adf

architectsdatafile.co.uk

09.26

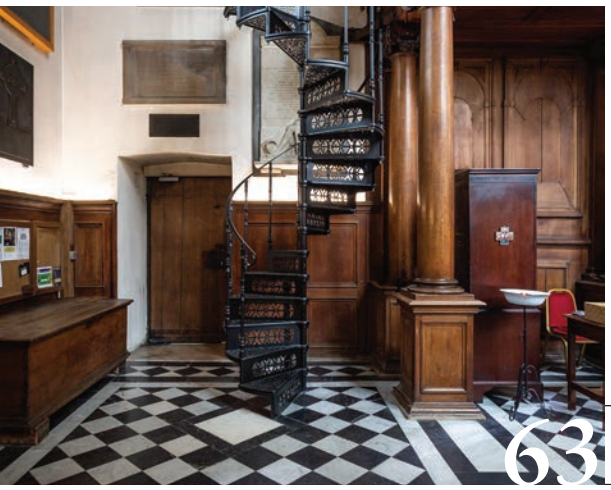
THE CHANCERY ROSEWOOD

How David Chipperfield Architects turned the former US Embassy in Grosvenor Square into a super-luxe hotel

Update your registration here:

Bring your vision to life with

SOPREMA



CONTENTS 09.26

NEWS, VIEWS & INSIGHTS

PRODUCTS

ROUND TABLE REVIEW

PROJECT REPORT

FEATURES

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

From *concept* to *construction*

Roofing systems & building envelope solutions

SOPREMA speaks your language

SCAN ME!

SOPREMA
Building for Life

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
Stephen Cousins

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.

FROM THE EDITOR

Passivhaus is probably a lot less expensive than you think, that's not only the assertion of co-director at the Passivhaus Trust, Ann-Marie Fallon, on our 101st Building Insights podcast, which just landed. It's also about to be proved with compelling research due to be published, which is likely to change the case for mainstreaming Passivhaus.

The really attention-grabbing part of Ann-Marie's fantastic discussion (almost treatise) on Passivhaus however was that is a guarantee of quality which will not only protect consumers and clients, but contractors, as quality expectations ramp up. Post-Building Safety Act, we have Principal Designers and Principal Contractors, but now we also have a pair of retrospective limitations which extend back to 15 years for newer schemes, but also 30 years for schemes designed before 2022.

While Passivhaus isn't strictly about building safety, the new culture of accountability for decision-making, transparency and change control is being forced by such ruthless new strictures. It's to be welcomed, but it's also hugely demanding for everyone in the sector, used to a very different, cost-focused set of priorities.

However, as Ann-Marie points out, Passivhaus stands as a ready-made, not to say onerous, system of quality assurance, which can give construction teams the surety that they have abided by a golden thread process. As well as costs coming down progressively, even in the current materials inflation context, this could be game-changing.

London has been the hotbed of Passivhaus at scale so far, with for example Barratt London committing to building all new homes to the standard (although medium or high-rise apartments rather than houses). This may be pragmatic, to avoid having to be part of heat networks – which will short term be fossil fuel in any case – but the result is likely to be an unseen level of mainstream Passivhaus residential projects in the capital.

The Mayor and GLA has to take some credit for this, with the London Plan having driven constructors to achieve Passivhaus as a default target for hitting the demanding building efficiency goals the boroughs want to see.

The robustness with which London has driven through new standards is seen to be something that other Mayors should be emulating, particularly around calling-in worthy projects which planners are unhappy about, for central direction. But some across the sector are concerned to know just how far this will extend, and what the criteria will be.

The hope is that the age of the NIMBY will be forcibly ended, and this might be a requirement to get certain Passivhaus projects through, regardless of their design qualities. It's about time that broader concerns were brought to bear rather than just the vested interests of individuals, on a national basis. But those NIMBYs won't go down without a fight.

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

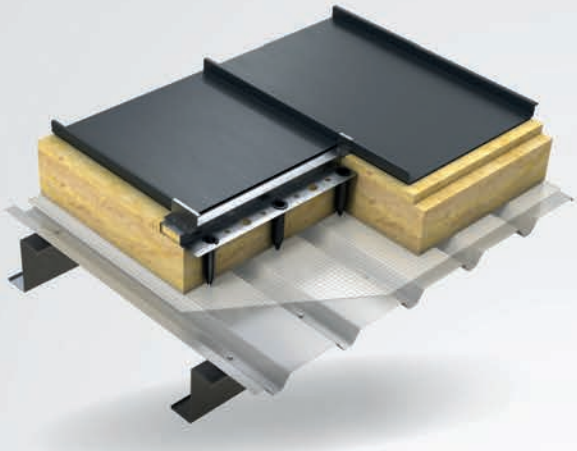
ON THE COVER...
How David Chipperfield Architects turned the former US Embassy in Grosvenor Square into a super-luxe hotel.

Cover image © Simon Menges
For the full report on this project, go to page 34.

Vieo

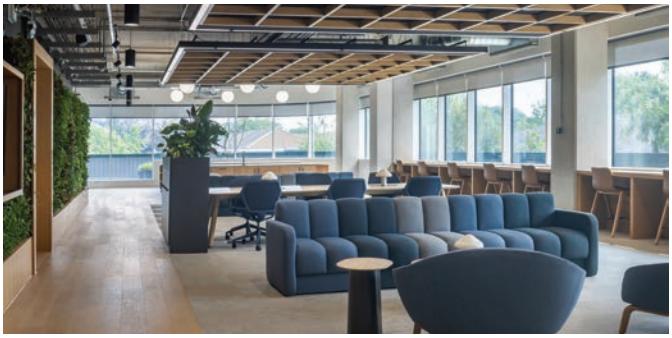
The all in one Roof and Wall System

Delivering clean lines, faster installation and lasting performance.



euroclad group


AMD
THREADRIPPER
9000
SERIES
AMD
THREADRIPPER
9000
SERIES
AMD
THREADRIPPER



CULTURAL DESIGN

BDP-designed life sciences centre completes in Manchester

Greenheys, a 131,000 ft² laboratory and research building at Manchester Science Park, has been completed, providing a new home for UK Biobank and a major new facility for life sciences research in Manchester. Designed by architects from BDP, the project also saw the practice manage the interior design, landscape architecture and acoustics, bringing the different disciplines together around the demanding technical requirements of a modern research facility.

Delivered for Bruntwood SciTech – a joint venture between Bruntwood, L&G and Greater Manchester Pension Fund – and constructed by Willmott Dixon, the new state-of-the-art innovation hub sits within Manchester's Oxford Road Corridor and will become the new headquarters and research facility for UK Biobank.

Greenheys provides flexible Containment Level 2 (CL2) laboratory and write-up space for organisations working across life sciences, biotechnology and advanced diagnostics. Its three floors of specialist laboratory space are supported by sophisticated ventilation and cooling systems, dedicated fume extraction, high-specification local exhaust ventilation and infrastructure designed to handle the movement and storage of biological samples and specialist equipment.

The building is designed to be fully electric and is targeting a BREEAM Excellent rating. It also includes Manchester city centre's largest living wall, with 160,000 plants covering 1,700 m², creating habitats for pollinators and more than 125 species of invertebrates, while helping to improve air quality in the surrounding area.

Alongside the technical demands of the laboratories, BDP's design creates spaces for people to meet, work and take a break, with shared breakout areas, meeting facilities, cycle storage and changing facilities with access to a nearby gym and cafe. The landscape design extends this approach beyond the building, bringing planting and green space into the wider campus setting.

The building is now preparing for UK Biobank's move from its existing facilities in Stockport. The organisation is relocating around 11m biological samples to Greenheys, alongside around half of its 400-strong team. The new facility is expected to increase the capacity and speed of its research, strengthening links with Manchester's universities, hospitals and wider life sciences community.

The project forms the latest phase of Manchester Science Park's wider development, strengthening the Oxford Road Corridor as a centre for science, technology and innovation. Its delivery also kept significant economic value within the region, with 99% of the project spend going to businesses within 40 miles of the site.

Greenheys is a prime example of BDP's multidisciplinary approach to science, technology and research buildings, combining architecture and specialist design expertise to create environments that can adapt as the industry and the needs of scientists and researchers evolve.

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

CONSERVATION

LOM secures planning for the restoration and redevelopment of Hampton Waterworks

Shoreditch-based practice, LOM Architecture and Design, has secured planning consent for the reimagining of Hampton Waterworks. The conservation project involves the transformation of a long-derelict, Grade II listed Victorian industrial site in Richmond upon Thames, into a vibrant new mixed-use community.

Built in the 1850s as monumental pumping houses for London's water supply, the site has stood empty for years, deteriorating and at risk of permanent loss.

The consent marks the culmination of seven years of design development, consultation and negotiation to overcome the complex challenges of restoring and adapting historic infrastructure for contemporary use.

LOM's approved proposals carefully balance heritage sensitivity with viability, ensuring the site's renewal against significant constraints. The adaptive reuse scheme will deliver 36 high-quality new homes, ranging from one to four-bedroom units, alongside 306 m^2 of flexible workspace, breathing new life into the Waterworks as a place to live and work.

The proposals retain and restore the Waterworks' imposing Victorian fabric while introducing carefully considered extensions and structural interventions to retain the historic fabric and ensure long-term feasibility. Contemporary glazed rooftop additions and rear extension sit modestly alongside the historic structures, designed to complement their scale and character. Interiors will expose and celebrate original industrial features, from wrought iron trusses and gantry cranes to ceramic tiling, creating distinctive spaces rich in heritage.

New communal gardens, private terraces, play space and a landscaped setting will open up the site and reconnect it with Hampton village. The design also resolves significant access and viability hurdles, enabling the reuse of buildings once considered too challenging to restore.

LOM commented: "Through this approval, Hampton Waterworks can finally be rescued from dereliction and reimagined as a distinctive residential and workspace development, an ambitious example of heritage-led regeneration delivered against the odds. By creating a community, LOM's design will support Hampton Waterworks continued role within the local neighbourhood for years to come."

APPOINTMENTS

Influence invests in the next generation

East Midlands landscape architecture practice Influence Landscape Planning & Design has welcomed three new Design Assistants to its team.

Joining the business are Keira Attridge and students Isabelle Henderson and Jay Charles, each bringing different educational backgrounds and experiences to the Newark-based practice.

The appointments reinforce Influence's commitment to developing future talent and demonstrate different routes into the career of landscape architecture.

The hires mark the latest investment in people by the practice, which moved to larger offices in Newark last year to accommodate its growing team and increasing portfolio.

Keira Attridge returns to Influence after previously completing a five-month student placement. Having recently graduated with a degree in Geography from the University of Lincoln, she has joined the Influence team full-time.

L-R: Keira Attridge, Isabelle Henderson, Jay Charles

Architecture graduate also from the University of Lincoln Isabelle Henderson, has joined the team full-time as she looks to expand her skills into landscape design.

Jay Charles joins Influence following the completion of his A-Levels. Having previously undertaken two work experience placements during his time at school, he now works with the practice two days a week while studying Countryside Management at Nottingham Trent University.

Together, the appointments reflect Influence's commitment to supporting young people from a range of educational backgrounds, whether through university placements, graduate opportunities or from school with flexible employment alongside further study.

The three appointments form part of Influence's growth strategy, strengthening its in-house expertise while ensuring the next generation of landscape professionals has the opportunity to enter the profession.

INDUSTRIAL DESIGN

IMA Architects appointed on major logistics development at WestWorks Corby

Leicestershire-based architectural practice delivering design and technical services for one of the Midlands' largest new logistics developments.

IMA Architects is the architect behind WestWorks Corby, a major new logistics and industrial development in Northamptonshire being brought forward by the real estate development arm of a global logistics group. The practice has been involved since outline planning stage.

The 55 acre site situated on Weldon Road on the western edge of Corby forms one of the largest employment-led regeneration projects in the region. WestWorks Corby will deliver circa two million square feet of sustainable industrial and logistics space across multiple units, designed to meet the growing demand for high-quality, flexible warehousing in the Midlands.

The first phase of the development comprises two buildings, a 500,000 ft^2 unit and a 300,000 ft^2 unit, with a further phase of circa one million ft^2 to follow. The 300,000 ft^2 unit has been prelet, while the 500,000 ft^2 unit is being developed speculatively and is available to occupiers. The first units are targeted for completion in Q2 2027.

IMA Architects is leading on the architectural design of the scheme and acting as Principal Designer, working alongside a multidisciplinary project team that includes Fairhurst, MBA Consulting Engineers Ltd, KAM Project Consultants, Wakemans Limited, Quod, SAJ Transport Consultants and Savills.

The masterplan for WestWorks Corby places sustainability and innovation at its core. All buildings are designed to achieve BREEAM 'Excellent' and EPC A+ ratings, with extensive landscaping, ecological enhancements and high-quality amenity space ensuring the development delivers both environmental and social value.

Located close to the A43 and A14, WestWorks Corby offers excellent connectivity to the national motorway network, making it an attractive location for logistics operators, manufacturers and advanced industrial occupiers seeking modern, energy-efficient space within the Midlands' 'Golden Triangle'. The site also benefits from a 20 MVA power supply, a significant draw for occupiers with high energy requirements.

Based in Blaby, Leicestershire, IMA Architects is one of the region's leading architectural practices, with a strong track record in industrial, logistics, retail, and commercial projects. The firm has completed hundreds of projects nationally and is actively working on 75 large-scale projects across the UK, Ireland and further afield.

STUDIO UPGRADE

HSSP Architects invests in headquarters to support growth and culture

Melton Mowbray-based HSSP Architects has completed a transformation of its headquarters, creating a workplace designed to support the next phase of the practice's growth.

The studio has kept pace with the times with various layouts and improvements over the years, but the refurbishment hails a new way of working.

With continued growth, an expanding team and an increasingly high-profile portfolio, HSSP needed a space that matched its ambitions - one designed to foster collaboration, flexibility and a better client experience.

The project has been delivered by Ashby-based workplace consultancy Blueprint Interiors, the same company that originally designed the space for HSSP more than a decade ago.

The redesigned workspace now offers a range of environments to suit different ways of working, including quiet spaces, collaborative project areas, meeting rooms, mentoring spaces and informal social settings. The new layout also improves flow through the studio, encouraging greater interaction between the team while creating a more welcoming experience for clients.

The investment forms part of HSSP's wider growth strategy, with the practice recently recruiting two new team members.

Rather than designing around desks, the new workplace has been planned around people and how they interact throughout the working day. Team members now have the freedom to choose spaces that best suit the task at hand, whether that's focused individual work, project collaboration, informal catch ups or confidential conversations.

FIRMAN

Value Added Partner
SCHOTT
glass made of ideas

PYRAN® S FIRE RESISTANT GLASS

Now available with bevelled edges and laminated patterned options.
Creating more design possibilities for fire rated projects.

www.firmanglass.com

01708 374534 sales@firmanglass.com

facebook.com/firmanglassuk instagram.com/fa_firman linkedin.com/in/firman-glass-633377334

ASK THE EXPERT

Luke Osborne, Senior Architectural Systems

Everything to declare

James Parker speaks to Luke Osborne at Senior Architectural Systems, about why greater transparency in Environmental Product Declarations (EPDs) is essential to help architects make informed specification decisions.

WHY DOES THE FENESTRATION INDUSTRY NEED A MORE TRANSPARENT, EVIDENCE BASED APPROACH?

From my perspective, architects are being asked to make increasingly complex sustainability decisions, and they can only do that well if the information they're given is clear and grounded in real data. Too often, environmental information is presented in ways that make it hard to compare like for like and when figures aren't explained properly, it becomes difficult for specifiers to understand the true impact of a fenestration system. A more transparent, evidence based approach simply means giving people the full picture so they can make confident choices. It's about removing ambiguity and making sure the environmental story behind a product is honest, consistent and easy to interpret.

WHY IS INTERROGATING EPDS IMPORTANT TO AVOID ARTIFICIALLY LOWERED FIGURES?

EPDs are incredibly useful, but they only work if the boundaries and assumptions behind them are clear. If certain stages of the lifecycle are left out, or if data is averaged in a way that hides variation, the carbon figures can look lower than they really are. That's why interrogating an EPD matters. It's not about catching anyone out but raising awareness and standards and ensuring that the numbers reflect the actual manufacturing processes. When architects dig into what's included, they can spot where figures might be unintentionally optimistic or generalised, and make decisions based on the real environmental impact rather than a simplified version of it.

We believe fenestration system EPDs should cover the full system – not just the raw aluminium billet. That means accounting for thermal breaks, gaskets, fixings, fabrication and delivery to site, along with the energy-intensive extrusion process. This level of detail is often missing from standard EPDs, which typically report carbon figures for 1 kg of aluminium and exclude key stages of the product's journey.

IS GLAZING BEING INCLUDED IN EPDS CREATING MISINFORMATION?

It can, yes. Most aluminium system manufacturers don't supply glazing, yet sometimes glass is included within a system's environmental data. If glazing is included, it can skew results when converted into a carbon figure reported per kilogram of material. The heavy weight of glass, combined with its relatively low carbon per kg figure, makes the overall figures for the aluminium system look lower than they really are.

Because glass has its own manufacturing processes and carbon profile, combining it with the frame can distort the information and means architects might think they're comparing two systems fairly when, in reality, one includes glazing and the other doesn't. This becomes even more challenging when glazing specifications vary widely between projects, as different coatings, treatments or performance requirements can significantly change the carbon impact. Keeping glazing separate avoids this confusion and supports more accurate, like-for-like comparisons.

WHY SHOULD GLAZING HAVE ITS OWN EPD, AND WHAT CHALLENGES EXIST FOR SUPPLIERS?

Glazing deserves its own EPD because it's a completely different material with its own energy intensive processes, coatings and treatments. When it's included in a system EPD, it blurs the true impact of the frame and makes it harder for architects to understand what they're actually specifying. The challenge for suppliers is that producing an EPD requires detailed data from every stage of production, and not all glass suppliers have the resources or systems in place to gather that information. It's a technical and administrative commitment, but it ultimately leads to clearer, more accurate environmental reporting for everyone.

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

DOES SEPARATING EPDS CREATE CHALLENGES FOR SPECIFIERS – OR ARE THEY EASILY MANAGED?

Separating EPDs does add an extra step, but it's not a major hurdle. Architects already combine information from multiple materials when assessing a building's carbon impact, so adding glazing as a separate data point is simply part of that process. The benefit is that the final picture is far more accurate. Instead of relying on blended figures, specifiers can see exactly where carbon is coming from and make more informed choices. With consistent formats and clear documentation, the extra effort is small compared to the value of having reliable, transparent data.

WHY MUST MANUFACTURERS PROVIDE TRANSPARENT DATA ON ALUMINIUM EXTRUSION PROCESSES?

The environmental impact of aluminium is shaped long before it becomes a finished profile. The source of the metal, the energy used in extrusion, and the recycled content all influence the final carbon figure. If manufacturers only share the number attached to the finished product, architects miss the context that explains how that number was reached. Transparent data on extrusion helps specifiers understand the real footprint of the material and compare systems fairly. It's about showing the full journey of the aluminium rather than just the end result.

ARE SPECIFIERS AWARE OF THESE ISSUES – AND DO SMES HAVE TIME TO INTERROGATE CLAIMS?

Awareness is improving, but many specifiers, especially smaller practices, are stretched for time. They want to make responsible choices, but they can't always dig into every technical detail. That's why clear, accessible environmental data is so important. If manufacturers present information in a straightforward, consistent way, architects don't need to become carbon experts to make good decisions. The responsibility shouldn't sit entirely with SMEs as the industry needs to make transparency the norm so that specifiers can trust the information without having to unpick it line by line.

ARE ANY BODIES LOOKING AT MANDATING GREATER TRANSPARENCY?

Across the construction sector, there is a clear shift toward more rigorous environmental reporting. Frameworks such as the UK Net Zero Carbon Buildings Standard, the growing use of whole life carbon assessments, and increasing scrutiny from green finance, planning and public sector procurement are all driving demand for more transparent data. Green finance requirements are also beginning to place greater emphasis on evidencing what has actually been installed on site, with auditors increasingly being used to verify environmental claims against completed works. While not all requirements are formally mandated, EPDs must already follow the EN 15804 framework, and the direction of travel is clear: environmental information is expected to be transparent, consistent and independently verified. Ultimately, sustainability claims will need to be backed by robust evidence rather than broad statements.

