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# FROM THE EDITOR



I predict that for fairly disappointing reasons of short-term political gain, construction – and more specifically, housebuilding – could be the key dominating issue of the next General Election campaign. We know that things like the ‘mutant algorithm’ have the power to lose Tories’ safe seats (such as Chesham and Amersham in 2021), so there is no saying that similar seats won’t see planning aims held hostage while local MPs attempt to placate voters.

In the *Telegraph* recently, Matthew Pratt, chief executive of top 10 housebuilder Redrow bemoans the setting of local housing targets based on what he sees as national political priorities. He claims that this is working against local people’s needs and that the “person without a house doesn’t have a voice, whereas those with houses do.” This is a slight shift from the normal complaints about the slowness of the planning system, to a suggestion that the Government is directly sabotaging developments by listening too much to local people!

Michael Gove has aimed to create waves at the Department of Levelling Up and Housing, and as a result of his strong words for housebuilders, such as ‘cartel,’ Pratt believes that now the industry has “probably the worst relationship with the Government that it has had in my lifetime.” This does make you wonder just how cushy it was in the past, when housebuilders are reportedly to be let off their agreed requirements to achieve nutrient neutrality in new developments (on the back of several soft-pedal Government decisions in recent years, such as losing the Code for Sustainable Homes and removing the original zero carbon target).

Housebuilders simply are not policed effectively enough by a governance set up, beyond Building Control, in order to castigate them for not adhering to moral guidelines. They are driven by profit, and the larger ones by shareholders, which means it’s not even in their interests to build until they have sold all the plots on a site. Asking them to do otherwise is foolish.

The Government is probably the only means of creating a system whereby housebuilders will build in excess of their requirements, particularly when the market is dropping at a rate of knots. Which is why Redrow’s Pratt thinks that an independent body like the Migration Advisory Committee should decide on housing need in each area, not “a government committee.” And this should be done “on the basis of population growth, immigration and everything else.”

This won’t happen before the next election, so the battleground of housebuilding provision could be a bloody one for both Labour and the Tories, but particularly the latter. Perhaps architects will slowly begin to have a bigger role, as the bigger housebuilders struggle to find the sites that are politically acceptable, and profitable.

## James Parker, Editor

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**ON THE COVER...**

HS2’s new ‘super-hub’ station in West London designed by WSP and WilkinsonEyre has been awarded BREEAM Outstanding.

For the full report on this project, go to page 8

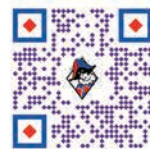


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## TRANSPORT

# WSP and WilkinsonEyre's HS2 'super-hub' design awarded BREEAM Outstanding

HS2's new 'super-hub' station, currently under construction in West London and designed by a team led by WSP and architects WilkinsonEyre – has been awarded BREEAM Outstanding.

Old Oak Common is planned to be the largest newly built station in the UK, and joins another HS2 station, Birmingham Interchange Station in achieving the Outstanding rating. It's a sustainability design accreditation thought to have been met by only 1% of new build assets globally.

The project's BREEAM credits have included responsible construction practices, "aftercare planning," cyclist facilities, life-cycle impact, "exemplary" waste management practices, and design for adaptation to climate change.

Elements of the station's design reduce its operational reliance on energy, said the architects, including an open plan layout with an atrium that allows for natural ventilation, and occupancy and daylight sensors that reduce demand for artificial light.

The design was also awarded an "exemplary credit" for its adaptation to climate change, taking into account thermal modelling that showed that the station won't overheat as a result of potential climate change impacts and events.

Rainwater harvesting at the station is expected to cover 100% of the demand for urinal and WC flushing at the station.

During the station construction there is a commitment to waste efficiency, with 95% of site materials sent for "beneficial" reuse.







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## BUILDING REGULATIONS

# Architects going ‘above and beyond’ Part O on overheating

A study by Pilkington UK has found that the majority of architects are “going above and beyond the minimum” when it comes to designing for minimising overheating in new homes, in the light of new Building Regulations.

According to Pilkington, “Nine in 10 architects are going above and beyond the minimum requirements for tackling overheating in new homes, as developers seek to protect residents against extreme heat waves.”

The manufacturer polled 100 architects a year on from the introduction of the Building Regulations Part O, which laid out stricter measures for new homes to minimise their risk of overheating.

Encouragingly, only 9% admitted to designing to the new Regulations’ minimum requirements. The study suggested that “developer demand” was among the factors motivating architects, said Pilkington. Almost a third (32%) of respondents said extreme heatwaves were leading to greater interest in overheating from developers in terms of occupant wellbeing, and this would be the biggest factor influencing greater measures for combating overheating in new homes over the next five years. Meanwhile, two in five (40%) architects said Part O would be the top driver.

Despite the positives, the study found 71% of architects agreed there was a missed opportunity in Part O in limiting the strictest measures for combating overheating only to London and central Manchester, with other areas being at a similar risk of overheating.

The study also found that a majority of architects (57%) had found compliance with Part O ‘easy.’ A larger majority (70%) said they were specifying more solar control glazing for residential projects since Part O was introduced last year.

Nearly nine in 10 (86%) architects polled agreed that solutions for combating overheating, like solar control glazing, are becoming increasingly important to new UK homes as the country becomes more



accustomed to experiencing extreme heat waves due to climate change.

However, one in seven (14%) said they most commonly incorporate air conditioning systems to help limit

overheating, despite Part O instructing architects to “exhaust all passive measures for mitigating overheating before considering mechanical cooling,” said Pilkington.





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## SCIENCE &amp; TECHNOLOGY

# Cambridge 'urban lab' reuses retail space to put science on show



Images © Scott Brownrigg

Cambridge Combined Authority has approved plans for the redevelopment of 2-14 Fitzroy Street into the city's first 'urban lab' facility; part of a new network of spaces for the wider Oxford-Cambridge Arc science community. Designed by Scott Brownrigg for client developer Journey, a subsidiary of Brydell Partners, the proposal repurposes and extends a vacant two storey retail space into a "state-of-the-art life science facility and technology hub, helping to reanimate the high street by putting science on show," said the architects.

Located within the Kite Conservation area, the proposal aims to "respect the privacy of neighbouring residential properties," and create a visual result that is sympathetic to the historic setting.

Approximately 28,000 ft<sup>2</sup> of flexible office and laboratory space will be created thanks to a new, lightweight timber extension on the roof. Angled oriel windows on the rear facade will bring in natural light and improve the safety of the

adjacent back street, without compromising the privacy of neighbouring properties. An existing roof terrace will be refurbished to provide tenants with a private outdoor space for year-round use.

Much of the existing building's structure and brick facade will be retained, with new elements introduced to "improve operational efficiency, functionality, and

aesthetics," said Scott Brownrigg. "Green features including a brown roof, green screen and increased planting on the roof terrace, together with swift boxes integrated into the design will improve biodiversity onsite," added the architects. Car parking has been reduced to accessible spaces only and replaced with cycle spaces to encourage a more sustainable and healthy commute.







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## EDUCATION

# WilkinsonEyre design for Wembley campus passed to GLA for approval



WilkinsonEyre's scheme for the College of North West London's campus in Wembley has been passed to the Greater London Authority for final approval, following Brent Council's granting stage one planning permission in July.

Should the plans be green-lighted by the GLA, what the architects describe as a "world-class" education facility will be constructed on the site of the Olympic Office Centre on Wembley Way. It will be developed into an

"innovative, exciting, and sector leading centre of education," commented Stephen Davis, group principal and CEO of client the United Colleges Group. The project comprises a total investment of over £130m, for a building that will cater for over 3000 students per week and 250 staff.

"Green skills," including engineering and the built environment, will be a key area of focus for the facility, which will also offer classes in digital technology, computing,

and health and social care subjects, including new T-levels.

Stafford Critchlow, director at WilkinsonEyre Architects, said: "We are pleased that the team's shared commitment to good design will give this prominent site the architecture it merits. The project makes a confident statement about the value placed on education and skills in Brent, and offers a template for provision across London."

## APPOINTMENT

## Symons joins Planning & Design Practice

Derby-based Planning & Design Practice has announced further expansion of its architectural team with the addition of senior architect David Symons.

David is an RIBA chartered architect who received his qualification at the University of Nottingham, and has experience working in both the UK and Canada.

Prior to moving to Planning & Design, David was project architect as part of a practice of 60 and responsible for project budgets in excess of £20m. His experience includes leading multi-disciplinary teams



and working with local authorities, property developers, and higher education institutions. Projects have ranged from

town centre regeneration utilising government Future High Streets funding, commercial office fitouts, and university projects both throughout the West Midlands and nationally.

David worked for a time in Vancouver, Canada for a large practice producing detailed designs and feasibility studies for large-scale mixed-use masterplans, residential and office high-rises. He also has strong local knowledge having previously worked in the residential and domestic architecture sector in the East Midlands for five years.



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# ASK THE ARCHITECT

As a chartered architect at award-winning practice Marchini Curran Associates, Sara Saadouni reveals what she learnt as a trainee architect in Morocco, and the journey she has been on to design sustainable UK buildings



Sara Saadouni, Marchini Curran Associates

## WHAT MADE YOU WANT TO BECOME AN ARCHITECT?

I've always enjoyed drawing and creative arts for as long as I can remember. Architecture only appeared on my radar when, as a teenager, I had to decide what direction to take with my academic training. I wasn't exactly sure about what the job entailed, and my priority at the time was to be enrolled in a course that had a significant focus on art and creativity.

The National School of Architecture in Rabat, Morocco, did just that and so the journey began. I quickly fell in love with architecture as I explored the work of Gaudi and Calatrava, and felt it became a vocation once I understood how good design could help reduce the environmental impact of the construction industry, as well as help us achieve the sustainability targets that are core to tackling global warming.

## WHAT WAS YOUR FAVOURITE PROFESSIONAL EXPERIENCE WORKING IN MOROCCO?

Throughout my six years of architecture training, it was common for students to work part-time in several practices. As part of this, I worked on a competition in a small practice that designed mostly high-end villas in Marrakech. The director was young, had a strong vision, and had a vernacular take on design that I hadn't seen previously done in Morocco. I remember when the whole team had the opportunity to work from one of the almost finished sites we designed – a beautiful villa in Marrakech with a swimming pool.

It was thoroughly enjoyable to create Sketchup diagrams in such a quiet, sunny environment.

## HOW & WHY DID YOU DECIDE TO MOVE TO WORK IN THE UK?

Halfway through architecture school, I got passionate about sustainable architecture and wanted to learn more. I applied to MSc programmes in the UK and was accepted to the Masters of Sustainable Building Technology at the University of Nottingham and secured a Developing Solutions Scholarship. As this was an MSc programme, it gave me a deep understanding of building physics and new scientific knowledge that helped strengthen my approach to design. After my studies, I decided to stay and gain professional experience in the field, as I could see exciting opportunities on the horizon.

## WHAT'S IT LIKE WORKING AS AN ARCHITECT IN NOTTINGHAM, WHAT ARE THE HIGHS & LOWS?

Nottingham is a great city to live and work in, and there are plenty of exciting ongoing projects including the Island Quarter masterplan. In a sense, it is a small community of construction professionals concentrated in the city centre and the Lace Market. This is a nice feature that facilitates face to face collaboration with consultants as well as networking through the numerous social events organised locally. I can't really think of any lows related to working in Nottingham!



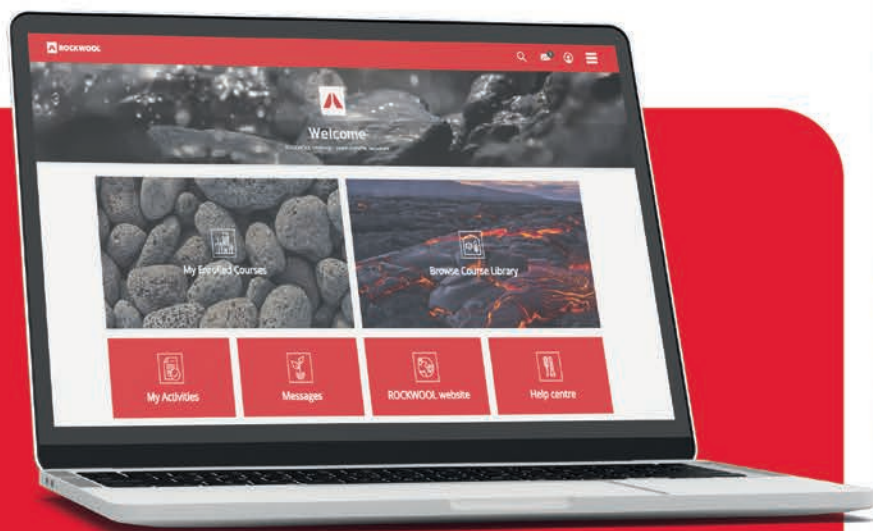
New Crematorium, Denham (illustrative aerial view of proposal from the north west) © Marchini Curran

**I quickly fell in love with architecture as I explored the work of Gaudi and Calatrava, and it became a vocation once I understood how good design could help reduce the environmental impact of the construction industry**



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Proposed rear extension at 8 Bowling Green Street, Leicester © Marchini Curran

### WHAT'S YOUR FAVOURITE SECTOR TO WORK IN AT THE MOMENT?

I find it enjoyable to work on any project that has a positive impact on the community. Community projects are by far my favourite, but I also really enjoy breathing new life into a derelict building. We are working at the moment on a Grade II listed building in Leicester that has been vacant since the pandemic, aiming to convert it into apartments. Protecting such a valuable heritage asset is a great way to create value for the users and for the city in general, as we will be ensuring the building's future.

### YOU ARE ALSO ACTIVE IN THE LOCAL ARCHITECTS' SOCIETY, IS THIS ENJOYABLE & CAN YOU GIVE AN EXAMPLE OF WHAT YOU'VE ACHIEVED RECENTLY (SUCH AS ON DIVERSITY)?

Having qualified as an architect abroad, I had to go through a challenging and lengthy process to register with the Architects Registration Board (ARB) here in the UK. It was hard, and I failed the first time I took the examination. I realised that there was a gap between the requirements of the exams and how candidates can interpret these, depending on where they studied before moving to the UK. After I successfully registered with the ARB, I managed to spin this setback and channel my disappointment into

something positive. This is how 'Roadmap to Recognition' started. Through my work as a committee officer at the Nottingham and Derby Society of Architects (NDSA), I aimed to provide support for prospective candidates willing to take the ARB Prescribed exams and register with the ARB. We interviewed people who had previously succeeded and shared extracts of their work. Candidates reported to us that they found this extremely helpful and didn't feel alone anymore in their struggle. We organised an in-person workshop at the beginning of September, which gave people the opportunity to ask questions and meet peers and mentors, and it was a very beneficial experience.

Another benefit of the 'Roadmap to Recognition' project is that it's highly likely to positively affect diversity, as it mainly applies to architects who are not originally from the UK or Europe. By helping these individuals in pursuing formal recognition with the ARB, the sector will benefit from their different perspectives, cultures, and approaches to design, which I think is key to keeping the profession resilient in an increasingly globalised world.

### NAME A GREAT PROJECT YOU ARE CURRENTLY WORKING ON

I am working on a number of great projects, but the one I'd like to mention is the New Crematorium in Denham,

Buckinghamshire. This project will be accommodating funeral services for the Hindu community, which is currently lacking at this scale. This new building will be a space that can accommodate both the ceremony and ritual that accompany the cremation of a Hindu individual, which is an important rite of passage in Hinduism. As I mentioned, I enjoy working on projects that bring value to the community, and I believe this certainly will, by providing comfort and reassurance at such an important and sensitive time.

### WHAT ONE THING WOULD MAKE YOUR JOB EASIER OR MORE SATISFYING?

If everyone was on the same page about the climate emergency; I believe we've been at a crossroads for a few years now, and we have at this moment the unique opportunity to tip the scales towards a sustainable world and a healthy planet. Unfortunately, however, not everyone is on the same page, with tensions spanning budget and funding available, policy, and commercial interests. I think stricter regulations would certainly help, but true change can only happen if most of us are actively working towards it. As designers, we do need to be working collaboratively with clients and contractors, if we hope to meet any sustainability targets.

### WHAT'S YOUR BIG PERSONAL SHORT-TERM GOAL?

I'd love to collaborate again with the RIBA to organise more support for architects who qualified abroad, beyond the UK and the EU, and looking to register with the ARB in the future. On a more personal level, I am slowly but surely cleaning up my diet to make it as healthy and sustainable as possible. I believe looking after ourselves and our planet go hand in hand.

### DO YOU SEE ARCHITECTS HAVING A GREATER ROLE AS CONSULTANTS ON REUSE OF PROPERTIES FOR THEIR CLIENTS IN FUTURE?

I'd like to end on a positive note, so I'd say 'hopefully'. I certainly hope that the possibility of reusing the existing building stock is explored first before considering a new build, as the life cycle cost of demolition and new construction is significantly higher.

However, having said that, I do think that with an ever-growing global population and an increased demand for housing and other services, our work is cut out for us.





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## SITE LINES

# Bringing a sense of theatre to Devon flood defences

Paul Hargreaves from Jacobs describes how the firm innovated a flood defence project in Sidmouth to create a dual-use amphitheatre for residents, as an amenity which enhanced the environment while helping protect them from future floods



The Sidmouth flood alleviation scheme involved the installation of a new drainage system to divert surface water away from properties. The water is guided via a swale to a flood storage area, which doubles up as an amphitheatre. The design enhances the local landscape and biodiversity – functioning as an outdoor performance venue and recreation space that can be enjoyed by the community, while ensuring it will remain flood-free in most rainfall events.

For many years Sidmouth, a town on the south west coast of England, has suffered regular stormwater flooding, with overland flowpaths draining to a low point directly in the town centre, putting up to around 150 residential properties and businesses at risk. If a major storm were to take place in the town, many local residential and commercial properties would be at risk of flooding.

Devon County Council brought Jacobs in to develop a flood management scheme that would overcome this and navigate





#### NATURAL ENHANCEMENT

The project includes two 'crossdrains' which take water off the highway to parkland

Sidmouth's drainage challenges – including a dense town centre, narrow streets and historic buildings with shallow foundations.

But our team went further, and were inspired to turn the flood defences into an amphitheatre, providing a public space for local communities to visit. We also reinstated a wildflower meadow and planted 11 new trees. Now, over 300 people at any one time can enjoy local events in a unique natural setting, so long as the weather stays dry!

#### The challenge

The project needed to consider how to intercept surface water flows on a busy highway and provide a flood storage solution to mitigate flood flows, while reducing flows into the town centre. More traditional approaches to mitigate flood risk were not viable due to the town's narrow streets and historic buildings, so the storage scheme needed to be located further upstream in an area of open parkland, that was acceptable to the local community and sensitive to the impact on the mature trees.

#### A blue-green infrastructure solution

Favouring Sustainable Drainage Systems (SuDS), we focused on creating an environmentally friendly solution using Innovyze, an

**For many years Sidmouth has suffered regular stormwater flooding, with overland flowpaths draining to a low point directly in the town centre, putting up to around 150 residential properties and businesses at risk**

Autodesk company's drainage design software, that would diversify the flora and support the needs of nature, while creating a useful community asset. We developed a landscape vision for the storage area with an amphitheatre as the focal point of the scheme, creating a venue for community and festival events.

With a strong focus on using recycled, upcycled and sustainable materials wherever possible, we developed a broader system design comprising two 'crossdrains,' which take water off the highway and towards the parkland area, with the outfall discharging into a swale. This leads to the flood storage area – the amphitheatre – designed for dual use. In normal weather conditions the storage area is a stunning outdoor amphitheatre for general amenity use, festivals and other town events.

During extreme rainfall events, water intercepted from the highway will flow along the swale and infiltrate through the surface





#### CENTRAL LOCKING

A lockable self-raising cover was developed by Jacobs for the central control chamber

of the amphitheatre into a sub-surface geo-cellular crate system. Once the sub-surface storage is full, water will pond on the surface of the amphitheatre, but can leave through a combination of the infiltration system and a piped outflow to the nearby surface water sewer network at a greatly reduced rate. In the event of a blockage of the outlet, a spillway can direct flows safely overland into the adjacent area of the parkland.

Using this 'blue-green infrastructure' solution helps improve the water quality of the runoff as it filters through grass and stone media. We incorporated several innovative features and designs including a carefully developed step design to the tiered seating, a state-of-the-art, plastic-free grass product, and reinforced earth techniques to resist erosion. A lockable, self-raising cover and frame was developed to protect the central flow control chamber from any movement and make for easy-access maintenance.

The dual-use approach used here is a model for how all projects should be conceived. Flood defences should benefit the community all year round as opposed to simply when there is a flood event. Maximising the use of blue-green infrastructure in our

**During extreme rainfall events, water intercepted from the highway will flow along the swale and infiltrate through the surface of the amphitheatre into a sub-surface geocellular crate system**

public realm will provide wildlife habitats, local amenities, and mitigate some of the effects of our changing climate. Our green spaces are enormously valuable to local communities, providing mental health benefits, cleaning the air and water, and reducing the urban heat island effect for those living in our cities and urban spaces.

This culturally relevant solution integrates the vital stormwater management into a creative, environmentally sensitive, climate-resilient design – enhancing the local landscape and biodiversity, while functioning as a delightful performance venue and community recreation space now being fully enjoyed by all.

*Paul Hargreaves is senior associate director of water, energy & environment at Jacobs*



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## COMMENT

# A performance-based approach to energy modelling & rating

Shikha Bhardwaj from Hawkins\Brown looks at the changing conversation around energy, and the shift from ‘designing for compliance’ to ‘designing for performance,’ as embodied in the increasingly popular NABERS approach



The conversation around energy is changing. The energy crisis – alongside the climate emergency and the UK’s legal net zero commitment by 2050 – has emphasised the need to minimise the energy use of the built environment. Importantly, the industry has also acknowledged that this outcome cannot be delivered by compliance tools only.

Methodologies such as predicted energy from SBEM Part L or EPC ratings only cover regulated energy-use based on standard assumptions that are not in line with how the building will be operated in real life, and hence are not a true representation. This realisation of the performance gap in energy use between design and operation has started a cultural shift from ‘designing for compliance’ to ‘designing for performance.’

