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## FROM THE EDITOR



adly, many of the messages in RIBA's 'manifesto' for the next Government are statements which, not to undermine their importance, have been heard many times before. However, such seemingly self-evident requirements such as "further and faster action" on climate change, solving the housing crisis, and "ensuring that people are safe in their homes" probably require that slightly numbing repetition, partly because of the fact they do not seem to have been heard adequately by the Government.

RIBA also calls for a national retrofit strategy, post-occupancy evaluation on publicly-funded buildings, and properly funded planning departments. All very laudable, all familiar, apart from perhaps the need for planning departments to "utilise the skills of architects," now there's an idea!

The call for safer housing has of course been addressed to some extent by this Government, with its hand forced to intervene by Grenfell to produce some top-down structure for once, in the form of the Building Safety Act. However, while professional competencies now have a workable framework in projects, the Building Regulations themselves have not been 'overhauled.' RIBA rightly says more examination of Part B is needed, and continues its call for second staircases in buildings over 18 metres, and sprinklers where there are vulnerable residents.

But in terms of the pressing need to make improvements at scale on carbon emissions, what really needs to happen is for the new Government to bring in tough regulation to require embodied carbon to be measured and restricted on a variety of projects. Currently this is the elephant in the room in terms of standards, with no mention in the upcoming Future Homes Standard, and a hopeful Part Z of the Building Regulations currently AWOL somewhere in Parliament.

Labour has rolled back its initial £28bn carbon reduction plans to something a lot cheaper and moderate to appease struggling voters. This is deeply disappointing, but understandable given the bloodshed of its last Election results, plus the increased financial turmoil of former 'blue wall' voters. More unnecessary was Labour's pronouncement in favour of retaining North Sea oil and gas for "decades to come," which must strike fear into the hearts of heat pump manufacturers.

Labour has steered away from talk of "free insulation" campaigns such as that proposed by the Lib Dems (who arguably have the leeway to put out such hard-to-deliver slogans, as they are unlikely to have to enact them.) But the near-total absence of statements directly linking built environment and climate goals from Labour is frankly, somewhat feeble. One hopes that RIBA is talking directly to the party about what is needed, and needed now.

James Parker, Editor

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#### ON THE COVER...

Scott Brownrigg added a transparent core and an extra storey to transform a typical low-rise 80s office in Bristol

Cover image @ Neil Waving

For the full report on this project, go to page 23

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#### **MIXED USE**

## Plans submitted for Farrells' Battersea brownfield regeneration

Property developer Rockwell has submitted proposals by architects Farrells to redevelop an "underused" brownfield site in Battersea to deliver 142 new homes.

As one of the oldest buildings in the Ransomes Dock area, the Glassmill (1 Battersea Bridge Road) is no longer fit for purpose in "modern London," according to the architects. They commented: "It is highly energy inefficient and struggling for commercial viability, with the building either vacant or occupied on short term licences below market rates."

There is an urgent need for new homes in Wandsworth, with over 3,600 households in the Borough classified as 'homeless.' Rockwell's proposals commit the developer to provide a "significant portion" of affordable homes within this scheme, helping to alleviate increasing local housing pressures.

Of the proposed 142 new homes in the

regeneration plans, 35% will be affordable housing, with 70% designated for social rent. These new homes will comprise a mix of one, two, three and four bedroom residences, and will include up to 18 "large family homes."

As well as creating much-needed new housing, this regeneration will provide over 5,700 ft<sup>2</sup> of modern, flexible and affordable office floorspace, alongside a new community hub and public realm improvements, including a new 'Waterfront Plaza.' The architects added: "Designed in consultation with local residents and stakeholders, these spaces are shaped to meet the needs of local businesses and charities." With a new riverside restaurant at the base of the building, these plans will "unlock the Battersea Bridge south side, rendering it a destination in its own right, with new visitors boosting the local economy."

Peter Barbalov, partner at Farrells, said: "We are delighted to collaborate with Rockwell on the development of One Battersea Bridge Road, an important site situated on the south bank of the Thames, serving as the gateway from Wandsworth to Battersea Bridge. Our proposal provides substantial public benefits, including the provision of safe, accessible public realm along the River Thames and Battersea Bridge Road, activation of the ground floor with diverse uses, and provision of much-needed housing for the Wandsworth community."

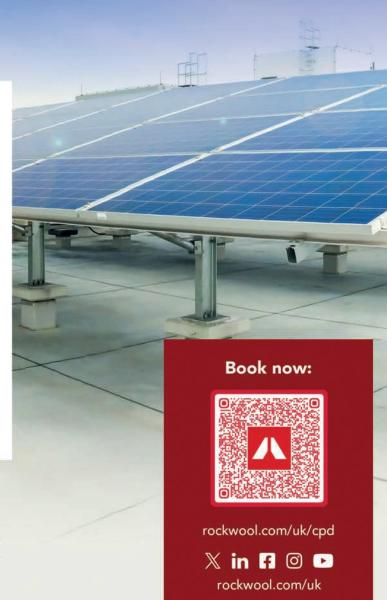
"To achieve these goals on this brownfield site, we have designed a high-quality building, with high quality homes, that contributes to the surrounding townscape along the River Thames while also addressing the climate emergency by achieving net zero in both operation and construction phases."

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#### **MIXED USE**

## PRP achieves planning for sustainable Brooklands College masterplan

Planning permission has been granted for the Brooklands College campus, in Weybridge, Surrey. Designed by PRP, the proposals will bring forward a "truly diverse community of mixeduse educational, residential and leisure development," said the architects.

PRP was appointed by CALA Homes and Brooklands College to develop a landscapeled sustainable mixed-use masterplan. The proposals "honour the site's rich context and history, providing highly sustainable new homes" – 40% will be affordable. A new community hub building with a sports hall will be available for students and local residents sitting alongside the "enhanced and reinvigorated" college campus facilities.

The project will also deliver much-needed Special Educational Needs provision and upgrade the existing teaching facilities to create a college "that will support and inspire students and the local community for years to come."

The site boasts a long history, from its



beginnings as Brooklands Farm in the early 17th century before a now listed mansion house was built by the Locke Kings who went on to build Brooklands motor racing circuit nearby. In the 1950s the mansion house and grounds were developed into a technical college that form the current occupants of the estate. PRP's masterplan ensures the viability and the continued operational status of Brooklands College campus and includes

the sensitive restoration of the site's Grade II listed mansion house and its historic terraced gardens.

This landscape-led plan opens up 14 hectares of new public open space, including accessible public parkland to the wider community. Of this, 10 hectares are preserved woodland, which are proposed as a new Suitable Alternative Natural Greenspace (SANG) within maintained woodland.

#### **APPOINTMENTS**

#### HKR Architects appoints Ojeyomi managing director

International design practice HKR Architects has announced the appointment of Kola Ojeyomi as managing director. As the practice "continues to expand its reach and impact in the global design arena," this appointment will be instrumental in "shaping the evolution of the firm," said HKR. He will be supported by founding partner Jerry Ryan, the new chair.

With over 15 years of experience driving progress and success in the EMEA region, Ojeyomi "will shape the future vision of HKR and drive strategic growth globally alongside Jerry and the overall leadership team." The key appointments have been made to strengthen the practice's ongoing growth strategy in the UK and Middle East markets.



Jerry Ryan commented on Ojeyomi's appointment: "Our team's unified vision and combined talents will together guide us as we explore new markets, identify and sustain lasting relationships and seize new opportunities. We have already accomplished so much, and I am delighted to continue our legacy of design innovation and teamwork as we enter this

exciting new chapter."

Kola joined HKR Architects as senior architect in 2013, having previously worked for several large top AJ100 practices. In 2021 he was appointed company director and became an equity director.

Kola Ojeyomi said: "I am excited to be taking on this new position and will work ever more closely with our team of passionate and talented architects. The industry faces many challenges, but we are committed to the future of the business and pride ourselves on being able to work closely with clients to deliver innovative design as well as fulfilling the traditional role of the architect in managing the entire design teams through all RIBA stages."



#### **EXPANSION**

#### JDP celebrates practice's growth

A Shropshire architect is celebrating 20 years of service by helping his practice to a record year of business performance.

Matt Spinks (pictured left), joined Johnson Design Partnership (JDP) founder Vic Johnson in 2004, and is "enjoying the perfect birthday present," after the practice's 10 strong team sealed a string of new instructions that will see turnover pass £600,000 for the first time.

The central Bridgnorth-based business has built a strong reputation for delivering innovative projects in healthcare, education and the self-build market, "helping owners bring their dream homes to life through the power of creative design."

In the last 12 months alone, JDP has been instructed on 150 jobs, with a total project value of more than £50m.

Spinks commented: "It has been a fantastic two decades with Johnson Design Partnership – I have no idea where the time has gone," who got the job after his dad saw the advert in the local paper.

He continued: "I had just finished my Post Grad Diploma (part two of the architecture course) and had the choice of three different practices. There was something about working in Bridgnorth and the chance to learn from Vic and shape the business going forward that really



appealed to me."

"My first project was one to remember – Upton Meadows Primary School. This was partly funded by the Prince's Foundation and King Charles opened the school when it was completed. Not a bad one to add to your fledgling CV."

"There were just the three of us at the start, but we have now grown into one of Shropshire's leading independent architects, employing 10 people. The skills, experience and personalities we have now really drive the culture of our business and I'm very proud to be part of this team."

The practice, which has recently been named on the NHS Shared Business Services Framework for the West Midlands, offers a complete project management service from feasibility work and planning to detailed design, project monitoring and contract administration.

Vic Johnson, who founded the practice in 2001, added: "Little did I know when I took a fresh-faced budding architect on in 2004 that he would become such a massive part of the business. We all share a passion for taking on complex projects that other architects have turned down!"

Johnson concluded: "Two of the next big pushes will be looking at more opportunities in the educational and industrial sectors, whilst exploring projects outside of the UK. We'll also be putting forward some of our more ambitious work for national architecture awards."

#### **BUILDING SAFETY ACT**

#### **ACA launches Principal Designer Register**

The Association of Consultant Architects has launched the Building Safety Act Principal Designer Register, to help clients identify practices with the competencies to fulfil the Principal Designer role.

The Building Safety Act's secondary legislation requires a Principal Designer on all building projects. The ACA has reviewed the competence required to undertake the new Principal Designer role, concluding that "the architect is best placed to carry it out." The Act requires that it has to be done by the designer in control of the design phase of the project.

In order to assist clients and others with responsibility for appointing a Principal

Designer, the ACA has created a register, located at www.PrincipalDesigner.uk. This will enable confirmation that the architect appointed to the project has the required qualifications and competences to fulfil the BSA Principal Designer role. They can search the register by name, practice name or postcode.

Architects have to be principals or directors of the practice and can register very simply provided that they are ACA members. This allows their practice to undertake the role. Membership of the ACA is free for registered architects who are directors or principals, and can join by visiting; ACArchitects.co.uk/join-the-aca

Architects can register as Principal Designers by visiting: www. PrincipalDesigner.uk for an annual fee of £100 plus VAT.

ACA president, Patrick Inglis said: "The new regulations make the client responsible for appointing suitably qualified entities to the new roles of Principal Designer and Principal Contractor. I am delighted that the ACA has launched the Principal Designer Register for architects. This will allow ACA members to register as principal designers for Building Regulations and will allow their clients, potential clients and others to find them."



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#### **NEW APPOINTMENTS**

#### AA appoints Brooks, Choi, Walters and Ware to governing body

The Architectural Association (AA) is delighted to announce the appointment of Alison Brooks, Pui Quan (PQ) Choi, Cindy Walters and Steven Ware as new members of Council, the AA's governing body. As practising architects, all four new members will draw on their experience and knowledge to help shape the AA's future as we launch a five-year strategy developed by AA Director Ingrid Schroder.

Alison Brooks studied architecture at the University of Waterloo, Canada before moving to the UK in 1988. Since founding her practice in 1996 she has emerged as one of the UK's most inventive architects, with works encompassing urban design and housing, higher education buildings, private houses and public buildings for the arts. She is the only UK architect to have received all three of the profession's most prestigious architectural awards: the RIBA Stirling Prize, the Manser Medal and the Stephen Lawrence Prize.

Brooks has become a public voice for the profession, advocating for the role of women in architecture, the resurgence of building craft and the value of timber as an expressive, low carbon building technology. She has contributed to architectural education for more than fifteen years and taught a Diploma unit at the AA from 2008-2010 as well as serving as an external examiner at the school from 2011-2019.

Pui Quan (PQ) Choi is an architect at Hawkins\Brown where she has worked on large-scale projects and now focuses on residential projects in London. She completed her undergraduate studies at the Bartlett School of Architecture, UCL and graduated from the AA Diploma Programme in 2019. PQ is currently a teaching assistant on the Open City Accelerate Course, a scheme that supports 16-18-year-olds who are interested in careers in the built environment. At Hawkins\Brown she chairs the Equality, Diversity and Inclusion Voice Group and oversees the office's participation in mentoring schemes such as Blueprint for All, Accelerate and Accumulate. She sits on



the Blueprint for All Architecture Advisory Board and the NLA's Diverse Leaders Steering Group. PQ is committed to making the built environment more accessible, inclusive and diverse, and is particularly invested in broadening access to the profession.

Cindy Walters is a director and cofounder of Walters & Cohen Architects. Since establishing the practice with Michál Cohen in 1994, she has led a variety of projects in the UK and abroad, including several schools, the Vajrasana Buddhist Retreat Centre in Suffolk, the Gallery of Botanical Art in Kew Gardens and the Dorothy Garrod Building for Newnham College, Cambridge. Cindy regularly contributes to academic and professional institutions as an external examiner and guest lecturer, has been a juror for the Lubetkin Prize and the Stirling Prize, and is a member of the RIBA Validation Board and competition adviser. Cindy was chair of the Architecture Foundation from 2019-2023 and is now a trustee. She is proud to promote diversity and inclusion through her roles

and practice, and is on her second term as governor at Regent High School, one of her former projects. In 2022, Cindy completed a PhD by Design at the Bartlett School of Architecture, UCL.