HOW HAS SENIOR APPROACHED ITS EPDS, AND HAVE THEY BEEN EXTERNALLY VETTED?

We have deliberately taken a different route with our EPDs. Instead of relying on generic industry datasets, we've focused on publishing documents that reflect how our systems are actually made. The process itself isn't complicated as it's simply about being open with the data and showing the full picture.

All of our EPDs are independently verified and that is really important as third-party assessments give architects and specifiers confidence that the information has been reviewed by competent people and have not simply been produced behind closed doors.

Our priority has been to make the information clear and easy to use so we have prioritised straightforward data, consistent presentation, and no unnecessary complexity. By pairing real manufacturing inputs with independent verification, we're aiming to set a higher bar for aluminium systems and encourage a more open approach to sustainability reporting.

WHAT IS THE FUTURE RISK IF SPECIFIERS DON'T OBTAIN TRUE CARBON DATA?

If architects don't have access to accurate carbon data, there's a real risk that buildings will be designed on assumptions that don't hold up to scrutiny or real-life applications. That can lead to higher embodied carbon than expected, missed sustainability targets and potential compliance issues as regulations continue to evolve and tighten. It also undermines trust in the fenestration and wider building products sector as, when environmental claims aren't backed by solid data, it becomes harder for specifiers to make responsible choices. Reliable carbon information is essential for delivering buildings that genuinely meet environmental ambitions rather than just appearing to on paper. Not making sure EPDs provide accurate, transparent and easy to access environmental data also reduces them to a marketing tool that misses the point completely and has the potential to do real harm.

Luke Osborne is UK sustainability lead at Senior Architectural Systems

#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

ASK THE ARCHITECT

Benedict Zucchi, chair of BDP's Global Board, speaks to *ADF* about his design philosophy, the role of architecture as a civic art, and how collaboration, context and sustainability will shape the profession.

AFTER SPENDING MORE THAN 30 YEARS AT BDP, HOW DO YOU REFLECT ON WHAT HAS INSPIRED YOU OVER THAT DURATION?
I'm still sustained by my original enthusiasm for BDP's founding ethos, the idea that design should be centred on the specific characteristics of people and place; the clients and users on the one hand and the social, historical and natural context of the project on the other. Our contextual, interdisciplinary approach marked us out from our foundation in the 1960s and anticipated by many decades the drive for sustainability that is now at the top of our environmental agenda.

AS RECENTLY APPOINTED CHAIR, WHAT ARE YOUR SHORT-TERM PRIORITIES FOR THE FIRM?
My number one priority is to ensure that we continue to think holistically about the complex challenges facing society and respond sensitively to the context of each project. This is the only path to innovative authentic solutions that will stand the test of time. As a growing global team, my role also focuses on drawing together the different parts of BDP, joining the dots between capabilities and alternative perspectives in different locations, always with a view to providing the best possible combination of talents for each project.

YOU'VE SPOKEN ABOUT ARCHITECTURE AS A CIVIC ART AND WHY IT'S MORE IMPORTANT THAN EVER; WHAT DOES THAT MEAN IN PRACTICE?
It means listening to people and driving genuine engagement, what I call the 'choreography of the collective', making the design process a core driver of success. This is the idea that the journey we undertake with clients is as important as the ultimate destination because it's the process, as much as the actual design outcome, that determines a project's long-term success. Environments only last if people appropriate them and that only happens if projects are embedded in their context, from inception.

WHAT HAS WORKING ACROSS HEALTHCARE, EDUCATION, HOUSING AND MASTERPLANNING SECTORS TAUGHT YOU IN TERMS OF TRANSFERABLE LESSONS THAT APPLY ACROSS ALL ASPECTS OF DESIGN?
Our success in all these sectors has been founded on a people and place-centred approach. Most of our work in health and education, where I have been most active, has been publicly funded, so there has been a common emphasis on collaborating with users, whether medical staff, academics, teachers, or residents, patients and students. In this context the role of the architect, or other lead designer, takes on a civic dimension because one is acting in the broader interest of a large group of people, a community, rather than a single client.

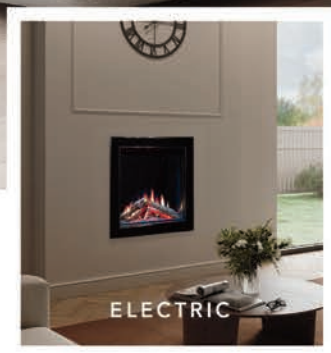
HOW DOES MULTIDISCIPLINARY COLLABORATION LEAD TO BETTER OUTCOMES FOR CLIENTS, COMMUNITIES AND THE BUILT ENVIRONMENT?
I would call it an ecosystemic approach. Through multidisciplinary collaboration, we grapple with the complexity of each project, harnessing its full potential rather than rushing to preconceived solutions which oversimplify the challenge and recycle generic responses. We believe that each project is enriched by the shared conversations it instils between people of different backgrounds and skillsets. Harnessing this dynamism is where true innovation originates, adding to our collective knowledge and the great work-in-progress that are our cities.

IN YOUR BOOK 'BIG HOUSE, LITTLE CITY,' YOU EXPLORE THE RELATIONSHIP BETWEEN BUILDINGS, CITIES AND ECOLOGY. HOW SHOULD ARCHITECTS BE RETHINKING THEIR APPROACH TO URBAN DESIGN TO RESPOND TO ENVIRONMENTAL CHALLENGES?
The overriding message of my book is that we must reunite architectural and urban thinking. They are part of an indissoluble

Everton FC Stadium

Charlton & Jenrick 5 YEAR WARRANTY

Sustainable Heating,
Stylish Living.



Charlton & Jenrick LTD

Scan, click or call to find out more

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

"For the first time in our history, we are truly a global team"


New Children's Hospital Dublin

and delicate ecosystem which needs to be approached holistically. The subtitle of my book, "architectural design through an urban lens" underscores this reciprocity. I conclude the book with specific examples of projects conceived as "little cities," where an urban mindset has underpinned the design process, facilitating user engagement, improving contextual integration and humanising the scale of large complexes.

CAN YOU PICK A PROJECT IN YOUR PORTFOLIO THAT BEST REPRESENTS YOUR DESIGN PHILOSOPHY?

The benefits of this methodology are illustrated very effectively by our National Children's Hospital in Dublin, a large high-profile building due to open next year. The image of the hospital as a little city, with internal daylit streets and individual buildings for different departmental clusters, made the design easy to understand for users. It broke down the scale of what might otherwise have been an intimidating institutional monolith. And allowed each user group to focus on the refinement of their 'building' without cramping the freedom of movement of other users to do the same with their areas, just like buildings along a street can develop independently of each other and of the street itself. In other words, there can be both diversity and unity, flexibility to cater for specific needs within a common sense of place.

WITH CHALLENGES ON SUSTAINABILITY, HOUSING DELIVERY AND SOCIAL VALUE PREVALENT IN THE INDUSTRY, WHAT DO YOU SEE AS THE BIGGEST CHALLENGE FOR ARCHITECTS?

Paradoxically, perhaps, the increase in complexity that comes with today's many societal challenges (whether related to environmental imperatives, heritage regulations or social value goals) only serves to highlight the importance of informed, collaborative action. The great pioneer of user participation, Italian architect Giancarlo De Carlo, once said provocatively that "architecture is too important by now to be left to architects". His aim was not to demean architects but to highlight that the environment should be a collective concern, in which everybody has a vital stake and a part to play. Architects are uniquely well-placed to develop solutions but these will only work if they are the product of a collective effort and hard-won consensus.

HOW DO YOU SEE THE PROFESSION CHANGING OVER THE NEXT DECADE, PARTICULARLY AROUND SUSTAINABILITY, COMMUNITY ENGAGEMENT AND INTERDISCIPLINARY COLLABORATION, AND WHAT SKILLS WILL DEFINE SUCCESSFUL FUTURE ARCHITECTS?

All these skills will become more and more important and will continue to require strong interpersonal abilities to develop briefs, articulate design visions, engage with multiple stakeholders and navigate increasingly complex regulations. These are aspects of the creative process that cannot and should not be relegated to machine-thinking. For the time being, at least, they will remain safe from AI!

AS PART OF RECRUITING THE 'NEXT GENERATION OF LEADERS' IN ARCHITECTURE, WHAT ADVICE WOULD YOU GIVE TO YOUNG ENTRANTS TO THE PROFESSION?

Hold onto your optimism! Understand and cultivate the drive that first inspired you to become an architect, urban designer or engineer. It's this that will give you the stamina to persevere. Doing the kinds of projects we do best at BDP is never a sprint; it's always a marathon that requires long term commitment and the patience to follow ideas through, staying true to the original vision but with sufficient resilience to respond to change. In this sense, the design and implementation process is like a dry run for the future life of the buildings.

BDP RECENTLY PUBLISHED GUIDING PRINCIPLES OF GOOD DESIGN. WHICH RESONATES MOST STRONGLY WITH YOU PERSONALLY?

Our Guiding Principles are People, Place, Planet, Purpose and Process. All are important and intertwined. Tackling any of them separately reinforces the kind of siloed thinking that we need to avoid. A well-known 'starchitect' said to me recently that "there is no such thing as local culture"; in other words that the specific characteristics embodied by the five P's are irrelevant. I disagree wholeheartedly!

WHERE DO YOU SEE THE PRACTICE HEADING OVER THE NEXT FIVE YEARS?

For the first time in our history, we are truly a global team. This comes with huge advantages in terms of insight, talent, breadth of collective experience and capacity for collaboration. But it also comes with understandable challenges, above all the imperative to stay agile, ensuring that we remain responsive and inventive as new challenges arise.

www.jameshardie.co.uk

JamesHardie™

SITE LINES

The final member of the Shard family earns its Place

Albert Giralt of Renzo Piano Building Workshop reflects on Shard Place, the final piece of the Shard Quarter, and how its design completes a 25-year vision for London Bridge.

Almost 25 years have passed since Renzo Piano Building Workshop was commissioned to design The Shard. With the completion of Shard Place, the vision we set out with all those years ago has finally come to fruition. This offers an opportune moment to reflect on that journey, and on the urban quarter it has produced.

It was never about a single landmark. From the outset, the ambition was to build a piece of city: a group of buildings that could transform London Bridge not only through its skyline but through its public realm and the way people move through the area. The Shard, The News Building and now Shard Place have each contributed to this transformation, turning a fragmented and difficult-to-navigate part of London into a coherent urban destination.

Before the project began, London Bridge was one of the city's most important transport interchanges, yet a confusing place to navigate. Below lay an intricate network of pedestrian routes; above, a concourse whose natural arrival point was blocked by a huge bus station, obscuring the railway entrance and denying the area any real civic presence. Between the two, a weak system of vertical connections did little to tie them together.

The three buildings have progressively transformed this condition. The Shard established a new identity for London Bridge and gave the station a recognisable main facade. The News Building made it possible to relocate the bus station away from the railway entrance, freeing space for a new public square that reconnected the station to the life of the street. Shard Place extends this transformation southwards: its floating mass carries the public realm beneath the building towards Guy's Quad and Southwark, widens Joiner Street, and strengthens the connection between street and concourse with a generous south-facing staircase – designed both as a route and as a place to sit and enjoy the sun.

Together, these interventions have done more than create three related buildings. They have reorganised the urban realm, clarified movement through a complex transport interchange, brought new commercial life to the site, and created a new centre for London Bridge. The buildings function as both architecture and urban infrastructure – defining streets, squares and connections while

A SENSE OF PLACE
"The challenge with Shard Place was not to repeat The Shard or The News Building, but to understand what connects them beneath the surface" – Albert Giralt
© Will Pryce

allowing a once fragmented place to become a coherent piece of the city.

We often describe the relationship between these buildings as a 'family.' But a family is not a set of identical individuals – its members share certain qualities while each keeps its own character and purpose. The challenge with Shard Place was not to repeat The Shard or The News Building, but to understand what connects them beneath the surface, and reinterpret that through a residential building.

That dialogue begins at the scale of the city itself. Very early in the design process, we decided that Shard Place should never compete with The Shard, but act as its companion. Its height was deliberately limited to roughly a third of The Shard's, establishing a clear hierarchy within the Shard Quarter and allowing each building to play its own role while reinforcing the coherence of the whole composition.

The second key decision was to step the massing of Shard Place down toward the south. The principal mass rises to roughly 100 metres in the north, toward the Thames and the long views beyond, while a lower 60 metre volume meets Southwark's more residential scale. This stepping also protects an important sightline within the Quarter: from Borough Street to the west, The Shard's inclined facade can still be read uninterrupted, base to summit. Shard Place is shaped to frame that diagonal, allowing The Shard to remain the dominant vertical presence.

With that relationship established through scale and massing, the question became how the dialogue could continue through material and detail. The kinship between the three buildings is also expressed in their response to light. All three use glass to capture the changing light and reflect the shifting sky of London. Rather than presenting heavy, opaque volumes, they respond almost like 'atmospheric instruments,' evolving throughout the day and across the seasons.

In The Shard, the building geometry is used to catch and reflect the changing sky. At The News Building, individually inclined glass panels similarly catch and reflect the light, while deeper metal fins add greater depth and a more pronounced rhythm. At Shard Place, this shared interest in light and reflection is expressed at a more intimate scale, through finely layered glass louvres that bring depth, texture and a much finer grain to the facade.

These louvres are not decoration. They provide natural ventilation, act as balustrades, soften solar gain, and create a richer relationship between interior and exterior. Where opaque panels are needed for thermal performance and solar control, they are treated as insulated shadow boxes behind an external louvred skin, so the facade's rhythm never breaks.

This layering gives the building a domestic character while keeping the crystalline quality shared across the Shard Quarter. From a distance, Shard Place reads as part of the same architectural family as its siblings; up close, its finer grain and residential identity come through. And because the louvres are so transparent, opening the full-height inner windows creates something rare in a high-rise: interiors that feel genuinely open to the air outside.

The wintergardens extend this idea of mediation between inside and outside. Positioned at the corners of the facades, their high transparency and lightweight construction help break down the perceived mass of the three buildings while enriching the spatial experience from the inside.

At Shard Place, this condition is particularly important.

WINTERGARDENS & LOUVRES
Wintergardens are found at corners of facades, and louvres provide natural ventilation
© Nic Lehoux / Hufton + Crow

Conceived as projecting balconies, the wintergardens extend the living spaces of the apartments and create a more immediate dialogue between the home and the city beyond. Sheltered from the elements but open to daylight, natural ventilation and the changing weather, they offer a softer transition between the domestic interior and the life of London Bridge beyond.

Now that the Quarter is complete, what satisfies me most is how naturally it all reads on the ground. Visitors do not experience The Shard, The News Building and Shard Place as three separate design exercises undertaken decades apart. They experience a continuous piece of city – one that has been allowed to grow and change while holding onto an underlying coherence.

That, to me, is the real measure of success. A building cannot be judged in isolation. It has to listen to what is already there and answer it thoughtfully, at every scale – from the skyline and the public realm down to the detail of a louvre and the experience of opening a window.

Shard Place was never meant to be read on its own. It was always meant to complete a sentence that we began writing 25 years ago.

Albert Giralt is partner and director at Renzo Piano Building Workshop

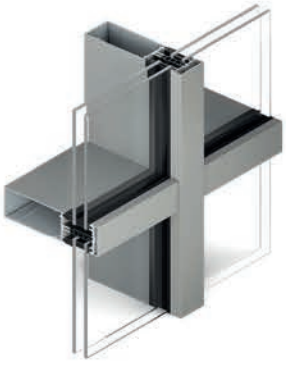
PASSIVE HOUSE THINKING
FUTURE-READY LEARNING

From primary schools to university campuses, education buildings demand low energy use, long-term durability and exceptional comfort. TECHNAL's SOLEAL Next windows and TENTAL 50 & 60 facade systems support Passive House informed design for cool, temperate climates with high thermal performance, slim sightlines and excellent daylight for teaching spaces.

IMAGINE WHAT'S NEXT

Passive House Institute

NBS



TECHNAL®

↗ Windows ↗ Doors ↗ Facades ↗ Sliders

www.technal.co.uk

By Hydro

BUILDING INSIGHTS LIVE

Round table chair, ADF editor James Parker

Delivering Cost-Effective Passivhaus Projects at Scale in the Commercial & Residential Sectors

Passivhaus at scale is the panacea for achieving game-changing cuts in carbon emissions in our built environment, and making commercial and residential buildings resilient against future economic and climate-based shocks. While achieving such projects is challenging in terms of build quality and performance, misconceptions exist around excessive cost, design difficulty and aesthetic ramification, and the reality could be far more achievable than people think.

That was the number one takeaway of a recent round table held to share views, insights and experience around delivering large-scale Passivhaus projects in both commercial and residential contexts. Held in London and sponsored by Ubbink, Aeroseal UK and Technal (representing the MVHR, air-tightness and facade sides of the debate respectively), this was a multi-faceted, and fascinating discussion which busted a few myths.

Being staged in one of the hottest weeks on record helped the discussion around physical ramifications of better performing lower carbon buildings resonate even more strongly. We looked at key areas such as whether the Government should mandate Passivhaus, whether 'designing to Passivhaus principles' was enough, and most revealingly, how Passivhaus at scale could be delivered at very competitive build costs.

The varied group we assembled included major housebuilders (Wilmott Dixon and Barratt London), who were embracing certified Passivhaus approaches, and gave valuable learnings from their work to date delivering schemes. We also welcomed SME builders (London-based Kind and Co, Sheffield-based Milestone, and Hastings firm Serenity Projects), who shared their experience of pivoting to focus on Passivhaus. Several architects, the Passivhaus Trust, academics, and consultants including Certifiers, constituted a really informed mix to give a broad view, bolstered by questions from our sponsors.

The debate also took in findings from ADF's 2025 research survey, which included positive findings such as that the current "resistance to a perceived 'Passivhaus look'" of buildings will decrease over time as we approach net zero, and that architects roles can be strengthened by projects which bring the painstaking rigour which Passivhaus demands. However, while clients remained the key driver of uptake, respondents said they had misconceptions on what Passivhaus actually constitutes. The largest design challenges for architects were confirmed as eliminating cold bridges, achieving

ATTENDEES

James Parker, Chair, Managing Editor, Architects' Datafile / Housebuilder & Developer
Mark Slater, Managing Director, WWA Studios
Michael Brett, Founder, By Milestone
Jean Dib, Senior Building Physics Consultant, SRE
Ann-Marie Fallon, Co-Director, Passivhaus Trust and Associate Director, Architype
Dr Joel Callow, Founder Director, Beyond Carbon
Attzaz Rashid, Head of Design, Barratt London
Mike Roe, Passivhaus Certifier and Director, WARM
Hannah Dixon, Passivhaus Designer, Progress In Practice Architects
Daniel Levey, Director, Serenity Projects
Lorna Taverner, Head of Architecture and Technical Design, Willmott Dixon
Aaron McCarthy, Director - Sustainability Lead, Hive Group
Evette Prout, Business Development Manager, Kind & Co Builders
Dr Sara Mohamed, Assistant Professor in Building Physics, University of Nottingham

SPONSORS' ATTENDEES

Craig Cundey, Ventilation Product Lead, Ubbink
Hugh Franklin, Head of Operations, Aeroseal UK
Craig Simms, National Specification Manager, TECHNAL

aeroseal UNITED KINGDOM ubbink TECHNAL

airtightness, and including MVHR in schemes, although our round table confirmed all as being essential to Passivhaus.

The takeup problem

It is well-established that Passivhaus buildings save up to 90% of the typical energy consumed for heating and cooling, and some buildings don't even require additional space heating at all, however only 2% of homes currently built are certified. While the debate touched on reasons for the relatively low takeup in the UK, it also celebrated the great at-scale examples, from St Sidwells Leisure Centre in Exeter, to the Stirling Prize-winning social housing scheme Goldsmith Street in Norwich, and Agar Grove affordable housing in London. The first phase of the latter was on a par with average build cost per m^2, and Goldsmith Street was even lower, coming in at a modest 1,875 m^2. This was a crucial learning to communicate, given that industry's costs had inflated by 91% since 2012.

The chair James Parker framed the opening discussion by saying that Passivhaus at scale was an incredible opportunity to achieve a raft of energy and carbon savings "in one hit," but it did mean that the industry would need to discard the prevalent "that'll do" approach to construction of buildings, and "embrace surgical precision and a painstaking focus on the details," whether this was tackling thermal bridges or taping all junctions.

