adf
architectsdatafile.co.uk
10.26



LUMI, UPPSALA, SWEDEN

A circular strategy by White Arkitekter salvages a 70s structure and its materials – producing a world-beating LEED score

Update your registration here:



T-T ADOPTABLE PUMPING STATIONS

We handle the whole process, from the initial enquiry to post-adoption maintenance, 24/7 365 days a year.

In-house manufacturing

No Sub-contractors

Quality control

For our adoptable pumping stations we include and install:

MADE IN BRITAIN

- S104 design pack via in-house design engineers
- Fixed drawing package price
- Manufacture, supply, installation and fitment of all key components
- Structural and septicity analysis (optional)
- Commissioning by T-T technicians
- Full NICEIC certification
- Comprehensive operation and maintenance manuals
- Adoption support

ttpumps.com pumpingstations@ttpumps.com +44 (0) 1630 647200







CONTENTS 10.26

NEWS, VIEWS & INSIGHTS

04 Industry News
12 **Practice Profile:** Emrys Architects
18 **View Point:** Architect Simon Sturgis on the UK's evolving carbon standards
22 International Focus
38 Materials In Architecture Supplement
57 London Build Show Preview
59 CPD Focus
60 Appointments & Company News

PRODUCTS

68 Modern Methods of Construction
73 Planning & Design
73 Structural Elements
73 External Envelope
88 Interiors
98 Heating, Ventilation & Services
104 Insulation
105 Landscaping & External Works
105 Safety & Security

INDUSTRY INSIGHTS

25 **ROUND TABLE REVIEW: HOW TO BUILD A BULLETPROOF GATEWAY 2 SUBMISSION**
A critical topic for debate, including input from sponsors Metsec, Leviat and Premcrete.

33 **INDUSTRY VIEWFINDER: TRACKING DESIGN STRATEGIES FOR FUTURE HOMES STANDARD COMPLIANCE**
White paper report on architects' current approaches to FHS design & specification.

PROJECT REPORT

46 **LUMI, UPPSALA, SWEDEN**
A defunct 1970s office building in southern Sweden's historic Uppsala was saved from demolition by White Arkitekter. Roseanne Field speaks to the practice about how they turned it into a modern mixed use with a LEED Platinum certificate.

FEATURES

69 **MODERN METHODS OF CONSTRUCTION**
PRECAST'S LEADING ROLE IN MMC
Kieran Fields at FP McCann on how precast unites fire, thermal and whole-life performance deliverables.

83 **EXTERNAL ENVELOPE: DOORS & WINDOWS**
THE HARD FACTS ON HARDWARE FOR GLASS-FOCUSED HOMES
Joe Ward at SIEGENIA explains why glass-forward domestic designs need to prioritise quality hardware.

91 **INTERIORS: BATHROOMS & WASHROOMS**
GETTING COMMERCIAL DRAINAGE RIGHT
Erik Mul from ACO Building Drainage on resolving the issues when installation space is compromised.

101 **HVAC: INOOOR AIR QUALITY**
A BALANCED APPROACH TO VENTILATING FUTURE HOMES
Getting the balance right between air-tightness and air quality – Lee Caulfield at Titon provides tips.

adf incorporating **Building Projects** magazine, **architectsdatafile.co.uk** and **@architectsDF**

Managing Editor
James Parker

Publisher
Anthony Parker

Account Director
Midge Myatt

Senior Account Manager
Steve Smith

Digital Marketing & PR Account Manager
Suzanne Easter

Operations Director
Shelley Collyer

Editorial Contributor
Roseanne Field

Events Coordinator
Amy Madigan

Studio Manager
Mikey Pooley

Production Assistant
Georgia Musson

Digital Production Coordinator
Kimberley Musson

Feature Coordinator & Publisher's Assistant
Kim Neville

Finance Director
Simon Reed

Advertising & Administration
01435 863500
info@netmagmedia.co.uk

Press Releases
editorial@netmagmedia.co.uk

Registration & Circulation Enquiries
info@netmagmedia.co.uk

netMAG media
An Employee Owned Company
Cointronic House
Station Road, Heathfield
East Sussex, TN21 8DF

abc

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

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

This magazine may be recycled

FROM THE EDITOR



Flashback to seven years ago, when RIBA judges gave the Stirling Prize to the first social housing scheme deemed worthy of the leading architectural accolade; the truly groundbreaking Goldsmith Street in Norwich. While Mikhail Riches and Cathy Hawley's 105-home timber-framed Passivhaus project was largely for social rent, this year's worthy winner (Lion Green Road in deepest south London – Coulsdon in fact), is a seemingly more pragmatic mix of affordable and private dwellings.

But the scheme developed by Croydon Council is a brilliantly simple use of an ex-car park, a very difficult sloping site that drops by 8 metres from back to front. Mary Duggan Architects' scheme design (RUFFARCHITECTS were the delivery architects) blends harmoniously with a nearby park thanks to subtle brownish pink and purple brick facades.

Perhaps Lion Green Road's biggest achievement, as well as working with the gradient, is the landscaping quality matched with the high density and efficient land use. There are 157 homes in the scheme, on a petite 1.45 hectare site surrounded by mature trees. The award-winning puzzle-solving by the designers has cleverly harnessed the surroundings to augment the spaces between the five apartment buildings, and provide a feeling of generous landscape with curving paths and planting.

The angular 13-sided blocks themselves are rotated so they present as subtly different, and yet repeatable in their design; a great combination of efficient construction and context-based response benefitting everyone. On a challenging site like this, Duggan's only real choice in creating something of true value was to respond to the conditions in as sensitive a way as possible, and not fight them. In doing this, she and the team have provided something that may not be fully 'teachable' for other projects, but will stand as a solid achievement in high-density urban design for decades to come.

More importantly, it's hopefully a great place to live on the fringes of London, for its residents, many of whom might be shocked by the quality (such as the loggia balconies for each flat) depending on their former accommodation! Reportedly, some tenants are already taking part in tending to the gardens and adding their own features, which is proof of the pudding.

We see a lot of 'tenure-blind' schemes, but we also witness a lot of schemes which seem a bit myopic in terms of really investigating the full potential of responding to a site, from orientation, to facade treatment and landscaping. In Lion Green Road's case, breaking the conformist mode – even subtly – has resulted in the highest honour in the profession for the architects.

James Parker, Editor

Looking to update or cancel your ADF registration? Scan the QR code to visit our registration page. From here you can also register for our Digital Issues and Newsletters. Alternatively, please visit architectsdatafile.co.uk/subscribe



ON THE COVER...
Lumi in Uppsala, Sweden saw White Arkitekter salvaging a 1970s building from demolition to produce a world-class sustainability score

Cover image © Måns Berg
For the full report on this project, go to page 46



Less thickness,
more performance.

Kooltherm®

When every millimetre matters, compromise shouldn't be part of the specification. Kingspan Kooltherm® delivers premium thermal performance with thinner insulation solutions for roofs, floors and walls. Specify a thinner insulation board and gain more performance.

Achieve demanding energy targets.
Maintain internal space.

Scan to visit our U-value calculator to work out the thickness of insulation needed for your project.

Kingspaninsulation.co.uk

Kingspan®

® Kingspan, Kooltherm and the Lion Device are registered trademarks of the Kingspan Group plc in the UK and other countries. All rights reserved.

AWARDS

Mary Duggan Architects' Coulsdon council housing scheme wins 2026 RIBA Stirling Prize



The RIBA has given the 2026 Stirling Prize to Lion Green Road, 157 homes commissioned by Croydon Council in Coulsdon, south London, and designed by Mary Duggan Architects, with delivery architects RUFFARCHITECTS.

Replacing a car park on a "challenging, sloping site," the development "creates a new connection between Lion Green Road and green parkland," said RIBA. The scheme comprises five similar 13-sided blocks of apartments in slightly varying heights, accommodating 635 residents in a combination of privately-owned and socially-rented homes.

Nestled amongst trees on the edge of green-belt land, the development is characterised by attractive soft brownish-purple and pink brickwork which "blends high-density housing into an area of natural beauty."

RIBA said: "Rather than treating the site's topography as a constraint, Lion Green Road reconsiders the conventional layout of residential streets and offers a new approach to higher density development. The arrangement uses the site's changing levels and views to create a new "living landscape" for residents.

Each of the five blocks is built to the same specification, but they are "carefully rotated and positioned to respond to the site's topography and offer distinct views." The design creates a "coherent family of buildings that belong within the landscape," said RIBA.

The buildings are arranged around open, shared outdoor spaces, and with access to a new public pathway from Lion Green Road to parkland beyond, the blocks "encourage interaction between residents and help foster a strong sense of community."

Each home is dual-aspect, with "generous daylight," while private balconies are carefully positioned to avoid directly overlooking neighbouring homes. This allows the buildings to "sit closer together while giving residents open views from their own outdoor spaces." The result is "density achieved through careful orientation and planning, rather than at the expense of privacy, daylight or views."

The project was designed and built to reduce its environmental impact and carbon emissions, including using "efficient construction methods, simple finishes, and a more streamlined building process."

RIBA 'Special Awards' were also given to:

- York Minster by Tonkin Liu Architects – RIBA Client of the Year Award 2026 for Heritage Quad and Technology Hub, both of which comprise the York Minster Centre of Excellence;
- The Buttermarket by Architectural Thread – RIBA Stephen Lawrence Prize 2026 and RIBA Conservation Award 2026;
- Rowan Court by Satish Jassal Architects – RIBA Neave Brown Award for Housing 2026
- Oru Sutton by Samuel Chisholm Studio and Takero Shimazaki Architects – RIBA Reinvention Award 2026.

Charlton & Jenrick 5 YEAR WARRANTY

Plug and Play Secondary Heating Solutions.

The Linear Centrepiece for Contemporary Architechure.









Charlton & Jenrick LTD

Scan, click or call to find out more

marketing@charltonandjenrick.co.uk charltonandjenrick.co.uk 01952 200 444

Bring your vision to life with

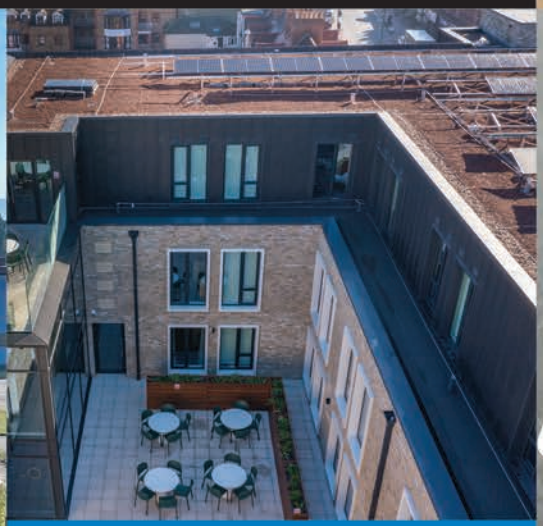
SOPREMA





From *concept* to *construction*





Roofing systems & building envelope solutions





SOPREMA speaks your language

SCAN ME!

SOPREMA
Building for Life

BOOK REVIEW

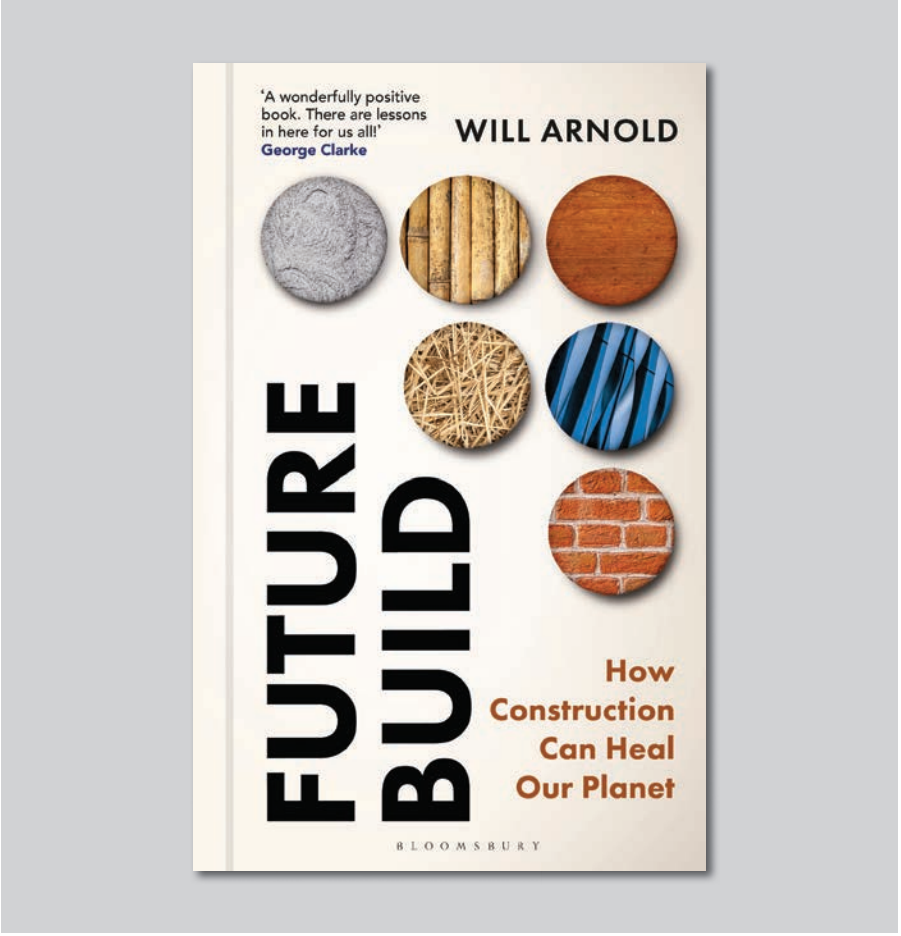
Net Zero Carbon Standard author's 'hopeful' book on construction's potential to heal the planet

Will Arnold is a leading environmentalist and structural engineer, and a visiting professor at the University of Bath. He was also a key contributor to the UK Net Zero Carbon Buildings Standard, and initiated the endeavour to create a new Part Z Building Regulation for embodied carbon.

At a pivotal moment when the industry is being called upon to be far more rigorous on construction, while also focusing on reducing whole life carbon and providing healthy buildings, Arnold has written a potentially game-changing book designed for a wide audience entitled Future Build: How Construction Can Heal Our Planet (published by Bloomsbury). It has been described by environmentalist Jonathan Porritt as "user-friendly, jargon-free, and solutions-rich." However while the book brings regenerative design concepts together to "reframe sustainable construction," (in the words of Dame Jo da Silva, Global Sustainable Development Director, Arup), Arnold doesn't hold back on criticising the industry for the damage it has already inflicted on the environment, as a result of "dependence" on materials such as steel, concrete, and masonry.

The book leads with a somewhat downbeat focus on the impact of materials, and proposes realistic alternatives to the commonly used solutions. Although bleak in some respects, Arnold's prose also aims to bring in end consumers as well as architects, contractors and others, and there are chapters called "The Allure of Big and Fat," and "The Philosophy of Less," as well as investigations into reuse and recycling. He also proposes the moves the industry has to make – to achieve what could be a seismic shift to regenerative approaches.

This is hailed as a "bold vision for change," by the publishers, "revealing how every stage of construction – from design to demolition – can be transformed for the better." Arnold explores international examples of buildings that "do more than just minimise harm: they actively heal the planet," such as schools constructed from bamboo. He therefore aims to show that the future he is describing is achievable, and "already being built."



This is certainly a call to action on construction to do 'good' and move away from the stigmas of environmental harm it has been associated with. Future Build could well start to build a wider audience than simply the 'believers' already out there in the industry and the wider public.

The book has been praised by a wide spectrum of industry voices such as architect, academic and 'Waste House' pioneer, Duncan Baker-Brown, who called it "thoughtful, hopeful, and deeply informed, and even "vital reading for anyone committed to a regenerative future." Another luminary, Prof James Norman of the Universities of Bath and Bristol, said the book is "fun and accessible, and essential reading on why and how the way we design buildings needs to change."

#AlarmsSaveLives

The **European Market Leader** in

Home Life Safety

- **Protecting Millions of Homes** across the UK
- Advanced **Multi-Sensor** and **Single Sensor** Alarms
- Full **Connected Home Solution** with **Environmental Monitoring**
- **Wireless Interconnection** and **Diagnostic Reports** Available
- **Quality** and **Long Lasting** Products

Protecting Homes Since **1990**



Smoke Alarms | **Heat** Alarms | **Carbon Monoxide** | **Environmental**

Want Free Training to Become an Alarm Expert?

Training provided in Shropshire and 4 Mobile Training & Demonstration units that travel the UK.

A range of CPD certified courses.

2 City and Guilds assured courses, a global quality benchmark.

Contact your Local Relationship Manager

www.aico.co.uk

T: 01691 664100 **E:** enquiries@aico.co.uk



Glyn Emrys © Alan Williams

PRACTICE PROFILE

Emrys Architects

Kim Neville speaks to Glyn Emrys, director of Emrys Architects, about the practice's evolution, its people-focused ethos and its longstanding commitment to finding new possibilities in existing buildings.

Glyn Emrys founded his first practice in 1994, during a recession, ostensibly not the most auspicious time to start a new venture. But, reflecting on the decision to go it alone three decades later, he explains what prompted the transition from employee to practice owner. "I have always been a doer and a maker, and I guess because of that, I always assumed that one day I would have my own practice." When the practice he had been working for started making redundancies, Emrys made the bold decision to establish his own firm.

Every practice's first project is memorable, and Emrys is no different. The first major commission was the design of the main office and trade showroom for Caterpillar Boots in London. Emrys recalls: "It was in an old warehouse building in Primrose Hill. It was very low budget, but it got us up and running."

Over the years, the practice has grown from a small studio into a multidisciplinary team working across a range of sectors. One of the major milestones, Emrys recalls, was the design of the first 24-hour library at Imperial College. It was a project whose relevance he only recently came to appreciate. "I realised the long-lasting relevance of this project when I saw it quoted in a book on co-working and how it began."

Another recession – in 2008 – marked another turning point for the practice, explains the architect, with its title formally becoming Emrys Architects during this period.

Bringing things up to date, the practice recently completed its largest project – a major retrofit scheme for department store Barkers of Kensington in west London. The project began as a competition during the Covid-19 pandemic, with Emrys triumphing over several established practices. "It started as a competition during Covid and we won it against some very good practices. It is our largest project to date, and has given us confidence to back ourselves against larger practices."



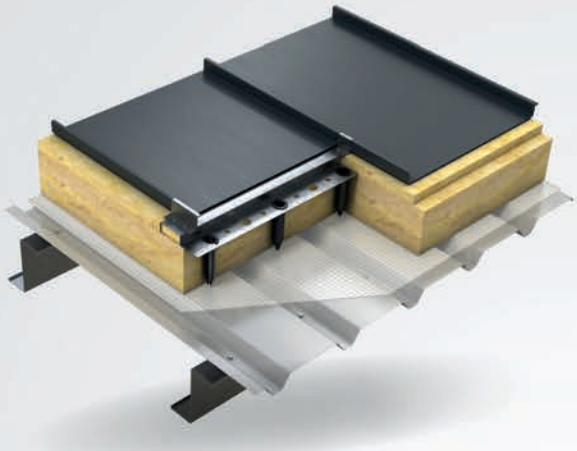


RETAIL SPECIALITIES
The practice has undertaken several key retail projects, including a deep retrofit of department store Barkers of Kensington, costing £120m and covering nearly 53,000 m² of floor space © Emrys Architects

Vieo

The all in one Roof and Wall System

Delivering clean lines, faster installation and lasting performance.





euroclad group

Adapting to change

Although the practice has designed several award-winning university buildings, Emrys explains that the old OJEU procurement system made it difficult to secure further projects in the education sector. This prompted a shift towards private-sector commercial projects.

Emrys goes on to outline the challenges the practice faces today. "Today, the two biggest challenges are fire and planning. Fire, post the Grenfell disaster, has understandably called for a whole new level of compliance. This does create time lags which can sometimes be a bit frustrating. I still wonder if it would have been a lot better to simply update and tighten up the Building Regulations to ensure fire safety, making the complicated process smoother. In terms of planning – we need to find a way to unblock the system to get things moving and built."

Ethos

While the practice has evolved considerably over the years, one of its core principles has remained constant. Emrys explains, "The principle that has remained constant is that it's not all about me. This has meant that the studio has naturally evolved."

This ethos is reflected in the studio's "Practice with purpose" philosophy, which sits at the heart of Emrys Architects. The practice's stated mission is to improve the world, placing purpose and the wider impact of its work at the centre of its approach. Emrys expands on this: "In our case, our purpose is to design every project as well as we possibly can, thereby improving the lives of those that inhabit our spaces, and hopefully through that design journey, influence/nudge their views about the built environment."

The practice also hopes that this dialogue encourages people to be more aware of the issues of the day, while potentially helping them to address the challenges of tomorrow.



COURTYARD CUPOLA
A retrofit combining two buildings in Bloomsbury for Great Portland Estates to form the Courtyard building office scheme includes a cupola repurposed as garden room
© Emrys Architects

Culture

The practice's emphasis on listening extends to its staff. Emrys believes that creating an environment where everyone feels able to contribute is essential to the way projects develop. "Listening to clients is key to any project. If you don't listen, then you don't get the brief right, and if you don't get the brief right, then the project goes off the rails very early on. We have been very lucky with our clients. They have been very loyal to our practice, and part of the reason for that is because we listen, and then we go the extra mile to make sure we have interpreted their requirements correctly."

That same principle applies within the studio, where Emrys encourages team members to take ownership of projects from the outset. "As part of this listening process, it's also important that all members of our team feel involved from the get go, and that their opinions are also listened to. To achieve this, we encourage ownership and autonomy, because we think that is the way people build confidence. We also discuss projects as a team so that everyone understands the issues and opportunities. Wherever possible, we try to avoid 'second hand' briefings."

The practice has also retained a studio-based way of working, post-Covid, viewing it as beneficial for communication and collaboration. Alongside the day-to-day interaction between colleagues, the practice has a regular social and cultural programme. This emphasis on connection, he suggests, is part of the wider responsibility the practice feels towards its people.

Ultimately, the same consideration for people informs how the practice approaches project designs. Emrys' ethos doesn't separate looking after the team and delivering good architecture, seeing them as facets of the same approach: understanding what people need, listening carefully and reflecting those needs in the work.

Design approach

The studio doesn't claim a standard design signature, but instead deploys a 'consistently bespoke' strategy to each project by enquiring, questioning and keeping an open mind. Emrys explains, "Having that open outlook always creates a bespoke and often surprising design solution for each project. As much of our work is retrofit, every project has a unique signature."

This approach is something the practice actively encourages staff to pursue with every project. Emrys characterises the outcome as a "narrative/handle that gives each building an overall coherence/legibility to the design."

For Emrys, the constraints of the sites the practice works with can also become a catalyst for creativity. "As much of our work is in central London, on tight, highly constrained sites, that pressure often seeks creative solutions, which is our true signature."

With each project, Emrys aims to combine both efficiency and delight. Emrys explains that the key to providing a result that embodies a client's character is to "take the client with you. At the end of the day, it is their building/home, and therefore it needs to reflect their sense of humour."

Design-led commercial washrooms in the heart of Clerkenwell, London.

The Washroom Design Centre was created to inspire architects and design professionals, bringing together a carefully selected range of aspirational products for your standout washroom projects.

Drop in to work through ideas, meet clients, or review materials in person. The showroom is designed to support specification at every stage, with regular events and CPDs focused on design, materials, compliance and long-term performance.

Discover bespoke washroom design.
Book your visit today.

01474 353333

www.venesta.co.uk

marketing@venesta.co.uk

Scan to explore our products.

Schedule your appointment.

The Washroom Design Centre

by Venesta







Looking back over three decades, Emrys sees longevity as one of the practice's most meaningful achievements

Sustainability has long been closely tied to the practice's approach, particularly shown through its work in retrofit. However, Emrys questions an approach that focuses too heavily on numerical targets at the expense of the wider picture. He explains, "We have always enjoyed the challenge of working in the world of retrofit." However, the architect admits, "what does irritate me sometimes is this fixation on numbers. There should be a more holistic view as to the best next life for a building."

Projects

The practice's approach is best understood through its projects, such as how they demonstrate an ability to find new possibilities within existing buildings. Retrofit has been central to Emrys since its inception, with recent schemes showing how environmental considerations can be combined with ambitious design.

One recently completed project that illustrates this exploratory approach is a retrofit office building on King Bench Street, near London Bridge, for GMS Estates. Originally an old fizzy drink bottling plant, the building will be marketed under the name Soda. "It was our oldest unbuilt project" he confirms. In 2014, the practice was asked to obtain planning for "as large a building as possible" on the site – this included a full basement, where none existed before. However, given building inflation over the years, this proved unviable. "Second time around, we were asked to look at a much more carbon friendly retrofit solution. It was also a viable scheme – so win, win!" The project shows how changing economic and environmental considerations can prompt a fundamentally different, lower-carbon approach.

A more new-build oriented office project in the City of London saw the practice combine new construction with the retention of an existing historic facade. The 56,000 ft² office building, designed for CLI Dartriver, replaces two poor-quality buildings while retaining the facade of Sixty Three Coleman Street. Contemporary facades to Coleman Street and Moorgate reflect the locality through limestone, black faience and bronze window frames, alongside a communal rooftop terrace, yoga and relaxation space, and end-of-journey facilities.

In Bloomsbury, the Courtyard building for Great Portland Estates brings together two buildings to create a flexible office offering. The existing courtyard will be glazed over as an events and seminar space, while a new fourth floor will provide communal facilities, including a bar, meeting rooms and terraces. A repurposed cupola will form a garden room.

At Glasshouse Street, Grade II-listed buildings for The Crown Estate are being transformed into office and retail space, with two light wells combined to create a dramatic atrium. A sculptural staircase will form the centrepiece, complemented by extensive roof terraces and communal spaces.

Tracking technology

Looking back over three decades, Emrys sees longevity as one of the practice's most meaningful achievements. The practice continues a working relationship with clients it has known for more than 25 years, while relationships with some consultants used stretch back more than 35 years. For the practice, these enduring relationships are rooted in a shared ambition to keep improving.



GLAZED EXPRESSION
The Courtyard building in Bloosmbury's eponymous courtyard has been glazed over to provide an events and seminar space
© Emrys Architects

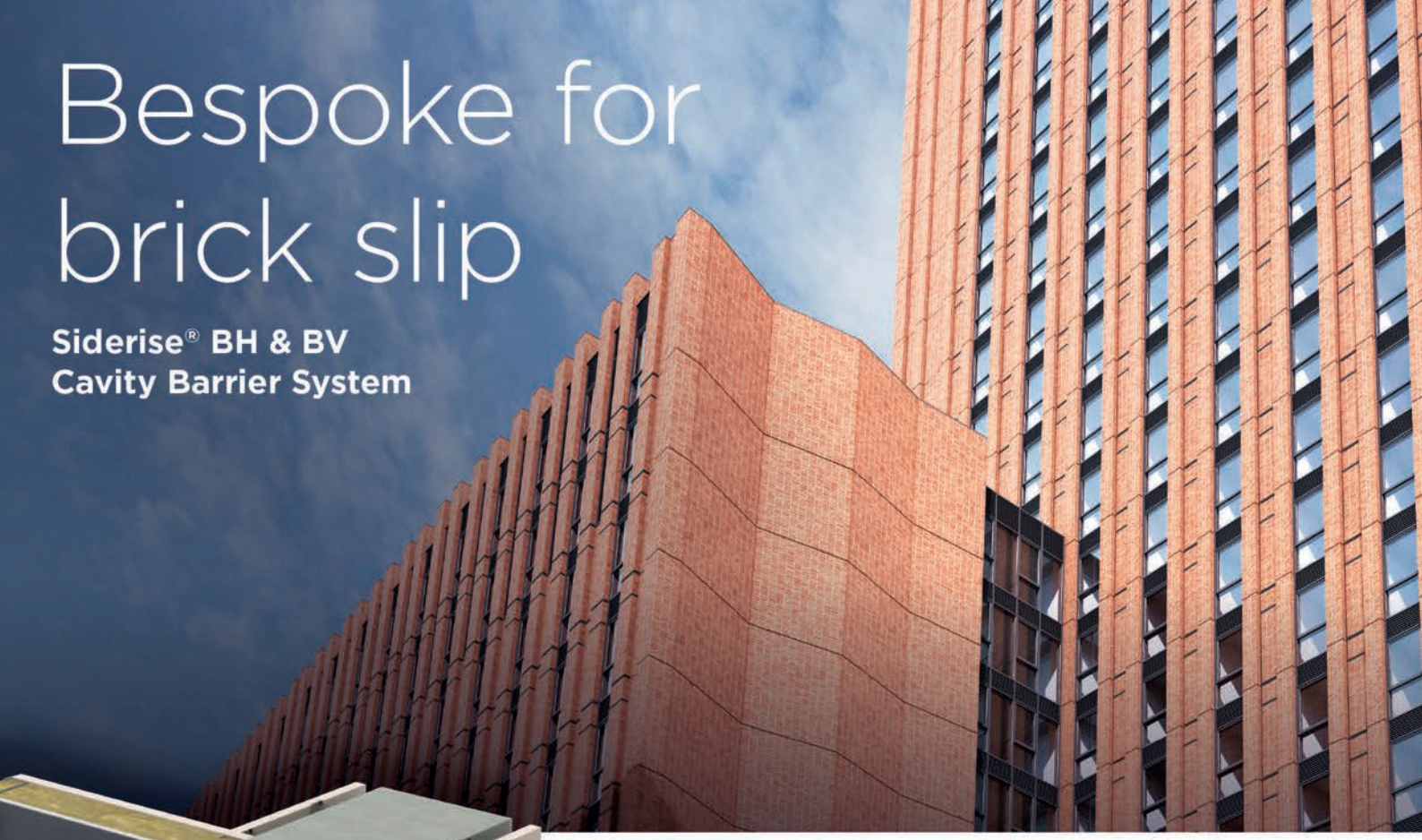
Awards and industry recognition are welcomed, but Emrys places greater value on what happens beyond the awards circuit. "Awards are always welcome, but probably industry recognition, repeat business, and of course any recommendation, is probably more valuable." In that sense, the longevity of the practice's relationships and the continued return of clients provide a measure of success that is less visible but perhaps more significant.

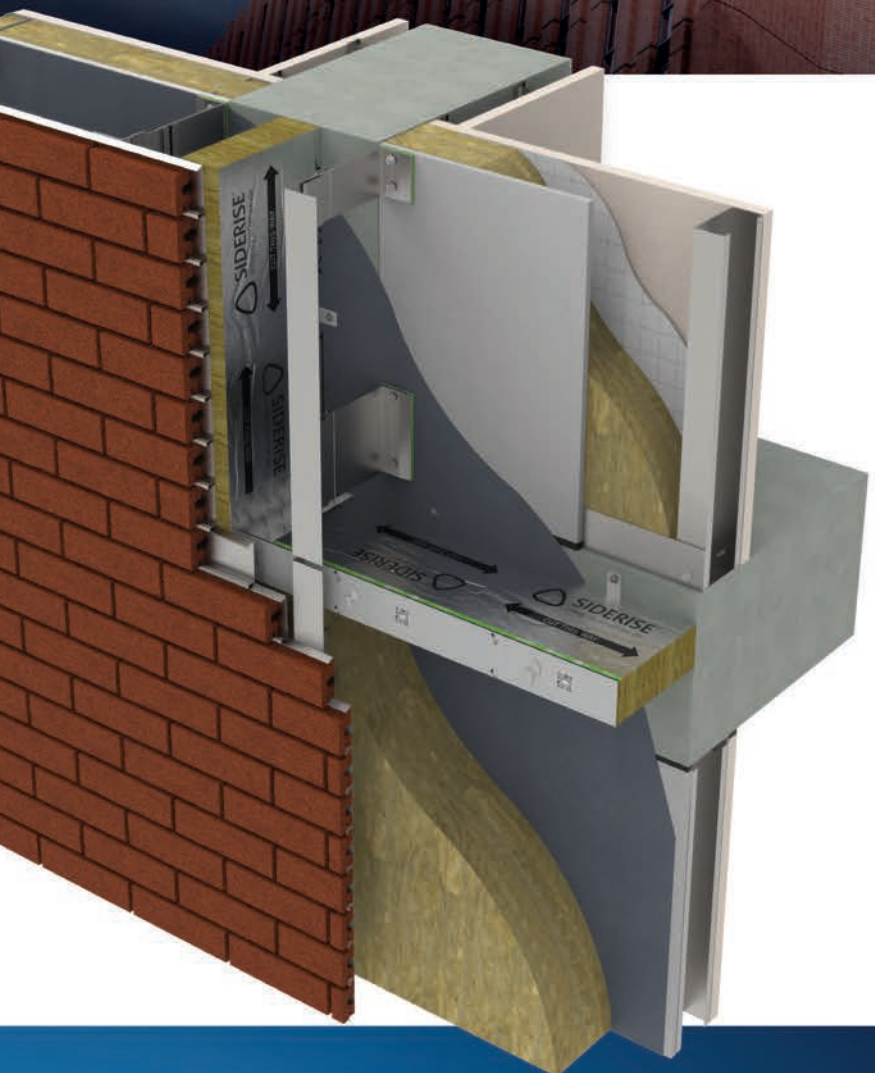
Technology is inevitably becoming part of that evolution. AI is already being used within the practice on the creative side, particularly to turn three-dimensional information, basic sketches and Revit outputs into highly realistic visualisations. Rather than simply presenting an abstract design, these tools can give clients an immediate sense of how a building might look, feel and function.

