

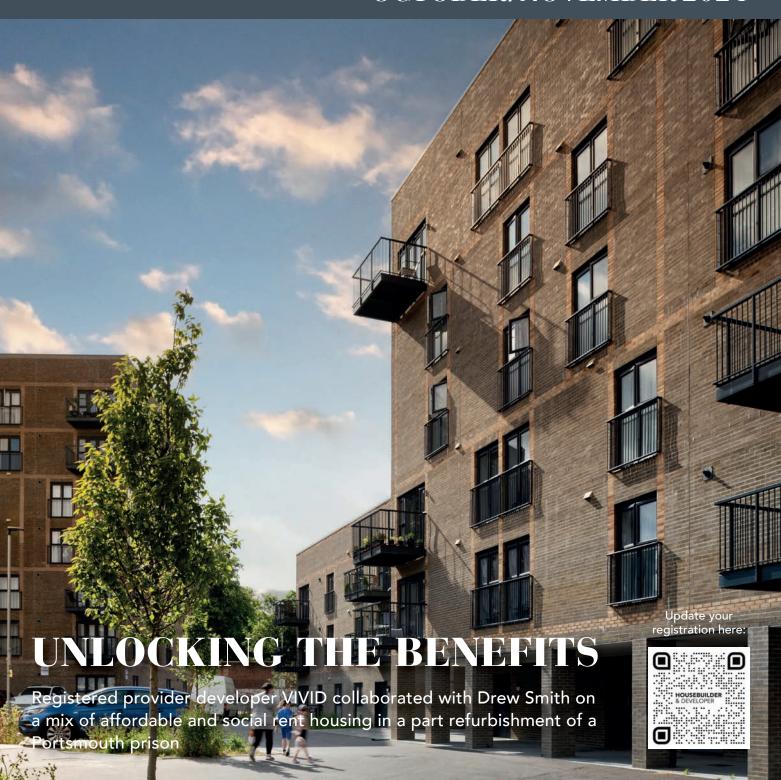




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in new venture

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**OCTOBER/NOVEMBER 2024** 





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# FROM THE EDITOR

The collapse of Northamptonshire approved building inspector PWC Building Control Services has had a major impact on thousands of ongoing housebuilding projects of different sizes. The LABC has written to approximately 14,000 of its creditors awaiting completion certificates, whose projects "range in size and value," said Martin Taylor, LABC chief executive.

This major £5m turnover firm's demise is one of the first signs that the new building safety regime brought in by the Building Safety Act has real teeth, and worrying consequences for lack of compliance. Short-term, the LABC says private clients and developers left in the lurch will now see their schemes passed over to local authority building inspectors, and have to pay once again for their services to get projects signed off in order to sell.

Observers reckon that because of other building control firms already having gone under after the Building Safety Regulator introduce its tougher compliance regime in April, and now this major firm disappearing, we are the start of something resembling a purge.

PWC is believed to have £10m of debts, following its licence to trade being finally revoked by the Regulator in August. The BSR initially rejected the firm's application to join the safety register in April, based on reported "breaches of its code of conduct."

Taylor said "understandably there will be much concern about what this situation means for these consumers" (possibly something of an understatement), and that developers affected need to speak to their local authority's building control team, and "provide them as much information as possible to help them determine whether the work completed so far complies with the relevant regulations."

Even if you follow good advice and keep all of your project evidence and data diligently, already snowed-under local authority teams aren't going to be green-lighting anything soon. You will be starting from scratch if you haven't got the appropriate documentation, including weekly hi-res photo diaries of work done.

We may be at the end of the era of developers managing to build across different local authorities using their relationship with their choice of private building control firm to achieve the gains they previously managed. It may be that, for good reasons of creating much more rigour in the process to achieve safety above all, we will at some stage be back to the era of only working with local authorities.

An estimated 15,000 building projects are affected by PWC's collapse, a few more of these and the 1.5 million homes promised by Labour starts to look fanciful.

Unfortunately, this is what a robust system looks like, there cannot be safety gains across the board without pain.

James Parker

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# Honey granted planning for £42m development in Nottinghamshire



Housebuilder Honey will build 114 new three, four and five-bedroom homes in Edwinstowe, Nottinghamshire, after being granted planning permission for a £42m development.

The development called, "Homes by Honey at Thoresby Vale" will comprise 12 of Honey's house types and include semi-detached and detached properties. Located on the former Thoresby Colliery, Thoresby Vale is redevelopment masterplan to create a new sustainable community. Once complete, it will comprise 800 new homes, a new primary school, a local centre and up to 250,000 ft² of commercial space.

Work was scheduled to start in September, Honey anticipates that the first residents will move into their new homes in June 2025.

Since the firm's launch in October 2022, Honey has secured 19 sites across Yorkshire and the Midlands that will deliver 2,278 homes and a combined gross development value of £675m. The company is backed by private equity firm Alchemy Partners and its Alchemy Special Opportunities Fund IV which has £937m of fully committed capital.

Honey chief executive officer, Mark Mitchell, commented: "The project at Thoresby Vale will help satisfy the demand from those living in, or wanting to move to, Edwinstowe for high quality, high specification new homes.

"We have seen significant interest from prospective buyers since announcing our plans and the development will deliver a range of new homes well suited to first-time buyers, families and downsizers.

Honey has analysed consumer insights and trends to inform its house type designs to ensure they meet the needs and wants of today's new home buyers, including the flexible use of all living spaces. Standard features in every Honey home include bi-fold doors; individually designed fully integrated kitchens; and boutique style bathrooms with a signature freestanding bath and full height tiling. All properties will also feature an EV charging point.

In addition, the development will accommodate the Future Homes Standard which requires all new homes being built from 2025 onwards to produce 75-80% less carbon emissions.

# Trio of appointments at Avant Homes



Coleshill-based Avant Homes West Midlands has strengthened its team with three new appointments to support the housebuilder's expansion plans throughout the region.

Nigel Rimmer has been hired as construction manager, while Toni Swindale and Layla Malik have joined as customer liaison manager and management accountant respectively.

With 40 years' experience within the housebuilding industry, Nigel Rimmer arrives from residential developer Taylor Wimpey. In his new role, he is overseeing the delivery of Avant Homes West Midlands' new homes build programme.

Toni Swindale, who has almost a decade of experience in customer care, joins from housebuilder Bovis Homes. As customer liaison manager, she is tasked with supporting the regional business' customers following the completion of their home purchase.

Layla Malik has been recruited from multi-tenure developer Countryside Partnership and is playing a central role within the Avant Homes West Midlands finance team.

Welcoming the three new starters to business, Avant Homes West Midlands technical director, Mark Marsh, said: "Nigel, Toni and Layla are excellent additions to our already strong team in the West Midlands. They are all accomplished and ambitious professionals who will help drive our regional expansion strategy forward by enabling us to deliver our vision of providing quality homes for everyone."







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# Story & Bellway secure planning for 300 homes in Poulton



Housebuilders Story Homes and Bellway Homes have announced that planning permission has been secured for a new residential development on land at Blackpool Road in Poulton.

Wyre Borough Council resolved to grant planning consent for the scheme at its Planning Committee meeting on 2 October, subject to conditions, giving the housebuilders the green light to work in partnership to deliver much-needed new homes in Lancashire.

The joint venture will see the two housebuilders deliver 300 new homes as part of a high quality scheme that will complement the local area. Story Homes will develop 143 of the homes, with Bellway Homes delivering the remaining 157.

Story Homes' scheme will include a range of one to six bedroom properties, while Bellway will offer a range of one to five bedroom homes. 30% of both schemes will be affordable homes for people with a connection to the local area. As part of the new scheme, the two developers will make a number of significant community payments in line with the Section 106 Agreement requirements, totalling over £1.5m. This includes contributions towards local highways improvements, medical and education schemes to benefit new and existing local residents.

The new development will also include the conversion of 9.8 acres of farmland to new wildlife rich habitat, as well the delivery of approximately 7.3 acres of new public open space across the scheme and enhancements to the public right of way which crosses the site.

The housebuilders are aiming to commence works on site in summer 2025.

### Cala secures approval for 96-unit East Sussex scheme



Cala Homes has announced it has secured Reserved Matters Approval from Lewes District Council to bring 96 much-needed, high-quality homes to Wivelsfield Green, 38 of which will be affordable. The site is on land to the East of Ditchling Road, Wivelsfield.

Cala's plans will provide a choice for house hunters, including a range of one and two bedroom affordable apartments, two, three and four bedroom affordable houses, and two, three, and four bedroom open market houses. The mix of options means there will be suitable homes for first-time buyers, families, and downsizers.

The development will also deliver a range of benefits for the local community in addition to the much-needed new homes, including enhanced pedestrian routes to the north of the site connecting to Blackmores, and the east of the site connecting to Green Road, to encourage "active travel" Furthermore, each house will have individual cycle parking and apartments will have access to communal cycle parking.

Additionally, it will include nearly 2 hectares (1.8) of new public open space, raised planting beds in the north west area of the site, a community orchard with a mixture of fruit trees, and a children's play area.

All homes on site will be equipped with electric vehicle charging points and air source heat pumps, to provide a low carbon heating solution to help residents reduce their carbon emissions. Furthermore, the homes will be built with a timber frame which has been shown to have up to 20% less embodied carbon than a typical masonry build.

Measures to support wildlife will also

be incorporated into the fabric of all homes, including bird nesting features and bat boxes through Cala's Urban Wildlife Strategy – an initiative to support and enhance local wildlife through simple and effective interventions. A Biodiversity Net Gain of 10% above existing levels will be achieved across the entirety of the site through new wildlife areas and enhancement of existing hedgerows and watercourses.

Cala has committed to establishing a 'Community Pledge' on the new development. Each Pledge will bring together a bespoke programme of activity designed to address specific community needs. Activity could include financial support, volunteering, schools' programmes and more. These Pledges have been created in collaboration with the local community, and to help further understand local needs.

Jessica Sparkes, head of planning at Cala (South Home Counties) commented: "We're delighted to achieve consent to deliver new homes in Wivelsfield. Lewes and Eastbourne Councils has identified that more than 1,600 new homes are needed across the district before the end of the decade, and this development will provide much-needed homes, as well as affordable rent and shared ownership options. As well as assisting the Council in reducing the significant under supply of housing within the district, the proposed new community would also provide significant contributions towards local services and infrastructure. Additionally, we hope to deliver further support through our Community Pledge initiative and welcome local people's thoughts and feedback."



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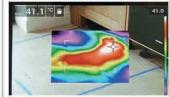
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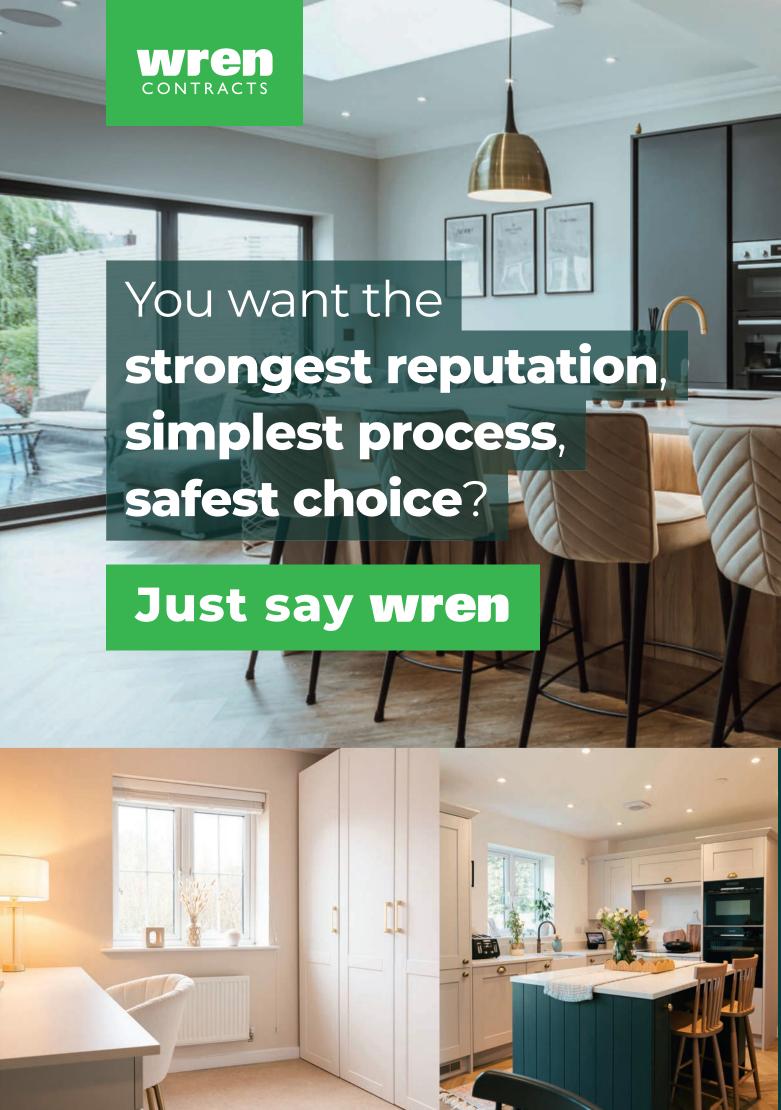


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# Industry survey finds lack of awareness key barrier to net zero innovation





A recent industry survey on construction specification has discovered that lack of awareness of "innovative products" was the second biggest barrier to the UK implementing the changes needed to reach zero, with cost at number one.

Futurebuild, which positions itself as the leading platform for innovation in the built environment, has invested in industry-wide research to discover the key challenges and issues in the specification process in the context of net zero aims. Entitled 'Impacting the Specification Process,' the report "examines the factors shaping the UK's path to carbon neutrality, highlights opportunities that will influence the industry's future, and provides an analysis of the critical trends driving the shift towards sustainable and net zero construction," commented Futurebuild.

The wide-ranging list of 448 survey respondents ranged from multidisciplinary consultants and building surveyors, housebuilders, developers and contractors, to government, trade associations, project managers, manufacturers, and engineering firms. The findings "highlight a strong demand for innovative, low-carbon solutions," said Futurebuild, but "also underscore significant barriers, particularly related to cost."

The majority of respondents agreed on the importance of decarbonisation, and 19% expressed enthusiasm for products which "directly contributed to decarbonisation." However, cost was cited as the number one barrier for specifying innovative lower carbon products (by 54% of respondents)

followed by 'lack of awareness' at number two (52%).

The report delved into specific challenges around sustainability for specifiers, including the need for improved training, education, and access to relevant information around Biodiversity Net Gain. Respondents also identified the opportunities and challenges in incorporating 'biomaterials' in projects, with the primary barrier among respondents again being a lack of knowledge and understanding on applications. Resistance to change and the absence of third-party verification also emerged as key issues.

Another prominent takeaway from the report was the need for closer collaboration between the industry and Government. More than 30% of respondents believed that policy reforms were essential for overcoming current industry challenges. The transition to a circular economy was deemed essential by respondents, who called for national take-back programs and circular hubs to enhance material reuse and recyclability.

Martin Hurn, event director at Futurebuild, emphasised the importance of collaboration and innovation in addressing these challenges: "At Futurebuild, we are dedicated to driving sustainable change by equipping the supply chain with the insights and tools to innovate."

The report produced by Futurebuild aligns with the event's aims, he said, by delivering "actionable data to help manufacturers position their solutions and sustainability credentials to decision-makers."

# The Hill Group reinforces BTR expansion with appointment of Tom Starkey



Housebuilder The Hill Group has appointed Tom Starkey as its new build to rent and commercial asset manager, the company's first role dedicated to Build to Rent (BTR). In this newly created position, Tom will help shape Hill's BTR strategy and oversee the company's expansion into the sector.

Drawing upon its reputation as a partner of choice, Hill is "perfectly placed to ensure the delivery of high-quality rental homes within thriving new communities," said the firm. Forming part of Hill's five-year business plan and growth strategy, the housebuilder is "exploring new opportunities to work with potential investors and partners on forward funding, forward commit and joint venture bases."

Having started his career as a land buyer, first at Taylor Wimpey and later at Berkeley Group, Starkey has most recently worked as a senior acquisitions manager at HUB. In his former role, he "played a significant role in the business' development and progression, with a focus on the company's BTR and commercial portfolios," said Hill. "Instrumental in supporting HUB to break into new regions, he delivered "flagship deals in London, Birmingham and Bath, showcasing his expertise in navigating these major markets."

Andy Hill OBE, founder and group chief executive of The Hill Group commented: "Tom's detailed understanding of the BTR market will prove invaluable as we strive to deliver on our ambitious plans and develop our offering. We are delighted to welcome Tom to our team and excited to see this area of the Group evolve under his leadership and expertise."

Hill's existing BTR pipeline includes upcoming projects in Coventry, Wembley, and Stevenage.



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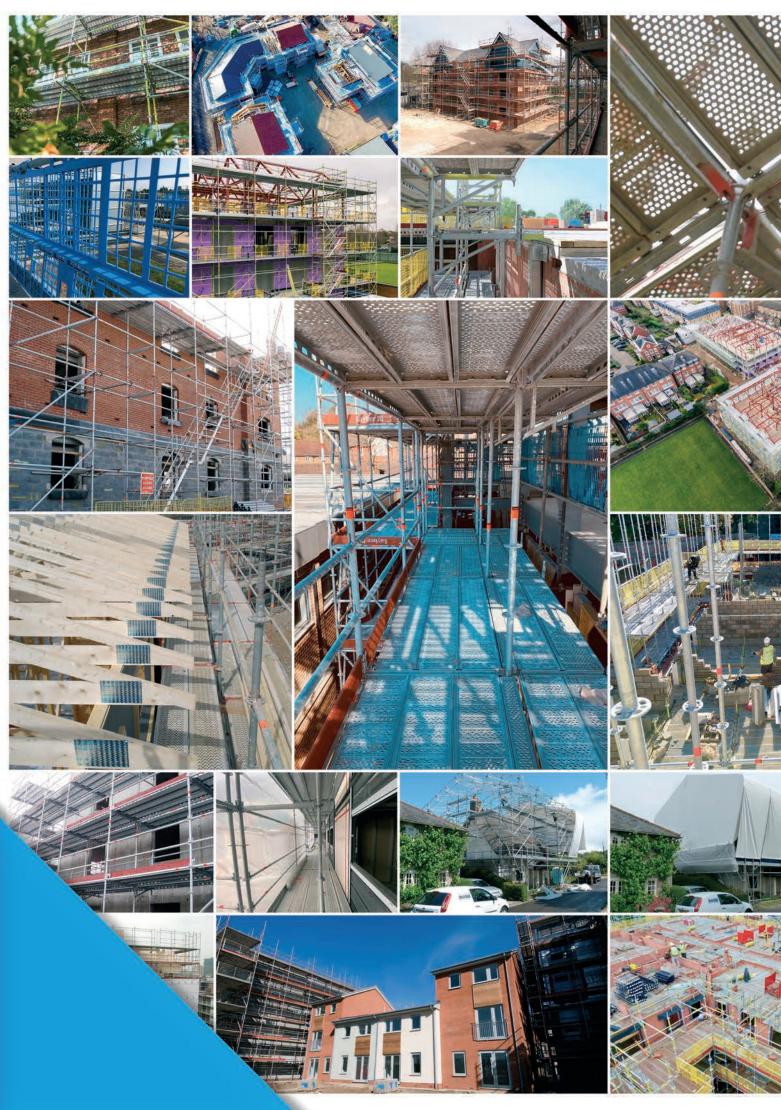
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## Innovation is the key to Keystone Group's 35 years of success





The Keystone Group is celebrating 35 years supplying innovative products to the construction sector, having grown rapidly to a £300m-plus turnover per annum company with over 2,000 employees across its 27 sites. The Group's brands include Keystone Lintels, IG Lintels and IG Masonry Support, as well as Keylite Roof Windows, Smartroof, Keyfix, and Keywall, and recent acquisition Showersave, which manufactures waste water heat recovery systems.

