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BAFTA HEADQUARTERS, LONDON

Benedetti Architects literally raised the roof at BAFTA's Piccadilly home to enable the organisation to double its capacity without having to make a premature exit

A photograph of a shower stall with light-colored mosaic tiles on the walls and floor. A modern shower system is mounted on the wall, featuring a vertical riser, a handheld showerhead, and a fixed showerhead. A white, rectangular shower seat is mounted on the wall, and a black, rectangular shower seat is mounted on the floor. The shower seat on the floor has a white top and a black frame with a vertical cutout. The shower seat on the wall is white and rectangular. The shower system is made of polished metal. The floor has a circular drain. The walls are covered in small, square mosaic tiles. The floor has large, square tiles with a decorative pattern.

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FROM THE EDITOR



We may well be entering an autumn of discontent, with a host of unionised industries, from postal and rail workers, to even barristers, taking strike action to try and safeguard their members against the effects of the £3,500 energy bills we are all likely to face this year.

Architects are starting to get interested in action, many facing mediocre earnings early in their career (£31,000 doesn't get you a lot in London), in an increasingly precarious economic context. Having often invested heavily to study for seven years, pay rises are scarce, and unpaid overtime common.

United Voices of the World (UVW) is a union created to protect “precarious, low-paid and predominantly BAME and migrant workers” in a variety of outsourced industries. An architects' wing was formed in 2019 (SAW-UVW), to combat inadequate contracts, antisocial hours, and low pay levels. Sitting alongside an unlikely grouping of professions including sex workers and barristers within the UVW's umbrella, the emergence of this direct action-based body shows just how vulnerable some employees feel, against the turbulent international context. It also perhaps shows a growing momentum of staff looking to unionise across many employment sectors as living costs spiral, inspiring people who might not have previously considered this kind of action to join the fray.

Recently providing further inspiration, Architectural Workers United has been formed in the US to demand that the profession – which Brooklyn-based founder Andrew Daley believes is deeply undervalued – is ascribed greater tangible value. With architects' work not directly tied to revenue, exhausting and exhaustive design hours are not rewarded, he says, long hours are expected as a given, and overtime is not recorded, to avoid adding costs to projects. The entire industry is geared towards an unprotected profession, and burnout is the result. Daley says: “With more workers interested in unionising, we envisage a future where the entire field is lifted to have equal leverage as our peers in the building industry.”

The fear is that if architects walk out, what will their employers' reaction be, particularly when those employers are contractors in Design and Build contracts? Unlike nurses and train drivers, buildings can be designed (badly) without architects involved; the world will still turn. Therefore, their leverage is arguably very small. However, it is to be hoped that partly because of the risk they would therefore be taking, employers will realise just how threatened these committed (if not ‘safety-critical’) staff feel. Knowing that they didn't go into this to get rich, architects demanding better treatment should be offered support rather than the cold shoulder, when debating what should be expected of them.

James Parker, Editor

**ON THE COVER...**

To enable BAFTA to remain at its London home in Piccadilly, Benedetti Architects raised the roof and released historic rooflights to provide a whole new floor for members

Cover image © Luca Piffaretti

For the full report on this project, go to page 48

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RENEWABLE POWER

Arup's 'Tower of Light'

After winning the project in Autumn 2017 alongside architects Tonkin Liu, Arup unveiled Manchester city centre's new combined heat and power plant, built within a 'Tower of Light' structure.

Inspired by the natural world and geometric shapes, the 40 metre high structure "prioritises design and architecture excellence while integrating energy efficient engineering," said the multi-disciplinary design firm.

The "striking and iconic" tower supports and encloses chimneys for the city's low carbon energy centre, serving heating to a district spanning two kilometres.

Core to the building is its structural design, clearly visible from the facade, which is the result of the "latest digital modelling, analysis and fabrication techniques," and known as a Shell Lace Structure. This method has been pioneered by Arup and Tonkin Liu for over a decade. According to Arup, the 'Tower of Light' is

the largest built structure using this method to date.

The light and thin single surface structure aims to use as little material as possible without compromising on design, while at the same time improving the building's sustainability credentials. The flat steel sheets at the bottom of the tower are between six and eight millimetres thick, and at the top of the tower slim down to just four millimetres. The strength is provided by cut plates which are bent and welded together at the seams, meaning no additional structural support is required.

A 63 metre long and four-to six-metre-high street facade structure named the 'Wall of Energy' also stands alongside the tower, enclosing the new energy centre. It is made of a tessellated interlocking lozenge tile pattern, which is composed of 1,373 tiles using 31 different tile types "which reflect and mirror both the busy city centre streets, and the sky," continued Arup.

It was essential that the building be energy efficient and provide low-carbon energy to the busy Manchester city centre 2 km radius which it covers, thereby contributing to the city's goal of becoming carbon neutral by 2038.

Heat from the engine in the tower is used to create hot water and is distributed through insulated district pipework across the city network, improving the building's efficiency by as much as 45%, saving 1,600 tonnes of carbon per year.

And while the building must be lit at all times, due to its dual function as a source of entertainment for passers-by, providing a backdrop of light sequences and animations, this will not impact energy efficiency, said Arup. The lights are powered by the wind, which causes reflectors in the tower to move and reflect sunlight into the tower's chambers during the day, and by night lights are directed at the reflectors to have the same effect.



Which screw will hit
the pipe?

MASTERPLANNING

Plans submitted for FaulknerBrowns' Guinness Quarter development

FaulknerBrowns Architects, working with developer Ballymore, has submitted a planning application to Dublin City Council to redevelop the historic St. James's Gate brewery into a mixed use scheme named the 'Guinness Quarter.'

The development includes 336 homes, hotels and a 300-seat performance space, plus a food hall, marketplace and commercial space.

The site has been "freed up by modernisation of Diageo's St James's Gate brewing campus," said the architects, and will be "opened up to the wider city," with more than two acres of landscaped public space. The proposals also include the refurbishment, repurposing and extension of heritage structures throughout the site, retaining key historic features.

The 336 homes will include apartments for sale, rent and social housing. At the



heart of the masterplan, a "destination food hall" with open kitchens will showcase Irish and international food. A marketplace is also proposed, for local, regional, and national makers, alongside a mix of commercial workspaces for large, medium and small businesses.

A network of fixed and flexible inside and outside spaces for culture and community use will be created, including a

multi-use space seating circa 300 people.

The Guinness Quarter aims to create Dublin's first net zero operational carbon district. Should planning approval be granted, it is expected that the development will be completed in 10-15 years.

Niall Durney, partner at FaulknerBrowns Architects, said: "We are so pleased to have reached this milestone. Our masterplan is designed around the powerful heritage and historical significance of St James's Gate; existing buildings, structures and surfaces that carry the history of brewing will be repurposed, extended and imbued with new life."

He added: "The Guinness Quarter will be shaped around streets and squares which retain the character and identity of the site while knitting together with the surrounding city."

MIXED USE

Scott Brownrigg's mixed use brownfield development in Greenwich gets planning

Plans for a "high-quality" mixed-use residential scheme at 141-143 Woolwich Road in Greenwich has recently received planning permission.

Designed by Scott Brownrigg for Lawfords, the scheme redevelops a brownfield site into 58 homes and 890 m² of flexible commercial space. Plans have been developed in collaboration with the Royal Borough of Greenwich, Greenwich Society, councillors and residents, and represent a "significant improvement to the urban environment of the Woolwich Road Corridor," said the architects.

The concept is for two apartment 'villa' buildings linked via arched colonnades, "with a rhythm informed by the Victorian grain and the curvature of Woolwich Road." Massing responds in height to mid-rise residential buildings located to the east, and steps back from site boundaries to the north and south to

protect daylight levels to adjacent homes. London stock brick and charcoal zinc cladding has been chosen to reflect the site's historic and industrial past.

All new homes have been designed to meet the London Mayor's Standards and the Government's Nationally Described Space Standards (NDSS), and most are dual facing and cross-ventilated.

Comprising a mix of one, two and three bedroom homes and four family maisonettes, the scheme is designed to be "tenure blind," and offers a mix of private, affordable rent and shared ownership housing provision.

All residents will have access to a range of health and wellbeing amenities, including a private balcony and two communal roof gardens where there is provision to grow food, enjoy communal dining facilities, for children to play, and to take in views over the city.



Sustainability is at the forefront of the design. It is anticipated that the creation of roof gardens, pocket parks and the incorporation of green living spaces will significantly increase biodiversity onsite and improve the streetscape. The sustainability strategy includes the use of recycled material for the building structure where possible, and responsibly sourced material when it's purchased new. Air source heat pumps and photovoltaic panels will provide renewable energy.



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STADIUM

Kick-off for Nottingham Forest's stadium expansion by Benoy

Planning has been granted for a new “stadium-wide regeneration” project at Nottingham Forest's City Ground, with Benoy as lead architect. Outline consent has also been granted for a residential block adjacent, “which adds both to the viability and place-making of the scheme,” said the architects.

Included in the project will be the Peter Taylor Stand, complete with “world-class” player facilities and a reportedly “new approach to guest hospitality” including multiple suites and dining venues, creating a “stunning centrepiece for the stadium.”

Researching best-in-class stadium design, Benoy's design for the new stand creates 10,000 seats in three tiers under a dramatic cantilevered roof. The building accommodates ‘state-of-the-art’ player facilities and various size hospitality suites to appeal to different fan groups and non-match day audiences. In addition,



the scheme includes a riverside residential development providing views from the site towards Trent Bridge.

Commenting on the project, Mike Wilson-MacCormack, director of Benoy's Newark studio and lead architect, said: “We



are delighted to see this project secure the green light to go ahead. The riverside stadium is an iconic part of the fabric of Nottingham, and this scheme will help to secure its future as a world-class sporting venue.”

SPORT & LEISURE

£24m Warwickshire activities hub receives go ahead

A Warwickshire facility which “challenges the traditional notion of a leisure centre,” has received planning permission, with a design by sport and leisure specialists, GT3 Architects.

Located in Miners' Welfare Park, the Bedworth Physical Activities Hub – delivered on behalf of Nuneaton and Bedworth Borough Council – has been designed to be “welcoming for all user groups.” The hub replaces an existing centre, providing new facilities that “better meets the needs of the local community, utilising GT3's ‘people first’ approach.”

The facility will include a 25 metre, eight lane pool, learner pool with a moveable floor, a 120 station fitness suite, two studios, a spin studio and associated changing areas as well as a cafe and multi-purpose room. In addition, the surrounding park will undergo a major transformation with a focus on creating an “active landscape that wraps around the



new building.”

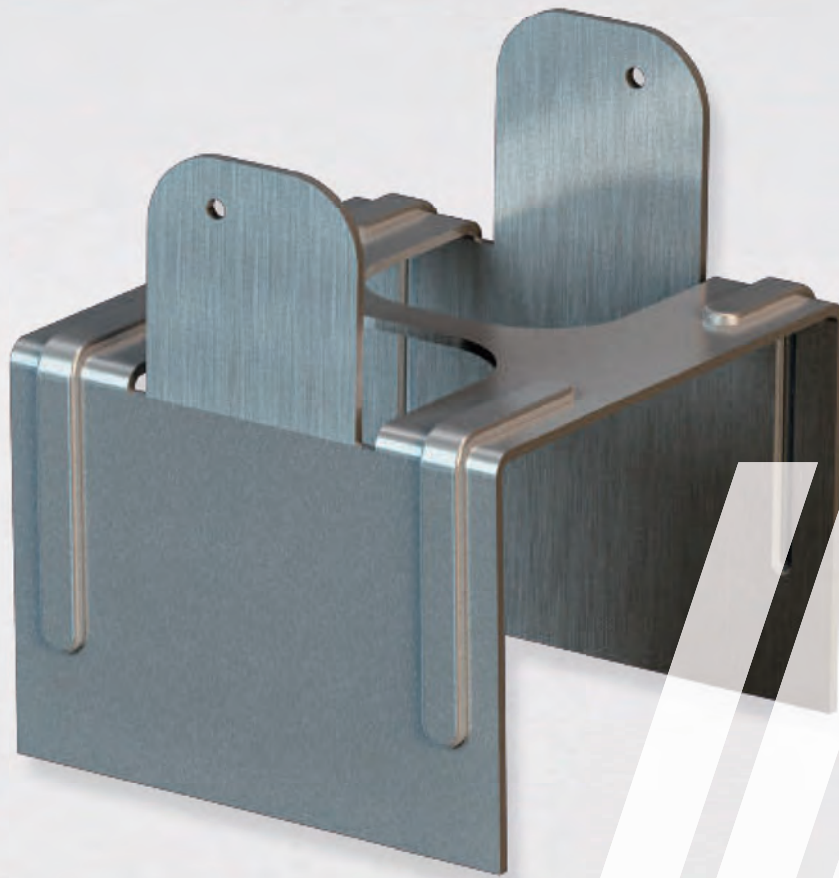
There is a strong focus on cycling throughout the scheme, with British Cycling recently funding a series of new mountain bike trails in the park and a Cycle Hub within the building that will offer bicycle hire services for users. There will also be a new “all-wheels” skatepark, learn-to-ride area and pump track provided as part of the approved proposal.

The team's project approach combines a unique blend of uses to create a leisure destination which will play a role in the



regeneration of Bedworth and act as a catalyst for future developments.

Matt McCreith, project architect at GT3, said: “The new hub is going to be a major asset for the borough and the landscape design for the park is truly transformational. We are approaching this project more like a community building as opposed to being a leisure centre that is only sports focused. It's been designed to be accessible from the park as well as the main entrance, encouraging more people to use the building.”



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**CONSTRUCTION
PRODUCTS**



VIEW POINT

Following June's significant changes to Part L, Nordan's Sonia Travis reviews the implications for window specification, and aluminium-clad timber in particular

The state-of-the-art demonstration COP26 Zero-Carbon House at last year's international COP26 climate conference in Glasgow was an effort to highlight the importance of building fabric choices in achieving net zero.

Less than 12 months on from COP26, and the Department for Levelling Up, Housing and Communities (DLUHC) has shown its teeth and commitment to reducing building related carbon, by introducing new Building Regulations.

The new Part L has of course been years in the making, and is something of an interlude for the industry prior to the advent of the Future Homes Standard in 2025, the full industry consultation which begins next year.

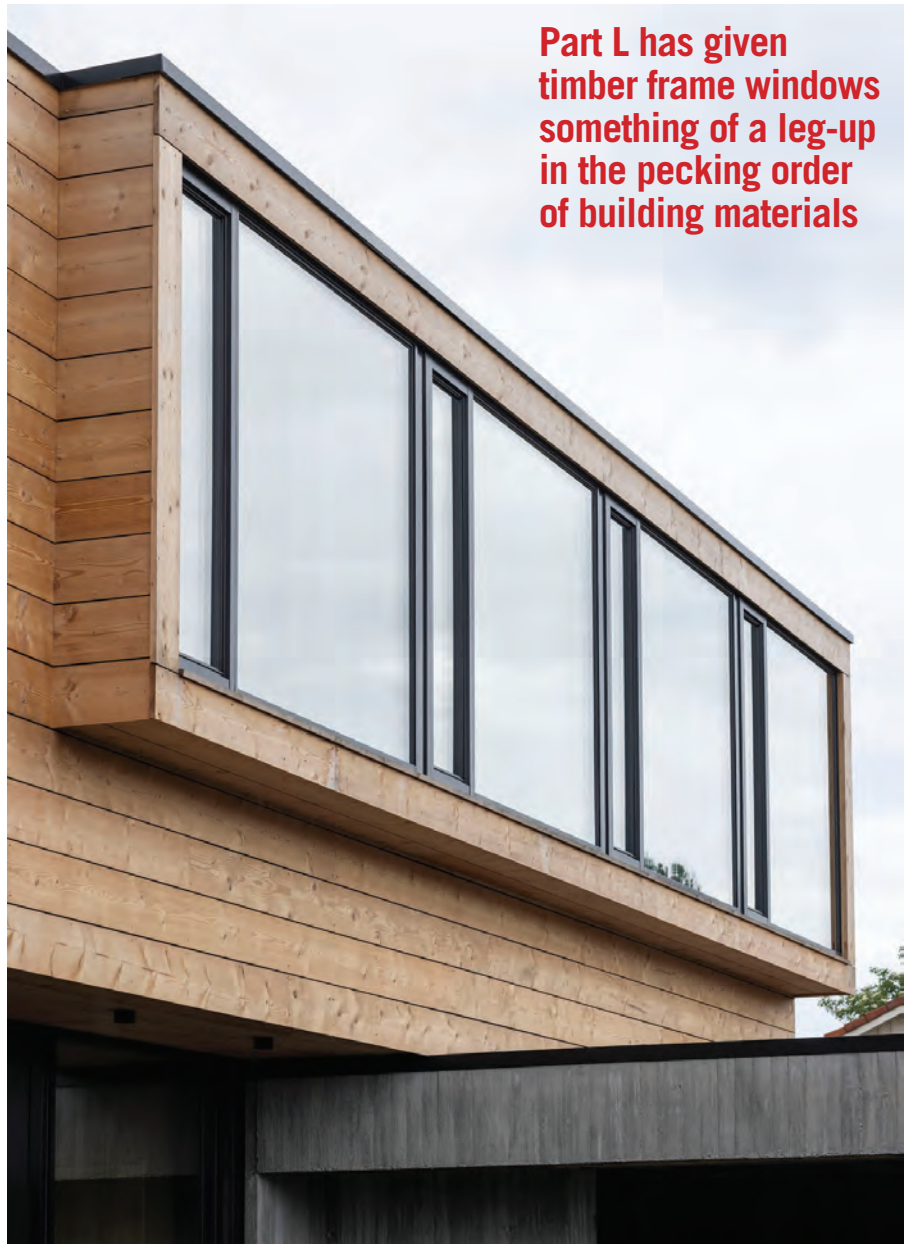
The new regulations aim to reduce carbon emissions from new build homes by 31%, and all other new buildings by 27%, and operate on a building-by-building basis, as opposed to whole sites. The ultimate objective is to reduce total building carbon emissions by a minimum of 75% by 2030, in order to meet wider legally binding net zero commitments.

All these changes will of course impact on the U-values of any and all building fabric, and have significant implications for windows.

The Future Buildings Standard policy document has already been published, and sets out new Building Regulations and the proposed changes to Part L (Conservation of Fuel and Power), and Part F (Building Ventilation) – as well as new requirements to address the risk of overheating in new residential buildings (Part O).

The changes to Part L cover both new and existing dwellings, with Part L1A laying out new energy efficiency standards for new build homes. Part L1B covers renovations and extensions to existing homes, and recognises that it is not always

Part L has given timber frame windows something of a leg-up in the pecking order of building materials



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The impact of Part L can already be seen, with window manufacturers reviewing the design and price point of their products based on the materials used

feasible to meet new build standards, however replacement thermal elements, such as roofs, walls or floors must meet the Part L1A standards.

In June, the maximum allowable figure for windows was lowered from 1.6 W/m²K to 1.2 W/m²K, and will shift further to 0.8 W/m²K in 2025. Heat is lost through a window's glazing and frames, so both must be factored in when calculating a window's U-value.

As you would expect, double and triple glazing gives you a lower U-value and better insulation, but the type of frame material chosen has a bigger impact than is sometimes anticipated. For example, an aluminium-clad timber window frame can achieve a U-value of 1.2, while a typical

PVCu, aluminium or composite window frame would need to be triple glazed to achieve that figure.

When combined with triple glazing, aluminium-clad timber frames can hit U-values as low as 0.74, due to the natural insulation qualities that timber develops as it grows, and the millions of tiny air pockets in wood's cellular structure.

Although architects have long known the benefits of timber, it appears that Part L has given timber frame windows something of a leg-up in the pecking order of building materials, nullifying the increased capital cost, and making the benefits more financially accessible.

The impact of Part L can already be seen in the fenestration industry, with window manufacturers reviewing the design and price point of their products based on the materials used.

It would be a step too far to suggest that this was the exact intention of those who framed Part L, but it's certainly a good practical example of how these changes will drive change, lower carbon and increase quality.

There are numerous projects over the past 30 years where architects have specified high-performance timber framed windows that far outstripped Building Regulations at the time, only for standards

to then subsequently advance. Castle Court is one such example, a high-rise social housing development managed by The Guinness Partnership. It was regenerated over 30 years ago, but will still meet the Future Homes Standard in 2025.

Switching to better quality window frames will also have positive benefits for the whole life carbon impact of a building. Less glazing and longer product life spans reduce the release of embodied carbon (the emissions generated from material abstraction and manufacture), due to the reduced use of materials, maintenance and replacement.

On top of this, timber is also a natural carbon sink, absorbing carbon as it grows, and is therefore carbon negative at the point of harvest and manufacture.

In conclusion, if architects require assistance in calculating the whole life carbon value of a building material, then they should look out for independently verified Environmental Product Declarations (EPDs), or their equivalent. We now have EPDs in place for the vast majority of our product range, meaning a transparent, third party audit of all embodied and operational carbon.

Sonia Travis is commercial sales manager for the North of England at NorDan UK

Who says timber windows are high maintenance? 20 years and no touch ups at Kings Cross!

Over 20 years ago, plans came to fruition for a large redevelopment of the Kings Cross area of London. The regeneration of the surrounding buildings became a catalyst for further development and in changing the overall area.

Regent's Quarter was the first area to begin development and this is when George Barnsdale entered the scene, installing approximately 350 sliding sash windows and 40 doors to remain in keeping with the history of the area.

Two decades later, the outstanding quality of George Barnsdale's products is evident in how well the windows and doors have stood the test of time. Though some are in need of a good clean, the timber and the paint finish is still perfectly intact despite no recoating having taken place in that time.

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With recent changes to Part L regulations, all new buildings in England are required to achieve higher energy efficiency. As part of these measures, the maximum allowable U-value for windows was lowered to 1.2W/m²K and will shift further to 0.8W/m²K by 2025. The innovative window supplier **Eterno** empowers architects by providing timber and alu-clad windows with superb energy efficiency and the thinnest frame on the market. Their state-of-the-art windows and doors achieve an exceptional lifetime and offer unbeatable customisability and design freedom.

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PRACTICE PROFILE

Scott Brownrigg

Consistently ranked among the leading UK architectural practices, Scott Brownrigg have grown steadily and diversified over the decades. Tom Boddy speaks to CEO Darren Comber about how they have evolved while nurturing talent internally

Scott Brownrigg's origins date back over 100 years when all-rounder architect Annesley Brownrigg was inspired to establish his own practice in Guildford after winning a series of design competitions. Since its humble beginnings, the practice (which rebranded to its current name in 2003) has evolved at a steady and sustainable pace, and today is one of the UK's most successful practices, currently ranked 18th in the AJ100, and within the top 100 internationally.

Following service in the First World War, he began to see success with help from cofounder Leslie Hiscock. On Annesley's passing in 1935, the ownership of the company landed at the feet of his son, John, who was at the time only loosely involved with the practice. He decided to band together with other cohorts in the industry – firstly Newman Turner to form Brownrigg and Turner, later with Brownrigg's old friend Duncan Scott, forming Scott Brownrigg & Turner.

These moves not only broadened the firm's offerings, but also provided them with the skillset and resources to take on major architectural programmes such as the Queen Elizabeth Barracks – a “significant project of its time” which was opened by the Queen in 1964, says Darren Comber, current CEO. By the late 60s Scott Brownrigg & Turner had bloomed into a practice with

national reach – boasting offices in London, Glasgow, Peterborough and Woking.