The round table tackled several of the assumptions made around Passivhaus, such as it being prohibitively expensive or difficult. But, as co-sponsor Hugh Franklin from Aeroseal UK put it, it required a much higher level of ambition than the 'do the minimum' he said was commonly seen in project meetings: "Passivhaus isn't asking us to meet minimums. It's asking us to be brave and bold – that's a wild change for people."

But one of the key learnings was that high-density Passivhaus could provide the cost savings on other, lower density options that might help it become a more mainstream proposition. At the same time, the industry needed to share approaches and understanding more, particularly given the unlikelihood of major Government levers being applied.

Answering the chair's question of whether Passivhaus should be mandated by Government in England (as it is soon to be, at least for an 'equivalent' standard, in Scotland), Franklin said that that the industry should be looking to Ireland, where there had been a "market-led drive" to Passivhaus at scale in residential, citing one major builder "committed to improving the fabric of low rise housing" using Passivhaus. He added that in Ireland, "It's Government encouraged. It's not mandated. It's all moving that way."

We looked at how to drive industry culture, training, but also standardisation in the hope of helping grow Passivhaus (without killing innovation), but also critically how it was one of the few tools available to provide a clear, unambiguous benchmark on quality against the current major drivers to improve standards in UK construction.

Anne-Marie Fallon gave a strong case that Passivhaus was the answer for serving the dual drivers of the incoming Single Construction Regulator (mooted for 2028 and covering building safety, product regulation, and contractor licensing), alongside the "consumer protection reform that is coming through DESNZ." She said Passivhaus stood as a ready-made solution to the "fundamental issue of not understanding what quality is or what it looks like." Fallon added that in this respect Passivhaus was a "framework to hang all of that building regulation on… it's about building quality, accountability, transparency…we already have Homes England identifying that Passive House is one of the only methodologies that can give you a healthy home."

Other participants agreed that Passivhaus was a proven but under-adopted framework for quality and comfort, and one, Joel Callow of Beyond Carbon, held that energy use in properties "was the problem, not carbon, and Passivhaus hits that bullseye directly."

Mandates versus incentives

The group had mixed views on whether the Government should be mandating Passivhaus for new builds in the commercial and residential sectors, in the way Scotland has done (albeit in a 'Passivhaus equivalent' model for Scottish homes). Ann-Marie Fallon said that current Government policy "prioritises clean heat over efficiency, which is backwards." Attzaz Rashid of Barratt London, who have committed to building all new homes Passivhaus Certified, warned about policy conflicts (for example "mandated heat networks" in London) making Passivhaus-type ambition unviable: "This kind of mandated de facto position in London just kills any ambition of anyone doing anything like Passivhaus…we're definitely trying to break down those barriers."

Joel Callow on the other hand had scepticism around adding to the "smorgasbord of contradictory regulation" already present, adding that Part L is "actively opposing Passivhaus by not showing the benefits that it actually brings." Most delegates agreed that rather than Government mandates for Passivhaus, what was needed was incentives for clients and developers to pursue the method, but also as in the words of builder Daniel Levey, "proper education on the benefits."

In terms of the 'carrot versus stick' debate for increasing uptake, several in the group favoured incentives and outcome-based rules over simple prescriptive approaches Mike Roe, Passivhaus Certifier at WARM, said that mandating Passivhaus was "dangerous; if we keep on mandating it, we're always going to get pushback." Instead he wondered whether there were "ways of incentivising Passivhaus, i.e. if you did Passivhaus, it smoothed the way."

Lorna Taverner from Willmott Dixon however reckoned that the industry had to pursue "the carrot and the stick" to make developers take up the approach: "If they don't want to, they will find a way not to do it." One potential 'planning incentive' mooted was the idea of faster approvals granted if teams delivered Certified Passivhaus.

Cundey argued for mandating "sensible ventilation," saying "if we are going to mandate things, let's look at mandating a sensible ventilation solution rather than a four-inch bathroom fan. If we put MVHR in as the baseline, then people will start saying, 'What's the next solution after that?'"

Aaron McCarthy of Hive said that the Passivhaus community was growing, but Government incentives were needed to grow it further, and that each new project "becomes a new benchmark."

MYTH BUSTING
Misconceptions around the cost of Passivhaus were tackled and debunked

The cost of Passivhaus design – and the myths

The delegates discussed the perception versus reality of the cost of Passivhaus, which has traditionally been seen as 'higher end' in UK residential projects, but where at-scale projects are demonstrating new levels of cost-effectiveness. However, Lorna Taverner noted that sometimes good aspirations rapidly change as clients discover the investment required: "many clients began with Passivhaus as an ambition but drop it as soon as cost advisors say it's 30% more."

Attzaz Rishad described the journey that Barratt London had taken to Passivhaus adoption, a large part of which was proving viability, meaning "a year of building physics and work with a cost planner." This was followed by a presentation to the board which was "framed around customer value, repeat business, and future resale, not just capex." He added: "Once you put all the puzzle together and you present it right, it becomes very difficult to ignore."

Joel Callow said that PHPP, the well-regarded Passivhaus design software, was, despite its limitations, also a worthy, but underappreciated value engineering tool. He said: "We regularly save the contractors money because we know they don't need X, Y, or Z." Delegates discussed how at-scale schemes were able to further reduce costs, but the incentives for developers to do this were less in private residential than in commercial projects.

The pricing of risk, and the 'de-risking' of Passivhaus, was fundamental to increasing its uptake, said delegates including Hugh Franklin, as is the presence of QS' in the early decision-making around projects' feasibility. However, Ann-Marie Fallon of the Passivhaus Trust counselled against 'double counting' in cost plans – "they often double count or mis-assume, such as double counting wall insulation. She cited a school project where a cost plan reportedly priced an air test at £250K, warning: "Those are risks that should be built into projects, and driven down over time."

Hugh Franklin commented: "The person that should be in this conversation is the QS, otherwise there will be a red light in the middle. It will stop." Lorna Taverner said while Passivhaus Designers should be engaged early, getting clarity on the project that will lead to realistic risk pricing and other certainties was "the difference between a Certified Designer and a good Passivhaus Certified Designer – they will give you really good starting points." Evette Prout from Kind & Co builders, said that they "love early engagement," and had been able to spot and fix overengineering with a particular social housing client as a result.

The conversation also looked at the need for dynamic modelling to cover the fluctuations in living behaviours and climate in large-scale, complex Passivhaus schemes, but also how PHPP could be the engine for the crucial collaboration that was needed in design teams. Aaron McCarthy of Hive Group said from his experience in large-scale schemes, "collaboration is really driven through the PHPP; no-one I have come across knows the ins and outs of every single aspect."

Delegates agreed PHPP was a useful predictive design tool, not just a tick-box, on the other hand, SAP and Future Homes Standard modelling was heavily criticised for "baked-in errors" (e.g. not valuing permeability higher than 3 $m^3/h{\cdot}m^2$).

The debate looked at the possibility that designers and contractors could be over-engineering Passivhaus, particularly in terms of the design of services, such as HVAC and MVHR in particular, and this could be one factor contributing unnecessary cost to projects. Instead, a more streamlined approach was possible, emphasised by our co-sponsor, Ubbink at the debate.

Solutions: airtightness, MVHR & overheating

As ever, the second half of the debate began with our sponsors posing realistic, and often searching questions to the group. Ubbink's Craig Cundey asked, based on experiences of several prospective Passivhaus domestic clients deciding against going the 'whole hog,' "What constraints are stopping them achieving Passivhaus? We know there's a financial element, but is the void as big as we think? Is it planning issues? Is it product availability, a lack of skilled supply chain?"

Michael Brett of Milestone said that the biggest issue was "knowledge and education; people were either being told the wrong thing, so it's putting them off, or the homeowner themselves isn't educated on the benefits." Cundey suggested that even the term "Passivhaus" could put people off, and wondered if something more like Barratt London's 'Low E' branding would be more helpful with consumers.

The conversation around ventilation solutions was enmeshed with a continuing debate around Passivhaus' ability to tackle rising temperatures and protect residents, particularly resonant in this heatwave summer, with heat a "silent killer" in the words of Joel Callow, versus the much more visible deaths at Grenfell Tower. He said there was "no natural ventilation solution to high-density housing."

In terms of MVHR delivery, Cundey said that 'design-only' software layouts for MVHR are often wrong;, but site surveys and close supplier–installer collaboration can avoid oversizing and over-engineering.

Hugh Franklin of Aeroseal UK (who specialise in air-tightness solutions) also homed in on perceptions of construction risk in Passivhaus, in his question. He asked: "Of the five core Passivhaus

MULTI-DISCIPLINARY, PRO-PASSIVHAUS
While addressing the challenges, the group were keen to advance Passivhaus at scale

design principles: insulation, windows, ventilation, airtightness, and thermal bridge-free construction, do you consider airtightness to be the largest risk to delivering at scale?"

Franklin gave a forthright set of views to the panel around the fear factor for clients on the 'extreme' levels of airtightness, versus the reality of practice. He said "many site teams view achieving the high levels of airtightness required in Passivhaus as the biggest "risk," but this was because it's new, not because it's inherently more difficult to achieve. He enthused that 'air testing day' was "like a school sports day," in terms of the levels of excitement and expectation generated from this new discipline.

Lorna Taverner said that Willmott Dixon had managed to get air-tightness "down to 0.25," and that now the firm's "bigger risk" was building "thermal bridge-free." She admitted that in London, in a "non-combustible situation," the company "will not build a timber frame building that has no thermal bridges," and they "are spending a lot of money getting those modelled, because [for insurers] it just doesn't exist."

Michael Brett from contractor Milestone said that the onsite culture shift towards a painstaking focus on details was huge compared to previously. "From where they were three years ago, the level of care and attention and detail that they put into a project now is out of this world."

Lastly, Craig Simms from Technal focused on commercial viability, suggesting that currently Passivhaus wasn't viable at scale in mainstream housebuilding. He asked: "What needs to change in the way projects are designed, specified and procured to make Passivhaus commercially viable at scale in mainstream residential development?' The delegates used this to springboard a conversation around the dangers of 'Passivhaus principles' being used for projects rather than actual certification; Simms saying this can result in "two different prices" for different specification levels in tenders.

Lorna Taverner gave the fascinating but worrying insight that Willmott Dixon has found they are "always undercut because other people will be saying we're Passivhaus principles, not Passivhaus certified." She said the risk factor here from ambiguity in tenders was "very challenging."

The group agreed that designing to 'Passivhaus principles' rather than going the whole hog, and therefore possibly ending up with 'Passivhaus-lite' schemes, was not advisable. It was seen that compromise of this sort would also potentially lead to "perverse outcomes," as Passivhaus is implicitly designed as a package solution with inter-related compliance components, not as a "pick and mix."

RECOMMENDATIONS FOR INDUSTRY & GOVERNMENT

- **Mike Roe, WARM:** Incentivise rather than mandate, as it's more practical.
- **Daniel Levey, Serenity Projects:** People need proper education on the benefits.
- **Hannah Dixon, Progress In Practice Architects:** There needs to be a long-term plan people can have access to, so they can prepare.
- **Aaron McCarthy, Hive Group:** I would like to see the Government incentivise Passivhaus so the community can grow organically.
- **Craig Simms, TECHNAL:** Remove the association with Passivhaus automatically being about pound signs.
- **Evette Prout, Kind & Co Builders:** Reach out to consumers.
- **Attzaz Rashid, Barratt London:** Outcome-based performance targets on heating demand, overheating resilience, air tightness, ventilation and in-use performance. And allow policy flexibility where evidence proves you have a better outcome than the default position.
- **Jean Dib, SRE:** Enhance the passive measures at the start of projects, to make things easier.
- **Ann-Marie Fallon, Architype:** Incentivise through outcome-based metrics, so a carrot not a stick, and mandate post-occupancy evaluation. Leverage the Building Safety Act to bring quality control, and see healthy buildings as a public right, not an asset.
- **Craig Cundey, Ubbink:** Increase training standards; what is offered currently isn't good enough.
- **Sarah Mohamed:** Focus on building performance, and academia and industry should collaborate to educate future generations.
- **Hugh Franklin, Aeroseal UK:** An outcome-based solution that isn't very confusing would be grasped with both hands.
- **Michael Brett:** Building Regs should be scrapped and rewritten, and it's all about what the guys onsite do.
- **Lorna Taverner, Willmott Dixon:** "We have a massive skills shortage, but we are very technical people and we need to bring the conversation to where new industry recruits are."
- **Mark Slater, WWA Studios:** Amalgamate Building Control with Clerk Of Works into a 'super inspector' role.

ubbink

Ubbink Ubiflux MVHR Units

Certified for Passivhaus. Designed for Excellence.

Ubiflux Vigor wall units are compact and energy efficient. The units are ready for direct assembly and do not require any adaptation on-site. Ubiflux Vigor units are available in left and right versions. All units are available with four top connections.

Benefits

- Extremely compact and energy efficient
- Guaranteed equal supply and exhaust
- Touch screen display with handy wizards for fast and easy install
- Practical maintenance and minimum service parts

@ sales@ubbink.co.uk

www.ubbink.co.uk

INTERNATIONAL FOCUS

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

BAKU, AZERBAIJAN
ZHA

Renders by ZHA

ZHA has been selected to design the Baku Expo City masterplan, guided by a comprehensive tree preservation strategy. The masterplan for the 198-hectare site adjacent to the existing Baku Expo Centre addresses the city's growth in population over the past decade by providing a wide variety of residences within its community.

Incorporating one-bedroom apartments to large family homes within a "walkable urban district", the masterplan "integrates the essential civic institutions that serve as the foundation of every vibrant community," said ZHA, including schools, shops, entertainment venues, as well as public parks, sports clubs and medical clinics.

The masterplan is arranged as a series of interconnected neighbourhoods within preserved pine forests, integrating tree-lined boulevards and landscaped nature corridors to create a sustainable and resilient community linked together by pedestrian pathways and cycle routes. At the heart of the masterplan lies a public square.

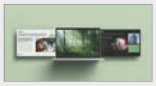
All new buildings within the masterplan will incorporate a green roof system to enhance thermal insulation and reduce cooling energy demand. This system is integral to the district's stormwater management that collects and naturally filters rainwater for reuse as well as mitigating the urban heat island effect. The masterplan prioritises a sustainable, people centred environment by integrating renewable solar and wind energy, passive design strategies, effective water management and low-carbon material choices. These measures create "highly efficient residential and civic infrastructure together with comfortable outdoor spaces within a vibrant, resilient community that supports the long-term ecological health of the city," said the architects.

BAL launches new website with enhanced digital tools

BAL had announced the launch of its new brand website, delivering a streamlined, user-friendly experience designed to make it easier than ever to find products, access technical information and plan tiling projects. The new website marks a significant evolution from the previous platform, moving away from a complex segmented user experience to provide a single, intuitive destination suitable for tilers, fixers, distributors and specifiers alike. Built with a responsive and fluid design, the new website has been developed with mobile users in mind, reflecting how the majority of people access BAL's digital resources. Enhanced navigation and improved functionality ensure visitors can quickly find the information and products they need, whether on site, in store or on the move. Alex Underwood, head of marketing at BAL said: "The launch of our new website represents a major investment in improving the customer experience and providing easier access to the products, tools and technical support our customers need. We've focused on creating a faster, more intuitive platform that helps contractors, retailers, distributors and specifiers find the right solutions."

01782 591100 www.bal-adhesives.com

Clade Engineering Systems' report



Clade Engineering Systems has published its fifth annual Sustainability Report, setting out the company's progress across carbon reduction, responsible business practice, product innovation and customer impact. The 2025 Sustainability Report highlights a year in which energy security has become an increasingly important driver for building owners and operators, alongside the continuing requirement to reduce carbon emissions. In 2025, Clade developed an Ultra Low Noise heat pump to address acoustic performance, and a high-efficiency cooling heat pump. Total emissions reduced from 599.23 tonnes CO_2e in 2024 to 574.88 tonnes CO_2e in 2025.

0113 887 9604 https://shorturl.at/Z3r5R

The opinions of the architectural community

As part of netMAGmedia's research offering, *ADF* has been increasingly harnessing the knowledge and views of its focused readership to produce 'Industry Viewfinder' white papers based on reader surveys. These are documents which contain unique insights and data on a wide range topics that are currently fuelling debate in the industry, from Passivhaus to Part L. This audience research, providing real-world experience, provides us with the opportunity to better understand the needs of our readers and tailor our content accordingly.

insights.netmagmedia.co.uk/whitepapers

NEWS FEATURE

Decoupling mats are an important element of successful background preparation

A successful commercial tiling job starts long before the first tile is laid. Careful assessment and preparation of the background, including the selection of a suitable decoupling mat (if required), is essential to create the foundations for a durable installation. For contractors, time spent getting the background right is not an optional extra – it is fundamental to delivering a successful project. All decoupling mats are designed for lateral movement, not vertical. If deflection is present in a substrate, this will require sufficient bracing to ensure the floor can withstand the weightloading of the tiled floor, especially in high traffic or load bearing areas.

While attention tends to be focused on tile selection, adhesives, grout and workmanship, background preparation is just as important, and decoupling mats have an important job to play in achieving a reliable, long-lasting tiled finish.

This is especially true in commercial buildings, which can present particularly demanding conditions. Floors may be subject to heavy foot traffic, wheeled loads, vibration, movement and fluctuations in temperature and humidity. At the same time, substrates such as concrete, screeds, timber and existing floors can experience movement or shrinkage. This is particularly true in the case of floors where underfloor heating has been installed. If these stresses are transferred directly into the tiled surface, cracking, debonding or grout failure can result.

A decoupling mat, such as PALACE EASI-MAT, is designed to help manage lateral movement by creating a separation layer between the substrate and the tiled finish, providing an isolating and protective layer to facilitate floor tiling. Stresses in the substrate are not transferred directly to the tiles.

For a tiling contractor working in a commercial environment, installing a decoupling mat will offer an important additional level of protection, complementing, but not taking the place of, other aspects of good surface preparation.

Any substrate still needs to be structurally sound, suitably clean and appropriately prepared for the system being installed. Levels, moisture content, surface contamination, cracks and existing movement all need to be assessed before work begins.

Correct specification is equally important. Not every mat is suitable for every substrate or application, as the requirements of a busy commercial environment will probably be considerably greater than those of a domestic installation. The different types are decoupling/uncoupling mats, anti-fracture mats and underfloor heating carrier mats. All types are designed to provide a cushion between the subfloor and the tiles. With regard to specification, the best advice, as always, is to follow manufacturer's guidance.

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

CPD FOCUS

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

GLIDEVALE PROTECT LAUNCHES NEW CPD ON FIRE RATED MEMBRANES FOR BUILDING SAFETY

Glidevale Protect has developed a comprehensive new CPD to address the importance of fire rated wall membrane systems and how they can contribute to building safety in higher risk buildings, as well as to support specifiers and architects in understanding Building Regulation compliance, Approved Document B, the Building Safety Act and Gateway 2 requirements.

The CPD covers the integral role of so-called 'hidden protectors' – fire rated wall breather membranes used within the external façade systems and air and vapour control layers. These products play a crucial part in helping structures achieve regulatory compliance as well as being able to offer other benefits such as moisture control, airtightness and the required reaction to fire and thermal performance. The area of correct specification for applications, as well as the importance of independent testing and robust technical evidence is also explored to aid understanding of what is required to progress a project through Gateway 2 of the Building Safety Act via the Building Safety Regulator.

Glidevale Protect's CPD examines how putting greater emphasis on specifying wall construction membranes which achieve a Class A2-s1, d0 reaction to fire rating and go beyond the current requirement for a Class B-s3, d0 membrane to be used in building heights of 11m and above, can help support long-term specifications as standards evolve and become more stringent.

As requirements can vary depending on region, building height and in some cases application, Glidevale Protect's CPD presentation also looks at the regulatory fire safety requirements in the UK and Ireland, covering the reaction to fire requirements for membranes in addition to focusing on public sector buildings such as schools.

Glidevale Protect's fire rated 'FR' range consists of Protect FrameSafe FR, its Class A2-s1, d0 fire rated external wall breather membrane; Protect FrameSafe 5000 FR, its unbranded counterpart for open façade cladding applications; Protect FrameFoil FR, a Class A2-s1, d0 fire rated reflective air and vapour control layer as well as associated Class A2 tapes for both the external and internal membranes. The company's fire rated membranes and BIM models are available on NBS Source. Glidevale Protect is also an NBS Chorus specification writing partner.