The company's journey began in 1989 when chairman Sean Coyle founded Keystone Lintels in Cookstown, Northern Ireland. His vision was to create "smart construction solutions beyond equal that meet the evolving needs of the construction industry, alongside exceptional customer service." Now the owner of 111 design patents, and with 125 staff dedicated to design and 35 product awards to its name, the company says this focus on innovation is "still at the heart of the Keystone Group 35 years later."

Housebuilder & Developer was invited to attend Keystone Group's head office in Cookstown, and spoke to various representatives from the firm's divisions to hear about how it had innovated over the years to find solutions to the industry's challenges. We also heard from the group's chief commercial officer (and son of the company's founder) Sean Og Coyle, about the ambitious plans for this already successful firm. He ascribed the rapid growth seen at Keystone Group down to an approach of "putting the thought and the R&D and the effort into listening to customers every time we launched something." He said this rigorous approach had seen a series of "step changes" in the Group's success over its 35 years.

Initially founded to plug a major gap in the steel lintel market in Ireland, within a couple of years the firm was the market leader across the island. In 1997 Keystone expanded with a manufacturing site in Birmingham, before moving to a bigger facility in Swadlincote in 2002.

Keystone Group took a sideways strategic move into making roof windows in 2001, launching Keylite roof windows as a "huge opportunity," as there was an absence of similar manufacturers in Western Europe. Sean said that roof windows represents a potential £250m market in the UK and €500 in France

alone, and hinted that the firm would be broadening its horizons to other countries.

He explained that a lot of the other "step change" growth for Keystone came via acquisitions of timber brands, which include Wyckham Blackwell, Timber Innovations, Crendon Timber Engineering, Glosford SIPS, Harmony Timber, David Smith St Ives, Roof Truss and Lynx Trussed Rafters. All of these individual brands had their own pre-existing products. He admitted "not all product launches always worked," but "we were always innovating, and some really took off." He added: "We never stood still or rested on our laurels."

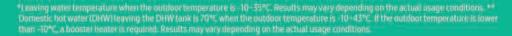
The company prides itself on succeeding based on "relentless innovation" within its own brands, resulting in 111 patents. However Coyle admitted that this can be "high-risk" based on the investment required in their development, without any guarantee they will succeed commercially. Showersave, the recently acquired brand of Dutch-manufactured waste water heat recovery systems, is one example of a pre-existing innovation Keystone now offers as an efficient low carbon solution for the upcoming Future Homes Standard.



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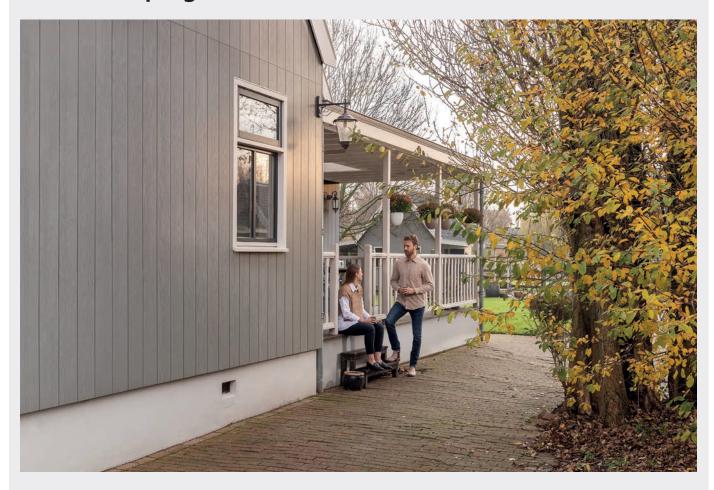
It consistently provides hot water of up to 75°C\* for domestic heating purposes. This can make it a suitable heating system replacement in older residential spaces. It boasts a reliable heating performance due to its larger heat transfer area, enabling it to deliver a 100% heating performance in temperatures as low as -10°C\*\*. Furthermore, EHS Mono R290 Pump has hydraulics components, like the pump and expansion tank, included in the outdoor unit. This reduces installation time and requires less indoor space.

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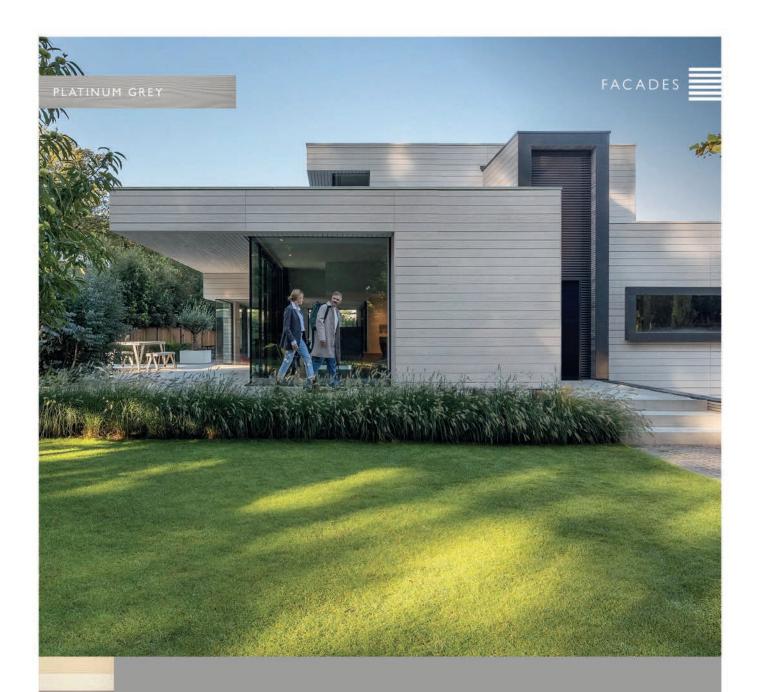
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Hugo Reeve

**COMMENT** 

# BUILDING A SOLID REPUTATION

BRiCS is a new housebuilder on the block which is attempting to raise the bar on quality and sustainability. James Parker speaks to co-founder Hugo Reeve.



BRICS is a new SME housebuilder targeted at building high-quality homes in the south east, which launched just before the pandemic hit in 2020. It was founded by ex-Crest Nicholson directors Hugo Reeve and Timothy Sadler, and professionals from that firm as well as other plc housebuilders. They had seen how it was done at the volume housebuilding end, and wanted to combine their skills to offer a different proposition.

Reeve tells me that the focus is on creating designs tailored for their settings that will help create "sustainable communities." He explains: "We've all been schooled in place making and good design, creating places with a more bespoke, individual character that respects its locality and setting." Supporting this, he says that BRiCS "chooses its architects very carefully, for each scheme to have the right skill set; it is more expensive, but we get a higher value result."

Backed by an investment fund, the firm found its feet with a strategy to build schemes ranging from 30 to 100 homes, mainly in Hampshire and Sussex, now with a team of around 12. The aim is schemes "large enough to create a character, with at least a street or two."

In terms of the business plan, having already completed affordable homes as part of Shopwyke Lakes in Chichester (to a higher quota than the Section 106 required), Reeve says the aim is to pursue a mix of similar schemes in addition to private sale. He says this is partly pragmatic, to give BRiCS a healthy balance between private sale and affordable housing for Registered Providers in its work stream; the firm is yet to complete its first private sale development.

### **PANDEMIC ORIGINS**

The fact that BRiCS was launched a month before the arrival of Covid was not ideal timing to say the least. However the nascent firm having emerged from the pandemic a growing success is even greater testimony to its strengths in the current market. At launch, there were a couple of higher-rise Build to Rent projects on the books to tide them over, but as lockdowns loomed, "the opportunities rapidly disappeared," and it was a slower start than anticipated.

The board had to pivot towards a clutch of smaller "suburban" projects, says Reeve. Fortunately, the firm's investor was "very patient" and believed in the combined

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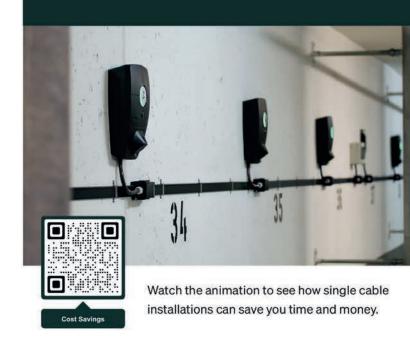
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experience and quality in the team, putting in more equity as needed, as the firm grew. After approximately a year, BRiCS secured its first 'serious' development site, for 77 homes, which then took a further year to go through the design and planning process. Reeve said for a start-up SME to make the jump to a larger scheme so quickly demonstrated the capacity of the firm which is now bearing fruit.

#### PLANNING FOR A SUSTAINABLE FUTURE

It has been challenging journey to get the business on a firm footing, says Reeve, given the partly unforeseen external pressures, but the staff's experience in the sector, plus a good external contact base helped see it through the rough headwinds of the early couple of years. The exodus of many planning officers during and post-Covid (with many not having to return to office posts since), and lack of local authority resources from cost pressures, has resulted in a "collapse" of the system, says Reeve.

He believes that the Government's plans to recruit another 300 planners, although the right approach, is unlikely to plug the current yawning gaps. Reeve explains: "It's very small in the scheme of things. It's not just planning officers that are needed,

but County officers too."

He says that budget cuts and staffing at local authorities have been so severe that the time taken just to process applications make the process "almost unviable as an SME." This means a shortage of land with planning permission; "any land that does come on to the market with some form of permission is fiercely fought over."

Delays in bringing in necessary infrastructure are another obstacle which has seen BRiCS having to grit their teeth to see margins come to a sustainable point. Reeve says that "a big discussion needs to be had with regards to the relationship between section 106 and the Common Infrastructure Levy, because a lot of it still comes down to the negotiation and discretion with the local authority, a lot of whom are very short of finance."

He backs the mandatory local housing targets with the new Labour Government announced as a policy soon after taking office. "It's desperately needed, but will take time to come through the local planning processes, to change the course of the ship to the extent that land availability and housing delivery frees up." Also Reeve welcomes the new 'grey belt' plans, but says that there is ambiguity as to what will and won't be deemed 'grey.'

On financing, he admits that despite the investors' valuable trust in the firm, the rigmarole of bank financing has been the real challenge, despite the "availability and appetite" being there. "Taking it through the legal process with the bank's solicitors has been very torturous, expensive and time-consuming." He believes there's an erroneous expectation in the sector that all loans should be "completely risk free, when development isn't."

#### PERFORMANCE ANXIETY?

Builders face more scrutiny than ever before on the performance of new build homes, given the drive to net zero, and the incoming Future Homes Standard which is designed to create 'net zero ready' homes as the grid continues to decarbonise. But what are the realities of doing this on the ground for a new SME housebuilder such as BRiCS? Reeve says that his firm has already embraced changes, with one scheme being fully electric, but they see sustainability in housebuilding as a wider issue than simply how well a building performs and the technology installed.

"It's as much about lifestyle, access to amenities, open space and creating a more sustainable community in itself,"



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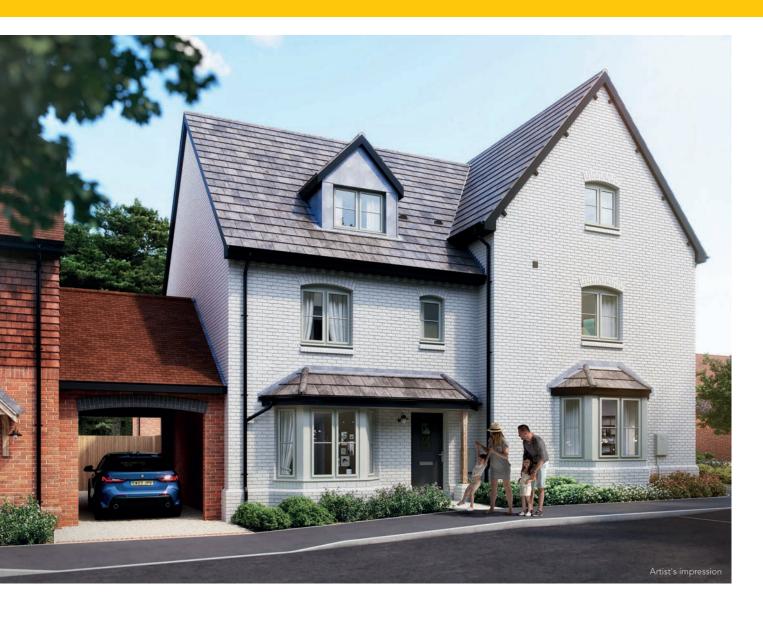








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he says. However, as well as the top-down targets and the demand from some buyers for better performing houses, does he believe that some of the momentum for 'green' new builds needs to come from developers? Reeve insists that "the appetite for greener homes is there from both developers and purchasers" but "what is more acute, and what we are trying to focus on, is lower running costs. Lowering bills, that's what our purchasers are really focused on."

He continues that with mortgage rates still being higher than previously, this is currently the key issue affecting the buying market, and that focusing on the fabric of homes "and trying to take it a step further than the Building Regulations" is the goal.

### **VIABLE FUTURES**

With their solid range of experience, BRiCS are built for a resilient future,

provided some of the key moves which the industry has been crying out for on planning and targets are honoured at a central level. Reeve and team were acutely aware of the need to grow to a certain size before the market would take them seriously as a viable land purchaser for larger schemes.

With schemes including a parcel of a site earmarked for SMEs now acquired from the Ministry of Defence, BRiCS are again looking to raise their game and broaden their scope for larger developments. They are well on the way to being a recognised name providing the in-demand, higher quality private sale schemes in key locations, and the proof will soon be evident.

As a new SME, Reeve and colleagues are conscious of what he says are "horrifying statistics" around the amount of small and medium housebuilders that are currently operating, compared

with 20 years ago. He says that a key issue is resourcing to tackle the layers of regulations, "well intended but often at cross purposes," from BNG to the Future Homes Standard: it "starts to require a large team of people." This can be met by larger plcs, but for a small company it "becomes a lot more challenging." That, plus the time schemes are taking, and the financing issues, makes launching a new venture a task not for the faint hearted.

So far, BRiCS are weathering the storms admirably, and Hugo Reeve says that its current private sale schemes "have the opportunity to be really well designed; they sit within design codes that are pushing the quality of design upwards." Although working at the higher end of the market currently, this is one housebuilder that is helping counter the stigma of poor quality which has dogged parts of the industry for years.

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## Shaping tomorrow

## The changing role of electrical consumer units in modern housing

The UK housing sector stands at a critical juncture, facing unprecedented challenges and opportunities.

This transformation is particularly significant in the realm of home electrification, where emerging trends in sustainability are not just changing how houses are built, but fundamentally altering their functionality and interaction with the wider energy ecosystem. Dan Dempsey, National Sales Manager at GARO explores how consumer units will play an increasingly central role in managing the complex electrical needs of sustainable, technology-driven households.

### The electrification trend

The electrical infrastructure of modern homes is undergoing a significant transformation, and at the heart of this lies the electrical consumer unit, a critical component that has seen substantial changes in recent years.

The demands of new regulations and green technologies are changing requirements for electrical units within new build designs. Not only do they need to have the flexibility and capacity to support new innovations, but they must also be able to scale up over time, to accommodate any new devices that will emerge in the next few decades. Coupled with the recent housebuilding resurgence with the Labour government's pledge to build 1.5 million homes in five years<sup>1</sup> to deal with the critical shortage of housing, this electrification evolution needs to not only be quick, but implemented on a significant scale.

One of these new legislations the sector faces is the Future Homes Standard. Set to be implemented in 2025, it aims to ensure new homes produce 75-80% less carbon emissions than those built under previous regulations.<sup>2</sup> Another important regulation is the 18th Edition of the IET Wiring Regulations (BS 7671:2018), introduced in 2018 and amended in 2020. It brought about several key changes, including an enhanced focus on surge protection, arc fault detection, more stringent requirements for RCD (Residual Current Device) protection, and greater attention to energy efficiency and monitoring. Altogether, the focus on energy efficiency, sustainability and electrical safeguarding characterise this new wave of regulations.

Furthermore, consumers and creators of innovative green technologies are demanding more incorporation. The integration of solar panels, heat pumps, EV charging points, and smart home systems requires a more sophisticated and robust electrical infrastructure. Consumer units and distribution boards must be designed to handle bidirectional power flow from solar panels, manage the high-power demands of heat pumps and EV chargers, and incorporate smart monitoring and control systems. The challenge is making sure the implementation of such advanced electrical consumer units doesn't become detrimentally expensive for the consumer and housebuilder.

### SMEs and regional housebuilders

SMEs and regional housebuilders are in the midst of recovery from recent and current difficult economic times. Collaboration and innovation are needed to solve problems such as a lack of funding and cash flow that make achieving long-term adaptability in consumer units difficult. Incorporating sustainable features and maintaining affordability is imperative and should be aided by sector partnerships and continuous learning from all stakeholders. This will not only ensure new homes are compliant with today's standards, but that they are flexible to future sustainable living.

The role of industry partners in supporting sustainable housing cannot be overstated. Manufacturers, technology providers, and regulatory bodies all play crucial roles in driving innovation, ensuring compliance, and supporting builders in delivering high-quality, future-ready homes. Collaboration between these stakeholders is essential for addressing the complex challenges of home electrification and sustainable building practices.



### Being ready for change

A well-designed consumer unit will incorporate multiple layers of protection, flexibility and futureproofing. At its core, it should provide robust safeguards against overcurrent and short circuits, preventing potential fire hazards as homes adopt more high-power devices. Furthermore, adaptability in the form of a modular design should allow for easy integration of new components as requirements evolve, potentially saving SME housebuilders from costly retrofits or system overhauls in the future.

Consumer units, such as the GARO Diamond range, incorporate advanced protection features as standard, including surge protection devices (SPDs), arc fault detection devices (AFDDs), and bi-directional protection capabilities that can potentially streamline the planning and approval process for SME housebuilders. This design and approach to the consumer unit demonstrate proactivity to consider the rapidly changing regulations and technologies in the housing sector and allow for evolution, something that will save housebuilders money in the long term.