The practice's early maxims of recognising the power of collaboration and diversity, as well as acknowledging the value of embracing different views, have sustained into the 21st century. “The legacy of these early beginnings has lived on within the practice across the decades, and in many ways, still influences our approach today,” asserts Comber.

Venturing overseas

One of the practice's first forays overseas saw them being “early pioneers” in the Middle East in the 1970s, designing structures ranging from airports in Iraq, to new islands off the coast of Abu Dhabi. The practice has since been involved with projects across four continents (Europe, Africa, Australasia, and North and South America).

An ongoing project on the Atlantic coast of Morocco is the development of an ‘eco-wellness’ and sports tourism destination, Turtle Bay, in a project which aims to connect the Sahara Desert and the Atlantic Ocean, and “build on a unique genius loci,” says Comber. The practice's CEO adds that the building “celebrates its desert location” in a way that “eschews



INTEGRATING LANDSCAPE

A low carbon headquarters for international not-for-profit CABl is a two-storey office in an AONB that “integrates an experimental bio-diverse landscape”



THE WOODS

A high-end residential scheme near Woburn, The Woods comprises four detached homes set in ancient woodland



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‘green’ landscapes which are alien and unsustainable.”

The firm’s international presence has not only bolstered its resilience to the vagaries of the UK market over the years, but also “crucially,” enhanced its understanding of local cultures, climates and building regulations – enabling the firm to collaborate more closely with local stakeholders and project teams. This expansion has also worked to consolidate the practice’s working methods: “We are now a totally integrated international team,” says Darren Comber.

Knowledge base

When identifying projects to pursue, each scheme is assessed against the practice’s defined set of requirements, to ensure it aligns with their “vision and values” as well as their “design and strategic targets,” explains the CEO.

Comber asserts that the practice applies its criteria of rigorous analysis, quality of thought and quality of detail in every project. “How a building looks can be subjective, but the practice has always strived to be known for the quality of product, design and buildings or places that have longevity, and provide legacy rather than short term fashion appeal.”

The practice’s Design Research Unit (DRU), developed in 2004, monitors adherence to these principles while informing all levels of the design process. It acts as a ‘knowledge base’ and provides guidance when seeking out relevant opportunities and collaborations.

“Knowledge sharing and embracing the skills of others at all levels and stages of their careers” is harnessed as a way to help create a cohesive and united workforce. It also “keeps the design process innovative and forward thinking,” he says. This has been one of Comber’s core focuses since becoming CEO of the practice, he says – “fostering a working culture and environment where like-minded individuals can contribute and add value.”

With “robust and transparent” Equity, Diversity Champion and Inclusion policies in place, employee wellbeing is front and centre. Appointments such as an in-house Mental Health First Aider and Employee Assistance Program provide workers with personal support as well as independent, expert advice. Recently becoming an Employee Owned Trust (EOT) further showcases the value of employee welfare, with the EOT committee “supporting colleagues at all levels with issues such as the cost of living crisis.”

Climate literacy

Sustainable architecture has been embedded within the practice for many years. A project which demonstrated their early green ambitions was the Red Kite House – a new headquarters for The Environment Agency that “challenged the institutional norm of a ‘four pipe fan coil’ approach of cooling,” explains Comber. The building, completed in 2005, is naturally ventilated and cooled through night purging with integrated wind turbines on the roof to support natural ventilation via automatic openable windows.

The practice is a member of the UK Green Building Council and signatory to the Architects Declare movement, and the RIBA 2030 challenge, as well as AJ’s Retrofit First Campaign. It was also reportedly the only UK architecture practice signed up to the UN Global Compact on social responsibility. Scott Brownrigg is exhibiting a serious level of commitment to grappling with global issues.

When designing for the environment, the focus is on building high quality structures and spaces that are flexible to the future needs of occupants. “There’s no one-size-fits-all solution,” asserts



TURTLE BAY

The practice is designing an ‘eco-wellness and sports tourism’ destination on the Atlantic coast of Morocco which connects the Sahara with the ocean

Comber, “each design is bespoke and must provide an appropriate response specific to the local climate and needs.” The sustainability team have developed a carbon reduction ‘roadmap’ for both their studios and projects to guide staff towards meeting the environmental ambitions.

A factor which the practice believes is vital to fortify the industry’s efforts to tackle climate change is improving “climate literacy,” as Comber explains: “We are working to give everyone core competency in sustainable design.” Across the firm, employees have access to a learning and development platform which aims to communicate and enhance their knowledge of sustainability. Sustainability reviews on projects, held from early stages, have proved effective at “bringing together in-house expertise with project specific challenges and requirements,” says Comber.

Working alongside the RIBA education team, the practice has launched the RIBA Scott Brownrigg Award for Sustainable Development this year. The award offers £5,000 to an individual or team interested in developing research projects or practical work in architecture-related topics associated with one or more of the 17 goals in the UN Global Compact.

Comber says this initiative brings together their “passion for and commitments to sustainable design, research, innovation, collaboration, academic partnerships and supporting the next generation.” The recipient of the inaugural award will be announced in September.

Conclusion

A challenge Scott Brownrigg are facing, along with many other practices, external financial climate: “PI and software costs have risen significantly,” says Comber, “yet fees have not kept pace; this has placed a strain across the entire profession.” However, he adds that their international diversity, as well as their sector diversity, has offered a degree of resilience to the UK economic outlook – allowing them to “divert attention to buoyant sectors.”

“Scott Brownrigg has always had the philosophy to be a practice where individuals can create something special and develop their careers,” says Comber. Encouraging people to thrive while developing their careers is a long-term ambition for the practice, creating an environment which allows them to express themselves as architects.

Moving forward, remaining relevant while positively contributing to society is the practice’s overarching intention. “We want to continue to design meaningful projects which leave a positive and lasting legacy on the built environment,” concludes Comber. ■

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MEADOWBANK PUBLIC SCHOOL & MARSDEN HIGH SCHOOL, AUSTRALIA WOODS BAGOT

Meadowbank Public School and Marsden High School – home to more than 2,500 students of all ages in Meadowbank, north-west Sydney – recently opened its doors. Designed by Woods Bagot, the development is part of a “new breed of education facilities” funded by the NSW Government. Spaces to encourage play, collaboration, connection to nature and learning underpin the architects’ design for the schools. They commented: “It was the school’s location, an undulating topography punctuated with trees that predate western colonisation, that defined its structure.” Within this existing network of trees, the schools have been organised into twinned, two-storey buildings which frame a central hill of libraries covered by gardens. Every level of teaching “opens directly to nature” and a series of connected open-ended courtyards create protected areas for collaboration, performance and outdoor learning. Other environmental considerations include access to natural daylight, views to nature, and surrounding district landmarks including the nearby Parramatta River. Designed and built during the two years of lockdown, offsite manufacturing and the use of local suppliers dramatically reduced waste, embodied energy and revived local manufacturing industries.



MIDTOWN BUS TERMINAL, MANHATTAN FOSTER + PARTNERS & EPSTEIN

The Port Authority of New York and New Jersey announced that Foster + Partners and Epstein will “jointly assist in developing the agency’s vision for a reimagined, state-of-the-art midtown bus terminal.” The replacement project will have expanded capacity to accommodate commuter bus growth through 2050 and intercity buses that currently pick up and drop off on the streets surrounding the outdated terminal. The proposed project will also provide new off-street capacity for buses waiting their turn to pick up and drop off, as well as for storing buses between the morning and evening rush periods. The new terminal will be designed to provide a “best-in-class customer experience that serves the region’s 21st century public transportation needs, while enhancing the surrounding community and allowing for the removal of intercity buses from local streets.”



HENGQIN SUPERCOMPUTING CENTRE, GUANGDONG AEDAS & GDAD

As a “pioneer” among advanced intelligence computing platforms, the Hengqin Supercomputing Centre is being built in three phases, and is set to be one of the largest AI computing centres. Phase Three is jointly designed by Guangdong Architectural Design & Research Institute (GDAD) and Aedas design team, led by executive director Kelvin Hu. Located on Huandao West Road at the base of Xiaohengqin Mountain, the landscape and greenery provide “thriving scenery.” Taking inspiration from energy circuits and ecological growth, the design “emphasises geometry and movement, expressing an architectural language that is sleek and neo-futuristic,” said the architects. The linear facade is inspired by integrated circuits, and “shapes the architecture with simple geometric form to create an atmospheric facade.” Metal plates mimic “dense lines on circuits,” and the design also has details and lighting features to light up the area as a “shining technological cube” at night. The blocks in the middle adopt facade mullions and double insulating glass to create a stick glass curtain wall facade that enables sunlight to “penetrate and blur the border to the exterior surroundings.” It is anticipated that the project will be completed and ready for use in 2023.

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CPD FOCUS

The latest CPD courses, seminars and documents for architects

Q-RAILING UK PRESENTS RECENTLY UPDATED 'SPECIFIERS GUIDE TO FRAMELESS GLASS BALUSTRADE'



Q-railing UK, who specialise in premium branded stainless steel and glass balustrade and handrail systems, will present their recently updated 'Specifiers Guide to Frameless Glass Balustrade' in Manchester on 22nd September. Their railing components are cleverly engineered for easy and quick installation on-site, so you can save time and costs in all your projects. Their extensive range of balustrades are found in residential, educational, commercial, healthcare, sports stadiums and airport projects in both horizontal applications and stairways. From glass balustrades to handrails with linear LED lighting, you can find a product for every project. Q-railing's LED lighting system, Q-lights, can be installed in handrails, cap rails or base channel, plus their products are BS 6180 and Kitemark certified. Q-railing can prepare customised uprights and base channel, as well as 2D and 3D bending of standard tube and base shoe, which is a real specialism. Dedicated

architectural sales consultants are on hand with expert advice on technical requirements and building regulations during all stages of the design and building process, including site and architectural practice visits. They are pleased to provide RIBA approved CPD seminars on glass railing systems.

Their updated CPD includes 'Changes to Approved Document B', as well as 'Designing out risks for CDM'. In conjunction with RIBA CPD Providers Network, there will be 9 presentations available on the day. The team from Q-railing UK will be on hand throughout the event and available to field questions and offer assistance on all things balustrades.

Join Q-railing for The Specifier's Guide to Frameless Glass Balustrades on 22nd September at the Radisson Blu Hotel Manchester Airport, Chicago Avenue, Manchester, M90 3RA.
ukconsultant@q-railing.com
q-railing.com

GROW YOUR TILE KNOWLEDGE WITH CPD SESSIONS



Join Parkside's RIBA approved CPD seminar sessions at its Clerkenwell Sustainability and Design Studio to keep your career progressing and expand your knowledge on how tiles can contribute to great design and better sustainability in your projects. Unlocking knowledge on how to best specify bespoke surfaces, innovations in sustainable surface materials and how to use tiling patterns effectively, you can catch any of Parkside's RIBA approved CPD seminars during morning and afternoon sessions at its Clerkenwell Sustainability Studio. Taking a journey through how the tile specification sector is meeting the challenge of environmental change, 'Sustainable Surface Materials' is a RIBA accredited CPD for everyone involved in the specification of finishes. 'Sustainable Surface Materials' explains how the industry is adopting recycled content, recycling and efficient manufacturing to bring about positive change. 'Creative Tile Fabrication' looks at how to use bespoke fabrication processes to specify creative tile designs in commercial and residential interiors. Introducing tiling patterns through the world of tessellations, symmetry, repeats and mathematical rules, 'An Introduction to Tiling Patterns' will leave you equipped with an understanding of the rules of patterns and mathematics – and how to break them – as well as how these principles can be successfully used in interiors. The CPD seminars are presented in a programme of morning and afternoon sessions at Parkside's Clerkenwell Sustainability and Design Studio, or can be held in offices across the UK.
 0116 276 2532
www.parkside.co.uk

EWI FIRE TESTING CPD LAUNCHED FOR ARCHITECTS AND SPECIFIERS



'The Reaction to Fire – Everything You Need to Consider When Choosing Facade Systems' is a new RIBA approved CPD training created by Saint-Gobain Weber to ensure that anyone involved in the specification of External Wall Insulation (EWI) systems is aware of what is required under the latest building regulations and what they should be looking for when it comes to test data. The CPD provides a framework for what architects and specifiers should be asking for from product manufacturers so that they can demonstrate compliance and provide the necessary information for the golden thread. It also gives an overview of the differences between reaction to fire and fire resistance, the principles of fire resistance and the current regulatory framework. James Thomson is a senior building surveyor at CUBE Building Consultancy and recently attended the online training. "We found the presentation beneficial to help us understand the quality standards facades go through in relation to fire performance. The technical input from Weber's specialist helped clarify the detail in the presentation," said James. "The CPD benefits our business in understanding the types of facade available and associated risks when advising clients who own buildings covered with cladding. The CPD provides a contact point for a specialist should we have any queries on a type of facade system." The presentation provides an in depth look at each of the different small and large scale fire tests and how these relate to standards, as well as giving insight into Weber's own testing experiences and projects.
mail@netweber.co.uk
www.uk.weber

Eventim Apollo's stage refurbishment by Harlequin Floors



Experts in stage building and performance floors

Last year one of the UK's largest original theatres, the Eventim Apollo in Hammersmith, went through a complete stage refurbishment carried out by the expert installation team at Harlequin Floors.

Harlequin supplied and installed a bespoke stage system covering 277m² and finished it with a Harlequin Standfast vinyl performance floor.

Harlequin works with theatres and venues around the world to build, refurbish, repair and replace stages and stage surfaces. Each stage is different which is why a bespoke solution is tailored to the requirements of the venue.

For further information about our stage floors solutions and performance dance floors, please contact our technical team.

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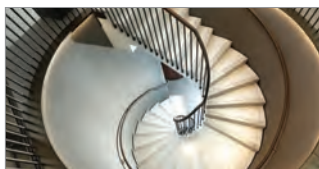
The latest CPD courses, seminars and documents for architects

GRAF UK LAUNCHES RAINWATER HARVESTING CPD



A CPD that explains the issues around rainwater harvesting and advises on the options available has been launched by Graf UK. The 55-minute presentation delivers a range of "Rainwater research", extending from the fundamentals to key regulations and issues, via a mix of "live" presentation and videos. It advises on what rainwater can and cannot be used for and how harvesting systems can be combined with storage for SUDS and stormwater management. A guide to sizing rainwater harvesting systems is also featured.
www.grafuk.co.uk
bit.ly/GRAFRWHCPD

SPIRAL AND HELICAL STAIRCASE CPD WEBINARS



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

NEW MOY CPD "ACHIEVING ZERO LEAKS"



MOY are pleased to announce the new RIBA approved CPD entitled "Achieving Zero Leaks."

This CPD presentation aims to support specifiers and designers on achieving long lasting, compliant and sustainable roofs, with problem free, zero leak solutions.

Achieving Zero Leaks CPD covers the following topics:

- Flat roof design principles – building standards & legislation compliance
- Flat roofing systems – roof waterproofing technology types and typical applications, accessories and components
- Achieving Zero Leaks – outlining the importance of 'quality system supplier' selection to help ensure successful development & delivery of the correct specification.

Duration: 1 hour

Format of delivery: At Practices & Digital delivery

MOY are one of the UK and Ireland's leading full system providers for high performance flat roof waterproofing systems. We work closely with clients and design teams to provide and deliver high quality systems to integral roofs and our innovative, long-lasting waterproofing solutions are backed by industry accreditation's and award-winning technical support.

If you are looking for a waterproofing solution and require support with designing a flat roof and developing a specification, please contact by phone or visit the website.

01245 373411

moymaterials.com/cpd-training



Eight new UltraCare surface protectors

Mapei has extended its UltraCare range with the introduction of eight new products dedicated to floor, tile and surface protection. The new treatments join nine existing UltraCare cleaning products, launched in the UK last October. Aimed at both professionals and DIY enthusiasts, Mapei's UltraCare cleaners and protectors represent an innovative, versatile and reliable system that simplifies application, while guaranteeing durability for every type of surface. The new protectors, formulated in the Mapei Research Laboratories, guarantee high performance and meet a variety of specific requirements: from colour enhancing and providing water and oil-repellent protection for surfaces including natural and artificial stone, cement, terrazzo, to the protection of tiles prior to grouting and of polished porcelain tiles with cementitious grout joints.

0121 508 6970 www.mapei.com/gb/en

Newton Waterproofing wins two awards



Newton Waterproofing has secured two prestigious wins at the Property Care Association Best Practice Awards. The company's first win was in the 'Sustainability' category, in recognition of its extremely successful and unique Recycling Service. Newton also scooped the 'Website of the Year' award for a medium/large company, thanks to its user-friendly and smartly designed site. Newton Waterproofing managing director, Warren Muschialli, comments: "Winning these two prestigious awards is such an honour".

01732 360 095 info@newtonwaterproofing.co.uk

National Ventilation shortlisted



National Ventilation is delighted to announce that it has been shortlisted in the prestigious H&V New Awards 2022. The landmark Golden Hinde project, which benefits from a ventilation system designed and supplied by National

Ventilation, has been named as a finalist in the HVAC Project of the Year (under £0.5 million) category. "Our work with The Golden Hinde is a fantastic example of a manufacturer working closely with a customer, combining expertise, to produce a truly successful outcome", said Andy Bills, National Ventilation's specification manager, South East Region.

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CHESHIRE PLAINS, ENGLAND

Pendock Linea – Silver linings...and other finishes too

The Pendock Linea range of building linings had its origins more than 20 years ago, when the name was first applied to its perimeter casings products, which were being widely specified to conceal HVAC systems, electrical and other interior building services.

Since then, the Linea range has expanded to include nine separate building lining and architectural finishing products that provide practical and aesthetic solutions for specific applications, while retaining a high degree of versatility.

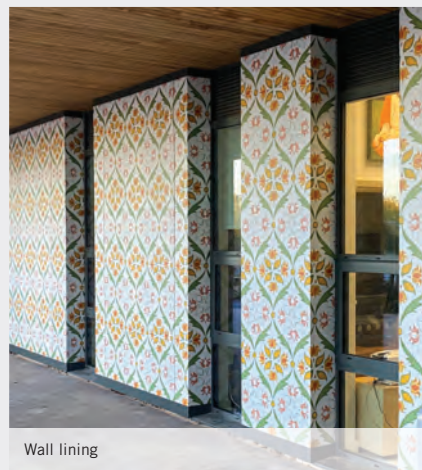
In addition to perimeter casings, the range now encompasses wall linings, ceiling rafts, lift reveals and soffit linings, as well as bulkheads, parapet capping and pilasters. Specialised rooflight linings & atrium beam casings complete the Linea range.

As all Linea products are bespoke manufactured to meet individual project requirements, an overview and outline guide to specification has been prepared for each product.

Wall linings

Used for both interior and exterior applications requiring decorative or protective solutions, they are particularly effective in areas of high pedestrian traffic, such as airports, public transport, retail and commercial buildings to resist scuffing and damage to internal walls.

Stainless steel and aluminium are commonly specified materials, although they can also be manufactured from a wide



Wall lining



Ceiling rafts

choice of materials including plywood; MDF or compact laminate, as well as textured metallics and a range of finishes from specialists including Rimex, Trespa and Formica. Clearly, the material specification is dependent on the individual application and its external or internal location.

As all wall linings projects are bespoke manufactured, unique designs, shapes, sizes and curved forms can be specified and special requirements can be incorporated, such as acoustic performance; perforations; backlighting and specialised illumination.

Ceiling rafts

Pendock ceiling rafts, islands and linings are already used within retail and commercial environments, as well as performance venues and other large spaces to provide a decorative suspended solution.

Circular, elliptical, square, plus bespoke designs can be specified and manufactured from plywood, glass-reinforced gypsum (GRG) or glass-reinforced plastic (GRP), as well as acoustically lined perforated aluminium and stainless steel, which helps enhance acoustic performance by damping reverberations or problem frequencies.

Integral lighting can also be incorporated within the ceiling raft design, which should be considered when specifying, as it may affect the choice of material. Plywood and GRP are manufactured in thicknesses of 12 mm and 4 mm respectively, while options of 12/15 mm are available on GRG.

Soffit linings

Linea soffit linings provide a versatile and high quality finish for exterior applications. Manufactured from aluminium for its low weight and inherent weather resistant properties, Linea soffit linings can be specified with PPC finishes and are available in three standard widths, as well as bespoke options, which interlock to create a uniform and attractive result.

Dedicated accessories are also incorporated within the range which includes internal & external corners, as well as flashing and trims to complement the panels.



Soffit linings

Rooflight linings & atrium beam casings

The range incorporates decorative casings for external upstands, as well as interior rooflight lining and finishing solutions which can be manufactured from PPC aluminium

and moulded GRP for interior and exterior applications, as well as moulded GRG for interior projects only.

As GRP and GRG rooflight linings and casings are bespoke manufactured from moulds, they provide a high level of fit and finish and can be specified in a range of sizes to meet individual project requirements. In the case of GRP casings, they can also help enhance weather resistance.

Used primarily to conceal structural roof beams and glazing bars, beam casings are designed to be as unobtrusive as possible so that they blend seamlessly with the atrium and building interior. Manufactured from aluminium, typically with a PPC finish, they can be produced in a range of bespoke forms to suit specific project requirements, such as ellipses and semi-circles to shallow curves, parabolic and rectangular profiles.

Parapet capping

Manufactured from 2 mm thick sheet aluminium and incorporating a PPC finish, the parapet and wall capping product range incorporates flat, pitched and sloping options, which can be face-fixed or use concealed fixings.

All Linea cappings are produced to the specifications and dimensions of each individual project and be specified in lengths of up to 4,000 mm in a single piece. The system also includes a range of dedicated accessories, which include internal & external corners; T-sections, peak angle and stop ends.



Bulkheads & fascias

Bulkheads & fascias

As most bulkheads are installed at high level, durability tends to be less of a consideration, yet they must be specified to be fit for purpose for the application. Bulkhead linings can be bonded or mechanically fixed to a timber subframe depending on their size and weight.

GRP and metal bulkheads can be specified



Atrium beam casings

for interior and exterior use, while GRG and ply/MDF core options can only be used for interior applications.

Moulded bulkheads, accommodating curved forms, tend to be made from GRG or GRP for reasons of weight and ease of creating a seamless integrated finish. GRP units are supplied with a smooth gel-coat finish, while GRG is site painted.

Metal bulkheads, like the other products in the range, are bespoke manufactured and can be specified in a range of PPC finishes, as well as brushed, polished or textured options. Specifiers should be aware that moulded items will extend lead times by up-to four weeks, due to the additional design and manufacturing processes involved.

Perimeter casings

Perimeter casings are designed to conceal building services along interior walls and below windows in long continuous runs or within bays between columns. They are generally manufactured from pre-formed plywood with a hard-wearing laminate finish and incorporate pre-cut convection grilles in the top and front face when used in HVAC concealment applications.

Suitable for both new build and refurbishment projects, their design helps maximise office space while enabling them to incorporate electrical, cable and voice cable management. The system also incorporates Pendock's proprietary metal mounting framework, which was developed specifically for use with this casing range and provides a robust structure onto which the casing panels and be easily fitted.