As a result, more and more of our clients are now aware of, and increasingly requesting, more accurate energy assessment methods. These include systems such as Passivhaus certification via PHPP calculation and CIBSE TM54 (Evaluating Operational

Energy Use). Procuring a NABERS rating is also grouped into this set of client requirements. This is positive for closing the performance gap and improving standards, but although client briefs target all the available assessments to the highest rating without understanding the best assessment method for the project and early implementation, performance is still not guaranteed. The use of each assessment method as a design tool to make improvements – and the accuracy of recommendations – demand early implementation, specialist skills and specific procedures that make demands on both time and cost. In addition, specific methods might be more suitable for certain building types than others. Therefore, to maximise the benefits of the process, it is key to compare the relevant assessments at the feasibility stage to identify the most suitable approach for a particular situation.

NABERS UK is a good example of this. Before committing to it, it is important to understand what the scheme is likely to entail. NABERS originated in Australia and has now been introduced and






# Reasons to pick brick.

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## Methodologies such as predicted energy use from SBEM Part L or EPC ratings are based on standard assumptions that are not in line with how the building will be operated in real life

Shikha Bhardwaj, Hawkins\Brown

adapted to the UK, under the management of the BRE. The scheme currently focuses on the commercial sector and aims to address the issue of the energy performance gap between the EPC rating and the actual in-use energy consumption of office buildings. This can be achieved by the two product offerings, including Design for Performance (DfP) and Energy for Offices.

### Design for Performance / Energy for Offices

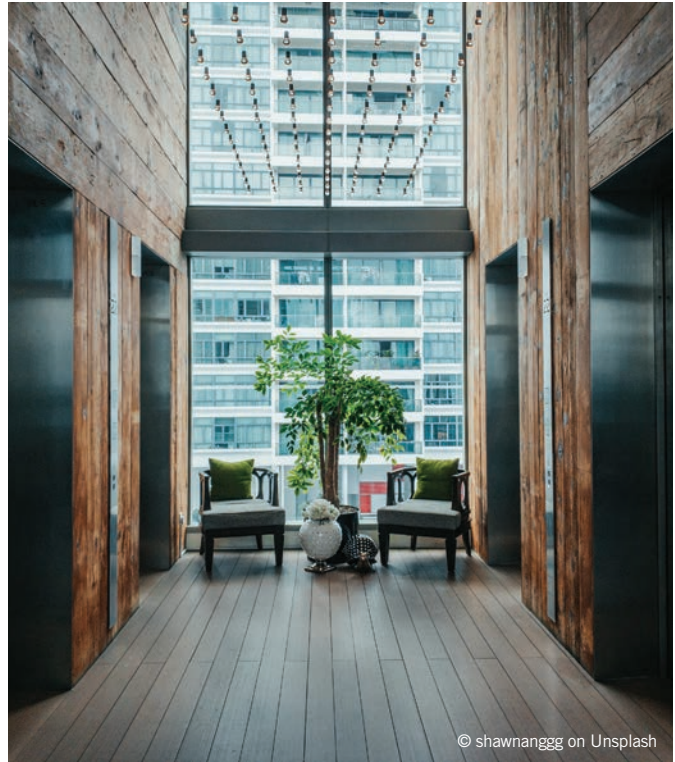
Design for Performance (DfP) is a more rigorous process as it starts early, and involves developers committing to design, build and commission a new office or major refurbishment project to achieve a specific rating. However, as it is more process-led, you could follow the approach without acquiring the actual NABERS rating certification.

On the other hand, Energy for Offices is used to measure the energy efficiency (of an operational office building), based on metered data and then to rate its performance.

Overall, building performance is measured via a six star rating system with a recommended minimum rating of four stars. This is in order to extract the most benefit from the scheme, as it takes a large amount of work and commitment to achieve a good rating. The target is set by the developer/client body, and is then used by designers as the minimum design target for the building.

DfP only begins with signing the agreement with BRE that includes the nominated target energy rating. It is a very contractual and commissioning-based approach that ensures steps are taken in a certain way, and recorded, modelled, and monitored to get the desired outcome. The process requires detailed energy modelling at specific RIBA stages that includes all proposed MEP systems and expected plug-in loads. Third-party evaluations in the form of Independent Design Reviews (IDR) ensure the desired rating can be achieved once the building is in operation. The final certificate is issued 12 months after full operation, based on actual energy data. The certificate is renewed yearly to ensure the building is being operated as designed.

The scheme measures and rates areas that generally fall under the landlord's responsibility; the Base Building, mainly including HVAC, lifts, domestic hot water, common area lighting, and small power. This is a small proportion of the final scheme, and most landlords don't operate their own space. The final rating can be highly influenced by tenant fit-out and management processes. Therefore, it is essential to ensure tenants are aware of their obligations.



Guidance and processes should be in place for clarity – including fit-out guides with detailed design requirements. Tenancy design can be reviewed and modelled to gauge how it affects the performance of the building as a whole, which obviously reduces their flexibility. That might be seen as a disadvantage, but high flexibility doesn't necessarily create a highly sustainable, low-energy building.

### Consider all costs

Lastly, the summary would be incomplete without the mention of costs, given it is a highly detailed process and involves specialists, design reviews, registration, and metering – there are many fees associated with the scheme which does make it more costly with potential impacts on the design programme. So, it's important to get a breakdown of the associated fee and how modelling affects the design decisions to get it covered in the cost plan and overall design programme.

Additionally, while the NABERS UK scheme is only applicable to offices, we have had clients request it be applied to lab-enabled offices. This might complicate the process without necessarily providing the benefit of a lower energy outcome or good rating, because the method is only tailored to standard workspace design.

For certain scenarios where NABERS UK is not considered the most fruitful and viable, the CIBSE TM54 methodology could be adopted instead. The key is to identify and commit to the detailed processes in spite of the complexity instead of relying on the compliance tools. The benefit of using such a scheme covers designing a building with a more accurate energy prediction, thereby closing the energy performance gap. This is a critical step in setting the right targets and KPIs to help reach net zero 2050.

*Shikha Bhardwaj is lead sustainability designer at Hawkins\Brown*



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# INTERNATIONAL FOCUS

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## CHENGDU WEST FIRST BRIDGE, CHINA ZAHA HADID ARCHITECTS (ZHA)

Zaha Hadid Architects (ZHA) was commissioned to build the first in a series of bridges on Chengdu's West Line Road; the 295 metre Chengdu West First Bridge. It crosses the Jiangxi River, a tributary of the Tuojiang River in China's Sichuan province.

With its 185 metre central span and 55 metre secondary span reaching to the riverbanks, the Chengdu West First Bridge is a road, cycle and pedestrian bridge enabling the West Line Road to become the western section of the Airport New Town ring-road and cycle route.

The bridge is composed of two symmetrical primary steel arches that rise to 30 metres from either side of the road deck, which lean together as they rise to "touch tangentially at their crown," stabilising the structure from lateral wind forces. The curvature of the bridge's supporting piers and abutments taper into its primary arches and road deck, "defining a sculptural landmark within Chengdu's transport infrastructure," said ZHA.

The practice used structural analysis software on the design's digital model to ensure the structure and foundations are designed to exceed the standards required for once-in-200-year weather events.





## TIANFU HQ, CHINA AEDAS

Situated in the heart of Tianfu central business district in Chengdu, Aedas global design principal Ken Wai led a team to create Tianfu HQ, a “high-end work-live headquarters tower.”

The design has a “semi-open” layout to allow communal areas and maximise the space for multi functions. The tower has a simple linear facade with slightly tilted panels on the upper half, which outlines an “abstract knot-like architectural form and creates a unique urban fabric,” said the architects.

The podium, which is located to the northwest of the site – and which connects to the surrounding park through a corridor – forms a multi-functional commercial street above the sunken plaza. Two sunken courtyards form a public realm with a multi-levelled retail and underground pedestrian system.



## DAXIA TOWER, XI'AN, CHINA ZAHA HADID ARCHITECTS

Daxia Group has announced Zaha Hadid Architects will build the new Daxia Tower at the centre of the city of Xi'an's development zone.

Located on Line 6 of Xi'an's metro system, the Xi'an High-Tech Economic and Technological Development Zone in the city's southwest includes manufacturing, research and development bases of more than one-hundred Fortune 500 companies and multinational corporations. The new tower for Daxia Group on Jingye Road is at the core of Xi'an's high-tech zone which has become a key driver of the city's economic growth.

Situated on a 16,700 m<sup>2</sup> site at the south east corner of the intersection between Jingye Road and Zhangbawu Road in the Yanta district of the city, the 210 m tower will incorporate 127,220 m<sup>2</sup> of offices, retail and ancillary facilities.

The tower's curving silhouette is accentuated by layers of patterned glazing and dramatic atriums that bring natural light deep into the floorplates, and give panoramic views. Planted interior terraces overlooking the atriums will help foster a healthier indoor environment.

Within Xi'an's temperate continental monsoon climate, Daxia Tower's design targets LEED Gold certification and the highest three-star rating of China's Green Building Program.



© Zaha Hadid Architects

# CPD FOCUS

## MARSHALL-TUFFLEX LAUNCHES FIRST CPD



Marshall-Tufflex has launched a new CPD course accredited by the CPD Certification Service that details the recycling and sustainability properties of PVC-U cable management systems. Aimed at contractors, specifiers, and consultants, the one-hour seminar will explain how these systems can benefit projects and best practices for specification. The launch of Marshall-Tufflex's first CPD, which will ultimately form part of a series, highlights the company's commitment to supporting continued professional development at specifier- and industry-level. Find out more at [cpduk.co.uk/providers/marshall-tufflex](http://cpduk.co.uk/providers/marshall-tufflex) 01424 856600 [www.marshall-tufflex.com/training](http://www.marshall-tufflex.com/training)

## HELPING ARCHITECTS AND SPECIFIERS WITH CPD PROGRAMME



Schlüter-Systems, the specialist in innovative solutions for tile and stone installations, has been offering support and advice to architects and specifiers for over 25 years. Today, this support includes RIBA approved CPD seminars, delivered by experienced Schlüter-Systems specification experts. The range of five 45-60 minute CPD seminars focuses on key application areas: 10 point plan for a perfect wetroom; Considerations for tile and stone installations; Integrated underfloor heating systems; Solutions for crack-free tile and stone coverings; External applications with tile and stone. 01530 813396 [www.schluter.co.uk](http://www.schluter.co.uk)

## RIBA APPROVED CPD 'STEP ON IT!' STAIRWAY SAFETY



This CPD from Quantum looks at the guidelines for the specification of a safe stairway. The presentation and discussion deals with the subject of how to make commercial, public or shared stairways safe and meet all current building regulation guidelines. The seminar lasts 40-60 minutes including time for a Q&A session. All seminars are part of the RIBA core curriculum syllabus and earn double CPD points for those attending the seminars. Now available via Teams, Zoom or Demio – for remote bookings please email for more information. [info@quantumflooring.co.uk](mailto:info@quantumflooring.co.uk) [www.quantumflooring.co.uk](http://www.quantumflooring.co.uk)

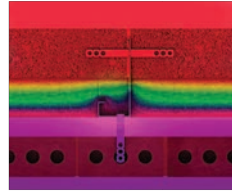
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## Maintaining and improving professional competence, skills, abilities and knowledge

## NEW CPD SEMINAR: WINDPOSTS FOR CONSTRUCTION



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## SPECIFYING HARDWOOD TIMBER DOORSETS



Urban Front are now presenting 'Specifying Hardwood Timber External Doorsets' CPD workshops online and can accommodate up to 20 participants for each available webinar date, or you can book a face to face if you prefer. The objective of this CPD presentation is to enthuse and inform architects about specifying hardwood internal and external doors it also includes detailed information about Passivhaus doors. All the seminars last for about an hour and count for double points for architects and architectural assistants. 01494 778787 [www.urbanfront.com/riba-cpd-offering/book-cpd](http://www.urbanfront.com/riba-cpd-offering/book-cpd)

## SPIRAL AND HELICAL STAIRCASE CPD WEBINARS



Staircase experts, Spiral UK, offer architects a live bespoke staircase CPD presentation on Microsoft Teams or Zoom free of charge at a time that suits them. The session covers: staircase design, stair regulations ADK, ADB, ADM and specifically BS5395 Part II (which relates to spiral and helical staircases), the design, manufacture and install process, materials and finishes and case study examples. The session is 30-40 minutes depending on questions and can be tailored to the interests of the practice. Certificates of attendance can also be issued. 0330 123 2447 [www.spiral.uk.com](http://www.spiral.uk.com)

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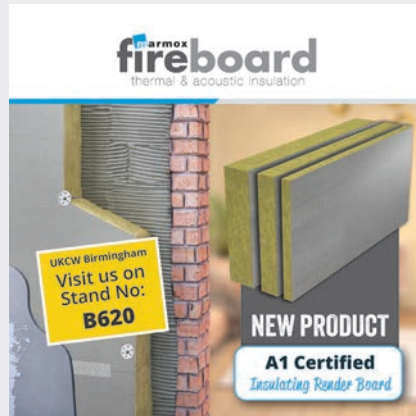


# Marmox showing off at UK Construction Week

Marmox, a leading British manufacturer of waterproofing and insulation solutions, will be attending this year's UK Construction Week show (NEC 3-5 October), where it will be previewing its versatile new Fireboard product alongside the company's well-established Multiboards on stand B620.

Marmox will be concentrating on the exterior applications for both these products, with Marmox Multiboards being presented as render boards, external tile backer boards and for their use in applications such as external garden furniture.

Scheduled for launch early in the new year, the equally versatile Marmox Fireboard will be exhibited as an exterior render board, where it can be used effectively for external wall insulation (EWI) applications. The 600 x 1,200 mm Fireboards, which range in thickness from 20 mm up to 200 mm can be supplied with a polymer modified mortar honeycomb coating on one or both faces.



The new substrate board carries the coveted A1 accreditation of being non-combustible while offering both thermal and acoustic properties. Multiboards are also certified to be used externally to cover outer walls to improve a building's energy efficiency.

In addition to their ease of installation across parapet walls and even within

swimming pools, Multiboards also offer good loadbearing and often get installed across promenade decks to take floor tiles.

The annual event at Birmingham's NEC has attracted over 300 exhibitors who will gather under the umbrellas of Build, Net Zero, Digital Construction and Offsite, along with the co-located Timber Expo. Delegates will also be able to attend a wide range of seminars and CPD sessions, as well as visiting Marmox's stand to speak to its highly experienced technical team.

For further information please contact Marmox or visit the company's website.

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



UK CONSTRUCTION WEEK STAND B620

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UK CONSTRUCTION WEEK STAND B176



**03-05 October**  
**NEC, Birmingham**



# UK Construction Week calls on the industry to act

**I**nnovative, inspirational and progressive, UK Construction Week (UKCW) Birmingham returns for its ninth year this autumn, with a ‘call to action’ for the sector to set its own agenda rather than wait for the Government to respond.

The UK’s largest event for the built environment, registration is now live for UKCW Birmingham, which will run from 3-5 October. The show will run alongside two co-located shows, Grand Designs Live and Timber Expo, which also celebrates its 10th anniversary this year.

Nathan Garnett, UKCW show director, commented: “Construction is often criticised for being too disparate, lacking collaboration, and not addressing its skills crisis, as well as reverting to protecting the bottom line, being scared of innovation and too often ignoring safety and the environment.

He continued: “UKCW, as the UK’s largest event bringing all parts of construction together, is the place to learn from those shaping this rapidly changing industry. We’ll tackle key issues head on – including mental health, fire safety and the skills gap – if you work in any part of the industry, you cannot afford to not be at UKCW Birmingham. We had a hugely successful UKCW London in May, but in such a fast-paced industry, the Birmingham show will give visitors invaluable insight into the latest trends, legislation, innovation and tech, with many new exhibitors and demonstrations.”

The three-day construction show, welcoming over 25,000 visitors, will herald culture change in construction and will feature over 6,000 products and services. Over 150 CPD hours including



sessions led by 400 thought leaders and keynote speakers – including West Midlands Mayor Andy Street – will also be available at UKCW Birmingham.

Visitors will also be able to explore sections dedicated to Build, Infrastructure, Roadmap to Net Zero, Digital Construction and Offsite. The show, which has already allocated more than 80% of its available slots to the likes of 300 exhibitors including Biffa, Topcon, Containex, SDS, Hanson Plywood, Expedeaon, Celsa Steel UK and HP Construction Services, is on track to be the most successful one yet.

**“In such a fast-paced industry, the Birmingham show will give visitors invaluable insight into the latest trends, innovation and tech”**



Officially opened by architect and Channel 4 presenter George Clarke and championed by partners and sponsors such as HP, Northgate, Find It In Birmingham, CIOB, BMF and NFB, the show will feature sessions and seminars led by industry experts across six stages:

- **UKCW Main Stage:** Taking on key construction industry topics with a mixture of keynotes, panel debates and case studies from industry leaders.
- **Sustainability Hub:** The heart of Timber Expo. The hub programme will tackle the issues, layout strategies and case studies to help the sector reach its net zero targets.
- **Infrastructure Hub:** From digitalisation to improving quality and sustainability, this area will deliver a three-day programme for those working on infrastructure projects of case studies, debates, networking opportunities, and keynote speeches on crucial issues.
- **Digital Construction Hub:** The centre piece of innovation at UKCW. This hub will deliver a series of presentations and panel discussions including topics such as information management using BIM.
- **CPD Hub:** A mix of industry relevant CPDs delivered by industry experts, association partners, government departments and exhibitors.



**TECHNAL's**  
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with multiple creative options, large glazing units and the lowest environmental impact. Four new patents allow for optimising materials, simplifying manufacture, and facilitating installation, which is carried out dry, with no glue or sealants used on-site, no packaging and no waste. **Stand Z106**

## Visitors will also be able to explore sections dedicated to Build, Infrastructure, Roadmap to Net Zero, Digital Construction and Offsite

- **Culture Change Hub:** A focus on improving inclusivity within the built environment, wellbeing and mental health and professional development.

Other key features of UKCW Birmingham this year include:

- **Future Lab:** Featuring ground-breaking and innovative products including the Exoskeleton from exhibitor German Bionic; a wearable device that can make users feel less tired and reduce the risk of strain injuries.
- **Robotics Theatre:** Sponsored by HP, will showcase all types of construction robotic innovation
- **COBOD 3D concrete printer:** Live printing a house
- **UKCW Role Model Awards:** Celebrating the unsung heroes of construction, the award ceremony will be taking place on the main stage on 5 October.
- **Timber Expo:** Celebrating 10 years at UKCW this year, the UK's largest display event for wood and timber presents the future of the sector – from sawmills, timber cladding and mouldings to doors, windows and flooring products.
- **Seminar programme:** Details of the comprehensive seminar programme and CPD opportunities will be revealed in July, covering latest building regulations, the Building Safety Act and its implications, and advice on retrofit.

To register for UKCW Birmingham for free, please scan the QR Code. You can also follow us on social media @uk\_cw #UKCW2023



*Article  
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# BEWI showcases the future of housebuilding at UK Construction Week

Come on to BEWI's stand at UK Construction Week and find out how sustainable houses of the future will be built.

BEWI building systems include the ICF system THERMOMUR® and the insulated concrete raft system JACKODUR® ATLAS. They enable the rapid construction of highly thermally efficient buildings, with market leading air tightness and excellent acoustic insulation.

These systems are revolutionising sustainable house construction in the UK. The JACKODUR® ATLAS Extruded Polystyrene (XPS) insulation and formwork system is for floor slabs, while THERMOMUR® is a robust pre-formed wall block with a hollow core manufactured with Expanded Polystyrene (EPS). The empty core is filled with a concrete pour during construction.

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JACKOBOARD® construction boards, which are the ideal substrate for all types of ceramic, porcelain, or natural stone tiles. Thanks to their extruded polystyrene foam core and the special coating on both sides, the JACKOBOARD® construction boards are the ideal base for plaster and tile. The surfaces of the JACKOBOARD® system provide a strong primer and can be used on virtually any substrate. At the same time, they are water repellant, thermally insulating, light and sturdy.

BEWI designs its product range to help its customers move towards zero energy construction, whether they are building a house from scratch or just fitting out a new wetroom. We are experts in the manufacture of building systems, insulation, packaging and other specialist products made from expanded (EPS) and extruded (XPS) polystyrene, produced for the construction and other industries.

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0870 600 3666 [www.bewi.com](http://www.bewi.com)

UK CONSTRUCTION WEEK STAND B172

## Two dividing walls for Edinburgh Golf Clubhouse



Working directly with Kingsknowe Golf Club, Style was contracted to install two folding walls to section off parts of the clubhouse lounge and bar, adding greater adaptability to the internal layout. David Loudon, Style's director for Scotland said: "Installing two Stylefold 900 folding walls provides exceptional flexibility, allowing the clubhouse to be either left as an open plan room, or to be segregated into separate areas for different social events and meetings. The internal blinds on the larger of the two walls offer a greater level of privacy when required." The request to divide the clubhouse space was initially for just one folding wall, however after they saw the quality of Style's work, and the benefits that the flexible space afforded, a second partition was added a few months later. The initial folding wall enables staff to section off a small, private dining room away from the main lounge bar. This is ideal for competitions, visiting societies and other gatherings. The second wall further divides the room, giving a greater level of privacy when shut thanks to internal blinds between the glass.

[www.style-partitions.co.uk](http://www.style-partitions.co.uk)

## Automatic entrance enhances hotel



The Travelodge Kendal, in Cumbria, benefits from a set of automatic sliding entrance doors that work in tandem to create a reception area that can be easily accessed by all guests. TORMAX, renowned for their expertise in door automation, partnered with Coupe Aluminium to design a reception area, recommending their Windrive 2201 sliding door operator as the perfect option to power the bi-parting doors. Operational in high-traffic hubs around the world, the TORMAX Windrive is a compact and discrete operator with a deserved reputation for steadfast reliability. Having undergone extensive testing that far surpasses current industry requirements, the Windrive operator measures just 142 mm x 100 mm, yet is still capable of powering a double set of doors weighing up to 100 kg per leaf. "TORMAX entrances are a preferred option for welcoming hotel guests nationwide," confirms Simon Roberts, MD for TORMAX UK. "In addition to our successful collaborations with well-known brands like Hilton and Ibis, we take pride in having delivered tailor-made solutions to numerous independent hotels over our extensive 60+ years of operation."

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**BUILDING  
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## WHITWICK & COALVILLE LEISURE CENTRE LEICESTERSHIRE

# A team effort

Providing a wide range of health and wellbeing facilities, and passing the finish line five months ahead of schedule, a new leisure centre in Leicestershire is set to become a central part of the local community. Paolo Coyle from architects GT3 speaks to Jack Wooler on the key to the project's success – collaboration





Images © GT3 Architects

The Whitwick and Coalville Leisure Centre forms a new gateway for the Leicestershire town of Coalville, introducing a wealth of health and fitness resources to the area in a form sensitive to its woodland surroundings.

