter details and curbs. The resin was applied in a single wet-on-wet process before the system was allowed to cure, creating a tough, flexible monolithic membrane that cannot delaminate and bonds directly to the substrate. At Ashford Oaks Primary School, the recently completed scheme involved the roofs to the school's main hall and adjoining classrooms. It is the second project to be completed by Capital Roofing at the school as part of a phased programme and follows the success of a scheme to renew the roof areas above the kitchen, dining hall and reception area using Kemperol 2K-PUR.

The project was carried out while the school was fully operational and Kemper System's solvent free Kemperol 2K-PUR provided significant advantages because it is both odourless and suitable for overlay directly onto the existing single ply surface.

Following installation of the Kemperol 2K-PUR, maintenance walkways were added, with Capital Roofing using Kemper System's TC resin and quartz aggregates, followed by a sealant, to create an anti-slip surface in designated areas.

019 254 45532 www.kempersystem.co.uk

nq.158

Kingspan OPTIM-R checks in at Premier Inn



Visitors to Harrogate's International Centre now don't have far to go for a good night's sleep thanks to the construction of an adjoining Premier Inn, featuring **Kingspan's** OPTIM-R Roofing System. To maintain drainage, a wide channel was incorporated into the building's flat roof. At

18 metres long and over a metre wide, it was essential that this was properly insulated while still providing the required fall. Subcontractor Protech Roofing therefore installed the Kingspan OPTIM-R Roofing System. David McLean, managing director from Protech Roofing, commented: "We found the Kingspan OPTIM-R panels lightweight and easy to handle and we were able to get them laid quickly following the plan provided by Kingspan Insulation's technical team."

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

ım-r

Architects Datafile website



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

www.architectsdatafile.co.uk



Axter waterproofing at Centenary Quay

Axter Ltd is proud to have provided the waterproofing for Centenary Quay, Crest Nicholson's vibrant development on Southampton's waterfront, including 102 apartments with high rise penthouse flats, retail and commercial space. Built by Willmott Dixon, phase three of the regeneration incorporated a bio-diverse living roof as well as amenity space built above a Morrisons supermarket. With fully accessible amenity gardens including a flowing water feature, it was vital a robust specification was delivered. Axter provided all the waterproofing for the development, utilising its Wilotekt Plus system on the podium, to deliver a reliable waterproofing system robust enough to accommodate the water feature and fully accessible amenity space above. Axter also developed a bespoke bio-diverse living roof specification to complement the natural coastal surroundings. This included specially selected grass and flower species, chosen for their ability to withstand windy coastal conditions. When established, these plants will provide shelter and forage to a range of invertebrates and birds. Axter worked alongside horticulture specialists and substrate and seed providers to ensure all elements of the roof complied with the Bio-Diversity Design Report for the development.

01473724056 www.axter.co.uk

nq.161

Metal Technology systems meet the brief



When Cornwall Council decided to consolidate office facilities at the Beacon Technology Park in Bodmin, leading edge performance products from **Metal Technology** were specified. Metal Technology's System 17 SP (silicone pointed) with

concealed vents and System 17 capped high rise curtain walling formed the framework for the extensive glazed facades. System 17 SP is a structured glazing system designed to create visually impressive all-glass facades with profiles that provide structural integrity, weather performance, thermal enhancement and, importantly, can only be seen on the inside of the building. System 5-20D Hi+ thermally broken doors were also specified for the project.

028 9448 7777 www.metaltechnology.com

And now for something completely different...



Invisifold Ltd and **VBH** have teamed up to develop and launch an exciting new system for slide & fold doors and windows. The system, known as greenteQ Invisifold, is being introduced by VBH this winter and includes applications for doors, tilt & turn windows and even outward opening casement windows. VBH advise that

as far as it is aware, this is the only solution that allows standard profiles to be used for slide & fold door and window applications. Peter Rowlands, MD of VBH commented: "The greenteQ Invisifold design is a major step forward as it allows standard profiles to be used for both doors and windows. The fact that the system has the potential to be Document Q compliant is also hugely beneficial as this style of opening is perfect for new build installations."

Stunning roof for London pub with new Sika Sarnafil Self Adhered Membrane



Specialist roofing contractor Hambro Roofing has recently completed works to a new JD Wetherspoon pub in London, known as 'The Mossy Well', which now boasts 500sq m of **Sika Sarnafil** Self Adhered membrane. JD Wetherspoon has spent just over £3 million developing the outlet on Muswell Hill, which opened in October. Extensive refurbishment and adaptations to the building needed to take place due to the existing roofs being in such a bad state. Essex-based Sika Sarnafil contractor, Hambro Roofing, was awarded the contract after proposing to use Sika Sarnafil single ply for the flat roof repairs. The refurbishment comprised of complex work on the existing pitched roofs, lead flashings, guttering and renewal of the flat roof. A section of new barrel roof was also required in the centre of the building; comprising of flat, vertical and soffit detailing. The client required the new roof area to look like a traditional zinc roof covering. Sika Sarnafil G410-15 FSA was specified for the job, with decor profiling to match the surrounding roofs. Ideal for the job, the system is lightweight, cost effective and offers a flawless finish. The barrel roof was also fitted with SarnaTherm insulation over a SarnaVap vapour barrier. Sikalastic Liquid Applied Membrane was used on the detailing around the guttering to achieve a seamless waterproof finish.

01707 394444 www.sarnafil.co.uk



VMZINC for £250m Cardiff bay development



Cardiff Pointe, a £250m residential project in Cardiff Bay has seen VMZINC* used throughout phases 1 and 2. Scott Brownrigg's design specified standing seam facades and roofs in dark charcoal ANTHRA-ZINC* for homes which stand on the peninsula adjacent to Cardiff Yacht Club and opposite the International Sports Village. Two 24

and 18 towers storeys on the north of the site cantilever out over the water to provide added focus for the colour's visual aesthetic. The matt black appearance and visible grain structure of pre-weathered ANTHRA-ZINC is distinctive of the metal and produced by modifying the surface's crystalline structure.

01992 822288 www.vmzinc.co.uk

Exhibiting the benefits of single ply



Olympia London's grand hall will continue to function as one of Europe's premier exhibition venues for years to come, with help from **Protan**. The 100+ years-old Grade II listed building is undergoing a major refurbishment, the latest element being the refurbishment of the North Elevation and Apex roofs. The north elevation of the

35m high iron-framed barrel roof covering has been overlaid by main contractor Heartfelt Roofing, using $1,600\text{m}^2$ of Protan SE1.2mm SE single ply membrane. Protan SE membrane has a tensile strength of $\geq 1050\text{N}$, and tear resistance $\geq 210\text{N}$. Developed to withstand the weather extremes of Scandinavia, Protan SE membrane is more flexible than comparable PVC membranes.

01925 658001 customercare@protan.co.uk

enq.167

CMS delivers in new Glasgow student homes development

MS Window Systems has played a key role in delivering high quality student accommodation for the Glasgow School of Art (GSA), helping a leading developer breathe new life into a city centre office building that had become surplus to requirements.

Whilst new build development often represents the ideal solution, limited site availability in city centre locations can make refurbishment of redundant buildings a more feasible approach. This was the case for the GSA which was keen to provide additional accommodation for its students in the heart of Glasgow, close to its Garnethill campus.

Located on West Regent Street to the west of Glasgow city centre, Blythswood House is a short walk from the GSA's main campus, providing 218 rooms arranged over six floors. These rooms are arranged in clusters of six to eight rooms with communal kitchen, dining and seating areas. There are also self-contained apartments at ground floor and roof level for the building's warden and visiting lecturers and tutors, plus superb amenities including studios, workshops, exhibition space, a cinema and a gym.

Working with main contractor Graham Construction, CMS Window Systems was appointed to design, manufacture and install high performance, contemporary style aluminium windows for the building's external envelope. Using the Metal Technology 4-20 thermally broken system, CMS has provided over 500 windows on the project as well as installing the bespoke panels which feature as part of the external envelope refurbishment solution.

CMS Window Systems routinely delivers projects like Blythswood House for main contractors across the UK to the highest standard. The company is a leading aluminium curtain walling, window and door manufacturer and



installer which was one of the first contractors of its kind to become BIM-ready. Its technical capabilities and systems portfolio ensure the company is equipped to deliver a wide range of projects and applications including hotels and leisure complexes, student accommodation, schools and office buildings.

01324 841 398 www.cmswindows.com

enq.168

Hueck's Volato M sliding system used for future-proofing London projects



Manufacturer of aluminium window, door and facade systems, **Hueck**, has reported an increase in demand from the highend market focused on superior weather tightness. The trend is highlighted by a number of recent projects supplied for by the company, incorporating the Hueck Volato M profile system for sliding and lifting-sliding windows and doors. As a project solution, Volato M can meet the same stringent specifications expected from curtain walls, in accordance with the Centre for Window and Cladding Technology's standard for systemised building envelopes. Hueck's Volato M door has successfully passed the 600 Pascals water penetration test pressure at 2001 to 2400 Pascals wind pressure, while installed in an aluminium facade. These standards, which correspond to the CWCT methodology, enable specifiers not to compromise on the performance of the building envelope when integrating a door system. Volato's ability to achieve these excellent weather performances has seen it specified in a number of London residential and mixed-use developments. Giant facilities management and construction services provider, Carillion, was first to specify the high performance door system initially for Berkeley Homes' £400m Battersea Power Station development, and, more recently, within the £80m Tidal Basin Road's twin tower project.