Steven Ware studied biology at Western University, Canada and architecture at the AA, graduating with honours. As a partner with ArtBuild architects, he steers the development and application of bioadaptive design principles, seeking new ways to fuse ethics and aesthetics. The practice's internal lab works with biologists, academics, industrialists and research groups to develop biomimetic concepts which can be transferred to mainstream construction practice. Steven lectures widely on subjects that bridge biology and the built environment, exploring the very nature of intelligence informing architects and the building sector at large.

The new Council members were elected following a vote by AA Members, including current students and staff, in April 2024 and will begin their three-year appointment on 15 July.

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#### **EDUCATION**

## Student residence by Howells completes in Birmingham

Pershore Junction is a new 127-bedroom purpose-built student building in the heart of Birmingham.

The contemporary brick building, said architects Howells, is distinctive yet fits appropriately into the wider fabric of the local area." Alan McCartney, partner at Howells said: "Pershore Junction contributes appropriately to the ongoing transformation of Stirchley, with the design delivering a contemporarily crafted brick and terracotta building, that remains clearly of its place, drawing reference to materials and details found on several local landmarks."

He added: "Stirchley is a fantastic part of Birmingham, and the quality the whole team have been able to deliver will serve to set the benchmark for new buildings coming forward in the area – we have always remained committed



to providing design excellence for this site and the design overall has benefited significantly through community and local authority involvement."

David Campbell, managing director from the developer of the project, Alumno said: "It is wonderful to see this dynamic building come to life and



provide accommodation for Birmingham's expanding student population. Working with the local authority and community was integral to the building's success, and it has re-energised what was an overlooked site to offer a unique student experience which enhances this vibrant university town."

#### **NEW APPOINTMENT**

## Akshay Khera appointed to lead BDP's Bristol studio

BDP director Akshay Khera has been appointed to head up the global design practice's Bristol studio.

With more than a decade of experience designing buildings and spaces in Bristol, the South West and Wales, Akshay is passionate about improving the built environment in the region. He is committed to delivering sustainable spaces that create a sense of community and wellbeing designed with end users in mind.

The firm commented: "Akshay's appointment supports the continued growth of BDP in the region as a widely respected, socially progressive practice with an embedded multidisciplinary approach across healthcare, housing, education, and workplace sectors."

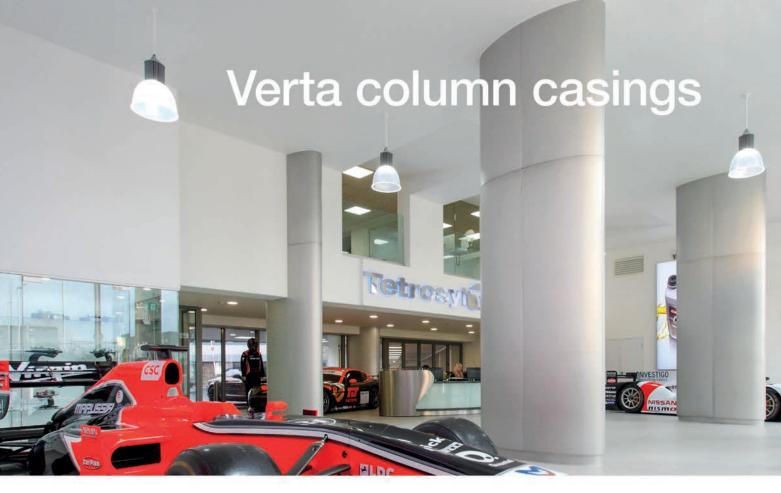
Akshay joined BDP Bristol in 2004 and in 2010 went on to lead the Delhi and Abu Dhabi studios where his international portfolio included notable projects such as the masterplan for the Indian Institute of Technology and the University of Birmingham's Dubai Incubator campus.

Since his return to Bristol in 2019 Khera "has brought his proven expertise in collaborative communication and design to lead a number of projects," said BDP. These include the University of Bristol Dental School, University of the West of England, and the International HQ for the European Centre for Medium Range Weather Forecasts.

BDP is currently working on a number of projects across the South West



including the innovative Gap House project in Bristol, a series of healthcare projects including the new elective care centre at Southmead Hospital, the design that won the Brighter Places/Housing Festival competition to build a 100% affordable housing development at Midland Road in Bristol, and schools for the Department for Education.









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#### **RIBA AWARD WINNERS**

## RIBA announces the world's 'most transformative buildings'

RIBA has revealed the winners of the RIBA International Awards for Excellence 2024. Selected from entries to the RIBA International Prize, the 22 projects present a "significant cultural shift in the way that architecture is designed and built for current and future generations," commented RIBA. From private homes and subway stations to museums and schools, each project is an "example of the highest calibre of architectural response to social, cultural and environmental challenges."

Spanning four continents, the winners were grouped under key themes by RIBA including "climate resilience and connection to nature." Bundanon Art Museum and Bridge (Illaroo, Australia) by Kerstin Thompson Architects, is a bridge housing a creative learning centre above a wet gully, resilient to seasonal flood. Green Field Factory (Rangpur, Bangladesh) by Nakshabid Architects, establishes a "close bond between humans and nature while supporting the ecosystem of the building's surroundings," and Liknon by K-Studio (Vourliotes, Greece), "celebrates the ancient vineyard and natural landscape by allowing the intervention to embrace the sloping typography," said RIBA.

Another theme was "creative reinvention and extension of existing architecture," with examples including Morland Mixité Capitale in Paris by David Chipperfield Architects Berlin and CALQ, which "transforms a previously introverted building complex into an open and accessible urban campus." Six Bricolagehouses (Shenzhen, China) by ARCity Office, renovated six houses to create a "new typology of 'bricolage architecture' by inserting mini public spaces into the dwellings," and Veemgebouw (Eindhoven, Netherlands) by Caruso St John Architects converted an industrial storage building into a public mixed use asset.

In the "space for wellness, mindfulness and community through design" category, examples given included Punchbowl Mosque (Sydney, Australia) by Angelo Candalepas and Associates, which



"inspired an entire city to use its rare public interior as a meeting place for all people." Sharanam Centre for Rural Development (near Pondicherry, India) by Jateen Lad, "creates a refuge of dignity and wellbeing for the poorest of the rural poor," and Shah Muhammad Mohsin Khan Mausoleum (Manikgonj, Bangladesh) by Sthapotik "endeavours to establish social harmony amongst all religions and groups through communal spaces."

The fourth RIBA International Prize will be announced in November 2024 alongside the winner of the RIBA International Emerging Architect Prize.

The bi-annual prize is claimed by RIBA to be "one of the world's most rigorously judged architecture awards," with every shortlisted building visited by a group of international design experts. It is open to any registered architect in the world and buildings of any size, type or budget.

The rest of the 22 winners of the RIBA International Awards for Excellence 2024 are as follows:

- Adega Pico Winder & Hotel by DRDH Architects and Sami Arquitectos (Bandeiras, Portugal)
- Ahmedabad University Centre by Stephane Paumier Architects (Ahmedabad, India)

- Bioclimatic School in Guécélard by Atelier Julien Boidot (Guécélard, France)
- Casa Catarina by Taller Hector Barraso (Valle de Braco, Mexico)
- Collège Hampaté Bá by Article 25 (Niamey, Niger)
- Engineering Laboratories | Pontificia Universidad Javeriana by Juan Pablo Ortiz Arquitectos TALLER Architects (Bogotá, Colombia)
- Jacoby Studios by David Chipperfield Architects Berlin (Paderborn, Germany)
- Jadgal Elementary School by DAAZ Office (Sistan and Baluchestan, Iran, pictured above)
- Jahad Metro Plaza by KA architecture Studio (Tehran, Iran)
- Jingdezhen Pengjia Alley Compound by Beijing AN-DESIGN Architects (Jingdezhen City, China)
- Modulus Matrix 85 Social Housing in Cornellà by Peris+Toral Arquitectes (Cornellà, Spain)
- Neue Nationalgalerie refurbishment by David Chipperfield Architects Berlin (Berlin, Germany)
- Thapar University Learning Laboratory by McCullough Mulvin Architects (Patiala, India).

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## ASK THE ARCHITECT

Former RIBA president, founder of her own practice and recipient of an OBE for diversity, Jane Duncan answers *ADF's* questions about what continues to inspire her



Jane Duncan OBE

#### WHAT WAS THE HIGHLIGHT OF YOUR CAREER AS A DESIGNER?

Most of my professional life I have loved designing new houses for clients, and the highlight is always when re-visiting to see them being completely at home in the spaces created for them.

#### HOW DID YOU FEEL AS THE THIRD WOMAN TO BE APPOINTED RIBA PRESIDENT?

I was thrilled to get the support of enough RIBA members to win the election, and then I just wanted to get on with the huge spread of initiatives on my to-do list! As a very vocal equality advocate, I think it important to have the widest field of applicants for any role, then it's up to the members to get involved and vote for the right person to represent them, whoever they are.

#### HOW MUCH HAVE THINGS CHANGED FOR WOMEN ARCHITECTS FOLLOWING YOUR TENURE AT RIBA?

In truth the last few years have changed the work/life balance for all architects — as we all had time to re-appraise after Covid lockdowns. It has always felt right to me, as a practice owner, to trust staff and look after them well; if you are happy you are productive, and the move I have seen towards a fairer work ethic affects everyone. I feel that this levels the

playing field somewhat, but still requires more definition and certainty to prevent the attrition of women from the profession, as does the need to encourage better gender diversity at high levels throughout the industry.

#### WHAT ARE YOUR PROFESSIONAL ROLES NOW, INCLUDING AT JDA?

I have very slowly moved away from active project running and now remain as a consultant to the practice after a management buy out in 2020, following years of succession planning. My life remains busy, chairing the RIBA's expert panel on fire safety, which involves advocacy to the Government for improved regulations, lecturing and writing on this huge topic. I have been delighted to be more involved in a wide range of industry awards judging; in architectural education, external examining, and recently appointed to Oxford Brookes University to help with the RIBA Studio courses.

#### WHAT WAS IT LIKE TO RECEIVE THE OBE?

It was an unexpected delight, as it was awarded for services to diversity in the architecture profession. I had spent 2013 to 2015 as the RIBA's first Ethnic Diversity & Inclusion champion and was elected to the presidency on an equality banner.



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#### WHAT DID YOU HELP TO ACHIEVE ON RIBA'S EXPERT ADVISORY GROUP ON FIRE SAFETY, IN THE YEARS FOLLOWING GRENFELL?

This has been a huge part of my life since the tragedy, and I was frustrated that nothing really happened fast enough in terms of regulatory change, in our industry relationships, or even the naked profiteering which was exposed by the Grenfell Inquiry. However the effects of the honesty in the Hackitt report and the aims of the new Building Safety Act regime are far reaching, even though it will take a few years to settle in. The amazing work by collaborative teams working across the industry has been consistent, and game changing.

#### IS THE BUILDING SAFETY ACT RIGHT TO PUT THE ONUS BACK ON INDUSTRY FOR 'SAFE DESIGN'?

The root cause of the Grenfell tragedy was complacency, by almost everyone, and now the industry is trying hard to adapt to the new regime. It needs more than that in my opinion – clients need to take

their role seriously and stop cost cutting to maintain quality (in building you do get what you pay for), the procurement routes and contract forms need re-assessing, and people, not profits, need to be front and centre. However, I believe that without clear base-line prescriptive levelling from a good set of clarified regulations there will still be loopholes available to those who wish to find them.

#### WILL THINGS CHANGE FOR THE BETTER FOR ARCHITECTS IF A LABOUR GOVERNMENT GETS INTO POWER?

I would very much like to think so; certainly the Labour-run GLA has worked well to amend their requirements.

#### HOW HAS BEING AN ARCHITECT CHANGED SINCE YOU QUALIFIED?

The work as an architect is far harder, far more challenging and far more technical than it was, but architects love challenges and are excited by innovation, so perhaps we just need to be willing to advocate for The effects of the honesty in the Hackitt report and the aims of the new Building Safety Act regime are far-reaching, even though it will take a few years to settle in

better fees and resourcing to support the research and creativity we all need now.

#### WHAT'S YOUR ADVICE TO PEOPLE LOOKING TO ENTER ARCHITECTURE?

I would say it's horses for courses: there are a lot of different skills needed in the profession, but you don't need to be professors in everything. Find what will get you jumping up out of bed in the morning, and do that. For me it's been an amazing, stimulating and exciting career. If that's what you are after – great! Let's talk.

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issue has even been delivered! What's more, the Digital Issue includes interactive links to featured companies. Subscribe for free now.

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#### **Ventilation to carbon negative offices**



Breathing Buildings, a leading provider of controlled hybrid ventilation systems, has supplied ventilation to ECO MEP's carbon negative headquarters in Ashford, Kent. Recently purchasing the building, ECO MEP's objective was to ensure their own new

offices were a beacon of sustainability and so specified Breathing Buildings' innovative NVHRe Natural Ventilation with Heat Recycling and Heat Recovery to provide energy efficient ventilation. Two NVHRe C+ 1100 units were installed in the first-floor open plan office space above the acoustic rafts, as an exposed installation.