To request the CPD, visit www.glidevaleprotect.com/cpd or to find out more about Glidevale Protect's fire rated membrane range, visit the website.

0161 905 5700 www.glidevaleprotect.com/frsolutions

CEDRAL'S VENTILATED FIBRE CEMENT RAINSCREEN CLADDING CPD

Cedral's latest RIBA accredited CPD presentation *Ventilated Fibre Cement Rainscreen Cladding: Design Principles and Project Integration* has been designed to give architects practical guidance and design inspiration. Helping attendees to specify and design rainscreen cladding with confidence our CPD offers insights into ventilated fibre cement rainscreen cladding, looking at design principles and project integration. The learning objectives from the CPD will simplify rainscreen cladding specification, reduce risk and provide support for realising your aesthetic vision.

www.cedral.world/en-gb/professionals/-/cpd-seminars

INFORMATIVE & ENTERTAINING ROUND TABLE EVENTS

Always looking for new ways to engage with our audience, *ADF* now hosts round table events. With constant updates to building regulations, round tables are an ideal way to gauge industry concerns/problems, to future-proof your marketing strategy. Hosted by our Editor, James Parker, we ask a diverse selection of our readers to attend, providing us with insights across the full spectrum of our audience. Sponsoring a round table enables you to position your brand/company as a voice of authority within the industry.

insights.netmagmedia.co.uk/round-tables

WHY DOOR HINGE SPECIFICATION DESERVES MORE ATTENTION

Hinges account for only a small proportion of the cost of a typical door assembly, yet they play a critical role in how doors perform throughout their lifespan. A new RIBA-approved CPD from hinge specialists **SIMONSWERK** explores the factors that influence hinge specification, helping architects understand how considerations such as door properties, applied hardware, environment and fire safety requirements can all affect hinge selection. "Specifying Door Hinges: Balancing Design, Performance and Compliance" covers two RIBA core curriculum areas, legal, regulatory and statutory compliance, and design, construction and technology. The CPD provides a practical framework that architects can use to support early design decisions and discussions with specialist suppliers. The presentation also includes project examples to demonstrate how hinge specification responds to different architectural requirements. Commenting on the new CPD, Andrew Kite, managing director at SIMONSWERK UK, said: "The aim of this CPD is to give architects greater confidence when approaching hinge specification, helping them understand the key influencing factors, ask the right questions early and make more informed decisions." The session runs for approximately 45 minutes and is available in person at your practice or online. For details or to book, please email or visit the website.

cpd@simonswerk.co.uk
uk.simonswerk.com/en/architecture/riba-approved-cpd

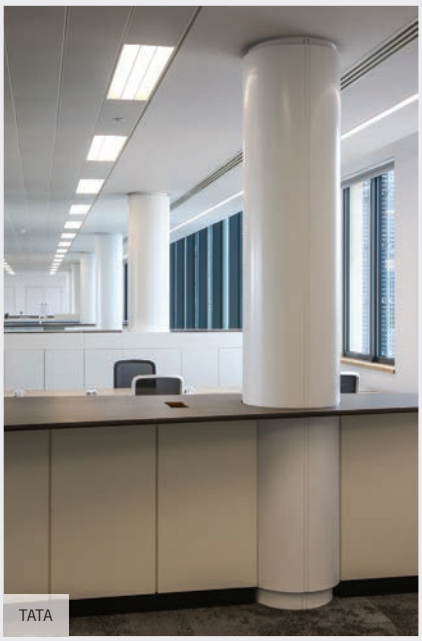
Verta column casings – covering up with style

Decorative architectural casings are widely used in contemporary building design, offering a versatile, effective and stylish way to conceal structural steelwork and concrete support columns.

Practicality, versatility and aesthetics are central to Encasement's Verta column casing range, which has been installed across many sectors, including retail, education, healthcare, hotels, sport and leisure, and commercial refurbishment.

This versatility is driven by the wide range of materials and finishes available to architects and specifiers, together with the choice of standard shapes and sizes alongside bespoke solutions manufactured for individual projects.

As a result, Verta casings have been specified and installed for many well-known brands, including Tesco, Porsche, Premier Inn, TATA, Kia Motors, Halfords and, as well as retail outlets, hospitals, universities, leisure projects and office buildings across the UK.



TATA

The range comprises six products: Circa pre-formed MDF casings, Quadra plywood casings and the Forma metal range. Polyma GRP and Gypra GRG casings are moulded from glass-reinforced polymer and glass-reinforced gypsum respectively, while Metza provides up to two hours' fire protection for mezzanine floor support columns.

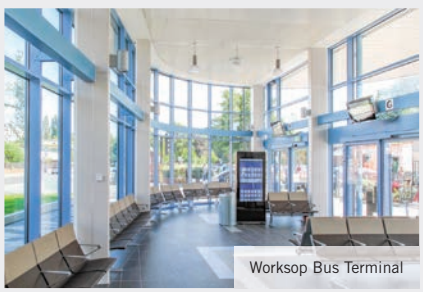
Porsche West London

Both Circa and Quadra casings are made from sustainably sourced, UKTR-compliant materials and are designed for interior use only. Each range offers circular and square profiles in a wide choice of sizes, along with extended circles and rectangular profiles using pre-sized infill panels for further design flexibility.

As with other column casings in the range, a wide choice of finishes is available. Decorative high-pressure laminate (HPL) is the most popular option for Circa and Quadra, as it is resistant to damage, scuffs and scratches, with finishes including plain colours, wood grains, metallics, textured effects and real wood veneers. Circa is also available unfinished for on-site painting and decoration.

Notable Circa and Quadra installations include Liverpool University, Gateshead International Stadium, Blackburn Markets, Worksop Bus Terminal, Farnborough College 6th Form Centre and the Dame Kelly Holmes Sports Centre.

While all Encasement column casings are suitable for interior applications, Polyma and Forma can also be used externally due to their weather resistance and durability.



Worksop Bus Terminal

Forma casings are manufactured from aluminium or stainless steel and are available as circular profiles from 250 mm to 1,000 mm in diameter, as well as square, rectangular, hexagonal and bespoke forms. Finish options include British Standard and RAL colour PPC, alongside brushed, anodised, embossed and textured surfaces.

Premier Inn

Polyma GRP casings also offer durability and extensive colour choice. Produced from moulds, they provide strong design flexibility, with shape, size and colour options that can be tailored to bespoke project requirements.

Projects including Lime Wood Primary School in Erith and Winchester College together with Porsche West London and Cardiff's Premier Inn demonstrate the versatility of bespoke Forma and Polyma column casings for both interior and exterior applications.

01733 266 889
www.encasement.co.uk

© Simon Menges

BUILDING PROJECTS

THE CHANCERY ROSEWOOD LONDON

A greener kind of grandeur

The transformation of the former US Embassy in London into a five-star hotel by David Chipperfield Architects delivers an adaptive reuse with high-end luxury and BREEAM Outstanding sustainability credentials, despite whole life carbon compromises, says Stephen Cousins.

At a time when the 'special relationship' between the UK and the US is under pressure, due to differing security strategies and tensions over military operations in the Middle East, it is gratifying to report on the restoration and revamp of a building constructed when the partnership was at its zenith.

David Chipperfield Architects' (DCA's) transformation of the former US Embassy in Grosvenor Square, originally designed by famous Finnish-American architect Eero Saarinen between 1957 and 1960, takes great pains to protect and restore the Grade II-listed structure. It also dials up the 'bling' factor to 11, with plush new interiors masterminded by French designer Joseph Dirand to meet the high standards required of a 5-star luxury hotel.

Britain's first modern embassy was created at the apotheosis of the US post-war embassy-building programme, its importance underscored by the fact it was the only such project designed through a competition.

Not many hotels have stone facades decorated with gold anodized aluminium, and fewer still have a gold-plated eagle with a 35-foot wingspan perched on the rooftop. In creating a 137-bedroom hotel for The Rosewood Chancery, Chipperfield retained and restored these features, alongside other elements, including a signature diagrid ceiling of intersecting concrete beams, which was also expanded.

Doubling the building's area from 25,000 m^2 to 48,000 m^2 nevertheless required significant interventions, including digging down 20 metres to expand the basement to house a gigantic new ballroom, spa complex with swimming pool and MVHR plant and 'stretching' the facade to add a much taller sixth storey.

Passive design and energy efficiency

BUILDING ON A SPECIAL RELATIONSHIP
The former Embassy building in Grosvenor Square was designed by Eero Saarinen between 1957-1960, at the height of US-UK diplomatic collaboration
© Library of Congress, Prints & Photographs Division, Balthazar Korab Archive at the Library of Congress

FACING PAGE
A well-insulated Metsec subframe now runs in front of the new posts around the perimeter of the building, which has been equipped with MVHR systems

measures, including thermally upgraded facades, delivered a 20%+ improvement on Part L compliance in terms of carbon emissions, enabling the building to become the first five-star hotel in the UK to achieve a BREEAM Outstanding rating for sustainability.

Ryan Butterfield, project architect at DCA said: "Many of the BREEAM credits were achieved with seemingly invisible architectural provisions: enough basement space for larger, more efficient plant equipment, water efficient vacuum drainage, biodiverse rooftop garden planting, and detailed tracking and monitoring of waste and recycling streams during construction."

Nerve centre

Grosvenor Square in Mayfair has always had a strong association with the US, during the Second World War Macdonald House at number 20 functioned as the nerve centre for the country's armed forces in the UK.

Saarinen's embassy, constructed across the full length of the western side of the square, exemplified a US post-war mission to 'engender good will' in host nations by creating distinctive architecture designed to be accessible, distinguishably American, but also to harmonise with the surroundings.

A fine example of mid-century modernism, the building is notable for its strongly-articulated design, dynamic chequerboard facade with 'O'-shaped window surrounds and finely detailed stonework. The scheme was developed in collaboration with UK executive architects Yorke, Rosenberg and Mardall, with FJ Samuely as structural engineers.

Adaptive reuse has become a trend with Saarinen's buildings, his bird-like terminal at John F. Kennedy International Airport in New York was resuscitated as a hotel in 2019 following an extensive renovation by Beyer Blinder Belle. More recently, another former US Embassy in Oslo was transformed into a mixed-use office complex.

When it opened in 1960, Saarinen's US diplomatic base in the UK proved controversial from the start. The blocky white facade contrasted with the surrounding Georgian architecture, even though it was intended to darken over time to blend more harmoniously with local buildings. Critic Reyner Banham called it "monumental in bulk, frilly in detail." Even Saarinen himself expressed some doubts, saying: "In my own mind the building is much better than the English think – but not quite as good as I wished it to be."

Political events deepened negative sentiment towards the building. In 1968 it was the focus of violent anti-Vietnam war protests and 200 people were arrested. After the attack on the twin towers in 2001, a series of anti-terrorist devices were installed around the embassy and the road running along the front was completely closed to traffic, quashing the architect's original intention – which was to promote a degree

© Simon Menges

of openness and accessibility.

The security threat continued over subsequent years until, in 2017, operations were moved to a new modern embassy building in Nine Elms, Battersea.

The decision to reinvent the building as a luxury hotel dates back to 2015, when DCA, in collaboration with structural engineers AKT II, won a design competition run by client Qatari Diar, an arm of the Qatar Investment Authority. ReardonSmith Architects was later appointed as executive architect and work commenced on site in 2018.

Chipperfield's proposal sought to strengthen the qualities that made Saarinen's original design so special, and enhance the dialogue between the adapted building and its context.

Improving the ground floor connection to the street, by removing the existing traffic regulation order and all external security measures accrued over the years, including the perimeter defensive sloping stone bank, makes the building more open and accessible.

The existing entrances at the front and sides are retained and the ground and first floors feature a range of new public uses including restaurants, bars, lounges and meeting rooms overlooking Grosvenor Square.

Despite the Grade II listing, many aspects of the embassy were not considered worth keeping. Over the years, it had been modified for different office uses, partitions, finishes and furniture had been removed, changed or covered leaving only small areas that remained faithful to their original design.

The first floor grand rooms, originally including a library and consular offices, had completely lost their original architectural value with spaces sub-divided by partition walls and original features removed or covered by carpets, banners, blinds, etc.

Elsewhere, the fountain in the main lobby, the auditorium ceiling, office

IMPROVED CONNECTION
Connection with the street has been improved by removing all the existing traffic regulation and external security measures accrued over the years
Photos © Simon Menges

furniture designed by Saarinen, and ironmongery on the main and side entrances, were lost.

As a result of these alterations, and in order to accommodate all the modern services required in a high end hotel, the upper floors were largely demolished and re-built behind the existing facade to accommodate guest rooms.

The building's original U-shaped block had a fourth side added as an extension to the rear to increase the sizes of hotel rooms on typical levels. This also enabled a new core layout with a central atrium, above the first floor, providing a visual connection between the first floor lobby and the hotel room levels above.

Saarinen's early design studies included a pronounced cornice level on the street frontage in the same checkerboard pattern, which was never realised.

Chipperfield seized on this idea, extending the facade vertically to add a double-height sixth storey designed to complement the composition and language of the floors below. The new Portland stone O-frames are built to a different scale and rhythm to distinguish the floor from the levels below.

Above the building's crown, and behind the winged form of sculptor Theodore Roszak's gilded eagle, another two storeys were added and set back to create a golden rooftop pavilion featuring a bar and penthouse suites, each reported to cost up to £24,000 a night.

Chipperfield seized on an idea from Saarinen's early design studies, extending the facade vertically to add a double-height sixth storey designed to complement floors below

A SUSTAINABLE SUBSTITUTE
Double-glazed units have been installed on ground and first floor facades, as well as better performing, but virtually identical looking units on upper stories
Photos © Simon Menges

Grid-locked

Saarinen's legacy on the interior is mostly evident on the first floor, where his unique concrete diagrid ceiling has been restored and extended at the rear, replacing an existing concrete beam ceiling.

Historic England's Grade II listing entry for the embassy describes the diagrid as "an intelligent combination of structural expression and decorative motifs, which provides cohesion to the whole and illustrates Saarinen's principles of marrying form to structure, interior to exterior – and his close involvement in detail and execution."

All embassy-era office partitions were removed from the first floor, giving the diagrid an almost continuous horizontal plane, an open piano nobile aligning with Saarinen's original intention for the building to appear as a "palace on the park." The existing double-height cruciform columns on this level were also retained and extended to the rear.

Externally, a comprehensive refurbishment of the existing facades saw more than 4,000 individual elements disassembled for cleaning and restoration before being reinstalled.

Improvements to facade thermal performance were key to helping the building achieve a BREEAM Outstanding rating. "Upgrading windows and wall layers offered building fabric improvement to reduce the energy demand for internal spaces," says Butterfield.

An insulation-packed Metsec subframe now runs in front of the new steel posts around the perimeter, the latter functioning as primary structural support for new post tensioned floor slabs. The upgraded facade is now 370 mm thick in section, resulting in a U-value of 1.14 W/m²K, down from 6.28 W/m²K.

Single-glazed windows on the ground and first floors are replaced by fixed double glazed units designed to match the existing. On the upper hotel levels, better performing but visually similar versions of the full-height, pivoting glass steel frame and rolled-steel cassette windows have been installed and the existing gold-anodised extruded aluminium central mullions refurbished.

Replacing the existing double-height aluminium framed glazing sections on the piano nobile level was a particular challenge. Saarinen's 57 mm frames were embedded into the cruciform columns to make them invisible, but adding new secondary glazing frames set back from the originals would have interfered with the sight lines.

DCA opted instead to specify a new aluminium frame with double-glazed units, which copies the original central mullion detail, increasing the frame section to 82 mm. This elegant solution improved transparency and acoustic performance and cut the U-value from 6.04 W/m²K to 1.89 W/m²K.

The Rosewood Chancery is operationally very efficient, thanks largely to all the high tech plant in its basement, but on the first floor the listed diagrid ceiling could not be used to supply air conditioning so a complex displacement air system via a raised floor was required.

"These are normally used in galleries or museum buildings, to provide the best quality solution for heritage and sustainability," says Butterfield.

Other factors helping boost the project's BREEAM credentials include enhanced biodiversity, through the installation of an extensive green roof with a higher number of floral species known to be of ecological value to wildlife.

But class-leading operational performance is sadly not matched by the ability to cut embodied energy. Despite efforts to adapt and reuse parts of the building, critics have highlighted the extensive demolition work and decision to ship in exotic stone from abroad to line the interiors.

Back when the design got underway in 2015, the impact of embodied carbon was less well understood by the industry and DCA has admitted that, at the time, its decision making was driven less by sustainability concerns than by heritage and conservation of architectural intent.

Were the project started again today, DCA has said embodied carbon would have been a more important part of the decision making process.

Ultimately, the Rosewood Chancery encapsulates both the promise and the contradictions of adaptive reuse. It demonstrates how heritage buildings can be sensitively reimagined to meet the highest standards of operational performance, but for future transformations to be truly sustainable, they must balance architectural legacy with a comprehensive plan to tackle whole-life carbon. ■

Overheating: why prevention should come before cooling

As overheating becomes an increasing challenge, Stuart Dantzic of Caribbean argues that architects should put passive measures such as external shading ahead of mechanical cooling.

A better approach is to prevent as much of that heat entering in the first place

The Environmental Investigation Agency's recent report, UK Cooling Policy in a Warming World, should prompt serious questions about how we approach overheating in buildings.

The report calls for a National Cooling Action Plan that prioritises passive measures, including shading, before mechanical cooling. I believe that principle deserves greater attention from everyone involved in building design. As we know only too well by now, the UK is experiencing hotter summers and more frequent periods of extreme heat while increasingly well-insulated and airtight buildings can be vulnerable to overheating if solar gains and ventilation have not been properly considered.

The obvious response is to increase cooling capacity. But that treats the heat after it has entered the building. A better approach is to prevent as much of that heat entering in the first place.

For architects, this is where solar shading becomes particularly important. Large areas of glazing can transform a building, bringing daylight into interiors, providing views and contributing to the architectural character of a facade. They can also allow substantial solar radiation into the building, particularly when glazing is exposed to strong sunlight.

Once solar radiation has passed through the glass, the resulting heat becomes part of the building's internal heat load. Removing it later requires energy. External shading addresses the problem before that happens by intercepting solar radiation outside the glazing and reducing the amount of heat reaching the glass.

This is an important distinction. Shading does not work like an air-conditioning system, lowering temperature by mechanical means. Its value is in reducing solar heat gain and helping to limit the conditions that lead to overheating.

The principle is reflected in the Cooling Ladder highlighted by the European Solar-Shading Organisation. Its approach places prevention and measures to reduce heat entering the building ahead of passive methods of removing heat, with active cooling further down the hierarchy. Solar shading is identified as one of the measures that can help prevent solar heat gain.

That is a logical sequence. We would not normally specify a heating system without first considering insulation and the performance of the building envelope, so overheating deserves the same level of thought.

The evidence for giving shading greater consideration is also growing. Research commissioned by the British Blind and Shutter Association examined overheating in a block of London flats. In the study, rooms without shading reached a maximum 'feels like' temperature of 47.5°C, while rooms fitted with external blinds reached 28°C.

Those figures relate to the specific building and conditions of the study, so they should not be treated as universal performance guarantees. They do, however, demonstrate the potential difference that effective solar control can make.

For architects, the implication is significant. Solar control needs to be considered alongside glazing specification, orientation, ventilation and the wider performance of the building envelope. It should form part of the design response to solar exposure rather than being left until the end of the project.

Dynamic shading also deserves consideration. Movable systems can respond to changing solar conditions, allowing shading to be deployed when solar gain is problematic and retracted when daylight or useful solar gains are desirable. Automated control can further improve performance by responding to solar radiation and internal conditions.

This makes shading part of the building's environmental strategy rather than simply a product applied to the facade. It also reinforces the importance of considering shading early, because the relationship between glazing, solar control, daylight, glare and ventilation is too fundamental to be resolved effectively as an afterthought.

The same thinking needs to extend beyond new-build projects. The EIA is clear that the UK needs to address overheating in existing buildings as well as future development. Retrofitting passive measures can be more challenging where the original facade, window design or planning constraints limit the available options, but shading should still be considered wherever significant solar gain is contributing to overheating.

The EIA also warns that an unmanaged expansion of mechanical cooling could increase energy demand, emissions and inequality in access to comfortable indoor temperatures. Mechanical cooling will have a role in many buildings, but the question is whether it should be the first response to overheating.

External shading is not a substitute for good building design, ventilation or mechanical systems where they are genuinely required

I believe the EIA report gives the industry an opportunity to reconsider that hierarchy. Architects already balance daylight against glare, glazing against solar gain and openness against thermal performance. As summers become hotter, overheating needs to sit firmly within that conversation.

External shading is not a substitute for good building design, ventilation or mechanical systems where they are genuinely required. It is one of the tools that can help make the whole building work better, and it needs to be considered early enough to influence the design.

If we are serious about creating buildings that remain comfortable as the climate changes, preventing excessive heat gain should come before finding ever more energy-intensive ways of removing it.

For more information about solar shading solutions, scan the QR code.

Stuart Dantzic is MD at Caribbean Blinds

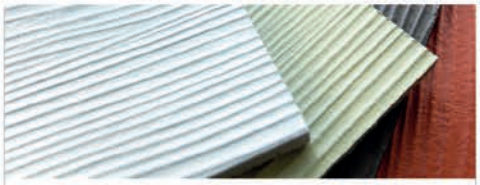
THE FIBRE CEMENT MARKET IS MOVING. YOUR PROJECT DOESN'T HAVE TO WAIT.

Alternative fibre cement façade solutions, supported by expert specification guidance.

ceramapanel®
Compressed Fibre Cement Façade

A1 RATED

Through-coloured fibre cement panels



evverlap®
Non-combustible Weatherboard

A2 A1-S1,D0 RATED

Fibre cement weatherboard planks

procellapro®
Non-combustible Sheathing Board

A1 RATED

Non-combustible sheathing board

Supply chains shift. Product ranges change. When they do, projects need practical alternatives that can be specified with confidence.

Valcan offers a comprehensive range of fibre cement façade solutions, including Ceramapanel (A1), ProcellaPro and Evverlap, supported by a UK-based technical team providing specification, design and project support.

Whether you're reviewing an existing specification, exploring alternative solutions or planning a new project, we're here to help keep your project moving.

- Ceramapanel®, ProcellaPro® and Evverlap® fibre cement solutions
- A1 and A2-s1,d0 fire classification options
- Available from UK stock*
- Technical specification support
- Accredited CPD sessions
- Samples, project advice and budget pricing available

*subject to technical verification and product range.

Discover more at valcan.co.uk

Request a sample | Download Technical Information | Specification Documents | Book a CPD session | Talk to the Technical Team

VALCAN
The Defining Standard

Specify, install, demonstrate

Simon Buckmaster at James Hardie discusses how the Building Safety Act has reshaped facade installation, from fire classification and product selection to competence, documentation and the need to rigorously specify, install and evidence work done.

The Building Safety Act has changed more than the regulatory landscape. It has changed the culture of construction and for facade contractors that shift is now very visible on the ground.

Product choice, documentation, installation practice and competence evidence are all under greater scrutiny than they were even two years ago. For those working on external walls, this is not a distant compliance conversation happening between clients and principal contractors. It is arriving in tender requirements, pre-construction meetings and practical completion checklists.

From classification to comprehension

One of the most tangible changes for the supply chain is the move away from older national fire testing classifications towards the European system, BS EN 13501. Ratings such as A1 and A2-s1,d0 are now becoming standard reference points across facade specification; for anyone selecting or installing external wall materials, understanding what sits behind those letters and numbers matters.

A2 denotes limited combustibility. S1 indicates very low smoke production. D0 means no flaming droplets or particles. Many clients and homeowners now recognise the term 'fire rated' but may not fully understand what it means in practice. For trades working onsite, being able to explain this clearly to architects, contractors and clients alike is increasingly a standard feature of the job.

What the HRB threshold means

The ban on combustible materials in and on the external walls of buildings over 18 metres has already reshaped specification habits across the sector. But the implications extend beyond the cladding board itself.

Insulation, membranes, cavity barriers, fixings and subframes all form part of the external wall system. A material that performs well aesthetically, matches a specification visually, or is more readily available may not carry the right fire classification or be suitable within the required wall build-up. Getting this wrong, or assuming that one compliant product makes the whole facade compliant, is one of the more common risks on site.

The Higher-Risk Buildings regime has reinforced this. For buildings of at least 18 metres (or seven storeys) containing two or more residential units, as well as hospitals and care homes, building control approval must now be secured before work begins. Applications must demonstrate both regulatory compliance and management competence. Facade contractors and subcontractors are consequently more likely than ever to be asked for product

Image courtesy of James Hardie

Many clients and homeowners now recognise the term 'fire rated,' but may not fully understand what it means in practice


Image courtesy of James Hardie

Fire safety requirements will continue to become more detailed, more evidence-led and more closely scrutinised

certificates, installation records, technical data sheets, warranties and photographic evidence of completed work.

Documentation

The instinct to treat compliance paperwork as an administrative task saved for the end of a project is no longer viable. Evidence of what has been installed, how and by whom is now central to how higher-risk building projects are managed and approved.

This has a practical consequence for how facade contractors approach procurement and installation. Early engagement with manufacturers and technical teams, before products are ordered, before details are fixed, before work begins onsite, reduces the risk of substitutions, queries and delays later in the programme. It also creates a cleaner paper trail from the outset.

For installers, one of the most important principles is that a product's fire classification does not automatically mean the whole facade is compliant. Overall performance depends on the complete construction, how products interact and whether installation reflects tested or assessed details.

Cavity barriers, movement joints, penetrations, fixings and ventilation gaps all require proper attention. Cutting corners in any of these areas can undermine the intention of the specification, regardless of how well the primary cladding product specified performs.

Manufacturers have a significant role to play here. Clear technical guidance, tested product data, installation instructions and accessible project support help contractors make better decisions and reduce risk.

From September 2026, updated Approved Document B guidance will recommend more than one common stair in HRBs, alongside provisions to support evacuation lifts. This is primarily a design-stage matter but it will have downstream consequences, affecting stair cores, escape routes, protected shafts, lobbies and the points where the external envelope meets the wider building design.

The regulatory direction is clear and it is not going to reverse. Fire safety requirements will continue to become more detailed, more evidence-led and more closely scrutinised.

Simon Buckmaster is operations & technical manager at James Hardie


Make your next decision easier....
In a world of tighter compliance, rising performance demands and greater scrutiny, architects need clarity they can trust.
Guided by *building for what's next*, wienerberger helps support confident specification decisions, **reducing risk, protecting design intent and helping future-ready projects move forward.**
Dave has spent nearly 40 years helping customers choose the right solution for their projects
wienerberger
Building for what's next

Magply

Independently BBA Certified for Safe and Reliable Structural Roof Deck Construction

BBA APPROVAL INSPECTION TESTING CERTIFICATION
CERTIFICATE 22/6050

BBA CERTIFIED FOR STRUCTURAL ROOF DECKS

OTHER ROOFING APPLICATIONS

Multi-Purpose Sheathing | Bitumen Felt | Capping
Recovery & Protection Board | Liquid Waterproofing
Lead & Hard Metals | Single Layer Membranes | Sarking

FOR MORE INFORMATION VISIT

magply.co.uk

+44 (0) 1621 776 252 sales@magply.co.uk

BUILD WARRANTY APPROVED

NBS Source PARTNER

A1
EUROCLASS A1 NON-COMBUSTIBLE BOARD

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

www.firmanglass.com

PYRAN® S

For fire resistance and protection of people and property

Now available for UK manufacture

Multifunctionality in fire protection

PYRAN® S is a pre-stressed, monolithic borosilicate single pane safety glass in accordance with EN 13024-1.

As a component in fire-resistant glazing that meets the requirements of resistance classes E 30, E 60, E 90 and E 120, it has proven its outstanding optical and mechanical characteristics over the years in a wide variety of buildings.

Areas of application

PYRAN® has been internationally approved and ideally suited for:

- Facades
- Partition walls
- Skylights and rooflights
- Doors
- Roofs
- Smoke screens
- lift door glazing
- lift shaft glazing

Facts

- Higher ability to withstand temperature differentials: In comparison to soda-lime glass, tempered borosilicate glass can better withstand temperature differentials and can therefore be glazed with normal edge covers (20±2 mm).
- Higher softening temperature: Because the glass is self-supporting for more than 30 minutes, large panes and simple frame constructions are now possible.
- Higher viscosity: The glass flow rate is low due to the high viscosity and durability of borosilicate glass, so with more edge cover, greater fire resistance times in excess of 90 minutes can be achieved.
- NiS crystals do not form: Due to the chemical composition of borosilicate glass, nickel sulphide crystals cannot form. Spontaneous glass fracture due to embedded NiS crystals cannot happen with PYRAN®.

Further information is available from our sales and technical offices or visit www.firmanglass.com

Tel: **01708 374534** Email: **Pyran@firmanglass.com**
Firman Glass, 19 Bates Road, Harold Wood, Romford, Essex RM3 0JH

Value Added Partner SCHOTT

FIRMAN
www.firmanglass.com

Sliding door specification for Passivhaus homes

Justin Spires at Solarlux UK explores how high-performance sliding doors can help Passivhaus and energy efficient homes achieve demanding thermal standards without compromising daylight, design or connection to nature.

In the current architectural landscape, large areas of glazing are a defining feature of contemporary design. Sliding doors, bifold doors and expansive glazed openings maximise natural light.

This raises an important question: does increasing the proportion of glazing come at the expense of thermal performance? As energy standards become more demanding from Approved Document L and the Future Homes Standard (which was released on 24 March 2026) to Passivhaus requirements – how can highly glazed buildings realistically meet them?

Traditionally, energy efficiency has depended on heavily insulated walls with relatively small windows to achieve low U-values and air tightness.

When treated as a high-performance system, precision-engineered sliding doors can enhance the thermal envelope while also providing the coveted glazed aesthetic and a connection to nature. With the right specification, extensively glazed buildings can achieve the performance levels required for Passivhaus certification.

Sliding doors as part of the thermal envelope

When assessing thermal performance, current guidance places increasing emphasis on whole-building performance.

This means that sliding doors – frame, edge details as well as the glass – must be considered as part of the overall thermal envelope, working with walls, roofs and floors to: control heat loss, manage solar gain, maintain indoor thermal comfort and reduce energy use.

Glazing behaves very differently from materials such as timber, brick and insulation. Even high-performance glazing systems have a disproportionate effect on heat loss and solar gain, as well as contributing to overheating risk, if not carefully specified.

Frame design is particularly important in Passivhaus sliding doors. Attention to detailing and airtightness at junctions play an important role in thermal performance.

The glazing specification is equally important. Features such as low-emissivity (low-e) coatings, and double or triple glazing help to reduce heat loss. At the same time, the glass must be carefully selected to manage solar gain throughout the year. Solar gain can be beneficial in the winter, as it brings additional heat into the building, but in the summer, solar gains can increase the risk of overheating.

With the right specification, extensively glazed buildings can achieve the performance levels required for Passivhaus

Sliding doors and their impact on airtightness and weatherproofing

Airtightness and weatherproofing are also an important part of the Passivhaus standard.

To achieve compliance with Passivhaus requirements, design-stage decisions are critical

Airtightness contributes to energy efficiency since air leakage around doors and at junctions can cause heat loss and draughts. Precision engineering can support a sliding door's airtightness with tight manufacturing tolerances and high-performance seals.

Weatherproofing is also linked to thermal performance. Wind load resistance affects how well a sliding door resists deflection when subjected to heavy winds. Good wind resistance means preventing drafts and heat loss, as well as maintaining the sliding door's structural integrity.

Meanwhile, watertightness refers to how well the system prevents water ingress during heavy rainfall.

Good airtightness, wind resistance and watertightness work together, contributing to the durability of the sliding door system and the building's overall thermal efficiency.

Integrating thermally efficient sliding doors

In Passivhaus design, energy performance is assessed across the entire building. Sliding doors are one part of the overall system, impacting thermal efficiency, solar gain, airtightness and weather resistance.

To achieve compliance with Passivhaus requirements, design-stage decisions are critical. The size, position and specifications of sliding doors can affect window-to-wall ratios, daylighting and solar-gain strategies. If the right balance is achieved, large spans of glazing can contribute to passive heating in winter while minimising the risk of overheating in summer.

For optimal thermal performance, sliding doors must be integrated correctly within the thermal envelope, with careful attention to junction detailing and installation. With care, precision and planning, a sliding door system can support compliance with not only Building Regulations, but also Passivhaus targets.

Sliding doors and expansive glazing systems do not have to be a compromise in energy efficient building design. When integrated into the complete thermal envelope, sliding doors can enhance energy performance and occupant comfort as well as achieving the thermal performance levels required for Passivhaus, without compromising on design or aesthetics.

Justin Spires is technical manager at Solarlux UK

TORMAX automation for historic entrance

As part of a refurbishment of the Grade II* listed Pitt Building, **TORMAX UK** partnered with IQ Glass to deliver advanced automation for the building's new frameless glass draft lobby. Supplying an advanced iMotion 2202 operator to power the single internal sliding door, TORMAX helped create an accessible, energy-efficient and reliable entrance solution that complements this prestigious heritage refurbishment. Designed and manufactured to exacting standards, the TORMAX range of iMotion operators offers exceptional whole-life value through reduced wear, low energy consumption and long operational life, making them an ideal choice for prestigious refurbishment projects where performance, sustainability and accessibility are equally important. Precise control of door movement, integrated safety monitoring and programmable operating parameters make the operator ideally suited to this key public access point. The sliding door system is tophung, with a discreet floor guide rail to maintain a clean threshold. The TORMAX iMotion 2202 operator is concealed within bespoke metal housings finished to complement the interior.

sales@tormax.co.uk

Brett Martin's polycarbonate panels

Brett Martin's Marlon Clickfix polycarbonate panels have been installed as part of the rebuilding of Hangar 2 at Manchester Airport, undertaken to accommodate Jet2.com's expanding aircraft fleet. Made to order in 12m lengths, and with excellent light transmission as well as thermal performance, Marlon Clickfix panels provided the ideal solution for the hangar doors. Maximising the amount of natural light, the panels have played a fundamental role in creating ultimate conditions for vital maintenance work on the fleet. Visit the website to find out more about Brett Martin's range of polycarbonate facade systems.

028 9084 9999 tinyurl.com/2axrd5jn

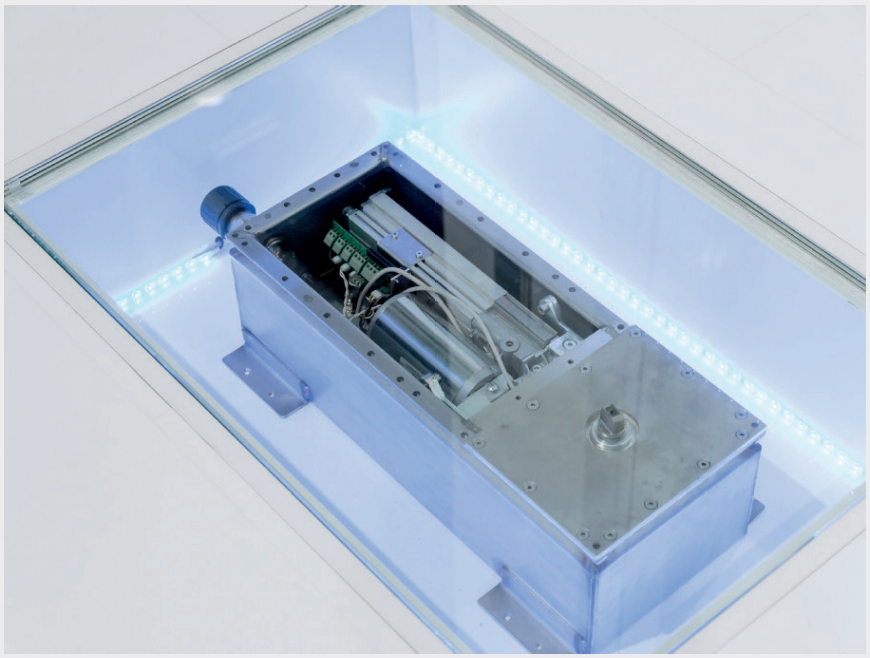
Latest news, views and more

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

Invisible innovation: The architectural case for underfloor drive systems on swing doors

In contemporary architecture, the demand for seamless integration between technology and design continues to grow. Nowhere is this more evident than in entrance systems, where the challenge lies in balancing automation, accessibility, and aesthetics. Underfloor drive systems for swing doors offer architects an elegant, discreet solution – one that delivers all the benefits of automation without compromising on visual design.



Seamless Design Integration

Architects often face the dilemma of integrating essential hardware into spaces where minimalism or heritage preservation is paramount. Traditional surface–mounted door operators can disrupt clean lines, obstruct sightlines, or appear visually intrusive – particularly in glass facades, timber doors, or stone–clad entrances. Underfloor operators resolve this by removing the need for visible hardware. Entirely concealed beneath the floor, these systems allow swing doors to function effortlessly without interrupting the aesthetic flow of the space.

Meeting Accessibility Standards with Style

Complying with regulations such as the Equality Act and BS 8300 doesn't have to come at the expense of design. Underfloor systems support fully automated, barrier–free access, while remaining hidden from view. They can be integrated with push pads, access control systems, sensors, or building management systems – ensuring compliance without cluttering the interior or exterior design.

Maximising Space and Flexibility

For projects where space is at a premium – narrow corridors, compact lobbies, or glass curtain walling – underfloor operators are an excellent alternative to overhead systems. They eliminate the need for side or overhead clearances and free up wall space for other architectural elements like signage, glazing, or lighting.

Quiet, Durable, and Built to Last

Behind the scenes, underfloor operators are designed for longevity and performance. Housed in sealed, floor–mounted boxes, they are protected against dirt, dust, and moisture – making them suitable for both interior and exterior applications. Their quiet operation makes them ideal for environments where acoustics are a priority, such as hotels, libraries, and healthcare settings.

Smart Specification for Modern Projects

Underfloor swing door operators align perfectly with modern architectural values: minimal visual impact, improved user experience, and intelligent, integrated functionality. While installation requires early coordination with floor construction and finishes, the design benefits are significant. For architects committed to delivering clean, cohesive, and compliant environments, underfloor operator systems offer a quiet revolution in door automation – both literally and aesthetically.

UFO NT: Underfloor operator – concealed door drive system

Giving designers greater freedom to create aesthetically attractive entrances the UFO NT operator is perfectly hidden from view. Mounted below the finished floor level it enables maximum transparency of the entrance yet still provides automatic access.

The UFO NT offers a wide range of capabilities and features, including manual use via the Smart swing function, a redundant spring system, programmable force settings, greater opening angles and increased leaf weight and widths for both internal and external doors.

Offering flexibility, the UFO NT has a full range of operational functions from fully automatic to manual opening and closing including low energy and Push & Go. At its core is GEZE's popular automatic swing operator, Powerturn. Scan the QR code to find out more.

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

GEZE

Deliver facade confidence with substructure focus

By Gary Robson, Business Development Manager at EJOT UK

The demands on rear ventilated or rainscreen facades are increasing all the time, with today's designs often required to deliver aesthetic excellence coupled with ever higher standards of fire safety, thermal performance and sustainability – usually within a demanding build programme.

The multiple challenges these design objectives and performance targets present mean the substructure has an increasingly important role to play. In many projects, a system-based approach is adopted to help reduce technical uncertainty and simplify delivery. However, as the performance capabilities of substructure systems, and the components that form them, varies widely, it is vital to carefully evaluate how the proposed support framing will meet the facade's overall goals.

Substructures like EJOT CROSSFIX are multi-purpose and critical to a facade's safety and long-term success. They must support various cladding loads, accommodate ever deeper levels of insulation, maintain strict ventilation levels and withstand the impact of fire, as well as manage movement caused by wind and thermal expansion.

The EJOT CROSSFIX Konsole

A project at Bremervörde, Germany, in which EJOT CROSSFIX was used to create the external envelope of a new school building.

Choosing ETA-backed components and systems

Facade substructures are often created using components sourced from multiple manufacturers, including rails, brackets, substrate fixings, insulation anchors and cladding fasteners. Although each product may carry its own performance credentials, proving compatibility across the complete assembly can be more complex.

Two very similar components may also have significantly different performance credentials, potentially introducing uncertainty regarding tolerances, movement allowances and responsibility for performance. All this adds risk and increases design coordination requirements.

This is one of the reasons why fully integrated systems, such as EJOT CROSSFIX, are increasingly popular. As a single engineered system manufactured from stainless steel, CROSSFIX is formed of components designed and tested to work together from the outset. This reduces the number of interfaces requiring verification and offers a clearer route to technical support – one system, one supplier.

CROSSFIX is Passivhaus certified and backed by a comprehensive European Technical Assessment (ETA), providing independently verified performance data across a range of cladding materials, substrates and design configurations. This helps project teams assess structural capability, thermal performance and durability with greater certainty.

Versatile and engineered to minimise thermal bridging, the CROSSFIX system utilises the innovative Konsole bracket. This can be used with both vertical and horizontal rails to simplify design and installation and reduce inventory. The Konsole also incorporates a thermal stop to further limit heat transmittance between the building structure and the cladding system.

A fully supported system on every level

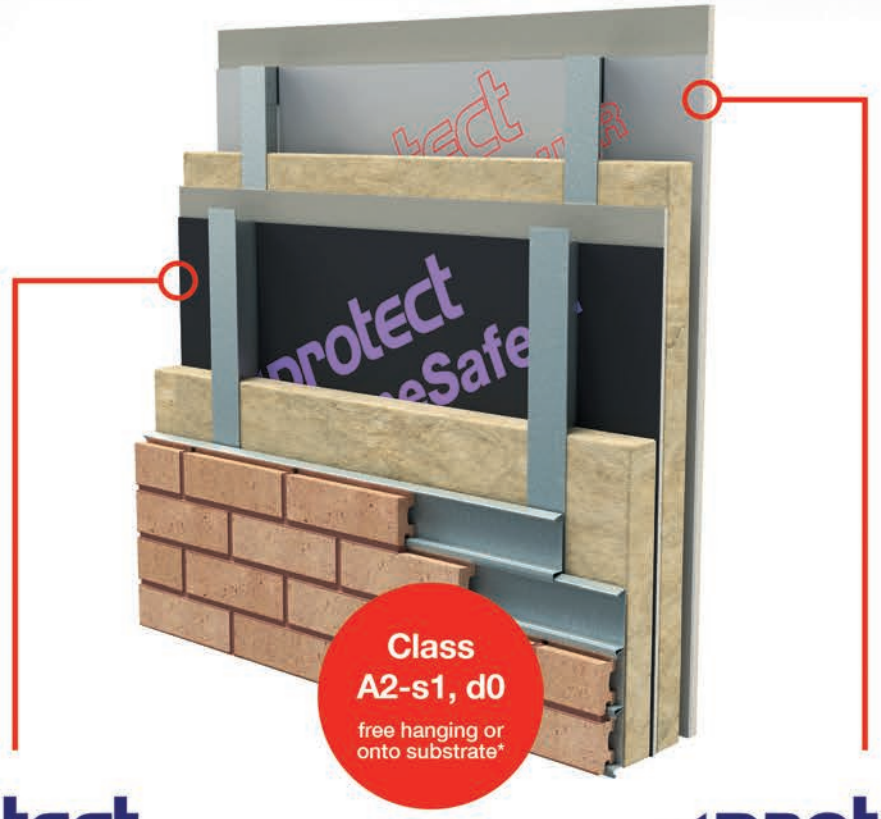
With CROSSFIX, architects and specifiers also benefit from a simplified design process because EJOT provides one source of technical information, calculations and design guidance. And structural engineers can easily access tested performance data and clearly defined load paths, while contractors can gain efficiencies through simplified procurement and coordination.

Early-stage technical support is another valuable dimension to working with EJOT UK, whether using the complete CROSSFIX system or our numerous individual components as part of another system. Our team can help identify suitable bracket configurations, movement solutions and fixing arrangements well before construction begins.

InfoUK@ejot.com
www.ejot.co.uk/CROSSFIX

NEW! Fire rated solutions for building safety CPD - book now: **www.glidevaleprotect.com/cpd**

Fire safety focused inside and out



A2 protect FrameSafe FR

Class A2 external fire rated breather membrane

A2 protect FrameFoil FR

Class A2 fire rated reflective air and vapour control layer

When choosing your fire rated wall membrane supply partner for high risk buildings, it's crucial that products perform.

By combining the Protect FrameFoil FR AVCL and FrameSafe FR external wall breather membrane with FR sealing tape, you can achieve a fully independently fire tested wall membrane system that exceeds Building Regulations. Suitable for all development heights, Glidevale Protect's complete fire rated solution gives added reassurance both inside and out.

*For further technical information and fire test reports, contact us on **+44 (0)161 905 5700** or e-mail **info@glidevaleprotect.com**

www.glidevaleprotect.com/frsolutions

glidevale protect

The Highlands' first Passivhaus school features offsite Wraptite® installation

In the Highlands, north of Inverness, students aged from 3 to 18 are enjoying the health and comfort benefits of the region's first Passivhaus-standard school.

The new £72 million Tain Campus is now home to Tain Royal Academy, Tain Primary School and St Duthus School. It has been constructed to the Passivhaus standard to reduce energy consumption and create a healthy learning environment.

The external wall specification included two Proctor Group membranes: the Wraptite® external air barrier system to the outside of the structure, and Procheck® A2 internally.

Veitchi Interiors installed both membranes as part of their work package. They played a proactive role in determining how the project was delivered. Thanks to having their own Metframe panel factory, they proposed installing Wraptite in the factory.

Following discussions at the project's pre-start meeting, both Highland Council (client) and Kier (main contractor) were happy to explore it.

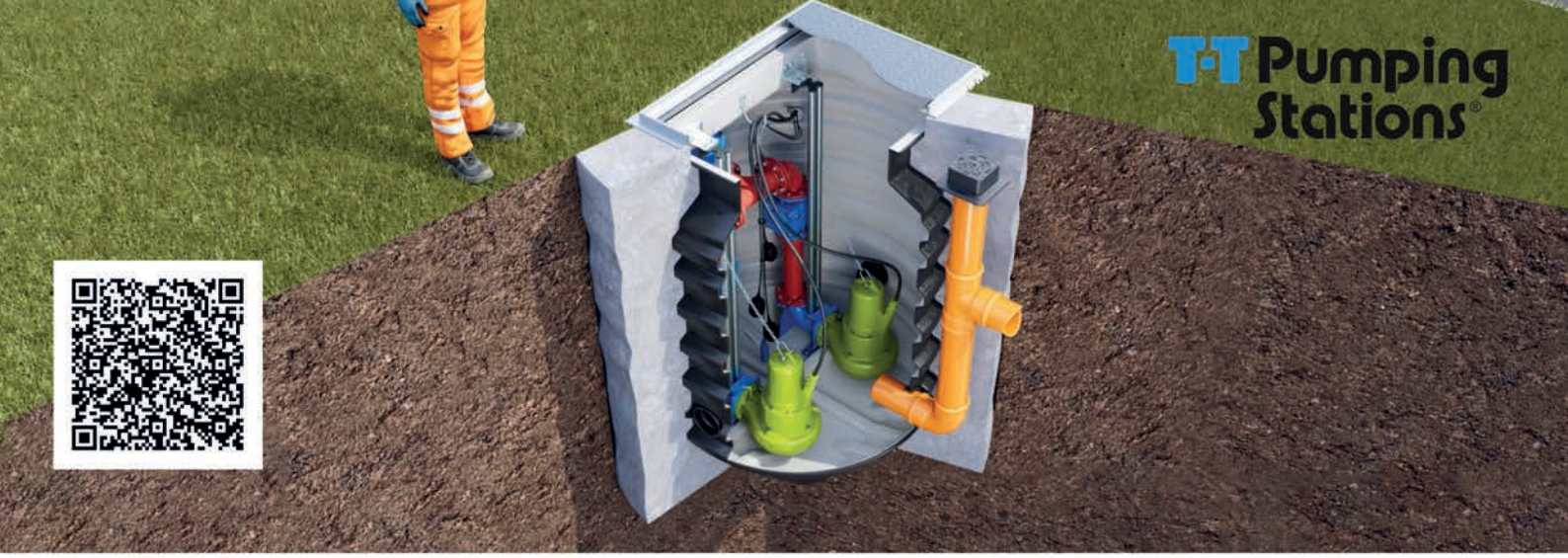
In such a northerly location, and also on the coast, weather was inevitably a factor. Removing the labour of the Wraptite installation meant the only work then needed on site was the application of tapes where required to fully seal the system against the wind and rain.

Alongside more formal Passivhaus training, Veitchi Interiors received an array of technical support from Proctor Group. Regional Sales Manager Linda Kay delivered a CPD training session on the products, followed by multiple site visits.

Wraptite is both airtight and highly vapour permeable, helping to achieve high standards of airtightness without increasing condensation risk in the structure. Its self-adhered installation is designed to ensure a consistent airtight external seal.

Procheck A2 is a vapour and airtight membrane that is also rated A2-s1,d0 when classified to BS EN 13501-1. It is therefore considered non-combustible, with no contribution to fire.

01250 872 261
proctorgroup.com/products/wraptite



T-T PRIVATE PUMPING STATIONS YOU CAN TRUST

BBA APPROVAL INSPECTION TESTING CERTIFICATION
CERTIFICATE 06/4303

MADE IN BRITAIN

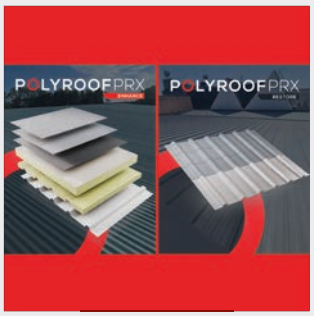
T-T's Planet Range of package pumping stations is your trusted choice for economical and efficient sewage and drainage management.

Whether for domestic properties or large commercial sites, don't compromise on quality...

- BBA approved since 2006
- Designed for use in domestic, commercial and industrial sites
- Smooth internal walls aid the hygienic disposal of effluents, avoiding smells and septicity
- Supplied with controls for fully automatic operation
- Units can be adapted to suit individual requirements
- 9000+ units sold worldwide with no structural failures
- Short lead times with most models available from stock

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

Polyroof launches PRX range for profiled metal roof refurbishment



Polyroof, a brand of Roberts Group, has launched the PRX Range – two distinct solutions developed specifically for refurbishment of pitched profiled metal roof sheets. Designed to address the varied challenges associated with ageing metal roof sheets, the PRX range provides building owners and specifiers with clearly defined options depending on whether a project requires waterproofing, thermally upgrading, or a protective refurbishment. Unlike traditional strip-and-replace methods, both solutions are engineered to extend the lifespan of metal roofs, minimise disruption, and support more sustainable refurbishment strategies. The PRX range comprises two systems: PRX Enhance – a complete waterproofing system incorporating a thermal upgrade for enhanced energy efficiency; and PRX Restore – a protective coating for long-term sheet protection. Each system has been developed to solve different problems commonly associated with profiled metal roof sheets. For further information about the Polyroof PRX Range or to discuss a profiled metal roofing project, contact the Polyroof team today.

0800 801 890 bit.ly/4xnwreW#

Health and productivity with Brett Martin

Brett Martin's CST Heatguard has been installed for the roof of a milking shed at Bloor's Farm in Warrington, Cheshire. Chosen by one of the farm's owners, the innovative roofing solution, with advanced heat reflective pigment, has helped to introduce improved levels of light, while reducing energy costs and enhancing the cows' welfare and productivity. The amount of daylight introduced by the Brett Martin solution not only improved light levels in the refurbished and repurposed shed, but to the surrounding sheds as well, making a truly positive impact across the farm.

024 7660 2022 www.brettmartin.com

Tata Steel announces refresh

Building on more than 20 years of innovation and success with Colorcoat Prisma®, **Tata Steel** is proud to introduce a refreshed collection of its widely specified pre-finished steel. This latest development showcases an enhanced colour palette, including several distinctive new shades, a more streamlined product offering, and an improved Confidex® Guarantee period. This latest update reaffirms Colorcoat Prisma® as the refined choice for modern building design. A particular highlight is the Confidex® Guarantee duration which has now been extended for roof applications.

01244 892434 www.colorcoat-online.com

Vectaire keeps wet rooms free of condensation, odours and mould

It's that time of year again – trying to keep condensation at bay. **Vectaire's** products ensure optimal air quality, low noise levels, and reduced running costs. They are designed to meet the needs of modern homes while prioritizing energy efficiency and environmental sustainability.

New to Vectaire's ventilation range is the MFCF100. This dMEV provides low level, continuous ventilation to control condensation. Its integral sensor recognises changes in system pressure and ensures the chosen airflow in maintained. It has a choice of six trickle airflows (from 5 l/sec to 20 l/sec) to cater for all installation situations, and a boost speed which will either kick in automatically or manually by the user. Models are available with timer and/or humidistat. They are all IPX4 rated, but for special installations, SELV models are also available. These fans are easy to fit (into walls or windows with an optional window kit) and easy to maintain. They are quiet, energy saving ventilation which will help keep homes free of condensation, odours and mould.

01494 522333 www.vectaire.co.uk/products/mfcf100

Altecnic helps improve water safety at Dalesdown Residential Conference and Activity Centre

Altecnic has helped improve water safety and hygiene at Dalesdown Residential Conference and Activity Centre in Horsham, West Sussex, delivering a complete thermostatic mixing valve (TMV) solution to help safeguard vulnerable visitors.

Originally approached to provide support with an upgrade to the centre's heating system, Altecnic's technical team identified a more immediate opportunity to improve water safety during a site survey. Six locations, including dormitory wash facilities, disabled toilets and kitchen hand wash basins, had no thermostatic mixing valves installed, while a further four existing TMVs had not been commissioned or serviced, meaning their performance and safety could not be guaranteed.

Meeting the challenge of protecting vulnerable users

Recognising the importance of protecting vulnerable users, all six Mixcal Careflo Plus®

TMV3 and WRAS-approved thermostatic mixing valves were specified and installed across key washroom facilities.

Designed for high-risk healthcare and residential environments, the valves were selected for their ability to provide safe mixed water temperatures while complying with the NHS D08 performance specification, helping protect vulnerable users from the risk of scalding. Their thermal override capability also enables thermal purging, helping reduce the risk of harmful bacteria, including Legionella and Pseudomonas aeruginosa, developing within the water system. This was particularly important in a facility such as Dalesdown, where maintaining excellent water hygiene is just as important as controlling outlet temperatures.

Delivering safer water systems

Alongside installing the new TMVs, each valve was fully commissioned to verify safe outlet temperatures and correct failsafe operation, while thermal purging was carried out through the valves to improve water hygiene throughout the system. The team also serviced and recommissioned four existing TMVs located within the site's public toilet facilities, improving the overall reliability, performance and safety of the site's water systems. As a result, Dalesdown now benefits from enhanced safeguarding for its visitors, improved water hygiene and greater confidence that its facilities continue to provide a safe and welcoming environment for everyone who uses them.

View the full case study: www.altecnic.co.uk/case-studies/dalesdown-tmv-case-study

01785 218200 www.altecnic.co.uk

Contract Panel Heater – Reliable heating and great prices for every project

Electrorad's Contract Panel Heater provides a practical, cost-effective heating solution for installers working on residential and commercial projects where dependable performance and ease of installation are essential.

Designed for straightforward replacement or new installations, the Contract Panel heater offers clean styling and fast heat-up times, making it ideal for apartments, offices and homes.

Supplied with an accurate electronic thermostat, simple user controls and Wi-Fi connection as standard, the heater allows users to maintain comfortable room temperatures. Multiple output sizes ensure there is a model suitable for virtually every room.

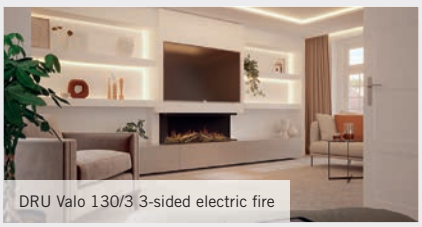
Installation couldn't be simpler. With no plumbing, boilers or ongoing servicing required, you can complete installations quickly, helping reduce labour costs while delivering a professional finish.

The Contract Panel Heater offers an attractive product when seeking an affordable electric heating solution without compromising on quality or reliability.

With Electrorad's trusted technical support and excellent product availability, it's an ideal addition to any electric heating project.

0113 2746799
sales@electrorad.co.uk

DRU turns up the warmth with three stylish new fires for autumn 2026



DRU Valo 130/3 3-sided electric fire

DRU Global Ivar 5 CF gas stove

Dik Geurts Instyle U700 3-sided wood fire

As the evenings draw in and thoughts turn to making our homes warmer and more inviting, the fireplace once again becomes the natural heart of the living space. And whether your taste is for the convenience of gas, the flexibility of electricity or the timeless appeal of a real wood fire, there are now more ways than ever to combine warmth with contemporary interior style.

Dutch fireplace manufacturer DRU, which has been creating fires and stoves since 1754, has introduced three new models for autumn 2026, designed for very different homes and lifestyles.

A classic stove style with the convenience of gas

For anyone who loves the traditional appearance of a wood stove but prefers the ease and convenience of gas, the new DRU Global Ivar 5 CF offers an appealing alternative.

Based on the popular Dik Geurts Ivar 5 wood stove, this compact model has been designed specifically for installation into UK chimneys, making it equally at home in a period property, country cottage or more contemporary interior.

At its heart is DRU's TrueFlame® burner, creating high, dancing flames around a realistic log bed. A Ceraglass interior enhances the effect, producing an impressive three-dimensional view of the fire.

With efficient performance, low maintenance and instant controllable warmth, the Ivar 5 CF provides the atmosphere of a traditional fireplace without the need to store or handle logs. It is available for natural gas or LPG, with an RRP of £2,095.

Electric fires enter a new era

Electric fires have become an increasingly popular feature of contemporary interiors, particularly with the growth of media walls and bespoke fireplace installations.

The new DRU Valo range combines modern LED technology with real wood to create a more natural-looking fireplace display. Its Purewood log set features individual pieces with their own unique wood grain, complemented by wood chips and a luminous glow bed to produce a warm, organic effect.

Available in 130 cm and 150 cm widths, Valo can be configured as a single-sided, two-sided or three-sided fire, providing plenty of scope for creative interior design.

And at just 29 cm deep, it can be incorporated easily into media walls and false chimney breasts without taking too much space from the room. Operation is by remote control or app, making it a particularly convenient option for modern living.

Prices start at £2,020 for the 130 model and £2,130 for the 150.

Make a statement with real wood

Dik Geurts is the brand under which DRU designs and produces its extensive selection of wood stoves and fires.

For larger rooms and dramatic open-plan interiors, the new Dik Geurts Instyle Triple U700 turns a wood fire into an architectural feature.

Built into a feature wall or room divider, its three-sided design provides an expansive view of the flames from different areas of the room – ideal for creating a visual connection between living, dining and kitchen spaces.

With a generous 8-12 kW heat output, the Instyle Triple U700 combines the atmosphere and natural warmth of burning wood with modern technology. The DG Smart Assist air control system can be operated using a remote control or app, helping to make managing the fire easier.

For households looking to reduce environmental impact, optional GreenBlocks features include a room-sealed configuration and catalytic converter, designed to lower emissions and improve air quality.

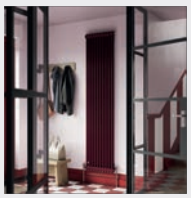
A warmer welcome to autumn

From a compact gas stove sitting comfortably within a traditional fireplace to a sleek electric media wall or a dramatic three-sided wood fire, today's fireplaces can be as much a part of the interior design as the furniture, lighting and decor.

And as autumn arrives, there are few additions to the home that can transform its atmosphere quite as effectively as the glow of a fire.

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

New look column radiators from Stelrad



Stelrad Radiators has introduced an Italian-designed new look, improved range of its popular Column radiators – in both its vertical and horizontal column radiator ranges. The new range is available through all existing outlets streamlining the existing range, enhancing the performance from its Column radiator selection, and strengthening long-term value for purchasers of the range. The most obvious changes are to the design of the radiators that will now feature a new rounded column design.

marketing@stelrad.com www.stelradprofessional.com

Upgrade with the Dinder 40 Inset Stove

The Dinder 40 Inset Stove from **Eurostove** has been specifically designed to fit neatly into a standard British fireplace opening, turning an old or unused hearth into a modern and efficient multi-fuel stove. It's durable and robust cast iron door combines with a sleek flush-glass finish and the choice of a three or four-sided black glass frame. Shown with the Integra cast iron frame, the Dinder 40 creates an elegant and classic aesthetic with all the benefits of a modern wood-burning stove.

01934 750500 www.eurostove.co.uk

How dark flooring is bringing depth to minimalist interiors

Havwoods' rich Walnut Cocoa flooring shows how a deeper timber tone can bring contrast and character to light-filled schemes. A Victorian London home, designed by Studio 163, demonstrates this approach. The project pairs restrained neutral joinery with Walnut Cocoa flooring from Havwoods' H Collection. The rich, warm tones create an elegant contrast against the lighter palette, adding depth and definition while helping to anchor each space. Choosing a darker timber over a lighter floor can have a significant impact on the atmosphere of a room. Here, Walnut Cocoa brings warmth and visual weight without compromising the calm, contemporary feel of the interiors. Used throughout the home, the flooring creates a consistent material palette, connecting the individual spaces while complementing the soft neutral tones. By combining rich colour with natural timber character, Havwoods enabled Studio 163 to create an interior that respects the home's Victorian character while delivering the understated, contemporary aesthetic the client envisioned.

01524 737000 www.havwoods.com/uk

Specifying staircases for listed buildings

Richard Harding at British Spirals & Castings discusses best practice for specifying staircases in listed buildings, from conservation principles and material selection to regulatory compliance and modern surveying techniques.

Historic buildings are an important part of the UK's architectural landscape, presenting architects with the unique challenge of balancing conservation requirements with modern accessibility and operational needs. Staircases sit at the centre of this challenge, serving not only as a practical structure for getting from floor to floor but as a significant architectural feature that is central to the building's historic character.

Whether designing for the repair of an existing staircase, a replacement for one that has reached the end of its life, or a new staircase that's being introduced into a historic setting, when specifying for these projects a sympathetic and considered approach must be taken.

Before any work commences on a listed building, Listed Building Consent should be obtained. With staircases being so closely integrated into a building's original design, any alterations are likely to receive close scrutiny, so early engagement with the local conservation officer is particularly useful. This not only helps to establish the appropriate level of intervention but ensures proposals reflect the site's heritage significance before detailed design begins.

The level of protection depends on the level of listing of a building; Historic England's conservation guidance emphasises minimum intervention, reversibility where possible, and the retention of historic fabric as key principles when introducing alterations. Individual treads, balusters, handrails and newel posts can often be replicated by specialist manufacturers while retaining significant portions of the existing staircase structure. This can include using a sample of original metalwork to create a new pattern from which replacements can be cast. When replacement is unavoidable, the focus should be on replication over reinterpretation, using surviving elements, archive drawings, photographs or pattern libraries to inform the design.

Material selection is equally important. In many Grade I listed buildings, conservation requirements typically expect replacement staircases or components to be manufactured from materials that match the original construction, such as cast iron for cast iron structures or the same timber species for wooden elements.

For some Grade II or II* projects, there may be greater flexibility. Modern materials such as cast aluminium can closely replicate the appearance of traditional cast iron, while offering reduced weight, rustproofing, and greater manufacturing flexibility for intricate decorative details. The use of substitute materials should always be agreed with the conservation officer before specification – specialist manufacturers may be able to support these conversations.

Alongside material selection, architects must also consider how heritage requirements align with stricter modern building regulations. Historic staircases were constructed with steeper pitches, narrower treads, and lower handrails than would typically be permitted in new buildings today. However, where strict compliance would result in unacceptable harm to a building's heritage significance, the regulatory framework may permit carefully justified departures from these standards, subject to agreement with your conservation officer.

Accurate surveying is also essential in older buildings. Heritage properties have walls, floors and openings that are rarely square or level, making precise measurement particularly important for staircases, which must connect multiple levels while fitting

Accurate surveying is also essential in older buildings

within often irregular spaces. Modern technologies such as laser scanning and CAD modelling allow these irregularities to be captured with precision before manufacture begins, with three-dimensional point cloud surveys proving particularly valuable in complex environments by creating accurate digital records that inform both design and fabrication.

These digital tools should complement traditional manufacturing methods, rather than replace them. Techniques such as sandcasting continue to provide the authentic texture and detailing expected within heritage sites during the manufacturing process, but modern design tools can help ensure the final structure is exactly as required for the building's historical significance.

A recent example can be seen at the Grade I listed Brasenose College Chapel, where Lee/Fitzgerald Architects commissioned a bespoke spiral staircase for improved organ maintenance access. In collaboration with them, the staircase was manufactured using CAD modelling and traditional sandcasting.

Through careful coordination with the architect, we were able to develop a bespoke cast aluminium design which was acceptable to planning. The narrow radius features a single baluster per tread (in keeping with the period) and a specially commissioned fascia developed from a reference image from another staircase in the chapel.

This project demonstrates how carefully considered design alongside early collaboration and appropriate regulatory flexibility can deliver solutions that both preserve heritage significance while meeting the practical needs of a building.

Specifying staircases for listed buildings requires more than selecting an appropriate product. It demands an understanding of conservation principles, careful consideration of historic materials and detailing, and close collaboration between architects, conservation bodies and specialist staircase manufacturers throughout the design and manufacturing process.

Bringing specialist manufacturers on board at an early stage helps navigate design and planning challenges, for staircases that respect historic character while meeting practical contemporary needs.

Richard Harding is managing director of British Spirals & Castings

The hallway revival: Make a statement with tiles

The hallway is one of the hardest-working spaces in the home, as well as the first and last area guests see. The latest **Tile of Spain** collections show how ceramic tiles can combine style, durability and practicality, with insights from María D Arráez, director of Tile of Spain UK.

First impressions count: "Patterned flooring, bold colours and tactile textures can give a hallway real personality, while durable, low-maintenance tiles make everyday life easier."

Pattern is back: "Checkerboard, geometric and Mediterranean-inspired designs are increasingly popular. In hallways, patterned tiles can even replace a rug while being easier to clean and more resilient."

Warmth is the new neutral: "Terracotta, beige, olive, warm white and sandy tones are replacing cool greys. Wood-effect tiles and earthy shades pair beautifully with natural materials and can brighten darker hallways."

Extend the flooring throughout the ground floor: "Using the same tile from the hallway through into the kitchen or living area can help the ground floor feel more connected and make smaller spaces appear larger."

www.tileofspain.com/en

Pick your perfect partner

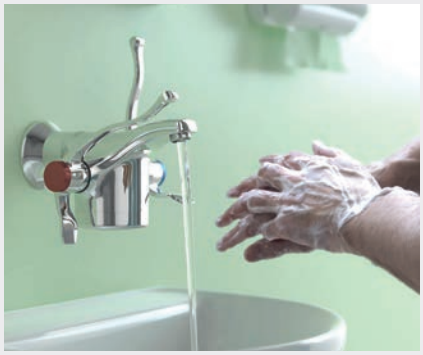
Don't settle for anything less than the perfect match for your colour scheme when choosing the grout to go with your carefully selected tiles. **Kerakoll's** Fugalite Color is a resin grout range with 50 different shades, allowing you to use colour with purpose. This gives you extensive design freedom, enabling perfect coordination with any style of tile, interior and architectural concept, from minimalist to bold and expressive. Suitable for demanding environments where performance is critical, the range is multipurpose, with one product suitable for all installations inside and out, where its deep UV-resistant colours do not fade over time. Its smooth, easy-to-clean surface guarantees long-lasting protection in areas exposed to constant moisture and pool chemicals and cleaning products. The range is certified for food-safe environments and can be used safely in all commercial and industrial environments, including saunas and other leisure facilities. Fugalite Color is supported by cradle-to-grave EPD certification and backed up by intensive testing over and above industry norms. Contact the specification team at Kerakoll UK Ltd for more details.

07944 825 999 kerakoll.co.uk

Supporting hand hygiene, managing water quality

In hospitals and other healthcare environments, effective hand hygiene is supported by clinical handwashing facilities that deliver warm water at a safe, constant and comfortable temperature, with an appropriate flow rate that minimises splashing and encourages consistent handwashing practice. But every clinical tap also sits at the end of a sometimes complex water system, where design can influence commissioning, water quality, stagnation and ongoing management.

Designed specifically for clinical environments, the award-winning* Horne Optitherm combines hands-free lever operation with thermostatically controlled warm water and cold drinking water, delivered via a single shared outlet. Temperature is controlled right at the point of discharge, minimising the mixed-water deadleg, while the shared outlet for warm or cold-water draw-off increases turnover and limits stagnation.



Behind that user experience is a design equally focused on water quality and system management. For compliant commissioning, and thereafter, the Optitherm provides for cleansing flushing at elevated velocities immediately upstream of the mixing mechanism: higher flow velocities increase shear at internal supply-pipe walls, helping to erode and mobilise excess biofilm and debris into the flow for removal to drain.

Maintainability is also fundamental. Isolation points enable simple in-situ performance testing, while protective strainers and the thermostatic cartridge are readily accessible for cleaning, servicing or replacement. Smooth external surfaces aid cleaning, and the precision outlet fitting is also easily removed for cleaning, disinfection or replacement.

Where a higher level of water-hygiene control is required, an optional ILTDU can facilitate periodic thermal disinfection, using the available system-temperature hot water, through to the point of discharge.

Designed around both user and water-system needs, the Optitherm supports effective hand hygiene while assisting active water-quality control and management throughout a long service life.

** Building Better Healthcare awards, Best Interiors Product, 2008.*

01505 321455 www.horne.co.uk

A premium alternative to stainless steel

Stainless steel has long been the go-to choice for contract and specification projects, but it no longer needs to be the only option. **Clearwater Products**' Granite Mio Compact range offers specifiers a competitively priced alternative, combining the premium look and feel of granite with practical design and accessible pricing. Designed specifically with compact kitchen spaces in mind, the Mio Compact range features scaled-down dimensions and a slender profile depth, making the sinks particularly well suited to galley kitchens and smaller layouts. Available in a choice of configurations, including single bowl and drainer, 1.5 bowl and drainer, and a round bowl option, the range provides flexibility across a variety of projects. Models feature reversible designs, pre-scored tap holes and standard waste kits, helping to simplify specification and installation. With a choice of Blizzard, Fossil and Jet finishes, Mio Compact allows projects to move beyond conventional stainless steel without compromising on practicality or value. A lifetime warranty further reinforces its suitability for specification-led projects.

01684 299555 www.clearwaterproducts.co.uk

CRL Stone introduces Silica Free Collection

CRL Stone has unveiled its new Silica Free Collection, bringing together luxurious design, exceptional durability and innovative material technology in a range created for the future of interior surfaces. Responding to evolving industry standards and growing demand for alternative surface materials, the collection features five elegant designs – Arabescato Vagli, Barletta, Modena, Statuario Oro and Taj Mahal – each inspired by the beauty of natural stone while delivering the practical benefits homeowners expect from engineered surfaces.

01706 863600 www.crlstone.co.uk

Cladding enhances residential development

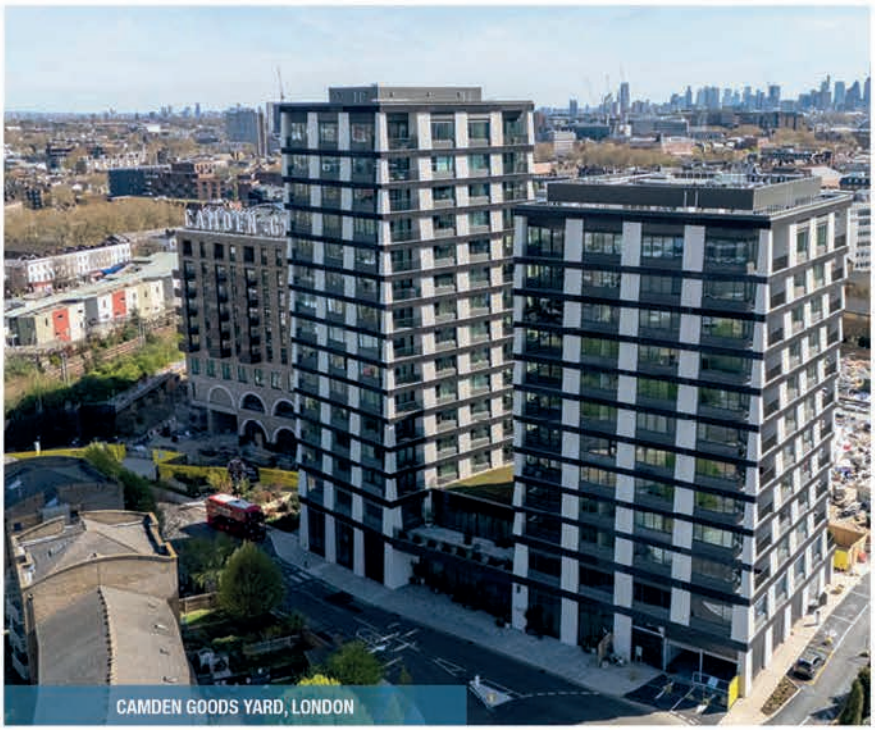
FP McCann has supplied and installed its high-performance Precast Concrete (PC) Cladding System on The Regent, a completed residential building within the landmark Camden Goods Yard development in NW1, London. Working with Berkeley and architect Design Delivery Unit, FP McCann designed, manufactured and installed a striking black-and-white architectural facade featuring fluted acid-etched mullions, window surrounds and brick spandrels. The company also supplied insulation and firestopping solutions. Berkeley praised the project as a showcase for sustainable, efficient MMC.

sales@fpmccann.co.uk shorturl.at/ZXgqa

fpmccann

PRECAST OFF-SITE BUILDING SOLUTION:

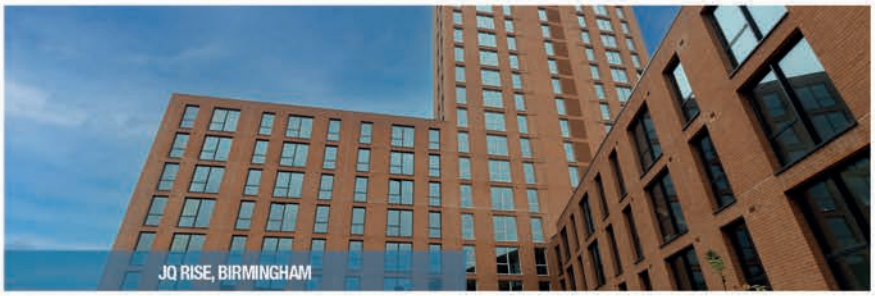
HOTELS/APARTMENTS
BUILD-TO-RENT
SPORTS STADIUMS
EDUCATION
MULTI STOREY CAR PARKS
STUDENT RESIDENCE
CUSTODIAL BUILDINGS


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

Unlocking design ambition with offsite brick slip detailing

Meka Ewurum at Keystone explores how offsite manufactured brick slip features are enabling architects and specifiers to combine traditional masonry detailing with fast, precise construction for distinctively detailed results.

Brick remains one of the defining materials of British architecture. Its longevity, versatility and connection to place continue to make it one of the most widely specified facade materials across residential, commercial and civic projects. Through variations in bond, texture, colour and form, brickwork introduces rhythm, depth and character while allowing buildings to respond to both their setting and architectural intent.

Many of Britain's most recognisable brick buildings derive their identity from carefully considered detailing, rather than the material alone. Arches, corbels, soldier courses, recessed panels, projecting brickwork and decorative lintels create hierarchy across a facade, adding shadow, texture and visual interest. These details establish a building's architectural language and contribute significantly to its relationship with the surrounding streetscape.

The demand for this level of architectural expression remains strong, yet projects are increasingly delivered within tighter construction programmes and with greater pressure on specialist trades. Labour shortages, complex procurement routes and demanding project schedules can make intricate masonry detailing more difficult to achieve consistently using traditional site built methods alone. As a result, architects and specifiers are increasingly considering offsite manufactured brick features as part of an integrated facade strategy.

Rather than replacing conventional brickwork, factory manufactured brick slip features complement it by providing complex architectural elements that can be manufactured under controlled conditions before installation onsite.

This approach improves dimensional accuracy, repeatability and coordination while reducing the reliance on specialist onsite craftsmanship for highly detailed masonry features.

The greatest advantage for designers is the level of architectural flexibility these systems provide. Brick slip feature lintels can accommodate a wide variety of bond patterns, enabling architects to create distinctive masonry detailing while maintaining buildability. Flat, segmental, gothic, parabolic, apex and bullseye arches can all be produced as prefabricated units, alongside bespoke brick panels, soffits, feature surrounds and decorative

Creativity and precision are equally important factors when delivering architectural brickwork

At a time when specialist bricklaying resources remain in high demand, offsite provides certainty

facade elements. This allows traditional masonry forms to be incorporated into contemporary projects without increasing construction complexity.

Digital design has strengthened this approach further. Building Information Modelling (BIM) and three-dimensional coordination allow bespoke brick features to be resolved well before manufacture begins. Structural interfaces, structural support and building envelope components can be coordinated during the design stage, reducing the likelihood of design changes during construction, and improving confidence that the completed building will accurately reflect the designer's original architectural intent.

Creativity and precision are equally important when delivering architectural brickwork. Decorative brickwork styles vary, while one style may rely on consistent joint widths, accurate geometry and carefully aligned brick courses to achieve its intended appearance, rustic and traditional styles can also be achieved in factory controlled settings. Manufacturing enables these tolerances to be maintained across repeated architectural features, ensuring a consistent finish. The benefits extend beyond aesthetics. Offsite manufacture allows brick slip components to be produced offsite, while reducing the need for temporary formwork and site built templates that aid traditional methods, saving time on site whilst also giving a consistent quality.

At a time when specialist bricklaying resources remain in high demand, this provides greater programme certainty while allowing architectural quality to be maintained.

Successful specification depends upon early collaboration between architects, structural engineers, contractors and specialist manufacturers. Structural support, movement joints, tolerances and installation sequencing all need to be considered from the outset. Early technical coordination ensures bespoke brick features integrate successfully with the wider building envelope while satisfying both aesthetic and performance requirements.

Exemplary detailing

A recent example of this collaborative approach can be seen at Lionsfields at Lambton Park, an exclusive development of 57 luxury homes set within 1,000 acres of historic parkland in Lambton Park. Designed and delivered by Robertson Homes, the scheme combines contemporary housing design with architectural detailing that reflects the character and heritage of the surrounding estate.

The architectural concept relied heavily on traditional brick detailing, requiring consistent masonry features across multiple house types while ensuring the structural support remained completely concealed above window or door openings. To achieve this, 393 bespoke brick slip lintels were designed and manufactured specifically for the development, each engineered to satisfy both structural performance and architectural intent.

The package incorporated a variety of bespoke masonry features, including herringbone-patterned full arch lintels and three-tier tapered creasing tile arches. Manufacturing these elements offsite enabled complex detailing to be delivered with consistent dimensional accuracy across all 57 plots while reducing dependence on specialist onsite labour and minimising programme risk.

The project also demonstrated the value of early technical coordination. Close collaboration between the architectural team, contractor and specialist manufacturer enabled plot specific solutions to be developed while maintaining consistency across the development. This ensured that the original design intent was preserved throughout construction despite the complexity and variation of the individual house types.

Projects such as Lionsfields illustrate how offsite manufactured brick features can support increasingly ambitious architectural design. Rather than simplifying masonry, they enable architects to specify more intricate brick detailing with greater confidence that it can be delivered consistently, efficiently and in accordance with the original design.

Brick continues to be one of architecture's most enduring and expressive materials. By combining traditional masonry detailing with the precision of offsite manufacturing, offsite brick slip features expand the possibilities available to architects and specifiers, allowing complex architectural brickwork to be realised, while meeting the practical demands of contemporary construction.

Meka Ewurum is technical detailer at Keystone

Lighting the way: Transforming spaces through urban regeneration

Lighting is no longer just a functional necessity – it has become a strategic tool that shapes how people experience public spaces. Thoughtfully designed lighting can enhance safety, encourage community interaction, support sustainability goals, and even stimulate local economies. For architects, designers, estate managers, and regeneration teams, this means creating spaces that are not only visually striking but also adaptable and resilient for the long term.

Sustainability at the heart of design

Modern urban regeneration projects demand more than energy-efficient products – they require lighting that performs beautifully while reducing environmental impact. Advances in LED technology, smart controls, and solar solutions allow design teams to lower energy use and carbon emissions without compromising on quality or aesthetics. But sustainability is about more than efficiency; it's about creating infrastructure that can adapt and thrive for decades, blending seamlessly with its surroundings and enhancing the lives of those who use it.

The right light, in the right place, at the right time

Today's public spaces are dynamic, and lighting needs to respond accordingly. Intelligent control systems, such as Schréder EXEDRA, provide the flexibility to monitor and optimise lighting remotely in real time; based on footfall, traffic patterns, or specific events. This targeted approach reduces unnecessary energy consumption, streamlines maintenance, and improves operational efficiency – all while keeping spaces safe and inviting after dark. At the same time, responsible lighting practices ensure spill and glare are minimised, preserving the dark sky and character of each urban environment.

Designing with context & collaboration

Successful regeneration is about understanding people, place, and purpose. Urbis Schréder works closely with councils, city partners and design teams to develop solutions that balance aesthetics, performance, and cost. Every project is approached individually, with careful consideration of luminaire selection, tailored optics, and heritage-sensitive design. The result is vibrant, welcoming spaces that encourage community use, support economic activity, and deliver long-term value.

Bespoke solutions delivering 50% energy savings: Guildhall Square, Southampton

Guildhall Square, a cornerstone of Southampton's Cultural Quarter, demonstrates the impact of tailored lighting. As a key public space, the square hosts events, exhibitions, and performances, serving the University of Southampton community and visitors alike. Originally redeveloped in 2010 with modern lighting, paving, and street furniture, it has remained a popular destination for concerts and art shows.

By 2024, aging columns and outdated luminaires prompted Southampton City Council to seek a replacement scheme. Working with installer Utili-light, Urbis Schréder delivered an energy-efficient solution that revitalised the space while minimising waste and installation costs. The VALINTA MAXI CURVE luminaire was proposed for its performance and contemporary aesthetic. To reuse the existing columns, bespoke bracketry was designed, allowing the new luminaires to be securely mounted on the existing metalwork. Whereas unstable columns were removed for testing and reinstalled following successful structural validation. Outdated reflectors and inefficient uplighters were also replaced, improving uniformity across the square and reducing energy consumption by 50%.

The result is a square that feels safer, more inviting, and architecturally refreshed. Colin Perris, contracting technical services manager at Southampton City Council, praised the outcome:

"The square now has a much better feel for all users and has been architecturally refreshed in appearance. We are incredibly impressed with the solution offered by Urbis Schréder."

Tailored solutions for every project

From civic squares and roads to cycle paths and heritage sites, Urbis Schréder offers flexible, sustainable lighting solutions – including grid-connected and – that do not compromise on safety, aesthetics or environmental responsibility. By combining smart design with long-term performance, urban spaces are not just illuminated - they are transformed, prepared to meet the demands of today while anticipating the needs of tomorrow.

Discover how Urbis Schréder can support your next project. Get in touch today.

sales@urbis-schreder.com
www.urbis-schreder.com

Schréder
Experts in lightability™

Pedestal super structures hold it together

Suspended deck systems are the unseen hero of many successful paving/decking schemes. For hidden beneath ultra flat porcelain tiles or composite boards, for example, is a carefully planned substructure of plastic or metal pedestals supporting the surface finish. Not only are suspended decks quick and clean to install (no sand or mortar required), they even-out height differences across site, make flush fitting with doors etc a breeze, deliver built-in drainage and provide a void for services. Paving/decking can be removed for access to the void, facilitating maintenance. **Wallbarn** is a UK leader in pedestal and substructure systems, with more than 40 years of experience. Recent projects include the ground-breaking outdoor critical care unit at King's College Hospital, London, and the newly renovated Harrods Helideck event space. Wallbarn has also completed public paving schemes and supplied solutions for restaurants, offices and hotels, quite literally paving the way for designers to furnish these spaces with planters, seating, tables etc.

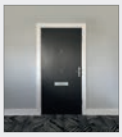
020 8916 2222 www.wallbarn.com

Invicta block paving takes pole position

Brett Landscaping & Building Products has supplied more than 3,500 m² of Invicta permeable block paving for the pedestrian areas around Silverstone Park. Brett Landscaping & Building Products was chosen by MEPC to supply the paving for the new pedestrian walkways and car parking areas. The Invicta block paving range was specified in three sophisticated colourways of Onyx, Moonstone, and Pearl which were chosen specifically for their premium granite aggregates that deliver an exceptionally hardwearing, contemporary finish befitting the world-class location.

03456 080 577 www.brettlandscaping.co.uk

Q-Mark Certified for Fire, Smoke & Security



Ahmarra specialises in triple scope internal entrance doors for residential buildings. The entrance doors are third-party certified for fire and smoke under the Q-Mark Timber Fire Door Manufacture scheme, and for security under the Q-Mark Enhanced Security Door scheme, whilst also meeting the Secured By Design and PAS 24 standards. Doorsets are available with FD30s and FD60s fire & smoke ratings. Ahmarra have manufactured and installed 1000's of severe-duty doorsets for social housing, retirement homes, student accommodation, military barracks and high-end apartments, throughout London and the South East.

02392 389 076 sales@ahmarra.co.uk

The impact of Martyn's Law on secure door specification

Rob Mottram at Robust UK examines the door specification implications of Martyn's Law (AKA the Terrorism Act 2025), in larger educational and public venues.

Martyn's Law – formally known as the Terrorism (Protection of Premises) Act 2025 – received Royal Assent last year and comes into force in Spring 2027. For architects and specifiers working on schools, colleges and other larger public venues, it introduces a new layer of design responsibility that sits alongside existing fire and life safety requirements.

Martyn's Law is built around a deceptively simple principle: venues must take proactive steps to protect people from terrorist attacks. For larger venues such as those with a capacity of 800 or more, which encompasses most secondary schools, sixth form colleges, universities, theatres and other leisure buildings, this means implementing procedural and physical protective measures, as well as training staff and being able to demonstrate a credible, tested security plan. Doors are the physical expression of that plan: they determine who can get in, how quickly a building can be secured and how people escape if something goes wrong. A door schedule that hasn't been thought through in security terms leaves a gap that no amount of procedural planning can close.

Four functions to design around

Historically, door specification in education buildings has been driven by fire compliance and budget, with security treated as an add-on if it is considered at all. Martyn's Law asks specifiers to think in terms of four distinct functions and to map every door in a scheme against them.

The first is entry control, which is managed access at the perimeter and at key internal thresholds. Second is zoning and compartmentalisation, as internal doors need to break up circulation and create protected areas. Thirdly, lockdown capability needs to be considered. Doors need to be secured quickly and reliably to shelter occupants in place. Finally, escape routes – doors should be specified that guarantee fast, unimpeded egress without compromising external security.

Few existing school buildings and venues were designed with this framework in mind, which makes early-stage audit work an essential part of any refurbishment or extension project.

Evacuation & 'invacuation' aren't the same design problem

One distinction that is easy to miss on paper, but is critical in practice is the difference between evacuation (moving people out) and invacuation (moving people to shelter within the building). Many hostile threat scenarios call for invacuation rather than evacuation, which means the doors serving refuge areas need to resist forced entry for long enough to allow emergency services to respond, while still allowing instant, single-action egress from inside if conditions change.

This is a genuine design challenge, not a hardware afterthought. A doorset that has to resist attack from one side while guaranteeing free escape from the other needs to be specified and tested as a complete system – leaf, frame and hardware together – rather than assembled from components chosen independently.

What assessors will look for

The Act doesn't prescribe a specific doorset standard, but it does require the responsible person to evidence a proportionate level of protection. In practice, that means specifiers should be building the following into their door schedules:

- Third-party certified doorsets are specified and tested as a single system rather than combined from separate suppliers
- Resistance ratings matched to a site

It is essential that compliance be built into the specification

specific risk assessment, rather than a blanket specification across the building.
- Locking systems proven to perform reliably under stress and high daily use.
- Fire and security performance that has been reconciled at design stage, not left to cause issues on site.
- Panic hardware on escape routes – halls, dining areas, sports facilities, main corridors – that is robust, tamper-resistant and simple to operate under pressure.

Where retrofit falls short

In the case of existing buildings, there is often pressure to upgrade hardware on existing door leaves, rather than full replace. A higher specification lock fitted to a leaf that was never designed to resist forced entry does not create a secure doorset if the leaf lacks structural integrity; the hardware is largely irrelevant. Mixing certified and uncertified components can leave a building in a compromised position that is arguably worse than no upgrade at all.

At main entrances, reception areas, external access points and designated lockdown spaces, full doorset replacement with a certified, tested system is usually the only specification that will stand scrutiny.

For many larger venues, we typically recommend certified steel doorsets at key external and high-risk internal locations. We also recommend internal steel doorsets for zoning, lockdown areas and protected corridors, which provide controlled access whilst supporting lockdown procedures without creating barriers to normal circulation. It is essential that compliance be built into the specification, not retrofitted, not assumed and not dependent on the weakest component in an ad hoc assembly.

Designing for the future

Doors in large venues, such as schools, colleges, leisure and hospitality buildings, are subject to heavy daily use, so a doorset's performance under constant operational stress matters as much as its rating on day one. Specifying certified steel doorsets at high-risk external and internal locations, and using internal steel doorsets for zoning and lockdown areas that support lockdown procedures without obstructing normal circulation, provides a building fabric that retains its compliance over time.

Rob Mottram, is head of product & compliance at Robust UK

Securiscape installs its biggest-ever planters at Manchester's historic industrial museum

A major restoration project at one of the UK's most significant industrial heritage sites has been given a fitting final touch - with two PAS 68-rated planters manufactured and installed by Securiscape.

The Science and Industry Museum in Manchester, which stands on the site of the world's first inter-urban passenger railway, has just undergone a £40m transformation designed to repair and renew its collection of Grade I and Grade II listed buildings.

The latest phase has seen the museum's Upper Yard, just off Liverpool Road, restored and opened to visitors, with two of Securiscape's planters forming a centrepiece of the space.

But not just any planters, because these were the biggest-ever products the Derbyshire firm has supplied in its history and the result of a highly specific brief which it received from Manchester-based Planit-IE landscape architects last year.

The requirement was for two large PAS 68-rated planters, each measuring five metres long and 2.2 metres wide, finished in Corten steel, with no visible welds to any elevation or panel.

Crucially, the planters also had to be removable, since large services run beneath the area, and needed to be manufactured off-site so they could be dropped into position without disrupting the ongoing paving works around them.

Securiscape fulfilled the brief by using two sizes from its patented planter frame system, which allowed the units to be fabricated to the precise specification required, delivered to site and installed without delay to the wider programme.

The Corten steel finish, chosen for its distinctive weathered appearance and its sympathetic relationship with the museum's Victorian brick buildings, develops a rich, rust-toned patina over time.

This makes the planters a natural and permanent-looking addition to one of the UK's most important heritage settings.

The result is a pair of substantial structures which blend seamlessly into the restored public realm and are planted with an attractive floral scheme, including trees and flowers popular with pollinators, while delivering the security credentials that a high-profile publicly accessible site like the museum demands.

Mark Stone, managing director of Securiscape, said: "The brief from Planit-IE was very precise. They wanted large scale, no visible welds, Corten finish, removable and installed without holding up the rest of the programme.

"That's exactly the kind of challenge our patented frame system is designed to meet and I'm really pleased with the way in which we've been able to demonstrate its flexibility.

"Now, seeing the finished planters in place at a site of this significance, as part of a restoration that has been years in the making, is something we're all proud of."

The Science and Industry Museum's Upper Yard forms part of a wider transformation that will eventually open the entire historic site to visitors, with new galleries, a science playground and improved connections to the surrounding Castlefield area all planned in the years ahead.

Securiscape company mission is protecting people in public places, and its work began when it was founded in the wake of the 2007 attack at Glasgow International Airport.

It designs, manufactures and installs a range of HVM products tested to standards including PAS 68 and IWA 14 and its range includes its own patented street planters, HVM bollards, Glide Bollards and guardrail systems.

01335 370979 info@securiscape.co.uk

securiSCAPE®
protecting people in public places®

Stannah launches Midilift PL2 – a next-generation platform lift designed for improved reliability, performance and flexibility

Stannah New Lifts Division, a leader in the UK lift sector, has introduced Midilift PL2, a next-generation platform lift engineered to deliver enhanced reliability, performance and design quality.

PL2 is a carefully re-engineered vertical platform lift solution for public and commercial environments. It provides a robust, dependable option that supports modern accessibility requirements while offering greater confidence at specification stage.

This compact screw and nut platform lift delivers a smoother, quieter ride and consistent installation quality, supporting efficient servicing over its lifetime. With a highly configurable design, Midilift PL2 allows inclusive access solutions to be seamlessly integrated into a wide range of architectural schemes.

Available in a range of platform sizes, the Midilift PL2 gives specifiers increased flexibility. A choice of door styles is available, including fire-rated, panoramic and vision panel options, maximise natural light and create a modern, open aesthetic. Every lift is supported by Stannah's established after-sales proposition, including a two-year warranty.

Specification and aftercare have also been simplified with site-specific drawings available early in the design process and support from highly trained specialists and experienced installation teams. Open-protocol parts offer greater flexibility over long-term maintenance arrangements, alongside the option of Stannah's planned maintenance packages.

Graham Mears, General Manager at Stannah New Lifts Division, said: "Midilift PL2 is a newly introduced product to Stannah with a clear focus on quality, performance and ease of installation, and designed to deliver dependable long-term performance."

The new Midilift PL2 is now live on Stannah Lifts' website: https://www.stannahlifts.co.uk/product/platform-lifts/vertical-platform-lift/midilift-pl2-platform-lift

01264 343692
stannahlifts.co.uk

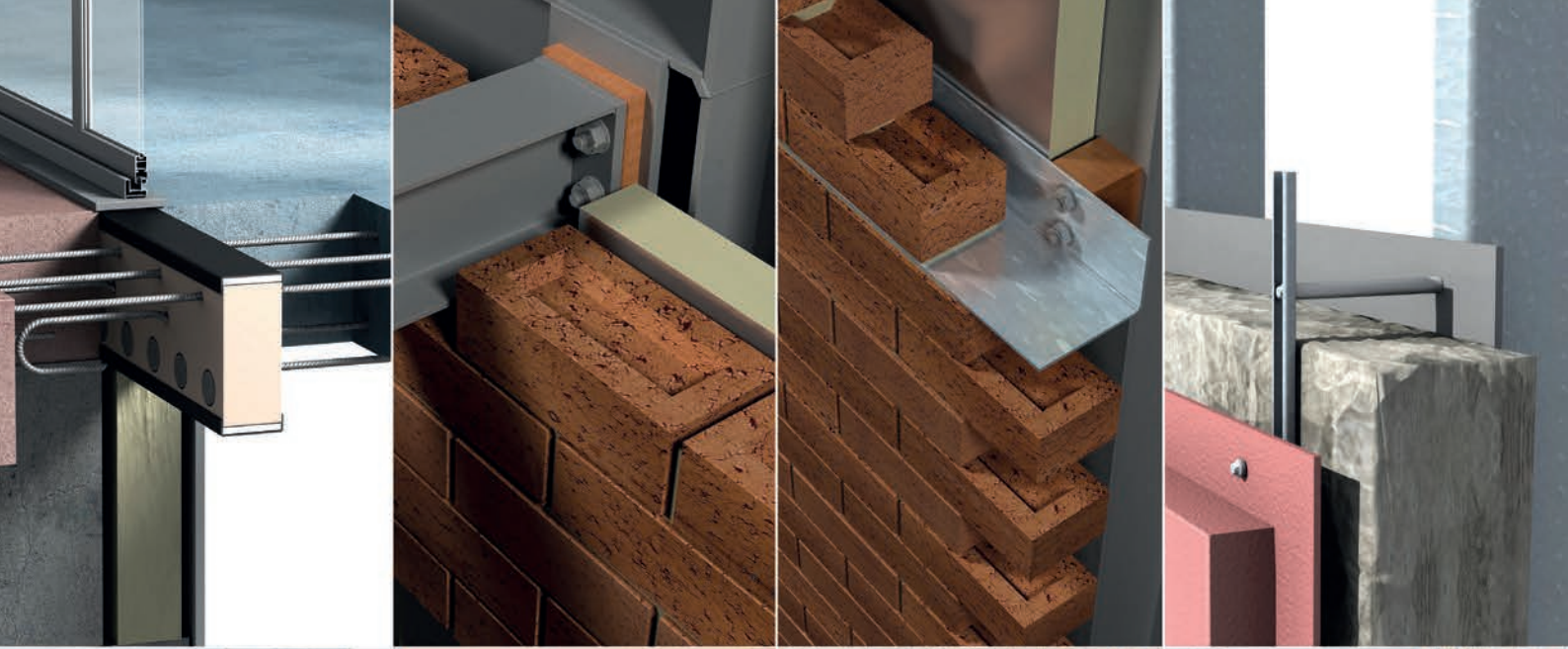
WEBINAR MASTERCLASSES

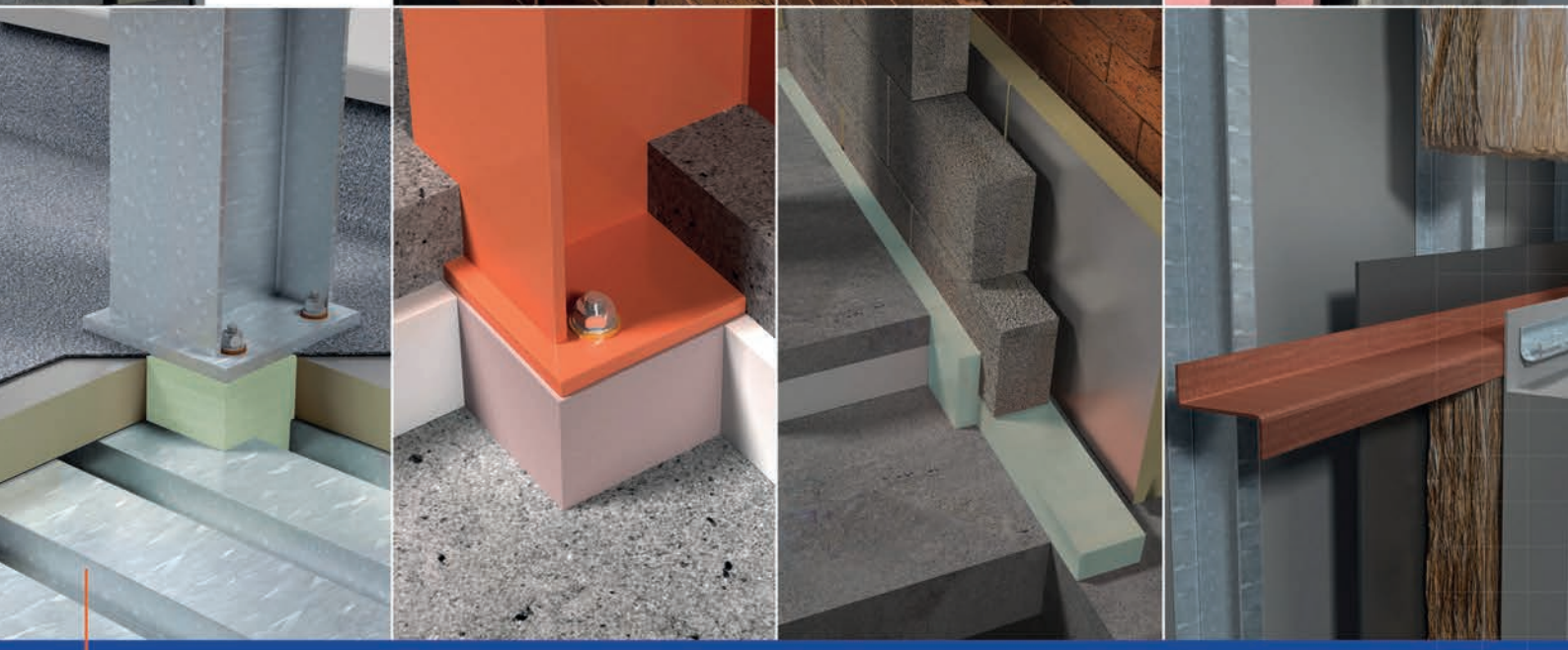
Connecting industry professionals through insight and expertise

Our webinar programme delivers targeted digital events designed to connect industry professionals with relevant insight, research findings, expert-led discussion, and valuable CPD-accredited content. Each session provides an accessible platform for engaging, helping attendees stay informed, develop their knowledge, and meet professional development requirements.

Have you registered for our next CPD webinar masterclass?

insights.netmagmedia.co.uk/webinars





armatherm.co.uk

ARMATHERM™
THERMAL BRIDGING SOLUTIONS

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