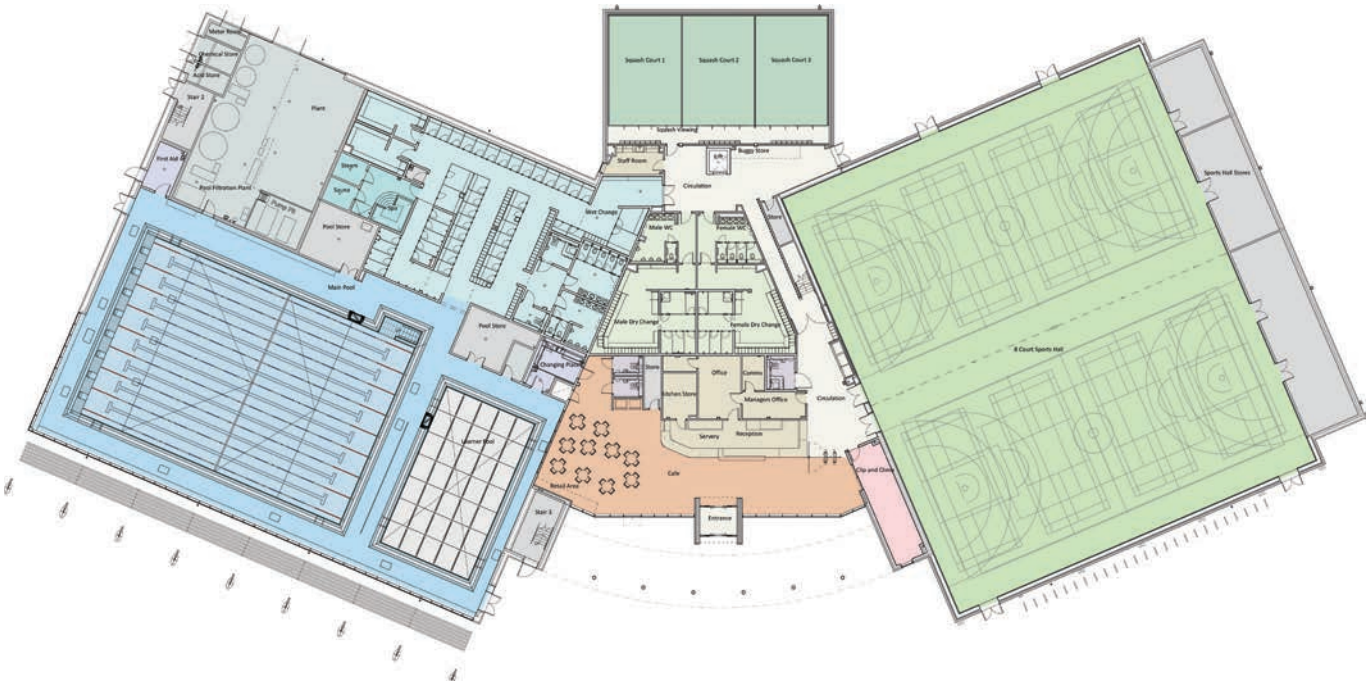
Developed for North West Leicestershire District Council (NWLDC) and designed by GT3 Architects, the new facility, which cost £22.5m, replaces the former outdated Hermitage Leisure Centre, and is located next to the A511 that runs east-west through Coalville.

As well as improving the wellbeing of the local residents, the centre is intended to create a new heart for the community that will enhance local connectivity, and forms a focal point for the area. In addition, the design exploited the full benefits of the

site to put a connection with nature at the foreground of the project for users.

Set on a wooded site on the northern outskirts of Coalville, users approach the centre through a series of vibrant outdoor spaces – designed by landscape architects OOBÉ – which have been designed to be a continuation of the semi-rural surroundings. Around the centre's exterior, exercise trails enclose a large area of grass with a mown footpath guiding visitors through. Coppiced woodland belts and swathes of wildflower planting adding ecological interest and biodiversity.

Within this substantial framing landscape, the design of the building itself takes a deep consideration of its surroundings. The external materials palette includes pre-patinated copper cladding,



#### ACTIVITY WEDGE

The plan has a central 'activity wedge' containing the reception and cafe, with views outside and into the swimming pool, set between the pool and sports hall

combined with an overhanging roof that reflects the design of the education college opposite. The forms created also include glulam timber columns alongside full-height glazing – mirroring the forest and helping open the centre up to the outside.

Heading through the centrally-positioned entrance, the new leisure centre hosts a wide range of amenities, including a 110-station state-of-the-art gym, plus two pools, three group fitness studios, a 'Clip n' Climb' wall, three squash courts, an eight-court sports hall, a steam room and a spa pool. All of the internal areas have been designed with "sensitive materiality," say the architects, which, combined with a layout closely focused around the needs of users thanks to a highly collaborative design process, amounted to a "truly landmark building that brings people together," says GT3.

Paolo Coyle, senior architect at the practice, says that the finished result encourages "community cohesion and improved access to health and wellbeing services." In addition, the collaborative approach taken to the project also allowed the team to achieve key milestones early, evidenced by the project being completed five months earlier than initially anticipated.

#### The brief

GT3 Architects is a multidisciplinary architecture practice whose services include

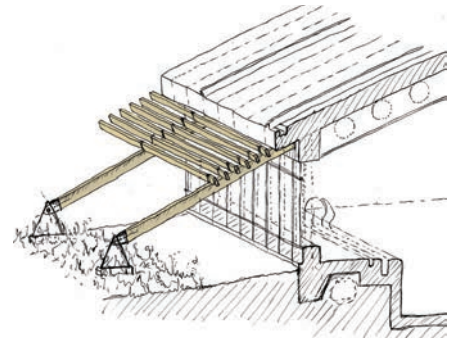
consultation, workplace and residential design, and masterplanning. Their specialisation however is in the sport and leisure sector, and already having a strong portfolio (plus relationships with relevant governing bodies such as Sport England), the practice was well placed to take full advantage of this opportunity in Coalville, and deliver the results for leisure operator Everyone Active.

The client conducted a bid process among several design firms. The successful GT3 team were appointed to undertake design, management and building procurement, which meant combining design, construction and operational aspects of the new leisure centre, with the funding provided by the council.

According to Coyle, the practice is in a continual process of reviewing its previous design projects to produce the best result possible, using its in-house R&D expertise to improve user experiences as well as its design processes. However, the practice's first step in every project, says the architect, is to fully understand the client's aspirations for this individual building.

The brief, initially discussed during 'dialogues' with the client, says Coyle, was for a strongly community-focused facility for the district, but one which would be informed by the pre-existing facility and its users. As in any project of this type, the form needed to suit the business case as





well as the needs assessment. This was soon refined during continuous engagement with the key stakeholders, with frequent ‘vision workshops’ and meetings to ensure that all parties were satisfied with progress.

Something that was clear among all parties, says Coyle, and a factor which “glued the team together,” was the opportunity that the site provided, plus the vision of an “aspirational leisure destination in a sensitive setting that encourages a connection to nature, outdoor active design, and a link back to indoor facilities.” As is common in sports and leisure however, achieving this would not be easy, and in fact multiple challenges awaited the design team through all the phases of the project.

### Collaborating on site constraints

One of the largest barriers the team faced were the constraints of the site itself, in fact caused by its abundant biodiversity, which also meant issues to address around the site’s infrastructure. One of the most prominent of these issues was the Grace Dieu Brook which runs around the site perimeter, which naturally constrained movement and created an obstacle that had to be retained.

Alongside this constraint, a pre-existing underground sewer was running diagonally across the site, with overhead power cables also running across this axis. Both of these would require relocating, with the power

cables needing to be buried underground around the site perimeter, avoiding the mature trees while traversing challenging topography and restricting site access around the brook.

The architects were well-equipped for the challenge however, as Coyle explains, with the key to the remediation of these constraints lying in the strong collaboration between all parties in the project, including the design team, planning, the operator (Everyone Active) and the project’s ultimate client, NWLDC.

According to the architect, the practice fostered “an honest and open relationship throughout the process, with regular communication enabling deadlines to be met and design and site issues remediated at pace.” The team had a “really positive relationship,” he enthuses.

With this collaboration at the core, the architect says that the project programme was “appropriately” set out based around these sites and building complexities, with the risks each proposed being considered constantly. One key risk to be mitigated was delays, given the possibility of further increases in the costs of materials in the current economic context.

Via regular reviews of the programme, key project milestones began to be hit ahead of time, one of the earliest being the groundworks, which in turn allowed the structural package to be coordinated,

**Another example of context-responsive design is a “rhythm of engineered timber elements across the main facade,” designed to respond to the forest surrounding the building**



#### GLULAM GREETINGS

Glulam timber columns greet visitors at the entrance, supporting the substantial canopy

procured and delivered early. This all meant the overall programme could be reduced – which helped to avoid material cost rises during the project’s construction.

“Every effort was made to reduce the programme to avoid the risk of rising material costs,” says Coyle. The team pragmatically looked at opportunities offered to store materials onsite where possible, for example, “meaning they could be procured ahead of schedule.”

“This was further enabled through working directly with the supply chain,” he continues, which was ameliorated by being “co-ordinated with the technical design, from start to finish.”

#### User-focused design

When it came to the final form arrived for this particular site, it was the product of the design brief, but also informed by the architects’ previous work. According to Coyle, the team employed lessons learned from both previous projects, and findings from the “contextual analysis” of the new site, again considering the engagement of

stakeholders and the key outcomes that each group desired.

“Strategic design moves were tested with a people-focused approach before developing building massing options that were appropriate for the site,” says Coyle. He adds that the layout “needed to consider both access and user journeys if it was to be successful.” The sizing of the various sports spaces within the centre was partly based on “relevant guidance from bodies such as Sport England,” says the architect.

Central to this approach is the main entrance, located at the end of the main boulevard for vehicle, cycle and pedestrian access, alongside dedicated coach parking. This entrance leads users straight into the central block – or “activity wedge” as Coyle terms it – hosting a reception and cafe with views both outside and into the pool, a climbing wall and rear squash court, and a fitness suite and studios above on the first floor. Coyle explains further that the design of the centralised circulation offered “glimpses of activity throughout,” through glazing and apertures, which had the key





everyone  
ACTIVE

  
North West  
Leicestershire  
District Council





benefit of providing a simple and efficient wayfinding approach for the building users.

To the west is a pool block, angled towards an 'informal' path to Stephenson College at the opposite rear corner of the site. This designated 'wet' block includes an eight lane, 25 metre pool with 100 seats for small galas and training – which was a key desire for the project stakeholders – alongside an adaptable learner pool. One result of the user consultations undertaken by the architects was lowering the roof's height to improve acoustics, reduce space heating requirements, and reduce the impact of glare – while still benefiting from south facing solar gain.

The entire block was aligned to support pool plant filtration across the site, and changing rooms including a Changing Places-registered disabled toilet. Another key response to engaging with stakeholders was making the teaching pool floor moveable, which enabled the operator to have depths of between 0-1.4 metres, facilitating a range of uses from shallow

swimming for gaining confidence, to lessons and casual swimming.

Situated above the pool, the spin studios were also specifically designed to conform with the user demands which had been communicated to the design team during the consultation process. An example is that one studio has been designed as a 'dark room' with an immersive screen to help motivate spin class users, while the other studios can be divided into two-thirds and one-third configurations thanks to an acoustically specified moveable wall, or opened fully, with windows running down their length bringing in daylight to benefit the range of classes and users in the spaces.

Lastly, to the east of the site is the sports block. Again, this is formed in a volume that's angled to guide users towards the Hermitage Recreation Ground as part of the site wayfinding strategy; connecting with the rear bridleway. Among the features of this block are a large eight court sports hall, which can accommodate for the wide range of sporting activities and community





events desired by the client, thanks to its flexible design.

### Design for performance

The practice carefully specified each internal finish of the sports spaces to support the corresponding activity likely to take place in each, such as sprung flooring to the sports hall, squash courts and studios, for example.

Beyond focusing on performance above all however, the architects made many nods to the building's setting and context in its materiality. The pool roof, for example, is constructed of PPC aluminium, which references the nearby college's copper cladding. Another example of this context-responsive design, say the architects, is a "rhythm of engineered timber elements across the main facade," which has been designed to respond to the National Forest surrounding the building.

According to the architect, these referencing elements were set out during the early planning stages. On the pool block,

for instance, as well as the central entrance and fitness areas, it was always clear to the designers that the building was going to require shading, and this is delivered by a canopy supported by timber posts. Similarly, on the eastern block, timber is used to visually break up the large sports hall's mass, as all parties were keen to avoid an imposing feel, and also covers an integrated cycle shelter along the connecting 'Hermitage' pathway.

In a similar way, the remaining external materials were also specified in response to the site's location and the client's needs – in particular, the latter requiring a low maintenance material palette. Chosen by the architects from the wide choice at the local Ibstock factory, the brick specification included a 3 metre high brick plinth around the perimeter, which was chosen to provide robustness against regular daily use, and concurrent low maintenance.

In terms of the building's energy performance, the team were well aware of the need to mitigate the commonly high

**All of the internal areas have all been designed with a "sensitive materiality," say the architects**









energy consumption of leisure centres, and took a range of steps to remediate it as much as possible, including using passive design measures. One was orientation – with the pools for instance oriented to the south to benefit from as much solar gain as could be achieved.

BREEAM was seen as a useful tool for co-ordinating the energy aspects of the design: “BREEAM helped set targets and promoted design review throughout,” says the architect. “Beyond this, we also used all our previous experiences and best practices in an effort to reduce both embodied and operational carbon within the constraints of the overall project.”

As well as energy use, protecting ecology was another key consideration for the project team, especially given the natural environment that encompasses the site. As such, great effort was taken by GT3 to reduce any impact on the surrounding environment, as well as additional measures to help bolster it, including the planting of new trees and other plants to increase local biodiversity.

### An early finish

Looking back on the project and its many successes, Coyle attributes a great deal of them to the strong collaboration between all the parties involved, characterised by constant open and honest communication, alongside a shared vision.

The architect says he is proud of the finished result, and sums up the team’s achievements: “The new Whitwick and Coalville Leisure centre provides new and enhanced facilities, opportunities for outdoor exercise, which is particularly important post-Covid. It meets modern standards and expectations when compared to the previous leisure centre which it replaces in the town.”

“The design is people-focused first and foremost,” concludes Coyle, thanks to a “flexible, universal design approach” which caters for all who will use it. He asserts that the centre “gives an opportunity for all users to meet their sporting ambitions, or simply have fun keeping fit.” ■

### POOL WINNER

The pool block is oriented to the south to benefit from maximum solar gain, and contains a 25 metre pool and a teaching pool with a movable floor

# Managing the Risk of Legionella during an energy crisis

**H**ot water is the primary method of controlling Legionella bacteria in water distribution systems in public buildings such as swimming pools and leisure centres. The recent energy crisis has placed extraordinary pressures on budgets and economising on heating and hot water production may seem like an obvious way to reduce the energy bills. However, reducing the temperature is a false economy and places the public at risk. Carole Armstrong, marketing manager at DELABIE looks at how to keep public washrooms safe for users.

## Contamination risk

Naturally present in water, Legionella bacteria develop in standing water with a source of nutrients, such as biofilm in pipes or corroded water storage tanks. They multiply at 20-45°C and are harmful if inhaled in aerosol form i.e., steam from showers.

Hot water is the typical method for controlling Legionella bacteria in non-domestic buildings. Health and Safety Guidance recommends producing and storing water above 60°C, and distributing it at 50°C. At these temperatures, 90% of the bacteria die within 2 minutes. If the temperature falls below this guideline, the risk of bacterial growth increases. Maintaining these minimum water temperatures reduces the risk of contamination and is more energy efficient than allowing water to cool during periods of inactivity then reheating.

Simple measures to help prevent heat loss and, therefore, bacterial development include keeping pipe runs to a minimum (ideally <2 metres); lagging pipes to prevent heat loss; and, where cold and hot water pipes run side by side, insulating cold water pipes to avoid heat transfer and maintain the cold water temperature below 20°C where legionella bacteria are no longer dormant.

## Technical solutions against Legionella

In sports facilities, thermostatic mixing valves (TMVs) are typically used to blend incoming hot water to deliver mixed water at a safe temperature for showering. Type 3 TMVs feature a failsafe which shuts off the hot water if the cold water supply fails (and vice versa). In normal circumstances, the failsafe requires a minimum temperature differential between the incoming water supplies to ensure user



SPORTING 2 electronic shower with integral TMV prevents scalding and cold water deadlegs

©DELABIE

safety. If this differential is not maintained, the failsafe won't operate, putting users at risk of scalding or cold showers. With centralised TMVs there is also a risk of bacterial development. Since the hot water is pre-blended, there is no draw off from the cold supply, creating a deadleg with stagnant water. Installing showers with a point-of-use TMV avoids any upstream deadlegs, drawing from both hot and cold supplies when in use.

DELABIE's thermostatic, electronic SPORTING 2 shower panel offers the perfect solution. When not in use, an automatic flush activates every 24 hours after the last use, running for 60 seconds and refreshing the water in the pipework and the mechanism. It is also touch-free, preventing the spread of germs by hand.

## Water efficient solutions

The electronic Sporting 2 shower panel also optimises water usage. The valve closes automatically when hands are removed from the detection zone and a pre-set flow rate of 6 litres per minute prevents unnecessary waste. The user can therefore pre-rinse, apply the soap or shampoo, and rinse without the

water running continuously. With a DELABIE electronic shower, water consumption is significantly reduced – and reducing water consumption reduces the amount of energy required to heat it.

Reducing energy costs can be achieved without compromising user safety. Legionella prevention measures must be maintained, but by reducing unnecessary water consumption, both water and energy bills can be managed in public places. By understanding the risks and installing products specifically designed to meet these challenges, the risk of contamination and scalding can be managed without blowing the budget.

01491 824449  
www.delabie.co.uk





# Gilberts delivers at Sandwell Aquatics Centre

**G**ilberts has dived into the challenge of delivering a sports venue fit for international competition and evolving it to a state-of-the-art community facility to engage local residents.

Sandwell Aquatics Centre was conceived for the 2022 Commonwealth Games with the intention of its evolution into an inclusive centre of excellence for the community. It set the pace for programmes of this type: consultants Arup achieved design to completion in just three years – half the typical duration.

With three pools including a 50 m Olympic sized one, 100+ gym stations, a sports hall, dry diving area, sauna, indoor cycling studio and a cafe, one of the major challenges for



Arup was designing the building services, for installation by Shepherd Building Services (part of Wates Group).

As the UK's leading air movement specialist Gilberts was chosen to support Arup and Wates to address the diverse and potentially aggressive environments. Components needed to deliver the indoor air quality, adequate extraction of moisture and CO<sub>2</sub> and supply of conditioned air appropriate for each area.

Gilberts worked closely with the team from outset to completion providing advice and technical support for the design.

It has produced more than 270 different types and configurations of grilles and diffusers for the facility, including its popular GSJA swirl diffusers, vision-proof transfer grilles, linear bar grilles and air valves.

Gilberts added various finishes - suitable for the diverse environments- included brush finish, matt black and gloss to RAL9010 pure white, in line with the specification.

"The concept was to create a long-lasting legacy that will make the centre a 'go to' place to inspire people to be active,"



says Martin Malyon, Gilberts Midlands area sales manager. Chris Finch of, SES Engineering Services said: "Behind that is the holistic endeavour that everyone who works in or uses the Centre needs to be comfortable whether they are working at a desk or working out in the gym, relaxing in the café or swimming. Getting the delivery and quality of air right is critical. It was a complex challenge, a challenge we have delivered."

Sandwell Aquatics Centre is the latest in a line of prestige sporting venues for which Gilberts has provided key building services components, including the London Stadium, Anfield, and Wimbledon.

01253 766911 [gilbertsblackpool.com](http://gilbertsblackpool.com)

# Iconic Stonehaven lido gets Mapei waterproofing treatment

**A**Mapei polyurea waterproofing system has been used to restore the historic Stonehaven Open Air Pool in Aberdeenshire. Applied by Anderson Specialist Contracting, the project forms part of renovation works carried out by Aberdeenshire Council. A polyurea waterproofing membrane with excellent chemical resistance, exceptional flexibility and tear strength, Mapei Purtop 1000 N is designed to waterproof structures above and below ground, including roofs, podiums, pools and storage tanks.

Opened in 1934, Stonehaven Open Air Pool is the UK's only art deco Olympic-sized heated sea water lido. Threat of closure in the 1990's prompted the founding of a community group – The Friends of Stonehaven Open Air Pool – which is now a Scottish Charitable Incorporated Organisation (SCIO) that works in close partnership with Aberdeenshire Council. Although regularly maintained and repaired,

the lido's multi-layered concrete and paint surface was in need of renovation. With its extensive expertise in pool waterproofing, Mapei was first approached in 2015 and recommended its Mapelastic Smart system overlaid with a finish. Last summer, Mapei was asked for further advice, as the client was now seeking a seamless solution. With an in depth understanding of previous works carried out, Mapei recommended specification of Purtop 1000 N – a two-component pure polyurea membrane which forms a completely waterproof coating, with high chemical resistance, exceptional flexibility and tear strength.

Mapei's proposal covered all aspects of the pool refurbishment, from repairs of the defective concrete using products from the Mapei concrete repair range, through to the Purtop 1000 N system build-up required for the lido.

Existing coats of paint were removed, and the concrete substrate was inspected and



tested, with the proposal amended to take into account the test results. Defects were repaired and cracks were filled and injected with water-stopping resin. All joints and cracks were then bandaged with Mapeband Flex Roll tape. The substrate was then primed with Mapecoat I 600 W epoxy-resin based sealer and two layers of Triblock P epoxy-cement which created a damp proof membrane to hold back any moisture within the concrete. Following a further coat of epoxy primer, Primer SN, the surface was cast with aggregate. Purtop 1000 N was then spray applied across the 1200 m<sup>2</sup> pool surface, followed by two coats of Mapecoat PU 20 N coloured aliphatic polyurethane topcoat and pool lines were painted.

[info@mapei.co.uk](mailto:info@mapei.co.uk) [www.mapei.co.uk](http://www.mapei.co.uk)

# Pendock's art of concealment

Since it was formed in 1987, the Pendock name has gradually become regarded as a byword for high quality decorative casing and enclosure solutions for concealing structural elements and building services, which helps improve a project's aesthetics and in many cases, also provide protection.

