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#### Metal ceiling solutions can offer design flexibility and a robust option

When it comes to ceiling solutions in today's buildings, material choice is more important than ever. Consideration has to be given to occupant comfort, ease of maintenance, durability, flexibility for future change and visual appeal, through the fit out, to achieve value. Andrew Jackson of SAS International looks at how to achieve long-term value in specifying ceiling solutions to accommodate change and ensure future tenants benefit from a robust interior

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Cover image: Glasgow School of Art's Reid Building.  
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# Glasgow School of Art's Reid Building officially opens

The latest addition to the Glasgow School of Art (GSA) campus, a stunning new £50 million purpose-built academic facility has officially been opened.

The Reid Building – named after Professor Seona Reid, the former GSA director – is situated opposite the world-renowned Charles Rennie Mackintosh building.

This new building will provide the school with high-quality facilities to inspire creative education and research in the visual disciplines of modern times. The building houses a series of large double height studios, lecture theatres and workshops, and is built over two basement storeys and five superstructure levels.

Arup worked with New York-based Steven Holl Architects and was appointed to provide a wide range of services on the project including structural, civil, geotechnical, mechanical, and electrical engineering; as well as lighting, facades, sustainability, acoustics, fire, energy, transport and venue consulting services.

Derek Roberts, lead structural engineer, Arup, commented: "Building across from an architectural icon is a once in a lifetime opportunity. The client's aspirations and Holl's architectural vision required a holistic design approach involving a wide range of specialists working closely together. The finished building's interior is a sculpture of concrete which works with natural light to provide great studio spaces interlinked with a winding stair. Dealing with these complex geometries provided a real challenge, bringing together a series of interdependent, multidisciplinary considerations within the exposed structural form."

Professor David Porter, head of the GSA's Mackintosh School of Architecture, said: "From the outset was the desire to take a route up through the building as a hybrid between architectural promenade and atrium that promises an extraordinary spatial richness. The proportion of rooms, walls and materials are being crafted to bind the building together into a whole that is infused by an approach to environmental control and sustainability that emanates from



© Alan McAteer

the physique of the building... a design strategy that has been driven forward with a mixture of poetics and ruthless pragmatics: qualities that are singularly appropriate in this context, and developed with an artistry and skill."

Arup developed an effective low energy design for the spaces above ground; using 5-metre diameter concrete 'driven-void' tubes within the central atrium space as ventilation chimneys to provide natural air and light, to improve students' concentration and learning.

Arup also proposed and implemented an upgrade to the GSA's district heating as part of the scheme, changing from the old inefficient boiler to a biomass system, which extensively lowered the carbon footprint of the campus including both the new Reid Building and the listed Mackintosh building. This complements a range of sustainability measures including natural ventilation, green roofs and gravity operated rainwater harvesting to deliver a BREEAM Excellent rated facility.

The Reid Building opened for student use in January and officially opened on 9 April. The building plays an integral part of GSA's redevelopment strategy and brings together departments which were previously dispersed across the city, into an efficient and sustainable location.



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## COMPETITION

## Lancaster University launches design competition

An urban design competition is being launched by Lancaster University in its 50th anniversary year.

The university is calling on architect-led, or landscape architect-led teams to rejuvenate its Lancaster campus' principal walkway, known as The Spine.

The Spine is a partially covered pedestrian walkway spanning one end of the campus to the other, a distance of one kilometre. It was originally designed to allow pedestrians to walk the whole length of the campus while providing a degree of protection from the weather. Portions of the walkway were left open to the sky to let in the natural light, avoiding the need to provide under canopy lighting in part. The original 1960s architects and master planners of the university (Shepherd Epstein) designed The Spine to follow the natural gradient of the land.

Mark Swindlehurst, director of facilities, said: "We are looking for an innovative team capable of rejuvenating The Spine and representing it as a space that knits together an array of different buildings, external landscapes and addresses various building frontages and entrances.

"We want to create an inspirational space where people learn, work and live, as well as go about their daily business. The university fosters a sense of community cohesion and The Spine should facilitate this."

The Royal Institute of British Architects (RIBA) is managing the competition process and a shortlist of five teams will be invited to develop their concepts in response to the university's outline brief. An equal honorarium will be paid to each of the five shortlisted teams invited to participate in the design phase of the competition. The

competition will be held in two stages:

- Stage 1: Expressions of Interest
- Stage 2: Submission of dialogues and concepts to illustrate possible design approach and final interview with jury panel

Expressions of Interest are invited in accordance with the requirements set out in the *Pre-Qualification Questionnaire* and *Preliminary Competition Brief* available from the university's e-tendering system at:

<https://in-tendhost.co.uk/lancaster/>

For further information on how to apply visit [www.architecture.com/competitions](http://www.architecture.com/competitions) and follow the link to Live Competitions to obtain the Unique Registration Number (URN) that must accompany the EOI return.

The deadline for submissions is 14.00 hrs on Monday 12 May.

*'The University is calling on architect-led, or landscape architect-led teams to rejuvenate its Lancaster campus' principal walkway, known as The Spine'*

## RIBA GALA AWARDS CEREMONY

## National architecture figure to speak at university

One of Britain's leading architects will visit Nottingham Trent University when it hosts a gala awards ceremony for the Royal Institute of British Architects (RIBA) East Midlands. Sir Michael Hopkins CBE – who was knighted for services to architecture – will, along with his wife, Lady Patty, be guest of honour at the event on 15 May. The awards ceremony will take place in the atrium at the university's RIBA award winning Newton Building, which Hopkins Architects designed as part of the £90 million transformation of the Newton and Arkwright buildings. A photography exhibition entitled Hopkins in Nottingham: Nottingham on Camera 1994 – 2014, by renowned photographer Martine Hamilton Knight DLitt (Hon), will also be on show during the event. Visit [www.ntu170years.co.uk](http://www.ntu170years.co.uk) for more information.

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WEST KOWLOON CULTURAL DISTRICT (WKCD), HONG KONG

# Atkins to project manage one of the world's largest arts and culture developments



Atkins will provide support to the West Kowloon Cultural District Authority's executive management team in managing and delivering the project and will be responsible for project management of the implementation of M+ – Hong Kong's new museum for visual culture – the Conservation and Storage Facility, Lyric Theatre, district cooling system and Common Basement Phase I. The work will start this month and last for five years.

Michael Lynch, chief executive officer of West Kowloon Cultural District Authority, said: "Atkins has a very strong track record in managing the most challenging, large scale projects in Hong Kong and around the world. We are confident that Atkins' extensive experience worldwide will be instrumental to our project's success."

John Blackwood, Atkins' project director, said: "Atkins has a notable reputation for engineering Hong Kong's major infrastructure projects, such as various MTR lines and Hong Kong International Airport. This project is extremely exciting as it involves a complex blend of world-class buildings and major infrastructure works which have to be delivered successfully in a challenging construction environment."

Chris Birdsong, Atkins' chief executive officer for Asia Pacific, added: "Securing this major project demonstrates our commitment to growth and diversification in Hong Kong and the Asia Pacific region. The breadth and depth of our design and engineering expertise has been complemented by the acquisition of project and construction management consultancy, Confluence, which further strengthened our regional capability in programme and project management."

## news bytes

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Building in harmony with nature and the landscape...

Ref: 89344

Planning permission granted for university key worker homes...

Ref: 45297

Industry heavyweights invest in world leading Ecobuild exhibition...

Ref: 24359

Planning permission granted for Maggie's at The Christie designed by Norman Foster...

Ref: 91569

Atkins has been appointed to project manage implementation of key elements of the West Kowloon Cultural District (WKCD) in Hong Kong.

Stretching across 40 hectares of reclaimed land, the West Kowloon Cultural District will create a vibrant cultural quarter for Hong Kong where the local arts scene can interact, develop and collaborate. When completed, it will provide 23 hectares of public open space with two kilometres of vibrant harbour-front promenade. It will also include a variety of arts and cultural facilities that will produce and host world-class exhibitions, performances and arts and cultural events.

## European Hotel Design Awards 2014 open for entries

The European Hotel Design Awards 2014 is now open for entries.

Internationally acclaimed as the leading pan-European competition to focus on excellence in hotel architecture and design, the awards are organised by *Sleeper* magazine and attract the hospitality industry's brightest stars competing in a variety of categories. The winning tastemakers will be revealed during a dinner and ceremony at the Park Plaza Westminster Bridge in London on 25 November.

Widely celebrated for their vision-

ary role in establishing the value of hotel design, the awards are distinguished by a meticulous and comprehensive judging process based not only on creative merit but also on commercial viability. Each shortlisted entry is visited by a member from the panel of judges. Refreshed annually, this jury encompasses the highest calibre of industry experts selected to ensure a diverse range of professional opinions are represented.

Chair of the judging panel in 2014 will be Celia Geyer, senior director,

architecture & design, global design services – Europe + North Africa for Hilton Worldwide. "As a benchmark for excellence, innovation and creativity, the European Hotel Design Awards bring gravitas and recognition not just to the design community but across the hospitality industry as a whole," she says.

"The breadth and diversity of projects entered make this one of the industry's top accolades, and I look forward to chairing this prestigious competition."



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#### TALK: DRMM – RECENT PROJECTS

## ‘Joyful, flamboyant and unique design’

RIBA East, in partnership with the University of Cambridge, invites you to join them for a glass of wine and listen to Alex de Rijke, architect of the year 2014, who will give an early-evening public talk in Cambridge on 7 May.

His illustrated talk, dRMM – Recent Projects, will focus on new work, the relationship between design concept and advancements in construction, in particular using timber.

Professor de Rijke has taught widely, including at the Architectural Association and Royal College of Art. He is active as an occasional critic, lecturer, architecture design advisor and photographer. He is Dean of Architecture at the RCA. De Rijke is also founding member of dRMM Architects. The practice’s work is underpinned by the use of standardised, cost-effective materials and building methods to make innovative architecture. Examples of their work include dRMM’s research for the 2012 Venice Biennale on the floating architecture of the Netherlands, which resulted in design proposals for London’s Royal Docks.

This talk is open to anyone interested in building design and exploring how architects can create better buildings and stronger communities, while making better use of the world’s resources.

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STRASBOURG, FRANCE

# Marc Mimram completes Strasbourg School of Architecture

Marc Mimram, the award winning Paris-based architecture and engineering practice, has completed the first phase of Strasbourg School of Architecture (Ecole Nationale Supérieure d'Architecture de Strasbourg). Located in the heart of the city, La Fabrique (The Factory) is a new 4,500m<sup>2</sup> building that will be complemented by the refurbishment of the adjoining building, Le Garage, to be completed in December.

The teaching spaces of La Fabrique are projected into the streetscape, encouraging students to engage with the building's context and allowing the city to permeate the ribbed veil of the façade. The transparent plinth gives the feeling that a gravitational force has pulled the building upwards leaving it to rest on stiletto heels, allowing the city in underneath.

The building's massing consists of two-storey blocks stacked on top of each other. The lower block cantilevers over the transparent, ground floor plinth, while the uppermost block steps back, providing the maximum volume within the constraints set by the planning regulations. The blocks are unified by the common envelope, a semi-transparent aluminium skin that cloaks the glazed 'boxes.'

A metal curtain glides between large bay windows to frame views across the city, its homes and its cathedral. By



day, the building reflects the changing light as the sun moves around the façade; by night, inside and outside are reversed, revealing the building's skeleton and morphing between transparent and opaque.

Marc Mimram, founding director of the practice said: "The central location presented a rare opportunity for an architecture school to engage in a dialogue between the city and the study of architecture. The relationship between structure and envelope has been the foundation of architectural practice since the Gothic age, and since the 19th century this has been beautifully expressed through metal structures.

"Today, there can be a tendency to enclose, thicken and solidify, to separate ourselves from the environment and the natural elements. La Fabrique expresses a renewed ambition to resist this trend and to open the building towards the city and the urban skylines."

The new school was above all designed as a tool for its students, a means to experience the study of architecture and to provide shared spaces in which to interact, collaborate and discover. The building's name, La Fabrique, refers to the history of the site, but also echoes the study of architecture: the construction of knowledge and the knowledge of construction.

## news bytes

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**Ref: 40494**

The Geffrye Museum commissions Wright & Wright Architects to design new development...  
**Ref: 48180**



## QUEEN ELIZABETH OLYMPIC PARK



## iCity to become 'Here East' as final plans approved

### news bytes

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**Ref: 87769**

Mayor of London approves plans for new stand at Lord's Cricket Ground...  
**Ref: 12247**

Jean Nouvel's latest design of a series of limited edition mirrors, in London...  
**Ref: 85874**

TCPA welcomes Garden City prospectus and announces conference and standout document...  
**Ref: 59097**

iCity's plans for a technology hub at the former broadcast and press centres at the Queen Elizabeth Olympic Park have been approved by the London Legacy Development Corporation (LLDC), with the new development set to be known as Here East.

The architectural designs have been developed by Hawkins/Brown, with LDA Design undertaking the landscape architecture for the project. The scheme will provide a new home with state-of-the-art infrastructure for the creative and digital industries.

In 2008, LDA Design was appointed to lead the masterplanning and detailed design of the London 2012 Olympic Park (now known as the Queen Elizabeth Olympic Park), and is currently working

on the post-Games transformation; ensuring the permanent legacy of 102 hectares of metropolitan open land.

Here East will feature three main buildings: a 300,000 sq ft innovation centre; a 1,045 seat auditorium; and an 850,000 sq ft building housing education space, broadcast studios, office space and a state-of-the-art data centre. Creating over 7,500 jobs, and offering some of the most advanced digital infrastructure in the world, Here East will be a new community destination for East London.

Neil Mattinson, senior partner at LDA Design, said: "Here East is a fantastic project to be involved with. It is set to become an exciting legacy and a world leading digital hub, providing thousands of high quality jobs set within the beautiful surroundings of the Queen Elizabeth Olympic Park."

Redevelopment is expected to begin in the summer with key tenants locating to the buildings from 2015, and the entire Here East area estimated to be fully operational by 2018. Key tenants include Loughborough University, Hackney Community College, Infinity SDC with BT Sport already broadcasting live directly from Here East.



## Queen Elizabeth Olympic Park opens to public

The south area of London's Queen Elizabeth Olympic Park opened to the public for the first time since the London 2012 Olympic and Paralympic Games on 5 April. Independent design, environment and sustainability consultancy, LDA Design, is the landscape architect responsible for developing the technical landscape design for James Corner Field Operations' (JCFO) competition winning concept.

LDA Design helped deliver the concept through the design and build contract which was awarded to Skanska with support from Willerby Landscapes. The concept has transformed the south of the park from the Games time concourse into a high quality, permanent addition to the Queen Elizabeth Olympic Park.

New features of the south of the Park include The Water Labyrinth – a major new water feature – designed by the Fountain Workshop as part of JCFO's award winning team, which is a water play facility situated between the London Aquatics Centre and the Stadium; the Promenade Arc, an impressive avenue of semi mature trees of mixed oak, tulip tree and lime trees, interspersed with a decorative catenary lighting scheme by Michael Grubb Studio, consisting of perforated metal globes lit from the inside which run the entire length of the south of the park; and the transformation of Carpenters Lock to become a new contemplative space, created from opening up the space beneath a bridge that was covered temporarily during the Games. Piet Oudolf designed a Herbaceous Ribbon planting feature, which forms the framework within which are set various play features, seating and lawns.



## Make's first legacy building opens at Queen Elizabeth Olympic Park

Make has helped transform the former Olympic Park site in Stratford into an exciting new riverside destination with the opening of its first legacy building; the Podium.

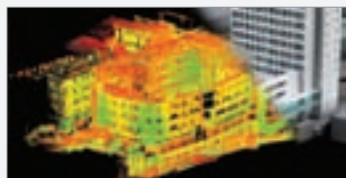
The new visitor centre for the south part of the park and the ArcelorMittal Orbit visitor attraction, includes ticketing and retail space, and flexible events space with a roof terrace providing panoramic views over the park. The opening of the hub building means the award-winning architectural practice is the only architect to date to have delivered an Olympic venue – the Copper Box Arena – as well as a legacy venue.

The project also includes four kiosks of different sizes, installed at intervals through the new area of parkland along the South Park promenade.

The Podium is close to several major venues including the stadium, ArcelorMittal Orbit and the Aquatics Centre. Its design complements these imposing structures rather than trying to compete with them. The building has a simple, elegant form and long lines that follow the riverside promenade. The design also engages people passing by with an interactive 'pixel wall' art installation that they can stop to enjoy.

### BUILDING INFORMATION MODELLING (BIM)

## BIM cited as the answer to hospital modernisation



BIM could be the answer to modernising Britain's hospitals in line with government patient legislation, according to 3D measurement expert Severn Partnership.

The bold statement comes at a time when the UK government has announced it will be making a £10 million pot of money available for UK hospitals to help them complete refurbishments of their maternity wards over the next few years. By utilising BIM, hospitals will be able to have whole scale refurbishments planned quickly and safely without having to cope with widespread disruption and ward closures, enabling them to continue to meet productivity targets set by the government.