### **Future proofing**

As the housing industry continues to transform, the concept of futureproofing has become increasingly crucial. Futureproofing in the context of new build homes refers to the practice of designing and constructing residences that can adapt to changing technologies, lifestyles, and environmental conditions without requiring extensive modifications.

The Parc Hadau net zero carbon Neighbourhood project, located in South Wales and developed by Sero Homes, demonstrates how new build

homes can be futureproofed to achieve high levels of sustainability. Each home is designed to generate more energy than it uses annually, with excess power fed back to the grid, addressing not just individual home efficiency but also community-wide sustainability through shared resources and integrated energy systems.

As the nature of consumer units goes in the direction of home electrification, from accommodating renewable energy sources to integrating smart home technologies, futureproofing becomes the logical step in any housebuilding process. Understanding how best to adapt current systems for the future on not just an individual level, but a community level takes creativity and time. However, once achieved, the benefits are significant for successive generations.

### Looking ahead

Future housebuilding represents both a challenge and an opportunity for the housing industry. By embracing innovation, prioritising adaptability, and focusing on long-term sustainability, housebuilders can create homes that not only meet the needs of today's homeowners but are also prepared for the demands of tomorrow.

Regulatory changes will improve safety and the overall resilience of electrical systems in modern homes. The next generation of consumer units will have to integrate advanced features, commit to quality and safety, and also keep sustainability as a priority. These elements will remain paramount in shaping the homes of the future.





Patrick Mooney

### COMMENT

# IMAGINATION & EFFORT NEEDED

Patrick Mooney, housing consultant and news editor of Housing Management & Maintenance magazine, looks at the crisis around temporary accommodation costs, and how addressing this requires investment in affordable housing, reforms, and collaboration across government, councils, and housing associations.

he scale of the new Government's housing challenge has been revealed in recent statistical releases showing a record number of homeless households and staggering amounts of money being spent on temporary accommodation by local councils.

The new administration has announced its intention to build 1.5 million new homes by 2029 to sort out the supply and affordability crisis, but there are a whole host of other actions that need to be taken by other organisations and bodies. This is not a problem that the Government alone can solve.

For instance Manchester Mayor, Andy Burnham has committed his authority to pursuing a 'Housing First' scheme to tackle rough sleeping in the city. This innovative scheme was first introduced in Finland in 2008 and it gives homes to people when they need them, without any conditions attached. In Finland it has brought down homelessness by 70% as well as eradicating poverty-based homelessness completely.

After a successful pilot of a Housing First scheme in Greater Manchester, which has supported 430 people with complex experiences of homelessness, Burnham is bidding for Government funding to extend it beyond its current deadline of March 2025.

In an equally dramatic intervention, England's 11 million renters are set to get more security from a new Bill to ban "nofault" evictions. The Government has brought forward a strengthened version of its Renters' Rights Bill, including an outright ban on tenants being kicked out of their home for no reason by landlords using a Section 21 notice.

A similar proposal was put on indefinite hold by the previous government because of the general election being called in July. But faced with the shocking figures on homelessness, evictions and the rising cost of temporary accommodation, Ministers in different departments have decided to take action.

#### A STATISTICAL HEADACHE

The statutory homelessness figures, which cover the period January to March 2024, have revealed a shocking situation:

- The number of children who are homeless and living in temporary accommodation with their families in England has rocketed to 151,630 an increase of 15% in a year and the highest figure since records began 20 years ago in 2004;
- The number of homeless families living in emergency accommodation such as B&Bs and hostels has reached 8,860

   a rise of 29% in a year. This type of emergency accommodation is notoriously overcrowded, expensive and unsuitable;
- Overall there are now a record 117,450 homeless households living in temporary accommodation in England – the highest figure ever and up 12% in a year; and
- The loss of a private tenancy remains the leading trigger of homelessness accounting for more than one in four households found to be homeless or at risk of becoming homeless.

Meanwhile, the spending on temporary accommodation for homeless households has doubled to £2.3bn in the last five years. The latest Government figures show the following:

- Councils spent a combined total of £2.3 billion on temporary accommodation between April 2023 and March 2024;
- This has increased by 29% in the last year and has almost doubled (a 97% increase) in the last five years; and
- More than one third of the total £780 million was spent on emergency
  B&Bs and hostels, which are often considered the worst type of temporary accommodation where families can be crammed into one room, forced to share beds and lack basic cooking facilities.





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This in effect is wasted money on what is a very expensive sticking plaster! It produces nothing concrete, but delivers extraordinary profits for a number of private landlords. Some of them are very unscrupulous.

Among the biggest contributors to the rising tide of homelessness and its cost to councils, has been the growth in Section 21 'no fault' evictions. The Ministry of Justice figures on repossession and eviction, which cover the period April to June 2024, shows the following:

- 2,916 privately renting households were removed from their homes by bailiffs as a result of a Section 21 eviction –the highest for over 6 years, and up 31% in the past year; and
- Between April and June 2024, 8,322 landlords in England began Section 21 eviction court proceedings in the past three months – up by 11% from the year before.

#### **INVESTMENT NEEDED**

Polly Neate, chief executive of Shelter, said: "As we hit yet another devastating record on homelessness, and evictions continue to rise, this government must succeed where previous governments have failed and tackle the housing emergency head on.

"Without a clear plan to invest in genuinely affordable social homes, thousands more children will be forced to grow up in damaging temporary accommodation, spending months if not years living out of suitcases, crammed into grim bedsits and B&Bs, and unable to put down any roots.

"The government must urgently establish a cross-department homelessness strategy and scrap no fault evictions if we are to end homelessness. Our Brick-by-Brick report shows how it can ramp up to 90,000 social rent homes a year in this parliament. Social housing would pay for itself within a few years, and in doing so relieve the pressure on private renting, generate new jobs, and create savings for the NHS and benefits bill." What is not to like?

But a warning has been given to the Government by private landlords that many of them are prepared to walk away from the sector or to impose sizeable rent hikes of up to 10% or more in response to the abolition of Section 21 evictions or if the introduction of flexible tenancies means that tenants can walk away from deals after just two months.

Angela Rayner, the deputy prime minister and housing secretary, has said the Bill would "rebalance the relationship between tenant and landlord", end bidding wars, and crack down on unscrupulous landlords. With the Bill



allowing tenants to end rental agreements with just two months' notice from the first day they move in, the National Residential Landlords Association said landlords might respond with rent rises in areas like city centres and coastal tourist hotspots.

The NRLA, which represents 110,000 private landlords, said its members were discussing how to adjust prices to mitigate the risk to incomes posed by renters who would be able to sign a tenancy agreement and pay for only two months before leaving. Previously, tenants often had to wait for six months before they could leave, the NRLA said.

### FAIRNESS FOR PRIVATE (AND SOCIAL) LANDLORDS

Ben Beadle, chief executive of the NRLA, has emphasised the importance of transparency and fairness in the upcoming changes to the private rented sector. He noted how crucial it is that steps be taken to deal with wait times which prevent the courts from ruling on cases in a timely manner.

Beadle commented: "Plans to reform the private rented sector have been on the table for over five years now. Above all, renters and landlords need certainty about what the future looks like. It is vital that the new Bill works, and is fair, to both tenants and landlords alike.

"The end of Section 21, 'no explanation' repossessions represents the biggest change to the sector for over 30 years.



Once the Bill is passed, it is vital that sufficient time is provided to enable the sector to properly prepare. Over 4.5 million households will need tenancy agreements updating, letting agent staff and landlords will need to undertake training and insurance and mortgage providers will need to adjust policies and rates. None of this will happen overnight and the Government needs to publish guidance.

"In addition, ending Section 21 will leave the courts needing to hear possession claims where landlords have a legitimate reason. The cross-party Housing Select Committee has warned that without reforms to ensure the courts process cases much more swiftly, they risk becoming overwhelmed. This will not serve the interests of tenants or landlords seeking justice."

Delivering the new homes is likely to fall disproportionately onto housing associations and local councils, but they are not exactly flush with cash right now as can be seen in the following section of an open letter written to the deputy prime minister, by representatives of the social housing sector.

"Capped income, crippling cuts, unfunded new requirements and soaring costs have decimated the housing association and council's housing budgets. Rental income is 15% lower in real terms than in 2015, at the same time as we need to invest up to £50k on average in every social home over the next three decades to ensure they are safe, high quality and decarbonised. Without action, councils will face a £2.2bn black hole in their housing budgets by 2028. And reflecting these financial pressures housing association starts on site of new homes were 30% down last year compared to the year before, with further falls expected this year.

"We are all united on the need for urgent action, which must include long-term income certainty, an immediate boost to existing grant programmes, and fairer access to building safety funding. At the next spending review, we need a long-term plan for new and existing social homes, underpinned by a fair and sustainable financial model developed alongside councils and housing associations."

And in a parting shot to the deputy prime minister, the open letter ends with the words "Without this, we will not be able deliver our shared ambition to build 1.5 million new homes this parliament. New build projects are already being delayed and cancelled across the country due to significant financial pressures and uncertainty." Solving the country's housing supply and affordability crisis is looking anything but easy.



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### THE CLIMATE CHALLENGE

### Overheating – the hot topic



Overheating has become an increasingly important issue for homes. Dr Anastasia Mylona from CIBSE explains the issue further and outlines some potential solutions

It feels odd to be talking about the impact of climate change after the UK has just experienced the coolest summer since 2015. In one sense, 2024's summer was noticeable precisely because it bucked the trend. But it was not cooler everywhere on the planet, this year Central and Southern Europe and North America all experienced heatwaves.

In future, there may be UK summers that are cooler too, but not many; the long-term global trend is of rising temperatures and a warming climate. It was, after all, only two years ago that temperatures broke the 40°C mark for

the first time in the UK as a series of heatwaves hit the nation and the Met Office issued its first-ever red warning for extreme heat. The prediction is that parts of the UK should expect temperatures over 45°C by 2050.

Increased external temperatures will result in higher internal temperatures in existing homes and flats, which could result in many of them overheating. This will impact the health of occupants; those expected to suffer most are the elderly and those with pre-existing health problems, which should be of concern to a nation with an ageing population.

According to the Environment Audit Committee's (EAC) report 2024 'Heat resilience and sustainable cooling', UK heat-related deaths "are believed to have exceeded 4,500 in 2022". The committee says this figure "could rise to 10,000 annually without concerted action to adapt to the warming climate."

Overheating does not only affect the



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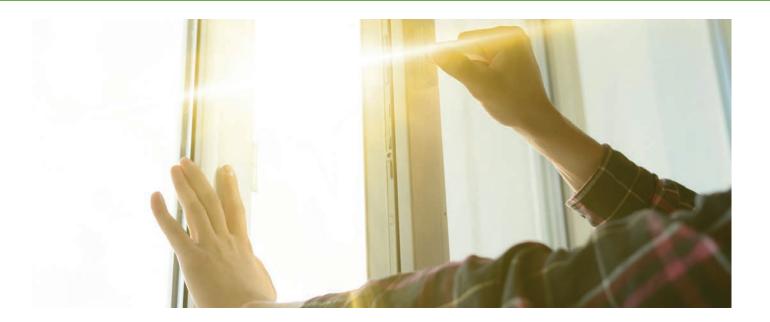
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elderly, it has broader wellbeing effects on the population at large, including through sleep deprivation. The EAC says economic costs from overheating are likely to "run into the billions."

Overheating is the accumulation of warmth within a building to the extent where it causes discomfort to the occupants. Until Part O of the Building Regulations came into effect in 2022, there was no requirement for the explicit assessment of overheating to be considered in a home's design. Consequently, there are thousands of homes built relatively recently with increased levels of insulation and airtightness to keep them warm in winter (in compliance with Part L), but which may be at increased risk of overheating in summer.

Alongside increased external temperatures, factors that can contribute to overheating include: solar gains from unshaded windows, heat from people and equipment and, in communal apartments, heat from uninsulated domestic hot water pipework in communal areas. There is also the increasing problem of the urban heat island effect.

The type of home most likely to be affected by overheating are apartment buildings in city centres with windows on only one elevation which faces south, east or west, particularly if there is no opportunity for cross ventilation.

Occupant behaviour can also make overheating worse. In the UK people often leave windows open to increase ventilation throughout the day, even when the outdoor temperature is higher than indoors whereas in the Mediterranean occupants are used to closing windows (and shutters) to keep heat out at the warmest time of the day.

As the climate warms, overheating

issues are set to increase. Research has shown that by 2050, passive measures such as thermal mass and night-time ventilation may not be effective in providing sufficient thermal comfort in homes and active cooling systems, such as air conditioning, may be necessary in some locations in the UK.

Currently less than 3% of dwellings have air conditioning, but this figure is expected to grow significantly, particularly as the number of people using their home as their main place of work is increasing. The International Energy Agency says that record-breaking temperatures feed the demand for air conditioning which in turn results in surges in demand for electricity - risking a vicious cycle of increased greenhouse gas emissions that in turn make the world even hotter. The cost of running air conditioning is also expected to lead to a doubling of electricity bills for homeowners.

The definition of overheating in Approved Document O of the Building Regulations is based on the Chartered Institution of Building Services Engineers (CIBSE) document TM59. The Approved Document outlines two methods for achieving the performance targets: a simplified method and the more thorough dynamic thermal modelling method embodied in CIBSE TM59.

The Building Regulations apply to new-build homes, but four out of five homes that will exist in 2050 are already built, meaning that the scale of retrofitting required for existing homes to protect them from overheating is vast.

Overheating is exacerbated by excess solar radiation. Modelling shows that external shading is highly effective protection against solar gains because it stops sunlight reaching a window. Overhangs, for example, can be

incorporated as part of the building design to provide shade to windows including extended roof eaves, balconies, upper floor external walkways, deep window reveals and the addition of brise soleil are all highly effective at blocking out high-angle summer sun.

External roller blinds and shutters are another option more often seen in continental Europe; shutters can be opened and blinds retracted when shading is not required to maintain views out. CIBSE Technical Memorandum 'TM37: Design for improved solar shading control,' outlines options designers have in addressing solar gains. Solar control glazing can also be used to reduce solar gains, although this has the disadvantage that it will also reduce heat gains in winter when they can contribute to meeting space heating demand.

Internal blinds are another option, although less effective. CIBSE's 'Technical Memorandum Dynamic thermal modelling of basic blinds (TM69: 2022)' recognises the role of internal shading in reducing indoor air temperatures along with the impact blinds have on internal daylight levels.

Increased ventilation is another mitigation option for overheating. Opening windows is a cheap and effective way to expel heat from a dwelling, but only when outside temperatures are cooler than those inside, such as early morning. The option to open windows, however, is less than ideal for dwellings in noisy or polluted locations or where safety or security considerations prevent windows being opened wide. Of course, as the climate warms and outside temperatures rise, the effectiveness of natural ventilation in preventing overheating will diminish.

As summer temperatures in the UK continue their inexorable rise, tackling overheating in existing homes will become increasingly important. The EAC, called for Part O to be expanded to cover refurbishments of existing properties as well as material changes of use to residential properties. The committee is also calling for "a comprehensive national heat resilience strategy."

CIBSE is one of the leading sources of guidance on dealing with overheating. It is ready to work with the Government to make the built environment more climate resilient. For more information on CIBSE go to www.cibse.org

Dr Anastasia Mylona is technical director at CIBSE



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### Vent-Axia leads the way at the HVR Awards



Vent-Axia impressed the judges at this year's HVR Awards with its groundbreaking innovation. The Sussex-based company scooped an award for its Lo-Carbon Sentinel Econiq Cool-Flow within the 'Domestic Ventilation Product of the Year' category at the HVR Awards 2024. Designed to help

housebuilders manage overheating in new homes, the Lo-Carbon Sentinel Econiq Cool-Flow is Vent-Axia's latest flagship mechanical ventilation with heat recovery (MVHR) system combined with its intelligent Econiq Cool-Flow Module. Vent-Axia received the accolade at a glittering awards ceremony on Thursday 12 September at London's Chelsea Harbour Hotel.

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SPONSORED RESEARCH

# THE CHANGING APPROACHES TO ELECTRIC SHOWERS FOR FHS COMPLIANCE

As the UK electrifies and decarbonises heating, there are opportunities for housebuilders to explore non-standard approaches to considering the 'whole house' for effective, sustainable energy and water savings. In association with Triton Showers, we report on a recent survey of housebuilders that highlighted opportunities to enhance understanding of the solutions available for supporting the Future Homes Standard using practical, common-sense approaches.

Ofwat estimates that by 2050, an extra four billion litres of water will be required in England and Wales. In order to deliver this, it says three things need to happen: supply needs to be boosted, demand reduced, and water wastage tackled.

Housebuilding is a fundamental part of driving this change and contributing to the saving of water, as well as reducing energy usage overall. Both climate change and population growth have contributed to the need to save water, and Part G and the new Part L and Future Homes Standard (FHS) all look to address the issues. While Part L and the FHS aim to reduce energy usage and carbon emissions more broadly, Part G focuses specifically on water efficiency, covering items such as flow rates and household water usage. Energy saving electric showers therefore have an important role to play in meeting these goals.

In association with Triton, we compiled a survey to gain insight into the views of housebuilders and developers on the challenge of including water-saving and energy-efficient solutions in their projects, to benefit them and their customers. While building fabric improvements, such as high insulation levels, can help a home's overall energy efficiency, domestic hot water usage isn't impacted by measures such as this. With building efficiencies improving, it's likely hot water will become the largest expense for household energy budgets.

Products like high-efficiency showers are key, with showers alone responsible for 11.5% of a home's overall energy use. We therefore sought to discover how housebuilders are working towards meeting targets, their views on the available solutions, and the general water and energy saving agenda. The results help shed light on where potential issues lie and what future collaboration is needed to develop lower-energy homes.

Our survey sought the opinions of those working for developers, with 40.8% of respondents working at director level positions. 10.2% hold chief executive positions, with the remaining 50% being made up of a combination of managers, quantity surveyors, chairmen, and architects.

Most of the respondents work for a developer (39.6%), 12.5% for a housing association, and 10.4% for a housebuilder. In the last year, 30.9% of these built between six and 20 homes a year, 16.4% built 50 to 200 homes, and 14.6% built 201 to 1,000 homes a year. However, following Angela Rayner's revised National Planning Policy Framework announcement earlier this year, a surprisingly high 21.4% of respondents said they foresee their firm building 'much less than usual' in the future.

## THE NEED FOR DECARBONISATION

The shift to electric solutions in housing in order to meet sustainability targets isn't a new concept, but is one that the industry is still working to deliver on. This can in part be blamed on previous incentives, which saw the government subsidise fossil fuels and inflate electricity prices, something 78.6% of our respondents were aware of. The government is aiming to decarbonise the grid by 2035 by reducing the UK's reliance on fossil fuels. As this becomes a reality and the previous gas subsidy is fully reversed, 75% of respondents said electricity will become the more favourable option from a cost perspective, highlighting the urgency for housebuilders to make electrification financially viable.