While all Pendock products are relevant to architects, specifiers and contractors, the most commonly specified are those within its Linea building lining and Radius column casing ranges.

## Linea building linings

The extensive Pendock Linea building linings range comprises nine different architectural finishing products. In addition to wall linings, ceiling rafts, and lift reveals and soffit linings, the range also encompasses bulkheads and fascias, as well as parapet capping and pilasters and perimeter casings. Specialised rooflight linings & atrium beam casings complete the range.

Each provides a practical and aesthetic solution for specific applications, while also retaining a high degree of versatility, as every Linea product is bespoke manufactured to the dimensions and specifications of individual projects.

The Linea range allows architects to specify several lining elements within a project from a single source, as opposed to these items being unlisted or 'floating' within various sections of a specification document. By using this approach, a high degree of consistency to be achieved across different aspects of a project, as the elements can be manufactured, supplied and installed, if required, from a single specialist manufacturer. This helps reduce risk, mitigate potential co-ordination issues on



Linea atrium beam casings

site and allows a uniform, high-quality finish to be achieved.

## Radius column casings

Column casings are a widely used and highly versatile method of concealing interior and exterior structural steelwork. Pendock's Radius brand unites the company's six individual column casing types to make specification simpler while also identifying the key differences between each option.

The pre-formed plywood range is purely for interior use and is available as circular or square profile casings, as well as extended circles or rectangular shapes. Although they are available unfinished for on-site painting, most are specified pre-finished with high pressure laminates (HPL) which provides increased durability and a very wide choice of finishes.

Glass reinforced gypsum (GRG) casings are also for interior use only and are regularly specified as circles, yet, as they are produced from moulds, GRG casings can also be manufactured to bespoke shapes and dimensions to meet the needs of specific projects.

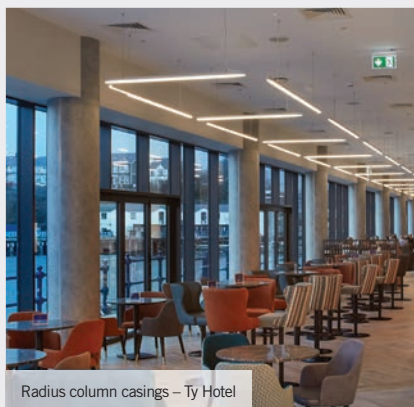
Pendock's GRP casings are also produced from moulds, which enables them to be bespoke manufactured to meet individual project specifications. However, they can be specified for use on both interior and exterior applications. Their durability and weather resistance also makes them well suited for high traffic areas, such as public buildings and retail.

The versatile metal column casing range is also designed for interior and exterior projects. As they are manufactured from aluminium or stainless-steel, they are weather resistant, highly durable and can be specified in a wide range of standard and bespoke shapes with finish options including RAL, BS colour PPC finishes as well as anodised, brushed, polished and textured.

01952 580590  
[www.pendock.co.uk](http://www.pendock.co.uk)



St Bart's Hospital – Courtesy of HOK Architects



Radius column casings – Ty Hotel



Linea building linings



Radius column casings



# Glidevale Protect turns up the heat with DiscreteHeat

Leading building materials manufacturer Glidevale Protect is continuing to help create energy efficient homes of the future by having its reflective membrane technology used as part of an innovative new heated skirting board system by Manchester based manufacturer DiscreteHeat Co. Ltd, maximising the product's thermal performance.

DiscreteHeat's patented product, ThermaSkirt™, is set to change the way we heat our homes by removing the need for traditional wall-mounted radiators. ThermaSkirt is a compact aluminium skirting board system which is connected to the home's heating system. It then radiates heat evenly and efficiently around a room. The DiscreteHeat system has been developed with both new build and refurbishments in mind and tests have shown that when combined with Glidevale Protect's VC Foil Ultra reflective membrane, its energy efficient benefits are further enhanced.

One of the leading air and vapour control layers (AVCLs) on the market, Protect VC Foil Ultra has a high-quality aluminium



Installation of ThermaSkirt with Protect VC Foil Ultra

foil surface, giving it a superior thermal resistance, which in turn increases the radiated temperature performance of DiscreteHeat's ThermaSkirt. To achieve these results the membrane is installed directly onto the wall substrate with the foil surface facing into the room. DiscreteHeat's skirting board system then fits over the top, using clips to maintain the airspace and enhance radiant heat.

Ethan Wadsworth, sales and marketing director at DiscreteHeat commented: "We're really proud of our ThermaSkirt

heated skirting board system and see it as playing a key part in making the UK's homes more energy efficient for the future. When we saw the potential of combining ThermaSkirt with a specialist reflective membrane such as Protect VC Foil Ultra, we immediately began testing and were impressed with the significant difference it made – increasing temperature levels by at least three degrees centigrade."

[info@glidevaleprotect.com](mailto:info@glidevaleprotect.com)  
[www.glidevaleprotect.com](http://www.glidevaleprotect.com)

## 35 years and counting



2023 sees GEZE UK celebrate another milestone in the company's history – 35 years in business, and in that time the company has grown and developed hugely. Formed in 1988, GEZE UK was the second subsidiary to be established by German parent company, GEZE GmbH, following GEZE France. Based in Chelmsford, Essex, the company started trading mainly in the distribution of door closer products. Recognising a gap in the UK market, a new division was set up in 1997, in Tamworth, Staffordshire to concentrate on the provision of complete automatic door solutions from design to installation and including technical advice and guidance on building regulations. By 2003, GEZE UK had outgrown the Chelmsford office and the decision was taken to merge it and the Tamworth operation into new purpose-built premises at Fradley Park in Lichfield, Staffordshire. In 2008 the first service office was set up followed by a further six offices throughout the UK. Kaz Spiewakowski, MD of GEZE UK, said: "From a handful of staff in the early days to over 250 today, the company would not have developed as it has without their expertise, determination and dedication."

[info.uk@geze.com](mailto:info.uk@geze.com) [www.geze.co.uk](http://www.geze.co.uk)

## Passing on the BAL and ARDEX baton



After more than 20 years with ARDEX and over 10 years with BAL, Peter Bell, managing director, is passing on the baton to his deputy, David Hackett. Peter has enjoyed a stellar career with the ARDEX Group underpinned by his leadership of ARDEX and BAL, two highly successful, market-leading UK businesses. Testament to his commitment and legacy, Peter also holds a group steering position as an ARDEX Global Management Committee member as well as roles on various group boards, including India, Ireland, and the Middle East. He will retain these roles until the end of 2023. As commented by Peter Bell: "David's promotion to UK managing director is a great example of how the ARDEX group opens development pathways for its key people. It also demonstrates how we promote from within, and how we encourage people to take on international assignments to open up career progression opportunities. As part of passing the baton to David, we expect our UK businesses to continue to thrive under his leadership. His commitment to our people, our customers and our strategic vision make him a great choice to lead our talented team into the future."

01782 591100 [www.bal-adhesives.com](http://www.bal-adhesives.com)

## Barry tops 25 years

As GEZE UK celebrate 35 years in business, one of the company's longest serving members of staff, Area Sales Manager, Barry Topham, celebrates 25 years with the company.

In this time, Barry has seen the company grow hugely; back when he started there was just 23 staff and turnover of £3m, today the company employs over 250 people and turnover is over £35m.

Barry has also witnessed many changes in the industry, he says: "The growth of automated doors and the windows sector is astounding, yet there have also been negative changes. There has been a deterioration of quality on site, such as the use of chipboard doors, and the influx of low quality, inferior finished products at lowest price is not good - it means the expected product life is far too short. However, the GEZE brand is still recognised in the market place as a reliable, quality supplier of door and window control products – and one of the reasons I have stayed."

"Another, is my customers – I always do what is best for both GEZE and the



customer and my relationships with the vast majority of them is excellent and akin to friendship, which makes doing business more pleasurable."

Barry runs his sales area as if it was his own company, his extensive knowledge of the market and the GEZE products enables him to ensure his customers get the advice they need and the best solution for their project.

Andy Howland, GEZE UK's sales and marketing director said: "I have worked with Barry for many years, his knowledge of GEZE and the industry is second to none, he is dedicated and passionate about what he does and is a real asset to the company."

Previous to joining GEZE Barry worked as an Architectural Ironmonger and was a GEZE customer so he knows the business from both sides. Originally, he was employed at GEZE as a specification manager working with architects and planners but as soon as an area sales manager role became available he snapped it up. Barry now covers central England and south Wales.

To find out more about GEZE UK and the comprehensive range of automatic and manual door closers, and window technology products, send an email or visit the website.

[info.uk@geze.com](mailto:info.uk@geze.com) [www.geze.co.uk](http://www.geze.co.uk)

## A day at the races for Newton Waterproofing



To celebrate its milestone 175th year, **Newton Waterproofing**, one of the UK's leading independent suppliers of guaranteed waterproofing systems, has hosted two successful customer race days. Welcoming dozens of its specialist contractors across the

South and North of the UK, the race days were held at Kempton Park Racecourse in South-West London, and the Doncaster Racecourse in South Yorkshire. Through the events, Newton also managed to successfully raise £225 for SNAPS Yorkshire, a Leeds-based charity that provides vital therapies to children with additional needs.

01732 360 095 [www.newtonwaterproofing.co.uk](http://www.newtonwaterproofing.co.uk)

## Long-term sustainability commitment

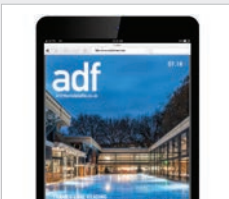


In 2022, **Tata Steel** announced an ambitious sustainability commitment for its Shotton site. One of the bold short-term targets was to reduce carbon dioxide emissions by 20%, with the ambition for Shotton to become carbon neutral well in advance of the

deadlines set out by the Paris Agreement and in particular, the UK greenhouse gas emissions net zero target of 2050. Now, a year on, the site is delighted to reveal the impressive results it has achieved so far. To find out more about Tata Steel's Shotton site and what is being done to create a more sustainable future, visit the website.

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

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## Dental School relies on Saniflo



**Saniflo UK** is providing two 610 Saniflo lifting stations and a Sanivite grey water pump to a new, state-of-the-art dental school in Bristol with numerous clinics and 119 dental chairs that will open in September 2023 enabling students to put theory into practice using the most modern

equipment available in a renovated building in the heart of the city. Nathan Thomas, senior mechanical engineer at Briggs and Forrester Engineering Services said: "Saniflo products are robust and durable and we know we can rely on them to do a good job."

[sales@saniflo.co.uk](mailto:sales@saniflo.co.uk) [www.saniflo.co.uk](http://www.saniflo.co.uk)



# Heavy trench covers are history

Once in a while, a product will come along whose performance will drive a change in standards across entire industries. Like stainless steel. Or concrete. Or a trench cover which is over 80% lighter than the cast iron traditionally used, eliminating the need for costly specialised lifting equipment and the accompanying health and safety hazards. And, unlike metal and concrete infill covers, it's engineered from a GRP composite material which is inert and impervious to corrosion from water and salt, as well as many other corrosive constituents.



Fibrelite's GRP composite trench and manhole covers are fast usurping metal and concrete covers to become the standard for high-performance industries like airports, commercial ports, leisure cruise terminals, military and defence, power generation (both traditional and renewables), and data centres, with companies like Magnox, The National Grid, all branches of the UK armed forces, and the world's largest technology brands specifying Fibrelite covers for new build and retrofit projects.

## Port Cruise Terminal upgrade, UK

As part of this Southern English Port's cruise terminal upgrade project, Fibrelite was approached by the end-user, who was providing the Onshore Power Supply (OPS) systems. The port had previously considered installing cast iron trench covers to cover the 500 metres of trench housing the high-voltage power cables, but due to their weight (approximately 350 kg) and the additional associated overheads, they approached Fibrelite for a lighter alternative.



## Major southern UK Airport off-apron lighting pit upgrade

At one of the UK's busiest airports, Fibrelite designed and manufactured a retrofit replacement for manhole covers over off-apron runway lighting pits where onsite staff have a window of approximately two minutes to effect maintenance and/or repair works between take-offs and landings, including removing and replacing the F900 load rated access cover. The new lightweight GRP composite Fibrelite covers now allow safe, fast access to the lighting pits, maximising time for maintenance and minimising the risk of injury.

For more information, please visit the website below:

[fibrelite.com/Fibrelite\\_Global\\_Projects](http://fibrelite.com/Fibrelite_Global_Projects)



## SMALL BUT MIGHTY PACKAGE PUMPING STATIONS

T-T's extensive range of private pumping stations features the Planet® Range, with the Pluto® and Pluto® Micro being the smallest.

The Pluto® package pumping station is specifically designed for small volumes of drainage and foul waters, ideal for domestic applications. This small yet robust system contains many of the key features found in the rest of the Planet® Range.

The smallest in our range of package pumping stations, the Pluto® Micro has many of the robust features of the standard Pluto® range in a more compact unit. It is ideal for smaller foul and surface water applications, such as basement conversions and cavity wall drainage.

\*Larger models available on request.



Planet  
pluto micro



Planet  
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# New Mapei Polyglass roof for Enfield Council Civic Centre

A Mapei Polyglass waterproofing roof system has been used to complete an extensive renovation at Enfield Council Civic Centre.

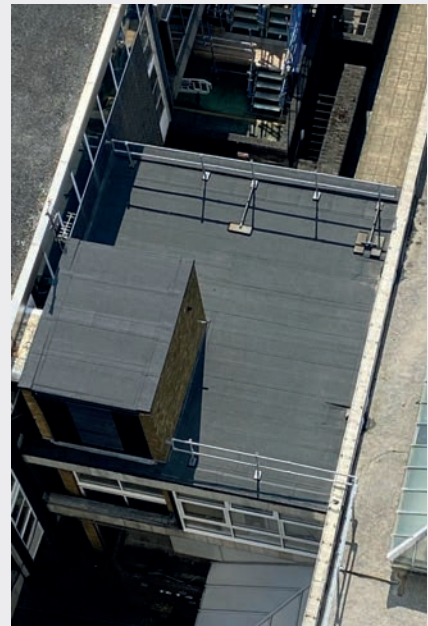
The project, completed by Alex Bennett Precision Roofing, spanned the link roof at the Centre and provided ungraded insulation, along with a host of high-performance features that were much-needed to improve the safety and efficiency of the building.

Constructed in 1961, in postmodern style, Enfield Civic Centre has expanded over the

years and was refurbished in 2017 to provide an open plan working environment and incorporate new timber grill ceilings.

During the recent roof refurbishment, limestone was carefully removed from the asphalt surface and the existing waterproofing system was cleaned and prepared. Mapei's fast-drying Bituminous primer, Polyprimer HP45 Professional, was then applied to the surface to eliminate dusting and the roof was treated with germicidal foam.

The new roof system included three Mapei Polyglass membranes which provided strength, stability, water resistance, cold flexibility and puncture resistance. They included: Polyvap SA P-AL prefabricated self-adhesive bitumen membrane, featuring ADESO® technology; Bitulight P – prefabricated elastomeric-plastomeric membrane featuring REOXTHENE® Ultralight Technology compound and Polyshield prefabricated waterproof plastomeric membrane. The system was installed with Adepru insulation adhesive.



For more information about Mapei products and applications, please contact by email or visit the Mapei website.

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## Encapsulate – Isolate – Integrate



When adding an extension, consider external openings in the existing cavity wall and where the new extension floor joins the original property floor. Cavity Trays Ltd manufactures a range of Level Threshold Trays (LTT), for extension and remedial applications. These encapsulate and separate damp ground level substrate from dry. They protect against damp ingress at an often-overlooked construction link, and versions

are available to suit all dimensions of cavity walls and solid walls.

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## 78 Derngate features Haddonstone



Built in 1815, 78 Derngate is a Grade II\* listed Georgian house, the interior of which was extensively remodelled in the early 1900's by Charles Rennie Mackintosh, one of Britain's most influential and celebrated designers. Haddonstone was the natural partner when it came to manufacturing and supplying the exacting cast stonework designs as part of a recent extension project at 78 Derngate.

Haddonstone supplied the copings, steps, and risers; all designed and hand-crafted to complement, and blend seamlessly with, the original beautiful structures.

[www.haddonstone.com](http://www.haddonstone.com)



# Why the industry must achieve timber integration

With mounting pressure on the Government to support and facilitate the increased use of timber in construction for sustainability and other reasons, it's important that all stakeholders seek a more collaborative approach to deliver effective 'timber integration.' Andrew Orriss of the Structural Timber Association explains why

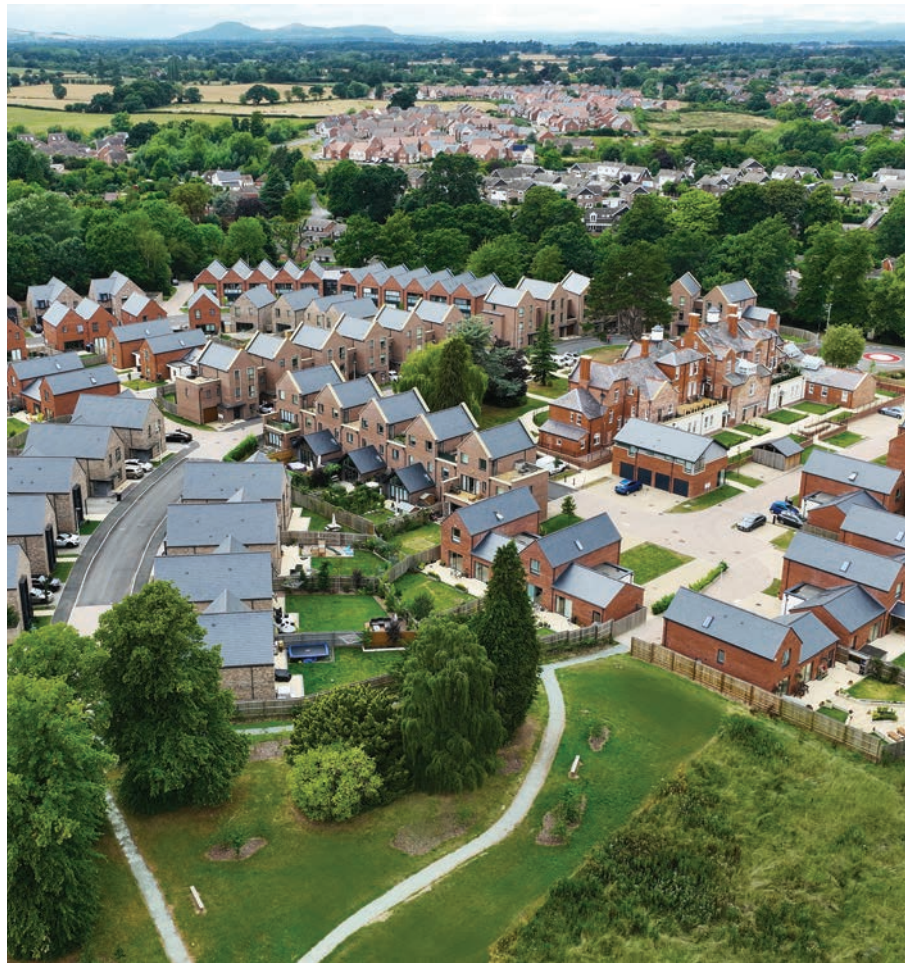
**A**lthough great steps have been made in recent years, there is still much that could be done by the UK Government when it comes to furthering the adoption of structural timber, an opinion mirrored by the latest report from the Environmental Audit Committee – 'Seeing the wood for the trees.' Within the report, the EAC called on the Government to introduce policy to support the increased use of timber in construction by 40%, a figure recommended by the Climate Change Committee.

The UK Government has already shown its support for the structural timber industry through its Clean Growth Strategy and 25 Year Environment Plan, pledging financial support for both. While it is encouraging that such efforts are being made, the Timber in Construction Working Group, led by Department for Environment Food and Rural Affairs (Defra), is calling for a legislative roadmap that would both drive timber adoption and provide a clear means of doing so.

## Sustainable practice allied to early collaboration

As sustainability takes centre stage in the construction industry, structural timber has emerged as the ideal solution for low carbon buildings. However, its successful integration relies on a comprehensive approach involving architects, contractors, and end clients.

For architects, contractors, and clients to incorporate structural timber into their plans, it is crucial to have a deep understanding of the material's properties and capabilities and to design with a 'material-first' philosophy. Architects should collaborate closely with structural engineers and manufacturers to fully grasp



the potential of structural timber in their projects. Early involvement of timber experts in the design phase can help identify potential challenges and optimise the use of timber in the building's structure. Clear and open communication throughout the project's life cycle ensures that everyone involved is on the same page regarding

## Embracing the true potential of timber construction will not only contribute to a greener future but also redefine construction with long-lasting and environmentally responsible buildings

design intent, construction methodologies, and long-term maintenance strategies.

Comprehensive knowledge of timber's structural performance and its interaction with other building systems will lead to more innovative and successful designs. The positive news is there are many knowledgeable and well-established experts in the industry to assist in this aim.

The Structural Timber Association is the collective voice of these experts and industry representing the structural timber sector and associated supply chain companies. Raising the bar for sustainability, quality, health and safety, skills training, and technical knowledge across the structural timber sector, the Structural Timber Association (STA) was established to drive awareness of the value and benefits structural timber can bring to the construction industry.

### Quality assurance

It is important that quality and standards of construction must be to the highest degree; therefore, the STA sees accreditation is crucial to providing all stakeholders with evidence that companies are held to a high quality standard.

STA Assure, the STA's Quality Assurance Scheme, delivers strong reassurances to the construction community regarding its members' compliance with current legislation and regulatory standards. Through a rigorous assessment process, the scheme ensures that design, production, and site assembly processes, as well as quality controls, consistently meet or surpass standards. It is crucial to note that members seeking STA Assure accreditation must ensure that the installers they hire have successfully completed the STA's Timber Frame Competency Award Scheme (TFCAS) to ensure knowledge and training in installing these systems.

By understanding the structural timber as a material, fostering collaboration and ensuring quality, stakeholders can unlock the full potential of this method of construction and meet their building's service-life objectives. Embracing the true potential of timber construction will not only contribute to a greener future but also redefine construction with long-lasting and environmentally responsible buildings.

