

A photograph of a modern interior space, likely a boutique hotel lobby. On the left is a textured, light green brick wall with two black wall-mounted light fixtures, each with a white globe. A white pillar stands in the center. In the background, there's a wall with a large, colorful mural of tropical plants, including a prominent red bird of paradise. Below the mural is a long, dark grey shelving unit with multiple open compartments. To the right, a wooden reception desk is visible, featuring a glass display case on top containing small decorative items. The floor is made of dark, patterned tiles.

adf

architectsdatafile.co.uk

05.19

WHITWORTH LOCKE, MANCHESTER

Revealing neglected Victorian charm in the creation of a colourfully quirky boutique hotel

BICESTER ECO BUSINESS CENTRE

Archetype delivers on a client's sustainable goals

No more space to insulate



Ultra-high performance encapsulated VIP insulation for flat roofs and terraces

Say goodbye to build-up constraints when installing effective insulation on flat roofs and terraces where space is tight and where height constraints exist. Deck-VQ® — with its exceptional thermal insulation performance of 0.008 W/mK with a thickness of just 60mm — helps you to achieve even greater insulation with ease. It's time to think thin.

For more details, please visit www.recticelinsulation.com

FEEL
GOOD
INSIDE





CONTENTS

05.19

NEWS, VIEWS & INSIGHTS

- 04 Industry news & events
- 17 **Site Lines:** Flexible, fascinating and fitting
- 19 **Ask The Architect:** Joe Morris of Morris + Company
- 21 New Arrivals
- 22 International Focus
- 24 CPD Focus
- 37 Appointments and company news
- 40 Clerkenwell Design Week Show Preview

PRODUCTS

- 42 Planning & design
- 42 Structural elements
- 47 Groundworks & drainage
- 48 External envelope
- 55 Insulation
- 55 Heating, ventilation & services
- 56 Interiors
- 68 Accessibility
- 70 Safety & security
- 70 Landscaping & external works
- 75 Classified & directory

PROJECT REPORTS

- 25 **Vertical integration**
As part of a UK first in sustainable masterplanning, Architype's Eco Business Centre brings flexible shared workspace plus exemplar energy credentials to 'eco-town' North West Bicester. Sébastien Reed reports
- 31 **The big reveal**
James Parker speaks to the architect of a complex restoration project in Manchester to create a boutique hotel which enhances industrial Victorian architecture, and celebrates the city's trading history

FEATURES

- 45 **STRUCTURAL ELEMENTS: BRICKS & BLOCKS**
The devil's in the detailing
Alex Patrick-Smith of Ketley Brick discusses the design potential and performance of textured brickwork
- 63 **INTERIORS: BATHROOMS & WASHROOMS**
Future-proofing bathroom design
Robin Tuffley of Closomat explains how whether you are designing a bathroom for a domestic, multi-user or commercial environment, there is one overriding consideration to bear in mind; a pro-active approach to suitability for all
- 69 **ACCESSIBILITY**
Accessing improvements
Christian King of Kee Systems looks at the current regulations and explores how premises should be built or upgraded to improve disabled access
- 71 **LANDSCAPING & EXTERNAL WORKS: COATINGS, PAINTS & STAINS**
What sustainability looks like
Peter Sotherton of Teknos GBI discusses the environmental impact of exterior paints and coatings and how clients can ensure they are acting responsibly

Managing Editor

James Parker
jparker@netmagmedia.co.uk

**Advertisement Manager/
Joint Publisher**

Anthony Parker
aparker@netmagmedia.co.uk

Editorial Co-ordinator

Shelley Collyer

Editorial Assistants

Roseanne Field
Jack Wooler

Editorial Contributor

Sébastien Reed

Studio Manager

Mikey Poolley

Production Assistants

Georgia Musson
Kim Musson

Sales Executives

Suzanne Easter
Ian Fletcher
Kim Friend
Steve Smith

**Audience Development
Manager**

Jane Spice

Managing Director

Simon Reed

**Advertising &
Administration**

t 01435 863500
info@netmagmedia.co.uk
www.architectsdatafile.co.uk

Press Releases

editorial@netmagmedia.co.uk

Subscription circulation

info@netmagmedia.co.uk

netMAGmedia Ltd

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



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

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

FROM THE EDITOR



It is a strange world where a shift in the national focus from Brexit, accompanied by a sense of post-postponement fatigue, to an increasingly fervent sense of urgency on climate change, is something that feels refreshing. However, led by its train-travelling poster girl Greta Thunberg telling it like it is to UK politicians, the sense of momentum to try and limit the damage is palpable.

With good timing, following the well-attended Extinction Rebellion protests and Thunberg's news-grabbing visit, the Government's climate watchdog the Committee on Climate Change has made an unequivocal statement. It says the UK should write a net zero emissions goal for 2050 into law, thus enabling us to fully meet our obligations within the Paris Agreement.

While the CCC thinks the increase in cost that would result need only be 1-2 per cent of GDP per year, it admits that a much tougher policy approach would be needed from Government, including a bigger focus on construction's contribution. "Current policy is insufficient for even the existing targets," the CCC warned, adding that a net zero greenhouse gases target of 2050 "will only be deliverable with a major strengthening and acceleration of policy effort."

As so often heard, but rarely more needing proper understanding, a joined up approach plus a sense of urgency would be essential, the CCC says. "Challenges across sectors must be tackled vigorously, and in tandem."

The big problem is that we have made strides in renewable generation, waste processing and industry, but homes, transport and farming still have a long way to go. In February this year, and purely based on the measures it was counting, residential loft, cavity and solid wall insulations were way below CCC targets. Only 'low carbon heat' was beating the target, excluding heat pump installations which were just above half of what was required.

The bigger picture is that while thousands may go vegan and fly less, the construction sector has a disproportionately high carbon take. Including construction and emissions in use, it's been estimated that buildings make up around half of the UK's total CO₂. Therefore they are the biggest problem to fix, but the sheer size of the task shouldn't be an excuse for apathy.

Why are clients still able to leave all the lights on in already energy-hungry giant glass buildings? Is it not possible for sustainability certification such as BREEAM to be made a legal requirement in certain sectors, rather than left to enlightened clients? And why were such blatantly good ideas as the Code for Sustainable Homes left by the wayside, particularly when they are still used as best practice by architects and clients?

Luckily the design profession – such as practices like Bennetts Associates – are continuing to carry the (LED) torch of driving sustainability. That means not only holding project teams to the task of minimising buildings' energy output, but also doing everything possible to lower the business' own carbon footprint.

James Parker
Editor

**ON THE COVER...**

Whitworth Locke is a high-end 160-room hotel in Manchester which connects three Victorian buildings, stripped back to reveal their original charm.

For the full report on this project, go to page 31
Cover image © Grzywinski+Pons

CLIMATE CHANGE

Bennetts Associates is first practice to achieve UN climate change targets

Bennetts Associates is thought to be the world's first architecture practice to have achieved "approved science-based targets" as part of committing to the UN's Climate Neutral Now campaign. This commitment builds on the practice's track record as pioneers of sustainability within the built environment by taking a leadership position on climate change.

Bennetts Associates has committed to 20 sustainability targets for 2022 including "ambitious science-based commitments" to:

- reduce energy related GHG emissions by at least 21 per cent by 2022 (from a 2016 baseline)
- procure all energy from 100 per cent renewable sources
- reduce travel emissions by 7.5 per cent by 2022 (from a 2016 baseline)
- identify ambitious sustainability agendas relevant to each of their projects continue to measure and improve conditions that relate to physical and mental wellbeing for staff across its three offices.

Bennetts Associates has said it will work towards being a single-use plastic-free office by 2022, and has set policies that work towards incorporating the circular economy within their practices, as well as assisting staff in switching their home energy to 100 per cent renewable sources.

Miguel Naranjo, from the relationship management team at the United Nations Climate Change Secretariat, UNFCCC said, "Bennetts Associates is an example of integration of sustainability and climate action in business, through their

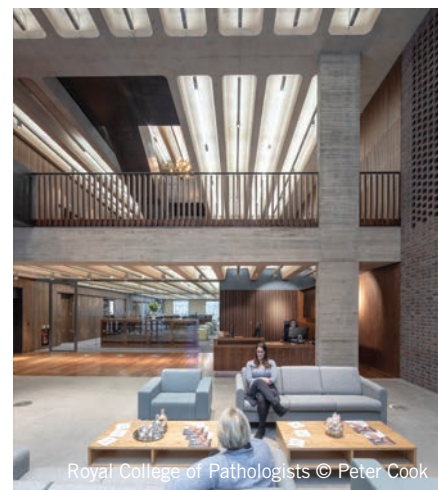


5 Pancras Square © Hufton+Crow

commitment to set a science-based target, procure sustainable energy, and include sustainability considerations in their designs. Their work contributes to moving us closer, faster to global climate neutrality."

Julie Hirigoyen, chief executive at UKGBC, said, "It is fantastic to see Bennetts Associates showing international leadership by becoming the first architecture practice to set itself an approved science-based target, amongst several other ambitious goals to 2022. These ambitious targets will ensure the practice is playing its role in mitigating the adverse impacts of climate change as well as signalling to the whole industry that architects can and must be part of the solution. We commend this Gold Leaf UKGBC founding member for its visionary leadership and foresight, and for putting sustainability ambition at the heart of decision-making."

Cynthia Cummis, director of Private Sector Climate Mitigation at World Resources Institute (one of the Science Based Targets initiative partners), said: "Congratulations to Bennetts Associates for becoming the first architecture firm to have their emissions reduction targets validated by the Science Based Targets initiative. By setting targets that align their business with global efforts to avoid the worst impacts of climate change, Bennetts



Royal College of Pathologists © Peter Cook

Associates is positioning itself to thrive as the global economy transitions to a low-carbon future."

Peter Fisher, director at Bennetts Associates, said, "Bennetts Associates has been at the vanguard of sustainable architecture for over 30 years. We were among the first architects to pioneer sustainability in large projects, bringing it to the mainstream. More recently projects such as 5 Pancras Square for the London Borough of Camden have acted as exemplars for urban and highly economical sustainability." Its BREEAM Rating of 97.6 per cent was the highest ever achieved at the time of its completion. 11-21 Canal Reach, which is currently on site, continues in the same vein, "pushing the boundaries of embodied energy and well being," said the firm.

Fisher continued: "In addition to projects, we place a high level of importance on our long-term environmental, social and economic sustainability as a business. We are therefore pleased to announce that we are the first firm of architects in the world (and first SME in the UK) to commit to approved Science Based Targets, and to sign up to the UN's Climate Neutral Now campaign. Agreeing Science Based Targets enables us to set greenhouse emissions reduction targets that are in line with the Paris Agreement."



The team at Bennetts Associates

urban | front[®]

#doorcouture

steel reinforced natural
hardwood doors

entrance doors

internal feature doors

garage doors

oversized doors

passive house
certified doors

made and designed in UK

+44 (0)1494 778787

info@urbanfront.co.uk

www.urbanfront.com

Secured by Design



Official Police Security Initiative

PULL
PUSH

For beautifully handcrafted
contemporary handles visit
pushpull.co.uk

TRANSPORT

Take off for first phase of Manchester Airport

Manchester Airport has celebrated the completion of the first major phase of its £1bn transformation programme designed by Pascall and Watson and Laing O'Rourke, with Arcadis engaged to support MAG (Manchester Airports Group) as project and programme managers.

Construction of the 216 m long structure commenced on site in July 2017, with the build completed in late January 2019. The facility was then trialled before transitioning into operation on 1 April.

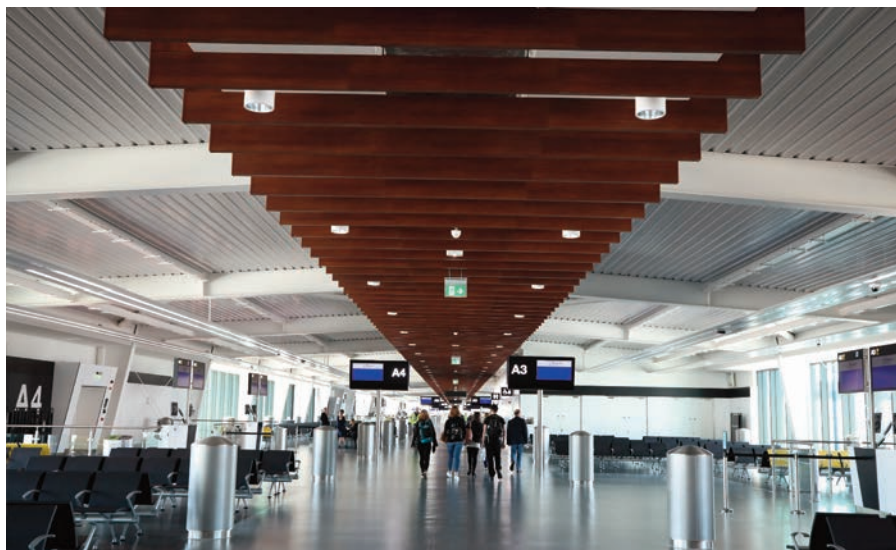
The Pier, which provides 11 jetty-served "contact" stands has more than 1400 seats in a fully glazed upper departures level offering panoramic views of the airfield. A separate, segregated arrivals level provides passengers with a travelator-assisted walking route to the main terminal arrivals facilities.

The new pier will be used by all airlines currently operating out of Terminal 2, and was constructed from 14,000 steel pieces, 47,184 bolts and painted with 2,600 litres of paint.

In preparation for the pier, the apron was extended by 49,000 m² to accommodate new aircraft parking stands, along with the construction of a new taxiway and associated infrastructure and services.

The opening marks the next phase of the airport's multi-phase transformation programme, that will see Terminal 2 become the focal point of its operations. More than 1,800 people are currently working on the project, which recently welcomed its 100th apprentice as work gathers pace. Over the coming weeks more and more flights will gradually move over to the new pier as it becomes fully operational.

Andrew Cowan, CEO of Manchester Airport, said, "This is a significant milestone for Manchester Airport as we deliver the first phase of the biggest investment we have made in our 80 year history. Over the coming years we will transform the airport for all of our customers, giving the north the world class airport it deserves. The investment we are making and the range of destinations we connect to, in all corners of the world, underlines the vital role Manchester Airport plays in creating jobs and driving growth across the north of England."



The next phase of the £1bn transformation is the extension to the existing Terminal 2. Work is well underway and will see the terminal more than double in size. The extension will open in Summer 2020 with around 40 new food and beverage outlets and shops, followed by a further 30+ when the existing building is fully refurbished.

The £1bn investment in Manchester Airport will provide major improvements to the customer experience with new security halls and the latest technological advancements. Once the Terminal 2 extension opens in summer 2020 the existing building will close for refurbishment, with its reopening targeted for 2022. Further piers will open in 2022 and 2024.



EVENTS

AWARDS

RIBA London Awards Ceremony
20 May, London
www.architecture.com/whatson

Mental Health Awards

21 May, Coventry
www.designinmentalhealth.com

FESTIVALS

London Festival of Architecture
01 - 30 June, London
www.londonfestivalofarchitecture.org

OPEN EVENING

LFA Open Evening at RIBA Incubator
14 June, London
www.architecture.com/whatson

SEMINARS

Inclusive Environments
22 May, Manchester
www.architecture.com/whatson

The Colin Rowe Lecture Series: Juhani Pallasmaa

4 June, London
www.architecture.com/whatson

TRADE SHOWS

edie live
21 - 22 May, Birmingham
www.exhibition.edie.net

Clerkenwell Design Week

21 - 23 May, London
www.clerkenwelldesignweek.com

EDUCATION

Design Engine's Solent University safety training centre in for planning



Design Engine's scheme for a new Safety Training Centre at Solent University's Warsash Maritime Academy has been submitted for planning.

The proposed development will be located east of Southampton on the Hampshire coast, within the existing Lower Site of Solent University's Warsash Maritime Academy, said to be the world's leading maritime education and training provider.

Of the nine buildings on the retained site, four are prefabricated and temporary and therefore not suitable for redevelopment. This proposal consolidates all teaching and training facilities into a new integrated L-shaped building within a remodelled campus as well as providing 'in-house Helicopter Underwater Escape' training facilities, and also accommodating the teaching and training requirements of Hampshire Fire & Rescue as part of a shared facility collaboration.

The proposed new buildings will make reference to coastal and dockyard marine architecture where structures typically take the form of wide span gable ended buildings, designed to accommodate boats and equipment, with easy access to slipways.

Design Engine has adopted the building typology, as it is also an appropriate fit for the new replacement teaching and training facilities. The new buildings will be clad in a textured metal material typical of marine and boatyard architecture and designed to be dark in colour, so as to be "visually recessive and non reflective against the backdrop of trees while also making use of signature colour highlights for branding and signage," said the architects.

Subject to planning consent, work on the main construction contract is due to start onsite in January 2020.

AWARDS

Global design awards sees record entry numbers

The internationally renowned jury for the 2019 AZ Awards convened in Toronto in March and selected the best from this year's record breaking haul of 1,175 architecture and design entries from 50 countries around the world.

This year's jury is comprised of Pritzker Prize-winning architect Thom Mayne, founding principal of Morphosis, Pat Hanson, architect and founding partner of Toronto's gh3*, Matt Carr, industrial designer and VP of design at Umbra, Italian architect Stefano Pujatti, director



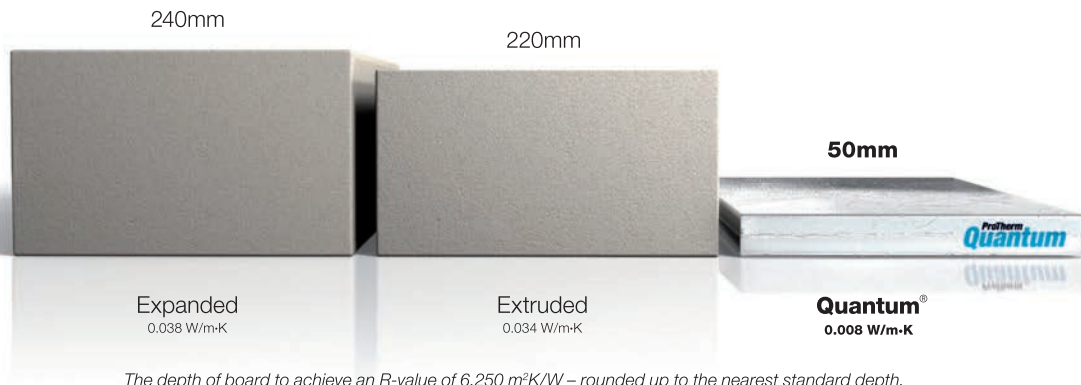
of Italy and Canada-based firm Elasticospa, and Toronto designer Johnson Chou. Their selection of the 68 finalists "exemplifies excellence in innovation, aesthetics, creativity and social and environmental responsibility," said the awards organisers.

The winners will be revealed on 21 June, as architects and designers from across the globe will gather for the 2019 AZ Awards Gala at Toronto's Evergreen Brick Works, to network as well as celebrate all the winners and finalists.

Quantum[®]

~~Theory.~~

Practical.



The world's thinnest inverted roof insulation.

The ProTherm Quantum[®] advanced Vacuum Insulation Panel system has been specifically developed for inverted roofs, balconies and terraces or wherever depth is critical to the overall construction. Quantum[®] can dramatically reduce the depth of a finished roof system, providing the solution to counter low upstands against the increasing thickness of traditional EPS & XPS products specified in order to meet more stringent thermal demands. It delivers an exceptional thermal performance and has been consistently proven to meet challenging standards required by home warranty providers. Quantum[®] is the first Vacuum insulated panel in the world to achieve BBA certification for inverted roof applications.



www.prothermquantum.com



MIXED USE

W Zone at King's Cross gets go-ahead

Kings Cross Central Limited Partnership (KCCLP) has been given the final go ahead by Islington Council for one of the final schemes in the King's Cross Central (KXC) development.

The W Zone, located off York Way and Randell's Road, will comprise three mixed-use buildings, known as W1, W2 and W3, positioned around a central podium garden.

The site masterplan, developed by David Morley Architects, includes a mixture of residential, across a range of tenures, as well as leisure space, plus a managed ecology garden with a focus on education and community engagement, to be known as the Habitat Zone.

Buildings W1 and W2, which together include 218 residential units, have been designed by Feilden Clegg Bradley Studios and David Morley Architects. The buildings were granted reserved matters planning approval in June 2016, with minor amendments recently approved by Islington Council in March 2019. The recent amendments to Buildings W1 and W2 were made with the intention of increasing and improving the shared residential facilities within the scheme, while the number of homes remains the same as the original planning permission.

W3, designed by Haptic Architects, is set to be a leisure-focused building, featuring a gym, nursery and cafe. The three buildings will be accessed from York Way.

Designed by Jan Kattein Architects in close collaboration with educational charity Global Generation, the Habitat Zone is situated to the north of the three buildings and will include four small, single-storey educational buildings – a community kitchen, a classroom, an admin building and a 'growing tunnel.' Central to the proposal for the Habitat Zone is a 1,097 m² ecology garden, featuring a wildlife meadow, an orchard, fruit and vegetable planters, and a wildlife maze.

Building W1 is split into two blocks of 11 storeys and 16 storeys respectively, which will comprise 140 open market residential apartments with a single retail unit at street level, fronting York Way. Meanwhile, Building W2 is an eight storey mixed tenure building featuring 36 social



Call now: 01278 428245



Valcan have been carrying out intensive testing on all our facade products including BS8414, CWCT and AS5113 testing

FREE FIRE SAFETY & FACADES CPD

WELCOME TO OUR CPD
EXPLAINING SAFE CLADDING
SOLUTIONS FOR BUILDINGS
OVER 18M HIGH



To share our experience and help you make the correct choice for the non-combustible cladding on your building, we are running a 'Safe Cladding Solutions' CPD program and will be happy to present this to you. It explains the safe cladding solutions available and how to comply with regulations. Please get in touch on 01278 428 245 and speak to Julie Hawkins.

www.valcan.co.uk

UNITED KINGDOM

P / +44 1278 428245
sales@valcan.co.uk

NORTH AMERICA

P / +1 860 242 2711
helpdesk.na@fairviewarch.com

AUSTRALASIA

P / +61 2 6352 2355
helpdesk@fv.com.au





rented apartments, 23 intermediate apartments and 19 open market apartments. It will also feature a retail element with three retail units fronting onto York Way.

The approval of Building W3 and the Habitat Zone sees the final part of the plot approved, and will deliver a new 1,500 m² building over three storeys. Designed to high environmental standards, it will feature solar panels, a green roof, and be built of sustainable materials including a cross laminated timber (CLT) structure. By using responsibly sourced timber in both the structure and cladding, the design enhances the promotion of well-being that is at the heart of the development, as well as creating a tactile and sustainable building. The facade design seeks to “elegantly interact with its immediate surroundings, creating spaces that encourage social interactions across different areas in the building,” said the architects.

Smith, project director at KCCLP commented: “We are thrilled that the entirety of W Zone now has the go-ahead and we are excited for works to start on the site next year. More than 10 years on from the start of construction works, we

are proud to have finalised the detailed design of one of the final pieces of the King’s Cross puzzle.”

David Morley, founder of David Morley Architects commented, “This is the only site at King’s Cross straddling the boundary between Camden and Islington and we are delighted that our masterplan for bringing together a new mixed-use community, focused around a garden, will soon be realised. As well as connecting east to west, the project will transform the streetscape of York Way and create a new gateway to King’s Cross for people arriving from the north.”

George Wilson, associate at Feilden Clegg Bradley Studios, commented, “King’s Cross’ W Zone presents a fantastic opportunity to establish a new residential community centred around high quality public space, communal amenities and community facilities, creating a unique place to live within central London. We are delighted that W Zone has been fully approved and can now be realised.”

Timo Haedrich RIBA, director at Haptic Architects commented, “We are very proud that this exciting project has been given the go ahead. The building

will provide a meaningful community centre, a place for people to learn, exercise and socialise.”

“The openness and transparency of the ground floor; its concertina-ing wall, movable screens and integrated seats create a seamless flow between the building and the adjacent public realm. The focus is to achieve the highest degree of sustainability. Timber is used in both the structure and facade, a material which has intrinsic tactile and pleasant qualities, making it fitting for a community hub.”