Lift reveals

Material options of aluminium, stainless steel, compact laminate (CL) and ply/MDF are included in the range of head and side reveals. Aluminium and stainless steel can

be specified in standard thicknesses of 2 mm and 1 mm respectively, although bespoke thicknesses are also offered along with a range of finishes, such as brushed, polished and textured.

Laminate finishes from leading manufacturers including Polyrey; Abet and Formica can be specified on CL reveals, which combine high durability with versatility to integrate with building colour schemes. High pressure laminate (HPL) finishes are one of the options within the ply/MDF range, which also includes real wood veneers and a paint grade substrate for onsite finishing.

Bespoke finishes can be specified on all ranges together with additional options, such as the inclusion of call button apertures, indicator signage and dry riser openings.

Pilaster linings

Linea pilaster linings are almost exclusively used in shopping malls to conceal steelwork and roller shutter guides between individual shops, giving a uniform look and finish. GRG and laminated plywood are commonly specified material choices with the former providing additional fire safety and material compatibility with other drylined elements.

Radiused corners and semi-circular forms can further improve safety by removing sharp edges. Stainless steel kickplates can be specified for added durability, while specifiers can choose to make pilasters blend-in or contrast with their surroundings through colour and material choices, including wood grain laminates and metal effects for plywood pilasters.

Pilaster casings can also be designed to accommodate additional services, such as mains sockets, fire alarms and CCTV, which can be surface mounted.

01952 580 590
www.pendock.co.uk



Vent-Axia Named as a Double Finalist



Vent-Axia is delighted to announce that two of its products have been shortlisted in the prestigious H&V News Awards 2022. The Vent-Axia Lo-Carbon Multivent MEV range made with recycled plastic and the Lo-Carbon NBR dMEV C have both been shortlisted

in the Domestic Ventilation Product of the Year category. Being named as a double finalist once again cements Vent-Axia's position as the leader in low carbon ventilation. "We are delighted to have been named a double finalist at the prestigious H&V News Awards – this takes it to six years in a row achieving multiple shortlistings!", said Lena Hebestreit, marketing manager at Vent-Axia.

0844 856 0590 www.vent-axia.com

Samsung's new training manager



Samsung Climate Solutions are delighted to welcome Scott Young (TMIET) to lead our expanding training programme. Speaking on what attracted him to the business, Scott Young commented: "Samsung's commitment and drive to being the market leader in many different technology categories was one of the main attractions to being offered an opportunity to work with Samsung Climate Solutions. With the big push to reduce CO₂ emissions complemented by changes to UK building regulations, moving to Samsung has given me the opportunity to be at the forefront of this drive towards change".

samsung-climatesolutions.com

A new opening for Dean



GEZE UK has strengthened its Window Technology team with the recent appointment of Dean Tonna, who joins the renowned manufacturer of door and window control systems as Area Sales Manager covering the Midlands, south of England, south and mid-Wales. Supporting GEZE UK's planned growth for window technology products, Dean will focus on developing first-class relationships with key contacts at fabricators, contractors and distributors, and work with architects and M&E consultants to develop specifications and provide technical solutions from the company's extensive window control range for both natural ventilation and natural smoke and heat extraction. With a strong track record in technical sales, including experience working for Monodraught, Coxdomo and Glidevale, Dean has extensive experience in the sector and will be assisting M&E consultants in specifying the correct products to form part of an integrated fire and indoor climate control system. Dean will also be focusing on the education sector as the sector looks to reduce CO₂ emissions in line with Net Zero targets for 2030.

01543 443000 www.geze.co.uk

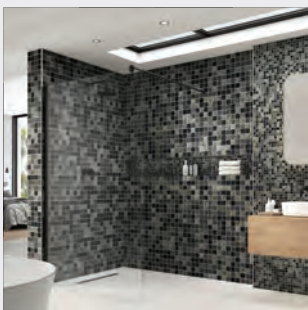
JACKON sets out a sustainable future for offsite construction products. Stand: J12



JACKOBOARD® gives you the sustainable, low energy future of construction, today. We design our product range to help you move towards zero energy construction, whether you are building a house from scratch or just fitting out a new wetroom. JACKOBOARD® high performance construction systems provide the flexibility to meet modern requirements in bathroom design for both commercial and domestic projects. JACKOBOARD® construction boards feature an extruded XPS polystyrene core with a special coating on each side. This ensures that the boards form an ideal substrate for all types of ceramic, porcelain, or natural stone tiles. They are waterproof, thermally insulating, easy to shape, truly lightweight and strong. Changes in the British Standard for tiling which came into force in 2018 require the wider use of more appropriate backing materials for tiling in water sensitive and wet areas. This has led to increased demand for JACKOBOARD® products. JACKOBOARD® comprises 98% air and is 100% recyclable, meaning it provides excellent insulation, helps improve the sustainability of houses and also helps drive down heating costs. Please visit the JACKON website for more information.

01204 221089 www.jackon.co.uk

Marmox to showcase Slicedstone mosaics at Offsite



Bathroom and wetroom specialist, Marmox is taking a stand at this year's Offsite Show (Coventry, September 20-21st) where the manufacturer will be exhibiting its versatile and very attractive Slicedstone range on Stand JO8. Suitable for a wide selection of applications from en-suites and spa pools to outdoor settings, Marmox Slicedstone is available in a range of 10 beautiful natural sandstones, precision cut and secured to a waterproof decoupling fleece which helps speed installation. At just 4mm thick the tiles are lightweight and can be fixed to vertical or horizontal surfaces, using 60% less adhesive and saving 80% on installation time.

Marmox manufactures and distributes a comprehensive range of building products which deliver enhanced insulation, waterproofing and other benefits, including Marmox Multiboards for floors and walls and its unique Thermoblocks which have been developed to eliminate thermal bridging around junctions in the building envelope.

01634 835290 www.marmox.co.uk



Offsite technology innovation

Taking place at the Coventry Building Society Arena on 20-21 September, Offsite Expo is the home of innovative offsite building and digital construction technologies

Offsite technology is now seen as the most important solution to overcome many of the challenges facing the industry today. Bringing together influential innovators within the sector who are driving change in the industry, Offsite Expo provides access to a wealth of knowledge and offsite innovation.

Construction professionals can gain a broad spectrum of offsite industry intelligence and practical insight – all under one roof. The event also features the Offsite Construction Awards, held on 20 September.

Advanced manufacturing approaches and smart digital construction technologies combine with innovative displays, live demonstrations, and pioneering speakers. The event will play host to manufacturers and component suppliers showcasing a broad spectrum of panelised, volumetric modular systems, pod and prefabricated MEP solutions.

The last Offsite Expo attracted over 3,000 visitors, and over 100 exhibiting companies promoted offsite solutions and smart technologies alongside 40 hours of CPD Accredited presentations.

Explore technologies

Offsite technology challenges outmoded construction practices, as a progressive and productive step that is set to revolutionise the way buildings are designed and assembled. Every major review of the construction industry has in some way recommended a move towards advanced factory-based construction methods.

The organisers of Offsite Expo believe it is set to become Europe's largest dedicated event, providing "direct access to this

innovative and fast-moving sector." Visitors can get to grips with the latest offsite methods and smart digital technology in "the widest and most comprehensive display within the built environment."

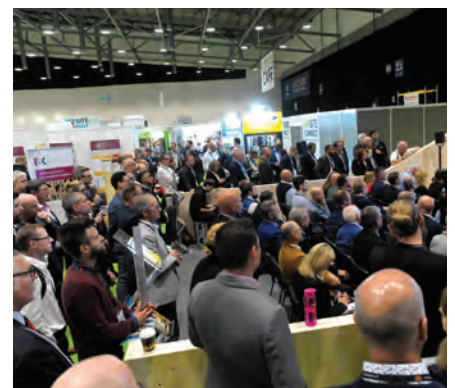
Find expertise

The event has the opportunity for "rapid and efficient access to the latest information" which is "crucial to success" in offsite. Advanced approaches and innovative technologies are changing the face of construction, and The Offsite Masterclass Theatres provide over 40 hours of CPD Accredited presentations in a "dynamic and interactive format" for those looking to learn directly from offsite industry experts.

Expect business opportunities

The Offsite Connect Forum gives exhibitors the opportunity to gain access to key industry professionals with a buying or specifying remit. This Forum offers a "structured, highly effective way for new and existing offsite industry suppliers to connect with potential customers easily and cost effectively in highly focused meetings."

The greatest success of the 2021 event for many, say the organisers, were the business development opportunities secured in the Offsite Connect Buyers and Specifiers Forum, which was a "hive of activity," and open exclusively to exhibitors. With over 100 buyers and specifiers participating from high profile construction companies such as Mace, Willmott Dixon, Kier, Balfour Beatty, Galliford Try and the NHS – over 330 business meetings took place and feedback from both the buyers and exhibitors was reportedly "outstanding."



To book free tickets to Offsite Expo 2022, visit the website: www.offsite-expo.co.uk/book



The roof event returns

The Roofing Cladding and Insulation (RCI) Show has announced that registrations for the specialist construction event held at Stadium MK, Milton Keynes on 18-19 October, are now open, enabling visitors to enjoy a face-to-face experience

Over the years, the RCI Show has become a key date in the industry calendar for thousands of contractors, installers, surveyors and specifiers, and this year's two-day event is expected to attract significant visitor numbers and manufacturers, associations and suppliers who are eager to engage face-to-face once again.

Whether you're searching for the most up-to-date product innovations and services; the latest news, trends, and best practice guidance; access to thought-leadership content; or you want to extend your network, then the RCI Show can fulfil your goals by reconnecting you with key experts across the entire roofing supply chain.

The line up

Seminar programme were launched at the beginning of August with subject areas including: Modern Methods of Construction (MMC), inflation, Brexit and the move to UKCA markings, cladding regulations, Building Safety Act, fire safety, sustainability, electric vehicles, and supply chain issues to name a few.

This year the show's headline sponsor is Guttercrest, manufacturer of an array of aluminium gutters and downpipes. Joining them within the exhibition hall will be over 50 other market-leading suppliers including:

- Alchimica Building Chemicals
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- Hamar
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- Proctor Group
- Safety Fabrications
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- Welwyn Tool Group

That is just a taste of many more still to be confirmed at RCI Show 2022...

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Celebrate culture change

Visitor registration for UK Construction Week Birmingham is now live, as the mammoth three-day show returns to the NEC from 4-6 October

UKCW Birmingham 2022 will “celebrate culture change in construction” with three days of debate and discussion from top speakers on how the industry can move forward to tackle its biggest issues, including quality, fire safety, sustainability, offsite manufacturing, mental health, and improving diversity and inclusion.

Designed to “connect the whole supply chain and be a catalyst for growth,” organisers are expecting 25,000 attendees. Visitors will also be able to find sections dedicated to Building Materials, Digitalisation, Infrastructure, Energy, HVAC, Surface and Materials, Timber, Offsite Construction and Skills and Careers.

Highlights & features

UKCW Birmingham will feature sessions and seminars led by industry experts across the show’s six stages. The main stage will be used to tackle overarching construction industry topics, with a mixture of keynotes, panel debates and case studies from industry leaders. The Sustainability Hub – forming the conference programme at the heart of Timber Expo – will tackle the issues, layout strategies and present exemplary case studies to help the sector reach its net zero targets.

The main feature content of Civils Expo, the Infrastructure Hub will deliver a three-day programme of case studies, debates, networking opportunities, and keynote speeches. Digital Construction Hub will see a series of presentations and panel discussions including topics such as Information Management using BIM. The CPD Hub will offer a mix of relevant CPDs delivered by experts, associations, government departments and exhibitors.

Finally the Offsite Alliance Hub will look at “how to change the way we think about

construction to deliver high quality homes for future generations” across the three days of UKCW Birmingham.

In addition to the main stages, the Careers Centre will provide a series of talks aimed at those interested in a career in construction, whether that be graduates, students in further education, or people looking at a career change.

UKCW Birmingham will see over 6,000 products on display from over 300 exhibitors including Bosch, Schneider Electric, Google, Graco Distribution, Wavin, Cemex, Hanson Plywood and many more. This year, the show has also attracted overseas exhibitors, including brands from as far afield as Australia, India, Norway, Turkey and the UAE.

The 2022 show has an even stronger emphasis on future development in the industry and this year’s theme is Celebrating Culture Change in Construction that will be present throughout the show, which is backed by all the industry’s leading organisations, including AICO, Bosch, Hanson, Northgate and Quadrant Building.

Key features

Key show features will include UKCW Role Model Awards – “celebrating the pioneers of construction.” The award ceremony will be taking place on the main stage on 5 October. The Innovation Zone is a dedicated showcase of innovative products and the UKCW Careers Fair – launched at UKCW’s London event – offers attendees a chance to get free face-face career advice and meet and network with top employers. Details of the comprehensive seminar programme and CPD opportunities “will be revealed soon,” say the organisers.

Follow UKCW Birmingham on social media @uk_cw using the hashtag #UKCW2022



To register free: ukcw-birmingham-2022.reg.buzz/pr

JACKON helps developers meet the requirements of the new Part L regulations

Visit JACKON's stand (B510) at UK Construction Week and find out how the sustainable houses of the future will be built.

JACKON's two building systems – JACKODUR® Atlas and THERMOMUR® Insulated Concrete Formwork (ICF) – are revolutionising UK house construction. This technology is growing at a time when the Future Homes Standard is set to be a key feature of the construction industry going forward, underpinning the green development of the housebuilding market.

JACKON's building systems help developers meet and surpass the requirements of all the latest regulations, including the recent changes to the Part L regulations, which have meant that from June this year, all new homes must produce 31% less CO₂ emissions, compared to what was acceptable under the previous Part L regulations. This puts the responsibility for achieving improved energy performance



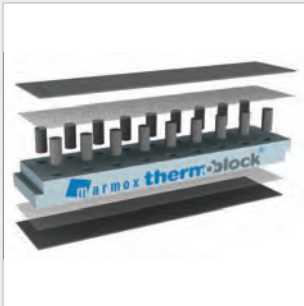
on to the developers of new dwellings. By using THERMOMUR® ICF moulded expanded polystyrene (EPS) to create the formwork and JACKODUR® ATLAS extruded polystyrene (XPS) to create an insulated floor slab, as well as JACKOBOARD® insulated tile backerboard for internal tiling in bathrooms, wetrooms and other areas, developers can ensure

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Marmox Thermoblocks offer warm support to UK Construction Week



With both an energy and a housing crisis looming large across the UK, it is appropriate that Marmox has opted to dedicate its stand (B43) at this year's Construction Week – taking place at the NEC from October 4th-6th – to showcasing a product offering a ready solution for the issue of thermal bridging. Well proven in practice, Marmox Thermoblocks are widely recognised by specifiers as providing a means of achieving compliance with Part L, by addressing the challenges of cold-bridging at the floor/wall junction or beneath parapet walls. In fact the growing emphasis on improving energy efficiency as well as the speed and quality of construction is making Thermoblock mainstream for both traditional and modern methods of building. Thermoblocks are available in widths of 100, 140 or 215 mm and are formed from sections of XPS (extruded polystyrene) encapsulating two rows of high strength, epoxy concrete mini-columns. These are attached at either end to the top and bottom layers of glass-fibre reinforced polymer concrete, to ensure a good bond with the rest of the structure.

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Accountability for Fire Safety post-Building Safety Act

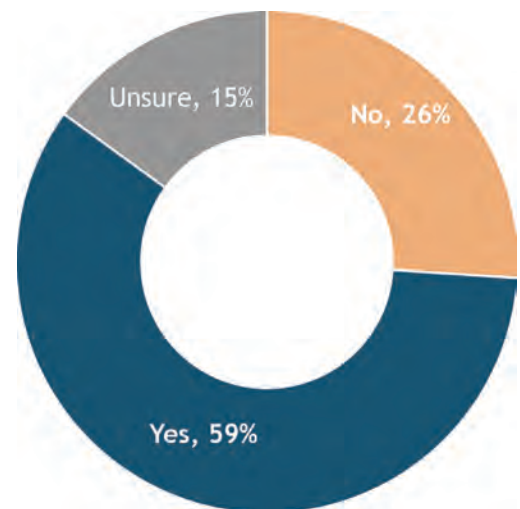
Executive Summary

The Grenfell Tower fire was the most devastating single event of its type to occur in the UK's built environment since the Second World War. Following the disaster, in which 72 people lost their lives, a range of pledges and proposals have been put forward by the Government to try and redress failings identified across the construction industry, including the key area of professional accountability in projects.

Two key themes have emerged on accountability issues in the post-Grenfell period: one, that the chain of responsibility was far from clear in 'higher risk' projects (over 18 metres), when it came to overseeing specification of buildings for ensuring fire safe designs are built. Secondly, that the construction products testing and compliance regime, alongside the Building Regulations themselves, was riddled with holes when it came to ensuring fire-safe buildings.

This troubling situation led to the Government taking a range of measures, from commissioning Dame Judith Hackitt's report, to a raft of legislative moves via the Building Safety Act, which became law in June this year (although will be implemented in phases for 18 months). It is claimed the Act will bring about the biggest changes in procurement of building safety in the last 40 years, introducing a clearer chain of responsibility, as well as tighter regulations, a national construction products regulator, and potentially a greater role for architects.

The new regime is looking to clarify as well as enhance and improve the accountability framework, and thereby professional responsibilities. But what do architects think of the new concepts, such as bringing in a Principal Designer who will be the guardian of the much-discussed new 'Golden Thread' of project data – which will theoretically run uninterrupted and un-tampered with through projects. With the laudable goal being to preserve the 'original design intent,' some designers believe it should be the mechanism for constant and rigorous inspection of the design as it progresses to construction. One of the other key developments is that the

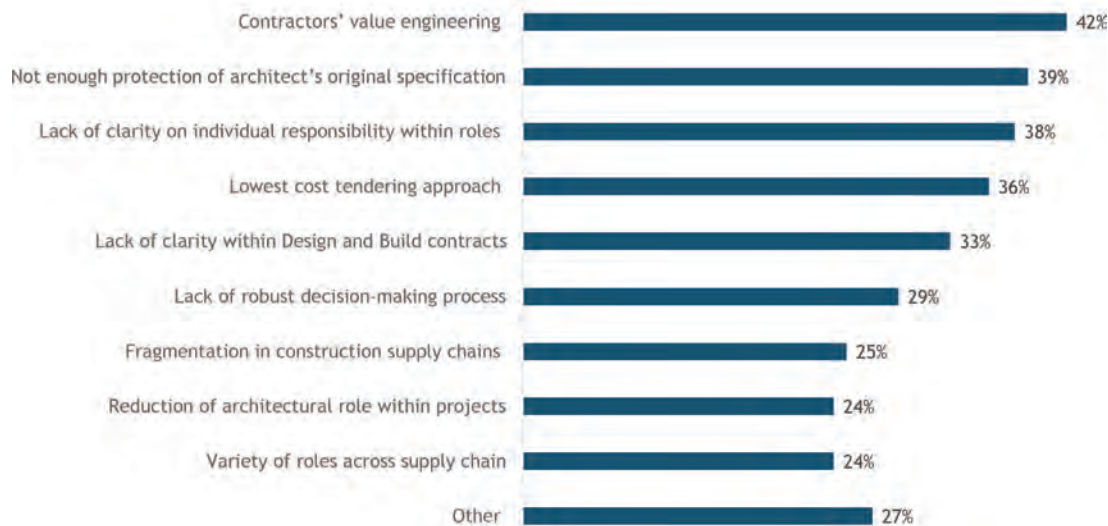


"Do you believe that lack of accountability on fire safety within project teams is the major issue preventing a robust safety regime in 'higher risk' residential projects?"

industry now has a National Regulator for Construction Products.

We surveyed our architect readership in summer 2022 to discover their views on this subject – including searching questions on how they felt about the current state of design and procurement when it comes to fire safety in projects. But also, how aware were they of the new changes aimed at safeguarding building occupants in future, and what were their thoughts on the potential new roles, in particular for architects, in this challenging but crucial new professional landscape.

We also managed to get the expert input of an architect closely involved with fire safety issues, Richard Harrison, of the



"What are the key problems within accountability at present in the 'higher risk' residential sector?"

Association of Consultant Architects, who provided extended comment on the survey questions. He is a founding director of Volume 3 Architects, and joint founder of Dal Riva Construction Management.

The findings of our survey threw up revealing insights on not only a degree of consensus over the problems, but also some lack of consensus when it came to the potential of proposed solutions to address the accountability issues in particular. The major takeaway was that nearly two-thirds (59%) of respondents believed that 'the lack of accountability on fire safety' was 'the major issue preventing a robust safety regime in higher risk residential projects.' Under a third believed this wasn't the case, showing that for our sample at least, the problems around clarity of responsibility, and resulting robustness in procurement, was clearly the biggest nut to crack, post-Grenfell.

Persistent concerns

Key among the concerns of respondents in terms of the causes of accountability issues, were the 'value engineering' (cost saving) undertaken by contractors during projects, a lack of protection of architects' original design specification, and a parallel 'lack of clarity of individual responsibility' in project roles. Design and build contracts were cited as a further cause of obfuscation of responsibility, as was the 'lack of a robust decision-making process,' and the fragmented nature of construction supply chains.

Architects were split on whether the Building Safety Act would fix most of the issues however, with only 10% separating the majority (who thought it would), from those in the other camp. Respondents also gave a muted response to the changes within the Act in terms of their individual potential to improve things, with only credibility of materials testing receiving a decent amount of

support. Despite the laudable intentions, only a tiny amount of respondents thought the Golden Thread had strong potential to protect the original design intent.

More worryingly, given the need – and potential – for architects to take a greater role in protecting specifications on safety grounds, most respondents (69%) said that they would not be keen to take up such a role, 'given the level of scrutiny and responsibility for safety.'

Finally, despite the changes brought by the post-Grenfell regime embodied in the Act, over half of respondents thought that contractors would still be able to switch product specifications, sabotaging the robustness the new legislation is designed to deliver. Most of our architects surveyed also believed that until there was a 'full overhaul' of Part B of the Building Regulations to resolve its ambiguities – beyond simply restricting the use of certain materials – the desired safer future would not be achieved.

Introduction

In her 2020 report on the construction industry issues revealed by the Grenfell tragedy, Dame Judith Hackitt made a couple of scathing assessments of the parlous state that a fragmented sector had got into over the years. In her damning report, a "broken" industry was characterised by a combination of confused roles and responsibilities, a degree of indifference, and ambiguous Building Regulations which effectively created loopholes for inadequate rigour in the system.