*Andrew Orriss is director of STA Assure at the Structural Timber Association*

## Multiple roles for Marmox Thermoblock in stylish petworth property



The construction of a truly individual new home in West Sussex is making use of **Marmox Thermoblocks** to tackle the issue of cold bridging, both around the building perimeter and to protect the ground floor slab where it spans a substantial basement structure, containing both the plant room and a wine cellar. The six-bedroom and five-bathroom dwelling near the village of Lurgashall is being built by Grangewood Southern Ltd on behalf of a private developer, with Fusion Brickwork being the specialist sub-contractor responsible for installing the 140 mm wide version of the Marmox Thermoblocks as part of an unusual wall construction, which features an inner and outer leaf of concrete blockwork faced with random natural stonework. Some 250 of the 600 mm long by 100 mm deep composite units have been installed using the Marmox 360 sealant to secure the overlapping end joints. With a proven track record going back more than a decade, Thermoblocks are available in widths of 100, 140 and 215 mm and feature a unique design where two rows of high strength epoxy concrete mini-columns are encapsulated in sections of XPS (Extruded Polystyrene).

01634 835290 [www.marmox.co.uk](http://www.marmox.co.uk)

## Redhill Barn



© Rory Gardiner  
Photography

Nestled between steep Devon hills is Redhill Barn, an award-winning barn conversion that is quietly pushing the boundaries of timber frame engineering. Sarah and Tom, architects from London based practice Type Studio, undertook the conversion. The large existing barn was roofless and ruined, Type's brief was to restore the building's character and retain the simplicity of the once functional building, adapting it for modern living. Their choice of materials for the frame were planned and kiln dried UK grown Douglas fir with black steel plates and bolts. Contact **Carpenter Oak** for further information.

[hello@carpenteroak.com](mailto:hello@carpenteroak.com) [www.carpenteroak.com](http://www.carpenteroak.com)

## Solis Air Brick scores an awards hattrick!



Following its success at 2022's London Construction Awards, the Solis Air Brick™ from **Domus Ventilation** has added a further two accolades to its collection having recently won the Best External Product at the Housebuilder Product Awards and

Innovation of the Year at the Wales Property Awards. The Solis Air Brick may be a seemingly simple product, but its ability to provide a cost-effective means of compliance with the revised Building Regulations Fire Safety Approved Document B has made it an extremely popular one amongst customers, and award schemes!

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## Triton Systems waterproofs ICF sub-structure for listed farmhouse extension



Products from the range of **Triton Systems** have been used to waterproof a semi-buried single storey extension to an old listed farmhouse near Uckfield in Essex, with the specialist sub-contractor involved being a long-term customer of the manufacturer for its work across the South-East. The current contract, which is being project managed by the property owner, features the use of Insulated Concrete Formwork (ICF) to construct the 30 metre long curving walls which have then been protected by Archer Specialist Treatments, using Triton's EX100 membrane and Double Drain barrier to direct groundwater into a land drain around the base. Triton fillet was also used at the floor/wall junction to prevent moisture penetrating the joint. As a long-established manufacturer with a very successful track record, Triton Systems offers a wide range of well proven products to cover damp-proofing problems, timber protection, structural repairs, condensation control and the penetration of gases such as radon and methane. Its technical advisory service is also able to offer advice on specific project requirements as well as guidance on relevant product compliances.

01322 318830 [www.tritonsystems.co.uk](http://www.tritonsystems.co.uk)

## Garador offers new generation side hinged doors



Britain's leading garage door manufacturer, **Garador**, has introduced a new sophisticated side-hinged garage door design that lifts this easy garage entrance style right into the future. These new precision engineered side-hinged garage doors are a long way from your typical barn door style entrance solutions, and feature a number of exciting new design ideas to enhance the usability and performance of the doors. Security is always key and this has been enhanced on these doors by hidden hinges and an upgraded 2-point shoot-bolt locking system. Other new features include door stays, increased weather proofing. These new side-hinged garage doors have been created for busy people who may want quick and easy access into their garage. They have been designed to open and close quickly and easily and, with a smart looking lever handle, can be operated even when your hands are full. Gas pistons have been incorporated to act as dampeners, ensuring a smooth and cushioned movement as the door is open or shut. Find out more about Garador's exciting new side-hinged garage doors by calling or visiting the website.

01935 443722 [www.garador.co.uk](http://www.garador.co.uk)

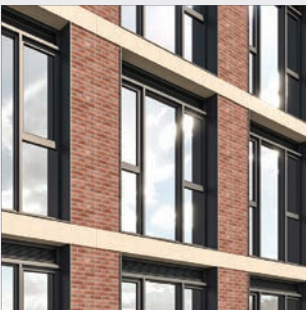
## Do you know what happens when a plenum is added to a louvre?



Do you know what happens when a plenum is added to a louvre? **Renson UK** does, thanks to having carried out tests at Building Services Research and Information Association (BSRIA). "A plenum is a specially designed chamber that is connected to the back of the louvre to serve as a distribution of airflow, and this addition can have several benefits," explains National Sales Manager Martin Daniels. "Firstly, it helps to evenly distribute incoming air across the louvre's surface, preventing localised pressure drops or airflow imbalances, ensuring a more uniform distribution of air. Secondly, by incorporating a plenum, the air entering the louvre can be distributed more evenly, reducing the pressure drop across the louvre face and thereby improving the overall performance of the ventilation system and reducing the energy required for air movement. And thirdly, the plenum box can act as an additional noise attenuator, helping to reduce noise generated by airflow passing through the louvre, resulting in a quieter ventilation system." Thanks to over 50 years of designing, developing and manufacturing high-performance ventilation products, Renson UK are the experts.

[www.renson.eu/en-gb/for-professionals/contact](http://www.renson.eu/en-gb/for-professionals/contact)

## Renson UK supplies full solution louvres to new Leeds residential project



Leading ventilation louvre specialist **Renson UK** has supplied its market-leading systems to two impressive residential buildings in Leeds. Situated on the previous site of Doncaster Monkbridge Iron and Steelworks, Latitude Purple, a £68 million development, comprises of 463 homes over two residential buildings at 17 and 21 storeys tall, and spanning 17,000 ft². Working with Facade company M Clarke, main contractor John Sisk Ltd, developer Hub Group, and architect Carey Jones Chapman Tolcher (CJCT), Renson UK has supplied over 1,400 of its 414 glazed in louvres with insulated blanking plates to the project. Made from extruded aluminium sections and stainless steel 304 insect screen, Renson UK's 414 glazed in louvres have a blade pitch of 33.3 mm and can accommodate most glazing thicknesses. They have a free area of 50%, and are weather and aerodynamically tested to EN 13030. Renson UK National Sales Manager Martin Daniels comments: "At Renson, we pride ourselves on our high-quality, fully-tested ventilation solutions, as well as our ability to deliver bespoke products for unique projects like this."

[www.renson.eu/en-gb/for-professionals/contact](http://www.renson.eu/en-gb/for-professionals/contact)

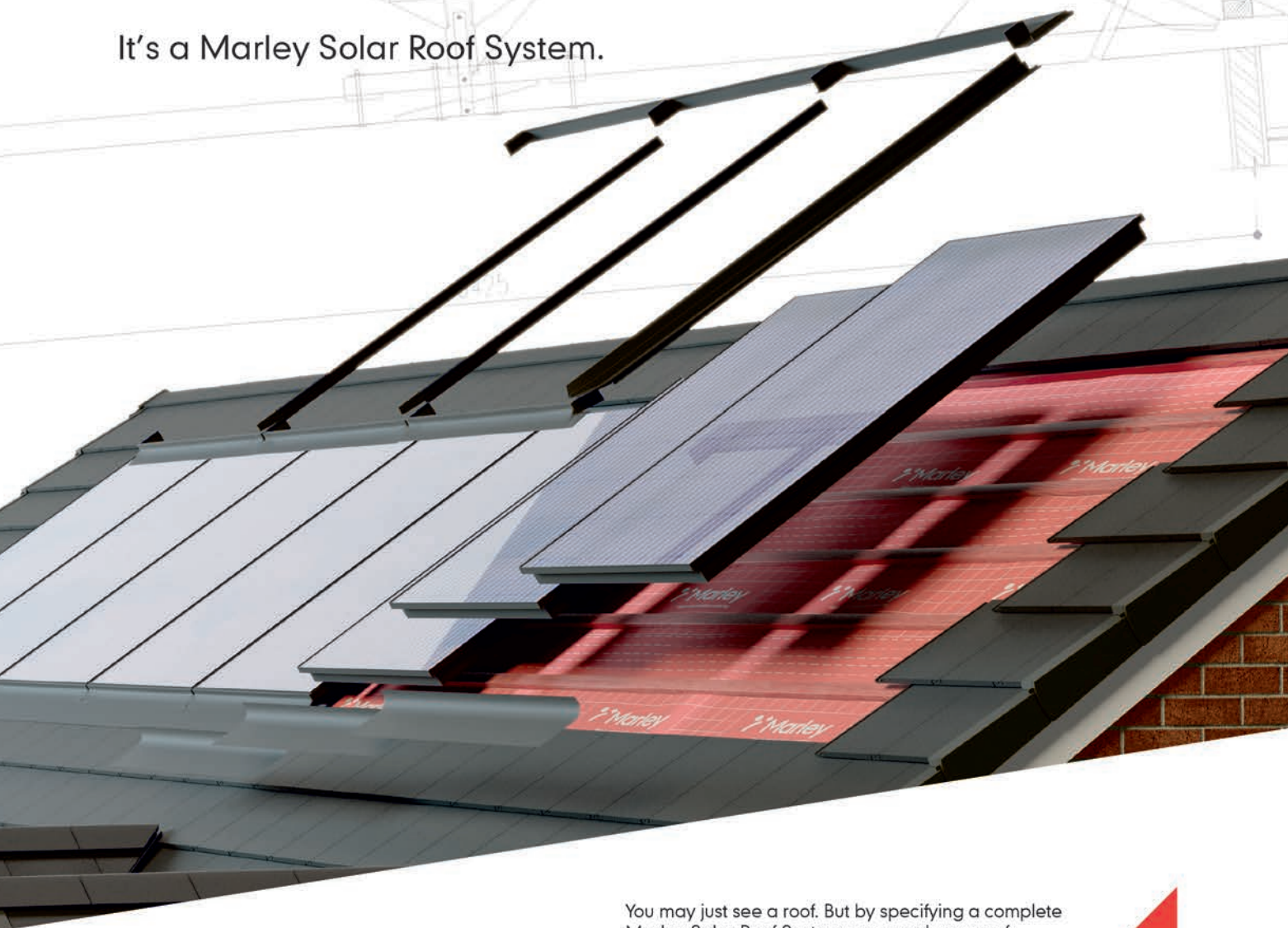


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# AIM's cavity barriers selected for 'path-breaking' university accommodation

**A**IM (Acoustic & Insulation Manufacturing) has supplied Wall Cavity Barriers and open state cavity barriers (OSCBs), along with technical support, for a 'path-breaking', 900-room student accommodation development at the University of West England Bristol's Frenchay Campus.

The new-build, low-carbon design development, which includes three buildings, six stories high, is to help meet demand from students for high-quality on-campus accommodation. The first rooms will be available from this September. Designed by Stride Treglown, the project's main contractor is Vinci Construction.

AIM worked with Maple Sunscreening on the rainscreen facade system assembly from the ground floor upwards, which is mainly cassette panels with AIM's OSCBs incorporated horizontally and AIM's Wall Cavity Barriers installed vertically. AIM also supplied and supported installers



Image courtesy of University of West England

Sandford Building Contractors during the construction of the extruded polystyrene (XPS) filled sub-floor cavity, which included a layer of AIM's Wall Cavity Barriers directly above the XPS, and all two masonry storeys.

Designed for use within ventilated rainscreen facades and timber frame cladding

systems, AIM's OSCBs allow free airflow and drainage and improve fire safety, providing fire resistance of up to two hours insulation and integrity in suitably supporting structures. In the event of a fire, heat activates an intumescent strip which expands quickly to fully close the cavity.

Manufactured from high density Rockwool stone wool and faced with the higher performance intumescent strip, AIM's OSCB range provides either a 60 or 120-minute rating for both integrity and insulation. The OSCBs are an effective barrier to the passage of hot smoke as well as fire. The AIM range has been tested to TGD 19 and the general principles of BS EN 1363-1. They have been exposed to BS 8414 Fire performance of external cladding systems fire tests and assessed to BR135 to achieve pass results with a variety of third-party cladding systems.

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# Airing ventilated cladding's healthy set of benefits

Rockpanel's Mark Snowden outlines the benefits of ventilated cladding buildups, in terms of the affect on fire safety performance in the wake of Grenfell Tower, as well as how such systems can benefit internal environmental quality in projects

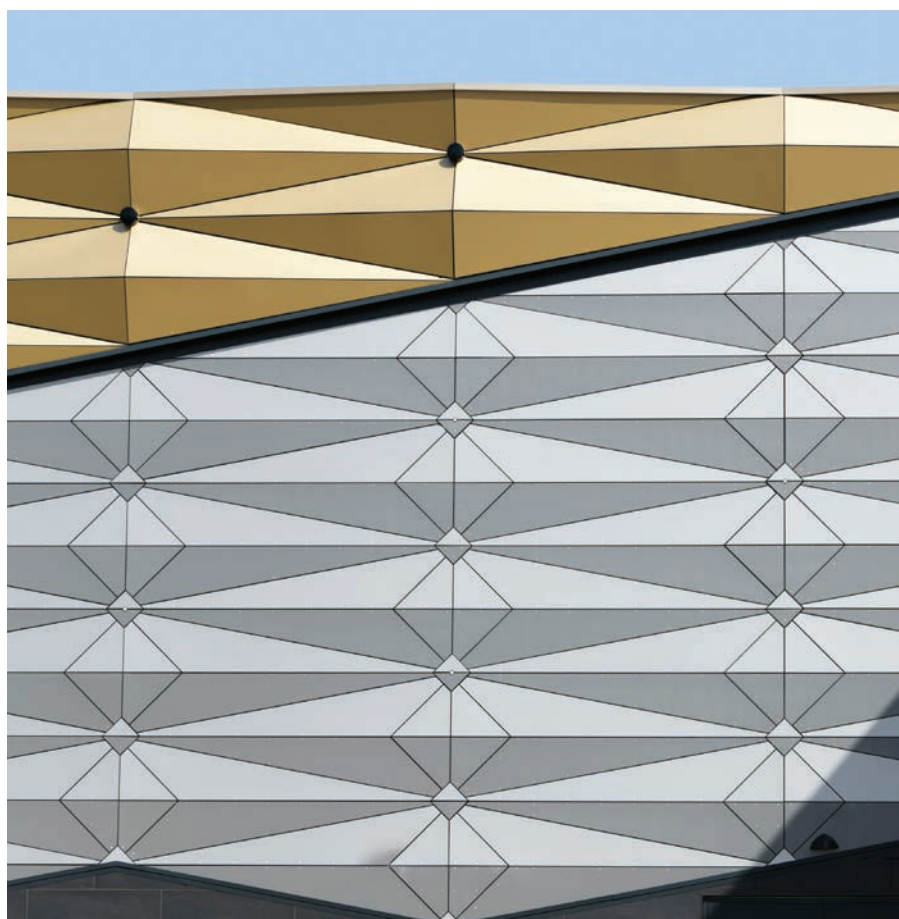
The Grenfell Tower fire in 2017 marked a defining moment in the public's consciousness regarding the fire safety of materials and systems used in the external cladding of new and renovated high-rise structures. Also brought into stark focus were issues concerning compliance and interpretation of fire regs and Building Regulations and how they impact on the materials originally specified for a project compared to what was, in reality, used.

In England, changes to fire regulations regarding residential and 'institutional' buildings over 18 metres made it mandatory that all components in the external wall meet or exceed EN13501 Class A2-s1,d0, with guidance that those of 11 metres also adhere to the same specification. Furthermore, in Scotland, recent changes in legislation state that only non-combustible systems, using materials classified as A1 and A2-s1, d0, are permitted on high-rise domestic and select high-risk buildings (including hospitals, care homes and entertainment complexes) over 11 metres.

## Ventilated facades

A ventilated facade is a construction with an air gap between the insulation and the cladding. This gap is open at the top and bottom of the facade and the cladding panels have small open joints between them. A ventilated facade can be viewed as a raincoat: it protects a building against the elements while at the same time helping maintain a healthy indoor climate. This is why the building technique of ventilated facades is often referred to as rainscreen cladding.

This type of external cladding offers many advantages, both in new build and retrofit refurbishment projects. A ventilated



facade is lighter and quicker to install than other options, leading to savings in construction costs. Individual panels can be demounted easily for maintenance and the whole facade can be replaced with the least inconvenience to the building's inhabitants.

Once in place, a ventilated facade reduces the direct solar impact on the building, resulting in a healthier indoor



**A ventilated facade is lighter and quicker to install than other options, leading to savings in construction costs**

climate. It also offers thermal insulation, which contributes to energy efficiency and acts to reduce the impact of exterior noise on those within. Ventilated cladding also affords architects and specifiers opportunities to use colour and other surface designs to create facades not achievable with other alternatives.

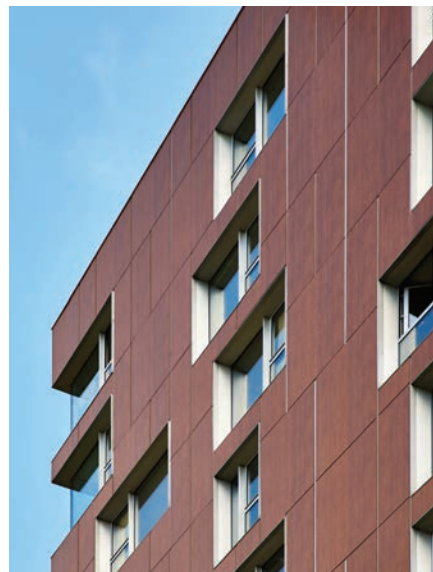
### **The Euroclass system**

Euroclass represents the most comprehensive and up-to-date standards system regarding reaction to fire. It compares ignitability, flame spread, heat release, smoke production, and propensity for producing flaming droplets/particles etc. Within this system each classification means that for a product tested within a certain end-use situation, specific parameters are achieved.

For example, with relevance to the A2 rating, all of the tests for previous classification levels are completed, plus a test for the calorific content of the product. For instance, a classification of A2- s1,d0 means that a kit (a kit represents the collective parts of a tested system) is tested and been assessed as having a very limited calorific content (A2), a smoke propagation which is low or non-existent (s1) and no spread of droplets in the first 10 minutes of the fire (d0).

### **Considering the system holistically**

In order to be confident that a facade adheres to the highest fire safety performance, it is vital to view the characteristics of its construction as a whole



– from panels and sub-frame, through to the insulation used and the design of cavity compartmentation, fire barriers, fixings and all other components.

The images shown here are a selection of projects where Rockpanel non-combustible ventilated facades have been used. Aurum comprises 52 luxury apartments. Here a mixture of reflective gunmetal and gold facades were installed throughout its balconied, curved and faceted exterior.

Facades were installed in three distinct styles at Merry Hill, one of the larger retail destinations in the UK. Gold and titanium colour options create pyramids reflecting light and shadow, transforming throughout the day, while white and grey aluminium designs produce 3D effects. Also used were the striking colour changing characteristics of Chameleon – forming flowing waves of purple, green and blue.

Non-combustible facades were installed at the Station Medical Centre to add low maintenance, organic warmth and visual impact while avoiding the maintenance and deterioration issues associated with the ‘real thing.’

As a final example, non-combustible facades have been used to great effect in the complete recladding of three 1960s residential blocks, delivering a future proof transformation for the 186 homes within. A mixture of inherent fire safety and true matching of the replaced veneer HPL panels simplified the planning process.

*Mark Snowden is country manager for UK at Rockpanel*



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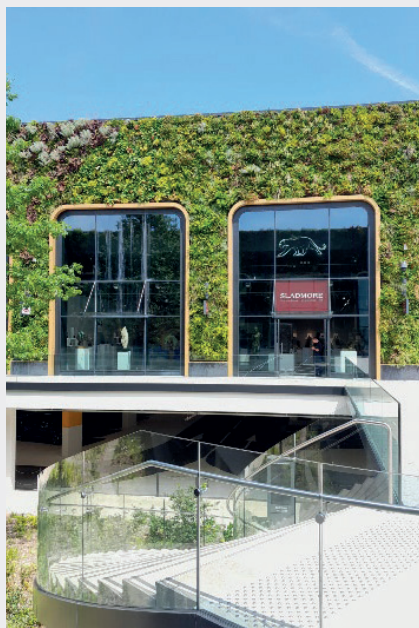
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# Greening up urban landscapes with living walls



Bringing nature into our urban landscapes is essential if we are to create sustainable liveable cities that are fit for the future. People like plants and they are vital for our wellbeing! 67% of people in a survey we commissioned earlier this year say the city they live in needs more greenery.

Living walls also offer the benefits of improved air quality, reduced urban temperatures and increased biodiversity. Green walls help meet planning requirements and count towards targets such as the Urban Greening Factor and Biodiversity Net Gain.

Biotechure's patented hydroponic BioPanel™ system is a proven living rainscreen cladding system. In terms of compliance, it is the only living wall system that has passed all tests for weathertightness, water resistance and wind resistance as per the Centre for Window and Cladding Technology (CWCT). Independent tests also confirm a B rating with regards to reaction



to fire and it is the most resilient and lowest water usage fully comprehensive living wall system in the world.

Biotechure have over 15 years' experience designing, supplying, installing, and maintaining living walls and from Consultancy to Long term maintenance partners have established themselves as the go-to partner for vertical green infrastructure. Over the years Biotechure have worked on many notable projects including Wimbledon's No.1 Court and 20 Fenchurch Street (The Walkie-Talkie). Most recently completing a 1,200 m<sup>2</sup> project in France at McArthurGlen's acclaimed flagship Designer Outlet just north of Paris.

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**Technical characteristics**  
Size of the project: 3,400 m<sup>2</sup>  
Material: Novelis ff3  
coil-coated aluminium  
Pattern: RMIG ImagePerf  
Thickness: 3.0 mm

**DORSET COUNTY HOSPITAL MSCP, DORCHESTER**

## Picture perforation used for a facade depicting landscapes

As the main provider of acute hospital services ample parking space is required at all times. It was decided that a multi-storey car park (MSCP) should be built to keep pace with demand. Due to new and stricter public regulations combined with the desire

for aesthetic freedom, the task presented several challenges that required extensive teamwork within our organisation. RMIG Ltd succeeded to merge the creative wishes of the architects to give residents a great impression of the Dorset landscapes.

