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IN-BUILT ACCESSIBILITY

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FROM THE **EDITOR**



re you involved in an adaptive reuse project at the moment? I'd imagine that if you're in a larger practice, the chances are it's very likely.

An American workplace blog reckons that 90% of real estate development will involve adaptive reuse of existing buildings in lieu of new build in the next decade. Of course, it's the sustainable option, but could it also be the most architecturally satisfying option too, bringing together past and future in stimulating ways?

The public inquiry that has been held into the issue of whether to demolish or refurb the (genuinely) iconic M&S store at Marble Arch crystallised the different perceptions on the issue in a painful fight. The retailer has ended up in a position of being seen as out of touch and anachronistic, determined to raze three decent buildings to the ground and start again. By contrast, the deep retrofit envisaged by their opponents (including Arup), the best of the existing building would be allied to new approaches to make the whole scheme fit for the future, as well as lighter and more appealing for users.

This is the essence of the adaptive reuse approach, a perhaps more complex, but more considered look at the assets we have. Obviously, some buildings just need to go, but in the majority of cases, I'd suggest that the retain and reuse approach has to be the first approach considered by any design team given our carbon challenges. And the London Plan gives weight to this idea, making it the required presumption on projects.

The SAVE Britain's Heritage group, which is leading the objections against M&S' stubborn plans to start from scratch, has called the situation the first major test of the UK's "disposable, knock it down and re-build attitude to our cities and historic buildings." No doubt this has some credence, given that over past decades we have arguably seen working with existing buildings as 'make do and mend,' rather than an end in itself.

The M&S inquiry will be resolved later this year when Michael Gove of all people will decide on whether the new build approach or the 'tabula rasa' method will be the one to fund. The world is watching; a world which is increasingly attuned to the need to preserve the most useful aspects of previous designers' work. In this case, I hope we take the conservative option.

I predict we will be talking about the promotion of adaptive reuse across previously unusual sectors more frequently in the coming years, and I look forward to celebrating architects' work in this challenging, but exciting future. If you are working on such a scheme at the moment, we would love to hear from you, for future coverage in ADF. Please email jparker@netmagmedia.co.uk

James Parker, Editor



ON THE COVER...

Two hours west of Shanghai, Inlong Narada Resort aims to transform a former quarry into a luxury resort featuring a variety of leisure amenities including a spa centre and villas For the full report on the elements of the project designed by Nottingham practice CPMG, go to p36



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COMMERCIAL

DLA completes post-Covid hybrid workspace for Home Group



DLA Architecture has completed the "radical" interior design project for the new 70,000 ft² headquarters of Home Group in Newcastle.

Home Group is one of the UK's largest providers of housing, health and care, employing nearly 3,000 colleagues. With a turnover of around £430m, the North-East based social enterprise provides homes for over 120,000 customers across 55,000 properties in England and Scotland.

One Strawberry Lane – a prominent building in Newcastle city centre – is one of the first workspaces in the UK to be



specifically designed for the "post-Covid way of working," said the architects. The five floor building is also one of only 80 in the world to receive Smartscore certification – the highest possible global accreditation for modern buildings.

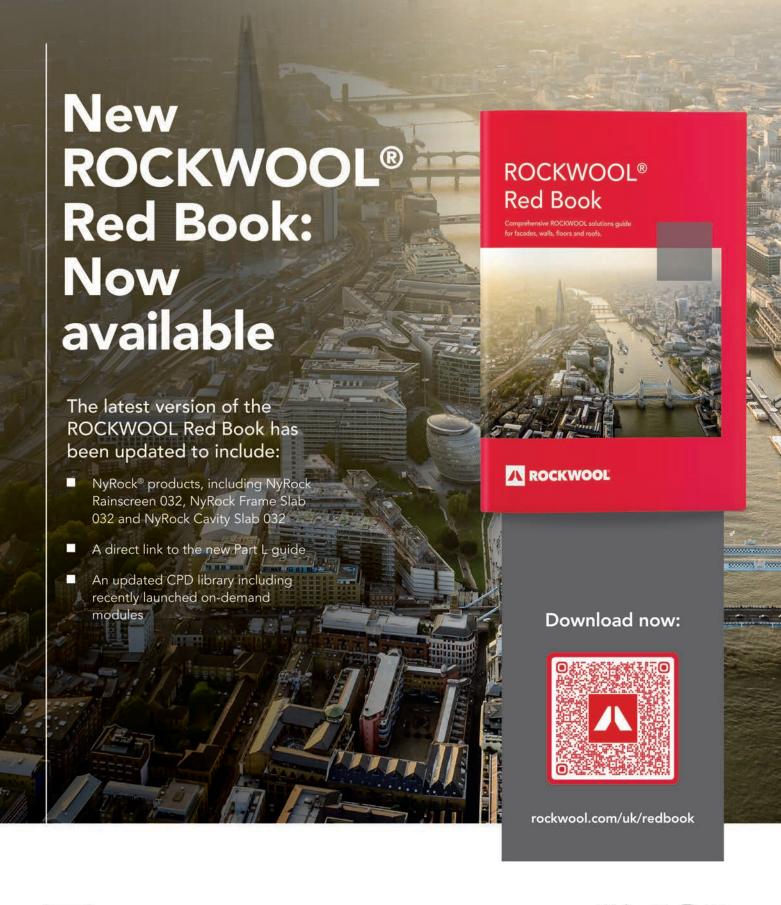
DLA won a competition to design the CAT-B workplace fitout with a brief led by the need for the HQ to respond to the next generation of hybrid working for all types of people and business functions. The majority of the building is the new head office for Home Group, but two of the floors are let to external organisations.



The design approach from the outset was to amplify the benefits of being in the office in a "dynamic and collaborative environment," more akin to a theatre stage than traditional office. Designed for "ultimate flexibility," routes have been "carved out between hubs of core infrastructure, such as tea points or scanning facilities, dividing the floorplate into flexible zones that can be programmed for different work settings," the architects commented.

Aesthetically, "quirkiness and colour has been taken from more domestic environments to bring the work and home atmospheres closer together." Greenery and landscape design greatly influenced the top floor with its "patio, green and forest spaces." A feature green wall down the central stairwell provides a "biophilic connection" through the building that starts at the cafe and entrance.

One Strawberry Lane was developed by Ask Real Estate and built by BAM; Ryder Architecture designed the project's CAT-A new building while Overbury delivered the fitout for Home Group.







ADAPTIVE REUSE

GT3 Architects reimagine Nottingham's former Debenhams building

The future of the former Debenhams store in Nottingham city centre has been subject to speculation since its closure in May 2021, with rumours and widespread debate about what should happen next to the Grade II listed building.

It was recently reported that Longmead Capital – a London-based investment management firm – had approached the city council to discuss future plans.

With 90% of former Debenhams stores still lying empty, this "poses a nationwide question, not just for Nottingham," said GT3 Architects, adding that "any proposals must meet the city's needs. The team at GT3 Architects have brought forward a vision that "will give the 159-year-old Nottingham landmark a new lease of life."

Designed by Liam Gallagher, Matt Drewitt, Jake Duthie and Marta Subh Lopez, the project will "encourage people to live, work and play in the city centre" and thereby will greatly "improve regeneration efforts, fire up the local economy and aid Nottingham in its efforts to become carbon neutral by 2028."

The concept "carefully divides the spaces to offer something different across the various levels," including a food hall, boutique shops, a high-end hotel, office space, a media centre, housing, a hospitality pavilion, and lastly a public roof terrace. The smaller building next door on Long



Row would become a pub and cultural centre, The Mikado, in reference to a cafe building which stood adjacent some 70 years before.

"Our design provides a 'shopping list' of options to provoke real discussion

around how we reimagine this muchadmired landmark," added the architects. "Nottingham needs more emphatic pieces of civic architecture, and we believe the interventions proposed will have a very positive impact on the townscape."















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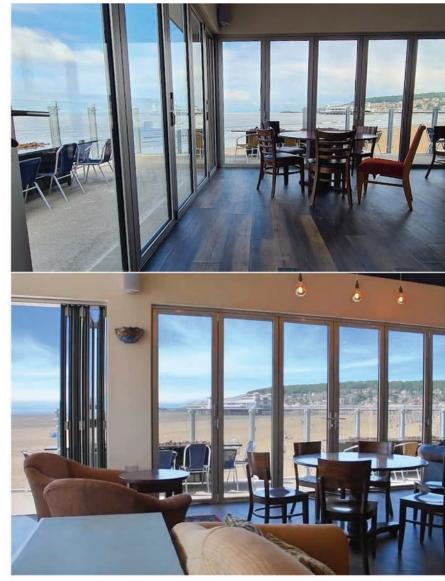


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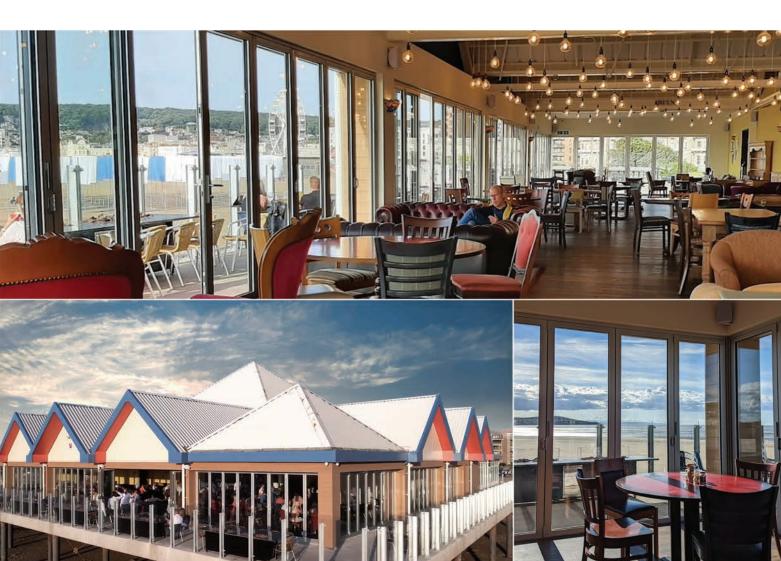
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WINDOWS DOORS



ROOFING







ASK THE ARCHITECTS

ADF gets two perspectives from Leeds practice
Brewster Bye Architects

– residential and student accommodation specialist and newly appointed director Andrew Chapman, and recently qualified architect Tim Chestnutt



(L-R): Andrew Chapman & Tim Chesnutt

WHAT MADE YOU WANT TO BECOME AN ARCHITECT?

Andrew: From an extremely early age, I was at my happiest spending hours sketching out designs for cities and football stadiums! As I moved through school, I developed a keen interest in art, design, and urban geography and with the support of enthusiastic art teachers, I focused on my future career path from a very early age.

Tim: I have always had a strong interest in creative subjects, studying art, design and engineering in school, which I suspect led to the idea of working in a field that is both creative and diverse.

WHAT DO YOU LIKE MOST ABOUT BEING AN ARCHITECT NOW?

Andrew: The greatest satisfaction in being an architect for me will always be the initial design stage. Whether the site requires a new build masterplan, a tricky urban infill or repurposing an existing building, the process of developing a design and vision for the client is always the most rewarding, and the stage where I feel architects add the most value. Having been lucky enough to develop a number of key sites in my home city of Leeds, the ability to play a part in shaping the future evolution of the city is incredibly rewarding.

"Working in a design-based profession is incredibly rewarding but it can also take an unquantifiable amount of time and patience to get right"

Andrew Chapman

Tim: The currently active construction industry ensures that as architects we constantly move forward, and with our creative skills and knowledge, we regularly deliver projects that we are all very proud of. We do a lot of early design and planning work, and this stage of the process is always enjoyable. It's a great way to hone existing skills while always being open to trying something different and exploring our creativity.

WHAT IS YOUR BIGGEST CHALLENGE AS A NEWLY QUALIFIED ARCHITECT?

Tim: Keeping up to date with a fast-moving industry and ever-changing regulations is probably the most challenging part. After spending years getting to this level in my career, I now see almost daily changes spanning products, legislation, potential new regulations, and everything else, which can be demanding.



A student accommodation scheme onsite currently at Merrion Street in Leeds' Grand Quarter conservation area includes 88 high specification studio apartments





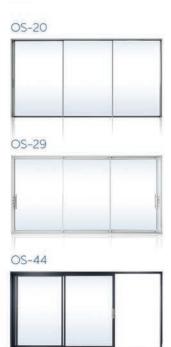




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Oasis Residence is another student accommodation scheme in central Leeds designed by the practice, but one which also includes ground floor retail space

WHAT PART OF YOUR TRAINING HAVE YOU ENJOYED THE MOST?

Tim: It's definitely been the onsite aspects of the training and realisation of a project from design to completion. It's part of the RIBA Part 3 training to review and demonstrate involvement in a project throughout the work stages and it's a great opportunity to really get a feel for how the industry works and everything involved in the delivery of a project.

WHAT IS YOUR BIGGEST CHALLENGE AS A NEW DIRECTOR?

Andrew: Having been at Brewster Bye Architects for nearly a decade and being given increased responsibility from several great mentors, I have become used to managing numerous projects for a fantastic client base. The biggest challenge however is the huge amount of work that directors do in the background, to continuously manage the business and operational side to provide the right environment for staff to continue producing great designs.

HOW HAVE YOU FOUND THE RETURN TO WORK SINCE THE PANDEMIC?

Andrew: As a design-based profession, the value of creating a studio culture is invaluable for the cross-pollination of ideas amongst staff, which has a hugely positive impact on design. Although the industry needed to show flexibility (and Teams meetings worked surprisingly well, particularly for planning stage presentations and online meetings which have continued to save hours of travelling,) there is no substitute for the knowledge sharing that occurs more naturally in the office environment, and particularly benefits more junior staff.

Tim: The design industry thrives on collaboration and the transition back to the office has been really valuable for me. As a student it was important to be around those with experience and to learn from others around me. However, there are benefits to home working, and I think all employers should offer flexibility, but I'd encourage younger employees and those still training to utilise the experience of the office and those around them as much as possible.

DO YOU THINK HOME WORKING WILL REMAIN A KEY PART OF YOUR JOB?

Andrew: I think Teams meetings will continue to be well-used, particularly at design stage, as the ability to present an idea or a scheme works well.

Tim: I think it's unlikely in the short term, I'm newly qualified and still have a lot to learn from my colleagues, so working in the office is ideal for me. I can however see myself working from home, in a hybrid role, in the future.

WHAT PIECE OF DESIGN WORK ARE YOU MOST PROUD OF?

Andrew: To date, my greatest architectural achievement was the design and delivery of Oasis Residence, a part six, part eight storey luxury student residence in the centre of the Leeds Civic Quarter. Having worked with the client from the first sketch to secure the site, the planning application was granted in record time due to the strong relationship built with the planners during the productive pre-application stage.

The building has an elegant stone facade and an active retail frontage at ground floor, and its modern, stepped design makes

a valuable contribution to the sensitive context – which includes the adjacent Grade II listed former church. Being heavily involved in the project (and its interior design) from concept to delivery was incredibly rewarding, and a credit to both the client and design team.

Tim: To date, a project on Merrion Street in Leeds city centre, which is the tallest scheme I've worked on, would be my most impressive. The part five-storey, part seven-storey and part nine-storey building is onsite now and will consist of 88 high specification studio apartments with associated amenities. I worked with Andrew on the concept, design and all the planning material, and although I'm no longer involved in the delivery, it's great to hear about the progress and see the design come to life.

NAME ONE THING THAT WOULD MAKE YOUR JOB EASIER?

Andrew: An extra five hours in a day would make things easier! Working in a design-based profession is incredibly rewarding, but it can also take an unquantifiable amount of time and patience to get right. With the increasing pace of the industry, and instant demands of incoming emails, spending sufficient time on a drawing board can be difficult at times!

Tim: Advancing technologies are regularly improving how we work, whether software and hardware, product technology, new building design aids or sustainability innovations. Technology is always advancing, which benefits our industry with new programs to assist designs and assess outcomes, or modernised technology to improve output and efficiency. Being at the forefront of this means our work is always of the highest standard.

WHAT ARE YOUR KEY CONTRIBUTIONS TO THE PRACTICE GOING TO BE IN THE NEAR FUTURE?

Andrew: Over the coming years, it would be fantastic to see some of the exciting new build proposals and masterplans currently on our desks coming to fruition and Brewster Bye playing a key role shaping the built environment of cities across the north. I am particularly excited to see our new Merrion Street development opening its doors in 2025, as we have been so heavily involved with it from conception.