### **WATER USAGE & EFFICIENCY**

Housebuilders are acutely aware of the need to decarbonise housing stock and implement more energy- and water-efficient technologies. When asked how important overall water efficiency is when building new houses, 89.3% said it was important to



them, with 37.5% of respondents saying it was 'very important' and 51.8% saying it was 'fairly important'.

Despite agreeing the need for installing energy-efficient technologies is high, interestingly, respondents' views as to why water usage is set to increase are varied and somewhat unclear. When offered a variety of potential reasons to choose from, our survey cohort struggled to settle on one. The need to supply the growing population was the most selected (48.2%). Respondents also identified changing water availability driven by climate change (33.4%), interruptions to supply caused by droughts (35.7%), and unsustainable abstraction (25%) as issues that need addressing.

The average household water usage in the UK is 142 litres per person per day. Part G requires that usage to drop to 125 litres, and RIBA has proposed an even more ambitious target of 75 litres per person per day by 2030. For housebuilders, the Part G target is mostly viewed as realistic, with 32.1% saying it's 'very realistic' and 39.3% saying it's 'fairly realistic.'

However, 28.6% said they will struggle to meet the target set out in Part G, and when asked about the RIBA target, that increased to 62.5%. Only 7% view it as 'very realistic' and 28.6% say it's 'fairly realistic', demonstrating a clear need for further support for housebuilders.

#### **ENERGY USE & THE FUTURE HOMES STANDARD**

There is a direct link between high household water usage and overall energy use, given the relatively intensive energy use required to heat water. However, while most of our respondents agreed the link is somewhat clear to them, 60.7% said it was only 'fairly clear' and that they could know more about it. 32.1% said they 'understand it completely'. Electric showers can help contribute to energy savings in this regard, but our survey once again highlights a gap in the knowledge of developers and specifiers and the solutions available to them to tackle issues.

The FHS, set to become mandatory in 2025, aims to decarbonise UK homes by focusing on improving heating, hot water systems, and reducing heat waste. With water usage and more specifically the heating of water falling within this, we asked housebuilders if they feel the FHS provides appropriate guidance when it comes to specifying showering solutions. Only 26.8% said it provides all the necessary guidance, with 50% saying it provides some and 23.2% saying it doesn't provide any. It's clear housebuilders are in need of further direction and information to place them in the best position to tackle decarbonisation.

#### SOLUTIONS

There are a range of solutions and technologies available to housebuilders and specifiers to help them meet incoming standards such as the FHS, Part L, and Part G. These include MVHR, solar thermal panels, heat pump solar photovoltaic (PV) panels, battery storage systems, biomass boilers, and combined heat & power (CHP) systems. When asked to select which of the technologies housebuilders are already specifying, the most common answer (49%) was heat pump solar PV panels. 47.4% are specifying solar thermal panels, and 38.6% are installing battery storage systems. This demonstrates that while housebuilders generally feel more guidance and

education is needed on how best to reduce carbon emissions, many are already taking steps to improve their developments' energy efficiency.

When asked about meeting specific water use guidelines, 28.6% of respondents say they are installing electric showers – the most selected answer. Other solutions specified to help meet water use guidelines include gravity-fed showers, non-electric power showers, water-saving bathroom and kitchen appliances, and internal and outdoor flow controllers. Other respondents said it depends on the project, and 12.5% said they leave it to the installer, indicating a potential lack of accountability and standard 'in-house' procedure among developers.

When asked what more could be done to make housebuilders aware of the link between showers and energy usage, some of the 'verbatim' comments received strongly urged the industry to provide more and better information, with "training courses", "education education", and "more detailed information from local authorities" among the comments received. One respondent asserted: "Guidance - both technical and regarding grant eligibility – about how water heating can be done using renewables is bad." They continued: "Rules change all the time and suppliers/manufacturers don't supply good instructions for integrative heating designs."

Other respondents suggested "reducing consumption levels" and introducing smart meters for hot water that show "real-time cost for showers or baths", encouraging homeowners themselves to take responsibility for their household usage. This was further reinforced when respondents were asked if they agree the predicted increase in water prices for consumers will make them more conscious of their water usage, with 50% saying they 'strongly agree.'

Another comment suggested "reducing the use of warm and hot water with improved appliances." When asked if manufacturers could do more to support housebuilders when it comes to water efficiency, 50% said they 'strongly agree', reinforcing the perception that some developers feel that better information and product choice would benefit them.

When asked how useful the information available on electric showering solutions via SAP is, 46.4% of respondents said it's 'fairly useful' and 23.2% said it's 'very useful' – a more positive response rate relating to available guidance.

#### PRIORITISING WATER EFFICIENCY & REDUCING WATER USAGE

Many developers indicated water efficiency is not currently their top priority, with 50% strongly agreeing with the statement that they are currently focusing on heating/insulation, again demonstrating the need for better education on the benefits of water efficiency in the overall reduction of carbon emissions. Furthermore, 48.2% admitted they don't pay much attention to water efficiency when specifying bathrooms.

Despite this, 44.7% selected 'strongly agree' when presented with the statement 'Water efficiency influences the design of our water heating systems', indicating that while it may not be a top priority, it is a consideration. This is further reinforced by 40% strongly agreeing that flow rate is a 'meaningful measure' when it comes to product selection.

When it comes to the specifics of how to meet the Part G water reductions per person per day, when given the opportunity to select all options that apply, 43% say they are implementing rainwater harvesting. This was by far the most popular choice, with the next most selected answer being leak detection and prevention systems, which 28.6% of respondents chose.

Selections across the remaining options were quite evenly

spread, with 23.2% saying they install low flow fixtures and fittings, greywater recycling systems, and smart water metering. 19.6% say they implement innovative plumbing designs, and 17.9% design water-efficient landscaping. While rainwater harvesting clearly leads the way, the remaining options sharing a somewhat even split implies housebuilders are already considering a myriad of solutions, despite their desire for further guidance.

#### SHOWER SPECIFICATION PRIORITIES

In terms of the design specification of showers in particular, we asked respondents to consider a number of options, ranking each one as either very, fairly, not very, or not at all important. The factors most commonly ranked as 'very important' were operational efficiency (71.4%), energy use (69.6%), and water saving (66%). Significantly, these all ranked higher than brand, availability, price, and familiarity. While it may be expected housebuilders would have a certain amount of brand loyalty or opt for the cheapest solutions, our research indicates that energy efficiency factors in fact rank higher.

The survey concluded by asking respondents to elaborate on what manufacturers can do generally to support them in the design and specification of low-carbon homes. While once again comments largely centred around providing more information/documentation/data sheets, other verbatim comments received included "provide comprehensive system-wide solutions" and "sell low-water-use fittings." One commenter said manufacturers should provide "shower trays and/or baths where WWHR is integrated in the tray/tub design itself for a plug-and-play install, in particular with instant-on electrical water heating."

#### **WASTE WATER HEAT RECOVERY (WWHR)**

Despite the technology's proven carbon-cutting benefits, waste water heat recovery (WWHR) wasn't one of the top solutions picked by our surveyed housebuilders in order to meet upcoming standards. It is a simple solution to recycling otherwise wasted heat from showers, which also assists heating systems such as heat pumps because water does not need to be heated 'from scratch.' 40% of respondents said none of their current builds incorporate WWHR, while at the other end of the scale only 5% say all their builds do. For the majority of the remaining respondents, between 31% and 70% of their builds incorporate WWHR.

Despite the high number of respondents not including WWHR at all, when asked if they believe it can achieve energy savings, a large number of respondents said yes. We did, however, receive mixed responses, with some revealing



verbatim comments including: "It's one aspect in a complex system; one measure alone will have very little effect" and "it's second in the hierarchy, we should reduce energy in the first instance." One commenter pointed out that "It takes up too much space, is hidden and therefore any problems require ripping lots out". Another said "For family houses and retrofits, it's hard to install and less cost effective than boosting water heating via solar PV. In blocks of flats with central heating, it makes more sense, as it can be integrated well with building-scale heat pumps."

WWHR can work well in conjunction with electric showers, and 65.5% of respondents said they're aware of the benefits of pairing the systems together. Despite this, our survey showed only 28.6% of respondents are installing electric showers, and the vast majority aren't specifying WWHR systems at all. When asked to select all applicable reasons why they're not utilising the potential benefits, 46.3% say it's not their decision, and 24% say price is an issue. 18.5% blame a lack of choice, and 27.8% once again cite a lack of knowledge around products.

#### CONCLUSION

Housebuilders are facing a multitude of challenges, with Labour's ambitious target of building 1.5 million homes alongside the decarbonisation of the grid and incoming statutory measures aimed at reducing carbon emissions. Whichever options they choose, the overall aim of water and energy savings is undeniable, with both already required in Parts L and G, and further extensions coming in the Future Homes Standard.

Our survey provides some key insights into some of the more specific challenges within the industry that need to be addressed to enable innovative, water- and energy-saving showering solutions to become more widely utilised. While it demonstrates a positive understanding of the need for such systems, as well as some of the solutions available, it also highlights some difficult obstacles, such as a lack of information from both product manufacturers and the government, which are ultimately holding housebuilders back.

In order to drive the positive changes needed for housebuilders to hit decarbonisation and water reduction targets, our survey shows that better guidance, documentation, and even education is urgently required, to enable specifiers and installers to drive forward and reduce carbon emissions by utilising the solutions available.

As part of this effort, in November netMAGmedia is hosting an industry round table discussion on water and energy-saving innovations in new build housing, including a range of experts in the field, product manufacturers, and housebuilders. This will take a deeper look at the challenges and opportunities for the industry, collaboratively exploring the solutions that can help housebuilders reduce carbon emissions and save water without compromising on quality and performance.











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PROJECT REPORT: SOCIAL HOUSING

# Unlocking the right mix



A former prison site in Portsmouth has found a new purpose, in a combination of new build and refurbishment for a 'tenure blind' mix of luxury flats and affordable homes – by two housebuilders. Roseanne Field reports

ocated on one of the main three roads running through Portsmouth, the former Kingston Prison had been left derelict since its closure in 2013.

Despite being purchased in 2014 by developer City and Country, a long road of planning issues and debate over what should be done with the site lay ahead.

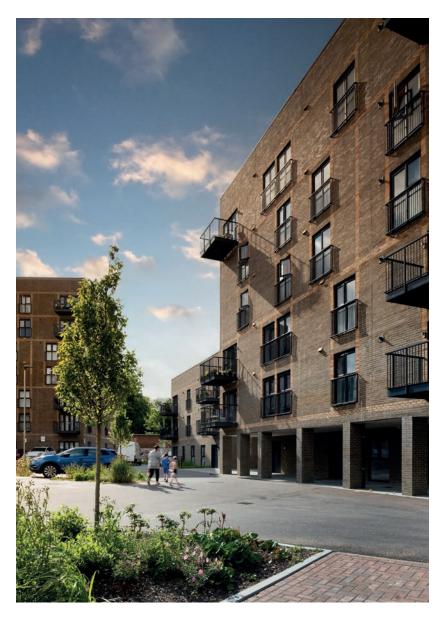
Several ideas were discussed, with the developer initially suggesting a museum, before then proposing an exclusively private residential development. However, with housing waiting lists high in the city Portsmouth City Council insisted

affordable housing must be included within the proposed development.

City and Country had originally purchased the site as part of a portfolio of 10 prisons it was looking to redevelop. However, getting the numbers to stack up on this particular site to justify developing it was proving difficult, particularly with the council standing firm that it must include affordable housing. On top of this, the main prison building – built in 1877 – as well as various elements around it are Grade II listed.

South east-based affordable housing provider VIVID had caught wind of the discussions, with Portsmouth being one of their target areas. "We track developments in that area, looking for opportunities where we can step in," explains VIVID group development and new business director, Tristan Samuels.

VIVID is a registered provider (RP) and developer, with around 36,000 homes currently under management and 80 projects under development.







The team keep abreast of ongoing projects and planning applications, simultaneously building a good working relationship with local authorities. With development being "a bit of a luxury" for RPs according to Samuels, he credits VIVID's success to the successful management of their existing stock.

As well as keeping an eye on upcoming developments, the company looks at locations where the housing need is high. Portsmouth and its surrounding areas, including Gosport and Southampton, are areas VIVID is particularly interested in, due to their unique mix of characteristics. "They're what we describe as northern cities on the south coast," explains Samuels. "They're low value areas, with high need, but the build costs are in line with the rest of Hampshire so they're quite hard to make work."

It was this that gave them their 'in' on the Kingston Place development, with the local authority - Portsmouth City

Council – and City and Country at a bit of a stalemate. "City and Country said they couldn't deliver affordable housing because of the value, so we stepped in and said we'd take it on," Samuels explains. "Being an RP, we were able to show we weren't just there to make a profit. We're here because there's a social and community value asset. They trusted we were going to do what we said we were going to do."

#### A MIX OF TENURES

The overall Kingston Place development comprises the new build elements that VIVID, working in partnership with housebuilder Drew Smith (part of Vistry Group) completed, making up the affordable housing portion, and the 83 luxury apartments that were sold privately, completed by St Cross Homes. The private apartments are within the former prison building, while VIVID's affordable housing is exclusively new build.

THE MAIN PRISON **BUILDING BUILT IN 1877 AS WELL AS VARIOUS ELEMENTS AROUND IT ARE GRADE II LISTED** 



The former prison sits at the centre of the site with four new build elements located around the perimeter within the listed prison walls, and one building constructed outside on the former prison car park. In total VIVID built 183 new homes, 110 of which were for social rent and 73 shared ownership. The blocks vary in height with the largest standing at seven storeys, and the flats are all either one or two bedroom.

Planning the landscaping on the site was divided between VIVID and St Cross Homes, with VIVID ensuring all their flats would overlook a courtyard-style green space. However while green space was important, it was also essential to the company that every flat had at least one parking space, with parking in the city being "one of Portsmouth's biggest problems," Samuels says. While the parking provision takes up what could have been green space, he explains how it wasn't the primary focus with the site backing on to the large Kingston Cemetery. "It was more about ensuring the development was fit for purpose and had usable space internally, noting that they had plenty of space to go just outside the wall."

When deciding on both unit and bedroom numbers, VIVID works closely with the council while also "thinking

about it from a mixed and balanced community perspective," Samuels explains. The company engages with the council, taking note of what their current housing needs are, as well as what the planners want, and what it feels offers the best mix of tenures. "We're thinking about what families in there want communities that support each other. If you get all single living people, you don't really get that."

With the shared ownership units all of which were reserved before the development was completed - Samuels says VIVID looks at what's selling well in the local market. "That's definitely more demand-led." The overall number of units for the entire development was also somewhat controlled by Historic England and what they would allow within the confines of the listed structures, as well as what would work for VIVID with the Homes England grant funding they received.

The company is a strategic partner with Homes England, which allows them to utilise grant funding by bidding on an amount and explaining what percentage will be used for social rent and what percentage for shared ownership. "It's a good position and we value that relationship with Homes England because it allows us to make decisions quickly,"

#### "BEING AN RP, WE WERE ABLE TO SHOW WE WEREN'T JUST THERE TO MAKE A PROFIT"

- TRISTAN SAMUELS, VIVID



explains Samuels. As a general rule on grant funded schemes, VIVID aims to split the funding by putting two thirds towards social rent and one third to shared ownership, while then also incorporating a mix of private tenures to create "mixed and balanced communities."

#### A COMPLEX SITE

As well as the prison building and walls, the former engineers' workshop and entrance complex - comprising a gate tower, detached gate piers and the Chief Warder's and Governor's houses - are also Grade II listed, and justifiably so: "It's a special building," says Samuels. However, this coupled with its use as a

maximum security prison meant they didn't know what they might find, both within the building and the grounds. "Everyone was on tenterhooks for most of that," Samuels admits.

The site itself, in particular the constraints of working within the prison walls, was one of the project's biggest challenges. "It's a very restrictive space, so trying to work in a very tight environment, with all the site compounds and everything, proved to be quite tricky from a logistics perspective," explains Samuels. The listed walls meant entrances to the site couldn't be widened so getting HGVs on and offsite required a one-way system.



The design of the new build was heavily influenced by the historic prison building, both in terms of overall aesthetic but also regarding heights and the overall site layout. "We had to figure out where we could put height and how you could move around the buildings as there were views through the existing gate and entrances that they were looking to protect," Samuels explains.

There was some general remediation work with ground contamination being a regular obstacle in this area, says Samuels. However, this didn't cause too much of a headache as the construction didn't involve digging down too deep, with all parking at ground level. "The cost of basement parking on a site without high values just doesn't work," he explains.

The site also had an impact on the materials used in the construction, and a subtle approach was called for. "It's one of those sites where we couldn't have got away with anything too flamboyant," Samuels says. A few of the walls had to be temporarily altered to allow for construction to take place, under the condition that the replacement blocks would be identical to the originals, down to where they were sourced from. The new build elements were constructed using a Metsec frame and a brick facade, with the brick chosen to contrast with yet complement the cladding on the

original buildings.

Although working with Historic England can involve a lot of back and forth, Samuels says that on schemes such as Kingston Place "you can absolutely see the value and it looks really good. We have a high quality and attractive scheme that we can all be proud of."

#### **PUTTING RESIDENTS FIRST**

VIVID puts a focus on prioritising the safety as well as comfort of residents, and sustainability and security were both key. All VIVID schemes are now designed with PV panels as standard, although the Kingston Place scheme was designed before they brought this into practice. The development includes gas boilers and each unit has an EPC B rating. By 2030 the company intends to upgrade all its existing stock to EPC C, and by 2050 it aims to have implemented its carbon zero plan.

As well as pushing for a higher EPC rating, Samuels explains the company tends to prioritise a fabric first approach to increasing buildings' performance. "If they perform well but wouldn't get an A we're happy that from an emissions perspective they're high performing." As well as including PVs, VIVID also now uses air source heat pumps as standard and insulates beyond the levels required by Building Control, as is the case at Kingston Place.

# "VIVID NOW USES AIR SOURCE HEAT PUMPS AS STANDARD"







# Join our drive to reduce pallet waste in UK construction

We've re-thought the way pallets can be used across the construction industry by partnering with The Pallet LOOP, a circular economy pallet supplier.

By becoming the first materials manufacturer in UK construction to switch to re-usable pallets, we're transforming the way building materials are supplied.

The nationwide collection service is easy, efficient and cost-effective, helping reduce and manage site waste safely and responsibly.

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Find out more at british-gypsum.com/the-pallet-loop





Every apartment includes fibre broadband and is well ventilated. "We think about the quality of the build and design life," says Samuels. "I think the most important thing is they are 'tenure blind' – you wouldn't look at our schemes and say 'that's affordable,' the quality is the same."