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# Crittall in the swim with England's finest

An openair swimming pool of a design described as the finest in England is being restored to its former elegance with Crittall windows playing a significant role.

Saltdean Lido, some five miles east of Brighton, is a Grade II\* listed Art Deco masterpiece built in 1938 utilising an innovative reinforced concrete structure designed by architect Richard Jones. It is one of only three Grade II\* listed lidos in the country and has been on Historic England's Heritage at Risk register for many years.

The structure epitomises the essence of the modernist movement with sweeping lines designed to elevate Saltdean's status as a resort. In its heyday, immediately before the Second World War, holidaymakers and local residents would flock to it paying sixpence to swim and to sunbathe on the adjacent lawns.

After the war, during which it was used for Fire Service training, it lay derelict until restored by Brighton Borough Council and stayed in use until the late 1990s when local people banded together to defeat a developer's plan to demolish the lido and build apartments on the site.



A Community Interest Company campaigned successfully to have the pool brought back into use which was achieved in 2017. Now it was the turn of the buildings currently being restored by Buxton Building Contractors of Surrey.

Once completed the building will house an Art Deco event space, suitable for weddings, an exercise studio, library, community hub, cafe and heritage learning zone plus workspace.

A key element of the design is the generous area of glazing facing the pool.

Here will be installed Crittall Homelight Plus steel windows that replicate the original fenestration and, because of the slender frames, maximise the benefits of natural light on this bright coastal location. The windows are also hot dipped galvanised to prevent corrosion and Duralife coated with marine grade polyester powder which will offer the highest level of protection against the aggressive wind-borne sea salts that caused damage to the original building.

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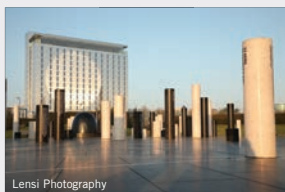
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## Professional Polishing Services are finalists



Lensi Photography

Professional Polishing Services were proud to see that two buildings featuring their finishes were finalists in the Best New Build Project category in the 2022 Facade Awards. Both Hotel La Tour and Kelaty House were nominated and both had facades that showcased how both stainless steel and aluminium are excellent material for architects and designers to work with on large build projects.

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## ASWS; a family affair



As one of the UK's leading specialists in the repair and replication of metal window systems, Associated Steel Window Services (ASWS) is not only confident in its expertise; it's also incredibly proud of the team making it all possible – in the office, on-site and everyone in between! Kris Bennell, contracts director and part of the senior team comments: "We are a family-managed business now into its third generation and 51st year as a specialist steel window refurbishment and replacement company. The company has evolved continuously since the 1960's and we continue to grow and evolve."

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## Turn a new leaf

**G**EZE has launched Revo.PRIME a new premium solution for revolving doors. The new operator boasts an exceptionally low canopy height, narrow profile systems and an improved running performance.

Providing maximum transparency the Revo.PRIME is perfect for creating beautiful entrances and is especially suited for hotels and offices or any building where a statement entrance is required. With its class leading canopy height of just 75 mm which houses the automation it ensures the minimal aesthetic whilst achieving excellent technical

functionality. In addition the narrow profiles of just 60 mm on the door leaf and side panel create a visually appealing entrance and increased transparency creating a light and airy entrance.

The Revo.PRIME is environmentally friendly as well, the operator saves up to 30% in energy compared with its predecessor models which is achieved through the drive unit's reduced power consumption.

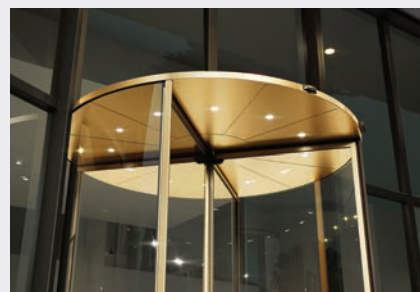
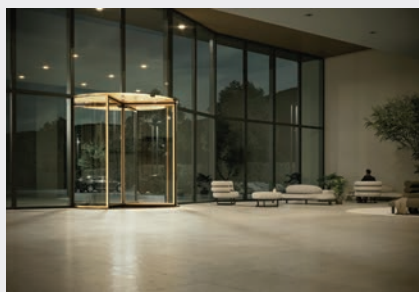
Another benefit of the Revo.PRIME is its improved running performance. The brushless direct current motor (BLDC) with 1,000 Nm torque and the enlarged diameter of the door system, up to 3,800 mm, ensures ease of access and meets the demands of today's architects and designers.

Available in three or four leaf versions and in a choice of gold, silver and black the Revo.PRIME can be networked to building automation systems via BACnet.

Andy Howland, sales and marketing director of GEZE UK, said: "The Revo.PRIME is an impressive edition to our range of automatic operators and one that is sure to delight architects and specifiers giving them the freedom to design stunning entrances."

See the Revo.PRIME in action on youtube at [youtu.be/3KPxcNnnZk](https://youtu.be/3KPxcNnnZk) or to find out more please visit the dedicated Revo.PRIME microsite or email.

[uk@geze.com](mailto:uk@geze.com)  
[revoprime.geze.com/en](https://revoprime.geze.com/en)



## Hörmann garage and entrance doors selected for exclusive Lichfield development



Set in an idyllic rural location near Lichfield, Packington Hall is a Grade II listed manor house which has been lovingly restored and converted into luxury apartments, with the surrounding grounds being redeveloped to provide an impressive development of 22 new homes. A total of 45 fully automated Hörmann M-ribbed Silkgrain sectional garage doors have been installed throughout the development by Birmingham based Doorfit, together with high performance Hörmann steel entrance doors. The Hörmann LPU42 sectional garage doors provide clean lines and a sophisticated, high-quality aesthetic. Their double-skinned construction provides good thermal insulation, a particularly important aspect for the integrated garages in the over-garage apartments. All the garage doors have been supplied in Anthracite Grey (RAL 7016), with a smooth Silkgrain surface providing a hardwearing, easy to clean and modern finish. With security in mind Hörmann automated sectional garage doors are supplied with Secured by Design as standard. All 45 doors have been fitted with Hörmann SupraMatic operators.

01530 516868 [www.hormann.co.uk/home-owners-and-renovators](http://www.hormann.co.uk/home-owners-and-renovators)

## Double-leaf Aluminium Entrance doors now available from Hörmann UK



Hörmann UK have announced the addition of a double-leaf option to their range of aluminium entrance doors. The TopComfort Portal, offers the combination of a modern, high quality, secure door together with the opportunity to create a truly imposing entrance for any style of home. Constructed using high quality materials featuring a PU foam core within an aluminium skin and an aluminium frame as standard, TopComfort Portal provides long-term, operational stability. It also features RC3 security as standard, good acoustic insulation, and excellent thermal performance with a U value of 1.2 W/M²K being achievable. A good-looking door is guaranteed with the solid door leaf being fully flush on both the exterior and interior of the door, together with flush fitting between the traffic and fixed leaf. Doors can be manufactured in widths up to 2,600 mm and heights up to 2,500 mm, with seven different door styles being available. An extensive choice of handles and accessories are available, together with 23 preferred colour options.

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## Wraptite® protection for cliff top residential dwelling



The Wraptite external air barrier system from A. Proctor Group, selected as part of the redesign and extension of a residential property on the Essex coast, will improve energy efficiency and protection from the elements. Designed by AFT Design architects, the works comprise a significant conservation project. The existing detached residential dwelling on the clifftop at Frinton on Sea was partly demolished and extended with large attractive single-storey extensions constructed to the rear elevation and roof level. Both extensions comprise a light gauge steel LGS panelised system, including a sheathing board and Wraptite installed by Nexus Modular. In addition, a proprietary Wetherby rendered cladding system will subsequently cover the LGS panelised system. Bill Attwell, director of Nexus Modular, explains why Wraptite, the only self-adhering vapour permeable air barrier certified by the BBA, was selected: "We chose Wraptite for the breather membrane because of its strength and durability. The self-adhesive application of Wraptite simplifies the installation and provides a totally durable solution."

01250 872261 [www.proctorgroup.com](http://www.proctorgroup.com)

## Senior keeps sustainability in view

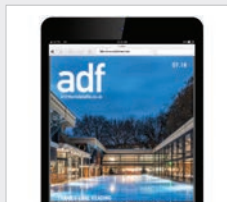


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## Acoustics help eating in comfort

By their very nature of being large, open spaces with many hard surfaces, ambient noise levels in bars and restaurants tends to be high. This inevitably leads to customers talking louder to be heard and so begins a perpetual cycle of increased noise levels as everyone starts to have increasingly louder conversations. This, coupled with noise from music, kitchen machinery and HVAC services, can easily ruin the experience.

To help combat the problems of reverberating sound, designers frequently specify acoustic ceilings to help to strike a balance between a lively and welcoming environment and an experience where

the space is uncomfortably loud. This is important because customers' comfort and a willingness to spend time and money is decreased in a noisy environment.

A good example of this is the Chamberlain Hotel in London where sustainable and ethical designers Sibley Grove have used Troldekt acoustic panels to counterpoint the reverberating noise reflecting from the stripped-back architecture with its exposed structural columns, ductwork and concrete surfaces.

Troldekt acoustic panels are a perfect solution for this type of venue either as part of a suspended ceiling or individual 'acoustic clouds'. They are available in a variety of different surfaces and colours and combine sound absorption with a tactile surface. With an expected life cycle of at least 50 years and resistance to humidity and impact, they are available in various sizes and four grades, from extreme fine to coarse. The panels can be left untreated or painted in almost any RAL colour. Depending on the panel specified, reaction to fire is classed in accordance with EN 13501 as B-s1,d0 or



Sibley Grove Project: The Chamberlain Hotel

A2-s1,d0 respectively.

Founded on the Cradle-to-Cradle design concept and having attained Gold certification, Troldekt wood wool acoustic panels are manufactured using wood from certified forests (PEFC™ and FSC®C115450) and can contribute positively to a building's BREEAM, DGNB or LEED points.

More information on how acoustics can provide solutions for hospitality areas can be found at [www.troldekt.com/references/hotel-restaurant](http://www.troldekt.com/references/hotel-restaurant) while samples and technical guidance is available from [www.troldekt.com](http://www.troldekt.com).

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## Wraptite® works with Comfort Frame IWI to achieve energy efficiency



The Wraptite® external air barrier system from A. Proctor Group has been installed in combination with the innovative and unique Comfort Frame Internal Wall Insulation system to deliver impressive energy efficiency savings to a housing retrofit project. Comfort Frame's IWI system is the only Fabric First solution that is isolated from the existing wall, which eliminates the risk of thermal bridging and condensation. Designed to improve the performance of solid walled properties, this transition to a lower carbon-built environment delivers 50% savings on tenant energy bills. Wraptite is the only self-adhering vapour-permeable air barrier certified by the BBA and combines the critical properties of vapour permeability and airtightness in one self-adhering membrane. This approach saves on both the labour and material costs associated with achieving the energy efficiency demands in buildings. Graham Harrison, managing director of Motion Frame Limited, explained: "The Wraptite breather membrane was applied to the inside face of the existing fabric of the building enabling us to create a highly efficient airtight finish."

01250 872261 [www.proctorgroup.com](http://www.proctorgroup.com)

## LAMILUX announce market launch of the Modular Glass Skylight MS78



LAMILUX are proud to introduce the new Modular Glass Skylight MS78 – the pre-glazed single tier mono-pitch rooflight innovatively designed for combining outstanding daylight, simple installation and outstanding performance. The LAMILUX Modular Glass Skylight MS78 is a thermally broken, mono-pitch rooflight that can be configured by forming a row of pre-fabricated modules, presenting architects and contractors with design flexibility and a product that is easy to specify and install. The latest daylighting innovation from LAMILUX offers design freedom with installation available in roof pitch inclinations ranging from 5°-30°, and sizes varying according to design – with a maximum module size of 1.3 m x 3 m, and a total rooflight length of up to 20 m. Each module, whilst uniformed in appearance, can be configured as a fixed panel, or as an integrated opening vent for natural ventilation with no restrictions on fixed/opening configurations. The pre-glazed paneling system can be mounted directly on load-bearing surfaces which means there is no special concrete, wood or steel upstand requirements, enabling a simple installation and shorter lead times.

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# Houlton School, Rugby



© James Brittain / vHH

A unique and innovative Soprema insulation specification provided a durable and robust solution to bring a historic landmark to life and create a state-of-the-art secondary school for pupils in Rugby, Warwickshire.

## The project

Soprema has helped to restore a Grade II Listed former radio station building in Rugby and transform it into a sustainable, distinctive and state-of-the-art secondary school.

Houlton School, located within the former Rugby Radio Station, has emerged as a critical component in the establishment of a thriving new community. It is part of the Houlton development, which will see developer Urban & Civic (U&C) deliver 6,200 homes alongside neighbourhood and community facilities.

The Grade II-listed transmitter building, formerly known as C Station, sits at the heart of a developing mini-town, named Houlton

to commemorate the first transatlantic call made from the radio station, which was to a receiver site in Houlton, Maine, in 1927.

With a vision to address the shortage of secondary school places and revitalise the listed building at the heart of Houlton, U&C undertook the monumental task of restoring the former radio station building, which dates back to 1925, and create a state-of-the-art secondary school on its site.

The new educational campus at Houlton School includes a main teaching block with a grand entrance and dining hall within the listed former power hall, capable of accommodating more than 1,000 students. In addition, two separate blocks were constructed for STEM and Humanities subjects, along with a Sport England compliant sports hall with dance, acting and fitness studios. It also features a new communications centre, fully resourced with a library and professional radio and television broadcasting station in homage to the legacy of the site.

## Challenges and objectives

The initial plan was to demolish the historic Rugby Radio Station to make way for the residential development. However, recognising the need for a secondary school in the area, developer U&C approached the Department for Education (DfE) to secure funding and repurpose the radio station

as a school. This bold proposal required overcoming several challenges, including the preservation of the listed building, industrial space constraints, contamination issues and insulation challenges.

## Innovative solutions and collaboration

U&C and the design team, led by architects van Heyningen and Haward (vHH), worked closely with Morgan Sindall Construction, appointed under an PCSA from RIBA Stage 2, and their specialist supply chain to address the project's complexity. By involving the supply chain, which included Soprema, during the design phase, all parties were able to mitigate risks and engage in value engineering exercises. Careful pre-application negotiations and intrusive examinations before the listed building consent applications were submitted ensured compliance with the DfE's standard output specification, balancing the preservation of the historic fabric with the requirements of a modern educational facility.

The design of Houlton School prioritised a fabric-first approach, focusing on the building envelope's quality and energy efficiency. The integration of Passivhaus software and thermal modelling enabled optimised insulation and improved performance.

vHH specified Soprema's PAVADRY insulation solution - a natural and ecological,



© vHH



innovative thermal insulation board based on wood fibre, bonded with hardboard and a lime-plaster parge coat.

The integrated air barrier provided by the moisture-open parge coat, together with the hygroscopic properties of the wood fibre and careful repair of the historic brickwork, ensured a controlled moisture transport which prevents the formation of damaging moisture. This characteristic makes PAVADRY the ideal insulation board to prevent the trapping of moisture within the historic fabric and was crucially important for the project to protect the original features of the building, and future-proof the structure for years to come.

### Successful outcomes

Despite facing the challenges posed by the global pandemic, the Houlton School project was delivered on time, within the £39m budget, and achieved a perfect 10/10 client satisfaction rating.

The innovative funding arrangement with the DfE enabled the school to commence operations years ahead of schedule, addressing the urgent need for secondary school places in the community.

Houlton School is an inspiring example of an elegant and creative retrofit, proving that almost any kind of repurposing is possible with a historic structure. It serves as a vibrant, bustling educational facility, is a centrepiece for the community and celebrates the historical significance of Rugby Radio, retaining a legacy for a globally significant heritage asset.

The insulation specification and installation, backed by Soprema's team of technical experts and guided by hands-on expertise from design stage onwards, exemplifies a successful synergy between historic preservation and modern development.



In the construction phase of the project, architects vHH were novated to Morgan Sindall Construction, de-risking the inevitable discoveries in the fabric of the old building by using the strong working relationships established with the supply chain and suppliers. Working closely with DCL, the drylining and plastering subcontractor, individual solutions were examined and finalised to accommodate tricky details within the building, especially around the historic steel frame members that are half enclosed within the masonry.

Through effective collaboration, careful planning, and meticulous attention to detail, Morgan Sindall Construction and its partners and suppliers, including vHH, DCL and Soprema, have delivered an inspirational, aesthetically beautiful, sensitively restored modern facility that caters to the educational

needs of a burgeoning community. The restoration and repurposing of the radio station into Houlton School stands as a testament to the dedication of the entire supply chain and delivery partners, resulting in a project that has received widespread acclaim including wins at the Construction News Awards, Planning Awards, RICS Awards, Spaces Awards and Developer Magazine and Festival of Place Pineapples Awards 2022.

Josh McCosh, partner at van Heyningen and Haward Architects, said: "Transforming the thermal envelope of C Station was a fundamental requirement of the Houlton School project. By using the Pavatex suite of products from Soprema, and with their technical support, we were able to deliver hugely improved air tightness and insulation to the building without damaging its solid brickwork facades, and thus secure the DfE and Historic England's support for the retrofit. The school is delighted with the facilities, and the heritage of the Radio Station is now preserved for all at the heart of Houlton."

info@soprema.co.uk  
www.soprema.co.uk

**Architect:** van Heyningen and Haward (vHH)  
**Main Contractor:** Morgan Sindall Construction  
**Sector:** Education  
**Product:** PAVADRY insulation



# SuperPhon provides reverberation control at Coventry's TWO FRIARGATE

CMS Danskin Acoustics' SuperPhon panel is to contribute to reverberation control in the full height reception area of Coventry's prestigious new, Grade A office address TWO FRIARGATE.

TWO FRIARGATE is part of Coventry's first dedicated business district, Friargate, adjacent to Coventry Railway Station. When complete in the coming months, it will be the city's most sustainable building and premier office address. TWO FRIARGATE has achieved BREEAM Excellent accreditation and is targeting A AirScore rating and EPC A.

Specified by the architects for the reception, which incorporates a business lounge, the SuperPhon panels have been installed by Bespoke Building & Joinery Projects.

SuperPhon is an acoustically absorbent ceiling and wall panel of composite construction for reducing sound reverberation, providing up to Class 'A' acoustic performance. Acoustic insulation experts CMS Danskin Acoustics provide a

free reverberation calculation service along with technical and on-site support.

Manufactured by CMS Danskin Acoustics in Warrington, SuperPhon is designed for use in many applications, including recording/rehearsal studios, audiology rooms, cinemas and theatres, schools, call centres and conference rooms. The panel has been installed at the British Science Museum and at Jodrell Bank, for example.

The TWO FRIARGATE project involved a tight order-to-delivery timescale of just nine days and a number of different sized panels all with a Cara Glass finish.

Commenting Joe Bradder of Bespoke Building & Joinery Projects said: "SuperPhon is a good product, easy to install and of good quality. We have used it in a number of projects now."

SuperPhon is available in a range of standard sizes and thicknesses. Bespoke panels and absorbers size, thickness, shape or fabric facing and high impact performance



options can be readily manufactured. A flexible solution, SuperPhon can provide complete or partial wall coverage. Its wide range of colour finishes, including 63 colours and others available on special order, provides aesthetically pleasing reverberation control.

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<b>Total = 4,374 kg CO2e</b>	

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## DRU contemporary gas stove collection now with five models



DRU Fires, based in The Netherlands, is one of Europe's leading fireplace companies with a large portfolio of contemporary gas, electric and wood burning fires and stoves.

DRU has reported an upsurge in the sales of gas stoves due to several factors. This includes people switching from wood burning due to the convenience of gas, the expectation that gas prices will stabilise this winter and the flexibility of the balanced flue system, which means that gas stoves can be installed in many locations around the home.

The DRU gas stove collection now includes five models:

### **Convexo**

Convexo is a curvaceous, one-metre-high stove with a 3-sided fire view and a sleek black colour finish.

### **Trio**

Trio has a 3-window fire view, with a fashionable new black finish. The mirrored Ceraglass interior adds greater depth to the flame picture.

### **Circo**

Circo is an elegant gas stove with an oval design and an expansive viewing window, revealing a classic log fire with high, dramatic flames and generous warmth.

### **Passo**

Passo is a sleek, cylindrical gas stove with a large, wrap-around viewing window framing a gorgeous log fire bed.

### **Polo**

Polo is a robust and stylish rectangular shaped gas stove, suitable for traditional or modern homes.

All the stoves are balanced flue appliances and, apart from the Polo, have the exclusive DRU Eco Wave operating system. This enables the user to control the flame pattern, flame height and room temperature using the remote control or an app for smartphones and tablets.







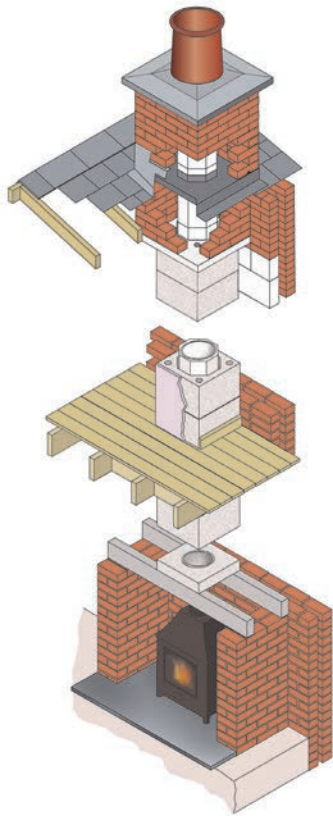
# A room with a flue

The future of home heating is largely focused on the use of heat pumps. Dennis Milligan from the British Flue and Chimney Manufacturers Association (BFCMA) looks at how they can be combined with wood burning stoves as secondary heating

**A**lthough not physically connected, heat pumps and stoves can be viewed as an effective hybrid system working together.

Regarded as secondary heating, and therefore not in the mix for primary central heating systems, wood burning stoves can provide quick and effective booster heating during a cold snap – heat pumps work best in a steady state and

cannot respond quickly to temperature changes. In the autumn and spring when it is not cold enough to justify putting on the central heating system, wood burning stoves can provide comfortable heating for the whole house. As stoves operate independently from the electric supply, homeowners with stoves are also able to continue heating their homes in a power cut.



## Requirements of a wood burning stove

Wood burning stoves require a flue/ chimney. The purpose of the chimney or flue is to discharge the products of combustion safely to the atmosphere. To work effectively the stove and the flue/ chimney should be considered as a complete system. The routing of the chimney/flue should be planned at the design stage.