Hackitt highlighted a "race to the bottom" in terms of the building procurement culture in this area, and that as a result, that culture needed a complete overhaul to avoid the likelihood of another Grenfell. The proposed introduction of a 'Golden Thread' of building information data, maintained and protected through



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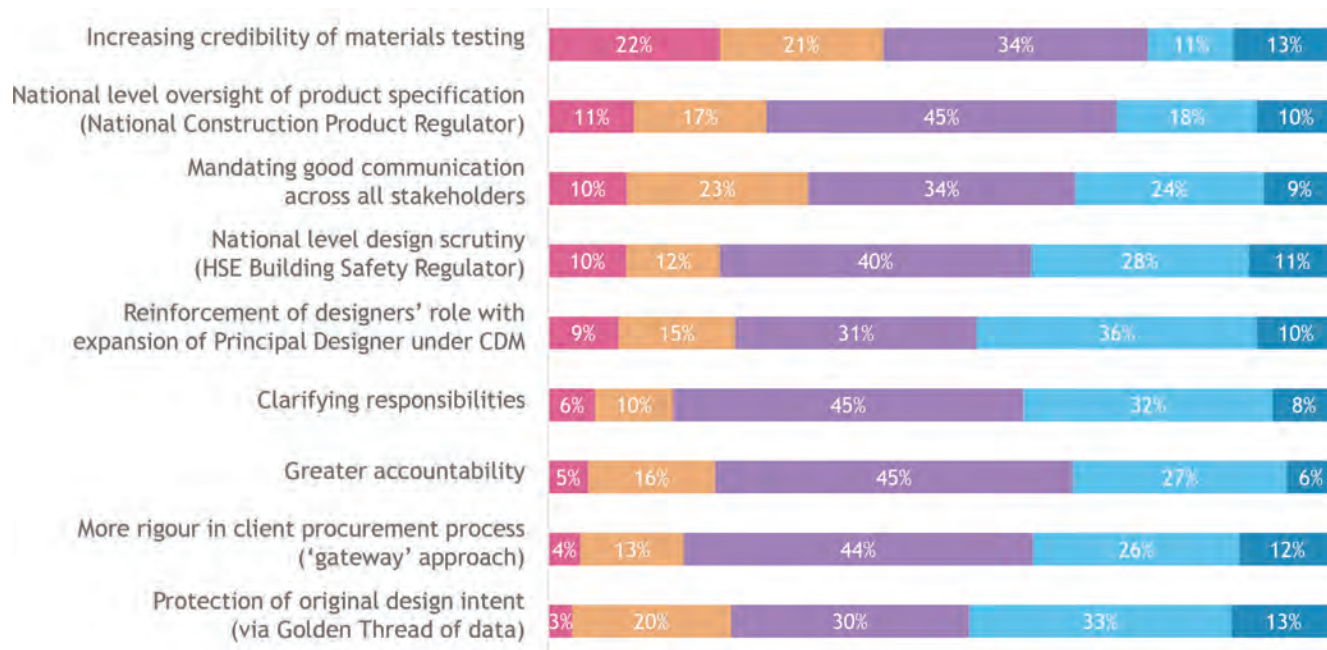
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"Please rate the changes in the Building Safety Act in their potential for improving the safety regime"

Excellent Very Good Good Acceptable Poor

the entirety of projects, and thereby "preserving the original design intent," would make the taking of shortcuts on quality impossible. This data would be stored and updated beyond completion, and throughout the building's life cycle.

Any changes to the design or specification would be subject to a formal checking process, and in theory, the final referee of the process would be the architect, in the new Principal Designer role, which was first sighted in the 2015 Construction Design and Management site safety regulations. This would restore much greater power to architects in a residential sector in which they've arguably been sidelined.

However, do architects want such a level of power when it comes with such great responsibility, and is it practically possible, notwithstanding the profession's wish to lead a more robust safety culture?

Levels of confusion

Grenfell, along with other major fires, sadly revealed some serious shortcomings within the procurement system, one of which is characterised by multiple and confusing layers of responsibility, regulation, and accreditation. This led to the potential of the system being abused by some unscrupulous firms, or at the very least, loopholes to be legally exploited for business gains.

Hackitt has been applauded by architects for targeting "fragmentation" as an endemic problem in the industry. There is an accompanying lack of clarity on roles and responsibilities,

particularly who is responsible for ensuring architects' design specifications are upheld throughout. In design and build contracts, where design responsibility is 'novated' to the contractor, this becomes even more complex.

This parsing out of responsibility is also complex on the client side, such as in local authorities or tenant management organisations, as it was in the case of Grenfell. Projects can be long-running, and continuity of professionals involved through the life of a design can be rare, with new teams emerging at the end, taking over from others. Hackitt has at the very least, fully shed light on the issue.

One of the main problems for architects, due to the lack of clear roles and accountability – and profit motives being allowed to drive the agenda as a result – is that their design role can be sidelined. Subcontractors may be given key roles overseeing design decisions, and architects may not be given sight of detailed costings.

Acting on the issues

The six-part Building Safety Act introduced the new changes when it comes to accountability in projects, including the Dutyholder role within projects, and following their completion. Part 2 of the act includes provisions to introduce a new National Building Safety Regulator (BSR), within an overall new safety framework, including the Golden Thread.

The BSR, which will sit within the Health and Safety Executive, will "oversee safety and standards of all buildings," but will only



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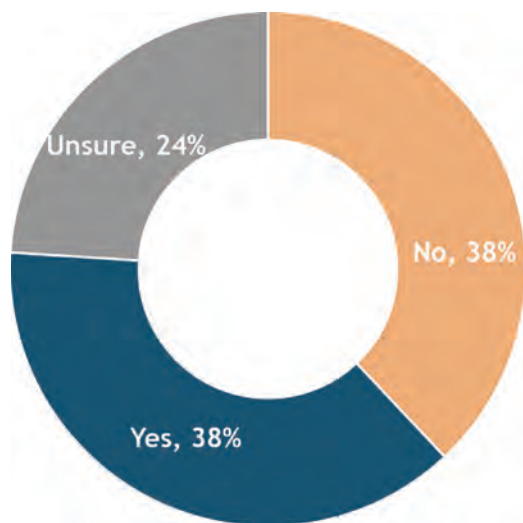
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"Do you think the Golden Thread of data will 'preserve the original design intent' as intended?"

have a direct regulatory role on buildings over 18 metres, or seven or more storeys. In ensuring the implementation of the new framework on high-rise buildings, it will also "help and encourage the built environment industry and building control professionals to improve competence.

The BSR will "be the building control authority for high-rise buildings," introducing "decision points during design and construction" to maintain rigour. It will assign Dutyholders "clear accountability and statutory responsibilities as buildings are designed, built, refurbished and occupied." They will be required to report "prescribed fire and structural safety occurrences" to the new regulator, and a register will be maintained of "occupied high-rise buildings, building inspectors and building control approvers." The introduction of such seemingly obvious measures speaks to just how free-for-all certain aspects of the system were previously.

Taking account

The new Act establishes the Dutyholder role – (an extension of the CDM regulations). Within the Act these are also termed 'Accountable Persons' (APs), which could either be an organisation or person who "owns or has responsibility for the building." It may also be an organisation or person who is responsible for maintaining common areas. The Government thinks it will "usually be an organisation or business."

The APs will have a duty to take "all reasonable steps" to "prevent building safety risk," which is defined as "spread of fire and/or structural failure" in the Act. Seemingly introducing a new layer of complexity, if there is more than one AP, the one responsible for the structure and exterior of the building will be the 'Principal Accountable Person (PAP),' with overall responsibility for design safety on a construction project.

PAPs must register existing buildings with the Building Safety Regulator – between April and October 2023 – as well as all new buildings before occupation. They will also have to prepare a 'safety case report' which will demonstrate using "detailed, accurate information" that they have assessed all building safety risks and "taken all reasonable steps to control them." After inspecting this, the BSR will then direct them to apply for a certificate to show the building has been assessed.

Information & the Golden Thread

Will the Golden Thread be the 'silver bullet' it's being hailed as, for maintaining information throughout a project, in order to prevent lapses in rigour and quality? Architects believe it has the potential to be a powerful tool, as long as they, in the Principal Designer role, are given full ownership of the data throughout, without handovers and revisions.

However, the complexity of supply chains, and resulting product assemblies, begs the question as to whether one person should be expected to take full responsibility for the decisions of others. Some believe that a more collaborative approach is the only way to achieve real accountability.

Assessing the Problem: Survey Findings

The majority of the professionals we surveyed were architects, making up 72% of the respondents. In addition, there were 22% who said they were either architectural technicians or technologists. The vast majority were involved in the housebuilding sector (76%), with commercial and workplace next at 32%, followed by mixed use (26%), heritage and conservation and healthcare at 19%, and industrial and self-build both at 15%.

The findings centred on the following areas:

- Key challenges for accountability
- The potential of the Building Safety Act to fix the safety issues in residential construction
- Whether the Golden Thread will 'preserve the original design intent' as intended
- Architects' willingness to take up the Principal Designer role, and the ARB review of competencies
- The legal firepower of the National Regulator of Construction Products
- The likelihood of 'specification switching' still endangering robustness in value engineering
- System-based testing of construction buildups versus individual products
- Design compromises for architects in the new regime
- Overhauling Building Regulations on fire safety (Part B)

Lack of accountability

Our survey found that 59% of respondents agreed with the statement 'the lack of accountability on fire safety is the major issue preventing a robust safety regime in higher risk residential projects.' Only 26% believed this wasn't the case, and 15% said they were

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unsure as to whether lack of clarity on responsibilities was in fact the key issue.

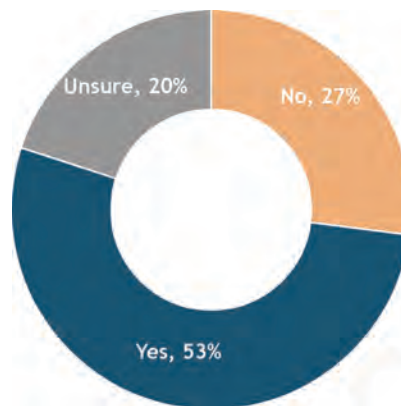
Dame Judith Hackitt found a fragmented picture when assessing the accountability within construction project teams, and our survey results bear this out when it comes to architects' views. One anonymous survey respondent put the accountability problem in supply chains as follows: "Everyone is trying to pass liability down the line for completing the design."



EXPERT VIEW

Architect Richard Harrison of the Association of Consultant Architects comments on how architects have a special but undervalued place in the supply chain, in being able to take a holistic

view of specification: "Architects or 'designers' are in a unique position to take full responsibility for the selection of all materials in combination, and in delivering the specification. Encouraged by design and build contracting however, the specifier's role has become diffused by a myriad of 'specialists' introduced at the pre-construction and construction stage, which has resulted in 'accountability confusion.' It has been a trend over the past 30-40 years and the public inquiry into the Grenfell tragedy has identified a very alarming variety of appalling practices in the building industry."



"Despite the Act's changes, will contractors still be able to switch product specifications based on ambiguous 'or equivalent' contract clauses?"

A glaring example at Grenfell Tower, the inquiry was told, was that the original cladding specification for the refurbishment was zinc with a fire retardant core, but this was reportedly switched to ACM (Aluminium Composite Material) for cost reasons. With clients unable to provide the expert insights into materials' performance, it's essential that a robustly evidence-based specification is not compromised on such projects.

Key challenges

The survey found readers highlighting a number of challenges hampering accountability currently within projects, which the new regime is intended to address. Top of the list was value engineering, tackled within the Building Safety Act by means of a provision where contractors need to justify any change to a specification as being a 'material change.' For 42% of our respondents, this was the biggest issue, but in a later question, we'll see that they didn't believe the Act would be the panacea for this problem. It also ties into the lack of protection of the original design, which the Golden Thread is hoped to address; architects have also expressed their keenness to see it extended to (often elusive) post-occupancy evaluation.

Specification switching

The 'switching' of product specifications is an endemic problem within the construction industry, whereby contractors, during the so-called 'value engineering' phase of a project are able to replace materials originally specified by an architect with a product deemed 'equivalent,' an ambiguous term often used in contracts. There is likely to be little verification of whether it is indeed a like-for-like replacement in terms of performance, or something inferior for the purpose, done as a cost-cutting exercise.

We asked our readers whether contractors would still be able to successfully switch specifications post-Building Safety Act, and a substantial number – 53% – believed this would still occur.



EXPERT VIEW

Regarding specification switching, Richard Harrison of the ACA believes that the onus is on specifiers not to allow ambiguity, but that if this was the case, switching was not a 'given':

"It's not, unless specifiers abrogate their responsibility for clear and unequivocal specification of products and avoid the use of ambiguous "or equivalent" clauses. Specifiers must be required to formally re-assess alternative products proposed by others and take clear responsibility for the change after due consideration; and time expended reviewing alternatives should be paid for."

Another respondent said that specification switching was potentially down to lack of testing data: "Testing by the BRE or other establishments needs to speed up and become more economical if we are not to end up with architecture that consists of two storey brick boxes." One other anonymous respondent asserted that manufacturers "need to be accountable so that specifiers have the confidence to select the correct performing materials and components."

Product testing

The testing of products used on Grenfell Tower has been under the spotlight during the enquiry, with issues around practices

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such as manufacturers' own 'desktop studies' on fire performance being called into question. Commentators have expressed the view that testing should be undertaken for proposed combinations of products for specific projects, on elements such as external walls, rather than for individual products. This had resounding support from our survey respondents, 88% of whom said that there should be "testing and verification of a set of details for safety-first cladding build-ups, rather than for individual products." Only 5% said that assembled systems should not be tested.

This idea resonated with many survey respondents, such as one who commented: "A set of acceptable details will protect designers and users. Like the robust details which were produced some time ago." Another put the case for system testing simply: "You can assemble safe products in a dangerous way." And a further respondent said that testing needs to be comprehensive and transparent: "If we really want to be serious about compliance with fire testing, a multitude of fire tested build up of details and building conditions need to be carried out and made publicly available in the market."

One anonymous respondent summed up the problem; that currently there was "a lack of clarity about levels of performance of construction materials." Another said there was a "lack of skill and competence within the consultancy base and supply chain," alongside "limited test and certification evidence of products." These were therefore "incompatible with fire specification requirements and other project constraints," (citing services, general co-ordination, spatial fit and 'compatibility with fabric materials').



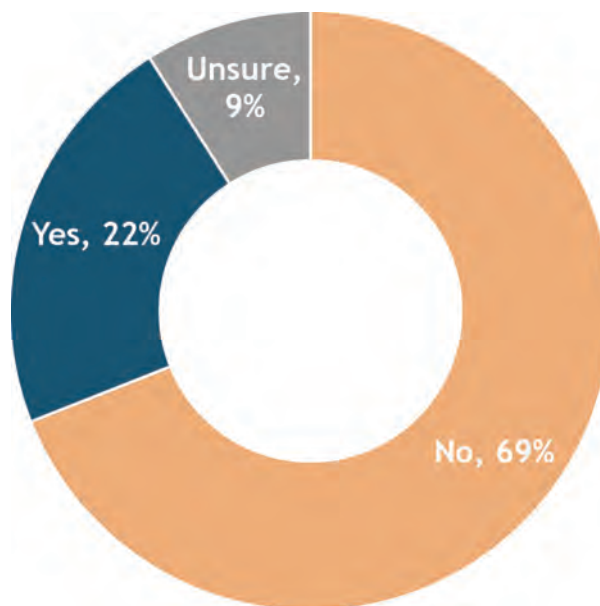
EXPERT VIEW

Richard Harrison (ACA) says system testing is the way forward: "It is important that a combination of products assembled together in a unique way should be proven to work as an assembly before implementation. All tests should be recorded and made available for scrutiny and re-use, refinement or rejection if they have failed. One of the classic errors in the industry has been the propensity to 'do what we did last time,' thereby repeating potential failures as has been proven by the Grenfell tragedy. Desktop assessments can no longer be regarded as acceptable."

Design compromises

A majority of respondents (60%) believed that the new regulatory regime would mean that architects would have to confront 'challenging' design compromises. However, as architect Richard Harrison commented: "All design is challenging, and this is normally relished by architects because it is what we trained for. I do not believe that designing safe buildings is a compromise, but should be a fundamental requirement."

One respondent commented that material selection would be compromised due to the "lack of trust between specifiers and



"Are architects likely to be keen to take up the oversight of safety under the expanded Principal Designer role, even if they are able, given the level of scrutiny and responsibility for safety?"

manufacturers." Another said that a "lack of comprehensive Professional Indemnity Insurance" for architects would be a factor constraining designs, and their creativity.

Conclusion

Richard Harrison of the ACA believes that a "sea change" is underway in the industry. However, he thinks it needs to gravitate towards collaborative contracting as its "default methodology." Harrison concludes: "Construction has always been fundamentally a team activity, but this has been forgotten by the race to the bottom on project costing, and thinking in silos."

Our survey shows that architects back the aims behind the Building Safety Act, given the catastrophic nature of what happened at Grenfell Tower, and the urgency of the need to safeguard residents against something similar in future. However, our survey results show it is a very complex picture, with a fragmented industry with a series of different drivers, and the answers to address this have not all been arrived at yet.

The Golden Thread is a path towards more scrutiny, rigour, and ultimately, safer buildings. However it requires architects to be given the chance to oversee a newly collaborative industry so that they are not isolated, and endangered professionally. Is it time for manufacturers, architects and contractors to come together more fundamentally to share their views and approaches to make the step change in procurement that's needed?

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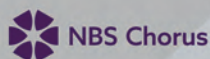
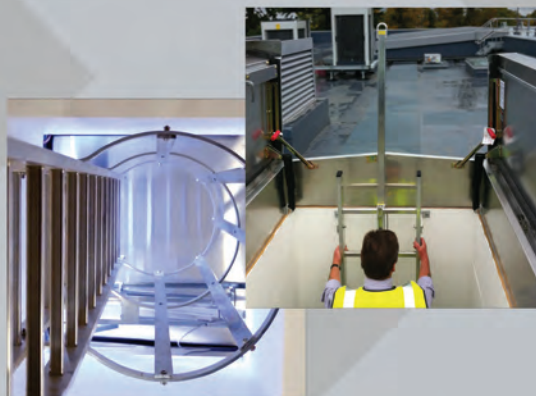
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When the Natural History Museum decided to replace its famous 'Dippy' the diplodocus exhibit with a new star exhibit – a real-life skeleton of a blue whale – design & engineering expertise from Lancashire provided a solution to balance all the elements. Consulting engineers for the refurbishment of the 150 years-old Grade 1 listed Hintze Hall, SVM, aimed to revive, as far as possible, the original ventilation for the iconic, lofty hall, whilst taking advantage of technological developments to deliver the optimum internal environment for exhibits, the building fabric, and visitors. Thus, SVM utilised the expertise of Britain's leading air movement specialist, **Gilberts**. Based on CFD (computational fluid dynamic) modelling, Gilberts manufactured and supplied 24no of a bespoke version of its Mistrale Model A natural ventilation units, with a further 42no standard WHF50 high performance louvres to provide the required levels of fresh air intake and exhaust. Each of the bespoke units was purpose-designed, using a combination of Gilberts' WHF50 cassette with its VN75 ultra low leakage air volume control damper, to fit within existing window apertures and frames.

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BUILDING
FILE

BAFTA HEADQUARTERS LONDON

Raising the roof at BAFTA

James Parker reviews the inspired remake of BAFTA's headquarters in London's West End, directed by Benedetti Architects and featuring bigger roles for original period features and some startling glazing innovation

The story of how an architect and a national cultural institution went on a journey of discovery together to uncover and reuse historic elements in its London head office could probably be made into a film. However, while it had dramatic moments, Benedetti Architects' ingenious scheme to literally raise the roof of BAFTA's base and provide another floor of key space for the charity as it celebrates its 75th year, was generally a smoothly realised, feel-good tale.

When it staged a design competition in 2014, BAFTA wasn't sure how to remain at 195 Piccadilly, despite it being its ideal location in the heart of London's West End. The listed Victorian building's size, layout and antiquated services were increasingly incapable of performing the functions required now and in future. BAFTA knew it would need to be fully reimaged by a design practice armed with a strong vision.

At the heart of BAFTA's work are its charitable activities, including increasing diversity and inclusion in the film, television and gaming industries, and fund-raising is a top priority, from film screenings to social events, having no government subsidy. The 1883 building (formerly the Royal Institute of Painters in Water Colours) is the centre

of this activity, and also the base where its members meet.

Purpose-designed in 1883 with the top half of the building as continuous, triple-height gallery spaces lit by three huge rooflights, the building's internal volumes attracted BAFTA to move in (in 1976), because it could include a raked cinema – the 227 seat Princess Anne Theatre – for major screenings and premieres.

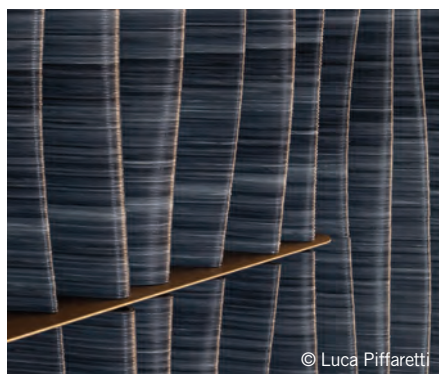
Benedetti worked closely with client and building owner The Crown Estate, as well as Historic England, as well as local stakeholders Westminster City Council and St James's Church. The architects helped BAFTA to establish the feasibility, as well as the benefits of remaining in its current home. A key design constraint was a desire to retain but completely revamp the already hi-spec two-storey cinema, leaving it insitu beneath two previously blocked-off Victorian rooflights.

The architects took a "bold yet sensitive" approach to the architectural heritage, as they simultaneously looked to integrate a wide range of the latest AV technology across the building. They had to "carefully balance members' needs with public access and revenue generation," says practice founder Renato Benedetti.

© Rory Mulvey



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© Jim Stephenson

SCREENING FOR CARBON

In search of a material for a bar in the form of a screen, the architects chose an innovative carbon-absorbing polymer, Wearepure.tech, from Barcelona

On level two a new Clore Learning Centre replaces the former member's area supporting the training of 'young creatives'



© Jim Stephenson

The key design intervention, included in the winning competition entry, was to create a new top (fourth) level for members; a complex task encompassing raising and restoring two of the building's three original Victorian rooflight spaces. This meant uncovering and restoring decorative plasterwork and structure that had been hidden for 45 years, and which was generally assumed to have been lost.

Brief

With several major heritage refurbishments in London under their belt, it was a "no brainer" for the practice to enter the competition. Inspired by their vision, BAFTA decided to invest in futureproofing the building. "They had already assessed a bunch of other relocation options, but the membership felt 195 Piccadilly was their home," Benedetti says.

The architects iteratively developed the brief with BAFTA over the next two years, which Benedetti says was a delicate and complex process, because the architects were attempting to establish the financial as well as practical scope of the project as they developed the brief: "We were on a journey together." Growing in confidence, the client opted to eschew a phasing approach, and instead go for 'one-hit.'

Design goals

Achieving the right level of environmental

quality for charitable events as well as members was critical, but also creating new spaces which could be flexible for a varying pattern of day and night events. The design's aim was to preserve but enhance the historic building's character, which had come to embody BAFTA, and achieving the client's mantra of "BAFTA-ness" for the new interiors.

"Part of the building's texture," Benedetti explains, "is that the spaces can adapt to multiple uses." But while keen to ensure flexibility, the architects wanted to avoid any sense of temporary, bland spaces, particularly with materials; "we always shied away from anything generic or 'fashionable.'" The architects were attempting to produce a timeless set of interiors, with "a classic palette of materials, and a highly refined set of details." BAFTA was founded in the 1940s, but the architects reached back to the 20s and 30s for inspiration, as "the heyday of British film," when people would visit luxurious cinemas to be "transported to another world."

Construction

The scheme received consent in 2017, together with enabling works including a substation beneath Piccadilly – providing the extra electric capacity needed by the enhanced facilities and reduced gas use in the kitchens. Designing this alongside the main refurbishment was "highly

complicated,” says Benedetti, and not phasing the project meant staff had to be relocated during construction. A former Jamie Oliver restaurant in the basement became the construction workers’ canteen.

The blocked-off rooflights were “packed full of stuff,” and their plasterwork was deteriorating rapidly, says Benedetti, with no atmospheric or temperature control. The structural challenge for remedying this via lifting the rooflights was complicated by the Crown Estate doing simultaneous work in the basement: “We needed to find a way to hold the building up and make all the changes; adding a floor and strengthening it all without putting significantly more weight on the foundations.”

There was a “huge amount of temporary works.” A ‘birdcage’ of steels around 20 metres high held the facade and the 20 tonne historic rooflights, and also created a temporary scaffolding roof above – one of the largest in London at the time – which also enabled all materials to be lifted in on such a constrained site.

Programme

The architects managed to double the building’s internal capacity without moving the main screening theatre – which was re-built and technologically re-engineered in collaboration with Dolby’s Californian HQ.

Other than a new invitingly glazed entrance, the accommodation begins on the first floor, with a foyer, multi-use event space and banqueting kitchen (the building as whole includes four new kitchens and bars). Then on the second floor, adjacent to the main cinema, are the Learning and New Talent spaces crucial to BAFTA’s charitable remit, which extend upwards at the west flank into a triple height space top lit by another rooflight, and which connects visually to the third floor. The second floor had previously been raised and was lowered around 1.5 metres here to avoid level changes, which “gave back some of the history about the relationship with the triple height galleries which attracted BAFTA in the first place,” says Benedetti. The raised floors were on “huge 20 metre beams,” so this wasn’t done “without consternation,” he adds.

On level two a new Clore Learning Centre (funded by the Clore Duffield Foundation, its first in the UK dedicated to moving image arts) replaces the former member’s area, supporting the training of a diverse range of ‘young creatives’ in the film, games and television industries. On level three there’s a new, 41-seat



© Jim Stephenson

cinema, and on the top floor alongside the members’ bar, a new boardroom re-uses historic oak flooring and marble found during the removal of the original raked seating in the Princess Anne Theatre. The building is set back with terraces which overlook Piccadilly and St. James’s Church – which is surrounded by mature trees and accessed via 24 metres of full-height glazed sliding doors.

A further reason for offering flexibility in the design of the various meeting areas was that BAFTA does a lot of its award judging in the building, so there’s a need for “privacy and containment.” All spaces are connected so that jury members can call each other wherever they are in the world, and view films together seamlessly. “You don’t see the kit,” says Benedetti. “We were working with world-renowned firms in partnering agreements with BAFTA to ensure it is cutting edge now, and updated in future.”

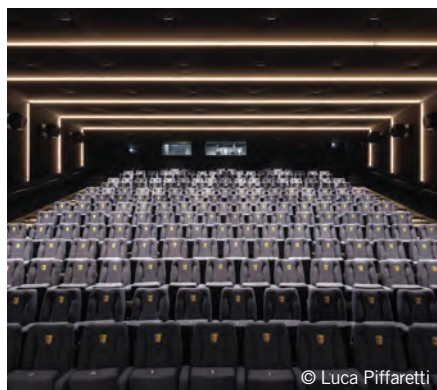
Clearly in control

As mentioned previously, this project was a test bed in UK terms for a highly innovative smart glazing system from Eyrise, a company formed by pharmaceutical giant Merck in Germany to plug a gap in the market for truly ‘clear’ solar control glass. The company had patented a glass liquid crystal technology in 1914, but it’s taken over 100 years for it to come to market.

This is ‘smarter than smart’ insulated glass, virtually clear from the interior



© Luca Piffaretti



© Luca Piffaretti



© Jim Stephenson

HEYDAY OF CINEMA

In creating the new interiors, the architects were inspired by the 1920s and 1930s, the “heyday of British cinema” where places would be designed to “transport people to another world”



© Luca Piffaretti

This is ‘smarter than smart’ insulated glass – passing an electric current through it ‘combs’ particles within the liquid crystal so that to the human eye, the glass appears virtually clear from the interior. On a sunny day, the glass appears nearly black from the outside, while 80% of harmful light such as UV rays are removed. It was the ideal solution for the new rooflight glazing, because temperature needed to be carefully controlled in the toplit members’ spaces, but at the same time darkened interiors would defeat the object of the painstaking historic plasterwork restoration.

From the project’s outset, the architects were convinced smart glass would provide the answer, says Benedetti. “We wanted it clear so you could see the trees in St James’s Church courtyard. The trees are about five stories higher than the building, and we wanted people to be able to experience the lovely green canopy above them.”

He continues: “The glass was literally being developed as we were designing the project.” Benedetti and project architect Carla Sorrentino visited the company’s HQ in Darmstadt to find out whether it was too good to be true: “It was a very bright day; the glass looked clear, they opened a window and you could hardly tell the difference.”

Helpfully, the building contractors Knight Harwood were already aware of Eyrise. The architects acted as ‘broker’ in the partnership agreement between BAFTA and Merck to foster trust in what was a groundbreaking first UK installation. The glass sits in a self-supporting, low profile structural frame beneath the historic structure, and appears completely untinted.

Overall, thanks to the combined glazing and upgraded services, what was a 154 kg/m² carbon footprint has been reduced to 42 kg/m² – saving almost 200 tonnes per year, the building went from an EPC rating of G to B.

Interior finishes

The interiors are subtle but richly coloured and elegant – consisting of a “pared-down, warm palette of classic, sustainably-sourced materials,” says Benedetti. The architects’ chosen palette includes travertine, terrazzo and European oak floors; in a variety of textures, plus brass inserts and other detailing, and walls painted in golds and greens. The level of refinement generally increases as users move up the floors, and the architects also designed the boardroom table and chairs. A subtle example of the drama and sense of increased excitement

brought in the interior design is the gold speckle in the terrazzo flooring, which increases as you ascend the oak and travertine-lined stair/lift core.

There are bars on every floor, but as the second floor bar was a space where kids’ events would be held, the team “effectively wanted a wall which could open.” This led to the idea of creating a screen, “but we thought we should do something unusual – and particularly sustainable,” says Benedetti. The result is a 4.5 metre x 2.5 metre undulating black screen, sitting next to a striking steel balustrade with the BAFTA ‘face’ cut into it. Prompted by a friend, he discovered a new material, Wearpure.tech, developed by Barcelona firm Noumena to “particulate carbon and nitrous oxides out of the air.” The 3D printed form resembles a curtain, with a maximised surface area that corresponds to ‘a young tree’ in terms of its carbon reducing performance.

Classic travertine is used in large wall slabs as well as in fluted tiles around the lifts. The oak slatted panelling on levels two and three have black backing doing the acoustic job, but on the member’s top level, the oak chevron sections are more refined, with an acoustic backing of brass mesh, which also seamlessly incorporates the air handling,

Grand finale

This was a project which actually benefitted from Covid; deliveries to site were far easier, and BAFTA didn’t lose custom to hotels during construction due to lack of demand. Renato Benedetti says the long-term outcome however food the client is a feeling that the building’s unique historic character has been “lovingly enhanced, and imaginatively transformed.”

The dramatically improved interiors proudly welcome both members and visitors, including to what architect Renato Benedetti confidently says is “by definition the best cinema in the country,” showcasing the latest Dolby audio-visual technology. The real showstoppers are the restored and repositioned rooflights, whose ornate original plasterwork enhances what are joyful, daylight spaces on the new members’ floor.

As for Benedetti’s next big role? They have been appointed for the refurbishment of RIBA’s Portland Street headquarters – that might see the challenges of this scheme somewhat upstaged. ■



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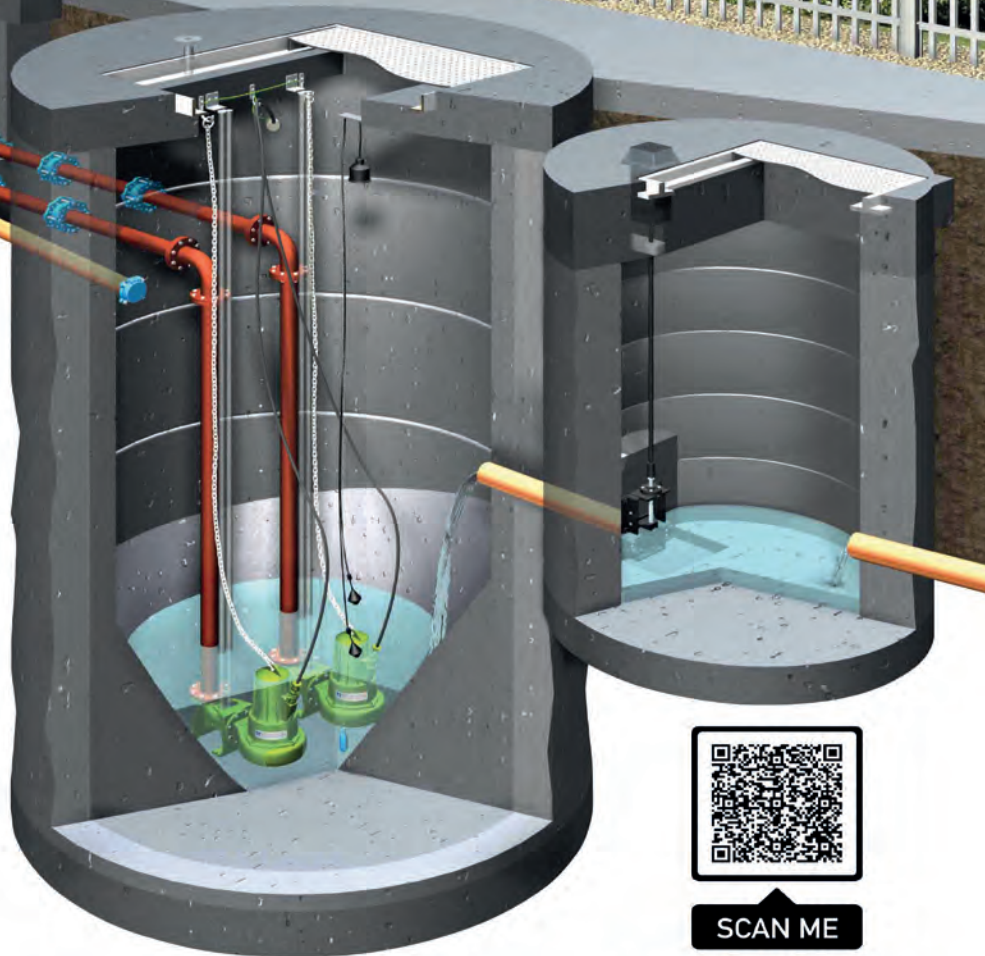
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BUILDING

THE WELCOME BUILDING, RHS GARDEN BRIDGEWATER SALFORD

A warm welcome

With sustainability at the core of the brief for a multi-purpose building at the Royal Horticultural Society's new garden in Salford, Hodder+Partners went to town with timber, with award-winning results. Roseanne Field speaks to Stephen Hodder

RHS Garden Bridgewater, the Royal Horticultural Society's fifth national garden, sits on the site of the former Worsley New Hall in Salford – a 154 acre estate designed and built in 1850 and demolished shortly after World War II. Although there had been many attempts to redevelop the site, nothing had come to fruition until the RHS came across it during their search for a site to locate their fifth national garden on.

The RHS came to an agreement with Salford City Council and Peel Land & Property, which led to landscape architect Tom Stuart-Smith, vice president of the RHS and a former Best In Show winner at Chelsea Flower Show, designing a masterplan for a phased redevelopment. This included the regeneration of a large walled garden, together with a car park and visitor centre. In 2016, the RHS invited architectural firms to compete to design

various elements including the visitor centre – which is now known as The Welcome Building.

After winning the project, Hodder+Partners worked to secure planning consent for the conversion of a horticultural services yard, visitor centre, and car park, as well as old stables and potting sheds. While designing the building, they continued work with Stuart-Smith on the immediate landscape, while the conversion of the outbuildings was managed in-house by the RHS.

Brief

Initially, the practice was given a “fairly cursory brief,” says Stephen Hodder, chair at Hodder+Partners, for “a membership area, retail area, and restaurant together with a glasshouse and outdoor plant sales.” The accommodation was to be “equally divided, and roughly 1,000 m².”



“We wanted this building to be a very delicate intervention within the garden, we didn’t want it rise above the treeline”

Stephen Hodder

The brief developed once Hodder had been awarded the project, with early discussions covering what the architect describes as “tricky site conditions.” There were also concerns about the garden becoming too popular, and managing the likely large visitor numbers. “There were a whole series of public consultations to allay concerns,” Hodder says. “We worked with the city council on a new entrance and sustainable transport strategies.” With the site being in the greenbelt, there were “many issues to address before we could actually start on site.”

There was also a hurdle to overcome with the ground conditions – one of the reasons Hodder cites as making the site difficult to develop previously. “There’s a layer of organic matter which sits underneath, and in terms of carbon capture it was important to the RHS that that was not disturbed,” he explains. This meant the architects had to rethink not only the car park layout, but also the location of the horticultural services yard.

Sustainability is a fundamental within RHS policies, and was therefore an important consideration from the beginning. It was something that was developed significantly during the pre-construction design phase, but was also central to Hodder’s competition bid – “We had an initial idea about how it could underpin the RHS’ approach, but it was something that evolved during the design process,” Hodder says. “The systems

we used are not unique, but I think the combination of this client and site meant that we could push the boundaries in a way we’d never been able to before.”

With this in mind, the practice intended from the outset to focus on timber, presenting a previous project of theirs – St Clare’s in Oxford – during the competition; a design that made extensive use of prefabricated CLT panels and glulam frames. Although predominantly driven by logistics in this case, Hodder felt such an approach could be transferred to The Welcome Building, not only in terms of materials, but also in that “it somehow captured the spirit and quality of space that we were trying to create,” he explains.

Timber ultimately made sense for the RHS’ fifth national garden for two reasons, says Hodder: “A timber pavilion sitting in a beautiful landscape was quite appropriate.” Simultaneously, the architects “were also developing the idea that sequestering carbon was really the right way to go, and very much supporting RHS’ sustainability policies.”

As well as predominantly using timber, the building cross ventilates, all rainwater is harvested, a ground source heat pump was installed, and permeable surfacing was used in the car park alongside swales and attenuation ponds. “Sustainability goes well beyond the building,” Hodder says.

The other key part of design development came following the practice’s examination of other RHS visitor centres, where



demand was exceeding the buildings' capabilities. The architects quickly realised the building would have to "flex with seasonal demands," as Hodder explains. On the other hand, there were also a set of what he describes as "prescribed" components; classrooms (for both school children and adults as part of the RHS' education programme), offices, and a kitchen serving the restaurant. "Our initial idea was the prescribed components being in their own buildings, and then the visitor centre being this flexible space," he says. "We then spent a lot of time shuffling these components around, always with the idea that they would sit beneath the overarching 'umbrella' structure in which the membership area, shop, and restaurant would sit."

Design

A key part of the designers' context-focused site response was achieving a 'horizontal composition.' Although in part intended to help minimise the building's impact on the landscape, it was predominantly inspired by the Bridgewater Canal which sits roughly four metres above the garden on the horizon, along with the site's strong treeline. "We wanted this building to be a very delicate intervention within the garden, we didn't want it to rise above the treeline; the horizontal form was responding to that horizon."

Although they wanted the building to be a discrete addition, it formed a key

part of the overall masterplan, as an important reference point. To this end, the roof folds down at the main entrance to 'signpost' it for visitors. It's visible from most points in the garden, which Hodder describes as a "happy accident; when you see it in the distance so you've always got that point of orientation."

This kind of fortuitous outcome also happened with the design of a long lawn stretching out from the north of the building. The architect of the original estate, Edward Blore, had played with this 'axis' throughout the gardens, but it wasn't until Hodder was standing on the lawn looking back towards the building that he realised "they were building on the axis Blore originally created."

The garden inevitably remained a focus throughout, so design details were included to reflect that. As well as timber, the practice utilised glazing extensively to connect visitors to the garden (with timber louvres to mitigate solar gain). The wall directly ahead of visitors upon entering the building is fully glazed, allowing views along the meadow to the east, as are the north and south elevations. "The building needed to orientate visitors, but at the same time, it was about throwing your attention out into the garden," says Hodder. At the north and south ends, the roof extends beyond the glazed curtain walling, the former being the entrance to the garden and the latter looking out into the outdoor plant sales area.

TREES

The biggest design challenge was resolved by the structural timber 'trees' which were specified to avoid a frame whose girth would have compromised the aesthetic



“The combination of this client and site meant that we could push the boundaries in a way we’d never been able to before”

Stephen Hodder

Timber

The roof structure – spruce with a cross laminated timber deck, plus the larch external wall cladding and louvres, were all manufactured and supplied by HESS. Their calculations show the roof structure sequesters 320 tonnes of carbon, and the cladding an additional 26 tonnes. “The use of timber was absolutely intrinsic to the approach to sustainability,” Hodder says.

The biggest challenges that came with the timber were around the structural ‘trees’ that support the 90 by 24 metre roof. Initially the building was designed utilising a portal frame, but when the structural engineers became involved it ended up increasing in girth beyond what the practice were happy with, hampering their desire for something more elegant. Hodder says he viewed the classroom, admin, and kitchen ‘pods’ as buildings in their own right, and that the overarching roof structure should be separate, and “should almost feel as if you’re outside; delicate with lots of natural light flowing in.”

To resolve this structural conundrum, the design went through a collaborative, iterative process which resulted in a diagrid structure initially with two-dimensional Y-frames, which slightly reduced the depth of the portal frame – but not enough. They then discussed looking at a more ‘three dimensional’ solution, and came up with the idea of using the structural trees.

Columns have four branches at the top, allowing each column to support a prefabricated six by six metre cassette.

“There’s a hierarchy in the size of timbers within the roof, but nevertheless it’s much finer, more elegant,” Hodder says. As well as enabling the roof structure to be more refined, the branch approach also meant fewer columns were required, which allowed the designers to keep the main space in the building flexible. “You go through this process until you achieve what you want from the building,” says Hodder.

The structural trees, combined with the way the roof sits, have become design features in their own right, says Hodder. A triple glazed rooflight runs down the centre – helping conjure the ‘outside’ feeling – with the diagrid structure beneath creating a variety of shadows. With the building seeing an unprecedented number of visitors (currently operating at levels not predicted until its eighth year of operation) it can feel chaotic at times, but Hodder says that the oversailing warm timber roof helps visitors relax. “For me it’s calming; and it’s quite rewarding when you see people enter that building and the first thing they do is look up at the roof,” Hodder says. “Wherever you are in the building, the roof is that common reference point.”

There were further structural challenges. The ‘trees’ all sit inboard of the main roof structure, meaning the edges of the roof canopy are cantilevered, and therefore susceptible to additional movement, beyond what is normal with timber. So managing that movement within the design was “critical,” says Hodder.

The ‘trees’ were originally designed

PROJECT FACTFILE

Architect: Hodder+Partners

Client: Royal Horticultural Society (RHS)

Contractor: BAM Construct UK

Timber: HESS Timber

Environmental/M&E engineers: Hoare Lea

Structural engineers: RoC Consulting

Quantity surveyor/cost consultant: Arcadis

Landscape architect: Tom Stuart-Smith



to include uplighting, but RHS director general Sue Biggs (who has since retired) didn't feel it gave the interior the right quality of light. She instead wanted to use pendant lighting, but the clerestory-type high level glazing below the roof around the entire perimeter meant that no power was running to it.

The solution was to run cabling up through the mullions of the curtain wall glazing at the ends of the building. In between each timber cassette in the roof, connecting them together, is a fitch plate – which created a shadow gap. The cabling was run within these gaps to power the pendants which, asserts Hodder, “really added to the quality of the interior and elegance of the roof structure.”

Layout & landscaping

To the right of reception is the main retail area, which leads through into the restaurant, featuring an outdoor terrace protected by the extending roof. Beyond the restaurant is the glasshouse, housing indoor plants and equipment and leading out to the outdoor plant sales area. The ticketing and membership areas are to the left, beyond which is the entrance to the garden. Flanking that are the toilets and ‘pods’ containing two classrooms and offices.

While the main hall is six metres high, the pods are more intimate, and neutral. “There’s a contrast between the two,” Hodder says. The membership area, ticketing desks and other key areas are clad in terracotta, with the intention to clearly signal to visitors where to go,

minimising the need for signage.

Although finding room for all the required elements wasn’t excessively taxing, deciding on the layout proved challenging. “We spent a lot of time shuffling the pods around to make sure the relationships were right,” Hodder explains.

The practice worked closely with Tom Stuart-Smith on the landscaping; “the shape of the new lake, the movement of people around the building, and the planting up against the building had to be really considered,” says Hodder. “He understood the building and what we were trying to achieve; the landscape and the building were seen as one.” The new lake connects to the original, restored lake (which sits slightly higher), via a stream.

Recognition

Completion was at the end of 2021, slightly delayed due to Covid, but the building has been a phenomenal success. Not only have visitor numbers far exceeded expectations, the project has also been shortlisted for and won a variety of awards, for its sustainability, accessibility, use of timber, and design.

“It’s a very special project,” Hodder says. The landscaping combined with the building’s wildflower roof has seen an improvement to the area’s biodiversity and the practice has received multiple compliments, from the RHS, visitors and fellow architects. “It’s a legacy project, it’s for the people of Salford,” Hodder concludes. “It’s just nice to go back and see people enjoying it.” ■



HORIZONTAL

Minimising the building’s impact on the landscape, the design’s low, horizontal composition was inspired by the Bridgewater Canal

AWARDS

- MSA Design Award 2017
- Architect of the Year (Winner) – Structural Timber Awards 2020
- Cultural & Leisure Project of the Year (Shortlisted, Highly Commended) – BCI Awards 2021
- Environment & Sustainability Initiative of the Year (Shortlisted) – BCI Awards 2021
- MSA Design Award 2021
- Structural Award (Winner) - Wood Awards 2021
- Commercial & Leisure (Highly Commended) – Wood Awards 2021
- Building of the Year (Winner) – GMCC Excellence Awards 2021
- Civic Trust Award 2022
- RIBA North West Award 2022
- RIBA North West Sustainability Award 2022
- RIBA North West Building of the Year 2022

T-T Ready Sump preformed Benching



Introducing the T-T Ready Sump range of pre-formed concrete chamber sump/base units from **T-T Pumps**. With most options readily available from stock, the T-T Ready Sump range of pre-formed chamber bases make good economic sense and can be ordered at the

same time as the concrete rings for speedy construction. Available also in a variety of formats (standalone sump, sump with pre-cast base, sump cast into a concrete ring plus base), many builders and ground-workers have enjoyed the benefits of using the Ready Sump bases for their inbuilt accuracy and ease of installation.

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CaberFloor P5 for creak-free flooring



CaberFloor P5, from timber panel specialist **West Fraser**, trading as **Norbord**, is the UK's most popular moisture resistant flooring panel of its type. It is a high-performance particleboard being widely specified due to its stability, durability and ease of installation for the user. The sturdy, high-density panels come in thicknesses of 18 or 22 mm, in both square-edged or tongue and grooved profiles, the latter featuring profiles on all four sides to offer maximum flexibility. The precision-engineered edges ensure smooth and speedy installation while the tight-fitting joints eliminate the annoyance of creaking.

uk.westfraser.com

Roofshield® protection for listed building in Paisley



A prominent town centre historic building in Paisley town centre which had fallen into disrepair is in the process of being restored with the help of Renfrewshire Council's Townscape Heritage Conservation Area Regeneration Scheme (TH.CARS2). The restoration project, led by Paisley architect John Martin consists of converting the upper floors into four dwellings and external repairs, including new windows, stonework, and roof works. As part of the roof works, protection for the roof will include a new roofing membrane, new leadwork and the re-use of the original slates. In selecting a suitable membrane, Architect John Martin explains: "I chose Roofshield for the roof underlay because it is both air and vapour permeable and requires no additional ventilation to the roof. Roofshield is my preferred roofing membrane. It is strong and robust and meets all of the key criteria." The incorporation of Roofshield into a project can lead to savings in both labour and material costs due to no additional VCL being required. The high-performance air permeability of Roofshield, by **A. Proctor Group**, means that the roof space will have similar air changes to that of a roof using traditional eaves/ridge ventilation.

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BBA Accreditation for Delta MS 500 Fire Retardant

Delta Membrane Systems is delighted to announce its Delta MS 500 Fire Retardant, Type C (basement/below ground waterproofing membrane) has been awarded BBA accreditation.

The Delta MS 500 Fire Retardant is the only Fire Retardant, Type C Membrane with BBA accreditation available in the UK market, and the only Type C waterproofing membrane with a B-S2, d0 Euroclass fire rating (EN 13501-1:2018).

Delta MS 500 Fire Retardant can be located under Certificate 00/3742, Product Sheet 7.

Delta Membrane Systems Limited is driven by quality, exceptional customer service and technical expertise. Delta MS 500 Fire Retardant's BBA accreditation further builds on Delta's already impressive portfolio of BBA accredited structural waterproofing products.

Who is BBA?

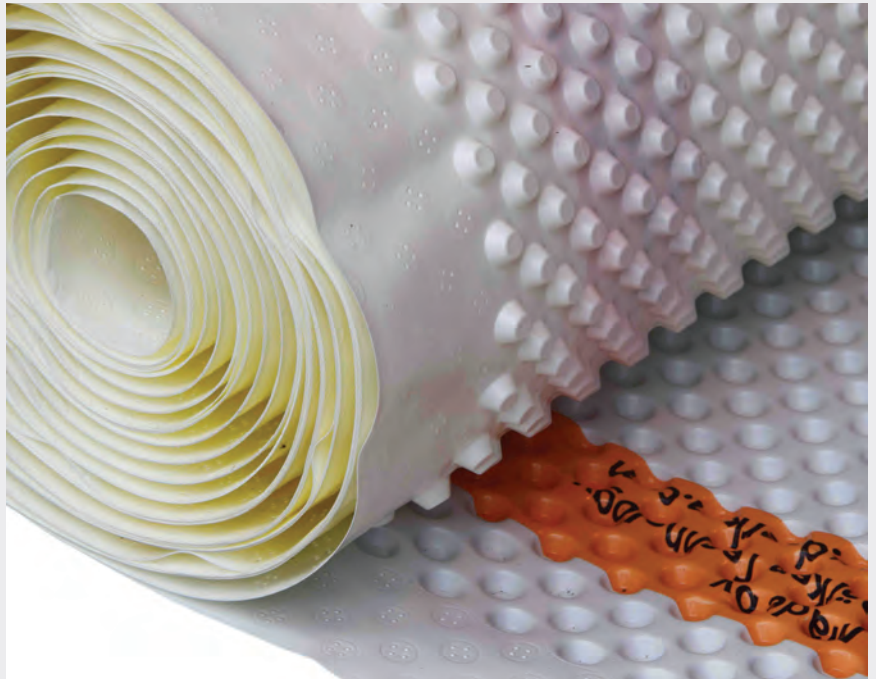
With a technical integrity founded on an independent approach the British Board of Agrément (BBA), is an industry recognised certification body for construction products. With a 50-year legacy of expertise and independently-lead research, auditing, inspection, testing, and certification, offer the construction industry confidence in products new to the UK market.

BBA Accreditation – MS 500 Fire Retardant

For Delta MS 500 Fire Retardant membrane to have BBA accreditation, its associated products Delta Ultra Fix (fixing plug) and Delta Fire Retardant Fleece Tape have also been extensively tested to ensure the complete waterproofing system is durable and fully compliant.



Installation of Delta MS 500 Fire Retardant, Type C waterproofing membrane system



What is a Type C membrane?

Cavity Drain Membranes (Type C Systems) are a maintainable waterproofing solution in below ground applications, suitable for new-build, refurbishment and retrofit projects.

British Standard 8102:2022 (BS 8102:2022, 'Protection of below ground structures against water ingress. Code of practice' defines 'Type C' waterproofing as "drained protection," where the structure itself provides primary resistance against water penetration and incorporates a drained cavity system within the basement structure.

About Delta

"At our very core, we are driven by a diverse team of waterproofing professionals that are dedicated to innovation and are enthusiastic about creating integrated, maintainable, and robust solutions."

At Delta Membrane Systems Limited, the company provides specialist structural waterproofing solutions, covering Types A, B and C waterproofing, combination waterproofing, damp proofing, flood resilience and ground gas protection.

With over 125 years of manufacturing experience, Delta is an impeccable partner on every project. In an ever-changing industry where reduced risk and higher quality is required, you need a waterproofing design partner that is proactive and dedicated to help you keep up with innovative technologies and solutions to ensure your projects thrive. Whatever the needs of your business, you can rely on the #DeltaTeam to ensure you get the right advice, support, and practical help at exactly the right time to keep you ahead of the competition.

01992 523 523 info@deltamembranes.com



Installation of Delta MS 500 Fire Retardant, Type C membrane install in commercial structure

Kemper System prescribed for multi-million-pound hospital building



Kemper System's cold-applied liquid waterproofing solution has been specified for a multi-million-pound extension at St John's and St Elizabeth (HJE) Hospital in the St John's Wood area of London. The £35m new build development has created six, hi-tech theatres and a day case suite which is one of the most modern in the UK. The extension also includes a new admissions lounge, imaging department, consultant rooms and an expanded Urgent Care Clinic. A total of 9,060m² of Kemper System's Kemperol 2K-PUR solvent-free and odourless waterproofing membrane has been applied beneath the building's green roof, onto a pedestrian trafficked walkway, the lower roof area and a plant roof area. The cold-applied solution was installed by London-based Ridgewell Flat Roofing Ltd. Contractors had a strict timescale to adhere to, meaning a quick and easy application solution was required to complete the job. Because of the location of the new build extension, adjacent to an occupied hospital building at HJE, the solvent-free and odourless qualities of the Kemperol system meant minimum disruption at the hospital throughout the application process.

enquiries@kempersystem.co.uk www.kempersystem.co.uk

Hörmann Glazed Section Doors light up high-end garage project



With a number of luxury cars and motorbikes to house, an impressive new-build garage project in the West Midlands is all the more striking with the inclusion of fully glazed ART42 sectional garage doors from Hörmann UK. Chosen for their modern design aesthetic and German build quality the doors were specified and installed by Birmingham based Doorfit. The double-storey garage, which includes a home office and gym on the first floor, is fitted with three, 2.5 m wide x 2 m high, fully automated ART42 sectional doors. Constructed from a lightweight, yet strong, aluminium framework the three doors include narrow framed, large clear glazing panels featuring the unique Hörmann DURATEC scratch-resistance finish. An innovative surface coating, DURATEC protects the glazing panes from scratches and damage caused by cleaning over the long-term, helping to guarantee a permanently flawless appearance. Finished in a smooth, modern Anthracite grey the three doors complement the other materials used and complete an impressive building ideal for displaying the clients' extensive vehicle collection and offering a bright unimpeded view.

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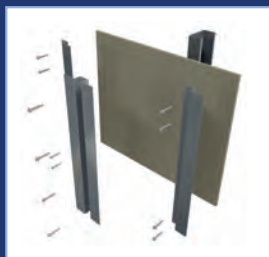
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Nordic Green Copper Aurora

This contemporary cottage, built in a stunning seashore location on the Lyngen peninsula – a protected heritage area well within the Arctic Circle and one of Norway's National Parks – is defined by its respect for nature and restrained material palette of Nordic Green copper clad walls and roofs, seamless glazing and timber.

Snorre Stinessen Architecture's design for the new Aurora Lodge retreat aims to embrace the stunning panorama across the sea and a close connection with nature, while retaining privacy. Conceptually, the design is based on a natural platform in the landscape



providing a continuous floor for the main building, both internally and externally. This platform is then protected by an angular canopy, forming the eastern wall and roof – clad entirely in Nordic Green copper – providing high indoor ceilings.

The copper enclosure contrasts with wide-open views of the surrounding nature – including the northern lights in winter – through extensive, seamless glazing. The same approach is taken with the two outbuildings, also enveloped with Nordic Green copper. Careful detailing and installation have resulted in graceful transformations between copper planes.

In terms of materiality, Snorre Stinessen explained: "Copper was chosen for its durability – particularly close to the sea and with air salinity – but also for its permanence, quality and beauty. The fact that copper is a natural material and, of course, 100% recyclable are for me important factors – and certainly its longevity is often overlooked".

The extensive Nordic Copper ranges offer patinated copper surfaces straightaway that would otherwise take many years to develop



Photos: Snorre and August Stinessen



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HIGH SCHOOL, CLERVAUX, LUXEMBOURG

Picture perforation used for a facade depicting a forest

L'École Internationale Edward Steichen is a high school in Clervaux, Luxembourg, with room for 650 students. Jonas Architectes Associés won the assignment for construction and devised not only a plan for the buildings, but also an idea for decorative facades and sun protection. RMIG ImagePerf made it possible to realise their vision.

As the school is more or less surrounded by woodland on all sides, a striking photo of a spring forest from a nature park in the Ardennes was chosen as the template for the facade image. Using perforation in various hole sizes, the beautiful image of the forest was transferred on to metal sheets.

Technical characteristics
Raw material: Aluminium EN 5005
Pattern: RMIG ImagePerf
Thickness: 3.0 mm
Surface treatment: Anodising
Finishing operation: Bending

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Humankind & Technology



Some accentuated features or highlights are so powerful that their impact is felt beyond the city and the region. One example is the Elithis Tower in Strasbourg. According to the owners, it is the first 'energy positive' high-rise in the world. The nearly 57-metre-tall tower is changing 21st century building culture in France, technically and socially. This is because although the building has 63 apartments of various sizes at very affordable rents and focuses on a social mix, it is also outstanding due to its remarkable architecture, particularly sustainable energy concept and smart building technology. The decisive factor is the tower's geometry and its facade. Its sides are angled; its footprint

is polygonal. The orientation of all facade surfaces are dictated by the best option from an energy standpoint. The north side facing the old town is narrow, diagonally pointed to minimise the surface exposed to the wind. This facade is clad with vertical, matt reflective ALUCOBOND® naturAL tray panels, giving the tower an understated look and one which changes in response to the colour of the sky. The other facades meet at elongated corners to maximise the length of the sides and catch as much sun as possible. Their external cladding consists of glass elements, which also act as partial sun protection, is interspersed with 790 m² of PV modules. Black ALUCOBOND® tray panels



complement the dark PV modules. The entire building features a dark to light colour gradient, a shift from solid to dematerialised, and a silhouette changing from understated to dominant. With additional PV modules on the roof, the building's energy balance is close to zero. The residents can also use software to control all the smart home technology, heating, ventilation, lighting, blinds and electricity. They can access data about their individual energy consumption and the associated costs, and have hands-on control over it. Both technology and architecture focus on the user and the human factor. The top floor, at a height of 50 metres, is designed as a terrace for residents. The best place is therefore reserved for the community. A highlight and appropriate emphasis for our modern world, not just for Strasbourg.

Paul Herbert, Sales Manager
07584 680262 www.alucobond.com



PROJECT DATA

Project: Tour Elithis, Strasbourg, France
Architect: XTU Architects
Fabricator: Atalu
Installer: Soprema
Facade System: Tray Panels on bolts
Year of Construction: 2018
Product: ALUCOBOND® A2 naturAL
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Photos: Elisabeth Leblanc



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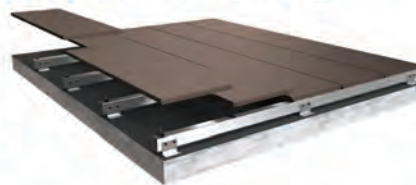
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Combinations unlocked

Combining cladding with stone, brick and other materials on residential facades can create character and have effective results, as Lisa Grosse from Cedral explains

Contemporary houses are particularly suitable for combining cladding materials – we are seeing a shift away from traditionally built brick housing to more creative construction solutions that employ a range of colours and materials such as glass, concrete, stone, brick, wood and plaster. Fibre cement cladding has become part of this trend, partnering with brick, natural stone, tiles, stucco and even metal. Fibre cement is developed to not rot, rust, warp or crack; it has excellent fire classification, and uses fewer raw materials and less energy and generates less waste than some traditional building materials.

Cladding allows designers to create a modern, sleek look – with a huge palette of colours and textures. With a grain imprinted along its mass, it imitates wood very well – while offering great longevity and low maintenance. Such boards can thus be used to cover a gable and provide a contrast with the rest of a building.

Design choice

A popular design choice now is shiplap sidings, a ‘New England’ style of wall cladding characterised by long planks, normally in white, that are mounted

horizontally to evoke the exterior of a ship. Another is Scandi-style slatted wood cladding, (an interior trend), which can also be used on the facade to add texture and dimension. It doesn’t have to be used for the entire exterior, as slat walls can work as accents or half walls, breaking up solid colour and changing the overall look. White, cream and beige are top colour choices for home exteriors but sage green, grey brown, blue grey and sand yellow are also appearing more often.

One reason for combining materials when building or updating a property is to create character and add an original, eye-catching focus. Other advantages are that this can give rhythm to the facade and can also underline the character of the house. A typical case is the addition of an annex with cladding that will deliberately create a contrast with the main building.

When it comes to facade cladding, there is a wide choice of materials, but some materials go better together than others. The choice between these multiple coverings will depend on factors such as local planning regulations.

Brick is widely used in urban settings, and in much of the countryside stone is

When it comes to facade cladding, there is a wide choice of materials, but some materials go better together than others



dominant – namely limestone, sandstone, bluestone or quartzite. Rough concrete has gained acceptance as a stylish cladding, and plaster has not gone out of fashion. Roof tiles are now spilling over onto the gables.

An example of successful combinations is adding an all-glass extension to an old, rough stone building. Another is using openwork wooden cladding on white-painted walls. Plaster and wood complement each other well. Footings made of large stones and a main floor of thin brick also work well in a design.

Case studies

A new build project in Newport-on-Tay, Fife, designed by BlackDog Architecture, mixes tones and textures on the facade to create a unique and contemporary property. The homeowners wanted the architects to create a low maintenance home while still being aesthetically striking in its scenic surroundings. Pairing wood effect 'Cedral Click' fibre cement cladding in white with soft tone in muted shades provided a different lighter tone and contrasting texture that complemented the overall design.

Stone and weatherboards also combine successfully to give a new lease of life to a

dilapidated 1970s house in the Ranmoor Conservation area in South Yorkshire. The fact that the building was in a conservation area could have posed a problem, and initially the homeowners faced some challenges from the local authority planning office. This choice for the facade received planning however, and the use of the two different materials provided a new contemporary look for a dated exterior.

Advice on combinations

There are endless combinations that might work – both practically and aesthetically – and some tips for achieving a harmonious result include keeping the number of materials/colours used down to a maximum of two or three – too much input can overwhelm the eye. Alternating a warm shade with a darker one always looks effective. On the other hand, using the same material in two different configurations, such as using the same bricks horizontally and vertically, does not give good results. Respect the alignments, otherwise the lines of perspective will lose cohesion, and importantly, consider the environment, the surrounding buildings, and the context.

Lisa Grosse is brand manager at Cedral

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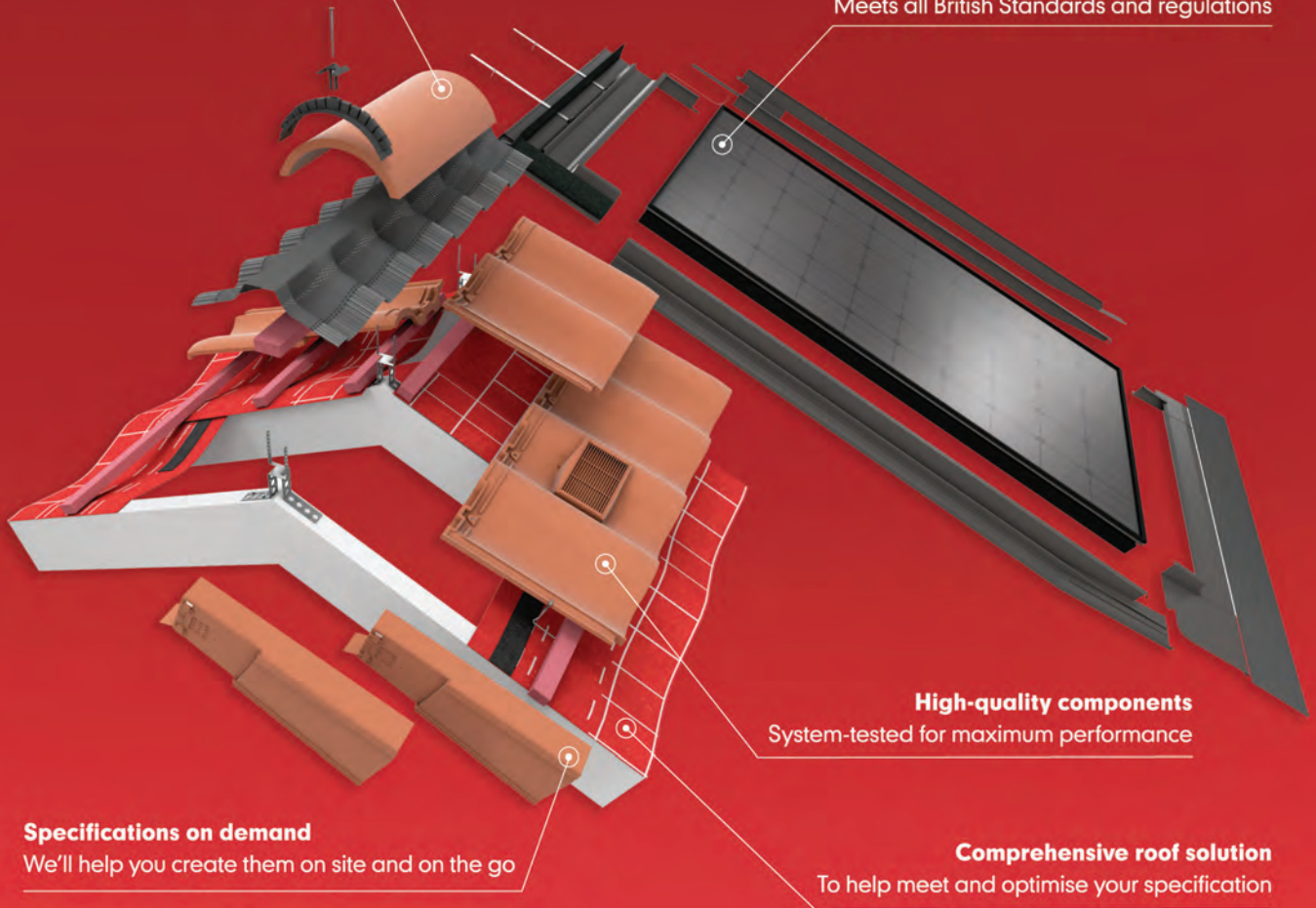
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Crittall's thermally broken T60 – a 21st Century solution

Steel window and doors manufacturer Crittall are reporting a surge in demand for its T60 range.

T60 is an innovative, thermally broken steel window and door system that combines the aesthetics of the company's traditional and much-loved fenestration solutions with 21st century levels of thermal and acoustic performance. The range incorporates an advanced, high-density polyurethane thermal barrier isolator, which facilitates the use of high-performance double- and triple-glazing up to 37mm wide. This ensures that T60 windows and doors exceed the demands of the Building Regulations, while remaining almost identical – in visual terms – to Crittall's traditional rolled steel profiles.

By employing thermal break technology, T60 can provide contemporary comfort levels in environments where traditional steel windows may have previously struggled. Equally importantly for architects and their clients, the windows and doors retain slim

sightlines, maximising both visual appeal and daylighting. Fitted with high-performance insulating glass, T60 will provide a whole window U-value as low as 0.8 W /m²K. Sound reduction over 40dB can be achieved using laminated sound-reducing glass. Each frame is fully welded ensuring strength and durability. As specifiers would expect from Crittall, T60 complies with the latest EN performance standards relating to air filtration, water permeability and structural wind-resistance.

The functionality of T60 is further boosted by a wide range of opening configurations comprising side, top and bottom; inward or outward; vertical and horizontal pivot (for the classic warehouse aesthetic); and double-leaf inward or outward opening doors. Tilt and turn options, together with reversible pivots and folding-sliding formats, will be unveiled later this year.

T60's visually clean and slender design means that it is ideally suited to



both newbuild and restoration projects. Traditional aesthetics ensure that the profile can be specified with confidence on listed buildings and projects in conservation areas.

Blue Chip Project

A new building in the grounds of historic Trinity College, Oxford, illustrates how T60 helps marry 21st Century environmental performance seamlessly with traditional aesthetic requirements.

Crittall's T60 thermally broken steel windows make a major contribution to the Levine Building's sustainability credentials.

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This means that when specifying Zenon rooflights, they can contribute a minimum of 1.5 points, in addition to the metal roof system, towards the building's overall BREEAM rating. These EPD points fall under the category of Material - Criterion Mat 02.

Over and above the metal roof system, rooflights can also contribute to two other categories: Energy, and Health and Wellbeing, as well as two other criterion for the Material Criteria.



THE SIMPLE WAY TO
GAIN A MINIMUM
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TRESPA®



Garador launches new and improved GaraRoll with DuraBelt technology

Garador has developed an innovative new roller door concept that will lift its range of GaraRoll roller doors into an exciting new era. Roller doors are one of the most popular designs for modern garages, but over time a build-up of dust and dirt on the surface of the door can cause abrasion on the paintwork which can lead to scratches and unsightly markings. To combat this problem, Garador has developed the DuraBelt, a unique anti-scratch system based round microcellular polyurethane elastomer which provides a protective layer between each lath as it rolls up. The whole system has been developed exclusively for Garador's GaraRoll roller doors to reduce scratches and prolong the life of the door curtain. It is now supplied as standard on all of Garador's GaraRoll roller doors.

01935 443 722 www.garador.co.uk

Evolve box range provides striking solution



Marley Alutec was recently specified to supply aluminium guttering downpipes, soffit and fascia, for a new church hall in Tweentown, Cheddar. The bold aesthetic and durable qualities of the aluminium system met the criteria for a striking guttering system that would be integral to the overall exterior design. "The Alutec products were

really easy to install allowing for a very neat and tidy finish," commented Steve Robinson. "The brackets were not visible, which further enhanced the modern and contemporary look of the build. The support offered by the company was equally fantastic, with Marley Alutec's local ASM always available on site to point us in the right direction."

01234 359438 www.marleyalutec.co.uk

Sto provides insulation for striking hotel



A portfolio of Sto products has been used to provide outstanding thermal performance for a prestigious new hotel in Ireland. The company's StoTherm Mineral M system, Sto-Rotofix mechanical fixings, Stolit render and StoColor Dryonic X-Black facade paint have all been used on the impressive new Dean Hotel. Sto Account Manager Gareth Hastings explains "Our StoTherm

Mineral external wall insulation system was ideal for this, especially when combined with our StoColor Dryonic X-Black facade paint which allowed them to use a very dark coloured render. This wouldn't have been possible with many other insulation and render combinations."

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Panasonic at CIBSE Build2Perform 2022



Panasonic is exhibiting at the CIBSE Build2Perform event at London Excel on 29th and 30th of November. The company will showcase innovations in its heating and cooling range as well as sharing technical knowledge with building services professionals. Panasonic will be showcasing its wide range of highly efficient VRF air conditioning systems, Aquarea air to water heat pumps, commercial cold chain range using CO₂ refrigeration, in addition to the Panasonic smart IoT control solutions. Also, visitors will be able to find out more about the nanoe™ X technology which can be deployed to help improve indoor environments.

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dormakaba sets the standard



Leading supplier of security and entrance system solutions **dormakaba**, has extended its revolving door portfolio with the KTV ATRIUM FLEX. Setting the new standard for entranceways, this innovative solution features groundbreaking design features in an extremely elegant form.

The new KTV ATRIUM FLEX features dormakaba's innovative KT FLEX Direct Drive System, the first of its kind purposely designed for revolving doors. Tested for two million cycles, the drive is housed in the door's ceiling and uses contactless magnetic fields instead of conventional belts and gears to propel the door panels.

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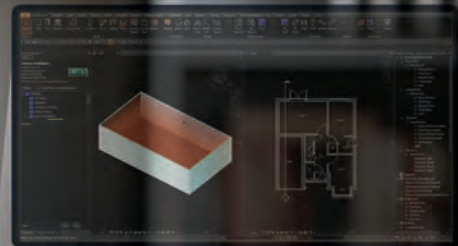
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The compliance balancing act

Balancing air quality and guidance with meeting energy and carbon reduction metrics can be a challenge. Ian Rogers from Gilberts Blackpool offers compliance advice

Designers and specifiers of HVAC are facing a raft of new, diverse issues to address, prompting a need to change the way we achieve good ventilation and therefore air quality within our buildings. Agile workspaces, reduced energy consumption, changing regulations are all playing a part.

The complexity is exacerbated by the fact that, alongside the prevailing drive to reduce a building's carbon footprint and energy usage, more often than not we are dealing with re-fitting or refurbishing existing buildings: some 80% of the buildings that will be in use by 2050 are already constructed. Thus we are inheriting a design that has to be adapted, rather than creating a new solution from scratch.

Manufacturers have been working to improve existing or devise new products to support the changing building services environment. When properly designed, "accessorised" and integrated into a building, natural ventilation can often deliver the criteria needed today, especially when its latest derivative – hybrid ventilation – is employed.

With computer-based systems now available, such as BIM and CFD

(Computational Fluid Dynamics), it is possible to virtually test any design before installation, to ensure appropriate levels of ventilation – now at least a minimum 10 l/s/p – is achieved along with appropriate filtration, to achieve the Health & Safety Executive's <5000 ppm long term.

According to the RCIS, demand for offices is on the increase – up 30% in 2022. The offices of the future need to be agile and increasingly are open plan to achieve that flexibility of use and occupancy. Whether new build or refit, hybrid ventilation is a great way to tick all the boxes in terms of ventilation levels, sustainability and indoor air quality (IAQ).

Hybrid ventilation centres around stand-alone natural ventilation for each space/zone, complimented by an as/when needed mechanical boost, usually via a low energy fan. It mixes incoming fresh air with warmer internal exhaust air to maintain compliant IAQ in each stand-alone space. The fresh air is drawn in through the facade at high level, and exhausted through the same route, once natural air movement principles have circulated the air throughout the space.

Being at high level, and the fresh air



It is now possible to virtually test any design before installation, to ensure appropriate levels of ventilation

tempered as it is drawn into the interior space, there are no cold spots or draughts, optimising occupant comfort.

Most systems can be tailored to individual specification by the inclusion of LPHW heat coils, connected to heat pumps and additional filtration. It is even possible to run on 100% fresh air, using the optional heat coil to temper the incoming air temperature. This keeps a cleaner and safer environment while ensuring indoor temperatures are not compromised, thereby avoiding cold draughts without the need to boost heating systems to maintain internal comfort levels. Using the heat coil also eliminates the need for radiators, which optimises usable floor space.

Even if mechanical ventilation is used in office space, a little careful thought in the design of the way the air is delivered into – and exhausted from – the interior can optimise use and flexibility of floor space. Linear bar grilles located around the perimeter, swirl diffusers in an exposed ceiling or raised floor are some examples.

Coinciding with Covid, but driven by the need to reduce energy consumption and cost (running at around £0.5bn per year), HTM guidance in the healthcare sector was updated to require natural ventilation to be

the default, with mechanical ventilation as a last resort.

In such environments, the air movement paths need to be different, particularly in operating theatres where the air needs to “wash” over the patient on the table and flow away at low level to effectively remove airborne pollutants or particulates. Software modelling is crucial to validate any design in such a sensitive environment.

Schools too are also an increase in building, and the latest Building Bulletin 101 guidance recommends hybrid ventilation as the most appropriate solution to balance IAQ and sustainability.

The trick for architects, going forward, is to work with experts such as building services consultants, and, ideally manufacturers. Working to balance such complexities on a daily basis, they have the in-depth knowledge to guide specifiers. Architects and other consultants can then be sure that the systems are as energy-efficient and environmentally friendly in all aspects as they can be. The desired aesthetic can still be delivered, but with the appropriate quality of internal air and comfort.

Ian Rogers is sales director at Gilberts Blackpool

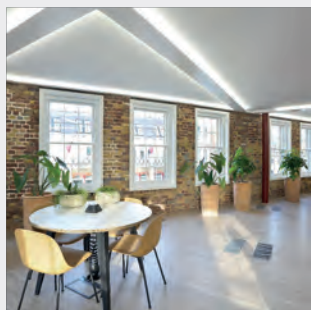
Filtering the options for IAQ



Specifiers can tailor-make their internal environments using an innovative approach to ventilation devised by **Gilberts (Blackpool) Limited**. The air movement specialist has developed a range of modular ‘accessory’ boxes to integrate with its innovative hybrid Mistrale Fusion System (MFS) stand-alone ventilation. The concept enables easy addition of various filtration options, to the MFS through-wall or through-window unit. Thus, just by adding the appropriate box behind the core Fusion unit, the ventilation can be simply and efficiently adapted to the specific requirements of each room, be it F2-7 rated inclusive, or F7+NOx filters. “Using this modular approach makes it as simple as possible for the precise needs of each room to be met, including compliance with the latest requirements regarding Covid,” explains Gilberts’ Technical Director Roy Jones. “For example, one facade may overlook a busy road, so require greater filtration of emissions from diesel and other pollutants. Specification of the appropriate filtration box to the individual MFS unit means those needs can be met, without complicated ducting, wiring or building management systems.”

01253 766911 info@gilbertsblackpool.com

AET’s sustainable answer



What is sustainability? Well, that’s the question we should all be looking to answer, right? For years developers have been progressing their projects using tried and tested methods, but those methods are now being put under the spotlight. Why? Because in most cases, these methods of building have been proven to be unsustainable. Many commercial office buildings are designed with ceiling-based air conditioning systems but are they truly sustainable? For changing occupiers, moving pre-fitted systems, and adding additional duct work is often required, resulting in an expendable amount of waste. **AET Flexible Space** offer a very simple answer to this problem, as we do not require the same duct or pipework required by ceiling based systems. AET systems use the floor void as a plenum and are inherently flexible. This means developers can fit out the building at CAT-A stage safe in the knowledge that when the new tenants take ownership they can reconfigure the existing equipment easily and effectively in a matter of minutes. In a nutshell, AET’s underfloor air conditioning system is the sustainable option.

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Challenges & opportunities

Dennis Milligan from the British Flue & Chimney Manufacturers Association gives his view on the ups and downs for the stove and chimney/flue industries currently

The regulatory framework for construction is changing; from the Building Safety Act to the Building Safety Regulator, and National Construction Products Regulator, the Building Regulations Approved Documents are also being revised.

As far as heating appliances and chimneys/flues are concerned, it could be up to five years before the review of Approved Document J (Combustion appliances and fuel storage systems) is published. New product and installation standards for wood burning stoves and flues have also been delayed by the European Commission. In the meantime, up to date information on product standards can be found in guides on the BFCMA website www.bfcma.co.uk

The new Environment Act contains the long-anticipated Ecodesign changes for wood burning and solid fuel stoves. All new appliances must now comply with the new efficiency and emission limits, and appliances placed on the market for sale before 1 January 2022 can still be sold. The Ecodesign limit for particulate matter (PM) is 55% lower than for Defra Exempt stoves – the gold standard for many years. It is encouraging that many Ecodesign stoves produce significantly fewer emissions than the Ecodesign limit, and further emission reductions are being worked on.

Stove manufacturers have employed a number of design features to reduce PM emissions. One of the ways in which they have reduced emissions is to retain the products of combustion in the fire chamber longer before releasing them into the flue. This needs to be factored into a chimney/flue design as this can reduce the velocity and temperature of the flue gases as they enter the flue. Most residential chimneys/flues rely on natural draft, the pressure difference between cold and hot air, to draw the flue gases up the chimney to the atmosphere. A potential reduction in velocity and temperature could reduce the draw of the chimney or flue. A straight chimney is the best solution, but where this is not possible, due the construction of the

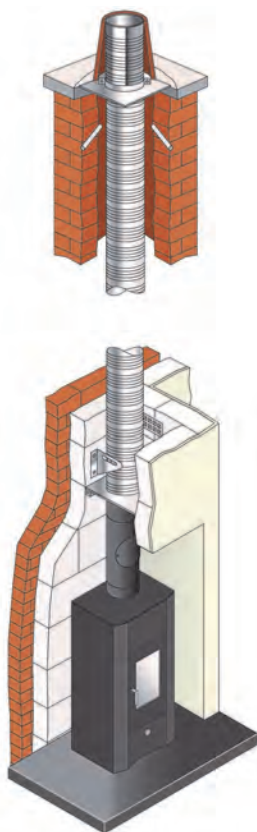


dwelling, there should not be more than four bends. The angle of the bends should be no greater than 45° from the vertical.

When constructing a new dwelling, the route of the chimney should be thought about at the design stage. It is always advisable to check with the stove manufacturer's recommendations and the chimney/flue company. BFCMA members can advise on chimney design and installation. This includes using standard software to check that the flue design will create the required draw.

The Ecodesign Emission limits could also spell the end of the traditional open fire, and this could bring about a change for architects who have tended to include 200 mm flues and a standard fire opening in their detached house designs. Architects and developers may now decide to install smaller flue diameters for wood burning stoves. This will also benefit architects in the air loss calculation in SAP. The general opinion is that new open fires will not be able to meet the new Ecodesign emission limits. HETAS, the largest competent persons scheme provider for solid fuel,

When constructing a new dwelling the route of the chimney should be thought about at the design stage



have advised their installers to check the emissions test results before installing a new open fire. There is still some confusion over decorative solid fuel appliances which are not designed to give heat to the room, like a basket in an open chimney with no restrictions. At the time of writing, it is unclear if they will have to meet the Ecodesign limits.

Stove sales have always been linked to the price of oil and gas, and as the price of oil and gas soars, sales of wood burning stoves are increasing.

The UK's alternative CE Mark

Brexit has led to the creation of the UK's replacement CE Mark, UKCA. After a number of false dawns, the UKCA mark will be mandatory in Great Britain from 1 January. As part of the Brexit deal, products sold in Northern Ireland will still have to bear the CE Mark. Both the CE Mark and UKCA mark are particularly important for flues. The UKCA mark confirms that the flue meets all the relevant chimney standards and has been tested in accordance with these standards.

Chimneys and flues are required to discharge a variety of combustion gases. Different types of flue will be required to

safely handle the different gases. Linked to the UKCA mark is a user-readable classification system that designates the features of the flue components. The features covered include temperature and pressure rating, fire, condensate, corrosion resistance and distance to combustibles. With stainless steel components, a label showing the classification must go with each flue component so that its specification can be easily verified.

The UKCA mark applies to both flue components and to system chimneys. It is worth pointing out that a CE/UKCA mark for a system chimney applies to the complete flue system, including add-on components like rain caps. The use of components that have not been tested with the flue invalidates the CE/UKCA mark and turns the system chimney into a custom flue.

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

Dennis Milligan is president of BFCMA





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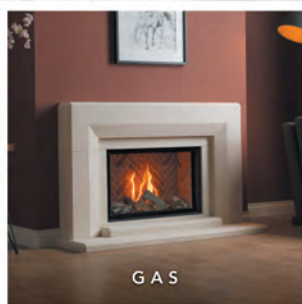
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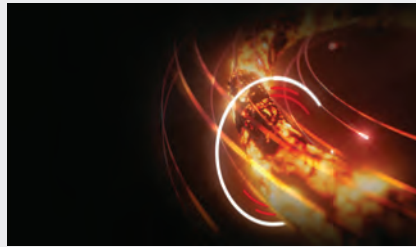


ROCKWOOL® launches NyRock® technology to create lowest lambda stone wool in the UK

As pressure mounts on the construction industry to deliver more thermally efficient buildings while preserving standards of fire and acoustic performance, ROCKWOOL has launched NyRock technology, an evolution in stone wool composition that delivers the lowest lambda stone wool insulation available in the UK.

Created using a new patented production process, this next generation stone wool insulation has a more efficient fibre structure that can deliver thermal conductivity as low as 0.032 W/mK. Critically, this means that U-values can be met with comparatively thinner constructions, which in the case of external wall applications, creates the potential for additional interior floor space over a given building footprint.

Alongside its improved thermal efficiency, NyRock technology still delivers all the additional benefits of stone wool insulation including durability, the ability to be recycled indefinitely, and acoustic and fire



performance. Comprising naturally non-combustible volcanic rock, ROCKWOOL solutions powered by NyRock technology achieve Euroclass A1 – the highest possible rating – and can withstand temperatures in excess of 1,000°C.

NyRock technology will be rolled out across a range of ROCKWOOL insulation solutions during 2022.

Paul Barrett, head of product management at ROCKWOOL UK said: “To limit the impact of climate change and support the delivery of net zero carbon in the UK by

2050, it's the responsibility of manufacturers like ourselves to go further, re-inventing and improving on existing solutions. NyRock technology does just that.”

“While stone wool insulation is already known for its proven benefits such as longevity, ease of install, circularity, and non-combustibility that is crucial for protecting people and properties, our patented technology builds on these advantages further.”

“Whether specifiers need a solution to the lower U-values of England's new Approved Document L that also maximises floor space, or a non-combustible option for a high-rise property with enhanced thermal and acoustic performance, NyRock technology's industry-leading lambda value for stone wool and ability to reduce the thickness of a construction element support those requirements.”

01656 868 400 rockwool.com/uk/nyrock

ROCKWOOL® launches low lambda non-combustible insulation for external walls



ROCKWOOL has launched NyRock® Rainscreen 032 and Frame Slab 032, the first in a series of products that use NyRock technology, a patented production process that delivers the lowest lambda stone wool insulation available in the UK. NyRock Rainscreen 032 is specifically developed for ventilated cladding systems and sealed structures such as curtain walling. It combines a low thermal conductivity of 0.032 W/mK and a non-combustible Euroclass A1 rating along with independently tested acoustic performance and the potential for thinner wall constructions. Manufactured using patented technology, NyRock Rainscreen 032 has a more efficient fibre structure than traditional stone wool products, resulting in improved thermal properties. As well as suited to ventilated facade systems, NyRock Frame Slab 032 can be used in a variety of external timber or steel frame applications, including with a brick outer and with or without a service void. All ROCKWOOL stone wool insulation comprising NyRock technology provides water resistance plus can be recycled indefinitely.

01656 862 621 www.rockwool.com/uk/nyrock

TPS360 provides a resin solution for Viridor recycling facility



TPS360 has provided a total project solution, including a class-leading resin floor, for a redeveloped recycling and waste management facility. Operated by Viridor, Cardiff Energy Recovery Facility (ERF) is the largest of its kind in Wales and treats waste from the local authority and local business contracts. The challenge on this particular project was to provide a hard-wearing finish for a demanding and potentially hazardous, live environment where 50 tonne front loaders and other heavy plant equipment are operated. The work also had to be scheduled in such a way that the facility could maintain 24-hour operation without any downtime. It was once again TPS360's experience and excellent project portfolio which opened the door for them on this project. The company worked closely with the client from an early stage, installing test samples and carrying out trials to ensure the best resin specification. Ucrete IF is a unique HD polyurethane resin floor which provides an extremely tough surface for environments subject to extreme impact and abrasion. It features a dense and impervious iron-armoured surface, which provides protection against severe abrasion.

info@tps360.co.uk www.tps360.co.uk

Klick deliver lab furniture for biotech facility



Klick Laboratories offer a flexible service providing specialist laboratory furniture design, installation and an optional one-stop-shop solution for the fit out of lab facilities. Deeside based Biofortuna were looking to convert a 16,500 sq ft warehouse shell to become their headquarters and house their molecular diagnostic testing facility. Klick co-ordinated the fit out including all fixtures, fittings and HVAC. The lab furniture was designed to suit the client's workflow including modular mobile units to provide flexibility for business expansion.

0161 998 9726 www.klicktechnology.co.uk

Forbo's latest designer collection



Award-winning architect and designer, Mac Stopa, has explored new themes and designs that let him express his artistic interpretation through the form of flooring. Using Forbo Flooring Systems' high-definition digital printing techniques, the new 'Created by Mac Stopa' Flotex range consists of graphical and expressive designs, which will allow specifiers

to create strong and aspirational spaces. The collection is split into four different designs, each of which are available in a variety of colourways: Flower, Trapezoid, Wicker and Hexagon (pictured).

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



Praising appearance of Marmox niches

A prestige housing project in New Romney, Kent, has seen a leading developer make extensive use of the prefabricated wall niches which have recently been added to the range of bathroom and wetroom specialist, Marmox: saving time and cost while facilitating the completion of luxurious interiors for the properties' new occupants. Mulberry Place is a beautifully landscaped development of 150 new properties by Pentland Homes. As a highly experienced contractor and developer, Pentland is always seeking to adopt new technologies which can help deliver schemes on time and to budget and is installing more than 250 of the Marmox units in two different size options. The Site Manager for Pentland Homes, Glynn Pogue, commented: "The Marmox niches are being well received by the purchasers who like the appearance and the usability of the recesses for storage. They have definitely been a success from that point of view."

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VitrA celebrates 30 years in the UK

International bathroom brand VitrA is celebrating 30 years of supplying bathrooms in the UK.

The British bathroom world was very different 30 years ago when Levent Giray and his team brought VitrA to the UK. VitrA was one of the first European manufacturers to break into the market – which was dominated by British names – thanks to its quality manufacturing, strength in domestic market leadership and innovative production capabilities.

When VitrA entered the UK market in the early 1990s, the company already had 30 years of experience in ceramic manufacturing, ten years of experience in brassware manufacturing, and an enviable portfolio of products.

From the start, VitrA showed commitment to acting as a British manufacturer instead of an importer. While VitrA brought new design styles into the UK, products were always produced according to UK plumbing systems. VitrA also designed products explicitly suited to the British market, such as the Chelsea and Chartwell ranges. The company was also one of the first non-British manufacturers to become a member of the Bathroom Manufacturers Association, reflecting its sense of duty to the UK industry.

Appearances at shows such as ISH and Interbuild, showing innovative, quality



VitrA's London Showroom – Liquid designed with Tom Dixon takes centre stage

products, won VitrA support early on among independent retailers. Ranges like VitrA's Riva, Pluto, and Berwick are still remembered by retailers who built their business on these and other ranges.

VitrA has played a key role in pivotal bathroom design developments, including wall-hung pans, which the brand has manufactured since the late 1980s. VitrA was also one of the first to introduce an affordable, good-looking shower toilet option into the UK market. Not only is the popular V-Care shower toilet priced incredibly competitively, but it's also virtually indistinguishable from a regular wall-hung toilet.

VitrA has always had a strong focus on innovation. In the early days, the brand pioneered advanced manufacturing technology, including the integration of CAD software. In 2011, VitrA opened the Innovation Centre. This state-of-the-art research and development centre produces and trials new products and technologies for international markets and specifically for the UK market, considering the UK demands for plumbing, water variations and space requirements. Several unique solutions, such as VitrA Rim-ex rimless technology and VitrA Hygiene ceramic glaze, have originated from the Innovation Centre.

Continuous investment over the thirty years allowed VitrA to lead manufacturing processes and remain hugely flexible in logistics and supply. In the UK, this was enhanced by building relationships with the strongest British distributors – early on with



A popular bathroom range from 1990's VitrA – Arion

Scorpion and later Barwick and Davroc. Over the years, Vitra has worked hard to build retailer relationships and introduce the brand to the British public. Vitra started the Showrooms of Excellence programme in the late 1990s, which continues today as an integral part of the sales strategy. These longstanding and effective partnerships form a network of retail experts that keep Vitra close to the marketplace.

Building on the success of the retail market, Vitra started to supply to the commercial market over 20 years ago. Within the first five years, the company won the contract for the new Heathrow T5 terminal and created the K basins specifically for this project. Vitra has also nurtured relationships within the hospitality sector, including IHG & Hilton, leveraging the company's global presence.

Vitra has also built longstanding relationships within the residential contracts market with architects, developers and housebuilders. In the early 2000s, Vitra started working with Urban Splash on projects including Moho, designed by shedkm, and Chips, designed by Will Alsop. Recent residential projects for Vitra include The Cocoa Works apartments by Latimer and the Phoenix apartments by Capital and Centric.

The range, called 'Istanbul', was and still is unlike anything else on the market. For the UK, this was the start of a long history of designer collaborations, culminating in the launch of Liquid with British designer Tom Dixon last year.



Vitra's Clerkenwell, London Flagship showroom is also a creative space and ideas hub

Today, Vitra operates over 2,000 sqm of warehouse space in Oxfordshire and has a team of 50 people. The company continues to grow from strength to strength, addressing the industry's new challenges and changes in

buyer behaviour.

Last year Vitra opened a showroom in London for architects, designers, and specifiers, marking a new milestone in the company's journey. Vitra London is not only a space to showcase products, but also to engage with the community through events, workshops, and installations.

Levent Giray, retiring Managing Director (end of July 2022), says, "It is fair to say we have come a long way in three decades. Brands pre-eminent when we arrived have largely disappeared. Internet sales and the IoT are pervasive, with companies interacting directly with consumers in ways unimaginable back then. The future is exciting. Leaving Vitra after 30 years is bittersweet, but in the skilful hands of Steve Breen and the team, I know that Vitra will continue to build on its reputation for good design, high-quality products and top customer service."

Managing Director Steve Breen says, "I'm delighted to be leading Vitra through this next chapter. Vitra is in fantastic shape with a great team of staff and management. The foundations built over 30 years mean we are well placed for the next 30."

01235 750990

www.vitra.co.uk



Istanbul developed with Ross Lovegrove remains unique in the bathroom market

Välinge innovation shakes up the wood flooring market

Välinge Innovation UK has introduced the Välinge Flooring Brand to the market this year – and rewritten the rules on hardwood flooring in the process.