The company also prioritises choosing a good design life when choosing individual products, and Samuels explains how focusing on little things can be just as important in creating a happy environment for everyone. "Bin stores and things like that are where you can get problems if you get it wrong, that's where you'll get anti-social behaviour and issues with how the building is used," he says. The company also considers elements such as front door security, windows with safety latches for children, balustrade locations and widths, and even things like pigeon netting. "You're thinking longer term about the wellbeing of the families and communities – if you can get it right early on then people will own it, they're proud of the space and that makes a big difference."

The development was finished in October 2023, after a brief delay towards the end of the project due to site logistics and getting final things such as Section 278 works tied up. Samuels says overall it was one of the more complicated projects

the company has worked on, due not only to the logistical issues but also because this project was an anomaly for VIVID in that they took on the D&B contract, usually preferring to work with various partners to develop schemes.

With residents having been in the apartments for almost a year, Samuels admits there hasn't been a huge amount of feedback from them: "when residents are happy, they don't want to talk to us!" There have been a few minor snagging issues with things such as door locks but, he says, the way housing providers react to that is just as important. Drew Smith as a construction brand was shut down and there were some staff redundancies which has affected them closing out the defects in a timely manner."

Overall, Samuels believes VIVID's "partnering approach" was key to getting this complex project over the line. "We work closely with all the local authorities in our area and have strong relationships with most of them," he says. "Local authorities and registered providers like us have similar values, the outcome we want is the same – good quality housing that's affordable for local people. By working with Portsmouth to get this through we've got a brilliant product that they're proud of as much as we are."









# Pump Supplies acquires UK market leader in wastewater pumping stations







ump Supplies Ltd ("Pump Supplies") supported by its parent company - Vestum AB (publ) ("Vestum") has today acquired all shares in PDAS Holdings Ltd ("PDAS"). During the fiscal year 2023/2024, PDAS generated sales of just over £14.5 million and an EBITA margin in line with the Vestum Group. The purchase price was financed through own cash and existing credit facilities.

PDAS was founded in 2014 and is a UK market leader in proactive maintenance and intelligent monitoring of wastewater pumping stations. The company specialises in packaged pumping stations, storm attenuation tanks, first-time sewerage schemes, station upgrades and refurbishments. A significant part of the offer consists of intelligent monitoring systems through remote telemetry and cloud-based technology for service and maintenance of pumping stations that allow self-employed experts to monitor customers' products in real-time with the aim of streamlining maintenance work. PDAS has 63 employees and is headquartered in Surrey, England.

Founded in 1982, Pump Supplies is one of the largest suppliers in the UK of electric submersible water pumps. The offer includes drainage, sewage and slurry pumps as well as an extensive range of accessories and pipe systems. Pump Supplies operates through five depots in England, Wales and Ireland. Pump Supplies has 90 employees and is headquartered in Gloucester.

Vestum's CEO Simon Göthberg, said: "I'm proud to announce the acquisition of PDAS, which constitutes an excellent add-on acquisition to Pump Supplies. With its strength in intelligent monitoring systems, PDAS can leverage the broad customer network built by Pump Supplies over the past 40 years to further accelerate growth in recurring revenue. There are concrete synergies on both the revenue and cost side, and the acquisition strengthens Vestum's position within water infrastructure in the UK.

"The acquisition of PDAS is Vestum's first acquisition in two years and demonstrates our strategy to grow the Water segment, both through high organic growth and acquisitions. Our ambition is to grow the Water segment to become Vestum's largest segment."

Luke Beattie, managing director of Pump Supplies, adds: "PDAS is a leading pumping station specialist which complements the Pump Supplies business and I'm delighted to welcome the entire team to the family. This strategic move is aimed at promoting stability, fostering growth, and strengthening our position in the marketplace. The acquisition won't disrupt our operations or alter the core values that customers have come to associate with us. Instead, it positions us for even greater success by leveraging synergies and expanding our reach. We are confident that this new chapter will bring about even more opportunities for collaboration and mutual growth."

Grant Thornton provided financial advice and Thrings has acted as legal advisor to Pump Supplies in connection with the acquisition.

sales@pumpsupplies.co.uk www.pumpsupplies.co.uk





#### **SHOW PREVIEW**

20-21 November Olympia London

# ONDON BUILD 2024: THE BIGGEST DITION YET





n 20-21 November, what's thought to be the UK's largest construction show, London Build, is back, and this year the biggest edition yet, with brand-new, exciting features and stages for attendees to discover.

London Build 2024 is doubling in size, taking over both the Grand & National Halls at Olympia. Your ticket gives you access to over 35,000 attendees, 700+ incredible speakers across 12 CPD stages, 450+ exhibitors, feature areas, networking parties, endless entertainment, DJs, and live music in the Festival of Construction.

Attendees will get the opportunity to connect with industry leaders, discover upcoming project opportunities, and uncover the latest trends and technologies shaping the UK's built environment. With 12 dedicated conference stages running over the two days, topics include the tall buildings boom, driving for a more sustainable future, the importance of diversity, mental health and wellbeing in construction, innovations in MMC, and much more!

Confirmed speakers include:

- Luke Askwith, european practice area leader at Gensler
- Ron Bakker, founding partner at PLP Architecture
- Charles Betts, regional director fire engineering & London office leader at AECOM
- Simon Cloherty, operations director at Robert Bird Group
- Dr Zainab Dangana, head sustainable technology services at Wates
- Andrew Dewdney, head of modern methods of construction at Kier Construction
- Danielle Doherty, head of social value at VINCI Building
- Joanna Gilroy, group director of sustainability at Balfour Beatty
- Chris Mattock, head of sustainability for infrastructure at Mace
- Juan A. Morillas, head of sustainable design at John Sisk & Son
- Jason Moss, head of health, safety &





- wellbeing at McLaren Group

   Karen Mosley, managing director at HLM Architects
- Dr Riette Oosthuizen, partner -Planning at HTA Design
- Caroline Pontifex, director & head of workplace & design at Savills
- Gwyn Richards, planning & development director at City of London.

#### BRAND NEW FOR 2024 LONDON BUILD FIRE & SECURITY

As a result of high demand from the industry, the London Build Fire & Security Expo will be taking over Olympia

London's National Hall in its own dedicated, stand-alone show. Co-hosted alongside London Build 2024, it will feature over 100 exhibitors showcasing the latest cutting-edge technologies and solutions in fire safety & security and thought leaders speaking on dedicated conference stages for fire safety and building security, including panel discussions, workshops and interactive demos from leading end-users and industry experts.

#### SKYSCRAPER & TALL BUILDINGS STAGE

For the first time, London Build will have an entire stage dedicated to

Skyscrapers and Tall Buildings, with a two-day conference bringing decision makers together to innovate and share successful strategies for creating sustainable and impressive high-rise structures. Be prepared to discover groundbreaking technologies, gain invaluable insights, and stay at the forefront of the construction industry. Hear from industry leaders from AECOM, The City of London, Knight Frank, Robert Bird Group, Savills, SOM and many more.

#### AI & DIGITAL CONSTRUCTION STAGE & CPD WORKSHOPS

Each year the London Build AI & Digital Construction Stage attracts thousands of digital construction professionals from across the UK to learn about the latest technology and innovations from across the sector. This year sees the addition of a brand new Digital Construction Workshop stage, featuring in-depth presentations showcasing the latest technology, innovation and digital transformation tools from leading industry experts.

London Build is free to attend, and promises two fun-filled days of high-level content, networking opportunities and endless entertainment. Register of free and start planning your visit today by scanning the QR Code on page 49.

Article supplied by London Build

#### Marmox answers the call at London Build 2024 with A1

#### rated Fireboard

**▼**ith the findings of the Grenfell Inquiry continuing to reshape building practices across the UK, the annual construction show at the capital's famous Olympia venue is this year doubling in size and being refocused as the London Build Fire & Security Expo (November 20-21) with insulation specialist Marmox UK Ltd on hand to demonstrate its recently launched Fireboard product on Stand L42. The Marmox Stone Wool based product shares the unique Marmox honeycomb surface structure with its XPS forerunner and is suitable for both internal and external wall insulation (IWI/EWI) applications.

Externally the A1 non-combustible certified Fireboard can serve as a weatherproof renderbacker, or be used internally across walls and ceilings to take a plaster finish, while providing sound absorption properties, along with thermal insulation. The 600 x 1200 mm Fireboards are available in thicknesses of 20 mm, 50 mm and 100 mm and with the polymer modified mortar honeycomb coating applied to both faces. With a nominal density of 150 kg/m³ the boards' core material offers a compressive strength of 90 kPa (9 tonnes/m²), while its high insulation performance will help combat thermal-bridging and the formation of surface condensation, as well as having the potential to cut energy bills.

The marketing manager for Marmox, Grant



Terry, commented: "As a regular exhibitor at London Build and other major trade shows, we endeavour to ensure the products we showcase are as relevant as possible to both specifiers and installation specialists; and believe that Fireboard is an ideal offering to help meet the multiple challenges presented by the Building Safety Act as well as Part L of the Building Regulations. The introduction of Fireboard into our range significantly enhances our offer to the construction industry, meaning we have an A1 non-combustible backer board for internal or external use, which can safely be installed across masonry as well as timber or steel framing systems. The Stone Wool boards are made of formed molten rock, meaning it is impossible for the fibres to absorb moisture, so they will not degrade no matter what weather they are

exposed to.

The thermal conductivity of 0.037 W/mK delivers very good thermal insulation while the tiny air pockets within the micro-fibre structure of the Stone Wool serve to interrupt the pathway for sound transmission, which solid materials facilitate. We expect Fireboard to find applications in new-build and refurbishment work within residential, commercial and other sectors"

As detailed in its A5 technical brochure which can be downloaded, Marmox Fireboard has been tested to prove compliance with BS EN 1182, EN 1716 and EN13823 (Resistance to fire test) conducted by UKTC, along with other testing completed by the BRE.

01634 835290 www.marmox.co.uk



#### CTD Tiles continues to serve architects and housebuilders

Now part of Topps Group, CTD Tiles remains fully committed to its customers, including those served by its specialist architectural and national housebuilder operations. With stability and commitment to stock, as well as access to an unrivalled supply chain, the tile specialist continues to be a service-driven business with the support of dedicated architectural, national housebuilder and sales support teams. Today, businesses can still enjoy 99% stock coverage across the full CTD Tiles portfolio and very shortly 100% coverage for all housebuilder specific tile and accessory ranges. Service remains excellent, with on-site deliveries running to schedule and collection available from all of the 31 remaining CTD Tiles stores across the country (for a full list of stores visit www.ctdtiles.co.uk/branch.aspx). Jonathan Wiles is now leading the commercial, architectural and national housebuilder teams within CTD Tiles alongside Parkside Architectural Tiles, a tile specification company also part of the Topps Group. He says: "The architectural and national housebuilder teams are a real success story of CTD Tiles and the commercial business accounts for almost a third of the company's sales. We are continuing to work with clients that have benefitted from the service-focused approach of our highly experienced teams. With the additional support of the UK's largest tile company, customers can be assured of first-rate service and business as usual into the future."

0121 803 7760 www.parkside.co.uk/ctdarchitecturaltiles

#### Nuaire at London Build 2024



Nuaire and Domus Ventilation will be exhibiting together once again at London Build on stand C52. Providing customers with a true breadth of ventilation solutions and expertise, whether it be the residential new build sector, social housing or commercial applications (the latter of which

is served by Nuaire's product portfolio), Domus Ventilation and Nuaire ventilation systems are renowned for saving energy and improving indoor air quality. At this year's London Build, Nuaire is proud to be showing its Hybrid Cooling System, which was a finalist in the Product Innovation of the Year category at this year's London Construction Awards (part of London Build).

www.nuaire.co.uk domusventilation.co.uk

#### Reginox at London Build Expo 2024



Reginox UK has built an outstanding reputation for the quality, depth and breadth of its ranges as a B2B manufacturer and supplier of sinks, taps, worktops and accessories for the housebuilding, specification and KBB sectors for 23 years.

Led by commercial director Dave Mayer, the Reginox UK team will have a significant presence on stand B84 at the London Build 2024 Expo at Olympia on 21-22 November.

Meanwhile, visit our new website.

01260 28 00 33 www.reginox.co.uk

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# RETHINKING THERMAL **EFFICIENCY**

Mark Bowman of Marmox explains why addressing cold bridging has become more important than ever for specifiers in the housebuilding sector.



■ ven with plans to utilise land in the so called "Grey Belt," the new Government will undoubtedly find it very tough to achieve its ambitions to build 1.5 million new homes during the next five years: with a shortage of skilled labour as well as many types of materials, compounded by ever greater emphasis on cutting energy losses in the quest to hit net zero. The construction industry, then, must embrace technologies which offer answers to multiple challenges: simplifying the build process while ensuring the continuity of insulation across the outer envelope.

Undoubtedly, wall and window performance have improved dramatically over recent decades, but getting the junction details right has remained stubbornly difficult since the BRE first identified the issue in its 1969 document

'Avoiding Risks,' with the wall-floor interface being the first focus as most projects get out of the ground. Fail to deal adequately with the problem of thermal bridging, and the penalty is not just an unquantified increase in the annual cost of heating a home, but also almost inevitable highly visible effects along the interior walls - and potentially life-threatening medical risks for building occupants.

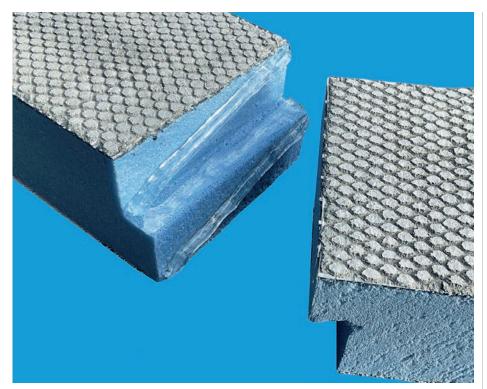
"Avoiding Risks" - like other publications cataloguing common short-comings with traditional construction techniques - contains numerous illustrations of the manner in which thermal bridging can cause condensation to form on plasterwork and other internal finishes, in turn leading to black mould disfiguring the surfaces and as the introduction of the Social Housing

Regulation Bill in 2023 underlined, the effect is not just visual, as mould growth releases dangerous microscopic spores into the living environment, presenting a particular danger to those living with asthma and other respiratory conditions.

Named in memory of the tragic death of a young boy whose family lived in seriously substandard accommodation, Awaab's Law stands as a chilling reminder not only to social housing landlords, but all property managers and the wider building industry: that poor construction practice can have the most serious consequences.

Certainly it is possible to wrap the entire structure in an 'outsulation' cocoon, but it is cumbersome and logistically difficult to achieve, while if a more traditional approach is sought, the load-carrying capacity of the materials

THE INDUSTRY MUST EMBRACE TECHNOLOGIES WHICH SIMPLIFY THE BUILD PROCESS WHILE ENSURING THE CONTINUITY OF INSULATION ACROSS THE OUTER ENVELOPE



forming the junction become a limiting factor, even when using a timber or light-gauge steel frame.

Popular on the continent, foamed glass insulation can offer a solution in some situations, but the hard truth is that the product solutions available only offer a

compressive strength of less than 3 MPa – or 3.0 N/mm² – which does not even match that of lower strength aircrete blocks, while the top performer in the Thermalite range achieves 10 N/mm². Foam is probably fine then for laying a raft foundation under your £1,800

per square metre dream Passivhaus, but if the industry is actually going to confront the housing crisis, a more practical and cost-effective answer is required.

Consequently, the construction of a truly individual new home in West Sussex made full use of a composite solution which is increasingly being specified to address thermal bridging on projects ranging from schools to multi-storey social housing developments. The six-bedroom, five-bathroom dwelling near the village of Lurgashall was built by Grangewood Southern for a private client, with Fusion Brickwork being the specialist subcontractor responsible for laying 140 mm wide Thermoblocks, both around the ground floor perimeter and where the slab spans a substantial basement.

The project's unusual wall construction features an inner and outer leaf of concrete blockwork, faced with random natural stonework. Some 250 of the 600 mm long by 100 mm deep composite units were installed using sealant to secure the overlapping end joints, while their XPS encased mini concrete columns create the fully insulated support zone at the base of the blockwork.

Mark Bowman is technical manager for Marmox





#### Sto helps residential development exceed U-value requirements

A Sto external wall insulation system has maximised thermal efficiency for more than 240 homes within a new residential development in Bracknell. Prioritising environmental sustainability, a range of features has been introduced, including solar panels and a heat pump system. Working in partnership with BDG and Sto's authorised installer, Stoneguard, Sto supplied a specification which would enhance the development's eco-credentials. The StoTherm Mineral K insulation system was selected and designed to achieve a U-value of 0.12 W/m<sup>2</sup>K for the wall structure, exceeding the requirements of building regulations. The BBA-certified StoTherm Mineral K external wall insulation system achieves a reaction to fire of A2-s1, d0 in accordance with BS EN 13501-1 and uses mineral fibre insulation boards, which optimise thermal efficiency and fire protection. The insulation boards were fixed to the substrate using StoLevell Uni adhesive followed by a reinforcing coat. Sto-Glass Fibre Mesh was then embedded into the reinforcing coat while wet providing the system with crack resistance. The system was finished with StoSilco K2.0 silicone resin render in white and mid grey to provide high levels of water repellence and protection from harsh weather. The application of StoColor Silco G, a silicone resin facade paint, bolsters durability by protecting the building from algae.

0330 024 2666 www.sto.co.uk



#### Brett Martin's flat glass rooflight receives BBA approval

Brett Martin is pleased to announce that its Flat Glass Rooflights have recently secured BBA Approval. Brett Martin is one of only few UK rooflight suppliers to obtain this certification. A modern alternative to the Roof Lantern, the Flat Glass Rooflight range offers a stylish means of bringing light into contemporary building designs. As well as more than 100 standard sizes, Brett Martin is now offering bespoke sizing and new colour options, meaning the Flat Glass Rooflight is fit for any refurbishment or new-build project. The Flat Glass square and rectangular rooflights in the range can now be coated in RAL 7016 grey and RAL 9005 black, in addition to the white that was previously available. The company's recently launched Flat Glass Access Hatch is also available in the same colour options, for applications where access is required. All Brett Martin's rooflights are manufactured using laminated glass which is engineered not only to resist breakage as much as possible but - if it does break - to break in a way that is both safe and secure. Constructed from two panes of float glass with an added polymer layer bonded between, laminated glass will not shatter into individual pieces on impact. Instead, it will form a characteristic spider's web pattern, reducing the likelihood of the broken rooflight falling on anyone below.

daylight@brettmartin.com www.brettmartin.com/daylight-systems/our-products/product/flat-glass-rooflight





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Make the kitchen your favorite place with Atelier's bespoke design and welcome an abundance of natural light into your life.

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For more information, please call or visit the AtelierBDB website.

Alternatively, you can email the team on info@atelierbdb.co.uk.