01223 450 060 www.breathingbuildings.com

#### Prestigious office of London law firm boasts ten moveable walls



Style recently revolutionised the new London office of global law firm, Barker McKenzie, with the installation of multiple moveable wall systems. The project enhances space flexibility in a multifunction area and on the terrace floor which boasts expansive city views. In the space, Style installed three Skyfold vertically rising walls and a Dorma Huppe Variflex ComfortDrive glazed wall. This innovative combination creates a self-contained room in an open plan area and is the first time Style has used Skyfolds to abut the ends of a glass moveable wall, with a third Skyfold further dividing the space. On level 11, a semi-automatic Dorma Huppe glazed wall transforms the terrace area into a private dining or meeting space, without obstructing the vista. Elsewhere, Style installed two more glazed Variflex moveable walls and three solid Variflex walls, enhancing the adaptability of the company's meeting suites, making this a truly adaptable office. The Skyfolds in the conference room offer phenomenal 60 dB acoustic ratings whilst the glazed moveable walls provide a 52 dB rating, ensuring meetings and client functions can take place in complete privacy when the walls are in place.

www.style-partitions.co.uk

#### The Broadway benefits from invisible access automation



The Broadway is a mixed-use development in Westminster, London. Contributing to the beautifully presented interior, TORMAX was contracted by Focchi Ltd to deliver invisible automation to over forty swing door entrances, concealing their advanced iMotion 1401 operator into the floor space below each door. "Where aesthetics is a high priority, such as at The Broadway, our invisible automation for swing doors helps maintain clean and contemporary lines within a room," said Simon Roberts, managing director for TORMAX UK Ltd. "In addition to our underfloor operator, we offer a door drive that can be concealed within the lintel above the door." Making it entirely practicable to position the door drives out of sight, the iMotion motor is uniquely designed without any of the parts that regularly wear out, requiring only minimal servicing and maintenance. "The Broadway showcases the iMotion 1401 underfloor operator in a wide variety of locations," comments Roberts. "Many of the retail units benefit from TORMAX automated swing doors, with operators being installed elsewhere, from in the residential areas right through to the cycle store."

sales@tormax.co.uk

#### Gilberts energises the workplace environment for global property company



The expansion, reconfiguration and refurbishment of the London headquarters of a global real estate company has created a workplace fit for the future with wellbeing for people and planet at its heart. The 1990s office block re-work has attained BREEAM Excellent and WELL Platinum. DBA Air Solutions supplied Gilberts' grilles and diffusers for use across the 10 floors of the 144,500 ft² that form the workspace. Throughout the spaces, Gilberts GSL linear slot diffusers, predominantly in four-slot configuration, have been installed in bulkheads to deliver fresh air, directing the airflow horizontally or vertically as required by each location. Gilberts' GECA eggcrate grilles extract the used air. Gilberts' GSFE circular swirl diffusers provide fresh air and extract stale air through the exposed ceiling-mounted building services into the office areas. The high air change rates achieved by the GSFE's are integral to maintaining the indoor air quality and to the attainment of the WELL Platinum categorisation. Gilberts' GHV double deflection grilles complement the air distribution, providing both supply and extraction.

01253 766911 info@gilbertsblackpool.com

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#### SPREADING THE WORD ON COMPLIANT COMPARTMENTATION



Changes to the fire regulations across the UK and the challenge of showing compliance with them, is motivating a growing number of construction professionals to book a place on FIREFLY®'s highly informative CPD seminar. Entitled 'The Design and Understanding of Passive

Fire Protection and Compartmentation', the 60 minute presentation provides an introduction to the behaviour of fire and the distinctions between active and passive protection measures, before moving on to explain the various ways in which fully compliant compartmentation can be achieved to prevent the spread of fire within a building. Daniel Gordon, the specification sales manager for Scotland and Ireland, comments: "Architects and fire assessors are joining to us to learn more about compartmentation and flexible fire barriers in particular and generally wanting us to update their conceptual knowledge of the subject as standards, compliance requirements and indeed solutions available all continue to evolve. As a result, myself and my colleagues in the technical sales team are delivering the training module – both online and direct to architects in their offices – on a weekly basis. Our webinars are hugely popular, but I particularly enjoy the in-practice sessions where it can be easier to get under the skin of a topic or question with a smaller group."

01706 758817 www.tbafirefly.com

#### WATERPROOFING BELOW GROUND STRUCTURES TO BS 8102:2022



In this informative CPD presentation, Delta aims to equip Architects, Designers, and Specifiers with an in-depth understanding of structural waterproofing methods. This involves introducing you to the key elements and factors a waterproofing design specialist utilises to build a solid and reliable waterproofing solutions,

compliant with BS 8102:2022. The presentation will cover various topics including Types A, B & C, which represent different forms of structural waterproofing systems available in the UK market.

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AZTEC 1000 BRISTOL

## From standard '80s to solar temple

Ruth Slavid reports on how Scott Brownrigg salvaged the 'bones' of a typical 1980s commercial building in Bristol to create an understated, sleek facility with greater capacity, and passive design measures to sustain it into the future

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he new Aztec 1000 building at Bristol's Aztec West business park is very much of its time. It has a cool, understated look, facades that respond to the orientation, and generous gym and eating spaces. It bears very little resemblance to the type of brash, brightly coloured – and environmentally reckless – building that was common from the period of its completion – the 1980s.

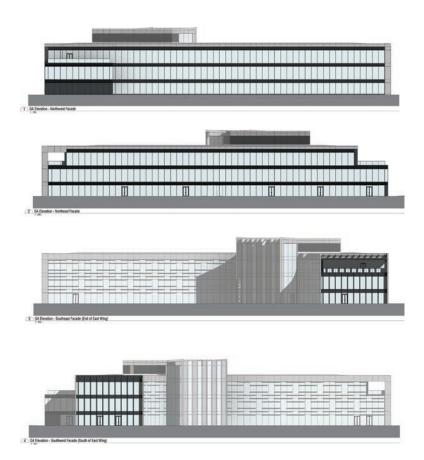
And yet, the bones of just such a building are contained within the new facility. Architect Scott Brownrigg has kept the 1980s frame, extending the building both upwards and outwards. Ed Hayden, director at Scott Brownrigg, explains, "As a company, we take a 'retain and refurbish first' approach. We ask: 'Can we retain it flexibly?'" In this case, he says: "It would have been very easy to demolish and rebuild from scratch." Instead, the practice worked closely with the client, Commercial Estates Group (CEG), to retain the frame and extend from there.

There was no question of keeping the building in its original form since it was not fit for today's needs. Indeed, it had not been a success. A two-storey, L-shaped structure, its steel frame was exposed

externally, causing cold bridging. The building was originally designed to be naturally ventilated, but this ventilation came from opening a series of sliding doors. The security implications deterred occupants from doing this. As a result, the building overheated and air conditioning was retrofitted.

The other main issue was with the plan. The core sat at the junction of the 'L' and blocked communication between the two wings. This was a building that was, at the time of construction, intended for single occupancy, making this problem severe. Other drawbacks included a lightweight roof, making it impossible to plant on it, and a low floor-to-ceiling height. At only 2,600 mm, this was less than the BCO minimum standard of 2,750 mm. The distance from the finished floor level to the underside of the structural steel was about 2,800 mm. For all these reasons, the building had ceased to be viable and was abandoned. CEG approached Scott Brownrigg, a practice who it had worked with before, to find a solution that would improve the attractiveness of the building and provide more space and a better environmental performance.

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Demolition and new build would have been the simplest solution, but Hayden was certain that retaining the original frame could work, and convinced the client

#### **FINGERS**

The L-shaped building has two fingers either side of a new circulation core; the architects adding a storey above the existing two

Demolition and new build would have been the simplest solution, but Hayden was certain that retention of the original frame could work and convinced the client. The decision was, he said, 'cost neutral'. Having looked at all the negative elements, there were also a number of positives that the new design could exploit.

Aztec 1000 is at one end of the Aztec West business park, a 68 ha development on the outskirts of Bristol. It's in South Gloucestershire, near to the M4 and M5 motorways, and next to the A38 trunk road. Development started in the early 1980s, at a time when good road transport was considered essential, and sustainable travel was not a major consideration. The name Aztec was believed to derive from 'A to Z of technology' and the scheme's original role was as a science park.

Some distinguished architects designed buildings there, including Nicholas Grimshaw, Michael Aukett, SOM and CZWG. In 2018, selected buildings on the site were listed. Evidently, Aztec 1000 was not a candidate. However, what it lacked in architectural pizzazz, it made up for in orientation and position. It sits at one end of the central zone of the park, encircled by

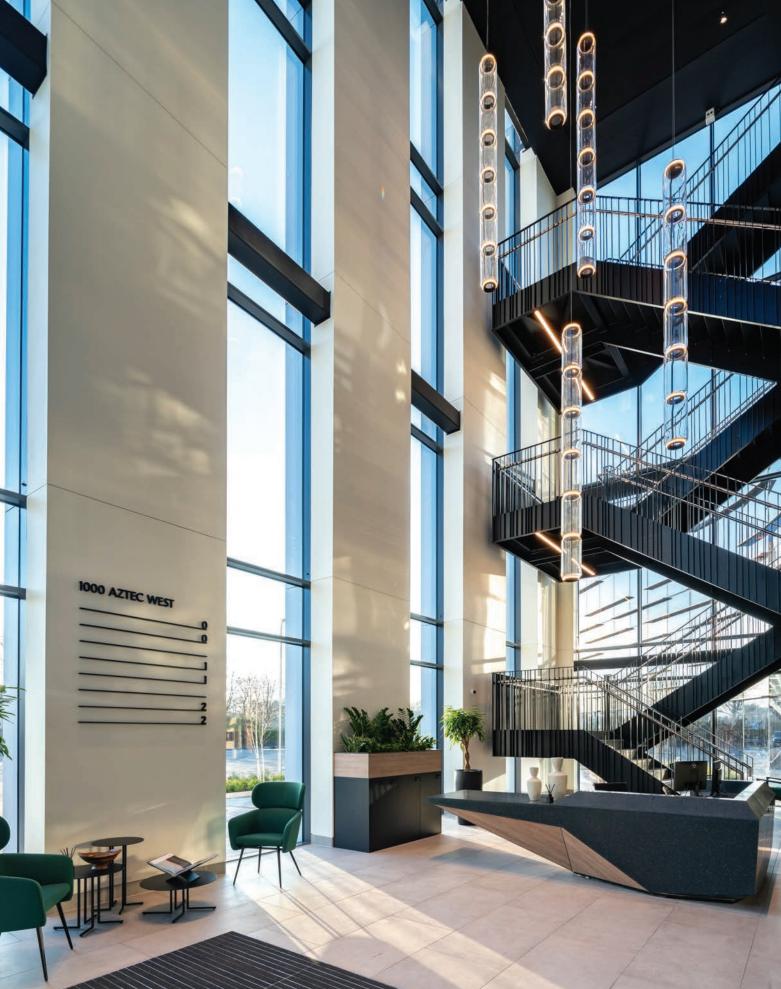
a pedestrian path that is roughly the shape of a race track.

The building is beside a lake, with one wing looking out over it, providing potential for a pleasant outlook. Scott Brownrigg has made this part of its design, providing a terrace where occupants can look over the water.

The architect has tackled the problems, creating more and better space. It removed the lightweight roof and replaced it with a new floor structure for an additional floor and a stronger new roof. From two storeys, the building now has three, with the ability to site some plant plus solar panels on the roof.

Retaining the facades was not an option. Modern day glass can be specified to have a far superior performance, and it was the design of the original facades, with their opening doors for ventilation, that proved unsuccessful in terms of usage, and resulted in the original introduction of air conditioning.

The structural engineer, Curtins, looked at a variety of structural solutions to provide additional space for the client. These included extending upwards (on which it finally settled), as well as extending









laterally, and an entire rebuild.

The engineers carried out detailed structural investigations to assist with understanding the load paths of the primary frame, and to confirm the ground conditions. Local strengthening was introduced to the steel frame and to the pad foundations. Hayden comments: "We now have rather dramatic cross bracing on the facades, which we have made a feature of."

There is also a new concrete core that helps to stabilise the structure. This also overcomes the problem of the original core blocking circulation. The new core has been added inside the bend of the plan, turning a single right angle into a pair of 45° angles. This additional triangular element, filling in the knuckle, increases the depth of the building at this point. The glazing provides as much transparency as possible. "You can see straight through to the lakeside," Hayden explains. The core contains stairs and two lifts, and the building is fully DDA compliant.

This change increased the depth of the building at this knuckle and allowed the design team to transform the way that the ground floor is used. The central space now contains a restaurant, cafe & meeting

area as well as a gym. These can be used by tenants of the building, and also by other tenants of Aztec West.

Hayden explained that this reflects the way that working practices have changed since the original business/ science park was built. In addition to any meeting rooms that tenants choose to put into their own spaces, the new social spaces on the ground floor, outside on the lakeside and on the roof terrace will facilitate the informal encounters that play such a vital role today in creative thinking and collaboration. This was identified as a vital element as post-Covid, meetings and interaction are the main reasons for going to the office - we all have the facilities to write an individual report at home. Beyond that, he says: "Part of our thinking is about the location at the southern end of the park. There are few facilities that can be used by the tenants. These spaces should foster collaboration across the park. And the architecture should create a buzz."

There is also a dedicated space for cycle parking and a roof terrace that tenants on the top floor will be able to use.

Taking the glazing beyond the original frame provided two benefits. It increased

#### TRANSPARENT TRIANGULATION

The new glazed triangular core inserted into the 'knuckle' between the two fingers brings transparency



#### **SOUTHERN LIGHT**

The southern elevations have aluminium 'light shelves' which bounce light deep into the plan

the floor area and it also solved the problem of the cold bridging that resulted from having an external exposed steel frame. The new enclosure is fully glazed with high performance glazing, allowing a high degree of light penetration into the space, which is only 16 metres deep. The southern elevations (effectively the 'inside face' of the L) have aluminium 'light shelves' incorporated in the curtain walling. These serve the double function of shading the facade from the sun and bouncing light deep into the plan.

The ends of the wings have vertical fins that reduce the solar gain in the morning and the evening when the sun strikes, respectively, from the east and the west.

The sealed box design approach should ensure that there are very low levels of air leakage.

Internally the main concerns were to create flexible spaces, to maximise the floor to ceiling heights and to improve the environmental behaviour of the building. There are no internal columns on the upper floor, allowing tenants to put in meeting

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rooms, partitions and so on wherever they decide to. Each floor will be able to accommodate two tenants, making a total of six, although larger tenancies will also be possible.

The floors are concrete planks, and the soffits have been left exposed, allowing for night-time purge cooling, which is a part of the environmental strategy. The exposed concrete will, says Hayden, retain 'coolth' in summer. "The engineer and client perceived this as a very positive move, " Hayden comments, because it gives additional

height, "which was important especially on the ground floor with the restricted floor to floor height."

With such a hard ceiling, there was evidently potential for acoustic problems. Scott Brownrigg has dealt with this by using soffits suspended acoustic rafts which contain sound-absorbent mats which reduce the reverberation. This approach uses far less material and therefore embodied carbon than a full ceiling system, while not affecting the perceived height.

Shallow raised floors house essential

The ends of the wings now have vertical fins that reduce solar gain in the morning and evening

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#### **EXPOSED**

The floor structure is concrete planks, and soffits have been left exposed to provide thermal mass services. Kept to a minimum. These allow a distance from the floor to the underside of the services of 2.55 metres (on the ground floor with the retained frame). The impression is of openness, coupled with the relative shallow floor plates and the generous glazing, the design has avoided the oppressiveness that is too often associated with limited ceiling heights.