For Emrys himself, the most interesting question is where the technology goes next. "The power of AI is evolving so fast, in so many areas, who knows how we will use it in the future." For a practice whose history has been shaped by changing economic conditions, procurement, regulation and the evolving demands of retrofit, that openness to what comes next is emblematic of the way the architect has operated throughout his career. ■

Bespoke for brick slip

Siderise® BH & BV Cavity Barrier System





Developed to meet the specific demands of popular designs.

The Siderise BH & BV Brick Slip Cavity Barrier System combines performance with service to address the individual characteristics of different ventilated systems - with our technical engineers talking you through design and specification, and our site engineers walking you through installation and inspection.

Practical adaptable passive fire protection

- Project-specific design and configuration reviews.
- Adjustment advice for irregular cavity sizes and troublesome voids.
- Primary test evidence and available supplementary data.
- Detail interfaces accurately with basic tools.

Get in touch for bespoke support on your project.

Learn more here.

www.siderise.com

SIDERISE® integrity in all we do



VIEW POINT

Architect and CIC Climate Change Expert Panel member Simon Sturgis tracks the progress of the UK's emerging carbon standards, and how they can help architects reduce emissions, improve resource efficiency, and future-proof building value.

The UK's trajectory to net zero received a major boost in July with the launch of the UK's Net Zero Carbon Building Standard's (NZCBS) 'Net Zero Carbon Aligned Verification'. This follows the March launch of the NZCBS after a period of intense consultation. Important though the NZCBS is, it should not be seen in isolation. Also launched this May was the UKGBC's 'Whole Life Carbon Framework.' Each of these builds on the RICS's professional standard 'Whole Life Carbon Assessment for the Built Environment - 2023' (RICSPS). Finally, what has happened with Part Z, the carbon answer to Part L? I will try and make sense of how these work together.

The NZCBS is the product of an industry-wide initiative to standardise carbon reporting. It is based on what must be achieved, project by project, for the built environment sector to contribute to the UK achieving net zero by 2050. Meeting the NZCBS's 'Limits' therefore means making a measurable contribution to UK decarbonisation. At this stage, the Limits cover 'upfront' embodied carbon, up to practical completion, and 'operational' energy use. Both must be measured after practical completion using actual measured data rather than predictions.

The NZCBS also requires a full whole life carbon (WLC) assessment to be reported and will introduce Limits for life-cycle embodied carbon and WLC once sufficiently robust data is available.



Rationalising these potentially conflicting requirements to achieve the optimum low carbon solutions requires good knowledge as well as practical experience

A further key feature is that the Limits become more demanding each year up to 2050. Broadly, the current Limits are achievable within existing technology and budgets. Over time, however, compliance will become more challenging as the limits reduce. Designs will need to become more efficient in form, material selection, design and construction to reduce upfront emissions, while also becoming more durable, low maintenance and energy efficient to reduce in-use emissions. This

ECLISSE SYNTESIS FLUSH
CONCEALED FRAME COLLECTION

BUILD DESIGN & BUILD AWARDS 2025
WINNER!
ECLISSE
Best Pocket Door System Supplier 2025 - UK



ECLISSE 15 YEARS WARRANTY

NBS National BIM Library

The simple beauty of a flush finish without the distraction of architrave

Minimalist and elegant, the ECLISSE Syntesis Flush Collection of pocket door systems, concealed door frames and flush skirting are used worldwide in residential projects and multi-million pound developments.

Our innovative range of fully engineered products have a specially designed edge profile for a beautiful, crisp plaster finish.

Contact our ECLISSE UK product experts on:
0333 5770828
info@eclisse.co.uk
www.eclisse.co.uk

Creating innovative door systems for more than 35 years

ARCHITRAVE FREE POCKET DOORS | CONCEALED FRAME HINGED DOORS | FLUSH SKIRTING

CALL 0333 5770828 TO REQUEST A COPY OF OUR LATEST BROCHURES

ECLISSE
LOOKING FURTHER

is why whole life carbon assessment is so important, as it encourages the fully integrated thinking necessary to get us to net zero, e.g., how to balance out embodied vs operational emissions as well as upfront vs life cycle impacts to achieve the lowest overall emissions.

Although formal reporting is based on post-completion measurement, clients will want early confidence that their projects are on track to meet the relevant Limits which means carrying out predictive assessments throughout the RIBA design stages to make any necessary design changes as early as possible.

Why is it necessary to get your WLC assessments verified by NZCBS? Ultimately it is about underwriting the value of your building. NZCBS verification will:

- cut greenwashing, i.e. ensure that actions taken to produce a 'green' building really do the job;
- build consistency in assessment and reporting, which will in turn:
- provide greater confidence in reported outcomes and:
- enable like for like comparisons with other similar buildings;
- help improve in-use energy performance and, once WLC Limits are provided, better lifetime material efficiency;
- help future proof asset value.

As noted, NZCBS is built on the foundation of the RICSPS (I was lead author). The RICSPS is mostly technical and covers assessment methodology, i.e. how do you reliably calculate both operational and embodied emissions and report them.

Most practitioners will undertake WLC assessments using a software tool and have no direct connection with the RICSPS. There are several tools available, and it is worth checking that they are fully RICS compliant. Even so, I would recommend reading at least the first three chapters of RICSPS which are short, very helpful and well worth having a look at. The RICSPS is a free download from the RICS website. The RICSPS standard is now recognised as the de facto UK assessment methodology, and is also now used internationally.

Other recent guidance is the UKGBC's 'Whole Life Carbon Framework' launched in May and can be seen as the 'how to do it' guidance. In essence the framework breaks down the actions required to reduce emissions into key 'Delivery Principles'



to be addressed over the life cycle, and practical actions required at each life cycle stage. Invariably there will be choices to be made; for example if you want, ideally, to achieve low 'upfront' carbon and low 'in use' carbon this is sometimes difficult as there can be carbon cost/benefit trade-offs such as quantity/type of insulation vs energy performance, or the upfront carbon cost of a new facade vs in-use carbon costs of maintenance and replacement cycles.

Rationalising these potentially conflicting requirements to achieve the optimum low carbon solutions requires good knowledge as well as practical experience. This is fundamentally about those involved in the design of buildings developing a carbon intuition which is where the architect or engineer has sufficient experience to develop the right combination of actions to produce a low carbon solution before even attempting detailed calculations.

So, what of Part Z? I am part of a group led by Will Arnold (and including Tim den Dekker, Julie Godefroy, Jannik Giesekam, Tom Hesslenberg and Ludovica Pototschnig) that has been working on an industry-wide proposal to develop a Building Regulation covering embodied and whole life carbon (see part-z.uk). This initiative has gained a lot of enthusiasm across all sectors of the built environment industry with over 200 key supporters including consultants, client bodies, housebuilders, banks and many others. There has also been a debate, led by Ellie Chowns MP, in the House of Commons. The problem seems to be that before such legislation can be enacted, significant, supportive data needs to be collected. It is for this reason and the lack of government interest that the private sector needs to continue to take the lead.

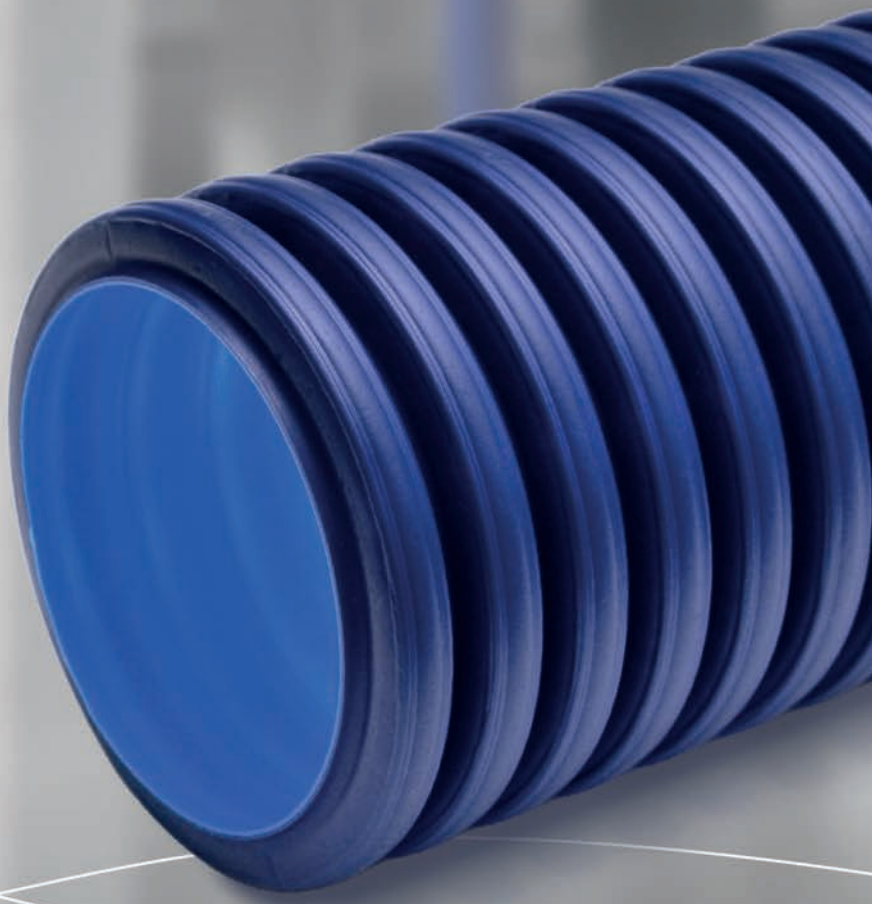
Even without Part Z, there is now a mature and robust set of standards as described above defining what to do and how to do it. Apart from those standards, there is a whole range of additional professional guidance from the RIBA, CIBSE, IStructE and others. If you want training in WLC assessment, CIBSE has a comprehensive course that is available. Two of the RICSPS authors (Jane Anderson and myself) were part of the team that put this together. Importantly the economic benefits of WLCA are becoming apparent. This is starting to manifest itself in improved resource efficiency as well as the items listed above.

Resource efficiency is in effect the flip side of carbon efficiency, and also leads to financial efficiency. Therefore among the many positive outcomes from WLC assessment are the climatic and economic benefits from engaging fully with RICSPS, the NZCBS and other supporting guidance.

Simon Sturgis is an architect and founder of Targeting Zero, member of the Construction Industry Council's Climate Change Expert Panel, and lead author of the RICSPS Whole Life Carbon Standard

Exceptional ventilation system performance starts here.

Wavin Ventiza Flex Ducting



Choosing the right ducting is critical to system efficiency. Ventiza Flex Ducting delivers robust construction, excellent airflow and speedy installation for building projects of today and beyond...

Improves indoor air quality
Antibacterial layers improve the quality of air provided

Flexible
designed to work around tight spaces and complex layouts

Ribbed design
provides high impact strength and mechanical resistance

Minimises air resistance
Extra smooth internal surfaces aids efficient airflow

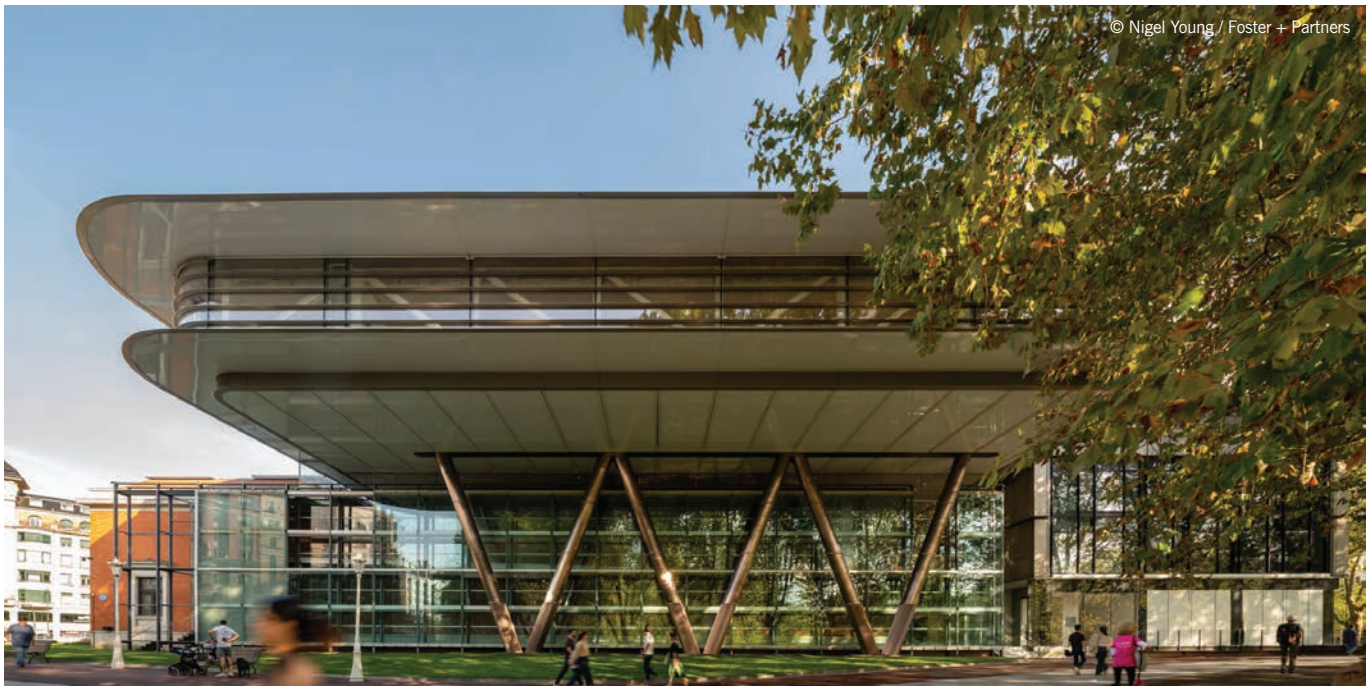
SCAN HERE for more information

www.wavin.co.uk

wavin
An Orbia business.

INTERNATIONAL FOCUS

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



BILBAO FINE ARTS MUSEUM
FOSTERS + PARTNERS

The Bilbao Fine Arts Museum has reopened with a dramatic new addition named the Agravitas, hovering like a bridge spanning 55 metres over the original buildings, and leaving them untouched except for restoration. It creates a new enclosed plaza, the social heart of the museum and a vital part of the freely accessible, ground-level public spaces. For the first time in many decades, the original 1940s entrance fronting the city square is reopened. The uppermost level houses a 1,300 m^2 new column-free gallery.

The design reinstates the museum's original main entrance and enhances connectivity across the site, bringing together the 1945 building, the 1970s extension, and a second intervention from the early 2000s. By increasing permeability at street level, the project celebrates the role of culture in the civic life of Bilbao, bringing together the past, present, and future into one unified architectural expression that embraces the city.

Rationalising the circulation between the new and old buildings has reinstated Plaza Arriaga as a "pure volume," said the architect, thus creating a "clear public focus for art and events." Its design is centred on Francisco Durrio's sculptural fountain, and the new daylight-filled atrium features sculptures by Richard Serra, Pablo Palazuelo, and Eduardo Chillida.

Agravitas increases the area of the original buildings by 60% and introduces 2,300 m^2 of flexible exhibition area on two levels to accommodate a wide range of exhibits alongside facilities for educational programmes, workshops, and office spaces. Designed in collaboration with the late Spanish engineer Julio Martinez Calzón, it spans between two sets of deep V-shaped columns, cantilevering over the museum buildings and strengthening the relationship with Doña Casilda de Iturrizar park.

Its innovative structural system of locally produced steel extended space provision beyond the competion brief for offices and exhibition spaces, as well as new public sculpture terraces with dramatic views of the city. At the upper level, light filtering through skylights that can be tuned for the widest range of exhibitions – from full daylight to complete black out.

The new extension's self-shading facade contributes towards a strong sustainability strategy that includes the use of green low carbon steel and a roof with over 500 m^2 of photovoltaic panels. The existing buildings have been upgraded to meet modern standards, and to provide a "unified sequence of museum spaces."

The project team comprises structural engineers, MC2; environmental engineers, Valladares Ingenieria; facade consultants, Enar. Contractors are a joint venture of four Basque companies – Urbelan, Altuna y Uria, Campezo and Teusa; and facade contractor, Martifer. The result is "a renewed civic landmark for Bilbao that is not only of the place but has been almost entirely fabricated as a local product," said Fosters.


Your trusted partner
for biodiversity net gain
Wates Wildscape is dedicated to delivering high quality biodiversity habitat sites across the UK with BNG habitat units now available to purchase.
We're part of Wates Group, a fourth generation family business founded in 1897, and one of the UK's leading family owned development, building and property maintenance companies.
Wates Wildscape provides a vital solution for developments that are unable to meet Biodiversity Net Gain (BNG) planning obligations on site. Our growing portfolio of habitat creation sites provides a dependable route for securing approved BNG units. Drawing on our deep understanding of the land development process, we offer a trusted and reliable way for developers to fulfil their BNG obligations, while also contributing to long term conservation, ecosystem restoration and nature stewardship.
If you're seeking secure, high quality BNG units backed by an experienced national provider, we're here to support your next project.
Talk to an expert and secure BNG units for your next development today
Wates
Wildscape
wates.co.uk/wates-wildscape
Illustrative CGI. Final site appearance may differ


This is not your average loft ladder...
PREMIER LOFT LADDERS
Learn about what makes our products different...
www.premierloftladders.co.uk
+44 (0)345 9000 195 | sales@premierloftladders.co.uk

Building Confidence into Every Gateway 2 Submission

From early design discussions to project delivery, Leviat's technical experts help architects navigate compliance, reduce specification risk and deliver buildable solutions with confidence.

Trusted brands. Proven expertise. Safer buildings.

Ancon HALFEN HELIFIX ISEDIO



Need Gateway 2 support?
T: 0114 275 5224
E: info.uk@leviat.com

Leviat
Imagine. Model. Make.

BUILDING INSIGHTS LIVE



Round table chair, ADF editor James Parker

How to Build a Bulletproof Gateway 2 Submission



One of the most useful things an industry round table can do is bring differing perspectives together on tackling a current issue in the sector, and share strategies for resolving its inter-disciplinary challenges. The Building Insights LIVE event we staged around Gateway 2 submissions, together with sponsors Leviat, Metsec and Premcrete, was just such an example. Admittedly however, there was much discussion of the continued problems and delays being caused at the Gateway 2 approval stage for Higher Risk Building (HRB) projects; confronting this was necessary to help inform exploration of realistic solutions.

We brought together clients, manufacturers and specifiers with experience of taking projects through the Gateway process, resulting in a wide-ranging set of insights for ensuring that project submissions are equipped to – if not pass the Building Safety Regulator's Gateway 2 first time – at least have the best chance of doing so. The group included two Principal Designers (Louise Flower of MacConvilles and Michele Pecoraro of P+P Architects), with key experience of overseeing the design requirements of such projects, the reams of associated data, and the communication, or lack of it, the Regulator.

With the regime having been in place for over four years, around 1500 schemes are thought to currently be waiting in line for Gateway 2 approvals – we wanted to discover what the Regulator was doing to accelerate the process, and what the industry could do to help make projects 'rejection-proof.'

Our sponsors' representatives were also on hand, demonstrating investment in strategies, data and informing customers around Gateway 2 requirements, but also concerns on areas such as potential value engineering and product substitution. The Regulator has begun fast-tracking schemes including the many cladding remediation projects required in social housing, (some reportedly waiting up to 40 weeks to go through the Gateway), and this is set to accelerate further once the National Construction Regulator is established – expected in 2028.

The round table delegates welcomed efforts made to speed the process up, including batching of schemes, and staged application. In addition, architects present including Jamie Chubb, director at PRP, showed from experience how a concerted approach to meeting the Regulator's requirements as well as construction rigour could give submissions a much higher success rate.

However, he also warned that the industry was going to struggle to hit 12 weeks – the intended turnaround for project submissions to the Regulator. He urged: "Let's just be realistic about what it is. I think the current median is 22 weeks."

PREMCRETE PROTECTING COMPLEX STRUCTURES

METSEC

Leviat Imagine. Model. Make.

The debate

There have been many stories around Gateway 2 schemes being rejected by the BSR, and subsequently being sent to the back of the queue. But as well as the challenges, we wanted to hear about strategies for helping ensure that submissions were best equipped to pass through first time.

We heard in the first session on the varied and significant challenges, including that the Regulator was still woefully underresourced, lacked industry knowledge, and was possibly overly draconian in applying its rules. Also, a culture of 'instant rejection' of schemes based on a single flaw in presentation, needed to change, to avoid the backlog of schemes being extended further.

There were other key issues for speeding up approvals, such as how certain elements of buildings were being placed in 'Category A' of designs, and therefore allocated 'complex' status; some delegates believed they should not be treated as such. Also, attendees such as Mark Batchelor, managing director of Property Services at The Hyde Group, which owns and manages around 125,000 homes, pled the case for exempting key 'emergency' elements such as certain lifts, from the Gateway process. This was because schemes were being held in the queue based on such issues, which was disadvantaging social housing residents awaiting much-needed projects.

As a Principal Designer working on HRB projects, and largely retrofits in the social housing sector, Louise Flower of MacConvilles was in an ideal position to give the group insights on the new responsibilities, and the specifics that needed to be improved. She said that the key area was around emergency works, and advocated "looking more at 'essential' works rather than 'emergency' works," as well establishing what budget is actually available from cash-strapped local authorities.

She said that undergoing the Gateway process for emergency works on existing HRBs was "slowing down improvements in fire safety; it's very slow, and it's very costly." And as Jamie Chubb pointed out, "funders don't release the money until you have a Gateway 2 approval."

Delivery & data

Our round table delegates showed why the delivery side of Higher Risk Buildings needed to improve too when it came to the quality of their Gateway 2 submissions for new build and retrofit schemes. There were particular issues around submitting data on project design, and product safety compliance, with a wide range of quality currently evident in the market. With the BSR making no bones about instantly rejecting any scheme which did not comply with data standards, improving this had to be the first priority going forward, said our delegates.

Stewart Kerr of Pennington Choices said there were still issues from pre-Grenfell industry culture in social housing retrofit, where the client "would just go to the contractor and say I need you to design and build that so it comes back EPC C, I don't care how you get there, I just need you to get it done." He added, "once Grenfell happened, we started looking at our buildings, and they're like Swiss cheese – we've done all this work to make them thoroughly efficient but they are now full of holes."

Project teams including suppliers had to avoid 'cut and paste' submissions, and resulting data inconsistencies, said our delegates. There was also 'congested' data and information around interfaces within structures, due to the combinations of various products and associated performance data accumulating in this space. The complexity of this area meant a likelihood of it causing continued problems for submissions.

Many of the issues in social housing around Gateway 2 and expediting product installation to protect tenants were crystallised by Mark Batchelor. He focused in on the challenges for smaller housing bodies, who the Hyde Group works with, mentioning one recent example where Gateway 2 procedures were causing obstacles for a specification: "We knew they didn't have the FRAEWs (Fire Risk Appraisals of External Walls) at that point, and we needed to put in a waking watch on one building; by doing it, we couldn't do what we really wanted to do, ie install a temporary fire alarm under emergency measures."

Cost & approvals 'with requirements'

Jamie Chubb, experienced in successful Gateway 2 submissions, dived into the morass of information and data which was currently required for submissions as the industry and the BSR evolved best practice. Data 'dumping' by suppliers was one issue which had been highlighted by the Regulator, but he said it was more complicated than that, explaining that submissions have been submitted prematurely, without the required certifications.

He said that the "timing" within procurement for Gateway 2 applications "wasn't right" currently, with clients submitting proposals asking for fire test certificates too early. He asked: "How do they have all of the supply chain and contractors in place to procure the works?", adding: "I want design orders from suppliers on contract terms that nobody's got set up yet, because I want to design for compliance, but I'm not going to commit to an order on your product." Chubb said that the situation had led to the Regulator granting approvals but 'with requirements,' i.e. caveats around outstanding certifications. Mark Batchelor for one welcomed this, saying that it "should speed things up, and help the

ATTENDEES

James Parker, Chair, Managing Editor, *Architects' Datafile*

Michele Pecoraro, Founder, P+P Architects
Stewart Kerr, Senior Consultant, Pennington Choices
Jamie Chubb, Director, PRP Architects
Li Yen Lim , Managing Associate, Freeths
Mark Batchelor, Managing Director of Property Services, The Hyde Group
Louise Flower, Building Regulation Principal Designer, MacConvilles

SPONSORS' ATTENDEES

Sara Dawes, Regional Technical Sales Manager, Leviat
David Atkinson, Head of Specification, Metsec
Lee Carron, Client Relations Manager, Premcrete

PREMCRETE PROTECTING COMPLEX STRUCTURES
METSEC
Leviat Imagine. Model. Make.

Structural Waterproofing | Ground Gas Protection | Ground Heave Protection | Civils Construction Materials

PREMCRETE | Design

Waterproofing design specialists

We take 100% of the design risk.

Our in-house CSSW and WDS-approved design team are waterproofing and gas protection specialists, supporting technical teams, architects and structural engineers in overcoming complex challenges from the earliest RIBA stages.

From feasibility reports and project-specific detailed design through to technical guidance, installation training and robust on-site quality assurance, we provide a complete turnkey service from design through to delivery.

PREMCRETE | Manufacturing



PREMCRETE | Site Services



PREMCRETE | Academy



Need a waterproofing design specialist that takes 100% of the design risk?

Contact us today:
+44 (0) 23 8027 6166 | www.premcrete.com

PREMCRETE

PROTECTING COMPLEX STRUCTURES



SOCIAL HOUSING SUCCESS STRATEGIES
Louise Flower from MacConvilles said in order to make the approval process cheaper and faster, certain 'emergency' works should instead be labelled 'essential'

manufacturers in terms of supplying less at that early design stage, and stopping the document dump at stage two."

Stewart Kerr said that with the resources that were needed for compliance with the Social Housing (Regulation) Act, and the expanded Awaab's Law Phase 2, funding Gateway 2 submissions was becoming much harder. "The money is now being spread so thin that when it comes to things like Gateway 2 applications, [providers] are not as invested in it."

He said this was being compounded by anecdotal issues such as lift contractors telling a client that "they didn't need to do a Gateway 2 application for the lift renovations, even though one was for a firefighting lift." Kerr asserted that "people were being ill advised; a culture shift needs to happen on the client side, and an understanding shift on the contractor side."

Batchelor took this further, saying that the BSR needed to "move towards trusting the competencies, trust the accreditations, so they can focus on the specific projects we need to do." He said that currently the "mitigators weren't right," explaining: "If I've got a lift that breaks down, the mitigation could be to decant property, or help people get up and down stairs – the right mitigator is to give people a working lift, quickly." He said "everything else is a terrible waste of revenue, and if I need to spend revenue on that, I can't start putting money into housebuilding."

Batchelor gave some worrying testimony of costs being added to the process, partly due to the Regulator's approach which was "very much about accreditations, and once you had them there was a lack of need for evidence." And he added that the waking watch required in the example he gave "will cost me more than half a million pounds to keep there for that period of time."

Solutions & sponsors' questions

Before our sponsors 'took the floor' to pose questions to our attendees, delegates raised some solutions for helping speed submissions, some of which put the ball back in the Regulator's court, such as from solicitor Li Yen Lim of Freeths. She said that in the likely event that the BSR "won't give us the granular transparency in terms of what good looks like," it needed to provide "a point where they encourage applicants to explain the thought process; show how the solutions have been chosen."

She added that from a legal perspective, Gateway 2 was currently "a first line of defence," and the final responsibility was "way down the years to come." This was a further reason why the industry needed "some encouragement and feedback" on why submissions had passed or failed, said Lim.

Sara Dawes of Leviat echoed this, saying that the firm had a strategy of "not being a company doing the data dumping" – i.e. dumping huge amounts of product data on the Regulator as part of a submission. But a lack of feedback on submission quality, establishing what's needed from submissions has necessarily led to submissions being a process of trial and error, she added.

Kicking off sponsors' question time, David Atkinson of Metsec asked what more manufacturers could do to support the design and application process, such as how information was disseminated. Stewart Kerr attempted to condense the answer, saying that what was needed was information on "how [a product] supports compliance of the overall project, fits in with the fire strategy?" He also emphasised how information needed to be formatted to guide users and teams towards the relevant information – "taking out those grey areas, and walking them through – holding their hands."

Architect Michele Pecoraro said that suppliers should ensure "it's clear which part [of the Building Regulations] they are referring to in documentation, as it is going to be easier for a Principal Designer to show compliance with that." Fellow designer Jamie Chubb said the Regulator's "utopia," was that "to pick up a Building Regs compliance statement, understand it, and not have to go and look at anything else." However, he added: "Sorry, but you've got to go look at the other 2000 drawings I've given you."

But the positive from requiring a far greater amount of information was that product suppliers adopted a far more 'designer'-type role. Chubb went as far as to tell the sponsors around the table: "I don't see you as suppliers, you are an extension of the design team, joining the process whilst it's live."

Chubb said that this highlighted that "as an industry we haven't taken on board the expertise that is available from the supply chain." While suppliers taking more early design responsibility in HRB schemes might increase their input and influence, it could also potentially increase their exposure to risk. But it may be the necessary way to ensure that designs were capturing both functionality and the accredited quality that is needed, while submitting the required data to the Regulator to aid submissions. Louise Flower said that "tapping into that more would be really useful," and it had been lacking previously.

Sara Dawes wondered what the panel's views were on the most common design coordination issues that were creating challenges at Gateway 2, and how these could be addressed earlier in the design process? She explained how Leviat had produced specific CPD materials designed to help designers create a "holistic slab edge detail, taking in components like fire barriers, DPC, plenum vents and post-tension pockets," in order to help submissions pass

PREMCRETE PROTECTING COMPLEX STRUCTURES
METSEC
Leviat Imagine. Model. Make.

METSEC
SFS FRAMING



INDUSTRY FIRST

JUNCTION FIRE TESTING
METSEC SFS TO METSEC INTERNAL DRYWALL

A Step Forward in Transparency and Confidence

We've now completed a full-scale fire test of the junction between SFS systems and internal non-loadbearing drywall partitions, constructed and tested in line with the general principles of EN 1364-1.

- For designers, it provides confidence.
- For contractors, it provides clarity.
- For the wider industry, it helps close a gap that has been open for too long

Request Report

TRUST

voestalpine Metsec plc
www.metsec.com

voestalpine
ONE STEP AHEAD.

Gateway 2. This was especially useful given the "congested" nature of product data at such interfaces, she said.

Jamie Chubb said that manufacturers of different packages "did have an appetite to engage, but the bit that's unclear is how they go about that engagement," in terms of increasing coordination around complex areas of structures. The issue of design responsibility for those elements, as well as who "owns the data," was also a critical challenge, said the architect.

Lastly, Lee Carron, client relations manager at Premcrete homed in on the issues of specification changes, particularly for "critical systems such as waterproofing or gas protection." He asked: "How do we determine whether a change to a specified product or system should be treated as a major change or a notifiable change to an approved submission? Is there a risk that the original design, testing and compliance evidence rigour can be lost in a substitution?"

Jamie Chubb responded saying that an "economics and market"-based mechanism to controlling change was unlikely, instead saying that the industry "generally just needs to have an enhanced awareness of unforeseen implications of even well considered change – that might still be a valid change." He added: "It could be an equal performing product, irrespective of whether it's cheaper; it might be a supply issue."

Open data

IT systems were at the core of resolving some of the issues of expediting projects' passage through the process, but as Jamie Chubb said, the Regulator had some work to do here. "I think they probably need to improve their IT. If we're going to sit on our side of the fence with rigorous and organised systems, they need to learn from us – we can help them do it." He added, however, that the currently rather clumsy way of uploading information had to be refined: "We need a better way of uploading information in a way that's easy for them to navigate, rather than just putting it in a single folder and hoping they find 6000 documents easily."