Jan Kattein from Jan Kattein Architects commented, “Proposals for the Habitat Zone were conceived in close collaboration with educational charity Global Generation who operates a number of public gardens across London. The buildings are designed to minimize the threshold between ecology and interior. Urban ecologies are some of the most interesting habitats on our planet and it is fantastic news that our project will be able to bring a little piece of wilderness to people’s doorstep.”

The W Zone is set to complete in 2022, and operators for the Habitat Zone and leisure facilities will be announced “in due course,” said KCCLP.

AWARD FOR GROWTH

Weston Williamson + Partners wins Queen's Award

Architects and urban designers Weston Williamson + Partners (WW+P) have won a Queen's Award for Enterprise (International Trade) in recognition of their "outstanding international growth."

The practice works on a wide range of infrastructure, urban regeneration and placemaking projects, and is "successfully exporting its experience designing some of the UK's most significant city-shaping projects to Australia, North America and the Far East," commented WW+P. International fees have grown by over 600 per cent in the last three years.

Working on Crossrail's new Elizabeth line stations at Paddington and Woolwich has given WW+P the opportunity to compete for major projects in Australia and Canada. As a result, the practice is currently designing and delivering five stations on the Melbourne Metro

extension, a major upgrade to Sydney Metro Sydenham Station, two stations and associated urban realm on the Yonge metro line extension in Toronto, and a new regional transit centre and passenger processing facility at Toronto Pearson International Airport.

These wins and others have enabled the establishment of studios in Melbourne, Sydney and most recently Toronto, and swelled staff numbers to 150.

Founding partner Chris Williamson said: "We are delighted to win the Queen's Award for Enterprise, which recognises our success in designing and delivering complex city-shaping projects around the world."

"London has led the world in gradually coaxing people out of cars and onto safe, reliable, efficient public transport, bringing with it great benefits to the

environment and creating a more civilised city. We're proud to be a part of this transformation and excited by the opportunities to demonstrate our knowledge and approach to city shaping in growing global cities around the world."

Williamson added: "Our export success shows that you don't have to be a huge company to work and sell abroad. If you have a specialism, if you're expert in your field, there are great opportunities."

WW+P are currently working on a diverse range of exciting transport, residential, commercial master planning and urban design projects including Elizabeth line stations at Paddington and Woolwich, Crossrail 2 and HS2 master planning, residential developments across London for local authorities and developers, and commercial developments for Network Rail.



New!
Fire-Rated Pedestals

www.buzonuk.com - sales@buzonuk.com - Tel: + 44 (0)20 8614 0874

WORKSPACE

BDG refurb of Rose Court gets approval

The Rose Court building, 2 Southwark Bridge Road, London, has received planning permission for an extensive refurbishment by BDG architecture + design.

The firm has obtained planning permission on behalf of WPP. The refurbishment will dramatically improve the performance of the existing Rose Court building, and includes “sensitively added mass” along Southwark Bridge Road and at roof level, said BDG.

An addition to the front facade, the street line and the roof extension will be “carefully sculpted” in response to long-range protected views of St Paul’s. A new rooftop terrace bordered by green roof and planting will offer views towards the City, South Bank, Tate Modern and across the River Thames.

Externally, the existing heavy granite cladding will be removed and replaced with a new high-performance brick and glass facade system. Along Southwark Bridge Road at ground and first floors the granite cladding will be replaced with full height ‘shop front’ style glazing to increase visibility and transparency, “helping to animate the street,” said the architects.

Internally, the scheme provides high quality ‘Cat A+’ shared amenity spaces in the form of a cafe, canteen, restaurant event space and business lounge. These are located at lower and upper storeys, with new staircase connections to encourage movement and ease pressure on lifts.

The flexible workspace will incorporate elements of the existing exposed concrete structure in open areas to maximise volume. Services will be concealed and cores fully refurbished.

The existing building sits astride the 16th century remains of the Rose Playhouse. Uncovered in 1989, the Rose Playhouse is one of the best-preserved examples of its type, and a listed historical monument. BDG has been working closely with the Rose Theatre Trust to improve the existing Playhouse setting whilst ensuring the Playhouse can continue to operate during the project works.

BDG’s design took its cues from the historical context and local industrial fabric



using “earthy, natural materials and colour references.” A generous sunken courtyard at roof level “echoes the size and position of the original Playhouse structure,” said the architects, and houses a “stunning” spiral concrete staircase, giving access to the roof.

The building is targeted to achieve a BREEAM ‘Excellent’ rating.

BDG’s design took its cues from the historical context and local industrial fabric using “earthy, natural materials and colour references”



WORKSPACE

Green light for a sustainable HQ

Plans for a major new office development and multi-storey car park at Sadlers Mead, Chippenham have received planning approval from Wiltshire Council. The AHR-designed 31,748 ft² office development will provide a new headquarters for Chippenham-based renewable power firm Good Energy, enabling the company to expand its business alongside growth plans for the town.

Adam Spall, regional director at AHR, said, "It was important for the new headquarters to reflect Good Energy's nature as a clean energy firm, in order to truly feel like their own. To achieve this, our design is rooted in sustainable values."

He explained further: "This includes physical attributes: solar panels, battery storage and on-site electric vehicle charging points, as well as more perceptible elements, such as giving each member of staff a view of both outdoor greenery and the sky. This is accomplished through the building's design, which wraps around two large existing trees whilst maximising natural daylight."

Spall concluded: "With the site located within the conservation area, our design draws from the character of the surroundings, resulting in an office that feels positive and in tune with its natural environment. It will provide an inspiring workplace internally, and externally, a great example for Chippenham's future growth."

The inclusion of battery storage within the design will allow the client to retain energy generated on-site, as opposed to sending it back to the grid. This greatly reduces energy waste and allows the company to be more self-sufficient, utilising their own energy reserves during high demand, or periods when the photovoltaics are not producing energy.

The office development has been approved alongside a new 245-space, fully SWLEP-funded multi-storey car park for Wiltshire Council, with AHR's design also including modern, sustainable features and charging for electric vehicles. Located adjacent to the new office on the edge of Monkton Park, the design of the facade is inspired by woodland.

Vertical, spaced timber sections provide further natural cohesion and reinforce the relationship with the new office, which also uses similar patterns of solids and voids on the brickwork exterior.

NEW FOR 2019

THE CRANE CAST IRON RADIATOR



HURLINGHAM

Classics

Radiator Collection

T: 01400 263310 | E: sales@hurlinghambaths.co.uk | W: www.hurlinghambaths.co.uk

The Crane - Renaissance Gold

adf

SUBSCRIBE TO THE FREE DIGITAL ISSUE



ARCHITECTSDATAFILE.CO.UK/ADF-DIGI

Having to Choose Between Brick Cladding or Real Brick ?



FastClad

FastClad's BBA Certified brick slip system means you can have both

Our patented system can use virtually any brick, enabling a seamless transition from traditional masonry to cladding

A 50 year minimum design life for both walls and soffits



Contact our team to see how we can realise your masonry designs

BBA APPROVED
BRICKWORK
CERTIFICATION
Agreement Certificate
04/4165

REHEARSAL ROOM

www.FastClad.co.uk Tel: 0116 272 5133 Email: info@FastClad.co.uk

Blockleys™ Carlton™ Charnwood™ FLOREN.be™ Freshfield Lane™ Hathern Terra Cotta™ Michelmersh™

Enhancing our built environment
for generations to come

PROUD SPONSORS OF RIBA
SUSTAINABILITY AWARD

BRANDS THAT SHOWCASE SUSTAINABILITY & INSPIRED BRICK ARCHITECTURE

MICHELMERSH
Britain's Brick Specialists
0844 931 0022
www.mbhplc.co.uk www.bimbricks.com

SITE LINES

Flexible, fascinating, and fitting

Jordan Perlman of Newground Architects explains that although a time-honoured material, brick has limitless possibilities for designers, illustrated by a recent mixed use scheme in London

In the six years since our practice was founded, we have used brick in a range of projects, and in all sorts of applications. We continue to explore its possibilities.

Besides its aesthetic qualities, we have found that using it as a base material complements and reflects the way we like to work as designers. Brick is such a simple ordering device; inherently rational but also flexible. Using one base component, you can set up infinite possibilities. From an intrinsically ordered starting point, the possibilities for creating something extraordinary are limitless, but designing with brick requires rigour at every scale. The principles that apply at detail level can be applied at all scales.

At the heart of any brick building lies the bonding – the way these elemental components are put together. Ingenious combinations have been developed and tested over millennia, with solutions driven as much out of practicality as aesthetics.

Colour and texture add another dimension. Whether it is through the deliberate choice of a particular brick colour, tone or texture, or comes about as a result of the inherent randomness derived out of the natural clays, additives or firing process, no two brick solutions ever need to be the same.

Although it is not immediately apparent why or how, the order of a brick facade often resonates with those who experience it. The repetition of components at a range of scales, as we so frequently observe in nature, is something that elicits a human response. And repetition, offset by differences, where there is a need for them, often creates even more inspiring results.

As buildings and technology evolve, brick has managed to keep up and adapt. It can be used completely honestly – as in a simple load-bearing garden wall – or, as is increasingly the case, as a facing material to more complex wall build-ups. The challenge here is to reconcile the expression of the brick relative to its function, and this is something designers are grappling with. This is particularly true given the ever more ambitious energy performance targets we are setting for our buildings and the evolving technologies and processes involved in the construction of modern buildings.



REHEARSAL ROOMS

The Rehearsal Rooms Build to Rent scheme in North Acton, London, provides 173 flats across two multi-storey blocks with large, sheltered balconies, and is clad in brick selected for its hand-made appearance



The repetition of components at a range of scales, as we so frequently observe in nature, is something that elicits a human response

Jordan Perlman

Case study: Rehearsal Rooms

This high-density mixed-use development is one of the first purpose-designed private sector schemes for the Build-to-Rent market in London.

As part of an emerging neighbourhood centred around the North Acton Underground station and public square, the project's ambition was to demonstrate that a contemporary, contextual, urban living environment can be achieved with a very modest budget, through considered design and specification. In total there are 173 one, two and three-bedroom flats across two blocks of 17 and 13 storeys, linked by a lower block of four storeys.

A logical plan of a few well-resolved, repeated parts underpins the efficiency of the scheme at all levels, from maximising the use of space to simplifying structural, servicing and detailing solutions. The rational approach is expressed in the use of a small range of materials in well-considered combinations. Large, sheltered balconies in the open-plan flats extend the usable private space while social interaction is encouraged by strategically located communal spaces and gardens that can be enjoyed as part of residents' everyday movements through the building.

The two blocks are replicas of one another in plan. However, while the smaller east block is a simple square, the taller west block is stepped to pick up on the geometries of the site, take in views of London in the distance, and create opportunity for an elegant articulation of the facade. Triangular balconies tie the stepped volumes of the tower together.

In each block, repeated flat types are clustered logically and economically around a central stair and lift core, with large dual aspect two-bed flats positioned on corners, and single aspect one-bed flats between.

The rational plan and elegant elevations are integral to one another, addressing form and function simultaneously. The geometry and detail of the distinctive balconies is as much about providing privacy and views as it is about rhythm, articulation and visual interest. Views through open-plan layouts emphasise space and light and allow connections from the inside out. The strong relief and the use of a limited palette of durable facade materials evoke solidity and permanence.

The richly coloured Freshfield Lane First Quality brick was selected for its hand-made appearance and warm mix of red, purple and orange hues, as well as for its technical properties of resistance to moisture and frost. Thanks to the lively variety of colours, the brick appears surprisingly different under different daylight conditions adding visual and tactile interest to the



PERMANENCE

Rehearsal Rooms' building envelope features "strong relief and a limited palette of durable facade materials to evoke solidity and permanence"

All images © Jack Hobhouse

architectural form and massing. A limited palette of robust materials and a strong sense of relief is accentuated by the full brick reveal to evoke solidity and permanence.

We purposely kept the brick detail relatively simple as the building itself has a powerful sense of geometry. Brick was an obvious choice with light and shadow highlighting variations in colour and texture throughout the day. Simple bonding and light flush mortar allow light to play along the building's surface. Relief and repetitive geometry, combined with the inherent richness of the brick, meant we didn't need to use fancy coursing or expensive bricks to bring the building to life.

Good design acquires a sense of inevitability. Things that look simple often take more effort to achieve. And good design requires consistency at all scales. The same control, rigour and thought that's required at detail level when working with brick, we like to apply at all scales. This goes from the way a building sits on its site and relates to its neighbours to the internal relationships between rooms and the legibility of movement to the detail, materials and manipulation of light.

Jordan Perlman is co-director at Newground Architects

ASK THE ARCHITECT

Joe Morris heads up his practice, but knows that collaboration is the way to good architecture. He answers *ADF*'s questions



Joe Morris, director of Morris + Company

The hardest part for many of my peers and indeed the wider field of architecture is the moment when you realise that you need to let go

WHY DID YOU BECOME AN ARCHITECT?

My journey to architecture was relatively casual, without a clearly defined goal, but one which has been shaped through experience and opportunity. Initially studying art at foundation level in Leicester, before exploring Landscape Architecture, I eventually came to being at the University of Greenwich between 1989 and 1993 achieving a first class honours degree, studying alongside many talented designers who today work at many of the leading contemporary practices.

Following a conventional journey through university at undergraduate and postgraduate level, and subsequently obtaining professional qualifications in 1999, I can't pin point the personal moment when I felt that I understood specifically why I was doing what I was doing. I find this continuously fascinating, and to some degree, a relief. It continues to enforce my ethos that nothing is fixed, events shape experience, and one's life is continuously evolving, all of which can be taken as positive growth. At this juncture, I'm very aware that my role within my practice and to a broader extent, is to seek methods of agency to influence positive change and action.

WHAT DO YOU LIKE ABOUT IT MOST?

Architecture equips those deeply immersed in its culture and processes to observe, in an evolved way, a distinct set of tools which empower one to see intangible things in a tangible way. Ideas, concepts, questions, and observations play out in a symphony of layered thoughts, diagrams, strategies. A sort of spatial and

interconnected spectrum of visual stimulus, one which comes with a special code which might be indecipherable to others, but is easily interpreted by the skilled architect. I recognise that this skill set is what can add value to a variety of conditions, not just within the field of architecture.

WHAT IS THE HARDEST PART OF YOUR JOB RUNNING A PRACTICE?

Over the course of a fifteen-year journey of facilitating a practice, I have increasingly nurtured the roles and agency of others. Practice is hard flown solo; it is equally hard in a group dynamic. But 'shared' concern, neurosis, ambition and fear is a far more supportive and positively engaged environment in which to work. Thus, in many ways, the hardest part for many of my peers and indeed the wider field of architecture is the moment when you realise that you need to let go, that negotiation and collaboration are the essential components of successful and rich work. This was not hard on a personal level, but it is hard to convince others of the same. Architecture is often emotionally charged and personal, with complex and conflicting attitudes evident in much of the decision-making process. But it is important to create space for success and failure in equal parts along the journey.

HOW WOULD YOU DESCRIBE YOUR MODUS OPERANDI AS AN MD?

This is a question I'm more comfortable being asked of my colleagues. My self perception and that of others is likely to diverge, and this is perhaps interesting. I consider myself to be compassionate, empathetic, nurturing, understanding, supportive and accessible. I place all of my trust in the will and power of people and ideas to trump prejudice and dogma, to realise potent opportunity, to enrich through output and experience etc. Being self-critical, it could be levelled that I am easily distracted, overly idealistic, massively optimistic, often unfocused, too stretched, repeatedly late and leaving things to the last moment. Obviously, the balance of myself and the team make for a perfect recipe of brilliant, thought-provoking work.

WHAT HAS BEEN YOUR PROUDEST ACHIEVEMENT SO FAR?

I cannot accomplish anything without others, and thus my greatest achievement is having been one of a team which has honed an environment in which the values, skills and expertise of others can



Wildernesse Restaurant, Sevenoaks © Jack Hobhouse

rise to the surface and not be suffocated by any one other.

WHAT WAS YOUR BIGGEST CHALLENGE IN CHANGING THE PRACTICE'S IDENTITY?

Duggan Morris Architects had, over the course of more than a decade, delivered a number of highly reputable buildings and projects. While remaining truthful to the idealism that the practice did not purport to a singular signature style, I had become more aware that contemporaries and collaborators considered that our work had become instantly recognisable. While this creates obvious benefits, my concerns remain that it is also a constraining and limiting factor. Commissioners and patrons seeking one's practice out for a repeat of something successfully achieved before is one of my larger concerns.

The rebrand therefore represented an opportunity to reinforce this approach. However, the challenge was to do so without alienating an established network of supporters, clients and so forth. The rebrand was thus carefully choreographed, slowly, openly and with warmth. The '+Company' being the key; architecture is a pursuit best done with others.

WHAT SINGLE CHANGE OR INNOVATION WOULD MAKE YOUR JOB EASIER?

Repeal Article 50. Remain in Europe.

DO YOU STRUGGLE TO SWITCH OFF? HOW DO YOU DO THIS?

This is a question with changing significance as my career has evolved. Presently I see no division between my life, my work, my travels, my leisure. Architecture has created rich opportunities which I may have otherwise missed. I am on the eternal busman's holiday. I am continuously motivated to apply my thought processes to contemporary concerns both through practice and in general.

HAVE YOU COME ACROSS ANY INNOVATIVE MATERIALS OR USE OF MATERIALS RECENTLY?

No. The procurement of buildings, the specification and detail of materials and the methods of building are relatively primitive. At a recent summit about collaboration, architecture and developer Roger Zogolovitch of Solid Space suggested that if we were to transport a Roman centurion 2,000 years from the past to a modern

construction site, he would, on the whole, comprehend in detail everything that was happening; bricks being laid, concrete being poured into the ground, cement, timber, buckets, scaffolding and cranes. But the same Roman would be utterly lost by the complexity of our civilisation. Therefore in Zogolovitch's words, it is clear that architecture and buildings need to explore, take risks, innovate and experiment tenfold more than we are doing at present.

To me the big issue remains that we glorify, objectify and eroticise buildings and their materials rather than being compelled by the stories of their inception, to construction and use. This would mean we engage more fully with the intrinsic 'value' of everything in a more rigorous way. For example, I believe it's no longer acceptable to fetishise the sensual quality and texture of a concrete wall without fully comprehending the origin and source of all the base ingredients, and to be able to recount their story. What has it meant to quarry the base materials? What energy has been expended to cook the cement soup? How far has it had to travel? What natural resources have been lost?

ARE UK PRACTICES GOING TO STRUGGLE TO GET THE BEST STAFF FROM OVERSEAS IN FUTURE?

In short, yes. Brexit will have a long-term damaging legacy for our towns and cities. The obvious one being the imposition of borders and territories which obstruct the movement of ideas, skills, culture. Close to 60 per cent of Morris + Company's staff are from other European or international countries, but as a nation and profession we have lost untold rich reserves over the last two years with many Europeans leaving the country as it becomes increasingly mired in internal rhetoric. But this issue sits lower in the psyche; the deed has been done. The UK public has cast its vote, and regardless of how Article 50 unravels, leaving with or without a deal, electing via a second referendum or indeed 'remaining', the bond with Europe is broken and this will leave a deep emotional scar, of lost trust, of conceit, of nationalism and betrayal.

WHAT WILL THE NEXT 'BIG THING' BE IN THE INDUSTRY?

I turned vegan almost two years ago. It was a flip-of-a-coin sort of decision, motivated not by any political conditioning, but more as a response to a strange itch or irritation buried deep, that contemporary society conditions us all to accept the hidden



horrors of human existence as normal. It was a peel-the-curtain-back, unplugging-from-the-matrix epiphany – an 'Oh my god, are you serious?' moment. Is that what the egg industry is hiding? Is that what happens to put milk on the table? Are rainforests really being destroyed to feed cattle to make burgers? The insanity – and absurdity – of it all is maddeningly shocking. But it needs you to want to look at it.

You and I need to make a change if we accept that the natural world as we know it is worth fighting for. To this end, I'm less interested in the 'next big thing', but more focussed on how to turn this issue around? How do we start to tackle these hugely complex issues? And how does architecture and construction slot into this cataclysmic conundrum? One question for our profession, for instance, is whether we continue to build in brick with the 100-year life span in mind, or do we take radical steps to tackle the environmental crisis now, building in a way that absorbs carbon, which would result in a new future-gazing architecture?

TECHNOLOGY OR DRAWING?

It's not an either or. Technology, and drawing, and making, and watching, and talking, and walking, and so on.

HOW CAN YOU SEE AN ARCHITECT'S ROLE CHANGING IN THE NEAR FUTURE?

The cynical response: less and less important, weakened, distanced and stripped of agency. The optimistic one: the architect at the table with scientists, engineers, entrepreneurs, innovators and creatives engineering an empathetic future version for our species.

NEW ARRIVALS

Rounding up the latest movers and in-house appointments across the industry



NEW MANAGING DIRECTOR AND PARTNERS SCHMIDT HAMMER LASSEN ARCHITECTS

International architectural firm Schmidt Hammer Lassen Architects has announced Sanne Wall-Gremstrup as the firm's new managing director. Known for "balancing high calibre creative output with financial performance," said the firm, she brings "strong change management, professional services, and marketing skills to the position." Sanne has more than 15 years of experience as a chief executive officer, having most recently served as the CEO of The Danish Architectural Press, a commercial foundation with the purpose of promoting Danish architecture in Denmark and abroad. Prior to that, she spent seven years as the country manager and CEO for Denmark and Finland at global marketing services company McCann WorldGroup. She also has extensive experience serving as a board member and executive board.

Schmidt Hammer Lassen has promoted three other architects to partner and associate partner roles. Elif Tinaztepe has been named partner after 14 years at the practice. She leads the firm's specialist work in the library sector, a typology for which it is well known. Jake Spruit has been named associate partner. Jake has experience in project management in Europe, the Middle East, Canada, and the United States, and is a licensed architect in the states of New York and Pennsylvania. And Philip Brinch Sørensen, who serves as director of the Aarhus office, also joins the associate partner group. Throughout his career, Philip has worked on projects ranging from residential to large and complex public buildings.



TRACEY WILES WOODS BAGOT

Woods Bagot Australia has announced the appointment of Tracey Wiles as regional interior design leader. Wiles played a key international role as an associate partner at Foster + Partners, where she oversaw luxury hotel projects including ME London, Zurich's Dolder Grand and Madrid's Hotel Puerta América as well as Norman Foster's private houses, among them La Voile at Cap Ferrat and an apartment in the Chesa Futura development in St Moritz. Global design leader Domenic Alvaro said: "Tracey's portfolio of work is world class and her design experience unparalleled. She's a tremendous asset and we will see that infuse through the Sydney studio."



MARIA SHÉHÉRAZADE GIUDICI ARCHITECTURAL ASSOCIATION

The Architectural Association is pleased to announce the appointment of Maria Shéhérazade Giudici as the new Editor of AA Files, the in-house journal of the Architectural Association. The appointment of Giudici continues a long standing tradition of publications at the AA that is an integral part of its founding charter. Eva Franch, AA director said, "Maria's work as a designer, critic, and editor in the international architectural arena and here at the AA have afforded her a unique perspective in contemporary discourse that I believe will become a new referent for the architectural community looking for relevant questions and new answers."



HELEN BENTLEY HLW

Global architecture, design and planning firm HLW has announced the addition of Helen Bentley to its London team. She is a "passionate leader in interior design and workplace planning," said the firm, and joins the firm's global strategy team as design strategist with a goal to "assist with key components of HLW's larger design process to enhance the end-user experience." Bentley will work alongside HLW's design team to "translate business drivers into interior solutions for a wide range of clients." She will serve as a "liaison between client leadership and end-users, aiding with message development, guiding expectations, and overseeing change management."

INTERNATIONAL FOCUS

Showcasing the latest projects from around the world – visit www.architectsdatafile.co.uk for full information



MSHEIREB MUSEUMS, QATAR JOHN MCASLAN + PARTNERS

John McAslan + Partners have transformed a group of historic houses within Msheireb Properties' flagship redevelopment of downtown Doha. The four historic houses have been remodelled and extended to accommodate state-of-the-art museum environments showcasing key elements of Qatari history and culture. "The practice's architectural responses were to specific to each house and yet share a coherent DNA that presents the four museums as a cohesive, overarching visitor experience," said the architects. Innovative interventions have reconfigured the original domestic structures so that they now function as modern museums in terms of circulation and environmental conditioning. Previous external courtyards have been enclosed with structures inspired by traditional Islamic designs, "creating dynamic new exhibition spaces characterised by a subtle rhythm of shade and dappled sunlight."