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SITE LINES

The zero cement game

Will Lavelle of Atkins and Dr Philippa Horton from the University of Cambridge discuss what's claimed to be the world's first trial of zero emissions cement, which aims to develop 'net-zero' cement for the global construction industry

he decarbonisation of the built environment presents a phenomenal challenge to the construction industry, as the global 2050 deadline looms. And with an estimated 80% of 2050's buildings already in use today, there has rightly been considerable political and public attention given to the operational decarbonisation of existing UK homes – through improved insulation, installation of heat pumps and a rapid shift towards a decarbonised domestic electricity grid.

But there is also a keen focus on the carbon footprint of construction itself, and a real need to ensure embodied carbon is not left behind in this drive. Which is why the recent launch of zero-emissions cement trials is such an important step in the construction industry's net zero journey.

Cement 2 Zero is a UK demonstrator project to trial the world's first zero-emissions cement on an industrial scale. This innovative project, which secured £6.5m of Government funding from UKRI (UK Research and Innovation) as part of the Transforming Foundation Industries Challenge, aims to further advance the construction, cement and steel sectors' decarbonisation journey to net zero industries of the future, to help meet the UK Government's commitment of achieving net zero by 2050.

Led by the Materials Processing Institute, and supported by the University of Cambridge, in collaboration with key players in the supply chain, Cement 2 Zero, the end goal of the project is to produce 'zero carbon' Cambridge Electric Cement (CEC) at scale. It is the first collaborative trial of its kind to address the global construction industry's biggest challenge of decarbonisation, in response to the climate emergency.

Concrete is the most widely used material on earth, after water. The chemical and thermal combustion processes involved in the production of cement are a significant source of CO_2 emissions. The more than four billion tonnes of cement produced each year accounts for around 7% of global CO_2 emissions, according to the Global Cement and Concrete Association (GCCA).

Cement-based products can easily contribute more than 50% of the CO₂e ('Carbon Dioxide Equivalent') emitted during construction of a traditional new-build home. Cement is of course found in many of the key elements including foundations, mortar and screed, but also blockwork and plasterboard, and in the UK, concrete and cement account for 1.5% of CO₂ emissions.

Project methodology

The Cement 2 Zero project will investigate the technical and commercial aspects of 'upscaling' the existing production from CEC



In the UK, concrete and cement account for 1.5% of CO₂ emissions

to produce 20 tonnes of zero emissions cement.

The first phase of trial 'melts' is being carried out by the Materials Processing Institute, initially in a 250 kg induction furnace, before being scaled up to 6T in an Electric Arc Furnace (EAF). Once the process has been substantially trialled, developed and de-risked effectively, industrial scale melts will follow in CELSA's EAF in Cardiff.

The two-year industrial trial will test each stage of the production process and brings together the expertise of the Materials Processing Institute, the University of Cambridge and key supply chain partners – Atkins, Balfour Beatty, CELSA, Day Aggregates and Tarmac – before using the product in a live UK construction project.



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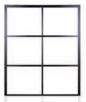












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The project aims to demonstrate that concrete can be recycled to create an addition which could, when cooled rapidly, replace Portland cement

If successful, it could not only further advance the cement, steel and construction industries, but influence how we recycle, construct and maintain our built environment and transport infrastructure, shaping the future of towns and cities, while simultaneously boosting economic development and reducing CO₂ emissions.

If Cambridge Electric Cement lives up to the promise it has shown in early laboratory trials, when combined with other innovative technologies, it could be a pivotal point in the journey to a zero-emissions society. The Cement 2 Zero project is an invaluable opportunity to collaborate across the entire construction supply chain, to expand CEC from the laboratory to its first commercial application.

It also has the potential to make a significant contribution to achieving a zero-carbon society, secure and increase jobs in the UK cement and steel sectors and challenge conventional production processes, creating high-value materials from demolition waste.

The science behind CEC is truly innovative. Three researchers at the University of Cambridge; Dr Cyrille Dunant and Professor Julian Allwood, along with co-author of this piece Dr Philippa Horton, invented a process that converts construction and demolition waste to cement over molten steel (using an EAF, normally used to recycle scrap steel).

The Cement 2 Zero project aims to demonstrate that concrete can be recycled to create a Slag Forming addition which could, when cooled rapidly, replace Portland cement.

Dr Dunant has discovered that the chemical composition of used cement is virtually identical to that of the lime-flux used in the conventional EAF steel recycling process.

Traditional Portland clinker, one of the main ingredients in cement, is produced by firing limestone and other minerals in a kiln at extremely high temperatures (1,450°C) – the process that accounts for more than 50% of the cement sector's emissions.

Cement 2 Zero takes a different approach – it will use recycled cement as the flux in the electric steel recycling process (in an EAF powered by renewables). The by-product of this, when cooled and ground, produces Portland cement clinker, which is then blended to make 'zero-emissions' cement.

With this in mind, this innovative cement product (CEC) could be produced using a virtuous recycling loop, that not only eliminates the significant emissions of cement and steel production, but also saves raw materials.

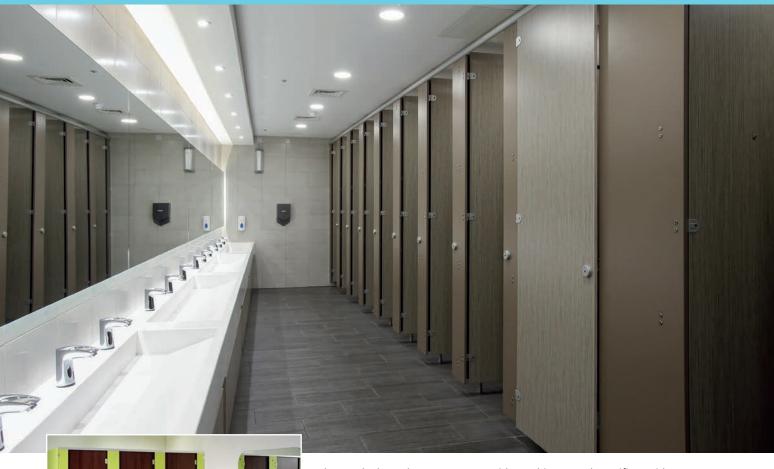
This is a project that aims to be transformational for the cement and steel industries, creating a zero-emission supply chain from demolition to construction.

And, when it comes to housebuilding, CEC represents a huge opportunity to massively reduce the impact of our industry. And when you combine this with the lower carbon steel technology which is also enabled by this trial, there is a real sense that we're well on our way to real net-zero homes.

Will Lavelle is embodied carbon lead at Atkins and Dr Philippa Horton is a business manager in the Engineering Department of the University of Cambridge

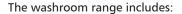
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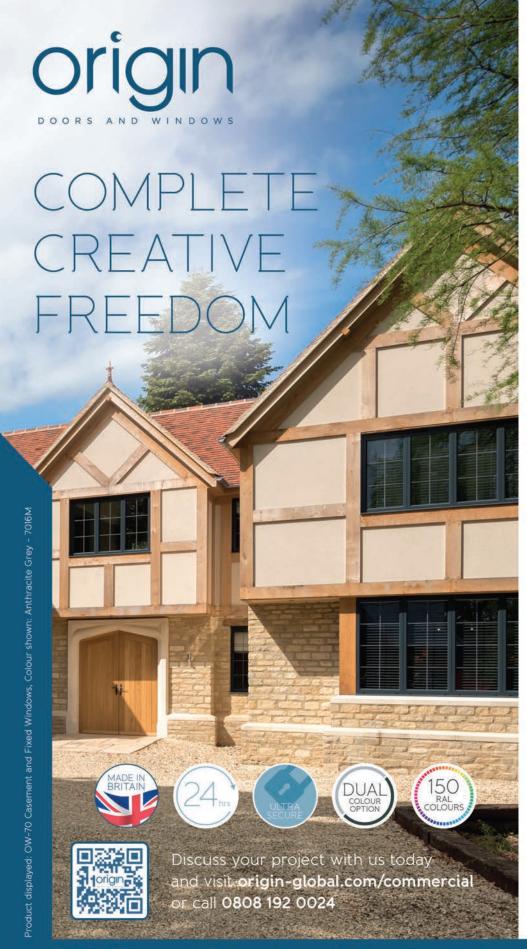
EXPO 2025 CZECH PAVILION, JAPAN APROPOS ARCHITECTS

Apropos Architects have won an architectural competition for their sculpted, upwards glass spiral design of the Czech Pavilion for EXPO 2025, to be held in Osaka, Japan. The pavilion is located at the edge of the coastal promenade, and its glass facade pays homage to the history of glassmaking in the Czech Republic.

The barrier-free spiral ramp of the exhibition space wraps around the multifunctional auditorium. With an internal diameter of 15.5 metres, it rises to a height of 12 metres above ground level. The exhibition ramp rises along with it, and its movement is mirrored by the ramp with seats for visitors inside the auditorium, which can be entered from several points throughout the spiral.

The capacity of its exhibition space is 402 m^2 and the width of the ramp varies between 1.8 and 7 metres. At 12 metres, the ramp opens to a spacious terrace with a restaurant and bar with views of the sea, as well as through the glass skylight down into the auditorium.

The concept is based around a load-bearing structure consisting of a regular framing system of CLT wooden panels, divided into 36 segments within a single turn around the auditorium.









AWARD-WINNING

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LAND OF TOMORROW, CYPRUS FOSTER + PARTNERS

Foster + Partners is working with Petrolina Group to design a masterplan that will transform Larnaca's seafront into a thriving and sustainable community for the city's residents, future generations and new visitors.

The Land of Tomorrow masterplan is designed to "enhances the land's ecological value," doubling the length of the waterfront that is accessible to the public. The development is "carefully stitched into the existing urban fabric and acts as a catalyst for expansion towards the north of the city," commented Ben Scott, senior partner at Foster + Partners.

A network of shaded, tree-lined streets and landscaped plazas connect the different elements of the masterplan. The city's canals are to be 'rewilded' to create new habitats for wildlife and "bring greenery towards the coastline." The existing highway, Larnaca-Dhekelia Road, is to be transformed into a verdant and pedestrian-friendly street with new public amenities.

New developments are "sensitively located" between the "enhanced ecological zones" that connect inland areas to the coastline. Larnaca's industrial heritage is celebrated through the architectural design and integration of industrial artefacts, "repurposed to activate the urban realm."

Fosters said the developments will create new opportunities for residents, attract people and businesses and enhance the "blue economy." A sustainable mobility strategy is being developed, connecting the masterplan area with the rest of the city and the wider region.









INNOVATION PARK ARTIFICIAL INTELLIGENCE (IPAI), GERMANY MVRDV

MVRDV has won a competition to design the Innovation Park Artificial Intelligence (Ipai) in Heilbronn, Germany. A mixture of business campus, laboratories, and a start-up innovation centre, plus housing, communication centre, and amenities such as a restaurant and kindergarten will also "allow visitors to see the development of world-changing technologies first hand." The masterplan design was developed for a consortium led by the municipality of Heilbronn and the Dieter Schwarz Foundation. With its distinctive circular plan, MVRDV's design aims to position the campus as a "world-leading site for the development of AI technologies," said the architects.

Inside, the masterplan is "simple, flexible, and sustainable." Two off-centre axes define the plan: a historical Roman path that provides the main north-south route, and the sport and health corridor that places a series of outdoor spaces in the east-west direction. A 1.2 km long path circumnavigates the campus buildings and incorporates various activities including a sprint track and skate park.

Most of the buildings are rectangular with an average height of 27 metres, making them efficient to construct, with modular grids and "bio-based" materials. At the heart of the plan, a number of buildings stand out from the crowd, with "unique typologies, iconic forms, and taller structures marking the campus skyline."

During operation, the energy consumption of the campus will be around 80% lower than a typical campus of the same size. Bioclimatic facades and energy-efficient building services help to minimise the energy required to run the campus. Including the carbon stored by the reforestation design of the landscape – by LOLA – and the embodied carbon in the buildings themselves, the plan is therefore projected to be 100% carbon-neutral over the course of its lifespan.



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CPD FOCUS

SENIOR LAUNCHES NEW RIBA APPROVED CPD



Senior Architectural Systems has created a new RIBA approved CPD seminar which explores the 'Evolution of Thermally Broken Window Profiles'. The new CPD has been developed to both inform and support architects and designers in the specification of thermally efficient window systems to meet the new lower U-value targets as outlined

by Part L of the Building Regulations. The seminar looks specifically at the development of aluminium window systems, and the latest generation of windows that feature the innovative use of polyurethane foam for even greater efficiency.

01709 772600 www.seniorarchitectural.co.uk

Maintaining and improving professional competence, skills, abilities and knowledge

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

LEVIAT CPD SEMINAR: WINDPOSTS IN CONSTRUCTION



Windposts and other products which span the cavity have the potential to seriously downgrade the thermal performance of a building, unless correctly specified, detailed and installed. Join Sara Dawes, one of our experienced Regional Technical Sales Managers here at Leviat, for

our next live webinar where we will examine the 'performance gap' between designed and realised thermal performance and how Thermal Windposts can help close this gap – an important topic to be considered if we are to be successful in our race for zero-carbon construction.

0114 275 5224 www.ancon.co.uk/resources/cpds-webinars

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

DETAILING FLOORING FINISHES CPD



Quantum Flooring Solutions is delighted to announce that its Detailing Flooring Finishes CPD has been updated for 2023. The new version of the popular presentation has been fully accredited as a RIBA Core Curriculum CPD, offering double CPD points.

This seminar looks at stair nosings, flooring accessories such as skirtings, covings and capping strips, and floor finishes and transitions including entrance matting. It explores how each of these can be specified to ensure adherence to all relevant aspects of Building Regulations, BS 8300-2:2018 and the Equality Act.

There are three main aims for this CPD:

- Explain how to safely finish floorcoverings at critical points such as stairways, wall junctions, and doorway transitions.
- Show how to specify flooring accessories correctly and successfully.
- Guidance on the legislative and regulatory framework.

Aspects which can affect the efficacy of flooring details will be explored. These are things such as the importance of colour options, fitting and maintenance issues which should be considered at specification, and environmental and legal concerns. A Q&A session is available after the seminar.

You can book Quantum's CPD on Detailing Flooring Finishes by emailing info@quantumflooring.co.uk, visiting the website, or by phone.

0161 627 4222 quantumflooring.co.uk

ROCKWOOL® LAUNCHES NEW FIRE PROTECTION CPD



ROCKWOOL has launched a new CPD (Continuing Professional Development), 'Essential Principles – Passive Fire Protection Solutions', to give construction professionals a deeper understanding of the 12 key principles of passive fre protection and how these are applied to different building projects. Presenting

each of the essential principles as defined by the RISCAuthority Design Guide, the CPD will demonstrate how they work to reduce the risk of fire in buildings. The module will also discuss the importance of compartmentation, structural fire protection, inspection, maintenance and much more. Available to book online now at rockwool.com/ uk, the 60-minute session is offered as an in-person CPD and will allow designers, fire engineers, occupiers, consultants and building owners to strengthen their understanding of effective passive fire protection methods. Attendees will also learn about the ecological and environmental impacts of a building fire and understand who shares liability if a fire occurs. 'Essential Principles – Passive Fire Protection Solutions' is the latest addition to ROCKWOOL's expanding range of CPDs, which help specifiers and contractors better understand the role of insulation in the built environment.

01656 862 621 rockwool.com/uk/cpd-essential-principles

Visit www.architectsdatafile.co.uk to subscribe to the CPD Focus newsletter – featuring the latest CPD courses, seminars and documents for architects



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Project: Arrow View, Herefordshire

Architect: AR Design Studio

Image: Paul Carter Photography

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High performance column casings for Porsche Preston

ecorative metal column casings, from the Pendock Radius range, are being used at the Porsche Centre in Preston, Lancashire, to conceal interior structural steelwork and add to the high quality interior of the two-storey main showroom and office area.

Part of the Bowker Motor Group, the Porsche Centre is located in the city's Docklands area and features new and pre-owned Porsche sales, as well as administration and workshop facilities at the 43,000 ft² site.

Bespoke manufactured from 3 mm thick aluminium, to meet the precise project specifications, each of the 12 circular column casings are 375 mm in diameter and are stacked to reach the full floor to ceiling height of almost 6.0 metres.

To ensure that they adhere to the Porsche brand and corporate colour scheme, Pendock finished the casings with a polyester powder coated finish in RAL 9007 grey, which is also



durable and easy to maintain.

This is also applied to column casings' colour matched joint covers, headers and skirting collar infills to give an integrated finish to the showroom interior. The casings are also utilised as a secure fixing point for the showroom's directional spotlights.

The MET-CL style casings use on the

Porsche project is one of six different column casing products under the Pendock Radius brand, which includes a range of shapes, finishes and materials, including pre-formed MDF and plywood options, as well as glass reinforced gypsum (GRG) and GRP options.

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clerkenwell design week

Highlighting reasons to come to Clerkenwell in 2023

lerkenwell Design Week (CDW), now in its 12th edition, will return Taking place across the whole of Clerkenwell, the festival is set to offer its biggest programme yet. Featuring more than 600 events and, for the first time, merging with its sister show Design London.