AVOIDING THE DATA DUMP
Sara Dawes of event co-sponsor Leviat said the company was determined to not 'data dump' on the Regulator

RECOMMENDATIONS FOR INDUSTRY & GOVERNMENT

- **Sara Dawes, Leviat:** It would be helpful just to have a bit more positive feedback from the Regulator.
- **Mark Batchelor, The Hyde Group:** Remember we need to get people into these homes; if we're just replacing stuff, let's get on and do it.
- **Lee Carron, Premcrete:** We need consistency in responses and the guidance – that is coming. And we want to get to the point where culturally this is what happens on all projects, not just HRBs.
- **Stewart Kerr, Pennington Choices:** It's about creating a two way collaboration with the regulator and industry, so that both learn at similar paces – it's about understanding the issues in the regulator that we don't get to see.
- **Michele Pecoraro, P+P Architects:** Publish a good example of a BSR application.
- **Li Yen Lim, Freeths solicitors:** The thought process needs to be captured; why are we doing it this way and why not the other way? It would be good if the Regulator did give some encouragement and some feedback in that sense.
- **Jamie Chubb, PRP Architects:** I'd like to see the Regulator open up a little bit more to early engagement; and we need to recognise there is a resource issue at the Regulator.
- **Louise Flower, MacConvilles:** It's really good to view suppliers as designers. That's a huge improvement, from a Principal Designer point of view.
- **David Atkinson, Metsec:** Identify any superfluous information so we can streamline what everyone's having to do, and early engagement with expert knowledge, finessing details on specific project designs.

A more challenging proposition for improving the process, he said, was to publish all approvals so the industry could learn from them. "I don't see why we don't – and if they genuinely recognise there is a difference of opinion on how a regulation is being interpreted by the industry, can we have a bulletin that says so? Not a consultation!"

He said that because "people are clearly getting it wrong," there was merit to the suggestion of at least publishing some best-in-class approvals," adding: "I think it's in everybody's interest to have transparency on submissions and decisions, not just for improvements in the process. Finally, this transparency should extend, he said, to giving tenants "access to the information that sits behind the safety of their property."

Chubb concluded that the industry needed to work together in a spirit of mutual learning, while accepting that everyone was on a learning curve, but that "some of the requirements need to be relaxed." And, in order to establish best practice, he asserted that we "need to move beyond going back over historical approvals and asking why this one, and not that one – and accept there was a learning curve on both sides."

PREMCRETE PROTECTING COMPLEX STRUCTURES
METSEC
Leviat Imagine. Model. Make.

Designing its future: How Bauder is investing in growth, resilience and sustainability

As the construction industry faces economic pressures, supply chain challenges and increasing sustainability expectations, architects and specifiers are placing greater value on manufacturers that demonstrate stability, technical expertise and long-term commitment. Recent investments by Bauder, including a new distribution centre at Gateway 14 and the refurbishment of its UK headquarters, demonstrate this commitment while strengthening operational capability and environmental performance.

In July last year, Bauder opened its new 44,000 ft² distribution centre. This investment has strengthened logistics capability and supports growing demand nationwide. Designed to achieve a BREEAM Excellent standard, the facility incorporates solar PV, smart energy management systems, EV charging infrastructure, rainwater harvesting, and biodiverse landscaping.

Bauder has also completed a major refurbishment of its Ipswich headquarters, modernising and extending the site it has occupied since 2009. Sustainability measures include: A 335-panel solar PV installation; BauderECO FF PIR insulation with lower embodied carbon than traditional PIR; a mechanically fastened single-ply roofing system supporting circularity through reuse and end-of-life recycling; improved thermal performance; windcatcher ventilation.



Bauder's renovated UK headquarters in Ipswich supports the growth of its technical specification team

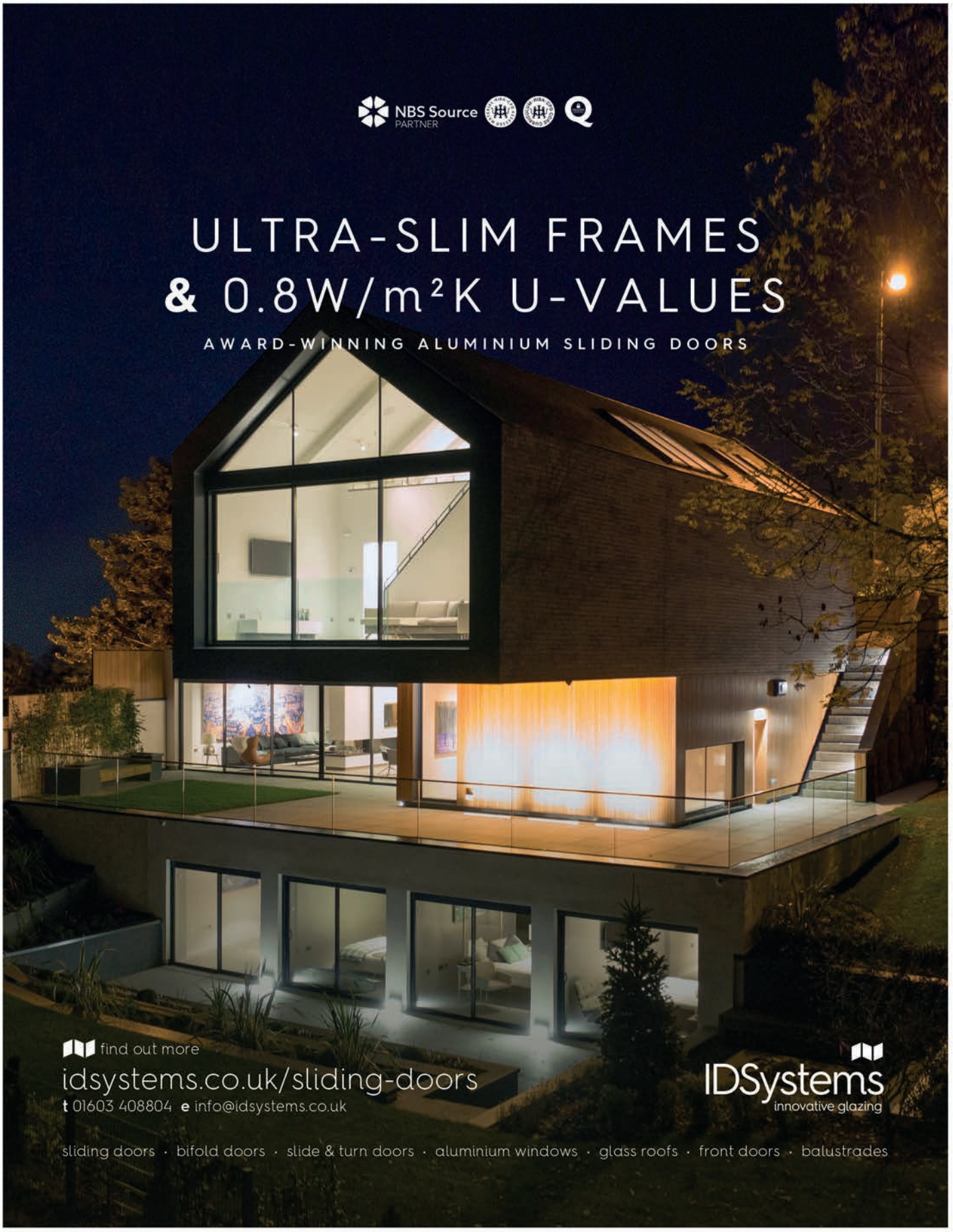
Committed to delivering value

Investment in UK infrastructure demonstrates Bauder's long-term commitment, providing reassurance that the manufacturer behind the specification has the capability to support projects into the future. The expansion of the UK headquarters supports the growth of Bauder's specification function and its team of more than 40 technicians, enabling expert project-specific guidance. Bauder's continued investment in facilities, people and operations reflects an ongoing commitment to technical support, project delivery and customer service.

Both projects demonstrate the practical application of the sustainability principles Bauder promotes. By deploying its own roofing, insulation and renewable energy solutions, the company provides evidence of performance and environmental benefits, further supported by CCPI verification across 24 Bauder systems.

01473 257671 www.bauder.co.uk/contact-us




TrägerHAUS by HAUS / Tom Manley Photography
NBS Source
PARTNER
ULTRA-SLIM FRAMES
& 0.8W/m²K U-VALUES
AWARD-WINNING ALUMINIUM SLIDING DOORS
find out more
idsystems.co.uk/sliding-doors
t 01603 408804 e info@idsystems.co.uk
IDSystems
innovative glazing
sliding doors · bifold doors · slide & turn doors · aluminium windows · glass roofs · front doors · balustrades



INDUSTRY VIEWFINDER

Tracking Architects' Design Strategies for Future Homes Standard Compliance

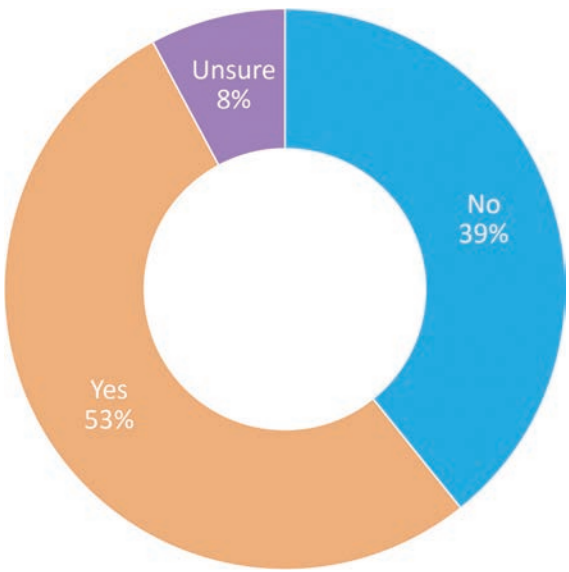
The Future Homes Standard (FHS) is due to come into force on 24 March 2027, albeit with a 12-month transition period for the industry to adjust. With the crucial Home Energy Model software still not launched, many questions remain about implementation as the industry grapples with a series of key challenges on compliance. These include higher build costs from upgrades to building insulation, low-carbon heating such as heat pumps, and renewable solar PV, plus balancing greater air tightness and mitigating overheating, and tackling electricity grid issues.

Our survey of architects' experience and knowledge of the FHS so far builds on previous surveys we have undertaken, and takes evolving knowledge into account. Now the standard is here, in part at least, we wanted to canvas architects on their strategies in the knowledge of the parameters they will be working to, post-March 2027. The results help us gain a picture of how the architectural sector is looking to deliver efficient compliance at scale, reflecting the key areas which affect designers of new homes.

We looked at the design and specification strategies being chosen, and the specific technologies architects expected to frequently specify, but also at their challenges for designing FHS-compliant homes. From the predictable top answer of capital cost increases, less aired obstacles, it was a particularly revealing picture of architects' response to the standard in practice.

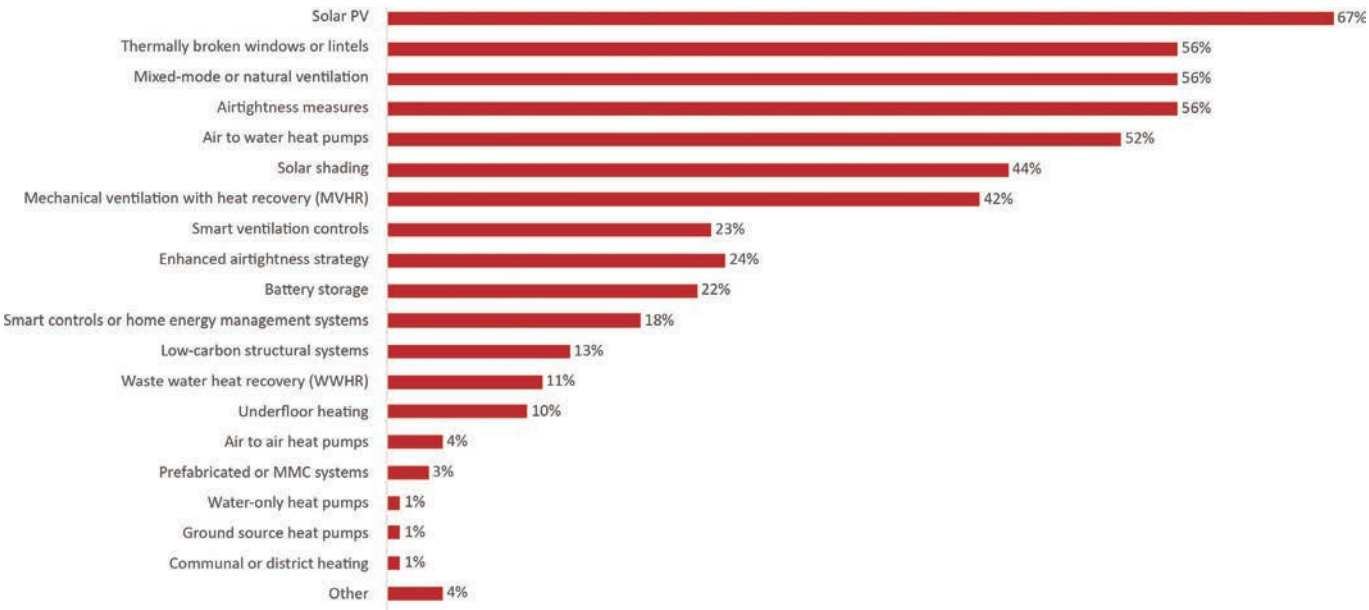
One key area of the findings were around the types of information on products architects required from manufacturers, plus views on the importance of third-party testing data for products, and how much they trusted manufacturers' information. This was one area where there certainly wasn't a uniformly positive response (42% said they were not very confident in the 'accuracy and transparency' of manufacturers' information on performance). All respondents expressed some concern around the 'performance gap' persisting between design and onsite delivery.

We heard their views on the industry's readiness, which were generally positive, while also suggesting the targets may still not be clear, but also wildly varying estimates for the cost of compliance. We also asked how the Home Energy Model (HEM) needed to improve on the interim SAP 10.3, which threw up a series of interesting comments.



Do you believe the Future Homes Standard targets are realistically achievable within current project and commercial constraints?

IDSystems innovative glazing
SOPREMA



Which of these building elements or systems are you finding most challenging to specify for Future Homes Standard compliance?

Survey findings

The key design change under the new Part L, brought in with the FHS, is the airtightness target used in the 'notional building.' Most new build homes achieve air-tightness in the 4-6 $m^3/(h \cdot m^2)$ range, but achieving the new notional target of 4 $m^3/(h \cdot m^2)$, but as well as better detailing such as at junctions and penetrations, it demands a better level of site discipline, and independent verification.

Higher insulation and airtightness levels can mean a need for complex mechanical ventilation and wastewater heat recovery systems to prevent indoor air quality as well as overheating issues. On-site renewable integration in the form of PVs on the roof (to 40% of ground floor area), and EV charging complicate roof design, procurement, and site logistics. The ongoing skills shortages in the industry compound these challenges, including a lack of expertise in planning and SAP assessment, for example.

While windows' U-values (1.2 W/m^2K) are staying 'as per' Part L under the FHS, the method of calculation being far more rigorous, calculated based on the specific size and configuration of each individual opening rather than a standard model of window. This could be one area where cost is added to the entire build, because a non-standard window may be required.

Design strategies

Given the overall targets, what design and specification strategies were currently being pursued for residential projects in order to comply, based on what respondents currently knew of the FHS? Given the somewhat lower profile of 'fabric first' in recent months as the focus has shifted towards heating and renewables, the top answer was 'a fabric first approach, with increased air-tightness.' This could also reflect the key change in terms of building envelope design being the increased air-tightness requirement from Part L 2021.

However, air source heat pumps were only one percentage point behind, showing just how far the industry has moved towards seeing their inclusion as a 'fait accompli' for FHS compliance. In third place, reflecting the 40% of ground floor area requirement in the standard, was solar PV (plus battery storage).

Showing the impact of air-tight constructions, MVHR was included by 28% of our survey cohort, and mixed mode and/or natural ventilation was also in the mix (27% picked it). Of our surveyed architects, 10% said they were making 'no significant changes to their current design approach,' and only 8% were pursuing offsite/MMC construction solutions. This meant the onus was on improving onsite approaches to bring a lot more rigour in construction to achieve desired performance levels.

Which specific building technologies and approaches did architects expect to specify most frequently as the standard comes into force? Solar PV was ahead of heat pumps (67% and 52% respectively), with air-tightness measures, mixed mode/natural ventilation, and thermally broken windows/lintels all sitting in joint third, just ahead of air to water heat pumps, at 56%. A reasonable number (22%) said they would be specifying battery storage – to maximise solar PV installations' effectiveness.

District heating, ground source, and water-only heat pumps were only forecasts as likely options by a shockingly low 1% of our sample. Smart controls for ventilation and overall energy management fared better, with 23% and 18% respectively, but only 11% picked waste water heat recovery and only 10% underfloor heating as likely to be specified by them. Now included in the still in force Appendix Q of SAP however, as a compliant measure,

IDSystems innovative glazing
SOPREMA

WWHR plus modulating electric showers could see an increase in specification in coming months.

Challenges

What were the greatest design challenges when delivering FHS projects, for our cohort? And, which building elements or systems were most difficult to specify? Capital cost increase was the main concern, and the second most prominent answer was client resistance based on those cost uplifts – a concerningly high 42% of respondents picking this. The other barriers were predictable, with skills shortages in third, followed by design time and resources, and 'contractor competency' not far behind, at 32%.

A lack of clarity of Government guidance was an issue for 22% of our respondents, but somewhat reassuringly, space requirements for plant such as MVHR and other services only presented a challenge for 16%. Also, overheating mitigation might have been assumed to be higher up the list, but was only 12%; planning restrictions were chosen by 11%. Somewhat of a cautionary finding for suppliers, reinforced by later questions, was that 'lack of reliable performance data' [on products] was chosen by 9% of our respondents.

The most difficult building elements and systems to specify for compliant homes at this point, said our respondents, were ventilation systems (53%), followed by renewable technologies such as PVs (50%). Heat pumps were significantly challenging too (46%), but other elements such as airtightness products, building fabric and insulation, and moisture management were less of a concern (30%, 17% and 13% respectively). Glazing manufacturers will be pleased to hear that only 1% said that specification for FHS compliance was a challenge, despite the more onerous per-unit performance calculation methods being introduced for windows.

Performance data

While data on product performance was clearly important for specifiers, how critical was the factor of that data being verified by third-parties? Despite not being officially mandated, a conclusive 72% said it was 'very important,' and the remaining 28% said it was 'moderately important.'

Bearing in mind the above finding, how confident were our respondents in the accuracy and transparency of manufacturers' own environmental and performance information? This was less conclusive than the figure on the importance of third party testing, with most respondents being in the 'middle ground' – 42% saying they were 'not very confident,' and only 20% saying they were 'very confident.' Manufacturers either need to improve their accuracy and transparency of data, or consult better with suppliers to help them understand the veracity of what they are offering.

Despite this challenging finding for manufacturers, what types of technical information were more critical for architects? Due to the focus of this survey, the somewhat generic factor of 'compliance guidance' was most popular, at 62%, with Declaration of Performance (including 'verified thermal performance') just behind at 61%. A key issue in terms of overall thermal performance, junction detailing info was only picked by 23%, perhaps pointing to the difficulty in obtaining such info from single manufacturers.

Performance Gap

Most respondents (64%) were 'very concerned' about the risk of a persistent gap between design and built performance post-FHS, while 33% said they were 'moderately' concerned. Unfortunately, yet predictably, a resounding 74% said that 'poor installation quality' was the culprit, no doubt aligning with a contingent of 51% saying 'insufficient contractor knowledge.' Also, supporting manufacturer concerns in the sector, 'product substitution or value engineering' was a substantial factor, with 44% choosing it.

Coordination problems in design processes, occupant behaviour, and 'airtightness failures' were all further down the list, but not insignificant numbers (29%, 21% and 15%). Echoing the responses around heat pumps in the subsequent question, 'commissioning' of systems post-install was higher up the list, at 38%. A glaring lack of post-occupancy evaluation in residential projects was not seen as a major reason for the performance gap, suggesting that such data would not be the necessary 'stick' to drive more onsite rigour.

Heat pumps

Heat pumps' effectiveness, particularly if not correctly sized and commissioned, may be a moot point for many specifiers. We devoted a question to the specific design challenges that architects were seeing in FHS compliance using 'heat pump-led' designs currently. The results confirmed expectations, although perhaps many would have expected 'upfront cost' to be above 'plant space requirements' as the top challenge picked. This shows just how difficult the spatial issues around including heat pumps in residential designs may prove to be at scale – 56% said it was a challenge. At the other end of the spectrum, noise was a negligible concern, with only 3% choosing it.

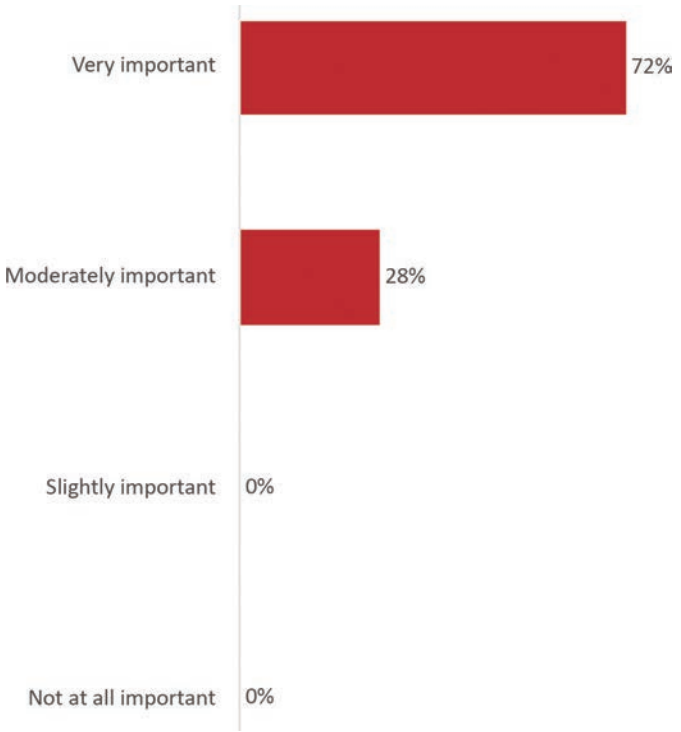
There were some other concerning issues around heat pumps, according to our survey, with 'installer competency,' and the related issue of commissioning new systems coming in at 46% and 33%. Commissioning systems correctly for optimising their performance in each domestic setting has been pinpointed as an acute issue currently, with attendant risks for a performance gap between design and in-use. Increasing the knowledge level of installers across the board remains a work in progress.

Other critical issues around heat pumps were hot water storage, and the associated demand on the electricity grid, both having a significant 31% vote from our respondents. And the more latent issue of having adequate building fabric to ensure as-designed heat pump performance was picked by 20%, so was clearly a real issue.

Overheating

Mitigating overheating, and thereby balancing Part O requirements with Part L, was not perhaps as large a concern for the overall shape of schemes as may have been expected, from our sample. While 21% said that their glazing specification strategy had been affected 'significantly,' suggesting that they had reduced window

IDSystems innovative glazing
SOPREMA



How important is third-party verified testing data when specifying products for Future Homes Standard compliance?

sizes, 66% said overheating had only 'somewhat affected' designs. What overheating mitigation strategies were they most frequently adopting? Perhaps surprisingly, 'solar control glazing' was number one, with 70% picking it, whereas reduction of glazing size on facades was only slightly behind, at 64%. Speaking to the UK's lack of facility for built-in external shading options currently due to inherited design precepts, external shading was 10 points behind, at 54%. Interestingly, natural ventilation was a popular choice at 44%, although whether opening windows without a cross-ventilation strategy will continue to be a viable option in hotter summers looks unlikely. And changing buildings' orientation was clearly a difficult nut to crack in residential scenarios, with only 16% choosing this strategy.

Home Energy Model improvements

We asked a handful of key questions around what needed to be addressed in HEM (and its notional building), to improve on the current 'interim' SAP 10.3; the top answer was 'clarity on design and specification' (inferring a need for clarity on the ramifications of certain design decisions within HEM). 80% picked this, but EPC metrics (with EPC also about to be updated) were critical, with 75% picking it. Also needing addressing were overheating, 'fabric calculations shortcomings,' the 'inflexibility of the PV requirement' in SAP 10.3, meaning mandatory 40% of ground floor area), 'dual running issues' with 10.3 and HEM once it is published, and lower down, bringing in more use of local weather data, and carbon emissions reporting. Whether or not any of these are being fully considered, as HEM's 2027 launch looms, is impossible to say.

Specific improvements they would like to see, shown in verbatim comments, included a need for consistency and clarity in data, and less scope for different assessors to have differing interpretations, and "straightforward reporting that architects, contractors and clients can all understand." Also needed, said respondents, was more clarity on the new inputs and information architects will need to provide for compliance, plus more certainty on default values. And, when manufacturer-specific performance data can be used, a clearer audit trail from design assumptions to as-built evidence would improve confidence.

The comments submitted centred on the need for performance data to be robust and reliably consistent, "not assumptions that don't reflect real world situations," and which were unambiguous on the notional building itself. Regional weather data should also be included, designers can interrogate earlier in the design process, plus clearer info on overheating, fabric and services, "so we can understand where the main compliance risks sit," as well as how much flexibility there is around the standard specification. The model needed to have "more dependable product inputs and fewer assumptions that are difficult to verify on live projects," and outputs that were "clearer so value engineering decisions can be assessed before they create a compliance problem." Also there should be clearer recognition of the impact of installation quality and commissioning, and guidance on "what evidence is needed at each design stage."

We also asked whether respondents believed that SAP 10.3 (and the notional building) were a fit-for-purpose interim measure. Strangely, given the responses to how 10.3 should be altered, the majority were 'unsure' around whether it was fit for purpose. But a combined 81% were unsure or definite no's – amounting to a conclusively lukewarm vote.

Cost impacts & stakeholder reaction

Lastly, compared with current practice, we asked what impact architects expect the Future Homes Standard to have on construction costs per home? This was a broad and somewhat hypothetical question, and there were a broad range of responses – while 16% thought that only 1K-5K would be added to the build cost, 28% thought it would be 10K-£20K, and 3% even thought it could be over 30K per home. This not only suggests applying the full palette of insulation, PV, heat pumps and other infrastructure, but also potentially designers working in higher-end markets.

The figures on whether clients, contractors and planners were accepting the design changes required for FHS compliance reflected these inflated costs, with a broad middle being seen in responses; 72% said it was a case of 'slight acceptance,' but there was a worrying segment of 25% saying that the uplifts and changes were 'not accepted' at all. These are all crucial challenges to resolve for design teams as we approach FHS implementation next year.

For the full white paper, visit www.insights.netmagmedia.co.uk

IDSystems innovative glazing
SOPREMA

Building Systems UK

Tata Steel UK Construction Solutions

TATA

Images: Trisobuild® site assembled roof and wall systems, ARC 500 Birkenhead

FUTURE PROOF YOUR BUILDING. SPECIFY WITH CONFIDENCE.

Building Systems UK now delivers proven fire performance to the newly adopted EN classifications. Proven fire performance to BS EN 1364-1 & BS EN 13501-2 classification.



View our technical guidance document to learn more

The UK government changes to fire performance standards through the withdrawal of BS 476 and phased adoption of European (EN) classifications is a key milestone in the fire performance of non load bearing walls. Ensure you future proof your buildings with Building System UK's Trisobuild®, Trisomet® Trimapanel® & Mineral Wool insulated site assembled and panel systems all of which have demonstrated compliance to BS EN 1364-1. Refer to our technical guidance document or talk to us directly to future proof your building.

70 YEARS OF INNOVATION

Platinum® Plus system guarantees for up to 25 years.
Confidex® pre-finished steel guarantees for up to 40 years.

Free samples available at **www.buildingsystemsuk.com**

Design and quality in a class of its own

Lindab

Steel roofing you can trust from Lindab
Seamline standing seam and Coverline SRP



Site-specific approaches to finishes for durability

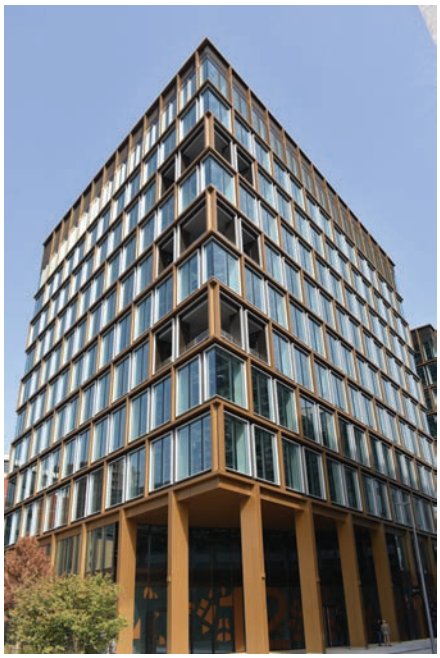
Architectural metals' performance can depend greatly on the location of a building, which is why understanding the substrate, environment and required service life are key. Tomasz Kluczewski at AkzoNobel Powder Coatings explains.



Architecture is designed to last, and that expectation applies not only to how a building functions, but to how it looks. When a facade, window system, balcony, canopy or other visible metal element deteriorates, the impact can extend beyond the surface, affecting the architect's original design intent and potentially leading to additional maintenance or replacement.

This is why coating specifications deserve consideration beyond their colour and finish alone.

Among respondents surveyed in the sector, 35% identify the financial cost of product returns and lost business as the main impact of corrosion, while 24% point to the environmental cost of premature replacement. The message is clear – what goes onto an architectural component can influence how well it performs and retains its intended appearance over time.



There is no single definition of a durable architectural finish

Different buildings, different demands

There is no single definition of a durable architectural finish. A facade on an inland residential development will experience different conditions from a beachfront hotel or a building in an industrial environment.

Coastal locations can expose architectural metals to salt-laden air and chlorides, while industrial and urban environments bring different combinations of moisture, pollutants, and contaminants. The substrate and its pre-treatment also influence the level and type of protection required.

Aluminium, widely used for facades, windows and doors, has inherent corrosion resistance, but appropriate pretreatment, coating selection and application remain important, particularly in more demanding environments. Steel, used for applications including entry systems, fencing and other architectural elements, will typically require greater corrosion protection, potentially including suitable pretreatment, a protective primer, and topcoat.

This variability helps explain why, among the 9% of architectural manufacturers who say anti-corrosion solutions are difficult to source, 58% attribute that difficulty to their requirements varying too much. Rather than asking simply whether a finish is durable, architects and specifiers need to consider what it will be applied to, where it will be used and what performance is required throughout its service life.

Where powder coatings fit

Meeting these different requirements calls for a coating technology that can combine protection and durability with the colours and finishes needed to deliver the architectural vision. This is where powder coatings play an important role.

Powder coatings are already used by 49% of architectural manufacturers surveyed, and the research points to the combination of attributes behind their use. Some 76% of architectural respondents value the ability to use powder coatings with multiple primers and topcoats, allowing the coating system to be adapted to different substrates and exposure conditions.

Meanwhile, 72% say powder coatings provide a more durable finish, while 73% say they provide the range of colours and finishes they need. This combination is particularly relevant to architecture because protection does not have to come at the expense of creative choice.

The coating system can be selected around the performance needs of the project while still giving architects access to the colours, textures and effects required to realise their design.

Performance is more than the coating

Selecting the right coating system is only part of achieving the required performance. Surface preparation, pretreatment and application quality also influence how the finished component performs, while relevant industry standards and specifications provide benchmarks against which that performance can be assessed. These include specification requirements such as Qualicoat and AAMA 2603, 2604 and 2605.

Programs provide additional confidence that coatings are applied by specialists working to defined requirements. Together, the right coating system, quality of the substrate, appropriate preparation and controlled application help translate the performance specified for a project into the performance of the finished architectural component.

Making longevity count

Longer-lasting finishes have a critical value beyond their appearance alone. Helping a coated component achieve a longer service life can reduce premature maintenance, recoating or replacement, with corresponding implications for materials, resources and cost.

These wider considerations are increasingly important to the sector, with 29% of respondents identifying environmental impact as the most important future benefit they want from the right anti-corrosion solution.

Ultimately, protecting architectural design is about understanding what a building will ask of its materials and specifying accordingly. By considering substrate, environment, coating system, application quality and aesthetics together, architects and specifiers can help ensure that a building continues to look and perform as intended for longer.

Tomasz Kluczewski is regional commercial director for North Europe at AkzoNobel Powder Coatings


Interpon
POWDER COATINGS
Architectural
Futura 2026-2029 Collection
Where comfort meets adventure - and the future takes shape.
In a world that never stands still, and where what came before shapes what comes next, balance is everything. It's this sense of harmony — between the familiar and the new — that shapes the **Futura 2026–2029 Collection** from Interpon. Two palettes bridge comfort and curiosity: High Serenity, grounded in calm and connection, and Bold Adventure, alive with energy and exploration. Together, they offer a spectrum of superdurable finishes with fine and coarse textures, soft metallics, and rich tones.
Each finish delivers exceptional color retention and film integrity, proven to withstand time, weather, and wear.
Part of our Eco+ portfolio Interpon D2525 Futura Collection supports the sustainability goals across the construction supply chain by reducing the total energy consumed, enhancing production line efficiencies and lowering carbon footprint while still delivering the optimum level of performance to leave a lasting legacy and protect the world around us.
Available with up to a 25-year global warranty when applied by an Interpon D Approved Applicator, the range carries Qualicoat Class 2 and GSB Master certifications and meets the requirements of AAMA 2604.
Your imagination starts with our finish.
interpon.com
AkzoNobel

FACADE HUB

2027 | BUILDING CONFIDENCE IN FACADES



REGISTRATION NOW OPEN

BUILDING CONFIDENCE IN FAÇADES

A day of practical, evidence-led sessions bringing together the people who design, specify and deliver façade projects.