01217 671344 www.hueck.com



Aurubis Copper afloat

A technically innovative floating restaurant in a prominent Helsinki location is characterised by a facade clad in Nordic Standard copper from **Aurubis**, alongside extensive glazing. The 200-seat 'Meripaviljonki' restaurant is the first floating public building in Finland. Its raft is connected to two giant tripod anchor piles by a rectangular, swinging arm ensuring that there is no detectable movement for visitors on board. The pontoon below the raft contains all the HVAC installations and a novel solution has been found for connecting these to land-side infrastructure below the entrance bridge, able to accommodate a 2.4m variation in sea level. The Nordic Standard copper facade references the famous, neighbouring 1960s "Round House" and recognises the material's sustainability credentials, long-life, durability, minimal maintenance and beautiful natural patination. Copper also announces the main entrance lobby and is used to form lettering for the restaurant's illuminated sign. Nordic Standard is produced by Aurubis, part of the world's leading integrated copper group and largest copper recycler. In addition to Nordic Standard, other Aurubis Architectural surfaces include Nordic Brown pre-oxidised copper with either light or dark brown oxidisation that otherwise takes time to develop in the environment.



enq.170

01875 812 144 www.aurubis.com/finland/architectural

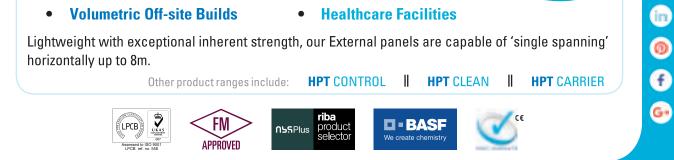


HPT External panels reduce the need for secondary supports enabling a reduction in structural steelwork and cost. An ideal solution for :

Retail

- **Schools**
- **Commercial Buildings**
- **Volumetric Off-site Builds**
- **Leisure Buildings**
- **Healthcare Facilities**

Lightweight with exceptional inherent strength, our External panels are capable of 'single spanning' horizontally up to 8m.



SIPs

y

Beating the UK climate with correct render choice

With severe weather events becoming more frequent in the UK, more detailed consideration of the type of materials we specify and their capability to withstand a climate that is so unpredictable is crucial. By Steven Keitley, general manager, Parex Render Systems & Facade Solutions

hether it is wind-driven rainstorms or deep and lasting frosts, we seem to be encountering more extremes. Render has always been a lasting and cost-effective solution for the external finish of properties in the UK, often ubiquitous on authority owned and social housing but now finding growing appreciation among architects and designers for the ability to create clean lines, varied textures in a broad choice of colours. Render has two primary functions:

Protection

The render must 'weatherproof' and not 'waterproof' the walls. Weatherproofing the walls allows them to breathe by letting water vapour migrate out of the structure, but stoping rain, from forcing its way into the structure. This is best achieved by using factory mixed high quality raw materials blended together with a range of special polymers supplied ready-to-use.

Decoration

With its finish and colour, the render provides a pleasing aspect to the building design.

Render thickness

When it rains, the facade darkens because rainwater wets the render's surface. When there is heavy rainfall, the water may reach the substrate if either poor quality render is used or there is insufficient thickness applied.

The thicker a good quality render is, the longer it will take for the water to reach the surface of the substrate. However thickness alone will not guarantee it will take longer for the water to reach the substrate.

Render thickness, quality of render and good polymer content, slows down water penetration into the wall. This also depends on the time that the render is exposed to rain.

The worst case scenario which the facade will need to be protected against, is related to wind driven rain where the rain is being forced against the facade by the wind.

Much of our Western seaboard, falls under the top "Very Severe" category of the four ratings of the British Standard Wind Driven Rain Index.



Render has always been a lasting and cost-effective solution for the external finish of properties in the UK'

For a wind driven rain against the render, it will take approximately twice as long to cross 8mm of render than 6mm – e.g. min two hours, with the time increasing in proportion and quality of the render thickness. Thus, 18mm of render will afford seven hours extra protection than a 6mm coating.

However, these figures will also be affected by the quality and type of render system being used as a thin high quality polymer modified render used on less traditional construction e.g. EWI systems, ICF, timber or steel frame constructions can achieve similar performance to a more traditional style render used on masonry construction.

A standard 15mm render thickness applied directly to masonry, using a modern factory produced high quality polymer modified render will withstand a prolonged 'continuous' rainfall of five hours before it is likely to penetrate

Continued overleaf...

through to the surface of the masonry. On a good masonry substrate, it then has a further 100mm to penetrate before even reaching the cavity or on a solid wall the masonry substrate is generally a minimum of 250mm thick, which provides even higher resistance to penetration.

However the weak point will generally be the detailing around openings or poor workmanship. Good detailing and site monitoring will ensure a good application is achieved and these can be achieved with the architect working in conjunction with the window company and render system manufacturer to ensure the detailing achieves the desired remit.

Of course, the old adage about beauty being only skin deep is never truer than in render choice. The render also needs to perform. It's amazing that we still see applicators applying basic sand/cement mixes and applying several layers before finishing with a bagged product. This entails thicknesses of 20-25 mm deep and actually results, if you are lucky, in physical "waterproofing" rather than "weatherproofing" which may keep water out of the fabric for some time, but will also trap it within the structure resulting in longer term in dampness and failure.

What's needed is a render "system" which takes into account of the substrate, be it masonry, timber or render board. The system will often include a primer to ensure correct adhesion of the basecoat which must be matched to the substrate as different substrates – for instance dense concrete masonry,



compared to lightweight block -- have different levels of suction.

A "suitable" system for each application can be obtained in consultation with the render manufacturer who should provide a specification which will take account of all factors, such as location, substrate, prevailing weather and many other factors to develop the best solution incorporating all the elements needed from primers and base coats to reinforcement for vulnerable areas such as openings - something often overlooked – to the thickness of the final finishing render which provides both the correct "look" and forms the first line of defence against the weather.

enq.173

Scotscape Living Wall systems with 'integrated insulation' available exclusively from Scotscape



The **Scotscape** Living Wall system is manufactured from a patented water-retaining fabric with integrated waterproofing and is supplied with a full 10 year warranty. Installed in one metre sections, the fabric living wall can be applied to projects of any scale and shape. The smart design of the system enables installation to be fast and straightforward and allows easy application to curved walls, gates and irregular shapes. Suitable for both interior and exterior use, the fabric is planted in situ, allowing the client to observe the on-going growth and development of plants until the entire fabric is covered in dense foliage. Costs are competitive enabling living walls to be accessible to more customers. Following the completion of an 18 month study into the thermal benefits of living walls, Scotscape has value-engineered our Fabric Living Wall system to enable the easy attachment of a variety of insulation materials to allow designers and architects to quantify the thermal benefits of living wall systems. Managing Director Angus Cunningham said: 'it is crucial for the design community to be able to calculate the thermal benefits of living walls, the continuing development of our fabric system to meet this demand will enable genuine traceable thermal benefits of living walls to be applied to the retrofitting of existing property assets to become more efficient and sustainable'.

0208 254 5000 www.scotscapelivingwalls.net

New unitised curtain walling launched



UK architectural aluminium systems supplier **Kawneer** has enhanced its curtain wall portfolio with the launch of a fasttrack dry-glazed unitised system. An alternative to the AA*201 structurally-glazed modular system, the AA*265 incorporates a three-chamber system and overlapping gasket design for optimum weather tightness. Its dry-glazed assembly gives the

building team a unique set of benefits including factory fabrication to ensure additional quality control and rapid on-site installation, with a team of five capable of installing up to 250m² of the AA*265 system in a single day. In addition, if access during installation is limited, the AA*265 system can be installed under restrictive working conditions, with the building remaining occupied.

01928 502500 www.kawneer.co.uk

enq.175

Warmcore video shows just how to do it!



A WarmCore installation video is now available on YouTube, which details exactly how to fit a new "warm aluminium" folding sliding door. Featuring two experienced engineers from **Synseal's** Technical Services team, this informative 8-minute video shows the removal of an old

in-line sliding patio door and its replacement with a brand new 3-2-1 bi-fold door in popular RAL 7016 Grey finish. The production follows a step-by-step approach and captions are used to support the voice-over commentary and emphasize key details, such as recommended outer frame fixing points. There is also an alternative "stop-motion" version of the video which presents the whole bi-door replacement process in less than 40 seconds to an up-tempo soundtrack.

01623 443200 www.synseal.com

enq.176

Introducing Sheerframe's Specifiers Guide



An informative new Specifiers Guide has been published by Sheerframe Ltd, to provide a handy and comprehensive product specification reference source for use by architects and designers. The guide summarises the calcium organic stabilised PVC-U window and door product range with Sheerframe 8000, Sheerframe 7000 and Sheerframe 6000 options clearly presented

and thermal performance detailed for the most popular profile and insulated glass configurations, which are capable of delivering U-values as low as $0.8 \text{ W/m}^2\text{K}$. As a member of the **Synseal** group of companies, Sheerframe Ltd's formidable range of proven fenestration solutions will continue to benefit from ongoing investment to strengthen the well-established Sheerframe brand name.

01623 443200 www.synseal.com

enq.177

'The future of commercial doors'

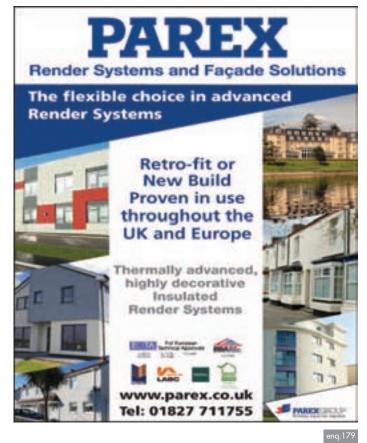


For many years commercial entrance doors, with their traditional looks, can be a little dated. But now, for the more prestige developments, there is a new contender in the market. Enter the MB-86 Frameless Leaf commercial door from **Aluprof** – it takes the inherent strength and sustainability from a frame of aluminium but also caters for bonded glazed units. The completed door has beautiful, flush, clean lines and is perfect for any commercial entrance application. Available with or without threshold the

MB-86 Frameless Leaf commercial door can be configured to open in or open out and can be automated with some of the leading door automatics.

0161 941 4005 www.aluprof.eu

enq.178





Aluminium entrance door ThermoCarbon XXL

When Your Security Matters the Doors are Hörmann

- Widest range of garage and entrance doors in the UK
- Precision German engineering
- Excellent security and outstanding reliability
- Large selection of designs to match every home





Flushglaze installed in award-winning project



Knitters House is a RIBA award-winning project by CE+C architects. The brief was to transform an aging 1950's bungalow into a modern contemporary dwelling, with interconnecting light-filled spaces. Glazing Vision's large modular Flushglaze rooflight is placed within the heart of the house, through a fissure reaching almost three stories high in the main entrance. The rooflight forms a central focal point in the building and is used to harness natural daylight on both floors,

transforming the interior space and continuing the buildings dialogue with the surrounding landscape. The glass fin comprises of two heat-soak tested toughened sections of glass, with a laminated interlayer which provides structural support.