02035762761 www.atelierbdb.co.uk





#### A. Proctor Group creates new Head of Global Sales Modular Offsite role

A. Proctor Group is proud to announce the promotion of Adam Salt to the position of head of global sales modular offsite, effective immediately. The newly-created role sees Adam promoted from his previous position as a business development manager within the Group, and reporting directly to managing director Keira Proctor. Adam is now responsible for overseeing the export division, growing and developing key accounts, researching potential new distributors, and building a significant customer presence internationally. This pivotal role will also see Adam spearheading the company's modular strategy on a global scale, driving growth and innovation in this rapidly evolving sector. As part of his new responsibilities, Adam will maintain links with the UK modular sector. He said: "I am honoured to accept this position and lead our global sales efforts. A. Proctor Group is known for its commitment to quality and innovation, and I'm eager to work with our talented team to expand our reach and continue delivering exceptional value to our customers. The A. Proctor Group is a fourth generation family business with a history of technical innovation, promoting good practice, and developing products that contractors and offsite manufacturers want to use."

01250 872261 www.proctorgroup.com



#### ARDEX Group UK Invests in Sustainable Energy

The ARDEX Group UK has commissioned more than 1,600 solar panels at its manufacturing facilities in Stoke-on-Trent and Haverhill. The high-performance photovoltaic (PV) systems have been installed on warehousing and manufacturing units at both sites and will generate approximately 30% of the ARDEX Group UK's electrical power requirements. The installation of solar panels is part of a global sustainability initiative in which the company is investing around €3 million globally. Installation of 1,332 panels were completed at ARDEX UK in Haverhill in September last year and since commissioning, more than 269,686 kWh of solar energy has been produced – equivalent to the consumption of 100 houses. A more modest 334 panels were installed at the Group's Stoke-on-Trent facility – **Building Adhesives Ltd** in Trentham – with commissioning completing in March this year. This is due to limitations for more panels from the local grid, however plans remain to invest in more panels at Building Adhesives Ltd once the local grid has been updated and allows this to be done. Since March 50,080 kWh of electricity has been produced – which is the equivalent of taking 9,814.4 kg CO, out of the atmosphere or planting 594 trees. It meets 14% of total energy needs at Building Adhesives.

01782 591100 www.bal-adhesives.com

#### Top 7 reasons to buy our exclusive insurance package:

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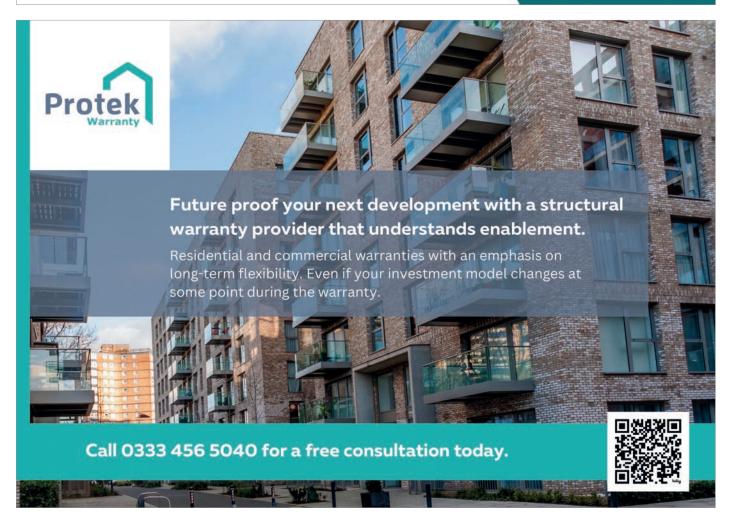
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#### Collaboration to drive renewable heating solutions



Wolseley and Panasonic Heating & Cooling are thrilled to announce an enhanced collaboration aimed at transforming the landscape of renewable heating technologies. This strategic collaboration is set to offer a comprehensive package designed explicitly for installers retrofitting properties with sustainable, energy-efficient systems. Wolseley and

Panasonic Heating & Cooling are joining forces to provide unparalleled support to installers and the commercial sector in transitioning from traditional gas boilers to advanced, eco-friendly solutions. This initiative will promote the adoption of hydronics, DX, and refrigerant solutions; all key technologies in the move towards renewable energy.

www.wolseley.co.uk/renewables www.aircon.panasonic.eu

#### Vent-Axia ventilates the Tomorrow Home project



Lovell Homes has selected **Vent-Axia's** Lo-Carbon Sentinel Kinetic Cooker Hood MVHR and the Lo-Carbon NBR dMEV C as part of its Tomorrow Home project at Cornish Park in Spennymoor, County Durham. "Vent-Axia's Lo-Carbon NBR dMEV C is currently fitted as standard in Lovell open market sales house types, with

dMEV recommended as a solution in the Future Homes Standard consultation document. Meanwhile, we chose the Lo-Carbon Sentinel Kinetic Cooker Hood for this trial because we see MVHR as being the most probable ventilation strategy for Net-Zero homes as airtightness is increased. We look forward to monitoring the performance of both these technologies in the two homes," said lain Gillies, divisional design & innovation manager at Lovell Homes.

0344 856 0590 www.vent-axia.com

#### Open the window of opportunity



A new Mini Dormer System has been developed by **Keylite Roof Windows** (Keylite) that can be conveniently built on the ground – saving installation time and improving safety for contractors working at height on busy housing developments. The product has been designed to fit on a roof from 10° to 75° and features two Keylite roof windows and an insulated timber upstand. Everything, from the timber upstand and roof windows to the brackets and aluminium

that goes around the roof tiles, is included within the Mini Dormer System kit, making construction and installation as straightforward as possible for housebuilders.

www.keyliteroofwindows.com

#### Keylite's new Fixed Skylight



Keylite Roof Windows (Keylite) has launched a new Fixed Skylight for roofs pitched from 10° upwards that will allow for more daylight and a higher level of security. The innovative design, which is new to the market for 2024,

will suit single-story roofs due to its low-pitch installation and offers 44% more daylight than a standard centre pivot window. The Fixed Skylight is also compliant with Part Q of UK building regulations and meets latest guidance in 'Security in dwellings: Approved Document Q' to help resist unauthorised access in new dwellings. The purpose of Part Q is to make a window sufficiently robust to resist its ability to be levered open or from the glass pane being removed intact from the window frame.

www.keyliteroofwindows.com



Althon Precast Concrete Outfall Structures



#### **Coloured Precast Concrete Headwalls**

Althon are now able to offer coloured headwalls for aesthetically sensitive areas. Our coloured concrete headwalls can help the installation blend into the surrounding landscape.

Althon use a colouring additive for cementitious materials. It provides a uniform streak free colour.

Colours shown are approximations of our colour mix in a typical concrete using mid grey Portland cement and having an as-cast surface. The final colour is affected by many influences.

www.althon.co.uk

E: sales@althon.co.uk | T: 01603 488700



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#### Altecnic release heat pump focused issue of Idronics UK

he sixth issue of Idronics UK offers guidance on heat pump design and componentry selection, aiming to enhance the knowledge of the industry and support the shift to low-carbon heating solutions.

Altecnic Ltd, one of the UK's leading suppliers of hydronic solutions, has launched the sixth issue of technical journal, Idronics UK. This latest edition focuses on heat pump systems, providing essential information on air-to-water heat pump design, advice on componentry and relevant updates for the industry.

The lead editorial offers detailed guidance on the design of efficient air-to-water heat pump systems. With the use of detailed diagrams, critical aspects such as system layout, component selection, and performance optimisation, are all discussed. Readers will benefit from expert advice on overcoming common challenges and maximising the benefits of air-to-water heat pump technology.

Throughout the new edition are a range of practical instructions for installing key components of heat pump systems. This includes step-by-step installation guides and technical focus pieces for anti-freeze valves and the Caleffi XF dirt and air heat pump filter, both crucial for maintaining system integrity and performance.

As hybrid heating systems become more prevalent, understanding how to integrate them effectively is essential. A feature in the latest edition of Idronics UK explores the key factors to consider when combining different heating



technologies, such as compatibility, component selection, and end-user comfort. It provides insights into designing systems that leverage the strengths of multiple heat sources, ensuring reliable and cost-effective heating solutions for various applications.

Also included in the latest edition of Idronics UK is a range of information on Altecnic's extended product offering for heat pump solutions, including the newly launched iStop® PLUS compact anti-freeze valve, the range of Series 569 Buffer Tanks, Caleffi XF dirt and air heat pump filter, and the latest 5516 High Efficiency Deaerator (HED®).

Helen Cooper, head of marketing, commented: "Altecnic are dedicated to aiding the industry's transition to heat pumps, promoting sustainable and energy-efficient heating solutions for the future. With this, we wish to use our expertise to advance industry knowledge in this area and support the continuous professional growth of our customers.

"Idronics UK, along with our digital learning

platform, Altecnic Academy, are proving invaluable resources to assist us in our aim. This latest edition offers support for professionals seeking to stay at the forefront of the heat pump industry, providing a blend of technical expertise and practical advice."

The issue of Idronics is now available digitally and can be accessed when subscribed via the link: www.altecnic.co.uk/technical-hub/

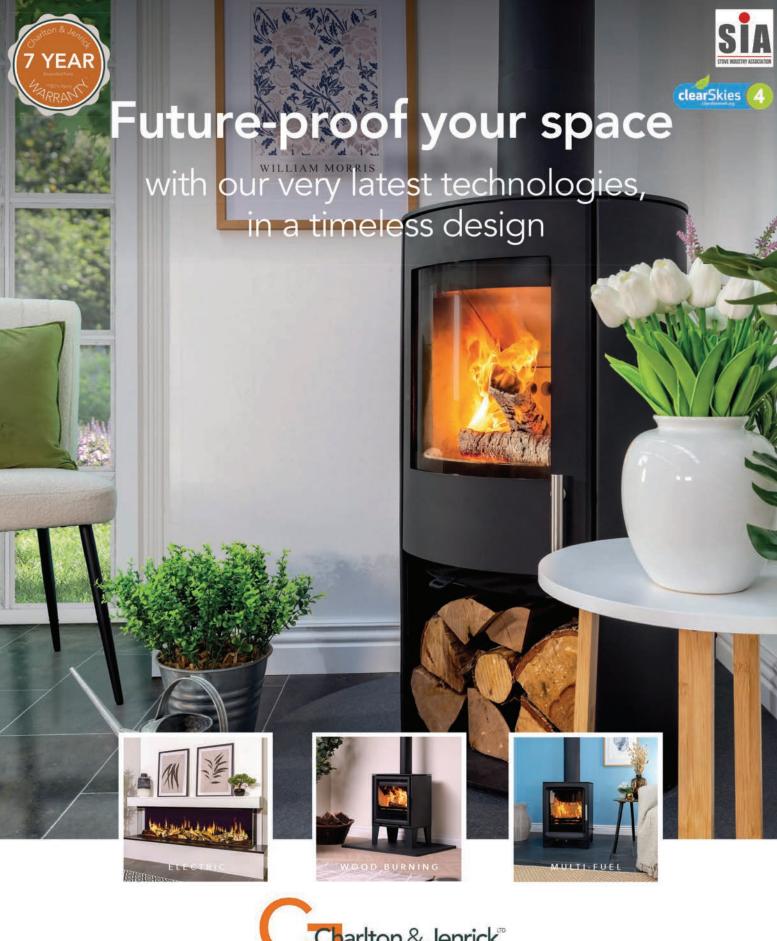
Alternatively, you can request a physical copy by emailing or by sending us a DM on one of our social pages.

Altecnic Ltd is the UK's leading supplier of hydronic solutions. Established near Stafford in 1987, the company imports and supplies over 5,000 product lines to distributors throughout the UK and Republic of Ireland. The company provides trade merchants, plumbing and heating engineers and specifiers with a comprehensive range of plumbing products, including; thermostatic mixing valves, underfloor heating, sealed systems, dirt and air separation, backflow prevention and vessels and a whole lot more.

Altecnic's mission statement is to deliver the highest quality products and services to its customers, through manufacturing excellence, innovation and education. Their extensive range of products and services are chosen by trade merchants, original equipment manufacturers, plumbing and heating engineers and specifiers.

marketing@altecnic.co.uk altecnic.co.uk







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# THE BENEFITS OF THOROUGHLY MODERN WOOD-BURNING STOVES

Erica Malkin of the Stove Industry Association highlights the advantages of modern wood-burning stoves and the important role they play in the UK's low carbon heating strategy.

n the evolving landscape of home heating, house builders and developers are increasingly tasked with balancing efficiency, environmental impact, and consumer demand.

Modern wood-burning stoves are designed to meet stringent environmental standards, significantly reducing emissions compared to open fires and older stove models. Open fires, while aesthetically pleasing, are notorious for their inefficiency and high levels of particulate emissions.

In contrast, modern stoves that comply with Ecodesign regulations emit up to 90% fewer particulates than open fires, and up to 80% less than many older stoves. This significant reduction is achieved through advanced combustion technology that ensures more complete burning of the fuel, thereby minimising the release of harmful pollutants.

Heating a home with a wood-burning stove offers significant low carbon benefits, making it an attractive option for UK housebuilders and developers focused on sustainability. Wood is a renewable and sustainable fuel source, as it can be replenished through responsible forestry practices. When sourced locally, wood also has a lower carbon footprint compared to fossil fuels, reducing transportation emissions. The carbon dioxide emitted during combustion is offset by the carbon absorbed during the growth of the trees. By incorporating wood-burning stoves into new builds, developers can provide homeowners with a low carbon heating solution that supports the UK's transition to a greener future.

#### **MAXIMISING HEAT OUTPUT**

Modern stoves are designed to maximise heat output. With efficiency rates of up to 85%, when used correctly, these stoves ensure that more of the heat generated is used to warm the home. This is achieved through better insulation and controlled airflow, which allows for more efficient



combustion. For developers, this translates to lower energy costs for homeowners and a more sustainable heating option.

#### **ENERGY RESILIENCE**

The economic advantages of modern stoves extend beyond efficiency. In the face of increasing energy grid constraints and the potential for power cuts, wood-burning stoves offer a reliable and resilient heating solution for UK homes. Unlike electric heating systems, modern wood-burning stoves can operate independently of the grid, ensuring that homes remain warm and comfortable even during outages. For housebuilders and developers, incorporating wood-burning stoves into new builds not only enhances energy security but also provides homeowners with

peace of mind, knowing they have a dependable source of heat regardless of external power supply issues. This makes wood-burning stoves an attractive feature in the design and marketing of sustainable, resilient homes.

#### THE ROLE OF THE STOVE INDUSTRY **ASSOCIATION**

The Stove Industry Association (SIA) plays a pivotal role in promoting the benefits of modern stoves and advocating for their inclusion in the UK's low carbon heating strategy. The SIA works closely with policymakers to ensure that wood-burning stoves are being recognised as a viable and sustainable heating option.

One of the key initiatives of the SIA is to provide evidence-based research on the environmental and economic

benefits of modern stoves. This research is crucial in informing policy decisions and ensuring that regulations support the use of efficient and low-emission heating solutions.

The SIA's advocacy efforts have been instrumental in shaping policies that support their use. The Association played a crucial role in overturning the ban on wood-burning stoves in new build properties in Scotland. By presenting evidence on the environmental benefits and efficiency of modern stoves, the SIA successfully argued that these appliances are a low carbon heating option. Their advocacy highlighted the importance of wood-burning stoves for rural communities, particularly during power outages. This has led to the Scottish government overturning the restrictions and reviewing the New Build Heat Standard.

#### SUPPORTING THE LOW CARBON HEATING STRATEGY

The inclusion of wood-burning stoves in the UK's low carbon heating strategy is essential for achieving the country's climate goals. The SIA advocates for the recognition of domestic wood-burning as part of a diversified approach to low carbon heating. This approach includes a mix of technologies such as heat pumps,



solar thermal systems, and biomass boilers. The use of modern wood burning stoves supports a balanced and flexible strategy that can adapt to different housing needs and regional variations in energy resources.

#### PRACTICAL CONSIDERATIONS FOR BUILDERS & DEVELOPERS

For housebuilders and developers, the choice of heating systems is a critical

#### HEATING A HOME WITH A WOOD-BURNING STOVE OFFERS SIGNIFICANT LOW CARBON BENEFITS

aspect of design and construction. Modern stoves offer several practical advantages that make them an attractive option for new builds and renovations.

Modern stoves are versatile and can be installed in a variety of settings, including homes without existing chimneys. This flexibility allows developers to incorporate stoves into a wide range of architectural designs. The aesthetic appeal of modern stoves can also enhance the marketability of properties, appealing to buyers who value both style and sustainability.

Modern wood-burning stoves offer a sustainable, efficient, and resilient heating solution for new builds and renovations. With their low emissions and high efficiency, they align with the UK's low carbon heating strategy and offer a range of environmental benefits and practical advantages. By incorporating modern wood-burning stoves, developers can meet consumer demand for a real fire while supporting the transition to a greener future. These stoves not only enhance energy security but also add aesthetic and market value to properties, making them a smart choice for sustainable home heating.

Erica Malkin is communications manager & treasurer of the Stove Industry Association

# Mendip (Stoves)

#### Innovative Luminosa Electric Fire Range



Charlton & Jenrick proudly introduce the Luminosa Electric Fire Range, featuring sleek design and cutting-edge Real Flame Technology™. Currently available in two sizes, with more to follow, this compact, space-saving range is perfect for modern, energy-efficient homes. With LED mood

lighting and optional real log sets, these electric fires blend style and functionality while requiring minimal installation. The Luminosa 150 is ideal for a media wall, while the Luminosa 62 fits seamlessly into a traditional fire surround. This versatile, low-maintenance secondary heating solution is an excellent addition to any home.

www.charltonandjenrick.co.uk

#### Housebuilder & Developer website



The Housebuilder & Developer (HBD) website is an online provider of past and present products and news items for the housebuilder and developer. hbdonline.co.uk is a one-stop source for all the latest press releases providing any visitor with access to information about products and services that they may require. From the website, you can find links to digital issues that have live

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- · Lifetime warranty



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#### Consort Claudgen's new commercial fan heater



Consort Claudgen is proud to announce the launch of the new CFH3 Commercial Fan Heater, designed to deliver efficient and reliable heating for workshops, garages, and other commercial spaces. Rated at 3 kW, this heater features three fan speeds and three heat settings, along with a fan-only mode for optimal air circulation. The HRXSL controller ensures precise temperature control, offering

up to six daily programmes and seven day scheduling for enhanced energy efficiency. Multiple heaters can be controlled in a single zone configuration, providing scalable solutions for larger spaces. The wall-mounted heater is equipped with multi-directional brackets for flexible installation, offering 180° horizontal and 45° vertical adjustment for targeted warmth.