DATE	VENUE
Thursday 18 February 2027	The Building Centre, Store Street, London

REGISTRATION NOW OPEN:
www.valcan.co.uk/facade-hub

VALCAN
The Defining Standard

Calculating the impact of the new window calcs

John McComb at Reynaers Aluminium UK discusses how the new, more rigorous method of calculating window performance is reshaping the fenestration industry.

Since the latest Future Homes Standard was published outlining the changes to Part L and Part F of the Building Regulations, much of the early industry commentary has understandably focused on what those changes will bring. However, now that the standard has finally arrived, perhaps the more important discussion should be about how energy performance must now be calculated.

Following a lengthy delay, the Future Homes Standard was finally published in March 2026, with much of the industry response to date focused on the detail of the extensive consultation. However, for new-build homes under Approved Document L1 (ADL1), the impact will prove to be far more significant than a series of regulatory revisions, representing instead a fundamental shift in how compliance is demonstrated.

In commercial fenestration projects this kind of detail oriented, project specific calculation has been considered best practice and commonplace for many years. The Future Homes Standard now requires the residential sector – particularly new-build housing – to adopt the same approach. Where compliance had previously relied on standard sizes and blanket energy ratings, every window, door and patio door must now be calculated on its specific dimensions and composition. In addition, hardware such as couplers must now be accounted for and distinguished between load-bearing and non-load bearing.

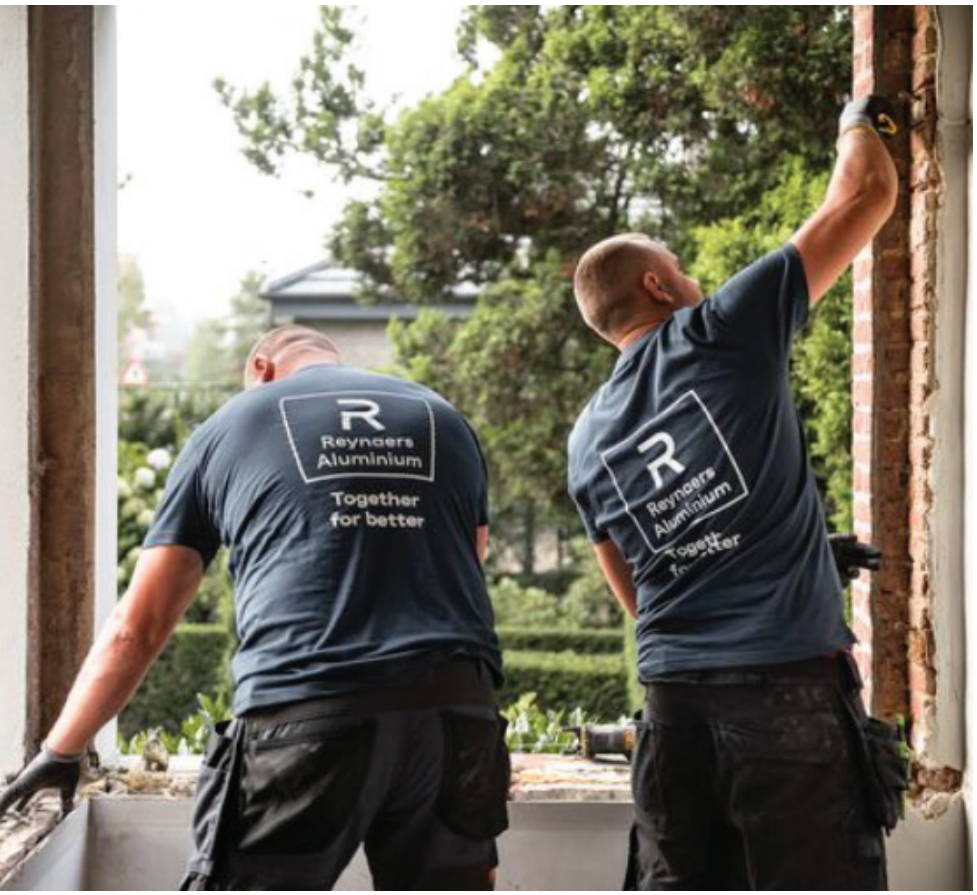
Why do these design implications matter? As each element must now be calculated individually, any change to a single U-value, even a small one, can significantly impact the entire build. For instance, if a door is widened by even a few millimetres to achieve compliance under the new standard this could reduce the square footage of an adjacent room. This is the sort of design decision that Tier 1 developers should be considering now.



The Government has confirmed that compliance will initially be assessed using SAP 10.3, while the longer-term intention is a transition toward the Home Energy Model (HEM). Once implemented, HEM will introduce a fundamentally different approach to energy assessment.

This transition represents far more than a software update. It marks a significant change in both the process and methodology used to demonstrate

Each element must now be calculated individually – any change to a single U-value can significantly impact the entire build



compliance in the new-build residential setting, requiring considerably greater levels of design accuracy, coordination and performance forecasting from the earliest stages of a project. Given the long lead times associated with specification, procurement and construction within the new-build sector, the implications of this new calculation methodology must be considered well in advance of formal implementation.

With the HEM model only being as good as the data provided, every window, door and facade element needs a verifiable U-value, G-value and frame factor, including couplers, add-ons, sills and thresholds - if suppliers don't have the data ready, the building design will stall.

Design decisions being made today will directly influence HEM outcomes in the years ahead. Projects specified for completion in 2027 are already in the design stages, with key specifications, such as fenestration systems, being fixed now. These early choices set parameters that will ultimately determine the HEM results in 2027. With Approved Document L's dates

Design decisions being made today will directly influence HEM outcomes in the years ahead

fixed in March and September 2027 the capability for Tier 1 developers to respond is deceptively short when you factor in the need to address verified data, in-house simulators, training of staff, and build supplier relationships. The methodological shift is significant: HEM pushes critical decision-making further upstream in the design process. Once key parameters are set, changes become increasingly difficult and costly, making early-stage decisions effectively locked in and difficult to reverse without substantial financial and programme implications.

The shift in methodology moves the burden of compliance and detail down the supply chain. Fabricators will be relied on to provide installers with the right data sets, and installers are then liable for ensuring the correct information is delivered to clients and assessors. Providing complete support for a project will need the right software, comprehensive data sets, and access to in-house simulation capability. Once a number is produced, interpreting that number and reconciling it with other impactful building regulations requires a high level of experience and competency across the board. This is where the calculation challenge becomes a competency one.

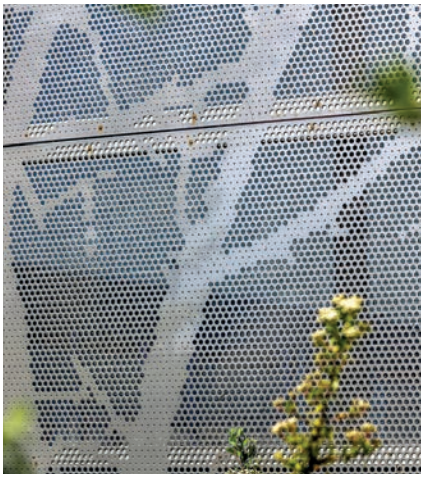
The combination of the calculation changes and competency requirement has exposed a market under pressure and decarbonisation cannot be achieved by improvements in fabric values alone; it requires a holistic approach that also recognises the ongoing decarbonisation of the electricity grid, and the Future Homes Standard is a necessary step towards achieving the UK's net zero commitment by 2050. The new methodology that the Home Energy Model has introduced will play a significant part in how we as an industry deliver on our part of this commitment. The Future Homes Standard is not only a new target to meet, but also a shift in the way we work, and the market needs to be ready to implement that change now.

John McComb is technical director at Reynaers Aluminium UK

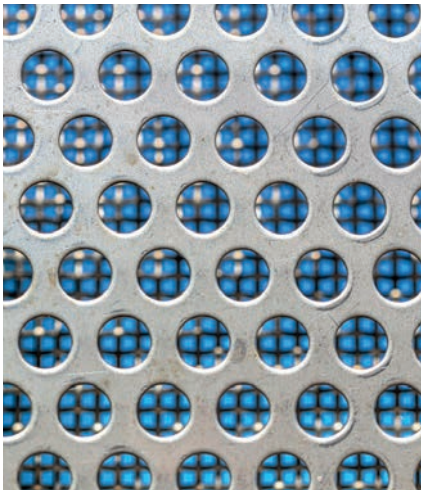
RMIG SOLUTIONS

Passion for perforation





Technical characteristics
Size of the project: 377 m^2
Material: Stainless steel EN 1.4404
Pattern: RMIG ImagePerf
Hole type: Round Holes
Thickness: 1.2 mm



Combining protection with a perforated design inspired by nature

Residential development, Staffordshire, UK

At Chenet Chase in Cannock, Staffordshire, a four-metre-high heat shield was required along the boundary between the residential area and a neighbouring processing plant. The shield provides protection from radiant heat in the event of a fire at the adjacent industrial site. With such a large protective structure positioned close to the homes, its visual appearance was also an important consideration.

RMIG ImagePerf was used to create a decorative layer featuring a natural tree motif in perforated stainless steel. The carefully designed perforation creates detailed imagery while maintaining the open area required for the underlying heat shield to perform as intended. The result combines essential protection with a distinctive architectural feature inspired by nature.

RMIG Ltd · Phone +44 1925 839610 · info.uk@rmig.com · rmigsolutions.co.uk

BUILDING PROJECTS

Upcycling in Uppsala



LUMI
UPPSALA, SWEDEN

A defunct 1970s purpose-built government office complex on the edge of Uppsala's historic centre had been earmarked for demolition – until White Arkitekter stepped up. Roseanne Field reports on how the practice reassessed the project and proposed a super-sustainable reuse strategy that resulted in a world-beating LEED score.





SCALING UP SUSTAINABLE REUSE
The slate facade was part of the general strategy to prioritise natural, durable materials
Photography © Måns Berg

Uppsala is a historic city approximately 40 miles north of Stockholm; the Hugin complex in its centre was completed in the 1970s, a purpose-built collection of offices accommodating various Swedish government agencies. It was most notably home to the Swedish Food Agency, as well as the Swedish Tax Agency and County Administrative Board.

Comprising three connected building volumes, the complex was bought in the 2000s by real estate company Vasakronan, with plans to redevelop. It was dated, and deemed no longer practical for office use, with performance standards of the 1970s lagging behind Swedish standards of today. Insulation levels were poor, meaning the buildings suffered from poor energy efficiency, windows were small, and the internal layout lacked the flexibility required for modern office requirements.

It was also viewed as something of an 'urban barrier'. The site was initially at the edge of the city, expansion meant it had become increasingly viewed as separating the historic central part of Uppsala from the more modern area, developed with light industries and housing.

Vasakronan assessed the complex in 2017 and deemed that renovation would not be the panacea for bringing the buildings up to the necessary standards, and therefore earmarked them for demolition. Its original proposal had looked at replacing the complex with a mixed use development including housing, offices, shops and a pre-school.

The Swedish Food Agency put its relocation plans in place, eventually fully leaving the site by late 2020/early 2021, moving to a premises in the newly built Uppsala Science Park. Planning for the replacement mixed use scheme was taking longer than hoped, and so Vasakronan approached architectural practice White

Arkitekter, whom they had worked with previously on projects which placed a strong focus on sustainability.

But rather than simply taking over, White wanted to reassess the entire plan. "What attracted us to the project was the opportunity to challenge the assumption that demolition was the only viable option," explains Anders Tväråna, lead architect on the project. "We were excited by the challenge of transforming those perceived weaknesses into strengths," he continues.

Tväråna says that there were "many reasons" why architects and developers who had previously studied the buildings had ruled out the possibility of adapting it for several tenant bodies, and modern requirements. "Being built bespoke for one large tenant, it was difficult to create spaces that would work for smaller tenants with individual entrances and fire escapes."

Low ceiling heights, small windows resulting in low daylight levels and poor insulation made it "outdated," and its low density – four storeys – was viewed as an inefficient use of the site. It also had no real contact with the street. "Potentially there was an opinion that it is more 'fun' to create new buildings weighed into the decision, too," adds Tväråna.

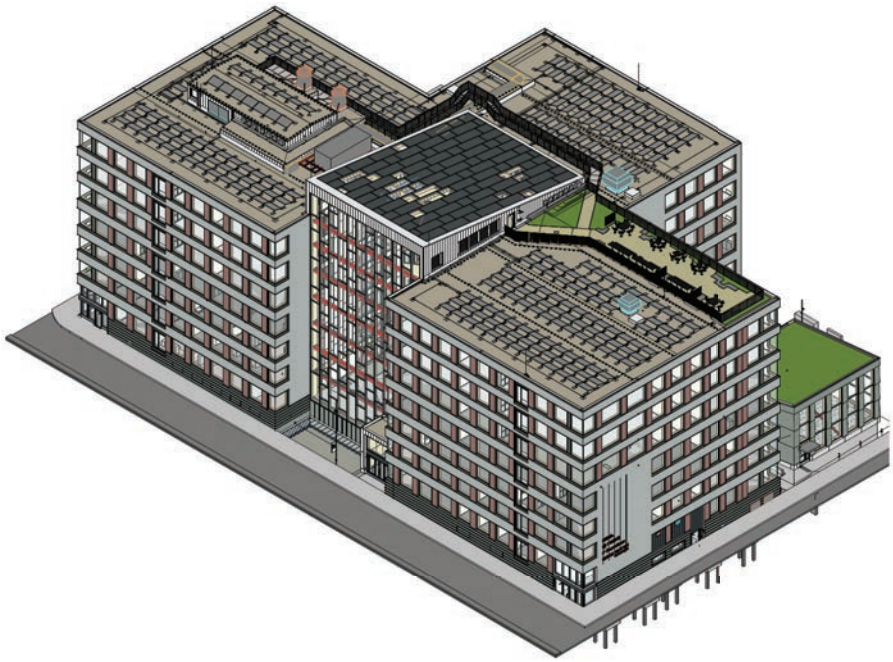
The architects' previous work and existing relationship with Vasakronan helped when it came to rethinking the plan for the development. "It gave us a strong foundation for pushing innovative construction approaches," Tväråna says. They had worked together on Magasin X – Sweden's largest fully timber office building, which had given them a "confidence" to pursue ambitious sustainability goals. "What was different here," Tväråna adds, was the scale of the transformation and reuse. Rather than creating a new building, we were focused on extending the life of an existing one," he adds.

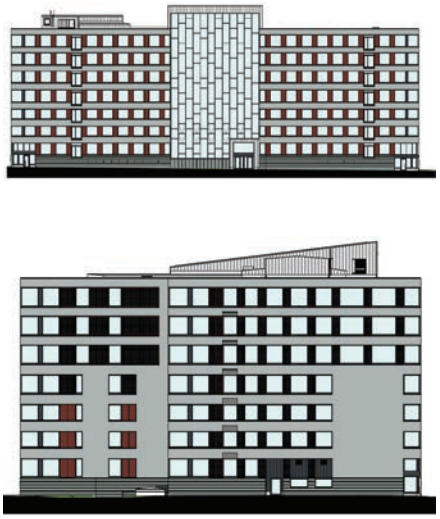
A rescue plan

The final brief was that the development was to include office and retail space, laboratories, restaurants and cafes, "creating a much more active and adaptable building," Tväråna says. The original brief was "quite simple" – to propose a development that maximises the building on the site while retaining the original structure.

"Our task was to determine whether the structure could be retained and adapted to modern requirements while remaining commercially viable," he continues. Upon examining the complex closer, the practice, alongside client Vasakronan found that the foundations and concrete structure were in a good enough condition to reuse.

However while the existing foundation was in good condition, it wasn't able to carry any additional weight – a problem for the team given their vision included the





LIGHTENING THE LOAD
The original load-bearing concrete facade was replaced with a lighter structural system, and three new floors were constructed in lightweight steel and CLT
CGI © White Arkitekter





"What attracted us was the opportunity to challenge the assumption that demolition was the only viable option"

Anders Tväråna, White Arkitekter

addition of three new floors. Strengthening the foundations "was not an option," so the architects had to find another solution. The original load-bearing concrete facade was replaced with a lighter structural system, and the three new floors were constructed using lightweight materials – namely lightweight steel and cross-laminated timber (CLT). Lightening the existing load on the foundations meant they were able to construct the new floors while keeping the overall load roughly the same, "making the transformation both technically viable and resource efficient," Tväråna adds.

Coordination and collaboration between White Arkitekter, Vasakronan, the engineers and building managers were essential in ensuring the success of the project. "The structural engineer played an especially important role, helping us understand the building's constraints and identify solutions that made it possible to preserve and adapt the existing building," Tväråna says.

As well as retaining and reusing the entire foundation structure, approximately 80% of the frame was saved. The team reused as much as possible that could realistically be retained or recycled. This included 70% of the sheet aluminium from the old roof, processed and "woven into the surface of the lift tower wall in the atrium," over acoustic material, explains the architect. In addition, 105 tonnes of plasterboard were dismantled and reinstalled.

Bricks, cabinets, 563 interior doors, and 383 glass partitions were also carefully dismantled to be reconditioned and reused, as were 446 radiators, electrical boxes and other technical equipment. Carpet tiles throughout the building are either recycled or reused, thanks to a partnership with Tarkett. While the original building's flooring wasn't good enough for reuse, the manufacturer sourced carpet tiles that were due to be torn up in other projects, fresh enough to be reconditioned. Overall, the final carbon footprint of the building is approximately half that of a new timber framed house on the site – a decrease of 3,700 tonnes of CO_2 emissions.

While determining how much of the buildings could be saved, recycled and repurposed was highly important, so too was redesigning and reconfiguring the site in order for it to meet modern standards and requirements. "Our solution was to turn the inward-facing complex inside out, replacing its single entrance with a shared atrium that connects all three buildings," explains Tväråna. "Placing the new entrance within the atrium, alongside a central staircase, new lifts and bridges linking directly to the office floors resolved the logistical challenges and created a space



that can accommodate up to six tenants on each floor."

In places the floor was lowered to street level to allow room for shops and cafes. A new facade was also designed with larger windows, improved insulation and integrated solar cells, all of which help create an energy efficient building with ample daylight. The building is now called Lumi, meaning 'light of life' in Latin – chosen for the way it "captures the philosophy of the project."

Turned inside out

The ultimate aim with the redesign and reconfiguration was to better connect the buildings that form the complex both with each other and with the surrounding area. The new central atrium, in what was the internal courtyard, was designed to create a heart for the development as part of the creation of an "open, connected destination," Tväråna says.

This was a major improvement on the previous poor connection to the street with only one main entrance, the external courtyard which was only accessible through existing offices. The lack of suitability to accommodate multiple tenants was partly down to the lack of "active public-facing spaces," explains Tväråna. "Rather than fighting against those constraints, we reorganised the building."

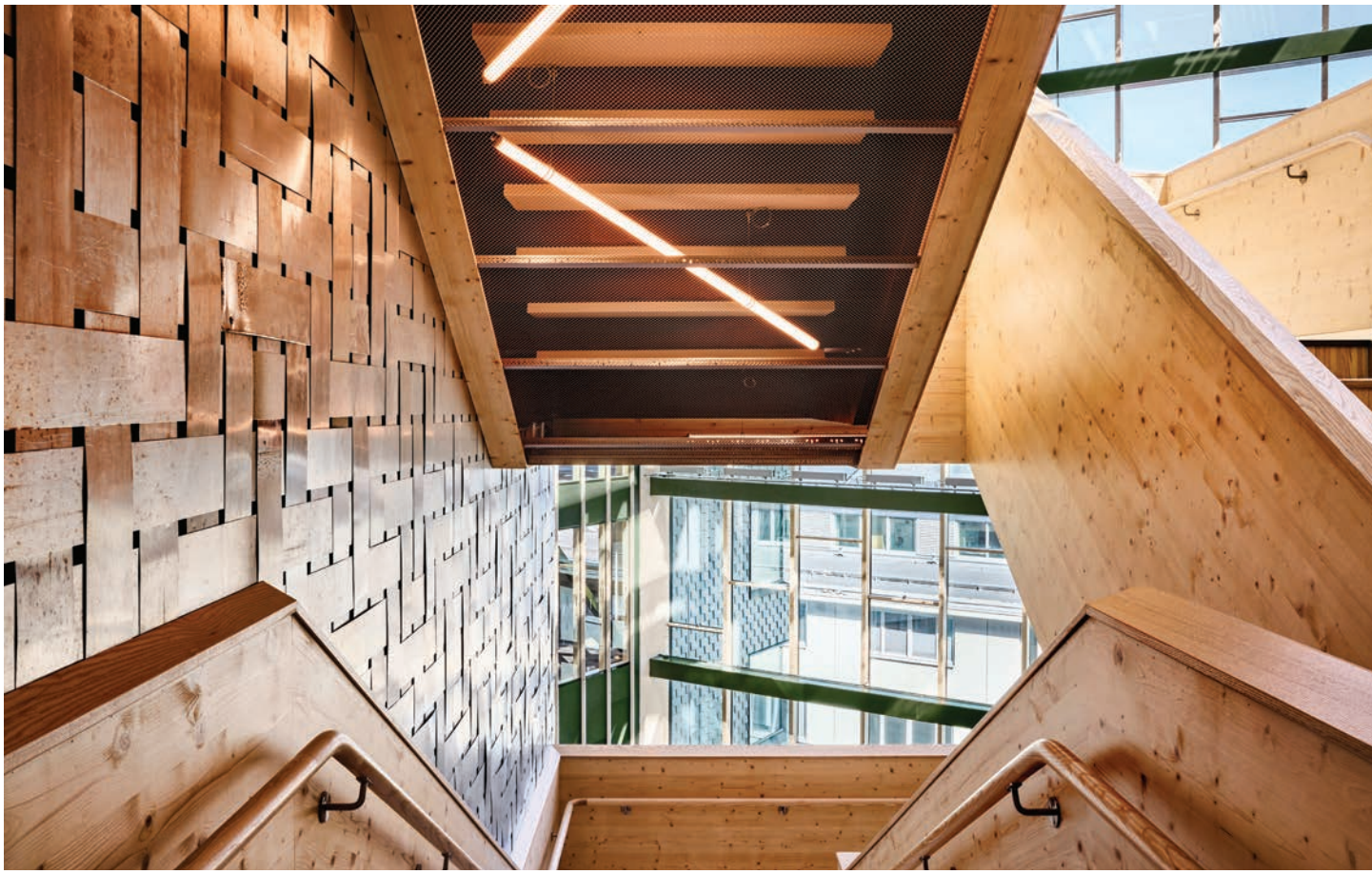
At street level, the team introduced new entrances and spaces, largely comprising retail units and restaurants. "The original building had no contact with the street, which was one of the major challenges we sought to address through the design," Tväråna says. The new entrances and spaces "transform the site from a former barrier into an addition that brings life and movement to the area."

Working out a design using the materials already existing within the building added an extra challenge for White Arkitekter – but not one they were discouraged by. "Rather than starting with a blank slate and selecting materials and components from catalogues, we had to design around the materials within the building," Tväråna explains. "While that

BELOW: CONNECTIONS
The design put the emphasis on much greater connection internally and externally between spaces

FACING PAGE: CIRCULARITY
70% of the original roof's aluminium was re-processed and installed onto the face of the lift tower





required a different way of working, it was also a far more interesting design challenge, pushing us to be creative and resourceful while making the most of what was already there."

Although every effort was made to recycle and reuse what was already there, new materials also had to be integrated into parts of the project. "Where they were required, we consistently prioritised natural, durable materials that can stand on their own without applied finishes," says Tväråna. This included the CLT for the three new storeys, but also the slate for the facade, chosen not only for its low environmental impact and longevity but also its potential to be reused. Around the base of the building is a plinth of black dolerite – a deep black stone which is quarried in Sweden.

In total the work has resulted in approximately 22,000 square metres of mixed use space. While the predominant focus was office space, the lower four floors include provision for laboratories. There is also retail and restaurant space. "The programme was influenced by the existing structure, but also by the ambition to create a long-lasting, adaptable workplace that could support a mix of uses while remaining relevant for future occupiers," Tväråna explains.

The latter aspect in particular is something White Arkitekter believes is highly important when designing any commercial space: "Buildings need to be able to adapt as tenants change over time without requiring major reconstruction," says Tväråna. "Natural light is one of the most important considerations, but flexibility is equally critical."

Going digital

The success of Lumi wouldn't have been possible without the use of advanced digital technology and tools, with Tväråna describing them as "critical." Every individual component of the existing building was 'inventoried' and catalogued in a database that linked directly to White Arkitekter's Revit model, which allowed the team to fully track and manage the

"Our solution was to turn the inward-facing complex inside out, replacing its single entrance with a shared atrium"



ATRIUM AT THE HEART
What was an inaccessible internal courtyard is now a connecting atrium that forms the heart of the building

materials that were being reused throughout the project.

The new design was modelled down to a granular level in BIM, meaning the project was entirely drawing-free. "The building was modelled in extraordinary detail, enabling accurate planning, cost control and construction coordination," explains Tväråna. The BIM model became the only construction document, allowing all information to be accessed by individuals and teams working on their project via their phone or tablet. "This was particularly valuable on a reuse project, where existing materials and components vary far more than standard new build products," adds Tväråna.

It also allowed climate calculation experts to perform necessary ongoing calculations based directly on the model, and overall reduce the risk involved – particularly in a project of this size. "Combined with continuous laser scanning, the 3D model helped us identify and resolve irregularities in the existing structure early on, reducing risk and making the large-scale transformation far more efficient and predictable," Tväråna says.

Green ambition

Sustainability was not merely a consideration, but was an important part of the brief from the outset of the project. Vasakronan targets LEED Platinum certification on all its developments, with 97% of its current portfolio environmentally certified – 95% of which have achieved LEED Gold or higher.

The developer pursues this strategy for two principal reasons; firstly a belief it is the responsible thing to do – focusing on areas such as energy use, material use, waste and transport. Secondly, its 'green financing strategy' means it seeks financing from investors who look for sustainable or green investments. Targeting LEED certification therefore gives investors confidence that Vasakronan are able to fulfil the lending criteria.

Measures undertaken on Lumi – aside from the enormous reuse and recycling effort – include the integration of roof

and facade solar cells, a sedum roof and rainwater harvesting tanks, the water from which is used in flushing the building's toilets. Alongside the improved insulation levels, the building has seen a significant reduction in energy consumption of 75%, dropping from 204 kWh per square metre to 52 kWh per square metre.

The effort that went into saving and improving the existing structure paid off – Lumi scored 99 out of 110 points in the LEED certification system, earning the desired LEED Platinum certification. This makes it not only the highest scoring project in Europe but also reportedly the highest LEED scoring office building in the world. The project has reported roughly 190 kg CO_2e/m^2, estimating that for a comparable new build that figure would be around 300-400 kg CO_2e/m^2.

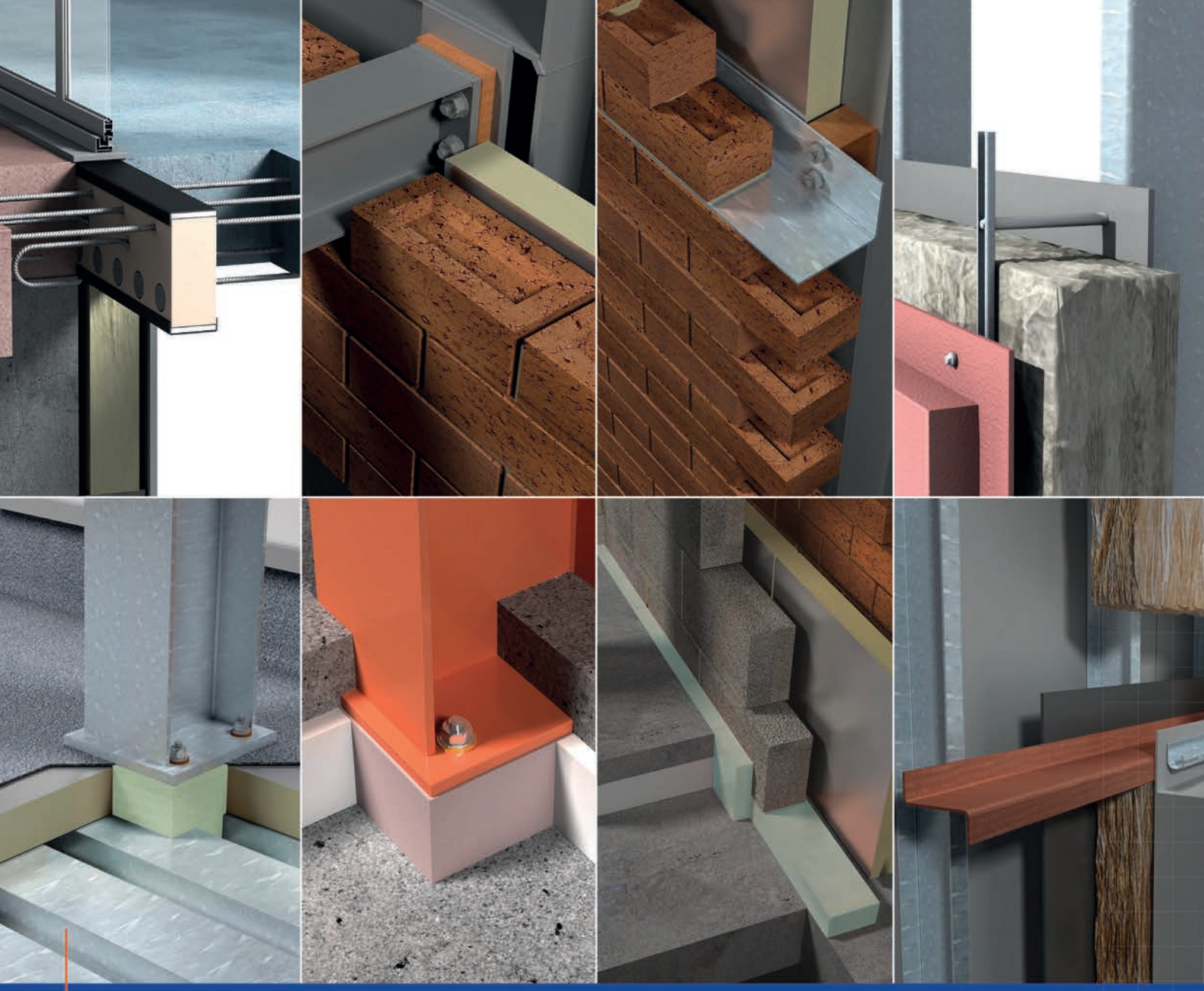
The project has been recognised in the wider industry with award wins – 'Building of the Year – LEED category' at the Sweden Green Building Awards 2025, and 'Best Retrofit & Reuse Building' at the UK Life Sciences, Tech & Research Clusters Awards 2026. It's the third time White Arkitekter has won the former, having received it in both 2022 and 2023 for other office buildings designed for Vasakronan.

The reuse programme itself went "very well," says Tväråna, thanks to the "strength of the project management and procurement team, who shared the ambition of maximising reuse from the outset," he adds. Specialist contractors for certain elements – such as the facade and ceilings – were appointed by the team which meant they were able to avoid relying on "multiple layers" of subcontractors.

As well as the recognition the project has had in the form of its world-beating LEED certification and clutch of award wins, it has also been very received locally and by clients, with the building fully let before it was completed. It's proof that challenging perception and pushing boundaries can pay off, as Tväråna concludes: "Lumi gave us the chance to demonstrate that reuse can deliver ambitious, contemporary architecture while significantly reducing the environmental impact." ■

"The building was modelled in extraordinary detail, enabling accurate planning, cost control, and construction coordination"





armatherm.co.uk

ARMATHERM™
THERMAL BRIDGING SOLUTIONS

LONDON BUILD BOOTH B119

THERMAL BRIDGING SOLUTIONS

Armatherm™ is a leading supplier of thermal break materials for the construction industry. We help architects, engineers and contractors tackle thermal bridging with products that combine low thermal conductivity and high strength. Designed and tested for load-bearing applications, Armatherm™ solutions effectively reduce or prevent thermal bridging.

Scan me for more information

BBA · RIBA · CPD PROVIDERS · Passive House Institute · IRISH STEEL · NBS · SCI ASSESSED · gcca

Excel, London
25-26 November

London Build 2026

Taking place from 25-26 November, London Build 2026, co-located with elementalLONDON, will bring together architects, designers, developers, contractors, manufacturers and built environment professionals at Excel London for two days of insight, networking and collaboration. The event will explore the ideas, technologies and approaches shaping the future of architecture, design and construction, with a strong focus on housing, sustainability and digital transformation.