Nick Blenkarn, director of Severn Partnership, explained: "Hospitals are constantly dealing with increasing numbers of patients and are being expected to have patients admitted or sent home within four hours of arrival. Refurbishment projects can be very disruptive and can have a significant impact on hospital resources and response times. With BIM, development projects can be quickly and safely planned and often delivered with no disruption at all to hospital services."

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### Greenbuild Awards

7 May, Manchester  
[www.greenbuildawards.co.uk](http://www.greenbuildawards.co.uk)

### British Homes Awards

19 September, London  
[britishhomesawards.co.uk](http://britishhomesawards.co.uk)

## CONFERENCES & SEMINARS

### Growing Communities:

**Sustainable Education Buildings**  
 29 April, London  
[www.buildingcentre.co.uk/events](http://www.buildingcentre.co.uk/events)

### Design intent to reality: closing the building performance gap

13 May, Exeter  
[www.architecture.com/whatson](http://www.architecture.com/whatson)

### The buildings we deserve...

16 May, Aberystwyth  
[www.architecture.com/whatson](http://www.architecture.com/whatson)

## EXHIBITIONS

### Agnese Sanvito: Absorb/reflect/scatter

Until 26 April, London  
[www.buildingcentre.co.uk/galleries/galleries\\_cafe.asp](http://www.buildingcentre.co.uk/galleries/galleries_cafe.asp)

### Living Laboratory:

**Richard Pare on Le Corbusier and Konstantin Melnikov**  
 Until 11 May, London  
[www.ealing.gov.uk/pmgalleryandhouse](http://www.ealing.gov.uk/pmgalleryandhouse)

### The Brits Who Built The Modern World

Until 27 May, London  
[www.architecture.com/whatson](http://www.architecture.com/whatson)

### New British Works:

**Today – Tomorrow**  
 Until 27 May, London  
[www.architecture.com/whatson](http://www.architecture.com/whatson)

### Empire Builders: 1750 - 1950

Until 15 June, London  
[www.architecture.com/whatson](http://www.architecture.com/whatson)

### John Pantlin: photographing the mid-century home

Until 29 June, London  
[www.architecture.com/whatson](http://www.architecture.com/whatson)

### Venice Architecture Biennale

7 June - 23 November, Venice  
[www.labiennale.org/en/architecture/](http://www.labiennale.org/en/architecture/)

## FESTIVALS

### Clerkenwell Design Week

20 - 22 May, London  
[clerkenwelldesignweek.com](http://clerkenwelldesignweek.com)

### London Festival of Architecture

1 - 30 June, London  
[www.londonfestivalofarchitecture.org](http://www.londonfestivalofarchitecture.org)

### The International Festival for Business (IFB) 2014

June - July, Liverpool  
[www.ifb2014.com](http://www.ifb2014.com)

## SHORT COURSES

### The Drawing Gym for Architects and Spatial Designers

29 April, London  
[www.buildingcentre.co.uk/events](http://www.buildingcentre.co.uk/events)

### Handcrafted Concrete for Small Projects

29 April, London  
[www.buildingcentre.co.uk/events](http://www.buildingcentre.co.uk/events)

### The Craft of Concrete

20 May, London  
[www.buildingcentre.co.uk/events](http://www.buildingcentre.co.uk/events)

## TALKS, LECTURES & DEBATES

### Airports – Our past, present and urban future?

29 April, London  
[www.architecture.com/whatson](http://www.architecture.com/whatson)

### Dream Builders

David Adjaye, 20 May  
 Moshe Safdie, 5 June  
 Francine Houben, 17 June  
 London  
[www.architecture.com/whatson](http://www.architecture.com/whatson)

## TOURS

### Open House London

20 - 21 September, London  
[www.londonopenhouse.org](http://www.londonopenhouse.org)

### Eco Open Houses

27 April, Steyning  
 18-19 and 25-26 October, Brighton & Hove  
[www.ecoopenhouses.org](http://www.ecoopenhouses.org)

## TRADE SHOWS

### Greenbuild Expo

7 - 8 May, Manchester  
[www.greenbuildexpo.co.uk](http://www.greenbuildexpo.co.uk)

### Design in Mental Health Conference & Exhibition

13 - 14 May, Birmingham  
[www.designinmentalhealth.com](http://www.designinmentalhealth.com)

### May Design Series

18 - 20 May, London  
[www.maydesignseries.com](http://www.maydesignseries.com)

### FIREX / IFSEC International

17 - 19 June, London  
[www.ifsec.co.uk](http://www.ifsec.co.uk)

### The Eco Technology Show

26 - 27 June, Brighton  
[www.ecotechnologyshow.co.uk](http://www.ecotechnologyshow.co.uk)

### 100% Design

17 - 20 September, London  
[www.100percentdesign.co.uk](http://www.100percentdesign.co.uk)

## WORKSHOPS

### Point & Shoot: Geometry & Height

3 May, London  
[www.architecture.com/whatson](http://www.architecture.com/whatson)



# Meet the experts and get inspired at the Eco Technology Show

The Eco Technology Show will be open from 9.30am - 5pm on Thursday 26 June and 9.30am - 4.30pm on Friday 27 June. Registration is free

**N**ow in its third year, the Eco Technology Show returns to the Brighton Centre on 26-27 June. A must-attend event for anyone interested in the practical use of low carbon solutions, the show is free to attend and offers a unique opportunity for architects and other specifiers to hear some of the most innovative thinkers speaking and meet innovative exhibitors, all under one roof.

The show is one of the UK's leading events focusing on low carbon solutions. Greg Barker, Minister of State at the Department of Energy & Climate Change, will set the keynote in a programme of over 70 leading speakers. With 140 exhibitors, the show is big enough to cover all of the technologies that you need to know about.

Expert speakers will discuss subjects such as how to use an energy management system, what implications fracking, nuclear and renewables may have for our energy future, whether bio-energy is an option and whether large scale PV still has a business case. Visitors will also be able to find out the latest on the government consultation to achieve zero carbon building standards for homes and non-domestic buildings.

New products will be showcased such as the Econoblock from Econovate Ltd; a lightweight, load-bearing, structural breeze block with a high thermal insulation performance, made out of waste paper and cardboard diverted from landfills.

Solar panels continue to be the most popular and easily-installed renewable energy technology, but



there are other options such as Open-Loop Ground Source Heat Pump installations, which exhibitor Open-Loop Ground Source Heating claim can reduce energy bills by over 50 per cent whereas Newform Energy will showcase hybrid solutions to significantly reduce a building's carbon footprint.

Further information can be found on the website [www.ecotechnologyshow.co.uk](http://www.ecotechnologyshow.co.uk)

enq.100



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Image courtesy of Concept Roofing & Cladding Ltd



enq.106

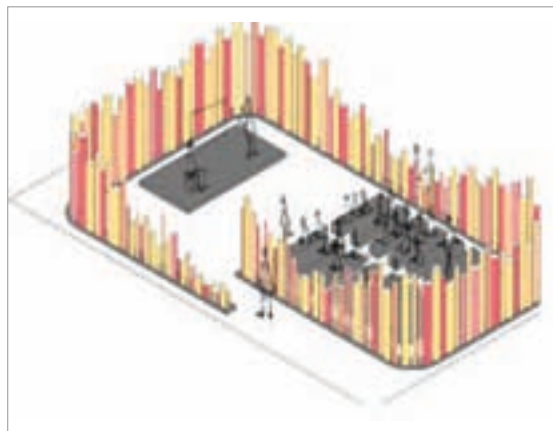
# Ab Rogers to design May Design Series

Design genius and renowned architect Ab Rogers will transform the show experience at May Design Series this year, following a successful collaboration with the inaugural edition of the show in 2013.

Ab Rogers Design, which has previously catered for high profile clients including the Tate Modern, Pompidou Centre Paris, Selfridges, Comme des Garçons and COMO Hotels, will be creating the interiors for go-to show destinations such as the show entrance, DX Bar, VIP area and the Conversation Series theatre.

This year, Ab plans to design the show under the theme of 'sustainability' by constructing his design from 100 per cent recyclable materials, primarily cardboard tubes, which form the basis of his vision for a "powerful dynamic vista" that will welcome visitors to the show. In essence, expect strong visual landmarks, vibrant colours and interactive spaces.

The design guru promises that the exhibition space will incorporate a vibrant spectrum of colours with practicality in terms of sound absorption and screening for areas such as the Conversation Series theatre. Ab explains: "We're using bright multi-coloured cardboard tubes, placed closely together, to



create an acoustic separation. The cardboard tubes are of various scales of thickness and dimensions, inviting visitors to engage and move in and out of the spaces around them."

Visit the website [www.architectsdatafile.co.uk](http://www.architectsdatafile.co.uk) and enter ref: 85935 for more information.

## news bytes

Visit the website [www.architectsdatafile.co.uk](http://www.architectsdatafile.co.uk) and enter the reference number for more information

Macreanor Lavington appointed for GLA London Plan research project...  
Ref: 31810

As the dust settles: How healthy is London's built environment?...  
Ref: 19875

Low-carbon building pioneers named as finalists for the 2014 Ashden Awards...  
Ref: 87718

Brent Civic Centre wins Sustainable Project of the Year award...  
Ref: 14922

The UK's rooftops to become power stations...  
Ref: 42187

"Creating Home" exhibition to showcase 100 Years of Architectural Change...  
Ref: 72661

## Dreaming of Hotels: Light Sleep seminars unveiled for the May Design Series at ExCeL London

The much anticipated annual hotel design conference, Light Sleep, is a series of free, trade-only seminars taking place at ExCeL London on Monday 19 May, during the May Design Series, which is set to be the UK's definitive international furnishings fair with five distinct sectors: The Furniture Show, Lighting, Decor, Kitchen + Bathroom, and DX. As part of the show's Conversation Series, three thought-provoking sessions will explore the newest ideas in hospitality design with panellists drawn from the industry's top movers and shakers and will be moderated by Guy Dittrich, freelance writer and independent commentator on hotels, travel and design.

Starting-off the show at 3.15pm is the topic Trending Hotel Design. Chris Webb, senior director interior design, Hilton Worldwide; Anita Rosato, principal, Anita Rosato Interior Design; and Paul Bevis, MD, Bevis Design Associates will investigate

the notion of hotels as a laboratory for design: a chance to experiment with function and volumes in a demanding design environment, one where paying guests are too ready to complain while owners want a differentiated yet timeless style. The panel will look at the latest trends within the wide-ranging remit of hospitality design, for example micro-hotels and all-suite hotels, and discuss how the experts are managing and shaping them. Don't miss this opportunity to be ahead of the pack in learning about the demographic and psychographic shifts that are impacting hospitality design.

Hotels, the Design Catalyst, at 4.00pm, examines the crossovers between the retail, restaurant, bar, cultural, educational and even hospital design sectors. The parallels between hospitality and residential design are clear. After all, every hotel guestroom needs a bathroom and to be furnished and lit. Equally, the blurring of work

and leisure in today's hotel lobby/lounge is now being seen in the office environment. Fiona Thompson, principal, Richmond International, London; Rab Bennetts, principal, Bennetts Associates; Rachel Johnson, associate vice president studio director – London, Wimberly Interiors; and Ken Mackay, senior partner, Mackay and Partners reveal what inspiration specialist hospitality designers derive from other industries and, conversely, how studios designing a wider range of projects adapt their experience from other sectors for the benefit of their hotel work.

Wrapping everything up at 4.50pm will be a keynote presentation entitled The Value of Design, during which Marco Nijhof, CEO of yoo Hotels, will chat with Guy about the real impact that results from the massive investment hoteliers and hotel owners make in good design.

There will be drinks and networking after the seminars until 8.00pm.






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enq. 108

## cpd focus

**NEW CPD LAUNCHED BY FRANKE  
WASHROOM SYSTEMS**


A new CPD by Franke Washroom Systems supports a new generation of commercial washbasins and washtroughs made from the company's own moulded solid-surface – Miranit. The CPD covers both the standard range of Miranit basins and Miranit Bespoke. Highlights include the benefits of using solid surfaces in washrooms, the properties of Miranit, the benefits of using Miranit over ceramics, cleaning and maintenance, standards and approvals, custom made products, and various commercial application examples.

[ws-marketing.gb@franke.com](mailto:ws-marketing.gb@franke.com)

enq. 109

**SWISH BUILDING PRODUCTS CPD  
SEMINARS**


Swish Building Products is a supplier of PVC roofline and cladding, including fascias, bargeboards, window boards and trims, and more. Swish has established itself as the pre-eminent name in the manufacture of cellular PVC products. Accredited with the responsible sourcing certification BES6001 in addition to previously secured certifications ISO9001, ISO14001 and OHSAS18001, Swish holds CPD Seminars focusing on sustainability and the low-maintenance benefits of cellular PVC.

01827 317 200

[www.swishbp.co.uk](http://www.swishbp.co.uk)

enq. 110

### cpd bytes

Visit the website [www.architectsdatafile.co.uk](http://www.architectsdatafile.co.uk) and enter the reference number for more information

#### New BRE Academy to deliver training excellence for the built environment

Ref: 15105

#### FAAST installed at KAC for factory protection and CPD webinars

Ref: 98824

#### New specification guide from Profile 22

Ref: 49350

#### Benefits of structural metal web timber frame components

Ref: 41005

#### New appointment for Roca to boost CPD programme

Ref: 79636

#### Understanding passive fire protection

Ref: 62746



## continuing professional development

Maintaining and improving professional competence, skills, abilities and knowledge

### SPECIFYING HARDWOOD TIMBER EXTERNAL DOORSETS



Urban Front is pleased to announce that it has joined the RIBA CPD Network, and its CPD seminar entitled *Specifying Hardwood Timber External Doorsets* is now available to architects and construction professionals. Learning aims include information on insulation, passive house, challenges with maintenance, accessibility and door security. The CPD is also very visual and offers various opportunities to touch and feel samples and lasts approximately 45 minutes.

01494 778787  
www.urbanfront.co.uk

enq. 111

### THE FIBRE CEMENT BUILDING ENVELOPE



Attendees at Marley Eternit's CPD will learn about using fibre cement for both roofing and facades. The CPD looks at how fibre cement rainscreen facade systems can improve thermal, acoustic and weather-resisting performance of old and new buildings. Attendees will also gain an understanding of the features of fibre cement that provide a range of benefits and how fibre cement roofing and facade products can help achieve higher Green Guide ratings.

01283 722588  
www.marleyeternit.co.uk/

enq. 114

### UNDERSTANDING AND SPECIFYING INVISIBLE SOUND SOLUTIONS

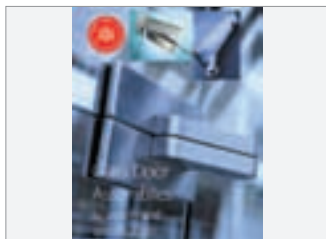


Amina Technologies' RIBA-approved CPD seminar compares the basic principles of conventional sound technology with that of VPT (Vibrational Panel Technology) technology used for Amina's invisible loudspeakers. Consideration is given to the characteristics and benefits of the different technologies before looking in more detail on how to specify an invisible sound solution for end customers illustrated by case studies on both commercial and residential applications.

01480 354390  
www.amina.co.uk

enq. 112

### GLASS DOOR ASSEMBLIES – SELECTION AND SPECIFICATION



GEZE UK has updated its popular RIBA-approved CPD seminar on glass door assemblies to provide architects with valuable guidance about glass and how it can be used within door situations throughout a building. The 40 minute seminar aims to demystify the specification process by providing information about everything from the beneficial properties of glass through to the very latest regulation and legislation.

01543 443000  
www.geze.co.uk

enq. 115

### LRWA CPD SEMINAR



The LRWA (Liquid Roofing and Waterproofing Association) has announced the launch of its RIBA approved CPD, available online for specifiers, architects, and surveyors. "Continuing Professional Development is crucial for anyone working in the construction industry," commented Terry Wain, LRWA technical secretary. The CPD should take around 25 minutes to complete and includes information on the history of liquids and the various ways in which LRWA aims to promote best practice within the industry.

0207 448 3859  
www.lrwa.org.uk

enq. 113

### CORROSION PROTECTION OF STEEL USING HOT DIP GALVANIZING



Corrosion protection of your steelwork should be an important element of your design. If overlooked, it can lead to extra maintenance costs. Galvanizers Association's two RIBA-approved, Core Curriculum presentations set this important aspect into context and cover issues such as the galvanizing process, performance, sustainability and specification. Galvanizers Association is an authoritative source of information and advice on this method.