Most wood burning stoves and chimneys operate under negative pressure, relying on natural draft to transport the flue gases to the atmosphere. This requires a clear path to the top of the flue. A straight chimney/ flue is always the best solution but where this is not possible, to suit the design of the dwelling, the number of bends should be kept to a minimum and not exceed more than four. The angle of the bends should not be greater than 45° from the vertical, with the exception that 90° factory made steel bends or tees may be treated as being equal to two 45° bends. Horizontal lengths should be avoided.

The draw in the chimney/flue is even more important with the advent of Ecodesign stoves. One of the ways in which stove manufacturers have reduced emissions is to retain the products of combustion in the fire chamber for longer before releasing them into the flue. This needs to be kept in mind when designing a chimney/flue, as holding the flue gases longer in the fire chamber can reduce the velocity and temperature of the flue gases as they enter the flue. It is always advisable to check the stove manufacturer's recommendations and that of the flue/chimney company. BFCMA members can advise on chimney design and installation. This includes using industry standard software to check that the flue design will create the required draw in the flue/chimney.

It is also important that the temperature of the gases are maintained above the dew point as they travel up the flue/ chimney. Good flue/chimney design requires consistent insulation along the complete length of the flue; clay, concrete and pumice flue liners require insulation to be prepared and added on site. Stainless steel system chimneys are supplied with effective insulation, and double wall pumice chimney systems have an air gap between the walls of the inner and outer blocks – the air gap combined with the natural insulating properties of pumice provide effective insulation.

## Although not physically connected, heat pumps and stoves can be viewed as an effective hybrid system

### Environmental concerns alleviated

The lower emission limits for wood burning in Defra's Environment Act could make it difficult for new open fires to meet the lower emission limits. It has been common practice to include 200 mm flues and a standard fire opening in detached houses, leaving the choice of appliance to the homeowner. Wood burning stoves require a smaller flue diameter, typically 150 mm. Installing a smaller diameter flue also has the benefit of substantially reducing the air loss in SAP. SAP does not include secondary heating in the 'notional building.' However, this does not mean that a stove with a flue/ chimney cannot be added to the house design. Using the smaller flue diameter will significantly reduce the air loss calculation.

There have been concerns about particulate emissions (PM) from wood burning. The Environment Act sets significantly lower emission limits for wood burning stoves than in the past. Many stoves already produce lower particulate levels than the Defra limits. The independently verified scheme, Clear Skies, identifies stoves that not only meet the emission limits required by Defra but also stoves that produce fewer emissions.

The sustainable nature of wood burning comes from the fact logs are generally the off cuts that come from pruning trees. Woodlands need to be managed to stay healthy and part of that management is pruning. Interestingly, burning wood in a modern stove will produce less carbon than if it was left to decay on the woodland floor.

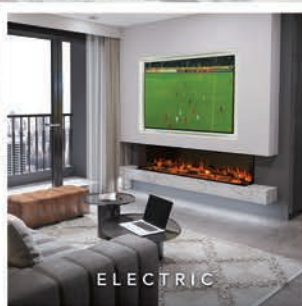
Including a wood burning stove with a heat pump adds value to a house. If you consider doing so, remember the flue/ chimney requirements and incorporate them into the house design.

The BFCMA is the UK's only trade association representing the chimney and flue industry and works closely with Government, public bodies and other organisations to further the interest of the chimney and flue industry. It represents the majority of manufacturers and sole distributors in the industry.

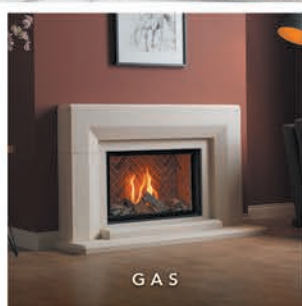
*Dennis Milligan is president of the BFCMA*



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01253 766911 [info@gilbertsblackpool.com](mailto:info@gilbertsblackpool.com)

## Modern offices benefit from Panasonic AC



St John's Innovation Centre, a fully serviced office building situated Silicon Fen in Cambridgeshire, has undergone an extensive upgrade of its air conditioning system. The new Panasonic 3-pipe ECOi-EX VRF system was designed, specified, and installed by Pitkin and Ruddock in collaboration with Panasonic in over 60 of the office spaces. As well as its highly energy efficient performance, the ECOi-EX units have built-in nanoe™ X as standard. This technology can help bring the incredible benefits of hydroxyl radicals indoors, improving the indoor environment.

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## SHORT CHIMNEY = CHIMNEY FAN

Traditional chimney design required a minimum flue height of 4.5 m. In theory, this was enough to ensure sufficient natural flue draught to clear the products of combustion from a wood-burning stove.

Unfortunately, the chimney draught was never guaranteed and the provision often resulted in unsightly tall chimneys when appliances were installed in single-storey buildings and orangeries.

A recent change in chimney design (see source) states that a chimney can be designed using the calculation method in BS EN 13384-2005 which allows for the installation of shorter chimneys, provided sufficient chimney draught can be proved. A chimney fan will guarantee this chimney draught even on a shorter flue design.

*[...] the calculation procedure within BS EN 13384-1 :2005 can be used as the basis for deciding whether a chimney design will provide sufficient draught."*

Source:  
Document J Building Control  
Combustion appliances and fuel storage systems  
page 30 - §2.8 - "Height of flues"

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Titon, a leading provider of ventilation solutions, is excited to announce the expansion of its mechanical heat recovery range with the introduction of the new HRV4 Q Plus Range. This latest addition showcases Titon's commitment to delivering innovative and efficient ventilation solutions for residential applications. The HRV4 Q Plus Range brings impressive enhancements, maintaining a compact size only 600 mm wide while significantly boosting performance and efficiency.

0800 970 4190 [www.titon.com/uk/biglittlemvhr](http://www.titon.com/uk/biglittlemvhr)

## New dimension with interior steel doors



The owners of a large late-Victorian property in Surrey have completed the renovation and extension of their home by bringing style and light to the interiors through the installation of fully glazed steel-framed doors, supplied and installed by Govette Windows, a member of the Steel Window Association (SWA). All of the doors were fabricated using the classic W20 steel profiles and polyester powder coated in a RAL 9005 Pure Black paint finish. They feature B870 handles from Steel Window Fittings on rose black plates in a brushed brass finish with standard latch mechanisms.

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# Primary colours

Jemma Saunders from Crown Paints shares tips on using colour in primary school design so that spaces are easier to navigate for young children's wellbeing

Designing a primary school is a tough balancing act; educational spaces must encourage creativity, inspire learning and sociability, without overstimulating pupils.

Colour can help designers tackle this challenge. Dividing classrooms into different zones, some with stimulating, bright colours, and others with relaxed, muted hues, can create multi-purpose teaching areas. Palettes composed of earthy, natural colours, can help nurture a feeling of connection to nature. And colour-coding can make schools far more navigable for young pupils.

Where to start with choosing colours? Colour choice has a huge role to play when it comes to designing primary schools. All colours have different properties, which can help schools to fulfil their many different functions. However, when picking palettes, it's important to bear the school's pre-formed colour scheme in mind.

Logos and uniforms give schools innate, strong colour associations. So, it's important to use appropriate, related tones. For example, 30 red jumpers against a deep green wall could lead to a lot of unpleasant visual stimulation.

## Getting in the zone

In nurseries and primary schools, colour zoning is a particularly effective technique for these multi-purpose spaces. It can help to establish separate creative and calm spaces, while helping children to navigate the school.

Bright, powerful hues should be used in a zone intended for creativity and socialising, with more muted colours used in another part of the room to create a relaxing space. Blending these zones gradually into a white transition point can give the room a sense of balance and order.

Young children respond favourably to bright colours. Vibrant hues encourage play and creative learning. As a result, they're great for this stage of education which is based around exploration. Balance



is critical though. It's easier to fire kids up than to calm them down – which is something that should always be considered when it comes to classroom design.

Colour-zoning needn't be confined to individual classrooms. Navigating around schools, which can feel like labyrinths of indistinguishable corridors, is often challenging for primary aged pupils. Zoning can help with this, by linking specific colours to specific rooms. Choosing a blue door for a bathroom and a red one for a classroom, for instance, will help children find their way easily.

## Go-faster stripes

School corridors and stairwells are high traffic environments. When the bell sounds at the end of a lesson, children pour into the corridors, bustling their way through to their next class or break time.

Corridors are great spaces for using

**Colour choice has a huge role to play when it comes to designing primary schools**



bright colours. Strong colours, also known as ‘fast colours,’ tend to encourage movement. Hence, powerful hues which might be over-stimulating in a classroom environment can work brilliantly. Vibrant, exciting colour – like an electric pink or a lively blue can really energise the space.

Similarly, stairwells and corridors are also great spaces for using dynamic patterns. Painting contrasting colours in horizontal or diagonal stripes gives the space an added sense of movement, speed and joy.

Busy environments are naturally more prone to knocks and stains, and might need more cleaning as a result. So, it’s advisable to use products with a scrubbable matt finish which can be cleaned thoroughly without compromising the final finish and keeps colours looking their best.

### Bringing the outside in

Biophilic design has become an increasingly common feature of schools, with an emphasis being placed on making sure children can constantly connect with nature, to make them happier and healthier.

This has seen a rise in different forms of outdoor learning – teaching a maths class outside, or cultivating a vegetable patch, for

## Colour-coding can make schools far more navigable for young pupils

instance. It’s also triggered an uptick in the use of natural colours and finishes indoors.

Using natural colours indoors can strengthen the feeling of connection to nature. Earthy browns and reds can create particularly warming, comfortable spaces, but watery blues, teals, and plant-like greens can also achieve a natural feel. The endless variety of colours visible in the natural world means that whatever the school’s pre-existing colour scheme, there should be an appropriate palette available.

Colour can be used to support a school’s function in a great variety of ways. Most importantly though, every element of a school’s colour palette needs to work with its uniform, logo and natural colour way. No matter how pleasing a colour scheme is on its own, it’ll prove visually disturbing if it clashes with the school’s established strong colour identity.

*Jemma Saunders is colour consultant at Crown Paints*



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# Furlong Flooring unveils exciting products and innovations at the Harrogate Flooring Show 2023

Furlong Flooring, the renowned UK-based family business specialising in flooring solutions, is thrilled to announce its participation in the highly anticipated Harrogate Flooring Show, taking place on the 17-19 September 2023 at the Harrogate Convention Centre.

With an impressive display of must-see flooring innovations and market-leading features, Furlong's stands A22 & A36, promise to be hubs of excitement for visiting retailers and industry professionals.

Furlong Flooring is introducing two new ranges to their esteemed Beyond Wool 100% recycled yarn collection: Stanton and Callanish, available in both pattern and plain designs. These ranges feature the revolutionary Combi-bac, an award-winning backing material that offers a flexible yet robust alternative to traditional carpet backings in the market. Adding to the excitement, Furlong Flooring proudly launches its new EcoSense range, featuring



Stanton

the Enchantment collection made with 100% recycled Polyester yarn. Enchantment currently comprises two qualities: Elite, and Luxe, each designed to exude elegance and sophistication. These carpets also boast Combi-bac backing, ensuring they are sturdy yet adaptable. Like the other ranges, Enchantment comes in widths of 4 and 5 metres, is moth-proof, bleach cleanable, and serves as an eco-friendly flooring option.

In keeping with their commitment to sustainability, Furlong Flooring introduces Avondale, an EcoSense range crafted from 100% recycled Polypropylene. Available

in both Plain and Heathers variations, Avondale features a 2-Ply yarn construction, comes in widths of 4 and 5 meters, and offers the same advantages of being moth-proof, bleach cleanable, and backed by a seven year warranty. This range showcases Furlong Flooring's dedication to providing eco-conscious flooring solutions without compromising on quality or performance.

Additionally, the company's latest innovation in hard flooring technology manifests as Endura, an engineered vinyl floor. This revolutionary product stands at the forefront of next-generation rigid vinyl flooring solutions. Notably, Endura boasts 100% waterproof capability and exceptional stability, surpassing SPC equivalents by an impressive 25%. Furlong Flooring is delighted to bring this cutting-edge product to the market, providing its customers with unmatched quality and performance.

01322 628 700 [www.furlongflooring.com](http://www.furlongflooring.com)

## It's Horses for Courses with IVC Commercial



IVC Commercial Carpet Tiles and Luxury Vinyl Tiles are bringing warmth and creating zones at the Holborn offices of the British Horseracing Authority. A range of Belgian made Carpet Tiles, Luxury Vinyl Tiles and Loose Lay Luxury Vinyl Tiles from IVC Commercial are helping to define zones and add a layer of warmth within the open plan offices of the British Horseracing Authority. The Rudiments collection features heavily with the popular Clay and Basalt designs used across congregation, desking and meeting rooms. Basalt takes the lion's share of duties in desking and congregation areas with Think Inside defining relaxed seating areas by a contrasting colour of the same design. In meeting rooms, the random lay Clay carpet plank carries out flooring duties. As part of the Rudiments collection, Clay and Basalt are designed to be mixed and matched together, bringing a sense of balance to the floor. Think Inside has also chosen IVC Commercial's award-winning Imperfection carpet planks, utilising Rupture to bring a premium aesthetic. Inspired by the Japanese golden lacquer repair technique of kintsugi, Imperfection is made with ECONYL® regenerated nylon.

01332 851 500 [www.ivc-commercial.com](http://www.ivc-commercial.com)

## Adhesive-free solution for college refurb

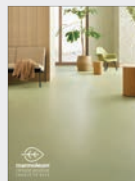


Altro Wood adhesive-free has been used throughout corridors and treatment rooms at the University College of Osteopathy, London, as part of a major refurbishment. Chosen for its slip resistance and comfort underfoot as well as its stylish yet homely modern

feel, Altro Wood adhesive-free also provided a cost-effective, carbon-saving solution to subfloor issues. Altro Wood™ adhesive-free is available in 18 shades, has 14dB sound reduction, a 10-year guarantee and Altro's one in a million slip-resistance reassurance.

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## Marmoleum achieves climate positive status



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# Take care with flooring

With environment heavily influencing health and wellbeing, Ashley Hooper from Joseph Hamilton Seaton discusses how the specification of care home flooring can aid wayfinding, provide visual stimulation, and boost social connectedness



Conjure up in your mind the image of a care home. While specific features will vary, there are some commonalities about the way the interiors of these spaces look and feel. Long corridors, with equally spaced out doors, wide open plan communal spaces; care homes tend to be pragmatic rather than aesthetic in design.

Architects often focus on making these spaces safer for vulnerable residents – by making design choices such as the use of non-slip flooring, accessible entrances and exits, and clean, hygienic furnishings that keep people safe. However, the use of aesthetics to improve the day-to-day wellbeing and health of care home residents often goes overlooked.

## The use of design

The selection of certain colours, patterns and shapes can help, or hinder, the wayfinding abilities and comfort levels of those living with dementia. Roughly 70% of all care home residents in the UK have dementia, or some form of severe memory loss, according to the Alzheimer's Society. Designing spaces that consider their specific needs, then, is crucial.

For people living with dementia, wayfinding problems can cause a great deal of stress, anxiety, and isolation. Wayfinding, i.e. the ability to navigate from one place to another, is integral to the independence and autonomy of a person, and the loss of this functional ability is one of the earliest signs of diseases such as

**The use of design elements such as signage and colour are vital to enable people living in care homes to navigate comfortably, safely and independently**



**A care home environment should be distinctive, and contain visual cues to help residents create an enduring memory of the space**



Alzheimer's. Without this crucial ability, even the most regularly frequented places can appear foreign, leading to feelings of panic and disorientation.

This is why the use of design elements such as signage and colour are vital to enable people living in care homes to navigate comfortably, safely and independently. The long corridors and general lack of distinctiveness that are commonplace in care home environments pose a challenge when designing for recognition and visual stimulation – making it harder for residents to find their way around. But there are several design interventions that can make a huge impact.

### Design considerations

Firstly, the care home environment should be distinctive, and contain visual cues to help residents create an enduring memory of the space. Even when little can be done about the structural layout of the building, interior design choices can boost wayfinding ability. Research has shown that people with Alzheimer's disease who have difficulty orienting can still learn their way around if the environment is supportive for wayfinding.

The colour and layout of flooring can be both functional – i.e. aiding navigation while being soothing. While colour associations aren't 'absolute fact' and instead are dependent on a variety of cultural, personal and subjective factors, different colours generally induce different emotions and feelings. Blues are seen as calming and restful, while reds stimulate adrenaline. Neutral colours, such as beige, should be considered carefully when specifying floor coverings; dull colours that lack distinctiveness mean people with poor eyesight may find that the floors appear to blend together, and into the walls. Black flooring, similarly, can cause confusion – as it is much harder to perceive depth.

As well as this, the use of patterns can also prove a challenge in dementia care homes. While some may think patterns will bring life and vibrancy to a care home, they can often cause misperceptions in surface and depth. Therefore, bold patterns shouldn't be used in a care home setting, unless for a functional purpose – such as to direct people. Instead, opting for strong block colours can provide that essential visual stimulation without leading to confusion.

Wayfinding design can be enhanced by using coloured carpet tiles to signify walkways and guidelines. While also having the practical benefits of design flexibility and ease of repair, using carpet tiles to create homogeneously coloured walkways enables residents to follow the path from the hallway to communal areas. Different coloured carpet tiles could also be used to signify the end of the path – i.e. where only staff should be accessing, or private rooms.

Another design consideration is the importance of contrasting colours. NHS guidelines suggest that contrasting colours should be chosen for the walls and floors; similarly, furnishings should stand out against the walls and floors, to allow residents to see more clearly between levels and objects. Furthermore, choosing products that are accredited by industry bodies such as the DSDC (Dementia Services Development Centre) ensures flooring solutions do not cause confusion to dementia patients. Flooring solutions can attain Class 1a if they are plain rather than patterned, and contrast well with the walls, skirtings, doors, and furnishings. This factor is based on the Light Reflectance Values (LRV) – how much light a colour reflects or absorbs – of a product, with the DSDC recommending a minimum contrast of 30 LRV between flooring and other surfaces.

It might also be beneficial to incorporate nostalgic decor into the design of care homes. Feelings of nostalgia are intensely powerful; proven to trigger brain activity relating to memory in people and is strongly associated with optimism and resilience. In people living with dementia, there is significant evidence that nostalgia improves self-esteem and social connectedness. Where possible, choosing flooring colours, layouts and styles that echo the designs of 40 or 50 years in the past and which can tap into the positive effects nostalgia can have on people with dementia.

From the earliest stages of the design and specification process, design choices within care homes should be made with ease of navigation in mind. But it is also important to remember that many of these facilities become people's homes – so, while clinical and practical safety will always be a priority, architects should strive to create spaces that are attractive and enjoyable for people to be in.

*Ashley Hooper is commercial marketing manager at Joseph Hamilton Seaton*



## Bjelin has a platform for future growth

**B**jelin has continued to rewrite the rules on hardened wood flooring during 2023. The company's range of hardened wood flooring products features the technologies of Woodura® and 5G® Dry™ from Välinge Innovation. These represent the next generation of technologies for highly innovative engineered wood floors.

Woodura® is a patented surface technology which gives outstanding durability and is also highly sustainable. 5G® Dry™ is a premium water-resistant fold-down system which is unique among hardened wood flooring products on account of its ease of installation and its water resistance.

The secret of the products' sustainability lies in their method of manufacture. This involves the fusing of a thin sheet of real wood veneer with a Compositex™ wood fibre core through a powder mix layer. The powder mix completely fills the natural gaps within the wood, while also enhancing the wood's appearance. It eliminates the need for a wood-filler and creates a significantly stronger surface with a hardness three times greater than a traditional solid wood floor – more



solid than a plank! It also means ten times more flooring can be produced from the same amount of timber, compared to traditional engineered wood flooring and 30 times more flooring compared to solid wood flooring.

Furthermore, the aesthetics speak for themselves – just like solid wood, every single sheet is unique, and the products allow ample opportunities for designers to create stunning effects on their projects, especially when using the 5G® Climb™ variant, which uses innovative technology

for wall mounting, to ensure a perfect match between floor and wall.

A successful participation in Clerkenwell Design Week in May led to further interest in the Bjelin product ranges, which are now expanded with a number of new sizes launched during the year. These now range from XXL at 271 mm x 2,378 mm down to S at 151 mm x 1,170 mm.

[richard.banham@valinge.co.uk](mailto:richard.banham@valinge.co.uk)  
[www.bjelin.com](http://www.bjelin.com)

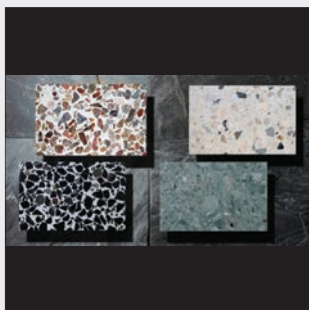
## Express the individuality of working personalities with Pattern from IVC Commercial



Made with the world's first carbon negative yarn, Pattern is the brand-new carpet tile collection from IVC Commercial that responds to today's agile spaces. As talent retention and wellbeing becomes the priority for corporations, modern office design needs to embrace different ways of working and being together, and Pattern helps the floor to play its role. The three designs of Pattern explore our relationship with working to create a collection that can flex across the modern office. Balanced has a strong sense of routine and rhythm for areas of rules and boundaries. The settled and structured look reflects a personality that seeks order in their working life, and this makes the design ideal for use in desking and boardroom areas. Contrastingly, Tailored is inspired by the self-control of those who are adept at switching between task and collaboration. It's structure flows more freely and breaks at random to give a look that's suited to spaces embracing today's many different ways of working. As the opposite to Balanced's restrained outlook, Unchained references expressive personalities that put freedom before all else. It's structure roams freely from one place to the next.

01332 851 500 [www.ivc-commercial.com](http://www.ivc-commercial.com)

## Manchester made Terrazzo



Available from Parkside, Ethical Stone Terrazzo is a low impact terrazzo tile that's made in Manchester using repurposed brick, natural British stones and low carbon cement. In a process that sees stone waste collected from factories or sites across the UK and turned into new premium floor tiles, Ethical Stone Terrazzo is a British made terrazzo that supports UK industry in producing low carbon materials. Available through Parkside, it can transform commercial interiors with an unmistakable terrazzo floor that offers significantly lower CO<sub>2</sub> emissions. With marble from the Isle of Skye, pink limestone from Devon, black Welsh slate and Derbyshire limestone; Ethical Stone is a unique and beautiful British take on classic terrazzo tiles in effects that simply can't be recreated. Reclaimed Manchester Brick is also highlight of the low impact approach of Ethical Stone Terrazzo. And it's not just old brick that can be reused: glass, metal, concrete, stone and even timber can all be used in production. The tile is available from Parkside in standard colours, including the striking Manchester Brick (with or without slate), and bespoke mixes are available on request.