Architecture in focus

The Architecture Stage will be a key destination for architects and designers, with a programme exploring some of the major opportunities and challenges facing the profession.

Among the sessions to look out for are 'Collaboration in Action: Designing in the Digital Era,' 'The UK's Path to Net-Zero: Architects Driving the Agenda' and 'Rethinking Residential Design: Meeting the UK's Housing Needs.' The programme will also feature 'Meet the Women Shaping the Future of UK Architecture,' highlighting the people driving change across the profession.

Newly announced speakers include senior representatives from Chapman Taylor, Hawkins\Brown, Gensler, AHMM and KPF, alongside a growing line-up of architectural and design professionals.

Discover projects & ideas

The Architect's Hub will provide a visual highlight of the event, with a walk-through gallery showcasing upcoming projects and innovations from leading architectural practices. Already announced practices include HS2, Dela Architects, Pascall + Watson, HOK and Zaha Hadid Architects.

For visitors looking to discover new ideas, materials and approaches, the hub will offer an opportunity to see what is being developed across the sector, and connect with the practices behind the projects.

Housing & sustainable design

Housing will also feature prominently, with the UK Housing Stage bringing together professionals from across the residential sector to discuss development, delivery and the future of UK housing.

Sessions including 'Affordable Housing: Meeting the UK's Growing Needs,' 'Government & Industry Collaboration: Accelerating the UK's Housing Delivery,' and 'MMC in Action: Unlocking the UK's Housing Potential' will explore how the industry can respond to growing demand while delivering high-quality, sustainable homes.

The Sustainability Arena, shared with co-located event elementalLONDON, will offer further insight into sustainable design and specification, with sessions including 'Tackling Embodied Carbon in UK Construction' and 'What's in the UK Net Zero Building Standard?'

Alongside the conference programme, visitors can explore the latest products, materials and technologies from 450+ exhibitors, creating opportunities to discover new solutions and connect directly with manufacturers and suppliers. The co-location with elementalLONDON will also bring additional focus to HVAC, energy efficiency and building performance, giving architects and specifiers a broader perspective on the technologies influencing project design and delivery.

With 25,000+ attendees, 450+ exhibitors and 900+ speakers across 17 CPD-accredited stages, London Build 2026 promises two packed, informative days for architects and designers.

Article supplied by London Build





To register for your ticket, please scan the QR Code.

BEWI to highlight civils capabilities at London Build 2026 Booth: H140



BEWI, manufacturer of construction, insulation and civils products, is delighted to be supporting London Build this year. The company is taking the opportunity to promote its growing capabilities in the civils sector in particular. The products in its growing range include expanded polystyrene (EPS) and extruded polystyrene (XPS) products designed for civil engineering, ground engineering, and infrastructure projects. Key individual product lines on offer from the company include: HeaveMaster GHP (Ground Heave Protection) – engineered EPS void formers designed to protect foundations from vertical and lateral ground heave in clay soils by collapsing under specified fail-load pressures; ClayMaster – compressible EPS boards used to protect vertical and horizontal concrete structures against the pressure of expanding clay soils; FormMaster Shuttering – lightweight EPS formwork components used for concrete edge profiling and ground beams, reducing the need for traditional timber shuttering; FillMaster – lightweight EPS blocks used for civil engineering bulk fill applications, reducing loads on weak subgrades, road embankments and bridge abutments.

0870 600 3666 www.bewi.com/uk

LONDON BUILD BOOTH H140

Marmox on display at London Build 2026 Expo



Marmox will be displaying its range of products at London Build 2026 Expo at Excel on 25th and 26th November on Booth B175, including flying the flag for a NEW Fireproof and sound absorbing product. The construction show involving some 350 exhibitors will be attended this year by an estimated 30,000 visitors, the numbers embracing builders, architects, engineers and developers, many of whom will have the chance to look over its well-respected and highly versatile Multiboard, along with the Marmox Fireboard. Fireboard can be specified for both internal and external wall insulation (IWI/EWI) applications and shares Marmox's honeycomb surface structure with its XPS forerunner, Multiboard, to create an A1 non-combustible certified render-backer which is weather resistant. It can further be used internally across walls or ceilings to take a plaster finish, while providing acoustic absorption properties, as well as thermal insulation. Fireboard has been tested to prove compliance with EN1182 (Efectis,) EN 1716 & EN 13823 (BRE) (Reaction to fire test) conducted by UKTC, along with other testing completed by the BRE.

01634 835290 www.marmox.co.uk

LONDON BUILD BOOTH B175

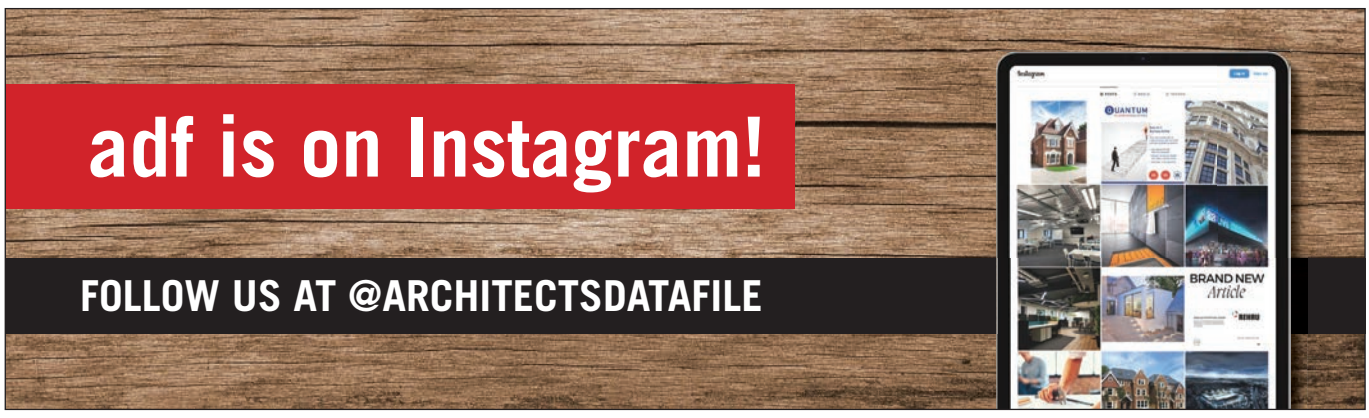
Obex promotes 'through wall' capabilities at London Build Show



Obex will be showcasing its Through-Wall System on its stand at London Build. It is a system which provides optimal structural integrity, safety, and fire protection for modern construction projects. It is the first through-wall system to include breather membranes and air & vapour control layers (AVCL) in its testing and certification process. This delivers unmatched performance and raises the bar for fire safety, making it the benchmark for advanced through-wall sealing systems in the industry. The company will also be showing RapidTray®, its cavity tray and DPC system launched this year, which is especially suitable for the large volume of recladding projects currently underway. It has been developed to help contractors and specifiers address increasing pressure around compliance, installation speed and build consistency. RapidTray® offers many advantages over rigid stainless steel sections, particularly in areas where space is restricted. Its flexibility and integrated fixing strip make it easier to install, and to adapt to unpredictable reclad conditions.

01905 337800 www.obexglobal.com/uk

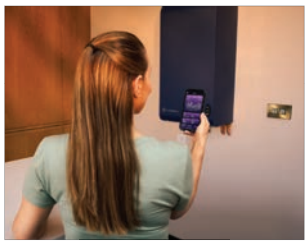
LONDON BUILD BOOTH F164



CPD FOCUS

Maintaining and improving professional competence, skills, abilities and knowledge

NO GAS, NO COMPROMISE



This CPD from **Luthmore** explores the role of battery-enabled electric combi boilers in the transition away from gas, focusing on their application in small and medium-sized properties. Attendees will gain an understanding of the technology, how it works and how its integrated battery stores electricity for use in domestic heating and hot water. The session will examine how intelligent energy management, off-peak electricity tariffs and solar PV can work together to support household energy requirements. It will identify suitable applications across new-build developments, apartments, social housing and retrofit projects, particularly where space, installation or infrastructure constraints can make conventional low-carbon heating solutions challenging. Attendees will explore the benefits of a compact, tankless design, including the absence of a separate hot water cylinder or external unit, and understand the practical considerations around electrical supply, hot water demand and heating capacity. The CPD will also cover key specification considerations, including property suitability, SAP ratings and EPC implications. Finally, it will examine how battery-enabled electric boilers can complement heat pumps as part of a broader approach to delivering low-carbon heating across the UK's housing stock.

01249 596588 www.luthmore.com/specify

UNDERFLOOR HEATING SOLUTIONS: SUPPORTING LOW-CARBON BUILDINGS



Gaia's new CPD, "*Underfloor Heating Solutions*", is designed to provide you with a comprehensive understanding of the underfloor heating technology and how it is rapidly becoming the perfect partner in low carbon designed buildings, from its core principles to installation techniques. Delve into the fundamental principles of underfloor heating, including SAP, Part L, heat transfer, system efficiency, and temperature control. Explore the wide range of underfloor heating solutions available in the market. Learn how to select the right components for different applications and budgets and discover innovative solutions for various heating needs, from residential spaces to commercial buildings.

info@gaia.co.uk www.gaia.co.uk

LATEST NEWS, VIEWS AND MORE



If you like to be kept informed of all the latest news, views, and promotions for the architectural community, the *ADF* email newsletters can offer you regular updates straight to your inbox. The weekly Editor's Choice newsletter includes top news stories curated by the *ADF* editorial team, while the monthly CPD Focus and fortnightly *ADF* Newsletter offer updates on products, services, events, and learning opportunities available from a wide variety of manufacturers and suppliers.

www.architectsdatafile.co.uk/subscribe

ADVANCED LAUNCHES NEW SMART FIRE SYSTEM MANAGEMENT CPD



Advanced has launched a new Continuing Professional Development (CPD) seminar exploring how connected technology, cloud-based monitoring and intelligent data are transforming the management of fire detection systems. The new CPD, '*The Evolution of Smart Fire System Management*', has been developed to help building owners, facilities managers, responsible persons and fire safety professionals understand how digital technologies can improve the way fire systems are monitored, maintained and managed.

The one-hour seminar examines how smart fire system management can provide greater visibility of system status, support faster decision-making and enable users to respond more quickly to events without needing to be physically present at the fire panel.

As buildings become more connected and fire safety responsibilities continue to evolve, the CPD explores the growing importance of data-led approaches to fire system management. Topics covered include cloud-based monitoring, real-time notifications, remote access, digital record-keeping and the role these technologies can play in supporting the golden thread of building safety information and helping organisations maintain accessible, up-to-date fire safety data.

Attendees will gain an understanding of what smart fire system management is, how it differs from traditional fire system monitoring and how connected platforms can be used to manage standalone fire panels, networked fire systems and multi-site portfolios through a single interface. The seminar also explores the benefits this can bring to responsible persons, premises managers, first responders and maintenance providers. The seminar also examines the practical benefits of connected fire system management, including improved safety, reduced administration, faster response times, lower operational costs and sustainability advantages. In addition, it addresses key considerations around cybersecurity, user access controls, audit trails, secure data storage and ISO 27001 compliance.

Looking to the future, the CPD explores emerging developments including predictive analytics, artificial intelligence and integration with wider smart building ecosystems, helping attendees understand how the next generation of fire system management is likely to evolve.

The free CPD is delivered online by members of the Advanced team and is certified by The CPD Certification Service. Participants who successfully complete the course receive a certificate of attendance.

The seminar is suitable for fire engineers, consultants, system designers, contractors, installers, facilities and building managers, duty holders, responsible persons and anyone seeking to better understand the role of connected technology in modern fire safety management.

marketing@advancedco.com
www.advancedco.com/product-attributes/cpd-the-evolution-of-smart-fire-system-management

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

CPD FOCUS

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

THREE STELRAD CPDS UPGRADED AND APPROVED BY CIBSE



Leading radiator manufacturer **Stelrad Radiators** has long lead the way in the provision of training and sharing knowledge via continuing professional development courses about every aspect of the use and specification of radiators on heating systems. You can now learn about the latest developments in radiators, from these upgraded CPD training sessions led by a Stelrad expert. Each one-hour training session counts towards your annual CPD requirement and can be arranged for you on a one-to-one or group basis at your practice, at a time to suit you, either face-to-face or via Teams. The original three CPDs offered have now been superseded by three new 1-hour courses – Space Heating with Radiators, Decarbonisation with Radiators and Low Surface Temperature Radiators – updated to meet CIBSE's high technical standards, offering meaningful learning outcomes reflecting the latest legislation. They are designed to meet Stelrad's evolving customer needs ensuring that the content remains both relevant and impactful. "We've just received approval from CIBSE for these three new CPDs and we're ready to begin offering these to interested parties up and down the country," says Sarah Baker, Stelrad's Marketing Communications Manager.

01709 578 950 marketing@stelrad.com

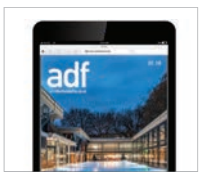
RENOLIT ALKORPLAN CPD COURSES



Develop your expertise in roofing with **RENOLIT** CPD courses designed for architects, specifiers, and construction professionals looking to strengthen their technical knowledge and stay up to date with the latest developments in roofing. *'Single ply done differently'* is a general overview of the company and history, its range of single ply membranes and services. RENOLIT also discusses the benefits of single ply. *'Let's go green'* is a more focused CPD covering a range of green roof products, build ups and designs. RENOLIT explains the use of green roofs and their benefits.

01670 718 283 renolit.alkorplan.com/uk/technical-support/training

CONVENIENT AND PAPER-FREE



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

www.architectsdatafile.co.uk/subscribe

NEWS FEATURE



The importance of floor levelling in ensuring a successful project

For specifiers in the commercial sector, the key benchmark for floor levelling is known as SR1. As defined by British Standards (BS 8204), this states that the level of a floor should not deviate by more than +/- 3 mm over a 2 metre length. In high-traffic commercial environments, such as hospitals, retail premises and office spaces, achieving this precise level of surface regularity, with the use of high quality levellers, is a structural necessity that directly impacts the longevity, aesthetics and safety of the final fit-out.

These commercial spaces are subject to increased operational demands compared to residential floors. Therefore preparing a subfloor to SR1 standard is essential for several key reasons:

- Large format porcelain tiles are increasingly used in modern commercial designs and their tolerance of surface irregularity is very low. If the subfloor has minor undulations, large format tiles, as well as LVT and other rigid floor types will bridge over hollows, leading to cracked tiles, popping joints and premature wear under heavy foot traffic.
- The prevention of adhesive failure is a key requirement. Uneven subfloors will cause uneven adhesive depth. Inconsistent contact will likely trigger localised bonding failures, leading to hollow-sounding floors or lifting materials that require costly business interruptions to repair.
- Elimination of trip hazards – in public and commercial spaces, height variance between adjoining tiles (known as lipping) can cause a significant legal and safety liability. SR1 compliance guarantees a perfectly seamless transition across the entire floor, ensuring adherence to strict accessibility and safety regulations.
- Visual aesthetics: high-intensity commercial lighting or oblique natural light from large windows will quickly expose subfloor imperfections. A floor laid to a lower standard, such as SR2 or SR3, will cast shadows over minor ridges, making the floor look poorly installed.

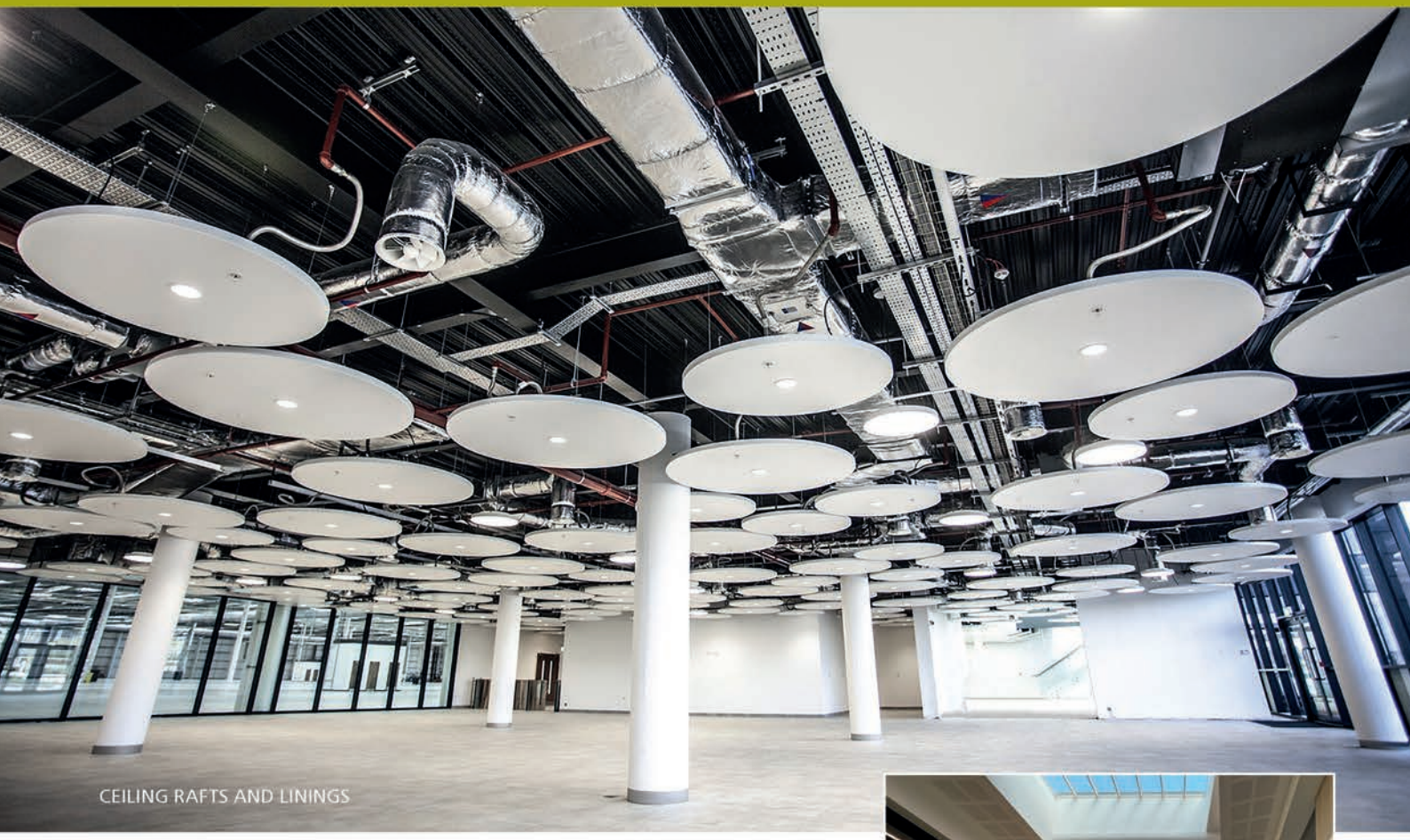
When it comes to subfloor preparation, the final floor covering is only ever as good as the substrate beneath it. Opting for cheaper, less precise levelling to save on initial handover times is a false economy. Subfloor irregularities are inevitably visible at the surface, and when subjected to commercial use, the floor will wear out that much quicker.

Rigorous enforcement of SR1 tolerances, which should be specified at building design stage, will enable commercial contractors to eliminate the root causes of flooring failure. Ultimately, investing in correct SR1 preparation ensures that commercial floors look flawless, perform safely and withstand the test of time.

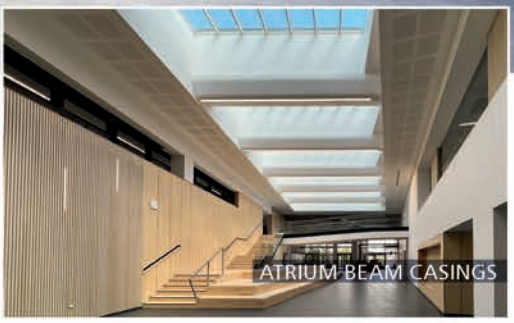
Supplied by Nick Bratt, national technical sales manager for Palace Chemicals

Form, fit & finish

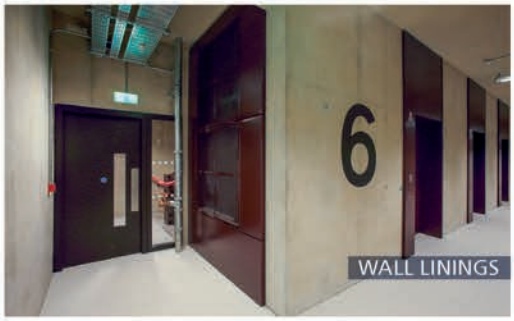
PENDOCK LINEA BUILDING LININGS



CEILING RAFTS AND LININGS



ATRIUM BEAM CASINGS



WALL LININGS

Pendock Linea building linings provide a comprehensive range of decorative architectural casings and finishing solutions for interior and exterior applications.

Bespoke manufactured and formed to meet individual project requirements, the Linea range can also be installed by our experienced teams to ensure the perfect fit and finish are achieved.

The Linea range includes:

Wall linings	Bulkheads & fascias	Lift reveals
Soffit linings	Rooflight linings & casings	Ceiling rafts
Parapet capping	Pilaster linings	Perimeter casings

Pendock Linea is part of our extensive casings, enclosures and decorative architectural products range, which combines aesthetics with practicality and design flexibility.

www.pendock.co.uk e: technical@pendock.co.uk t: 01952 580590

PENDOCK LINEA

BUILDING LININGS

Proctor Group supplies membrane products to Social Bite Villages

Scottish suppliers across the construction industry, including the Proctor Group, have provided support to a homelessness charity in creating new supported village communities. Social Bite engaged modular construction specialists Ecosystems Technologies to manufacture the living spaces for the sites. As part of the design and specification process, Proctor Group provided membrane products and accessories free of charge, to help deliver high-quality homes that enable residents to build confidence and find their feet again.

Such a commitment to sustainable materials and local supply chains is reflected in all of the company's material specifications, and is how they came to recommend the Proctor Group's membranes to Social Bite. "We use the Proctor Group's membranes pretty much as standard," noted Owen Young.

Proctor Group has supplied three different membranes to the project:



- Wraptite® UV, which combines properties of vapour permeability and airtightness in one self-adhering product, and is specifically designed for use behind open-jointed cladding. Applied externally, Wraptite UV acts as the main airtightness layer for the units.
- Procheck® Adapt is a variable-permeability vapour control layer which is capable of adapting to changes in humidity levels, becoming more resistant in winter and more permeable in summer. Applied to the units internally, it protects the fabric from potential condensation risks and is also an airtight barrier.
- Proctor Air® is an air and vapour permeable, highly water-resistant roofing underlay. Normally used on pitched roofs, in this case it was installed on the flat roofs to provide temporary protection and help to retain the wood fibre.

Find out more:
proctorgroup.com/products/wraptite-uv
proctorgroup.com/products/procheck-adapt
proctorgroup.com/products/proctor-air

01250 872 261
proctorgroup.com

Quantum Flooring Accessories launches External Performance Nosing Ramped



Quantum Flooring Accessories is proud to announce the launch of its latest high-performance stair nosings, designed to deliver superior safety, durability, and compliance in both internal and external environments. The EPNR-F and EPNR-R ranges provide a robust solution for areas of high and very high traffic, ensuring maximum slip resistance and enhanced visibility. The EPNR stair nosings are designed for a wide range of environments, including: motorway footbridges and railway stations; underground transport systems; airports, transport terminals, and commercial entrances; sports stadia, outdoor arenas, and shopping centres; heavy industry, food processing, water treatment, and military bases; prisons, police stations, and exposed or partially covered staircases. It complies with BS 8300 and Building Regulations; approved by Network Rail for strict performance and safety standards. The EPNR-F and EPNR-R stair nosings offer a reliable, high-quality solution for any environment where safety, durability, and compliance are critical. To request more product information or a sample please visit the website.

0161 627 4222 www.quantumprofilesystems.com/quantum-flooring-accessories

Senior Architectural Systems joins London's Building Centre



Senior Architectural Systems has returned to the Building Centre with a new permanent product stand that showcases the company's latest aluminium window, door and curtain wall systems. Located in central London, the Building Centre is a non-profit organisation dedicated to promoting innovation in the built environment and features a large exhibition area where leading manufacturers such as Senior showcase a selection of market-leading products. Positioned within the Building Centre's permanent product gallery, Senior's main stand provides architects and specifiers with a convenient way to view the company's latest aluminium window, door and curtain wall systems without the need to travel to its main showroom and manufacturing facilities in South Yorkshire. The manufacturer's stand features a curated selection of Senior's most innovative products, including its patented low U-value PURe® aluminium window and door range, slimline aluminium curtain wall systems and doors for both residential and commercial buildings. The dedicated display also highlights Senior's ongoing environmental and sustainability initiatives.

01709 772600 www.seniorarchitectural.co.uk

GEZE UK wins two awards at the National Fenestration Awards





GEZE UK celebrated a successful evening at the National Fenestration Awards 2026, taking home two awards recognising both product innovation and individual achievement. The company's MCRdrive hermetic sliding door system was named New Product of the Year, while GEZE's Hope Kendall received the Young Person of the Year award.

MCRdrive recognised for product innovation

The recognition for GEZE's MCRdrive hermetic sliding door system highlights the innovation and technical expertise behind a system designed to meet the demanding requirement of specialist environments, including operating theatres, intensive care units and research laboratories, where effective environmental control is essential.

The award recognises GEZE's commitment to developing innovative solutions that respond to the evolving needs of the built environment, combining specialist sealing performance, acoustic insulation and adaptable design.

Recognising and developing young talent

Our second win of the evening was for GEZE's Hope Kendall, who was named Young Person of the Year.

The award recognises the contribution of emerging talent within the fenestration sector and represents an important achievement for both Hope and the wider GEZE team.

At GEZE, investing in young people and creating opportunities for colleagues to develop their skills and careers are important parts of building a strong, knowledgeable workforce. Supporting young talent helps bring fresh perspectives into the industry while developing the expertise needed to meet its future challenges.

Hope's achievement reflects the value of recognising individual contributions and giving people the opportunity to grow and make their mark within the business.

Celebrating a double success

The double win builds on GEZE UK's success at the 2025 National Fenestration Awards, when the company received Fire Door Product of the Year for its Slimdrive EMD-F powered swing door drive system.

Kaz Spiewakowski, Managing Director at GEZE UK, said: "We're absolutely delighted to have won two awards at this year's National Fenestration Awards. The recognition for MCRdrive is a great endorsement of the innovation and engineering expertise that goes into developing our products, while Hope's achievement is something we're equally proud of. Both awards reflect different but equally important aspects of our business. We're committed to developing solutions that meet the changing needs of our customers, and to supporting the people whose talent, dedication and ideas help us move forward. Congratulations to Hope and everyone involved in bringing the MCRdrive to market."

GEZE

info.uk@geze.com/en www.geze.co.uk

Freefoam Building Products' EPDs enable transparent product specification

Three new Environmental Product Declaration's (EPDs) are announced for PVC rainwater systems and PVC & U-PVC roofline products.

Freefoam Building Products are delighted to announce the release of three Environmental Product Declaration's. Summary documents of the full EPD's are now available covering PVC Downpipes, PVC Gutter and PVC Fascia, Soffit and Window Trim ranges, giving the trade clear, concise access to verified environmental performance information for key roofline and rainwater products.

Three new summary documents are now available online containing key information and high-level data designed to give clear concise information to help building product distributors, installers, housebuilders, specifiers and contractors respond to the growing need for transparent sustainability data across the construction supply chain.

Each document presents key assessment results for 1kg of product. These summarise



product cradle-to-gate carbon footprint data, along with embodied carbon footprint data for the entire lifecycle of the product. Additional information on programme operator details, standards followed and the manufacturing scope are covered in each of the summary documents.

The products are manufactured in the United Kingdom and assessed using 2024 production data, with the declarations following ISO 14025:2006 and EN 15804:2012+A2:2019/AC:2021.

For Freefoam customers, the release provides an accessible route to product-level environmental information that can support specification decisions, tender responses and conversations around lower-carbon construction. The documents summarise Global Warming Potential and embodied carbon values for declared units of 1kg, helping the trade compare product categories using consistent assessment boundaries.

The summaries also set out the lifecycle modules covered, including raw materials, raw material transport to factory, manufacture, transport to site, construction, building use and maintenance, and end-of-life stages such as demolition, waste transport, recycling and disposal.

The full Environmental Product Declarations are available through The International EPD System, with additional product information available from Freefoam Building Products.

0800 00 29903 www.freefoam.com

Siderise reports another year of strong progress in its 2025 Sustainability Report



Siderise Group has published its third annual sustainability report, providing a transparent overview of progress against its ambitious targets and demonstrating how its rapid growth is being realised without compromising its commitment to protecting both people and planet. The report sets out the issues most material to the business and its stakeholders, aligned to its four ESG pillars: Planet, People, Product and Policy. Adam Turk, CEO of Siderise Group, commented: "Contributing to safer, more sustainable buildings is at the heart of what we do at Siderise and despite all of the macro and geopolitical challenges of 2025, our business has remained steadfastly committed to its ESG policy as we continue to expand globally. Our latest sustainability report demonstrates progress across every level of the business, with an unwavering commitment to safety, sustainability and putting our customers first. I'm proud of the progress our teams have made and the strong foundations we are building to deliver lasting value for our customers, colleagues and the wider communities that we impact." Read the report in full on the Siderise website.

01656 730 833 www.siderise.com/sustainability

Vent-Axia celebrates 90 years of innovation



Vent-Axia celebrated 90 years of British manufacturing and innovation on Thursday 15 October 2026, marking the milestone with a commemorative tree planting at Crawter's Brook People's Park in Manor Royal, Crawley, close to its headquarters. To honour the occasion, a Fastigiate Oak was planted by the Vice Lord-Lieutenant of West Sussex, John Barclay, DL, as part of the anniversary celebrations. Vent-Axia's commitment to innovation continues today with a raft of award-winning ventilation solutions building on nine decades of British engineering expertise.

0344 856 0590 www.vent-axia.com

CCPI Assessment Mark for five product sets



Kingspan Insulated Panels and Euroclad Group are proud to share that five product sets have received the CCPI Mark, helping to provide specifiers and end users with greater confidence that the product information supplied is clear, accurate, accessible, up-to-date and unambiguous. The product sets include the Multideck range and Steel Frame System (SFS), and the Eurobond mineral fibre wall panel range (Europanel, Rockspan, Rainspan and Firemaster) Rockspan Roof & Firemaster Ceiling.

www.panels.kingspan.com/en-gb www.cpicode.org.uk

Schlüter-Systems strengthens UK leadership team with appointment of Head of Sales

Schlüter-Systems Ltd, a market-leading provider of innovative tile and stone installation systems, is pleased to announce the appointment of Jamie Coxall as its new Head of Sales UK.

Jamie joins Schlüter-Systems with extensive experience in the construction sector, having held senior commercial roles with leading industry organisations. Throughout his career, he has built a strong reputation for developing high-performing sales teams, strengthening customer relationships and driving sustainable business growth across the UK market.

Jamie will be responsible for leading Schlüter-Systems' UK sales strategy, supporting the continued growth of the business and further strengthening relationships with distributors, installers, contractors and specifiers across the country. Bringing extensive experience from both the building materials and manufacturing industries, he offers a strong understanding of customer requirements, route-to-market strategies and market development, reinforcing Schlüter-Systems' commitment to investing in experienced leadership while continuing to provide exceptional support to its customers throughout the UK.

Commenting on his appointment, Jamie said: "I am delighted to be joining Schlüter-Systems. From my early conversations with the team, it was clear that this is a business with strong values, a genuine focus on supporting its customers and its people at the core of everything it does.

One message that really resonated with me during the interview process was that Schlüter products are not simply sold, they must be understood. That commitment to technical expertise, education and customer support says a great deal about the culture of the business. Since then, I continue to be impressed as I continue to learn more about the organisation, its people and the values that have shaped its success.

What excites me most is the opportunity to work with an experienced and talented team and help create an environment where people can continue to develop, challenge themselves and enjoy success together. I have always believed that great businesses are built by great people. I'm also looking forward to working with colleagues across the wider business. There is already a huge amount of knowledge, experience and passion within Schlüter, and my aim is to contribute wherever I can as we continue to build on the company's success, strengthen our position in the market and create even more value for our customers and partners."



Schlüter-Systems Ltd Managing Director, Joachim Backes, welcomed Jamie to the business: "We are delighted to welcome Jamie to Schlüter-Systems. His extensive experience within the construction sector, combined with his proven leadership capabilities, make him an excellent addition to our senior management team. Jamie's expertise will be invaluable as we continue to strengthen our position in the UK market, expand our customer relationships and support the long-term growth of the business. We look forward to seeing the positive impact he will make and are excited to have him join us on the next stage of our journey."