CDW 2023 sees a total of 12 exhibition venues across Clerkenwell including: Design Fields, Contract, Light, Project, Elements, British Collection, Detail, Platform, Ceramics of Italy, Old Sessions House (the festival hub), and two new additions - Catapult, and The Garden. While these unique venues will present over 300 design brands and emerging talent, an extensive network of more than 130 local showroom partners will host product launches, workshops and talks over the three days.

Architecture goes inflatable

Headlining this year's CDW Presents programme is a specially commissioned installation by British artist Steve Messam - who exhibits internationally and is well known for his large-scale, inflatable artwork reimagining our everyday surroundings. At the festival, the County Durham-based artist will bring his distinctive public art sponsored by 3D design software company, SketchUp - to historic St John's Gate of the Order of St John. This site-specific piece, titled Gateway and measuring 6 m (high) by 15.5 m (long), will feature 27 giant spikes hand-sewn in a striking blue textile.

Sustainability is the norm

Creating a more sustainable way of living - from biodiversity to reduce-reuserecycle - remains a key subject matter for many design manufacturers and makers. Using modern technology and the latest research, many explore and propose new ways to challenge the status quo while tackling these industry-wide issues with a global outlook.

As part of the CDW Presents series, Symbiocene living: Mycelium Building Block is an interpretive, artistic mycelium installation that encourages the public to envision and engage with fungi architecture. While the modular feature is made of mycelium blocks with a 3D printed timber shell, the blocks will be arranged to create a different formation incorporating abstract seating and towers on each day of the festival. Set to be situated outside Clerkenwell & Social on St John's Square, this one-off installation is designed by East London-based PLP Architecture.

CDW has long established itself as a major platform for both established and emerging design businesses to showcase their latest innovations and forwardthinking ideas. Marlon Cera-Marle, design division director of Media 10 commented: "We're thrilled to be back with an even bigger line-up, including some of the industry's most dominant figures. From thought-provoking installations to exciting new names, we look forward to bringing an abundance of creativity and world-class content to the heart of Clerkenwell this May."

For more information, please visit clerkenwelldesignweek.com.

Article supplied by Clerkenwell Design Week London





CDW has long established itself as a major platform for both established and emerging design businesses to showcase their latest innovations and forward-thinking ideas

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Bjelin at Clerkenwell Design Week



Visitors to the **Bjelin** stand at Clerkenwell Design Week will have the opportunity to see at first hand the latest innovations in hardened wood flooring. The latest developments from industry leading innovators - sister company Välinge Innovation – will be on display. Over the

past year the company has been rolling out the Bjelin Hardened Wood Flooring brand in the UK. It has now completed a number of stunning high-end projects in the London area, which showcase the amazing aesthetic of the Bjelin products to maximum effect.

support@bjelin.com www.bjelin.com

CLERKENWELL DESIGN WEEK STAND PCQ

Design with neurodiversity focus



Visit Altro's showroom during Clerkenwell Design Week to be immersed in a journey of discovery about design for neurodiversity. By exploring how people experience spaces differently, expert panel discussions, talks and practical workshops, Altro will share best practice on how to design

spaces for everyone. Altro has been championing the importance of designing spaces to be inclusive through its forum events for specifiers and end-users, and its recent 'Designing for Neurodiversity' CPD. Altro's showroom programme for Clerkenwell Design Week draws and expands on this knowledge and experience.

01462 489516 www.altro.co.uk

It's a Mapei World of Sport for Clerkenwell Design Week 2023



In a celebration of sport, activity and wellbeing, Mapei will focus on systems and solutions for sport surfaces at this year's Clerkenwell Design Week. Colour and texture will take centre stage at the Mapei World London City Specification Centre, in Great Sutton Street, supported by product displays, demonstrations, sport-themed interactive challenges and workshops. Mapei solutions span a vast array of sports, from adhesives for running tracks and sub-bases for synthetic grass, to decorative resin finishes for playing courts and full waterproofing and tiling systems for swimming pools and leisure centres. Exhibits across the three-day event will showcase these systems and, in true Mapei style, visitors can enjoy hands-on themed experiences and sporting challenges throughout the three-day festival. Mapei UK's own long and proud connection with sport includes sponsorship of professional golfer Adrian Otaegui, PGA Coach Chris Ryan, as well as Halesowen Town Football Club and Halesowen Cycling Club. Mapei looks forward to welcoming visitors across the three-day festival – from Tuesday 23 to Thursday 25 May – at Mapei World London City, 6 Great Sutton Street, London EC1V 0BX.

info@mapei.co.uk www.mapei.co.uk

SIMONSWERK showroom opens its doors for Clerkenwell Design Week



SIMONSWERK will be opening its showroom doors for the return of Clerkenwell Design Week. The three-day event takes part on the 23-25 May, showcasing leading UK and international brands and companies in a series of showroom events, exhibitions and special installations that take place across the area. Visitors to the showroom at 45 Great Sutton Street will be able to view the SIMONSWERK Groups full range of hinge applications including the BILOBA hydraulic hinge concepts for glass doors, the ANSELMI concealed hinges for light residential doors together with the TECTUS heavy duty hinge. Also on display will be the online advanced PRODUCTSELECTOR information system created specifically for architects, ironmongers, specifiers and interior designers. SIMONSWERK are Europe's leading Hinge Manufacturer with a history spanning more than 130 years in the manufacture of brass, aluminium and stainless-steel hinges for doors and windows. The range includes the renowned fully concealed TECTUS hinges and the popular TRITECH solid brass hinge with concealed bearings.

0121 522 2848 www.simonswerk.co.uk

Series of changes at Renson UK sees increased product demand



Ventilation louvre specialist **Renson UK** has seen an influx of demand for its market-leading products following a series of changes at the Maidstone company.

Implemented to drive business growth and development, the company has seen both internal re-structuring to ensure better customer service, and wider price adjustments put into place in order to be more compatible with the wider louvre market.

Renson specialises in high-quality, fully tested louvre systems, mechanical ventilation products, fans and window vents, while also providing design support, and NBS specifications to ensure compliance and technical performance.

The company also specialises in integrated ventilation solutions (IVS), a complete, one-unit airtight and rain resistant ventilation system that includes blanking panels, insulated blanking panels, bespoke plenums and factory-fitted dampers.

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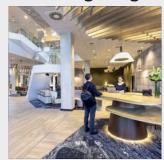
Gilberts leads the way in creating the right hospitality environment



Gilberts Blackpool is continuing its pioneering reputation at the original outlet for one of the UK's fastest-growing coffee brands. Black Sheep Coffee, with its strapline of 'leaving the herd behind', it is leading the field in expansion, opening 30 stores in 2022, with a focus on speciality coffee and customer service. Founded less than a decade ago, the brand already has 40 outlets across the UK, including at the iconic, once-derelict Grade II Battersea Power Station. The chain's owner Group Metropolitan has turned to Gilberts to create a discreet means of balancing adequate ventilation for the Battersea outlet's kitchen without impacting on customers' ability to relax and enjoy a coffee al fresco in the outside seating area. A floor-mounted screen of 12no. AP50 acoustic panels enclosed behind a bank of 12no. WGF38 factory-built flanged louvres minimises noise while directing the extract air (and associated odours from the kitchen) upwards away from guests and surrounding residents. To accommodate the architecture of the external facade, the compact bank graduates from 1.5 m to 2 m along its 10.4 m length, providing 50% free ventilation with noise modulation.

01253 766911 info@gilbertsblackpool.com

G F Holding Tiling completes 'highest hotel' install with Mapei



An extensive tiling project – completed by G F Holding Tiling Ltd using a Mapei preparation and fixing system – features at Novotel Liverpool Paddington Village. G F Holding Tiling Ltd's installation – within the reception area, and ground, first and second floor rest rooms – was completed with Mapei preparation products, adhesives and grout. The specification included Latexplan Trade smoothing compound – a protein-free, low odour leveller with high compressive strength which was used to level the existing screed – and anti-fracture membrane, Mapetex, which was bonded with Keraquick S1 – a quick-setting, very low VOC deformable cementitious adhesive – and mixed with Latex Plus, an admixture which increases flexibility to S2 classification. Tiles were installed with Keraflex Maxi S1 – a deformable standard setting cementitious adhesive which provided benefits including an extended open time. The installation was completed with Ultracolor Plus grout – an anti-efflorescence, quick-setting and drying polymer-modified formulation which features water-repellent DropEffect® and mould-resistant BioBlock® technologies.

info@mapei.co.uk www.mapei.com

Streamlined automatic access for spa guests



At the new £4.3m luxury spa, Breedon Priory in Derbyshire, access specialist TORMAX was contracted by Smart Aluminium Ltd to install their sophisticated bi-parting automatic sliding door system to the rear of the building, giving guests effortless access out onto a well-appointed sundeck. Delivering an unobtrusive solution, TORMAX recommended their Windrive 2201 door operator. Housed in a neat casing measuring just 142 mm x 100 mm, the discreet Windrive blends seamlessly with the contemporary yet sumptuous interior decor of the spa. In addition to treatment rooms, a restaurant and small shop the 1,344 m² highend spa also includes a wellbeing suite with thermal cabins, relaxation lounges, an indoor vitality pool, ice fountain and experience showers, plus two beautiful outdoor infinity pools. Phase II of the development will include the addition of eight luxury holiday lodges for overnight stays. Helping reduce heat-loss from the building, simple two-key programming of the TORMAX operator allows staff to easily change the speed at which the automatic doors open and close, efficiently helping to keep the warm air in on chillier days.

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UK CONSTRUCTION WEEK STAND B210

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2-4 MAY 2023 | EXCEL

UKCW London makes its return this May

host of famous faces, interactive demos, new features and ground-breaking products await visitors to the UK's largest event for the built environment, UK Construction Week (UKCW), when it makes a welcome return to London's ExCeL from 2-4 May 2023. Registration is now live!

TV architect and education campaigner George Clarke, BBC News business editor Simon Jack and BBC presenter Victoria Derbyshire are set to chair the Main Stage at UK Construction Week and will join the 25,000+ visitors who will head to UKCW London, which debuted in the capital in 2022. UKCW London is co-located with Concrete Expo and The Offsite Show as well as the UK's premier event for the self-build sector, Grand Designs Live.

With over 10,000 products on display from over 300 exciting exhibitors including Rointe, Kingspan, Google, Sevadis, HP, Celsa UK, Houzz Pro, Hanson Plywood and many more, the multi award-winning show attracts a wealth of overseas exhibitors from as far afield as Australia, China, India, Norway, Turkey and the UAE.

UKCW London will also feature sessions and seminars led by industry experts across the show's six stages; the show will feature an incredible 300 speakers, with over 150 hours of CPD seminars available. Highlights of UKCW London 2023 include:

• The ZERO feature, which will include a full-scale build by Natural Building Systems, demonstrating how combining low embodied-carbon materials with modern construction methods can transform the industry. The ZERO Playbook workshops will enable contributors to share and learn how as an industry we can get to net zero as fast as possible.

- The Culture Change Hub will focus on improving inclusivity within the built environment, wellbeing and mental health, and professional development. Daily programmes will be delivered by The National Federation of Builders, Building People and The Women in Construction Awards.
- A busy programme of high-profile thought leadership speakers which includes: Mark Thurston, CEO, HS2; Sadie Morgan, co-founding director of dRMM Architects, youngest and only third ever-female president of the Architectural Association, design chair for High Speed Two (HS2) and founder of the Quality of Life Foundation.
- An expanded networking zone, allowing visitors more space and time to catch up with colleagues and contacts, with over 20 different networking events planned by partner organisations.
- A new tunnel entrance and easier to navigate floor plan which will allow delegates to pinpoint their areas of interest and plan their time efficiently.

Nathan Garnett, UKCW event director, commented: "UK Construction Week London got off to the best start we could ever have imagined, and this year's second edition will be bigger and better. The amount of innovation we see at each event is proof this is an industry changing fast, and this May UKCW at London ExCeL will be the best interactive showcase for a sector that should be optimistic about the future as we continue to embrace culture change."

Scan the QR Code to register for free.

Article supplied by UK Construction Week London





UKCW London will feature sessions and seminars led by industry experts across the show's six stages



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BUILDING

INLONG NARADA RESORT CHINA

Discreetly ecological, on a grand scale

Nottingham-based CPMG Architects spoke to *ADF*'s Tom Boddy about their phase of an extensive hotel and spa complex under construction west of Shanghai, which is driven by sustainability and embedded into the landscape



Situated two hours west of Shanghai and near one of the largest freshwater lakes in China, a sprawling resort is taking shape on the site of a disused quarry.

Named Inlong Narada Resort, the scheme's masterplan extends over 530 acres, and will feature a variety of leisure amenities such as a 'spa centre' and luxurious villas, as well as a reception building, restaurants, and a 20,000 m² family park.

CPMG Architects has been entrusted by the Narada Hotel Group to spearhead the latest phase of the project. Since April 2022, the firm's international base in Hangzhou (the capital of Zheijang province), has been leading the design process. Sitting in a remote location, the overarching ambition is to transform the former quarry into a major tourist destination, attracting visitors from all corners of China.

A key element of the scheme is to create a sustainable development that has minimal impact on the environment. As such, the design is built around eco-friendly principles, while the resort's facilities are crafted to blend seamlessly with the surrounding landscape.

Project origins

Mining operations at the expansive quarry where the development is sited had ceased over a decade ago due to it being exhausted of its resources, according to Amy Zhao, manager of CPMG's Hangzhou office, located just south west of Shanghai.

The quarry was owned by a man who grew up in the area with his family. When the mining contract came to an end, he saw an opportunity to repurpose the site into something that would benefit the local community. His vision was twofold: To

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SITTING COMFORTABLY

The complex is entered via a 'dragon-inspired' reception building and then steps down two more levels, following the contours of the former quarry

create employment opportunities, and enhance the local environment. With this in mind, the owner invested a considerable sum in measures to safeguard the land against potential landslides. Over this time, he recognised the site had the potential to be developed into a substantial resort.

The initial phases of the project have seen local companies take on some of the designs of the resort. However, as the project's scope became more apparent, the owner sought out the expertise of Narada Group, one of China's leading hotel firms, to manage and oversee the resort's operations.

Being aware of CPMG's masterplanning capabilities in China, and as part of their growing relationship Narada's CEO introduced the site owner to CPMG Architects. He was impressed by Zhao's extensive experience in masterplanning and urban design from projects across the UK, the Middle East, and China, and decided to employ CPMG to design a comprehensive masterplan for the resort. Building on the success of CPMG's work at Inlong Resort, Narada has now introduced CPMG to another project – the Peach Blossom Hotel in Hangzhou.

Richard Flisher, managing director

at CPMG Architects, explains how this project is an "interesting departure" from the practice's usual work. While they have completed a large number of leisure facilities, these have been "much more sports-focused."

They have however worked with Center Parcs on the design of some hotels, and therefore this project builds on their expertise from successful commissions undertaken in the UK.

The practice's connection with China was cemented when Zhao, then working in the London office, decided to move back to her home country. Building on her and Flisher's "long standing professional relationship," they established an international base in Hangzhou, which Zhao has been managing since 2016.

Retrofitting a masterplan

The sheer scale of the project, with a lot of elements already underway onsite, has posed several challenges for the team. With CPMG being brought in at a later stage, two hotels had already been built without their involvement. Upon reviewing the current designs, the architects firstly noted that the buildings were isolated due to their



location, with limited access.

To enhance the site's appeal and turn it into a sought-after tourist destination, the architects suggested introducing additional functions such as a spa centre, villas, as well as a large family park, as part of "trying to make sense of it all," explains Flisher. "With Narada's help, we hope to transform it into a destination that really works." He adds: "it's been like retrofitting a masterplan."

The owner was impressed with the new designs and contracted the architects to deliver detailed designs for the public areas such as the reception building, as well as other parts of the scheme which were not initially included in their brief.

Design evolution

The architects initially envisioned a unique tribute to the site's mining heritage, with the intention of constructing a "stone village" out of the existing quarry site. The vision was to construct all buildings using stone, so they'd appear as though they had emerged from the quarry itself.

However, as the design progressed, the project's materiality evolved to comprise both natural stone and timber, as well as organic materials including green roofs and abundant vegetation. Zhao further elaborates that the design is a fusion of "both traditional and modern elements."

Building within the ex-quarry – and on a site of natural beauty – presented some "interesting opportunities and challenges," asserts Flisher. He says that it was a vital project aimed to create a symbiotic relationship between the buildings and surrounding landscape. As he explains, this required careful consideration to ensure the buildings were positioned and formed in a way that respects the landscape while maximising the site's potential.