Wherever possible, the building uses recycled materials. For example, the upholstery fabric is 100% recycled and half of that is made from marine plastics. Other elements, such as the vinyl used in the kitchens and on the gym floors, have a substantial recycled content. Hayden comments: "Both we and the client are exponents of the re-use of materials". "Due to the reduction in embodied carbon, this is the correct approach to embrace a 'circular economy' mindset".

The original design was in modular 6 metre bays, and the design team has taken advantage of this in its environmental strategy. Although there is some plant on the roof, most of the climate treatment happens not only on a floor-by-floor basis, but on a bay-by-bay basis. This means that if part of the building – a floor or just a

bay – is not occupied, then the heating and cooling can be switched off, saving energy. The design services engineer Cudd Bently, who developed the final solution for the M&E services, designed an overall BMS for the building, but much of the control is at a local level.

Vents at each floor level draw in naturally cooled air from the lake side of the building, taking advantage of the cooling properties of a body of water. Conditioning is then carried out by the floor-based plant.

Hayden explains the integrated ventilation approach further: "Working with the M&E designers at an early stage has allowed us to design a fully integrated solution where architecture and services are working together to create a united low energy solution is fundamental when designing for low energy use." He continues: "A great example of this is using the lake-side setting to draw in cool air from the waterside into each bay of the floor plates. The pre-cooling provided by the lake ensures we minimise the energy required for conditioning the internal air temperature."

Solar panels on the roof are deliberately oriented east and west, rather than south.









"We believe the first step in achieving true sustainability is to retain as much of the existing material as is practically possible"

Ed Hayden, Scott Brownrigg

What this does, explained Hayden, is flatten the curve of power output. Because battery storage on a building scale is still not commercially viable, electricity can only be used or sold back to the grid at the moment that it is generated. Flattening the curve means that, while the peak output drops, there is more usable electricity over a longer period. This therefore increases the proportion of electricity generated by the panels that the building can use. The team developed this concept during the project design, in conjunction with the specialist subcontractor.

The building has been designed to be zero carbon. CEG employed sustainable energy consultant Cudd Bentley to review and verify its plan. The client has substantially more floor space, thanks not just to the additional floor but also to the enlarged footprint. Users, whether sitting out on the terrace, or using the canteen and gym, will have a building that enhances the quality of their working day. And this will apply not only to the tenants of the building but also to others within the business park.

Hayden is clear that Scott Brownrigg designs every job to fit the particular circumstances of the building and the needs of the client. But there is one lesson that he will carry forward to future projects. "We have learnt the importance of the modularity of air conditioning and other kit," he says. "Utilisation varies through the building. We think this approach is a key part of conserving energy."

The architect has given the client a building that is fit for present-day use, with good environmental credentials and additional space. The open aspect and shared space mean that, instead of the previous, outdated building, it is now an office whose spaces align with modern ways of working.

Hayden concludes on how this building exemplifies how Scott Brownrigg places a priority on reuse as a means to sustainability: "We believe that the first step in achieving true sustainability is to retain as much of the existing material as is practically possible and to build passive energy and carbon saving strategies into the layout and fabric of the building." Scott Brownrigg's ambitions have been realised, in a workspace that is rated BREEAM Excellent and boasts an 'A' EPC rating. And it's a full vindication of the decision to retain, and adapt.

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#### STA hosts new event for architects at RIBA



The Structural Timber Association (STA) has announced a new, free event 'Navigating Structural Timber Construction to Address Net Zero', taking place on

2 July 2024 at RIBA's London headquarters. Aimed at architects and structural engineers, the event features high-profile speakers from organisations including RIBA, Waugh Thistleton, Tate + Co and dRMM Studio. The event will give delegates the chance to discover how their industry peers are transitioning to using more timber, with a focus on sharing best practice advice.

01259 272 140 www.structuraltimber.co.uk

#### Panasonic continues advocacy efforts



Panasonic Heating & Cooling Solutions is pleased to announce that its managing director, Enrique Vilamitjana, has been appointed to the European Heat Pump Association (EHPA) Board for the third consecutive year. Enrique's reappointment to the EHPA Board underscores his commitment to advancing the adoption of heat pumps across Europe as a sustainable and highly efficient solution.

Enrique continues to advocate widely for heat pumps in the market, particularly in the current economic and political climates. His dedication to promoting sustainable heating and cooling solutions remains unwavering as he works to address pressing challenges facing the industry.

0808 2082115 www.aircon.panasonic.eu

#### A. Proctor Group joins the CORC and the Association of Master Roofers



The A. Proctor Group has become a member of both the Confederation of Roofing Contractors (CORC) and the Association of Master Roofers. For nearly 50 years, the Group has provided the construction industry with technically advanced thermal, acoustic and membrane products. A history of technical innovation and promoting good practice has led to close links with industry, allowing the Group to keep pace with the evolving requirements of the construction industry. Being members of the two organisations will further develop those links. As a 4th generation family business, the A. Proctor Group recognises the importance of respecting tradition and preparing for the future, and wants to be involved in educating the next generation of roofing professionals. "Good communication is essential to a healthy and sustainable construction industry," said Keira Proctor, managing director of the A. Proctor Group. "Joining the CORC and the Association of Master Roofers gives us the opportunity to better understand the requirements of roofing contractors. Accordingly, we can explain the benefits of our existing products, and new solutions we develop in future."

01250 872 261 proctorgroup.com

#### **Marmox appoints Finance Director**



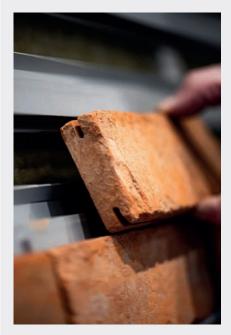
Marmox Ltd. has strengthened its board by promoting its current finance manager to the newly created post of finance director with immediate effect. The move follows founding family member, Jonathan Parsons, having been appointed as business development director as his parents, Harry and Anne, prepare to take a less active role in running the company. Having been at the company since 2014, Richard Kent-Smith previously worked for a firm of chartered accountants where he was involved for some years in preparing VAT returns and management accounts on behalf of Marmox, before the company created the position of finance manager in order to recruit him as a member of staff: a position where he has successfully applied his people skills as well as his aptitude for numbers. Sarah Viney, managing director commented: "I am absolutely delighted to have Richard as a fellow director. His skills and knowledge have helped us to grow the company over the last few years and it is great to be able to recognise his invaluable contribution by appointing him as a company director."

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



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## FabSpeed launches CMS40, the lightweight brick facade system.







ntroducing the CMS40 Facade System by FabSpeed, a Michelmersh Group brand, in collaboration with fellow industry leaders, Cladmate Facade Systems.

The CMS40 is a lightweight, easy-to-install, cost-effective system that integrates mechanically fixed, non-combustible brick slips to offer the beautiful clay aesthetic that we all know and love. It is suitable for multiple construction projects, ranging from volume high or low-rise projects to new builds or retrofit applications and can be applied to both indoor and outdoor facades. By seamlessly blending traditional brickwork aesthetics with advanced rain screen cladding solutions, CMS40 sets a new standard in architectural versatility and performance.

CMS40 offers numerous benefits, including reduced on-site labour meaning shorter project durations, installation cost savings, improved production safety and quality procedures, enhanced precision and environmental advantages through waste reduction, system recyclability and re-use.

Pairing the innovative CMS40 system with the durability and longevity advantages of clay bricks, in an easy-to-install system, reinforces its appeal in the wider construction industry. Renowned for their strength, fire

resistance, thermal and acoustic performance and beauty, clay bricks provide enduring quality alongside their famed long-life expectancy. With a variety of colours and textures, clay brick slips offer unparalleled design flexibility and adaptability which can evolve over generations whilst also complementing change in architectural vision. With confidence in CMS40's versatility, why not choose a less standard brick bond or even projecting brickwork patterns to give your facade more depth?

Furthermore, the CMS40 support system incorporates 70% recycled aluminium as its primary component and as such is fully recyclable, promoting circular principles, similar to its clay brick counterpart. Its dismantlable and reusable nature coupled with clay brick slips, can ensure a full aesthetic revision with only mortar replacement, ensuring it aligns with sustainable building practices and makes it an ideal choice for secondary applications.

CMS40 stands ready to be adorned with a wide selection of clay brick slip products from Michelmersh's core range. Additionally, FabSpeed's team of skilled craftspeople can customise slips from various manufacturers' clay products, providing tailored solutions to meet every project's challenges.

Certified for fire safety and environmental standards, CMS40 has undergone rigorous testing, including BS 8414-2:2020 and CWCT standards, with BBA certification covering both Parex lime-based and Instamac cement-based mortars. This lightweight framework system not only reduces structural load but also boasts an A1 non-combustible rating, ensuring safety throughout its lifecycle.

CMS40 is available through FabSpeed with components which can be supplied directly from Cladmate to offer an efficient and reliable supply chain. FabSpeed's integration within the Michelmersh Group and its decades of readily available expertise on brick finishes and design aspects will ensure that designers looking for a lightweight and innovative prefabricated facade system will be in safe hands.

If you would like to discuss your desired aesthetics or further details on our CMS40 facade system, please contact FabSpeed.



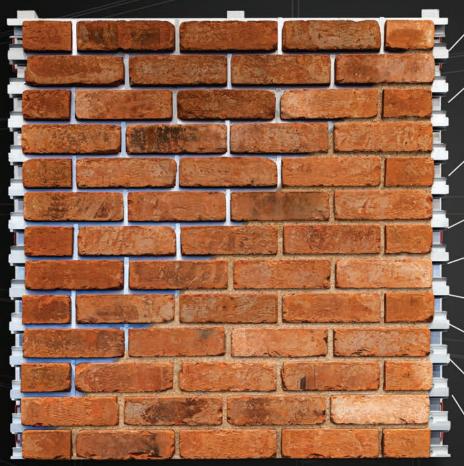




0844 931 0022 www.mbhplc.co.uk/cms40-facade-system



### Making brickwork lightweight



CMS40

The clay brick façade and aluminum bracket system offer an A1 non-combustible rating.

Tested to the Centre for Window and Cladding Technology (CWCT) standards and BS 8414-2 tested in accordance with BR135.

BBA certification of the CMS40 system, covers both Parex lime based mortar and Instamac cement based mortars.

Easier and quicker, non-weather dependent on-site installation.

Accuracy of installation when using pre-spaced mortar joints and mechanically fixed slips.

Lightweight framework system reduces structural load.

Slim system allows for reduced wall thickness for external retrofit applications or increased floor space.

The system components and facing brick slips can be re-used and recycled.

A wide selection of clay bricks of varying textures, styles, sizes and colours can be cut into slips by FabSpeed and used on CMS40.

#### The advanced brick façade system

In conjunction with industry leaders Cladmate, FabSpeed has co-produced the CMS40 Façade System. CMS40 uses mechanically fixed non-combustible brick slips, in a lightweight, easy-to-install, cost-effective product. Suitable for volume high or low-rise applications, newbuilds or retrofit projects, internal and external use, CMS40 fuses traditional brickwork façade aesthetics with the latest advanced rainscreen cladding systems. Speak to FabSpeed today.





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Website: www.mbhplc.co.uk/cms40-facade-system Email: sales@fabspeed.uk

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# Skilling up to design sustainable timber buildings

Andrew Orriss from the Structural Timber Association says that with the Government's Timber in Construction Policy Roadmap pinpointing skills as one of the key themes to address, the industry needs to take a series of steps

ccording to the UK Government's own figures, the built environment accounts for around 40% of carbon emissions. More specifically, construction activity accounts for around 50 million tonnes of CO<sub>2</sub> emissions, over half of which is related to product and material production. If the UK is to meet its commitment to achieve net zero by 2050, the construction industry must transition to a more sustainable building material, such as timber.

Late in 2023, the Department for Environment, Food and Rural Affairs (Defra) released the Timber in Construction (TiC) Policy Roadmap, which set out a framework for increasing the use of structural timber in construction. The TiC Policy Roadmap was the culmination of many months of collaboration between the Government and the industry, of which the Structural Timber Association (STA) was a key contributor, and focused on identifying the important steps that need to be taken to encourage wider adoption of timber as a construction material. This activity was broken down into seven priority themes, each of which explored a different challenge, ranging from improving data to promoting innovation.

One of the priority themes within the Roadmap focuses on increasing skills, capacity and competency across the supply chain, explaining that increasing the use of timber in construction requires an appropriately skilled and competent workforce which is confident in the use and application of a range of timber systems. Additionally, attracting new entrants, along with up-skilling and reskilling existing workforce practitioners is essential in achieving this.



So, how does this relate to design and architecture in the build process? In order to successfully transition to timber as a construction material, we cannot simply replace other materials in a like-for-like fashion. Instead, we must design with timber in mind – not only to make the best use of the material, but to ensure that it is used in the most efficient way.

As such, early collaboration at the design stage between the client and architects, along with any other key stakeholders is crucial in order to achieve sustainable buildings with high performance and energy efficiency. There is more to be done, however in engineering, architecture and design, education and training institutions have begun to rise to the challenge through a number of programmes and schemes.

Additionally, the STA have launched a new skills hub to provide STA members and

Early collaboration at the design stage between the client and architects, along with any other key stakeholders, is crucial in order to achieve sustainable buildings with high performance and energy efficiency

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# Now all we need is the buy-in from architects and designers that are motivated to build more sustainable buildings

the structural timber community and the wider construction industry with the latest information and guidance on sector specific skills, training, and education. This hub also includes the STA's Installer Training Scheme which gives assurance to designers that timber systems can be correctly installed. This can be viewed as a very positive start for increasing skills and competency within the architectural and design sectors, but there are still some key opportunities for further progress.

Firstly, more promotion of Design and Technology qualifications in schools and colleges and developing clear construction career pathways to entice those with an interest in building more sustainably will propel the younger generation of professionals toward building with timber. Next, broadening the availability for short course modular training provisions will provide much more scope and opportunity for up-skilling or re-skilling the workforce. Another key opportunity could lie with new and emerging Continued Professional Development (CPD) requirements which would allow industry to keep pace with topics such as timber engineering and whole life carbon.