01646 692172 www.consortepl.com

#### Domus Ventilation expands axial fan range



Domus Ventilation has added new models to its intermittent axial fan range: the DBF100 100 mm (4") fan and the DKF150 150 mm (6") fan. Both fan types are available in versions with timer control, and combined humidistat and timer control which identifies and reacts to a significant change

in humidity. The DBF100 is also available with a pull cord control. The new Domus Ventilation axial fans have been designed for high performance and energy efficiency. As with all Domus Ventilation products, ease of installation has been a fundamental aspect of the product design. The new axial fans are compact so readily fit into small spaces.

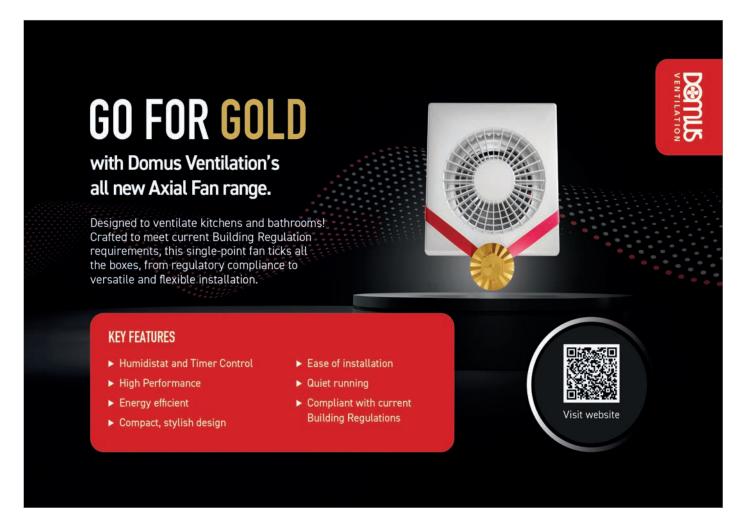
vent.info@domusventilation.co.uk



#### EnviroVent launches market leading decentralised MEV unit

EnviroVent has revealed an exciting new decentralised Mechanical Extract Ventilation (dMEV) unit that is set to take the new build sector by storm. QURO is set to be a 'best in class' product that incorporates the latest fan technology achieving noise levels below 9 dB(A) at 3m. It comes with constant volume technology ensuring that the selected airflow rate is able to be achieved at a range of pressures without manual adjustments. Performance is guaranteed as EnviroVent's QURO has low specific fan power (SFP) down to 0.08 W/l/s, which means the fan operates in the most efficient manner. Compliant with Building Regulations Approved Document F for Continuous Extract Ventilation within dwellings, QURO is listed on the SAP PCDB (Product Characteristics Database). QURO has a stylish, compact low-profile design, making it perfect for the specification and new build market, with the flexibility to be wall or ceiling mounted. It has a small footprint of 175 mm x 175 mm. A powerful ventilation unit, QURO is capable of meeting the requirements of all the wet rooms in a property, including the kitchen, bathroom, utility, ensuite and WC. As part of enhancing energy efficiency, QURO has been aerodynamically optimised and uses a low watt DC motor, providing reduced energy consumption and increased efficiency with enhanced sustainability.

01423 810 810 www.envirovent.com/products/mechanical-extract-ventilation-mev/quro



# BUILDING INDOOR AIR QUALITY INTO DWELLINGS FROM THE GROUND UP

On behalf of BEAMA Underfloor Heating Group, Ashley Cooper discusses how hydronic (water-based) underfloor heating can support the industry to build healthier indoor air quality into the very fabric of a home.

elivering homes which provide residents with good indoor air quality is essential to ensure the property can offer both thermal comfort and a healthy indoor environment. One key aspect is airborne particles, as the movement of dust, dander and allergens can exacerbate or trigger respiratory disease symptoms. With 5.4 million people in the UK living with asthma, it's crucial to the public's health and wellbeing to improve indoor environments and reduce triggers.

There are many aspects within a property and individual rooms which can improve or deteriorate indoor air quality, but one major culprit is the movement of problematic particles, such as dust and allergens. These particles can't be easily avoided, but when airborne, they begin to cause more issues, especially for those who suffer from respiratory problems.

As underfloor heating emits radiant heat, the system doesn't require any forced air to create thermal comfort instead, radiant heat warms the very fabric of a room. Plus, as underfloor systems are entirely hidden within the floor, there aren't any hard-to-reach components, such as coils or panels, where particles can gather and become propelled into the living space when the system is active.

#### **EVEN HEAT DISTRIBUTION**

Ensuring even distribution of heat throughout a space is imperative. Underfloor heating achieves this important aspect thanks to a series of continuous loops fitted under the floor - either within the screed or within specialist panels - which creates a large radiant surface that heats a room from the floor up.

In situations where parts of a room are much cooler than others, when the warm, moist air comes into contact with cooler surfaces such as walls or windows, condensation may gather. This moisture then provides an ideal environment for mould growth and, therefore, poor air quality, due to the mould spores. Pollutants such as dust and allergens can also get 'trapped' in poorly heated areas of a property. While ventilation plays an essential part in good indoor air quality, from an energy conservation and security perspective having windows open during the cooler months isn't always an option.

The only heating system which can heat all surfaces in the room evenly is radiant heating - specifically hydronic (water-based) underfloor heating. As underfloor heating transforms the whole floor surface into a large heat emitter, it ensures even heat distribution and maintains even temperatures, keeping the air free from pollutant build-up. Importantly, it helps to minimise condensation, reducing the likelihood of mould forming.

In addition, thanks to the stable and consistent temperatures created by underfloor heating, it also maintains and balances humidity levels, further improving indoor air quality, and the delivery of comfortable living environments.

#### **SEAMLESS SEQUENCING**

The reassurance of good indoor air quality can be built directly into the fabric of a property when a screeded underfloor heating system is specified. Most systems integrate seamlessly into the construction process, with flexible options available at both oversite and weathertight stages, depending on build preferences. This adaptability makes it a practical solution for managing project schedules and site logistics. There is also an array of flexible systems available for every sub-floor construction - from floating options, laid directly onto a sub-base of concrete or chipboard, or in between timber battens,





ideal for upper floors, to fully bespoke systems for solid wall or listed properties undergoing renovation.

Due to the flexibility of underfloor heating, most types of floor coverings can be used with the system – including carpet. However, it's essential to consider the floor finish during the initial system design, along with other critical factors.



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UNDERFLOOR HEATING
SYSTEM IS SPECIFIED

This approach ensures that the chosen floor covering does not negatively impact the performance of the underfloor heating system and allows both elements to work together efficiently. This is particularly important when different rooms have varying finishes, such as carpet in the living room and solid wood in the kitchen.

By understanding the thermal resistance of the floor coverings, the underfloor heating system can be designed to account for the correct pipe spacing and the required water flow rate to compensate for heat loss. Collaborating with a system supplier is critical to developing an underfloor heating and flooring solution that balances performance and aesthetic appeal for future homeowners.

From a space-saving and interior design standpoint, underfloor heating is also completely concealed within the floor structure, allowing every inch of floor and wall space to be fully utilised.

This gives housebuilders and homeowners total flexibility with the floor plan, making it easier to arrange furniture and fixtures without restrictions.

BEAMA Underfloor Heating Group is the UK's national trade association for underfloor heating. Its members can be relied upon to provide quality systems and components backed up with great design, customer service and trustworthy advice. Visit beama.org.uk to learn more and to contact a BEAMA Underfloor Heating Group member.

Ashley Cooper is a member of the BEAMA Underfloor Heating Group





#### Gaia celebrate 35 years designing, supplying and installing underfloor heating

aia are celebrating 35 years delivering underfloor heating across the UK and Ireland.

Established in 1989, Gaia have become a recognisable name in the underfloor heating community.

"We're proud to have become an established provider of underfloor heating. Trusted by architects, contractors, M&E consultants, builders and developers nationwide, clients come to us for our expertise, dependability and friendly approach -which have gained us many valuable relationships over the last 35 years" says Steven Rooney, director of Gaia.

The company has experienced consistent growth over the years, expanding its workforce to over 50 employees.

Today, Gaia offers the complete underfloor heating package, from system design to supply and installation - as well as an exceptional after-sales service.

"We're passionate about offering a personal service, from recommending the right system to answering any queries throughout the project and beyond. Whatever the project, our capable team are always on hand to find the most suitable solution" adds Steven.

"As we've reached this significant milestone, we're also celebrating our loyal employees many of whom have been with us for over 20 years. Our success wouldn't have been possible



without them" adds Chris Alecock, fellow director of Gaia.

Gaia have completed a wide range of commercial and residential projects - from The Shard – One Hyde Park and Center Parcs to Canterbury Cathedral and the biggest electric project in 15 years at Eight Gardens, Watford.

Having worked with housing developers such as Taylor Wimpey and Telford Homes, Gaia have become the UK's underfloor heating partner of choice.

"Whatever the scale of the project residential or commercial - we have built a trusted reputation for designing, supplying and installing underfloor heating. With 35 years' experience - and demand for energy-efficient heating on the rise - we're ideally placed to provide the solution architects and developers are looking for" concludes Steven.

01359 242 400 www.gaia.co.uk

















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## MASTERING KITCHENS

Damian Sheridan of Wren Contracts discusses the key starting points when it comes to choosing a kitchen supplier in housing projects.



Then it comes to choosing a kitchen supplier for property development and social housing projects, developers and housebuilders are faced with decisions that can affect a project's success and the satisfaction of future homeowners and residents. A kitchen is the heart of the home and plays an important part in a property's appeal. With this in mind, developers should carefully consider several important factors when choosing a kitchen supplier, striking the right balance between quality, cost and reliability.

#### **PRODUCT RANGE & FLEXIBILITY**

An extensive product range is a key consideration for developers. A kitchen supplier that provides a wide range of options, catering to different budgets and design preferences, allows developers to meet the diverse needs of their market. Whether the project involves luxury high-rise apartments or affordable housing, the ability to choose from both ready-to-install and bespoke, made-to-order kitchens gives developers the

#### A KITCHEN IS THE HEART OF THE HOME AND PLAYS AN IMPORTANT PART IN A PROPERTY'S APPEAL

flexibility to tailor solutions to specific project requirements.

Accessible kitchen designs are also an important factor. With a growing trend towards multi-generational living and the need for homes that accommodate individuals with limited mobility, developers should consider a supplier that can provide kitchens designed to meet these needs.

#### **QUALITY & WORKMANSHIP**

Quality is a top priority, and high standards of materials and craftsmanship should be non-negotiable when choosing a kitchen supplier. Suppliers that manufacture their products in-house can provide greater control over quality throughout the production process, which in turn reduces the risk of defects.

Long warranty periods are also a good indicator of quality. Kitchen suppliers that offer warranties extending beyond industry standards demonstrate confidence in the durability and reliability of their products.

Equally important is the installation process. A supplier with accredited installation teams, managed by dedicated site managers, gives greater reassurance that the finished product is produced to the highest standard.

#### **LEAD TIMES & RELIABILITY**

In the fast-moving world of property development, timing is everything. Delays in production, delivery or installation can lead to costly setbacks. Developers must therefore prioritise suppliers that offer reliable lead times and a strong track record of meeting deadlines. Suppliers who can provide swift call-off periods and rapid replacement of any necessary parts can be invaluable in keeping a project on schedule.



The supplier's approach to logistics and delivery should also be flexible to the specific needs of each development site. A supplier that provides flexible delivery schedules, carried out by dedicated and knowledgeable teams that can work around the project's timeline, can significantly reduce the risk of delays and project disruption.

#### SUSTAINABILITY & ENVIRONMENTAL IMPACT

As sustainability becomes a key focus in modern property development, the environmental practices of a kitchen supplier should be carefully considered. Developers are increasingly expected to deliver projects that are not only high quality but also environmentally

responsible. Therefore, a supplier's commitment to sustainability – such as the use of sustainable materials, waste reduction initiatives and their efforts to minimise carbon emissions – should be an important factor in the decision-making process.

#### REPUTATION AND TRACK RECORD

Finally, a supplier's reputation within the industry is a strong indicator of their reliability and performance. Suppliers who have a proven track record on similar projects, positive testimonials from developers, as well as homeowners, provide valuable insights into the supplier's consistency, service quality and overall reliability.

There are large number of important factors which specifiers need to consider when choosing the right kitchen supplier. Housebuilders and developers should look at a mixture of product range, quality, reliability, sustainability and reputation during the decision-making process.

At the end of the day, choosing the right supplier adds significant value to property developments, providing long-term success in a competitive market.

Damian Sheridan is director of sales at Wren Contracts



#### British General innovating house building with Vistry

British General (BG Electrical) products have been featured in the Vistry Innovation Centre (VIC), a new house design that paves the way for the Future Homes Standard and beyond to net zero carbon. Vistry Group, which owns the house building brands Linden Homes, Bovis Homes, Countryside Homes and Countryside Partnerships, has created the state-of-the-art factory to showcase brands using cutting edge technologies to promote the construction of more sustainable new build homes. The BG Electrical products featured include the BG consumer units, Wi-Fi double switch sockets, integrated door chime, outdoor power socket, and smart home control socket. Part of the Luceco Group, British General is leading the way in smart electrics, creating environmentally responsible electrical solutions as homes become more energy efficient by utilising smart innovations. The inclusion of these BG Electrical products in Vistry's Innovation Centre can aid homeowners to optimise their operational energy usage, delivering smarter solutions to reduce energy wastage and emissions. Joe Wright, national house builder account mseanager for Luceco, said: "This new collaboration with Vistry and British General is an exciting venture into the future of house building. The entirety of the Luceco Group and its brands are dedicated to sustainability and electrifying the UK."

01952 238 100 www.bgelectrical.uk



#### Dulux unveils True Joy™ as its Colour Of The Year 2025

For 2025, **Dulux** is asking architects, specifiers and designers to embrace yellow and infuse a sense of optimism, pride and imagination into their projects. As a guiding light to introduce these bold, positive shades to clients, the paint manufacturer has announced True Joy™ as its Colour of the Year for 2025, which is complemented by three versatile ColourFutures™ palettes. Over that last two decades, the Dulux Colour of the Year has been chosen through extensive trend research by Dulux colour experts and international design professionals. The 2025 selection, True Joy™, is a bright and positive yellow that reflects people's desire to break free, reset, and create something new and exciting. As well as embracing True Joy™, Dulux is also encouraging designers to share the joy of yellow and help clients to leap out of their comfort zone – and feel confident in doing so. Yellow shades like True Joy™ can be used as a bold statement colour or an accent hue. However, to help designers advise their clients on the best colour pairings, Dulux has created three supporting ColourFutures™ palettes. To support specifiers and provide additional guidance on the use of True Joy™, Dulux has created the Dulux Trade Colour of the Year 2025 Specifier Guide which includes mood boards that can be used to help create the perfect space across any sector.

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# SMART, SAFE & SUSTAINABLE SHOWERS

With multi-generational living on the rise, Karen Wise of Triton Showers outlines the key considerations when specifying inclusive electric showers



ver the past few years, a monumental spike in the cost of living has contributed to an unprecedented level of demand for affordable housing. While the Government's plan to deliver 1.5 million new homes before the close of the decade is a positive development, in the meantime, many are being forced into multi-generational living, while waiting for the plan to 'get Britain building' to come to fruition.

Research conducted by Aviva at the turn of the decade revealed that one in three UK homes were multi-generational and, given the countless challenges endured since then, the number of multi-generational households may now be much higher.

### **BATHROOM SPECIFICATION**

With more households now accommodating residents of all ages under one roof, catering for different needs and abilities may require adaptations throughout the home, particularly the bathroom. Deemed as the most dangerous area in the home by the US Centers for Disease and Control Prevention (CDC), slips and falls when exiting bathtubs and showers often rank among the most common causes of accidents.

As a result, it's important to specify

showers with all users in mind. Selecting an inclusive solution can make showering the safe and accessible task it should be. An adapted set-up can also boost independence and wellbeing, providing occupants with the confidence to start or end their day in comfort.

Whether it's the task of retrofitting the current stock of housing or preparing housing of the future for occupancy, what should housebuilders and developers consider when specifying electric showers?

### UNDERSTANDING THE REGULATIONS

First and foremost, understanding the regulations associated with specifying



bathrooms is essential. The Decent Homes Standard, which sets the minimum standards for social housing, stipulates that bathroom appliances, pipework and sanitaryware must not be more than 30 years old. Therefore, when the time for replacement comes around, understanding how to create an updated space that preserves end-user safety is crucial.

The Decent Homes guidance specifies the need for an appropriately located bathroom and WC, with adequate space and layout. For those with mobility issues, wet rooms can produce a simple yet functional design. By forgoing a shower enclosure or raised shower tray, a wet room design can be practical in terms of planning a space, too.

Ensuring there is sufficient drainage, however, is just as important to maximise usability and safety across generations. The combined presence of sanitaryware and bathing facilities poses the risk of the bathroom floor becoming wet. To combat this issue, installing a grab bar will help users maintain balance and navigate areas with slip hazards. While this feature is sometimes overlooked due to the misconception of creating a clinical-looking area, there are options that maintain aesthetics while providing added functionality. Weight-bearing riser rails, for example, provide discreet support without sacrificing style.

#### **SPECIFYING SUSTAINABLY**

It should go without saying that driving

sustainability is a major priority across the industry, and this is where electric showers really come into their own. Thanks to their ability to heat water on demand, electric showers have long been considered the most energy and water-efficient solution.

Triton's research determined that electric showers could save more than 29,000 litres of water per year than a mixer shower, creating the potential to save over 300 kg of CO<sub>2</sub>e – the equivalent of driving 1,050 miles in a diesel hatchback. Electric showers supplied solely by cold mains run at a flow rate of around six litres per minute, compared to mixer showers which run at an average of nine litres per minute when drawing on a hot water system.

When using an electric shower, a user could therefore save a considerable amount of water and reduce energy consumption by up to 68%, which may prove invaluable to cutting bills.

Triton was recently honoured with a King's Award for Enterprise, recognising its outstanding commitment to Sustainable Development, which places sustainability at the heart of its long-term business strategy and Net Zero ambition. This year, Triton is just one of 29 organisations to be recognised nationally for its contribution to driving sustainable action.

#### **FUTURE-PROOFING BATHROOM SPACES**

It's safe to say that the market has invested in developing offerings with a whole host of innovative features to make the lives of residents much easier. An example is a shower we have developed that is equipped with thermostatic temperature controls to prevent sudden drops in water temperature, and regulating within a range of +/-10 °C.

This thermostatic electric shower, which is suitable for all new and retrofit installations, aids visually impaired users by providing audible confirmation when the shower starts and ends. The appliance's accreditation from the Royal National Institute of Blind People (RNIB) is a testament to the benefits of this feature.

With multi-generational living rapidly on the rise, it's crucial that houses are suitably specified to improve lives at home. As one of the busiest rooms in the house, the bathroom is key to this movement. Choosing a manufacturer that offers a range of efficient showering solutions designed to meet all needs can help specifiers go the extra mile.