0121 355 8838  
www.galvanizers.org.uk

enq. 116

### BENEFITS OF STRUCTURAL METAL WEB TIMBER FRAME COMPONENTS



ITW Industry, developers and system suppliers of SpaceJoist metal web floor joists, SpaceRaft metal web rafters and SpaceStud performance wall studs announce its RIBA Core Curriculum CPD titled *Benefits of structural metal web timber frame components*. ITW Industry's 45 minute RIBA CPD, which is conveniently delivered by the means of an onsite seminar, provides attendees with a foundation knowledge of structural metal web timber frame components. The CPD module falls within the RIBA Core Curriculum category of 'Designing and building it: design, construction, technology and engineering' and covers the open web components' construction, thermal efficiency and sound performance to the latest standards, building codes and regulations, plus various informative case studies. ITW Industry, which includes the Alpine and Gang-Nail truss system brands, are well positioned to deliver such a metal web CPD. Alpine originally supplied SpaceJoist back in the early '80s, while the Gang-Nail brand has established itself as a generic name for the punched nail plates used in timber engineered components. Together, their metal web timber frame systems have seen considerable development, culminating in producing the best performing metal web joist (SpaceJoist) on the market and a pioneering performance wall stud system (SpaceStud).

01592 771132  
www.itw-industry.com

enq. 117

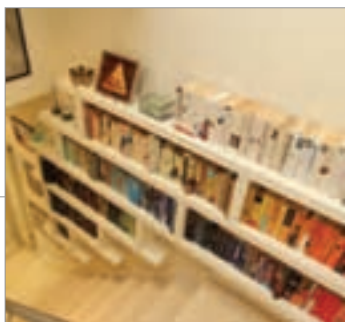
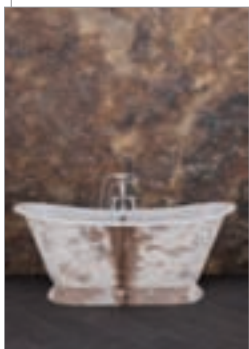


# editor's focus

## Hurlingham

Hurlingham's quest is to create a distinctive collection of original and classic reproduction free-standing baths, while offering individual refinements to add something truly momentous to the bathroom. From bespoke genuine leather to hand-gilded metal leaf embellishments, Hurlingham can tailor your bath to your wishes. With a range of stunning finishes, including hand polished and 3,200 paint colours, the possibilities are endless. Hurlingham offer outstanding quality and unrivalled style. All baths are hand finished in the UK to meet Hurlingham's exacting standards.

enq. 118



## Empatika

London-based Empatika specialise in the design and manufacture of contemporary bespoke fitted furniture for private clients in London and the UK, using materials that are healthier for you and the planet. Empatika works with you closely to increase space and get rid of clutter with bespoke furniture that fits like a glove. The company also puts sustainable thinking at the heart of everything it does from planting a tree for every customer, buying an acre of the rainforest for clients spending over £5,000 to using 100 per cent renewable energy and plant-based paints, meeting the high standards of the environmentally aware specifier.

enq. 122

## Dural

Coloured Movements Joints produce bespoke joints for hard flooring, natural stone and slate. It specialises in colour matching its joints to the grout or the floor finish, creating a stylish designer look and a seamless finish. CMJ are designed and manufactured to exceed the requirements of BS 5385 and are part of a wide range of trims and accessories for flooring. It has been specified on many projects including retail, commercial, transport, education, hotels, sport and leisure, prisons and Terminal 5 / Heathrow and is available in PVC, aluminium, stainless steel and brass.

enq. 123

## Low-E

Low-E® Reflective Insulation has been on sale world-wide for nearly 20 years and now the Original Reflective Insulation product has BBA Approval and LABC System Approval in the UK. With its Class A/Class 1 Fire Rating, Low-E is the only reflective insulation on the market that's approved for use in roofs, walls and floors and can be left exposed in commercial applications. Low-E Insulation is available in 'breathable' or 'vapour barrier' options and is used across a wide range of applications, from commercial and domestic upgrades to new builds. Unaffected by moisture and made from recycled material, call to see how Low-E can benefit you.

enq. 119

## Cranborne Stone

Cranborne Stone has been supporting property professionals with building projects for over 30 years. The range of over 1,500 products covers all classical styles and is manufactured in the UK to modern standards using traditional handmade methods. Many clients have chosen Cranborne Stone for its extensive knowledge and excellent customer service. Last year its design team worked alongside Facit Homes, designing the portico and steps, along with bespoke window sills and string course for its development in Bedfordshire. The project was completed to a high standard, on time and within budget.

enq. 120

## Acheson & Glover

Acheson & Glover has launched a new highly durable and versatile flagstone to the UK and Ireland markets that ticks all the boxes. Superior sustainability, outstanding quality and premium aesthetics are the cornerstones of Caliza. Featuring premium graded local aggregates, Caliza offers the choice of ground and textured finishes that will enhance any new development. Ideally suited for high profile commercial and public realm schemes, Caliza is suitable for pedestrian and occasional heavy vehicle traffic thanks to density enhancers that improve structural integrity.

enq. 121

# The Sunday Times British Homes Awards: Showcasing design excellence

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

In his foreword to the awards' publication *Design. The key to a better place* Housing Minister the Rt.Hon. Kris Hopkins MP commented: "The British Homes Awards continue to demonstrate the most imaginative and innovative designs, which inspire the creation of beautiful homes built to high environmental standards using the latest technologies."

## Call for category entries!

By showcasing the very best of British homes, the awards have established an unrivalled pedigree of championing design and construction excellence across our built environment. In addition to the annual design competition, the awards recognise and celebrate design excellence within specific categories.

Entries are now invited into the 10 categories featured at [www.britishhomesawards.co.uk](http://www.britishhomesawards.co.uk) where you can also download the entry form. Closing date for entries is Friday 2 May.

## Viessmann partners EcoHaus design challenge!

This year's competition – EcoHaus – has challenged UK architects to design an aspirational home to Passivhaus standards for a waterside site owned by the Habitat First Group. Designed with the Passivhaus methodology, the winning design will be of stunning architectural merit, visually arresting, environmentally smart and offer a healthy environment for the occupants: a home that everyone loves. And the winning design, as voted by readers of *The Sunday Times* from the shortlist selected by the panel of judges, chaired by Robert Adam of ADAM Architecture, will be built at one of the waterside sites owned by the Habitat First Group.

Leading international manufacturer of heating systems, Viessmann, has been supplying highly efficient and clean heating systems for decades. Its comprehensive product range encompasses all fuel types and applications allowing it to deliver high quality, efficient and fully integrated solutions. With an output of 1.5 to 120,000 kW, Viessmann offers oil and gas fired boilers, solar thermal and photovoltaics, combined heat and power modules (CHP), ground, air and water sourced heat pumps and biomass boilers.

For further details visit [www.viessmann.co.uk](http://www.viessmann.co.uk)



## Read all about it!

Those shortlisted will be featured within an exclusive *Sunday Times British Homes Awards supplement* in June. All winning and commended schemes will be presented within an eight page *British Homes Awards supplement* published within *Home* in September and listed on [www.britishhomesawards.co.uk](http://www.britishhomesawards.co.uk)

## Gallery exhibit at The Building Centre

The winning schemes and projects will be displayed at The Building Centre in Store Street, London, and extensively featured in the 2015 edition of the award publication *Design. The key to a better place.*



Incorporating EcoHausHub.com and presented by Viessmann, EcoHomeHub.com is the UK's premier portfolio of energy efficient homes providing one online destination for all involved in the design and construction of our new homes. All competition submissions will be added to this industry leading archive of best practice further raising the profile of the participating architects. [www.ecohomehub.com](http://www.ecohomehub.com)

## The awards presentation: your place awaits!

The awards will be announced at a luncheon at The London Marriott, Grosvenor Square on Friday 19 September. To reserve your place visit: [www.britishhomesawards.co.uk/reserve-your-place/](http://www.britishhomesawards.co.uk/reserve-your-place/)

**We look forward to seeing you there to help celebrate your achievement**

For more information call 01483 225221 or email [mg@britishhomesawards.com](mailto:mg@britishhomesawards.com)

enq. 124

## Partners:



# The Tile Association gears up for Annual Awards

The Tile Association is appointing a new secretariat, as it gears up to meet the latest challenges being faced by its members in the tiling industry. In the first of a number of new initiatives due to be announced during the course of the year, the TTA Board is appointing Smart Marketing Works Ltd from 1 April 2014.

Smart Marketing Works takes over from Forum Court Services. The TTA already has an established working relationship with Smart Marketing Works Ltd, founded and run by Kay Porter, who has been an active member of its marketing committee since 2001 and is supported by a team of industry specialists. Accordingly, Kay brings with her a developed insight into the TTA's brand values and principles of operation combined with a wealth of experience from 20 years spent in the building industry with some of Europe's largest and most progressive brands.



Kay Porter with TTA Committee



The Tile Association Awards – the tiling industry's most glittering event of the year – are less than a month away. With a move this year to a lunchtime event and a new central London venue – the Hilton Metropole – the Awards are more convenient, and more cost-effective, to attend than ever before.

As the build-up to the 25 April main event accelerates, under the theme London Calling!, the organisers have now released the names of the 60 finalists in all 16 categories. These cover product categories such as Best Wall Tile and Best Floor Tile and include awards to recognize innovation as well as individual achievement such as Employee of the Year, Tile Fixer of the Year and, new for this year, Trainee of the Year. There are also project awards, as well as accolades to recognise the top environmental and marketing initiatives of the past year.

enq.125

*For more information please contact The Tile Association (TTA) on 0300 365 8453, email [info@tile.org.uk](mailto:info@tile.org.uk) or visit [www.tiles.org.uk](http://www.tiles.org.uk)*

## Specification team become BREEAM accredited



Members of Mitsubishi Electric's dedicated Specification Team have been fully trained as BREEAM Accredited Professionals (AP) in a move that allows the company to speak the same language as its customers. A BREEAM pass means a project must achieve better than current building regula-

tions and takes into account not only the energy efficiency of a building and the equipment used, but also the health and well-being of its occupants. Heat pump systems score particularly well in these areas. Qualification as a BREEAM AP allows Mitsubishi Electric's Specification Team to provide expert advice on built environment sustainability, environmental design and environmental assessment.

01707 282880 [www.mitsubishielectric.co.uk](http://www.mitsubishielectric.co.uk)

enq.126

## Dow offers Part L 2013 summary



STYROFOAM manufacturer Dow Building Solutions has released a new independent publication summarising key changes to Part L of the Building Regulations, in force from 6 April 2014. Authored by Huw Evans of JPA Technical Literature Ltd, the paper describes key

changes to Part L of the Building Regulations introduced in England in 2013 and 2014, made as part of the triennial revision cycle. The changes are a further step towards the government's long term commitment to reduce carbon dioxide emissions to 80 per cent below 1990 levels by 2050. They also move standards for new dwellings closer to the 2016 zero carbon target, and new buildings other than dwellings towards the 2019 zero carbon target.

enq.127

## Reduced carbon footprint for fifth year running



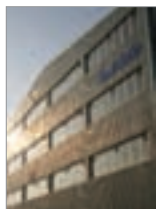
As part of its continuous commitment to improving environmental performance, Swish Building Products has once again cut its carbon footprint, seeing a decrease of 27.4 per cent since 2008; well ahead of the industry target set by the government.

The company's electricity consumption proved to be the biggest saving, down 26.2 per cent on the base line year of 2008. In real terms that is equivalent to the average annual consumption of 1,000 UK homes; 100 more than in 2012. The last couple of years have also seen the low maintenance building product specialist make a dedicated effort to improve its delivery performance, being 21 per cent more fuel efficient than in 2008.

01827 317 200 [www.swishbp.co.uk](http://www.swishbp.co.uk)

enq.128

## Vent-Axia is a business superbrand



Ventilation manufacturer Vent-Axia is delighted to be ranked as a UK Business (B2B) Superbrand for 2014. The award follows robust independent research commissioned by The Centre for Brand Analysis, which identifies the UK's Superbrands in an annual league table. This year, Vent-Axia was once again voted one of the best performing business-to-business brands, joining the likes of other Sussex Superbrands such as Rolls Royce. Jenny Smith, marketing

services manager at Vent-Axia said: "We're thrilled that Vent-Axia has been named a Superbrand for 2014 reflecting our high standards of quality, reliability and distinction within the market."

0844 856 0590 [www.vent-axia.com](http://www.vent-axia.com)

enq.129



## New one stop shop for architectural supplies



Specialist engineering and architectural suppliers, **Woodwood Group** has announced a major restructuring of its business to take place on 22 April 2014. From that date, customers who would previously have ordered products from Woodwood Door Controls, FASS Security and Cloakroom Solutions

will only need to make one call to order from all their ranges – including cloakroom products, washroom accessories, door hardware and automatic door operators. Woodwood Group will re-locate into larger, more efficient premises at Rosewood Business Park, Eastways, Witham, Essex. Visit its new all encompassing website and enter your details for an opportunity to win a new iPad Mini.

01376 502131 [www.woodwoodgroup.com](http://www.woodwoodgroup.com)

enq.130

## project bytes

Visit the website [www.architectsdatafile.co.uk](http://www.architectsdatafile.co.uk) and enter the reference number for more information

### Make designs Wanda Reign Hotel facade in Wuhan

Ref: 49798

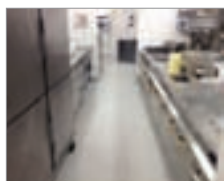
### Book: JOI-Design releases IOI Hotel Lobbies, Bars & Restaurants

Ref: 50217

### 3M shows product innovations at Hotelympia 2014

Ref: 61055

## Remmers serve up 5 star flooring at hotel



**Remmers Floormix DQ** system has been installed by Phoenix Specialist Flooring to upgrade the floors and coves to the kitchens of a major hotel chain in the Midlands. The system was laid over the existing quarry tiles using Remmers FAS Primer 100, chosen for its exceptional bond to wet, glazed and difficult surfaces. Due to the nature of the busy

hotel kitchen area, the Floormix DQ system was selected by the Client to meet their requirements for a seamless, hard wearing surface that was easy to clean and maintain as well as providing a good level of slip resistance. The installation was carried out over four days as part of a fast track, full kitchen fit-out project.

0845 373 0103 [www.remmers.co.uk](http://www.remmers.co.uk)

enq.133

## Kidde professional business manager retires



**Kidde** – a world leading smoke, heat and carbon monoxide alarm manufacturer – has announced the retirement of Gerald Jones, business manager for Professional and Fire Brigade Channels in the UK and Ireland. A chartered marketer, Gerald's career was largely spent in the construction products sector, latterly in fire safety. He joined Kidde in 2000 and developed the specification-led side of the business from virtually nothing to its current

position. Kidde Safety Europe Director Andy Burnett said: "Gerald devoted himself to the business and applied his extensive knowledge and long experience of residential fire and carbon monoxide safety to the benefit of the industry."

01753 685096 [www.smoke-alarms.co.uk](http://www.smoke-alarms.co.uk)

enq.131

## Cladding developments revealed in brochure



**Shackerley's** new ventilated cladding brochure reveals an extended Sureclad® Ceramic Granite Collection and an impressive gallery of Sureclad façade projects, some of which are the result of a strategic partnership with Kingspan, where Shackerley's ceramic granite has been installed as a premium quality façade with the BENCHMARK Karrier Engineered insulated panel system. The 124 page catalogue introduces a range of

additional Sureclad façade materials, including attractive large format engineered stone options, prefabricated in the same way as Shackerley's ceramic granite panels at the company's ISO 9001 certified production facilities in Lancashire.

0800 783 0391 [www.shackerley.com](http://www.shackerley.com)

enq.132

## New free swing door closer launched



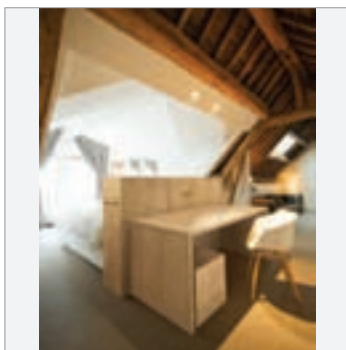
**Powermatic® Free Swing** is the latest controlled, concealed door closer to be introduced by **Samuel Heath**. Connected to the building's 24-volt fire alarm system, it can function in the same way as the company's popular Powermatic door closer or can allow a door to be operated manually and left open as desired once

the mechanism has been primed by opening the door to its maximum. When the fire alarm is activated, or there is a power failure, the inactive door closer becomes active and the door is closed automatically at a controlled rate. In addition to meeting all relevant fire and accessibility requirements, it offers a number of advantages thanks to the fact that it is totally concealed when the door is closed.

0121 766 4200 [www.powermatic-freeswing.co.uk](http://www.powermatic-freeswing.co.uk)

enq.134

## Ready to use veneered panels from James Latham



One of the UK's biggest independent timber and panel products distributors, **James Latham**, is now offering Shinnoki 2.0, a range of ready to use veneered panels that are supplied already stained and lacquered, requiring no further finishing.

With Shinnoki, the veneer is applied to an MDF base, rendering the panels sturdy and easy to use. In addition, the panels are produced in both a single or double sided finish, with the first having a melamine faced-reverse. Veneers are mismatched, but stained and textured to create a consistent finish that shows the natural aspects and beauty of the species.

Perfect for the hotel and restaurant sector, the extensive Shinnoki 2.0 range is supplied in designs which are completely in tune with current design trends and includes matching realwood and ABS edge banding. The 17 designs are also supplied in separate 3-ply veneer sheets and are ideal for curved surfaces, doors or other interior requirements.

Contact James Latham by telephone or email, or check out its website for more information.

enq.135

# Hilton wins at Waterloo

The world famous hotel chain brings one of its growing brands to London for the first time with a distinctive and handsome building, writes Ray Philpott

*'The use of an aesthetically pleasing cladding in two colours, captures tones of light and shadow that vary according to the light conditions'*

Any brand new hotel building in London naturally tends to attract a lot of interest – and the just-opened 259-room Hampton by Hilton in London's Waterloo area is certainly worthy of attention.

While it has appealing and unusual features that make it a distinctive building, it also complements the streetscape.

The nine-storey hotel occupies a prominent position on the corner of Waterloo Road and Gray Street in an up-coming part of the area south of Waterloo Station. It needs to create a strong impression, as it is the first of Hilton's mid-priced, limited-service brand to open its doors in London.

That, combined with the fact that this the largest Hampton outside the USA, makes it a highly significant hotel for the growing brand, which first arrived in the UK in 2009.

The main facade on Waterloo Road features a series of rooms with bedroom windows that are recessed and angled alternately different directions. This elevation subtly changes in appearance during the day as the angles in the facia, combined with the use of an aesthetically pleasing cladding in two

colours, captures tones of light and shadow that vary according to the light conditions. Turn the corner to the view of the building in Gray Street and it appears to become a group of separate buildings, the last one stepping down in height. In reality the image of several buildings is only a clever illusion.

The ground floor is recessed back from the main facade and entirely glass-fronted, enabling passers by to easily view the interior areas, including the smart Portuguese-influenced Assado Restaurant run by celebrity chef Cyrus Todiwala.

The top floor, containing hotel rooms, is constructed of glass. It too is also recessed back from the main facia reflecting the layout of Wellington House next door – a large late-'70s block with an older Grade II-listed facia that was once part of a grand department store.

Yet, this is in fact a fundamentally modular building made of specialised pre-cast concrete elements manufactured off-site and craned into position. This construction method enabled it to be built in around a year, a relatively short time for this level of building.



The articulated facade of the hotel (right) captures the rhythm of Waterloo Road while the glass-fronted ground floor invites interest from people at street level (facing page, left)

## Active street frontage

Shiva Hotels, which manages the hotel on behalf of Hilton, asked Dexter Moren Associates, a London-based architectural practice with a strong pedigree in hotel architecture and design, to deliver the project from site acquisition to completion.

Director Dexter Moren says: “We inherited a planning approved envelope from the client. It was our brief to make it work as Hampton by Hilton branded hotel while keeping as closely as possible to the original planning, design and visualisation intent but to also make more efficient use of the internal space.

“While there was some similarity, we changed most of the internal arrangements and removed the proposed basement. The hotel stands on the site of a grey 1960s block – the former Christian Missionary Office – which had a conference hall but no proper connection to pedestrians in Waterloo Road.

“In contrast, we now have a really good, active street frontage with a nice big glass windows. These open onto the lobby, restaurant and lounge and then, moving around the corner, the meeting space. It’s very much a shop window for the hotel.”

Moren points out that the main facade is distinctive because of the way the windows articulate and face in different directions and then flow around the corner into Gray Street. This stepping down feature has been designed to preserve the rights of light to the residential buildings in Gray Street. Using three different coloured facias gives the interesting effect of their being several buildings when viewed from the side.

Commenting on the undulating, grey and cream Waterloo Road frontage above the glass floor, he says: “We simplified it to some extent because it is actually technically difficult to make a facade like that work in a practical way.

“You have many horizontal surfaces that are rain-absorbing on top of room spaces beneath. So, there is a lot of technical detail necessary to ensure the waterproofing works and you don’t get cold areas created by thermal bridging.”

*Continued overleaf...*



The angled bedroom windows (above) create interest both on the outside and for guests within





Seen from Gray Street (above) differing tones of cladding create an illusion of multiple buildings and (right) the living and gathering zones inside

## Enticing people in

Associate Kate Sandle worked closely with Moren initially, taking the project forward and developing the details and leading the interior design team.

“The hotel facade I think it’s very exciting, especially as the light plays with your eyes on the undulating facade,” she says.

“There is quite a rhythm to that part of Waterloo Road. I feel the facade repeats that rhythm, adding to it with its undulating design and helps to give a lot of depth to the street. At the same time, the facade’s also vertical, similar to the buildings adjacent to it.”

While the brand typically offers a standard room size of standard 21 sq m, every urban site is different and requires

some slight variations. At Waterloo the rooms on the largely glass top floor do offer a very different outlook for guests.

“I think they feel spectacular. Equally, those on the undulating facade also change the way a guest room feels from your standard hotel styling because the view is angled outward,” says Sandle.

The Dexter Moren interior design team was inspired by the original, historic meaning of the word Waterloo – ‘clearing in the water’ – the design invites people who are walking outside the building to clearly see into the glass-fronted public areas on the ground floor.

“The idea is for people to be enticed in from the street to



drink at the bar or stay in the hotel or eat at the restaurant. It certainly does bring a lot of life to that end of Waterloo.

“As a public space it’s linear and very long, as we wanted to use the full frontage. With a separate meeting room space, business hub, lounge area and a spacious bar, plus the restaurant, the challenge was to ensure all those spaces have different characters but also reflect the brand’s strong identity,” says Sandle.

DMA’s specialist hospitality interiors team selected a palette of muted, natural tones interspersed by strong accents of green and blue to feature throughout the scheme. Other design elements include screens made from undulating timber batons, organic forms reflected in the ceiling and patterned

carpets, and nature-inspired wall graphics.

At night this area of the hotel comes alive even more because of the way lighting is used – and some of the lighting fixtures and shades are pretty eye-catching. Like the large ‘thinking cloud’ light fitting above the meeting room area, for instance.

Sandle adds: “The lighting choices are an important part of the character of each space. While there’s an overall theme in term of materials and colour pallet, the team has introduced different kinds of furniture within each space and different proportions of timber, fabrics and textures to create the variation of feel for each area.”

*Continued overleaf...*

*‘At night this area of the hotel comes alive even more because of the way lighting is used’*



**BUILDING  
PROJECTS**







## A fine finish

The choice of material for the outer cladding strongly influenced both the construction process and the building's character and finish.

The Techrete concrete cladding panels used at the front side and back were pre-cast in the manufacturer's hi-tech factory in Ireland.

Sandle explains: "As a surface the Techrete product looks almost like a natural material as it's quite textural and you can produce a lot of different colours from it. In fact Techrete is an interesting company because it makes all of its own models in-house and even has its own timber team. So there is quite a craft-like process involved in casting these pieces."

The front facades consist of a series of 3m by 3m individual room panels, with a window opening. Each is supported on a concrete foot which is part of the module that sits on a concrete slab with the module more or less bolt-fixed at the top.

The rear facade panels came as two guest rooms in one width and a storey high, and the rooms themselves are concrete frames with a 'pod' bathroom that can also be craned in.

"You just crane the module in and place it onto the facade, so no major scaffolding is required. We, and the main contractor, McAleer and Rushe, found this an efficient system that helped speed things up."

While Gray Street was closed off, disruption to the surrounding areas was reasonably minimal as the large cranes could operate inside what was effectively a courtyard at the rear of the building.

"We were very pleased with the cladding finish – it shows that concrete products can be used to create aesthetically attractive buildings," says Sandle.

The brand is set to expand in the UK with more Hampton by Hiltons planned in coming years and, thanks to the appeal of the Waterloo Road hotel, it has already made its mark on the capital.



*'You just crane the module in and place it onto the facade, so no major scaffolding is required'*

**Client:** Shiva Hotels

**Architect:** Dexter Moren Associates

**Interior design:** Dexter Moren Associates

**Main contractor:** McAleer and Rushe

**Facia panels:** Techrete

**Structural engineer:** Ian Black Consulting

**MEP engineer & BREEAM assessor:** Caldwell Consulting

The facia panels (far left) catch the light in interesting ways while the interior design (left) features distinctive interior lighting

# Top marks for project to give old school new life

Jess Unwin reports on the renovation and refurbishment of a classic example of so-called 1960s brutalism architecture as classrooms are converted into loft-style apartments in the London borough of Lambeth

*‘Buildings on the western side of the site – listed as important examples of an early block-planned school – have been retained and original features restored’*

In many ways the Baylis Old School development is a class apart. The bare facts are it’s 149 new homes – 60 of which are badly needed affordable units – in the London borough of Lambeth. But you would be ignoring the real story and, well, let’s just say it would be a ‘must try harder’ verdict in your school report.

That’s because the challenge for this housing project is that it’s set in and around the Grade II Listed former Lilian Baylis secondary school. Designed for 600 pupils in an instantly recognisable 1960s modernist style by Architects Co-Partnership (ACP), its detractors would certainly agree to label it as that style of design that has been dubbed brutalism architecture. Some are still asking why the site wasn’t razed to the ground when the children moved to a new school in 2005.

But since then, a community sports initiative has been set up for just under half of the old school grounds with Henley Homes buying the rest. After agreement from Lambeth



Borough Council that some school structures could be demolished, planning permission was granted last year. With the close involvement of English Heritage, buildings on the western side of the site – listed as important examples of an early block-planned school – have been retained and original features restored.

Designed to the planning stage by Conran and Partners, the approximately £60 million project on 3.2 acres will eventually produce one-, two-, three- and four-bedroom homes that are a mix of refurbishment and conversion of the ’60s buildings, which are a concrete frame with brick facade, plus new steel-framed apartments and townhouses.

Lee Davies, of Conran and Partners, says: “The layout and function of the old buildings were aimed at the philosophy of schooling in the ’60s. The challenge was to understand the architectural language, proportions and how that might work in a residential form.





“So it’s certainly about using all of the former courtyard forms, for instance, in an enjoyable residential way. And it’s making the best of the generous floor-to-ceiling windows – providing in many instances the equivalent to loft-style living – placing the right rooms behind that amount of glazing, and then using the architectural style and rhythm and enhancing it in a delicate way.

Shakil Ahmed, projects architect for Henley Homes, adds: “ACP had such a clear vision for the school that, love it or hate it, it has been very easy to translate into a modern residential development.” He believes the most noteworthy engineering features are the original and huge concrete floor slabs, visible externally, which were precast on-site. This was a signature style of ACP and a deliberate move away from the traditional Victorian school of architecture. Alongside this are the very large expanses of glazing, quite unusual at the time in municipal buildings.

*Continued overleaf...*







© Henley Homes

He continues: “Some buildings have floors that step in and out, others are on piers at ground level, allowing circulation beneath them to playgrounds and a good viewpoint for staff to keep an eye on what was happening.” Incorporating these features has given rise to “a scheme where open, airy classrooms overlooking spacious playgrounds have become large apartments with original but refurbished and code-compliant sliding fenestration overlooking landscaped courtyards”.

Flat roofs (definitely out of bounds to pupils at the former school!) have become glass-balustraded balconies or terrace gardens. And Shakil adds that floor-to-ceiling ribbon windows along corridors have created “striking communal areas or been brought within apartments to provide dramatic views and amazing amounts of light”.

Lee is certainly a fan of the old school design. He says: “It’s quite sculptural, I particularly like the expression of the structure and the concrete slabs and how those are used as forms almost like a set of drawers that the building form pushes and pulls.”

He explains that besides converting former classrooms there were decisions about what to do with circulation spaces, a “generous openness” around the edge of the site and the intimate set of courtyards inside. He says: “The scheme is about the spaces it creates, which is equally as important as the way it looks and was formed.”

Lee goes on: “There are four internal courtyards and we’ve



© Henley Homes

used the intended circulation routes through the centre of the site so, generally, the apartments have dual aspects and relationships and they all evolve and rotate around pinwheel courtyards and then face outwards from the court.”

Lee says the apartments in the refurbished school buildings are generous in size and space because the widths of rooms need to relate to the high ceilings. Typically, a number of rooms were brought together to form each apartment, often with associated rooms adjacent to the classrooms and some corridors becoming bedrooms, while classrooms themselves

*‘A scheme where open, airy classrooms overlooking spacious playgrounds have become large apartments with original but refurbished and code-compliant sliding fenestration overlooking landscaped courtyards’*

Shakil Ahmed, projects architect for Henley Homes



became the main living/dining spaces.

“This school did not conform to the older traditional classic school design of a quadrangle and then classes running around that. It’s more complicated than that – more of a pinwheel of rotating courtyards, then there are cloisters and overhangs and a series of spaces that reveal themselves as you walk through deeper into the site,” reveals Lee.

Lee admits that working with existing buildings is always a challenge. “We worked with structural engineers to understand where we could drop new service runs. There are all

*Continued overleaf..*



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***‘We’ve had to introduce insulation without affecting the external appearance or internal feel’***

Lee Davies of Conran and Partners

the sorts of things that come with housing – where do you put the toilets successfully, where do you drain the sinks from and ventilation.”

He believes the innovation – and the sustainability – on the project centres on reusing the buildings, rather than knocking them down, and working with the existing fabric. “Take the thermal performance of the existing building – as a school you were just trying to heat classes for very active children but that doesn’t meet the housing standards of today.

“We’ve had to introduce insulation without affecting the external appearance or internal feel – a gentle approach to sustainability with photovoltaics and efficient boilers to improve thermal performance and insulation treatments applied to floors, ceilings and walls, plus stepping profiles next to windows.”

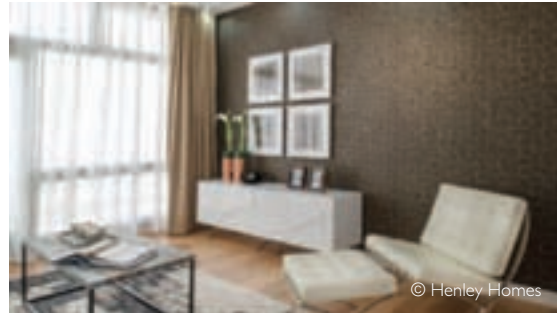
Aaron Usmani, Henley Homes contracts manager, points out that timber from demolished parts of the school are being

reused in the retained areas. And precision blasting was used to remove 50 years of paint to help in the process of upgrading original wooden window frames to a modern double glazing standard – “...a laborious task but we made that decision to retain the aesthetics of the building,” he says.

He agrees with Lee on the difficulties of installing new infrastructure for services: “We’re having to dig up the concrete floors and it’s complicated because there are a dozen or so separate buildings on this development as a whole so it’s a challenge to coordinate a new drainage system, water, gas, electricity.”

Half the development site is new-build structures of varying different shapes and sizes, rising to a maximum height of six storeys – but all are designed to blend in with the old school buildings. Aaron explains a panelised system of brick slips is being applied to the steel frame of many so they have a look compatible with the older structures.





And inside, again to pick up a theme from the old school, there are generous ceiling heights. Lee says: "We didn't want to duplicate exactly, it was more a case of light references to the old but very much buildings of their time. So, it was about using similar materials, most notably complementary brick in terms of pallet and tone. But it was always important to our architectural strategy that there was a clear legibility of existing and new."

First occupation of the refurbished school buildings should be in August this year with people moving into the new-build homes from six months after that. There are 24 shared-ownership units and 36 units for affordable rent. Eligibility criteria, including maximum income levels, will apply for people

hoping to take up the shared ownership homes and priority will be given to people living and working in Lambeth. The Guinness Trust will work with Lambeth Borough Council to allocate the affordable rent units – but tenants will most likely be from within the borough as well.

Challenges remain, like exactly what's to be done with the school's assembly hall, which planning consent stipulates must be kept as a public building. But, overall, Lee believes the design aims for the Baylis Old School have been met: "It was a building that clearly Lambeth wanted to save. The key was coming up with a solution that would allow new life. I feel we've retained the charm of the school and we're using its form and shape for a new future."

**Architects:**  
Conran & Partners  
(conversion and new  
build design to plan-  
ning consent stage).

Henley Homes  
(working drawings)

**Main contractor:**  
Reis Construct Ltd  
(construction arm of  
the Henley Homes  
group)

**M&E sub-contractor:**  
Mendick Waring

**Structural  
sub-contractor:**  
Lyons O'Neill

**Geotechnical  
consultant:**  
MLM Environmental

**CDM consultant:**  
SafeScope

**Asbestos consultant:**  
Eton Environmental

## project

Visit the website [www.architectsdatafile.co.uk](http://www.architectsdatafile.co.uk) and enter the reference number for more information

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### Construction gets underway at pioneering age friendly development in South Edinburgh

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### New PassivHaus scheme in Norfolk

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## Profloor Dynamic Batten at prominent site



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# GreenbuildEXPO

7<sup>th</sup> & 8<sup>th</sup> May 2014 Manchester Central

## Greenbuild Expo returns

With a packed conference and exhibition Greenbuild Expo returns to Manchester Central in May to highlight and promote sustainability in the built environment

*'With retrofit still firmly on the agenda, the Green Deal and ECO debate area will be at the heart of the show'*



Greg Barker visited Greenbuild Expo in 2013

**G**reenbuild Expo takes place in Manchester on the 7 and 8 May featuring a packed conference programme and innovative exhibitors covering all aspects of sustainability in the built environment.

Once again the doors of Manchester Central will be thrown open to visitors from industry, academia and the public sector seeking ways to increase energy efficiency, reduce resource usage and improve sustainability in the built environment.

The event is free to attend and offers an exciting schedule of debates, workshops and seminars, as well as exhibitors showcasing the latest green products and solutions.

The seminar highlights include practical advice from Terry Nash of the UK Rain Water Harvesting Association on avoiding future floods and droughts, while Gavin Summerson from the BRE will introduce the new BREEAM Non-Domestic Refurbishment and Fit-Out 2014 scheme. This new version of BREEAM is dedicated to the refurbishment and fit-out of offices, retail and other buildings, and has been developed following a piloting process including a range of building refurbishments around the UK.

Andrew Hopton from HETAS will be talking about MCS accreditation and Paul Barker, energy manager at Bristol City Council, is set to describe how the City Council were one of the early adopters of biomass for heating a range of buildings

within the city. He will reveal the lessons learned and explain how it has developed its own fuel supply chain to make biomass a real success story.

With retrofit still firmly on the agenda, the Green Deal and ECO debate area will be at the heart of the show. This will give visitors the chance to hear from key organisations and government departments on what the Green Deal means for the built environment and how we can all make the most of this flagship green policy.

In addition, the themed seminar rooms will offer something for everyone, with sessions on everything from green materials and sustainable methods of construction, to low-carbon design and energy-saving refurbishment.

### Other highlights of Greenbuild Expo 2014

- Sustainable Cities – green solutions for commercial buildings from schools to hospitals, as well as high-density housing, focusing on smart buildings.
- Ignition14 – the UK's only wood fuel event, which runs as part of Greenbuild Expo. With a dedicated seminar programme and exhibition area, Ignition14 will include advice on the Renewable Heat Incentive (RHI), Microgeneration Certification Scheme (MCS), the various fuel types available and much more.



**Greenbuild Expo is free to attend and takes place on 7 and 8 May at Manchester Central. The event is free to attend.**

**For further detail visit [www.greenbuildexpo.co.uk](http://www.greenbuildexpo.co.uk) and follow @greenbuildexpo on Twitter for regular show updates**

- Greenbuild Awards – all the finalists of the awards will be on display, and many will be presenting their shortlisted projects, explaining how they have achieved impressive energy savings. Judged by a panel of distinguished industry leaders, winners of a Greenbuild Award will know that their work really does raise the bar for the rest of the industry when it comes to reducing the environmental impact of our buildings. [www.greenbuildawards.co.uk](http://www.greenbuildawards.co.uk)
- The Greenbuild Challenge – highlighting the success stories from our campaign for better buildings: from innovative building design and the installation of intelligent building management systems to reduce energy usage – to adopting a cycle to work scheme or installing dimmer switches on your home lighting circuits. [www.greenbuildchallenge.co.uk](http://www.greenbuildchallenge.co.uk)

Throughout Greenbuild numerous seminar areas will cover a broad range of topics across a number of areas including: New Build, Retrofit, Smart Buildings and Water.

Grappling with the key issues affecting sustainability in the built environment, the central debate area will feature expert speakers from across the sector and allow visitors the opportunity to debate with the experts.

Topics up for debate include:

- ECO – overcoming the challenges
- What does energy efficiency mean?
- Sustainability and social media
- The reality of zero carbon building
- Low carbon cities
- What lies ahead for the Green Deal?

## Look out for...



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## Heat pump experts to explain RHI benefits



Mitsubishi Electric is using the Greenbuild Expo (7-8 May 2014, Manchester Central) to help anyone interested in renewable heat pumps to understand how they can benefit from the introduction of the Renewable

Heat Incentive (RHI) this spring – whether for domestic or non-domestic projects. The company will use its stand (D5) to showcase how its Ecodan® range of air source heat pumps can be used to provide a constant, comfortable level of heat to a building whilst lowering running costs and reducing carbon emissions. Ecodan systems are increasingly being used in schools, showrooms and offices that need to demonstrate an effective level of renewable heating.

01707 282880 [www.heating.mitsubishielectric.co.uk](http://www.heating.mitsubishielectric.co.uk)

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**greenbuildEXPO stand D5**

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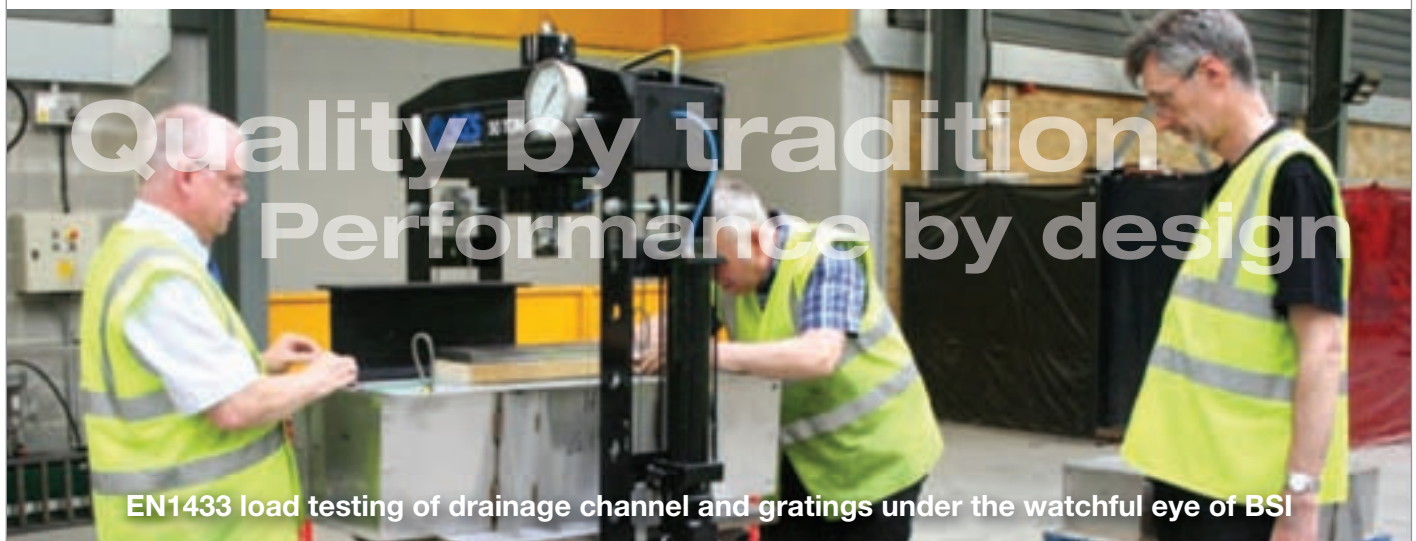
**'T6'**

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## Brochure highlights pumped drainage

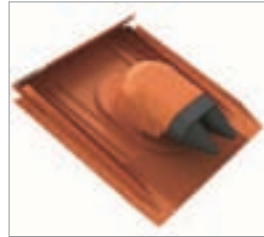


Comprehensive details on an extensive range of pumped drainage systems are included in a new 28 page brochure from **Delta Membrane Systems**, produced in association with the company's service partner PPS – Packaged Pump Systems. The brochure highlights the Dual V3 standard ground water chamber, Foul V3 standard foul water chamber, and Single V3 for limited applications.

Upgrade versions are also detailed. Both the 800 and 1160 Series pump chambers also feature, with an overview of their application uses and specifications, and a comprehensive list of accessories including battery backup and standard or bespoke control panels. Other sections of the brochure feature pipe, fittings and valves, alarms, and drainage channel and fittings.

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## Permo underlay for low pitch extensions



The Venduct® Duo Solar Outlet Kit is the latest addition to **Klober's** Solar-Line range of solar thermal and PV installation accessories. It provides an ideal solution for passing twin cables through the roof and makes the penetration fully weathertight. The outer casing can be twisted to vary the cables' entry angle, thereby removing any risk of distortion.

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01332 813050 [www.klober.co.uk](http://www.klober.co.uk)

enq.143

## Rt Hon Tom Clarke visits Heathrow Terminal 2 to view Bison's £1.15 million works



Rt Hon Tom Clarke, MP for Coatbridge, Chryston and Bellshill, where **Bison Manufacturing** is based, met with representatives from the company and toured Heathrow's Terminal 2. Bison, which manufactures concrete building components including walls, stairs and floors, was responsible for producing more than 40,000 square metres of flooring for the project, equivalent to almost 10 acres and enough to cover around six football pitches. The company has successfully completed a prestigious £1.15 million contract to help build the UK's newest airport terminal, set to open on 4th June this year. Bison Manufacturing will have its work showcased on a Global stage with more than 20 million passengers from around the world set to use the new terminal every year. The contract accounted for half of the factory's output over eight months, with 20 staff from the local area retained to help meet the increased workload. The project also gave Bison the opportunity to develop a new product that it had never been required to manufacture previously. At 60mm deep, the flooring slabs produced for Terminal 2 were specially created for the project and are the thinnest to be manufactured in Britain. Tom commented: "I have been thoroughly impressed by what I have seen. I am so proud of their link in the Uddingston part of my constituency."

01283 817500 [www.bison.co.uk](http://www.bison.co.uk)

enq.144



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enq.145



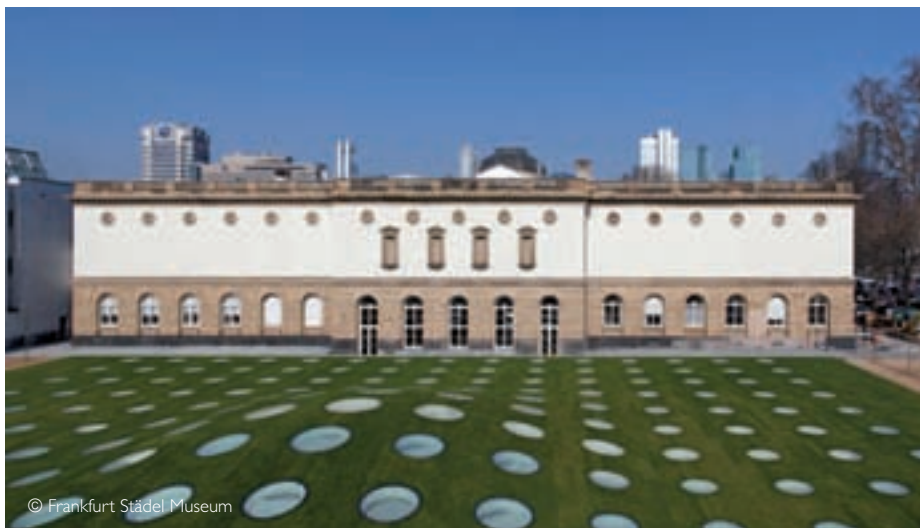
## Advertorial

# An eye for architectural detail

While the purpose of museums and galleries is to showcase the exhibits inside, it's no coincidence that many of the world's most famous museums are also among the architectural world's most celebrated buildings. Look at the Louvre in Paris, the Guggenheim in Bilbao and London's own Tate Modern, for example.

Founded in 1815 when banker and spice merchant, Johann Friedrich Städel, bequeathed his house and art collection as a public institute that would bear his name, The Städel Museum in Frankfurt continues to use the same imposing but unremarkable building as its main exhibition space today. However, there have been numerous extensions and modernisations during the course of the museum's 200 year history and the latest, the €35 million 'Garden Halls', not only provides a distinctive and contemporary underground exhibition space but has also created an external landscaping feature which is both unique and in keeping with the Städel's status as the home of one of the most significant art collections in Europe.

The creation of an extension to the museum below ground provides a self-contained, contemporary exhibition space that extends the available space without creating any architectural conflict with the existing traditional façade. However, the real genius of this building is not in the physical space of the new underground building but in the roof of that building, which provides natural light and also forms the substrate for a new garden area that is a striking green space in the daytime and



provides eye-catching feature lighting at night.

At the heart of that achievement is the perfect geometry of 195 round skylights, or 'eyes on art' as the Museum calls them, positioned in a grid formation on the undulating domed lawn that forms the roof of the Garden Halls extension. These 'eyes' bring sunlight into the new building during the day and enable artificial light to illuminate the lawn from within the extension at night. The idea is simple in concept, spectacular in its realisation and technically challenging for architects Schneider + Schumacher who won an international design competition for the 3,000 sq m extension. The roof substrate of the extension had to be both sufficiently well waterproofed to ensure that the underground extension was safe from water ingress and suitably root resistant as the base for the garden lawn/green roof planting – and with 195 'eyes on art' creating so much detailing, this was no easy task.

The solution to meeting this challenge was to

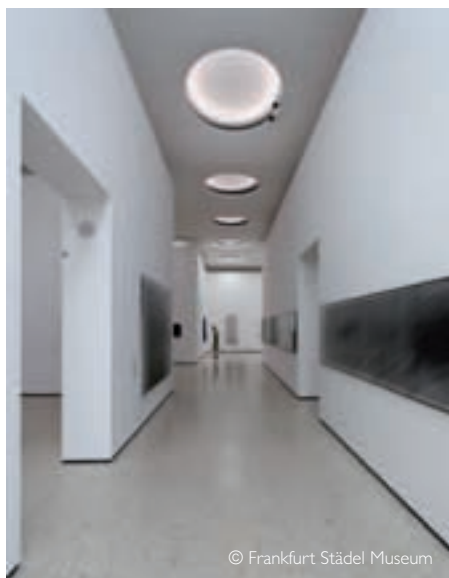
use a cold liquid applied waterproof membrane and waterproofing specialist, Kemper System, was brought in to advise on the specification and application of a suitable membrane.

Explains Stuart Hicks from Kemper System UK: "Kemper System Germany was involved with planning the roofing element of the Städel Museum project from the early design stages to ensure that the design concept was deliverable and could provide a lasting water-tight solution. The architects wanted to use a long-term and homogeneous waterproofing product that would be durable enough to withstand footfall and flexible enough to cope with the contours of the dome-shaped roof.

"Kemperol 2K-PUR is a solvent-free system based on a castor oil formulation using sustainable crops. The solvent-free resin is used in conjunction with a non-woven reinforcement fleece, which is manufactured using recycled plastic bottles, and the two elements are installed in a single process to create a seamless, monolithic membrane that cannot delaminate and has a service life in excess of 25 years."

Go to [www.architectsdatafile.co.uk](http://www.architectsdatafile.co.uk) and enter Ref: 10210 in the search bar to find out more about this extraordinary project.

enq.146



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## Advertorial

# Eurobond NRG panels light the way for energy savings



**L**ow environmental impact is an essential part of Eurobond Laminates' ongoing success and the launch of the innovative NRG wall panel option is the latest demonstration of its brand promise of sustainability and energy savings.

The new NRG solution is available on the Europanel, Rockspan, Rainspan and Firemaster panel ranges and it utilizes a special high reflectivity internal steel face that maximises daylight and reducing the requirement for artificial lighting. The result is lower energy bills for the life of the building, a reduction in the CO<sub>2</sub> footprint and a positive contribution to material credits in a BREEAM assessment.

The NRG panels are available in a wide range of external finishes that combine aesthetics, functionality and performance. NRG panels are ideal for industrial buildings, logistics centres, retail and warehouses and other buildings that need good levels of lighting.

The internal liner of a NRG panel is Colorcoat® High Reflect – an innovative material designed with maximum reflectivity to reduce energy requirements, associated operational costs and CO<sub>2</sub> emissions. NRG is a passive energy saving product, maintenance free and the benefits are expected to last the life of the building in normal and unpolluted environments.

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- Can improve daylight factor by 10 per cent.
- Energy savings of over 8 per cent per annum \*

All NRG panel systems deliver a fast track construction and the architectural excellence demanded from modern building envelopes. The long span capability can reduce secondary steelwork requirements and build costs. The high level of airtightness improves the overall energy efficiency of a building.

\* Based on 4,000m<sup>2</sup> building, daytime operation [Payback for 24 hour operation is ≤ 1.5 years] Based on SBEM Calculation under NCM conditions for Part L compliance. High Reflect used for wall and ceiling.



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enq. 147

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enq.148

## Introducing Sopralene Optima



Sopralene Optima is a high performance bituminous waterproofing membrane that will take the lead with **Soprema's** new 25 year waterproofing systems. Sopralene Optima stands out from other SBS modified bitumen membranes because of its bespoke bitumen blend, optimum adhesion and resistance to extreme

temperatures down to -30°C. This gives the product excellent ageing characteristics, the composite reinforcement provides exceptional dimensional stability and the coloured ceramic granules give the membrane a particularly striking aesthetic appearance. Sopralene Optima is BBA certified and can be torch or cold applied. Sopralene Optima is available in the UK from 17 April onwards.

08451 948 727 [www.soprema.co.uk](http://www.soprema.co.uk)

enq.149

## Extended insulated balcony connectors range



Construction fixings specialist **ANCON** has extended its existing balcony connector range to include three new thermally insulated systems designed to minimise the effects of cold bridging at concrete to concrete, concrete to steel and steel to steel interfaces. The new systems, called Isotec, STC and STS, are designed to provide an

effective thermal break whilst maintaining full structural integrity by transferring moment, shear, tension and compression forces at the joint. Marketing Manager, Annabelle Wilson, said: "We have extended our connector range as balconies are an increasingly popular feature in the residential sector, where designers are keen to add style and aesthetic appeal to high density occupancies."

0114 2755224 [www.ancon.co.uk](http://www.ancon.co.uk)

enq.150



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enq.151

## Hambleside Danelaw at world-class facility



Hambleside Danelaw's eco-friendly rooflights have been installed on a new £100 million manufacturing plant in Ashington that will be the heart of AkzoNobel's UK Decorative Paints operations. The Insulator core and StepSafe external skin in the rooflights were ideal for AkzoNobel's environmental needs. The honeycomb

core is made from sustainable material and reduces carbon emissions without decreasing light transmission, providing enhanced light diffusion. By maximising the use of natural daylight, the need for artificial light is reduced and energy costs are lowered. Terry Minns of roofing contractors Hathaway commented: "We will definitely be using Hambleside Danelaw again in the future."

01327 701 900 [www.hambleside-danelaw.co.uk](http://www.hambleside-danelaw.co.uk)

enq.152

## Freefoam's new cast iron style rainwater range



Freefoam, a manufacturer of a wide range of innovative products for the building industry, announced the addition of a new cast iron effect range to the Freeflow rainwater system. The range is manufactured with long lasting PVC-U and designed to provide the authentic look and feel of traditional cast iron rainwater systems with all the

benefits of a modern, low maintenance and fitter-friendly system. The cast iron effect system is available in both half round and deep styles with a full range of related accessories to ensure a neat and professional installation. Cast iron style guttering offers specifiers and property developers the ideal solution for a stylish traditional look, giving homeowners a low maintenance and long lasting system.

01604 591110 [www.freefoam.com](http://www.freefoam.com)

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enq.155



## Levolux keeps The Wilson cool

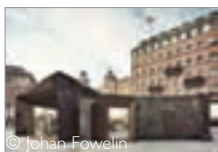


Following a £6.3 million renovation project, The Wilson – Cheltenham's Art Gallery & Museum – has opened to national acclaim, featuring a unique solar shading solution from Levolux. Levolux was invited to develop a comprehensive solution, comprising an arrangement of fixed Louvres applied horizontally

across the façade, along with a series of internal double roller blinds. While the external Louvres provide effective shading, they were also required to appear sympathetic to the existing 19th century period architecture. In total, Levolux installed 194 tubular ceramic louvres, each measuring 75mm in diameter, supplied in a white gloss, glazed finish, and reinforced by a stainless steel bar running through the centre of each louvre.

enq.156

## Brass quays with Aurubis Architectural



© Johan Fowelin

A recent renovation of the Strömkajen quayside, one of Stockholm's busiest and most iconic areas, included a range of new terminal buildings serving local ferries and sightseeing boats that were characterised by Nordic Brass cladding from Aurubis Architectural. Roofs and walls are clad with Nordic

Brass, which harmonises well with the stone and stucco facades in the background and creates a unified, sculptural architectural expression. In addition, the Nordic Brass surfaces were burnished by specialists and variations in surface texture achieved using a range of techniques. On this exposed quayside site, Nordic Brass also offers great corrosion resistance and durability.

01875 812 144 [www.aurubis.com/finland/architectural](http://www.aurubis.com/finland/architectural)

enq.158

## Stainless steel performance after 30+ years



The Thames Barrier stands astride the river in a 'corrosive' location due to temperature and humidity levels activating salt deposits on a regular basis. Stainless steel was considered to be the only metal which would provide a sufficient level of corrosion resistance to fulfil a planned 50 year design life.

Austenitic grade 316 from Aperam was specified for its corrosion resistance along with a smooth matt finish designed for severe conditions. Its smoothness minimises corrosive deposit accumulation and increases the effectiveness of self-cleaning by natural rain washing. As a result, the dramatic curves of the barrier retain both their attractive appearance and functionality after more than 30 years.

01246 571660 [www.aperam.com](http://www.aperam.com)

enq.159

## EQUITONE clad cinema gets exposure



EQUITONE architectural fibre cement materials from Marley Eternit have been used to create a striking facade on the UK's most northerly cinema and music venue. Marley Eternit's EQUITONE [natura] was specified

for the £12.4 million 'Mareel' building in Lerwick, Shetland, which has recently been awarded both RIAS Regional and RIBA National Awards. EQUITONE [natura] allows the texture of the fibres to show through, offering a unique visual appearance and natural fibre cement finish. Anthracite coloured EQUITONE [natura] was chosen because of its combination of toughness, texture and appealing colour. Robustness was an overriding factor on this project because Lerwick experiences gusts of wind over 70 miles per hour.

enq.159




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enq.161

## EQUITONE in BREEAM 'Excellent' facility



EQUITONE [natura] and [textura] from Marley Eternit have helped create the award-winning BREEAM 'Excellent' research facility at Swansea University. The Institute of Life Science building (Phase 2), won the BREEAM Wales Award thanks, in part, to Marley Eternit's EQUITONE architectural fibre cement facade material.

EQUITONE [natura] in charcoal and cool grey was the predominant material used on the facade because it created a striking visual appearance. EQUITONE [textura] in sand and egyptian blue was chosen for recessed elements within the facade and a number of feature walls.

enq.162

## Architects create gem in central London



London-based Piercy & Co architects have specified a fibre cement EQUITONE facade, from Marley Eternit, on the 1 Baker's Row development in Clerkenwell Green Conservation Area. Anthracite-coloured EQUITONE [natura] was specified because the architects felt that the matt surface appearance created a

contemporary aesthetic that interfaced well with the adjoining historic buildings. EQUITONE [natura] allows the textures of the fibre cement to show through, creating a tactile, smooth surface. It is a sustainable and low maintenance exterior rainscreen cladding material that combines excellent aesthetics with durability and impact resistance.

enq.163



## Aluminium grilles provide extensive cladding

NEACO's Techdek aluminium open grille system is extensively featured as cladding at a £6.3 million development in Finnieston, Glasgow, which provides a new 132/33kV substation on behalf of Scottish Power Energy Networks. Designed by Dane Architectural and built by Miller Construction, the new 1,500sq m facility off Argyle Street is serving as a secure electricity supply for Scottish Power Energy Networks' new development and organic growth within the west of Glasgow. Techdek aluminium cladding covers a large proportion of the substation building, which is approximately 80m in length and 16m in width. Mark Benson of Dane Architectural said: "We wanted an aesthetically pleasing façade and NEACO's product was the most visually impressive and commercially viable choice. The completed installation looks very smart and NEACO's technical support was excellent. They were very flexible in providing a design solution which accommodated the structural demands of the building and we would definitely work with NEACO again in future projects of this type." Techdek is also suitable for decking, access walkways, ventilation, staging, balustrade infills and stair treads.

enq.164



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enq.165



## Advertorial

# Glazpart launch innovative range of background trickle ventilators

**B**anbury-based Glazpart, is a specialist injection moulding company with extensive experience in the fenestration industry, employing 80 staff at its ISO 9001:2008 certified site, producing millions of mouldings each month.

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- 1,000's of colour decoration options.

## Compact

- The Link-vent 5000 EQA delivers significantly more EQA performance compared to similar overall length traditional 4,000mm<sup>2</sup> (free area) ventilators.

- The Link-vent 2500 EQA delivers approximately the same performance of a traditional 4,000mm<sup>2</sup> in the length of traditional 2,000mm<sup>2</sup> (free area) ventilators.

## Efficient

- 2500 EQA is delivered through a 204mm x 13mm slot, reducing routing machine times and waste materials generated. For simplicity the 5000 EQA has two slots the same size.

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- The Link-vent 5000 closure plate is split to allow for partial (50 per cent) opening and



further ease opening of the ventilator.

- Rounded ends of the vent allow for installation on timber windows.
- Available in either screw or clip in fixing types.
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## Schueco concealed fittings are a real advance



New from building systems specialist **Schueco UK Ltd** is **AvanTec SimplySmart**, a comprehensive range of concealed fittings for all types of Schueco aluminium inward opening windows – tilt/turn, side-hung and bottom-hung. Developed as a response to the architectural trend for uncluttered minimalism, the Schueco **AvanTec SimplySmart** range combines contemporary design with

functionality in use and includes a world first: a fully concealed fitting which allows a window to open a full 180° (previously, 90° was the maximum angle of opening). Schueco **AvanTec SimplySmart** fittings offer clean lines and advanced engineering complemented by a variety of stylish ergonomic handles and finishes.

01908 282111 [www.schueco.co.uk](http://www.schueco.co.uk)

enq.169

## Alu-Timber used in Appleton School project



**Alu-Timber** and its approved fabricator **Anglia Fixing** recently completed a new dining hall extension and re-modelling project for **The Appleton School** in Essex. This project was completed using **Alu-Timber EFT** curtain walling, alongside casement windows from **Comar 5Pi ECO** with **Comar 7Pi** pivot commercial doors.

**Alu-Timber EFT** is a 60mm aluminium/timber curtain walling system which offers capped, two sided structural glazing with vertical or horizontal capping and four sided structural glazing. **Comar 5Pi ECO** are thermally efficient polyamide insulated aluminium windows, offering outstanding weather performance and reducing heat loss through the trademark **P.i** thermal break.

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enq.172



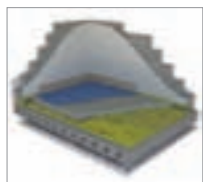
## Reynaers launches its BIM Library



Supporting architects, construction and fabrication partners throughout the building industry, Reynaers has released its latest Building Information Modelling (BIM) library, enhancing collaborative partnerships. Reynaers BIM system provides fully compatible models of Reynaers systems for integration into building designs, plans, and simulation. The library includes a comprehensive collection of Reynaers systems such as windows, doors, sliding doors and sliding and folding doors with additional products being added on a regular basis. In total some 130 BIM models of various aluminium systems are currently available. Reynaers BIM library can be downloaded free via the company's website.

enq.173

## Sound choice for under screeds



Specifically designed to be installed under a floating screed on a concrete floor, YELOfon HD10+ is a high performance sound proofing layer from **Cellecta**. In addition to the systems excellent acoustic performance (Robust detail E-FC-5), it also excels in installation, practicality and cost effectiveness, with each roll having a coverage area of 50m<sup>2</sup> and a 20kg weight.

This represents an advantage for ground workers and installers who traditionally use heavy rubber based systems requiring a two man lift. Each pack includes all the items that are required for installation, ensuring the installer is using the correct products every time. The system has been installed across the UK.

08456 717174 [www.cellecta.co.uk](http://www.cellecta.co.uk)

enq.175

## EcoTherm solutions on top of the shops



EcoTherm products have provided a cost effective flat roof insulation solution for a multi-storey development in North London including a new Sainsbury's supermarket and two storeys of flexible commercial space. Over 7,000 m<sup>2</sup> of

EcoTherm Taper-Bond and Eco-Fix were installed on the development in two build-ups designed by EcoTherm's specialist tapered insulation partners, Building Innovation. The main roof featured a concrete deck, and to reduce the overall scheme height, the aluminium foil faced EcoTherm Eco-Fix was mechanically fixed as an underlay for EcoTherm Taper-Bond (tapered Eco-Bond). This build-up helped to minimise heat loss and prevent the potential issue of water ponding.

01702 520166 [www.ecotherm.co.uk](http://www.ecotherm.co.uk)

enq.174

## Kingspan OPTIM-R: the smart solution



Kingspan Insulation's OPTIM-R External Wall System has provided the space saving solution to help transform 10 under-insulated bungalows in Southend-on-Sea into highly energy efficient 'smart homes'. The cavity walled bungalows featured u-PVC facades around the front and rear windows

and allowed high levels of heat loss with an external wall U-value of 1.19 W/m<sup>2</sup>K. To improve thermal performance within the minimal cavity space behind the facades, 20mm of the Kingspan OPTIM-R External Wall System was installed. Kingspan OPTIM-R vacuum insulation panels feature a microporous core which allows optimal thermal performance from the thinnest possible solution.

01544 387384 [www.kingspaninsulation.co.uk](http://www.kingspaninsulation.co.uk)

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## SuperQuilt

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enq.177

## New innovations from Kingspan Tarec®



Kingspan Tarec is offering specifiers even greater freedom and flexibility with the latest developments in its premium performance Kooltherm® FM Pipe Insulation. The manufacturer has introduced slotted board technology to complement its award winning continuous pipeline manufacture process, creating a

range of fully bore coated products for pipe sizes from 15 to 610 mm. An architectural 'Theatre Black' facing option has also been launched, providing an ideal alternative for exposed to view applications. With thermal conductivities as low as 0.025 W/m-K, Kooltherm FM Pipe Insulation is able to meet the thermal performance requirements of each application with a minimal thickness.

01457 890400 [www.kingspantarec.com](http://www.kingspantarec.com)

enq.178

## Kingspan TEK® for flagship development

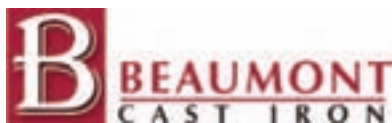


The Kingspan TEK® Building System has been installed as part of the walls and roofs of 185 new properties in South Gloucestershire, helping to form one of the UK's largest 'zero carbon' developments. Kingspan TEK Building System panels comprise a high performance insulated core sandwiched

between two layers of Oriented Strand Board type 3 (OSB/3) and were designed and factory pre-cut to the project's requirements by Kingspan TEK Delivery Partner, Kingspan Timber Solutions. Kingspan was involved from the initial design phase of the project and worked alongside HTA Design LLP, Barratt Homes and Sovereign Housing Association right through to the final detailing.

01544 387 384 [www.kingspantek.co.uk](http://www.kingspantek.co.uk)

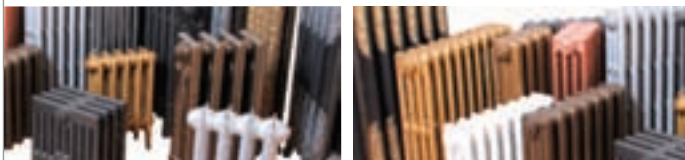
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enq.182

## Loxton 5 Maxi - heat for the modern home



As part of its re-launch of the Mendip wood burning stove range from Eurostove, the new Loxton 5 Maxi model has been introduced and will feature in the all new brochure. The Loxton 5 Maxi has been devised with the modern home environment clearly in mind with sleek convection side panels for better heat distribution in an open plan room, and the stove itself raised on attractive legs offering a more obvious view of the fire and a better loading position.

This also offers a storage area for logs. With the modern and new-build house market clearly in mind, Eurostove have achieved a practical optimal price without in any way compromising its inherent quality and performance.

01934 750 500 [www.eurostove.co.uk](http://www.eurostove.co.uk)

enq.179

## Windhager launches the BioWin 2 boiler



New from Windhager is its latest development, BioWIN 2. The BioWin 2 has been designed to be a 'space conscious' appliance and can be installed within an alcove as it requires no servicing clearances either to the left, right or the rear and minimal clearance to the front. All cleaning and servicing is achieved from the front of the BioWin 2 – no other wood pellet boiler achieves these minimum clearances

making it a real innovation and ideal for many different properties. BioWin 2 is available in four outputs from 10 to 26kW, all with a 30 per cent modulation range for maximum efficiency. The boilers come with a host of innovative features, including fully automated cleaning and ash removal, and a patented sliding grate to guarantee maximum combustion efficiencies.

enq.181

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enq.185

# function *and form*

## The Towel Rail Collection by Stelrad



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enq.186

# UFH in conversion projects – the essentials

The most common question asked about the suitability of underfloor heating (UFH) in a building conversion is 'how can we minimise the floor build up?' This is an important area to master within a project such as an office to domestic conversion, particularly when there is an acoustic and UFH requirement. Andrew Grimsley, technical director of Nu-Heat UK Ltd, discusses the low-height options for conversion projects

Underfloor heating can either be installed on top of an existing deck, within an existing suspended timber floor structure or can become part of the floor structure. In many conversion projects the specifier often prefers to avoid pulling up existing floors by fitting the UFH over the top, which will inevitably add height to the deck profile especially in an acoustic floor. The main impact of this can be seen at the

top of stairs, at thresholds, and on doors, which will all have to be adjusted – and the bigger the increase, the more expensive and time-consuming this becomes. Low ceiling heights may also have an impact on marketability, either making the property more difficult to sell or affecting the purchase price.

The other point to consider is whether the conversion needs to meet the acoustic requirements of Part E of the Building

*Continued on page 51...*





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Regulations. There are two ways of ensuring compliance with Part E: either install an acoustic floor recommended by the supplier, which is then tested by an independent consultant, or use a Robust Detail (RD) floor construction.

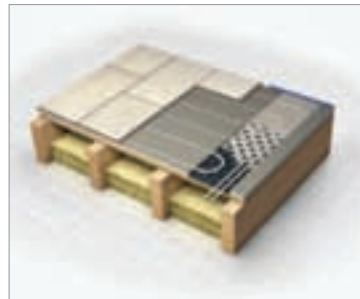
Correct heating system design is especially important in older buildings. The building's construction, U-values, ceiling heights, existing floor construction, heat source and floor covering must all be factored in. From this information the designer can calculate heat losses and the output required from the UFH, produce a detailed system specification with associated CAD pipe layouts, flow temperatures, and system schematics to illustrate how the various components should be configured.

This level of detail, backed up with a comprehensive manual, makes for a straightforward installation process and also allows a good supplier to guarantee their system design.

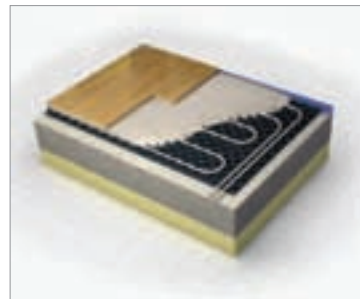
The choice of floor covering is important as the conductivity of the material has a bearing on the effectiveness of the UFH system. Natural stone or ceramic tiles conduct heat extremely well and can be installed directly onto the pre-routed gypsum board or castellated panel systems with just a thin decoupling layer. Laminates or engineered timber can be 'floated' directly over the floor. Carpet with underlay is the least conductive option but can be used where the combined tog value is no greater than 2.5.



Cross section schematic drawing of a specialist metal heat diffuser plate system, which is ideal for use in suspended timber floors. The plates can be fitted from above on top of joists where the existing floor is being lifted or between the joists from below if ceilings are being replaced



Cross section schematic drawing of a system that uses pre-routed gypsum panels together with 10mm UFH pipe and gives a total height build-up of just 15mm



Cross section schematic drawing of a new and innovative low-height option for retrofit UFH. The system consists of a castellated panel to hold the UFH pipe in place, which is then covered with a specialist self-levelling compound with an average depth of 22mm

*'UFH in retrofit projects allows every available inch of room space to be utilised'*

## Low height build-up retrofit options

The options for low-height floor constructions are fairly limited, but those available can be very effective. For instance, a system that uses pre-routed gypsum panels together with 10mm UFH pipe gives a total height build-up of just 15mm, making it one of the slimmest profiles available. With a flow temperature of 50°C heat output can be up to 80W/m<sup>2</sup>.

This type of system is also available in acoustic floor variants which have been independently proven to exceed the required standards. The panels can be used over a structural concrete deck or a suspended timber sub-floor.

An alternative new and innovative low-height option for retrofit UFH consists of a castellated panel to hold the UFH pipe in place, which is then covered with a specialist self-levelling compound with an average depth of 22mm.

This system produces a very high heat output: at 50°C flow it is in excess of 120W/m<sup>2</sup>. Its fast response times allow it to be used as a direct replacement for a radiator system, making it ideal in a retrofit situation. The finished floor construction offers a perfectly level finish on which to lay ceramic tiles or natural stone products.

This system can be used over a concrete deck or suspended timber sub-floor and, like the pre-routed panel system, can be used in the sort of irregularly shaped room found in many retrofit projects.

Another retrofit option would be specialist metal heat diffuser plate systems, which are ideal for use in suspended timber floors. The plates, which hold the UFH in place, can be fitted from above on top of joists where the existing floor is being lifted or between the joists from below if ceilings are being replaced. There is no additional height build-up because the plates are just 1mm thick and sit within the floor structure. Heat output is up to 85W/m<sup>2</sup> when used in conjunction with a specialist deck and acoustic variants are available.

The choice of heat source will affect the performance of the heat emitter and vice-versa. For instance, the low flow temperatures of UFH allow a condensing boiler to work in efficient condensing mode for more of its operating time, which keeps running costs down. Heat pumps linked to UFH are suitable for buildings with U-values equivalent to current Building Regulations. In this situation, flow temperatures of 35–45°C are typical, and will ensure good performance from both heat pump and UFH.

UFH in retrofit projects allows every available inch of room space to be utilised for furniture and fittings, it is less prone to damage and is an energy-efficient option for tenants and owners. Specialist UFH design-and-supply companies should be happy to support architects and specifiers in choosing the right option for the individual project.

enq.188



## Advertorial

# Monodraught celebrates 40 years at the top

Natural ventilation, daylighting and cooling specialist, Monodraught, celebrated its 40th anniversary in March. Renowned for its Windcatcher, Sunpipe and Cool-phase 'natural' systems, Monodraught has established itself over four decades as the UK's most innovative creator of low energy solutions for the building services industry.

## Windcatcher

Founded in 1974, initially to manufacture and supply balanced flue brick chimneys, a small but innovative company led by Professor Terry Payne quickly developed to exploit a growing interest in air movement. This, in turn, led to the production in 1988 of the first prototypes of the company's groundbreaking Windcatcher natural ventilation systems, helping to create the building services industry's now popular Natural Ventilation of Buildings sector.

Developments of the Windcatcher have included the state-of-the-art Sola-boost ventilation unit, which uses solar driven PIV to provide energy-free, solar-powered ventilation while maintaining a traditional appearance. So innovative was this new natural ventilation solution that, in 2006, Sola-boost was awarded 'Best Building Services Product of the Show' at the UK building industry's Interbuild exhibition. Then, in 2010 the next generation Windcatcher, the completely re-engineered Windcatcher X-Air, joined the Monodraught natural ventilation portfolio featuring an Active Louvre System and 'No Leak Guarantee'.

## Sunpipes

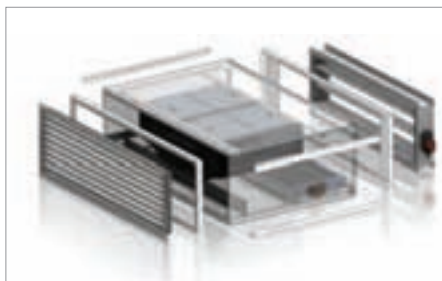
Having helped to create the Natural Ventilation sector from 1974, Monodraught applied itself to natural daylighting and, in 1995, the Sunpipe natural daylight system was launched into the UK market and was followed just two years later with the introduction of the Suncatcher, an all-new system combining natural daylight and natural ventilation.

## Cool-phase

Following a four-year development programme, 2009 saw the UK launch of Cool-phase, an innovative application of the exciting new 'phase change technology', to create a low-energy cooling and ventilation system that creates a thermally-comfortable, fresh and healthy indoor environment, while reducing the energy consumption and running costs of buildings.

In 2013, design and technology enhancements were incorporated and Cool-phase Nova was introduced. Monodraught began the upgrade by exploring new design techniques to speed the design process and, having already used 3D modeling within the R&D department, the company complemented it with the latest 3D printing technology to enable them to bypass traditional 'prototype' lead times.

## Still innovating: the hybrid thermal mixing system



Typical of Monodraught's commitment, exactly 40 years after it was founded, the company has unveiled another creative and innovative product – the Hybrid Thermal Mixing System (HTM). This exciting new product is designed to provide a mix of air from natural and hybrid ventilation for winter, with the ability to deliver secure night time cooling and boosted levels of ventilation in the summer.

HTM is designed to meet the requirements of the Priority Schools Building Programme by combining exceptionally low specific fan powers and an intelligent control system as standard, which includes a full data logging facility, temperature control and CO<sub>2</sub> control.



## The business development

Growing demand for Monodraught's innovative natural building services solutions created rapid expansion and in 2000 the company moved to its current premises in High Wycombe. Later that same year Monodraught was incorporated into VKR Holding.

In 2013 Monodraught created its own Technology Centre at its High Wycombe facility to act as a training resource and provide easy access to working examples of new products and technologies.

## Summary

Monodraught is proud to have been delivering sustainable solutions for 40 years and is looking forward to continuing into the future.

The following timeline is a summary of all the Monodraught products produced in 40 years

## Technology timeline – 40 years of Monodraught highlights

- Founded 18 March 1974
- First prototypes of the Windcatcher Natural Ventilation Systems in 1988
- 1991 first major commercial installation of Windcatchers installed at Bosch Industries
- 1995 Sunpipe Natural Daylight System launched
- 1997 Suncatcher System launched
- 2000 moved to Halifax House, High Wycombe
- 2005 Sola-boost system created
- 2006 Sola-boost awarded "Best Building Services Product of the Show" at Interbuild
- 2007 iNVent introduced
- 2007 Monodraught incorporated into VKR Holding
- 2009 Cool-phase launched
- 2010 Windcatcher X-Air introduced with Active Louvre System and No Leak Guarantee
- 2011 Ventsair launched
- 2013 Cool-phase Nova introduced
- 2014 Celebrating 40 years of innovation



To find out more visit the website  
[www.monodraught.com](http://www.monodraught.com)

enq.189

## Uninterrupted sounds of war at Bannockburn



Air handling and heat recovery specialist **Air Design** is helping to ensure that visitors to a brand new attraction at The Battle of Bannockburn attraction get the full experience. A heritage centre has been built to commemorate one of the most famous battles between the Scots and the English,

with a virtual environment allowing visitors to lead their own division of medieval soldiers in a dramatic battle simulation. No distractions were wanted from the interactive experience, so two air handling units from Air Design were required for the centre's HVAC system. The units feature a single phase AC backward curved fan, selected as it is one of the quietest fans available.

01384 720460 [www.air-design.com](http://www.air-design.com)

enq.190

## Lucy Switchgear launches content rich website



**Lucy Switchgear**, a leader in medium voltage, secondary power distribution solutions, has launched a new, content-rich website. Designed to make it quicker and easier for visitors to find the information they want, it also includes a host of exciting new features for Lucy Switchgear's customers,

agents and partners. A key new feature on the site is the 'ask a question' facility. Through this, visitors can access Lucy Switchgear's specialist expertise and get answers to their technical questions, direct from experienced engineers. Easy product navigation and a lightning-fast search facility helps visitors to quickly find information about Lucy Switchgear's best-in-class products and services.

01844 267 267 [www.lucyswitchgear.com](http://www.lucyswitchgear.com)

enq.191

## ModuSat combined heating and cooling heat interface units



**Evinox** are excited to announce the launch of the ModuSat CHHC combined heating and cooling interface unit range, perfect for homes connected to a communal scheme that require both heating and cooling throughout the property. The ModuSat combined heating, hot water and cooling unit provides simultaneous heating and cooling and the instantaneous production of hot water. Designed to simplify apartment installations where cooling and heating is required, the CHHC unit features a small footprint that minimises required cupboard space, with easy access for service and maintenance. The heating, DHW and cooling plate heat exchangers are housed within a single cased unit with high quality fully insulated separation between the hot and chilled zones. The unit can be provided in either floor standing top connection or wall mounted bottom connection orientations, making it suitable for a wide number of installation configurations. The ModuSat CHHC is available with a number of plate size options to meet a range of cooling, heating and DHW requirements and can be supplied complete with a ViewSmart room controller featuring humidity control. Evinox combines the expertise and independence to deliver lifetime communal heating packages for any project brief.

01372 722277 [www.evinox.co.uk](http://www.evinox.co.uk)

enq.192

## The Piazzetta Oslo fireplace with a 360° view



At last, a fireplace that really takes centre stage. With its 360° view the fire looks stunning from any angle. The gorgeous majolica cladding is available in a range of colours and is complemented by large, electrically operated ceramic glass panels. The Oslo is exclusively available through Robeys.

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## Lyndon Design drives transformation



The head offices of Volkswagen Group UK pay testimony to **Lyndon Design's** bespoke design, handcrafted seating capabilities and ability to deliver tailored solutions. Several of its high-backed Arthur seats provide informal meeting areas within the refurbished building, while delivering the ultimate in design prowess and comfortable ergonomics. Arthur's cushioned high-back provides both a sense of privacy as well as comfort – created by the horizontal panelling and lumber cushion unique to Arthur. The low, soft seat helps to provoke the current trend for intimacy within corporate meetings. The Arthur sofas have been specified in grey felt upholstery with a red border lining the seat cushions, and feature elegant rectilinear aluminium legs.

enq.195

## Exploring the creativity of Illusion



**Solus Ceramics** introduce Illusion, a range of exciting diamond shaped tiles that are set to capture the attention of the design world. This innovative series of tiles is a versatile instrument that designers can use to freely create innovative geometric patterns and funky three-dimensional cubic shapes. By playing with shade and colour, walls can be transformed

into visual spectacles and even works of art that will enchant the eye. Tiles are available in one standard size and in a choice of 12 imaginative colours including vibrant blues, enchanting pinks and numerous shades of white and grey.

0121 753 0777 [www.solusceramics.com](http://www.solusceramics.com)

enq.196

## Encasement's big entrance for Mini showroom



Visitors to a new Mini showroom in Hereford can't fail to notice its eye-catching entrance feature, which has been manufactured and supplied by **Encasement** as part of the overall design produced by BK Architecture for The Cotswold Motor Group. With an internal width of 2.6 metres and an overall height of 2.8 metres, the new showroom's entrance is part of Encasement's 'Forma' range of decorative casings and is fabricated using 3mm thick aluminium, which is formed into a 300mm square section and secured to an internal steel support structure. As the main purpose of the structure is to clearly identify the location of the showroom entrance, the casing's exterior is given a bright orange RAL 2008 finish that is also in keeping with the stylish and contemporary Mini brand. Martin Taylor, Encasement's managing director, explained: "We get involved in a wide range of decorative casing projects for the automotive industry, particularly for finishing dealer showrooms and this is a perfect example of how our corrosion resistant aluminium Forma casings can be used to add a touch of style to a showroom exterior." Encasement specialises in the supply of decorative casings, interior wall linings and cladding for the architectural, contracting and construction sectors. Further information on every product in the range can be obtained by contacting Encasement or visiting the website.

enq.197



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enq.199

## Combining precision with smoothness



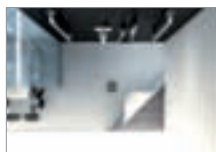
In collaboration with Phoenix Design, Hansgrohe has developed mixers whose distinctive shapes combine precision with smoothness. The design of Logis is characterised by taut surfaces, clear lines and rounded contours. The new Logis mixers come in different heights and handle variants,

ensuring that ceramics and mixer match both visually and functionally with options for cloakrooms through to larger family bathrooms. As a result of efficient technologies, Logis has received the top 'Water Efficiency Label' rating of A in the Home category for the domestic sector. All users will be able to find a model that is ideal for their own personal ComfortZone from this comprehensive range.

01372 465655 [www.hansgrohe.co.uk](http://www.hansgrohe.co.uk)

enq.200

## wedi Solso takes care of PVC on shower floors



wedi has launched a floor-level shower system developed especially for PVC coverings. wedi Solso is the unrivalled shower floor system for wet areas in hospitals and private and public care home facilities. The wedi Solso comes as a fully integrated sealed drainage unit, which allows the PVC surface to be

easily connected directly to the drainage system and is 100 per cent water-proof. This means that there is no chance of any water flowing backwards and seeping under the PVC. As a result of its incredibly strong stability and ability to bear heavy loads, it is suitable for very high pressure point loads. With 2.5 N/mm<sup>2</sup>, this system enables trouble-free use for wheelchairs and zimmer frames etc.

0161 864 2336 [www.wedi.co.uk](http://www.wedi.co.uk)

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enq.203



## Hidden treasure from HOPPE UK



Hardware specialist **HOPPE UK** has launched a new overhead concealed door closer, **ARRONE 7383**, that is the answer for high use doors requiring a reliable closer that is hidden away for maximum aesthetic

appeal. HOPPE UK launched the concealed closer in response to increasing demand from specifiers who want a reliable, cam action closer without the sometimes unappealing visual metalwork. For hospitals, nursing homes, schools and other public buildings, it is the perfect choice to avoid the institutional look of many doors while ensuring reliability, safety and security. As an added bonus, concealed closers are less vulnerable to attack, vandalism and theft.

01902 484 400 [www.hoppe.co.uk](http://www.hoppe.co.uk)

enq.204

## Door kit and set solutions made simple



Interior door manufacturer **Vicaima** has just launched a new door kit and set solutions brochure, making the process of specifying and selecting the ideal door and frame assembly straightforward and simple. Packed with options for every kind of project, this new brochure offers performance and design solutions to satisfy the most exacting requirements. This new Vicaima guide contains over 40

pages of inspiration and illustrates the host of possibilities offered by its ever popular Portaro and Easi-fit ranges. Vicaima have a wealth of experience in the design, manufacture and supply of door assemblies and this expertise and innovation has seen its products specified for an ever growing number of UK and international luxury apartments, hotel and leisure developments.

enq.206

## Flooring specialists reach recycling milestone



**Selby Carpets**, a leading flooring and carpet installation specialist, has reached a recycling milestone, diverting over 10,000m<sup>2</sup> of carpet from landfill to recycling centres – the equivalent of 11 football pitches. And this figure doesn't include Selby Carpets' recycling of sheet carpet, vinyl, underlay

and all the cardboard it puts through its compactor. The company, which supplies and fits carpets and floor coverings throughout London is a member of the Carpet Recycling UK initiative, a not-for-profit membership association that works to increase the recycling of carpet waste across the UK. "This milestone is extremely important to us and of course our clients, as it helps them to meet their green responsibilities too," explains Ian Winsley, managing director.

enq.205

## Gerflor plays its part in family firm's superstore



Independent electrical goods retailer **HBH Woolacotts** specified international vinyl flooring specialist **Gerflor's** Creation Luxury Vinyl Tile & Plank (LVT) range for its new 18,000<sup>2</sup>ft store. The client chose four styles from the Creation range to define spaces,

without obvious walkways, which would showcase the goods in similar settings to customers' homes and create a cafe and cookery demonstration area. Usually specified for public and commercial areas needing a sophisticated look while coping with high footfall, Creation LVT range has 89 realistic wood and mineral finishes in an array of formats, grains and colours.

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## Advertorial



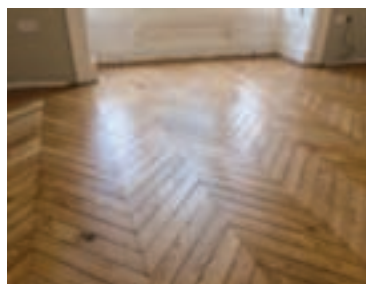
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Tasou Associates, architects and structural engineers

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## "The art of a great carpet"



Commercial fibre bonded carpet manufacturer Heckmondwike FB is making it even easier for specifiers to create art in carpets by expanding its Array carpet tile range with six new colours. The new colourways are Copper, Marble, Peacock, Violet, Emerald and Fuchsia, which brings the number of

options in the Array range to 12. These colourways have been carefully selected to reflect current trends in furniture design and seating, which is set to enhance the appeal of Array for even more public and private sector commercial projects. Array carpet tiles are British-made and provide outstanding performance.

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## Commuters enjoy new-look railway station



Hunter Douglas has supplied a solid wood ceiling system for the £400 million project to transform Reading railway station into a 21st century transportation hub. The Hunter Douglas solution features a solid wood linear open system, finished in Siberian Larch, that was installed as a series of

rafts spanning across the new 110m long covered pedestrian bridge over the tracks and platforms. The system was installed without the usual non-woven acoustic fleece fixed between the panels to allow easier access for maintenance teams. The individual rafters were assembled on the ground then fixed into position on a rigid suspension system, a fast and simple installation to hit the project's deadlines.

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## Brio Pivotfold for pivoting partitions



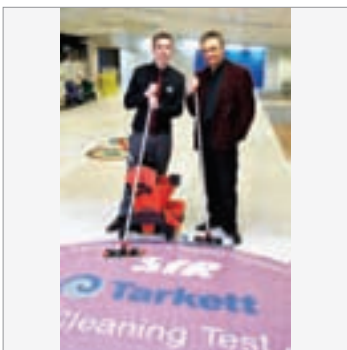
Brio has developed and manufactured a system for pivot folding top hung interior partitions that will be welcomed by architects, specifiers, architectural ironmongers and joiners. Brio Pivotfold track systems are available in three weight capacities (20, 45 and 75kg) and enable an end folding internal

partition to be designed using standard width door leaves with no cutting down of the leaf adjacent to the jamb. Pivotfold is suitable for residential and light commercial pivot folding partitions with a maximum leaf height of 2,400mm x 900mm for 20kg, 3,000mm x 900mm for 45kg and 3,300mm x 900mm for 75kg.

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## Tarkett flooring put to the toughest test



Tarkett's products are going under the spotlight in a new national showcase for innovative cleaning. The company has teamed up with cleaning experts Scot Young Research (SYR) Resilient to provide all the flooring for a new test centre being built at Lye in the West Midlands. The centre will be open to the trade by the end of April, offering demonstration facilities for technologically-advanced cleaning machinery and advanced products. SYR Resilient manager Steve Parry said: "We've had a partnership with Tarkett for many years – I've a background in flooring myself and believe there's no other company like them in the business." Tarkett's range of floor, wall and installation solutions, including Granit Safe, T, Eclipse Premium, Safetred, iQ Optima and ProtectWALL, are being installed at the centre. Salespeople will be able to take customers to view the flooring being put to the toughest tests by SYR's state-of-the-art machinery and cleaning solutions. Steve Urwin, Tarkett's UK marketing manager said the company was delighted to be taking part in the new venture: "Tarkett produces exceptionally hard-wearing yet attractive design led flooring. This means it has numerous applications, such as in hospitals and schools where extensive cleaning is crucial."

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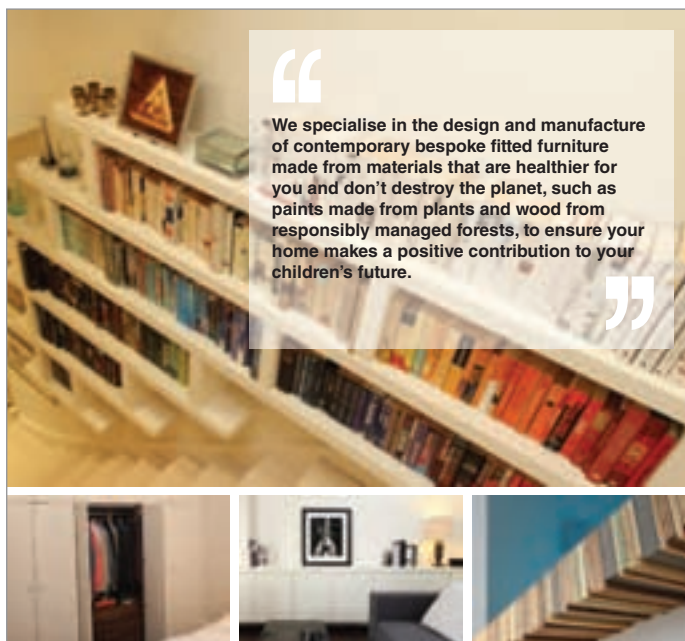
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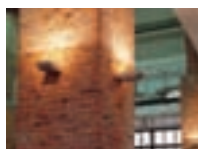
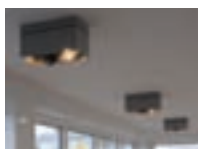
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## Metal ceiling solutions can offer design flexibility and a robust option

When it comes to ceiling solutions in today's buildings, material choice is more important than ever. Consideration has to be given to occupant comfort, ease of maintenance, durability, flexibility for future change and visual appeal, through the fit out, to achieve value. Andrew Jackson of SAS International looks at how to achieve long-term value in specifying ceiling solutions to accommodate change and ensure future tenants benefit from a robust interior

The British Council of Office's Guide to Specification states that "good quality, modular perforated metal ceilings are preferred". As a guide to best practice, it acknowledges metal ceiling solutions offer a high quality, long-lasting solution for modern workplaces.

We are all aware that in the modern workplace open plan spaces have increasingly become the norm, but this move brings challenges associated with it, particularly the impact this has on acoustics.

## Acoustic considerations

Acoustic demands in interiors can be met through the specification of the correct combination of perforations and acoustic pads in metal ceiling systems.

A variety of acoustic backings can help achieve, where needed, high acoustic absorption in open plan office areas to improve privacy through high room to room attenuation.

In general 50dB is considered to be the sound level of a normal office. With a metal ceiling system currently in the market, 50dB – the highest rated acoustic attenuation level for a suspended ceiling solution – can be achieved. In this system, the metal ceiling tiles incorporate a 30mm acoustic pad and 12.5mm plasterboard.

When both acoustic performance and visual appearance is a requisite for a project, metal ceiling tiles can be specified to incorporate sound absorbing pads. A striking aesthetic and outstanding acoustic control is then achieved for an enhanced occupant experience.

Another advantage of metal ceilings is easy access to services. The choice of a demountable flush tile for a suspended ceiling system means that access to the ceiling void is straightforward. Simple and safe access in order to maintain M&E services, for example, is a critical consideration in buildings which carry an increasingly sophisticated range of building services.

## Visual appeal

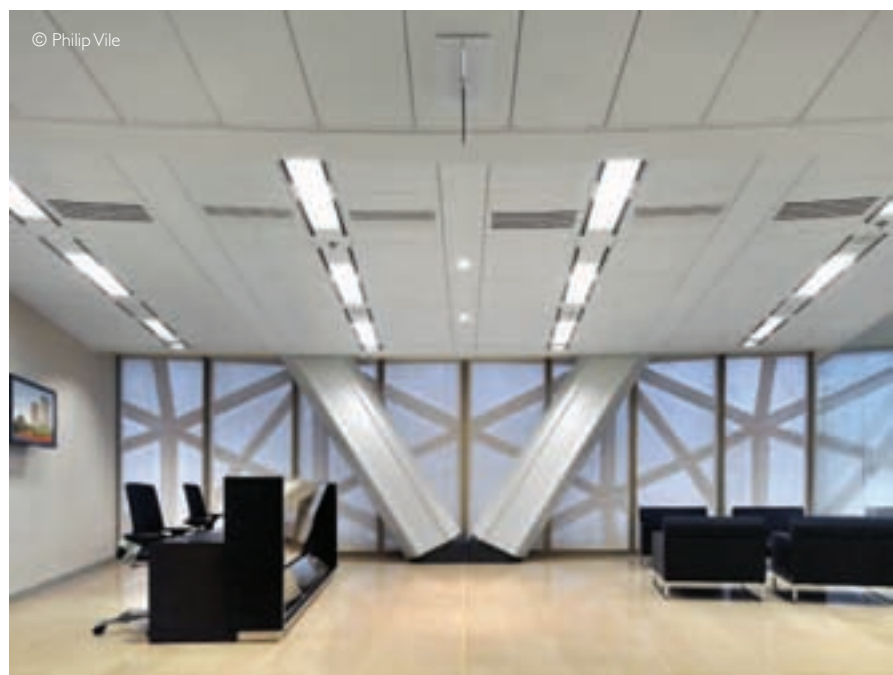
Function and pattern can combine, therefore, to achieve the answer for occupant comfort and beautiful interiors. Variants in the spacing and size of the perforations for acoustic control can in turn create a whole range of different aesthetic looks. With square pitch patterns for example, perforations can be grouped to create distinctive geometric effects for visual appeal.

Metal tiles are also manufactured in a range of lengths, sizes and shapes and so can be specified to accommodate new demands from innovative modern building forms.

A linear grid system, for example, offers design flexibility and is generally designed and manufactured to the building planning grid. These systems can also be designed with bespoke shaped tiles incorporated, such as trapezoidal to complement the curved shape of the building envelope.

## Finishes

Steel ceiling solutions offer a 25-year plus lifespan. This durability is improved further when combined with spray applied powder coat paint finishes. Polyester powder coated metal



ceilings are not susceptible to chipping and accidental damage typically associated with alternative ceiling finishes. Using approved powder coatings on metal, the paint finish itself can be guaranteed for 30 to 40 years. Finishes and coatings available on metal ceiling solutions can also be specified with a number of different options.

Technology has seen new innovations in paint finishes. For the commercial workplace, a fine textured paint finish can offer a semi-matt/low-gloss appearance, which is visually very similar to emulsioned plasterboard. It negates the chance of lighting 'hot spots' and glare occurring, and of course is an option offered alongside the benefits of durability and functionality that a metal ceiling solution provides.

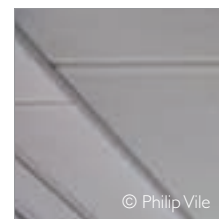
Other specialist finishes that are available to meet specific demands include anti-graffiti and anti-bacterial paint finishes. Anti-bacterial coatings, for example, bacteria growth, which is a characteristic sometimes demanded in laboratories, hospitals and schools.

There is demand in high footfall areas such as transport hubs for a durable solution, and an anti-graffiti finish is just one option proving popular. This provides a robust finish and reduces ongoing maintenance costs for cleaning.

With the number of services that are present in a ceiling void there is a need for regular access without causing tile damage. Metal ceiling solutions provide a durable surface that is easy to clean and allow ease of access, without fear of damage, for essential ongoing maintenance.

In today's work, travel and leisure spaces, metal ceiling solutions are specified because of their high performance characteristics, aesthetic appeal and ability to offer long-term value. Working closely with a manufacturer at design stage ensures the architectural vision is realised.

*'Using approved powder coatings on metal, the paint finish itself can be guaranteed for 30 to 40 years'*



An example of a quality, modular perforated metal ceiling

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## C-TEC's ZFP scores for The Stags



One Call Stadium, the home of up-and-coming Second Division football team, Mansfield Town, is the latest venue to be safeguarded by C-TEC's revolutionary new ZFP touch-screen controlled addressable fire panel. With its user-friendly touch-screen

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## Porcelain Paving range expands



Greensquares has introduced two new colours to its successful Refin Porcelain Paving range. An appreciation of this alternative flooring material has seen Refin being adopted extensively in domestic, commercial and public projects. Adding a sense of style and elegance, Refin porcelain

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# Unravelling the options for cast stone specifications

There are three cast stone options available for architectural projects. Simon Scott of Haddonstone explains



**C**ast stone is one of the most versatile building materials available and, in a number of important ways, is markedly superior to quarried stone. One of its greatest advantages is price, which, piece for piece, is normally significantly less than that of the quarried alternative. There are three high-specification cast stone options for specifiers.

## Semi-dry cast limestone

The finest semi-dry mix designs replicate the texture and feel of Portland and Bath stone, while exceeding their strength. Such cast stonework weathers beautifully to become virtually indistinguishable from its quarried stone equivalent, making it ideal for decorative ornamental and architectural designs. The principal materials for semi-dry cast stone are limestone, white cement, sand and a very small quantity of water. The mix has the feel of damp sand or earth before compaction. The stone is packed into the mould using a number of ingeniously crafted tools. This is done by hand or by using pneumatic hand rammers. No finishing is required due to the quality of mould manufacture and casting technique.

## Wet-cast limestone

Some specialist companies also manufacture products by a wet-cast process. Here, the mix is poured into the mould. This process can give a finish, once acid etched, much more akin to the famous Coade stone and is ideal for larger architectural products, flooring, fireplaces, complex statues and contemporary designs where clients prefer a surface finish which does

not weather quickly. The stone produced by the wet-cast process is considered to be a high specification stone designed to meet demanding design and performance criteria for commercial projects and large or small scale individual private developments. Hand finishing is required to ensure a quality product.

## Fibre-reinforced stonework

Fibre-reinforced stonework benefits from glass-fibre reinforced concrete (GRC) technology, which closely resembles traditional cast stone and natural stone in appearance – yet the use of thin wall construction GRC materials means the component weight is reduced by approximately two thirds when compared with similar dry-cast and wet-cast pieces.

Fibre-reinforced stone is a high specification cement based material containing alkali-resistant glass fibre, which benefits from a high strength to weight ratio. Architectural products made by this process are ideal for retrofit, timber-frame and new build projects.

High specification fibre-reinforced products can be used in conjunction with other semi-dry and wet-cast architectural components as the colours should be complementary. Consequently, users can incorporate different materials in the same project with absolute confidence. Fibre-reinforced products achieve the same crisp detailing normally only associated with semi-dry cast and wet cast designs.

Reputable cast stone manufacturers ensure the materials comply with stringent UK and European standards as well as exceeding the compressive cube strength requirements of BS1217:2008. Some manufacturers also put their cast stone through rigorous tests in order to further ensure the reliability and durability of the material for use, including vigorous salt crystallisation and water absorption tests (conducted by the renowned BRE laboratories) as well as the strenuous Canadian freeze-thaw tests.

One of the great advantages of using all three cast stone materials from a single reputable company is that they can be successfully used alongside each other on the same project. All three types of cast stone provide quality, longevity and value for money. The choice of which material to use can be based on a client's individual preferences, specifications and requirements. Whether using a single type of cast stone or all three combined, most projects can be completed solely using material from a single reputable company.

---

*'The finest semi-dry mix designs replicate the texture and feel of Portland and Bath stone, while exceeding their strength'*

---



Fibre-reinforced stonework closely resembles traditional cast stone and natural stone in appearance

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## TILES & TILING

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## WINDOW CONTROLS



Enq. 507



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