With the structures centred around the lake (but elevated above the lakeside and sitting on complex terrain), the architects adopted what Flisher describes as a "free approach to the levels." This led to their strategy of excavating into the quarry so that the buildings "go into the ground as much as they come out of it." Fortunately, as the client is a quarry operator who "doesn't mind digging holes," says Flisher, these ideas were practical to realise.

Spa centre & villas

The spa, which is still in the concept phase, sits at the top of a hill, its volumes

The overarching ambition is to transform the former quarry into a major tourist destination

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To enhance the site's appeal, the architects suggested introducing additional functions including a spa centre

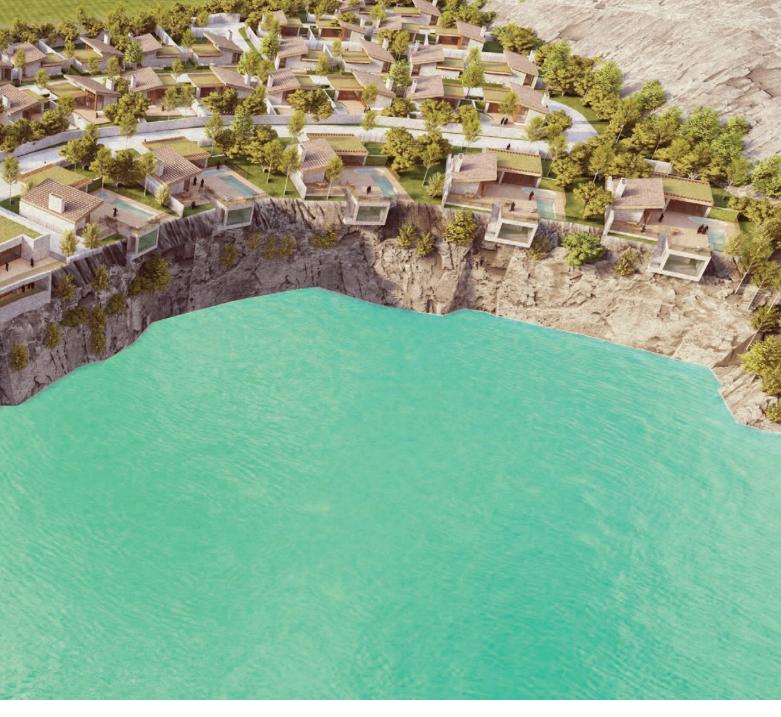
descending with the gradient towards the lake, which was formed from a 100 metre deep section of the quarry that has been filled with rainwater. Despite being manmade, surrounded by steep cliffs it creates what Flisher describes as an "amazing landscape" which the spa design takes full advantage of.

Spanning an area of 6,000 m², the design for the spa comprises three levels (basement, ground and first) and features natural elements such as timber and stone to generate a nurturing ambience. Upon entering, visitors descend a monumental

staircase that leads them down to the 'underground' levels. As they reach the end, striking views of the lake are provided through the open rear elevation. The designers' aim, which was a "fundamental design point," says Flisher, was to create a sense of "progressing downwards towards the water."

There's a central courtyard with water features and planting, harnessing nature to aid a feeling of "contemplation." The building is oriented towards the courtyard and the lake, providing occupants with scenic views from every angle.

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The spa treatment areas themselves are sat within the crook of the L-shaped infinity pool which the architects believe is one of the largest in China. This setting, combined with the bespoke-created monopitch timber roof, produces a "distinctive environment" for the pool that distinguishes it from the rest of the building. Flisher explains that it was a key aim to draw daylight into this area, while offering views out of either end.

Despite it being a concept they developed, tackling the design of the spa centre was something entirely new for both Zhao and Flisher. "It's a really interesting

building typology to be involved with," asserts Flisher.

Closely associated with the spa centre within the masterplan are 37 luxurious villas; CPMG has crafted two types, each offering a "unique experience" to guests; one with a lake view, the other offering views of the mountains.

The lakeside villas are designed to be spacious and elegant, featuring multiple bedrooms, a living area, a kitchen, and a workspace, with a private swimming pool and garden area. However, like the spa, the villas' forms will "bury themselves down

ON THE WATERFRONT

The building sits at the edge of a man-made lake, formed from a 100 metre deep section of the old quarry that has been filled with rainwater

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NATURAL REMEDY

The design for the spa centre alone spans 6,000 m²; it is to be built from natural materials in order to help provide a 'nurturing' feel for guests

into the rock," says Flisher. This allows for an underground room that extends out over the quarry, offering immersive views of the lake.

The villas also incorporate the natural stone found in the immediate vicinity, creating a design that sits harmoniously within its surroundings. The use of timber adds a touch of warmth, while the villa's large windows throughout the design maximise the views from all angles.

A warm reception

The reception building provides a strikingly modern welcome for visitors to the Inlong Narada Resort. The resort's plans to include a vast range of onsite amenities made an area for check-ins a necessity, and this building will fulfil that requirement.

The reception building is designed to cater to a wide range of needs of arriving guests, including washrooms, offices, and ample parking facilities. "It's almost like an airport lounge – guests arrive and linger a while, and then move on to where they need to be," explains Flisher.

The building's form is "essentially that of a pure ellipse," says Flisher, with large canopies protruding from either side of the structure. Currently under construction, the reception building is due to be the first structure completed in the next phase of the project, expected to be open in May.

While each building boasts "very different forms and are bespoke to their functions," says Flisher, there is some commonality between the different elements. For example, the buildings present a common material palette of stone and timber running throughout their designs.

Another key example is found in the impressive entrances with large canopies found on many of the buildings. This was partly a result of a concept that further groups the buildings together – namely a dragon theme running throughout the design. The name 'Inlong' translates as 'Dragon Valley,' which stems from an ancient legend that a dragon hides somewhere in the valley, explains Zhao.

The architects have fully expressed this concept in the canopies of the reception buildings and the exterior of the spa, which have been designed to subtly evoke dragons' wings. This is one example of how the design demonstrates cultural sensitivity and creates a "relationship with the history of the site," says Zhao.











The designs "go into the ground as much as they are coming out of it"

Nature & sustainabilty

As part of the overall masterplan, the design team took on the role of landscape architects for the resort. From the outset, their emphasis has been on enhancing the features of the quarry to resemble a natural landscape. "You wouldn't say it looks like an old quarry," says Zhao, "it's almost like the UK's Lake District."

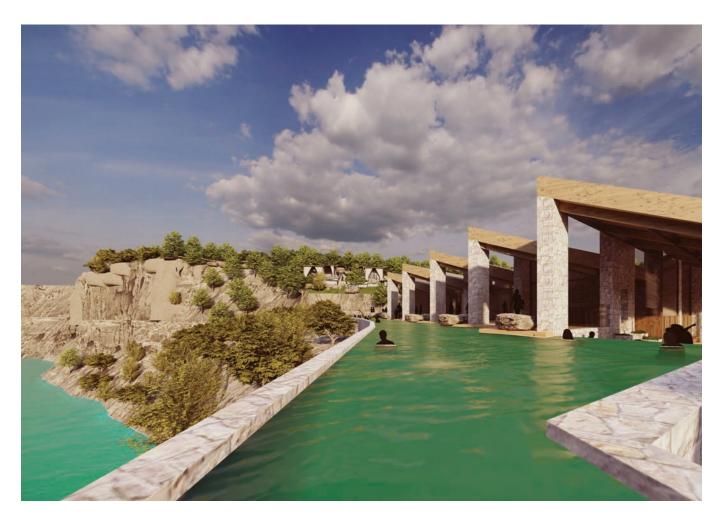
To achieve this result, the team incorporated a variety of indigenous plants and trees into the scheme. As well as reducing the resort's embodied carbon footprint, this also minimises maintenance, says Zhao, while helping the building tie in with the local nature. Part of the landscape design will also feature lakeside campsites as well as scenic walks.

In addition to these features, a substantial 20,000 m² 'family park' has been proposed. CPMG has also been involved in its design, which includes a large play area which will provide an exciting and enjoyable space for visitors of all ages.

The resort has integrated sustainability into its design by adopting a range of 'ecoregenerative' design measures. While the designs haven't undergone a certification process, the scheme incorporates "key principles" of sustainable design including various elements reportedly designed to Passivhaus levels.

With the region's climate being subtropical, the focus wasn't on the heating the buildings, and was primarily about keeping them cool, while controlling humidity. As solar gains are a "real issue" in this area of China, says Flisher, CPMG has included shading measures to the buildings, along with MVHR systems to ensure air quality. "We also had to introduce cooling systems because in the summer temperatures can get extremely hot," says Flisher.

CPMG are a practice that strives to apply Passivhaus elements in their projects, but it has been done on a case-by-case basis in this project. "We look at every building type and see what elements are relevant, and



what can be applied," explains Flisher.

A unique aspect of the sustainability strategy is how the water for the spa is heated. In this region, it is common to use geothermal wells to provide natural heating to nearby structures. To utilise this sustainable approach for the spa, a 2000 metre deep geothermal well is set to be dug just 200 metres away from the building, to supply water for the infinity pool.

In recognition of the importance of water conservation, the resort will incorporate water-saving fixtures in all its rooms, and install a rainwater harvesting system to collect and store rainwater for irrigation purposes. The natural materials used such as stone and timber are locally sourced where possible from nearby supply chains.

Conclusion

The Inlong Narada Resort is set to be a substantial example of modern – and sustainable – leisure sector masterplanning, creating a set of buildings that sit unobtrusively in their setting. Its combination of Passivhaus elements, luxurious amenities and respect for landscape is leading to a dynamic and innovative yet subtle scheme that marks it out among international projects.

Despite being engaged later on in the process, the architect's designs have been well-received by the client and are set to transform the once-remote site into a major destination. "It's a joy and a fascination working in China," says Flisher. He adds that one major change is "the speed at which they work out there compared with UK projects," which is "just astonishing."

While some sections of the resort are expected to be completed in May, other sections such as the spa centre will be finished in the second half of the year.

The CEO of the Narada Group is impressed with the architects' work, which bodes well for further opportunities in China, says Zhao. She concludes: "I have really enjoyed working on the resort, as it's not something I've done before. It's been a really fascinating process."

INFINITELY SUSTAINABLE

One of the key sustainability measures taken by the designers was to dig a 2000 metre geothermal well which will supply hot water for the infinity pool

GEZE exhibits at BAU



One of the leading trade fairs for architecture, material, and systems, BAU 2023 will be opening its doors from 17-22 April in Munich and GEZE, a specialist in door, window and safety technology will be exhibiting a range of innovative products, system solutions and services at the show. Under the motto of "Liveable buildings: digital, sustainable, smasrt" GEZE will be exhibiting myGEZE Control: the next generation networking solution for smart buildings that is able to integrate door, window and safety technology into many different areas of a building management system. In addition GEZE will be exhibiting several other new products; Revo.PRIME – an automatic revolving door system with a low canopy height and narrow profiles, the F 1200+ window drive, designed for large and heavy turn-and-tilt, and bottom hung windows up to 200 kg leaf weight, and the TS 5000 SoftClose, perfect for anywhere where a doors needs to be closed securely, but with minimal sound. The exhibition stand, which is 500 m² in size, will be located in Hall B1, stand 538-539, with representatives from GEZE UK on hand to offer advice and demonstrate products.

01543 443000 www.geze.co.uk

Magply makes its mark at Futurebuild



The 5 ft high flame billowing from a fan unit on the corner of IPP's stand at Futurebuild ensured the 16,000 specifiers who toured the exhibition (ExCeL London, 5-7 March) were left in little doubt regarding one of the key benefits to its high performance board brand, Magply. The BBA approved magnesium oxide based alternative to plywood and other panel products is increasingly being specified as an external sheathing for steel and timber frames as well as to form pattresses for the internal fixtures in high rise construction. In fact Magply's excellent weather resistance, pull-out strength and all round robustness are seeing it used in multiple applications including as a render substrate in the most exposed locations. Also on show were the manufacturer's Durawall and Cemgold products, both of which provide consultants and contractors with key performance benefits over the competition. The latter is a multipurpose board produced using Portland cement, high purity silica and cellulose reinforcing fibres. With a Class 0 rating for fire, the 10 and 12 mm thick Cemgold sheets typically feature in rainscreen and other cladding build-ups where robustness and fire resistance are paramount.

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Delta Membrane Systems launches new 800 Series of Packaged Pump Stations

elta Membrane Systems Limited, recently launched "Delta Pumps" a customised department in all things basement pumps and drainage. The newly formed department offers a wide range of standard and bespoke submersible pumps and pumping stations.

The Delta Bespoke 800 Series is suited for larger domestic and commercial projects due to its higher chamber capacity.

The Delta 800 Series of Package Pumping Station are available in depths from 1,250 mm to 2,000 mm and with varying pumping capabilities from the Delta Single V3 Foul to powerful Delta Dual V6 pump. Designed for pumping groundwater, surface water and foul water depending on specific project requirements.

As the name implies, a submersible pump is one that is designed to be immersed in a substance (from groundwater to foul water). While foul pumps are focused on pumping away foul and grey water. Subject to specification, groundwater sump pumps are used in conjunction with a Type C waterproofing solution to protect structures against groundwater. The purpose of a sump chamber is to collect and discharge (to a suitable evacuation point) any water ingress which has collected in the cavity drain membrane system and to discharge groundwater to a suitable external discharge point such as the mains drainage system.

Delta Membrane Systems Limited have substantially invested in their new range of packaged pump stations, with further investments planned for 2023.





Delta's Packaged Pump Stations are a complete unit. Comprising of chamber, pumps, pipework kit, valves, Control Panels, etc which are pre-assembled at their Pump Distribution Hub.

The new 800 series of package pump stations compliments, Delta's upgraded 695 and 895 chambers.

All of Delta's sump pump stations are built for durability, longevity and designed to withstand the most demanding of below ground environments. Whether it be a multi-level commercial, social facilities, or larger residential project, Delta Pumps have the solution to meet the specific needs of the contractor/architect/specifier.

Commenting on the announcement, Christopher Burbridge, co-founder of Delta Membrane Systems Limited said: "I'm incredibly proud of our continued success and delighted to see the company expanding operations with the opening of our Pump Distribution Hub. Delta continues to receive strong support from the waterproofing community, helping us to drive product development and future growth plans."

"The investment in 'Delta Pumps' signifies our business and team's strengths. With Kevin Dodds (managing director) overseeing our product development, I believe Delta will continue to add exciting new technology and products to our already impressive portfolio."

"We recognise that every project has different requirements and therefore our Technical Teams work together as one, to provide tailored solutions that meet specific site and project needs. We manufacture all our package pump stations in-house from design, through to assembly and testing."

"We tailor the project scope to the client's requirements, providing basement drainage designs for developments of all sizes."

Delta Pumps are proud to be manufacturing and fabricating all their sump pump chambers from their new warehouse facilities in a new dedicated Pump Distribution Hub close to its Epping Headquarters to enhances the company's ability to serve their nationwide customer base.

To explore the new range of Delta Pumps visit the Package Pumps and Basement Drainage Systems section at Delta Membranes' website.

Whatever the needs of your project, you can rely on Delta's Technical Team to ensure you get the right advice, support, and practical help at exactly the right time its required. Call Delta today on 01992 523 523.

info@deltamembranes.com www.deltamembranes.com

PUMPS & DRAINAGE

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Newton Waterproofing to host open day



Newton Waterproofing will be hosting an open day to officially launch its new Leeds distribution centre. On 27 April, the company will be welcoming architects, specifiers and contractors to its new northern branch, where on-the-day discounts

will be available for orders placed at the event, as well as a prize draw for qualifying orders. The new branch gives customers in the North of the UK quicker and easier access to Newton's technical services and extensive range of waterproofing products.

0113 521 6777 north@newtonwaterproofing.co.uk

Kingspan achieves 26% reduction



Kingspan Group has today released its third annual report for its 10-year sustainability programme, Planet Passionate. 2022 marked another impressive year for the programme, as Kingspan unveiled a

26% reduction in absolute scope 1 and 2 GHG emissions relative to its 2020 base year marking significant progress against its target of a 90% reduction by 2030, that it had completed over 100 Planet Passionate projects in 2022, and that, as of January 2023, it has implemented an internal carbon charge of 70€/tCO₂e. In addition, the estimated emissions savings benefit from Kingspan insulation systems sold in 2022 is 173 million tonnes of CO₂e, enough to power a major airline for 15 years.

01544 388 601 www.kingspaninsulation.co.uk



Triton shields showroom conversion

The renovation and conversion of a former workshop and car storage facility, into a stylish basement space as part of a high-spec residential property, is making extensive use of fully compatible products from the range of Triton Systems. The work is being led by Elite Basements Ltd, whose highly experienced team of ground-workers, joiners and other tradespeople are reconfiguring the upper floors as well as transforming half the old undercroft into habitable space. In doing so the specialist is employing Triton's anti-lime coating to treat the newly laid basement slab, followed by a layer of the manufacturer's TM20 profiled membrane to remove water to the floor perimeter, where it is conducted to a sump using Aqua Channel. Elite Basement's founder and technical expert, Aidan Vallely, explained: "I've always found the Triton range to be very good to work with and gives us confidence in passing on the guarantees to our customers. We have a very good working relationship with the manufacturer."