Ultimately, a lot of great progress has been made, but this year and the next few years present the greatest opportunity the industry has had in addressing net zero and truly adopting more sustainable building materials. The TiC Policy Roadmap has outlined many of these opportunities, and now all we need is the buy-in from architects and designers that are motivated to build more sustainable buildings.

To help drive this, the STA has announced a free event 'Navigating Structural Timber Construction to Address Net Zero,' taking place on 2 July at RIBA's London headquarters. Aimed at architects and structural engineers, there will be talks from high-profile speakers from organisations such as RIBA, Waugh Thistleton, Tate + Co and dRMM Studio. The event will give delegates the chance to discover how their peers have transitioned to using more timber,

with a focus on sharing best practice advice.

To find out more about the STA event at RIBA, scan the OR code:



# A. Proctor Group's new Proctor Air® membrane awarded BBA certificate

Proctor Air has now been issued with a BBA certificate.

Specifiers, Housebuilders and Roofing Contractors therefore have the all important verification from an independent third-party that the membrane performs as claimed.

As a 4th generation family business with a history of technical innovation and promoting good practice, the A. Proctor Group Ltd advocates working with certification bodies like the British Board of Agrément to bring new product technologies to the market.

Proctor Air fits that category, being a roofing membrane designed for the future. It simplifies pitched roof constructions thanks to being both air permeable and vapour permeable. In addition, its water holdout performance and wind uplift resistance ensure it is able to cope with the more frequent extreme weather driven by climate change.

"An Agrément certificate assesses a construction product's fitness for purpose,"

said Iain Fairnington, technical director at A. Proctor Group.

"Having a BBA certificate for Proctor Air shows we have had the product tested and assessed in relation to its intended use."

A. Proctor Group enjoyed a collaborative relationship with the BBA while getting Proctor Air certified. Monthly meetings with the designated BBA project manager ensured both parties could update each other on progress, and maintain ongoing dialogue with regard to testing schedules and product sample needs.

Certification showing that a third-party has tested and verified the performance of a product gives the construction industry confidence that a manufacturer's claims are genuine and accurate.

Proctor Air has an Sd value of 0.015 m and a vapour resistance of 0.075 MNs/g, making it one of the highest performing vapour and air permeable membranes on the market.

It is an air permeable low resistance (APLR)



underlay, which provides a more uniform flow of air through the roof space than normal vents.

A unique feature within Proctor Air's BBA is the inclusion of the use of Proctor Air below PV panels. These would be treated similarly to a tight fitting outer covering.

For more information visit the website.

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



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# Ventilated aluminium wall cladding for data centres

ore and more companies are turning to external computing power for their business. Instead of in-house servers, they rent from data centres, large buildings with lots of servers. The computing capacity of the numerous servers results in a large amount of heat generation. To protect the servers from overheating and maintaining the architectural integrity of the building, ventilated aluminium wall cladding is the perfect solution to finish of these critical buildings.

#### Prevent overheating

No well-functioning data centre without enough air conditioning. To conceal the essential AC's while ensuring a sufficient supply of fresh air to enable cooling, a louvred aluminium facade is a smart choice. Renson's Linius system combines quality and aesthetics in a sustainable wall cladding system.



The horizontal aluminium Linius slats form a new facade, around the outer shell of the data centre. This solution has been an established feature of Renson's range for many years and has been used in a wide variety of industrial and commercial projects. Throughout the years, Renson optimized and further developed the louvres, according to feedback from the fall

#### Demountable facades are the future

Server technology is evolving at lightning speed. When building data centres, companies are already thinking about how to replace servers quickly and efficiently in the short term. A fully demountable facade makes this complex process much faster, simpler and safer. From a deep-rooted sense of innovation, Renson's CSI department develops and tests new Linius concepts to provide a readymade answer to this challenge. Meanwhile, the Linius cassettes already proved to be a good solution for building this kind of demountable facade. The wide range of blades ensures that there is always a suitable type available. Thanks to the extensive range, large spans, for example, pose no problem at all. A combination of blades (including acoustic or water-repellent types), supports, and integrated doors consistently provides a customized solution. With a RAL colour of your choice as the finishing touch.

www.renson.net



## Cladding comes of age

Rainscreen cladding has been put under immense scrutiny post-Grenfell. While manufacturers have worked hard to regain trust, architects have become much more sophisticated when it comes to material specification. Andy Thomas of Vivalda Group discusses the current key trends

The latest figures from the Office for National Statistics (ONS) suggest that the UK construction industry could finally be turning a corner. While 2023 saw mostly negative growth, January 2024 saw an uplift of 1.1% compared to the previous month. We're not out of the woods yet, but there is cause for optimism in certain sectors of the industry - and that is certainly the case with cladding.

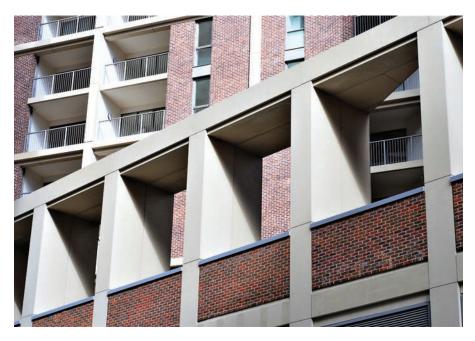
Despite a tough 2023 for many, we saw demand for material such as fibre cement, solid aluminium, glass reinforced concrete and high-pressure laminate continue to grow steadily. Furthermore, as we emerge from the shadow of Covid and recession, we are expecting steady growth in the medium term, with more significant growth opportunities in 2025.

In terms of specification, one of the big trends we have seen in recent months is a shift away from the 'A1 or nothing' mantra, to a much more informed view when it comes to cladding material selection. While this 'belt and braces' approach to facade safety was understandable in the wake of the Grenfell Tower fire (and the foundation of the Building Safety Regulator), architects have become much more sophisticated when it comes to the appropriate specification of facade systems.

#### Remediation nation

To date of the 3,839 buildings above 11 metres being monitored by the Government as in need of cladding remediation, 2,286 have not yet commenced. While this is hugely disruptive for residents stuck in homes that require new cladding, it should be noted that the cause of the poor progress in this area lies in the complexity of the challenge facing contractors.

Unwary building owners are too often faced with remediation projects comprising not only incorrectly specified facade panels, but also wrongly installed, missing



or inappropriate fire barriers, breather membranes, framing systems or insulation. In practice, it is these details, which have far-reaching contractual and financial implications, that are often preventing remedial work from occurring.

Nevertheless, we continue to work with developers and architects to supply tested, conforming facade systems - most often solid aluminium or fibre cement to both high rise and other municipal projects. The Link Building on London's City Road is typical of a mixed development remediation project that is commonplace in the UK today. Clearly, cladding remediation work continues to be a significant part of our activities moving forward, even though its pace is frustratingly slow at times for all concerned.

#### HPL makes a comeback

Due to the newfound appreciation of cladding safety regulations among **Every specification** decision is a balancing act between price, aesthetic and performance



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More cladding manufacturers are exploring the prospect of reverse logistics – to facilitate re-use and recycling in the sector

architects – and the more nuanced appreciation of materials appropriate for high (i.e. above 18 metres) and low-rise buildings, we are seeing a return to facades made from high pressure laminates (HPL). While demand for this type of product saw a significant drop in the aftermath of Grenfell, seven years later we are seeing this type of product being used on specific applications, most notably educational buildings or commercial developments up to three storeys in height.

Several years ago, the market faced challenges of under-supply of certain facade products, due to specifiers citing only A1 rated cladding, when A2 alternatives were well within safety and performance parameters. It's encouraging to see that a more balanced view has been restored, which can only be supported by the recent Department for Education document (December 2023) which clearly states that A2-s1, d0 rated panels are perfectly acceptable on school buildings of up to 18 metres above ground.

We have seen a surge in demand for HPL within the education sector – with recent projects including South Wolds Academy in Nottinghamshire and Parmiter's School in Hertfordshire. Another good example of the creative use of HPL can be seen at the Ashford Mental Health Unit in Southampton. This demonstrates the juxtaposition of colours and the use of precision cut boards to create real visual impact.

The relatively low cost of aluminium compared to other facade materials is a

key driver for many specifiers. While it ticks the sustainability box from the outset, when we talk to architects during the initial stages of a project, we are always mindful of the 'price-aesthetic-performance' paradigm. Every specification decision is a balancing act between these three competing considerations. In our experience metal, especially aluminium cladding, scores highly here.

Texture is another important aspect of aluminium cladding that is often overlooked. Working with our trusted coatings partners, we can produce metal facades that exhibit stone-like effects, so that tactile stone or GRC facades can be used at the bottom of buildings, while lightweight aluminium can be employed higher up the structure.

Given the rise in biophilia – the use of more natural materials in buildings – we are even seeing aluminium facades maintaining 'share of spec' here, as architects play with the use of metals next to materials such as wood and stone. This is a major trend we are seeing in building design that looks set to take off over the next few years.

Fibre cement products as well as glass reinforced concrete solutions (GRC) find favour with architects looking for a wood or stone-like aesthetic without the associated issues of fire rating, weight, or cost

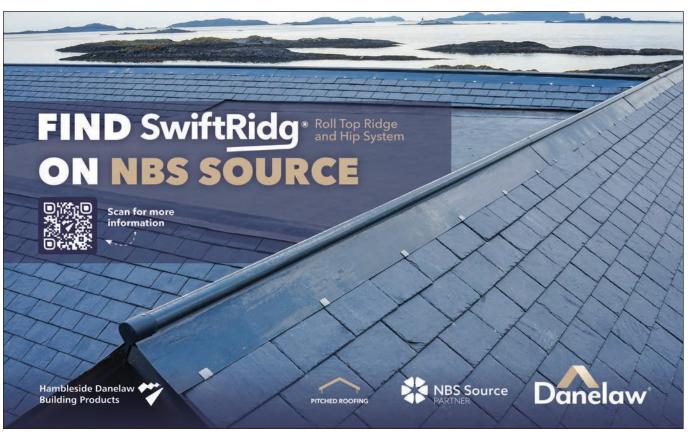
While fibre cement products can create a strong, stone-like look, GRC is being discovered by architects as a creative facade medium, used for curved facade details, columns and window surrounds.

#### Sustainable futures

Sustainability continues to be a major consideration for architects when specifying rainscreen facades. We are certainly seeing responsible manufacturers making strides in this area, looking at production processes, re-use and recycling wherever possible.

More cladding manufacturers are exploring the prospect of reverse logistics to facilitate re-use and recycling – something that we are ideally placed to support given our nationwide presence. Cladding, be it metal, cement, concrete, terracotta or laminate, is stepping up to the environmental challenge and has come of age as a building material of the future.

Andy Thomas is trading director at Vivalda Group





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## Back in 2018 Astraseal first ventured into the sector widely known in the industry as multi-room. A sector that encompasses multi-room, multi-use higher rise buildings and larger scale projects.

The very first project for Astraseal being a 23-storey student accommodation site in Coventry, a project being managed by Winvic Construction for Code Student Accommodation. The project of 1206 student rooms along with associated recreational areas came with many challenges. uPVC windows had not been previously used in a building of this height. The project came with new challenges for Astraseal and in many cases bespoke solutions had to be researched, developed and tested. Structural integrity, acoustic performance, thermal efficiency, ventilation regulation compliance, light and heat transmission all major factors within this type of building.

Following the first project in 2018 Astraseal have partnered with several leading construction firms working on further student accommodation blocks, private rental apartment schemes, schools and other high-rise large-scale projects.

Special Projects Division having gained invaluable experience within this sector since 2018. Astraseal have invested in and developed a team dedicated to this works, the team includes CAD technicians, an in-house architect, technical fenestration experts and qualified site management. In addition to this Astraseal have formed partnerships with structural engineers, facade specialists and test houses all of which continue to be involved in the growth of what is now a new division of Astraseal. the 'Special Projects Division,' dedicated to the multi-room, multi-use large scale new build projects. The Special Projects Division has now launched a new fenestration

system, designed specifically for this type of project. The Rehau Artevo system. Unlike any other window system, the Artevo system incorporates glass fibres within the profiles to offer unrivalled strength, whilst maintaining slim profile sightlines. The glass fibre reinforcing within the profiles reduces noise transmission, offers hugely improved thermal performance and enables the use of much larger, heavier glass panes.

This mix of glass fibres and polymer is branded Rau-Fipro X and all profiles within the Artevo suite are extruded using this technology. Rau-Fipro X window profiles are certified by the Passive House Institute in Darmdstadt. Building materials approved by Passive House are generally between two and four times more efficient than standard products. Thanks to the slimline profile that allows more light into the room whilst ensuring less heat leaves it, 90% of all Rau-Fipro X frames do not need steel reinforcements, meaning no wasteful thermal bridges. The Artevo system easily achieves overall U-values as low as 1.1 w/ mk when fitted with double glazed units but can achieve overall U-values as low as 0.6 w/mk when fitting with high performance triple glazing.

The Artevo system is available with a range of laminated foil finishes, the foil is bonded to the surface of the profiles during the extrusion process, the range covers the ever-popular anthracite grey colours but goes on to offer metallics and matt foil finishes in a range of colours.

To further enhance the Artevo system, Astraseal are approved for the manufacture and installation of the new Skyforce Juliet Balcony solution. Skyforce is a Juliet Balcony that fits perfectly and discreetly into the clean lines of the build. With a concealed attachment system and all visible parts offered to match the chosen finish of the windows and doors. Skyforce is fitted to the Artevo window or doors through specifically designed and tested reinforcement sections. Negating the need for obstructive bracket details fitted to the facade of the building. The Skyforce system is fully certified and compliant with Building Regulations offering protection from falling, collision and impact.

Both the Artevo and Skyforce systems are added to Astraseal's industry leading portfolio of British manufactured glazing solutions which includes both Rehau and Eurocell uPVC systems, third party certified fire rated windows and doors along with an impressive range of aluminium glazing systems, screens and curtain walling.

For further information on the range of glazing solutions manufactured and offered by Astraseal please contact the Special Projects Division by emailing spd@astraseal.com





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on products, services, events, and learning opportunities available from a wide variety of manufacturers and suppliers.