Jamie's appointment marks another significant step in Schlüter-Systems' growth strategy, reinforcing the company's commitment to delivering industry-leading products, technical services and customer support to our partners in the UK construction industry.

01530 813396 www.schluter.co.uk

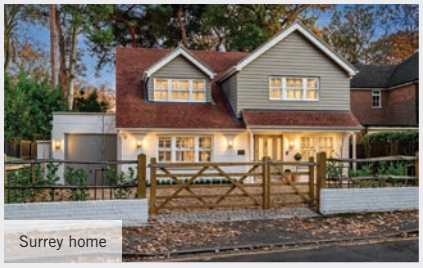
Cedral facades and vernacular architecture: reinterpreting tradition for contemporary homes

Architects can use Cedral cladding to create both new-build homes and renovations which combine the character and material traditions of the local area while meeting contemporary requirements of durability, comfort and maintenance. The result is an approach that respects the local heritage and context with the performance needed for today's living.

With its wood-effect finish, range of colours and varied installation profiles, Cedral facades allow architects to reference the scale and rhythm of timber boarding without relying on natural timber for the external cladding.

Cedral Lap is specially designed so the planks are overlapped, evoking traditional weatherboarding found in rural cottages, farmhouses and agricultural buildings. Cedral Click with its flush tongue-and-groove profile suits modern interpretations of vernacular architecture, especially when the boards are arranged vertically or used with minimal detailing. This can emphasise the height of a gabled house or give a rural form a contemporary look. Another approach in reinterpreting the vernacular is by using cladding selectively on upper floors, gable ends, rear elevations or new extensions.

Colour is one of the most effective ways to connect a contemporary cladding system to its vernacular context. Earthy browns and warm greys can reference weathered timber, agricultural buildings and rural palettes. Muted greens can help a house sit quietly within a wooded or planted setting. Off-whites and pale neutrals can reinterpret traditional painted weatherboarding. Dark grey and black can give a familiar house form a more contemporary identity particularly against stone, brick or natural timber. A darker palette can create a quiet, recessive building. Carefully proportioned windows and a simple roofline maintain a connection with the local building traditions.

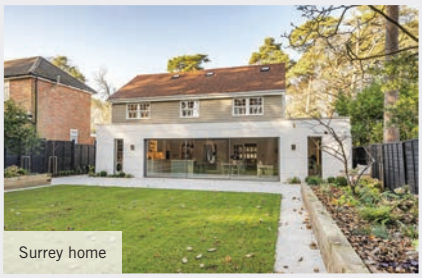


Surrey home

Below are some examples of vernacular-inspired homes with Cedral.

The New England clapboard look for a modern makeover

The renovation of a house in Surrey shows how the material can reinterpret a traditional residential aesthetic. The renovation uses horizontally installed Cedral Lap in Grey Brown alongside soft-shade render, drawing on the familiar appearance of New England clapboard houses.



Surrey home

Inspired by the clean lines and classic style of New England clapboard houses, the homeowners Emma and Matt chose Cedral facades to give their tired 1950's home a modern makeover that provides this aesthetic. They loved the wide range of Cedral colour options and chose the Grey Brown shade for a look that is natural and earthy. And, to complete the New England effect, they opted for lap fitting weatherboards.

Having researched the cladding market, the couple liked the longevity that Cedral offered. "We wanted something that would be hard-wearing and last for a long time," says Emma. "Wood needs a lot of maintenance, but Cedral had that wood-effect we liked so it's the best of both worlds – the look of wood but with low maintenance."

The horizontally installed Cedral Lap in Clay Brown paired with a soft shade render added a wow effect that has impressed the couple's 21,000 followers on Instagram. "I get asked a lot about the cladding we used when I share any exterior shots of the house," says Emma.



North-East Scotland home

A Contemporary Scottish Longhouse Designed for Modern Family Living

After living for ten years in a house that was built off plans, Tony and Nicola Fraser decided they wanted to create a property that they designed and reflected the way they lived. Set in the countryside of north-east Scotland, the couple purchased the plot next door and began designing a contemporary take on a traditional Scottish longhouse. They wanted to combine modern practicality with warmth, character and a strong connection to the outdoors.

Having worked in the construction industry for many years through their business Russell Construction Moray Ltd., the couple had gathered inspiration from countless renovations and self-build projects over time.

The resulting property combines clean architectural lines with natural textures and materials. On the exterior Black Cedral facades contrast with sandstone walls, while inside, vaulted ceilings, large expanses of glazing and an internal stone gable create a warm yet contemporary atmosphere.

"We loved the look and feel of it straight away," says Tony. "The black finish worked perfectly with the sandstone, and we also liked that it was low maintenance and built to last."

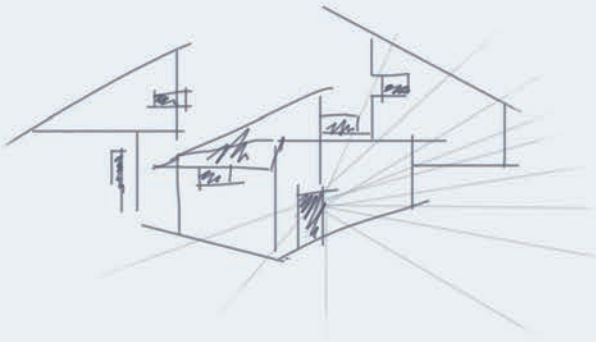
01283 501555 www.cedral.world



Low-maintenance but still reads premium – ideal for heavy weather exposure.



Contrast with brick adds proper weight + texture shift.





Dark finish to stand out against treeline.

BEGIN WITH THE PERFECT FINISH

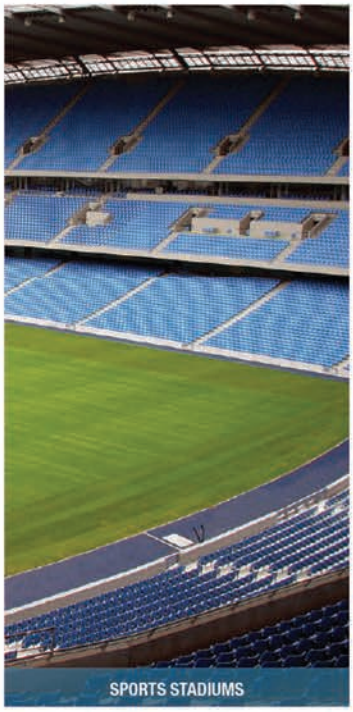
Cedral's durable, design-conscious cladding helps bring your vision to life from the first sketch. With specialist stockists across the UK, you can plan for that perfect finish long before ground's even been broken.

EXPLORE THE COLLECTIONS AT
WWW.CEDRAL.WORLD

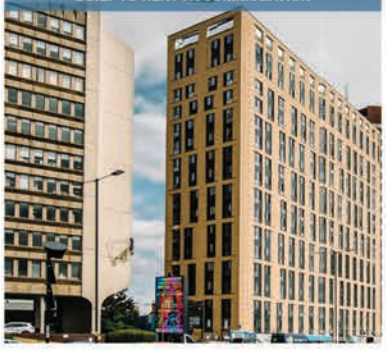
CEDRAL
by etex

PRECAST OFF-SITE BUILDING SOLUTIONS: MULTI-SECTOR


HOTELS / APARTMENT BUILDINGS


SPORTS STADIUMS


BUILT TO RENT ACCOMMODATION




MULTI STOREY CAR PARKS


CUSTODIAL BUILDINGS


STUDENT RESIDENCE



SCHOOLS / UNIVERSITIES

Byley 01606 843 500
Grantham 01476 562 277

Littleport 01353 861 416
Toomebridge 028 7965 0471

sales@fpmccann.co.uk
fpmccann.co.uk/offsite

Precast's leading role in MMC

Kieran Fields at FP McCann considers how precast-led MMC can unite fire resilience, thermal comfort and whole-life performance deliverables.



Modern methods of construction (MMC) are often promoted as a route to building faster. For architects, the more useful question is whether they can produce buildings that perform predictably over decades. Precast construction moves structure and envelope to controlled manufacture. Its value is not simply that work happens offsite. It is that the approach asks the project team to make decisions earlier, coordinate them more closely, and verify them more rigorously.

That shift matters as schemes face exacting expectations for safety, comfort, resource efficiency and programme certainty. Precast can include structural frames, crosswalls, floors, stairs, facade panels or insulated sandwich panels. It can form a complete system or be used selectively alongside other construction methods. In either case, it should be judged against the brief, site constraints and whole-life objectives rather than treated as a default substitute for traditional construction.

The architect's influence is greatest before production drawings are fixed. Structural grid, span, repetition, interfaces, lifting strategy, access, tolerances and service locations affect whether the benefits of manufacture can be realised. Early dialogue with the structural engineer, services engineer, fire specialist, contractor and precast manufacturer is fundamental. A coordinated digital model can make interfaces visible before they become site adjustments, while a clear responsibility matrix can protect design intent through manufacture, installation and handover.

Fire resilience is one of the clearest reasons to take this integrated approach. Standard concrete is classified as A1 non-combustible under BS EN 13501-1, subject to the composition of the product. Its slow transfer of heat and inherent resistance can form part of a robust strategy for structural stability and compartmentation. Yet material classification alone does not make a building safe. The required performance depends on the complete assembly: element thickness and reinforcement, connections, joints, cavity barriers, penetrations, fire stopping, facade interfaces, and installation quality.

Precast can make this level of control easier to plan, but it cannot remove the need for it. Architects should ask for a coherent line of evidence from design assumptions to tested or assessed details, manufacturing records and site inspection.

A coordinated digital model can make interfaces visible before they become site adjustments



Details should avoid reliance on late, difficult to inspect remedial work. This is especially important where structural and envelope components meet, or where services cross compartment lines. In projects in England, the design must also be considered within the applicable regulatory framework, including Approved Document B; it should never rely on a generic claim about a material.

The same whole-building thinking applies to environmental performance. Precast concrete has an embodied carbon impact that needs to be measured, reduced and reported through project-specific whole-life carbon assessment. There is no single low-carbon answer embedded in an offsite process. Architects can use early design stages to seek environmental product declarations, set limits or targets, examine cement replacement and reinforcement options, minimise unnecessary material and compare transport distances. Factory production can support repeatable mix control, accurate material ordering and reduced site waste, but those advantages should be evidenced rather than assumed.

Operational performance deserves equal attention. Concrete's thermal mass can absorb heat when internal temperatures rise and release it later as the space cools. When sufficient mass is exposed, and the building is correctly designed, it can moderate daily temperature swings and reduce peak heating and cooling loads. This may also help limit the size and cost of building services plant. However thermal mass is not a remedy for poor orientation, excessive glazing or inadequate solar control. It works best as part of a passive strategy that combines fabric performance, shading, ventilation, and controls, tested through dynamic thermal modelling.

The longer view is equally important. A durable structure can avoid premature replacement, while regular structural grids and considered connections can create adaptable floorplates and make future alterations more manageable. Designers should identify elements genuinely capable of reuse or disassembly and record this in the project information set. Where reuse is not viable, end-of-life recovery routes should still inform the specification. A design that is materially efficient, durable, adaptable and capable of repair has a stronger claim to sustainability than one assessed only at practical completion.

A recent precast example at the University of York illustrates the value of aligning those decisions. For the Heslington East student accommodation development, designed by Sheppard Robson, the team used a precast crosswall and insulated sandwich panel approach across 18 residential blocks. The components combined structural walls, floors, facades, stairs and landings, with the envelope design developed alongside the architecture rather than appended at the end.

The project is not a template to be copied wholesale. Its relevance lies in the questions it demonstrates: how can a repeated building type retain architectural character; how can the envelope, structure and services be coordinated before manufacture; and how can a system support predictable assembly without simplifying design ambition? For projects with comparable repetition, constrained sites or demanding programmes, those questions are worth addressing at concept stage, not after planning or tender.

MMC should therefore be understood as much a design discipline as a construction method. Precast offers architects a way to bring fire resilience, thermal comfort, buildability, and whole-life carbon into the same early conversation. Its potential is realised when the team treats the system as integrated performance commitments, evidenced through design, manufacture and use, rather than as components ordered late in the process.

Kieran Fields is director of business development & marketing at FP McCann & vice chair of MPA Precast

Wernick®
BUILDINGS

Your trusted modular partner



CONTACT US TODAY

0800 18 18 22 | www.wernick.co.uk

buildings@wernick.co.uk

Register your interest for a factory tour and CPD presentation

Proshield®

Stick with the Membrane Pros

Airtight by Design.

Simplifies airtightness. Releases moisture vapour.

Meet the growing demand for enhanced **thermal performance** in modular and high-rise construction with the use of proven airtight solutions.

KIWA-certified, self-adhesive and vapour-permeable, **Proshield®** helps deliver a fully airtight building envelope, without trapping moisture.



Don & Low
MEMBER OF THRACE GROUP

Built on Tradition,
Driven by Innovation
Since 1792

donlow.co.uk

Early-stage project planning quicker & simpler with new system calculator



Ecological Building Systems has launched its new online System Calculator, designed to make early-stage project planning quicker, simpler and more accessible. Ecological's System Calculator guides users through a series of simple questions about the existing construction and the desired upgrade to build a complete wall, roof, floor or loft system rather than selecting individual products in isolation. As each answer is selected, the system automatically generates a specification tailored to the selected project requirements, including the estimated material quantities, costs and the achievable U-value. Users can then adjust their answers to instantly compare how different options affect material quantities, costs and thermal performance, making it easy to explore the most suitable solution for their project. By combining material quantities, indicative costs and achievable U-values within a complete system specification, the System Calculator gives users greater confidence during the early planning stages. It enables different options to be explored and compared in minutes, making it easier to understand how individual choices influence overall system performance.

01228 711511 www.ecologicalbuildingsystems.com/system-calculator

BEWI supports cutting-edge ICF project



BEWI Thermomur® Insulating Concrete Formwork (ICF) Building System and BEWI Jackodur® Atlas Foundation System have made possible the construction of a new cutting-edge energy-efficient home in Berkshire. Called Swallowbrook, the project, which was in the past shortlisted for the BuildIt Awards, comprised the stunning transformation of a 1960s bungalow into a superb and unique family home of 418sq m internal area. BEWI Thermomur® 350 Super ensures an outstanding thermal performance (with a U-value of 0.15W/m²K) and also enables a fast and efficient build. It was used on this project in conjunction with the BEWI Jackodur® Atlas Foundation System, which features an innovative interlocking design to eliminate thermal bridging and ensure superior insulation, combined with stability for the foundation slab. The BEWI high density cavity closure product was also used on all four sides of every external door or window opening. The result is a building with a total construction cost of just under £1m, which has an outstanding thermal and acoustic performance and highly insulated structural walls and floors.

0870 600 3666 bewi.com/products/thermomur?lang=en-gb

Sustainable precast concrete solution



FP McCann's Structural Precast Concrete Frame division is delivering an innovative off-site construction solution for the new Overstone Gate Primary School in Northampton. The precast concrete frame system, incorporating hollowcore floors, insulated sandwich panels and architectural features, supports the school's operational carbon reduction targets while accelerating construction. Manufactured off-site using Modern Methods of Construction (MMC), the system offers enhanced quality, programme certainty, reduced waste and improved site safety, helping create a sustainable educational facility.

sales@fpmccann.co.uk fpmccann.co.uk

New Thin Leading Edge Tile Vent



Hambleside Danelaw has expanded its roof ventilation range with the Danelaw Thin Leading Edge Tile Vent (TV10/12), compatible with most large-format thin leading-edge tile types. The vent is suitable for roof pitches down to 17.5° and a maximum headlap of 120 mm. Manufactured from polypropylene, the vent back box contains up to 70% recycled PP. Suitable for new-build and refurbishment projects, the TV10/12 replaces a single thin leading-edge tile and can be used for soil pipe ventilation and mechanical extraction. The vent provides a ventilation airflow area of 10,000 mm² (with pipe spigot removed).

01327 701910 sales@hambleside-danelaw.co.uk

TORMAX revolving door completes premium entrance at 175 Putney



TORMAX UK Ltd was contracted to install a three-wing, fully automatic T5 Classic revolving door at the main entrance of 175 Putney, a premium office development in central London. Drawing on more than 60 years' experience in door automation, TORMAX continues to develop technologically advanced systems designed to deliver reliable operation, safety and long service life. Combining elegant architectural styling with dependable performance, the TORMAX T5 Classic is engineered for demanding pedestrian environments. Capable of accommodating door diameters from 1.6m to 7.4m, the system is available with two, three or four leaves. Its drive is seamlessly integrated into the roof system, creating a clean, unobtrusive aesthetic, while features including mechanical break-out provide additional safety for escape and rescue routes. As a revolving door, it helps reduce heat loss in winter and heat gain in summer, supporting the building's wider energy-efficiency objectives. TORMAX systems are precision-engineered for reliability, combining dependable operation with efficient performance and robust construction.

sales@tormax.co.uk

Proctor Group supports developer to implement Passivhaus standards



Pipers Square in Charlestown, Dublin is one of four projects currently under construction by Cairn, Ireland's largest house builder. Pipers Square represents the company's first foray into delivering residential accommodation to the Passivhaus standard. Over 1,700 units are expected to be delivered by the first half of 2026, with some 600 units of those ready to occupy at Pipers Square by the end of 2025.

The Proctor Group's external air barrier, Wraptite®, is part of the external wall specification at Pipers Square. In addition, the Group's technical services team assisted Cairn with U-value calculations, and a condensation risk analysis to explore the effect of vapour permeable insulation.

Adapting existing specifications to meet the Passivhaus standard

The site was acquired with planning permission for a scheme that was never designed with the standard in mind. A feasibility study carried out by Cairn, looking at what they would need to do over and above a 'nearly zero energy' specification, allowed them to make the commitment to Passivhaus. As reported in Passive House+ magazine, the study found that "Cairn's quality assurance focus and approach to meeting the nearly zero energy building standard required under Irish building regulations made passive house surprisingly attainable."

Wraptite is a Passivhaus-certified component, reinforcing its credentials as a high-quality product suitable for use in Passivhaus buildings. That it was already part of the external wall specification serves to demonstrate the existing 'quality assurance focus' of Cairn Homes.

Installing Wraptite at Pipers Square

Installation of Wraptite at Pipers Square was the responsibility of specialist contractors Platt & Reilly Ltd. As a company they have plenty of experience of the product. Wraptite is an airtight and vapour permeable membrane with a W1 water penetration classification. It played a crucial role at Pipers Square in conjunction with an internal airtightness line.

The vapour permeability of Wraptite also allows the passage of moisture vapour and helps to eliminate any condensation risk in the wall. With the decision to adopt the Passivhaus standard, Cairn worked with the Proctor Group's technical services team to fully assess the external wall build-up for any moisture risks. They chose to explore several options for internal vapour control layers, including the possible effect of using a vapour variable membrane with the vapour permeable mineral wool insulation. A comprehensive condensation risk analysis, carried out using WUFI® software, showed the proposed build-up was not subject to any moisture risk due to condensation.

01250 872 261 proctorgroup.com/products/wraptite

Specify with Confidence: Yeoman Rainguard Rainwater Solutions

Every successful building begins with a well-resolved envelope, where even the most practical components contribute to the overall design. A carefully specified rainwater system does more than manage water: it can reinforce architectural intent, complement the elevation and deliver reliable, long-term performance.

Yeoman Rainguard gives architects the freedom to specify rainwater solutions around the needs of each project. Its extensive range includes aluminium and GRP gutters, downpipes and hoppers, alongside fascia, soffit, coping and anti-climb products. Multiple profiles, capacities and configurations make it easier to find an appropriate solution for contemporary developments, refurbishment schemes and character-sensitive buildings.

Design flexibility extends to colour. Products are available in more than 50 colours, with colour-matching options from recognised ranges including RAL, Dulux,



Little Greene and Farrow & Ball. Whether the aim is to coordinate with facades and rooflines or introduce a carefully considered contrast, Yeoman Rainguard helps rainwater systems become part of the architectural language rather than an afterthought.

Specification support is available from the earliest design stages. Architects can access technical specifications, fixing instructions, maintenance guidance and practical help choosing the right system. Where additional assistance is required, the Yeoman Rainguard team can review architectural drawings, produce a product take-off and provide an itemised quotation. Free site surveys are also available, helping turn design intent into a coordinated, buildable solution.

With options for high-capacity drainage, economical installations and bespoke project requirements, the range combines practical performance with visual choice. Installation advice and access to Yeoman Rainguard's own team and approved installers provide further support through delivery. This joined-up approach can simplify procurement, improve coordination and give project teams greater confidence from initial specification through manufacture, delivery and installation.

For your next project, specify a rainwater system designed to perform, complement and endure. Speak to Yeoman Rainguard early and give every elevation the complete solution it deserves.

0113 279 5854 www.rainguard.co.uk

fpmccann

PRECAST OFF-SITE BUILDING SOLUTION:

HOTELS/APARTMENTS

BUILD-TO-RENT

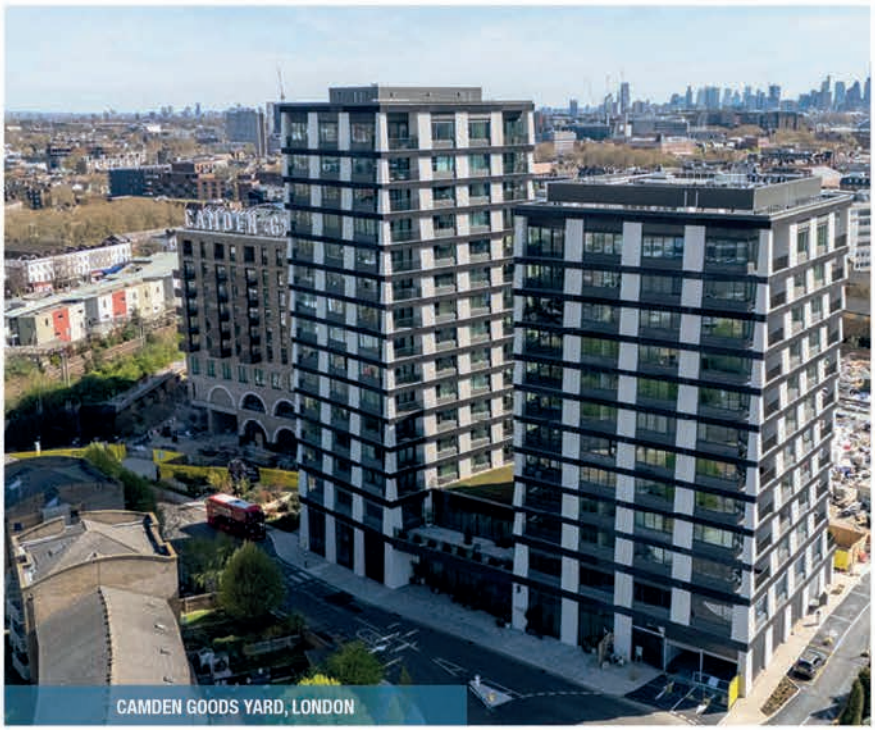
SPORTS STADIUMS

EDUCATION

MULTI STOREY CAR PARKS

STUDENT RESIDENCE

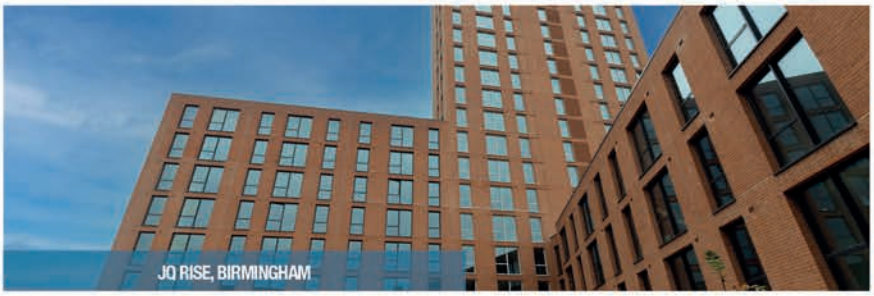
CUSTODIAL BUILDINGS


CAMDEN GOODS YARD, LONDON


GREENWICH PENINSULA, LONDON


PARK MODERN, LONDON


WOODBERRY DOWN, LONDON


JQ RISE, BIRMINGHAM


EBURY BRIDGE, LONDON

Byley 01606 843 500
Grantham 01476 562 277

Littleport 01353 861 416
Toomebridge 028 7965 0471

sales@fpmccann.co.uk
fpmccann.co.uk/offsite

BEWI supports renewed ICF push with new UK manufacturing capability



Jean-Marc Bouvier, Head of BEWI's UK ICF Business



James Mead, Steve Broadhurst, Charles Rhodes, Ian Walker, Paul McDonald, John Cooper, Karl Eric Olesen, Michael Hailwood

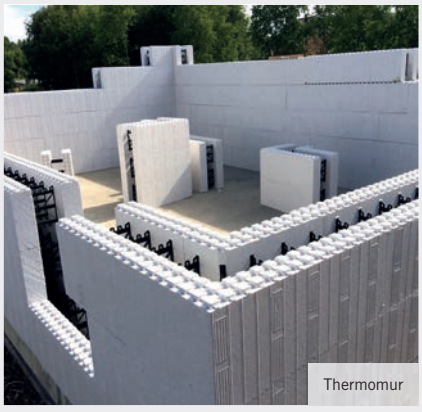
BEWI is announcing a major push into the growing Insulated Concrete Formwork (ICF) market in the UK.

As increasing attention turns to improving the thermal efficiency of the UK housing stock, ICF which offers massive benefits in terms of improved thermal insulation, reduced heat loss, better acoustic performance, ease and speed of build and many other benefits, is now viewed as an excellent construction solution for many housing projects.

Early October saw an exciting development at BEWI with the opening of a new production line dedicated to ICF manufacture at Ford in Hampshire. This new capability allows the company to manufacture Thermomur® ICF blocks in the UK for the first time, enabling it to respond rapidly and flexibly to growing customer demand for ICF building solutions.

"This is a fantastic milestone for the Ford team and an important step in growing our ICF offering here in the UK. Starting production locally gives us the capability to support customers, whilst strengthening our manufacturing footprint. It's great to see the hard work of the team come together to make this happen, and I'm excited about the opportunities this creates," says John Cooper, Managing Director.

Coinciding with the opening of the new manufacturing facility, BEWI is also delighted to announce that it has appointed Jean-Marc Bouvier to head up the ICF business in the UK. Jean-Marc joins BEWI with an illustrious track record in the ICF sector, having previously worked for Nudura as Director of Sales & Business Development. In that role he was single-handedly responsible for developing multiple overseas markets for the brand, including the UK. He has also worked for ICF Build Ireland, Tremco and, most recently, Ecowall ICF. Along with Technical Director, Stephen Broadhurst, Jean-Marc will be responsible for further developing the ICF business in the UK, supported by the additional capacity, made possible by the new Ford manufacturing line.



Thermomur

The team will also be supported by a dedicated new website which has gone live this month. The new page www.bewi-icf.co.uk provides an overview of the company's Thermomur® ICF product range, as well as case studies, testimonials and full technical information, complete with links to downloads of technical documentation about the products. The site is designed to provide information for all users of the Thermomur® range, whether self builders, architects, developers or contractors.

"This is an exciting time in my career to be joining BEWI, as I worked with Nudura for 20 years, and have been in the industry since 1990," says Jean-Marc Bouvier. "With the current investment in manufacturing and marketing support, the company's aspirations for the UK market are clear for all to see and I am delighted to be part of this new ICF campaign. I look forward to speaking to customers old and new, and no doubt renewing some acquaintances from my own past roles in this industry!"

0870 600 3666
www.bewi.com/uk

Pick your perfect partner.



Whether you want your grout to fade into the background or make a statement that can't be ignored, you're sure to find the perfect match among the 50 shades in Kerakoll's Fugabella Color range.

Contrast or coordinate the choice is yours. Secure in the knowledge that the grout is safe, reliable, and that the deep, even colours will stand the test of time.

Scan the QR Code to book our RIBA-Approved CPD on tiling installation and receive complimentary Fugabella Color samples.

Colour. With Purpose.

kerakoll

Crittall steelwork to take centre stage at historic Ibex House

Crittall Windows has secured a major contract to supply 2,600 individual window frames for the transformation of London's Grade II-listed Ibex House into a landmark hotel.

Crittall's W20 windows will feature throughout the historic Art Deco building, including large ribbon windows with curved elements and horizontal glazing bars designed to complement the distinctive character of the original architecture.



Located on The Minories in the City of London, Ibex House is being transformed from a vacant office building into a 382-room hotel by developer and operator Dominus, in partnership with alternative investment manager Cheyne Capital. Studio Moren is leading the design, with the scheme retaining 100% of the building's substructure and 90% of its superstructure.

The ambitious project will also introduce more than 50,000 sq ft of public space, including a conference centre and ballroom, alongside a new café and the restoration of the historic Peacock pub.

For Crittall, the project is a major commission that brings its steel window expertise to a building where the preservation of architectural character is central to its transformation.

Russell Ager, Managing Director at Crittall Windows, said: "Ibex House is a remarkable example of Art Deco architecture and we're delighted to be part of its transformation.



Supplying 2,600 individual frames makes this a substantial project for Crittall, but what really matters is the opportunity to help retain the character that makes this building so distinctive.

"W20 is an excellent fit for a project where heritage and modern hotel use have to work together."

The completed hotel is expected to open in late 2028 and will be operated by Dominus. The development is also set to create more than 160 jobs, with a hospitality academy providing training and employment pathways for local people.

sales@crittall-windows.co.uk
www.crittall-windows.co.uk



SPECIFY WITH CONFIDENCE.

Compatible roofing specification you can rely on.

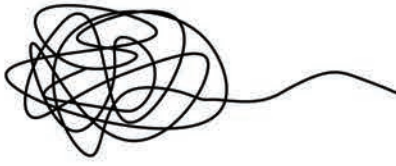


Roofing specification requires clarity, compatibility and confidence, from early design through to delivery.

With Marley's new and improved online Technical Tools, you can create compatible NBS, Fixing Specifications, Estimates and Integrated Solar designs, all built around complete Marley Roof and Solar systems.

Reassurance, traceability and consistency throughout the project lifecycle.

Scan the QR code or visit marley.co.uk/technicaltools



Built to take the complexity out of Roofing Specification.

One suite of integrated tools.
marley.co.uk/technicaltools

Marley

THE FACADE HUB 2027

UNDERSTANDING TODAY'S FAÇADE CHALLENGES

FACADE HUB
2027 | BUILDING CONFIDENCE IN FACADES

The façade industry is facing increasing scrutiny, evolving regulations and growing project complexity. Success depends on access to trusted information, practical guidance and collaboration across the supply chain.

Now in its third year, Facade HUB brings together leading voices from across the industry to share expertise, evidence and real-world experience, helping you make informed decisions at every stage of a project.







DATE	Thursday 18 February 2027
VENUE	The Building Centre, 26 Store Street, London WC1E 7BT
FORMAT	Keynotes, technical talks, networking, refreshments, lunch and a drinks reception at the end of the day
AUDIENCE	Architects, Planners, Principal Contractors and Installers
COST	Free to attend - registration required



REGISTRATION NOW OPEN:
www.valcan.co.uk/facade-hub

VALCAN
The Defining Standard

SPONSORED BY:

SIDERISE integrity in all we do

HOUSING ASSOCIATION MAGAZINE

CONSORT

rci ROOFING CLADDING & INSULATION

For sponsor or speaking opportunities, contact **claire.gould@valcan.co.uk** or call **01278 428 245**



Pyroguard expands fire-rated facade portfolio

Pyroguard has launched a new range of spandrel panels, expanding its portfolio of high-performance facade glazing products and giving the UK projects market access to a more comprehensive fire-rated facade offering from a single supplier. The new range provides an A2 reaction-to-fire, non-flammable solution for applications where fully fire-resistant spandrel panels are not required. The launch gives facade designers greater flexibility, enabling them to coordinate aesthetic requirements with the necessary performance criteria. Manufactured in the UK, the spandrel panels are available as single gel-filled laminates or as DGU (double glazed units) in a 'shadow box' style for enhanced aesthetics. They are available in three standard colours: white, anthracite grey and black, with other RAL colours available on request. The panels can also incorporate Low-E glass technology to support improved thermal performance requirements.

01942 710 720 www.pyroguard.eu

Marlon Toploc Panel Glazing System



Designed for pitched and curved canopy roofing applications, **Brett Martin**'s Marlon Toploc panel glazing system is a high-performance solution. Engineered with installers and specifiers in mind, the product offers a streamlined installation process, alongside reliable weather resistance, helping to ensure consistent performance. The system is suitable for cold curving on-site for added design flexibility, making it a popular option for sports venues.

024 7660 2022 www.brettmartin.com/marlontoploc

Top of the class at letting light in



Nelson Place has utilised **Brett Martin**'s Glass Link rooflight system above one of the building's atriums. The rooflight has introduced high levels of natural daylight, a key design requirement, that has played a fundamental role in enhancing student wellbeing, boosting concentration and supporting the project's wider goal of creating healthy environments for learning and living. Nelson Place is winner of Commercial Development of the Year at the Belfast Telegraph Property Awards 2024 and recipient of a highly commended recognition in the Property Week Student Accommodation Awards in December 2025.