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Stainless steel construction project doors



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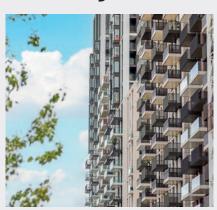
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Sapphire Balconies solve design and logistical challenges for Berkeley Homes project

Bespoke Glide-OnTM Cassette® balconies by Sapphire have provided the perfect solution to the design and logistical challenges of Phase 2 of Woodberry Down, a housing development by Berkeley Homes in the vibrant, multicultural area of Finsbury Park. North London.

The residential project presented various challenges from the design stage. A slight design variance was required to accommodate a section of the development allocated to affordable housing. The floor build-up in this section meant a difference in decking height, which would have created a visual inconsistency to the fascia element. In addition, one elevation of the building posed a particular challenge because of the close proximity of a large tree which could not be cut down due to planning regulations.

To solve these challenges, Sapphire incorporated several elements from both design and installation perspectives. To address the differences in fascia elements, a



screen-printed design feature was included on the balcony fascia to keep the design visually consistent across the building. Secondly, to avoid the elevation where a substantial tree was an obstacle, Sapphire's innovative Glide-OnTM Cassette® balconies were used which, when lifted, could avoid the tree

completely. Preassembled offsite, including balustrades, decking and soffits, the Cassette® balconies are lifted into position and simply Glide-On™ to the building's pre-erected support arms, before completing the mechanical fixings. While the balcony units were being preassembled offsite, cast-in anchors and incorporated thermal break connections were cast into the building slab, offering superior rigidity to the balconies.

A total of 228 balconies featuring Sapphire's Crystal® frameless, structural glass have been installed to luxury apartments in this second phase of Woodberry Down. Having specified Sapphire Glide-On™ balconies for a number of its prestigious residential projects, a spokesman for Berkeley Homes, Woodberry Down Phase 2, commented: "We've always valued the quality of Sapphire's end product and communication."

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The versatile, efficient UFO NT automatic swing door operator is completely hidden from view — perfect for glass facades, historical or listed buildings, or where maximum transparency at an entrance is demanded.

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Suitable for internal and external doors, and for retrofitting, the UFO NT can even be used manually thanks to the Smart swing function – all-in-all an innovative operator, just a shame you can't see it.

More information: info.uk@geze.com | www.geze.co.uk



Connecting expertise – building solutions.



Fassa receive two new certifications for Steel Frame System

lways striving for excellence, leading Italian render manufacturer, Fassa Bortolo, can now announce that two of its Fassatherm Mechanical Plus (Steel Frame) cycles have received KIWA BDA certifications.

A trusted and established testing body within the UK construction arena, KIWA BDA recognition is a true reflection of quality for building envelope products. This accolade gives specifiers, architects, contractors and installers added confidence that Fassa systems will perform to the highest standard, both at point of application and for many years

The first of the certifications is for application of mineral wool insulation supported by a horizontal or vertical rail which is mechanically fit to the wall. The insulation is covered with layers of basecoat and reinforcing mesh, before being finished with primer and silicone render. The second incorporates the same steps, but



Mechanical Plus Mineral wool insulation

with a brickslip finish which is fixed using adhesive and mortar pointing. Brickslips are the latest innovation to be added to the Fassa portfolio and are designed to create a look which authentically replicates real brick.

The certifications apply to both new and existing buildings and commercial and residential projects, offering great versatility and potential to professionals looking for a reliable insulation render system.

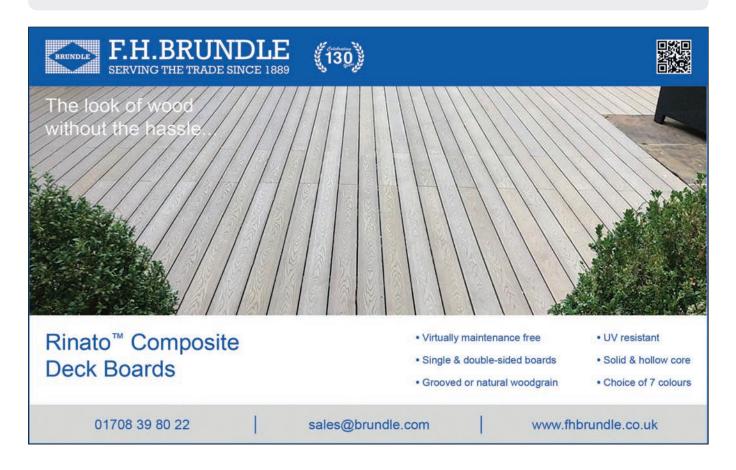
Dale Telling, commercial manager at Fassa Bortolo UK, comments: "We really



Mechanical Plus Brick Brickslip finish

understand the importance of putting our systems through testing, as our customers want to be certain they are making the right choices. Render has a very specific application processes, and no two cycles are the same. Temperature, storage and substrate suitability all play a part, but so does compatibility with other products, which is one of the main reasons for problems that surface years down

01684 218 305 www.fassabortolo.co.uk/en



Meeting the challenge of combining aesthetics and regulations at Dorset County Hospital MSCP





orset County Hospital is located just outside Dorchester town centre. This modern hospital provides a full range of district general services, including an accident and emergency department, and links with satellite units in five community hospitals. As the main provider of acute hospital services to a population of around 300,000, 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.

The design and construction of multistorey car parks are receiving a lot of attention in the UK. It gives status to develop aesthetic garages and prizes are awarded every year for the best MSCP architecture – RMIG Solutions has contributed to many significant projects within this field.

At the same time, the regulations and legislation for MSCPs are being tightened all the time in the UK. This applies to the guidelines for light and ventilation, and to a large extent to the rules for fire safety.

RMIG Solutions joined the project at an early stage and their experience and expertise within this field was a great advantage, enabling those involved to find the best possible solution.

After a public vote, three images from the beautiful Dorset countryside had been



selected for illustration on the facade, and had to be processed so that the perforated pattern creating the images could meet the requirements for open areas for light and ventilation.

The images were successfully processed and the results were remarkable! Through a bit of wizardry, it was possible to change the photos to landscape format and at the same time let in light and air for the users. This made it possible to merge the creative wishes of the architects with what was technically possible. It is always a compromise when it comes to MSCPs, but even though ventilation requirements reduce the contrast in the images, they still stand out and give residents a great impression of the Dorset landscapes.

Finally, numbers could be stamped directly on each element in the production line so there was never any doubt as to where and in what order they should be installed. This made the on-site mounting process much easier.

01925 839610 www.rmig.com/en

TECHNICAL CHARACTERISTICS

Size of the project: 3,400 m² Material: Novelis ff3® coil-coated

aluminium

Pattern: RMIG ImagePerf
Thickness: 3.0 mm
Finishing operation: Bending



Remember Me

The Remember Me memorial portico at St Paul's Cathedral is a physical memorial to all those that died as a result of the Covid-19 pandemic. Entered via the cathedral's North Transept entrance it is home to the online book of remembrance.

Designed by Caroe Architecture with Connolly Wellingham, the portico is a beautiful, elliptical structure crafted in the UK and featuring several GEZE doors.

As a visitor enters the cathedral from the North Transept they pass through a pair of swing doors powered by GEZE Powerturn automatic swing door operators. These doors take the visitor into the memorial and were chosen as they can open large or heavy doors and offer the flexibility of allowing the doors to be used both manually and automatically due to GEZE's Smart swing function.

Above the doors, etched in to the structure in gold are the words 'Remembering all who died as a result of the coronavirus pandemic'.

Once inside the portico, visitors can view the online Remember Me memorial, search for and view the tribute to their loved one. light a candle and take a moment to pause

and reflect in this tranquil space. The online book is open to all people, whatever their faith or none.

From the memorial portico the main entrance into the cathedral is through GEZE's TSA 325 NT, a manual revolving door with 4 leaves. The revolving door was chosen as it minimises air flow into the cathedral as only one quadrant is open at a time.

To ensure access for all a GEZE Slimdrive SCR curved automatic sliding doors was installed opposite the revolving door enabling those who are less able, or people with children in buggies, can still visit the memorial and access the cathedral. The Slimdrive SCR is controlled by wave sensors to ensure the doors only open when requested. This is part of the portico's design to minimise air flow.

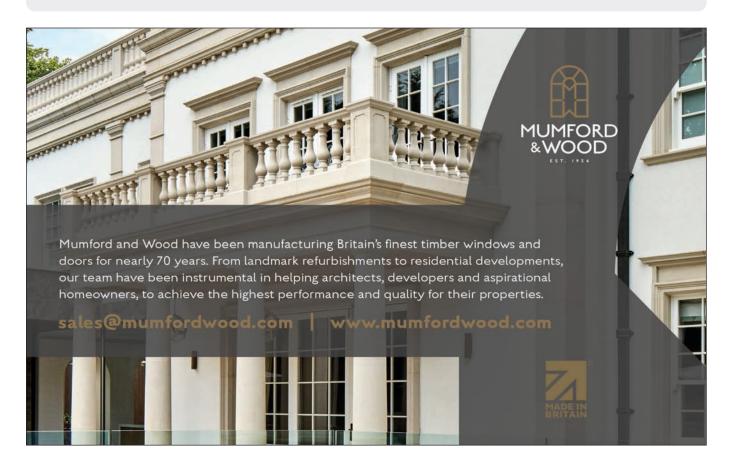
Across all the glass in the doors are beautiful phrases such as 'we will always remember' and 'never forget'.

The Remember Me memorial portico is a poignant tribute to those who died as a result of the Covid-19 pandemic and is the most significant change to St Paul's Cathedral in 300 years.



Following the public response to the online memorial, and in partnership with the Daily Mail, over £2million was raised to give the Remember Me memorial a physical home within the Cathedral.

01543 443000 www.geze.co.uk



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Rare Le Corbusier £1k lithograph poster to be won with Crittall

Steel windows and doors manufacturer Crittall Windows is offering architects a unique chance to win a rare original lithograph poster that celebrates the work of the famous Swiss architect La Corbusier, one of the pioneers of modern architecture and design.

Valued at £1000, "Tapisseries en L'eglise de Chateau Fellentin Creuse" is a rich and beautiful traditional stone lithograph exhibition poster printed in 1963 by Atelier Mourlot.

"We wanted an idea that engaged the architectural community after what has seen a pretty traumatic couple of years for the profession," commented Russell Ager, Crittall managing director.

"The Crittall aesthetic was favoured by the originators of the Bauhaus Movement to which Le Corbusier's name is indelibly linked, so offering as a prize an original lithographic poster celebrating the iconic designer seemed to fit the bill."



"We are all very proud of our unique Crittall heritage, its links to some of the 20th Century's notable architects and designers, and how that continues to be reflected in the products we offer to meet 21st Century demands."

The free, simple-to-enter competition, which closes on 20 June 2023, is open to all UK registered architects.

The entry form and full terms and conditions and can be found at: www.crittall-windows.co.uk/win-a-rare-le-corbusier-original-lithograph-poster-competition

01376 530800 www.crittall-windows.co.uk





How timber can dovetail into the circular economy

With the construction industry responsible for a third of the world's total waste, Scott Martin from Mumford & Wood asks when is the sector going to take responsibility

he industry's monumental output of non-biodegradable and often hazardous materials has been linked to several environmental issues, including soil degradation, water pollution and air contamination. They also contribute to climate change due to the emission of greenhouse gases during both production and disposal.

There is increasing pressure on the industrial sector globally to take more responsibility for the materials used in both construction and manufacturing. For example, the UN's most important actions for industry include full decarbonisation of industrial production; reduce material waste and recirculate materials; and reduce demand and enhance access to energy efficient, material efficient and CO, neutral materials.

And the UN's most important actions for construction itself include creating an efficient building shell, and scaling up zero-emissions heating and cooling technology. The choice of building or product materials can greatly affect future environmental changes. Often, the recyclability of the material is the key consideration, but the entire 'cradle to grave' journey is equally important and often overlooked.

Why is 'cradle to grave' so important?

To find out, let's look at a typical product manufactured for the construction industry – windows and doors.

It's probably obvious, when looking at materials such as aluminium, timber and plastic, which presents the more sustainable option.

We know that around 43% of PVCu is from petroleum and currently around 80% of all plastic is not recycled and destined for landfill. The recyclability of aluminium is significantly better at around 95%. However, the Building Research

Establishment Environmental Assessment Method (BREEAM) found that wood is the only truly sustainable and renewable building material available. In fact, a report by Heriot Watt University shows that timber frames are carbon negative, and will save $160~{\rm kg}$ of ${\rm CO}_2$ over their lifetime compared to PVCu. But this needs to be qualified; just using timber doesn't mean these figures are achieved.

Sourcing

Understanding where materials come from is incredibly important, and the transparency of this depends on the level of care being taken along each stage of the product journey. We are extracting 100 billion tonnes of raw material from the planet every year. So how is this managed?

For timber extraction, forest stewardship, logistics considerations, manufacturing efficiencies, recycling, and waste management all need to be considered.

Sustainability certifications are an important tool for architects and building professionals to evaluate and improve the environmental impact of buildings. ISO 14001 & 50001 is one such certification. Another is Forest Stewardship Council (FSC) certification, which guarantees that the wood used in a building project has been sustainably harvested and managed. This certification aims to ensure that forests are managed in a way that preserves biodiversity, reduces the risk of deforestation, and supports the livelihoods of local communities.

Another certification that's widely used in the industry is BREEAM, which evaluates and rates a building's environmental impact based on factors such as energy use, water efficiency, materials, waste, and health and wellbeing of the occupants. BREEAM certification is recognised globally as a standard for sustainable building design and construction.



Around 43% of PVCu is from petroleum and currently around 80% of all plastic is not recycled and destined for landfill

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Often the recyclability of the material is the key consideration, but the entire cradle to grave journey these materials take is equally important and often overlooked

Logistics

Delivery of wood is one of the areas that companies have the least visibility of and where many of the emissions come from. The Department for Transport suggests that 29% of HGVs on the road are empty. In order to reduce this, it is important to plan so that each delivery is full and that space is maximised to reduce the number of deliveries required. Also, shortening the supply chain by sourcing locally helps.

Waste

Manufacturers can reduce waste by using set lengths, and minimising waste by getting the most out of a single length, and optimising pallets and manufacturing lines.

It is possible to recycle 100% of timber waste and keep it out of landfills. With the right equipment many by-products from production can be recycled into usable lumber, or turned into fuel for power stations. Additionally, businesses that process timber can send their waste to be chipped and used for mulch in gardens or landscaping projects. By recycling timber waste instead of throwing it away, we can reduce the amount of energy needed to

produce new resources from scratch.

Lifespan

The lifespan of a product or material should also be considered in this journey. Despite aluminium being nearly 100% recyclable, its typical lifespan is around 30 years and PVCu just 15 to 25 years. However, with correct maintenance, timber can last up to 60 years. The longevity of material not only supports being more sustainable, but also contributes to lower overall costs in building.

Solution

In order to improve the sustainability of our building projects, we need to ensure that materials are sourced from sustainable sources and delivered in an efficient way. It's clear that timber can play an important role in our efforts towards sustainable practices in the construction industry, but total transparency of a materials origination, manufacturing technique, delivery, installation and recycling is essential.

Scott Martin is sales director at Mumford & Wood

Garador introduces improved side-hinged garage door range



Garador has introduced a new and improved side-hinged garage doors range, specifically designed for modern homes where garages are often used for storing garden equipment, bicycles and tools. In addition to its robust and versatile design, the improved range has been engineered with a variety of new features including an upgraded 2-point locking system means for extra security and weatherproof rubber seals built into the door frame to prevent drafts. The door is supplied pre-framed for a quick installation and is suitable for between brickwork fixing. There are door stays positioned at the top of the garage door frame next to each door leaf, helping to keep the door open and prevent it from blowing closed in blustery conditions. The improved range retains a fundamentally simple and easy to use design, with two outward opening door leaves and a black plastic lever handle. There are 19 side-hinged door models to choose from, as well as a wide range of colours and materials including steel, timber and grp. Find out more about the new side hinged garage doors by calling Garador or visit the website.

01935 443722 www.garador.co.uk

High performance at York Theatre Royal



Neaco supplied a bespoke balustrade design as part of a project carried out to improve accessibility at York Theatre Royal. Neaco's ramp solution included toughened glass panels and an offset handrail with a modification to its standard dimensions to accommodate the design of the parapet. The original design

brief required stainless steel handrails and stanchions but due to budget restrictions Neaco supplied a value-engineered alternative in the form of powder-coated white aluminium providing a durable, non-chip finish which is warm and comfortable to the touch.