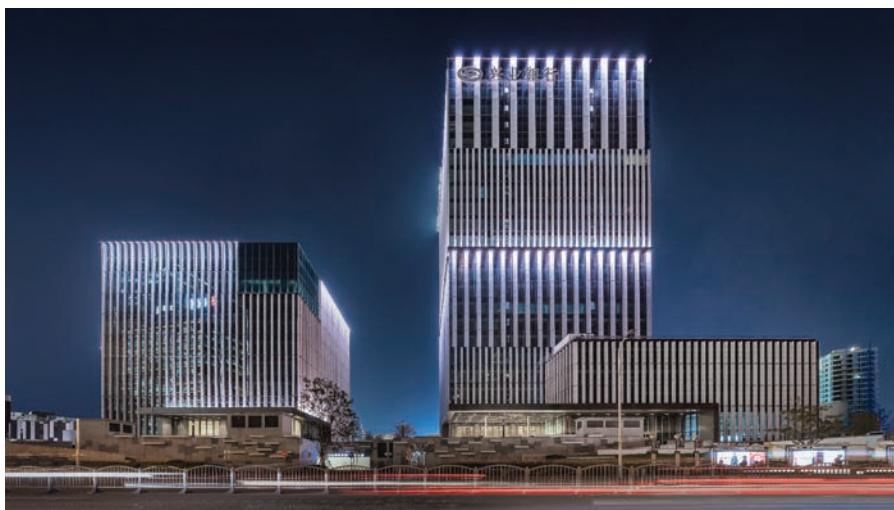
LAHOVER WINERY, CZECH REPUBLIC CHYBIK + KRISTOF ARCHITECTS

CHYBIK + KRISTOF Architects & Urban Designers have unveiled the new design for the expansion of the Lahofer Winery in the Czech Republic. Nestled in the Moravian countryside, the Lahofer Winery is a fusion of tradition, nature and modern wine making practices. The building consists of three interconnected structures varying in height, including a winemaking facility, the company's administrative base, and a visitor centre featuring a tasting room. An undulating roof serves as the public amphitheatre and will host concerts and cultural events for visitors and locals. "The building will echo the natural slopes of the surrounding terrain most noticeably in the amphitheatre's incline," said the architects.



HOUSE OF WISDOM, SHARJAH, UAE FOSTER + PARTNERS

Foster + Partners have revealed the designs for Sharjah's new 'House of Wisdom' – a library and cultural centre that is intended to be the catalyst for a new cultural quarter in the city. Located 10 km from the city centre, the two-storey building "embodies a sense of clarity and lightness" said the architects, with a large floating roof cantilevering on all sides of a transparent rectilinear volume. The 15 metre-wide overhang shades the facades throughout the day, while aluminium screens with differing densities filter the low sun in the evenings. The movable screens are deployed during late afternoon, when the sun is at its lowest, preserving the visual connections with the landscaped gardens.



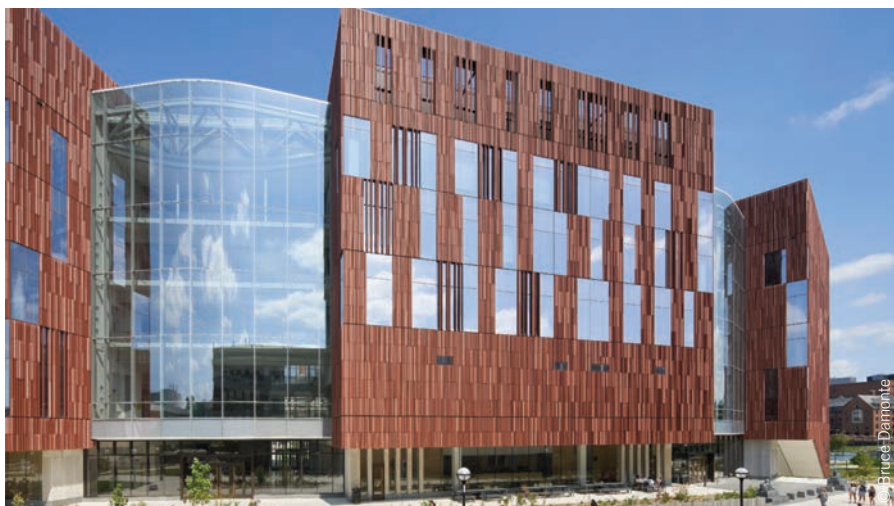
SHANGHAI SHIPYARD, CHINA FARRELLS

Commissioned as masterplanners and architects for the first phase, Farrells are delivering the vision for Shanghai's Shipyard. The Lujiazui Central Financial District of Pudong is the first 'national financial zone' in China, which builds on Shanghai's economic and cultural foundations. The architects' vision is to create a "lively, vibrant, and iconic destination as an extension or 'missing piece' of the Pudong district, complementing the Central Business District." The project comprises two office towers within the wider masterplan. The two towers, along with the integration of several office and residential buildings, act as a "gateway" into the retail element of the site with a podium and several shopping "villas" sitting above ground. The retail areas are linked underground throughout the site.



ISENBERG BUSINESS HUB, USA BIG

Designed by architectural studios BIG-Bjarke Ingels Group and Goody Clancy, the copper clad Business Innovation Hub at the heart of the University of Massachusetts Amherst adds 70,000 ft² of "hyper-collaborative" study and social space to one of the top-30 public business schools in the United States. The Business Innovation Hub's exterior is clad in copper, so long-term exposure to the elements will naturally weather the metal from a dark ochre to an enduring patina. With longevity and sustainability in mind, the building also targets LEED Silver certification. "Daylight peers between the accordion-like pillars to illuminate the multi-storey atrium," said the architects.



UNIVERSITY OF MICHIGAN'S BIOLOGICAL SCIENCES BUILDING, USA ENNEAD ARCHITECTS & SMITHGROUP

Design firms Ennead Architects (Design Architect) and SmithGroup (Architect of Record) have celebrated the grand opening of the University of Michigan's new Biological Sciences Building (BSB) in Ann Arbor. Characterised by a transparent, "open-lab" concept that combines cutting-edge scientific research and the new home of the U-M Museum of Natural History, the BSB establishes a new paradigm in science education for a university that is widely recognised as one of the US' leading research institutions. The form of the BSB creates public views deep into the facility. The five-storey structure is comprised of three terracotta and glass-clad towers connected by two large and transparent atria that bring light deep into the laboratories and public spaces.



METSÄ PAVILION, JAPAN HELIN & CO. ARCHITECTS

The Metsä Pavilion in Tokyo, Japan designed by Helin & Co Architects will be used during the Summer 2020 Olympics. Pekka Helin from Helin & Co. Architects described the design process as "an interesting and challenging project." The Metsä Pavilion will be made from industrially manufactured Kerto LVL elements and will be easy to dismantle for relocation elsewhere. "The pavilion needed to be based on industrial products, instead of being a complicated, fancy structure," Helin explained. Japan's long traditions in timber construction, served as an inspiration during the design process. The Metsä Pavilion is an example of unique, beautiful architecture based on industrial wooden elements.

CPD FOCUS

The latest CPD courses, seminars and documents for architects

TWO NEW RIBA ASSESSED CPD SEMINARS FROM COMAR



In two RIBA assessed seminars, Comar outlines: *'Stand & Deliver: a Study of Curtain Walling'* – the design of curtain walling, it's properties and how it is used by specifiers. This seminar aims to offer an understanding of the points of Hll in the NBS specification system, and how best to make use of it. *'Designing Functions & Reliability into Entrances'* – the issues that influence the function of main entrance design and technology. This seminar aims to offer an understanding of how user expectation influences door design and links this with hardware selection, entrance configuration and floor finishes. 020 685 9685 www.comar-alu.co.uk

NEW CPD: 10 MINUTES OF RESIN BOUND



SureSet UK Ltd offer two types of accredited CPD's, in person at a location of your choice or from the comfort of your own desk via a fully detailed, 10 minute video. The CPD, accredited by CPDUK will explain the differences between resin bound and resin bonded products and their differing characteristics. Permeable build ups including SuDS (sustainable urban drainage system) is mentioned as well as the different SureSet aggregates and SureSet's own naturally sourced two part UV stable polyurethane resin and the applications it's suitable for. 01985 841180 www.sureset.co.uk

A NEW CPD FROM HORNE: LET'S TALK ABOUT HAND WASHING



Considering the march of antibiotic resistance, rightly described as a global threat that equals climate change in terms of its seriousness, the need to break the chain of infection through effective hand decontamination becomes ever more important. In spite of this, hand hygiene compliance – its frequency and technique – in the healthcare environment remains woefully inadequate. **Horne Engineering's** new CPD seminar raises the question what are the barriers or disincentives, to achieving effective hand hygiene compliance? And how can engineering help? goo.gl/gvzeDZ www.horne.co.uk

WETROOM DESIGN & SPECIFICATION CPD



The Wetroom Design & Specification CPD from CCL Wetrooms, guides Architects through the process of designing and specifying a watertight wetroom. Run free of charge at a time to suit your practice, the 45 minute technical presentation comprehensively covers all aspects of wetroom design and specification. This includes wetroom design & layout, waterproofing, drainage, floor build up and installation. An informative section on how wetrooms can help meet the Lifetime Homes Standard is also covered. 0844 327 6002 www.ccl-wetrooms.co.uk

WOOD FLOOR FINISHES



The correct specification of wood floor finish will depend upon how your client wants the surface to look and perform. **Bona** has over 100 years of experience in the development of wood floor treatments and manufactures a comprehensive range of oil and lacquer finishes, colours and ancillary products for the finishing, protection and ongoing maintenance of wood floors in commercial, public and domestic environments. Bona offers a seminar on how to specify the correct finish for the surface and a second seminar on wood floor installation using the latest silane based adhesives. 01908 525 161 www.bona.com

FREE FIRE AND SMOKE CURTAIN CPD SEMINARS FROM COOPERS FIRE



Coopers Fire offers a range of free Continuing Professional Development (CPD) seminars. Approved by the Royal Institute of British Architects (RIBA), the seminars aim to educate the fire protection industry and wider building industry about application of fire and smoke curtains in buildings. Aimed at construction industry professionals such as Architects, Building Control Officers, Building Engineers, Specifiers and the Fire and Rescue Service, the seminars provide an excellent overview of the benefits of specifying such products. 02392 454 405 www.coopersfire.com

SPECIFYING POCKET DOORS



Eclisse's RIBA accredited CPD seminar *'Pocket Doors: The Future of Doors'* outlines the different construction and type of pocket doors that are on the market. It shows the different variations and styles of pocket door including those that require finishing with architrave and styles that are flush without architrave. Single, double, telescopic and curved pocket door systems with timber door leaves are depicted. A variety of frameless glass door finishes are shown. FD30 options are discussed along with testing and certification. 01476 542 809 www.eclisse.co.uk

SPECIFYING HARDWOOD TIMBER EXTERNAL DOORSETS



A RIBA CPD seminar entitled *Specifying Hardwood Timber External Doorsets*, from **Urban Front**, has recently been updated and is available to architects and construction professionals. Learning aims include information on fitting into Architectural Glass, challenges with maintenance, accessibility, door security, design features, and various regulations that must be met. The CPD is very visual and offers various opportunities to handle samples and lasts approximately 45 minutes plus questions. 01494778787 www.urbanfront.com

ECO BUSINESS CENTRE
BICESTER

Vertical integration

Architype's Eco Business Centre brings flexible shared workspace to eco-town North West Bicester, in what ended up being the UK's first non-residential Passivhaus Plus accredited building. Sébastien Reed reports



There are 6,000 new 'true' zero-carbon homes planned for North West (NW) Bicester – an eco-town scheme given the green light under the Government's 'Eco Town Planning Policy Statement 1' in 2015. Not only this, the pioneering masterplan for the town has its sights set ambitiously on 40 per cent green space – half of which will be public. The plan includes five new schools and hopes to generate 4,500 new jobs – some of which are to be housed at the new Eco Business

Centre, courtesy of the Perch coworking startup which operates the centre.

Architype were selected to work on broad feasibility studies for the new workspace following a competitive tender hosted by client Cherwell District Council. The council, using Architype's Enterprise Centre at the University of East Anglia as a precedent, were conscious of the practice's past work designing and delivering office space which meets stringent sustainability criteria.



© Architype

To balance the difference between solar gain and daylight, there are external timber fins wrapped around the building detailed with Siberian larch

Entrants to the tender were asked to keep in mind the essence of the overarching town development, as being above all ecological, explains Matthew Hayes, architect at Architype: “When the project came into the office, there was already outline planning permission and a design there.” Hayes continues: “Our first task was to review it, assess it, and make the brief work within the context of the planning – as well as zero-carbon use and BREEAM Excellent, plus ergonomics.”

After examining Cherwell’s original design and testing outline planning, the architects realised that the proposal was insufficient for the council’s quota capacity of 125 people. In addition, while Passivhaus credentials weren’t specified in the brief, the architects decided to take the opportunity to up the energy performance, but Hayes notes that “from past experience, achieving the standard on a site like this would require the building fabric to be improved” – Cherwell’s first design being a more traditional brick building. Architype responded with their

own scheme that identified elements from the original design that could be carried over to form an upgraded vision for Bicester’s new business centre.

Plan & provision

The new eco town covers a large expansion of the city to the north west over existing greenfield, part of which envelops the exemplar masterplan, developed by ADT. Within this is a central hub, which cradles dedicated plots for amenities such as a primary school and ‘eco pub,’ as well as the new commercial scheme occupying a third of an acre.

A car park serving the scheme is situated at the northern side of the business centre plot, displacing the building to the south with the intention of eliminating shade over the northern boundary where neighbouring residential properties are located, while shading parked cars during the warmer hours of the day.

In plan, the business centre assumes a rectangular shape, while in elevation, the

architects designed a simple cuboidal form, three storeys high, devoid of any complex extrusions or elevations. “It does that to reduce the energy demand,” says Hayes. “It wraps around a central atrium, and there’s a really good amount of daylight provided through glazing. But to balance the difference between solar gain and daylight, there are external timber fins, detailed with Siberian larch.” The fins, which extrude slightly higher than roof level, instil a strong vertical aesthetic to the scheme.

The fins step in and out in relation to the main body of the building, varying the intensity of shading at different points according to the scheme’s internal profile. The timber detailing is contrasted against crisp aluminium cladding and considerable use of glazing, which simultaneously differentiate the scheme from surrounding residential and civic buildings and “reflect the use of the building – a collaborative high-tech startup environment.”

Structurally, the building has a hybrid concrete frame with timber infill. In terms of scale, Architype’s updated design reduces the overall elevation of the business centre from the original design, configuring it in relation to the massing of adjacent buildings.

The main entrance to the building is located at the western elevation, opening immediately into the triple-height atrium and top-lit central ‘hubspace,’ and a reprographic area to the right. The north and south elevations are flanked by the centre’s office and consultation spaces of varying sizes – catering for from four to twenty-one users. At the back of the hubspace, to the far east side of the building, are WCs, as well as a lift and staircase which provide access to the first and second floors. On these upper floors, circulation spaces fringe the central atrium’s southern side, also leading to balcony areas above the main entrance at the building’s western elevation.

The plant, IT server and main kitchen areas are located on the ground floor in the north east corner in order to create an easily accessible plant area and M&E services at a point in the building that offers residential amenity, while smaller kitchenettes and tea areas serve the first and second floors. “It’s all part of the ‘Tetris’ game of making the building work,” says Hayes.

Above all, a workspace

“We knew it was going to be a community workplace, that was always going to stay the same,” says Hayes. The team envisioned an environment that would constantly



be evolving and revolving – a business incubator. In line with this, Hayes continues: “We wanted to create a central area in the building that all the offices are accessed by to encourage collaboration, and increase happenstance interaction and the cross-fertilisation of ideas.”

At the very heart of the building, the central hubspace is top-lit and spacious – “somewhere to breakout to”, says Hayes. Considerable attention was paid to the common circulation areas of the building; by creating one primary circulation route



© Kier Construction

The carefully selected materials reduce the building's embodied carbon but also improve internal air quality

with wide walkways and a single staircase, the architects aimed to increase the probability of serendipitous, productive interaction between users. In addition, both the interior and exterior balconies get bigger with every floor upwards, providing further breakout spaces with far-reaching views over Bicester and the surrounding Oxfordshire countryside.

Conscious efforts were made by the design team to create an uplifting environment to inspire the business centre's users. For example, looking up inside the central atrium space, the architects have specified a plywood waffle ceiling: "What this means is that on a really bright day you can see really strong lines and shadows cast onto it. It's a really animated place." Vision panels on the partitions and doors separating different spaces aim to evoke an even more spacious feeling in the scheme's users: "You can see from inside to outside and into all the offices," remarks Hayes.

"Two things we aimed at were; to get as much natural light as possible, and to maximise internal air quality", says Hayes. Architype's environmental strategy aims to

support a healthy working environment, helping to increase workforce wellness and productivity through clean, optimised air supply and eliminating excessive use of artificial heat and light.

The extensive use of glazing on the building envelope partnered with the central rooflight illuminate the interior spaces to provide a naturally bright working environment. Issues related to glare in the upper levels are remedied by outer envelope's larch fins, in addition to internal blinds. The distance they're set off from the building varies to provide the right balance and prevent overheating – given the ribbon window of fixed glazing wrapping around the building's body behind the shading system. "It was an iterative process with the engineers," says the architect. In order to meet air quality standards specified in the brief, a mixed mode system gives users control over their immediate environments.

Passive in nature

While Passivhaus Plus was not targeted in the original client brief – zero-carbon in use being the initial sustainability goal – the



© Kier Construction

design team noticed that with some refining of the proposal, more ambitious sustainability credentials could be within reach. With this knowledge, ecological measures were meticulously woven into the final design, eventually making Bicester Eco Business Centre the first non-residential scheme in the UK to secure Passivhaus Plus standard. BREEAM Excellent was also achieved for the scheme.

For example, to minimise energy consumption in use, the balconies create the additional roof area required to maximise solar photovoltaic panel coverage, as well as providing a canopy over the entrance and forming one of the two fire escape routes from the building. District heating supplied by nearby council amenities supplies all the hot water and heating requirements, triple glazing throughout locks in warmth and prevents outside noise from penetrating the office, and where steel components connect to the concrete frame, the architects have inserted thermal breaks.

“They wanted as much natural material as possible,” explains Hayes. In response,

the architects specified softwood battened acoustic ceilings, rubber flooring, and entrance matting made from recycled truck tyres. The carefully selected materials reduce the building’s embodied carbon but also improve internal air quality. Where possible natural finishes were used, such as an Osmo finish on the waffle-textured ceiling.

Compared to the original plans that Architype received at the outset, the overall mass of the business centre has been slightly reduced, leaving more surface area on the plot for landscaping with low-carbon materials. Rainwater harvesting to provide the scheme’s greywater has also been integrated in the car park.

With all this considered, the Bicester Eco Business Centre doesn’t just assist the overall eco-town programme in lowering its environmental impact in practice and increasing the number of jobs in the region. Its very purpose of hosting new local SMEs should translate into a heightened perception for environmental concerns, among the individuals and businesses that occupy it. ■

BRIGHT IDEAS

Triple glazing plus a central rooflight combine to bring working environment with high thermal performance

New to the Architextural portfolio:

SQUID[®]



ARCHITEXTURAL™

Surface. Designed.

Revolutionary self-adhesive
window textile.


“
YOU'VE GOT TO
FEEL IT, TO BELIEVE IT.
”

- Transparent privacy solution
- Minimalism and simplicity
- Perfectly printable
- Moisture- and sun-resistance
- Multifunctional and customisable



NOW AVAILABLE FROM:
www.architextural.co.uk

Contact us to find out more and
to get your hands on a sample.
info@architextural.co.uk

 @Architextural
 @WilliamSmith1832

PART OF WILLIAM SMITH GROUP 1832



WHITWORTH LOCKE HOTEL
MANCHESTER

The big reveal

James Parker speaks to the architect of a complex restoration project in Manchester to create a boutique hotel which enhances industrial Victorian architecture, and celebrates the city's trading history

A new adaptive reuse project in Manchester has rescued three important Victorian industrial buildings and stripped them back to reveal their original character, including thoughtful interior design which refers back to Manchester's global trade of the past.

The project, realised in the heart of the city for boutique 'aparthotel' chain Locke, has created a high-end 160-room hotel whose guests now benefit from the proportions of the restored spaces, combined with comfortable interiors and guest rooms complete with kitchens. The site is sandwiched between key thoroughfare Whitworth Street and the Rochdale Canal, surrounded by bars and hotels, and adjacent to Manchester's 'Gay Village' located in Canal Street.

Whitworth Locke comprises three connected Victorian era buildings, which are somewhat Mancunian with their robust red brick facades. The slight exception is the listed Central House on Princess Street which was built as a showroom for textiles in the Scottish Baronial style, complete with corner tourelles. Behind it, and running along the canal is Johnson House, a former textile mill, and on Whitworth Street sits Dominion House, which was a warehouse for storing the goods produced in the mill.

The architects of the project, New York firm Grzywinski + Pons, commented that the commission to restore what were neglected buildings, and remedy previous poor interventions, had "a special resonance" for them. The practice explained: "The beautiful former textile warehouses and showroom were highly reminiscent of some of the earliest work we did designing interventions to 19th





century masonry buildings in New York City.” It added: “The proportions, materials, textures and quality of light we inherited felt a bit like home, and demanded to be exalted.”

Part of that demand came from the fact that the buildings had endured a fairly disastrous renovation in the 1980s, with “no respect for the underlying structure,” says Matthew Grzywinski, founding partner at the studio. Converting the former mill into a boarding house and Indian restaurant, the intervention was a cost-driven ‘cover up’ job that was typical of the time. Despite the fact that the three buildings’ qualities had become hidden, Grzywinski says the C-shaped block they comprise was still regarded by locals as a “marker that you’re in the centre of town.”

The architect says it was characterised by acoustic ceilings and drylined walls “just kind of floating in space”. He adds: “It was pretty banal and all financially governed by the least you could do to make a place inhabitable.” The new renovation by contrast was driven by a determination to “preserve and celebrate” the richness of the historic 19th century building fabric while “obliterating” the previous alterations, he says.

The brief from the client included “a couple of dictums about things they wanted to promote,” says Matthew. He explains that these were “an inclusive nature, and a kind of hybridisation of aspirational – a special quality you’d like to have in a boutique hospitality project – and a homeliness,” exemplified in the fact the hotel apartments have their own kitchen facilities. “The idea was you could stay there a day or a couple of months.”

In terms of dealings with the client, Matthew confirms that there was a “nice kind of back and forth,” applying Locke Hotels’ required number of rooms to the idiosyncrasies of old buildings. He says there are benefits for this kind of boutique project: “You’re constrained, but it gives you a reason not to create a really regular grid. That kind of whimsy and discovery – oh I have a turret in my room!”

He says the project was notable for the good relations between the project team and planners. “Quite often, there’s an acrimonious relationship, but in this case, I wanted to do everything they wanted to do.” However, there was a fixed budget, and there were further constraints in terms of discovering issues like a lack of fire stopping in the roof, or plumbing problems that were critical to address.



Bringing clarity

There are guest rooms in all of the three buildings, and the common spaces and circulation spaces have been designed to connect the ground floors of all three as effectively one building. The architects did not retain many of the internal walls added during the previous renovation, but retained the floors 'as is.'

While a lot of the internal layout was "pretty new," says Grzywinski, some of the pre-existing layout was retained, notably in the attic/top floor space. However below this, many partitions and ceilings needed removing to provide a clearer layout, and at the same time benefit from the considerable qualities of the underlying structure. "They had not really considered the building last time, they had things like walls in the middle of fenestration, strange things like that." While most of the original windows were retained (a requirement on the listed Central House), some secondary glazing had to be added to provide the necessary thermal and acoustic performance.

A large part of the project was to make the layout of the ground floor as legible as possible, to help guests find their way around, and introduce a freer-flowing

circulation. In addition, accessibility requirements were placed to the fore, for example in addressing the various level changes across the ground floor of the three buildings, including the basement level of the Johnson Building, which accommodates guest rooms overlooking the canal.

"We made changes so that the small steps or ramps are not so conspicuous any more, and are part of the smoother flow," explains Grzywinski. In the case of the rooms along the canal, some of the floor was removed to create new egress to help clarify the layout, and aid navigation. The layout of guest rooms in upper levels in each of the three buildings was also done with a focus on legibility, as well as aspects like fire separation. "By virtue of the fact that it's three buildings with so much character, it was a bit of a challenge making the wayfinding, signage and navigating work."

Atrium & thresholds

Matthew Grzywinski says striking the balance between "interfering" with old structures and ensuring they were rescued for future public as well as hotel use was serving a self-evident need: "You always feel

FACING PAGE

Central House, built in the Scottish Baronial style, flanks the newly opened-up atrium space of Galbraith Street, with Dominion House on the other side

ABOVE

The bar area within the new atrium

You always feel like you're walking on eggshells doing something to an old property, but I felt we were doing a real service to this building by ripping everything out of there



like you're walking on eggshells doing something to an old property, but I felt we were doing a real service to this building by ripping everything out of there."

At the centre of the three buildings was what was formerly a small closed-off 'street' (Galbraith Street, leading onto Princess Street). However it had been covered with a glazed steel-framed barrel vault in the previous renovation, which also closed off the access with glass doors. Grzywinski says: "It did feel a bit defensive, like maybe it was turning its back to what was considered a hostile neighbourhood at the time. We wanted to open this building to neighbourhood that was coming back to life in a lot of ways."

Addressing the atrium was one of the first interventions the practice identified, and set about removing previous alterations and simplifying the barrel vault roof structure. Matthew explains: "The main roof structure stayed, but everything below the barrel vault came down." A new, simple rectangular steel structure increased transparency throughout the space, opening up views from the internal facades of Central House and Dominion House into the atrium.

Matthew admits the previous renovation's addition of salvaged cast iron columns supporting the vault were complementary – and as such were retained, partly also out of structural practicality.

The atrium was one important 'threshold' the architects identified in the project – while blending the inside with the outside by being re-opened to Princess Street, it also included the new reception, a bar, and a granite paved floor, that "brought back some of the feeling of the street." Removing the tiles and drylining revealed the internal facades of Johnson and Central House, and these were restored with 'period' doors, although this raised accessibility challenges. "Doors were tricky because of budget combined with DDA and Part M, we couldn't really do period glazed steel-framed doors, but we tried to do the best we could."

The project uncovered "further thresholds between what are now public spaces," says Matthew – "Beaver Street, Princess Street, the canal, all these connections, some of which were uncovered because of safety concerns, but some which we wanted to create so you could enter the building from all three streets."

The ground floor of Johnson House, which was "literally full of rubbish" previously, with "lots of weird level changes

and a redundant service entrance,” was all ripped out. Now leading out onto Beaver Street, it includes a lounge, co-working space and coffee shop. Here, salvaged glazed brick was added to something retained from the 80s renovation – columns of masonry with steel cores, creating “a kind of atrium within an atrium.” A skylight was also revealed by removing ceiling tiles. “It was a deep floor plate because all three buildings were interconnected – so it was a nice way to bring light down, which there isn’t a huge amount of in Manchester,” says Grzywinski.

The safety issues that needed addressing were chiefly around fire egress improvements. The previous 80s intervention had introduced fire stairs across the internal facades in Galbraith Street plus others into Beaver Street, and these had to be brought back inside the building to avoid disrupting the atrium’s newly clarified aesthetics. How the architects resolved this then fed into some of their decision-making on the internal circulation.

Trading heritage

“What we often see in boutique properties is that they’re lovely, but they’re not really liveable, not really comfortable,” says Matthew Grzywinski. He explains his motivation in this case to “walk the line” between something that was “aspirational, and certainly didn’t look like where people spend their daily lives,” and something which combined all the conveniences they’d expect, with a high level of comfort.

Services have been exposed throughout the hotel, matching the generally ‘stripped back’ aesthetic. Matthew says the idea was well received: “I proposed exposing them and the planners jumped on it.” This extended to the new adaptive kitchen services running from the Dominion building, which couldn’t come through the interior, as the structure would have been compromised. Instead they were run across the internal ‘Galbraith’ elevation, painted, and taken into the attic space.

This approach was continued in the guest rooms, where services have been exposed, which Matthew admits was somewhat controversial. “There was tension between the contractor and the planners, who didn’t want to cover anything up. However they also didn’t care whether there was a functioning restaurant or cooling, so I had to bridge that gap and try and please everybody.”

As a result the distinctive decor, which in guest rooms is in subtle yet warm ‘blush’

tones that covers not only brick walls and plaster ceilings but also ducting, cast iron columns and virtually everything attached to the walls, caused “a lot of raised eyebrows.” Matthew adds: “It wasn’t trying to fight the fact Manchester is a grey and red city, but that feeling that in a muscular building in a gritty city could be really special.” The soft feel is enhanced by colour-coordinated headboards made like the decks of canal boats.

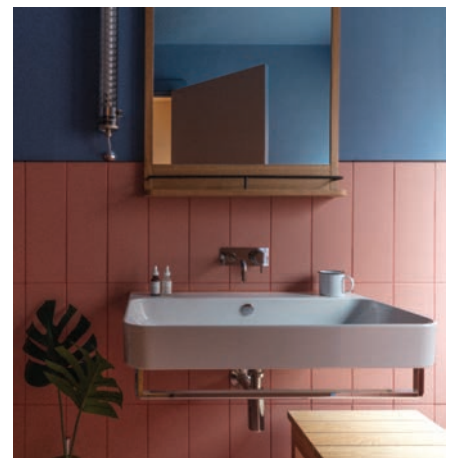
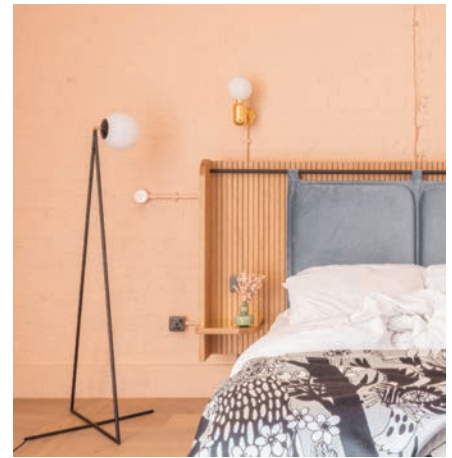
While the internal colour choices, extending to the pistachio green of furniture and walls in the atrium, might initially seem to step away from the building’s heritage, in fact they drew inspiration from Manchester’s historic global trade links. “Manchester exists because of international commerce, and the textile business in particular was pretty far flung,” Matthew says.

He’s a fan of the colour of skies in rainy cities, and has worked on several projects in such cities, from Seattle to Edinburgh. The architect applied this to Whitworth Locke in the form of palette of soft greys for metal elements in the atrium, and blues in the bathrooms, which work effectively with the warmer ‘equatorial’ colours elsewhere. The grey is also offset by a strong yellow in the atrium’s added steelwork (taken from the locally well-known symbol of Manchester, the Worker Bee), and botanical-themed textile murals in the atrium/bar, enhanced by hanging baskets, and behind the reception.

Feedback

“You hear feedback from people who are staying there or working there, that there’s a level of ‘personality,’ says Grzywinski. The architect is delighted that this project, which has rescued important local heritage buildings for a new use, and opened up a formerly closed off street to the city, has received great reviews so far. Ironically, TripAdvisor is one problem to solve, given that its reviews are unfortunately conflating the new Whitworth Locke with its former dysfunctional identity.

Matthew sees Manchester as having some similarities with New York in terms of its inherited properties from a bygone era, ripe for enhancement, but also a city with “so much soul, culture and personality, and a huge amount of creativity.” This new comfortable, yet colourfully elegant, hotel embodies those traits, and will likely be a big contributor to that culture. A product of sensitive architecture, it has also given venerable old buildings vibrant new life. ■



DISTINCTIVE DECOR

The guest rooms are painted in warm ‘blush’ tones and bathrooms combine blues with ‘equatorial’ colours
Images © Grzywinski + Pons

Noise mitigation against HS2 enabling works at 30 Euston Square

30 Euston Square is a stunning Grade II* Listed building dating back to 1906. It has a grand Victorian facade with an original Greek revival style entrance hall and internally is full of ornate architectural details. Maintaining the legacy of the health related professionals who have occupied the building since it was constructed; in 2010 it was acquired by the Royal College of General Practitioners (RCGP).

Selectaglaze has a long standing relationship with RCGP and has carried out a number of installations to different areas of the building over the years. The relationship began in 2010, when the new owners decided it was necessary to undertake works to reduce noise ingress on the facade overlooking the Euston Road. To make it more attractive for the users of the space, it was decided to treat them with secondary glazing.

On a few of the lower floors there are study rooms where GP members can stay when they are on College business. Secondary



glazing has been installed to prevent noise from passing traffic. These rooms required optimum noise reduction to enable complete concentration for students who were near to gaining their medical qualifications. A mixture of units was installed, including vertical and horizontal sliding units and side hung casements.

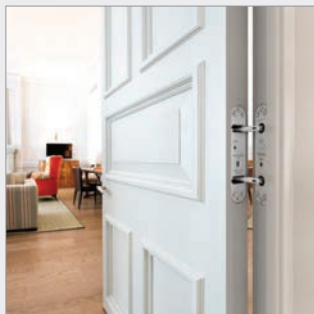
In 2012/2013, Selectaglaze returned to install secondary glazing to other areas of the building, which were either used for RCGP staff or as tenanted office areas. These were mainly overlooking Euston Square and a few of the study bedrooms towards the rear of the building.

Secondary glazing is one of the most effective methods of reducing noise ingress. If a cavity of 150mm from the primary glazing can be achieved and acoustic laminate glass used, then a reduction of over 48dB can be reached. In addition, thermal insulation is increased and prevents the spread of dust and dirt.

With works in the surrounding area due to finish in 2026 – the projected date for the opening of the new terminus, the occupants should feel a difference; with a nice quiet environment where they can sleep well, concentrate and hear themselves think.

01727 837271 www.selectaglaze.co.uk

Hidden benefits for hotel interiors



Samuel Heath Powermatic door closers deliver outstanding performance in fire resistance and accessibility, but it is their concealment that brings a host of benefits for hotel projects, making them the specifier's choice for hotel interiors.

Fitting neatly between the door and frame, Powermatic door closers are totally concealed when the door is closed, ensuring that nothing interferes with the appearance of the door and interior. They also help to create a more homely, less functional, or institutionalised, ambience within the room.

These benefits have seen Powermatic used by the world's leading designers on impressive hotel projects across the globe, including The Savoy and Brown's Hotel, London; ARIA resort and casino, Las Vegas; Hilton, Manchester and the exclusive South Lodge hotel and spa in Surrey.

0121 766 4200 www.concealeddoorclosers.com

Kingspan holds court at the Dixon



Tower Bridge Magistrates' Court and Police Station has been reinvented as a four-star boutique hotel in a Dominus Group development. It includes the installation of a tapered roof insulation system from Kingspan Insulation – ensuring the only thing taking the fall

from now on at the former court will be the rain. To raise the thermal performance of the building's flat roof, whilst also providing effective drainage, Kingspan Thermataper TT47 LPC/FM and Kingspan Thermaroof TR27 LPC/FM were installed.

01544 387 384 www.kingspaninsulation.co.uk

ASWS returns to County Hall after 20 years



County Hall on the Southbank of the Thames is one of the capital's most notable buildings, having continued to fulfil many roles since the departure of the GLC; and has twice been the focus for far-reaching restoration work involving

one of the Steel Window Association's members. London-based, Associated Steel Window Services (ASWS), specialises in the repair and restoration of steel and other metal windows, including heritage work, a skillset which led to the company being awarded the original contract encompassing the whole of County Hall twenty years ago.

www.steel-window-association.co.uk

Schöck meets both thermal and acoustic insulation challenges

Roomers Hotels in Germany are individualistic in their architecture and interior styling and the Baden-Baden hotel is no exception, with its 130 spacious rooms and an award-winning design interior. The hotel is part of an L-shaped reinforced concrete frame building containing fourteen apartments and a medical centre. It is brick faced, finished with a white plaster and has an extremely high building envelope insulation performance.

Schöck had to meet two important insulation considerations. The prevention of thermal bridging and impact sound. With thermal bridging local heat loss or heat gain are major factors and condensation can also form, causing condensation, which may result in mould growth. The second insulation requirement involved acoustic comfort for guests, where the prevention of impact sound on the stairways was critical. Although these are unrelated insulation challenges, Schöck was able to bring its expertise to both.



The risk of thermal bridging is at the points where the cantilever steel roof girders connect

to the reinforced concrete slab; and where the reinforced concrete balconies connect to the concrete frame. The Schöck Isokorb for concrete-to-steel was used for the roof connections and the Isokorb for concrete-to-concrete in the reinforced concrete balconies.

A medical centre and an apartment block are in the same complex – with adjacent stairs in that part of the hotel. So it was crucial to negate any possible impact sound travelling into the guest rooms. Although best known for thermal insulation, Schöck has also developed an innovative solution for minimising impact sound on stairs. Called Tronsole, this fully integrated system fits both straight and winding staircases. The system separates the stairs completely from the landing, achieving a performance level far in advance of the requirements currently demanded here in the UK.

01865 290 890

www.schoeck.co.uk

RCM adds Abet Laminati to their portfolio



RCM, the complete through wall solutions supplier is delighted to announce the addition of Abet Laminati MEG HPL facade to its already impressive portfolio. Robust, compact and long-lasting, MEG – Material Exterior Grade building facade by Abet Laminati is specifically designed for outdoor applications. This versatile and durable range is made up of a rigid core combined with a decorative surface consisting of weather-resistant thermosetting resins. The high pressure laminate (HPL) is often used as rainscreen cladding, as well as on balconies. Having the BBA Agrément certificate makes MEG an ideal choice for architects and with 58 colours, 31 woodgrains, five concrete and metal effect finishes the possibilities are huge. The new agreement between RCM and Abet Laminati to supply MEG facades follows RCM celebrating a most promising start to the year with ever increasing orders in their facade ranges. “As a company we have been going from strength to strength and it is a great achievement that we are able to bolster our facade range by adding the unique and versatile Abet Laminati MEG cladding range.” said Ian Quinton, Managing Director of RCM.

0800 612 4662 info@rcmltd.biz

Reduce the demand for cooling



Guthrie Douglas, the innovator in blind systems, has used its technical expertise to produce an exceptional solar shading solution for the Kong Bar in Paris. Guthrie Douglas designed and manufactured 18 bespoke external blinds for the 100 sq m curved glass roof, using its TESS™ system for strength, versatility and wind resistance. This was combined with Serge Ferrari's Soltis fabric to provide the optimum balance of transparency and heat reflection. The result was a dramatic cut in solar heat gain and glare, which significantly reduced the need for air conditioning.

01926 310850 www.guthriedouglas.co.uk

TTA Awards night – a great success



At the annual TTA Awards the tiling industry rolled out the red carpet in style to celebrate the top achievers in our sector. Kyran Bracken MBE was host for the first time. TTA would once again like to congratulate all the winners and finalists, who are a credit to the industry.

This year there was a record number of Gold sponsors. They were Banks & Lloyd, Jackoboard, Mapei, Norcros Adhesives, Shackerley (Holdings) Group Ltd., Tilemaster Adhesives, Topps Tiles, Trimline Group, UltraTileFix, Walls and Floors, Warmup.

0300 365 8453 www.tiles.org.uk

University has been equipped with overhead lifting equipment from Street Crane

The overhead crane, designed, manufactured and installed by Street Crane, is actively being used to lift and re-position heavyweight research equipment and apparatus, being developed and tested at the new 9,000 sq. metre building.

The new Advanced Manufacturing Building incorporates purpose-built teaching spaces, specialist research laboratories and a specialist clean room for the research and development of 3D printed pharmaceutical devices. The building is the home of the Institute for Advanced Manufacturing (IfAM) which brings together the research activities of the Advanced Manufacturing, 3D Printing and Additive Manufacturing and Polymer Composites research groups under one roof with over 200 academics, researchers and PhD students, providing a focal point for manufacturing innovation.

The new facility has created a real buzz and will support start-ups as well as existing businesses, like GSK, BAE Systems and



JLR. Currently, the centre is working on a new range of robot mechanics that could transform Rolls Royce's jet engine maintenance operations, helping to improve service for passengers, whilst reducing costs for airline operators.

Gus Zona is Managing Director at Street Crane and explains, "We have worked with many colleges and Universities around

the UK as they invest in new specialist manufacturing facilities. As the UK's only manufacturer of overhead cranes, we know the challenges companies face as they seek to compete and win on a global stage. It gives us a real feeling of pride knowing that our products are being used to help build solutions for the energy sector that could prove critical to the future of mankind."

The crane supplied and installed by Street Crane has a lifting capacity of ten tonnes and a span of twenty metres. It is mounted on 37 metre length rails, allowing it to lift or drop heavy equipment to any part of 700 sq. metre laboratory.

The building has achieved a BREEAM 'Excellent' rating, meaning that it meets strict industry standards for eco-efficiency which will help keep running costs low and protect the environment.

01298 812456

www.streetcrane.co.uk

Heritage hotel is worthy winner



The largest hospitality project ever undertaken in Ireland has scooped a prestigious 'Winner of Winners' award sponsored by GEZE UK. Adare Manor, a neo Gothic 'architectural masterpiece', in County Limerick, took the top category at the AI Specification Awards 2019 for ReardonSmith Architects, Carrson International and Mooney Architectural. Local architect, Michael Healy, also worked on the project. The five-star resort which sits within an 840-acre estate incorporates a new five-storey wing which sits alongside the original 19th Century manor. Its architectural ironmongery was more than just a finishing touch, Sun Valley Bronze hardware was specified by Carrson to mirror the "passion for quality craftsmanship" which was integral to the design standard. GEZE UK also provided more than 200 closers for the project – including the TS 2000 NV and TS 4000 E overhead closers and the Boxer integrated closer – all completed in a bronze finish to compliment the other ironmongery fittings that were used. A video presentation on the Winner of Winners project can be seen at: www.gai.org.uk/events-117/ai-specification-awards-2019/winning-projects.

01543 443000 www.geze.co.uk

New recruit reflects ongoing growth



Structural and civil engineering specialist Rhodes & Partners has recruited graduate engineer Michelle Kiboi, in a move designed to help the company with its growing workload. The company is undergoing a period of carefully managed and sustainable growth, and this is the latest in a series of developments which reflect this growing success. Rhodes & Partners recently revealed

that 2018 was a record year for the company, in which it surpassed all previous records for the volume of work which it had handled.

0161 427 8388 www.rhodesandpartners.co.uk

Creating a community with Kingspan TEK



Kingspan TEK Cladding Panels have provided an offsite wall solution for a school and leisure campus in Littleport. Kingspan TEK Structural Insulated

Panels were designed and factory cut to the project's unique specifications by Kingspan Timber Solutions. This offsite production process minimised site waste and enabled the panels to be quickly installed onto the steel frame, ready for main contractors, Morgan Sindall Construction, to apply the final external finishes. The highly-insulated core of the Kingspan TEK Cladding Panels allowed the project to meet its thermal performance targets.

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

Mapei Are Endurance – Clerkenwell Design Week 2019

Kee on pedalling’ the metaphor which Mapei’s CEO often uses to describe his approach to life and work.

Passion and commitment to continuous improvement are the fundamental principles which, as recognised by Mapei, are also acknowledged in the foundation stones for sport. Mapei’s long-standing commitment to sport is in the company’s DNA and MAPEI products can be found in stadiums and leisure facilities all around the world.

With over 80 years of experience, Mapei applies the same principle to day-to-day business while offering a free, expert service to provide tailored specification advice and technical assistance from installation to post-completion, recommending the material and workmanship required for projects.

Speed, endurance, strength and stamina are sporting qualities that can also be attributed to many Mapei products, from an extensive range of systems for construction projects whatever the sector or scale. It is these

products that will be the focus of Clerkenwell Design Week 2019 supported by a range of daily workshops, with themes and activities from cycling to nutrition.

On Tuesday 21st May ‘The Smoothie Bike Company’ will be on hand for well earned refreshments and other nutritious workshops will take place throughout the day. These can be enjoyed by guests while viewing the wide range of systems MAPEI provide for floor and wall coverings in the food and beverage sector.

Wednesday 22nd May provides a more competitive sporting theme with the opportunity to compete for prizes by taking part in short road race cycle simulation, provided by PSW events. An afternoon tea inspired lunch is also provided, perfect after burning off all those calories. Cycling workshops are planned during the morning and afternoon and visitors can experience the types of sports systems Mapei offer and where they have been used



globally. An Italian evening event will also take place on this day, with special guest speaker to be announced, please email ukmarketing@mapei.co.uk to register your interest.

On Thursday 23rd May experience what Mapei has to offer in terrazzo flooring. Workshops inspired by the colourful unique finishes include chocolate bar decoration and make your own coaster.

Drop in to Mapei World London City at 6 Great Sutton Street for what promises to be an entertaining and informative Clerkenwell Design Week.

0121 508 6970 www.mapei.co.uk

VISIT AT CLERKENWELL DESIGN WEEK

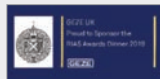
New national sales manager for GEZE UK



Andy Iredale is the new man in charge of opening doors for GEZE UK having been promoted to the role of national sales manager for automatics. Andy, who was previously sales manager for the North of England, now leads the team of which he was once part – GEZE UK’s area sales managers who provide design and commercial advice on GEZE automatic door systems. He will lead on the sales promotion of new and innovative GEZE automatic door solutions, develop and maintain relationships with key customers across the country and advise them on the best range of products for their needs – from modest automatic doors to complex requirements for major developments. Andy has significant experience in the commercial door sector across a variety of disciplines – from service and project management, through to sales – spanning an impressive 24 years – the last four of which have been with GEZE UK. Among his notable achievements is the work that he carried out for the company in the North of England and the completion of an ACAS management development programme.

01543 443000 www.geze.co.uk

Celebrating the best in Scottish architecture



GEZE UK is to sponsor the prestigious Royal Incorporation of Architects in Scotland (RIAS) Awards Dinner for the fifth consecutive year. The glittering event, showcases the best of Scottish architecture and will take place at The Assembly Rooms, Edinburgh, on 30 May. A total of 82 entries have now been shortlisted to 19 projects which must go head-to-head in order to win accolades for architectural achievement. Said Andy Howland, GEZE UK sales and marketing director: “It is always an honour to be part of the RIAS Awards which presents an eclectic range of projects within a variety of landscapes and created to accommodate very different requirements.”

01543 443000 www.geze.co.uk

Altro – the key to century of success



Altro is celebrating 100 years in business. Founded in 1919 by a small group of individuals with a big idea, the company now has more than 900 employees globally. Richard Kahn is Altro’s CEO, and the third generation to lead this Hertfordshire-based family company that has offices across Europe, the Americas and Asia Pacific. “We’ve always known that speaking with, listening to and partnering with customers, end users, contractors, engineers and designers is the key to getting what we do right. It’s allowed us to be bold and to explore design and functional possibilities, without losing sight of who we’re doing it for.”

01462 489 516 www.altro.co.uk



CDW celebrates turning 10

This year sees Clerkenwell Design Week celebrate its 10th edition, showcasing a host of the industry's best in London's key hub for design and architecture



From new designs by Ronan and Erwan Bouroullec for Established & Sons to Fritz Hansen's exhibition in collaboration with Zaha Hadid Architects and an outdoor cooking space serving food by Kitchen Architecture, CDW's 10th edition will be a show full of celebration and achievement.

Set across three days (21-23 May), CDW is the annual focus for London's leading design district. The festival programme has been tailored to reflect the unique nature of this culturally rich area – playing host to hundreds of showrooms, fringe events, talks, workshops and installations.

For the 10th anniversary of 'CDW Presents,' the organisers promise "exciting street spectacles," including 'Once Upon A Time' in partnership with the University of

the Arts London, and Lansdown's London, which takes inspiration from the rich and sometimes dark historical tales of Clerkenwell. For this initiative, CDW have collaborated with BA Graphic Design Communication students at Chelsea College of Arts to create a series of graphic installations inspired by the stories relating to the significant locations. The seven winning entries have been chosen by a judging panel including Max Fraser, CDW content editor, Priya Khanchandani, ICON editor, and David Barnett, Chelsea College of Art course leader, BA Graphic Design Communication.

The winning designs are: Alistair Ramage – St James Church, Carrie Maxwell – Smithfield Market, Alba Skottowe – Farringdon Station, Rory Brown – Passing Alley, Maxim Cook – Passing Alley, Natasha Lopez – House of Detention and Woon Ko – Jerusalem Passage. In conjunction with the project, Lansdown's London will be hosting historical walking tours during CDW exploring its past as a centre of making, from clock-makers to gin distillers.

CDW will also present 'Decade', a dramatic trail of 10 three metre high candle-like beacons designed by pioneers within the creative industry as well as confirmed collaborations with brands such as Hakwood and Parkside. The installations, symbolic of birthday candles, will also form part of CDW's wayfinding strategy to help guide visitors across the exhibition route whilst playfully celebrating CDW as the UK's leading independent design festival. With a nod to the area as London's creative heart, each installation will showcase the designers' individuality and imagination.

CDW's installation 'Reflect Us,' created

by artist Beau Kerouac, intends to bridge gaps in society by confronting visitors with illuminated eyes etched onto 10 glass gateways, telling the stories of the homeless from our city streets. Using AR technology, Kerouac invites visitors to question how an act of respect; simply making eye contact, can change someone's day for the better through shared experience.

For Clerkenwell's 10th anniversary, a plethora of exciting pop up showrooms and workspaces will take place during the festival. Established & Sons will take up residency in Fora to launch four new designs including The Grid Sofa by Ronan & Erwan Bouroullec, the KD Table and Beam Table by Konstantin Grcic and the Lucio Chair by Sebastian Wrong. Conceived as a "complete take-over" of Fora's breakout spaces, the installation will invite visitors to explore the possibilities of Established & Sons' new designs by trying them out with hot-desking, Wi-Fi and refreshments from Fora's cafe.

The installation will be complemented by a series of talks, workshops and events. Fritz Hansen will be collaborating with Zaha Hadid Architects to showcase aspects of their Heritage Exhibition, while Relay Design Agency will present + Halle, Baux, Orsjo, Mitab and Zeitram within a fashion house on Clerkenwell Road. KI, one of the world's largest manufacturers of workplace and education furniture, will take over an architectural gem in the centre of the festival site. The pop-up showroom at the landmark Paxton Locher House on Clerkenwell Green will be transformed into 'KI House' for the launch of several new UK-designed & manufactured products.

CDW's exhibitions are hosted in distinctive spaces around the area linked by a route running through the centre of EC1. There are seven exhibitions, each with a different curatorial focus, ranging from cutting edge international design, to emerging talent, lighting and luxury interiors, and the best of British design.



Clerkenwell Design Week takes place 21-23 May – register free at www.clerkenwelldesignweek.com

PRO-TEK™ to open new Clerkenwell showroom during CDW 2019



PRO-TEK™ is opening its new Clerkenwell showroom in May, to coincide with Clerkenwell Design Week. The new showroom – at The Old Trading House, Northburgh Street – will provide a specification hub for the new PRO-TEK™ WPC engineered vinyl flooring range. It will also feature complementary office furniture designs from PRO-TEK's partner, BURONOMIC. Each of the new PRO-TEK™ WPC award-winning designs will be featured at the new showroom, which will form part of CDW 2019. Throughout the new range, 40 authentic natural-effects are divided into five distinct collections; wood-effects are included within the Excel, Essential, Distressed and Excel Long Plank Collections and the fifth range – Excel Tile – includes slate, travertine and marble-effects. The collections present a brand new and highly versatile flooring option to the UK specification sector, suitable for residential and commercial settings, including bathrooms, basements and over underfloor heating. All PRO-TEK™ WPC floors feature a robust engineered construction, with a LVT surface finish, an integral jointed waterproof core and acoustic underlay.

020 3917 5550 www.pro-tek-flooring.com

VISIT AT CLERKENWELL DESIGN WEEK

Introducing the Viu & XViU Bathroom Series



The new Viu ceramics and XViU furniture including matching bathtubs, will be on display at the Duravit London Showroom during CDW 2019. This totally new bathroom range from Duravit, with its dynamic V-shaped profile and geometric detail has been created exclusively with sieger design. Described as the bathroom of the future, the XViU furniture series combines elegant and strikingly precise industrial elements with the organic curves of the Viu ceramics. Visit Duravit at 36-42 Clerkenwell Rd, London EC1M 5PS.

01908 286 680 www.duravit.co.uk

VISIT AT CLERKENWELL DESIGN WEEK

Havwoods Set to Impress at CDW 2019



International wood flooring brand, Havwoods is excited to be participating in this year's Clerkenwell Design Week, between the 21 - 23 May 2019. Located on Great Sutton Street, the brand's flagship Clerkenwell showroom is nestled within the city's iconic creative district, which will play host to the internationally renowned design festival this May. Throughout the three-day event, Havwoods Clerkenwell will be hosting a series of engaging talks, presentations and product showcases to celebrate the creativity of wood and its presence in the world of interior design.

01524 737000 www.havwoods.co.uk

VISIT AT CLERKENWELL DESIGN WEEK

University achieves safe new student accommodation thanks to Ash & Lacy facade

Durability, safety and aesthetics needed to work together for the Viking House project. With the refurbishment nestled among conventionally built brick buildings there was a need for a contemporary look that mirrored the local vernacular.

Viking House is a managed student accommodation development at the University of Lincoln. Made up of three five-storey buildings and standing 20m tall, it was designed to reflect the university's continuing progress. Converted from several repurposed properties, the design of the buildings was in contrast to others in the largely traditional area of Brayford Wharf. One of the main challenges was the University's desire to complete the project within only six months in order to accommodate the new intake of students at the start of the 2018/19 term, but without compromising on safety.

Working in partnership with Globe Consultants, Ash & Lacy proposed the use of



its exclusive MechSlip facade. Developed in conjunction with Ibstock Kevington, MechSlip is a lightweight, mechanically fixed system that offers significant advantages including reduced installation times and

associated costs, as well as being completely non-combustible and certified A1 to EN 13501-1 standards.

0121 525 1444 www.ashandlacy.com

Metsec wins BIM/Digital Construction Award



voestalpine Metsec has won the BIM/Digital Construction Award at the Offsite Construction Awards ceremony, held at Futurebuild 2019 at ExCel, London. The prestigious award not only underlines Metsec's commitment to Building Information Modelling but also reinforces the company's position as one of the leading exponents in the digitisation of construction. Metsec was one of the first companies to recognise the significance of digitisation and the many benefits that it can bring, including improvements in collaboration, design time, manufacturing time and accuracy, all of which adds up to greater efficiency and enhanced customer satisfaction. From the outset, the company undertook a programme of focused investment in the key technologies as well as the systems necessary to delivering these benefits, including staff training, updating processes, cultural change and digitisation of the product. The results have been impressive; Metsec is the first Tier 2 Designer and Manufacturer, complying with BIM Level 2 for design and construction in the UK and the first manufacturing company to receive the BSI Kitemark for BIM.

0121 601 6000 www.metsec.com

Help us understand you better!



ADF magazine always endeavours to bring its readers the most relevant, interesting content that informs, inspires and helps you solve challenges within your projects. So that we can improve our understanding of your professional needs and wants, we'd appreciate it if you could complete a quick online survey. The personal information

you provide will only be used to update your subscriber profile. Your privacy is important to us and your data will not be shared with anyone outside of netMAGmedia Ltd, publishers of ADF.

www.architectsdatafile.co.uk/adf-ereader-survey

Practical points – SterlingOSB Zero



Norbord's SterlingOSB Zero can be used for all the same structural applications that plywood can be used for, and as SterlingOSB Zero is made in the UK, the finished board is very competitively priced as it doesn't have to travel here like plywood does. New SterlingOSB Zero StrongFix is an OSB panel designed to be used in drylining applications. It is simple to fit, highly versatile and ideal for fixing cabinets, radiators, wash basins, railings and other heavy fixtures to stud walls. It is cut to size to fit within c-stud sections, has a pre-groove already cut and has zero knots meaning the strength of the board is maintained throughout.

www.norbord.co.uk



REAL BRICK. REAL SAFE. REAL QUICK.



MECHSLIP
REAL BRICK. REAL POSSIBILITIES.

MechSlip opens up a world of creative possibilities for using real clay brick as versatile, non-combustible cladding. With a palette of over 300 authentic Ibstock finishes, MechSlip means architects and specifiers can maintain both the integrity and efficiency of their designs without compromising on aesthetics or safety.



REAL BRICK

Genuine, traditional
clay materials
guarantee
long-term durability



REAL SAFE

Non-combustible,
A1 certified materials
deliver complete
peace of mind



REAL QUICK

Simple, fast and
adaptable
installation reduces
time on site

Contact us today to find out how MechSlip can transform your next project.

0844 800 4576

email : sales@mechslip.co.uk / web : www.mechslip.co.uk



FIFTY SHADES OF CLAY

Feel restrained by your current brick options?

We offer over 50 styles of handmade, waterstruck, wirecut and pressed bricks in **imperial and metric** sizes.

Regional variations, custom blends, bespoke weathering and ageing to match existing brickwork is our speciality.

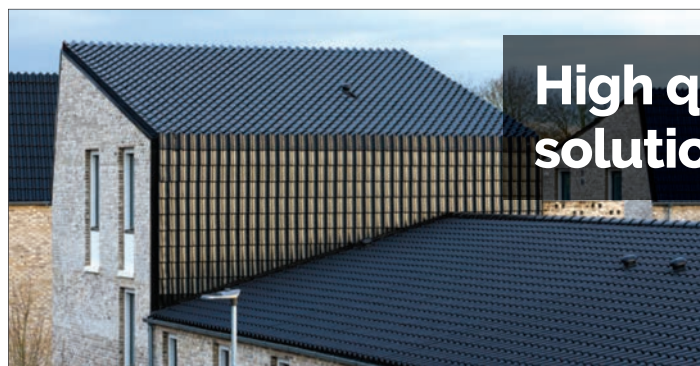
Try our **FREE** brick matching service!

Visit your **local merchant**
Call **01952 750 816**
Visit **imperialbricks.co.uk**
Email **sales@imperialbricks.co.uk**

Download our **FREE** Brick Matcher app



IMPERIAL
handmade bricks



▲ Goldsmith Street, Norwich: Award winning development showcasing Crest's H14 interlocking black clay tile & Crest's Belgravia Buff & Grosvenor Grey Multi bricks.



▲ The unique roofing system flows without interruption from eave to ridge.



▲ Crest's specifically designed 70° angle roofing tile.

High quality bespoke roofing solutions for every project ...

The Crest Nelskamp roofing range has **proven to be an inspired choice** when used with both modern and traditional styles of architecture as well as renovation and heritage works. Whatever your needs, we have a wide choice of roofing materials all proven to enhance any type of build.

- ▶ Bespoke tiles specially designed & engineered
- ▶ Large choice of profiles and colours
- ▶ Fully guaranteed for 30 years
- ▶ Manufactured to Standards EN1304
- ▶ Full range of special roof tiles and fittings
- ▶ Over 125 different brick types available



For more information on our **quality roof** tiles or to order a **FREE** sample call us on **01430 432667**

☎ **01430 432667** ✉ **info@crest-bst.co.uk** 🌐 **www.crest-bst.co.uk**



crest
NELSKAMP
ROOFING TILES

The devil's in the detailing

Alex Patrick-Smith of Ketley Brick discusses the performance considerations that need to be borne in mind when choosing increasingly popular textured brickwork facades

Brick, which has of course been a major part of the British built environment for thousands of years, is undergoing a renaissance. The material is finding fresh audiences for the way it can add texture to buildings in exciting, innovative and contemporary ways.

Not surprisingly, new generations of architects are seeing the potential of 'hit and miss' cladding techniques and projecting brickwork on large scale urban projects as they seek to push boundaries with more ambitious and visually striking facades, such as those seen on the 2017 RIBA National Award winning Victoria Gate in Leeds.

Modern methods of construction, using digital imaging and precast concrete, have further opened up design possibilities, enabling complicated textured brickwork patterns with a complexity of detail, which would have been impossible with traditional construction, while adding the associated advantages of faster and more efficient off-site construction.

However, as the design potential for more ambitious and elaborate facades grows, so do the technical and physical demands made on projecting brickwork in exposed applications.

Traditionally, F2 has been the recognised standard for frost resistance of facing bricks, with 'Class A' engineering bricks – having high compressive strength and low water absorption – offering the highest level of durability.

However, the fact that F2 certification offers the highest frost resistance classification for facing bricks in flush finished brickwork does not guarantee that the same bricks can withstand the more severe omnidirectional freeze-thaw conditions seen in exposed applications. In fact, in textured brickwork tests, many F2 facing bricks have actually experienced failures which could potentially result in the degradation of the bricks when they are projecting.

In reality, the level of freeze-thawing experienced by projecting brickwork is far more severe than conventional flush



© Alex Upton Photography

brickwork and closer to in fact that of pavers. As the 'bed' face of the headers is more exposed to the elements, there is always the potential for the rainwater to sit on the 'bed,' causing the brickwork to become saturated, and then be vulnerable to freezing and deterioration.

Despite the need for bricks with much lower water absorption rates in exposed applications, there is currently no industry wide standard in the UK specifically for 'hit and miss' or projecting brickwork, unlike in Holland and parts of Europe, where tougher tests similar to paver freeze-thaw tests are beginning to be introduced.



Modern methods of construction have further opened up design possibilities, enabling complicated textured brickwork patterns with a complexity of detail which would have been impossible with traditional construction

At present, the onus is on individual manufacturers to have their own products freeze-thaw tested to a higher level, and their results published. The onus is also on architects to check with the manufacturer that their specification is suitable for detailing that deviates from a standard flat panel.

There now a strong case for projecting header bricks to be tested to 100 freeze-thaw cycles (with no cracks), on all five exposed faces at projections of a minimum of 30 cm and preferably 50 cm, in order to give architects and specifiers complete reassurance that they are fit for purpose.

Victoria Gate

Victoria Gate in Leeds, part of Hammerson's Victoria Leeds Estate in Leeds city centre, was developed and inspired by its local historic and architectural context.

Designed by architects ACME, the creative and innovative use of projecting brickwork produced what is considered to be one of the most intricate and distinctive brick and concrete facades in the country, with an elaborate pleated pattern on three external elevations of the new arcades building.

The challenging scale and complexity of the 6,000 m² geometric brickwork facade was delivered through a combination of



high specification materials, the latest advances in digital technology, and last but not least, innovative use of off-site constructed pre-cast panels.

Approximately 360,000 'Class A' Staffordshire Red 'snap headers', bespoke specials and brick slips, were supplied by Ketley Brick. Purpose-designed to include perforations or 'snaps,' two headers were generated from each engineering brick without cutting, whilst providing a positive 'key' for casting onto a reinforced concrete backing.

BIM processes and 3D mould technology enabled Thorp Precast to plot and place every individual header onto the 550 pre-cast panels, seven, nine, 11 or 13 bricks wide, and repeated in differing lengths. The tops of the panels were dressed with corbelling made from full bricks with a dedicated cut out to secure them to the concrete backing panel.

Considerable time was spent researching bricks, which not only had a precise form and sharp-edged aesthetic to suit the geometrical design, but also the physical characteristics to withstand freeze-thaw conditions at exposed projections of 25 cm on all three facades.

Alex Patrick-Smith is managing director of Ketley Brick

Innovative Ancon rebar connectors used in iconic Russian skyscraper

Innovative and quick-to-install reinforcing bar couplers from Ancon replace time-consuming lapped joints and minimise reinforcement congestion in the gigantic concrete superstructure of Europe's tallest building; the 87-floor, 462m high helicoidal Lakhta Tower in St. Petersburg.

The use of Ancon's high-performance mechanical rebar coupling systems also helped maintain build quality. By eliminating lapped joints and hooked bar ends, Ancon's couplers and headed anchors allowed the wet concrete to flow more effectively through the reinforcement grid during casting.

125,000 couplers, a combination of Ancon CXL threaded and MBT bolted systems, are installed in the tower's immense 3.6m thick concrete foundation raft, where 32mm diameter reinforcement is arranged in

15 layers. The raft's construction registered as the Guinness World Record's largest-ever continuous concrete pour at the time.

In the central cylindrical reinforced concrete core of the tower, the innovative Ancon CXL Type B Couplers were used which are rotated from one bar to the next to form the connection; ideal where rotating long, heavy rebars into couplers would prove difficult.

Continuity of reinforcement between the concrete floor slabs and the central core is achieved through rows of Ancon KSN threaded anchors and Ancon CXL Coupler Boxes. Both continuity systems enabled simple plain-faced formwork to be adopted throughout the build.

Contact Ancon to discuss the specific requirements of your next reinforced concrete



Photo courtesy of Inforceproject

installation or visit the company's website to review the available product range and major project portfolio.

0114 275 5224
www.ancon.co.uk



25 years of excellence in the UK

Construction connector manufacturer Simpson Strong-Tie is celebrating 25 years in the UK, helping people build safer, stronger homes and structures. Simpson launched its European operations from well-established beginnings in America, where founder Barclay Simpson created his first joist hanger back in 1956. In 1998 a purpose-built manufacturing facility and head office opened in Tamworth, and subsequent acquisitions in the UK, Germany, France and Denmark have established Simpson as a European industry leader. In 2009 Simpson's UKAS accredited European Testing Laboratory opened, which now conducts over 10,000 product tests annually. Managing Director Malcolm Paulson says: "We believe that if we invest in our people our customers will reap the benefits. In my 14 years in role, I've seen the business grow and flourish."

01827 255 600 www.strongtie.co.uk

adf

SUBSCRIBE TO THE

FREE DIGITAL ISSUE



ARCHITECTSDATAFILE.CO.UK/ADF-DIGI

ALUCOBOND® Designmaker Launched – Creative Design Tool for Facade Concepts

Seeing something that you like, and then taking the time to understand why you like it, is the first step in the inspirational process. ALUCOBOND®, from 3A Composites GmbH, has launched ALUCOBOND® Designmaker, an innovative and inspirational tool for architects, designers and planners that facilitates the creation of individual surface designs in facade concepts.

The interactive and intuitively engineered online design tool allows the user the ability to apply different design graphics to the building envelope and adapt them individually in size and colour. The desired facade visual can then be requested as a PDF file via the on-line contact form as well as generate direct transfer of the CADS data for use in CAD software packages.

ALUCOBOND® Designmaker, joins the company's ALUCOBOND® Facademaker online tool, which launched in 2017 and gives architects and designers a hands-on method of adapting both form and colour of facade elements, as well as allowing the creation of individual facade patterns and grids, at the click of a mouse. It also can be used to create the corresponding BIM and DWG files, which can be requested via the online contact form for continued application within a CAD program.

Both online software tools allow architects and designers to conceptualise the many ALUCOBOND® building facades. From styles and topology to visualising patterns and colours both tools can work together, and



with the ability to adjust element lengths and depths together with the number of elements they allow for true design freedom and the ultimate in architectural expression.

Both ALUCOBOND® Designmaker and ALUCOBOND® Facademaker online software tools are available on the ALUCOBOND® website and are intuitively designed for ease of use and with minimal

instruction.

For details about ALUCOBOND®, its products and services as well as access to ALUCOBOND® Designmaker and ALUCOBOND® Facademaker, visit the company's website.

075 84 68 02 62
www.alucobond.com



Fire Safe Facade Refurbishment

A new replacement facade system being installed at a high-rise residential building in Leeds brings the structure up to compliance with the new government guidance.

Two derelict blocks at Saxton Gardens in Leeds were completely renovated in 2007, providing 410 new apartments in an ambitious urban redevelopment. To give the blocks an aesthetically pleasing exterior, the architects designed the facades with varying window sizes, slot balconies and contrasting coloured cladding. The new owners and tenants rated the development highly.

Ten years later, an assessment of the facade design determined that the cladding used on one of the two blocks did not meet sufficiently high safety standards, and the decision was taken to upgrade the facade.

EnviroSips Limited, specialist designers, manufacturers and installers of structural insulated panel systems, were engaged to carry out the facade refurbishment on behalf of the property management company. The existing 27-metre high facade is being removed and replaced with A2 rated,



non-combustible cladding materials while the building remains fully occupied. The renovation is in full compliance with revised government guidance for buildings above 18 metres. The new regulations came into effect on 27 December last year and relate to external wall construction in buildings that contain one or more dwellings.

One element of the system being installed is a superior flame retardant breather membrane. FlameOut Breathe is rated Class B-s1,d0, the highest level for flame retardancy in the Euroclass system. "This project represents an excellent example of providing an integrated upgrade solution to

bring this housing development in line with the most stringent fire safety standards. ITP's flame retardant breather membranes work well to provide an efficient, safe cladding installation," said Richard Evans, Director at EnviroSips and the ESL Group.

Produced by North Yorkshire firm Industrial Textiles & Plastics (ITP), FlameOut Breathe is part of their flame retardant range of vapour control layers (VCLs) and breather membranes, including the UK's only Class A2 non-combustible membrane.

01347 825200
www.itpltd.com

BMI Icopal hot melt provides great result



Pupils at a South East London school can now enjoy sport at height thanks to the timely completion of a rooftop 'multi-use games area' or MUGA. Flat roof specialist Byford Roofing tackled the job knowing that the installation was

complex and demanding but also that the schedule was tight. Given the demanding nature of the contract, Byford was pleased with the result. "I was happy with the spec we put forward," he said. "It has worked well and it enabled us to complete the project on time and within budget. Working with materials that we trust such as BMI Icopal Parabit Hot Melt Duo, helped us achieve a really satisfying outcome."

01908 015760 www.bmigroup.com/uk

Complexity simplified with Torch-on system



The 4,250m² flat roof of Unit 800 at Aztec West is not only one of the most complex roofs in Bristol it is also one of the most securely guaranteed after being re-roofed with a BMI Icopal's Torch-on system. "The technical support from BMI is always excellent," says Matthew Goddard of Mitie Tilley Roofing. "Tapered insulation was designed and detailed by BMI to create falls in the areas of the building that had flat decking, with sumps to the perimeter to keep ponding water to a minimum. Regular inspection visits by the BMI technician ensured that any difficult details were overcome quickly and effectively, ensuring a very high standard of work."

01908 015760 www.bmigroup.com/uk

BMI combine to deliver a thief-proof roof



Sympathetic locally-sourced materials, technical expertise and market-leading guarantees led Vale of Glamorgan Council to choose BMI Redland and BMI Icopal materials when re-roofing an early 20th century primary school. "We chose

BMI because it could offer us 15-year guarantees on the products; the roof slate was made from locally-sourced materials and because the pitched and flat products could work in conjunction on the details," says Paul Hynam, Consultant Building Surveyor to the project. "We'd worked with BMI before using its SpecMaster service for pitched roofs and knew that it would oversee the job closely."

01908 015760 www.bmigroup.com/uk

Zen garden resort uses Cupa 12 slates



A unique roofing and cladding project at Zen Garden Resort in Zánka (Hungary) has chosen CUPA 12 slates for their unique triangular resort homes. The project was done in collaboration with distributor Teto Horn Kft, located in Hungary. Slate provides a natural look that fits perfectly

into the green landscape surrounding the resort. The trees are part of the Zen Garden Resort appeal and natural slate has been naturally integrated. As it is a natural material, slate's integration into the landscape becomes quite easy.

020 3904 3001 www.cupapizaras.com

Nordic Copper Inside and Out

A strong, decorative approach to copper cladding for both internal and external surfaces – combining three different Nordic Copper products from Aurubis – defines Onslow House, a prominent commercial headquarters building in the heart of Guildford.

Interior design and external alterations, designed by architects AWW, sought to add value to letting space and bring the 90,600 ft² building up to date. The updated, massive, glazed entrance atrium incorporates feature walls – including inset doors – faced with horizontal copper panels, alternating in three different surfaces: Nordic Standard bright ‘mill finish’, Nordic Brown Light and Nordic Brown pre-oxidised copper. The Nordic Brown range offers lighter or darker colour shades determined by the thickness of oxide layer.

Structural columns are similarly enwrapped with alternating finish copper bands and the copper detailing is even continued into elements of bespoke furniture. The internal copper cladding had a post-lacquer finish applied to arrest further oxidation, so

retaining the three colours and protecting the surface. This creates a reflective surface, mirroring and enhancing the lightness of the atrium space. The same horizontal copper panel composition of three surfaces continues past the external glazing to the outside. Here, the building’s entrance has been transformed with new copper-clad canopies to create a strong, easily recognised identity, with minimal work to the existing building envelope.

Externally, the copper has not received a lacquer finish, as AWW explain: “We consider copper’s natural surface development outside, reflecting the local environment, to be one of the material’s key attributes. An attractive, gradual weathering and softening of the differentiation between the three Nordic Copper surfaces on the canopies has already begun – and will continue over time – as we anticipated.” Fabrication and installation of the Nordic Copper panels was carried out by specialists CGL Facades.

In addition to Nordic Standard and Nordic Brown, extensive Nordic Green, Nordic Blue and Nordic Turquoise ranges have been



developed with properties and colours based on the same brochantite mineralogy found in natural patinas all over the world. A wide choice of Nordic Decor mechanically applied surface treatments is also available.

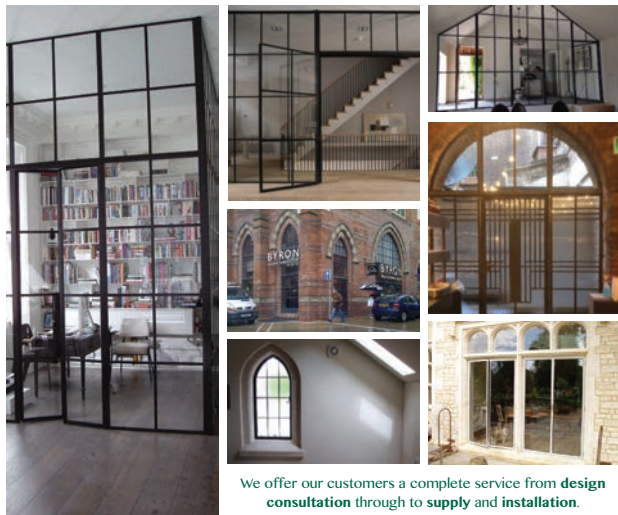
Nordic Copper alloys include Nordic Brass – which can also be supplied pre-weathered – and Nordic Bronze, an alloy of copper and tin initially with a similar colour to Nordic Standard, which gradually changes to a stable, dark chocolate brown. The innovative Nordic Royal, an alloy of copper with aluminium and zinc, enjoys a rich golden through-colour which remains very stable.

g.bell@aurubis.com www.nordiccopper.com



Holdsworth Windows is a family run business specialising in the manufacture of bespoke steel windows, doors and screens. Established for over 50 years we have designed, fabricated and installed windows, doors and screens for a wide range of contemporary, listed and historic buildings.

Specialists in Steel Windows, Doors & Screens



We offer our customers a complete service from **design consultation** through to **supply and installation**.

Tel: 01608 661883 | www.holdsworthwindows.co.uk | Email: info@holdsworthwindows.co.uk
Holdsworth Windows, Darlingscote Road, Shipson-on-Stour, Warwickshire, CV34 4PR

Accommodation benefits from Optima

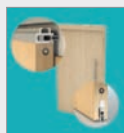


Profile 22 Flush Tilt & Turn Windows were chosen for a £24 million project to build new accommodation for 735 students at Sheffield Hallam University. While aluminium windows were specified for the building’s street facing elevations

in order to meet planning requirements, Profile 22’s high performance Flush Tilt & Turn Windows in Smooth Anthracite Grey were specified for the internal courtyard. Purposely designed for medium and high rise buildings, the sash on the Flush Tilt & Turn Window is neatly positioned inside the frame of the window to create an elegant and sleek ‘flush’ appearance that means it is a cost-effective alternative to aluminium.

info@profile22.co.uk

Norseal seals are safe and sound



Finding a solution to the challenge of acoustically sealing sliding doors has now been solved with a range of acoustic seals. Norseal has created a range of solutions including the feature-packed Complete Sealing System which provides all round smoke and draft protection as well as acoustic insulation for the majority of sliding doors. Norseal is a leading provider of specialist door seal solutions, plus a wide range of ancillary door products. The company has a long track record of innovation, developing products which meet and exceed the latest industry standards for fire and smoke protection, acoustic properties, accessibility and thermal insulation.

01661 830088 www.norseal.co.uk

The original is full of facets.



Original variety: the Max Exterior surfaces.

Give your buildings character:
The wide variety of surfaces offer you
more freedom and design possibilities.

The Max Exterior panel. The original.

Facades, interiors or furniture design –
let yourself be inspired and inspire others:
at showroom.fundermax.at

FUNDERMAX®

for
people
who
create

Sustainable House benefits from Copper Rainwater System

If you are wanting a natural looking and eco-friendly rainwater system then Copper gutters and down pipes from the Yeoman Rainguard range, as chosen by the owners of a charming detached residence in North Yorkshire, are the solution.

With solar panels already in place the proprietors were keen to extend their sustainable ideas to a new rainwater system choosing a copper product for its natural attributes.

Yeoman Rainguard 125 x 70mm copper half round gutters along with 80mm dia. downpipes were expertly fitted to the

property by local contractor Robertson Building & Roofing Ltd of York.

Over time the bright finish will darken through natural oxidation to, eventually, a beautiful green patina. This attractive finish looks perfect against natural stone, timber and red brick facades.

The finish is not only pleasing to the eye but gives copper gutters and downpipes their own self-manufactured defence to corrosion, meaning a low maintenance lifecycle of over 50 years.

A copper rainwater system is also a perfect choice for those, as in this case, wanting to harvest rainwater because it is a natural biocide which prevents the build-up of algae.

"We are very happy with what Yeoman Rainguard have supplied us and look forward to the system giving us many years of maintenance free service," commented the house owner.

0113 279 5854 www.rainguard.co.uk



Marley Alutec makes the grade



Marley Alutec's Evoke Type B fascia system and Evolve Ogee gutter system were specified for a roof, eaves and guttering refurbishment at Urmston Grammar School in Manchester. Selected for its 50-year life expectancy and low maintenance, the Marley Alutec aluminium systems have provided a

'fit and forget' solution. Mark Whitehurst, Site Manager at Urmston Grammar School was pleased with the completed work, commenting: "The refurbishment has made a significant improvement to the look of the exterior of the school and the systems are working well."

01234 359438 www.marleyalutec.co.uk

Marley Alutec launches new roof range



Marley Alutec has launched Elite, an innovative multi-purpose flat roof and balcony drainage system that is compatible with all waterproofing membranes and roof build-ups. The launch is supported by the introduction of a unique online

roof drainage design tool. Simple and fast to install, the unique membrane compression clamp design on Elite outlets, combined with high-performance butyl sealing rings, securely locks the waterproof membrane to the outlet body, ensuring a durable watertight seal. For more information on the Elite product range, please visit the website or visit their Youtube channel.

01234 359438 www.marleyalutec.co.uk/elite

Open up new possibilities with Senior's aluminium doors



Senior Architectural Systems is helping specifiers get a handle on selecting the most appropriate door system for their project thanks to its recently extended product range and technical support packages. Benefitting from the recent launch of the new PURE® Commercial Door, Senior's largest and strongest door system to date, the manufacturer's product portfolio includes a wide range of flexible solutions for both residential and commercial contracts. Offering single, double and emergency door systems and a choice of swing, folding sliding, lift and slide and automatic opening options, Senior's aluminium doors have been designed to offer exceptional aesthetic appeal and excellent performance. From the low U-values achieved by the PURE® door range, which includes both residential style patio doors and a new commercial door option, to the robust SD aluminium doors that are ideally suited to high traffic environments, all products within Senior's extensive door range have been designed to work effectively alongside the company's aluminium curtain walling and shop front glazing systems.

www.seniorarchitectural.co.uk

Six reasons to specify wood windows

Tony Pell, the Chair of The Wood Window Alliance (WWA), explains the benefits of timber windows – and it's not all about aesthetics

Wood windows are undeniably better looking than their PVCu equivalents. Wood is intrinsically beautiful, embodies character and delivers design credentials for a wide range of building projects from domestic to healthcare, education and commercial. Wood windows can conjure up thoughts of traditional design, but their versatility and longevity mean that they are now specified for even the most contemporary projects as the sustainable long-term choice.

Here are six reasons why wood is good for any type of build:

Built for longevity

Modern WWA member wood windows are factory finished and highly engineered to have a long life. Overall, they are found to provide better long-term value than PVCu windows. A report by Heriot Watt University, Whole Life Analysis of Timber, Modified Timber and Aluminium-clad Timber Windows, found “an expected service life for timber windows of between 56 and 65 years; for modified timber windows between 68 and 80 years; and for aluminium-clad timber windows 71 and 83 years. These are set against a base case for PVCu of between 25 and 35 years.” The report also compared differing exposure levels and concluded that “in all exposure conditions over 60 years, PVCu window frames were shown to have the highest whole life cost.”

Wood windows are carbon negative over their lifetime

Buildings contribute to nearly a third of all carbon emissions and following the Intergovernmental Panel on Climate Change's report on limiting global warming to 1.5°C, there is increasing pressure to design zero carbon buildings. A report by Heriot Watt University, Whole Life Analysis of Timber, Modified Timber and Aluminium-clad Timber Windows, found that considering all aspects of materials production, conversion, transport, maintenance and disposal, a typical wood window made to WWA standards has a negative GWP (Global Warming Potential) over 60 years. The same study revealed that using a timber frame in place of a comparable



PVCu frame will save 160kgs of CO₂e over 60 years in average conditions – that's around one and a half tonnes of CO₂e in a typical house. As part of membership criteria, all WWA manufacturing members must hold either FSC® or PEFC™ chain of custody.

Wood windows require minimal maintenance

There is a misconception that wood windows require regular upkeep and are high maintenance. This may be true of the decades old, single-glazed wood windows but modern window frames made to WWA standards are given a specialist paint or stain factory-finish coating. This not only means the window frames have an attractive, even finish but they are extremely durable, and weather protected. The peeling paint is a thing of the past with microporous paint that allows the timber to breathe. WWA-approved factory-finished windows are backed with a specialist supplier-backed coating guarantee – typically 10 years for paint and seven years for stain coatings.

Wood makes people feel good

Wood is proving to be the catalyst for architecture professionals in creating spaces that promote a real connection to nature. Using timber in a build can have a calming effect, improve air quality by moderating humidity and lead to a general feeling of wellbeing. In a 2010 Australian study, children's heart beats reduced when they were taught in timber-built classrooms. Two years ago the WWA undertook independent research with 1,000 homeowners across the UK which revealed that 49 per cent of homeowners feel that



having natural materials in their homes makes them feel happier.

A quality choice

As with any building product, a key consideration has to be the quality of the manufactured product and its correct installation. Founded and managed by its members, the Wood Windows Alliance (WWA) is the benchmark for the industry, providing the reassurance of high quality, performance and sustainability standards. Using engineered softwood, quality hardwood or modified timber, all member products are provided with supplier-backed guarantees; typically 30 years for the frame and 10 years for glazing and hardware.

The design choice

Crucially, wood windows offer the potential to add character and personality across a myriad of projects. Of course, wood windows are the first choice when it comes to period properties; particularly those in conservation areas. For sympathetic replacement of original windows, WWA members can offer intricate period detailing for exact replication. However, it is in contemporary projects where wood is increasingly being used to deliver impact and longevity. With triple glazing and slim sightlines, contemporary wood windows are the sustainable, alternative choice.

To find a supplier you can trust, visit The WWA's website or find them on Twitter:

@woodwindowall
www.woodwindowalliance.com

A functional and aesthetic facade for an award-winning building



TECHNICAL CHARACTERISTICS

Raw material:
ALU EN 1050 H14/H24
Pattern: LTH200x76x30x3 &
RMIG ImagePerf
Thickness: 3.0 mm
Finishing operations: Bending
Surface treatment:
Powder coating (Syntha Pulvin
Anodite 547)

A vast regeneration project for Lincoln City Centre has resulted in a modern and effective transport hub for both visitors and residents, with a pedestrian plaza, retail space and a bus station.

The single largest element of the project is the 1,000-space six-level multi-storey car park.

The facade of the car park has been created with 3,600 m² of expanded metal and 400 m² of perforated sheets, with the Lincoln coat of arms and fleur-de-lis reproduced on to the perforated panels by means of RMIG ImagePerf technology.

The inspirational style of the building and

its architectural merits have resulted in the award for Best New Car Park at the British Parking Awards.

For further information or if you are interested in our CPD presentation 'Perforation in Architecture' contact info.uk@rmig.com.

01925 839610 www.city-emotion.com

WHY USE LEAD? USE UBIFLEX INSTEAD!



- Complete product portfolio to suit your application requirements
- Full BBA Approval and 25 year guarantee
- BRE wind tunnel and fire tested (reports available)
- Lighter to handle and quicker to install than lead
- No scrap value, deterring theft and the damage it causes on site
- Suitable fixing accessories available

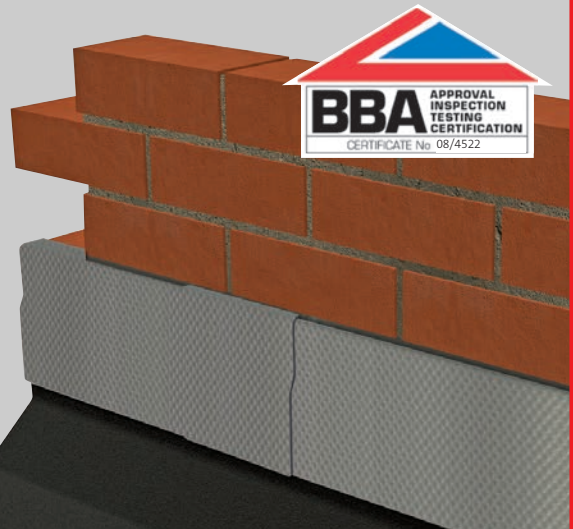
www.ubbink.co.uk

Call us on **01604 433000** or visit our website for more details.

UBIFLEX B3



UBIFLEX EXTREME



Spacetherm® improves thermal efficiency



The A. Proctor Group's Spacetherm Aerogel Blanket has been selected for an impressive £14m development of Bristol Waterfront apartments. Grégoire Capron, Project Lead at AWW explains: "We chose to use Spacetherm Aerogel Blanket

from the A. Proctor Group, a high-performance insulation blanket, capable of achieving extremely low U-values, whilst providing us with the flexibility required to work around doors, window reveals, and walls with minimum loss of space." With a thermal conductivity of 0.015 W/mK, Spacetherm Aerogel's performance credentials qualify it as one of the best insulation materials available worldwide.

01250 872261 www.proctorgroup.com

Kingspan helps deliver learning environment



A 21st Century school has been constructed to provide a new, single-site secondary school and sixth form. Kingspan Kooltherm Pipe Insulation was specified to help ensure it is both comfortable and low cost to run. 7,000 lm of Kingspan

Kooltherm Pipe Insulation was installed by delivery partners, Gill Insulation. The pipe insulation was used in concealed areas such as in the ceiling voids, on droppers and within low-level boxings, in addition to the plant room and boiler room. With thermal conductivities as low as 0.025 W/m·K, Kingspan Kooltherm Pipe Insulation provided a slim-line solution for reducing heat transmission from the pipework.

01544 388 601 www.kingspanindustrialinsulation.com

Convenient and paper-free



Enjoy reading ADF but find it's not always convenient to have the printed magazine? Or has your workplace turned paper-free? The Digital Issue offers you the same content, delivered straight to your inbox and accessible via smartphone, tablet and desktop computers. Be among the first to read all the latest features, comment, interviews, and more, before the print

issue has even been delivered! What's more, the Digital Issue includes interactive links to featured companies. Subscribe for free now.

www.subscribe.com/adf

JS Air Curtains NEW product catalogue



JS Air Curtains has released an updated product catalogue including over 450 units and customisation features set to inspire architects into making a design feature of their entrance's air barrier system. As well as clear product information and at-a-glance selection

guides, the catalogue incorporates lots of images to illustrate the vast array of mounting systems, colours and aesthetic options available. New to the exposed range is the Essense Neo air curtain, a highly efficient model, ideal for small shops and restaurants to office buildings and banks. Its unique "straw system outlet" steadily blows out air at high pressure to provide the best possible seal across a doorway.

www.jsaircurtains.com/catalogue



brings spaces to life

Rested³



❶ Every flying start to the day begins with a good night. For that you need the healthy indoor environment provided by the AEROVITAL ambience smart.



❷ Sleep and live better with automatic air humidity optimisation, mould and pollen protection and over 80% heat recovery.



❸ Switch to automatic mode or access via the app. Discover the room comfort that suits you. www.siegenia.com

SIEGENIA Window systems · Door systems · Comfort systems

AET Flexible Space goes Down Under



AET Flexible Space has won their first order from Australia, for the supply of their underfloor air conditioning equipment for the new build development of the Warilla Library located in New South Wales, Australia. The system specified for the

Warilla Library is a CAM-V system is split into four zones. The conditioned air is introduced into the workspace using around 15 TU4 Fantiles per zone and the spent air is received back at high level before returning to the CAM for reconditioning. Fantiles recess into the underfloor void and the whole system is networked together and can be controlled using the Flexmatic Touch display unit connected to the CAM.

01342 310400 www.flexiblespace.com

Warm welcome at National Army Museum



JS Air Curtains has supplied two Zen air curtains for the recently refurbished National Army Museum in Chelsea, London, to provide a warm welcome to visitors in its reception foyer and gift shop. The air curtains seal the entrances while the doors are open with an invisible barrier of air, preventing cold air

entering in the winter and cool air escaping in the summer. The Zen air curtain was selected to architecturally fit in with the design of the interior and, in the case of the foyer, match the colour of the doorway.

www.jsaircurtains.com

Improving air quality with Flowcrete's M1 Certified Floors



Flowcrete UK has successfully achieved the M1 standard of emissions classification for its Comfort Resins flooring collection. This certification means that architects, specifiers and facilities managers can choose to install these finishes, safe in the knowledge that the floor will contribute to a healthier indoor environment for the end user. Finland's Building Information Foundation RTS developed the M1 emissions classification system to encourage the use of low-emitting building materials. The system includes three categories, with M1 being the lowest emission class that can be achieved. Maintaining a healthy interior air standard is important for spaces where large numbers of people spend a significant amount of time, such as offices and schools and is particularly critical for locations including hospitals and care homes. Managing Director of Flowcrete UK, Kevin Potter, said: "We have successfully developed a full range of low-emitting flooring materials. This means that designers can specify the finishes they need without having to worry about the effect that the materials will have on the building's air quality."

01270 753000 www.flowcrete.co.uk

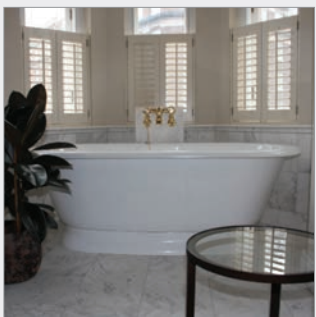
Multi-generational living? Don't forget the toilet



One issue not generally discussed when talking about multi-generational households is the bathroom – access to, and use of. It's a growing problem for the households. But it provides potential increase in sales for all involved in the business of bathrooms – architects, builders, plumbers, and retailers. There has been a 46 per cent rise in multi-generational households in less than a decade. It is set to continue: some 60 per cent of people would consider living in a multi-generational household. Set alongside that the fact that, on average, we go to the toilet eight times a day. Multiply that by each resident, and you have a very busy room! But each generation has different needs – children may be young, and not very adept at wiping properly; the senior citizens may equally struggle with wiping, for different reasons – general flexibility, manual dexterity, balance to name a few – but are reticent to ask family to help. The solution is **Closomat's** range of wash/dry (shower) WCs. Looking like – and capable of being used as – a conventional WC, the Closomat has integrated douching and drying- the best performance in each on the market. Thus, if preferred, the user does not have to wipe manually.

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

The Principal Transformation



When Russell Hotel was refurbished before reopening as the Principal London Hotel the tiling contractor chosen to fit out the 338 guest bathrooms and public washrooms was Chiltern Contracts, who specified **Kerakoll** products for their "ease of use and eco credentials". Kerakoll has adopted a "GreenBuilding" philosophy and tries to apply that to everything it does from the construction of an ecologically friendly R&D facility to the development of new green products and the improvement of existing ones. Time was a factor in some areas so Kerakoll UK's project manager recommended the use of some of the company's fast track products: Keracem Eco, a screed that supports foot traffic after eight hours and can be tiled after 24 hours in standard conditions, Biogel Revolution, the rapid-set version of the Biogel range that is ready for foot-traffic and grouting on floors after three hours and grouting on walls after two hours, and Fugabella Eco Flex which is also rapid setting. In areas where the work was not so time-critical Biogel No Limits, the standard set version of the range was used with Fugabella Eco Porcelana 0-5. Fugabella Silicone was used as a sealant throughout. The results speak for themselves – fast, problem-free tiling giving a beautiful finish.

01527 578000 www.kerakoll.co.uk

Smart. Innovative. Colourful.



Forbo Flooring Systems has refreshed its Flotex® Colour collection with the addition of a new design and format, as well as an array of new colours that are inspired by the moods and illuminating and spectral shades of cities around the world. The

comprehensive flocked flooring range now offers even more flexibility to create contemporary interiors. There is a science to creating Flotex which is what it makes so unique. Offering the warmth, comfort and acoustic properties of a textile, combined with practical and hygienic benefits of a resilient, Flotex is a smart floor covering.

01773 744 121 www.forbo-flooring.co.uk/flotexcolour

Altro Serenade reduces noise



Altro Serenade™ acoustic flooring has been used throughout the new £17 million Reach Free School, in Rickmansworth, providing the highest level of sound reduction and comfort underfoot. Altro Serenade flooring was

recommended by Horizontal Limited, which installed the product. MD Jonathan Bown explained: "We needed a floor that not only had a high acoustic rating, but was also great looking, hard wearing, stylish, contemporary and very comfortable underfoot. I have been working with Altro for nearly 25 years and I knew they had a product that would fit the bill and that quality would be guaranteed."

01462 489 516 www.altro.co.uk

DELABIE



DELABIE offers a complete range of products specifically designed for intensive use in the education sector. The **DELABIE** range combines **design, water savings, hygiene and durability.**

- ▶ Water controls for commercial and public places
- ▶ Accessibility and hygienic accessories
- ▶ Stainless steel sanitary ware



TEMPOMIX 3
Time flow basin mixer



Liquid soap dispenser
with soft-touch operation



More information at delabie.co.uk



ARCHITECTS DATAFILE
IS INDEPENDENTLY
VERIFIED BY ABC

Considerations for Hand Dryer Selection

Hand dryers are an increasingly common solution to replace or complement paper towels. They eliminate paper towel waste completely, along with the need to manage paper towel inventory. In fact, hand dryers can result in 95 percent cost savings compared to paper towel systems.

An authentically sustainable approach to design requires close attention to all resources used in the restroom. For example, while hand dryers dramatically reduce waste, some can be culprits of high electrical costs.

In recent years, evolving consumer preferences have driven demand for hand dryers with quicker dry times. Thus, high speed hand dryers, also known as jet dryers, have increased in popularity. However, many high speed hand dryers run on a high wattages and/or voltages, in addition to high noise levels. Over time, this can lead to higher energy bills.

However, newer innovations can satisfy the desire for a quick, thorough hand-dry without the high energy costs. Bobrick's new B-7125 InstaDry™ Surface-Mounted Hand

Dryer features an industry-best power rating of 200 watts, or 0.2 kilowatts. When motor life is a consideration, InstaDry also has a longer life expectancy – as much as 7,500 hours, or 10 years in high-traffic environments. This leads to reduced replacement cycles and further savings for the owner.

To ensure optimal use of hand dryers, it's essential to take a holistic approach to product selection. Before specifying a hand dryer, a number of other factors should be considered.

Many hand dryers have an institutional aesthetic; recessed or semi-recessed stainless steel units can elevate design. Excess noise can negatively impact the patron experience; researching noise levels can ensure appropriate acoustics for the project.

Other models may feature more unique design elements. Bobrick's B-3725 Accessible Recessed Hand Dryer features an oversized drying alcove that catches and absorbs water, thereby reducing maintenance while improving hygiene.

Although sustainability certifications and



standards used throughout the world are typically the focus of green washrooms, they often do not address many operational issues – approaching product selection with these issues in mind can ensure authentic, long-term sustainability.

020 8366 1771 www.bobrick.co.uk

Atlas Professional
FROM LECICO BATHROOMS

GOLD STAR WASHROOMS

Products for any application

Find out more:

Web: www.lecico.co.uk

Tel: 01234 244030



SANIFLO. PERFECT ON EVERY LEVEL.



SANIFLOOR® + 1&2



Dual action pump and shower wastes designed for wet rooms with tiled or vinyl flooring



NOW
WIRELESS



SANIFLOOR® + 3



Dual action pump and shower waste designed for low level trays



NOW
WIRELESS



SANIFLOOR® + Tray



Low level shower tray, pump and waste



NOW
WIRELESS



SANISHOWER® FLAT



Waste water pump with shower gully and waste



SANISHOWER® +



Waste water pump for traditional shower trays



Whatever the height, there's a Saniflo solution for your shower.

Wash
Basin



Shower



Power
Shower



Bidet



Anything's possible. Visit saniflo.co.uk to see how.

SANIFLO®

PLUMBING THE POSSIBILITIES

Specifying for Sustainability

Sustainability is not always the first priority in commercial washrooms. However, if the five principles of sustainability are factored into product selection, specifiers can ensure the buildings' environmental credentials are assured.

Fit-for-purpose

Domestic tapware is regularly installed in commercial washrooms through habit, or for aesthetic reasons. However, a domestic WC cistern with plastic components is ineffective in a football stadium. Cistern refill times are too long between flushes and mechanisms quickly wear out. Conversely, a direct flush WC, such as TEMPOFLUX 3, withstands repeated use and the flush is instantly available for successive flushes.

Waste prevention

In commercial washrooms, waste occurs through neglect or voluntary abuse. Taps with an automatic shut-off will minimise waste. The water delivery is split into wetting, soaping and rinsing, which reduces consumption to a minimum. However, where



TEMPOMATIC 4 "intelligent" urinal

abuse is rife, anti-blocking systems are effective. Water only flows once the push-button is released, or electronic systems will lock-out if a sensor is permanently activated or operated too frequently within a given time period.

Improved efficiency

Many urinal installations flush continuously to optimise hygiene but waste water. However, DELABIE has developed the TEMPOMATIC 4 "intelligent" urinal valve which detects busy periods and adapts its rinsing accordingly. During peak periods, the bowl is rinsed between users and at the end of the busy period, a complementary rinse

occurs, cleaning the bowl and preventing crystallisation of uric acid in the pipes.

Design for future use

Electronic controls offer different operating modes which can adapt to changing usage patterns. DELABIE's TEMPOMATIC WC offers choices: various flush length options; adjustable flow rate and flush volume to suit system conditions and pan size; and varying detection distances. The installation can adapt to future use without replacing the operating mechanisms.

Design for de-construction, re-use and recovery

For true sustainability, materials need to be durable and 100 per cent recyclable. Water controls are no exception. DELABIE's products are designed to withstand intensive and prolonged use. Made from hard-wearing materials such as brass, stainless steel and Hostaform, they can also be fully recycled – even electronic models.

01491 824449 www.delabie.co.uk

Miena: fine-edged washbasin bowls



Kaldewei have produced yet another iconic bathroom design with the Miena washbasin bowls. The washbasin bowls are made of superior single layer of steel enamel combining the highest standards of minimalist design with a unique fine-

edged quality. The Miena washbasin bowls are round or rectangular and come in two different sizes. What is completely new is the diversity of colour: customers can choose from the exclusive Coordinated Colours Collection, such as Oyster Grey and Lava Black allowing for greater individuality. All Kaldewei steel enamel bathroom solutions are 100 per cent recyclable and are supplied with a 30-year guarantee.

01480 498053 www.kaldewei.co.uk

Delivering over 1,100 bathroom pods



over £2.6 million to Offsite Solutions. The Offsite Solutions design team worked closely with Mace to develop a standardised ensuite pod solution which can be used on multiple student schemes. This GRP composite pod which is fully fitted out in the factory, has only left and right-hand variations for maximum efficiency in manufacturing.

www.offsitesolutions.com/GRP-pods

Distinctive dark oak and bronze washrooms



Washroom designer and manufacturer, Washroom Washroom has completed the installation of new washrooms for a London office utilising a striking dark oak and bronze design to complement the building's distinctive Art Deco interior. Working

with Nick Jordan from interior architecture and design company, WISH, Washroom Washroom installed new washrooms on the second floor of the building which were designed to complement the Art Deco style of the building. Each cubicle includes its own bespoke vanity unit, with veneered vanity under panels and wall panels both stained to match the toilet cubicle doors and link the washroom areas to together.

sales@washroom.co.uk

Launch of the CLG-W10 Outdoor Subwoofer



The new CLG-W10 subwoofer is designed to bring the bass outside. It can be partially buried in a garden border or positioned on a deck or patio area. The compact dimensions make it extremely versatile and provide

the system designer with a variety of installation options. The CLG-W10 is the latest addition to Monitor Audio's Climate Garden System and is designed to augment the low frequencies when teamed with any of the outdoor speakers in the series.

info@monitoraudio.com

FROM SIMPLE, MODULAR PRODUCTS TO A GUARANTEED, WATERPROOF SYSTEM



10
YEAR
GUARANTEE
10



100% waterproof
to the core



Thermally insulating
(0.036 WmK)



Perfect medium to use
beneath underfloor heating systems



Protects against
mould and fungus



Load-bearing
& wheelchair accessible



Wide variety of modular
products & system solutions



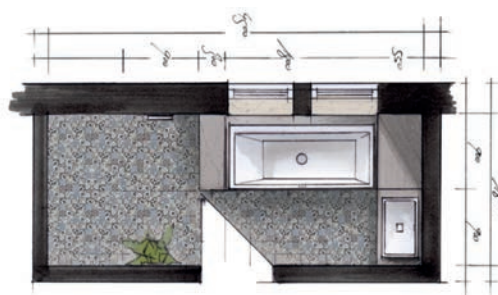
Diverse range of
sound deadening products

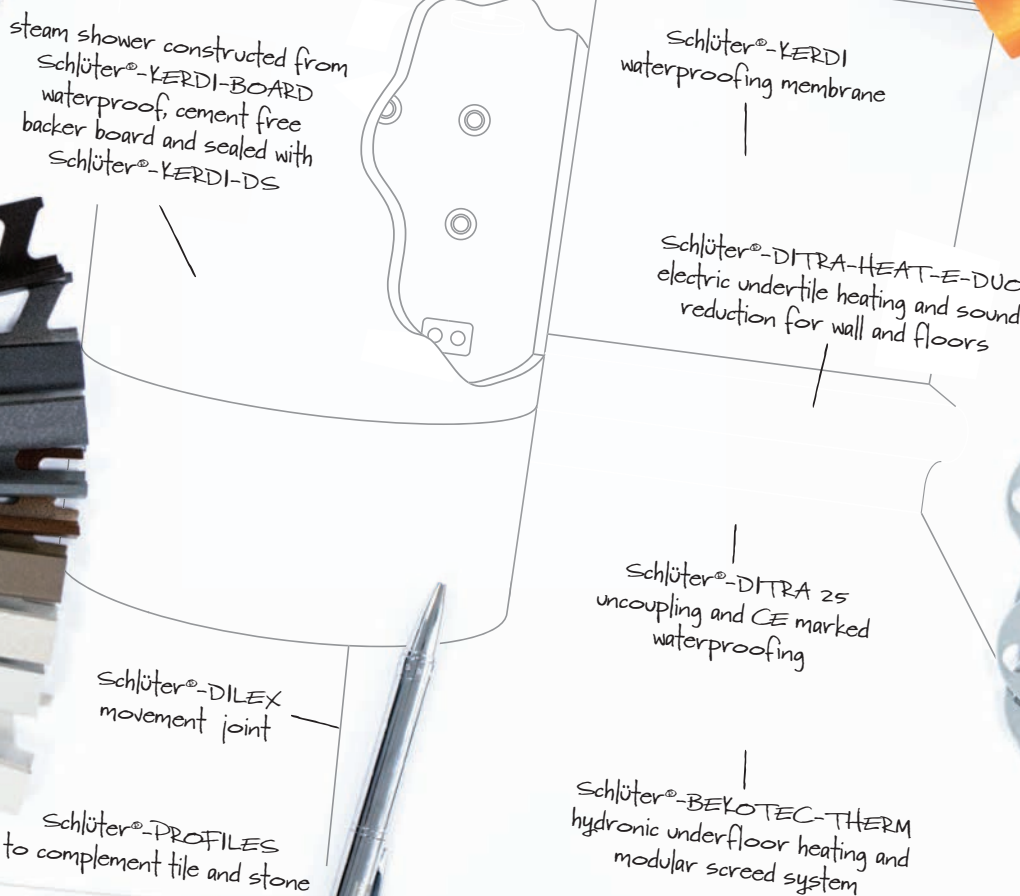


Plan with confidence:
bespoke production available



wedi Systems (UK) Ltd. · 0161 864 2336 · info@wedi.co.uk





steam shower constructed from
Schlüter®-KERDI-BOARD
waterproof, cement free
backer board and sealed with
Schlüter®-KERDI-DS

Schlüter®-KERDI
waterproofing membrane

Schlüter®-DITRA-HEAT-E-DUO
electric undertile heating and sound
reduction for wall and floors

Schlüter®-DITRA 25
uncoupling and CE marked
waterproofing

Schlüter®-DILEX
movement joint

Schlüter®-PROFILES
to complement tile and stone

Schlüter®-BEKOTEC-THERM
hydronic underfloor heating and
modular screed system

PROBLEM SOLVED

Schlüter®-SUBSTRATES

When specifying substrates, you
need a system you can trust.

Our Schlüter®-BEKOTEC floor assembly systems
and Schlüter®-KERDI-BOARD substrate for walls,
offer flexible, easy-to install substrate solutions,
suitable for use in commercial and residential
installations with tile and stone coverings.

Backed up by expert technical support, whenever,
wherever you need it.

Making the decision to choose Schlüter-Systems
even easier.

To find out more call 01530 813396 or visit
www.schluterspecifier.co.uk



Future-proofing bathroom design

Robin Tuffley of Closomat explains how whether you are designing a bathroom for a domestic, multi-user or commercial environment, there is one overriding consideration to bear in mind: a proactive approach to suitability for all

It doesn't matter what words are used – inclusive, accessible, multi-generational, multi-occupancy – they all mean the same thing. Today's bathrooms (washrooms, restrooms, cloakrooms, public conveniences and ensuites) need to accommodate a huge range of needs.

Those needs are physical, mental, racial, religious. It is no secret we are facing an ageing population, with all its degenerative health issues, or that our population is becoming increasingly obese, and 20 per cent of the population is registered disabled. Islam is now the largest non-Christian religion in the UK, is set to triple in the next 30 years to 13 million, and has specific toilet requirements.

HM Government is currently debating a Private Members Bill, which, if enacted, will require all new public buildings to include a Changing Places assisted accessible toilet. The 'Neighbourhoods of the future' White Paper published by the Agile Ageing Alliance calls for housing to feature built-in adaptability. A YouGov poll highlighted that 75 per cent of people feel new homes should be built to be accessible from the outset, with 90 per cent of those respondents citing an accessible WC and shower as the most important accessibility features. Market research has further identified that the market for inclusive bathrooms has grown by 20 per cent in less than five years, and is now worth £180m.

Factor in too changes to accessible best practice guidelines – BS8300 and Lifetime Homes. The British Standard was revised in 2018, and now applies to all multi-occupancy buildings, whether new build projects or not. It now recommends up to 5 per cent of bedrooms should have a wheelchair accessible ensuite shower room, if ensuite facilities are available elsewhere in the building; a further 1 per cent should have a fixed track hoist system, a further 5 per cent (maximum) should have an ensuite for ambulant disabled people,



with an overall total of 15 per cent of bedrooms large enough to enable easy adaptation if required in the future. In buildings to which the public have access, or spend any amount of time in, at very least a unisex wheelchair-accessible toilet should be provided.

Lifetime Homes criteria advise an accessible bathroom in every dwelling, on the same storey as the main bedroom, plus an accessible WC at entry level, plus potential for retro-fitting of a hoist.

Alongside that, RIBA's latest guidance for age-friendly housing says "hospital-style bathrooms have made bathing [personal hygiene] a procedure rather than a pleasure for older and disabled people, but safety and practicality no longer need to come at the expense of style."

Therefore, market forces alone are encouraging inclusive design in bathrooms. With developments in mobility equipment technology and design, it is easier than ever

Just by implementing these few elements, bathrooms and washrooms become accessible and future-proofed, addressing the needs of almost every potential user



FUTURE-PROOF

It is easier than ever to future-proof the design of a stylish bathroom, so that it enables as many users as possible to optimise its functionality

to future-proof the design of a stylish bathroom, so that it enables as many users as possible to optimise its functionality from the outset.

First, people need to get into the room. Doorways need to be wide enough to allow for a wheelchair, level access, and ideally the door opening mechanism's compliant with fire regulations but still light enough to enable someone in a wheelchair to open it and manoeuvre through.

Whether at home or away, the most common reason for a bathroom to be accessed is to use the WC. Simply changing the conventional WC for a wash dry/shower toilet instantly broadens its use. It actually simultaneously gives any user improved cleanliness and hygiene. It is perhaps the ultimate in accessible bathroom fixtures, addressing diverse religions, cultures and most disabilities, alongside enhanced cleanliness, wellbeing and hygiene for your 'average Joe.' Indeed, the RIBA age-friendly guidance cites inclusion of such equipment as exemplar.

To optimise scope for all, consider too that we are not all the same height, whether or not we are walking into the room or entering via a wheelchair. Height adjustable

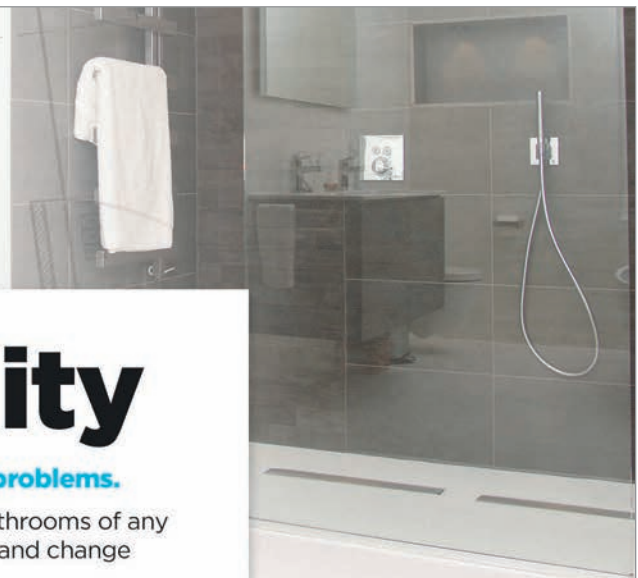
fixtures and fittings enable each user to set the washbasin, shower seat, even the WC and changing bench, to the most appropriate/ convenient height.

With the prevalence towards obesity and ageing, manual handling is a correspondingly increasing consideration. At home or away, a ceiling track ('X/Y') hoist provides a safe solution that accesses every point of the room – and spaces beyond.

Hoist design has advanced: the motor units themselves look more aesthetic, they are more discreet. The systems can be installed unobtrusively, even if the ceiling and/or walls do not provide sufficient load bearing: utilisation of modern materials means slimline gantry legs are almost invisible once fitted.

Just by implementing these few elements, bathrooms and washrooms become accessible and future-proofed, addressing the needs of almost every potential user, yet still delivering a contemporary, hygienic, relaxing environment to undertake our ablutions.

Robin Tuffley is marketing manager at Closomat



Make it Reality

OTL works with the client to solve the trickiest of problems.

The OTL bespoke service allows freedom of design, in bathrooms of any shape or size. We manufacture to suit your requirements and change waste positions to suit configurations and layouts.



www.onthelevel.co.uk

info@onthelevel.co.uk | 0843 6341 705

#KeepingWaterUnderControl

#BespokeWetRoom

Saving Time on Substrates: Find a Practical Tile Backerboard

The latest updates to BS5385 Part 1 have placed renewed focus on tile backerboards, as a solution to combating deteriorating standards of plywood entering the UK market.

The standard now specifies that wall tiling direct to plywood is no longer recommended in wet areas and that a tile backerboard should be used in its place. There are a number of different boards on the market, with varying properties. So what qualities should you look for in a backerboard? Here are four that will make a positive practical impact on the projects that you undertake.

Waterproof not water-resistant

A number of other boards on the market are merely water-resistant rather than waterproof. The difference is significant – water-resistant boards will allow water to ingress over time, whereas waterproof boards keep it out permanently. Water-resistant boards can be waterproofed via the use of a liquid-applied or sheet membrane, but this increases installation time by adding an additional process to the job. It is also not uncommon for this crucial waterproofing step to be missed, due to the package of works for a substrate often not including the additional waterproofing layer. Use of one, ready-waterproof product avoids any ambiguity, preventing confusion on-site as to who is responsible for the work and protecting the specifier's reputation.

Lightweight

Particularly on large scale projects, having a lightweight board that can be easily manoeuvred around site makes a tangible difference, encouraging a quicker construction process and preventing injuries caused by lifting and dropping. Reduced fatigue means more work is completed, to a higher standard, saving time and money on remedial steps later.

Cement-free

A board that is cement-free is more environmentally friendly in its constitution, plus is more practical on-site as it can be cut without having to use masks or clear the area. Coupled with additional useful features such as high strength support, thermal



insulation and sound reduction, you can achieve a system that performs as well as more traditional boards, but without the health implications of carcinogenic materials.

Multi-functional

Why use five products when you can use one? Backerboards that come in a variety of thicknesses can often be used for a number of different purposes, from use over existing substrates through to the creation of features such as shelves, partition walls and seats. It's easier to customise boards that are non-cementitious into different shapes and you can more quickly achieve neater and cleaner edges ready to receive tile and stone edge details.

Chose... Schlüter®-KERDI-BOARD

Offering design flexibility, ease of installation

and enabling the creation of CE Marked bonded waterproofing assemblies, the versatile and unique Schlüter®-KERDI-BOARD is a robust and practical backerboard, capable of supporting up to 60kg/m². Its construction consists of an extruded hard foam core panel, with a special reinforcement material on both sides and waterproof fleece faces to finish, providing effective anchoring in the tile adhesive. Providing a smooth substrate and enabling precise angling of corners, seven thickness options are available – ranging from 5-50mm. Plus a utility knife is all that is needed to cut it to shape and size.

This core product in Schlüter-Systems' portfolio is the key to an easier specification process and a quicker project progression. For more information, email pr@schluter.co.uk.

01530 813396 www.kerdi-board.co.uk

Armstrong Ceilings set to help focus on delivering hundreds of new schools

With just a couple of months to go before the start of the summer holidays, latest research by public sector procurement specialist Scape Group shows 640 new schools will be needed over the next two years.

In that time an additional 385,000 pupils are expected to join England's school system, with every region in the country experiencing at least a 3 per cent increase on the current number of pupils.

To handle the demand, Scape Group is asking for focus on delivering a strategy and solutions which not only provide high-quality, modern spaces for teaching and learning but also offer local authorities cost certainty, value for money and timely delivery.

But buildings for education are among those which have particularly onerous design requirements in the areas of acoustics, natural light and fire resistance.

Elements for consideration for the design of ceilings are:

1. Any room will have an optimum reverberation time (RT) requirement depending upon its use and size and whether the main activity is speech or music based. Providing too much sound absorption, and hence having a very low RT, can be just as acoustically damaging and undesirable as having insufficient sound absorption when an excessively long reverberation time will result. Office workers improve their focus on tasks by 48 per cent when speech privacy is improved.
2. You can calculate the reverberation time of space by using a mathematical model based upon the "Sabine" formula which takes into account the significant surfaces of a room, their respective sound absorption coefficients and the room dimensions. An acoustic module available from some manufacturers enables a simple indicative calculation to be made. Once the total sound absorption present in a room (from both planar surfaces and objects) has been calculated, an estimate can be made of the room's probable reverberation time. The installation of clouds and canopies in a reverberant space can significantly reduce the reverberation time and contribute to the reduction in background noise.



3. Fire resistance in a suspended ceiling can only be achieved by a combined tile and grid system as there is no such thing as a fire resistant tile or a fire resistant grid. Depending upon national legislation, the type of structure to be protected (wood, concrete or steel) and a manufacturer's product offer, ceiling systems can typically provide at least 30 and more than 60 minutes' protection. Full details of the ceiling type and construction, protected structure and tested time are given in fire reports available from the manufacturer.
4. The increased use of concrete thermal slabs as heat sinks rules out wall-to-wall ceilings. But not having an acoustic ceiling will mean higher reverberation times and unacceptable noise levels. The installation of canopies in a reverberant space, in sufficient numbers and layout to satisfy both technical and aesthetic considerations, can significantly reduce the reverberation time and contribute to the reduction in background noise and occupants' comfort and well-being.
5. According to a Brinjac Engineering study (2006) on the environmental effect of high-light reflectance ceilings, the use of a 90 per cent light reflectance ceiling tile combined with indirect lighting can provide cost savings of up to 20 per cent, equating to as much as an 11 per cent reduction of the energy buildings use, compared with a standard 75 per cent light reflectance tile. Canopies installed over an

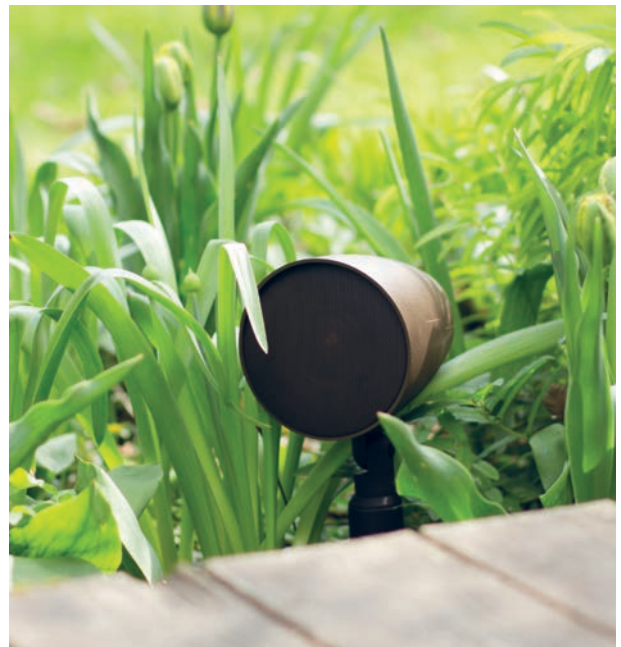
individual working place can improve the light reflection over that space and provide improved user comfort without affecting other areas.

6. Standard ceiling tiles can not only be used to hide or integrate service elements such as lighting fixtures, loudspeakers, air diffusers, chilled beams and sprinkler systems, but provide minimal grid visibility for a clean and monolithic ceiling finish. The system can also be integrated into canopies to offer design solutions for thermal mass and is flexible enough to allow the re-configuring of room layouts and service element positions without moving ceiling panels.
7. It is now possible to calculate (according to ISO 14021) exactly what degree of recycled content a ceiling tile comprises, and recycling schemes such as those for the off-cuts from new installations and end-of-life tiles from refurbishment and strip out projects, both of which divert waste from landfill, will increase this ratio exponentially. Some ceiling tiles comprise more than 70 per cent recycled material and some ceiling systems are capable of achieving an Ecopoints rating of 0.16.

For more information, please email sales-support@armstrong.com.

0800 371849

www.armstrongceilings.com/commercial/en-gb/technical-downloads.html



Ultra-discreet loudspeakers for any location

British loudspeaker designer, Monitor Audio, has a range of Custom Install speakers for every situation. Their ultra-discreet in-wall and in-ceiling speakers deliver a stunning audio performance whilst protecting the room's décor. For more extreme environments, such as outdoor terraces or pool rooms, they offer a choice of speaker ranges, all of which deliver Monitor Audio's award-winning sound.



monitoraudio.com



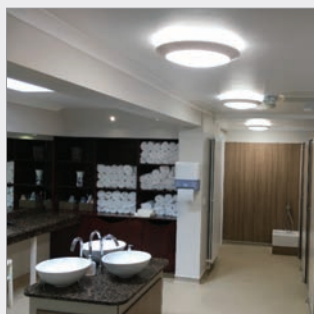
Changing places at Tottenham Hotspur



The new £1billion Tottenham Stadium claims to be world class, in every way- through to accessibility. The new venue – heralded as a benchmark in global stadium design – is the latest to be built fully compliant with Accessible Stadia guidelines. As such, it includes within the stadium 2 x Changing Places toilet facilities, both supplied by the market leader **Closomat**. The Changing Places toilets deliver appropriate space (12m²), plus an adult-sized height adjustable changing bench, height-adjustable washbasin, and full room coverage ceiling track hoist alongside a conventional, peninsular WC. The Changing Places mean that anyone who needs extra help, space and/or equipment to go to the toilet can relax and enjoy their time at the Stadium, knowing there are suitable toilet facilities, whether there to watch football, or NFL. Closomat has been involved with the Changing Places campaign almost from the outset, and was the original campaign sponsor. It has supplied and installed hundreds of Changing Places over the past decade, as both new build and refurbishments. Uniquely, it can not only supply and install, but, in-house, provide post-installation service & maintenance.

0161 969 1199 www.closomat.co.uk

Luceco's Celestial lighting at St Enodoc Golf Club



Luceco has recently supplied LED lighting for a general refurbishment at St Enodoc Golf Club, located on the north Cornish coast. After fully refurbishing the hospitality areas within the club house, the changing areas and Pro Shop were next on the list. Celeste, an attractive circular LED luminaire from Luceco featuring a 'corona' backlight effect with a direct / indirect light distribution, was chosen for the ladies changing areas. The Celeste is ideal for many commercial and residential lighting applications offering up to 50,000 hours working life with no maintenance or re-lamping requirements. Celeste is available as standard output, digital dimming, microwave, and emergency variants including self-test. Celeste can be surface mounted as at St Enodoc Golf Club, wall mounted, or suspended using a 3 point 1.5-meter suspension kit, creating an attractive "heavenly" pendant. The backlit accent effect is available in red, yellow, green, and blue plus a choice of decorative bezel trims including white, brushed chrome and steel finish. IP65 rated Atlas was also used in the shower and WC areas, providing an alternative to traditional 28 and 38-watt 2D compact fluorescent fittings.

01952 238100 www.luceco.co.uk

MODERN LIGHTING SOLUTIONS



Specialists in
GLOBAL lighting
 & Spot Lighting
 Tel: 0203 805 2288
www.modernlightingsolutions.co.uk

Traditional with a modern twist



BLANCO has created the FARON XL 6 S; a large sink with a SILGRANIT® PuraDur® finish which is perfect for bringing a modern country house style into the kitchen. The FARON XL 6 S comprises a generous bowl with a draining board which features double grooves. The grooving in the seamless surface enables water to run off and the SILGRANIT® PuraDur® finish prevents stains. The wide tap ledge offers plenty of space for washing-up accessories whilst the spacious draining board provides an easy-to-clean preparation surface. The uniquely patterned wooden chopping board is a useful and stylish addition to the workspace.

www.blanco.co.uk

28 colours to keep kitchens on trend



As one of the first companies to introduce quartz to the UK market, Königstone is proud of its growing range of quartz worktops: Königquartz. Quartz is one of the toughest natural substances making it the perfect material for kitchen worktops. Quartz worktops are highly scratch-, stain- and heat-resistant, have a consistent design from the engineered aspect and are easy to maintain. The Königquartz range is currently made up of 28 colours with varying designs to complement any kitchen scheme; whether homeowners are looking for an elegant marble-look worktop or a trendy modern industrial style, there is something for everyone.

info@konigstone.co.uk

Accessing improvements

The lack of access into commercial and public buildings is still a key issue affecting disabled people in the UK. Christian King of Kee Systems looks at the current regulations and explores how premises should be built or upgraded to improve disabled access

According to the 'Facts and Figures 2018' report published by The Papworth Trust on Disability, there are 13.3 million disabled people living in the UK, making up around 20 per cent of the overall population. The report also states that the most commonly reported accessibility difficulties for disabled people in accessing goods and public services are shopping (20 per cent), cinema, theatre and concerts (15 per cent) and pubs and restaurants (14 per cent).

This was illustrated further in March, when a dispute between a restaurant owner in Cambridge and a disabled woman was settled outside of court after a step prevented her from entering the restaurant. The case was taken to court and the restaurant owner agreed to cover the woman's expenses and provide a donation to a charity to acknowledge the distress that she experienced. The owner also – and more importantly – improved the wheelchair access to the building. This is just one of many examples of disabled people not being able to access public buildings.

Laws tackling the discrimination and inequality against disabled people in the UK have existed for a number of years. These regulations state that "reasonable steps" need to be taken to ensure disabled people are not at a disadvantage when accessing commercial and public buildings. However, it seems that buildings are still not being built or upgraded to meet the required standards.

What is reasonable will depend on all circumstances, including the cost of an adjustment, the potential benefit it might bring to visitors, the resources a client has, and how practical the changes are.

The Equality Act 2010 requires that property owners must think ahead and take steps to address barriers that impede disabled people. Previously – under the Disability Discrimination Act (DDA) – adjustments to premises had to be made



Architects should aim to have handrail systems installed from which children, the elderly, the disabled and even able-bodied adults can benefit

only where it would otherwise be 'impossible or unreasonably difficult' for a disabled person to access the property. Under the Equality Act, adjustments must be made where disabled people experience a "substantial disadvantage."

A common solution can involve taking out physical structures like steps and replacing them with ramps, or simply providing handrails to aid wheelchair or other disabled users. In these cases, the precise obligations set out in 'Building Regulation Approved Document M' specify that handrail heights on all building



stairways and ramps do not discriminate against any disability group.

On access ramp gradients, which vary from two through to five degrees, handrails need to be positioned on both sides, or centrally for a wide path, to allow a choice of which arm to use for support. They should be installed on both sides of the ramps that are longer than two metres and should, where possible, extend 300 mm beyond the top and bottom of the ramp or staircase. The Building Regulations stipulate an outside diameter tube size for such installations of between 40 and 45 mm, and must be offset in the case of a mid-height handrail.

Architects and specifiers must satisfy these regulatory requirements, yet also be able to meet customer demands on aesthetics as well as on cost-effective options. This is really important on retrofit projects, where the time and cost involved in removing handrails and replacing with a new structure can seem incredibly expensive.

One option is to adapt existing handrails to meet the requirements of Part M and the Equality Act. There are many solutions on the market which are ideal for heavy traffic environments, and which allow both speedy

and seamless retrofitting as well as hassle-free and simple installation in a new build. This is hugely important to those businesses where there is no option of down time.

There are fittings available which provide versatility to help adapt to a particular installation's requirements. These ensure that handrails can be assembled at any required angle, or to offer a midpoint connection to dual handrails, when required. One-piece 90° corner elbow and an adjustable elbow fitting, meanwhile, ensure that any new handrailing structure created can cope easily with different angles and changes in direction. Product ranges which include 'Add-on' offset fittings remain popular; they lend themselves well to retrofit projects, where the new handrail can simply be added onto an existing structure of the appropriate size.

Given the requirements of the Equality Act and Building Regulations, architects should aim to have handrail systems installed which children, the elderly, the disabled and even able-bodied adults can benefit from.

Christian King is general manager at Kee Systems

earthborn®



Introducing the Earthborn #Claymates

Earthborn has relaunched its website with some wonderful new features, offering paint colour ideas, decorating tips, the latest news and competitions. Earthborn paint is special, with some truly unique qualities. Its signature Claypaint is made from real clay, making it luxuriously thick and creamy, highly breathable and with a distinctive ultra flat matt finish. To help spread the word, Earthborn asked five fabulous interiors bloggers to contribute to a year of inspiring projects and room makeovers. Throughout 2019 Earthborn will be working with five brand ambassadors, dubbed the Earthborn #claymates! Across the year, you can check out their personal projects and room makeovers, all using Earthborn. They are Soozie Danson from The Patterned Palace (@sooziedanson); Kimberly Duran from Swoonworthy (@swoonworthyblog); Luke Arthur Wells (@lukearthurwells); Jess Hurrell from Gold is a Neutral (@gold_is_a_neutral) and; Emma Jane Palin (@emmajane Palin).

If you would like to get involved in the #claymates campaign, join Earthborn on Instagram, Facebook, Twitter and Pinterest where there will be competitions – hosted by each of the #claymates – plus a special discount code for the website.

info@earthbornpaints.co.uk
www.earthbornpaints.co.uk

C-TEC safeguards award-winning care home



C-TEC systems provide the highest levels of protection at Mlesian Manor, an award-winning care home in Magherafelt. Communication is facilitated by a powerful Quantec addressable call system specifically tailored to meet the home's requirements. Each bedroom is equipped with a call point and patients

have their own tail call leads for assistance calls. Door entry/exit monitoring systems are also in operation powered up by a series of C-TEC's EN54-4 certified power supplies. At the heart of the home's fire protection system is one of C-TEC's revolutionary ZFP 4-loop addressable fire panels connected to four stylish compact controllers.

www.c-tec.com

Making towers smoke safe



Following the acquisition of STG-Beikirch in 2016, Kingspan Light + Air has increased its smoke management solutions offering in the UK market. A notable life-saving solution in the STG-Beikirch range is the Smoke Pressure System (SPS). In the event of a fire,

SPS – also known as overpressure ventilation systems – save lives by ensuring escape and rescue routes remain smoke-free for building occupants and firefighters. If a fire occurs, the SPS detects smoke and floods the escape and rescue areas with fresh air, keeping smoke out.

01352 716100 www.kingspanlightandair.co.uk

What sustainability looks like

Peter Sotherton of Teknos GBI discusses the development of more sustainable exterior paints and coatings, and how they can help client organisations ensure they are acting responsibly when it comes to the environment

Paints and finishes are an important part of the sustainability jigsaw. Good quality performance paints enhance and protect buildings, helping to maintain and extend the life of materials, saving on replacement and the consequent use of natural resources. These are particularly important considerations when specifying paints and coatings for exterior use; for example, those used to protect timber windows, doors, conservatories and cladding.

Oil-based paints would traditionally have been the first choice, but these involve the production of toxins, which can harm humans. The most obvious indication of the damage conventional paints can do is the odour they give off due to VOCs (volatile organic compounds). VOCs rank high on the list of concerns when considering paints, although they are found in other materials such as domestic cleaning products and furniture. These chemical compounds vaporise, so the fumes affect those applying the products as well as those occupying the building, because 'off-gassing' continues, even after the paint has been applied. This unseen hazard can result in allergic reactions, nausea, dizziness and headaches; VOCs are also linked to cancer. According to the World Health Organisation, professional decorators have a 40 per cent greater risk of lung cancer.

Following regulations to minimise, monitor and control the harmful effects of VOCs in 2007, the levels in paints have been steadily reduced, and products must be compliant in formulation and labelling. This does not make all paints equal; some are much more sustainable than others, both in their chemical content and performance in use. Labels such as eco, green and organic are often used in the marketing of paints, but cannot be relied upon when specifying products, as there are no set standards for defining these labels.

Manufacturers that are committed to providing sustainable and innovative solutions offer ranges that include water-borne paints. These are low VOC and, unlike traditional oil-based products, do not



contain heavy metals and other toxins. They also have a lower carbon footprint and embrace manufacturing processes that have a lower environmental impact.

True sustainability goes much deeper than the end product; it should permeate the entire business. Manufacturers that take their responsibilities seriously have sustainability integrated within their business model. Products must use fewer and more sustainable resources; in turn meaning increased use of renewable and secondary raw materials and the analysis of life-cycle impacts.

This means taking responsibility for the entire value chain, from procurement to delivery. Defining and comparing energy and carbon emissions is far from straightforward and the various methodologies and data used



True sustainability goes much deeper than the end product; it should permeate the entire business

can produce a wide range of embodied values for any given material or process. To overcome these problems, Environmental Product Declarations (EPDs) offer a standardised way of measuring paint's environmental impact. The declarations cover the life stages from cradle-to-gate and include information on raw material acquisition, energy use and efficiency, raw material substances and chemicals used, and the environmental impacts related to emissions and waste for a specific product range.

High quality, sustainable water-borne paints compare favourably with traditional oil-based products in terms of performance, with low VOC levels and little or no unpleasant odour. When used on external joinery they can offer superior durability. Due to the flexibility of the paint film, they are less likely to crack and have excellent resistance to the weather and UV rays, retaining their colour and surface appearance over time.

In the past, some water-borne paints have been criticised for being difficult to apply, with poor coverage and slow drying times, but this need not be the case. The latest generation of innovative products has solved these problems while also embracing the

trend for strong colours. This is achieved through the use of high-grade raw materials, including superior pigments and binders, and a large proportion of 'solids.' Various sheen levels are offered today with a high gloss finish available that is comparable with the appearance of traditional oil-based products.

These water-borne paints are easy to use and have a good flow and even spread, while the number of coats required is reduced. All of these factors help make the process of application easier, whether with a brush, roller or spray. Where necessary, products may be thinned with water. Decorating equipment is easily cleaned ready for reuse using water and a suitable detergent – no solvent cleaner is needed.

It must never be forgotten that the environmental impact of paint is part of the environmental impact of a whole building. As with any product, the key to its specification is remembering that the least sustainable product of all is one which fails to work, or, worse still, makes the people using it or living with it unwell.

Peter Sotherton is business development manager at Teknos GBI; a leading supplier of water-borne coatings

**BUY BRITISH, BUY QUALITY,
BUY Jeckells SHADE SAILS**

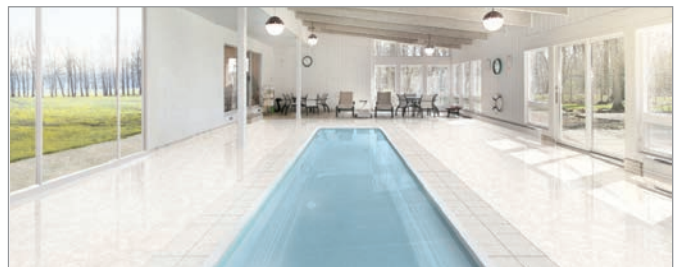


We design and manufacture Shade and Weatherproof Sails in commercial and domestic environments. Our forte is engineering solutions that not only look good but will also stand the test of time in unpredictable outdoor environments.

All our Shade Sails are individually designed with colour, shape and size to suit your particular requirements. Architecturally stunning. We use either Stainless Steel or Timber posts depending upon the environment. Our Shade Sails are easily fitted and removed. A full design, installation and maintenance services is available.

Jeckells 
THE SAILMAKERS

For more details please call **01603 782223**,
email fiona@jeckells.co.uk or visit www.jeckells-shade-sails.co.uk



SUPERIOR ONE-PIECE POOLS

- The most cost effective solution for a below ground pool
- For indoor and outdoor use
- One-piece reinforced fibreglass construction
- Corner steps, roman ends and cover chamber options
- Pool insulation available during manufacturing process
- Extensive range of models available
- Over 40 years of fibreglass manufacturing experience



www.bakewellpools.co.uk
Tel: 01865 735205

**Bakewell
POOLS**

UK industry can help revolutionise future mobility with all urban's smart cycling point



All Urban celebrate the launch of Monna, a new innovative smart cycling point into their designer product portfolio. They specialise in supplying UK industries with world-class innovative products and welcome this new addition which has the potential to revolutionise urban and rural mobility and transform everyday journeys. Monna has been designed and manufactured by Croatian company Include, who have quickly built up a reputation for delivering world-class SMART technology. The Monna cycling point is suitable for both urban and rural areas and represents innovation in the Smart City market by combining urban furniture, the Internet of Things (IoT) and solar energy for a new GreenTech solution. It features specially designed solar panels which deliver a fully sustainable power source to locations with no electricity. The solar-powered point comes with multiple functionalities – bike repairing tools which includes an air pump and is accessible using Wifi authorisation, bike racks and electrical sockets for charging electric bicycles, wireless charging pad and charging ports for wired phones, night illumination and data collection capabilities.

0114 282 3095 www.allurban.co.uk/include

The Winn Building opens at Eastbourne College



Mr David Winn OBE, chairman of leading corrosion prevention and sealing specialists, Winn & Coales (Denso) Ltd, has been recognised for his ongoing support of Eastbourne College with a building on campus named in his honour. The Winn Building is a new, purpose built facility featuring an array of state of the art amenities, including multiple sport and fitness suites, function rooms, dining facilities and classrooms. The opening of the Winn Building, named in recognition of the College's greatest living benefactor, signals the completion of Project 150 at the site in East Sussex, which saw a £33 million investment in the College campus to celebrate the school's 150th anniversary. Winn & Coales (Denso) Ltd are a leading manufacturer of corrosion prevention systems for the long term protection of above and below ground pipelines and steel structures. Their company chairman, Mr David Winn OBE, is only the third chairman in the company's 136-year history and has been with the company for over 53 years. Mr Winn attended Eastbourne College from 1954-59, and today the school is one of the UK's leading independent co-educational day and boarding schools.

0208 670 7511 mail@denso.net



Working with nature

SiOO Wood Protection AB are leaders in wood protection using silicate technology.

Specified by architects across Europe, our patented SiOO:X product gives long life and a beautiful natural surface with even colouration. It is friendly to people and the environment. An example of a SiOO:X project is this house in Devon where the Siberian Larch cladding was factory treated by Russwood Timber with SiOO:X Mid Grey pigment.

SiOO Wood Protection AB
www.sioox.org.uk

SWEDISH PATENTED SILICON TECHNOLOGY



Photography by Alex Campbell.

Hauraton high capacity drainage systems installed at Port Sunderland

The Port of Sunderland now boasts some impressive infrastructure and associated services. Municipally owned and situated on the south side of the River Wear, the latest wharf facilities now



allow for multi materials handling. A fleet of fork lift trucks, from four tonne to 29 tonne capacity have a wide range of attachments to meet all cargo handling requirements. Additionally, a drop-sided HGV, an articulated tractor unit and two 40-tonne low-loaders are also available for transportation of cargoes within the port estate.

Designed to resist the rigours of site work, 180 metres of Hauraton RECYFIX® HICAP® 8000 high capacity channels were installed to drain the wharf area. Factory fitted with 14mm wide slotted ductile iron inlets, the channels comply with a loading class of F900 so can easily take the weight of the fully laden vehicles employed. Importantly, once installed the complete channel system is highly resilient to the twisting forces imposed by their wheels.

The RECYFIX® HICAP® one metre channels used each have a water capacity of 171.4 litres so the 180 metre channel system



installed is able to accept a water volume of 30852 litres. Trash boxes to match the channels were also supplied.

01582 501380 www.drainage-projects.co.uk

Designed to make a difference
Recycle more and waste less with Method

methodrecycling.com

Introducing Resiblock's Resiecco

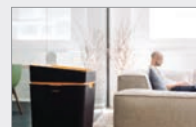


Resiblock have combined with Rosgal Ltd to provide sealing solutions for Stockport Councils Cheadle Corridor Scheme. Resiblock were specified by Stockport Council, and following consultations with Rosgal, Resiblock Resiecco has

now been manufactured for site, which has seen both new paving and an extension to paved cycle lanes installed. Resiblock Resiecco will provide both joint stabilisation and long-term paver protection to both the Concrete Block Paving and Concrete Slabs that have been laid. This marks the second installation of Resiblock Resiecco for Stockport Council following successful sealing works at Bridgefield Street in 2017.

mail@resiblock.com

Recycling Redesigned



Designed to be out in the open, Method's award-winning 60L recycling bins are coded with information to help users accurately sort their waste. Placed together they form flexible recycling stations to be located throughout a space. Pioneers of the Open

Plan Recycling philosophy, Method's bins become part of the furniture; becoming a visible statement of the organisation's commitment to sustainability. Introduce the Method system into your next sustainable design and watch the way it transforms not only individual recycling behaviours, but the environmental footprint of the building.

www.methodrecycling.com

CLASSIFIED & DIRECTORY

CLADDING & FACADES

Kingspan Facades
Tel: 01352 716100
www.kingspan.com/gb/en-gb/products/architectural-facade-systems

COATINGS & FINISHES

Owatrol Coatings UK
Tel: 01582 592707
www.owatrol-direct.co.uk

CONCRETE

Milbank Concrete Products
Tel: 01787 223931
www.milbank.co.uk

DOORS & WINDOWS

Garador Ltd
Tel: 01935 443 722
www.garador.co.uk

GLASS & GLAZING

Lamilux UK
Tel: 01284 749051
www.lamilux.co.uk

Senior Architectural Systems Ltd
Tel: 01709 772600
www.seniorarchitectural.co.uk

GLASS & GLAZING

Structural Glass Design Ltd
Tel: 0333 577 7177
www.structural-glass.com

GREEN ROOFS

Optigreen Ltd
Tel: 0845 565 0236
www.optigreen.co.uk

INSULATION

Recticel Insulation Products
Tel: 0800 085 4079
www.recticelinsulation.com

LANDSCAPING & EXTERNAL WORKS

Wykeham Mature Plants
Tel: 01723 862406
www.wykehammatureplants.co.uk

LIFTS, STAIRS & ESCALATORS

Stiltz Limited
Tel: 0808 256 3649
www.stiltz.co.uk

PRECAST CONCRETE

British Precast
Tel: 0116 232 5170
www.britishprecast.org

PUMPING STATIONS

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

R&D TAX CREDITS/ PATENT BOX

MCS Corporate Strategies Ltd
Tel: 01926 512475
www.mcs-corporate.com

RADIATION SHIELDING

Midland Lead
Tel: 01283 224 555
www.midlandlead.co.uk

ROOFGLAZING & ROOFLIGHTS

Whitesales
Tel: 01483 271371
www.whitesales.co.uk

ROOFING

Kemper System
Tel: 01925 445532
www.kemper-system.com/UK/eng

Midland Lead
Tel: 01283 224 555
www.midlandlead.co.uk

STREET FURNITURE

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

SAP & SDEM CALCULATIONS

EAL Consult
17 Dobree Ave, London NW10 2AD
Tel: 0208 930 5660
info@ealconsult.com
www.ealconsult.com
EAL Consult specialise in Building Regulations Part L compliance, SAP, SBEM, Thermal Bridging, BREEAM and Energy and Sustainability reports for obtaining planning permission, CPD training

WASTE MANAGEMENT & RECYCLING

Method Recycling
Tel: +44 7763 525 668
www.methodrecycling.com
Method has redesigned recycling, bringing beautiful recycling bins out into the open plan of modern facilities. Helping organisations recycle more and waste less, beautifully.

WINDOW CONTROLS



WP
WINDOW OPERATORS
Manual + Electric
New + Repairs
Teleflex + Clearline + others
For High Level & Awkward
to reach Situations
WP Window Controls
T/F: 01344-886459
www.wpproducts.co.uk



BE WISE WHEN YOU ADVERTISE
ADF IS INDEPENDENTLY VERIFIED BY ABC



adf
architectsdatafile.co.uk

WEBSITE

The ADF website is an online provider of past and present products and news items for the architect or specifier. www.architectsdatafile.co.uk is a one-stop source for all the latest press releases providing any visitor with access to information about products and services that they may require for their project as well as news relevant to architectural developments.

NEWSLETTER

The fortnightly ADF email newsletter is designed to provide you with the latest products and services, direct to your inbox. You can quickly gather a snapshot of information from up to 12 carefully selected companies and easily follow links through to further information on the website or go directly to the company's website. Go to the ADF website to subscribe.

DIGITAL ISSUE

The ADF digital issue provides all the same content as the print issue with the added advantage of being instantly available whenever and wherever you have access to the internet. In addition to its ease of access, the ADF digital issue gives direct links to advertisers, allowing you to visit a potential supplier's website with the click of a mouse. Subscribe on the ADF website.

Promat

**One small change to a
specification could lead to
a domino effect.**

One tiny change to a fire rated glazing specification risks setting off a catastrophic domino effect if a fire breaks out. Stick with SYSTEMGLAS®, a fully certified fire rated glazing system, for maximum safety, quality and supply chain traceability.

SYSTEMGLAS® has a heritage of over 30 years with a variety of framing options with fire ratings from EI30 up to EI120.

Find out more at promat-glass.co.uk/specifiedforareason

Promat SYSTEMGLAS® Specified for a Reason®

Promat UK Ltd | 0800 588 4444 | sales@promat.co.uk

etex industry