024 7660 2022 www.brettmartin.com



SIEGENIA
brings spaces to life



The first window that opens up the space.

Maximum opening width, maximum open space: The new TITAN axxent 180° concealed hinge side.

The new hinge side impresses from every perspective – invisible when the window's closed, unmistakable when it's open. Because the maximum opening width of 180° and the stable sash position turn an open window into an open space. It is also impressive from the point of view of production, which consistently relies on well-established processes. From the simple installation technology to the optimally accessible 3D pressure adjustment. Find out more at: **www.siegenia.com**

360° room comfort



The hard facts on hardware for glass-focused homes

As windows and doors get bigger and heavier, the quality of the hardware is more important than ever. Joe Ward at SIEGENIA discusses the key trends and points to consider when choosing opening systems for 'glass-led' residential projects.

Designs in commercial and increasingly in residential buildings are geared towards bringing the outdoors in. Large glass ratios have been the dominant aesthetic choice for a while, be it for windows or doors. In terms of patio doors, for instance, although bifold doors have certainly experienced a boom due to their qualities of blurring the lines between indoors and outdoors, sliding doors still make up the bulk of the patio market, and sliding and French doors continue to be the most commonly specified for new build apartments according to the latest Barbour ABI market report. This increase in glass size is usually paired with a desire for slimmer frames in order to maximise the aesthetic.

The pairing of larger, heavier glass and slimmer profiles naturally puts a strain on the hardware. Therefore, these often-overlooked small parts become even more critical. Whether it is for larger tilt-and-turn windows in a commercial or high-rise building, larger French doors for apartments or imposing sliding doors with slim frames for high-end homes, the hardware needs to be able to bear the additional load while still fulfilling the expected durability, security, safety and usability requirements.

Do we have to sacrifice performance for aesthetics?

It might be presumed that a trade-off needs to be made when implementing striking glass heavy designs. Perhaps the intruder resistance or service life will suffer. However, that should no longer be the case. For instance, quality tilt-and-turn window systems that carry up to 150 kg are now available that are still PAS24-compliant and keep their extremely long service life,



successfully achieving testing to 20,000 cycles. There are also now sliding door systems available that can be used on total door widths up to 19.8 m and weights up to 500 kg while also maintaining the highest durability class H3 (EN 13126) at 20,000 cycles. It is therefore worth keeping in mind that not all systems are made equal, and that a considered choice can make all the difference when it comes to these elements of the building.

A considered choice can make all the difference when it comes to these elements of the building

Hardware's role in ensuring the right window or door system

Regardless of the aesthetic requirements of the project the hardware component is crucial in ensuring the selected window and door systems deliver a number of vital considerations for the building's



overall performance. Security and safety are probably the most obvious factors that hardware influences. PAS24 and childproofing requirements are naturally important when selecting systems that are suitable and compliant for the purpose. Other usage considerations may be disabled access, such as zero-threshold options, low handle heights or motorised systems, as well as functions such as panic or emergency egress. However, there are other factors where hardware might not be the first component that springs to mind, but where it can have a massive impact.

As well as supporting the aesthetic vision by enabling larger sashes and slimmer frames, the right hardware can advance the look even further by being unobtrusive in and of itself, or even completely concealed. The slickest building design could be undermined by bulky, unattractive hinges, when concealed options may well be available offering the same level of performance. Another topic that is gaining ever greater significance is that of ventilation and cooling. Overheating is becoming a real concern, and while the first considerations would probably be air conditioning systems, taking time to consider different opening systems can reap rewards in terms of the comfort of the users or inhabitants. Windows or doors that allow for secure tilt opening or a night vent position will alleviate some of the discomfort that can be caused by the airtightness of modern buildings. The main takeaway is that comfort does not have to compromise on quality, durability or usability if the systems in place are built upon the right hardware foundations.

And such considerations do not need to cause complications for your fabricators. Systems are available whereby the same hardware components can be used across a variety of applications, sizes and materials. This means bespoke-feeling products can be offered with minimal stock, training, or variations in process and machinery. A further advantage of this is that the fabricator can futureproof their offering. With hardware systems that can service a wide range of applications, their portfolio can adapt quickly and easily to new trends, regulations and requirements.

The triple-glazed future?

Indeed, one such change that is on the horizon is the move towards triple glazing. U-value targets and the tightening up of their measurements in the new Future Homes and Buildings Standard could effectively push through an uptake in triple glazing to achieve these figures. Much like the trend towards larger glazed areas requiring a stronger foundation, so too will the increased weight of triple-glazed units. And so, again, we come back to the bedrock of it all: a quality, durable hardware system. Therefore, having that experience of using hardware configurations that can bear heavier loads means there is one less complication when fabricators come to incorporating or ramping up their triple-glazed solutions, and specifiers can have the confidence of knowing their partners are knowledgeable and capable of supplying compliant products.

Joe Ward is technical manager at SIEGENIA

ZENON®
OPTIMUM

ZENON®
PREMIER

Hambleside Danelaw
Building Products



Download

NON-FRAGILITY

Learn more about non-fragility of rooflights in our brochure

Proctor Air® preserves heritage of traditional roof

Modern 'breathable' membranes allow moisture vapour to pass out of the roof space. As an air permeable and low resistance (APLR) underlay, Proctor Air® also allows air to pass through it, ensuring air movement in the roof at the same time.



Air movement is essential for preventing potential condensation risk in roof structures, but usually requires ventilation products to be installed at the eaves and/or ridge. This is a problem on heritage projects and listed buildings, as modern ventilation products risk spoiling the traditional appearance.

Built in 1869, St Peter and St Paul Church is a valuable heritage asset to the village of Bessbrook, south Armagh. Extensive restoration work was carried out in the 1950s, but a condition report in 2017 revealed the building was suffering from serious issues and required major conservation works.

To maintain the traditional appearance of the building and its roof finish, architects Consarc Conservation specified a roof build-up that included Proctor Air.

Air permeability is particularly useful on a project like St Peter and St Paul Church, where insulation improvements were also made to the roof. New insulation can be installed in the roof to be as effective as possible, without worrying about whether it is blocking eaves vents.



Overall, Proctor Air has made it possible to blend tradition and performance in the same roof restoration, supporting the conservation of heritage while making sure that St Peter and St Paul Church can serve its community for many more years.

01250 872 261
proctorgroup.com/products/proctor-air

AIM cavity barriers win fire safety role in stunning zinc theatre facade

Reading's Hexagon Theatre is being transformed by a scheme that will add to its facilities and give the 70's theatre a dramatic, contemporary look. Behind the scenes, Acoustic Insulation Manufacturing's (AIM) cavity barriers will perform a key role by preventing the passage of heat, flame and smoke within the stunning, new decorative zinc rainscreen in the event of a fire.

Ahead of the Hexagon's 50th anniversary in 2027, Reading Borough Council has commissioned Feltham Construction to deliver the project designed by Haworth Tompkins. In conjunction with SIG Hard Metals, specialist insulation manufacturer AIM has supplied facade installer Kingsley Hard Metals with Wall Cavity Barriers and Open State Cavity Barriers.

Kingsley Hard Metals is fitting the distinctive zinc brise soleil skin, which has been fabricated by partners Belfry Facade Systems. AIM's cavity barriers are being fixed between the facade and the venue's timber

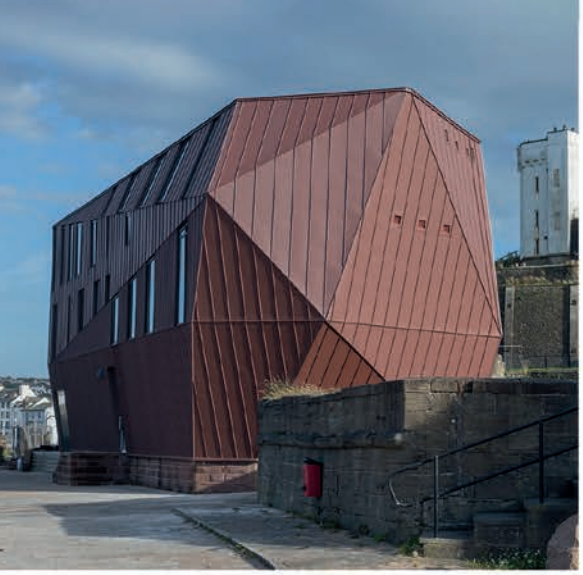


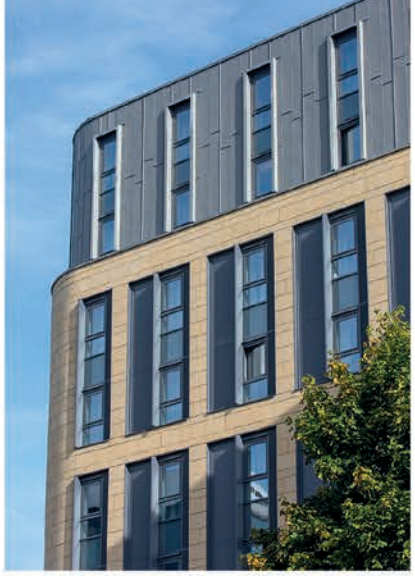
frame. Designed for use within rainscreens, AIM's Open State Cavity Barriers (OSCBs) allow the ventilation necessary within the building envelope. In the event of fire, heat activates the barriers' intumescent strip, which expands quickly to close the cavity. Tested to TGD 19 and the general principles of BS EN 1363-1, the OSCBs offer a fire rating of up to 120 minutes insulation and integrity.

The AIM Wall Cavity Barrier (Red Edition) also works to prevent the passage of heat, flame and smoke within the cavity providing up to 120-minute fire ratings to BS EN 1366-4. Used vertically and horizontally, they provide a fully closed cavity fire barrier along compartmentation lines in the outer leaf of the building. Earlier this year, AIM also supplied barriers for Kingsley Hard Metals facade installations at Bracton House, High Holborn, London, and for Stoke City training ground in summer 2025.

When complete in 2027, the extension of the Hexagon Theatre will provide a new 200-seat studio auditorium, flexible rehearsal space, community studio with workshop space and back of house space, along with improved public realm. The redevelopment is a central feature of Reading's wider Minster Quarter regeneration.

01293 582400 www.aimlimited.co.uk











Attractive roofs and walls for all styles of architecture

Rather than just painting metal, why not let the wonderful aesthetic of zinc shine through? Also, with 100 year service life, 100% recyclability and an A1 non combustibility rating with BROOFt4 certification, it does more than just look good.

Please contact us for samples and a RIBA accredited CPD on Zinc as a Building Envelope

VM Building Solutions
Phone : 01992 921 300
vmzinc.uk@vmbuildingsolutions.com
www.vmzinc.co.uk

VM BUILDING SOLUTIONS

VMZINC

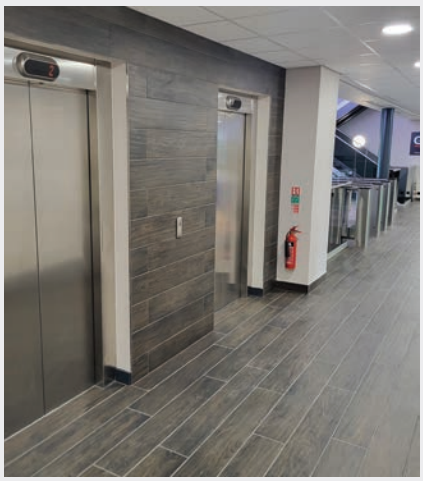
Birmingham office renovation – BAL AF Max

A prestigious office renovation in Birmingham has been completed with a full BAL solution – including BAL AF Max anti-fracture tile adhesive to remove the need for an uncoupling system.

Large format 1,500 x 200 mm porcelain plank tiles from Tiles UK (Leeds) were installed by Sutton Stone and Ceramics on a 300 m² walkway. The subfloor was a suspended Caber-Dek type board system, so to ensure structural rigidity, these were over-boarded by the main contractors with 280 sheets of BAL Board 12 mm boards glued and screwed to take out any deflection.

The porcelain tiles were installed using BAL AF Max – a high-strength, high-yield S2 anti-fracture tile adhesive.

As an 'all-in-one' anti-fracture system, BAL AF Max is an innovative technology designed to absorb the lateral stress from the substrate. This removes the need for expensive traditional technologies such as uncoupling mat systems, saving project costs, reducing labour time through removing the need for cutting and installing the mats and freeing up storage space needed for large rolls



of uncoupling mats. As a high yield product, one 17 kg bag can go up to 8.4 m² with a 10 mm x 10 mm notched trowel meaning only 4 bags are needed for 30m², compared to 10-11 bags of adhesive for a traditional 'tile adhesive – uncoupling mat – tile adhesive' system install. Extensive testing has revealed BAL AF Max provides a 40% lower-cost system, 70% faster installation time, and 70% less material weight than traditional uncoupling systems.

On this project 56 bags of AF Max were supplied by Tiles UK, which easily met the meterage required.

After the tiles were installed, they were grouted with BAL Micromax3 ECO water repellant and anti-microbial wall and floor grout in Anthracite, with movement and perimeter joints sealed with colour and texture-matched BAL Micromax Grout-Effect Sealant.

Talking about the project Garry Hughes from Sutton Stone and Ceramics said: "My team were very impressed with BAL AF Max, especially how nice and light it was in the bucket. The product went really far, was easy to spread and seemed to stick and bond to the tiles and BAL Boards really well."



01782 591100
www.bal-adhesives.com

FUHR supports Jack Aluminium heritage door development with PAS 24 locking solution



Carl F Groupco has supported a successful PAS 24 security test for Jack Aluminium's new SD70 heritage door system, working closely with the Jack Aluminium technical team and **FUHR** to provide a multipoint locking solution tailored to the requirements of the system. The project centred on the integration of FUHR's multisafe 856 lever-operated door lock, featuring four mushroom rollers with hardened steel cams. Its lever-operation functionality allows the option of standard or heritage style lever handles. The 65 mm backset door lock features serrations to allow for shootbolt extensions for taller doors or added security. FUHR supplied the gearing, product samples, fit-and-function support and 3D modelling files, allowing the hardware to be accurately demonstrated within the system. This gave all parties greater technical confidence ahead of testing and ensured the locking solution was fully aligned with the door design. PAS 24 testing was attended by both Carl F Groupco and FUHR, with Matt Brown and Paul Balfe providing additional technical support on site alongside the Jack Aluminium team to help ensure the locking solution performed as required.

pbalfe@fuhr.co.uk www.fuhr.de/en

A solution for every system



Kerakoll's range of grouts and silicones is made up of 2 ranges of grout and a range of silicone, all in 50 colours carefully selected to complement contemporary interiors. Fugabella Color is a resin-cement hybrid grout. It has performance values which exceed the British standard for cementitious grout, deep colours that won't fade over time, and is not subject to unsightly efflorescence. Fugalite Color is a resin grout suitable for demanding environments where performance is critical. It is certified food safe and can be safely used in all commercial and industrial settings including saunas and swimming pools.

Silicone Color develops a high degree of adhesion to non-absorbent surfaces and is perfect for use in pools, and other areas in permanent contact with water. All of which means that you can coordinate the grout and silicone with your tiles and the rest of your room confident that they will perform as required. Contact the specification team at Kerakoll UK Ltd for more details.

specification@kerakoll.co.uk kerakoll.co.uk

10-year warranty



Unique lateral water flow system so your feet are not in stagnant water

Biolex material

Cuttable tray

Easy installation

3 colours

Opulent and sleek, designed for luxury – Your perfect shower tray awaits

Transform your shower space with our brand new stylish and elegant Kinediva shower tray range

The Kinedo collection of shower trays offers a range of surfaces, colours, sizes and cuttable options to suit every bathroom. The Kinediva is added to our range of luxurious cuttable trays, bringing fresh new colours and a new sleek designer look.

Visit a Kinedo showroom or see our website to find out more.

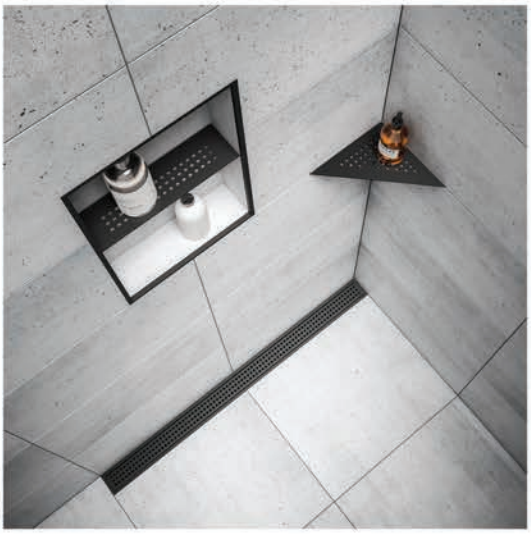
kinedo.co.uk

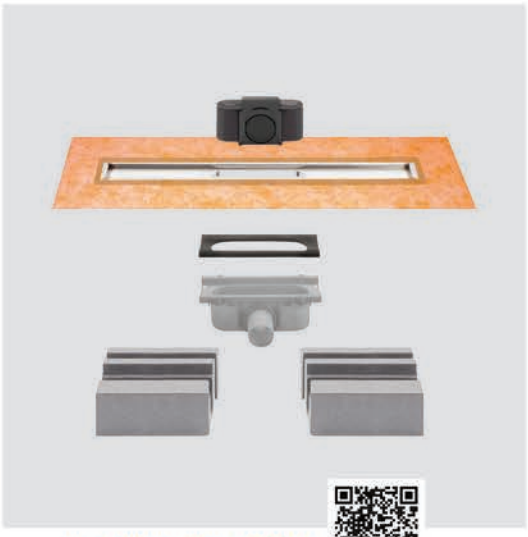
Kinedo | SFA Saniflo

Find us on NBS Source PARTNER

Low height system. **Highly luxurious.**







DID WE PIQUE YOUR INTEREST?

Schlüter®-KERDI-LINE-G3

Low height solutions for level access showers

It is essential that the bathroom products you choose work together to offer a reliable & long-lasting installation. This is why our solutions work best when used as part of a system. In addition, when it comes to service, you can rely on us to go above and beyond throughout your project.

It's the details that make the difference. schluter.co.uk

Schlüter® Systems

Getting commercial drainage right when space is tight

Erik Mul at ACO Building Drainage looks at the drainage issues that arise when high-use washrooms have limited space for installation, and how to solve them.

In gyms, spas and hotels, drainage has to fit around a lot besides the finished floor. A shallow floor build-up, restricted service voids or existing pipework can all make the job more difficult. There are demanding hygiene standards and sustainability targets to hit, while still being expected to deliver a finished space that looks the part.

Much of the drainage will be out of sight once the work is complete. That can make it easy to overlook during design. It is only when something goes wrong that its importance tends to become obvious; poor flow, blockages and unpleasant odours can all affect the way a washroom performs, and putting problems right afterwards can be expensive.

A further reason to get it right early is that in high-end hospitality, the end user experience matters hugely, so drainage problems can affect the business as well as satisfaction with the finished job. Considering the drainage at the outset gives the design more opportunity to work with the restrictions of the building instead of trying to accommodate them later.



Working within existing constraints

Refurbishments and retrofits can leave very little room for manoeuvre as floor build-ups may be low, service voids restricted and existing pipework can make routing more complicated. These are not reasons to accept poor drainage. Effective drainage should remain 'non-negotiable,' even where conditions make it harder to achieve. Good drainage is more achievable when architects have a strong understanding of the available options – be they solutions or approaches. The aesthetic requirements of a washroom need to be enabled by the drainage in place, rather than one of these aspects having to compromise so the other can be kept to a high standard.



Effective drainage should remain non-negotiable, even where conditions make it harder to achieve

The hydraulic demands can also change considerably in places such as gyms and hotels where levels of use fluctuate, significantly increasing the risk of pooling. That makes the way the system will perform under peak demand an important factor to be accounted for during design.

Making the installation adaptable

When space is tight, adaptability becomes more useful and low-profile systems can help where floor build-ups are limited. Flexible outlet configurations and modular components can reduce the need for extensive structural alterations.

There can be value in having some adjustment within the installation too, such as adjustable frames and different outlet orientations, which can make it easier to work with existing substrates and waterproofing systems.

For architects, this means looking beyond whether a drainage system will fit 'on paper.' The conditions for a refurbishment or retrofit are rarely the same from one project to another, so having some scope to adjust the installation can make a big difference.

Checking hydraulic performance

The starting point is the expected peak level of use. Channels and gullies need to have suitable flow rates for those conditions to help reduce the risk of standing water and ensure the drainage system can deal with periods of high demand.

Trap design and channel capacity also need to be considered, though neither should be viewed separately from the rest of the arrangement.

A component can perform as expected in isolation without necessarily giving an accurate picture of the complete drainage system. The channels, gullies, traps and other elements need to be considered as part of the same installation when assessing how it will perform.

Keeping maintenance practical

A washroom that sees high usage every day needs drainage that can be cleaned without unnecessary difficulty, so maintenance is another consideration for the specification stage.

Access is important here, particularly where routine cleaning needs to be carried out without specialist tools. The way debris is dealt with is worth planning for too; a design that limits build-up and makes routine cleaning straightforward can help operators maintain high hygiene standards without adding needless work to the maintenance schedule.

These practical points are easy to miss when the drainage will eventually be hidden beneath the finished washroom.

Bringing the requirements together

In a hotel, gym or other high-use commercial washroom, hydraulic performance is only part of the picture. The drainage also has to fit the available space, remain manageable to maintain, and support the aesthetic appearance of the finished room.

The broader point for architects is that these requirements do not need to be dealt with separately. Drainage can be considered alongside the rest of the washroom design from an early stage, when there is still scope to take account of floor build-up, existing conditions, hydraulic demand, maintenance and aesthetics.

Leaving it until later can mean working around decisions that have already been made. Considering it earlier gives the drainage a better chance of fitting the project, rather than the project having to fit around the drainage.

Erik Mul is technical product manager at ACO Building Drainage



DELABIE I DVS, expert in **water controls and sanitary ware for Public and Commercial Places**, is saving water and energy, without compromising product design, performance and sustainability.

More information at **delabie.co.uk**

PLATINUM Top 1%
ecovadis
Sustainability Rating
JUL 2026

30 YEAR
WARRANTY

Designing for whole-life safe water management

In healthcare and other managed-water environments, decisions made during design and specification can influence how easily water outlets can be effectively commissioned, inspected, isolated, tested, flushed, maintained and recommissioned throughout their service life.

For showers, that means considering more than immediate user safety and functionality. Access to services, suitable isolation points and provision for effective flushing all contribute to practical long-term water management.

Horne pre-plumbed shower panels bring these requirements together within a factory-assembled, pressure-tested unit. Because the pipework and service connections are already assembled within the panel, there is less on-site assembly and fewer wall penetrations – simplifying installation, coordination and future access. Accessible low-level servicing and isolation points support maintenance, sampling, pressure and temperature testing and performance verification, while also simplifying decommissioning and recommissioning when outlets are temporarily taken out of use.

Provision is made for elevated-velocity (EV) flushing. Unlike routine, or 'duty' flushing, which principally turns over and replaces stagnant water, EV flushing specifically increases shear forces at the internal pipe surfaces, helping to disturb, erode and mobilise accumulated material and biofilm from local pipework.

Where a further level of water-hygiene control is desired, Horne -T4 and -T9 shower models incorporate the patented In-line Thermal Disinfection Unit (ILTDU), enabling targeted thermal disinfection of the mixed-water pathway through to the outlet using the existing >60°C system hot-water supply.

These measures can be particularly valuable where occupancy fluctuates, or facilities experience periods of reduced use, temporary shutdown or seasonal closure.



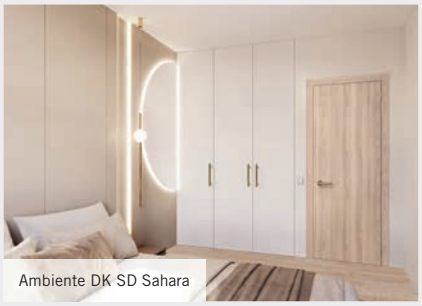
By incorporating access, ease of flushing and maintainability from the outset, shower specification can support effective water management from commissioning through long-term operation, temporary decommissioning and subsequent recommissioning.

Horne shower 'families' are available on NBS Source, where specifiers can access product information, detailed specification data and BIM objects.

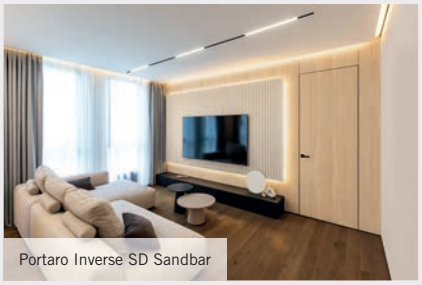
01505 321455 www.horne.co.uk
b.link/NBS_Horne



New Dekordor® SD brochure including refreshed Visual Sensations Finishes



Ambiente DK SD Sahara



Portaro Inverse SD Sandbar



Ambiente Portaro Lagoon

The beginning of the 21st century saw a great many fresh ideas across the UK construction industry, from the adoption of digital technologies to a wider recognition of sustainability and the importance of reducing carbon emissions. Both innovations, we might add, that were whole heartedly embraced and harnessed by Vicaima in the development of its products and services. However, alongside this forward-thinking approach, came the realisation that old habits in our industry are often difficult change, such as painting doors on-site, or the reluctance to consider complete door assemblies, rather than cobbling together a collection of disparate and non-compatible parts. The logic of cost-effective factory finishing or the long-term assurance provided by fully compliant door systems were still being ignored. Perhaps because it had always been done that way, or simply that the value of whole life costs were rarely discussed or that people to do a myriad of tasks on site, were always plentiful.

Fast-forward to the present day and we see Home Developers and Housing Associations who are far more enlightened and well informed about product specification and the impact it can have not only on its immediate use, but in terms of future maintenance and safety. Products, especially interior doors need to perform on so many levels. With high expectations from eventual property occupiers and tenants, the aesthetics must be in perfect harmony with their surroundings and in-tune with modern décor trends. Of course, an attractive appearance is only part of the story. Ever-increasing regulatory performance demands that doors must be made to exacting standards and with functionality appropriate to their setting and usage. Vicaima offers these solutions in the form of innovative interior doors designs, together with doorsets which are independently accredited and rigorously tested to comply with fire, security, acoustic and thermal requirements in some of the most demanding locations.

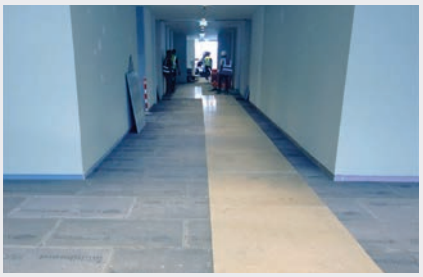
It was at the beginning of the new millennial, that Vicaima first launched its Dekordor® SD range of decorative foil faced interior timber doors. Offering a clean and consistent, flush pre-finished wood effect style, it captured the demand for an alternative to the ordinary, with simple yet reliable face finishes that required no further treatment on site. However, like all good ideas, it was given the opportunity to evolve, something that Vicaima, with its visionary commitment and serious investment is renown for. Today Vicaima has expanded and enhanced the exciting possibilities Dekordor® SD brings to interiors and entrance systems. With FSC certified sustainable and technically advanced manufacturing at the heart of door design.

Perhaps one of the most revolutionary finish options from the Dekordor SD range, is epitomised by the Visual Sensations (VS) collection. Utilizing high precision photographic technologies, doors are imaged during construction, to recreate authentic characteristics, which faithfully replicate a natural appearance. Now with the launch of its latest Dekordor SD brochure, Vicaima brings together this famous and ever-growing selection of foil finishes, into one compendium and at the same time extends its popular Visual Sensations range with the introduction of no less than four new woodgrain tones, including Sahara, Sandbar, Lagoon and Glade.

Available as doors or doorsets, Dekordor SD and Visual Sensations present a new generation of products for a new generation of specifiers. Find out more by visiting www.vicaima.com and download the brochure.

01793 532333
info@vicaima.com

Marmox Multiboard spreads the load for London wall fit-out



A nationally renowned flooring specialist is using Marmox Multiboard as part of a high-specification installation covering much of the 13th floor of Moor House, an architecturally striking commercial office building on London's historic London Wall.

Epping-based OSF is a family-run business serving commercial, residential and other sectors across the UK. For this project, its 40-strong workforce is working to a challenging timetable, with progress needing to be maximised without compromising appearance or long-term durability.

Following removal of the original carpet tiles, the raised access floor is being covered with 12.5 mm Multiboard to provide a suitable substrate for unusually large-format limestone tiles.

OSF MD and founder Ollie Scarfe comments: "We specialise in delivering high-specification flooring finishes for the construction industry, with a reputation built on quality and service. At Moor House we are providing the flooring package for the project developer, including carpet tiles in the offices, broadloom to the media rooms, vinyl in the kitchen and limestone in the boardroom.

"We are installing 1,200 x 1,200 mm, 20 mm-thick limestone tiles across 360 square metres after our proposals for the build-up were accepted by the project team. Although the company has been established for nearly 20 years, we have only been using Marmox Multiboard for the past 6-12 months, replacing plywood and a decoupling mat. This solution is quicker, equally effective and saves a lot of money. We now really only use Multiboard as the substrate for such situations."

A total of 445 1,200 x 600 mm Multiboard sheets were supplied through Pro Tiler Tools in Northampton. Installation is being carried out using approximately 150 tubes of Marmox MSP 360 adhesive, together with specialist galvanised steel washers to spread the load from the screw fixings. Marmox Multiboard comprises XPS encapsulated in reinforced polymer concrete and is available in a range of thicknesses. Fully waterproof, lightweight and easy to cut, it can withstand substantial loadings of up to 300kPa, equivalent to 30 tonnes per square metre.

Multiboard can be screw fixed using specialist plastic dowels or bonded using Marmox adhesive. It is widely used as a substrate for tiling in commercial and domestic applications, including wetrooms and swimming pools. Where a fully waterproof surface is required, joints are sealed using Marmox butyl-based waterproofing tape.

sales@marmox.co.uk www.marmox.co.uk

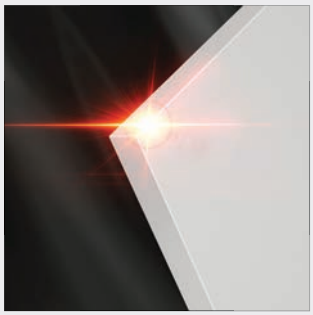
Avoid unseen problems in social housing flooring with Beauflor cushion vinyl



Social housing providers looking to reduce void costs, rent loss and turnover should consider the provision of **Beauflor** cushion vinyl flooring in all rooms. By providing floor coverings in all rooms of social housing, providers can achieve a reduction in void rent loss, a 50% reduction in void turnover and a £500 per property reduction in void costs, says the Longleigh Foundation report, *'The Provision of Floor Coverings in Social Housing'*. Yet, the same report also highlights that one-fifth of landlords still rip-out floor coverings for all new lets. The removal of existing floor coverings is often carried out because of concerns around health and hygiene, safety, and ongoing maintenance and responsibility. But with Beauflor cushion vinyl flooring, landlords and providers can alleviate many of these worries, ensuring the costs associated with voids are minimised. Because of its resilient sheet format, Beauflor cushion vinyl is a seamless, hygienic, and durable floor covering. Easy to maintain using household cleaning methods, it upholds its appearance throughout use and can be easily assessed for its condition and hygiene at end of tenancy.

info@beauflor.com www.beauflor.com/en/professionals/sectors/social-housing

New standards in movable wall design with Zero-Joint Technology



Style Group is bringing a new dimension to movable wall design with DORMA Hüppe's innovative Zero-Joint Technology, combining seamless aesthetics, lasting quality and independently verified low emissions. The technology creates a premium, seamless appearance, with panel surfaces and edges appearing as one continuous material. Advanced laser bonding eliminates the visible joint line associated with conventional edge banding, delivering a refined finish for contemporary architectural interiors. For long-term durability, all four edges of the cover panels are protected, helping prevent moisture ingress through exposed edges. Independently tested low VOC emissions, including formaldehyde levels approximately 95% below the new European limit, also make the panels particularly relevant for projects prioritising indoor air quality and sustainable building design, including BREEAM and LEED. "With Zero-Joint Technology, we combine precision manufacturing techniques with high-quality materials to deliver aesthetically sophisticated movable wall solutions that also contribute to indoor air quality targets." says Michael Porter, MD of Style Group Ltd.

www.style-group.co.uk/contact-us

From entrance to bathroom: Choosing the right flooring for every space.

Across the UK housing sector, evolving market demands are reshaping how residential interiors are designed and specified. Build-to-rent developments, affordable housing schemes and later living environments are all increasing the need for interiors that balance durability, operational efficiency and long-term performance with a cohesive architectural finish.