Neaco.co.uk

First Minister opens Innovation Centre



On 8 March 2023, the Rt Hon Mark Drakeford MS, First Minister of Wales officially opened **Siderise's** new £1 million Innovation Centre at Maesteg, which will drive the creation of enhanced fire safety solutions for facades and building

finishes, helping to deliver safer buildings all over the world. The event marked a significant milestone in the development of one of the leading companies in the region. The First Minister unveiled a plaque, signifying the company's ongoing investment in the local area and commitment to product testing and quality control.

01656 730833 www.siderise.com

Wraptite® partners with Hadley Frame for an airtight performance

The Wraptite external air barrier system from the A. Proctor Group has enhanced the performance of considerate inner city development of retirement living apartments working in partnership with the market leading Hadley Group.

The Lichfield's Bonds retirement living development for Pegasus Life consists of three apartment blocks in the heart of the cathedral city. Constructing on a compact site and nestled against local residents and businesses required a sensitive building approach and a considerate program design. An essential requirement for the client was ensuring that traffic was not disrupted and that the project positively contributed to the city.

The Wraptite external air barrier system from A. Proctor Group was installed in combination with the innovative, unique pre-panelised and fully load-bearing Hadley Frame offsite system, which is ideal for developments of low to medium rise structures.

The Hadley Frame system is designed to be installed off a structural concrete slab or transfer structure and provides a high strength-to-weight ratio and relative weight saving. In some cases, savings of 20-25% in weight can be achieved compared to traditional methods of construction.

Adam Salt, business development manager of the A. Proctor Group explained: "One of the key benefits of installing the Wraptite air barrier system in the factory for the Hadley Group was minimal on-site disruption."

"Minimising disruption on site provides significant benefits to local residents, particularly in the case of compact inner city sites like the one at Lichfield."

"The Wraptite air barrier system offers a safer and simplified membrane system. It provides a fully self-adhered vapour permeable air barrier certified by the BBA and combines the critical properties of vapour permeability and airtightness in



one self-adhering membrane. The selfadhesive membrane is easily applied in the factory, bonded externally to the substrate, positioning the airtightness line away from the internal service penetrations ensuring a superior performance on the project."

Joseph Sargeantson, technical director of the Hadley Group, explained: "The efficiency of the Hadley Frame system is significantly enhanced by the use of the Wraptite membrane from the A. Proctor Group. Combining Wraptite with Hadley Frame has enabled us to improve the air tightness and building performance and to achieve test results of 1.24 m³/hr/m²."

01250 872 261 www.proctorgroup.com



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TO FIND OUT MORE

about Fassa Bortolo and its range of render systems and building products.

Please SCAN THE QR CODE to get in contact visit www.fassabortolo.co.uk or call 01684 218 305











Testing your metal

With regulation changes and a market still in recovery mode, specifiers and architects looking to utilise metal for roofing and cladding should expect fresh challenges over the coming months, says Simon Walker at SIG Design and Technology

s a global commodity, metal products have always been subject to price fluctuations driven by global demand and international events. Up until 2022 these were relatively predictable and it was possible to forecast, with reasonable accuracy, the likely cost of metal roofing products in advance. Metals such as copper offered specifiers and architects value, both in terms of cost and product performance.

However, last year represented a huge shift in the norm and pricing forecasts suddenly became a lot less reliable. 2022 saw big price fluctuations due to soaring energy prices and rapidly changing availability. Copper, for example, saw prices soaring as sanctions were imposed on Russian exports following its invasion of Ukraine (in 2020, Russian was seventh in the world's copper producing nations.)

Compounding this, a fall in the value of the GB Pound against the US Dollar has pushed up some material prices on the domestic market because metals are traded in US Dollars on the London Metals Exchange.

Moving away from the norm

Copper has long been seen as an ideal material for metal cladding and roofing. However, amid warnings of potential slowdowns in the construction sector and spiralling prices, specifiers are starting to search for alternatives.

The key has been to find an alternative to copper which maintains the performance qualities, ease of installation on site, and has a similar aesthetic over time. Reflecting this trend, aluminium has seen a huge increase in interest as an alternative.

Aluminium combines the benefits of being lightweight and easy to work with - making for efficient installations. For architects and specifiers, it's available in a wide choice of colours and with unique surface patterns or effects to match as closely as possible to typical copper applications.



Depending on the product, aluminium cladding comes in a number of varying shades as standard with bespoke colours available upon request. This flexibility and durability have made it a highly sought after solution.

Keeping up with the standards

On top of the challenge of specifying different products to stay within budget, the other hurdle architects and specifiers must overcome is ensuring compliance with the latest changes to the fire regulations. More specifically in England & Wales, to Approved Document B which includes the ban on the use of combustible materials as part of an external wall construction for residential buildings.

In 2018, Regulation 7 of the Building Regulations was amended to explicitly ban the use of combustible cladding in the external walls of residential buildings with a storey at least 18 metres above ground.

The recent amendments to the Building Regulations (including Document B) were introduced in June 2022 and came into effect on 1 December 2022. From this date, the ban on the use of combustible cladding has been extended to include any building with at least one storey 11 metres above ground level and which contains one or more dwellings, including student

Copper has long been seen as an ideal material for metal cladding and roofing. However, specifiers are starting to search for alternatives due to spiralling prices and accessibility

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Aluminium combines the benefits of being lightweight and easy to work with

accommodation, care homes, sheltered housing, hospitals, and dormitories.

While metal is largely unaffected, it's the substrate the metal cladding is attached to which is where many of the changes will impact how products are specified.

For example, on Barchester Street, a scheme for 115 new affordable homes in Poplar, east London, SIG Design and Technology worked with the project team to develop a fire compliant solution for the zinc-clad facades.

The solution utilised a steel frame system and comprised a cement particle backing board, mineral wool insulation, aluminium rails to support the steel sheeting (in place of plywood) followed by a breather membrane. This was then covered with angled zinc standing seam cladding.

The above paragraphs highlight the importance of understanding the new rules relating to fire and how it affects the materials used in a roofing or cladding application. While the temptation might be to reuse an existing specification, it's now critical to check that each component is fit for purpose and that the system as a whole satisfies the requirements of the Building Regulations.

Use your supply chain

The information to help specifiers and architects is out there and readily available from manufacturers, but finding and making sense of it is a task in itself.

It's here where early engagement with the supply chain can make overcoming these challenges easier. Distributors can leverage their relationships with manufacturers to ensure the information needed is readily available, removing the pain of searching.

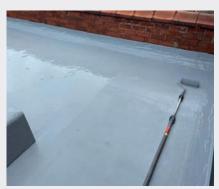
Some companies go one step further in not only supplying complete cladding solutions but offering technical and regulation specialists that are there to support customers in developing a compliant solution.

It is also worth looking at whether system component warranties are offered by your supplier. This is critical as while individual warranties will likely be in place for single products, the focus is on how these all perform as a system. Therefore, a system approach to solutions and warranties is the best way to ensure peace of mind for you and the building owner.

Simon Walker is category manager at SIG Design and Technology – Hard Metals

Resapol supply Mapei Purtop Easy for roof renovation

In August 2022 Steve Harrison, Resapol's northern divisional sales manager, visited a site to recommend products for an extensive roof renovation in Leigh, Greater Manchester. It was identified during the initial site visit that a number of criteria needed to be met; a high performance, fast-track system that offered excellent adhesion and easy application was required.



The Resapol Leigh depot technical team immediately thought of Mapei as the ideal manufacturer. Their range of waterproofing membranes stand out as really versatile and typically come as 'ready-to-use'. They are also rigorously tested and backed up by extensive research and development, so they provide a guarantee of durability, quality and environmental sustainability for the construction's themselves.

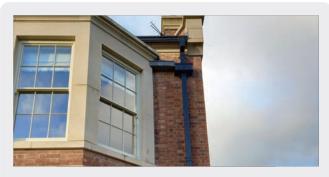
After conducting a further site visit with Mapei's Phil Graham, the client chose to go ahead with Mapei's Purtop Easy roofing system. Purtop Easy is a one-component, elastic polyurethane membrane with a coloured finish typically utilised for waterproofing both new and existing balconies, terraces, roofs and areas with pedestrian access. It can be applied on concrete, cementitious screeds, ceramic, fibre-cement boards, old bituminous membranes and metal. Highly elastic and exceptionally durable, the membrane is



equally easy to apply either horizontally or vertically using a brush, roller or trowel. Once applied, it guarantees substrates are fully impermeable and resistant to standing water, root penetration, foot traffic and temperatures from -40°c to +80°c.

Once specified Resapol arranged fast delivery, direct to site where Elite Construction & Property Services Group successfully completed the project within just three days.

0800 083 194 www.resapol.com



Marley Alutec's Traditional range selected

Marley Alutec's Traditional range of aluminium rainwater gutter systems has been chosen for a traditionally styled new-build home in the Derbyshire countryside. The Marley Alutec products provide the aesthetics and longevity the homeowners were looking for while satisfying local planning requirements. The Georgian-styled house is a replacement for an old farm worker's cottage and was designed to blend traditional aesthetics with modern comfort and performance. Ian and Julia selected the Marley Alutec Traditional Moulded Ogee 125 x 100 mm bolted gutter system and Traditional Square 102 x 102 mm downpipes. The Traditional Moulded Ogee range is manufactured to BS 8530, the original design standard for cast iron. In addition, the chosen Heritage Black finish features a textured surface to accurately reproduce the appearance of cast iron systems. Marley Alutec Ornamental Hoppers were also chosen to add further authenticity to the design of the house.

01234 359438 www.marlevalutec.co.uk



Appointment to support Heraklith® range

Knauf Insulation has appointed Ross Foreman as National Wood Wool Manager for UK & Ireland to meet increasing demand for its Heraklith® range of wood wool products. The appointment reinforces the company's commitment to giving architects and specifiers design freedom through a diverse range of insulation solutions. Ross will work with Knauf Insulation's regional sales, specification and technical support teams, helping architects and designers create design statements with wood wool. Ross said: "Insulation is usually hidden away in the building's construction, but there are applications where it's on display. I'm looking forward to working closely with our customers to help them deliver insulation solutions that not only comply with increasingly stringent regulatory standards but look great too. The Heraklith® range of products is unique in the UK – it not only delivers the required thermal performance, fire safety and sound absorption, but is aesthetically pleasing too."

01744 766 600 www.knaufinsulation.co.uk





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Euroform's Versapanel® 'makes the cut' for film and TV studios

Persapanel®, Euroform's cement particle board, has been specified for its acoustic properties as a roofing system component for what is set to be one of the UK's largest film and TV studios, Shinfield Studios, at the Thames Valley Science Park.

Shinfield Studios is a state of the art, purpose-built studio facility close to Reading in Berkshire. Phase 1, comprising four sound stages, workshops and offices is in operation having opened last year. Phase 2, to add five new sound stages, workshops and offices is opening across the coming months. When Shinfield Studios is complete it will offer film and television producers over one million square feet of studio space with 18 sound stages and complimentary facilities.

The project is designed by international design practice Scott Brownrigg and being delivered by contractors, including Curo Construction. Vertec, a leading specialist in facades, roofing and cladding, is constructing the building envelopes for the studios.

Protection against noise is important in modern construction design, but at Shinfield Studios it is crucial to the purpose of the studio buildings. Versapanel® is used extensively in construction where acoustic control is essential.

Specified by scheme architects Scott Brownrigg, approximately 17,000 square metres of Euroform's Versapanel® is being incorporated by Vertec as an element, along with acoustic matting and mineral fibre products, to the acoustic roof construction across the studios.



"Versapanel® has advantages over other types of board materials due to its strength, workability, durability and high performance in the presence of moisture, but, in this project where acoustic performance is so important, it is Versapanel's sound reduction properties that were key to meeting the brief," said Euroform's national commercial manager Mark Atkinson.

Versapanel® has a minimum density of 1300kg per M3 providing superior acoustic performance when used in construction of walls, floors, ceilings or roofs. A single Versapanel® board provides airborne sound reduction of between 30 dB and 36 dB,

depending on board thickness which ranges from 8mm up to 28mm.

Versapanel® can be used in single sheet or sandwich construction. At Shinfield Studios, to achieve the building design's demanding decibel reduction objectives it has been specified as a multiple layer, contributing to the effectiveness of the acoustic system in the pitched steel roofs at Shinfield Studios.

A versatile building board, Versapanel® is widely used in acoustic roofs, ceilings and floors, but also as sheathing panel for steel frame systems, for external wall insulation and for partition walls. It can be found in a wide range of commercial, residential and public sector buildings, including offices, schools, hospitals, libraries and hotels.

Euroform has been developing, fabricating and supplying materials for the construction industry since 1995. Euroform specialises in ensuring fire and thermal compliance across its product range. Each product is supported by an experienced and knowledgeable technical team to provide advice and guidance.

Based at Warrington, Euroform is part of Performance Technology Group an SIG Trading Ltd group of companies specialising in supporting the construction industry to meet acoustic, fire, thermal and vibration challenges.

01925 860 999 www.euroform.co.uk



Modern materials for modern schools

new €74 million 23,500 m² school has been built in Freising, Germany, as a showcase of how modern design and educational requirements can be designed in harmony to create a lively and vibrant learning space filled with space and light.

Designed by architects Fuchs and Rudolph Architecture, the combined primary and secondary SteinPark-Schulen school comprises 44 classrooms and ten specialist learning centres along with triple-field sports hall, auditorium, outdoor classrooms and playing fields.

Linked via a central atrium, daylight floods through large windows. To control the acoustics and the problems of reverberated sound from the large windows and hard floors, Troldtekt's wood wool acoustic panels were specified across the ceilings in the classrooms, open spaces and dining halls to ensure optimal acoustic performance and to create a pleasant, relaxed learning environment for staff and students. Finished in a white 101 colour, the ultrafine panels complement the window frames and furniture of pale wood and the light-coloured floors.

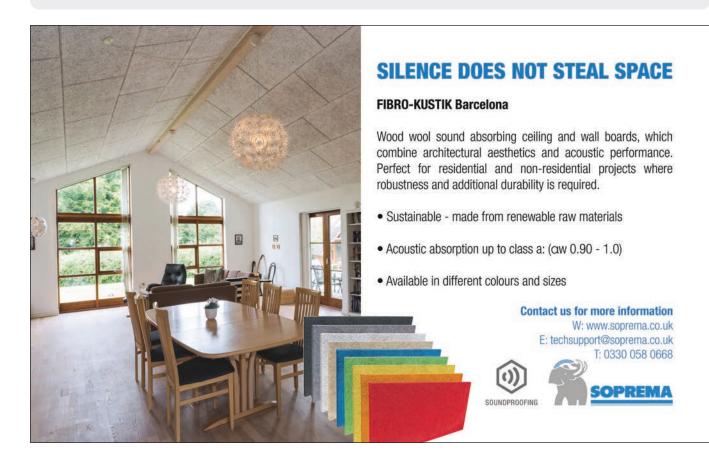


Founded on the Cradle-to-Cradle design concept and recently attaining Gold certification, Troldtekt's natural and inherently sustainable panels are available in a variety of different surfaces and colours and contribute positively to a building's BREEAM, DGNB and LEED ratings. In addition to their high sound absorption and tactile surface, they offer high durability and

low-cost lifecycle performance. Available in various sizes and in four grades, from extreme fine to coarse, the panels can be left untreated or painted in almost any RAL colour.

Samples, case studies and technical guidance are available from the website.

01978 664255 Troldtekt.co.uk



DRU reports excellent growth from its expanding Dik Geurts wood stove range

Established in the Netherlands in 1981, Dik Geurts stoves and fires are now produced by DRU, one of Europe's leading fireplace companies.

Soaring energy prices have provided a welcome boost to wood stove sales. Consumers are looking for cheaper and greener sources of home heating that can be supplied and installed rapidly to alleviate punitive home heating bills.

Increased production and distribution

This market uplift has led to DRU increasing production and distribution of its Dik Geurts Ivar selection of classic and contemporary stoves, which align with British and European emissions and efficiency standards. They are a popular choice to replace older, inefficient stoves or open fires.

The Dik Geurts Ivar series also includes the Aste, Soren and Modivar models. These stoves are based on classic designs, making them ideal for traditional or modern homes. They are easily installed into Class 1 chimneys, with their dark anthracite colour finishes blending perfectly with any style of decor.

A+ energy labels and high efficiency

Each model in the range has an A+ energy label, with an efficiency rating of over 80%. And for added air quality, there are external air and room-sealed options available.

All stoves in the range are Ecodesign ready, so they comply with European standards for low emissions and clean burning.



In addition, they have HETAS, DEFRA and clearSkies approvals.

Freestanding and water heating options

For homes with no chimney, customers can choose from a range of freestanding models, which are available in a selection of sizes and capacities with built-in wood storage.

In addition, The Ivar 10 H2O Store model is an Ecodesign 'boiler stove' with a substantial 4.7 kW room heating output and 5.5 kW of water heating power. It provides supplementary water heating for radiators, showers and general domestic hot water.

Commenting on the success of the Dik Geurts range, DRU UK general manager Niall Deiraniya said: "The Dik Geurts Ivar series and its associated models are among the best performing and best value wood stoves in Europe. That is why we are committed to increasing their production and distribution throughout the UK. In return, we offer high profitability, regular stocks, prompt deliveries, nationwide technical and marketing support, friendly customer service and expert account management."

info@drufire.co.uk www.dikgeurts.co.uk





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Charlton & Jenrick

Best of British fires, fireplaces & stoves





Designed with personalisation in mind



The new iRange Slimline range, from Charlton and Jenrick, takes the format of the extremely successful iRange Deep fires, but with a slimmer form factor. There are six models to choose from, ranging from 560 mm to 2,000 mm across, providing an option for every home. Media wall,

feature wall, and fireplace installations are all possible with this range. The iRange Slimline range has three different flame colours, nine different fuel bed colours, and optional LED lighting with thirteen colours. There is also app control, enhancing the usability of the fire and allowing you to create your own fire pre-sets.

01952 200 444 www.charltonandjenrick.co.uk

National Ventilation helps to meet regulations



National Ventilation is helping architects, developers, and contractors with developments of less than 100 plots to comply with amended Building Regulations. The new 2021 edition of Part F (Means of Ventilation), L (Conservation of Fuel and Power) and O (Overheating) came into force on 15th June 2022 in England, but there is a 12-month grace period. Fortunately, National

Ventilation offers a free whole-house ventilation design service for design and build projects to ensure the ventilation systems will both work within the buildings and meet the Building Regulations.

01823 690 290 www.nationalventilation.co.uk/design-service

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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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Positive Input Ventilation System



VORTICE has launched a new Positive Input Ventilation System (PIV) in both loft and wall versions to help eradicate the issue of mould in the home. Positive Input Ventilation means that a loft unit continuously draws air through the loft's natural leakage and ventilation points from outside, then feeds it through a filter into

the property via a central hallway diffuser. The wall unit works in the same way but is directly ducted to the outside and situated in the hallway of the property. By bringing this fresh air in, it reduces the humidity in the home, reducing the opportunity for mould to grow.

01283 492949 www.vortice.ltd.uk/vort-piv-range

The "low down" on the changing face of commercial ventilation



HVAC, or heating, ventilation, and air conditioning, is becoming a crucial consideration in the design of commercial spaces due to changing working trends and new regulations. Developers want buildings that can be quickly leased and have a low churn rate, while tenants demand spaces that are flexible, sustainable, and cost-efficient to run. Offices with new HVAC systems, particularly those with low carbon emissions, are becoming more popular. AET's UfAC system provides architects, developers, and tenants with design freedom by using the floor void for air conditioning and ventilation instead of traditional ceiling-mounted building services. UfAC's conditioned air module (CAM) unit handles air supply and exhaust, and strategically located Fantiles ventilate the space above. Its modular design allows each zone to operate independently at very low pressure, achieving up to 30% savings on energy and CO₂ emissions compared to conventional ceiling-based systems. UfAC contributes to BREEAM, LEED, and WELL accreditation and has a positive impact on embodied carbon. It also improves health and well-being, resulting in higher productivity and a healthy workspace.

01342 310400 www.flexiblespace.com

New LowBoard 2 underfloor heating overlay: thin just got thinner



OMNIE, the underfloor heating specialist, has launched a new, low profile, overlay panel, LowBoard 2, the latest upgrade to its industry-leading LowBoard panel which transformed the overlay market when it was launched in 2012. LowBoard 2 consists of routed lower and upper panels with a combined profile of just 18 mm, making it the thinnest overlay system on the market. Its predecessor, LowBoard, had a lower panel profile of 15 mm but, like other overlays, LowBoard also required a ply upper layer which can add at least 6 mm to its overall depth. LowBoard 2 is quick and easy to install and offers outstanding heat performance thanks to its innovative design. It has a 15% higher heat output than its predecessor and a 40% higher heat output than other unfoiled low build-up systems or alternative overlay solutions. Its lower and 'over' panels have pipe channels that tightly sandwich and encapsulate the warm water pipe. The routing follows OMNIE's patented multi-directional pipe channel pattern, eliminating the need for separate straight and loop panels while also ensuring the warm water pipe can be easily laid around any planned room layouts.

01392 363605 www.omnie.co.uk

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Introducing Sahara, our latest premium cubicle range inspired by bold minimalism.

Push the boundaries of modern commercial washroom design by specifying Sahara, our new floating, flush fronted cubicle range with innovative pivot hinge system that's available in five opulent finishes.

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01474 353333 www.venesta.co.uk marketing@venesta.co.uk



Scan to view the Sahara range.













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Singular Trom Ideal Standard









Tap into vital water savings

Kate Hirst at Lecico Bathrooms taps into the crucial issue of water scarcity, and how specifiers looking to water saving products can help to provide a host of economic, social, and environmental benefits

oday, one in 10 people have no access to drinking water. Eight years from now, it is estimated that there will be a 40% shortfall in water supply. By 2050 water demand will increase by 55% with growing populations coupled with increasing water scarcity. Recent consultations with the UK Government on water labelling, changes to Part G of the Building Regulations, and recent water shortages mean that product manufacturers can play a lead role in addressing these challenges.

Bathrooms account for 90% of water use in commercial buildings, with almost 50% of the water being used for flushing toilets. In homes, Part G stipulates that we should use no more than 125 litres of water per day. Given the enormous amount of water used, any savings that can be achieved will have a significant impact in managing water sustainably for the future.

Environmental assessment tools

Choosing water saving products is now a legislative requirement for new buildings, and the need for demonstrable sustainability measures is having a big impact on building design, with clients looking at more sustainable ways to build and fit out their buildings. Building designers often adopt environmental assessment tools to help guide product selection, demonstrate best practice, and document their efforts to create sustainable environments.

Using an environmental assessment tool greatly improves the likelihood of making informed and creative decisions in the way a project is designed. Selecting the right materials, products, and M&E and plumbing systems, can greatly reduce the building's initial (and life cycle) impact on the environment, including reduced consumption of water, reduced energy costs, and a healthier environment for users.



Product innovation

Consequently, sustainability and water saving has become a very important consideration for the bathroom industry and conservation of water is leading to significant developments in product innovation. Bathroom manufacturers are aiding building designers in their quest to reduce water consumption by producing new, exciting, innovative, and technologically advanced products. Current ranges of water saving products include WCs which only require 4/2.6 litres of water for flushing, waterless urinals, water saving baths, and flow restrictors in taps. A recent innovation in toilets is also making a

Selecting water-efficient products not only saves water but directly impacts a premises' carbon footprint by reducing the need for supply and water treatment processing

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Macro-economic, social, and sustainability drivers have led to water saving being an important consideration for all new build and refurbishment construction projects

significant impact in water saving.

Propelair – a new toilet innovation and the "world's lowest water-flush toilet" – uses only 1.5 litres per flush. It is the highest performer under BREEAM's water efficiency guidelines, using up to 84% less water than conventional toilets. Its patented design has been engineered specifically for commercial, public, and heavy footfall premises.

The benefits of water saving are significant and comprehensive. With consciousness of waste, carbon emissions, climate change and ESG (Environmental, Social and Governance) being at the forefront of commercial clients' concerns, saving water is high on the agenda. Selecting water-efficient products not only saves water but directly impacts a premises' carbon footprint by reducing the need for supply and water treatment processing.

Macro-economic, social, and sustainability drivers have led to water saving being an important consideration for all new build and refurbishment construction projects. The benefits offered by specifying water saving products include environmental, economic, and social benefits as described in the next paragraphs.

Economic benefits

Significant reductions can be made in a building's operational costs by using less water – chiefly as a result of less maintenance, and lower water bills. Organisations can also claim capital allowances (under their annual investment allowances) for specifying water saving products.

Environmental benefits

With less water being used, natural waterway habitats are more protected. Significant carbon savings can also be made from reductions in water treatment plants and processing.

Social benefits

Using less water in buildings also has a social impact – we are all aware of the damage our lifestyles have on the environment and are looking to change our habits. The technological developments in water-efficient products mean the construction industry is in a strong position to effect change.

Kate Hirst is commercial director at Lecico Bathrooms

Modern Convenience

t is a great convenience of Horne shower panels that half of any installation is complete, even before arrival on site. Pre-plumbed in controlled conditions at Horne's factory, for consistent quality and robustness, every shower is also fully pressure tested. Installation, therefore, is a quick and simple affair - hang the panel at the chosen location, affix to the wall (four screws), connect the supply pipework and commission into service. Voila!

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 materials are also highly durable; chromium-plated stamped brass, die-cast zinc and stainless steel are tolerant of accidental, or intentional abuse.

Three, healthcare approved (Type 3), shower mixing valves feature across the range, and offer a few flow and temperature control combinations. Designs can also be optimised for secure facilities (ligature resistant) or healthcare, elderly or cognitively impaired, and accessible

installations (lever controls).

Easily mix and match fittings to make a shower for any application, niche or otherwise. Choose from four shower head options; fixed vandal and ligature resistant, fixed swivel, or riser/grab rail, hose and handset (single or three function). Integral flow regulators provide optimised flow rates, whilst limiting wastage of pre-heated water. Timed flow control models give additional water and energy savings, and these are particularly suited to the prison estate, but also for recreation, leisure and school sports where showers may be left, inadvertently or intentionally, running. T4 or T9 type showers (as pictured), feature an integral In-Line Thermal Disinfection Unit plus key-holed pipe cover. This patented device easily addresses retrograde contamination of the shower and water supply by pathogens. For the protection of vulnerable users, especially in care settings, this proven safety feature facilitates routine thermal disinfection of the shower's internal pipework, valve, and shower head, utilising the available hot water supply.





The pipe cover, with same profile as the shower panel, can also be specified as an accessory for -A type shower models. Available in two lengths, these accommodate for difference ceiling heights. Primarily removing the ligature risk presented by the exposed supply pipework, it also offers a hygiene cover for easy cleaning and improved aesthetics.

01505 321455 b.link/ConvenienceShower

Hidden and chic

Häfele UK's Elizabeth Briggs shares design concepts as well as budgeting ideas for integrating multi-functional hidden kitchens into residential designs post-pandemic

he rise in popularity of hidden kitchens has multiple factors, but it is undoubtedly driven what we can call the 'pandemic effect.'

During lockdowns, people spent more time in their homes – whether working, home-schooling or exercising. During that time, there was a need for homes to be clutter free and spacious, as people had such little space to enjoy compared to usual. Then, as restrictions were lifted, families and friends spent more time entertaining at home rather than going out.

As a result of this, the desire for kitchens – as the heart of the home – to be multifunctional and free of mess has grown significantly. Being able to 'shut off' an area is now more important to homeowners than ever. In fact, last year, we surveyed over 2,000 homeowners who told us this capability was critical when choosing a new kitchen, with 15% saying they want to be able to change the function of the room on demand. For example closing off areas to hide a mess or change the use of the space. Further to this, 65% of people bake in their kitchen, one in 10 use it as a home office, and 4.5% exercise in this space.

Customers clearly want their spaces to work harder for them, but many don't believe they have the budget or floor space for a hidden or 'second' area within their kitchen. What many don't realise is that the concept is scalable; while budgets vary considerably, so do product ranges.

With this in mind, architects and designers are currently in a strong position to demonstrate how hidden kitchens can be integrated with ease – whether an existing space or as part of an extension. The key however is taking a personalised approach to the customer's needs, considering both their practical requirements and their personal taste.

Dedicated storage

Some people want their worktops to be clutter free, and for small appliances like kettles, toasters, coffee machines and



microwaves to be out of sight when not in use. Having a dedicated area for items like these creates a cleaner, more streamlined aesthetic in the rest of the kitchen space, but can also become a key design feature that can act as a hidden kitchen space.

For example, a breakfast cupboard that opens up when needed and closed off when finished with can be a great addition to a kitchen. This idea can be taken further for people who have a particular hobby, like baking, with specific tools and equipment that take up a lot of space. In this case, creating a concealed 'prep area' that exists behind closed doors, or dedicating an area within a newly added utility room for the activity, will act as a secondary space to the main kitchen and can be used to place mess and equipment quickly out of sight.

The power of pocket – and pivot – doors

For homeowners with a larger floor plan, walk-in pantries or butler's kitchens – also known as spice kitchens – are increasing in popularity too. These might be integrated as part of an extension, typically taking up a whole corner of a room or an entire wall, rather than consisting of one large cabinet as a breakfast cabinet would. The premise,

Architects and designers are currently in a strong position to demonstrate how hidden kitchens can be integrated with ease — whether an existing space or as part of an extension



though, is still the same – homeowners want the luxury of having a space they can close off once their task is complete, to return to entertaining their guests, with mess out of sight.

With such a big installation however, open traditional swing doors would take up a significant amount of floor space. Instead, pocket or pivot doors can be installed, which slide back into a recess in between walls or cabinets so they're out of sight when the pantry space is open. When needed, they slide back into place and form part of the overall kitchen design, simultaneously keeping mess, smells and washing up contained.

Brilliant broken plan

Where and how doors are installed in a space undergoing a renovation is central to how the overall room will work. While open plan has dominated design for years, fixtures and fittings that allow homeowners to shut off zones within their home as and when needed are more popular today. For example, many homeowners want to strike a balance between large kitchen diners and smaller, more intimate dining spaces which

aren't impacted by the mess and smells created by cooking.

Sliding doors play a key role in this, as they create physical and visual connections in a space as well as carving out specific areas for designated purposes, and save space compared to traditional swinging doors. Today, there is an endless range of door designs available, incorporating on-trend colours and matt finishes, which can also be paired with a wide range of stylish decorative handles. By making doors a key functional part of a space, flexibility will be achieved which creates the illusion of a 'second' space without major structural work.

Spaces that don't work effectively for us can impact our day-to-day lives and relationships in a negative way. But with some tactical thinking and using the clever product ranges available today, designers can more easily create the feeling of second spaces that help homeowners feel more comfortable and productive in their homes.

Elizabeth Briggs is category manager at Häfele UK

Make the natural choice



Granorte manufacturers cork floors and other products in Portugal, where it has been finding new ways to use the waste cork from wine stopper production since 1972. The cork used in Granorte's flooring ranges is originally harvested from the bark of trees within Portugal's protected forests. Portugal produces around 50% of the world's cork supply and its forests are strictly protected by the government. This strict protection, which includes government approval for the removal of trees, ensures that Granorte cork floors come from a sustainable natural resource. These forests also lock in carbon, with a recent study showing that Portuguese cork forests absorbs 4.8 million tonnes of carbon each year. Granorte takes this natural material and manufactures a range of highly sustainable flooring options. In its purest form – the glue-down tiles of Tradition – this makes a Granorte floor made from 90% recycled and rapidly renewable natural resources. There are few other floors that are suitable for commercial use that have this status. Even with its engineered floating floors using Uniclic®, Granorte achieves up to 80% renewable natural materials status.

01952 443 555 www.granorte.co.uk

Make Hero Spaces with Hive from UNILIN Panels



Hive is the striking 3D decorative surface panel made with 90% post-consumer wood by UNILIN Panels. For 'instagrammable' hospitality backdrops to smart workspace finishes in offices and merchandising areas in retail, Hive's 3D geometric structure captures the light to create a subtle hexagonal pattern. Now available from UNILIN Panels, the decorative panel brings a cost-effective, durable and easy to maintain finish suitable for commercial interiors. Hive panels are available in a range of solid colours and decorative effects. Everest White and Elegant Black are classics, with Dusty Coral, Oatmeal Beige and Sage Green providing a palette of uplifting natural tones. Brushed Steel Blue combines Hive's hexagon relief with a smart brushed metal for a futuristic edge. Each colour can be used to add a unique and individual look to areas. Whatever the look, Hive is made with UNILIN Evola-Belspan® 100% recovered chipboard. This is made entirely from recycled wood, with 92% coming from locally sourced post-consumer materials including old furniture, making chipboard this way saves over 900,00 tonnes of wood from incineration every year.

info.panels@unilin.com www.unilinpanels.com

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Bjelin supplies flooring for elegant Modernity London showroom in Belgravia's Pimlico Road

B jelin has continued to expand in the UK commercial flooring market over the past year, with its distinctive hardened wood flooring range. Now it has been featured on an elegant 250 m² renovation project for design gallery Modernity in Belgravia, London, which highlights the functionality and outstanding aesthetic qualities of the Bjelin range.

Modernity specialises in the collection and sale of rare and high-grade furniture, ceramics, glass, lighting and jewellery by the most renowned Nordic designers of the 20th century.

In January 2023, Modernity opened a new permanent London showroom located in Newson's Yard – a newly developed design destination on the Pimlico Road in Belgravia. With thanks to Wood and Beyond, the specialist London importers and suppliers of hardwood products, Bjelin were able to supply an area of 250 m² of hardened wood flooring. They were looking for flooring that



could create a feel of luxury, whilst being durable enough to perform well in a high traffic destination.

The Bjelin hardened wood flooring on this project looks absolutely superb and is a credit to the location. The product used was XXL Oak Nature – Natural – Brushed Lacquer, which showcases the technology behind the manufacture of a Bjelin hardened

wood floor. This involves the pressing of a thin wooden veneer layer together with a wood fibre core, coated with a powder under high heat and pressure.

Woodura® the patented surface technology from Bjelin's sister company Välinge, enhances the unique character of solid wood, by combining different wood veneer qualities with a powder mix in different colours and finishes. Additionally, the 5G® Dry™ technology gives the floor enhanced water resistance by preventing water from penetrating into the joints of the floor panels.

The Woodura® technology also maximises the floor surface available from every log. By using sliced wood instead of solid wood, ten times more flooring can be produced from the same amount of timber, while the 5G® Dry™ technology makes floors both easy to install and easy to live with.

www.bjelin.com www.modernity.se

F. Ball chosen for Cairo Hospital installation



A high-performance levelling compound and adhesives from F. Ball and Co. Ltd. have been chosen to install floorcoverings in the Middle East and Africa's principal healthcare and research centre for the treatment of burns and trauma, the Ahl Masr Hospital in New

Cairo, Egypt. Stopgap Red Bag was applied throughout to create a perfectly smooth base for floorcoverings to be installed. Styccobond F44 solvent-free acrylic emulsion adhesive was used to install Gerflor Taralay Impression Compact safety flooring throughout the hospital, with the exception of operating theatres and X-ray rooms.

01583 361 633 www.f-ball.co.uk

Forbo helps to refurbish workspace



Forbo Flooring Systems' contemporary range of floor coverings were specified by Momentum, a furniture expert, to create a warm and vibrant hybrid working space for Newydd Housing Association. Rhian Worgan, interior designer at Momentum, talked about this specification,

saying: "We're delighted with the way the office space has come together, as are Newydd themselves! I've worked with Forbo on many projects in the past and trust the products to do what we need them to. Their portfolio on offer, alongside the customer service and technical support provided, is something that keeps me coming back to Forbo."

01773 744 121 www.forbo.com

Texture and tone for a bespoke look



Carpet Tiles and loose lay Luxury Vinyl Tiles from IVC Commercial have transformed the Derby offices of Alliance Medical, supporting a feeling of openness and transparency. As part of the Cat A fit-out of Alliance Medical's new Derby offices, IVC Commercial's Rudiments Basalt carpet tiles and Matrix 70 Loose Lay LVT floors were installed to meet the need for a cost-effective and easy to maintain floor that looked great. Bringing comfort and good acoustics to the open plan desking and meeting rooms with Rudiments, and natural looks and practicality to social spaces with Matrix 70 Loose Lay, the flooring design supports the openness and transparency of the office space. With texture and tone flowing through the flooring, Office Principles has ensured a bespoke space with design continuity. By using Matrix 70 Loose Lay alongside carpet tiles, Office Principles was able to eliminate the need for transition profiles, creating a bespoke, custom-made look right across the floor. Alongside, there's a cost-effective and easy to maintain finish on offer from both Rudiments and Matrix 70.

01332 851 500 www.ivc-commercial.com











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Luceco's Sigma at the Liver Building





uceco has recently supplied their Sigma luminaires to the Royal Liver Building. The building overlooks the River Mersey from its waterfront location on the Pier Head and forms one of the 'Three Graces' along with the Port of Liverpool Building and the Cunard Building.

CBRE, a global leader in commercial real estate services, has managed the refurbishment of the iconic Grade I Liver Building to create a 'best in Class' office and leisure destination. The 8th floor is home to The Bank of New York Mellon who now benefits from a significantly improved, energy efficient lit environment. Tom Francis, Luceco project manager said: "We worked alongside CorEnergy, part of the SureServe Group, based in Manchester, a renewables specialist in the sustainability and low-carbon sectors. Sigma was selected for this impressive office environment due to its advanced technical performance, a direct/indirect recessed luminaire for low glare applications designed to assist with LG7 compliant settings."

Backlit LED technology and a central Tp(a) microprism optic ensured suitability for this office environment offering UGR 19 compliance and less than 3,000 cdm² at 65°. Platinum Mini downlighters were also used to light circulation spaces alongside Sigma. A recessed luminaire offering an efficacy

up to 117 Llm/cW, Platinum Mini features a unique swing tab design for quick and easy installation.

Sigma is engineered to be installed in the traditional lay in method or pulled up to the ceiling using specially designed swing tabs. The luminaire has a range of mounting accessories for solid or plasterboard ceilings and is also suitable for non-standard ceilings in commercial applications. As well as offering an efficacy of 130 Llm/cW and excellent photometric performance, Sigma delivers over 100,000 hours of maintenance



free, operational life.

James Burton from CorEnergy, part of the SureServe Group, said: "The successful completion of this lighting improvement project at the Liver Building is a great example of CorEnergy working in partnership with Luceco to provide an enhanced lighting solution within a prestigious building. In a time where all businesses are striving for carbon neutrality whilst also facing the impact of rising energy costs, our lighting solution will result in a significant return on investment for the client and deliver ongoing carbon savings."

Opened in 1911 as the headquarters to the Royal Liver Group, the Royal Liver Building holds historical and cultural importance to the city of Liverpool, including Bertie and Bella, the mythical Liver Birds adorning its towers. The Liver Building was a pioneer of its time, being one of the first buildings in the world to be built using reinforced concrete. Today this iconic structure has been carefully managed by maintaining the building's Grade I status as well as offering the facilities to service modern commercial users, cost effective, energy efficient lighting being of significant importance to the environmental operations of the building.

01952 238 100 luceco.com/uk



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Yeoman Shield extend lifecycle of walls at Pinderfields Hospital

eoman Shield engaged with Equans and The Mid Yorkshire NHS Trust to continue to improve the lifecycle of wall coverings in key areas of Pinderfields Hospital.

Previously Yeoman Shield Imagery wall protection panels had been installed on the lower section of walls in the gate areas of the hospital. These panels perfectly replicated the design of the wallpaper which was becoming damaged and starting to look unkempt.

Showing to be successful in fending off impact damage, scratching, and marking the



decision was taken to repeat the same process to the upper part of the wallpapered walls.

Yeoman Shield's team copied images and dimensions from the printed pattern on the original wall covering taking care to align the top and bottom graphics.

The designs were programmed into Yeoman Shield's in-house CNC machine then cut from Yeoman Shield's 2.0 mm Falmouthex protection panels and fitted together to emulate the design and colourways.

The panels were installed by Yeoman Shield's fixing operatives to provide a decorative, hygienic, and impact-resistant covering that remains true to the original design brief. Minimising future redecoration and repair requirements, the panels will assist in reducing maintenance budgets providing a long-lasting, durable solution to impact damage.

Richard Bebb, Equans Lifecycle manager commented: "The Yeoman Shield fixing team were great and worked well and with respect



in live areas and we are very pleased with the product and finished installation."

0113 2795854 www.yeomanshield.com







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Visual, acoustic and thermal comfort



Unique in its versatility, the PareauLux Climate ceiling is being introduced to new European markets after its success in the Netherlands. A collaboration between Hunter Douglas and Inteco, this versatile system is available in three versions – durable roll-formed aluminium. HeartFelt® and veneered

wood grill – is fully adjustable to the client's specific needs and comes in several colours and panel sizes. PareauLux's built-in climate system's high-cooling power makes it truly one of a kind.

01604 648229 www.hunterdouglas.co.uk

Keller; striving to be environmentally better



In 2021, a partnership was born with ZLTO, Keller Kitchens' parent company, DKG, and two farmers to start the Carbon Farming-project to sequester carbon into their soil. The collaboration was established over a five year period in which the farmers apply Carbon Farming techniques that are

scientifically backed with data. The techniques used are equivalent to at least 15 tons of stored CO₂ per farmer per year. Keller/DKG are delighted to announce the initiative is working extremely well and the CO₂ is binding into the soil better than expected.

www.kellerkitchens.com

A principle of mass production



The Principle collection, from Parkside and Alusid, represents a huge step forward for the ceramic tile industry as the world's first mass produced 95% recycled content tile. With a tile body made entirely from by-products (post-consumer recycled glass and ceramic) of other manufacturing processes, Principle is based on technology that has taken a bold leap from a small batch production to a fully scalable process. Made by adapting the tile body to work in standard ceramic production facilities, Principle achieves a similar like-to-like cost as some other twice-fired tiles. The original Sequel Vibe requires making each tile by hand from low value glass and ceramic waste with capacity of approximately 50 m² per week. The new technique developed for Principle uses the same low value materials, but sources them after a further production process for finer granules that can enter the machine-operated ceramic tile production cycle. In turn, Principle enters the world of scalable production with current output of 1,000 m² per day. Principle echoes a similar hand-made aesthetic to Vibe, with a colour and depth in each of the four tones inspired by the Victorian period.

0116 276 2532 www.parkside.co.uk





FIREFLY's Titan Lite selected

TBA FIREFLY™ have been chosen to compartmentalise roof voids between apartments and communal lobbies of a large apartment building in the London Borough of Lewisham, providing 120 minutes fire integrity protection as part of a wide ranging refurbishment programme carried out earlier this year. The contract on Lewisham Homes' Commodore Court in Albyn Road has been led by the sector specialist construction company, Mulalley & Co. with CLM Fireproofing carrying out the installation of the TITAN Lite™ 120:60 barrier system, in combination with Collaroll and the use of ancillary products from the FIREFLY™ range. TITAN Lite™ 120:60 has been developed for use in vertical separation or compartmentation situations, offering 120 minutes integrity and 60 minutes insulation and is able to be sealed around penetrations. It is widely specified to form fire barriers within roof voids and floor voids in many different property types, including tower blocks and other HMOs.

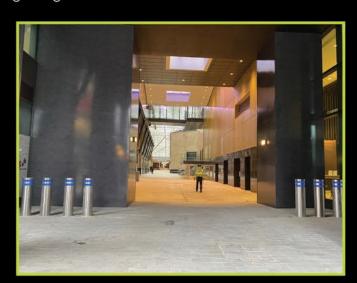
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FIREFLY™ APOLLO Lite specified

A passive fire protection contractor has been involved in the installation of fully compatible products from the range of TBA FIREFLYTM for the creation of half hour fire barriers within ceiling voids to a major general hospital undergoing extensive refurbishment work in the north of England. Cubic FM is the specialist sub-contractor carrying out all of the passive fire protection work at the Royal Stoke University Hospital. The work is making use of FIREFLY's well proven APOLLO LiteTM 30:30 barrier system in combination with the equally widely specified Collaroll across areas featuring cable trays, water pipes and other building services. APOLLO LiteTM 30:30 has been developed for use in vertical separation or compartmentation situations, offering 30 minutes integrity and insulation and is able to be sealed around penetrations. It is widely specified to form fire barriers within roof voids and floor voids in many different property types, including tower blocks and other HMOs.

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A perfect time to create the 'now home' while planning for the 'forever home', is when building from the ground up or significantly remodelling an existing property.

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Building in accessibility

Yola Mealing of Stiltz Homelifts considers how factoring in accessibility at project planning stage delivers the 'forever home' that clients are desiring

s more homes are reworked for multi-functional living, the opportunity exists to create properties that cater for all phases of life. Architects and planners are starting to prioritise inclusive design for new builds, but opportunities remain to encourage adaptability of existing housing stock too.

There's a lot of talk about 'Ageing in Place' as a solution to our ageing population. Baby-boomers are hitting retirement, with Generation X hot on their heels. However, The Centre for Ageing Better reports around only 7% of the UK's current housing stock is accessible for all people, while Government figures show poor quality housing costs the NHS an estimated £2.5bn per year. Unfortunately, too often a home becomes a barrier to independent living in later life offering the scope for design professionals to respond by delivering functional and adaptable spaces.

As Paul Gamble chief executive of Habinteg, stated in the national press: "People want to age in their own homes as independently as possible, for as long as they are able. It seems obvious to me this choice remains important as we get older."

While demand for new build homes continues, an estimated seven million existing homes in England are owned by someone aged 65 or over. Many of these homeowners have no plans to move but are in the market to preserve and protect their current way of life.

It's not just older people who need to consider accessibility though. As architect Julia Park explains in the Resi Happy Homes podcast: "Homes lived in by younger people shouldn't be excluded when it comes to accessibility. We're sociable, we want to invite friends and family into our homes, and some may be older people and others wheelchair users."

The stair conundrum

Stairs are often the first stumbling block for the design of an accessible home. Older



housing stock can present steep stairwells and space-restricted landings, negatively affecting the ergonomic function of a home for those less mobile.

Layouts and movement patterns around the whole property should be considered when remodelling and re-imagining a client's existing home, or when building a new one. Having access to the entire house is critical for independent living and remaining connected to every part of

For the architect who has a design-aware client, a homelift is the obvious answer to solving inter-storey access.

There are homelifts on the market which get the balance of form and function spot on. Products which present a compact footprint of less than a square metre allow space to be easily modified with minimal impact on the surrounding structure. Installation can be quick and straightforward due to a lift's modularity, Installation can be quick and straightforward due to homelifts' modularity, with only a simple ceiling/floor aperture to consider in terms of building work

with only a simple ceiling/floor aperture to consider in terms of building work. And, if space is restricted or where there is a need to maintain existing property features, shaftless and freestanding homelifts offer the bonus of flexible positioning.

A homelift can be sited close to existing stairs or, space permitting, within the turn of a staircase. Another popular location is in the main family room travelling to a bedroom above. It is the versatility of installation options which enables these capsule lifts to work in so many different applications.

Building for 'active ageing'

Including, or allowing for homelifts in the built environment can support clients to continue living in their home of choice for as long as possible, regardless of age or ability. A homelift can also be a practical solution prior to being needed as an accessibility aid, such as generally helping move luggage, vacuum cleaners or heavy washing up and down the stairs.

As Rose Gilroy, who is professor of ageing, planning and policy at Newcastle University, points out: "Homeowners

should ideally be installing adaptations while 'still fit and able.'"

It is somewhat self-evident to state, but a future-proofed home isn't about adding every deliverable from the outset. A major overhaul is not always necessary, especially while the cost of living and building materials soar. However, incremental changes, perhaps adding sockets at easy-to-reach heights or strengthening walls to allow for future fitting of grabrails, as well as optimising spatial planning with wider corridors and connected spaces for wheelchair access, ensures long-term accessibility.

Starting with a homelift, the objective would be to include products as needed to support universal moveability. These can be pre-planned to harmonise with chosen layouts rather than retrospectively shoehorned in, resulting in a compromised design aesthetic.

By seamlessly connecting space and storeys for future needs, we can deliver holistic housing that stands the test of time.

Yola Mealing is head of brand and communications at Stiltz Homelifts



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Pyroguard pivotal in creation of art depot



Pyroguard's fire safety glass was recently specified for The Netherlands' Depot Boijmans Van Beuningen, the world's first publicly accessible art storage facility. A stunning ovoid shaped building standing 40m tall, with reflective mirrors covering its surface, the depot receives anywhere from 150,000 to 250,000 visitors a year.

Pyroguard Protect fire safety glass was installed throughout the building's internal partitions, providing a high-performance 1B1 impact protection and EI60 fire resistance.

01942 710 720 www.pyroguard.eu



Get your garden summer ready

Spring is the perfect time to think about preparing outdoor spaces for the summer months ahead, but while the great British weather cannot be relied on, a Glass Room from CRL provides the perfect solution. Featuring an intelligent modular design, the aluminium structure means very few supports are needed even over large areas. The innovative connectors give a high degree of flexibility with many variations possible, while optional extras including sliding doors, vertical blinds and ceiling blinds makes it simple to create a unique space that can be enjoyed throughout the seasons. It was the all-weather element of the Glass Room that led to it being chosen in a residential property in Poynton, with the owners wanting to make the most of their garden year-round. They called on CRL to help open the outside space while protecting it from the weather and retaining the gorgeous views. The system's modular design enables the Glass Room to be configured to suit any space, from simple rectangles to more complex L shape designs.

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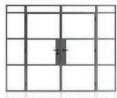
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