01379 658 300 www.glazingvision.co.uk/request-cpd

enq.181

Levolux sheds light on fine art



The new £15 million extension to The Whitworth gallery in Manchester employs a state-of-the-art solar shading solution, coupled with an intelligent lighting control system, provided by Levolux, a leading solar shading and screening specialist. The Solar Shading solution comprises 48 Roller Blinds and 30 Skyvane systems, all motorised and linked to

an intelligent control system. Unguided, guided and zipped roller blinds were combined with non-retractable blinds, in the form of Levolux's Skyvane system, to satisfy challenging performance requirements. All blinds are linked to a Levolux lighting control system, which monitors multiple internal and external light sensors and presence detectors. These can be individually configured to set the level of lighting required given a range of criteria.

Hunter Douglas's new, silent sunscreens



A new low-maintenance and sound-absorbing retractable sunscreen has been developed by Hunter Douglas and incorporated into a prestigious Passiv Haus project in Brussels. ProScreen is a unique exterior sunscreen system with a patented noise reduction insert that provides superior sound-

absorbing properties in addition to up to 75 per cent sun glare protection and up to 85 per cent heat entry reduction. Architect practice A2M commissioned 206 units for its Anvers Simons FrontiSpice scheme, after being impressed with the guiding system which comprises a spring that counteracts movement, enabling noise to be completely absorbed.

01604766251 www.hunterdouglas.co.uk

Senior's fluent design



The newly built Education First (EF) language school in Cambridge has been carefully arranged, with the classrooms spread over two levels and linked by a central glazed atrium. With a key requirement of the scheme being the use of both natural light and ventilation, Senior Architectural System's

innovative Hybrid range of doors, windows and curtain walling has been specified to fulfil the exacting brief. Senior's Hybrid Series 3 curtain walling has been used to create the school's striking double height atrium with the slim sightlines offered by the Hybrid Series 2 windows further complementing the building's architectural heritage. To meet the additional requirements of a busy modern school, Senior's SD automatic doors completed the package. enq.184



New light on waste recycling

Mid-Sussex District Council has opened a new state-of-the-art refuse and recycling depot at Haywards Heath. Designed by Milan Babic Architects, its crisp simplicity is a dramatic example of the Kalwall translucent cladding system in action. Replacing an existing 50 year-old depot, the building is designed to be more environmentally friendly, reducing the Council's greenhouse gas emissions, its energy consumption and its use of water, thereby generating long term financial savings and other benefits for every resident of the District. It is being run by Serco. The project boasts a number of new technologies to reduce running costs and the carbon footprint including photovoltaic cells and rainwater collection tanks. It also benefits from the use of highly insulating Kalwall cladding which helps to reduce both energy consumption and heat loss by diffusing natural daylight across the interior. Unlike conventional glazing, Kalwall eliminates shadows and glare and the stark contrasts of light and shade. The system also enhances simplicity by eliminating the need for blinds, curtains or solar control. Even on cloudy days, the offices are bathed with natural daylight, both from the cladding and the roof above the workshop which means less artificial lighting. Kalwall is distributed in England, Wales and Northern Ireland by Structura UK, a supplier, fabricator and installer of glass curtain walling, rainscreens, glass atria, windows and other architectural glass building products.



Minimalist design for maximum daylight



Horsefield House, situated in the suburbs of Sheffield, is a large semi-detached Victorian villa with a courtyard garden to the rear of the property. The clients' brief was for the kitchen space to be transformed into an open-plan, sociable living area for the entire family. To achieve this look, large sections of bespoke glazing were

TLX Insulation now has its entire range accredited

by BBA certification with the latest addition being

TLX Gold the unique 2 in 1 Insulating Breather mem-

brane. "Although the existing European certification covered the same performance standards, we felt that

the trusted certification for UK architects was the BBA", said MD Thomas Hun. TLX Gold is fully

breathable so is the ideal choice where condensation

incorporated into the design plans. Glazing Vision's bespoke Flushglaze rooflight was situated directly above the bar area; the glazed unit, with its minimalist design and compact, frameless finish, helped CE+CA to achieve the desired effect within the existing built conditions. The rooflight captures vast amounts of natural daylight while providing breathtaking views of the changing sky.

01379 658 300 www.glazingvision.co.uk

TLX Gold makes it a double

enq.187

Nordan Windows for Gaelic College on Skye



The £2.5 million "IaIn Noble Centre" was officially opened in October, at the Sabhal Mor Ostaig Gaelic College on Skye, with windows supplied by NorDan UK Ltd. "NorDan's aluminium clad timber windows are our windows of choice, and especially for extremely exposed locations such as

this education facility on Skye," says Alan Dickson of Rural Design Architects. He continues, "NorDan's range of Scandinavian windows can cope with storms, wind and rain and the aluminium cladding ensures the minimum requirement for maintenance making them ideal for a project like this one. Their back up service, when it's rarely required, is second to none."

01452 883131 www.nordan.co.uk



enq.188

THE EVOLUTION OF INSULATION

tel: 01229716039 mob: 07851854860 info@uksprayfoam.co.uk www.uksprayfoam.co.uk

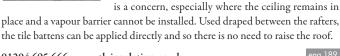
THE FIRST NAME IN SPRAY FOAM INSULATION



Icynene has been 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.

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.





01204 695 666 www.tlxinsulation.co.uk

Development leads the field with Kingspan



Kingspan Industrial Insulation Ltd's Kooltherm® FM Pipe Insulation System has been installed as part of a multi-million pound education and sports development in South Wales, helping the project towards its goal of BREEAM 'Excellent'. Both Aberdare Community School and Sobell Leisure

Centre have been pre-assessed to BREEAM 'Excellent' and the Kingspan Kooltherm[®] FM Pipe Insulation System helped contribute, directly and indirectly, to the award of these ratings. With thermal conductivities as low as 0.025 W/m·K, the Kingspan Kooltherm® FM Pipe Insulation System is the most thermally efficient commonly used pipe insulation.

01544 388 888 www.kingspanindustrialinsulation.com

eng.189

Salford spruces up with Kingspan Insulation



Nine 1970s residential blocks in central Salford are being given a new lease of life with both the inside and out being revitalised, thanks to a major retrofit scheme which incorporates premium performance **Kingspan** Kooltherm K15 Rainscreen Board in the over-cladding of external walls. 110mm Kingspan Kooltherm K15 Rainscreen Board was specified as part of a cladding system solution. The insulation

holds the highest possible BRE Green Guide summary rating of A+ and with thermal conductivities as low as 0.020 W/m.K. This helps to maintain internal space and should also help to minimise heating bills for the residents. The insulation boards are being fitted tightly to the original brick and block walls.

01544 387 384 www.kingspaninsulation.co.uk

enq.192

Recticel Insulation marks a BIM century



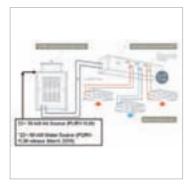
A leading PIR manufacturer, **Recticel Insulation** has marked a century by posting more than 100 objects with the award-winning NBS National BIM Library, the fastest-growing BIM library in the UK. The Recticel portfolio of BIM objects includes its three key brands – Eurothane, Eurowall and Powerdeck. This encompasses solutions for flat and pitched

roofs, walls (including rainscreen systems) and floors. The continual development of Recticel's BIM offering ensures its suitability for projects of all types, with a particular view towards the impending requirement from the UK Government that all public construction projects are to be built using level 2 BIM from 2016.

01782 590 407 www.nationalbimlibrary.com/recticel

enq.19

Hybrid VRF system delivers the best of VRF and Chiller technologies



Mitsubishi Electric has launched a new air conditioning system that delivers levels of comfort normally associated with Chiller technology, while providing the flexibility and efficiencies of traditional VRF (Variable Refrigerant Flow). The City Multi Hybrid VRF system operates without using refrigerant in occupied spaces, removing the need for leak detection equipment and allowing more properties to take advantage of manageable phased installation through the system's modular two-pipe design. At the heart of the new system is an HBC (Hybrid Branch Controller) box, connected to an outdoor City Multi unit via traditional refrigerant piping. Between the HBC and the indoor fan coils, the system uses water piping but is still able to deliver mild air-off temperatures and a great stability of temperature all year round, supplying Chiller levels of comfort to occupants. With no refrigerant in occupied spaces, Hybrid VRF also enables simple compliance with BS EN378 and removes the need for leak detection in any occupied room. This technological benefit also means a low overall system refrigerant volume. Hybrid VRF offers the complete flexibility of design and installation that City Multi VRF has become renowned for, while still providing centralised control, individual operation, and simultaneous heating and cooling with heat recovery.

01707 282880 www.livingenvironmentalsystems.mitsubishielectric.co.uk

ena.194

City of Bristol College - top marks for new heating system



City of Bristol College asked Remeha to provide an improved and more efficient heating solution for its College Green Centre, which caters for more than 1,500 students. The new heating solution involved the installation of four Remeha P420 12 Section boilers, each powered by Baltur TBG 85pn fully modulating gas burners producing a total output capability of 2,900kw. Cambridgeshire-based **EOGB Energy Products Ltd** supplied the burners for the installation. By replacing the old two-stage burners with fully-modulating EOGB/Baltur burners, the college now benefits from efficiency gains of more than 30 per cent, leading to significant energy savings and CO₂ and NOx reductions. At the same time, the units have superior reliability and lower maintenance costs. Martin Cooke, technical manager at EOGB, said: "The burner-boiler match in this heating system is very effective and enables the burners to operate at a 4:1 turndown ratio which significantly improves efficiency when compared to the old installation. The Baltur PN range of air to gas ratio burners are well established and provide optimum combustion and performance which will heat the City of Bristol College in a more efficient manner for many years to come."

01480 477066 www.eogb.co.uk

Video demonstrates benefits of HWAT T55



Electrical heat-tracing specialist, **Pentair Thermal Building Solutions**, has recently launched a video on its YouTube channel to demonstrate the benefits of its HWAT-T55 thermostat, which has been designed to operate with the Company's Raychem Hot Water Maintenance System for small pipe networks or for branches up-to 50m. The Raychem HWAT-T55 thermostat effectively monitors pipe

temperature and ensures that the system is used exclusively for maintaining the temperature in the pipe network, not for heating the water. In this way, the system ensures that power consumption is reduced to a minimum without affecting user comfort or safety. For more information and benefits of the Raychem HWAT-T55 thermostat, please visit Pentair's Youtube channel.

Fusing efficient ventilation



Effective, compliant ventilation of multi-occupancy rooms is simplified with an innovative concept from **Gilberts of Blackpool**. The air movement specialist's Mistrale Fusion (MFS)Terminal delivers optimum internal air control for less than £5.00/room/annum. The initial single-sided through-structure unit provides a one box, stand-alone solution, requiring no additional

ductwork or plant. The Mistrale MFS is, says Gilberts, the first in a new series that revolutionises energy-efficient ventilation in non-domestic buildings. Gilberts' Sales Director Ian Rogers said: "In one unit, it ticks all the boxes in terms of natural ventilation criteria in multi-occupancy rooms such as classrooms."

01253766911 info@gilbertsblackpool.com

Specify the latest technology in any underfloor heating application

The underfloor heating market is saturated with systems and solutions all claiming to have similar features and benefits, but when it comes to specifying the right type of underfloor heating, the system to specify needs to offer a lasting and effective solution... so how to decide?

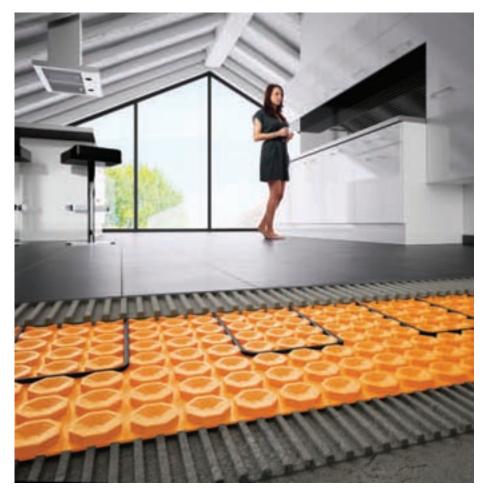
Underfloor heating must be well designed and installed properly first time as it's difficult to change or adapt once fitted. Up-to-date training is on offer for installers, architects and specifiers from solutions experts at Schlüter-Systems, who offer a CPD seminar titled *Modular Underfloor Heating Systems for Tile and Stone Coverings*, which explains how these systems help to protect tile and stone coverings from cracking, splitting, tenting and debonding and also explores the theory behind modular screed systems and the differences in water fed and electric underfloor heating. The RIBA accredited seminar lasts 45 minutes and is run within an architect's office.

There are two types of underfloor heating systems, the wet or hydronic system and an electric system. Schlüter-Systems happen to manufacture and supply both – but what should be specified and under which circumstances?

Electric System

Ideal for refurbishment and renovation projects, an electric underfloor heating system has a series of electrical wires installed beneath the tile or stone covering. Schlüter-DITRA-HEAT-E enables the heating cable to be quickly installed in the unique membrane reducing overall assembly height and installation steps compared to other electric systems.

The complete patented system for under tile and stone heating for wall and floors with uncoupling, crack-bridging and waterproofing properties, Schlüter-DITRA-HEAT, has been updated with Schlüter-DITRA-HEAT-TB matting. The new Schlüter-DITRA-HEAT-TB mat has a unique thermal barrier that reduces heat loss into the screed and subfloor, and it also benefits from 70 per cent quicker warm-up time on screed and concrete. Due to the intelligent touchscreen thermostat you can easily control temperatures and heating times, creating warm tile and stone whenever and wherever you chose.



Schlüter-DITRA-HEAT can also be used in wetrooms, bathrooms, en-suites and showerrooms. Under wall or underfloor heating, as a source of heat, can be an extremely beneficial method of ensuring effective moisture management, preventing mould and fungus by drying out any residual moisture, and in addition providing comfort, while maximising space in some of the smallest rooms in the home.

Wet or Hydronic System

Water fed underfloor heating systems are ideal for new build and partial renovations, projects like a new extension or a new floor slab.

Water fed system Schlüter-BEKOTEC-THERM provides a unique benefit, as it is as much as 30 per cent more energy-efficient, being part of a modular screed system (BEKOTEC) which brings the heating pipes closer to the surface, therefore with less screed mass to heat it can be fed by water at a lower temperature. And as the heat is being given off over a larger area, it is more evenly distributed throughout the room. Again with modular screeds such as Schlüter-BEKOTEC the amount of screed above the pipes is reduced enabling a more rapid response to heating cycles, providing eco benefits by saving energy, and using less cement compared to traditional screeds.

01530 813396 www.schluter.co.uk



Demand-controlled ventilation by RENSON®

r 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 whilst 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_2 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.

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.

Renson is a trendsetter in ventilation, solar shading and terrace covers. Since 1909 the company has developed and manufactured innovative products and solutions, which improve the living conditions of people and at the same time cut energy costs – Creating healthy spaces!

From its UK-based production facility in Maidstone, this company provides standard as well as customised solutions to the construction market and offers architects, specifiers, developers, fabricators and installers a wide range of innovative systems. Our product ranges include window ventilators, louvres and continuous louvre systems as well as hinges, sun protection elements with aluminium blades and screens and terrace covers.

For various applications in the UK, the project team of Renson has been developing special



ventilation solutions with louvre panels, combined with options, such as dampers or an insulation stack on the backside. By integrating such special glazed-in louvre panels with insulation on every window of a building, architects and installers not only take care of ventilation and thermal resistance, but also add a new architectural dimension to the façade of the building.

01622754123 www.rensonuk.net



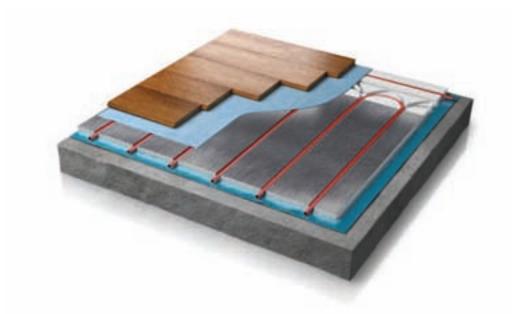


For more information please visit our website

www.electricboilerscompany.com

Why is Hydronic underfloor heating the best solution for your project?

Underfloor heating is fast becoming the heating solution of choice for domestic and non-domestic buildings in the UK. When choosing underfloor heating, there are two options, Hydronic (wet) or Electric. By Antony White, technical director, Warmup Plc



There are many different heat emitters available, currently the most common choice is the radiator. Although radiators have been the default method of installing central heating for many years, underfloor heating has been consistently growing and taking market share from radiators year after year. Radiator systems are typically designed to operate with a flow water temperature of 75°C and a return water temperature of 65°C, therefore running at 87 per cent efficiency. Underfloor heating by comparison is largely radiant with very little heat dispersed through convection. This immediately eliminates the excessive heat loss through windows and the ceiling that is attributable to radiators. With underfloor heating, the return water temperature is likely to be lower than 40°C by design. This allows the boiler to condense and boosts its efficiency to 94 per cent, an 8 per cent increase in comparison to the conventional systems.

The government's Standard Assessment Procedure (SAP) for energy rating buildings and the Microgeneration Certification Scheme both award improved efficiency ratings through reduced design water temperatures. While the ability to reduce the design water temperature is not unique to hydronic underfloor heating, it is a much more natural fit. Underfloor heating is often designed to operate at 40°C with zero impact on the room layout, but a radiator designed to operate with 40°C return water temperature instead of 65°C would need to be approximately four times the size of its predecessor – this would be impractical in many situations, as it would remove so much usable space within a room

Hydronic underfloor heating can be used with a variety of heating sources from boilers to heat pumps. The benefits with renewable technologies such as air source heat pumps are even more significant as their total efficiencies typically increase by 2.5 per cent for every 1°C reduction in design water temperature. Therefore, moving from a renewables optimised radiator system fitted with oversized radiators, to an optimised hydronic underfloor heating system with pipes fitted closer together within the floor, can substantially improve the efficiency of an air source heat pump by allowing it to operate at a 10°C lower water temperature.

Most hydronic systems are fitted onto the structural subfloor of a building, which often means that they are best suited to new-builds where the floor heights have not yet been *Continued overleaf...* 'It is everything a modern heating system should be'



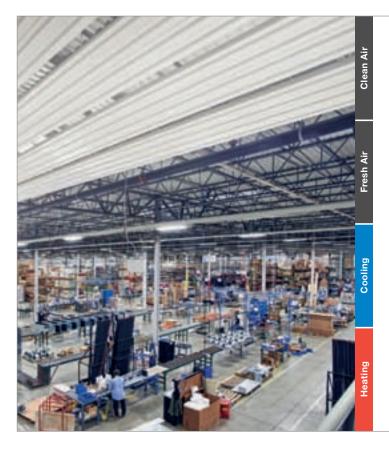
established. For renovations, or those projects where the source of heating is selected upon completion of other works – a low build hydronic insulation system will offer a complete solution, and because it is not embedded within screed, the heat up time is faster.

The minimal circulation of air allows advanced smart thermostats to accurately control the air temperature in individual rooms. Therefore heating each room only when it is needed, rather than wasting energy by heating unoccupied rooms within the house. It provides comfortable, radiant heat, while reducing the amount of energy wasted by inefficient heating systems.

Finally, hydronic underfloor heating requires very little maintenance. Any potential damage to a system normally occurs only during installation, where the underfloor heating pipe gets cut accidentally or becomes otherwise damaged. For those rare occasions some companies offer installation guarantees with free replacement of the damaged product.

When you add up all of the above, hydronic underfloor heating is more efficient to run, has lower maintenance requirements, and allows you to make full use of your heated rooms. With underfloor heating we are not unnecessarily wasting energy and it just feels right. The air does not feel stuffy, and unlike with radiators, everyone in the room experiences the same comfortable temperature. It is everything a modern heating system should be.

enq.201



Zehnder ZIP – Raising the roof

Zehnder ZIP radiant ceiling panels offer many benefits which contribute to creating a comfortable, healthy and energyefficient indoor climate.

Its lightweight construction makes Zehnder ZIP a perfect fit for refurbishment projects, facilitating ease of handling and installation. Proving both cost effective and responsive in operation; Zehnder ZIP radiant panels are ideally suited to rooms with high ceilings, such as production halls and warehouses, workshops, sports halls, garages, showrooms, maintenance halls and wet environments.

For full product information, download the Zehnder ZIP Planning document from: www.zehnder.co.uk

T: 01276 605 800 E: enquiries@zehnder.co.uk

always around you



Vortice supplies Quadro and Punto Filo Fans



Navigation Point in Walsall, West Midlands comprises an impressive selection of one and two bedroomed apartments set in scenic grounds and developers Walton Homes chose Vortice fans for their energy efficient ventilation. The Vort Quadro fan is

aesthetically pleasing within the bathroom, ideal for longer duct runs and available in an inbuilt or surface mounted versions. The unit is also easy to maintain, filters are washable and there are various versions including timer and humidity control models. The Punto Filo axial fan has a slim aesthetically pleasing profile which works well alongside Quadro and it has timers, PIR and humidity control versions suitable for bathrooms, utility rooms and kitchens.

01283 492949 www.vortice.ltd.uk

enq.203

enq.204

Refurbishment overcomes height restrictions



AET Flexible Space has recently supplied its under floor air conditioning system and bespoke teak finish raised access flooring to another height restricted London refurbishment at 28 Savile Row Mayfair, fully redeveloped by Allied London. AET supplied six CAM-C downflow units, one per floor and a total of 109 TUS-EC

fantiles. The slimline fantile will fit into a shallow floor void of just under 180mm making it ideal for height limited refurbishment. The system communicates using the latest Flexvisor for Modbus module and control is fully integrated with the Daikin 2-pipe heat pumps installed on external platforms adjacent to each floor.

01342 310400 www.flexiblespace.com

JS Air Curtains new product catalogue



JS Air Curtains, a leading UK air curtain specialist, is pleased to announce the launch of its new product catalogue. Packed with detailed information on its wide range of exposed, recessed, industrial and revolving door units, the catalogue incorporates quick glance product options and performance data tables for each

model. Tim Scott, head of sales at JS Air Curtains comments: "This catalogue has many new products, an easy to view selection guide, information on heat pump technology and more control options. These details and its comprehensive range for all air curtain applications, makes this catalogue the "go-to" resource for air curtain selection and expert advice." enq.205

Savills HQ fitted with Panasonic systems



Ireland's leading real estate organisation, Savills, recently acquired additional office space in Dublin, right in the city centre, at a location where power supply was extremely challenging, with a grid operating at capacity. A complete installation of a Panasonic

GHP VRF system capable of coping with a 243 kW Load provided the solution, utilising the ECO G 3-way units. These outdoor units require only a single phase supply and as such allow the building's electrical power to be used for other critical electricity demands which is vital in a large office space. The capability of the ECO G 3 way system to optimally cool and heat simultaneously with individual operation of each indoor unit from only one outdoor unit offers a flexible system to meet the demands of a busy office environment.





...For Superior Installations



100% Made in the UK



for internal and external applications

For more info, visit our website:

www.sflchimneys.com

A cool solution from SE Controls for Sydney's Netball Central

etball Central, Sydney Olympic Park's state of the art netball complex, is using a natural ventilation solution from SE Controls' Australian systems partner, Unique Window Services (UWS), to deliver precise, energy efficient control over indoor air quality and temperature at the centre.

The natural ventilation system uses four compact SE Controls NVLogiQ zone controllers, which constantly monitor a range of indoor air quality parameters, including carbon dioxide (CO_2) , temperature and humidity to maintain a comfortable environment for teams and spectators.

Air quality in each of four zones in the centre's upper and lower levels are monitored by the NVLogiQ units and if it exceeds any of the pre-defined environment set-point limits the controllers trigger the automatic opening of high and low level louvres to provide ventilation or cooling.

In normal operation, the principle of thermal stacking is used with warm stale air being vented through the high level vents, which has the effect of drawing cooler and fresher replacement air into the building via the low level louvres.

In addition to the NVLogiQ controllers, 10 dedicated SE Controls PSUs were also installed as part of the system, which ensure each louvre responds precisely to the signals received from the controller and provides the correct level of ventilation.

The system is also configured to provide night purge cooling at the end of each day, which not only helps reduce the internal temperature, but by fully opening the vents it also ensures that stratified air is removed along with any airborne pollutants that have built up during the day.

Shane Grice, UWS managing director, explained: "As an SE Controls technology partner, we have access to their advanced monitoring and



control systems, which allow us to design and install highly effective and efficient ventilation solutions, which have proven to be of significant benefit on this an a number of other key projects."

He added: "The demand for highly energy efficient building is an essential part of managing the global environment, and for prestige buildings, such as Netball Central, it's important that they set the standard for low energy cooling and building management solutions."

01543 443060 www.secontrols.com

Fusing two into one...



Gilberts of Blackpool, one of Britain's leading air movement specialists is extending its new Mistrale Fusion Series (MFS) range with the introduction of a high capacity version, to compliment the core MFS128 unit, which transfers 128l/s of fresh air/unit, mainly naturally, into a building. The new MFS256 delivers double the airflow capacity in one, larger

unit. Thus, the number of penetrations through the building facade - be it wall or window – is halved. The high capacity version still delivers all the performance criteria of the MFS range: providing a dynamic hybrid natural ventilation solution that uses occasional eco fan assistance to maintain comfort conditions and meet, or exceed, current regulations for ventilation, air quality and noise.

01253766911 info@gilbertsblackpool.com

ATAG boilers helps Co-Op cut energy costs



A system based around two high efficiency ATAG XL140 gas-fired boilers supplied by ATAG Commercial was installed at the Stockbridge Co-Op. It was the ideal choice as the key objectives were to achieve reductions in both energy and maintenance costs while being able to monitor

energy usage 24 hours a day, seven days a week, to keep future costs firmly under control. The XL140 gives a class leading efficiency of 109.3 per cent (EN677) achieved through seamless upwards modulation. NOx emissions have been reduced to below 30ppm, which ATAG believe is the lowest in its class. "Initial feedback from our monitoring system indicates a 12 per cent reduction in the store's energy running costs" said Delivery Project Manager, Nick Cairns MEI.

01243 815770 www.atagcommercial.co.uk



AIR EXPERTS Vortice ventilation systems create a healthy home



TALK TO VORTICE AIR EXPERTS NOW!

01283 492949 sales@vortice.ltd.uk www.vortice.ltd.uk



enq.213

GEZE has the winning formula



Appleton House in Warrington has been transformed with a funky industrial gym theme fit for the European headquarters of global Sportswear brand New Balance. As part of the renovation GEZE UK was commissioned to install a pair of bi-parting automatic doors powered by ECdrives to the entrance

of the canteen. The doors separate the working space from the canteen which features bold geometric flooring with colourful accents. Aluminium framed glass doors finished in grey satin were chosen to reflect the industrial theme while providing a stylish modern entrance. ECdrives have been specifically designed for use in busy areas, making them ideal for the canteen.

01543 443000 www.geze.co.uk

Class A sound solutions for Swansea University



Knauf AMF provided ceilings with the highest standard of acoustic control to help enable the University of Swansea offer world-class learning, teaching and research facilities. In the large library and resource centre Thermatex Antaris A ceilings were fitted to reduce the amount of intrusive

background noise. Sound control continues in the lecture theatre, where the ceiling performs two different acoustic functions. The area above the lecturer's platform is fitted with Fine Stratos micro-perforated tiles to improve speech intelligibility around the room. Fine Stratos Non-perforated tiles are installed in the remaining area to help reflect sound. Antaris A was also fitted in the stairwells and other circulation areas around the campus.

info@knaufamf.co.uk www.amfceilings.co.uk



JLC Automation Services specified for HQ



Specified for its high quality products, technical excellence and competitive prices, **JLC Automation Services** has completed the retrofit installation of DDA approved automated door opening systems for OFCOM at its London headquarters. OFCOM chose JLC Automation Services to install automated door systems to 12 doors over three levels of Riverside House, 2a Southward Bridge Road, London. The JLC technical team was also able to provide specialist advice to satisfy the detailed

triggering variation required for each door due to the strict security measures in place at OFCOM. The project has been a great success and OFCOM is now considering further installation of automated door openers throughout its properties.

01293 567929 www.jlcautomationservices.co.uk

Pub style provides metal window inspiration



As part of a major refurbishment of a semi-derelict home and adjoining coach house, Adam and Sarah Johnson saw the opportunity to add an 83m² rear extension that includes a kitchen and open plan living area. To help create the industrial look they wanted

they chose steel windows and doors from **Steel Window Association** Member, Monk Metal Windows. Monk manufactured and installed a 3.7m wide by 1.6m high window together with two screens containing windows and doors measuring nearly 3.7m wide and 2.7m and 3.1m high respectively. Fabricated from W20 sections and polyester powder coated in RAL 9005 matt black, the screens were glazed with traditional small pane 'Georgian' 16mm high performance double glazed units with a centre pane U-value of 1.2Wm²k.



Glass Writing Boards from Casca

Call us on 0845 519 4995



Linear tile range draws the line for 2016



Solus Ceramics has launched another inspirational range within the architectural and interior design industry for 2016, introducing beautifully illustrated, graphic wall tiles. Prototype offers endless possibilities to architects and designers alike, who are looking to create dynamic and striking designs, through the mix of three scintillat-

ing linear themes. At the heart of the range sees a mixture of thick and thin candy-striped tiles setting a strong graphical stance for the complimenting styles. Harmonising these, Prototype also features a mixture of geometric lined tiles that echo the look of futuristic electrical computer circuits. These unique and innovative tiles can be used to produce spectacular patchwork feature walls.

0121 753 0777 www.solusceramics.com

enq.217

Sublimated Trascenda is permanently patterned



Glass mosaic and decorative solid surfaces specialist, **Trend** has launched its new Trascenda agglomerate range. Created using cutting-edge dye sublimation techniques, the distinctive designs are embedded into the surface of Trend's slimline granite, quartz, porcelain

or even recycled glass composite sheets, so that permanent images are transferred into the material. The host agglomerate sheet retains all of its technical properties, so these beautiful surfaces are non-porous, low maintenance and resistant to heat, impact, scratch, stains and chemical cleaners. The standard Trascenda range currently comprises three distinctive design collections. Trascenda solid surfaces for the home are available to order from Granite Transformations showrooms.

01892 509690 www.trend-group.com

enq.219

www.apolloradiators.co.uk



monza aluminium column radiator

Ideal for low temperature renewable systems Ideal for high pressure systems The latest patented european technology A unique aluminium radiator design Half the weight of steel 82 vertical and horizontal sizes Delivered within 3 working days

New remote flush buttons from Geberit



More than half of UK householders would locate the flush away from the traditional area behind the toilet, given the opportunity to do so, new research has revealed. As many as 30 per cent of us would prefer to site the flush to the left or right of the WC, rather than directly behind it. "Just because the flush button has before now always been found behind the WC, doesn't mean this is where it always has to be," comments Rafaella De Vittorio, marketing director at

Geberit, which conducted the research. "The launch of the Geberit Type01 and Type10 flush buttons gives homeowners the freedom to position the flush within 1.7metres of the toilet, be it for practical or aesthetics reasons."

0800 077 8365 www.geberit.co.uk

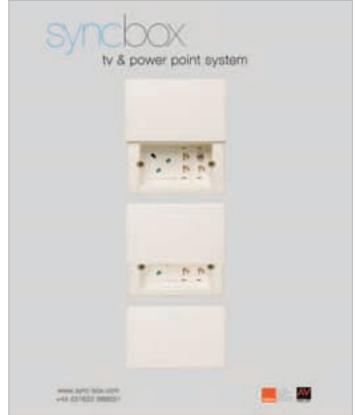
enq.218

Maxwood stars in London's West End



Stylish commercial washrooms from **Maxwood** have a starring role in an impressive development in London's West End. The new building at 55 St James' Street creates over 23,000 sq ft of Grade A office accommodation, designed to attract a high calibre of tenant. The internal fit-out includes high quality male,

female and DDA compliant washrooms, custom-made and installed by Maxwood over seven floors. In keeping with the project's prestigious specification, the washrooms feature a distinctive cast of luxury materials, from real wood veneer cubicles and decorative glass duct panelling to high performance hardware with an attractive copper-coloured finish.



enq.221

www.architectsdatafile.co.uk

Wetroom solution for St Joseph's Gate



Wetrooms UK are nominated installers to Berkeley Homes and were approached by them to supply and install wetroom systems into this unique Grade II listed building. The biggest challenge was to achieve a consistent look across each of the 115 wetrooms that were due

to be constructed throughout the old and new sections of the building on timber and solid floors. Wetrooms UK specified a range of wetroom solutions. For the timber floors, Modular Wet-Floor Systems with wastes, traps and 1,400mm solid stainless steel linear wall grills; Wet-decs with 130mm solid square grills were employed for the four way fall wetrooms and floors that had less than 100mm depth, a Modular Wet-Floor System with waterless trap and solid linear wall grill.

0845 045 6001 www.wetroomsuk.co.uk

New product literature from Thermaset



Powder coatings company, **Thermaset Limited**, based in Tamworth, Staffordshire, has launched a new suite of product brochures. The new range of individual A4 size publications covers Thermaset's specification brochures for its Spectra range and Ripple Finishes, a description of its Hygienilac

enq.223

enq.224

Antibacterial powder coatings and a Stock Range brochure. The specification brochures include four pages of product samples demonstrating the extensive ranges of RAL colours and finishes available. Thermaset supplies powder coatings to a wide range of customers including automotive manufacturers, architects, furniture and household goods, garden equipment suppliers, sports equipment and many more. For further information please contact Ben Jennens at Themaset.

01827 55777 www.thermaset.co.uk

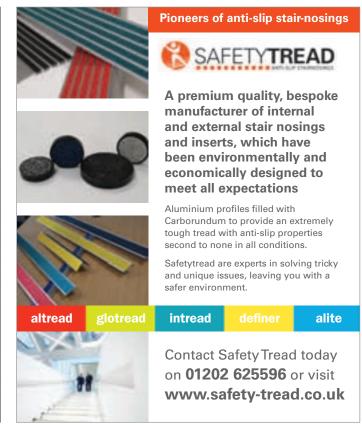


Integration in the second seco

Mapei UK helps shopping centre refurbishment

A complete system of **Mapei** products has been installed in the Monaghan Shopping Centre, North East of Ireland. Mapei's Ultraplan Renovation Screed, Epojet, Eporip, Planicrete, Topcem, Eco Prim T, Primer G, Keraquick, Latex Plus, Mapetex, Ultracolor Plus and Mapesil AC provided a series of systems to prepare the substrate, refurbish the existing floor and install Pamesa Ikom ADZ tiles. Mapei was asked to provide a system of products for the refurbishment of the shopping centre due to movement in the substrate resulting in cracking and de-bonding of the existing porcelain tiles. The products included three main systems of Mapei products being used to repair the substrate and install new tiling on the 1,400m² of retail and leisure space. The first system specified was to replace areas of screed. This system of repair included Epojet, Eporip, Planicrete and Topcem. Cracks in the existing screed were repaired using Eporip and Epojet. The second system installed was used to smooth the total area to a tolerance of SR1 for the installation of large format porcelain tiles. The third system was used to complete the installation of the Pamesa Ikam ADZ tiles.

0121 508 6970 www.mapei.co.uk



enq.220

Practical solution for Park Chinois

The Park Chinois is an ambitious restaurant located on Berkeley street, London W1. The May Fair property, which formerly housed an American diner-style automat has recently been transformed into a very different type of restaurant.

Delivering traditional Chinese food in a surrounding that has a retro feel, reminiscent to that of the 1940s/1950s Shanghai, the Park Chinois delivers an all round dining experience.

Alan Yao, who originally opened the Wagamama chain in 1992 and has since added Hakkasan, Busaba Ethai, Yauatcha and Sake No Hana to his list of stylish restaurants, launched the new 15,200 sq. ft Park Chinois, which seats 300 people, in November 2015.

Having provided Alan Yao's restaurants with products for more than a decade, stainless steel specialists Component Developments were specified to supply stainless steel drainage channels and gullies throughout both the ground floor and basement kitchen areas of the Park Chinois.



On the ground floor kitchen area a total of 20 stainless steel channel drains and gullies were fitted, each one topped with an anti-slip grating. The channel widths ranged in size from 395mm to 995mm (specifically sized to match the modules), with lengths up to 5.75 metres.

On the basement floor a further 2 channel drains and 15 large gully pots where fitted. All gully bodies installed were standard designs, supplied by Component Developments to various projects throughout London on a regular basis. All included removable stainless steel odour traps and waste baskets placed inside, allowing for easy cleaning and maintenance.

Working closely for over a year with the kitchen design team and on-site contractors, Component Developments were able to help overcome any on-site problems. This included communication between the different trades and designing the channel system to tie together the plumbing and floor tile layout within the structure of the building. Offering both a practical and visually pleasing solution, whilst sticking tightly to the requirements of the kitchen design.

Component Developments will be launching a brand new website in February 2016 which will highlight a range of stainless steel drainage, access and surface protection products.

01952 588488 www.componentdevelopments.com



Lido Ponty restored to its former glory



Polysafe safety flooring from UK manufacturer **Polyflor** was recently used to help return Lido Ponty, the National Lido of Wales in Pontypridd, to its former glory. The Polysafe Arena PUR and Polysafe Modena PUR safety flooring ranges which offer sustainable slip

resistance in accordance with HSE guidelines were installed at Pontypridd's new visitor attraction. Suitable for busy commercial environments where there is a high level of footfall, Polysafe Arena PUR in the Cement design was installed in The Waterside cafe and the visitor centre where the lido's rich heritage is show-cased, while Polysafe Modena PUR safety flooring in the Blue Quartz and Andesite shades was used in back of house zones and the centre's busy reception.

01617671111 www.polyflor.com

Attiro Order



Kingspan Access Floors has secured an order for 200 sq m of its pioneering new Attiro accessible oak flooring to be installed in a £30 million building constructed by Balfour Beatty for Sheffield Hallam University. Attiro secures magnetically to Kingspan steel encapsulated raised access flooring, achieving the look of a traditional wood floor but without limiting access to the raised floor and

void beneath. Because Attiro is installed at the fit out stage there is far less chance of damage, if a stave does need to be replaced it can be easily removed, and the floor can be walked on as soon as it has been laid.

$\mathsf{DuPont}^{\mathsf{m}}$ Corian[®] shines as luxury lighting



© Andy Carver

Caxton Rhode has unveiled its latest work of art, a solid light installation made from Corian^{*} for a luxury Chelsea apartment. At nearly a metre in diameter, and completed from concept to creation in only four weeks, this dramatic piece of wall lighting perfectly fulfilled the requirement that the lighting design should reflect the sumptuous feel and finish that was applied throughout

the scheme. Known as a "tailor of interiors", Rob Bartlett, creative director of Caxton Rhode, opted for Glacier Ice White Corian^{*} from **CD UK** and fabricated by Zone Creations for the material's durability and beauty. The product's translucent qualities and malleability made it the perfect choice for this design.

0113 201 2240 www.cdukltd.co.uk

New range of tiles from Johnson Tiles



Johnson Tiles has launched an exciting new tile range that perfectly replicates the look of exposed bricks using expert design and the most advanced tile manufacturing technology yet. Brics is a floor and wall tile available in a realistic 250 x 60mm slim format that offers all the stylish effects of brickwork,

with all the practicalities of tiling. Available in six colours from sandy beige, to slate grey and iconic red, it is designed to mimic the different clays used to create bricks. Each tile includes unique detailing and varying characteristics, and packs are made up of a random mix for an authentic and distressed overall finish. Brics brings this stylish urban look to life.

Sika Flooring celebrates a trio of FeRFA awards



Sika has triumphed at the prestigious FeRFA (The Resin Flooring Association) Awards Ceremony 2015, scooping three awards for its collaborative and impressive work on a range of resin flooring projects. Held at the Belfry Hotel in Sutton Coldfield on 27 November, the FeRFA Awards recognise outstanding

workmanship, diversity and innovation shown by its members. In a competitive field of entries across six categories, Sika stood out against a wide range of top quality resin flooring projects. With five projects nominated and three winners at one of the flooring industry's most prestigious events, Sika has further enhanced its reputation for manufacture and supply of market leading flooring systems.

0800 1123863 www.sika.co.uk/flooring

enq.231

enq.233

Playtime with Polyflor safety flooring



enq.230

Polyflor's recently relaunched Polysafe Wood fx PUR vinyl safety flooring was chosen to help create a safe, child-friendly environment at the Paper Moon Day Nursery in Nottinghamshire. The grey toned Silver Oak design from the Polysafe Wood fx PUR collection of sheet vinyl flooring

was installed in the playroom areas of the new nursery. The popular range now features six new on-trend designs, giving a more contemporary feel to the collection. Polysafe Wood fx features a cross-linked and UV cured PUR polyurethane reinforcement which makes it easy to clean and provides optimum appearance levels and reduced life cycle maintenance cost savings. The flooring has also been found not to contribute to common allergies such as asthma or dust allergies.

01617671111 www.polyflor.com

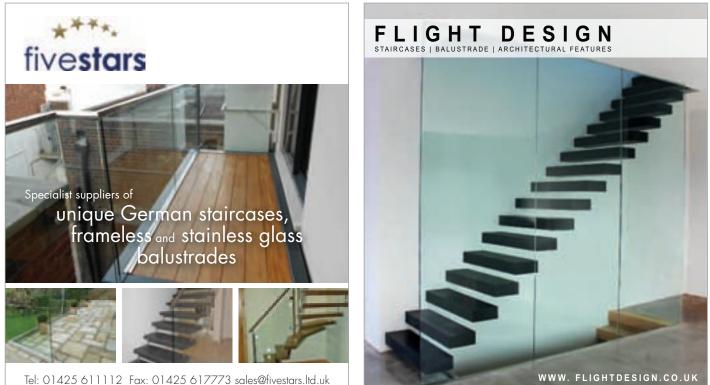


MFE Glass Partitioning specialise in a range of partitioning solutions. We specialise in the supply and installation of 30 minute and 60 minute fire rated glass and our accoustic glass is perfect for board rooms, executive office suites and meeting rooms as well as general office use. Ask us to quote for your next project.

01206 760111 www.glasspartitioning-mfe.co.uk

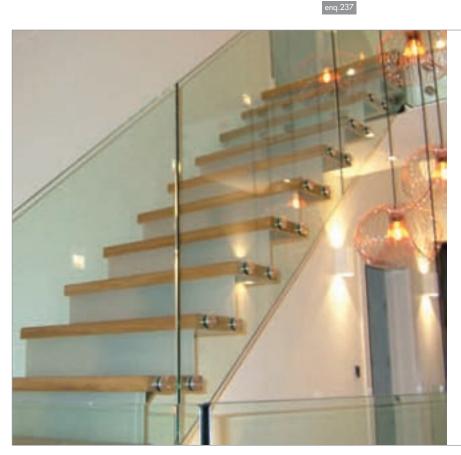
01782 575575 www.johnson-tiles.com

enq.235



13A CHAPMAN ROAD, LONDON, E9 5E 020 8980 10

enq.238



www.fivestars.ltd.uk



ARCHITECTURAL GLASS

Bespoke stairs & balustrades Splashbacks & worktops Glass floors & roof lights Complete glass solutions

Please contact us for details 01903 733206 www.demon-designs.co.uk

Balustrading design – Practical implications

A beautiful new building or a stunning renovation project – whatever the scheme, balustrading is an integral part of any design. It's a feature that can contribute to the overall look – positively or otherwise – so it is essential that designers spend time finding one that fits the bill. Harry Watson, managing director at SG System Products Ltd explores why

Balustrading is not just an essential feature for most buildings, it is also something that can consolidate the character of a building. For this reason alone, it is important

to make the most of what is essentially a small part, cost-wise, of a building project.

Historically, balustrading accounts for just one or two per cent of the cost of a new building project, but because it comes late in the construction process, there is a tendency for cost-cutting measures to be implemented if the budget is under strain by then.

However, skimping on balustrading is inadvisable for myriad reasons.

Most importantly, safety considerations must be adhered to: the balustrade must meet clearly defined structural requirements. A reputable supplier will ensure this is the case and will provide the relevant calculations, if requested.

The question of maintenance should also be considered as part of the lifetime cost. The cheapest balustrading – mild steel that is painted on site – although sufficiently strong to do its job, will need to be maintained regularly.

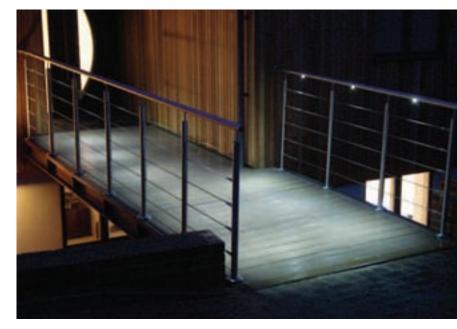
There is also the question of aesthetic appeal that must be considered by designers and end users because a poorly designed and constructed balustrade can cheapen the appearance of even the most elegant building.

A simple way to avoid problems when it comes to budgeting for balustrading is to specify a recognised system at the outset.

By doing so, costs are largely known in advance, even if the systems are tailored to suit the client's specific requirements; quality is agreed and not left to interpretation; structural strength is defined; and delivery dates are more likely to be more reliable as the product manufacturing times will be already established.

Of course, it is essential to select the balustrading system that complements most closely the overall design theme; that meets the requirements of Disability Discrimination Act (DDA); and that meets any special structural requirements, if necessary.

External balustrading provides visitors with that essential first impression. Stainless steel is often specified because it has to be



weather-proof, but ensure that the steel used in the manufacture of the balusters, handrail and fittings, is grade 316. Any lesser grade will not resist the weather.

There are good alternatives to stainless steel. Mild steel with a thick PVC sleeving is almost as durable, is available in a range of colours, and is particularly useful where disabled access is required because it is "warm to the touch". If aluminium is used externally, it must be powder-coated or anodised. Either metal will look good but they will need to be maintained eventually.

There is a much wider choice for internal balustrading, giving designers the chance to go to town. A feature staircase can be enhanced with glass or stainless steel balustrading, or a combination of aluminium and stainless steel, while for a more functional, yet aesthetically pleasing, choice, stairs could be treated with a PVC sleeve, which would allow you to choose from a selection of colours, or even different colours for handrail and balusters.

Continued overleaf...

'Balustrading is not just an essential feature for most buildings, it is also something that can consolidate the character of a building' Infill panels to the balustrade are also important in determining the overall effect. Toughened or laminated glass panels are popular and are cheaper than perforated sheet, although perforated panels are often used in schools.

Using a combination of products means that clients can achieve a bespoke look for their building.

"Warm to the touch" handrail on stainless steel balusters meet DDA requirements, while stainless steel with custom built handrail and brass fittings make what could be a utilitarian staircase into an impressive feature. High traffic areas in schools, libraries, offices, and access ramps lend themselves to PVC-sleeved systems.

Recent developments in balustrade design means that handrails can now incorporate LED lights. This feature is not only aesthetically pleasing, with its attractive "stepping stones of light", it can also be very practical because the use of PIR motion sensors with illuminated handrail can direct people to the relevant entrance, for example.

With so many options to choose from, it pays to contact potential suppliers at the design stage so that balustrading details can be agreed. It's important, when getting quotes, to ask questions about the required structural strength, building requirements to accommodate the fixings, durability and other available options so that the supplier can provide a more accurate cost per metre run for your preferred design.



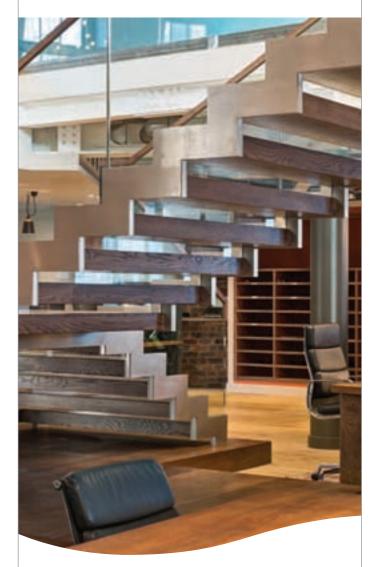
If possible, request samples to help you drill down to your final choice and visit suppliers' websites to get a "feel" for the company and its products.

Being prepared at the earliest opportunity – and asking the right questions – will help to minimise any problems when it comes to delivering the very best balustrade for a building project, particularly when handover is looming and budgets are getting tight.









British engineered stairs, balustrades and handrails for commercial and residential environments, installed throughout the UK & abroad. Visit our London Showroom located in the heart of Clerkenwell.

> Clerkenwell Architectural Showroom 11-12 Great Sutton St. London EC1V 0BX

Ecobuild | Clerkenwell Design Week | 100% Design



| By Canal Engineering Limited +44 (0)115 986 6321 www.canal.gb.com TAPER-LOC DAY BLAZE RAILUNG SYSTEM Simple, Fast, Junique,

Frameless Glass Balustrade System

- 50% faster to install than alternatives
- Save Time & Money The horizontal TAPER-LOC[®] design allows the system to be adjusted, dismantled and re-set
- · Meets BS 6180: 2011 requirements



To see a demonstration, visit taperloc.co.uk

1: 00 800 0421 6144 et CRLijterlautenen.co.uk 1: 00 800 8262 3299

enq.242

enq.243





Premier Loft Ladders are the pretered choice of architects and building industry professionals throughout the UK, and their range of COLUMBUS. Treppen stairways leads the way in engineering quality, design, technology and energy efficiency, making Premier the foremost supplier of concertina style aluminium and folding or sliding style wooden loft and access ladders. Our stairways have a wide range of options including flat roof access, fire resistant trapdoors, electrical operation (concertina stairway) and vertical access.

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

bimstore.co.uk

Contact us on: 0845 9000 195 01394 214413

E: sales@premierloftladders.com W: www.premierloftladders.com



y resone to choose PLL:

- Outstanding quality & value Preferred choice of architects and
- building industry professionals
- COLUMBUS Treppen UK Main Dealer
- Technical & design advice
- Electrical operation
- Commercial & domestic applications Fire resistant trapdoors
- Vertical access
- Flat roof access



Latest LED lighting solutions in new brochure



The Greenstock Lamp Company has just published a 120 page colour brochure covering its entire range of LED lighting products, including its U-Connect plug and play system. The comprehensive range of quality products covers many different types of LED lamps, tubes and shatterproof tubes, LED strip and tape all the way through to LED luminaires such as high performance LED flat panels, highbays, floodlights and non-corrosive fittings. With huge

growth in low voltage 12V and 24V LED products, a significant part of the new catalogue is devoted to the LED strip and LED tape. The products lend themselves to architectural and interior design specification such as in retail, kitchens, bathrooms, and in property development.

'Twin' trunking duo resolves size issue



Marshall-Tufflex's Twin165 cable management solution has come up trumps for yet another major educational new-build project, offering generous compartment sizes in a trunking profile able to accommodate height restrictions around window sills. The new £22 million Arts and Sports Academies at Sunderland College's Bede Campus required an integrated

cable management solution for both buildings. When specifying trunking to carry power and data supplies throughout the new buildings consultants were limited by height restrictions around window sills, Twin 165 solved the dilemma, offering a solution for these tricky areas with a flexible, medium-sized, cable containment solution that met the specification and required cable capacity perfectly.

01424 856655 www.marshall-tufflex.com



MODERN LIGHTING SOLUTIONS

more than light



Lighting catalogue with style shots available on request

0208 123 7914 modernlighting.co.uk

enq.246

enq.247

Introducing the universal sensor from Sontay



The single output UN-Sensor is the latest low-cost addition to **Sontay's** range of sensors and is an ideal choice for tightbudgeted projects. Installers can expect devices within the range to automatically detect the controller signal whether it is 4-20mA or 0-10V and rest assured that it will have the accuracy and reliability that the Sontay product family is renowned for. Despite it being the most affordable option in the range and focused on a single output, the device is

available to measure a range of variables, concentrating on one of three options: air quality (AQ), carbon dioxide (CO_2) and relative humidity (RH). The UN-Sensor is just as reliable as the standard Sontay sensing devices and the technology it features is superior to competitive products on the market.

SterlingOSB helps designer scoop RHS award



Norbord's SterlingOSB played a leading role in the construction of a prize-winning display by Welsh garden designer, Robert Hughes at this year's RHS Flower Show in Bute Park, Cardiff. Robert, who specialises in garden design for domestic customers as

well as a growing list of commercial clients, designed the garden along with the unique garden office which was central to his display. "We needed a cost-effective, strong material to build with, and Norbord's SterlingOSB offered the perfect solution," says Robert. SterlingOSB was used to build the base of the garden's raised patio structure as well as wall panels and flat-roof decking for the Office Box itself. "I really like SterlingOSB – it's easy to work with, it's strong, light and durable. It's ideal for something like a flat roof deck structure," he says.



1: 20629 636 210 E sales@krupskeigas.ct.uk W. www.krupskeigas.c



ADDRESSABLE VADS TO BE HAD! C-TEC's addressable visual alarm devices & sounders are here! Introducing C-TEC's new range of UK-manufactured addressable visual alarm devices and sounders. Fully compatible with our XFP & ZFP range of XP95/Discovery fire panels, Base, Hi-Output and Compact variants are available, all certified to the relevant parts of EN54 parts 3, 23 and 17. PCB I PCB Hi-Output W-2.4-8.2 Wall VAD C-3-8 Base VAD Compact C-3-8 Ceiling c/w 103dB(A) Sounder VAD c/w 91dB(A) Sounder c/w 96dB(A) Sounder VAD SYSTEM DESIGN GUIDE • W-2.4-8.2 light distribution • C-3-8 light distribution • C-3-8 light distribution NOW AVAILABLE Ideal for mounting under • 14mA alarm current @24V DC • 14mA alarm current @24VDC +44(0)194232274 fire detectors in corridors, etc. FOR A COPY • IP33C rated IP21C rated • Sounder, VAD-only and Voice Sounder, VAD-only and Voice Sounder variants also available VAD-only and Voice Sounder Sounder variants also available variants also available +44 (0)1942 322744 sales@c-tec.co.uk www.c-tec.co.uk You're safe with C-TEC

nq.251



Permeable paving reviewed

A new case study, published by the trade body Interpave, reviews the successful long-term use of concrete block permeable paving around a Milton Keynes School, The Hazeley Academy. The academy is a purpose-built secondary school incorporating a sustainable drainage system (SuDS) with extensive areas of concrete block permeable paving installed around 10-years ago. It exemplifies the use of permeable paving in distinct compartments with accessible flow controls to provide demonstrable water storage, manage sloping sites and optimise pollution removal. The concrete block permeable paving has been shown to deliver a controlled flow of clean water for wildlife habitats such as ponds. In particular, research showed an overall post-development increase in the population of protected Great Crested Newts native to the site and suggested that 'Favourable Conservation Status' has been achieved. Experience of the Academy Site Manager demonstrates that the concrete block permeable paving is also a problem-free technology over the longer term, able to accept roof water and runoff from adjacent sealed paving.



RECYFIX® GREEN grass reinforcement modules installed at Banovallum School

The Hauraton RECYFIX* GREEN STANDARD surface reinforcement grid system was used extensively in the grassed pathways, where a high footfall was expected, and the grassed areas surrounding Banovallum School, Horncastle. The system helped to prevent erosion and improve surface drainage. Once installed, the RECYFIX* GREEN modules were discreet, yet provided a permanent surface reinforcement to the grassed areas with a loading capacity of 200 tonne/m². The pathways and area to be grassed were excavated, covered with a granular sub-base, a layer of sharp sand applied and then rolled. The RECYFIX* GREEN modules were then secured on top of the rolled surface and their apertures filled with top soil which was compacted then grass seeded. The grass was left to grow over several weeks before access was allowed. For the full case study and more information, please visit the company website.

0116 232 5170 www.paving.org.uk



01582 501 380 www.drainage-projects.co.uk



classified & directory

ADVICE & INFORMATION

NHBC (National Housebuilding Council) Tel: 0800 035 6422 www.nhbc.co.uk

ADHESIVES

BAL Tel: 01782 591100 www.bal-adhesives.co.uk

Balco Balcony Systems Tel: 0203 687 1020 www.balcouk.com

BATHROOMS & WASHROOMS

www.heatedmirrors.co.uk



Satana Int Ltd (01935) 891888 we also design bespoke Steam-Free Mirrors

Eng. 501

BIOMASS STOVES & BOILERS



Enq. 502

CAD & PRINTERS

Standing Stone Tel: 01661 886653 www.standing-stone.co.uk

Enquire online at www.architectsdatafile.co.uk

COATINGS, SEALANTS & PAINTS

Barrettine Group Tel: 01179 600060 www.barrettine.co.uk

CURTAIN WALLING

Comar Architectural Aluminium Systems Tel: 0208 685 9685 www.comar-alu.co.uk

DOORS & WINDOWS

Timber Door Canopies by George Woods



Tel: 01363 884218 www.timberdoorcanopies.co.uk

Eng. 503

DRAINAGE & VENTILATION

Sita Bauelemente Tel: +49 2522 8340 0 www.sita-bauelemente.de

Enquire online at www.architectsdatafile.co.uk

ENVIRONMENTAL REPORTS

GeoSmart Information Tel: 01743 276 150 www.geosmartinfo.co.uk

FIRES & FIREPLACES

Charlton & Jenrick Ltd Tel: 0845 519 5991 www.charltonandjenrick.co.uk

HEATING & VENTILATION



ww.aelheating.com

Eng. 504

Recticel Insulation Products Tel: 01782 590470 www.recticelinsulation.co.uk

Greentherm Solutions Ltd Tel: 01229 716039 www.uksprayfoam.co.uk

INSULATED PANELS



Eng. 505

KITCHENS

Aga Twyford (Trading as Twyford Cookers) Tel: 01568 611124 www.twyford-cookers.com

NATURAL STONE

Stone Federation Great Britain Tel: 01303 856123 www.stonefed.org.uk

PUMPING STATIONS

J T Pumps Tel: 0844 414 5800 www.jtpumps.co.uk

Reader enquiries online at

www.architectsdatafile.co.uk

If you're interested in advertising within this section please contact the sales team on

01435 863500

RAINWATER SYSTEMS

Rainclear Systems Ltd Tel: 0800 644 44 26 www.rainclear.co.uk

Yeoman Rainguard Tel: 0113 279 5854 www.rainguard.co.uk

National Federation of Roofing Contractors (NFRC) Tel: 020 7638 7663 www.nfrc.co.uk

Topseal Systems Ltd Tel: 08000 831 094 www.topseal.co.uk

Traditional Clay Roof Tiles Tel: 08008 886 633 www.traditionalclayrooftiles.co.uk

Levolux Limited Tel: 020 8863 9111 www.levolux.com

STAIRS & BALUSTRADES

Railing London Ltd Tel: 0208 566 6750 www.railinglondon.com

STREET FURNITURE

Contenur UK Ltd Tel: 01282 604400 www.contenur.com

TILES & TILING

Solus Ceramics Tel: 0121 7530777 www.solusceramics.com

TIMBER & JOINERY





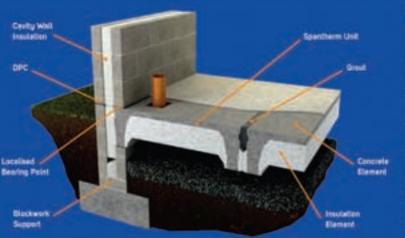
Enq. 507

75





Ę S



Why Choose Spantherm?

- More efficient than beam and block
- Excellent thermal peformance with a U-value as low as 0.12W/m²K
- No need for expensive storage for insulation
- Eliminates cold bridging
- Faster installation on site
- Significantly reduces on site construction time, labour and waste
- Structural sub floor ready to build off the next day
- Provides a flat, safe working platform with all insulation below the structural slab
- Install with on-site plant and machinery
- Factory produced giving consistent insulation
- Durable and robust

What is Spantherm?

Spantherm is a pre-insulated precast concrete flooring system designed specifically for residential and mid-sized commercial ground floors. The composite slab combines structural concrete and high performance Expanded Polystyrene (EPS) insulation to provide a superior, structural thermal floor.



Creagh Concrete Products Ltd, Blackpark Road, Toomebridge, County Antrim BT41 3SL NI: 028 7965 0500 - ROI: 048 7965 0500 spantherm@creaghconcrete.com

www.creaghconcrete.co.uk/spantherm.html