The company's range of hardened wood products features the technologies of Woodura® and 5G® Dry™, representing the next generation of highly innovative engineered wood floors. Woodura® is a patented surface technology which gives outstanding durability and is also highly sustainable. 5G® Dry™ is a premium water-resistant fold-down system which is unique among hardened wood flooring products on account of its ease of installation and its water resistance.

These new products are getting an enthusiastic reception from UK buyers, who welcome the way in which the new products from Välinge Flooring combine the beauty and feel of a real wood floor with exceptional water-resistance, durability and sustainability.

To meet increasing demand for its new products in all markets where they are active including the UK and Ireland, Välinge is now ramping up its capacity, both at its headquarters in Viken (Sweden) and also by setting up a new mega-factory in Ogulin (Croatia).

The company is taking this step to protect its supplies in a situation where a raw materials crisis was already strongly affecting the wood flooring industry, and this has been greatly exacerbated by the war in Ukraine. Together Ukraine and Russia account for about 25 per cent of all oak top



layers produced for the European market and the shortage of oak in general and parquet floors in particular is now having an impact on the market, jeopardising many construction projects, which now face the risk of major delays due to cancelled deliveries of traditional wood flooring products.

The first phase of the new Croatia factory is scheduled to be operational in 2023 and the factory will be completed by 2027. The massive new complex will include a warehouse, press hall, process hall, powder production, energy station and offices. The two factories together will eventually have a

production capacity in excess of 20 million square metres annually.

Given that the Woodura® surface technology maximizes the amount of product that can be manufactured from every log, it is possible to see that Välinge's capacity in the future is going to be truly impressive. Ten times more flooring can be produced from the same amount of timber, compared to traditional engineered wood flooring and 30 times more flooring compared to solid wood flooring. The surface created also provides outstanding impact and wear resistance, making hardened wood floors truly worry-free.

The patented Woodura technology involves the fusing of a thin sheet of real wood with a wood fibre core through a powder mix layer. Compared to traditional wood flooring, the durability of the wood wear layer is massively increased.

In the UK, Välinge Innovation is headed up by General Manager Simon Darbyshire and National Key Account Manager for UK & Ireland, Richard Banham.

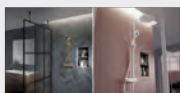
"We are now once again able to offer something very new to the market with our latest range of finished hardened wood flooring products in XL and XXL sizes," says Simon.

01948 302270

www.valingeflooring.com



Aqualisa expands shower range



Aqualisa has extended its iconic Midas™ 220 mixer shower line-up with the addition of two new ranges in Brushed Brass and Matt White – meeting the growing consumer demand for new options and colourways in the bathroom

brassware sector. Three options are available in each new colour: Midas 220 Single Outlet Shower; Midas 220 Dual Outlet Shower; and Midas 220 Bath Shower Mixer. An easy-fit bracket is included with each product for added convenience. The Aqualisa Midas 220 collection is backed by the Aqualisa five year guarantee. The range is also available in Chrome and Black Metal finishes.

01959 560010 www.aqualisa.co.uk

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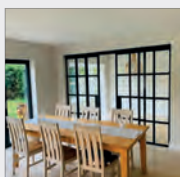


Exclusive British bathroom brand Elisa™ has announced the availability of its new line-up of premium taps: the Antonella™ collection. Designed to complement the recently-launched Elisa Emilie™ and Rosa™ modular concealed mixer shower range, homeowners can select from a large and small single lever pillar tap, a discreet and elegant wall mixer tap, and a stunning free-standing bath filler with shower attachment. All

models are offered in a choice of classic chrome, brushed brass or a matt black finish with an on-trend, minimalist profile.

01959 560003 www.elisabathrooms.com

Sliding steel doors provide stylish link



Members of the Steel Window Association (SWA) supply and install internal sliding doors (pictured) in a wide range of sizes and styles to suit all types of interior schemes. They create a stylish link which maximises light transmission while cutting draughts and noise transmission from adjoining spaces.

Sliding doorsets are not fire rated. They are, however, glazed with toughened or laminated glass for safety and can be lockable. They are also available with many different types of handles and in bespoke as well as standard RAL colours.

www.steel-window-association.co.uk

One-Stop Shop for Strand Solutions



Strand Hardware has introduced new products to its panic and emergency hardware range to provide customers with a one-stop shop for complete solutions to key products. Armoured door loops, power supply units (PSU) and PSU batteries to

provide battery back-up are now available to purchase alongside the Strand Antipanic Motorised Touch Bar range. Until now, Strand Hardware customers have needed to source these items from other suppliers. Being able to buy them in one place should save time and money by incorporating into existing orders, thereby reducing costs.

01922 639111 www.strandhardware.co.uk

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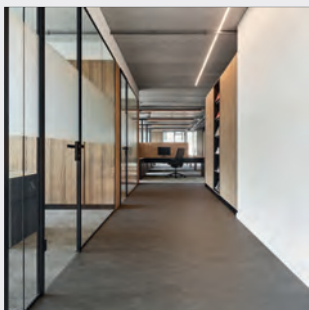
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A neat solution for a variety of projects



Using an advanced multi-layer construction to provide installation and comfort benefits, IVC Commercial's Origin 55 Engineered Click Acoustic (ECA) is the ideal floor for new and refurbishment projects. Suitable for fast, glue-free installs over a range of floors, its improved comfort and acoustics make Origin 55 ECA a collection that looks after people too. There for when you when you need a fast, glue-free transformation with minimal fuss, Origin 55 ECA's makes nature's best looks simple to install. With a patented Uniclic® locking profile – Unizip® on herringbone – and designed for use straight on top of old floors or subfloors, Origin 55 ECA's integrated pad absorbs irregularities for a smooth and worry-free floor. As a bonus, it also cuts down on noise and improves walking and standing comfort to support wellbeing. From seamless transitions of wood into stone to the classic elegance of herringbone, the floor makes the spirit of the great outdoors easier to achieve. Made in Belgium from up to 30% recycled content and completely recyclable, Origin 55 Engineered Click Acoustic is a high-quality floor that's a really neat solution for today's projects.

01332 851 500 www.ivc-commercial.com

Granorte presents Delivering Nature



Granorte's premium Delivering Nature cork floor and wall covering collections are now presented in a range of luxury folders ready for quick delivery across the UK. Beautifully made and featuring samples of every single colour and design available in each collection, the folders are perfect for deciding on the right Granorte Delivering Nature floor or wall from a wide range of unique cork products. So, whether considering the raw bark wall tiles of Rusticork or traditional floors of Naturals, Granorte's luxury presenters are an ideal place to start your journey into the beautiful world of cork. Delivering Nature is Granorte's collection of high-design and high-specification wall and floor products. Using cork as the primary aesthetic detail, or to support comfort, durability and sustainability; Delivering Nature sees the Portuguese manufacturer innovate and find new ways to embrace cork in interiors. Equally suitable for retailers, independent interior designers, commercial design companies and architecture practices looking to explore Granorte's unique range of cork products; the luxury presentation folders are now available to order directly from the company in the UK.

01785 711131 www.granorte.co.uk

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There's more to floors

Manufacturers can help specifiers navigate their carpet choices to help underpin sustainability aims, says Becky Gordon from Interface

Building sustainably is a challenge that applies at a macro level across entire projects. However, there's no silver bullet; it's ultimately achieved via lots of smaller decisions made at every stage of the design and construction process.

Specifying decisions are opportunities for architects and designers to make a tangible positive impact on the planet, and such opportunities are more abundant than you might think. Flooring can make a real difference to the sustainability of a building if chosen correctly.

Assessing products and suppliers for their sustainability can be tricky to navigate. Architects can often be left fitting together a jigsaw of different scoring and certification methods. With all aspects of a product considered, including the materials used to make them, the manufacturing process, supply chains, usage and disposal, there is a lot to think about.

Cradle-to-gate & back again

The demand for carbon transparency has grown significantly in recent years, which has led to more and more manufacturers producing Environmental Product Declarations (EPDs). These contain third party verified data on products, allowing the specifier to see the carbon impact at each stage of the life cycle, including transport and installation. Manufacturers providing this information is an important first step from which action can follow.

Manufacturers often report their product's carbon footprint based on the "cradle-to-gate" data, which includes the raw materials, transport to the factory and manufacturing process. This is the element of a product life cycle that the manufacturer is in control of. With insights from their life cycle assessments, manufacturers can reduce the carbon emissions of their products. When specifying with climate in mind, it's also important to keep embodied carbon as the benchmark – an indicator of both the carbon credentials of a product itself and its manufacturer's measures to reduce the overall environmental impact.

To make a real, positive change, it's also

crucial that manufacturers continuously work to lower the carbon footprint of their products. This gives specifiers the ability to select products that contribute to their customers' sustainability goals, regardless of design brief and budget.

Thinking about end of life

Architects' view of the impact of a product they specify must go beyond just the completion of the project, extending through its use in a space, to the end of its life and disposal. The latter, in particular, can have a sizeable environmental impact and so represents an important opportunity for emissions reduction.

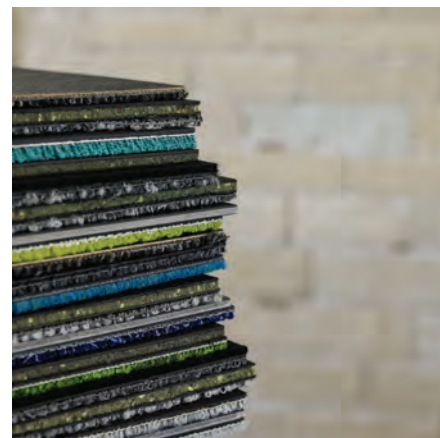
It's important for specifiers to take time to research the disposal options for products, as there will often be better alternatives to ending up in landfill. When looking at the different end of life options, a waste hierarchy should be used – prioritising reuse where possible. Some products can even be recycled back into new products.

Interface operates the ReEntry programme, which allows customers to send back used carpet tiles and, in addition to recycling, facilitate their reuse by charities, local businesses and others in need. These reuse schemes not only prevent products going to landfill, but increase their lifespan, meaning fewer emissions from new product creation.

Schemes like these are a sign of manufacturers beginning to embrace the circular economy. Providing viable and accessible opportunities for recycling and reuse helps to close the life cycle loop, with the objective being a completely circular process, in which as few new raw materials are needed as possible.

How manufacturers engage with ideas such as the circular economy is a good barometer for their willingness to go the distance when it comes to sustainability, and something architects must be aware of when deciding which products to specify.

Becky Gordon is regional sustainability manager at Interface



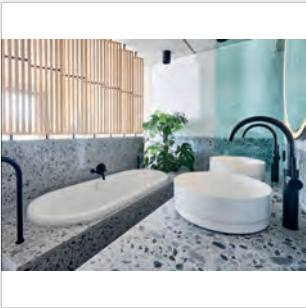
A world first moves Unilin Panels closer to circularity



Transformational recycling technology from **Unilin Panels** reclaims wood fibre from HDF and MDF and gives it a second life. MDF and HDF boards are commonly used in furniture and interior design, yet it has been impossible to recover and recycle them for reuse. Unilin Panels is beginning its journey to change this, reclaiming the wood fibres from HDF and MDF in a viable way for reuse in the production of high-quality fibreboards. Over time, it will lock-in 380,000 tons of CO₂ per year in the circular production of fibreboards. In the initial phase of onboarding technology, Unilin will use it for internal recycling at its Bazeilles production site, which has a history of cutting-edge production technology. Production capacity will gradually be increased to allow the recycling of externally sourced fibreboards and laminate floors with the goal to replace at least 25% of raw material with recycled fibres by 2030. This patented technology is a world-first and part of a wider investment programme in sustainable technology and initiatives, including a further €160m investment for projects over the next two years.

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

Introducing Nueva the latest addition to Kaldewei's "Luxsustainable" bathroom solutions

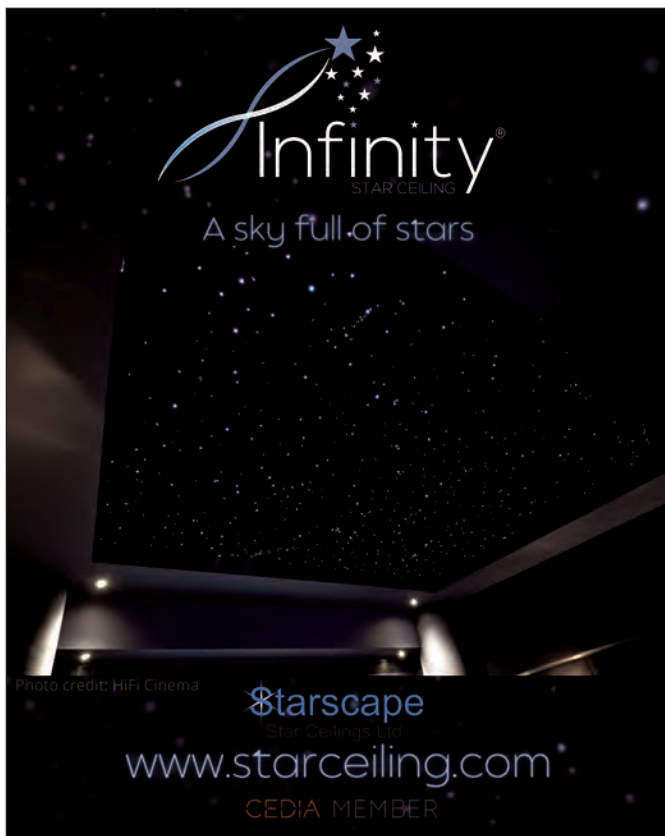


Kaldewei is a brand with a strong ethical and ecological conscience, and a pioneer in the field of sustainability and as such their sanitaryware was the go-to solution for TV Chef Olaf Baumeister, when selected the bathrooms for his new project the luxury Hotel Seegarten, in Germany.

In addition to the Centro Duo bathtubs, they also installed the new Nueva washbowls designed by Werner Aisslinger in 49 of the guest bathrooms. The hotel is the first to receive the Nueva, Aisslinger succeeded in giving the bowls made of Kaldewei's steel enamel a unique accent. The Nueva has a clear, authentic design, the elegant contour is offset adding a graceful precision. The design received the Red Dot Award, at the end of June 2022 and is destined to become a classic.

As part of their commitment to the environment Kaldewei are using Bluemint steel which reduces their carbon output by 70% enabling them to produce these luxurious, sustainable bathroom solutions and coining the term Luxsustainable.

01480 498053 www.kaldewei.co.uk



Knightsbridge goes full tilt



Knightsbridge has taken the next step in its lighting evolution with the inclusion of SpektrLED® Tilt to the configurable, Knightsbridge SpektrLED® series. SpektrLED® offers so many combinations of wattage, colour temperature and bezel choice that the product

provides a genuine 40-in-1 fire-rated downlighting solution, now in both fixed and tilt versions. With the introduction of SpektrLED®, Knightsbridge has removed the limitations of traditional downlights, offering versatility, performance and style in one unique package, and allowing for customisation and personalisation of lighting design without resorting to multiple lamp types.

01582 887760 www.mlaccessories.co.uk


Keller launches Cottage Life kitchen



Natural materials are trending and rapidly growing in popularity, especially in styles that are charming and simplistic without feeling dated or old-fashioned. With this in mind, Keller is thrilled to announce the development of Cottage Life, the premier country style kitchen.

Utilising stoic stain dark grey oak and trendy Bronx linen, the colours and materials in this uncomplicated design prioritise clean, pristine living, unblemished by the rigours of modern life. The interior is cloaked in colour 'mist', a series of white, grey, and black shades that create a remarkably striking veneer.

www.kellerkitchens.com




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Low Waste and Great Taste



Apricity is a low-waste cooking and sustainable food sourcing restaurant in London's Mayfair. Headed by award-winning chef, Chantelle Nicholson, this restaurant with purpose has an interior reflecting its low impact approach to dining, including recycled content tiles from Parkside. When it came to equipping the reception, bar and toilets with surfaces that was easy to maintain, durable and lasting, Parkside's recycled content tiles were a good choice. Object Space Place selected the 70% recycled content of Bruar, as well as Sensi and Kingham. For the bar walls, Bruar's hand-crafted look in a glossy teal colour has been installed herringbone with a contrasting white grout. Standing out from Apricity's terracotta and plaster palette, the tile provides a striking backdrop. A similar hand-crafted feel continues with Kingham used for splashbacks and walls in water closets. Here, an ochre shade complements brass sanitary ware and the terrazzo vanity tops for the second-hand sinks. Parkside's Sensi tiles also deliver a hardwearing and lasting surface on floors.

0116 276 2532 www.parkside.co.uk

A "game-changer"



Securiscape's Glide Bollard HVM system is now becoming a familiar sight on Britain's streets – including in the shadow of Wembley Stadium. Designed to control vehicular access, the Derbyshire firm's system consists of a series of rail-mounted bollards which can be moved manually side to side, yet are capable of withstanding the impact from a 7.2 tonne truck travelling at 40 mph. They are also inexpensive to install and require extremely shallow footings, which the rail the bollards move along buried just 240 mm deep into the road or pavement surface.

01335 370979 www.securiscape.co.uk

Resiecco on point at shopping centre



Since 2018, Castle Point Shopping Centre in Bournemouth has been carrying out a series of staged reparation and expansion works to both the external car parks and walkways across the site. Having originally sealed the shopping centre in 2015, Castle Point knew they could rely

on Resiblock to provide sealing solutions that would ensure long term asset protection. Sealing works continue to take place in the current stages of redevelopment and set to take place until project completion in 2023.

www.resiblock.co.uk

GLIDE BOLLARDS

Flexible, ingenious and secure, Securiscape's Glide Bollard HVM system gives high performance protection to busy premises where access needs to be controlled – and yet it couldn't be simpler. Capable of withstanding an impact from a 7.2 tonne lorry, the system uses **industry-leading shallow fixings** and moveable bollards that are slid aside to create an opening and pushed back and locked into position to prevent unwanted vehicles gaining access.



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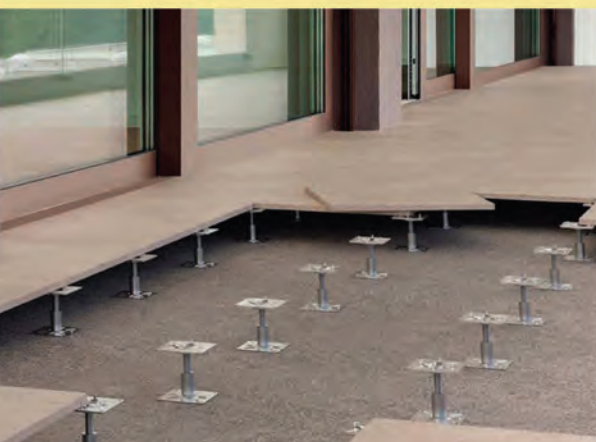
With a vast choice of finishes available for any Design scheme, including larger formats and co-ordinating internal tiling, Levato Mono porcelain paver system is perfect for balconies, roof terraces, garden decks and piazzas. Key benefits include; high slip resistance & load bearing, fade & wear resistance – so low cost ongoing maintenance.

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FRSL New Class A1 Pedestals



Resapol – Northwood Town Wall

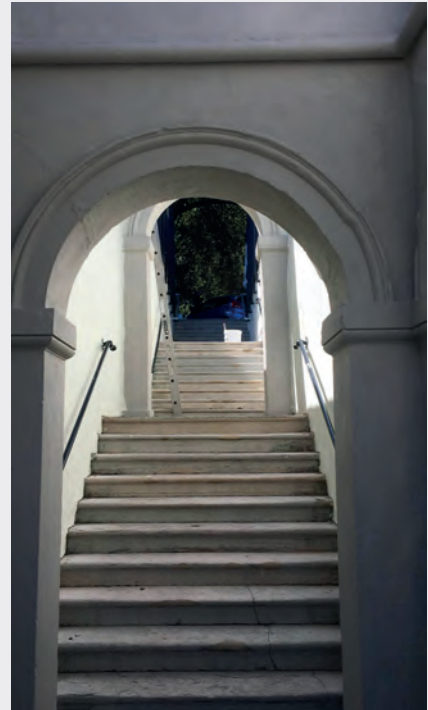
Resapol, the UK's trusted supplier of Specialist Construction Products, recently worked with existing customer Northwood House Charitable Trust for the recommendation of suitable products for the renovation of the Town Wall Entrance to Northwood House, situated in Cowes Isle of Wight. This included the old, narrow and steep steps leading to the former Nun's quarters. The structures were in need of a fresh coating in order to protect them from weather conditions and the elements. Structures surrounding the area had also fallen victim to graffiti, which had unfortunately defaced several locations. Northwood Trust sought solutions that were easy to use, provided a professional finish, whilst providing long lasting protection.

After consulting with Resapol Southampton's technical sales team, Intercrete 4891 (formerly Flexcrete Monodex Smooth) and Sikagard®-850 Clear Anti-Graffiti were put forward and subsequently chosen as the most suitable products. Intercrete 4891 is a high-performance water based, elastomeric, high build, decorative coating which provides

protection against carbonation and water ingress, yet allows damp substrates to breathe. It is ultra-fast drying which enables two coat applications to take place on the same day and facilitates year-round usage. It also comes in a range of attractive colours, including the pebble grey and pastel white colours that were selected for the project.

To deal with the graffiti Sikagard Anti-Graffiti system was utilised on top of the Intercrete system. Sikagard®-850 is a one-part ready to use permanent anti-graffiti and anti-fly poster semi-matt coating. The product requires no dilution; once applied to a substrate any subsequent graffiti applied can be removed easily and quickly using a simple cold-water pressure sprayer without damaging the protection or requiring a refresher coat.

The materials supplied have performed exceptionally well, far exceeding their initial expectations in terms of effectiveness and longevity. Northwood Charitable Trust are extremely pleased with the results and the project has also since won an RIBA award.



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Luceco's educational lighting at Victoria Schools at Kalba & Dhaid – Sharjah

Luceco has supplied luminaires to Victoria International Schools of Sharjah (VISS). The schools were commissioned under the Department of Public Works – Sharjah, Luceco supplying complete lighting solutions for the facilities. VISS is a non-profit international school in the UAE teaching the Victorian version of the Australian curriculum, its teachers are predominately sourced from schools in Australia, the majority being from Victoria. The school's modern facilities include specialised classrooms, technology halls and knowledge resources, along with art and music rooms, library, canteen, auditorium, WCs, and externally play and amenity areas. Luminaires specified included Platinum Mini and Palladium downlights, Atlas, various LuxPanels, Architectural bidirectional fittings and externally, Bollards. The LuxPanel family offers various levels of technical performance according to the specification and environment requirements, the lumen output options designed to maximise performance whilst realising the energy savings available.

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The advertisement features a top-down view of a workspace. On the left, a portion of a laptop keyboard is visible. In the center, a small green cup of coffee sits on a white surface. To the left of the coffee is a spiral-bound notebook with a silver clip. On the right, a teal teapot is partially visible. In the bottom right corner, a tablet displays the Architects' Datafile (adf) website, which includes a header with the 'adf' logo, a navigation bar, and a main content area with a featured article about the government's net-zero carbon emissions target. A blue banner with the text 'Now on LinkedIn' is overlaid on the left side of the image, and a black banner with the LinkedIn URL is at the bottom.



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