0116 276 2532 [www.parkside.co.uk](http://www.parkside.co.uk)

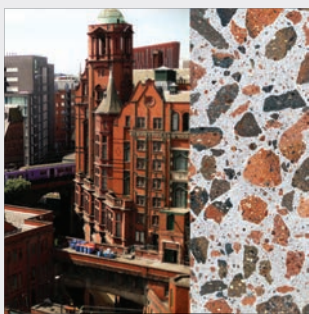
## Dulux Trade videos help further explain the upgrade and benefits of Diamond Matt



Following the recent news that Dulux Trade has reformulated its popular Diamond Matt product, the company has shared two exciting videos that will further explain the upgrade and the benefits. The first is a 'Behind The Scenes' interview with Hannah Beeke, R&D team leader at AkzoNobel. She explains more about the product's durability and improved sustainability credentials, as well as the Tested & Approved process and what it means for the industry. You can find the video here: [www.youtube.com/watch?v=8AW4gMn\\_MOW](http://www.youtube.com/watch?v=8AW4gMn_MOW). In the second video, AkzoNobel's Duncan Lochhead (commercial sustainability manager at Dulux Decorator Centre) and Peter Howard (sustainability & CSR lead) discuss what the new Diamond Matt will mean for architects and specifiers. They talk about why Dulux Trade Diamond Matt has been upgraded and the benefits it offers, including the importance of sustainability and why it was placed front and centre when updating the Diamond Matt formula. They also delve in deeper to explain what sets the new Diamond Matt apart. You can find the video here: [www.youtube.com/watch?v=D9EI9cFycrE](http://www.youtube.com/watch?v=D9EI9cFycrE)

0333 222 7070 [www.duluxtrade.co.uk/diamondmatt](http://www.duluxtrade.co.uk/diamondmatt)

## Manchester born and bred



Using reclaimed and locally sourced red brick, Ethical Stone Terrazzo Manchester Brick is the British made terrazzo that brings a unique aesthetic to interiors and exteriors. Exclusively available from Parkside Architectural Tiles and on show at the Parkside Tile Studio in Clerkenwell, Ethical Stone Manchester Brick Terrazzo uses reclaimed and locally sourced Manchester red brick to bring a very special terrazzo tile. By reusing brick from buildings designated for demolition or upgrade, Manchester Brick Terrazzo continues the story and character of old materials and locks in CO<sub>2</sub>, bringing a circular material that also continues an 80-year history of terrazzo manufacturing in the city. Just like the rest of the Ethical Stone Terrazzo collection, Manchester Brick is made using a low carbon alternative to traditional Ordinary Portland Cement (OPC). By utilising a by-product of the steel industry, this alternative reduces reliance on OPC by up to 50% and saves up to 450 kg of CO<sub>2</sub> per tonne used. It's a ground-breaking low carbon technology that helps to further lower Ethical Stone's footprint.

0116 276 2532 [www.parkside.co.uk](http://www.parkside.co.uk)

## Smoothing compound for underfloor heating

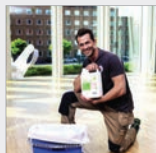


F. Ball and Co. Ltd. has launched Stopgap 1600, a new fast-drying, fibre-reinforced smoothing compound that is formulated especially for use over underfloor heating systems prior to the installation of floorcoverings. Stopgap 1600 can be applied between 3 – 40 mm thick to encapsulate electrical wired or water-fed underflooring heating and cooling systems installed over internal subfloors in both

domestic and commercial environments. The product is suitable for use over a wide range of absorbent and non-absorbent subfloors.

01538 361 633 [www.f-ball.co.uk](http://www.f-ball.co.uk)

## Bona launches Traffic GO



Bona is announcing the launch of its new lacquer, Bona Traffic GO. This unique wood floor treatment is developed with innovative two-component (2K) technology and a built-in hardener providing simplicity, safety, and heavy-wear durability all in one product. Bona Traffic GO is free from isocyanate due to its built-in hardener, as well as PFAS, which Bona is phasing out and replacing with other components. With less than 3% volatile organic compounds (VOC), Bona Traffic GO ensures a healthier application and curing process that exceeds current legislative guidelines.

01908 525150 [www.bona.com](http://www.bona.com)

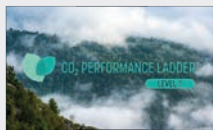
## LED battens send fluorescents down the tube



The new BATSC range of LED battens from Knightsbridge provide energy-efficient, cost-effective and technologically-advanced replacement alternatives to outdated legacy fluorescent lighting in industrial, commercial or office environments. The BATSC (batten, self-contained) units are colour temperature and wattage adjustable, offering ultra-high efficiency and contain the latest control chip technology. Highly durable owing to their steel and polycarbonate construction, the battens are low maintenance and long-lived in operation, with an estimated lamp life of nearly seven years.

01582 887760 [www.mlaccessories.co.uk](http://www.mlaccessories.co.uk)

## An impressive sustainability milestone

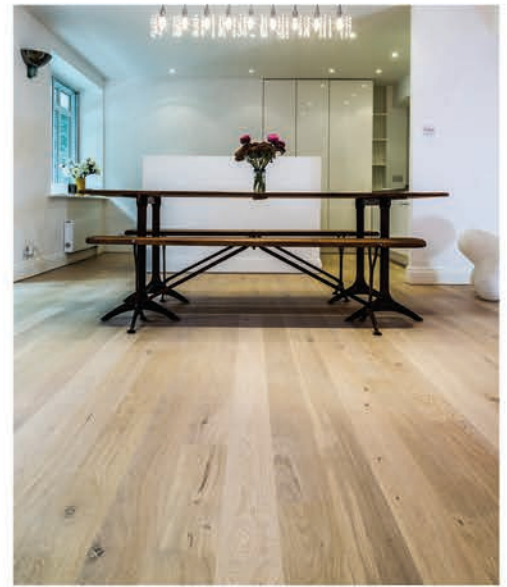
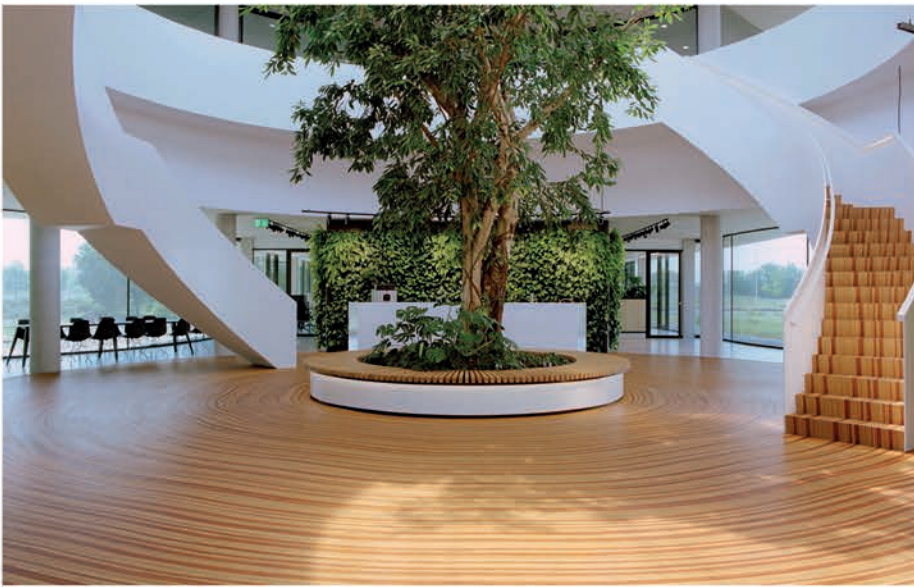


Kitchen manufacturer, Keller Kitchens, is well known for its pioneering approach to sustainability and is delighted to announce that parent company, DKG, has been awarded level 5 on the CO<sub>2</sub> Performance Ladder; the highest possible.

The CO<sub>2</sub> Performance Ladder is the measuring instrument for governments and large companies – the higher the level, the more sustainable the company! By achieving level 5, DKG demonstrates that the company has not only taken the necessary steps to massively reduce its own CO<sub>2</sub> emissions, but also for the entire supply chain.

[www.kellerkitchens.com/en/csr](http://www.kellerkitchens.com/en/csr)





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## Turning heads for assisted showering

**H**orne shower panels are designed specifically to withstand challenging environments: the aluminium extrusion casing, anodised and epoxy-coated, is stable and robust for a maximised lifespan. Shower head and control components are highly durable; chromium-plated stamped brass, die-cast zinc and stainless steel are tolerant of accidental, or intentional abuse. The extensive range serves sport and leisure to acute healthcare, residential care, a variety of assisted showering applications, to secure facilities, as well as highly specialised niche applications.

Responding to a series of requests from Occupational Therapists (OTs) and care professionals, Horne has created a new range of dual-outlet (featuring a fixed vandal resistant (VR) shower head and a flexible hose with shower handset) models for assisted showering. Specifically requesting a diverter valve that is manually, rather than automatically, operated to switch flow

between the VR head and the handset, OTs predict that assisting challenging clients to shower will be easier to manage and reduce the risk and severity of escalation behaviours. The range includes a wall-mounted riser rail, available in white/grey, and dementia and sight-loss friendly deep orange/grey. It doubles as a robust and supportive grab rail and features an inclusive-design, BS 8300 compliant, handset holder. Its unique design, with precision fishing-reel technology, allows for exceptionally easy movement of the carriage, yet retains a tight holding grip once at the user's optimum position. Matching grab rails are available if required.

A pipe cover is included and is available in two lengths, to accommodate for different ceiling heights: 465 mm (T4 coding) and 940 mm (T9). As a security cover, it protects the internal ILTUD thermal disinfection unit (for waterborne pathogen control) whilst still providing key access for its operation. The pipe cover also improves installation

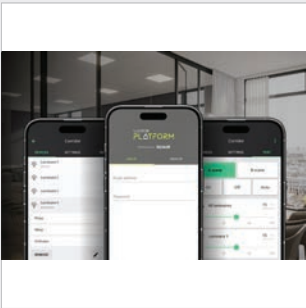


aesthetics and shower hygiene, being easier to clean than exposed pipework.

More info at [b.link/Included](https://b.link/Included). Architects, OTs and residential care providers can see the new range at Stand J56 at The OT Show, NEC, 22-23 November 2023.

01505 321455  
[www.horne.co.uk](http://www.horne.co.uk)

## Luceco Wireless lighting controls (but not as you know them...)



**Luceco Lighting**, part of the Luceco Group, has announced an exciting strategic partnership with Silvair, a pioneer in wireless lighting control technology. Luceco Platform transforms existing lighting installations and creates a simple and efficient wireless communication system offering dimming, scene-setting, presence, and daylight control, all helping to reduce energy consumption and operating costs, while creating a comfortable lit environment. Based on the advanced technology developed by Silvair, the now available to download Luceco Platform App offers a new range of tools for lighting system commissioning, radically enhancing user convenience and operational efficiency providing seamless integration with the existing Luceco Lighting portfolio. Luceco Platform aligns with Luceco's core sustainability commitment to reducing their own, and their customers' carbon footprint. Recognising the crucial role of energy efficiency, Luceco Platform incorporates an innovative energy monitoring feature. This tool allows users to keep a close eye on energy consumption, making it much simpler to monitor and manage resources responsibly and effectively.

01952 238 100 [luceco.com/uk](http://luceco.com/uk)

## Get closer to cork with Granorte



**Granorte's** cork products have long been desired and used in high-end interior design projects across Europe. Now with an improved service, UK homes and business can enjoy a closer connection to some of the world's finest cork products. With a hugely impressive choice of cork floors and walls, as well as design objects that are all made in-house in Portugal, Granorte is one of the world's finest cork product producers. Its innovation and excellence has seen it receive design industry awards and recognition across the world. Now, as the natural and sustainable qualities of cork come to the fore of purchasing decisions and the material is considered more than ever before, Granorte has taken huge strides to improve accessibility across the UK. Granorte floors and walls are now easier than ever to choose for homes and businesses. On the website, there's access to a novel room creator that lets users experience any of Granorte's floors and walls in virtual rooms and fast access to a world of design possibilities. In fact, with the premium design of Delivering Nature and the accessibility of TRENDCollection, there's a cork finish to suit any room.

01952 443 555 [www.granorte.co.uk](http://www.granorte.co.uk)



# Resapol supplies Steintec products for Old Portsmouth paving jointing project

In April the Resapol Southampton Depot was contacted by Reds Builders for a project involving the jointing of Yorkstone paving slabs situated in Old Portsmouth. They sought a product that would meet their requirements of ease of use & quick application; the project needed to be completed by the King's Coronation weekend on 6 May. The project site is situated on the seafront and adjacent to the seawall; meaning during volatile weather conditions waves crash into the wall and subsequently puddle on the paving. Barney Wotman, Technical Advisor at Resapol Southampton, recommended Steintec's tufftop, alongside Weiss Install Protect and the rental of a Pergo 880 Grout Cleaner.

Steintec tufftop is a high performance, highly elastic, free flowing bonding mortar that contains no polymer or resin additives and requires only the addition of water. It is renowned for its durability, strength, and flexibility, making it an ideal choice for



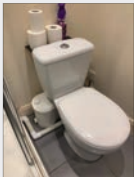
jointing the Yorkstone paving slabs. It offers excellent bond strength, crack resistance, and weather resistance, ensuring long-lasting results. The material comes in a range of colour options, the beige version of tufftop was selected for this project to achieve an

aesthetically pleasing result. Weiss Install Protect is a pre-construction protection impregnator for paving elements and the Pergo 880 Grout Cleaner is a sponge belted grout cleaning machine.

The materials were promptly delivered to the project site in Old Portsmouth, allowing Reds Builders to start the project as soon as possible; the ease of application facilitated efficient completion in time for the Coronation. Paul Lewis, business development manager & senior estimator at Reds Builders, expressed his satisfaction with Resapol Southampton and the chosen materials: "Resapol Southampton's service was second to none, they always come up with a solution that works great! The products and equipment were easy to use, so much so that we are planning to use the same materials for an upcoming project in July."

0800 083 1942  
www.resapol.com

## Saniflo provides robust service for house



A 100-year-old guest house apartment in Inverness received a new Sanibest Pro to replace a non-Saniflo macerator that had been changed three times in seven years and had required multiple repairs and maintenance due to clogged blades. Saniflo advised the property owner that the Sanibest Pro, although usually specified for commercial applications, would suit this domestic scenario because a more powerful product was required to dispose of items that clog blades. The Sanibest Pro occupies the same space as its defunct predecessor, so no additional plumbing or pipework was required.

sales@saniflo.co.uk www.saniflo.co.uk

## Four new finishes for 45W USB wall chargers



Knightsbridge has enhanced its range pioneering 45W USB charging solutions with the introduction of four additional decorative finishes in the company's popular screwless format. At the time of their initial launch, Knightsbridge's 45W USB sockets and modules were the fastest chargers available on the market and still remain at the top of the competitive tree. Now, beyond curved or square edge moulded sockets in white, these powerful 230V 13A two-gang switched USB sockets come in anthracite, matt black, matt white and brushed chrome.

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## One Can helps Many Hands make light work of bridge



When design studio Many Hands were commissioned to brighten up a railway bridge in South London, a conversation with **Bradite** provided the solution – One Can. Working with Greenwich London Borough Council to improve the appearance of the public space, Many Hands painted a multi-coloured design for the Plumstead railway bridge. The design was created by Make:Good who work with local communities to improve the environment. In need of a high-performance coating that would provide superior protection, Many Hands turned to the Bradite technical specialists, whose suggestions had proved invaluable for previous projects, including the HQ of cycling lifestyle brand RAPHIA. On this occasion, the chosen finish had to satisfy the technical requirements of the Network Rail M24 certified paint system. “They have strict guidelines about what paints to use on their structures, so they were given the details about Bradite One Can and they approved it,” explains Many Hands Director, Luke James. The job took 10 days, with One Can’s extensive palette of RAL colours supplying everything required for the job.

01248 600315 [bradite.com](http://bradite.com)

## Okopod offers sustainable garden rooms



Okopod, a fast-growing new timber building company based in Cambridge is supplying clients across the country with sustainably-built garden rooms which employ West Fraser’s SterlingOSB Zero as a primary material for fabricating the main structure and interior partitions. SterlingOSB Zero is available in a

range of sizes and thicknesses up to 22 mm as well as a T&G version ideal for flooring and decking applications. The high-performance panel product, free of added formaldehyde, has also earned BBA approval and meets the requirements of NHBC Technical.

[uk.westfraser.com](http://uk.westfraser.com)

## Latest news, views and more



If you like to be kept informed of all the latest news, views, and promotions for the architectural community, the ADF email newsletters can offer you regular updates straight to your inbox. The weekly Editor’s Choice newsletter includes top news stories curated by the ADF editorial team, while the monthly CPD Focus and fortnightly ADF Newsletter offer updates

on products, services, events, and learning opportunities available from a wide variety of manufacturers and suppliers.

[www.subscribepage.com/adf](http://www.subscribepage.com/adf)

## FIREFLY™ Phoenix picked to protect pharma giant’s new Macclesfield plant



A Manchester based passive fire protection specialist has utilised products from the range of TBA FIREFLY™ – including the versatile Phoenix Smoke & Flame barriers – to achieve the compartmentation of concealed spaces within the new Macclesfield manufacturing facility of a world-leading pharmaceutical giant. Firetech UK Ltd is a key sub-contractor to DES for the construction of the extensive new laboratories and production plant for AstraZeneca, part of the FTSE 100 company’s continuing investment at its East Cheshire site for the distribution of drugs to markets around the world. The Contracts Manager for Firetech UK on the Macclesfield Project, Josh Dodds comments: “We have been using FIREFLY™ products for the past five years, including here on this very large new plant. Early on in the contract we installed a large quantity of TITAN Lite™ 120:60 fire barriers in the ‘Amenities Area’ of the building and then when we were tasked with installing a series of smoke and flame barriers in the ceiling voids over the laboratories, we proposed the Phoenix product as being the most cost-effective solution.”

01706 758817 [www.tbafirefly.com](http://www.tbafirefly.com)

## Siderise launches Technical Deep Dives



Siderise has launched the first in the series of its new Technical Deep Dives— short free e-learning modules designed to help construction professionals get to grips with key areas of passive fire protection and noise control in the built environment. Edition

1 explores the challenges imposed upon perimeter firestops resulting from curtain wall facade and building movement, and the consequential performance requirements for providing effective compartmentation. This includes examining the test standards to look out for when specifying these products.

01656 730833 [knowledge.siderise.com](http://knowledge.siderise.com)

## Raise the bar on worker safety



Despite the huge progress which has been made in health and safety standards and practice across the UK construction industry over recent decades, falls from height continue to pose the biggest risk in terms of injury or worse. The ongoing risk has prompted SFS, one of the largest manufacturers of safety equipment, to launch a new initiative intended to maximise the protection of contractors. The SFS Fall Protection Installer Network has been created to provide a platform dedicated to advancing competency and awareness for companies and their individual operatives.

[uk.sfs.com/fallprotection-installernetwork](http://uk.sfs.com/fallprotection-installernetwork)





## GLIDE BOLLARDS

Flexible, ingenious and totally secure, Securiscape's Glide Bollard HVM system is ideal for protecting busy premises where access needs to be controlled – and yet it couldn't be simpler. The system uses industry-leading shallow fixings and moveable bollards that can be moved side-to-side to create an opening and pushed back into position to prevent unwanted vehicles gaining access.

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## Brighton apartments accessing the versatile performance benefits of Magply



The task of adding an extra floor to an apartment building in the heart of Brighton has seen the 12 mm version of IPP Ltd.'s **Magply** boards employed in a variety of applications, both internally and externally: highlighting the well proven MOS product's fire performance, weather resistance and overall economic benefits. The local branch of Jewson, located in Portslade, has supplied Godfrey Investments with 295 sheets of the 12 mm boards for use in the construction of a parapet around the new roof terraces being created atop the three-storey structure. Then more of the boards are being used inside the quartet of luxury apartments. Site manager, Hassam Yesilada said: "Internally the Magply MOS boards being covered in two layers of plasterboard while around the terraces the liquid rubber membrane is being dressed up the face of the parapet walls and covered by a capping. Definitely, this is a unique project for central Brighton with every property having a scenic roof terrace and the work has gone well." Magply MOS boards present a fire-safe and environmentally friendly alternative to conventional plywood or OSB products.

01621 776252 [www.magply.co.uk](http://www.magply.co.uk)

## FIREFLY™ system upgrades roofspaces at Ashfield Wellbeing Centre



A programme of works carried out at a Nottinghamshire hospital, just prior to Christmas, has seen a number of products from the **FIREFLY™** range employed to upgrade the passive fire protection throughout the roof spaces, with the manufacturer providing site specific design details to assist the highly experienced contractor complete the project on time. DC Fire Protection Ltd., based at Wellingborough in Northamptonshire, works right across the country covering multiple sectors of the construction industry, installing active as well as passive fire protection systems. For its 10 week contract at the Ashfield Health and Wellbeing Centre at Kirby in Ashfield, the specialist installed dozens of rolls of the **TITAN Lite™** fire barrier as well as the **APOLLO Horizontal barrier**, **Collaroll** and two of the 1,200 x 600 mm **FR120 Access Panels** to link some of the safety zones being created. Third party approved, **FIREFY™ APOLLO Horizontal 30:30** provides 30 minutes integrity and insulation to exceed the minimum requirements within the Building Regulations relating to fire barriers. Visit **TBA's** website to find more information about the full range of products available.

01706 758817 [www.tbafirefly.com](http://www.tbafirefly.com)



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**Contributing to safer buildings.**

Backed by over 50 years' experience, Siderise passive fire and acoustic insulation systems provide high-performance solutions to create beautiful, protected buildings without compromise.

We have the technical expertise and insight to understand what's required to build a safer building, and we will work with you to ensure that your projects are designed and built with integrity.

Seamlessly, from design concept through to site installation and whole-life performance, our technical data, product quality, and outstanding service support ensures we have the ingenuity to be your project partner.

**Siderise. Making buildings safer together.**

Discover more at [siderise.com](https://siderise.com)