As construction costs continue to rise and housing providers place greater emphasis on whole-life value, specification strategies are moving beyond purely aesthetic considerations. Flooring and decorative wall finishes are now expected to contribute to maintenance efficiency, occupant wellbeing and asset longevity, while also helping create consistent, high-quality living environments across multiple residential settings.

Cohesive interior design has therefore become an important part of performance-led housing specification. Coordinated finishes can improve spatial



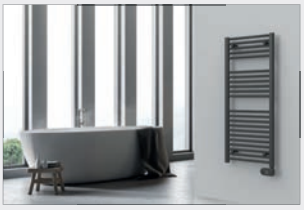
flow, support visual continuity and simplify maintenance and replacement programmes, particularly within large-scale or high-density residential developments. From procurement and installation through to ongoing facilities management, standardised material palettes help reduce complexity whilst supporting long-term operational performance.

Flooring plays a key role in establishing continuity throughout residential interiors, particularly within open-plan layouts where seamless transitions between spaces are increasingly desirable. At the same time, decorative wall panels are becoming more widely specified within kitchens, bathrooms and circulation areas due to their durability, moisture resistance and ease of maintenance.

By integrating complementary flooring and wall finishes, housing providers and developers can create interiors that are visually unified, technically robust and better suited to the demands of modern residential living. This approach not only supports immediate design objectives but also helps futureproof residential schemes through improved durability, maintenance efficiency and occupant experience.

01625 428 922 www.gerflor.co.uk

Towel rails from Stelrad



Stelrad continues to offer a wide range of specialist designer towel rails both for traditional wet heating systems and in its new electric radiator series which has taken off in a big way. From relatively simple ladder type designs to more complex designer styling the range ensures there's a radiator for every bathroom and en-suite. Head to the Stelrad website for more information.

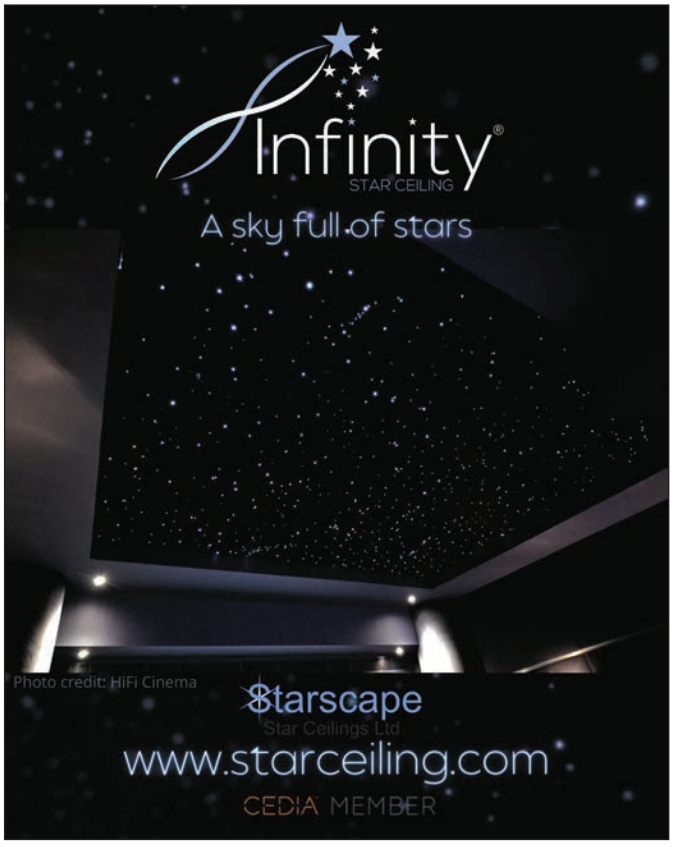
0800 876 6813 www.stelradprofessional.com

The Supreme loft ladder



The 'Supreme' from **Premier Loft Ladders** sets the standard for loft ladders, combining heavy-duty performance with light-weight operation. It features a high-strength retractable ladder, suitable for ceilings as high as 4.6 m. Furthermore, it offers superb thermal insulation and an airtight seal, therefore helping to maintain warmth in the home and reduce energy costs. The sophisticated counter-balance system makes using the Supreme very easy. However, it is also available with fully-automatic electrical operation for ultimate convenience.

0345 9000 195 www.premierloftladders.co.uk/supreme



Wood-look blades for an attractive newbuild project

With its historic centre and vibrant city life, Bruges (BE) appeals to young and old alike. So when you find a home surrounded by greenery yet within walking distance of everything the city has to offer, you've struck gold. The Avenue residential development adds 11 contemporary apartments and two commercial units to the area. Traditional brickwork and modern wood-look blades combine to create a timeless facade.

Inside, light colours contrast elegantly with the darker facade elements in Linarte Wood Design. Developer Bossuyt Vastgoed deliberately wanted a facade that would stand out from the crowd by moving away from more conventional architectural concrete. "We initially considered timber profiles," recalls project leader Baptiste Bossuyt, "but then the architect introduced us to Linarte Wood Design. The warm appearance of wood, combined with excellent fire safety and minimal maintenance, made it the ideal solution."



The enduring appeal of wood

Architectural engineer Tom Jonckheere of Jonckheere IR-architecten explains: "We've used aluminium on many projects to create visual continuity between windows. However, when it matches the joinery colour, the result can quickly become somewhat monotonous, especially on a taller building like this. Wood introduces warmth and variation, but it can discolour in the sun and

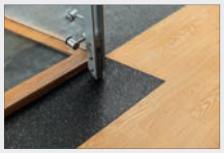


requires maintenance. We also wanted to integrate the garage door seamlessly into the facade. Linarte allowed us to achieve all of that, while adding the aesthetic value of the new wood-look range."

The choice of Linarte also brought practical advantages during construction. "With Linarte, we had greater flexibility in our planning," says Jonckheere. "If a blade is damaged, it can simply be replaced without major cost or disruption. Even after completion, the system remains adaptable: individual blades can be removed and reinstalled easily, for example when additional cabling needs to be added later on."

www.renson.net

Vibrant and inclusive learning environment



A package of **Altro** flooring has been used to transform learning spaces and create a welcoming and inclusive environment at a diverse educational site in Hull. After years of heavy use, the floors were looking tired and didn't match the bright, welcoming feel the school wanted. Altro Wood Comfort, Altro Orchestra, and Altro Walkway were used to enhance corridors and the atrium with natural style and safety, while Altro Wood Comfort in corridors reduced noise transference in echoey spaces. Altro Illustra was fitted on stairs for slip resistance.

enquiries@altro.com www.altro.com/uk/sectors/education

Reshaping the patient experience



Credit: White Arkitekter and photographer Rafael Ferrees Echavarren

At the heart of the new Reuben Young People's Centre at Chelsea and Westminster Hospital was a focus on reimagining the clinical feel that can often be associated with healthcare spaces, instead creating a welcoming environment that promotes healing and well-being. With the flooring playing a critical element of the refurbishment, White Arkitekter trusted **Forbo's** flooring portfolio to support their strong design narrative. White Arkitekter specified Forbo Flooring Systems' Sphera Energetic homogeneous vinyl in the Shimmer Lace colourway, installed in all clinical spaces, bedrooms and corridors.

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

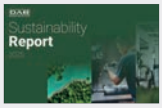
Convenient and paper-free



Enjoy reading *adf* but find it's not always convenient to have the printed magazine? Or has your workplace turned paper-free? The Digital Issue offers you the same content, delivered straight to your inbox and accessible via smartphone, tablet and desktop computers. Be among the first to read all the latest features, comment, interviews, and more, before the print issue has even been delivered! What's more, the Digital Issue includes interactive links to featured companies. Subscribe for free now.

www.architectsdatafile.co.uk/subscribe

DAB beats emissions target 5 years early



DAB Pumps is highlighting the importance of whole-life pump efficiency after new figures revealed that approximately 99% of the Group's carbon footprint is associated with the use of its products after they have been sold. The finding is published in DAB Group's first Sustainability Report, which also reveals that the pump manufacturer has already exceeded its 2030 target for reducing Scope 1 and 2 greenhouse gas emissions five years ahead of schedule. DAB had committed to reducing combined Scope 1 and market-based Scope 2 emissions by 50% by 2030.

company.dabpumps.com/en/sustainability
company.dabpumps.com/en/brand

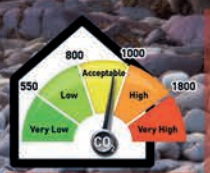
PAUL
Heat Recovery

The Ventilation Experts

Best MVHR Solutions Company in Scotland 2025 & 2026

Looking for the best ventilation systems?
We have identified the finest MVHR Systems

Larger MVHR	Zehnder **ComfoAir Q**	Zehnder **ComfoAir Flex**	Zehnder **EVO**
Smaller MVHR	Zehnder **ComfoAir 200**	Zehnder **ComfoAir 180**	Zehnder **ComfoAir 160**
Specialist MVHR	A1 Magic **Big Magic** (Room-by-room MVHR)	bluMartin **freeAir100** (Cascade MVHR)	Zehnder **ComfoSpot/ 70**
MVHR+cooling/heating	A1Magic / **Cool Magic**	Zehnder **ComfoClime**	Nilan **Combi 302 Top**
MVHR+DHW+cooling/h.	Nilan **Compact P**	Nilan **Compact P2**	Nilan **Compact S**



Optimized Air Quality

It's the outcome that counts.
We do things a bit differently than most other companies, as we specify to good IAQ levels where it really counts - not just to the minimum required levels


Silent Operation



No Compromise Ducting


High Grade Filtration

We care for our customers
from start to finish and beyond

- Free Specification & Cost Proposals
- Bespoke 3d Design Service
- Accredited Installer Training
- Material Supply & Commissioning
- In-House Project Support
- After Sales Support

Contact our friendly team for free consultation:
info@paulheatrecovery.co.uk - 01383 221 255



ubbink

Build smart.



Maximum Performance. Minimal Space.

THE COMPACT MVHR SOLUTION FOR MODERN HOMES

The **Ubiflux Compact W200** combines powerful heat recovery ventilation with a space-saving design. Easy to install and commission, it provides reliable indoor air quality and energy-efficient performance, even in challenging installation environments.

BENEFITS

- Fast, flexible installation
- Compact cupboard-fit design
- Energy-efficient heat recovery
- Integrated summer bypass
- Multiple configuration options
- Consistent airflow and comfort all year round

Ubbink UK Ltd 01604 433000 sales@ubbink.co.uk www.ubbink.co.uk

A balanced approach to ventilating future homes

As residential design evolves to meet higher energy efficiency standards, Lee Caulfield at Titon examines the importance of ventilation in creating healthier as well as more sustainable homes for residents.

The design of residential buildings is undergoing significant change as the construction industry responds to increasing energy efficiency requirements, carbon reduction targets and the need to create healthier living environments. While improvements in insulation, airtightness and building fabric performance are essential to reducing energy consumption, they also reinforce the importance of providing effective ventilation.

As homes become more airtight, natural air leakage through the building fabric is reduced. Although this helps minimise unwanted heat loss, it can also allow moisture and indoor pollutants to accumulate where adequate ventilation is not provided. Consequently, ventilation must be considered an integral part of residential design rather than an addition at the end of the construction process.

Understanding Part F and its role in residential design

Approved Document F provides guidance on meeting the ventilation requirements of the Building Regulations in England. Its fundamental purpose is to ensure that buildings are provided with adequate means of ventilation to maintain indoor air quality and manage moisture. It recognises the importance of removing pollutants generated by everyday activities, including cooking, bathing and cleaning, while ensuring a suitable supply of fresh air throughout the dwelling.

Residential ventilation strategies generally incorporate whole-dwelling ventilation, local extract ventilation and purge ventilation. Each performs a different function, but together they contribute towards maintaining a healthy indoor environment.

Depending on the building design and performance requirements, ventilation can be achieved through natural, mechanical or combined approaches. Background ventilators, continuous mechanical extract systems and mechanical ventilation with heat recovery (MVHR) are among the solutions available to designers.

The appropriate strategy in each case depends on several factors, including dwelling size, airtightness, layout, external environmental conditions and the intended energy performance.

Importantly, compliance should not be viewed simply as achieving minimum ventilation rates. The effectiveness of the chosen system throughout the building's occupied life is equally significant.

Looking ahead, the forthcoming revisions to Approved Document F – introduced alongside the Future Homes and Buildings Standard – will place further emphasis on ensuring ventilation strategies are appropriate for increasingly energy-efficient and airtight homes. The changes will require architects and specifiers to consider the updated ventilation provisions, including system design, performance and commissioning, to ensure that improvements in energy efficiency do not compromise indoor air quality.

The Future Homes Standard & changing expectations

The introduction of the Future Homes Standard represents an important development in the way new residential buildings are designed and constructed.

Published in March 2026, the associated changes to the Building Regulations seek to improve energy efficiency and reduce carbon emissions from new homes. The updated regulatory framework, including revisions



Compliance should not be viewed simply as achieving minimum ventilation rates



One of the most important considerations for architects is early integration of ventilation within an overall design

to Approved Document F, is scheduled to take effect during 2027, subject to the relevant transitional arrangements. These developments reinforce the relationship between the building fabric, heating systems and ventilation provision.

As new homes increasingly incorporate improved insulation, enhanced airtightness and low-carbon heating technologies, ventilation strategies must complement these measures without unnecessarily increasing energy demand.

Mechanical ventilation with heat recovery can offer advantages in highly airtight dwellings by recovering heat from extracted air and transferring it to incoming fresh air. This can help reduce ventilation-related heat losses while maintaining a controlled supply of outdoor air.

However, the selection of a ventilation system should always reflect the specific building requirements. There is no universal solution, and architects must consider the practical implications of each approach alongside its potential energy benefits.

Designing ventilation into the building fabric

One of the most important considerations for architects is the often-expressed need for early integration – in this case of ventilation within the overall building design.

Ventilation requirements can influence window specifications, facade design, internal layouts, service routes and the allocation of plant space. Addressing these elements during the initial design stages can help avoid compromises later in the project.

In the case of naturally ventilated dwellings however, the positioning and performance of background ventilators require careful consideration. Window and wall ventilators must provide appropriate airflow while taking account of acoustic requirements, weather exposure and external air quality.

In mechanically ventilated homes, sufficient space must be allocated for equipment, ductwork, access and maintenance. Poorly planned duct routes or restrictive components can increase resistance, potentially affecting airflow performance, noise and energy consumption.

Acoustic performance is another important consideration, particularly in urban developments or locations exposed to significant external noise. Ventilation systems should provide adequate airflow without creating unacceptable noise levels or encouraging occupants to disable them.

Early coordination between architects, building services designers and other project stakeholders can help ensure that ventilation solutions are both effective and compatible with the architectural intent.

Supporting healthier homes

Beyond regulatory compliance, effective ventilation plays an important role in protecting the quality of the indoor environment.

Everyday activities generate moisture, carbon dioxide and airborne pollutants. Without adequate ventilation, these can accumulate and contribute to condensation, mould growth, and poor indoor air quality.

The challenge is particularly relevant in modern homes, where improved airtightness reduces the uncontrolled movement of air through the building envelope.

Ventilation must also be considered alongside overheating risk. Approved Document O addresses overheating in new residential buildings, highlighting the need to coordinate ventilation, solar control and building design.

Providing sufficient airflow, managing summertime temperatures and limiting unnecessary heat loss require a considered approach that responds to both seasonal conditions and occupant needs.

Looking towards future residential design

As residential construction moves towards lower-carbon buildings, ventilation will remain an essential component of successful design.

The evolving regulatory landscape provides an opportunity for architects to consider ventilation more holistically, integrating it with energy performance, occupant wellbeing and long-term building functionality.

Ultimately, the homes of tomorrow must do more than conserve energy. They must also provide comfortable, healthy and practical living environments.

By incorporating effective ventilation strategies from the earliest design stages, architects can help ensure that improvements in building fabric performance are matched by equally important improvements in indoor environmental quality.

Lee Caulfield is VS sales director at Titon

Simple, stylish and easy-to-control electric heating

Electrorad's Digiline electric radiator combines modern styling with intuitive digital controls, making it an ideal choice for installers looking for a reliable heating solution that's quick to fit and easy for customers to use.

Designed to look exactly like a gas heated radiator it's ideal for domestic and commercial applications, The Digiline delivers responsive heating with precise electronic temperature control to help maintain consistent comfort throughout the day.

The easy-to-use, side mounted, digital control allows users to create heating schedules that suit their lifestyle, helping improve convenience while avoiding unnecessary energy use.

Open window detection and intelligent heating functions further enhance efficiency without adding complexity for the end user.

Available in a variety of outputs and a low level option, the Digiline is suitable for living rooms, bedrooms, home offices and apartments, offering installers flexibility across a wide range of projects. Plus, by adding the optional Tuya wifi gateway you can control them from anywhere in the world!

Installation is fast and uncomplicated, with no pipework, servicing or annual maintenance required. For electrical contractors, this means shorter installation times and fewer future maintenance concerns.

Supported by Electrorad's experienced technical team and strong product availability, the Digiline offers electrical wholesalers and installers a dependable electric heating solution that delivers excellent performance, straightforward installation and great value.

0113 2746799 sales@electrorad.co.uk



Ideal Commercial Heating launch white paper



Ideal Commercial Heating has launched a new white paper exploring how hybrid heating systems can support the decarbonisation of commercial buildings while addressing the practical constraints faced by consultants, specifiers and building owners. Titled *'The Future of Sustainable Commercial Heating: The Role of Hybrid Systems'*, the free-to-download document examines the decision-making process behind commercial heating decarbonisation projects and highlights why hybrid systems are increasingly being adopted as part of a realistic and effective transition to lower carbon heating.

03330 040 393 idealcommercialboilers.com/net-zero

Now's the time to plan remedial work for 2027



Keraflo is encouraging facilities managers to use the start of term to plan water-system remedial work well ahead of the next holiday closures. Keraflo says that the first weeks of a new term are an important opportunity to identify priorities for the year ahead. Keraflo's delayed-action mechanical valves are designed to allow a larger fall in tank level before refilling, helping to promote turnover. Its Tanktronic electronic tank-management system monitors water levels and temperature and can support the monitoring and control of cold-water storage tanks.

0118 921 9920 www.keraflo.co.uk




TRUST THE EXPERTS
Holistic Solutions For a Healthy Building Envelope
Spacetherm
Energy efficient, space efficient
Spacetherm A1 is a flexible, ultra thin aerogel insulation delivering high thermal performance with limited combustibility. Ideal for thermal upgrades, it improves energy efficiency and reduces thermal bridging, including around window reveals and shutter boxes.
Proctor Group
contact@proctorgroup.com
+44 01250 872 261
www.proctorgroup.com
Beaufort West, Bath

Resapol supports landmark Sheepfolds Public Realm project

Resapol supported the delivery of Sunderland's Sheepfolds Public Realm project, supplying specialist streetscape materials and technical support for a major new pedestrian route connecting the city centre, River Wear, Sheepfolds Stables and the Stadium of Light.

Delivered by Esh Construction Ltd in partnership with Sunderland City Council, the project forms part of the wider Riverside Sunderland regeneration programme and has transformed former industrial land into an attractive, accessible and durable public space.

With Sunderland hosting the opening match of the Women's Rugby World Cup at the Stadium of Light, completion of the route was particularly significant, helping provide improved pedestrian access for thousands of visitors travelling through the area.

Working closely with Esh Construction, Resapol supported the project with the supply of a complete UltraScape streetscape



system, alongside product knowledge and technical expertise throughout the works.

Approximately 5,500m² of premium paving was installed, combining Indian sandstone, granite and natural stone, with reclaimed cobbles incorporated along the historic wagonway route to reflect the area's industrial heritage.

To support the extensive paving installation, Resapol supplied around 800 tonnes of UltraScape Pro-Bed HS Fine Bedding Concrete, covering approximately 5,000m² at an average depth of 40mm. UltraScape Pro-Prime slurry primer was used to provide a strong bond between the paving and bedding mortar, while UltraScape Flowpoint grout, supplied in both charcoal and natural shades, completed the system.

Resapol's involvement demonstrates the value of combining product availability with specialist technical knowledge on demanding public realm schemes. By working collaboratively with contractors and manufacturers, Resapol helps ensure the right systems are specified, supplied and supported from initial requirements through to installation.

The completed Sheepfolds scheme now provides Sunderland with a high-quality public space designed to serve the city for years to come.

0800 083 1942 www.resapol.com

Firefly® span specified to help safeguard Royal Shrewsbury hospital expansion



A £312 million project for the expansion of clinical facilities and refurbishment of the A&E facilities at The Royal Shrewsbury Hospital is one of the first major construction contracts to make use of **FIREFLY®** Span, a high performance linear joint seal ideal for helping achieve effective compartmentation. Complete Fire Solutions (NW) is the specialist sub-contractor undertaking the installation of the one-hour intumescent fire seal. During the survey for the protection of the various construction joints in the newly built walls, the use of Span was agreed upon and subsequently installed. There are some 350 linear metres of construction joints to be addressed across the job enabling us to utilise the 50 x 50 mm version of the product. The depth of the walls are mainly 130 mm – constructed either in reinforced concrete or as plasterboard partitions. The FIREFLY® technical manager has been to site to deliver the appropriate training for our operatives. FIREFLY® Span combines flexibility of application with complete dependability, having been developed to prevent the spread of fire, smoke and even sound through construction joints in walls and floors for a full 60 minutes.

info@tba-pt.com www.tbafirefly.com

Modumax mk4 boilers installed at University



Hamworthy Heating has supplied its latest range of Modumax mk4 floor standing boilers to the University of Huddersfield, as part of the university's ongoing investment in improving efficiency and sustainability across its campus. The new boilers have been installed at two key locations, Queen Street and The Laura Annie Willson Building. With limited space and access at both sites, the university needed a solution that could efficiently deliver the required heating output while making best use of the existing plant room layouts.

01202 662 552 www.hamworthy-heating.com

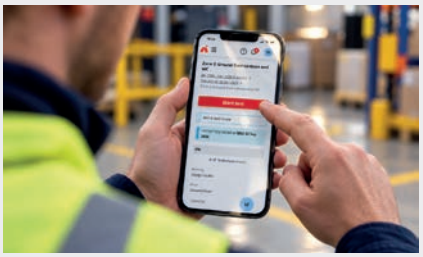
Secure learning



A powerful network of **C-TEC**'s ZFP CAST fire alarm and lockdown alert systems is protecting Willow Grove Primary School, a community school dedicated to supporting children with special needs. When the school needed to upgrade its fire and security systems, it turned to GHE, one of the UK's leading fire specialists. Graham Hurst, GHE's CEO said: "Martyn's Law meant it was vital that we chose a life-safety system that could fulfil the exact lockdown requirements of the school. C-TEC's fire alarm and lockdown alert system is versatile, powerful and allows the user to select different voice messages dependent on the situation."

01942 366328 c-tec.com

Smarter Fire System Testing with AdvancedLive



Advanced has launched Smart Walk Test, a new feature within AdvancedLive, the smart management platform available on MxPro 5 Gen-2 fire panels. Designed to support the testing and record-keeping requirements highlighted in the latest revision of BS 5839-1:2025, Smart Walk Test simplifies routine fire system testing and helps organisations demonstrate that testing has taken place.

Although facilities teams and maintenance contractors are both responsible for testing fire systems, their requirements are very different. Smart Walk Test has therefore been designed around two distinct testing modes: weekly testing for facilities teams and annual testing and maintenance activities for maintenance contractors.

For facilities teams, Smart Walk Test provides a simple, guided process that allows routine weekly tests to be completed quickly and confidently. Step-by-step prompts guide users through the testing of call points, sounders and outputs, while real-time pass/fail confirmation provides instant assurance that devices have responded correctly. Every activity is automatically logged within AdvancedLive, creating a secure digital record that makes testing information easier to capture, store and review.

The system can also track which call points have been tested and prompt users to rotate call point checks in line with best-practice guidance. Meanwhile, dashboard visibility gives facilities teams greater oversight of testing activity across one or multiple sites.

For maintenance contractors, Smart Walk Test supports a more efficient, connected approach to annual testing and maintenance activities. Engineers can remotely place zones into test mode, verify device activations in real time and track progress as testing is completed across the building. Testing activity can be recorded automatically as it happens.

By allowing engineers to verify activations and monitor progress while moving through a building, Smart Walk Test can help testing be completed more quickly and efficiently while reducing administration. The platform also supports the testing of outputs and ancillary functions, including sounders, beacons, door releases and smoke control interfaces, during the same visit. A central focus of Smart Walk Test is creating a stronger evidence trail. The latest revision of BS 5839-1 places continued emphasis on maintaining appropriate records of system inspection, testing and maintenance. Smart Walk Test supports this by providing automatically generated logs, timestamped testing histories and detailed activity records. Testing information can be stored securely, reviewed when required and used to support audits, inspections and compliance reviews.

0345 894 7000 shorturl.at/oO2JC

Marmox Fireboard performance on display in retail redevelopment

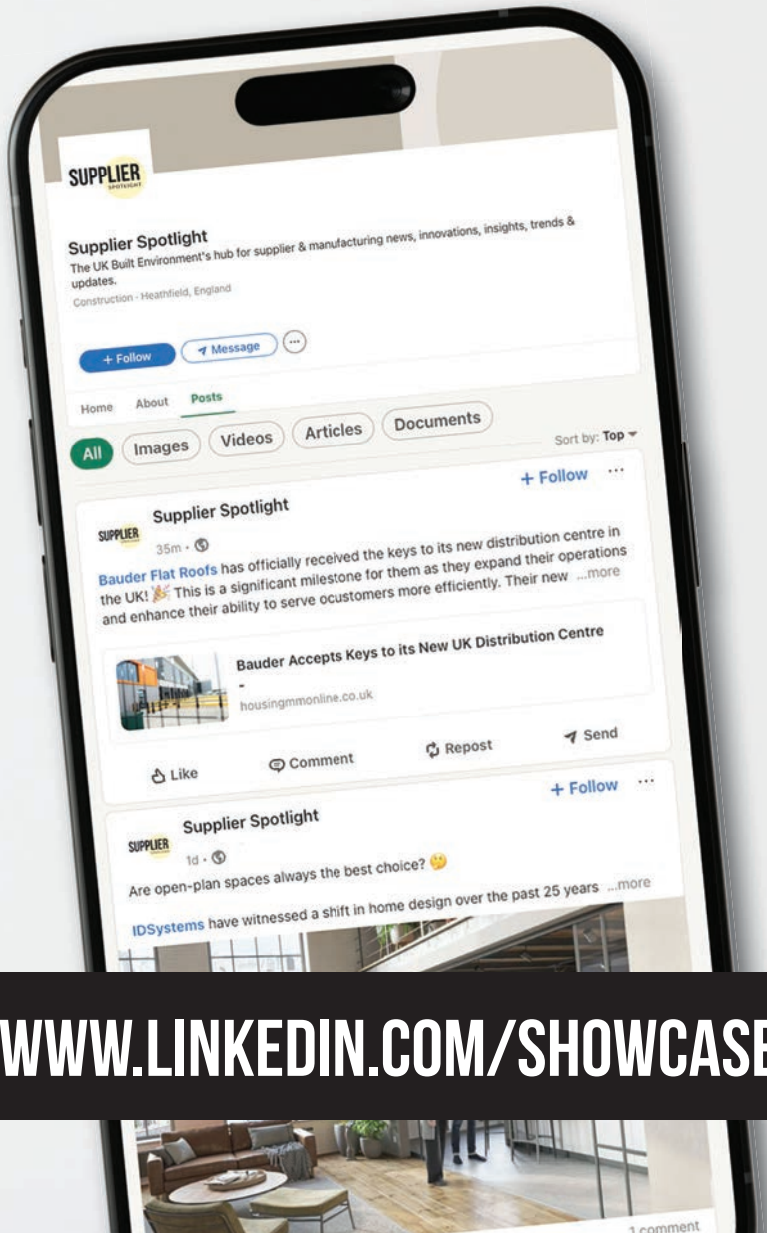


The restoration and redevelopment of a landmark 1930s Art Deco building on one of South London's most popular shopping streets is making extensive use of **Marmox**'s A1 rated non-combustible backer board as a key element to the refurbishment strategy. While failsafe fire protection is critical to safeguarding hybrid projects such as this, the financial viability of the scheme has been achieved through the inclusion of an upward extension to the century old structure and although preserving the original brickwork and stone elevations was always an essential element to the work, the Fireboard is one of the contemporary materials which has further helped deliver an uplift in thermal performance as well as providing protection for life and property. In total, 100 sheets of the 20 mm thick version to Marmox Fireboard were sourced from Wray-Tech Supplies Ltd in Chelmsford for cutting and fixing by Earl Green's operatives across the window reveals. The Stone Wool based product shares the unique Marmox honeycomb surface structure of its XPS forerunner, Multiboard, to create an A1 non-combustible certified render-backer which is weatherproof.

sales@marmox.co.uk www.marmox.co.uk

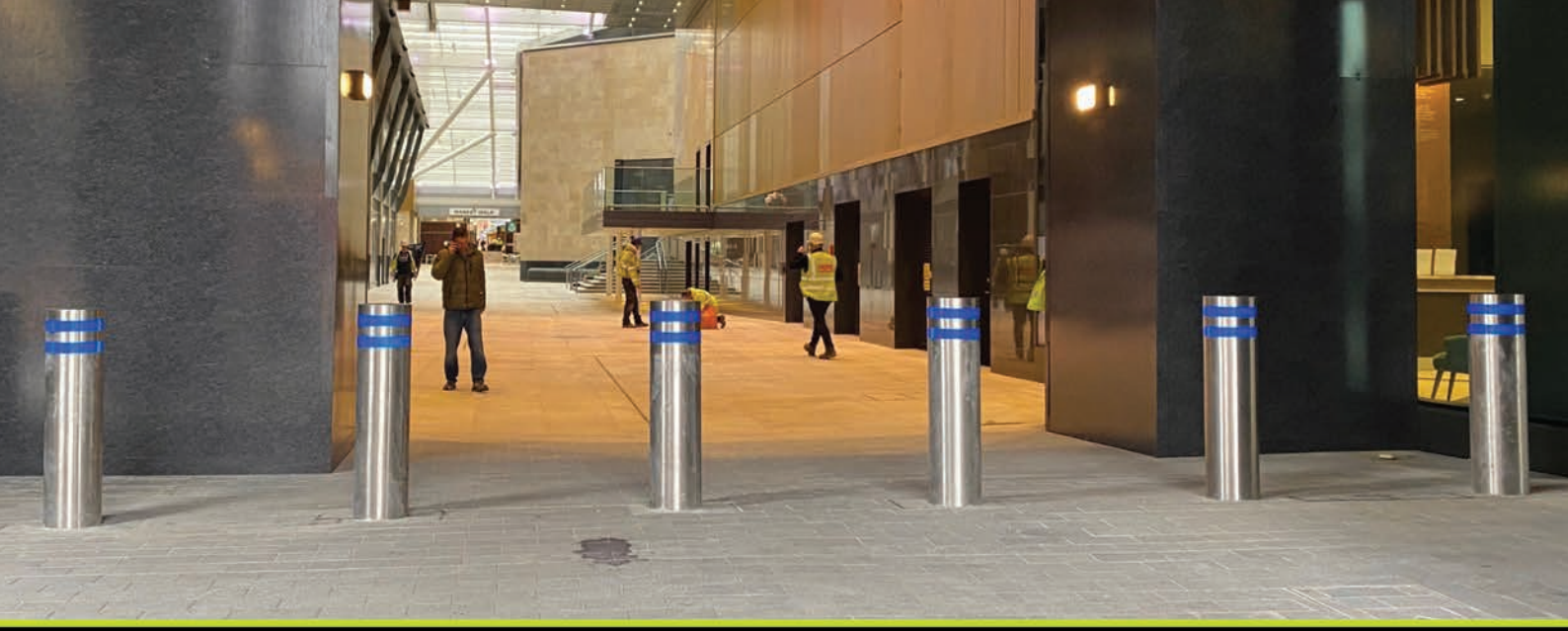


Your new Source of Manufacturing insights!



SUPPLIER
SPOTLIGHT

WWW.LINKEDIN.COM/SHOWCASE/SUPPLIER-SPOTLIGHT



GLIDE BOLLARDS

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

- Crash-tested and capable of withstanding the impact with a 7.2 tonne lorry travelling at 40mph - without significant bending or buckling
- **Available as the Glide Bollard 30 and Glide Bollard 40, whose footings measure just 210mm and 240mm deep respectively**
- Manually operated and incorporating removable and lockable panels designed to blend into the street or road surface
- Manufactured in the heart of the UK from high quality materials and lowered in place as a complete cassette



All Securiscape Products have been tested to **PAS68** or **Iwa** and have **full certification**

Securiscape Limited **+44 (0) 1335 370979**
info@securiscape.co.uk **www.securiscape.com**

securiSCAPE®
protecting people in public places®

FOLLOW US ON: