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Managing Editor James Parker jparker@netmagmedia.co.uk

Publisher Anthony Parker aparker@netmagmedia.co.uk

Account Director Midge Myatt

Content & Research Coordinator Shelley Collyer

Events Coordinator & Data Analysis
Amy Madigan

Studio Manager Mikev Poolev

Production Assistants Georgia Musson Kim Musson

Account Manager Steve Smith

Digital Marketing & PR Account Manager Suzanne Easter

Publishing Assistant Kim Neville

Managing Director Simon Reed

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

www.architectsdatafile.co.uk

Press Releases
editorial@netmagmedia.co.uk

Registration & Circulation Enquiries info@netmagmedia.co.uk



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





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FROM THE EDITOR



re we seeing the start of a worrying backlash against the prize-winning designs of the 1990s, and one which seems to throw out sustainability goals with the bathwater?

The first winner of the Stirling Prize (more recent than you might think, in 1996), was the Centenary Building at the University of Salford, who recently announced their intention to demolish it to make way for a colossal £2.5bn urban regeneration creating a new 'quarter' called Crescent Salford.

Manchester Stephen Hodder's naturally ventilated steel and glass building may have been a somewhat controversial addition to the campus, due to functional niggles, but the university is sacrificing this youthful and well-regarded edifice due to perceived notions of obsolescence.

Arguably, we should be preserving, future proofing or even protecting structures so they can see out their 'centenary,' so you'd assume the case for demolishing here must be a convincing one, surely? But it's a travesty that after a reuse project to turn it into a primary school failed, that there is no viable ongoing place for the building in the new plan. The university failed to find another use for it, leaving it vacant for years since the Departments of Spatial, Graphic and Industrial Design moved out.

The case for demolition is actually a bit more predictable than compelling, the result of one of those collaborations between "industry, innovation and the public sector." The 'quarter' will combine 1.5 million ft² of "commercial innovation, academic and research space" with over 3,000 new homes, in a project driven by Salford City Council, the University of Salford and the English Cities Fund (a partnership between Muse Developments, Legal and General and Homes England).

It's also predictable, but right, that Hodder and other architects are up in arms about the decision. Perhaps there should be a different form of 'listing' for buildings which do not have inherent flaws or danger, preventing them from being simply taken down if organisational priorities dictate it. No matter what replaces it, there will never be a better carbon saving than making the best of what is there.

Only buildings planned to be temporary should be temporary, the irony is we are still using temporary buildings erected decades ago, such as Nissen huts erected during WW2 seen in active use in the NHS until recently. Conversely, important buildings designed for a long life, if they happen to be in the 'right' location, are suddenly disposable.

This issue's project report demonstrates a small but beautiful example of creative reuse at the other extreme, i.e. a Listed Georgian gem that would never be demolished, but being in the right location meant it was interfered with by refurbishments so egregious that they were done beyond the sight of planners. Thanks to architects SPPARC, this is one building that's not going anywhere, having been turned into a fantastic office for a family working in ethical investments.

James Parker, Editor

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ON THE COVER... SPPARC's Grade II-Listed townhouse restoration in Fitzrovia, London.

For the full report on this project, go to page 38.











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AWARDS

Elizabeth Line first rail winner of Stirling Prize

The entirety of the Elizabeth Line in London, designed by Grimshaw, Maynard, Equation and AtkinsRéalis, was named as the winner of the RIBA Stirling Prize, which recognises the UK's best new architecture.

The Royal Institute of British Architects (RIBA) announced the winners of the 2024 RIBA Awards at a ceremony held in October at London's Roundhouse.

Four RIBA Special Awards were also announced at the ceremony:

- Croft 3 in the Isle of Mull, by fardaa, won the RIBA Reinvention Award;
- Wraxall Yard in Dorset, by Clementine Blakemore Architects, won the Stephen Lawrence Prize;
- Chowdhury Walk in Hackney, by Al-Jawad Pike, won the Neave Brown Award for Housing;
- Shakespeare North Trust and Knowsley Metropolitan Borough Council won the Client of the Year Award for Shakespeare North in Prescot, by Helm Architecture.

The Elizabeth Line

The Elizabeth Line spans 62 miles of track and 26 miles of tunnels, carrying 700,000 passengers every weekday. The RIBA judges commented that the project was: "an extraordinary, complex architectural feat masked by an elegant simplicity."

Six million tonnes of earth were



excavated to create room for the tunnels in what became Britain's largest ever archaeological dig, repurposed to create a nature reserve in Essex.

The Elizabeth Line was designed to provide a quiet and calm environment, and features a "muted palette" of perforated cladding, sensitive lighting and coherent wayfinding systems. "Curvaceous, fluid lines guide passengers around corners, down vaulted tunnels and onto the wide platforms," said RIBA. The lighting shifts between warmer and cooler tones to highlight different levels and junctures.

Step-free access features throughout, and sensory experience considerations include hidden acoustic mats to absorb noise, the removal of unnecessary fixtures and fittings, and a restrained colour palette. Passive cooling at platform level and escalator motion sensors, as well as provision for further air conditioning and temperature control, are some of the environmental measures included in the project.

The Elizabeth Line is the result of a collaboration between architects, engineers and designers. The Grimshaw, Maynard, Equation and AtkinsRéalis team "have designed a highly-inclusive, cohesive transport system that has already evidenced its social, environmental, and economic value" commented RIBA.

Speaking on behalf of the jury, Muyiwa Oki, RIBA president and jury chair said: "The Elizabeth Line is a triumph in architect-led collaboration, offering a flawless, efficient, beautifully choreographed solution to inner-city transport. It's an uncluttered canvas that incorporates a slick suite of architectural components to create a consistent, line-wide identity – through which thousands of daily passengers navigate with ease."

Croft 3

Winner of the RIBA Reinvention Award, Croft 3 by fardaa saw the restoration of an original croft building into a dining hall, with a new extension housing a kitchen, entrance, and back-of-house



spaces. Located in the remote Isle of Mull in Scotland, it was purchased by its owner to expand her local restaurant. The low-carbon restoration "honours the nature of the ruin and the cultural and historical traditions of the locale" said RIBA.

Wraxall Yard

The Stephen Lawrence Prize, established in 1998 in memory of Stephen Lawrence, recognises projects led by an early career project architect. Wraxall Yard director Nick Read has personal experience with inaccessible holiday accommodation for wheelchair users so partnered with architect Clementine Blakemore to restore and convert the ruins of the old dairy farm into highly accessible holiday lets.

Continued overleaf...





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Slorya Kaufman





"Clever landscaping, polished concrete floors and exposed door frames are some of the features included to prioritise accessibility in an elegant way,' said RIBA. It added: "The project proves that inclusive design is not only a set of standards to be met, but something that enhances the experience of space for everyone."

Chowdhury Walk

Al-Jawad Pike's Chowdhury Walk was awarded the Neave Brown Award for Housing, which recognises the UK's best



new affordable housing. The project is part of an ambitious programme of "new generation council housing" by Hackney Council, built on a plot that previously housed garages and ad-hoc parking. In total there are 11 new two, three, and four bedroom homes, seven of which are for social rent. The houses were built using cross-laminated timber, and were staggered in a way to move away from the traditional linear terrace house arrangement, providing residents with added privacy and supporting passive solar gain. "Chowdhury Walk offers a blueprint for social housing - an elegant piece of high quality urban placemaking that generously serves both its residents and passers-by" commented RIBA.

Shakespeare North Trust and Knowsley Metropolitan Borough Council

The RIBA Client of the Year Award was presented to Shakespeare North Trust and Knowsley Metropolitan Borough Council for their community regeneration project Shakespeare North in Prescot. The new theatre building promotes "learning, experimentation, and reinterpretation



of Shakespeare's works." It was built on a former council-owned car park and includes an exhibition space, outdoor performance area, seminar rooms and the only known purpose-built indoor Elizabethan theatre. Judges praised: "the client's dedication to social purpose and local investment throughout the project, with an emphasis on creating partnerships with local merchants and collaborations with independent businesses."

SPORTS & LEISURE FACILITIES

Wrexham AFC appoint Populous for Design of new stand

Wrexham AFC have appointed Populous to create the masterplan for its STōK Cae Ras stadium (formerly known as the Racecourse Ground), initially focusing on redesigning the Kop stand.



The new Kop stand will house 5,500 fans and include provision for safe standing, hospitality and accessible seating, will be a focal point for the stadium and a destination for fans and the local community, on both match and non-match days. It will be fully compliant with UEFA Category Four stadium requirements and will be completed in time for the UEFA European Under-19 Championship final tournament in 2026.

Populous' appointment comes after a pause and review of the existing plans for the Kop and following a full tender process.

Declan Sharkey, global director and senior principal at Populous commented: "We're extremely proud to be appointed to work on the new Kop stand and to explore the potential for a wider vision and masterplan for the future STōK



Cae Ras. Our aim is to create a home for Wrexham's passionate fans and the community that pays tribute to the heritage and traditions of the club and the city itself. The Kop stand will be the epicentre of the atmosphere at the ground on matchday, while incorporating enhanced facilities that can be used every day throughout the year."

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ASK THE ARCHITECT

Weymouth native Sarah Small is an associate and Passivhaus designer at Dorchester practice SPASE Design – here she answers ADF's questions on what drives her, from early concepts to current schemes





[Tutors at Kingston Polytechnic] Jeremy Till, Sarah Wigglesworth, **Hilary French and Paul** Shepheard all inspired me



WHAT MADE YOU WANT TO BE AN ARCHITECT?

From an early age, I was encouraged to recycle and reuse. My childhood was spent growing vegetables, keeping ducks and bees, and making things. My mother would make our clothes from patterns which were laid out on the kitchen table and we watched as she sewed them together.

My father encouraged us to travel, and during school holidays we would take long road trips navigating and camping throughout Europe. A place that stands out in my memory was a small remote village in Switzerland that had been constructed entirely from slate. I thought it was beautiful seeing buildings blending into the landscape, the roof and walls of the buildings made from one continuous material.

By the time I reached the age of 15 my curiosity in engineering and the built environment had grown into something I wanted to pursue as a career. My studies led me to Kingston Polytechnic and brought me into contact with some highly influential tutors. Jeremy Till, Sarah Wigglesworth, Hilary French and Paul Shepheard all inspired me and encouraged me to follow my passion. By the end of my year out I

was ready to start my post-graduate studies and I immersed myself in the creative surroundings of The Bartlett.

I loved studying. My final year diploma project was the 'Master Cycle.' It was the reunification of the River Thames with its city by reclaiming tidal land, opening the foreshore and allowing access to transient, hidden spaces within the city of London. I proposed to form the London Borough of Thames and to give a focus back to the river. The LBT uses tidal cycles of the river as a vehicle to cleanse the city through recycling wastepaper. The tidal force would be used to pulp paper in giant sacks.

After graduating I moved back to Dorset and started full-time employment as an architect. I thoroughly enjoyed working for a large multi-disciplinary practice where I was able to develop an appreciation for other disciplines by working alongside landscape architects, urban designers, town planners and ecologists. I enjoyed working on high-quality large-scale projects covering the south of England.

WHAT DO YOU MOST LIKE ABOUT IT NOW?

I love designing and running projects onsite, using my experience to provide



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well-thought-out and considered design solutions. I like being able to manage a client relationship and provide the best possible service. I am also thrilled to be a student mentor, as I find this very rewarding.

WHAT HAS BEEN YOUR BIGGEST CHALLENGE IN YOUR CAREER TO DATE?

I would say that my biggest challenge to date was building my house. I had a young family at the time and the house we were living in was cold and too small. I read about the Passivhaus standards in a journal and decided that this was something I wanted to pursue; I thought that I had enough experience in running projects and dealing with contractors that would give me the necessary parameters to design and self-build the house.

There were elements of the design that required development, such as using traditional strip foundations rather than using an insulated raft foundation. I worked up a level threshold detail and ran it through the thermal model. It was satisfying to find the foundation detail worked and was thermally acceptable for Passivhaus requirements as it was cheaper and more straightforward to build for the groundworker than going with an insulated raft system. For 18 months I was able to manage subcontractors, source manufacturers and order materials, obtain quotes and coordinate the various packages. Every day on site was a huge learning experience. The decision to use recycled newspaper as insulation was a good one as it works both in summer keeping the heat out, and in winter keeping the heat in. The timber frame was cut offsite using the CAD drawings and brought to the site and assembled in six weeks. Both elements are hugely sustainable.

WHAT PROJECT ARE YOU MOST PROUD OF?

The project I am most proud of is my house where we get to experience and appreciate the Passivhaus benefits every day. The south facing elevation is oriented so that on a sunny winter day the house is filled with warmth and thanks to the insulation the heat stays inside for days. The airtight membranes work hard keeping the heat from escaping, and the heat recovery unit makes sure we have a constant supply of warm fresh air throughout.

My daughter is asthmatic and used to suffer from regular chest infections. Since



building the house she has not suffered from a chest infection, and I believe this is due to a better internal air quality from the heat recovery unit.

I also feel proud to showcase the house when touring visitors on the open days for the national network for low carbon open homes and during the last two years on behalf of the International Passivhaus Association open days. Last year I was also invited to a local school to talk to the students about the science behind the Passivhaus. The students also asked me about being an architect, which I was proud to talk about.

WHAT IS YOUR NEXT BIG PROJECT?

For the last two years, I have been working as a project architect on a refurbishment and retrofit school in Wimborne, upgrading a collection of Victorian school buildings into an SEN facility for 13-18 year old students. Beaucroft College was one of the first projects in Dorset to be awarded government SALIX funding due to the installation of renewable energy including air source heat pump, photovoltaics and heat recovery systems along with thermal upgrades to the existing fabric. The design team integrated new services into bespoke teaching walls in 11 classrooms and increased daylight by introducing high level roof lights.

The heat recovery units supply warm fresh air into purpose made quiet rooms, and the ceilings have been raised to the apex to give a spacious feel inside the classrooms. The retrofit has been calculated to reduce annual CO, emissions by 76% and the project was a finalist in the AJ Retrofit and Decarbonisation Awards 2024.



More recently, I have been working on an EnerPHit project, which is a deep retrofit of a 1970s detached house in Devon. The proposals also involved a large single and two storey extensions to the property as well as upgrades to the existing fabric. We assessed several types of construction methods and used the thermal model as a guide when proposing the new materials.

WHAT IS THE HARDEST PART OF YOUR JOB?

The hardest part of my job since building my house is providing clients with a working drawing package that meets the standard Building Regulations requirements. It is disappointing that the standards and regulations in the UK are so minimal and that moving towards designing low energy buildings is so slow. I feel the only way we can change the industry is to make the regulations more stringent.

WHAT IS YOUR NEXT PROFESSIONAL GOAL?

To design more buildings to the Passivhaus standards or retrofit to EnerPHit.

WHAT IS YOUR BIG PERSONAL GOAL FOR **NEXT YEAR?**

My big personal goal would be to develop an outPHit project. OutPHit is a deep retrofit made faster, cheaper and more reliable. I would like to explore offsite fabrication and modular systems with high degrees of prefabrication, and research materials such as Hempcrete and wool. To specify biodegradable products such as mycelium could be a good alternative.

Finally, I would like to continue to push the fabric first approach as much as possible and make the most of being part of a great team at SPASE Design.



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SITE LINES

Evidencing competency: Who is the judge?

Nigel Ostime, architect and principal at Ostime Consulting, questions the effectiveness of the new competency requirements for Principal Designers under the Building Safety Act, asking whether the varied systems plus no unified vetting will ensure safety.

ne of the glaring issues highlighted by the Grenfell Inquiry was a lack of competency; this was across the board and from top to bottom, and it included the architects. So perhaps unsurprisingly, one of the principal requirements of the new legislation has been for designers and Principal Designers to actively demonstrate and evidence their ability to perform their roles. But is there consistency across the industry, and if not, what should be done to achieve that?

Individual designers remain responsible for the compliance of their own design work, but the BR PD has overall responsibility for coordinating the design process

Clients' duties

Clients have an important role to play, and they can't just be passengers in the process. They have similar duties under the Building Regulations as they have under CDM. As with CDM they have an obligation to appoint a Principal Designer and a Principal Contractor, albeit a 'BR PD' and a 'BR PC' as opposed to a 'CDM PD' and 'CDM PC'.

If they fail to make these appointments, they are then required to fulfil the duties themselves, which is impractical or even unachievable for most clients.

The regulations stipulate that the Principal Designer must be appointed, in writing, before the construction phase begins, or before submitting an application for Building Control approval for a higher-risk building, but these are 'longstops' and in practice the appointment needs to be much earlier.

Clients have a duty to appoint a competent person to undertake the work, so there is an expectation they will undertake due diligence, probably by checking against previous projects and ensuring that the key people have the right accreditations. Where clients appoint an organisation, the organisation must designate a competent individual to carry out the functions of the role. This does not make the individual the Principal Designer or Principal Contractor – the legal responsibilities remain with the organisation.

Clients also have to make a declaration at the end of a project that to the best of their knowledge the work complies with regulations, which is a new responsibility.

Duties of the PD

Under CDM, the Principal Designer is required to:

 Plan, manage and monitor the pre-construction phase and to coordinate matters relating to health and safety; and to Ensure, so far as is reasonably practicable, that projects are designed and managed without risks to the health and safety of those who build, use and maintain them.

Under the Building Regulations, the Principal Designer is required to do the following:

- Plan, manage and monitor the design work during the design phase of the project
- Coordinate matters relating to the design work comprised in the project so that all reasonable steps are taken to ensure that the design is such that if the building work to which the design relates were built in accordance with that design the building work would be in compliance with all relevant requirements.

The 'relevant requirements' are the functional requirements of the Building Regulations 2010, as set out in Schedule 1 (so Part A, B, etc), plus the requirements of regulations 4, 6, 7, 8, 22, 23, 25B, 26, 26A, 28, 36, 41(2)(a), 42(2)a, 44A, 44ZA, 44ZC, and 44D-44I.

The BR PD must take 'all reasonable steps' to ensure the design work on a project is co-ordinated and demonstrates compliance with the Building Regulations. This is effectively a response to Dame Judith Hackitt's call for a more "robust ownership of accountability." The aim is to provide regulation of an industry where, as we saw with Grenfell Tower, design responsibilities have been split across multiple parties and have been lacking in terms of overall coordination.

Individual designers remain responsible for the compliance of their own design work, but the BR PD has overall responsibility for coordinating the design process.

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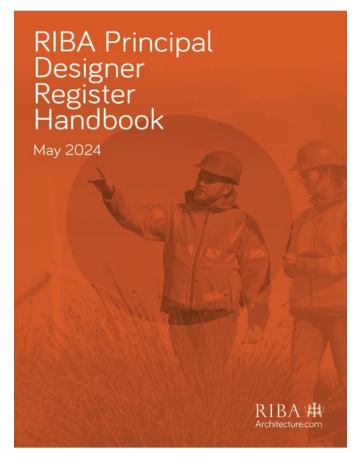
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SETTING OUT COMPETENCIES

The RIBA Principal Designer Register Handbook and Competence Criteria set out how architects need to demonstrate their competence to meet the criteria for registration

Competence

Individuals must be able to demonstrate they are competent to carry out their duties and this means having the necessary skills, knowledge, experience and behaviours.

Organisations must be able to demonstrate they have the organisational capability to carry out their duties and undertake the work. This means having policies, procedures, systems and resources in place to make sure those employed by the organisation comply with all relevant regulations. The procedures and policies that organisations put in place should actively monitor and supervise their people and provide sufficient time and resources to do the job.

PAS 8671

There are no prescribed requirements for demonstrating competence under CDM but PAS 8671 sets out the competencies required for PDs with regard to the Building Regulations.

The RIBA has set up a registration programme based on PAS 8671. The RIBA Principal Designer Register Handbook and Competence Criteria booklets set out how architects need to demonstrate their competence to meet the criteria for registration. There are four specific competency headings:

- Behavioural
- Legislative/Regulatory
- Management
- Technical.

Each heading has core competencies which are required for all buildings and additional competencies for PDs delivering HRBs.

Behavioural competence

Under behavioural competence, architects need to demonstrate that they will not take on a specific Principal Designer dutyholder role when the needs of the project in question are beyond their competence, or their organisation's capability. They also need to demonstrate the integrity required to identify and report design work that cannot conform to relevant requirements.

They must encourage designers to perform their own duties, including to cooperate with other duty holders and challenge designers to rework designs if design work shows insufficient evidence of compliance and or insufficient design compliance. And, they must challenge the Principal Contractor's comments if they compromise design work compliance.

Assessing competency

Clearly designers and Principal Designers have a duty to be honest about their capabilities, but that aside, how should clients assess their competence, and to what extent are they doing that?

There are a number of options open to them. They can either ask for or require their appointees to be on one of the PD registers set up by RIBA, CIAT and APS. Or they can ask their consultants to provide a self-assessment, which seems to be the most common approach.

To date there are 54 individuals on the RIBA register, 12 on the CIAT register, and the APS says they have nine but does not publish the list. Clearly this process is in its infancy.

Furthermore, registration demonstrates having met the requirements prescribed under that particular scheme, but they are all different, and consequently some are more stringent than others. Ultimately clients will need to make their own decisions and have to address a number of questions. Will they care that one scheme is less demanding than another? Will the Regulator consider clients have met their duties if they accept registration, but do not require further, project-specific evidence? To what extent must clients consider the requirements related to the nature of their project? Is there a need for overall guidance on using these accreditations for both architects and clients? Do we need to make the process of assessing competency more standardised?

The three principal dutyholders – clients, Principal Designers and Principal Contractors – all need to play their part to drive the outcomes Hackitt was promoting, and that Moore-Bick, who led the inquiry, was calling for. In many ways clients are the most disparate group of that triumvirate, but they sit at its head, and will be the ones who ultimately drive change, through their application and interpretation of the requirements of the regulations.

Perhaps it is not surprising as the legislation is relatively new, but there are clients who are unaware of their duties and are failing to allow sufficient time and resources on projects. Guidance for clients is urgently needed.

The regulations are intended to stop the race to the bottom – clients hold the starting gun and the chequered flag.

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Brick Awards 2024 Royal Lancaster Hotel, London



Brick Awards 2024: The Winners

Presented by the Brick Development Association at a ceremony in London on 6 November, the awards "recognise the outstanding contributions of architects, builders, bricklayers, and manufacturers to the built environment." The winners were selected by a panel of industry experts who evaluated projects based on "design innovation, craftsmanship, sustainability, and overall aesthetic appeal."

Supreme Winner & Urban Regeneration

Project: Norton Folgate Brick Manufacturer: Michelmersh Brick Holdings Plc & Ibstock Plc Architects: Allford Hall Monaghan Morris, Stanton Williams, Morris + Company, DSDHA & EAST

Norton Folgate is a vibrant new neighbourhood in London's City Fringe, and a "testament to the enduring beauty and versatility of clay brick architecture," said BDA. The project transformed a series of underutilised urban blocks by carefully restoring, refurbishing, and extending existing buildings and introducing sensitively designed new structures.



Sustainability

Project: Aspen Wood Hospital Brick Manufacturer: Michelmersh Brick Holdings Plc

Architect: Gilling Dod Architects
Mersey Care's facility is a state-of-the-art
healthcare building designed to provide
specialised care for individuals with
complex forensic learning disability needs.
The striking brick facade, constructed using
high-quality clay bricks, enhances aesthetics
but also contributes to sustainability.

Contractors' Choice

Project: Royal Eden Docks Phase 2 Brick Manufacturer: Ibstock Plc Architect: Hunters

The project in London's Docklands "showcases the power of brickwork to create stunning and sustainable architecture," said BDA. It features a combination of clay brick types, including Ivanhoe Creams and Engobe Whites, laid in a classic stretcher bond pattern.

Architects' Choice

Project: The Scoop Brick Manufacturer: Ibstock Plc Architect: Corstorphine & Wright A striking new office building in Southwark, south London, that reimagines the potential of existing structures. It involves the reuse and reconfiguration of an existing building to create a unique and inspiring workspace.

Individual Housing Development Project: Six Columns

Architect: 31/44 Architects

A bespoke family home that celebrates the beauty of brickwork and modern design; it is also a unique residence that seamlessly integrates into its surrounding neighbourhood while showcasing bold architectural features.



Small Housing Development

Project: Manresa House Brick Manufacturer: Ibstock Plc & Wienerberger Ltd

Architect: OMI Architects

A historic novitiate in Harborne, Birmingham transformed into a serene and inspiring space with a striking red brick facade that harmonises with the original structure; internal spaces feature exposed brickwork to create a warm and contemplative atmosphere.

Medium Housing Development

Project: Forest Road Brick Manufacturer: Michelmersh Brick Holdings Plc

Architect: Gort Scott

A scheme of 90 affordable one-bedroom homes in London's Waltham Forest that celebrates the area's rich history, drawing inspiration from the nearby William Morris Gallery. Brickwork creates a warm and inviting facade that complements the local character, and innovative brickwork techniques such as recessed vertical lines and soldier course lintels, add depth and visual interest.







Large Housing Development

Project: Brabazon

Brick Manufacturer: Michelmersh Brick Holdings Plc

Architect: Feilden Clegg Bradley Studios & Grant Associates

Feilden Clegg Bradley Studios' Hangar District, the first phase of the Brabazon development, is a transformative project that breathes new life into Bristol's historic Filton Airfield. The scheme delivers 303 new homes, including a mix of family houses, apartments, and affordable housing. The Brabazon development showcases how historic sites can be repurposed to create vibrant and sustainable communities.

Housebuilder

Cala Homes

Shopwyke Lakes & Waterbeach developments

Brick Manufacturer: Ibstock Plc

Cala Homes has a strong focus on design, quality, and customer service. The company's sustainability initiatives include homes designed for net zero carbon, reduced carbon footprints, and the use of sustainable materials.

Commercial

Project: Berner & Wells Street Brick Manufacturer: Ibstock Plc & Michelmersh Brick Holdings Plc Architect: Emrys Architects

A striking addition to London's Fitzrovia, a mixed-use project with 56,000 ft² of office space and retail space, spanning two urban blocks and combining refurbishment and new build. Facades are a blend of modern and traditional elements, with bespoke brickwork including teal glazed detailing creating a visually striking entrance.

Public

Project: Greenock Ocean Terminal
Location: Inverclyde
Brick Manufacturer: Ibstock Plc
Architect: Richard Murphy Architects
A stunning new addition to the Clyde
waterfront which serves as a cruise ship
visitor centre, a processing centre for
passengers, and a tribute to renowned local
artist George Wyllie.

Education

Project: Mulberry Academy London Dock Location: London

Brick Manufacturer: Ibstock Plc

Architect: Architype

A cutting-edge secondary school in the heart of London's Docklands, this Passivhaus-certified building showcases a design that seamlessly integrates with the historic surroundings.

Refurbishment

Project: Ice Factory Brick Manufacturer: Michelmersh Brick Holdings Plc

Architect: Buckley Gray Yeoman

The renovation of 27 Eccleston Place has transformed a former industrial building into a vibrant workspace and retail destination. The project involved a careful restoration of the historic fabric, combined with a modern extension that complements the building's original character.

Innovation

Project: HyBrick Bench Brick Manufacturer: Michelmersh Brick Holdings Plc

Architect: Unknown Works

This bench at the Science Museum is a "physical embodiment of how product

innovation can address the challenges facing the clay brick industry," said BDA. The unique bench constructed by Lyons & Annoot showcases the possibilities of the world's first 100% hydrogen-fired brick.

Craftmanship

Project: 5 Fredericks Place Brick Manufacturer: Ibstock Plc & York Handmade Brick Company Architect: Stanton Williams & Sonnemann Toon

The refurbishment of Frederick's Place has transformed a historic London site into a striking new development. The project involved the demolition of two existing buildings and the construction of a seven-story structure, featuring a blend of retail and commercial spaces. The building's facade successfully incorporates a variety of brickwork techniques, including a unique 'woven tapestry' pattern on the archive building.

Specialist Brickwork Contractor

Cara Brickwork

Development 1: Monk Bridge Brick Manufacturer: Ibstock Plc & Wienerberger Ltd Architect: Carey Jones Chapman Tolcher

Development 2: Islington Wharf Brick Manufacturer: Forterra Plc & Michelmersh Brick Holdings Plc Architect: Ryder Architects Cara Brickwork is a leading UK construction company committed to quality, safety, and sustainability. With a strong focus on training and development, the company is nurturing the next generation of skilled bricklayers.

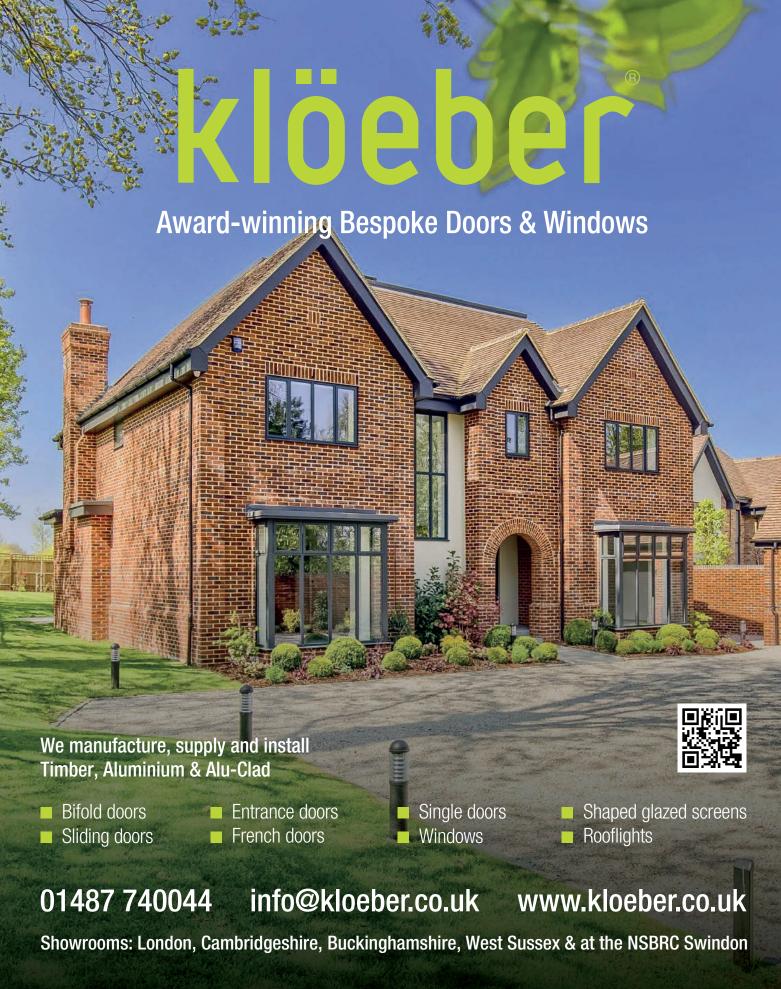
Worldwide

Project: Sandford Lodge Brick Manufacturer: Wienerberger Bronsgroen

Architect: Shay Cleary Architects
This is a groundbreaking mixed use

development in Dublin, which "sets a new standard for sustainable urban development," said BDA. The scheme, spearheaded by Wienerberger, incorporates innovative design, sustainable materials, and advanced technologies to create ecofriendly living spaces.

More information for the winners & commended projects can be found on the BDA's website: www.brick.org.uk





etex inspiring ways of living





Design Solutions for Supportive Dementia Care Environments

living with dementia in the UK in 2025, what are the best design approaches for supporting their complex needs in the various care environments that will be needed in coming years?

We staged a round table at RIBA in London, sponsored by flooring manufacturer Amtico Flooring, Johnstone's Trade Paints and WMS Underfloor Heating, in order to attempt to unravel some of the challenges and opportunities for designers. With environmental factors presenting an array of challenges for people living with dementia, a key takeaway was that facilities should above all be tailored to the individual; a challenge for institutionalised healthcare.

With a strong panel of experts in the field, including architects, academics and product manufacturers, many insights emerged. Recommendations for industry for improving design are found at the end of this report; the attendees hoped to build on this meeting via an ongoing network to disseminate best practice.

The debate looked at the need for design collaboration and tailoring to individuals, and the growth of 'co-design' – design teams working in close collaboration with end-users to tailor designs to needs. Some of the established design 'rules' for facilities supporting dementia were challenged, as this report reveals.

The debate

Rob Hayles from 'outlier designers' collective Citizens with Experience, kicked off the discussion by asserting the acute need for bespoke designs, caveating that this challenges advocates of standardised approaches – "there are commonalities, but we must understand and design for the differences," he said.

Clare Cameron, an experienced architect in the field, told the group that the current "silo approach" in healthcare needed to be freed up to ensure all later living facilities support those living with dementia. Cameron said: "It is quite frustrating when clients say that 'we're not doing dementia in this building,' it's ridiculous; all



DELEGATES

- Fiona Walsh, Principal Architect, DDS Architects
- Clare Cameron, Architect & Director, PRP Architects
- Robert MacDonald, Independent Consultant
- Eef Hogervorst, Professor of Psychology, Loughborough University
- Paul Rodgers, Professor of Design, University of Strathclyde
- Lesley Palmer, Architect & Professor, Dementia Services Development Centre, Stirling University
- Rob Hayles, Health & Built Environment Lead, Citizens with Experience

SPONSORS

- Sophia Wise, Head Of Regional Commercial UK & Ireland, Amtico Flooring
- Donna Taylor, Colour Design Manager, Johnstone's Trade Paints
- Ashley Cooper, Managing Director, WMS Underfloor Heating







later living buildings will potentially be used by people living with dementia." She added it was key that such aspects "were not added on later in projects."

Fiona Walsh of DDS architects said there was "all this knowledge out there that is just not being used" to benefit supportive design. She warned, "if you put somebody in an environment where they feel anxious, stressed, or it's unfamiliar, we're actually accelerating their decline. There's an awful lot we can do, but we can't continue the way things are."

Rob Hayles said there were "entrenched views" in the care sector and a lack of consulting users with dementia on their requirements. There were some arguments for an over-standardised approach, he said: "they wanted to have a universal design to cut costs, not a design that would actually make lives better."

Eef Hogervorst cited research into the effects of design on dementia, however Lesley Palmer admitted there were challenges persuading architects of the merits of some research, when they are "trained to be cynical and ask questions, and want to know the quantitative; they recognise outputs as defined by numeric values."

Lesley Palmer said that in order to design for "person-centred care" it was essential to have "a common understanding of what it is." In order to achieve this there needs to be "a common language between the care provision, the operator and the designer, and that has to start at the very beginning of the project." This could be a cultural issue when designing for overseas projects, she added.

Palmer emphasised the need to prioritise needs of care providers, and that a dialogue should be established with design teams, "so that you're also educating each other." However, notwithstanding this, more important was the need to "ask the individual," in order to arrive at a solution which is as suited to them as possible. "We still have a tension in architecture between who is the client, and who is the end user," and warned that "the conversations you have with the person commissioning the building really don't relate to the people who are going to be living in that building."

Clare Cameron advocated a flexible approach to the fit-out of facilities, for example allowing residents to bring in their own furniture to increase feelings of familiarity, "or enabling gardening, if that's what somebody likes to do, or cooking, or allowing them to be with a dog, if they love pets." She added: "It's just thinking about how to design to enable all the different kinds of possibilities that somebody might need." She said that cost was clearly a factor, but enthused that her firm is working on "some really magical projects where all those things are being considered."

Eef Hogervorst interjected that research (by Professor Clive Ballard at Exeter University Medical School) has shown that personcentred care, "when it's implemented in a care home, actually saves money, because you need less medication; and people aren't humiliated through medical intervention." She referred to some exemplary projects which had seen similar results in Rotterdam, including a small unit scheme which "was so homely; people could just wander into the kitchen to get something to eat, and if they wanted to have a pet or wander out, that was fine. People were treated as individuals, the people that they were, and still are."

Cameron mentioned that the client objection is often of increased capital costs of such approaches, but Hogervorst countered these objections saying that person-centred facilities are much more fulfilling places to work, which in turn helps the bottom line. "Often that cost is returned, because you don't have the enormous staff turnover that most of the specialist dementia facilities have,



ENGAGING WITH ACADEMICS

Sophia Wise, head of regional commercial UK & Ireland at event sponsors Amtico Flooring, chats to Paul Rodgers of Strathclyde University; meanwhile Lesley Palmer engages with Eve Hogervorst (Stirling and Loughborough Universities respectively)

because it's mind numbingly awful when you're just running around dispensing tablets and trying to keep people calm."

Co-design

Our attendees agreed that a diligent and informed approach needed to be taken for co-design to be successful, because cognitive impairments means that traditional user consultation methods may be very inappropriate. Hogervorst is an advocate of co-design, but cautioned that they should not be measured using the normal scientific prism, due to the qualitative nature of the approach.

Robert MacDonald, a retired architect with Parkinsonism and dementia, and now design consultant, commented that "people living with dementia don't like to be asked direct questions." However, he added that successful alternative methods and approaches have been developed such as 'Living Labs,' using design 'cue cards' to prompt comments and sand trays – "the questions and answers come out of the play."

Hogervorst advocated "walking and talking" with individual users, as seen on the Chris and Sally's House 'ageing in place' demonstration project at the BRE Innovation Park. However she acknowledged that subjective opinions had to be viewed as such, saying her team at Loughborough University had developed 'personae,' grouping individual characteristics to help designers understand "the common denominators" for the different stages of dementia. She admitted: "There is a tension between 'person centred' and what other individuals like; it has to be adaptable to some degree." She referred to Delft University's programme for profiling dementia patients on a "person-centred" basis,' saying: "It's very simple, you just have a chat with people and get to know a bit of their history, the things they like, the things that irritate them."

Rob Hayles said that one attempt to pursue 'action research' to develop tailored design with a client in the NHS led to him being told bluntly that it couldn't be done, as it "too slow, too big, too governmental." Hayles concluded that "we need to explain to the NHS that we can do better." Clare Cameron said better design of dementia care facilities would bring general benefits to society, offsetting the difficulties of setting up improvement programmes.

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"Good practice in dementia is going to benefit everybody," she said.

Fiona Walsh articulated the key problem for people with dementia in experiencing facilities is having to share an "institutional environment with 40 or 50 residents – none of us want to live like that." She said that tailoring spaces for each person was therefore unachievable, and so the industry "need to come up with some baseline, and from that we can adapt."

Rob Hayles concluded the first session by capturing the five essential factors for supportive facilities: comfort, physical safety, psychological safety, enabling a "therapeutic base," and connections which are "meaningful and worthwhile." He added that the extra money put into private care facilities wasn't the key factor: "Money doesn't actually mean getting it right. It actually means more chances of getting it wrong."

Solutions

The second session included a deep dive into key practical aspects of key design and product specification aspects for creating supporting dementia environments. As well as looking at flooring, colour and underfloor heating, delegates discussed the merits of flexible spaces, spaces for socialising, the therapeutic effects of light, and the viability of post-occupancy studies.

Coatings & colour

There are established principles and guidance for avoiding reflective surfaces and patterns in flooring, and design to prevent people becoming distressed or confused. The ability of people living with dementia to see contrast and delineate different surfaces deteriorates with their level of cognitive impairment; the 30 point rule within The Equality Act of 2010 requires a minimum variance of 30 Light Reflectance Value points between 'critical' surfaces like walls and floors to give residents enough visual contrast to safely negotiate their environment and feel a degree of independence. However, there are contrasting views as to how strictly this should be applied in every case.

Donna Taylor, colour design manager at Johnstone's Trade Paints asked: "How do different stakeholders, such as individuals living with dementia, caregivers, manufacturers, and architects etc, perceive the importance of the 30 point rule between critical surfaces, and are there varying opinions on its strictness?"

Eef Hogervorst said rigid application was not necessary, it could be applied as needed by informed designers. Taylor warned: "A lot of customers have the mindset that we have to achieve that maximum 30% between critical surfaces, but have a misconception that it has to be applied to multiple surfaces."

Lesley Palmer explained that 30% has been "removed as an essential requirement, it's no longer a mandatory part of any accreditation, because the research is still very light in that area." Taylor added: "There's no 'one scheme fits all,' you need to design something that will work for both." Rob Hayles asserted that the 30 point rule is "irrelevant," and advocated for flexibility, according to need, "If somebody needs a change, it can be done."

Flooring

Amtico Flooring has put a large focus into identifying how its offerings align with healthcare sector; Sophia Wise, Head Of Regional Commercial UK & Ireland, wanted to know how they could "better support the design community." She asked the round table: "What else do you need from manufacturers?"



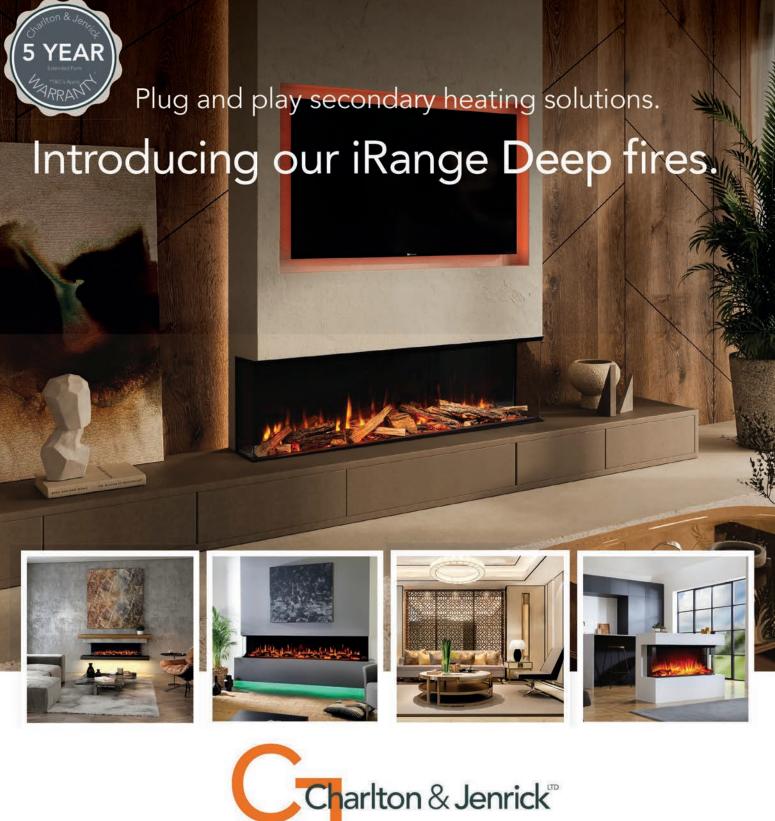
IN-DEPTH

Delegates (including Lesley Palmer of Stirling University, Ashley Cooper of sponsor WMS, and Clare Cameron of PLP enjoyed an in-depth and frank conversation

INDUSTRY RECOMMENDATIONS

The round table delegates' key recommendations to the industry for creating supportive dementia care spaces

- Clare Cameron, PLP Architects: Architecture schools to try and include design for dementia and invite experts in to open the eyes of young designers.
- Robert MacDonald, independent consultant: It's vitally important that designers become more aware of the spatial difficulties that users live with 24 hours a day.
- Rob Hayles, Citizens with Experience: There are commonalities, and transferables, but we must understand and design for the differences.
- Sophia Wise, Amtico Flooring: To share best practice in some kind of forum where people could show designs, ask questions, and showcase the work that they've done.
- Lesley Palmer, Stirling University: There's very little in the RIBA Plan of Work about the joy of working with end users; think about how to integrate co-design.
- Ashley Cooper, WMS Underfloor Heating: We need a group to share best practice and feed into, there is loads of information we could offer.
- Paul Rodgers, University of Strathclyde: There are some amazing and talented people across universities and in practice across the UK, and we just have to reach out and find them.
- Donna Taylor, Johnstone's Trade Paints: Let's create a central point where everybody can lean on each other and get advice and education.
- **Fiona Walsh, DDS Architects**: Universities need to take this on board, it needs to be ingrained in design, we need to move this knowledge into the mainstream.
- Eef Hogervorst, Loughborough University: What's good for people with dementia is good for everybody; it's good design – we need to let go of the stigma.



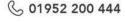


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VIEWED IN THE ROUND

There was a focus on viewing design for dementia as design for individual needs

Fiona Walsh of DDS Architects answered: "a kit of parts that is water resistant, for wet rooms; some kind of a system, and flexibility on the 30 point issue." Rob Hayles suggested using elements such as strips or inlays can assist wayfinding, but also for "restriction or progression of movement," and Wise said vinyl planks could be installed in a contrasting pattern to achieve this.

Underfloor heating

Ashley Cooper, managing director of WMS Underfloor Heating, asked: What part do underfloor heating systems play in the environmental and physiological aspects of enhancing the safety, comfort, and overall well-being of patients, including minimising fall risks and creating a more intuitive and calming atmosphere? He explained some of the benefits of removing radiators, including their potential risks for people with dementia. He acknowledged that UFH systems could be slow to respond to changes in temperature required, while smart solutions could be deployed to help achieve the desired results.

Conclusion

The key takeaway for many delegates, including our sponsors, was the need for an ongoing network to discuss and disseminate best practice on design for people living with dementia, as the demographic challenge grows exponentially. In the words of architect Fiona Walsh, "What we really need is one central base that people can source the information." This group has the potential to be the start of that network, and we look forward to participating in and staging further events.

We are grateful to Amtico Flooring, Johnstone's Trade Paints and WMS Underfloor Heating for supporting Building Insights LIVE.

To listen to a podcast capturing the discussion's highlights, please visit: insights.netmagmedia.co.uk

We have formed a Linkedin network 'Solutions for Supportive Dementia Care Environments,' to discuss and disseminate best practice on designing spaces for people living with dementia. If you would like to join, please scan the QR Code.





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THE GROVE, QATAR ZAHA HADID ARCHITECTS

JMJ Group Holding in collaboration with Qetaifan Projects has unveiled The Grove, a new seafront neighbourhood and marina designed by Zaha Hadid Architects and claimed to "incorporate the highest standards of design and sustainability."

Comprising 293 apartments ranging from one to four bedrooms, the Grove has been designed with its waterfront promenade as the heart of the community incorporating cafes and restaurants, as well as shops and boutiques.

Passive design strategies are combined with advanced cooling technologies to enable residents and visitors to enjoy outdoor living, dining and recreation throughout the year. Powered by onsite renewables and developed for optimum efficiencies, the re-utilisation of pre-cooled extracted air from the buildings will cool the promenade during warmer months to enhance user comfort.

The orientation and composition of The Grove's residences have been designed to optimise views, shading and privacy, together with the "intricately crafted interiors" of the common areas. Each apartment includes extensive outdoor living spaces on generous balconies.

"Defining the development's unique geometries, the facades are characterised by an interplay of vertical and horizontal 'scoops' that create a dynamic visual rhythm," said ZHA. They have been designed to meet Global Sustainability Assessment System (GSAS) targets of less than 50% glazing.

The stepped balconies and vertical components within the facade provide separation and privacy for residents while maintaining views of the waterfront from each apartment. Developed as a modular system enabling repetition and optimisation to increase efficiencies in production, the facades enhance the building's environmental performance and provide extensive shading in response to the region's climatic demands.

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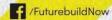
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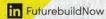
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NEWS FEATURE

A case for tiles

I iled surfaces offer enormous aesthetic and practical opportunities for building designers. Product innovation and regulatory advances ensure that this product sector remains dynamic and exciting, meaning that specifiers need to be aware of the technical issues around tiling.

On many projects, tiles remain the best option for finishing walls and floors. If tiling is carried out correctly, it can last a lifetime. You can't say that about many of the alternatives. Consider for example, the tiling in London's underground stations, some of which goes back to the Victorian era.

In terms of functionality, ease of cleaning, durability and timeless aesthetic design, tiles just cannot be beaten.

New technical developments are adding even more versatility to tiled surfaces. One of the latest design trends is the move towards large format tiles. These are an architect's dream, as they minimise the presence of grout lines and allow the design of the tile to be fully maximised and appreciated.

The arrival on the market of the new generation of large format tiles and panels is now accompanied by new digital printing technology. This can give the tiles the appearance of natural stone, and there are many other new design opportunities.

However it is important to understand the technical aspects of tile installation, particularly when it comes to adhesives. The correct adhesive should be used for each application, and the substrate should also be considered. For example skimmed plaster walls can only accommodate 20 kg of weight and bespoke tile backer boards are by far the preferable type of substrate to use. When fixing large format tiles at height (or any tiles above 3 metres), British Standards specify that mechanical fixing systems should be used.

A further example that we still come across very regularly is that of anhydrite screeds. Although they have been around for nearly 40 years, and are popular with specifiers because of the speed with which they can be poured and their sustainability credentials, they do have a downside, namely that curing times can be very much extended compared to sand:cement screeds.

There are solutions on the market, such as Palace's own Pro Gyp-Base, which provides a sealing system to enable earlier application of tiled finishes, fixed with cement based adhesives.

These topics and more are covered in RIBA-approved CPD presentations, such as the one we have introduced this year, and I would urge any architects working with tiles to familiarise themselves with these resources.

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

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REMOTE RIBA CPD 2024



Quantum Flooring Accessories began holding CPD remote seminars in 2020. While in-person CPDs are fully available, it is still useful for some people to access CPDs from their desks. Quantum's webinars allow architects to earn RIBA CPD points from their home or office. These sessions are all free to attend, with three Flooring based CPDs, and one from Dacatie, Quantum's sister brand, about cavity fire barriers. Register

your attendance today, and attend as many as you like. RIBA CPD certificates will be sent out to all attendees via email, and all Quantum's CPDs are RIBA Core Curriculum.

- 5 December: How to correctly specify Entrance Matting
- 6 December: How to correctly specify Cavity Closers & Cavity Barriers
- 12 December: How to correctly specify Safe Stairs
- 13 December: How to correctly specify Flooring Details

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DIFFUSION OFFERS NEW CIBSE-APPROVED CPD



Diffusion, British heating and cooling equipment specialist, is thrilled to announce that it now offers a CIBSE (Chartered Institution of Building Engineers) approved CPD course designed to give attendees a better understanding of Heating, Ventilating and Air Conditioning systems. Ideal for consultants, specifiers and

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INDUSTRY VIEWFINDER

Revisiting Fire Safety & Project Accountability

ne of the outcomes of the Grenfell tragedy has been increased scrutiny on the design and construction of taller residential buildings and specification and appropriateness of products for fire safety. Our recent survey once again collated architects' views on a variety of key areas in the new regime.

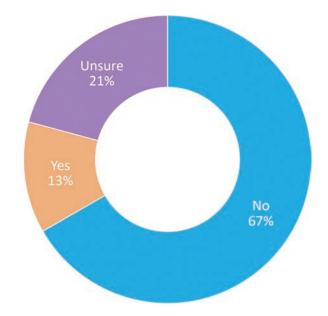
Following Dame Judith Hackitt's review and the resulting Building Safety Act of 2022, a new regime (which extends to all buildings) would enforce accountability for all design and build decisions made on projects related to building safety, and require a new level of data management. Now this Act has been in force for year, we are again canvassing architects' views on their experience of these fundamental changes, having previously done so in 2022.

The hope is for clear accountability, starting with the enforcement of a Principal Designer and Principal Contractor with prescribed responsibilities on every project. The Act also introduces a new system of 'gateways' whereby new build designs will be required to be submitted to the new Building Safety Regulator within the Health and Safety Executive for approval at various stages. However, with the new system throwing up a host of challenges and questions, do architects perceive it as fit for purpose for achieving the intended aims?

Projects are now vetted by the new Building Safety Regulator at the HSE, and a Principal Designer is required to act as 'Dutyholder' in charge of a 'Golden Thread' of all digital building information relating to safety. This data has to be carefully managed throughout a project, with aspects like specification changes under tight control. Architects taking up the Principal Designer role will have much greater responsibility in higher risk projects. In addition, a national construction products regulator will oversee a more robust product testing framework.

Building Safety Act - a comparison with 2022

The first key question which we repeated from the 2022 survey was to ask our respondents whether they believed that the Building Safety Act contained the necessary elements and weight in order to address the key issues, and we were able to compare responses to see if that attitude had evolved.



Do you think architects are likely to be keen to take up the overseeing of safety under the Principal Designer role?



ADF NOVEMBER/DECEMBER 2024 WWW.ARCHITECTSDATAFILE.CO.UK



The majority of our respondents were unsure as to whether the Building Safety Act had the credentials to fix most of the issues which were currently preventing a robust safety regime in the construction industry. The total who said they were unsure was 60%, while only 16% believed the Act plus its new project procurement framework and accountability provisions was fit to provide that robustness as it currently stands. And a greater number (24%) were convinced that it was not, a worrying statistic for the Government to take on board.

This was a fairly drastic increase in the naysayers as to the Act's ability to solve the problems in the safety of designs since 2022, with the numbers saying that it would shrink by two thirds from 36% to 16%. This is concerning, given that it represents views now the Act's ramifications have begun to be fully realised.

In both surveys we asked how respondents rated the individual changes in the Building Safety Act in their potential for improving the safety regime. And, in a similar way to the general question around whether the legislation would be able to fix the problems, as the realities of it working in practice had become clearer two years down the line, so the views on the likelihood of some aspects to improve safety had become less optimistic.

Somewhat surprisingly, there was doubt cast upon the rigour which the new project procurement 'gateways' for clients' design teams would be likely to bring. Those saying there was 'good' potential for this outcome dropped by 11% and there were no picks of 'excellent' potential (compared with a more optimistic 4% in 2022). The potential of the Building Safety Regulator to bring the national scrutiny of design was not endorsed, with half as many people picking it in 2024 as having an 'excellent' chance. 'Mandating good communication across all stakeholders,' necessary in order to ensure a smooth Golden Thread data sharing if nothing else, also saw mixed responses. And lastly, the crucial area of increasing credibility of materials testing, saw a drop from the 2022 figure of 22% believing that credibility would be improved had dropped by 8% to 14%.

There were better figures for the likelihood of the Act bringing greater accountability ('excellent' or 'very good' potential up 14%), and for the potential 'protection of original design intent via the Golden Thread' and its in-built transparency and hoped-for protection of specifications saw a hike in support of 6%.

Comparing views on architects' roles

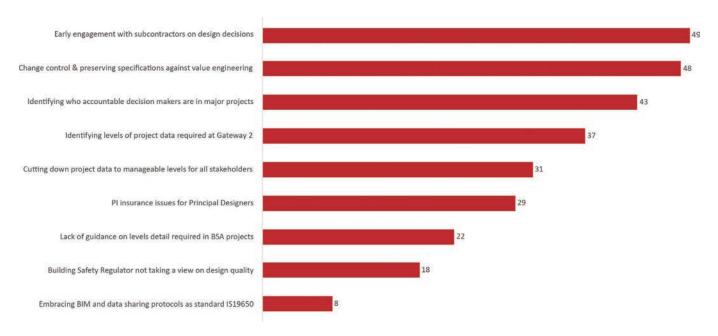
Given this wide ranging set of new responsibilities inherent to the Principal Designer role, we repeated the question we asked our survey cohort in 2022 on Principal Designer take-up, in order to see if there was a greater chance of architects being likely to grasp the opportunity and take the role in projects.

Most respondents believed this was unlikely, given the wide range of risks and resources that would be required, as well as the possible risks to PI insurance which have been mooted. With the Building Safety Act's ramifications in practice having become clearer since its initial implementation in 2022, a similar proportion (67%) said they believed architects would not be keen to take up the Principal Designer role.

One of the key issues around risk and responsibility is the legal liabilities (and insurance ramifications) of taking on a wider range of safety-critical aspects of a building as an architect, working as Principal Designer. We asked what respondents' primary concerns were regarding legal liability in higher risk projects.

The verbatim comments we received were understandable, such as concerns that "the commensurate compensation will not be granted to architects as duty holders by either clients or PII providers." According to another respondent, "The Government is removing responsibility of the approved inspector/local authority to assess and confirm that a design is compliant to the current regulations," which creates a further gap in responsibility, presumably leaving the Principal Designer with more risk and responsibility, leading to concerns around potential negligence legal action.

And put simply, the overriding challenge in such projects is



What are the major challenges posed by the Building Safety Act's requirements?

"identifying who is responsible for each design element," and "the separation of responsibility between the parties," in the words of two commenters. This could be part of the reason why another concern was expressed of the likelihood of "finding the wrong people liable just because of their perceived role when fault may lie elsewhere."

The Golden Thread

The Golden Thread concept aims to ensure that building safety information is consistently captured and retained throughout the entire lifecycle of a building, and is available and accessible to the relevant parties, beyond the design team to building owners, managers, regulators, and emergency responders.

It is partly intended to prevent contractors from value engineering products to produce last-minute cost savings using inferior and potentially compromised options. However, views from our survey were somewhat cynical as to the likelihood of this. In our initial 2022 study 53% believed that value engineering of this sort would still take place, while 27% believed it could be prevented. In 2024's study we added some qualification to the question; we asked if the Golden Thread and the CCPI would make value engineering to cheaper options less likely, and unfortunately the answers were less hopeful than two years ago. Only 39% said they thought it would be less likely, but a similar number (35%) said it would not be.

In 2024 we asked the question about what level of detail the 'Accountable Person' at the client side would require for the Golden Thread of project data to be useful for them on an ongoing basis. However, our cohort generally believed (62%) that the nature of the buildings meant that the design team would need to handover data at a 'very detailed' level.

Approved Document B

The controversial Class O for materials within Part B (narrowly focused on surface spread of flame and smoke) was removed in

2021, but allegedly can still be used for specifications. We asked our survey if they were aware that Class O was still being used on a 'legacy basis' on projects, and only 23%, either demonstrating a lack of awareness, or that the practice may not be as prevalent as some fear. The former may be suggested by the large number (55%) saying they were unsure.

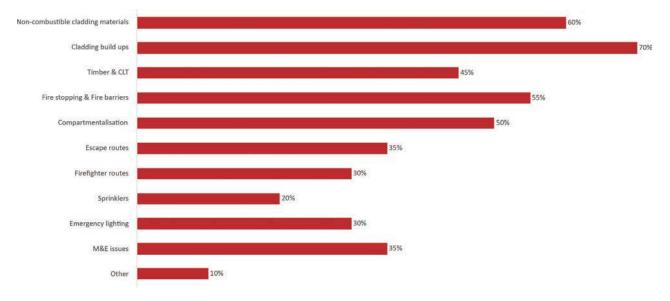
In 2022 70% supported a full overhaul of Part B including "removing ambiguities." This year's study saw a somewhat confusing response of only 38% saying that Part B required a full overhaul, given the fact that the 2024 update did not go far to address the wide range of issues.

Product performance & test data

'Classification of materials' was cited as a key concern in our earlier question around legal liability for architects in higher-risk projects. This speaks to the clear issue that clarity on materials' performance, and the classification of such, is at the root of the credibility required to make for robust specifications, essentially, specifiers are relying on manufacturers, third-party testing houses, and product information sources to provide this.

Another commenter on the subject of liability gave a damning verdict on the flexibility and ambiguity within current building Regs enabled a wide range of solutions to be employed, making the 'rightness' or 'wrongness' of a design decision hard to quantify. They said the "design discretion allowed in the preamble to the Approved Documents is an incitation to opinion engineering." The situation had been allowed to occur, they said, as "Building Control has been weakened ever since the Statutory Instrument procedure lapsed."

We asked our survey cohort whether they believed that testing and certification should be based on assemblies, i.e. sets of 'details' for cladding build-ups, rather than just for individual products?' The result was one of the most comprehensive findings in the whole study, namely 79% said that this should be done on such projects, while only 4% said it shouldn't.



Which building methodologies and elements do you require more understanding on in terms of fire safety?

Most verbatim comments backing testing assemblies, such as "you need to test the interface between individual products," "there are differing circumstances," and "fire test certificates for individual products appear to be unable to predict the performance of the individual material, as part of a build-up assembly."

A further commenter said: "As the Grenfell case has shown, materials can behave differently in different scenarios, including when combined with certain other products."

A National Regulator with teeth?

The National Regulator for Construction Products within the Government's Office for Product Safety & Standards has the power to prosecute individual manufacturers for breaches of its code.

The divisions between certain product types and the ensuing responsibilities are sure to be a long-running source of difficulty for the body as it tries to establish a viable new regime and develops an evidence base. A representative has this year raised the issue of what constitutes a 'product' when it comes to the assembly required in an offsite context. Arguably this is an issue in many cladding scenarios which are not necessarily offsite-based too.

The Regulator has powers to investigate firms it believes may be making suspect claims, and to do its own testing. However, how have our survey audience's views of the new body changed in the two years since it has begun work? prosecuting companies who are attempting to produce dubious test results?" Most thought it would be prosecuting companies producing 'dubious test results' when asked in 2022 (64%), however this had softened considerably in 2024 with only 38% saying they believed prosecutions would be likely, and a much larger 33% saying they weren't sure.

This played into a further finding on the National Regulator's potential to 'ensure transparency on building materials' safety?' which we asked in this year's study. This was a transparently unclear response, with half of respondents saying they were 'unsure' on whether it will ensure such transparent information to be promulgated to the industry. And more worryingly, 29% said no, meaning that more moves are going to be needed to unravel the issues which obscure performance information from manufacturers.

Lastly, the veracity of certification depends on the robustness and rigour of the testing processes, and one of the major lessons from Grenfell was that there was a lack of coordination across product testing bodies, but moreover a series of loopholes enabling product testing not to be as rigorously policed as it should. This can (and did) result in products being tested and approved in situations where what was tested was not what was installed, resulting in confusion and obfuscation, and higher risk.

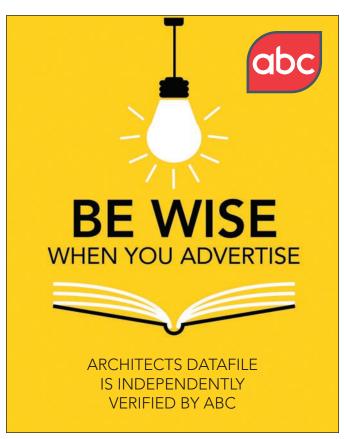
The difficult takeaway for manufacturers reading this report is that when asked if they had 'had difficulties obtaining credible test data on fire-resistant building materials from manufacturers,' the largest segment of responders (43%) said they had found this to be the case.

A broader understanding

Our survey respondents were asked where their knowledge gaps were on product types relating to fire safety, and there were several stand-out areas. 70% of our cohort said they require more understanding on 'cladding build-ups,' 60% said they needed more on 'non-combustible cladding materials,' 55% on 'fire stopping and fire barriers.' It is incumbent on the supply chain including testing houses as well as manufacturers to provide unbiased, third-party resources to assist these specifiers on the necessary knowledge. However, going forward, architectural education establishments also need to take note that these may be areas where there are gaps in awareness.

The Building Safety Act is a powerful new lever for change in the sector, one which is going to cause some pain as well as significant gain in rigour. Our architectural survey group backed the Act despite a few caveats, and two-thirds (67%) believed it should be extended to buildings under 18 metres and refurbishments. We will watch with interest to see what happens at the central level and bring you further research to gauge the industry's response, to help share understanding, and where there are weak links in the chain.

For the full version of the Industry Viewfinder white paper report, visit insights.netmagmedia.co.uk









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FITZROVIA TOWNHOUSE LONDON

Hive mind

SPPARC encouraged a family business hesitant to the perceived limitations of heritage restorations to rescue a Grade II-listed Fitzrovia townhouse and create an elegant modern family office. James Parker reports.

London architecture studio SPPARC built on its existing relationship with an ethical investment client in Fitzrovia to achieve a striking and playful restoration of a five-storey Georgian townhouse into a workspace that really works, with a stunning timber-topped extension.

The Grade II listed building, in a terrace of handsome similar properties just north of Oxford Street, had seen a range of interventions over the years, including a non Regs compliant project in the 1990s which removed large parts of the upper floors, along with much of the original character. SPPARC and founder Trevor Morriss were determined to not only reinstate these much-missed features for the benefit of the client and to rescue a handsome Georgian interior, but also to add further spaces which would provide a vibrant communal hub for the business.

The restoration and addition encompasses the full five floors of the building, plus a two-storey rear extension. This bestows a new social hub and kitchen, an extra space for social value community use and a roof terrace garden that adds further opportunities for employees to mingle and socialise as well as work. The eye-catching honeycombed-shaped timber and glass roof also provides a lightwell connecting the two levels – which would otherwise be spaces relying on artificial lighting, enclosed on three sides by walls.

SPPARC has recently demonstrated something of a specialism in careful adaptive reuse (or "creative reuse" as Trevor Morriss prefers it), but in much

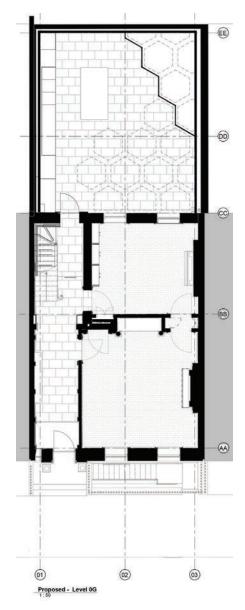
larger, more complex projects like Borough Yards, and the Olympia restoration it's progressing to completion with Heatherwick currently. But the practice is applying the same level of meticulous attention to detail as it discovered the building's secrets, aligned with some modern touches, which has its own sensitivities being a family-owned business.

Design development

In the words of Trevor Morriss, principal at SPPARC, this project is "the product of six years spent carefully crafting and curating a modern, best-in-class workspace that celebrates the Grade II listed building's heritage, remediating works that stripped it of its Georgian charm."

He says the guiding principle for the client, and therefore his practice, was that "this was their office, but they approached it as if it was their home." Having Danish heritage, the client was keen to adopt some of the Scandinavian interior design principles that SPPARC were bringing to the table, as these harmonised well with the restored light and spacious interiors.

The design development with the client saw them taking a hands-on role: "This wasn't a corporate client, they were very, very invested and wanted to be involved in every kind of aspect of the design process." Genuine collaboration was the watchword on this project, with the client making comments while the architects were making sketchings and models. This was "exactly what we like to do," enthuses Morriss.



LAYERED

The extension's roof is a combination of structural CLT oak hexagonal sections, and a filigree of smaller sections within; topped by hexagonal glazing elements

SPPARC's main architectural additions were the new extension but also the reinstatement of the top two stories, and the traditional Georgian hipped roof structure. However, the practice was actually appointed by the client based on its masterplan project in Tbilisi (which involved the client's finance director in his previous role at another family office in Mayfair), before they even identified this building in Fitzrovia as the ideal location. Building on their fruitful partnership, SPPARC assisted the client in their search and purchase of the townhouse, however the client wasn't initially inclined to go for another heritage project, having previously been in an inherently cellular Georgian house in St James's, Piccadilly.

A trip to SPPARC's studio in Bedford Square, itself a Georgian townhouse conversion, saw the client change their mind, and want to adopt a similar restoration approach to a new office. "They thought that it could be a bit too constrained, but then they came to our studio and saw how we had opened it up and made it a collaborative environment, and we encouraged them to revisit a building they had previously dismissed."

Morriss says the client "fell in love" with the building they now occupy, despite the "complexities of the building's planning history," which included "work done that was unauthorised." He says that the client "recognised they were taking on quite a liability at the outset." He adds: "We had to be very clear with them about their statutory obligations," and then the practice got in touch with Camden Borough, who luckily they know well, and Historic England, to show them the location of the proposed renovation.

Morriss exclaims that, despite the project sitting just outside the conservation area: "I've never seen a conservation area officer so outwardly distressed as the officer from Camden, when she saw the work that had been completed without permission years before." The real damage was done on the uppermost two levels (the second and third floors), which were being rented out for living accommodation, says Morriss. "Walls, staircases and roofs were taken out," he explains - "all the historic fabric had effectively been replaced, dismantled." He says this was no accident: "It was a very purposeful piece of design, which just kind of ignored what it was cohabiting with."

He adds however that the disgruntled planning department were confident in the proposed project to restore the building's character, despite the painful recent history of bypassing planning. And the architects were confident they could "reverse things, and make a handsome job out of it."

Now, this family office has the whole refurbished and restored second floor as a modern workspace for its charitable arm, as well as a range of other spaces including the new 'heart' that is the social hub in the extension. The lower ground level has its own secure access enabling the social enterprise working with Camden Council which occupies it to have a separate workspace.

Redressing the balance

The project redresses the previous alterations to the second and third floors, drawing on SPPARC's experience of "striking the balance between restoring and re-imagining heritage buildings." The architects put the emphasis on restoring the original Georgian plan form's proportions allied with making "sensitive interior responses," but more fundamentally, reinstated level three of the five levels, which had been removed.

In addressing the restoration of the existing structure, Trevor Morriss explains that as is typical for this kind of SPPARC project, they did copious historical research of the building and its locality to identify how and when to replace and when to repair. "And doing it in a really sensitive and quite faithful way, but not pastiche." He gives the example of reinstating a stair "in the spirit of the original" up to the attic, which would have historically been the servants quarters. This resulted in a "very simple, but very well crafted" timber stair, "elegantly detailed," but running traditionally along one side of the building rather than through the centre of the upper two levels as the previous addition had. Also, the hipped roof which had been removed was restored, plus reclaimed slates, "a lot of lead work, and meticulous details."

SPPARC undertook an extensive process of studying the building's original layout and those of the surrounding properties, including using historical documents to create a coherent and authentic result in the restored building. Morriss explains the approach: We wanted to get into that craftsmanship and that making," which was inherent to the precisely







crafted buildings of that area." They were determined to be as "faithful as possible to the Georgian architecture," so rather than the incongruous roof terrace that had been created the designers said "let the bees have the roof, and we'll do you a lovely terrace on the lower floors." Morriss adds: "There was a real commitment from the client to follow that logic."

He says this conscious effort to craft the spaces fed into the goals which the client has in its ethical business, and which it wanted to embody in the building, including the idea of the beehive, and of "working together towards a common good." The hive theme emerged early on, he says, and became the "DNA of what that space would be about, and not just a motif."

Flagstones were installed in the hallway, reinstated to complement the original retained exposed stone staircase, and the "very strange" front door was replaced; it was previously metal made to look Georgian – "I can't help think it was to keep the planners out!," says Morriss with a smile. Other key fittings and details include terrazzo formed basins and intricate detailing on the stairs and floor finishes.

Trevor Morriss says that SPPARC make a concerted effort to "work with and listen to" conservation bodies and statutory authorities to ensure a harmonious design process.

A hive of connections

The building has had its second and third levels restored, but at the same time SPPARC worked to link as many of the spaces as possible, chiefly using the partrefurbished stair that curls its way through the building, but also critically using the new social hub in the extension created at ground floor level.

Introducing a focal point of a central hub, which was to result in the unique structural honeycomb timber and glass roof to the extension, was the project's key feature since the early stages of the concept design. But this is not only as an aesthetic flourish but also as a functional means to bring light to the lower ground floor rented space (the tenant is a social enterprise tackling homelessness).

The extension replaced a typically ostentatious 1990s 'conservatory'-style glazed pyramid (which, says Morriss, "ironically had planning permission,"

The hexagonal structure is no mere design conceit, says Morriss; "It's not just a piece of glass with decoration below, it's a structural shape doing a job; too often you see something which is just cladding"





and creates instead something which explicitly extends the building, but at the same time makes a sympathetic new statement of its own.

The new extension would replace this structure with a freestanding rectangular structure tied to the three surrounding walls, but which would not put any loads on the heritage walls. With its oak CLT structural roof supporting both glazing and roof garden above, it connects to the rear parapet wall but essentially SPPARC created an independent structure, both vertically and horizontally."

The wholly CLT roof structure is deceptively complex, a web of hexagonal frames pegged together, with a further filigree of non-structural hexagons within each, conjuring up an effect of bubbles as much as beehive, as Trevor says. The individual 1.5 metre sections that form the webbed structure were manually brought through the building and elevated into position over several weeks.

The CLT roof is held together by restraint nodes and tension rods concealed in each

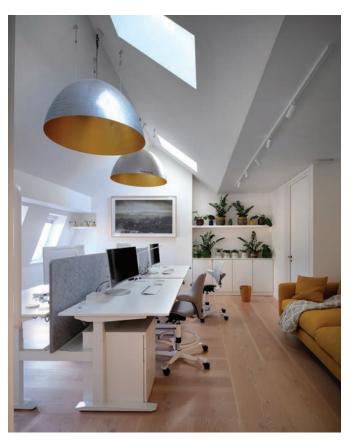
of the timber lengths. Above, a separate layer of frameless glass hexagons sits on the web, forming a giant rooflight which runs around the roof garden and brings copious light to spaces beneath. The hexagonal structure is no mere design conceit, says Morriss; "It's not just a piece of glass with decoration below, it's a structural shape doing a job; too often you see something which is just cladding."

The structural oak roof (and the sky) is visible throughout the new extension, helping connect the two levels and provide an unusual yet calming spatial quality for staff members to relax and socialise. The enclosure of the timber staircase leading to the roof garden visibly penetrates the spacious ground floor of the extension which contains a beautifully detailed kitchen with a large table and benches. This is backed with the existing building's back wall and gives visual connection through to the 'library' while allowing meetings as well as eating and drinking. The high ceiling contrasts with the low door entering it from the listed building, with its height









VISIBLE QUALITY

The restoration exposes sections of original brickwork to add interest to the workplace, and creates a variety of internal spaces for both work and relaxation

constrained by the soffit of the original stone stair's half landing above it.

The hexagonal new roof is visible from the entrance hallway of the building, offering a tantalising glimpse of this centre of the 'hive.' This is reinforced throughout the building with the glass roof visible from the large windows to workplaces, the open stair, and from the lower ground floor via the pleated-glass lightwell, reinforcing the theme.

Despite the theme and the workspace function, the building retains a domestic feel in many respects, particularly in the new kitchen area in the extension: "That's the idea behind it," says Morriss. "They share food there, and that's how they kind of download and share ideas, and how they debrief on things. It happens around the kitchen table as it would in the family home."

Working at home

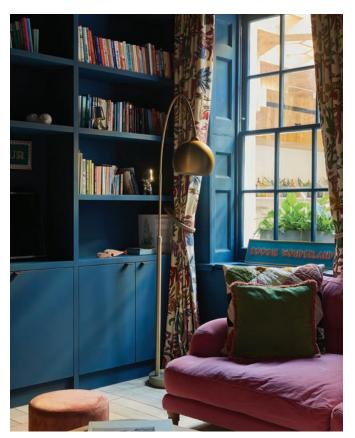
Architects Pia Lucas and Ben Salter explain how the restoration of the rooms and circulation spaces of the existing house adopted some sympathetic touches of Scandinavian design, which suited the simple, generous proportions of the

Georgian home as well as the owners' heritage. "Even though we're celebrating the existing Georgian building, they are very calm tones."

The selective use of full-height Crittall screens in several parts of the building opens up the space, for example on the third floor workspace, bringing the spaces together visually and avoiding the closed-off nature of a Georgian interior floorplate. While the architects restored many of the original features on the second and third levels, they introduced these partitions to give the workspaces the ability to have privacy alongside modern visual connection.

SPPARC carefully selected new materials that harmonised with existing decorative features. This included the restoration of historic features including wall panelling and plaster mouldings, as well as incorporating contemporary furniture, bespoke joinery, lighting and wall colours.

While the lightwell is a focal point, the building enjoys a varied aesthetic throughout with each of the spaces and rooms having a distinct look of their own, reflecting SPPARC's attention to detail. The light oak flooring is a calm counterpoint







to the often colourful walls, and there is a large irregular-shaped oak design that SPPARC designed for the boardroom at the front of the building. It was CNC cut in three pieces and assembled onsite, like the hexagonal sections of oak ceiling used for the extension.

The extension lightwell's soft, bright tones are echoed by a warm material palette designed to create a feeling of "calm and reflection" to support the workplace and social hub. Bespoke pendant lighting hangs in the lightwell between the two levels, creating a high-end, relaxing feel to the space.

The 'library' room on the ground floor, overlooking the glass roof and roof terrace, contrasts with the rest of the interiors, a cocooning domestic space painted dark blue (walls and ceiling). It offers a private retreat ideal for relaxation and contemplative tasks, with its deep colour offset by the large windows, and direct visual connection to the extension.

Exteriors

Located above the structural timber roof of the new extension is a new external roof garden, accessed from the original stone cantilevered staircase. Precisely formed oak planks create an integrated balustrade and seating area, providing views through the hexagonal glass into the interior below.

The honeycomb motif is continued in a perforated corten planter screen around the terrace's perimeter that houses bee-friendly planting. This encourages pollination from working bees which have been installed in a hive on the roof, completing the theme, which is a strong unifying factor but still a subtly-applied one in this highly successful adaptation.

Conclusion

Commercial priorities led to additions in recent years, which – out of sight of the planners – arguably robbed this lovely Georgian building of its essential nature, at least in part. However, SPPARC took the opportunity to subtly consolidate their reputation in Camden and rescue this building, and turn it around to face inwards to its new social heart, by harnessing a different sort of commercial impetus. Namely, one that puts ethics above capital, and that has been fully embodied in this thoroughly virtuous project which left no stone unturned to please the client.

While the lightwell is a focal point, the building enjoys a varied aesthetic throughout with each of the spaces and rooms having a distinct look of their own

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The HLA Plus has a clear goal, to keep buildings and structures safe by providing live performance data on all pump station activities. Promoting a culture of responsibility, where commitment is achieved, and risk is mitigated and reduced.

The Delta HLA Plus is a smart device, suitable for groundwater, surface, and foul water pumping stations.

The Delta HLA Plus is smart technology which has both proactive and preventive functions. Putting property owners and/or facilities managers in control. Any pumping station fitted with a Delta HLA Plus device can benefit from a range of features that keep pumps running at peak performance – maximum protection and benefits.

The Delta HLA Plus will give key users access to real-time analysis of their pumping

stations enabling service, maintenance, or repair requirements to be detected and implemented at the earliest opportunity.

With a simple dashboard and a host of features to help protect pumping stations, the Delta Pumps App offers peace of mind at the touch of a button. Always know what's happening with your pumping station, day, or night. Know what's activating as it happens. With no subscription fees and big on features, the Delta HLA Plus can connect to any new or existing pumping station – offering protection where it's needed most.

Smart home solutions have transformed lifestyles, from Alexa to Ring. Smart technology is changing our lives – it is also an opportunity to change and improve industry. The Delta HLA Plus is smart construction technology which is used to monitor the performance of pumping stations in real-time and provide detailed analytics that assist people to make informed decisions, accurate planning for maintenance, minimising delays and reducing cost.

Kevin Dodds, managing director at Delta Membrane Systems Ltd, a strategic basement waterproofing thought leader, uncovers how digitising and operationalising maintenance of equipment can improve reliability and efficiency of Type C, cavity drain waterproofing systems and optimise end-to-end value chains:

"Predictive maintenance is one such solution that helps lower operating and maintenance costs by facilitating proactive servicing and repair of assets, while allowing the more efficient use of repair resources. Delta's HLA Plus delivers innovative software that maximizing customer value to streamlining servicing and boosting efficiency, both Delta's clients and our customer's clients can make better decisions and avoid costly repairs should their property be empty at the time a visual or sound alarm occurs. The unfortunate truth is, that home emergencies do happen. Even those who prepare for worst case scenario, such as high-water levels in basements, may still suffer catastrophic losses in the event of a flooded basement. These types of emergencies devastate homes, individuals, and families. A flooded basement is often called a disaster for a reason. The structural integrity of a basement can be severely damaged, leaving it uninhabitable. The Delta HLA Plus reduces the risk of these disasters occurring, especially if a property is not occupied at the time of emergency."

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

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Knauf Insulation adds to rainscreen range

nauf Insulation has launched Rocksilk® RainScreen Slab EE, the UK's first non-combustible rainscreen sheathing insulation with an enhanced water-repellent facing. The facing reduces the risk of water damage when the insulation is left exposed to preserve the intended thermal, fire and acoustic performance of the building.

Best practice for installing insulation in rainscreen facades is to use a 'rolling front', but a survey of facade contractors by Knauf Insulation suggests that this is only achieved in approximately 50% of projects. If insulation is left exposed to the elements for too long during construction, it could be damaged, and its performance compromised.



"We designed Rocksilk® RainScreen Slab EE to give specifiers a solution to the exposure problem," explained Luke Davies, product manager at Knauf Insulation, "Rather than rely on best practice on site, specifiers can now proactively protect building performance by selecting a product engineered for the real world."

Rocksilk® RainScreen Slab EE has been extensively tested to deliver proven performance. It is non-combustible, with a Euroclass A2-s1,d0 reaction to fire classification and the black facing provides an aesthetic solution for behind perforated facades.

To further simplify specification and support compliance, Rocksilk® RainScreen Slab EE has been added to the new Rocksilk® RainScreen Cavity Systems range, launched earlier this year. Specifiers will be able to meet challenging fire safety requirements with a complete, tested system that includes the sheathing insulation, fixings and cavity barriers.

Alongside the launch of the new product, Knauf Insulation will be releasing a new CPD



on using rainscreen insulation to achieve realworld performance. "Specifiers are under greater pressure than ever, particularly when designing high-risk buildings with rainscreen facades", said Davies. "This launch is part of our wider plan to support specifiers with the products, services and resources they need, to have confidence in their insulation choice."

01744 466 600 www.knaufinsulation.co.uk

Senior provides pitch-perfect fenestration package for Rangers FC



Aluminium commercial doors and curtain walling from Senior Architectural Systems have been specified for the stunning new museum and event space for Rangers Football Club. Known as Edmiston House, the new two-storey building has been designed by Keppie Design and takes inspiration from the area's rich shipbuilding and industrial heritage. The building feature the use of Senior's SF62 aluminium curtain wall system and thermally-efficient PURe® aluminium doors, all fabricated and installed by specialist contractor Marshall Brown. The aluminium frames are powder coated in a matt black finish so that the doors and curtain wall system create a seamless facade, with Senior's thermally-efficient PURe® FOLD bi-folding doors installed to the first-floor terrace alongside a PURe® Commercial Door. Part of Senior's patented and award-winning PURe® range of aluminium windows and doors, the PURe® FOLD door features an innovative thermal barrier manufactured from expanded polyurethane (PUR) foam, which is most often found in insulation products. When calculated as a CEN standard commercial door, the PURe® FOLD aluminium door can achieve U-values as low as 0.88 W/m²K.

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Invisible door automation opens historic Oxford College entrance



The Grade II listed dining hall at Pembroke College, Oxford University has undergone a significant upgrade. Architects Walters & Cohen, in collaboration with Glasstec, has addressed the issue of draughts from the hall's heavy timber doors by installing an elegant yet highly functional, self-opening glazed entrance door. This creative solution incorporates a TORMAX iMotion 1401 concealed door drive, providing invisible automation for the swing door. The result is a warm, draught-free environment that enhances thermal comfort and energy efficiency without compromising the hall's historic charm. The new entrance door is a testament to the seamless integration of modern technology within a historic setting. The TORMAX iMotion 1401, located discreetly in a steel casing beneath the door, ensures that the aesthetic integrity of the Victorian stonework remains intact. The iMotion range of automatic door operators incorporate a motor with none of the elements that generally wear out, such as gears and brushes. This ensures exceptional longevity and demands only minimal ongoing maintenance, making it entirely feasible to situate the drive in a concealed location.

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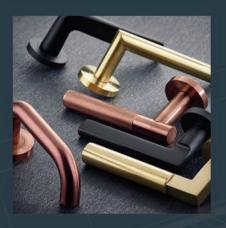
















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The power of colour in design

Victoria Brocklesby of Origin discusses how coloured doors and windows can transform home design, and offers practical advice on using colour to boost kerb appeal, enhance light, and add value.

he decisions are endless when designing a home: from floor plans to materials, and naturally, the aesthetics. Colour plays a crucial role in residential properties, influencing mood, atmosphere, and the overall feel of each space. In recent years, the trend of aggressively grey and neutral interiors has started to shift, leaving many homeowners feeling bored and uninspired.

While these muted tones were once popular for their simplicity, more homeowners are now drawn to bold colours to bring personality and energy back into their homes.

In addition to their practicality, doors and windows can shape the overall character and personality of a home, with colour being a key aspect of this.

Including colourful doors & windows

Just as a building's exterior colour or wall paint creates a distinct feel, the colour of a door or window can significantly boost kerb appeal and set the aesthetic tone. For example, a front door's colour can make a powerful first impression, while the colour of door and window frames can either complement or contrast with the building's architectural style.

What to consider

Before specifying coloured doors or windows, architects will need to consider any restrictions on the property. In conservation areas, for instance, there may be limitations on colour choices that don't align with the character of the area.

It's also important to think about how the interior colour scheme will interact with doors and windows. Rooms are redecorated by homeowners frequently, so choosing a versatile colour that can adapt to various decor changes is crucial. Exterior materials, such as brickwork or cladding, should also be factored into colour decisions.



Dual-colour options on bespoke doors and windows allow for different interior and exterior frame colours, which can further enhance design flexibility.

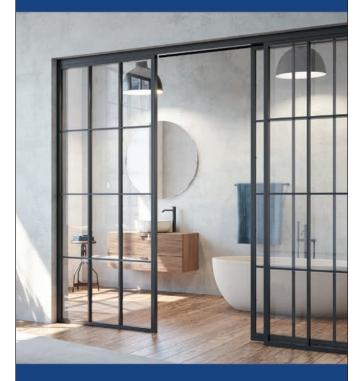
Although neutral or grey hues may seem like a safe choice, carefully selected contrasting or statement tones can bring a unique edge to a building. For example, a red front door or pastel window frames inject personality into the property.

Framing spaces with colour

Coloured frames can also influence how light enters and moves through a room. Lighter frames can amplify natural light, which is particularly beneficial in smaller spaces or rooms with limited natural light.

In recent years, the trend of aggressively grey and neutral interiors has started to shift, leaving many homeowners feeling bored and uninspired

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A pale grey or pastel yellow door, for instance, can brighten a hallway by reflecting light from adjacent rooms, creating a more open, airy feel. In contrast, darker frames can subtly define spaces by limiting light flow, enhancing a sense of separation between areas.

Boosting property value

When designing homes, saleability is always on the mind. Research of 2,000 UK prospective homeowners found that they are likely to pay an average of 5% less for a property with an unappealing colour scheme. Notably, almost a fifth of people believe a bad colour scheme – either on the inside or outside of a property – knocks over 10% off the value of a house.

So which colours tend to discourage buyers? Yellow is perceived as the 'cheapest' looking colour, with pink considered as the 'tackiest,' and neutrals the most 'boring.' However, whites, blues, and reds are widely regarded as stylish and timeless. Architects may want to keep these preferences in mind when selecting frame colours that add lasting appeal.

Specifying quality

With a vast selection of doors and windows on the market, it's essential for architects to recommend systems that prioritise quality. Quality doors and windows are defined by several key features that combine craftsmanship, durability, and aesthetic appeal.

The highest-quality fenestration is often British-made, valued for its craftsmanship, durability, and precision. British manufacturers adhere to strict quality standards, ensuring products are robust, long-lasting, and fit seamlessly.

When prioritising quality, material choice plays a vital role. Aluminium is a superior material for doors and windows due to its exceptional strength and durability, yet it is also lightweight. It offers superior performance compared to other materials, ensuring that the door remains robust and performs well for years.

Given the investment in fenestration and the impact of colour, architects shouldn't compromise on quality. For clients interested in unique colours, selecting a manufacturer that offers bespoke products ensures a range of colour choices and an assurance of quality.

Victoria Brocklesby is COO at Origin



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360° room comfort

Wraptite® external air barrier helps to deliver performance and quality in new development

raptite®, the vapour permeable external air barrier from A. Proctor Group, is part of the high-performance residential building specification in the new Dublin city quarter, Glass Bottle.

The creation of Glass Bottle is transforming some 15 hectares of a former glass bottle-making site that was once home to one of the most modern factories in Europe.

The work currently being undertaken, and which features the use of Wraptite as part of the specification, is Phase 1.

Specifying an external air barrier for the new Glass Bottle city quarter

The external wall build-up of the apartment buildings is a fairly typical light steel frame structure with a sheathing board and external finish. Designed and specified by Dublin-based architectural practice Henry J. Lyons, the Wraptite external air barrier was named within their specification pack.

As an airtight and vapour permeable



membrane, Wraptite can be positioned to the external side of the structure. This moves the airtightness barrier away from the internal services zone, simplifying detailing and reducing the number of penetrations through the membrane. At the same time, allowing the passage of moisture vapour eliminates condensation risk.

It is even possible to use Wraptite as the sole membrane in a wall build-up, subject to the appropriate condensation risk analyses being carried out.

However, at Glass Bottle, the Phase 1 specification still included an internal vapour

control membrane as part of a belt-and-braces approach.

The residential apartments feature mechanical heat recovery ventilation, so an airtightness target of less than 3 m³/hr/m² will be desirable. The better the standard of airtightness achieved on the project, the more efficiently the heat recovery ventilation will operate – and that all depends on the quality of the installation.

Installing Wraptite external air barrier on Phase 1 of Glass Bottle

The performance of Wraptite membrane is founded on it being a simple, self-adhesive solution, with the added benefit of Wraptite Tape being used for particular areas of detailing. This approach saves on the labour and material costs associated with meeting modern energy efficiency requirements, which are at the forefront of Glass Bottle's conception.

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Sto facade products specified for new school building



A Sto external wall insulation system was specified to create a thermally-efficient school building with a facade reflecting its branding. The building has been designed as a simple cube with an inset box in the school's signature purple colour. The StoTherm Mineral K external wall insulation system was chosen together with StoSilco render and StoColor Dryonic X-Black facade paint, BBA certified, StoTherm Mineral K has an A2s1, d0 reaction to fire classification in accordance with BS EN 13501-1. The system's mineral fibre insulation boards were adhesively and mechanically fixed to the concrete block substrate. A reinforcement coat and mesh were then applied followed by the installation of the silicone resin render in white as well as the school's signature purple. The StoColor Dryonic X-Black paint, which repels water and protects facades from algae growth, was used to overpaint the purple render. The paint has solar reflecting properties so infrared and UV rays are reflected, reducing solar heat gain and ensuring the colour doesn't fade, and remains vibrant for years to come.

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Garador's large natural timber range of garage doors can transform a property



Wooden garage doors add a distinctive look to any property. Leading British garage door manufacturer Garador now offers a huge range of beautiful up & over garage doors constructed from red cedar, a lovely natural and sustainable hardwood that adds real style to any home. The cedar wood used in Garador's doors is grown in cooler climates where the wood has developed self-protective qualities which give it a number of advantages. It is especially useful in areas where humidity, temperature changes and cracking are problems; and while many types of wood warp when subjected to moisture; cedar stays straight and flat and should last a lifetime. This makes it ideal for a garage door.

The wood is also beautiful. Garador's expertly crafted timber Up & Over garage doors come in two main ranges: the Solid Cedar range and the Elizabethan range and they also come in a wide choice of stain finishes. These beautiful timber doors are a great way to add real style and value to any property.

01935 443703 www.garador.co.uk

Sto helps residential development exceed U-value requirements for excellent thermal performance



A Sto external wall insulation system has maximised thermal efficiency for more than 240 homes within a new residential development in Bracknell. Working in partnership with BDG and Sto's authorised installer, Stoneguard, Sto supplied a specification which would enhance the development's eco-credentials. The StoTherm Mineral K insulation system was selected and designed to achieve a U-value of 0.12 W/m²K for the wall structure, exceeding the requirements of building regulations. The BBA-certified StoTherm Mineral K external wall insulation system achieves a reaction to fire of A2-s1, d0 in accordance with BS EN 13501-1 and uses mineral fibre insulation boards, which optimise thermal efficiency and fire protection. Ian Sired, project manager for Sto, said: "A total of 3,750 m² of StoTherm Mineral was used across this scheme following extensive preparatory works, including fixing assessments and wind load calculations. Through close collaboration with BDG and Stoneguard, we were able to develop a system meeting the low U-value target ensuring as little heat as possible is lost through the external wall."

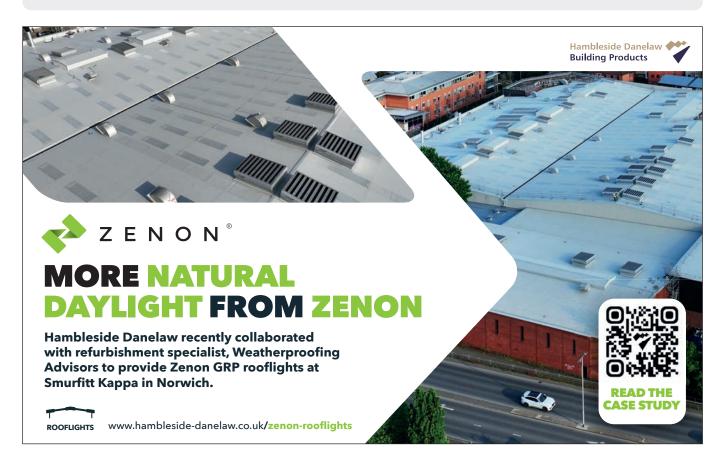
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Mapei finish chosen for MAC Rendering facade



A Mapei render finish has been used to complete an extensive facade project at a property in Sheffield. All materials were supplied by ProTec Render Supplies Ltd and installed by Mac Rendering Ltd. During works on the facade, all external elevations were rendered using Mapewall GRP one-coat render. The surface was then reinforced with Mapetherm Net – an alkali-resistant glass fibre mesh. This was followed with a base layer of Silancolor Base Coat Primer – a silicone resin-based paint featuring micro-granular quartz and selected charges. The surface was then finished with Silancolor Tonachino 1.5 mm silicone-resin thin coat render; a fibre-reinforced, breathable and highly water-repellent textured finish. Colour shade 8510 – an off-white tone – was chosen from the Mapei Colour Project range, for both the primer and top coat, to complement the property's Anthracite Grey-toned roof and windows. "We've been using Mapei renders for around 12 months now, on a number of local projects across South Yorkshire. Our skilled installation team find the products extremely easy to use and the quality to be of a high standard." commented Chris McVann, director of MAC Rendering Ltd.



Follow the curve to innovation

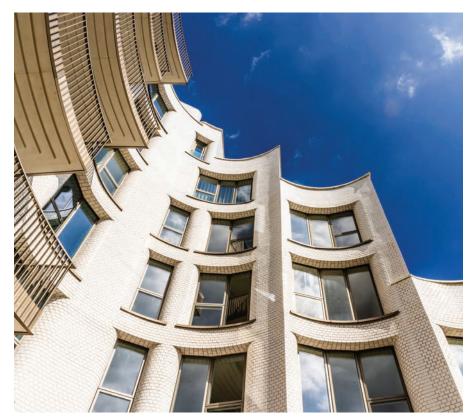
Innovative manufacturing and collaboration are key to architectural success. Mick Beresford of Leviat details some unique, engineered solutions for complex projects.

Today's architects are not content with the conventional and frequently seek to create buildings that will challenge our perceptions of space, form and function. This ambition may manifest itself in designs featuring unusual or irregular angles, intricate facades, and seamlessly integrated curved structures. However, achieving and realising these visions can present significant technical challenges that traditional construction methods struggle to overcome.

This is where engineered solutions enter the mix. Product manufacturers specialising in engineered solutions can play a crucial role in bridging the gap between design vision and structural reality. Expertise in creating bespoke facade and restraint components plays an important role in achieving complex architectural designs. Through early involvement, they can tailor their products to the specific requirements of each project, enabling architects and contractors to push the boundaries of what is possible in construction. These engineered solutions transform architectural concepts into tangible, safe, and visually striking buildings. Their ability to adapt standard products or create bespoke solutions ensures even the most challenging designs can be realised, whilst maintaining structural integrity and aesthetic appeal.

This adaptability is particularly evident in two critical areas of modern building design: masonry support systems and balcony connectors. These vital components, while often hidden from view, are fundamental in realising some of the most striking features of contemporary architecture.

Masonry support systems make facade designs possible by providing hidden structural support for brickwork and stonework. These systems can be engineered to accommodate unusual angles, cantilevers, and curved surfaces, ensuring that architects' visions are not constrained, allowing them to be creative with traditional brick-and-mortar construction.



By adapting to unique structural conditions, such as post-tensioned slabs or heavily reinforced concrete, this will ensure that the architectural intent is preserved even in the face of complex engineering requirements. Differential movement, corrosion resistance, type of cladding and frame type; all need to be considered. Furthermore, advanced modelling and fabrication techniques offered by manufacturers ensures the seamless integration of support systems within the building structure.

Whether it's a subtly undulating wall or a dramatically cantilevered feature, engineered masonry support solutions ensure that the vision can be realised without compromising on structural integrity or long-term durability. Custom-designed masonry support systems were crucial in realising the building's curved structure





Beyond the facade, balconies have become integral elements in aesthetically appealing, mixed-use developments. However, integrating these features seamlessly into a building's structure, especially in high-rise or unusually shaped buildings, presents significant engineering challenges.

Engineered balcony connector solutions address these challenges head-on and their correct specification is crucial for ensuring structural integrity, thermal efficiency, and fire safety. Balcony connectors are that critical link between the balcony and the building structure, transferring loads and accommodating movement. With continuous innovation, thermal connections allow architects to design balconies that appear to be natural extensions of the building's form, rather than afterthoughts.

A case study with curve appeal

Folkestone's Shoreline development showcases how innovative engineering solutions can bring complex architectural visions to life. The project's distinctive curved design, featuring convex and concave elements and a glazed white brick facade, presented unique challenges for masonry support and balcony integration.

Custom-designed support systems were crucial in realising the building's curved structure. Engineers developed bespoke brackets and channels to support the masonry and precast brick soffits, carefully coordinating with window locations at every level. Special fabrications were created for acute corners, for seamless integration with the unique geometry.

Non-standard brackets were designed to connect steel balconies to the curved concrete frame, navigating potential clashes with reinforcement in the congested slab edge. This demanded close collaboration between design and production teams. Another important consideration was material selection for structural components. Due to the coastal location, grade 316 stainless steel was chosen to withstand the high salt content of the sea spray in this harsh coastal environment.

The project demonstrates how early engagement and close collaboration between engineers, contractors, and manufacturers can overcome complex design challenges.

Mick Beresford is design services manager at Leviat



Sustainable Construction Academy launched



Cemex UK launched its Sustainable Construction Academy earlier this year, via its Cemex University learning and development platform helping to develop future talent across the industry. The aim of this new learning programme is to demonstrate how lower carbon building can

support the sustainability requirements of a wide range of building and construction projects understanding across the building and construction sectors. After a successful launch in the UK, Cemex is now taking this wider across the EMEA region.

www.cemexuniversity.com/course/SustainableConstructionAcademy

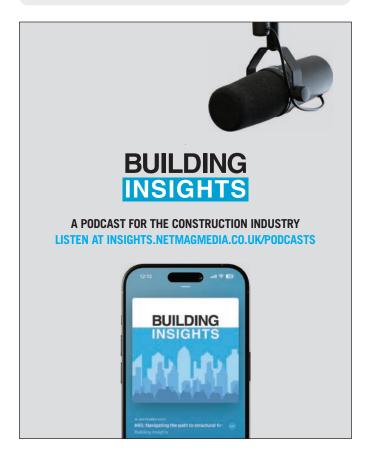
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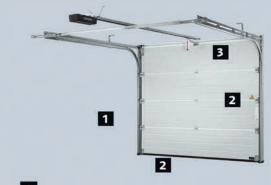
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Keylite's new Fixed Skylight



Keylite Roof Windows has launched a new Fixed Skylight for roofs pitched from 10° upwards that will allow for more daylight and a higher level of security. The innovative design will suit single-story roofs due to its low-pitch installation and offers

44% more daylight than a standard centre pivot window. The Fixed Skylight is also compliant with Part Q of UK building regulations and meets latest guidance in 'Security in dwellings: Approved Document Q' to help resist unauthorised access in new dwellings.

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Building the future with ICF

ICF is one means available for reducing the carbon footprint of new housing, says Christopher Stride of the Insulating Concrete Formwork Association.

When used correctly, ICF offers excellent buildability, flexibility and virtually limitless design potential

The drive to improve levels of energy efficiency and airtightness while reducing a building's reliance on heating and cooling systems has paved the way for Modern Methods of Construction (MMC) to provide simple solutions.

Taking a fabric-first approach is considered the most effective approach to achieving these standards with the concept featuring heavily in the Part L changes which are an interim step to the Future Homes Standard. This focuses on enhancing the building's.

Although many think MMC means volumetric builds, it is in fact an umbrella term which encompasses a vast array of systems. Each one is different, but they all provide the speed while creating high-quality, energy-efficient homes.

Site-based insulated solid wall construction methods like ICF sit under the MMC umbrella. A system that uses construction methods already familiar to contractors enabling it to integrate easily into developments.

When used correctly, ICF offers excellent buildability, flexibility, and virtually

limitless design potential. A great example of this is the ease of adding aesthetic details, such as recessed doors and windows. In fact, some design elements, like corner windows or cantilevered openings, are simpler to construct with ICF compared to traditional methods because they don't require complex structural solutions.

It's not just about U!

ICF systems provide high levels of energy efficiency. One of the biggest problems in achieving high U-value levels is ensuring the installation of the insulation is correct – any gaps and the building will underperform. This is not typically a problem with ICF. During construction, the blocks lock to keep the concrete in place while setting.

The combination of the tight fitting insulation, which wraps both sides of the building, sitting in direct contact with the concrete provides one of the biggest benefits of ICF structures. While figures can vary depending on the chosen system and building design, ICF constructions typically achieve U-values around 0.18 W/m²K.

Of course, creating energy-efficient buildings is not only about the level of insulation used. Solid concrete wall construction also ensures good levels of airtightness - as low as 0.3 m³/hr.m² and superior thermal bridging performance with Y-values as 0.02 regularly being demonstrated using certified junction psi values. This is a critical factor in their outstanding thermal performance, achieved when combined with their inherent air tightness and low U-values. This results in even temperatures throughout the structure with reduced draughts and cold spots enabling the building to stay warm in the winter and cool throughout the summer.

Energy efficiency in practice

A great example of ICF's potential is The Curly House by Nudura. The client's brief was to rebuild an existing cottage to Passivhaus standards to minimise their energy consumption and carbon footprint while also meeting planning restrictions faced when building in an Area of Outstanding Natural Beauty. The energy efficiency challenge was even greater when working on a highly exposed site

subjected to bitingly cold winters and very hot summers. The design by architects Ecotecture consists of a crescent-shaped detached home which steps and slides into the slopes of the site and features a curved brise soleil.

Nudura was specified for the walls with a thermally broken super-insulated deck system that would take a load of 5 kN/m. The heavier construction option was chosen to provide thermal mass that balances the heating gains and losses due to the large areas of glazing. The insulating element of Nudura's ICF acts as a buffer to the thermal mass allowing the slow release of heat into the building to ensure a constant internal temperature throughout the year. The semi-subterranean nature of the design also meant that the build materials had to withstand a damp environment – ruling out the option of timber.

The finished design and ICF have made it possible to reduce thermal bridging to a minimum with the enhanced air-tightness standards required for Passivhaus compliance.

Christopher Stride is chairman at Insulating Concrete Formwork Association







ADF NOVEMBER/DECEMBER 2024 WWW.ARCHITECTSDATAFILE.CO.UK

Designing for wellness: How architects can create cleaner and healthier indoor spaces





rchitects and designers play a crucial role in crafting environments that prioritise wellbeing, productivity, and comfort. Occupants are demanding more from their surroundings, be it offices, schools, hospitality, or leisure spaces. For example, 55% of workers want their workplace to provide a wider range of amenities than their home environment. With that in mind, having a thorough understanding of the spaces we inhabit is vital for architects and designers, from air we breathe to hygiene standards.

Understanding Indoor Air Quality

With people spending up to 90% of their time indoors, indoor air quality is a universal concern that impacts people across all sectors and in any shared space. Pollutants or Volatile Organic Compounds (VOCs) are emitted from numerous sources including fuels, flooring, cleaning products, and even

soft furnishings. These micro pollutants are impossible to see but can have an impact on our health, wellbeing and productivity.

Short-term exposure to poor indoor air quality can potentially lead heightened fatigue, difficulty concentrating, and an overall sense of discomfort. Those with respiratory conditions such as asthma may notice an exacerbation of symptoms, including coughing and shortness of breath. Additionally, poor indoor air quality can contribute to the spread of viruses and respiratory infections among occupants.

Studies show that 61% of urban offices reported levels of air pollution above the WHO guidelines for safe indoor air quality. This data underscores the critical importance of proactively embracing available solutions for air purification in buildings. This should not be seen as a seasonal measure but rather as a year-round necessity.

Choosing Technology for Cleaner Indoor Environments

When architects and designers are making decisions on suitable technology for their spaces, it is essential to consider various features and technologies that are catered to large, shared spaces which have distinct requirements compared to home environments.

For architects and designers, prioritising good indoor air quality involves making informed decisions about building materials, HVAC systems, and overall design strategies. The implementation of air purification

technologies create healthier indoor environments, addresses wellbeing risks and looks to enhance productivity, aligning with the evolving priorities of occupants. This collaborative effort between architects and designers holds the potential to create spaces that prioritise the wellbeing of all, fostering an optimal learning environment. Opting for quiet and powerful purifiers, such as Dyson's Big + Quiet, are particularly conducive to shared spaces as it reduces exposure to pollution, without disruption.

To learn more on how to create cleaner, and more hygienic shared spaces across workplaces, educational institutions, hospitality venues, healthcare and transportation hubs, visit Dyson technology's business hub and book a call.

0800 298 0298 www.dyson.co.uk/commercial/air-treatment







SOLUS ix SERIES

Taking electric fires to a whole new level, the iX series features Truburn flame technology, bringing electric fires to life like never before. Using a method to create moving flames, combined with ultra realistic glowing logs and authentic sound effects, the level of realism is unparalleled, resulting in the convincing illusion of a real fire.





The Relax Hybrid



The Radiator Company has launched the new stylish Relax Hybrid – the ultimate solution for contemporary homes looking to address varying temperature needs in the UK and crucially - without compromising on aesthetics. The Relax Hybrid has advanced technology, which can heat and cool, using both radiant heat

and fan coil assisted engineering. This highly efficient, contemporary radiator offers a future proof solution that is compatible with both traditional boiler heating systems and heat pump installations. The silent force of the ventilating component evenly spreads heat throughout the space to reach desired temperatures quickly.

01342 302250 www.theradiatorcompany.co.uk/relax-hybrid

Exciting times at Breathing Buildings



Breathing Buildings is striding ahead in indoor air quality (IAQ) with three exciting developments. Firstly, the company recently celebrated winning 'Commercial/ Industrial Ventilation Product of the Year' category at the prestigious HVR Awards 2024.

Secondly, building on this success, the company has invested in a new business development director, Matthew Cooper to help grow the Breathing Buildings brand providing industry leading ventilation solutions. Thirdly, Breathing Buildings is exhibiting for the first time in Ireland at the Education Buildings Ireland Exhibition.

01223 450 060 www.breathingbuildings.com

Cast iron radiator finishes to suit every need



The Radiator Company has introduced a striking new collection of cast iron finishes available for its Clifton, Ledbury, Henley, and Wentworth ranges of cast iron radiators. Now customers can choose between ten exclusive new colours in addition to the wide selection of finishes that were previously available. The ten classic colours have been specifically selected to complement a range of interiors and satisfy contemporary design

demands. The attractive finishes are ideal for creating a rich, bold statement within a historically inspired modern space.

01342 302250 www.theradiatorcompany.co.uk

First to use Panasonic's Cold Chain unit



Dunstaple Farm Ltd, home of the award-winning Farmer Tom's Ice Cream, sought to replace their existing freezer system with a more reliable, sustainable and energy efficient solution to reduce their carbon footprint and increase productivity. A Panasonic 20HP cold chain solution that utilises the natural refrigerant R744 (CO₂), was specified

- the first of its kind in the UK and outside of Japan - installed by experienced and cooling specialists, Keep It Cool Refrigeration, along with the support of the Panasonic team and Mervin Chumun, technical & applications manager for distributors Hawco.

www.keepitcoolsouthwest.co.uk www.aircon.panasonic.eu

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More than just hot air

Clarissa Youden from Total Home Environment discusses how super-insulated and airtight building fabrics have seen the use of Passivhaus-certified systems that go 'beyond' MVHR to harness the benefits of heat pump ventilation.

magine the appeal of a new home which does not rely on an air source heat pump outside disturbing the peace, or a social housing project that doesn't need district heating that's prohibitively expensive-to-maintain? Now, a home can recover all waste heat and have responsive, energy efficient space heating and cooling, all without a formal heating system.

This is no longer simply the domain of the bespoke eco home, but a reality that has been made possible by advances in mechanical ventilation with heat recovery (MVHR) and the development of heat pump ventilation (HPV).

It is well known that one of the best things to reduce carbon emissions in homes is to conserve heat by investing in a better insulated, airtight fabric. In doing this though, air quality is compromised, and especially after Covid, there is more awareness of the dangerous compounds that can be trapped in the air. The solution is normally MVHR, but it is possible to go a step further, with HPV which combines mechanical heat recovery ventilation with an integral heat pump(s). The technology doesn't require pellet storage space, ground-drilling, inconvenient radiators, underfloor heating pipes or planning permission.

How does heat pump ventilation work?

The HPV unit is normally located in a plant room, utility, cupboard or loft area and connected to rooms via rigid metal ducting and ceiling terminals. Like MVHR, HPV silently extracts stale warm air out of kitchens and bathrooms and then recycles the heat into fresh filtered air. The integral heat pump then adds energy efficient heating (or cooling) to the air supplied to bedrooms and living rooms. Typical COPs (Coefficient of Performance) of between three and seven can be achieved in comparison to gas at only 0.9.

If needed, the HPV Series can also



A combined heating, cooling, heat recovery ventilation and domestic hot water HPV system for Passivhaus

regulate heated ceiling terminals or radiant heating panels for convenient room temperature control with quick response times to 'top-up' the heating. While underfloor heating offers a great level of comfort underfoot for residents, they can have instant control and year-round comfort with heat pump ventilation.

It is still useful to have heated towel radiators in bathrooms and WCs (although the heating output needs to be carefully watched, so they don't overheat) as being extract rooms, they would not be supplied with warm air. A small wood burning stove or focal point fire in a sitting room can also bring comfortable temperatures up to cosy levels, and be aesthetically pleasing.



A Passivhaus-certified compact service unit located in a utility room; heat recovery ventilation with two integral heat pumps – one for space heating and one for water

All domestic hot water comes from air-to-water heat pump in this scenario; the HPW 300 for instance, which is a pre-plumbed 300 L water cylinder with integrated heat pump also has a secondary coil to provide for up to 20 m² of wet underfloor heating in bathrooms, or it can accept heat from a solar thermal heat source, so even the heat pump doesn't need to heat the water in the sunniest months.

For smaller homes like townhouses and flats, the Passivhaus certified Pichler PKOM 4 compact service unit could be specified, as it performs all of the functions of the larger model, but in one compact box – so suitable where floorspace is at a premium.

If homes are going to be increasingly well-insulated and air-tight, then MVHR is essential. However, by utilising the ventilation infrastructure for heating and cooling purposes too, heat pump ventilation can assist homeowners and specifiers in reducing build time, the number of trades on site and installation costs, all while meeting those all-important carbon reductions.

The principle behind heat pump ventilation is grounded in health and sustainability, but importantly, conserving

BENEFITS OF HEAT PUMP VENTILATION

- Energy efficient heating with COPs of three to seven
- Energy efficient cooling with EER of 4.5
- Circa 1,000 litres of energy efficient hot water per day
- Supplementary heating efficiently controlled with quick effect
- Constant fresh air filtered for pollen & allergens down to 0.01 microns
- Heat recovery ventilation
- No separate heating system required (if home well insulated & airtight)

and recovering more heat initially using this combined technology, means that less heat needs to be generated in the long term.

Clarissa Youden is associate director at Total Home Environment





Gilberts brings new level of cohesion to interior design



Commercial interiors can be taken to a unique, new level of cohesion with the latest offering from Gilberts Blackpool. The leading air movement specialist is building on its in-house manufacturing capability to bring to market customisable face plates for its top-selling GA swirl diffuser for exposed ceilings. It means even the detail of air distribution within the interior space can play a role in the overall design aesthetic. A range of geometric and decorative styles has been developed as standard options. These enable the face plate design to reflect the ambience of the space - modern, industrial, or classic heritage - while offering high performance of up to 250 l/s airflow and pressure drop between 8 and 30 Pa depending on design. Additionally, Gilberts can design and produce a personal, unique pattern: even something as potentially complex as the client's logo can be pierced into the face plate. And, with Gilberts' in-house powder coating, the face plate can be colour-matched to any RAL colour, adding a further dimension to the interior ambience, or left bare metal (galvanised steel).

01253 766911 info@gilbertsblackpool.com

Slot into a pioneering way to achieve comfort conditions



A 'first of its kind" air movement diffuser is set to revolutionise how comfort conditions are maintained inside commercial buildings. The Series JSL-T ultra-high-capacity linear slot diffuser with thermal transition is the latest development from Gilberts Blackpool. It reinforces the company's 60+ year track record of developing pioneering, innovative ventilation solutions. Series JSL-T automatically adjusts airflow within seconds of any temperature variation being detected to maintain the preset ambient. Clever design in the configuration of the plenum and diffuser, and utilisation of thermally reactive components, means Series JSL-T functions without any electrical input or auxiliary power. In cooling/isothermal mode, air supply of up to 250 l/s/m is delivered horizontally. When a variation in temperature is sensed, the diffuser automatically switches to project the air vertically. As Series JSL-T has an airthrow of 5 m, this ensures rapid, effective mixing of air within the occupied zone, maintaining the ambient temperature without stratification or draughts. The diffuser is relevant for both ceiling and side wall applications. It can also be specified with acoustic and/or thermal insulation.

01253 766911 info@gilbertsblackpool.com

Energy efficient heating for museum



Two Imax Xtra 2 240 kW Ideal Heating Commercial condensing boilers have been installed at Hull Maritime Museum as part of a major restoration project to the Grade 2* listed building. The Imax Xtra 2 range of floor standing condensing boilers from Ideal Heating Commercial provide up

to 97.7% full load efficiency and up to 108.2% part load efficiency, and have a high 5:1 turndown, making them highly energy efficient.

01482 498376 www.idealcommercialheating.co.uk

Safe to touch heating



Low surface temperature radiators – LSTs – are key where there is a need to meet NHS Guidance for 'Safe Hot Water and surface temperature' in hospitals, care and nursing homes, as well as sheltered housing, schools, nurseries and other educational establishments and in an increasing amount of general needs housing that may be used by vulnerable people during that home's

lifetime. Stelrad Radiators has developed the largest selection of LST radiators in its impressive portfolio – offering more sizes and outputs than any other company in the sector.

0800 876 6813 stelrad.com

Residential ventilation



Vectaire Ltd can design systems ensuring efficient, low energy ventilation and can supply accessories, organise installation, commissioning and maintenance of the products. Schemes can be designed for private and social housing; apartments; student accommodation;

care homes; and hotels. WHEREVER good indoor air quality is required Vectaire products do the right job, helping to cool in summer and save heat and energy in winter. The residential ventilation range comprises vertical and horizontal MVHRs, some with extra low noise levels, and all commissioned by integral or remote LCD; two sizes of MEVs; and DMEVS available in several sizes, either axial or centrifugal.

01494 522333 www.vectaire.co.uk

Consort's new commercial fan heater



Introducing Consort Claudgen's CFH3 Commercial Fan Heater, designed for efficient heating in workshops, garages, and commercial spaces. Rated at 3 kW, it offers three fan speeds, three heat settings, and a fan-only mode. With the HRXSL controller, users can set up to six daily programs and seven day scheduling for energy efficiency. Multiple heaters can be controlled together for larger spaces. The

heater features multi-directional brackets, allowing 180° horizontal and 45° vertical adjustment for targeted heating. Finished in sleek matt black, the CFH3 combines functionality with style.

01646 692172 www.consortepl.com

ARDEX and Polypipe Underfloor Heating join forces

RDEX – one of the UK's leading manufacturers and suppliers of high-performance building products for flooring and tiling – has partnered with Polypipe Underfloor Heating to provide a trusted solution for their water-fed underfloor heating systems.

ARDEX products have been extensively tested with Polypipe Underfloor Heating's Overlay® gypsum panels, Overlay® Plus lightweight retro-fit boards, as well as their solid floor systems including the Red Floor Panel System, Clip Rail and Staple systems.

ARDEX and Polypipe Underfloor Heating have joined forces to produce a comprehensive installation guide. Available to download by visiting ARDEX.co.uk and PolypipeUFH. com, the guide covers everything from subfloor preparation and installation of retro-fit board and solid-floor systems to tiling and resilient flooring installation guidance using ARDEX products.

Emma McDonald, ARDEX UK technical



Manager, said: "After a long process involving extensive testing of Polypipe Underfloor Heating's warm-water systems with our products, we're delighted to be able to announce this partnership.

"This is one of the first partnerships of its kind in the industry, providing a recommended system when tiling or flooring onto these kinds of retro-fit systems to help ensure problem-free installations.

"The system covers everything from the preparation of subfloors prior to the installation of these systems, right to the products needed to fix tiles or lay resilient flooring. ARDEX solutions have also been tested and are recommended for use with Polypipe Underfloor Heating systems for use in solid or screeded floors.

"Whether you're installing warm-water UFH or laying a floorcovering over an existing system, our partnership provides clear guidance and will help you overcome common installation problems."

Stuart Wood, product manager – sustainable heating from Polypipe Underfloor Heating said: "We are delighted to be working with Ardex, ensuring our customers receive the best advice on floor preparation both before and after the installation of our Underfloor Heating Systems. ARDEX have worked tirelessly with us over the last few months to create a comprehensive guide that really supports best installation practises for the industry."

www.polypipeufh.com ardex.co.uk

Showersave launches QB1-21XE system



Showersave has unveiled the Showersave QB1-21XE, its latest innovation designed to help SAP assessors, architects, and specifiers improve energy efficiency and achieve Part L compliance. This new model builds on the success of its

predecessor, the QB1-21, and is designed to deliver maximum energy savings, compliance with building regulations, and ease of specification and installation – key benefits for assessors and specifiers across the UK. The QB1-21XE is an affordable and effective solution for meeting energy performance requirements and supporting building projects that align with the upcoming Future Homes Standard (FHS).

sales@showersave.com

Harness the power of creative lighting



Schlüter-Systems' collection of lighting systems incorporate advanced control and luminaire technology, offering almost unlimited choice for the most imaginative schemes. The key is Schlüter-LIPROTEC which creates restful lighting for relaxing spaces, or bright, colourful lighting for a

busy family bathroom or kitchen. It can be installed in a choice of direct or indirect lighting effects, enabling the interior designer, architect or property owner to illuminate feature walls, pictures, tiled areas such as shower enclosures or study spaces, kitchen countertops and stairways; in fact, anywhere the creative mind can conceive a plan for.

www.schluter.co.uk

F. Ball raises the bar



Products from F. Ball's System LVT range, including the company's Stopgap 700 and Stopgap 1200 smoothing compounds and Styccobond F46 pressure sensitive adhesive, were chosen to meet high expectations for a contemporary flooring installation

in a brand new Bromsgrove bar. Commenting on the work, Jason Pirie, director at Décor Design, said: "We only use F. Ball products because they're good quality and you can rely on them. In this case, Styccobond F46 made installing the LVTs hassle free."

01538 361 633 www.f-ball.co.uk

FP600 Finger Protection



Strand Hardware's FP600 offers robust finger protection for high-traffic environments. Designed for facilities like schools, hospital and care homes, the FP600 ensures safety for vulnerable users, including children and the elderly. With durable flame-retardant fabric, the FP600 shields fingers from accidental

entrapment, offering high-cycle durability and easy-fit CLICK system installation. It meets stringent European safety standards and resists tampering and cleaning products, making it perfect for automatic doors. Available in various lengths and customisable finishes, the FP600 integrates seamlessly into any setting, ensuring both safety and style.

01922 639 111 www.strandhardware.co.uk















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Fighting fires: an unlikely washroom hero

In the post-Grenfell landscape, fire safety in commercial washrooms is a critical issue. Carole Armstrong of Delabie UK explains how WC frames can sit at the centre of a project's fire strategy for preventing the spread of flame.

Ire safety is not the first thing that springs to mind when specifying non-domestic washrooms. The very fact that there is water literally on tap makes the concept almost counter-intuitive. However, in the wake of the Grenfell enquiry, fire safety is firmly on the agenda and specifiers are now much more attuned to the risk that fire poses in all aspects of building design. What is less obvious is the role that the choice of sanitary fittings in washrooms can play in improving fire safety.

Fire requires three things to spread: heat, oxygen and fuel. Once the initial spark has ignited a fire, the rate of spread depends on the availability of all these three factors. A significant aspect of reducing the risk lies with preventative measures, i.e. eliminating fuel sources as far as possible and reducing the potential for heat transfer. Of course, the ready availability of oxygen means that trained firefighters are best placed to actively deal with limiting its access to burning material.

Fire-retardant sanitaryware

Post-Grenfell, material choice is definitely the topic-du-jour and in washrooms, fireretardant finishes for floors, ceilings and wall surfaces can all contribute to slowing the spread of fire.

When specifying sanitaryware, flammability is not even a consideration. Porcelain does not burn and, in the event of a fire, it will not release toxic substances or produce smoke. Similarly, stainless steel does not carry a fire rating because it cannot ignite, and it will only start to melt at temperatures over 1,400°C. When it comes to fire safety, sanitaryware can be specified for its aesthetic qualities as well as its ability to prevent the spread of fire.

There is one aspect of washroom design



that can have a positive impact on fire safety, and it is possibly the least obvious solution. In a situation where every second can make a massive difference to the outcome, there is one unsung washroom hero that can potentially be a life-saver. The toilet. Or, to be more precise, the components and frame that accompany the toilet pan.

Intumescent frame systems

This unassuming assembly of a steel frame, flush valve and evacuation pipe can reduce the spread of fire in three specific areas.

Sanitaryware can be specified for its aesthetic qualities as well as its ability to prevent the spread of fire



Firstly, a fire-retardant frame can delay the spread of flames by up to 60 minutes. British Standard BS EN 13501-2 identifies three aspects of fire-resistance: 'E' indicating integrity and the ability to withstand flame and smoke to prevent their spread; 'I' for insulation, which prevents the transmission of heat; and 'W' which indicates the ability to restrict the spread of radiation and toxic gases. So, for example, a frame system with a rating of EI 60 will withstand smoke and flames as well as insulate against the transmission of heat for 60 minutes.

The second super power of a fire-retardant WC assembly derives from its valve housing which has an intumescent collar. The collar on the housing has inherent characteristics which allow it to swell when exposed to heat, increasing its volume and decreasing its density. It provides passive fire protection, sealing any apertures in the housing to prevent the passage of oxygen which is vital for fuelling the fire. In effect, there is no need for human intervention in a dangerous environment, closing off the fire's access to oxygen without the need for a fire extinguisher.

The third life-saving aspect of this

unassuming toilet frame is its soil pipe and connector which are also made from intumescent substances. Again, their ability to expand ensures that flames, smoke and noxious gases cannot pass from one room to another. In situations where the spread of smoke can pose as much of a threat to life as the actual flames, the ability to slow and prevent its spread can also be vital to preserving life.

Unlikely hero

Until recently, safer washrooms meant preventing scalding from hot water, or improving hygiene to prevent the spread of germs and bacteria. In this new post-Grenfell era, it also means tackling the risks posed by fire and smoke.

Not all the solutions are immediately obvious, but the humble toilet frame system is a surprising one. By putting fire safety on the agenda during washroom design it is possible to provide washrooms that are safe for the user. A fire-retardant frame system can really make a difference when vital seconds count.

Carole Armstrong is senior marketing & communications manager at Delabie UK

Zentia unveils Decoframe – A renaming of the Axiom range

entia is excited to announce the renaming of its popular Axiom range of canopies to DecoFrame. This change reflects the company's commitment to modern design and high acoustic performance, offering customers a solution where aesthetics and functionality meet seamlessly.

Previously known as Axiom, the newly named DecoFrame line includes several key changes:

- Axiom C Canopy is now DecoFrame Kit Classic Canopy
- Axiom KE Canopy is now DecoFrame Kit Blade Canopy
- Axiom Curved Canopy is now DecoFrame Kit Curved Canopy
- Axiom Circle Canopy is now DecoFrame Kit Circle Canopy

Aesthetic Appeal Meets Acoustic Performance Zentia's DecoFrame canopies are designed to deliver on both style and practicality, providing a modern, striking visual appearance while maintaining excellent acoustic performance. Packaged and delivered as a kit, the canopies offer quick and easy installation. With DecoFrame, there's no need to compromise between aesthetics and functionality.

This makes DecoFrame canopies the perfect solution for open-plan environments such as offices, schools, and public buildings, where controlling acoustics and maintaining an appealing design are critical.

Key Features & Benefits

Key features of the DecoFrame include:

- Seamless Integration: DecoFrame canopies integrate effortlessly with nearly all of Zentia's range of ceiling tiles, providing designers with creative flexibility.
- Optimised Acoustics: Each canopy enhances sound control, making it ideal for open-plan spaces such as offices, schools, and public buildings.
- Customisable Design: Available in various



shapes, including circle, curved, and rectangular, DecoFrame is customisable to meet the unique needs of any project.

The DecoFrame range offers a variety of standout features designed to enhance both aesthetics and functionality. Its floating canopy design adds dimension and visual appeal to any space, available in customisable shapes like circle, curved, and rectangular forms. The frame and tile system is compatible with a wide range of ceiling tiles, offering design flexibility for all shapes, while the acoustic performance makes it an ideal choice for open-plan areas like offices and schools. Installation is simple and efficient thanks to the joggled Gridline system, allowing for quick, hassle-free setup.

0800 371 849 www.zentia.com/en-gb

Haworth Tompkins offices become a living showcase

hen architects Haworth Tompkins relocated after over a decade in Kentish Town – the move allowed the studio to combine their main office and nearby satellite office into one new larger space close to the Barbican. The move provided the perfect opportunity to make the new office a showcase of the latest materials and digital infrastructure. Keen to keep to their ethos of reuse, recycle and reduce, many



of the original fixtures and fittings were repurposed to make them suitable for the new office. Facilities also include personal lockers, bike storage and shower rooms to encourage sustainable commuting.

The new studio accommodates 110 staff on site, coupled with digitally equipped meeting rooms, display areas showing architectural models and large open plan areas including hot desks, meeting spaces and break out areas. The practice also hosts many public outreach events, such as the London Festival of Architecture, Architects Declare Sustainability events and various exhibitions. As a result, Troldtekt wood wool acoustic panels were used to control the acoustics and help acoustical performance. Specified in a natural finish, they blend in well with the existing substrate of concrete, wood and tiled floors.

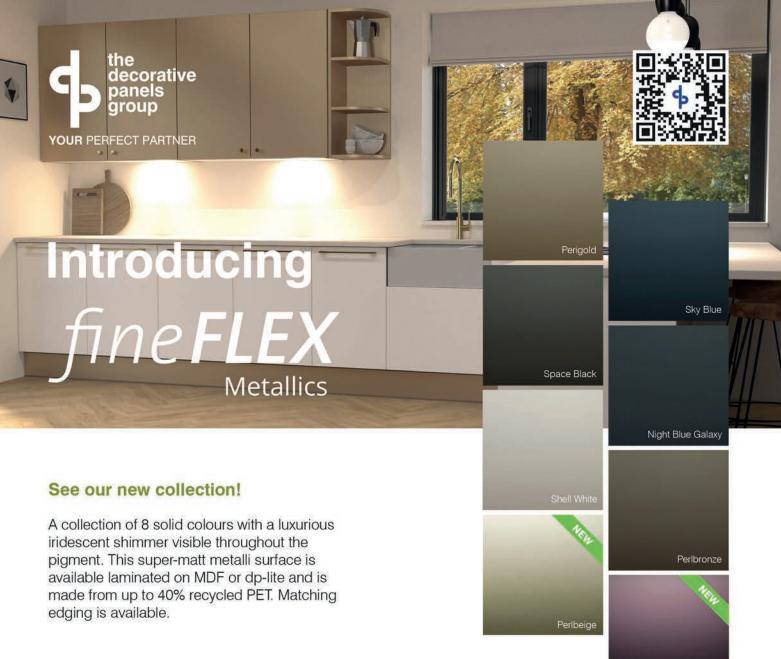
Troldtekt wood wool acoustic panels excel at mitigating the problems stemming from long reverberation time and reflected sound.



They are available in a variety of different structures and colours, combining superior sound absorption with an award-winning design. The Troldtekt range has a minimum expected life cycle of 50 years coupled with excellent resistance to humidity and tested to meet ball impact standards. The range is available in various sizes and structures, from extreme fine to fine. They can be supplied as unpainted natural wood or natural grey Futurecem®, alternatively they can be finished in our standard colours or almost any RAL or NCS upon request.

info@troldtekt.dk www.troldtekt.com













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Altro distils style and performance



English Spirit Distillery has used an extensive package of Altro products front and back of house in their new visitor centre cafe, shop and viewing area for the working distillery. The small batch distillery was looking to create the best environment,

choosing surfaces that combine a range of hard-working features and benefits with aesthetic appeal. Altro Ensemble is an awardwinning modular flooring system, with luxury vinyl tiles in four modular sizes that can be mixed and matched to create unique designs from colour blocking to geometric patterns.

01462 489 516 www.altro.com

LED battens put fluorescents in the shade



Efficient and affordable, Knightsbridge's range of interior LED battens are the ideal upgrade for obsolete fluorescent lights, bringing upto-the-minute performance to industrial, commercial and office premises. Available in three sizes (4', 5', and 6' lengths), the interior LED batten range has three variants: standard;

microwave presence sensor; and Digital Addressable Interface (DALI), a feature that enables it to be connected to networked building control systems. The range offers three colour temperatures - 3000K warm white, 4000K neutral white, and 5700K daylight.

01582 887760 www.mlaccessories.co.uk





Style delivers adaptable space to The Spine



Located in Liverpool's Knowledge Quarter, The Spine is the northern home of the Royal College of Physicians (RCP) and is one of the healthiest buildings in the UK, adhering to the ethos and principles of the WELL Building Standard. Supporting this commitment to health, partitioning expert Style worked with AHR architects, and main contractor, Overbury to install 10 Dorma Huppe semi-automatic Variflex moveable walls over three floors, creating adaptable space that encourages collaborative working amongst RCP staff. Furthermore, Variflex walls hold both a Health Product Declaration, detailing the health effects of all the elements of the system, as well as an Environmental Product Declaration, which provides verified information on the environmental impact of the product across its lifecycle. "We were incredibly proud to have been specified to deliver flexible space in this pioneering new building," said Andy Gibson, Style's director for the North. "We were also delighted to work with AHR architects and Overbury, who gave our team 9.6 out of 10 for our work on site, reporting that the Style team was 'excellent and really helpful' and that Overbury's project team was 'every happy with Style and would highly recommend us'."

sales@style-partitions.co.uk www.style-partitions.co.uk

Parkside Architectural Tiles comes to Manchester's Material Source Studio



Parkside Architectural Tiles has become part of Material Source Studio Manchester, connecting it closer to the North West's thriving architecture and design community. Now with representation in London, Leicester, Glasgow and Manchester, Parkside has a physical presence in the UK's key architectural and design districts. Jonathan Wiles, director of commercial sales, says: "Achieving representation in Manchester helps us to strengthen our connection to architects and designers across the North-West and puts Parkside in more places than ever before. As a specialist architectural tile company, it's important that we're able to provide the community with close cooperation and ready access to great tiling products." Parkside can be found in Material Source Studio Manchester with a colourful pod that brings together hero tiling products like the Manchestermade Ethical Stone Terrazzo, Alusid Principle and Criaterra v2 along with popular commercial solutions such as Regal and design tiles including the iconic Lilypad of Juniper and stylish terrazzo ranges such as Dandy and Cleveland.

0116 276 2532 www.parkside.co.uk

Gerflor & Gradus expand their contemporary hospitality collection



Gerflor and Gradus have expanded their Hospitality Collection for 2025, offering a range of contemporary flooring and interior solutions tailored to the needs of hotels, restaurants, spas, and conference venues. Key highlights include the Creation 70 Luxury Vinyl Tile (LVT) for high-traffic areas, Creation 55 Zen for acoustic comfort, and waterproof solutions for bathrooms and spas. Gradus adds to this collection with slip-resistant stair edgings and LED lighting profiles, enhancing both safety and design. The collection also features specialised options for gyms, event spaces, and bar areas, blending durability, aesthetics, and functionality for a complete hospitality solution. With a broad selection of innovative products, Gerflor's expanded Hospitality Collection provides comprehensive solutions that balance performance, design, and sustainability. From high-traffic areas to serene spa environments, Gerflor offers products that cater to every need in hospitality spaces. To explore the full range of flooring and wall solutions for your next project, discover Gerflor's and Gradus's latest Hospitality brochure and experience the future of hospitality design.

01625 428922 www.gerflor.co.uk

Make the Move to Low Carbon Tiles with Mas



With the European Commission estimating that the ceramic tile industry generates up to 3,000,000 tonnes of waste and emits 19,000,000 CO₂e per year, there is a need to find alternative materials and production processes that provide the same long-life and low maintenance products, but that divert waste from landfill and reduce the energy needed for production. Mas, a new sustainable tile form Parkside Architectural Tiles that's been developed by Alusid®, has achieved exactly this. Made from between 95% and 98.5% recycled materials (depending on the colour), Mas transforms an abundant volume of material that would otherwise likely end up in a landfill using a unique low-energy dry granulation process. Taking waste products aggregated from industries, and from various parts of the production process (both pre and post-fired) and by only adding a small amount of water to the raw materials that have already been processed, Alusid is able to reduce the use of natural gas and electricity. For Mas, Alusid has unlocked a unique low impact manufacturing process to create a vitrified tile that has the performance for commercial use as a wall or floor surface.

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GUARD RAIL

Described as a game-changer for the security industry, our IWA-14-rated HVM pedestrian guardrails offer full roadside protection thanks to their ability to withstand a deliberate or accidental impact from vehicles weighing up to 2.5 tonnes.

Available in a range of designs, including bespoke or heritage schemes, the guardrails use shallow fittings and are ideal for pavements and other restricted sites outside schools, shops, local government buildings and other locations.



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

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Daring to be different



The 'Quadro', from Premier Loft Ladders, challenges the expectations of the traditional timber loft ladder. It features the latest innovations to provide excellent thermal performance and an airtight seal, combined with attractive styling and a high-quality finish. What is more, the Quadro is made-to-measure, so

helping to avoid troublesome ceiling modifications. Suitable for floor-to-ceiling heights up to 3.44 m, and for openings starting from 1 m x 0.53 m, the Quadro is suitable for a very wide range of applications. The ladder also benefits from a load rating of 150 kg per tread and is manufactured to BS/EN 14975 to ensure safe access to lofts.

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

A sound nights sleep with Pyroguard Protect



Set in the heart of Airport City Manchester's hotel district, TRIBE is the third new hotel to be built at the modern development. The project demanded more from its fire-rated glazing systems, with Pyroguard's toughened solution chosen to help meet the challenge. OWS was responsible for designing, manufacturing and installing all fire-rated glazing systems for the new-

build hotel. Andy Vooght, sales director at OWS, explained: "Their toughened Pyroguard Protect solution not only met the required EI60 fire performance and acoustic properties but also delivered excellent light transmission, making it the ideal choice for the project."

01942 710 720 www.pyroguard.eu

Belfast transport hub features Magply A1 fire resistant roof build-up



One of the most notable infrastructure projects to be completed in Northern Ireland over recent years is nearing completion with the specialist roofing contractor involved installing a PVC system across an intermediate level deck, where originally marine grade plywood had been specified for the deck, but Thornton Roofing changed this to achieve A1 fire performance by recommending A1 non-combustible Magply boards from the range of IPP Ltd, thereby complying with the province's fire regulations and mirroring those in the rest of the UK. With a Class 1 fire rating and backed by BBA Agrement certification, Magply MOS boards present a fire-safe and environmentally friendly alternative to conventional plywood or OSB products. Additionally, the unique production process enhances both the boards' stability and long-term durability, while they create an ideal substrate for installing the full spectrum of waterproofing systems. This includes their use in recovery applications and as a temporary protection layer. The different thicknesses of panel are also widely used as a substrate board for the direct application of proprietary render systems, as well as for flooring and pitched roof build-ups.

01621 776252 www.magply.co.uk



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