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#### ASWS facilitates 'forensic' demolition work



The finesse and forensic attention to detail displayed by Associated Steel Window Services (ASWS) when removing, cataloguing and eventually reinstating old windows or other architectural metalwork could not be further removed from the world of the

wrecking ball, or Fred Dibner burning timber props from beneath a factory chimney. Typically, ASWS will conduct a full condition survey on behalf of the client or architects which can include laser scans of the building, intrusive metal sampling to determine the materials used, and recording details about each window.

asws.co.uk

#### Sto's external wall insulation system specified for 8,000 m<sup>2</sup> Canary Wharf recladding project



A Sto external wall insulation (EWI) system spanning 8,000 m² has upgraded the exterior of a waterside residential development in Canary Wharf, London, providing fire compliant facades. Pierhead Lock is situated opposite the O2 arena on the River Thames. Beginning with a 12-storey tower by the water, the development gradually steps down to two storeys as it curls round the dock. The BBA-certified StoTherm Mineral K external wall insulation system achieves a reaction to fire of A2-s1, d0 in accordance with BS EN 13501-1. The A1-rated mineral fibre insulation boards were adhesively fixed to the concrete substrate using StoLevell Duo Plus. This levelling mineral adhesive was applied to the back of the insulation boards, with fixings used to secure the insulation boards to the substrate, including through the mesh to suit wind load conditions. StoFlexyl, an acrylic-based, fibre-reinforced waterproofing product was also used to encapsulate the insulation below the dampproof course. To reflect Pierhead Lock's original architectural style, the system was finished with StoSilco K1.5 silicone resin render. This provided a crisp white finish.

0330 024 2666 www.sto.co.uk

#### Hörmann and Panattoni get central in the East Midlands



Panattoni has completed two units of Grade A warehouse space at Panattoni Park J28 which is conveniently located just off junction 28 of the M1. The two units are 344,945 sq ft and 230,852 sq ft respectively, with both benefiting from 15M clear internal height, two storey hub offices and 50M yards. Both units have achieved BREEAM ratings of 'Very Good,' and have an EPC rating of 'A'. Supplying both units, Hörmann UK have installed full loading bays with safety and operational equipment including dock buffers, dock lights and traffic lights, plus sectional level access doors and fire exit doorsets. The total installation consists of fifty-three loading bays and seven level access bays, with the loading bays comprising of Hörmann SPU F42 sectional doors with HTL-2 dock levellers, featuring a one metre telescopic lip which provides an optimal range loading platform. This enables precise bridging for a variety of vehicle types and a guarantee of fast, efficient, and most importantly safe loading and unloading. Other elements of the Hörmann loading bay system include reinforced Dock Bumpers, which are constructed from recycled tyre rubber with 15mm thick steel faceplates.

01530 516868 www.hormann.co.uk

#### Garador's innovative Durabelt now available on GaraGlide garage doors



Garador's innovative Durabelt anti-scratch system is now available with Garador's popular GaraGlide roller garage doors. This Garador Durabelt is an exciting new development in modern garage roller doors, designed specifically to reduce marks and scratches on the surface of the curtain.

The system is built around a special belt made from microcellular polyurethane elastomer which provides a strong protective layer between each lath of the garage door as it rolls up. This additional layer offers high abrasion resistance and is also resistant to moisture, oil and grease, helping to ensure a smooth operation and even more long lasting protection for the door curtain.

Garador's GaraGlide roller garage door is already a top seller, designed not just for looks and performance but also for its quick and easy fit. Available in a pre-assembled box cover system, it has pre-drilled guide rails and as few as 12 fixings all round.

GaraGlide comes in a large choice of colours including timber effect finishes and can be fully automated.

01935 443 700 www.garador.co.uk

# Recycled material versus design flexibility?

Nick Haughton of Sapphire Balconies delves into the concept of 'next generation' manufacturing, and the need for firms to account for their recycled materials' origin, addressing the perceived impact on design flexibility

luminium has been instrumental in companies advancing sustainable and innovative solutions, proving highly beneficial to both construction industries and customers. The use of recycled aluminium should not be underestimated when it comes to sustainability. Its durability and availability in different grades (or purities) makes it an incredibly versatile material to work with. However, with industry attention often placed firmly on sustainable economies, how do recycled materials such as aluminium stack up?

All processes involving the manipulation of materials for light, heat, or movement necessitate energy, which is frequently obtained from unsustainable sources such as oil, natural gas, or coal. This results in harmful emissions, which is why sustainability has been a major focus over the last 15 years, with industries urged to pivot away from fossil fuels, and adopt greener energy sources like wind, solar, and hydropower to curb emissions.

Aluminium extrusion – a manufacturing process involving the refining of aluminium shapes – has gained traction in product design and manufacturing thanks to its ability to simplify construction. Recycled content is poised to play a crucial role in shaping the future of construction, promoting resource conservation, sustainability, and the industry's dedication to responsible building practices both now and in the years ahead.

This process, taking into account different aluminium grades, allows for customisable shapes and thicknesses of components, reducing carbon emissions impact by up to 44% through intelligent use of material and reduced material wastage.



#### The impact of ESG

Given that many client companies globally are adopting an ESG (Environmental, Social and Governance) framework, it's crucial to understand exactly why ESG is important from a sustainability perspective. ESG goes beyond simple carbon-cutting measures and incorporates environmental, social and governance strategies into a business at a fundamental level.

Recycled content contributes to the 'Environmental' pillar of ESG. By reducing the amount of extruded aluminium a company produces, energy consumption and waste generation can further be reduced as a by-product.

### How valuable is recycled material if you can't prove it's recycled?

Reaching net zero carbon emissions is an absolute must-do for a company aiming for sustainable practices, but carbon credits and

Recycled content is poised to play a crucial role in shaping the future of construction

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Thanks to recycled aluminium's malleability and flexibility, architects and developers can tailor construction elements





greenwashing aren't the way to go about it. To strive for true sustainability, you need to prove that your material is recycled and provide a form of traceability to show the source of the material.

Attempting to find the source of all materials can be strenuous and so many companies opt to buy carbon credits in an attempt to offset their carbon emissions. However, this is not true sustainability as these credits simply 'allow' a company to avoid what they might see as an inconvenience. For true sustainability, either traced recycled materials must be used or other methods of reducing carbon emissions must be considered, such as reducing levels of transport, reducing the amount of material in your product or making sure your waste products are recycled properly.

#### The limitations of recycled material

Global demand for aluminium profiles and the means to extrude them has remained strong into 2024. Considering the enduring influence of the coronavirus pandemic, the ongoing conflict in Ukraine and the continuing impact of Brexit, increased global demand is still an issue and has forced many countries to increase production, leading to scarcity of supply.

Limiting your opportunities by focusing too heavily on achieving a highly recycled material can be a hurdle for many buyers of extruded aluminium. The importance of recycled content should lie in the weight of CO<sub>2</sub> per item, not the percentage of recycled content in the materials themselves. Reducing the total emissions associated with a product is far more sustainable than increasing the percentage of recycled content used, as the less embodied carbon used – by weight – will directly impact how sustainable a product can be.

There are no hard and fast rules on what you should or should not do when it comes to the materials you use, but by staying informed on the role of recycled material, we can all make more informed and more viable choices. Adopting a well-thought-through ESG strategy can make a great difference to your approach to sustainability.

#### Removing aesthetic limitations

Most recycled materials can easily be customised to meet specific design requirements. This flexibility enables architects and builders to tailor the appearance of construction elements to match the desired aesthetic of a project.

Aluminium, for example, is inherently a very malleable construction material, but by using recycled aluminium, custom extrusions can be formed without extra waste from an ore extrusion. In this instance, aesthetics actually come as a benefit when using recycled material.

### Is recycled content the future of construction?

Recycled content holds a great deal of potential for the future of the construction industry. Through a massive impact on sustainability, resource conservation and aesthetic possibilities, recycled material can reduce a project's carbon footprint and alleviate the burden on finite resources.

A paradigm shift appears to be incoming – with a laser focus on ESG strategies in the lead-up to 2030 and beyond, companies will likely begin to embrace recycled content not just as a carbon-saving measure, but also as a commitment of responsibility for construction for future generations.

#### Conclusion

No, sustainability does not need to come at the cost of design flexibility.

Thanks to recycled content's malleability and flexibility, architects and developers are provided with the ability to tailor construction elements to meet specific aesthetic preferences. While there are still limitations with recycled content, such as global demand and scarcity of supply, the benefits largely outweigh the detractors.

Some manufacturers already use recycled materials to maintain a level of sustainable manufacturing throughout their entire process. There are no hard and fast rules on what you should or should not do when it comes to the materials you use, but by staying informed on the role of recycled material, we can all make more informed and more viable choices. Adopting a well-thought-through ESG strategy can make a great difference to your approach to sustainability.

Recycled content is likely to be a pivotal force in shaping tomorrow's construction landscape, benefitting resource conservation, sustainability and the industry's commitment to responsible construction practices for now and the future yet to come.

Nick Haughton is head of ESG at Sapphire Balconies











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### Senior makes window ventilation a breeze

eeting the individual ventilation requirements of different buildings can be a challenge, which is why leading aluminium fenestration solutions manufacturer Senior Architectural Systems has developed a range of specialist products including a Louvre Guard system and automatic opening ventilation (AOV) aluminium windows.

Senior's Louvre Guard system is a stylish aluminium louvre which is compatible with the inward opening designs of the company's popular SPW600 and PURe® windows. It is ideal for high-rise buildings where ventilation



strategies must address the need to reduce the risk of occupants falling from windows. Easy to install, Senior's Louvre Guard comprises an external adaptor and oval shaped blades which are fixed to the outside of an inward opening window. The system can be fixed through the face of the window or through a bespoke coupling mullion to maintain the thermal barrier.

Available either in anodised silver or bronze, or in any standard RAL colour, Senior's Louvre Guard system adds an extra design element to give any building a distinctive look. The blades can be positioned horizontally or at any angle up to 45° in either direction, and has been tested to 3 kN for barrier loading at a maximum blade span of 1,000 mm.

Senior can also offer a high performance aluminium window system with automatic opening ventilation (AOV). Based on the same aesthetic design as the manufacturer's popular SPW600 aluminium window system, Senior's AOV version is fitted with a smart actuator which allows for quick and automatic ventilation in the event of a fire to



help to remove smoke from the air.

The three chamber 75 mm polyamide window system has been designed to achieve impressive thermal performance and is available in a wide range of colours and can be top, side or bottom hung.

For more information on Senior's extensive range of aluminium fenestration solutions, please visit the website or download Senior's Specification Guide from the resources section.

01709 772600 www.seniorarchitectural.co.uk



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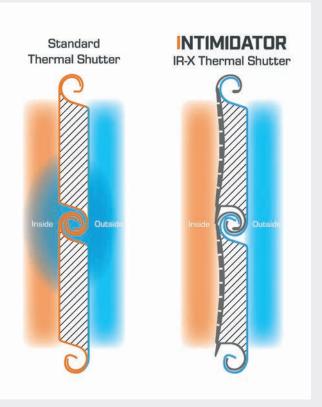
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# CGT Security launches a new industrial door with amazing thermal performance





s an industry-leading manufacturer of innovative security shutters, CGT Security are known for delivering quality solutions that are beyond the traditional shutter door.

Following on from the launch of the Intimidator Industrial door range at the end of 2023, CGT Security are now launching the Intimidator IR-X thermal industrial door with amazing insulation properties due to a combination of innovative product features.

Patented thermal break technology used on the Intimidator IR-X removes the cold bridge through the joints between the laths, giving a higher thermal performance than standard insulated shutters. The U value is traditionally stated as a through-lath metric, but on a standard shutter much of the heat transfer is actually through the joint between the laths, so the thermal break technology of the IR-X reduces the overall temperature

transfer by removing the cold bridge through the joint, as well as having a soft, PVC lip between the laths for even greater insulation.

In addition to this, the curtain of the shutter has an integral rubber top seal for a reduction in air flow between the frame and door, and the guide rails have internal brush seals to give even greater insulation. This gives an overall U value for the whole curtain as 2.8 W/m²K compared to a typical insulated shutter U value of 4.3 W/m²K.

These two part guide rails also give extra reinforcement for high wind-loading as well as giving additional strength on the attack face of the shutter.

The Intimidator IR-X has been independently certified by the Loss Prevention Certification Board (LPCB) to LPS 1175 Issue 8 standard up to a B3 (SR2) rating and has Secured By Design Police Preferred Accreditation.

Each lath of the Intimidator IR-X is made from a twin material; an aluminium outer and a soft PVC finish on the curtain wall that gives quieter rolling of the door, even at high speeds, and the curved shape of the laths ensures a more intelligent shutter roll, reducing the space required in the head box area.

The combination of these smart product features, produces a secure, high speed industrial door with superb acoustic performance as well as thermal excellence, making it especially suitable for production facilities, utilities buildings, logistics depots and warehouses where low noise levels and good insulation are important.

You can find out more about Intimidator IR-X and the rest of the Intimidator range on our website.

0330 024 9409 cgtsecurity.com

#### FlameOut Breathe used for project



ITP's FlameOut Breathe flame-retardant breather membrane was specified for the redevelopment of the Stephenson building at Newcastle University. FlameOut Breathe was supplied via builders' merchant, M Markovitz, and installed by leading facade specialists, Keyclad. Providing high

breathability to facilitate the release of water vapour and protect the condition of the building envelope, its advanced membrane technology combines W1-rated water tightness with a B-s1,d0 fire safety rating which is independently tested to EN 13501-1.

01347 825200 www.itpltd.com

#### An ideal match for modern living



The versatile W40 window profiles, specifically developed by the Steel Window Association (SWA) for its members, are a stylish and modern solution that suit both new-build and refurbishment applications. Today's W40 profiles, manufactured from hot rolled steel, provide greater flexibility

than their predecessors, being able to accommodate thicker double or even triple glazing units. They are also capable of creating larger window openings without coupling individual frames together.

www.steel-window-association.co.uk



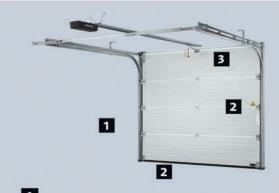
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www.structural-glass.com

#### **Brilliantly British manufacturing from DoorCo**



DoorCo recently announced the addition of a new door to their composite door portfolio that is being manufactured in their new Doncaster facility. Revealed as BRiTDOR, the new timber core composite door represents the new brand's classic British origins. BRiTDOR's construction is a

timber core finished with Thermoplastic CoolSkin technology, made to fit any profile on the market. The collection will include existing styles like 6/4 combi, flush and farmhouse, as well as two new exclusive designs just for this range, available in over 15 colours.

01625 428955 retail.door-co.com

#### **DuoFlex achieve UK BBA Accreditation**



SOPREMA, a global leader in waterproofing, roofing, thermal and acoustic insulation solutions, proudly announces that its innovative DuoFlex hot melt single pour system has received UK BBA (British Board of Agrément) accreditation. This esteemed accreditation endorses DuoFlex for a variety of applications including weatherproofing

inverted roofs, zero fall roofs, roof gardens, blue roof specifications in combination with stormwater attenuation systems, and protected roofs with limited access in flat roof specifications.

techsupport@soprema.co.uk www.soprema.co.uk

#### **Introducing Wernick Buildings**



Wernick Buildings has decades of experience in the design, manufacture, and build of permanent modular accommodation. Wernick pride themselves on being a trusted partner and industry leader, delivering exceptional solutions to their valued customers.

They have been working with architects for years, with some of their most exciting projects being developed in collaboration with leading UK practices. With small changes to your design process, modular construction can provide enormous benefits to a project.

Wernick pride themselves on being a trusted partner and industry leader, delivering exceptional solutions to their valued customers. When you choose to work with them, you can expect a seamless experience, unmatched quality, and outstanding customer service.

enquiries.buildings@wernickgroup.co.uk www.wernick.co.uk



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knaufinsulation.co.uk/ housebuilders-hub

### **Quiet transformation for iconic Boys' School**

rchitects Hawkins Brown have completed a transformative redevelopment at the Central Foundation Boys' School, the 150-year-old top performing comprehensive school in central London. The vision was to rationalise and consolidate the school's several buildings into a cohesive design to allow more efficient use of the campus.

Works included providing a new, purposebuilt science building equipped with state-ofthe-art facilities along with a new three-court, multi-use sports hall with changing facilities. The tight nature of the site meant that the sports hall was sunken under the courtyard



with rooflights bringing in natural light. It has been designed to comply with Sport England guidance, providing the school with a flexible multi-purpose space that can be used for outof-hours community activity.

To help combat the problems of poor acoustics and sound reverberation in the sports hall, music and drama rooms, Hawkins Brown specified Troldtekt acoustic panels across all the ceilings. Panels were chosen in both grey and natural finishes to provide a discreet look whilst complementing the interior design. Troldtekt solutions excel at providing acoustic comfort with a visually attractive, aesthetic tactile surface along with high durability and low-cost lifecycle performance.

Troldtekt acoustic panels are available in a variety of different structures and colours, combining superior sound absorption with an award-winning design. The Troldtekt range has a minimum expected life cycle of 50 years coupled with excellent resistance to humidity and tested to meet ball impact standards. The range is available in various sizes and structures, from extreme fine to fine.



They can be supplied as natural wood, and in the carbon-reduced FUTURECEM<sup>TM</sup> finished in almost any RAL or NCS colour.

Depending on the panel specified, reaction to fire is classed in accordance with EN 13501 as B-s1,d0 or A2-s1,d0 respectively. Cradle to Cradle Certified® at Gold level, Troldtekt wood wool acoustic panels are manufactured using wood from certified forests (PEFCTM and FSC®C115450) and can contribute positively to a building's BREEAM, WELL or LEED points.

bit.ly/3vxoTfq www.troldtekt.co.uk

#### Manchester housing provider picks ISO-THERM insulation to upgrade older stock



One of the leading providers of affordable housing in the North-West has begun utilising slimline and waterproof ISO-THERM insulation, recently introduced to the Wykamol range, to help address issues of condensation and mould growth in some of its older properties, with the manufacturer present at the first installation to help train the customer's staff. Wythenshawe Community Housing Group manages some 14,000 homes across Manchester and prides itself on offering residents high quality accommodation, meeting the needs of a diverse population, including those with complex health challenges. Wykamol's Technical Manager, Kevin Topping was invited to give a presentation to a cross-section of WCHG's staff, including surveyors and housing managers, together with some of the potential applicators. This meeting allowed the housing provider to understand some of ISO-THERM's technical benefits including its ability to create an isolation layer to keep damp out of dwellings, while offering an uplift in thermal performance approximately equivalent to installing up to a 25 mm thick layer of polystyrene.

01282 473100 www.wykamol.com

#### **ROCKWOOL** streamlines cavity barrier offering with **ROCKWOOL SCB**



ROCKWOOL® has developed a new cavity barrier called SCB. The product is an expansion of its current range of cavity fire stopping products and is tested to meet the requirements of BS EN 1366-4:2021. This new product development underlines the company's commitment to offering products tested to the latest BS EN standards, while simultaneously providing customers with a more streamlined range. ROCKWOOL SCB combines the functions of the currently available TCB and PWCB, building and expanding on their scope of application to replace these products. SCB will be available in two widths: 110 mm as standard, and 200 mm for use where a party wall meets the external cavity. It is suitable for use in masonry, timber frame and steel frame cavities up to 290 mm, and can be installed horizontally or vertically. TCB and PWCB were phased out following the launch of SCB on 15 May 2024 and ROCKWOOL recommends switching to SCB specification in advance where possible. Specifications written prior to the expiration of the TCB and PWCB certifications will remain valid and the products remain available until 15 November 2024.

01656 868 490 rockwool.link/SCB

### Delivering safe and sustainable hot water

s spring unfolds into summer, it presents the perfect opportunity for architects to get outside to explore practical and eco-friendly shower solutions tailored for healthcare, accessible and aged care, mental health and secure, and leisure and education facilities. Horne's Display Van or Roadshow, currently making its way across the UK, offers a personalised, handson experience with Horne's tried and trusted thermostatic showers and Optitherm clinical taps, and including the game-changing ILTDU, and TMV ranges.

Horne products are meticulously designed to meet the stringent demands of both public and private healthcare, mental health and secure facilities, to institutional



accommodations and recreational, wet leisure and sport environments. For settings such as mental health and learning disability facilities, Horne provides safe, robust, hygienic, ligature-resistant shower designs. Each unit features an internal healthcareapproved thermostatic shower valve, for consistent and reliable warm water delivery, housed in a durable extruded aluminium panel, with precision engineering head and hand controls for longevity and reliability.

A highlight for architects prioritising net zero design is our water (and energy) saving features. Timed-flow controls, flow regulators and optimised spray plate designs, minimise the wastage of pre-heated water, while still ensuring an effective shower experience. Enhance the eco-credentials of any project and contribute to water and energy efficiencies for improved BREEAM ratings.

The Horne Roadshow is more than just a mobile showroom; it's an integral resource for architects and project collaborators to evaluate Horne products first hand, engage in detailed discussions about specific project needs, and receive tailored advice from our



experts. Our scheduling can be flexible to easily fit into your project timelines.

Don't wait for the usual exhibition circuits - the Roadshow is ready now to visit your office or site. Discover how Horne's advanced integrated thermostatic solutions can elevate your next healthcare, secure, or leisure project conveniently and efficiently.

Contact Horne to schedule your personalised Roadshow, and take a significant step towards integrating sustainable, durable, high-performance shower, tap and TMV systems into your designs.

01505 321455 b.link/RoadShow

#### Knightsbridge turns up the power



Laptops and other power-hungry devices can now be USB-charged directly from the socket thanks to Knightsbridge's new 63W PD (Power Delivery) wall charger. Suited to commercial and retail environments, the wall charger is Knightsbridge's most powerful yet and supports PD, Programmable Power Supply (PPS) and Quick Charge (QC)

through two USB-C and one USB-A ports. PPS fast charging is the most advanced charging technology for USB-C devices. The technology adjusts the voltage and current in real-time, depending on a device's charging status, feeding it with maximum power.

01582 887760 www.mlaccessories.co.uk

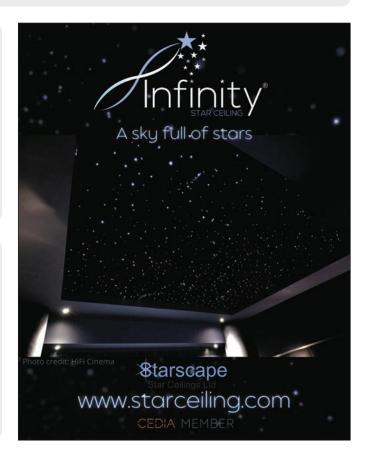
#### The opinions of the architectural community



As part of netMAGmedia's research offering, adf has been increasingly harnessing the knowledge and views of its focused readership to produce 'Industry Viewfinder' white papers based on reader surveys. These are documents which contain unique insights and data on a wide range topics that are currently fuelling debate in the industry,

from Passivhaus to Part L. This audience research, providing real-world experience, provides us with the opportunity to better understand the needs of our readers and tailor our content accordingly.

insights.netmagmedia.co.uk/whitepapers



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#### F. Ball launches new smoothing compound



F. Ball and Co. Ltd. has drawn upon the latest cement formulation technology to create a 'best-in-class' high flow smoothing compound: Stopgap 1400. A fast-setting, two-component smoothing compound, with superior self-smoothing properties, Stopgap 1400 is walk-on hard from just 90 minutes after application and ready to receive floorcoverings from

12 hours. Stopgap 1400 can be applied between 2-10 mm thick to a wide range of absorbent and non-absorbent subfloors.

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

#### Strong solutions for cabinetry and joinery



Consistency and quality are essential attributes of materials used in producing domestic and commercial furniture. Add to this the need for materials and processes to be sustainable and, unsurprisingly, West Fraser's CaberMDF and SterlingOSB Zero are among the most popular panel products used in the furniture industry. Panels for furniture and joinery production must have high-quality surfaces, strength,

consistent density, impact resistance, good machining properties and be able to facilitate all sorts of fixings and fasteners securely.

uk.westfraser.com

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issue has even been delivered! What's more, the Digital Issue includes interactive links to featured companies. Subscribe for free now.

www.architectsdatafile.co.uk/subscribe

#### **Keller Kitchens' new contract partners**



Keller Kitchens has announced a new strategic partnership for the company's kitchen contract channel in the UK. Arcos Interiors of Bristol has been appointed as Keller's exclusive contract partner for the South West of England. Headed up by Christian Ford, Arcos Interiors boasts 30 years' experience in the industry and

the new partnership offers a full turnkey service for developers in the region encompassing experienced project management – from design to handover – and excellent customer care thereafter.

www.kellerkitchens.com

#### Riviera Home bespoke rugs & runners: Elevating excellence with quality



Riviera Home has launched a bespoke rug service, bringing the exquisite quality of its handcrafted broadloom carpets to area rugs. For homeowners and interior designers looking to add unique style to interiors, Riviera Home has launched a bespoke rugs and runners programme that lets any of its hand-crafted, Wilton and tufted ranges, including outdoor-ready carpet styles, be enjoyed as an area rug or stair runner. The perfect addition to home or garden, every rug brings the quality and beauty of Riviera Home. The service is available on all qualities by Riviera Home: from the rustic, chunky wool loop of Burford and the silk-like shine of Monaco, to the classic chevron of Sorrento, tweed-effect flatweaves of Capri and Milano, and stylish Turin and Genoa. Customers are free to choose any of Riviera Home's stock broadloom ranges, offering them an impressively flexible service. So, whether a timeless classic to bring elegance to a luxury living space, a rug with a minimalist and modernist aesthetic, or a comfortable and laidback feel for outdoor living; the Riviera Home bespoke rug and runner service brings a tailored look.

01299 871446 www.rivierahomeuk.co.uk



#### One step further towards net zero



The new ECOMOD CO2 monobloc air source heat pumps form part of Ideal Heating Commercial's range of next generation natural refrigerant heat pumps released in

2024, featuring maximum flow temperatures up to 70°C. As the name implies, natural refrigerants are those that occur naturally, as opposed to synthetically made. They have a low Global Warming Potential (GWP), making them the environmentally friendly option over their lifetime. In the case of ECOMOD CO2, which uses R744 natural refrigerant, the GWP rating is just 1, making them the ideal choice for customers with net zero commitments.

01482 498376 rb.gy/gj0hvk

#### The new Titon HRV Cool Plus™



Titon announces the launch of the HRV Cool Plus<sup>TM</sup>, specifically designed to provide cooling in warmer weather conditions and tackle residential overheating. It is engineered to seamlessly integrate into heat recovery ventilation (MVHR) systems, delivering cooling and filtered air to enhance user comfort. With its integrated cooling module, the cutting-edge

unit pre-cools incoming fresh air during warmer months, ensuring a comfortable indoor environment. Providing up to 3.3 kW total cooling capacity, it ensures optimal performance even in demanding conditions, and offers flexibility to suit any installation requirement.

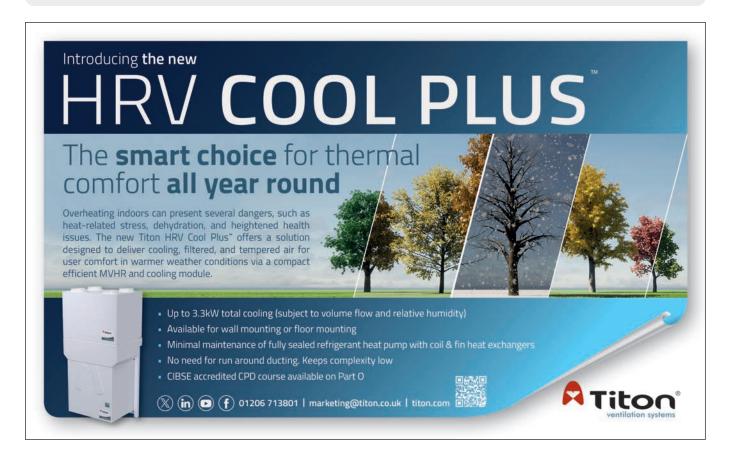
info@titon.co.uk www.titon.com/cooler

#### Gilberts breathes new life into Edinburgh



Edinburgh's St James Quarter is unveiling the final landmark element of its regeneration of the historic city's new Town with the opening of the W Edinburgh. All the key elements of the 1.7m ft2 "urban resort" including residential apartments, hotel and retail space - are being aired by Gilberts. Gilberts' involvement throughout St James demonstrates the company's relevance for and dominance of high-end developments. The company has now delivered the internal atmosphere for what is believed to be the three biggest hotel projects in Scotland in the past year, all of which are in the city - W Edinburgh, Gleneagles Townhouse and the new Virgin Hotel. All three have also been major refurbishments and remodelling of historic, listed buildings in a World Heritage Site location. At the W Edinburgh - known locally as the walnut whip because of its iconic spiralling architecture - air throughout the 12-storey venue is delivered via Gilberts' linear slot diffusers. A combination of some 250 no. Gilberts' GSL and high capacity JSL linear slot diffusers have been installed by M&E specialist FES for principal contractor BAM to the design developed by Introba.

01253 766911 info@gilbertsblackpool.com



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# Fire door safety maintained at West Lothian schools with Yeoman Shield

est Lothian Council schools, Deans Community High School and Armadale Academy, are maintained by Bellrock Group under a contractual PPP3 project agreement. Taking on this maintenance management for the two school buildings places the Bellrock management team as the Responsible Person when it comes to compliance to fire safety maintenance which incorporates fire rated doors.

With this in mind, Martin Igoe, Senior FM for Bellrock, engaged with Yeoman Shield Fire Door Services when it came to assessing and protecting the condition of the schools' fire doors with an impact protection system.

As a brand name of Harrison Thompson & Co. Ltd. who are a registered FIRAS Warringtonfire (a UKAS accredited scheme for fire door and passive fire resisting products installation) company, Yeoman Shield Fire Door Team were able to under take a conformity survey of the doors in both schools.

This consisted of an assessment of the



condition of the fire doors, noting remedial work required to improve the doors functionality, replacement of doors where required as well as noting advisory door protection products that could improve the look, condition and extend the life cycle of the doors by solving impact damage problems.

After an itemised quotation for the work had been raised and accepted, Yeoman Shield directly employed fixing operatives carried out the work simultaneously at both school sites simultaneously in accordance to Bellrock's programme.

Remedial work to both frame and fire doors, replacement doors as well as Yeoman Shield Fire Rated Protection products which were Door Protection Panels, Door Edge Protectors and PVCu clad Glazing Beads were fitted by the accredited teams following best practice guidance.

Martin Igoe commented "Having previously used Yeoman Shield on school projects in Aberdeenshire I was more than happy to again collaborate with Yeoman Shield for the Deans Community High School and Armadale Academy."

"Their door protection products are great; not only have Yeoman shield re-certified the old fire doors for conformity, they have also extended the life of the doors by fitting a hardwearing cladding to each. This makes them more durable for the rigours of school life, they look amazing and are so easy to clean."

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### Advanced scores fire safety system upgrade at Stamford Bridge

tamford Bridge, home to Chelsea Football Club, now boasts an upgraded fire safety system thanks to TP Fire & Security Ltd's installation of Advanced equipment, ensuring protection and peace of mind for fans and staff. The project at the iconic London stadium involved replacing 14 existing fire alarm panels with a network of 17 Advanced MxPro 5s and three repeater while ensuring uninterrupted functionality throughout the transition.

The systematic decommissioning of the old system and installation of the new MxPro 5 network throughout the stadium, plus the integration of two new graphics system, demanded careful planning and efficiency. Despite the complexity of the task, the work was successfully completed in just six days, meeting the client's stringent requirements for continuous protection and performance.

Stamford Bridge, situated in Fulham, West London, has been the proud home of Chelsea



Football Club since 1905. With a capacity of 40,343, it stands as one of England's most historic football venues.

Simon Fiddy, project manager at TP Fire & Security Ltd, stated: "The successful upgrade at Stamford Bridge is testament to our team's expertise and dedication and the ease of use of Advanced products. Despite the challenges posed by the scale and complexity of the installation, the exacting schedule and the need for continuous operation, we delivered a seamless transition to the new Advanced system. Chelsea FC's satisfaction with the completed project underscores our commitment to excellence in fire safety solutions."

Robert Ives, fire safety officer for Chelsea Football Club, added: "Ensuring the safety of Stamford Bridge and its occupants is our top priority, and the successful upgrade to our fire safety system plays a significant part in that goal. I'm relieved to have implemented a reliable and adaptable solution, ensuring continuous protection for Chelsea Football Club and its loyal supporters. I extend my thanks to all parties involved, whose expertise and dedication made this project a resounding success."

MxPro 5 is the fire industry's leading multiprotocol fire panel and is certified by FM Approvals to EN 54 Parts 2 and 4.

0345 894 7000 www.advancedco.com

#### A1 rated Cemgold boards protect care home patients' memories



A new care home complex has made use of IPP's A1 non-combustible Cemgold boards to create Memory Boxes that will help patients find their rooms and orientate themselves by storing photographs or other memorabilia. Prominently positioned in the corridor wall outside each of the rooms is one of the 600 x 400 mm boxes with a lockable door, which were fabricated on site by Highwood's own carpenters, with the room number featured in large, high contrast numerals. On the room side of the boxes, however, a similarly sized panel of 12.5 mm thick Cemgold replaces the plasterboard lining to offer half-hour fire resistance. The Project Architect for Harris Irwin, Michael Bond, recounts: "Because the Memory Boxes are made up using standard blockboard, they required separate fire protection for which we specified a material meeting the requirements of Euro Class A2 should be utilised. The main contractor, Highwood then proposed Cemgold which met all of the criteria." Available in thicknesses of 6, 10, 12.5, 16 and 18 mm, the 1,200 x 2,400 mm sheets of Cemgold are widely specified across the construction industry for interior and exterior applications including in combination with IPP's Magply boards.

01621 776252 www.magply.co.uk

#### Vox Ignis launches Unicorn Voice PAVA with global first UL certification



Worldwide voice alarm and safety communications specialist Vox Ignis has launched its new unified PAVA system, Unicorn Voice, after becoming the global first to receive UL certification to EN54-16. This European standard specifies the requirements for voice alarm controls and other equipment used in fire detection and alarm systems. Unicorn Voice is a powerful wall-mounted, scalable public address and voice alarm (PAVA) system for almost any site. It is designed to be the easiest to specify, install, and configure. It can grow from one panel to a fault-tolerant network of 64 multi-amplifier panels with up to 256 speaker circuits supporting over 163,000 speakers as per BS EN 5839-8. Unicorn Voice is easily programmed and managed via integrated, intuitive touch screens or PC and offers a range of amplifier sizes and speaker taps that maximise power efficiency. Amplifiers can be hot-swapped, and Vox Ignis' speaker range promises easy firstfix with plug-and-play installation. Unicorn Voice offers pre-recorded and live voice messaging, background music, integrated fire telephones, disabled refuge, fire alarm VADs, and assistance alarms.

0191 516 6030 www.vox-ignis.com

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sales@sunraytimberdoordivision.co.uk www.sunraytimberdoors.co.uk















## What lies beneath?

Julian Thurbin of Wallbarn explores the key factors to consider when specifying the infrastructure beneath decking or paving that may be hidden, but is essential

well-designed, specified and installed decking or paving area can form the crowning glory of an outdoor space. But what lies beneath these new-build or retrofitted spaces is key to ensuring their safety and long-term performance.

Many decked, paved or tiled areas are supported by a hidden substructure of pedestals or rails which must be robust enough to withstand loads placed upon them as well as being weatherproof, rot-proof, durable and long-lasting. This is especially important for public areas and if designers expect heavy traffic and/ or planters, street art or heavy furniture on the suspended surface. Substructures must also offer flexibility to deal with deck falls, interruptions in the deck surface, and different surface finishes.

Therefore, understanding how the space is going to be used (domestic or commercial; public or private; fire-rated; multiple levels?) lays the groundwork for selecting the most appropriate and cost-effective substructure to support the decking or paving selected.

Paved hard landscaped areas supported by pedestals have slim gaps – millimetres wide – between pavers. These are formed when slabs are clicked into place on special lugs attached to pedestal headpieces. Lugs hold the floor elements in position and the gaps facilitate drainage, with rainfall directed into channels beneath the hard landscaping, either at street or roof level. This system also creates an opportunity to collect rainwater for recycling, on blue roofs for example. Decking will have a joist beneath the boards connected using mechanical fixings/clips. Often the joists will be laid onto adjustable plastic pedestals

#### Floating floor

Entry level fixed-height solutions to self-levelling, adjustable height, heavyweight and Class A fire-rated pedestals all provide a 'floating floor' with uniform flat surfaces separating paving/decking from the base structure, improving drainage and



protecting the surface beneath.

Pedestals require no penetrations of roof membranes (there are no mechanical fixings), protect the roof finish, are lighter than bedding into mortar, and provide a quick and cost-effective way to transform areas into usable spaces. Paving can be lifted to allow access to the roof deck if required.

Specifiers and contractors have a wide choice of pedestals, substructure systems and paving/decking finishes. But there are pitfalls to be avoided and key decisions to be made to ensure the required finish and performance is achieved.

#### Class A?

Is the project at height, and within scope of Approved Document B, and BS 8579, BS 8579:2020 Guide to the Design of Balconies and Terraces? If so, only Class A non-combustible metal pedestals, substructures and fixings, and Class A paving can be specified in order to comply with relevant Building Regulations.

There are a number of solutions marketed as 'fire-safe' but it's worth making sure that the system manufacturer/ supplier can demonstrate compliance and that the pedestals do not have flammable elements such as rubber 'gaskets.'

Understanding how the space is going to be used lays the groundwork for selecting the most appropriate and cost-effective substructure



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Expect pedestal weight tolerances of up to two tonnes and height ranges from 26 mm to 675 mm via threaded stems. Good Class A pedestal systems will be compatible with a range of height-adjustable profiled aluminium joists and rails to form a strong substructure frame to create Class A decking or terrace.

The retrospective ban on combustible materials in the external walls of high rise buildings above 18 metres (11 metres in Scotland) has compelled building owners to remove such materials from at-height balconies and replace them with Class A non-combustible products in order to certify buildings safe via the EWS1 Form. For these projects consider speaking with a supplier who can assist in creating a pedestal layout, as it can be difficult to ascertain exactly what lies beneath a wooden or PVC deck until strip-out begins. Having a supply partner that's able to quickly and accurately estimate and lay out the height and position of pedestals is extremely useful to specifiers.

#### Usage

Will the newly-created or refurbished space be open to the public, subject to high footfall, vehicular movements, and will it be supporting heavy furniture, planters etc? Understanding the usage is important to ensuring that the pedestal system can withstand the required weight tolerance long-term.

Failures can happen when an unsuitable product is installed. We were called in following the partial collapse of raised paving on a public roof area. Lifting slabs around the affected area revealed that the architect's specification for quality pedestals with independent laboratory certification had been disregarded in favour of a cheaper alternative – injection moulded plastic pedestals with a large proportion

of chemical fillers. The pedestals became brittle in cold temperatures and shattered. The original specification was not met, therefore the contractor was held liable for the claim.

What to look for? For standard plastic pedestals, a weight tolerance of 680 kg and temperature tolerance of -40°C to +75°C is more than achievable. Heavy duty plastic pedestals can offer a weight tolerance of over 1.5 tonnes each with a breaking point of two tonnes. Standard metal pedestals can withstand two tonnes.

Both plastic and metal pedestals are available in self-balancing systems, allowing installers to deliver super flat finishes even when deck surfaces are uneven (for example felt overlaps, blemishes, ridges etc) or when paving slab thickness varies.

Leading pedestal systems include all this plus self-levelling headpieces, positioning lugs, the ability to change pedestal height post-installation and a variety of heights (from 10 mm to 1 metre plus) to accommodate changes in deck heights, thresholds etc and work around deck obstructions. The substructure system of a platform of aluminium rails fitted to adjustable pedestals, then the tiles or decking fixed to them creates a laterally stable and ultra hard-wearing raft, improving the performance of the paving or decking system and allowing a greater degree of finishing and furnishing options as well as being able to accommodate more foot traffic.

Suppliers who offer a full and compatible substructure (a rail system connected to pedestals for tiles and decking) means that clients know all the individual elements connect effectively and they can source the entire system – pedestals, substructure and tiles/paving/decking – from one source.

Julian Thurbin is director of Wallbarn

#### King Edward IV Multi Academy Trust case study



Forming part of the King Edward VI Multi Academy Trust, are two Camp Hill institutions for Boys and Girls. As part of the campus there are a number of outdoor pitches to cater for a plethora of sporting activities. Despite a number of outdoor pitches both grass and tarmac, it was decided by the school that the existing tarmac surface located next to the indoor facilities needed to be replaced. The Trust wanted to take the opportunity to install a new surface that could offer more protection to the students and could be used by both the girls and boys campuses. With this in mind Blakedown Sport & Play worked with the school to select a surface that met the needs of the school. Having undergone rigorous surface interaction tests Playrite's Matchplay 2 was found to have higher levels of shock absorption, slip resistance, impact attenuation and rotation resistance, making artificial grass an ideal choice for physical environments. Playrite's Matchplay 2 synthetic grass surface is a multi-use surface specifically designed to be used for multiple sports. Matchplay 2 also benefits from a low sand content allowing for playtime to be conducted all year round and all weather conditions.

01924 412488 www.playrite.co.uk

#### Turn outside spaces into high value areas



Parkside Architectural Tiles has launched Everscape<sup>TM</sup>, a collection of outdoor-ready porcelain tiles, as well as technical accessories, designed to withstand the rigours of all-weather use. For multi-storey rentable homes, private residential developments and commercial properties looking to maximise return on outside space, Everscape<sup>TM</sup> outdoor porcelain tiles brings a high-quality approach to patios, terraces, balconies and more. Landscape architects, designers and contractors working on outdoor commercial and residential projects, can use Everscape to find a tiling solution that will deliver durability in all-weathers. Not only tiles, but with outdoor grouts, adhesives, preparation products, fabricated metal treads and strips, trims and pedestals; Everscape is a complete solution for creating beautiful outdoor spaces. Frost, stain and fire resistant, Everscape tiles need little upkeep and are available in elegant and simple designs that bring a high-quality look to outdoor areas. One of the highlights of the range is Kemble, a smart and sophisticated limestone look tile in three warm shades. Available in square and rectangular formats, Kemble can be used both inside and outside, creating a fluid transition and extending habitable and usable space.

0116 276 2532 parkside.co.uk



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