Karen Wise is head of product management at Triton Showers

### Meadfleet support estate management regulation



The Labour government have committed to move swiftly to grant homeowners enhanced rights and protections over their properties by enacting the provisions of the Leasehold and Freehold Reform Act 2024 which the Conservatives fast tracked in to law prior to the general

election. David King, managing director of Meadfleet, comments: "We welcome this forthcoming legislation which provides freeholders with enhanced rights in respect of estate management, something previously only reserved for leaseholders. All homeowners deserve greater protections and transparency over estate management. Meadfleet have led the way by voluntarily offering free independent redress to our customers since 2019 and provide a transparent charging structure with prompt and consistent communications."

01438 890 780 meadfleet.co.uk

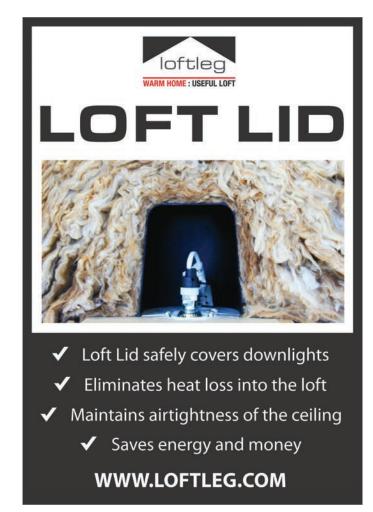
### **Building with West Fraser on Mudeford**

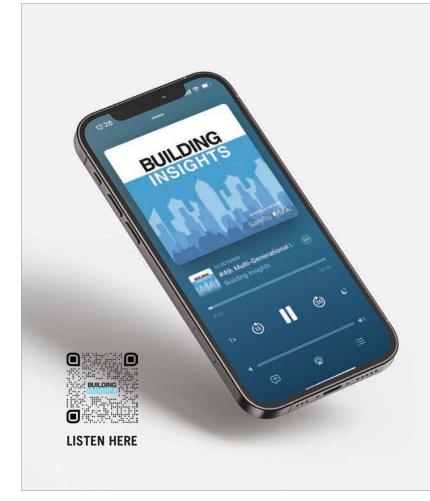


One of West Fraser's customers, in a redevelopment project, is employing the company's high performance panel products where a building is being transformed into a three-storey, fivebedroom dwelling with a rooftop sun deck. The team carrying out the work for

a private owner includes Steve Mayes who has gained a lot of experience of the West Fraser product range working for local developers. Steve explained: "On a lot of our projects, the architect's drawings will specify the use of a certain thickness of chipboard or another panel product, but we tend to buy West Fraser's SterlingOSB Zero for its quality and reliability."

Uk.westfraser.com





### BUILDING **INSIGHTS**

IN ASSOCIATION WITH

Saniflo **SFA** 

**EPISODE 49: MULTI-GENERATIONAL LIVING: CREATING ADDITIONAL LIVING SPACE** 

In association with Saniflo. James Parker speaks to David Cook, managing director of Saniflo about the rising demand for bathrooms which work for elderly users and the rest of the family, to support multigenerational living. He also has some strong views about the need for housebuilders to be driven to focus on whole-life performance.

### GreenBlue Urban win



GreenBlue Urban is thrilled to announce its success at the recent Pro Landscaper Sustainability & Biodiversity Awards, where the company was honoured with the award for Best Product for Hard Landscaping for its innovative RootSpace system. This recognition not only highlights the excellence

of GreenBlue's UK-manufactured products but also underscores the company's commitment to creating sustainable and biodiverse urban environments. The RootSpace system is designed to enhance root development and promote healthy tree growth in urban areas, integrating and enhancing nature into the built environment.

01580 830 800 www.greenblue.com

### HiB announces key promotions in sales team



HiB is pleased to announce the promotion of two key team members. Steve Wortley has been promoted to the position of National Sales Manager. In his new role, Steve will take on the responsibility of managing the Area Sales Managers and leading

the Installations and Sales Administration teams. With the company's presence expanding across the UK due to a growing customer base, HiB has also created a new role to support their key retail partners. Richard Chmiel has been promoted to the newly created role of National Key Account Manager. In his new position, Richard will focus entirely on managing HiB's National Accounts and Buying Groups, ensuring that key retail business partners continue to receive the highest level of service and support.

020 8441 0352 www.hib.co.uk



### Luceco celebrates 10 year partnership with Jones Homes

For the past 10 years, Luceco has assisted Jones Homes in building high-quality homes by providing the housebuilder with their Luceco Lighting and British General products. With a reputation for excellent customer service and high quality construction, Jones Homes' has earned many prestigious accolades for the properties they build. Luceco has now been working with Jones Homes for 10 years to help enhance the specification of homes, by being the housebuilder's provider of lighting and electrical accessories though the Luceco Lighting and British General (BG Electrical) brands. As well as the recent addition of EV chargers being supplied by Luceco's Sync Energy brand, which will be installed in every home. Joe Wright, national house builder account manager at Luceco, said: "Over the past 10 years we have built up a great relationship with Jones Homes. We understand the high quality standard they have attained for their homes and provide them with high quality products to help them achieve this. "Luceco Lighting's LED products help Jones Homes and their customers save money on electricity bills, while still being sleek and stylish. Whereas British General accessories help give homes a high-quality, easily customisable finish with trusted products."

uk\_sales@luceco.com luceco.com/uk

## Industry Viewfinder White Papers – the key topics that matter to you

ousebuilder & Developer's white paper series canvasses the industry to discover opinion and insight on topics in development and house construction, from offsite technologies and flood management, to the imminent challenges of the Future Homes Standard and the Building Safety Act.

#### **REVISITING CHANGES TO PART F & PART L**

Discovering housebuilders awareness of (and approaches to) the updated Part L, Part F & Part O have improved a year on from their inception and the answers they need.

### APPROACHES TO WATER EFFICIENCY IN NEW HOMES

Investigating how housebuilders are approaching current water efficiency standards, their views on those standards, and how product solutions are helping.

### SOLVING THE HOUSING CRISIS WITH OFFSITE CONSTRUCTION

Revisiting the key area of offsite construction for tackling the industry challenges, this Industry Viewfinder reveals how perceptions and approaches have changed since 2021.

### **BUILDING SAFETY INTO LAW**

The Building Safety Act responded to the



Grenfell tragedy with a range of industry reforms; during its introduction we asked housebuilders how they were preparing for the changes to come.

### **FUTURE-PROOFING AGAINST FLOODS**

With increased severe flooding on the cards, and Sustainable Urban Drainage Systems soon to be mandatory, we canvas housebuilders on how they are specifying for flood management.

The full library of white papers is available to request on the Housebuilder & Developer website today.

www.hbdonline.co.uk/white-papers

## COMPETENCE, COORDINATION & COMPLIANCE

As the regulatory landscape continues to evolve for residential building duty holders on fire door safety, Karen Trigg of Allegion UK reviews the importance of competence and coordination in a more rigorous environment

Then fire safety fails, lives are put at risk. In all buildings, reasonable steps must be made to reduce the likelihood and impact of fire, yet, many people remain unsure towards fire safety practice and the roles and responsibilities associated with fire door safety.

In view of this, in October 2023, new fire safety legislation was introduced to non-domestic properties in England and Wales. Section 156 of the Building Safety Act 2022 (BSA) has made a number of amendments to the Regulatory Reform (Fire Safety) Order 2005 (FSO), with the latest improvements forming a new framework designed to improve fire safety in all regulated buildings, including workplaces, educational, healthcare and leisure premises and the shared areas of Houses in Multiple Occupation (HMOs).

In short, Phase 3 of the fire safety reform programme further strengthens fire safety in all FSO regulated premises by:

- Improving cooperation and coordination between Responsible Persons (RPs)
- Increasing requirements in relation to the recording and sharing of fire safety information thus creating a continual record throughout a building's lifespan
- Making it easier for enforcement authorities to take action against non-compliance
- Ensuring residents have access to comprehensive information about fire safety in their building.

The latest updates are comprehensive and aim to eliminate any ambiguity associated with fire safety compliance. And so, with greater emphasis being placed on accountability and all round



coordination, how should responsible persons approach fire doors and their hardware?

### **COMPETENCE & COORDINATION**

Fire doors are a key element of a building's passive fire protection system and an area that RPs must possess a robust knowledge of, if they are to comply with the latest regulations. Equally, to keep buildings and occupants safe, responsible persons are required to perform various duties under the Regulatory Reform (Fire Safety) Order 2005, which include:

- Undertaking regular fire risk assessments
- Implementing appropriate fire safety measures
- Creating and maintaining a fire safety plan
- Providing relevant fire safety

- information
- Regular testing and maintenance of fire safety equipment and systems
- Coordination with relevant authorities and other responsible persons
- Provision of information to a new responsible person when departing the role.

Functional fire doors and clear exit routes are critical in ensuring appropriate precautions and preventive measures are in place. Adding to this, responsible persons are required to review the condition of their fire doors when conducting, recording and keeping written records of fire risk assessments, which consist of:

- Identifying fire hazards
- Identifying people at risk
- Evaluating, removing or reducing the risks
- Recording findings, preparing an emergency plan and providing training
- Reviewing and updating the fire risk assessment regularly.

Fire doors are often the first line of defence against fire. When closed, they compartmentalise and delay the spread of fire and smoke whilst protecting property and providing occupants with an opportunity to escape. In contrast, duty holders must recognise that a building's fire doors will not perform as intended unless essential hardware has been correctly specified, installed and maintained.

### **REDUCING THE GAPS**

Incorrect hardware specification is a common problem associated with fire door safety. When selecting fire door

### IF FIRE DOOR HARDWARE IS CORRECTLY SPECIFIED, INSTALLED AND TESTED, YOU'RE MITIGATING AS MUCH OF THE RISK AS YOU POSSIBLY CAN

hardware, it's important that any chosen door application meets the required fire ratings, performance ratings and latest legislative requirements. For example, all doors located on an escape route must have suitable exit hardware installed, which is determined by a number of factors including building size and whether it is public facing or not. In addition, it is also a legal requirement for all exit devices to comply with the latest revisions of EN 1125 or EN 179 and to possess UKCA and CE markings.

Similarly, one of the most significant gaps in fire safety is the installation of fire door hardware. Fire door integrity can quickly become compromised by hardware alignment issues and improper installation methods. As a result, the door may not be able to latch or close fully from its standing position, leaving gaps large enough for fire and smoke to pass through. Whilst there is currently no legal framework to assess the competency of installers, responsible persons are encouraged to appreciate that installation is a specialised task. During installation, installers must also look to follow manufacturer guidelines and fittings

instructions, which should be supplied with all third-party certified fire doors and hardware.

When it comes to maintenance, it's vital to recognise that even durable door hardware can become worn and tired in high-footfall environments and may need repairing or replacing over time. A damaged or ineffective self-closing device for example, can limit the closing action of a fire door and prevent it from fully closing into the frame - rendering it useless in the event of a fire. As part of regular fire risk assessment duties, responsible persons should perform quarterly checks on fire doors - as well as annual checks on flat entrance doors and self-closing devices in HMOs. A competent assessor must ensure that the entire fire door is in working order, reviewing the certification, door integrity, glazing, gaps, seals, hinges and closing elements. If a fire door isn't operating as intended, it's imperative to seek out professional advice and ensure maintenance is carried out both quickly and professionally.

In any circumstance, under the latest regulations, responsible persons must

cooperate, coordinate and share necessary information with others in order to comply. With that in mind, dependable fire door hardware devices will be supplied with full product information from the manufacturer including the Declaration of Performance (DoP), third-party certification and product data sheets. Transparent and accurate construction product information is more readily available than ever before and highlights whether a product complies with the necessary standards – helping duty holders to ensure the most suitable fire door hardware solution is being applied in the correct way.

More than that, with it being made easier for enforcement authorities to act against non-compliance, it is necessary to become educated on key fire door safety themes, such as specification, installation and maintenance. While fire safety practice may be complex by nature, it pays to understand the fundamentals.

Karen Trigg is business development manager (South East) at Allegion UK

### IN SHARED OCCUPANCY AND HIGHER RISK BUILDINGS, IT'S VITAL THAT PEOPLE KNOW WHO THE RESPONSIBLE PERSON IS

### New shootbolt options from VBH

ardware specialist VBH has introduced two new greenteQ shootbolt systems for outward opening casement windows.

greenteQ iQ Intellect is a non-crop shootbolt that speeds up the fitting process and generates no wasted hardware through offcuts.

It covers sash rebate sizes up to a door-like 1,800 mm.

VBH advise that adjustable mushroom bolt cams in the middle of the window and adjacent to the projecting shootbolts ensure exceptional weather proofing and effective burglar resistance to the PAS24 security standard.

Intellect utilises modern, strong, low-friction materials, and a clever keep design guides the mushroom bolts into position. Coupled with projecting shootbolts manufactured from steel-reinforced ultra-low friction polymer, this makes for a combination of extremely smooth operation and high strength.

The second newcomer, iQ Superior, combines two bi-directional hooks on the gearbox with adjustable mushroom-headed cams and shootbolts on the extensions to provide exceptional security performance and weather proofing on windows with sash rebate sizes up to 1.500 mm.

Like iQ Intellect and the original greenteQ Invicta shootbolt, iQ Superior has been independently tested to the PAS24 security standard. Both new shootbolts are approved for use on Q-secure PREMIUM Plus installations. greenteQ shootbolts are available in industry-standard 20 and 22 mm backsets,



so are compatible with most popular PVCu profile systems.

VBH also advise that, as with all greenteQ iQ products, both Superior and Intellect work with Kubu to link windows to a smart home network. This gives the user a host of benefits, including a live check on the open/closed status of windows, security alerts, weather alerts and more. The windows can even be linked to other elements in the network, so the heating can be set to turn off in a room if a window is opened, for example.

Dan Powell, head of brand at VBH says: "Our

original iQ security espagnolette proved so popular that it was an easy decision to introduce more casement lock options that are compatible with Kubu.

"Including our original Invicta product, we now have three greenteQ shootbolts for fabricators to choose from. This will increase to four later this year when we unveil another Invicta variant. I'm looking forward to telling you more nearer the time!"

01634 263300 info@vbhgb.com

# FIRE DOORS

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by Astraseal



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Our Fire Doors are third party certified for fire, smoke and security rating.



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Third party certified for Fire Door installation and maintenance.



Tested to full PAS 24 enhanced security standard.



Several glazed and solid designs.



Available with glazed top lights and glazed side panels in the same screen.



Choice of door slab cores available

Whatever your requirements, we have a solution to fit, including a supply only package.

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### Let the Spruce Loose

ata shows that timber and timber-based panels have become the fastest-growing categories in contemporary construction, particularly in the offsite and modular niche. Whether it's walls, floors or ceilings, recent, proprietary research we conducted showed these products are predicted to make up a massive proportion of the materials used in a market forecast to grow to £1.2bn by 2028.

European-sourced plywood is particularly popular, and demand is only set to increase as the use of MMC for commercial, residential, and public buildings becomes more prolific.

However, as the last two years have shown, not all plywood is manufactured equal, with counterfeit, poor-quality or embargoed panel products flooding the market in the wake of the Russia-Ukraine conflict. Indeed, accusations of sub-standard units have also been a recent sore point within the modular sector with a number of high-profile developments called out over their structural integrity. Both situations have seriously dented investor, trade, and customer confidence.

Fortunately, these twin issues can be addressed by working with responsible, ethical supply chain partners dedicated to the combined values of safety, security, and sustainability. UPM WISA is one such brand, and its WISA-Spruce Special, a catalyst for a global renaissance in plywood is set to support another for offsite construction.

Sourced and made from responsibly managed, sustainable forests in Finland, WISA-Spruce Special is on a mission to set a new standard within the timber panels market. Its reputation as a high-spec, yet competitively priced product, is an instant mark of quality in any build in which it's used.

It's looking to develop this further for the Offsite sector, working in collaboration with James Latham to showcase its unique attributes and why we're one of their key distributors in the UK and Ireland.

So what makes WISA-Spruce Special so wellsuited to offsite construction? Let's take a look...

- Structurally robust, suitable for loadbearing applications
- Dimensionally consistent, providing all-important repeatability in an offsite



- manufacturing process
- Possesses up-to-date EPDs and certification from globally recognised sustainable and responsible forest management certification schemes, supporting developers looking to achieve much-coveted certifications like LEED and BREEAM for projects.
- Ultra-sustainable through use of WISA® BioBond adhesive; replacing 50% of standard glue's fossil-based phenol with lignin, timber's inherent bonding agent reduces the overall carbon footprint by approximately 10%, without compromising technical performance or visual appeal.

Offsite developers also need to know they can rely on there being healthy stock levels, especially for large-scale developments. Well, we've got you covered, with WISA-Spruce Special available nationwide throughout our 12 strategically-located depot, plus a direct-from-port option for bulk loads, and dedicated technical experts to advise on almost any requirement, regardless of scale and scope.

And, with the ability to call off large quantities at short notice, you'll achieve the all-important peace of mind you can keep your lines running to deliver on short-lead demand increases.

That's not all, it's also available from James Latham in a Euroclass B FR variant, Wisa Spruce FR.

As you can see, when you order WISA-Spruce Special through James Latham, you get the full package, from great product through to great customer service, wherever, whenever.

At a time when the modular sector is facing scrutiny regarding quality control issues, knowing you're working with a panel that ticks all the compliance boxes provides essential peace of mind. Not only that, it will give clients, investors, shareholders, and occupants assurance you are dedicated to delivering safe, secure, and sustainable buildings.

Ultimately, WISA-Spruce Special is a product that adds value at every level, setting a new standard for sustainable plywood and supporting a new golden age of MMC.

marketing@lathams.co.uk www.lathamtimber.co.uk/products/panels/ plywood/softwood-plywood/wisa-spruce-special





### Time for Timber Hub at Offsite Expo



The Structural Timber Association has launched a new Time for Timber Hub at Offsite Expo, to provide a vital source of information and resources to those interested in building in structural timber. With all eyes on the new Labour Government to deliver its ambitious commitment to building 1.5 million homes in the next five years, offsite manufacture and low carbon

structural timber has an essential role to play. To support in this effort, the new Time for Timber hub has been developed to provide the HOW – guidance on how to plan, design, cost and build in structural timber.

01259 272 140 timefortimber.org



### Gilberts raises the bar with fire rated ventilation solutions

Gilberts has risen to the challenge of ensuring the balance of ventilation and safety with the development of its fire rated connection box (plenum). The Fire Rated Connection Box (available in both top and side entry versions) achieves 60 minutes' fire and thermal rating to EN1366-3-2021. It means that fire integrity of ventilation between internal compartments has never been easier to achieve. The new plenum maintains performance integrity when tested at temperatures up to 1,000°C. It ensures that the fire barrier through a masonry or plasterboard wall or ceiling or concrete floor will be retained, maintaining compartmentation. Gilberts believes it is the only plenum of its kind in the UK tested to deliver such high performance. It gives assurance that the two relevant layers of fire safety- compartmentation and structural safety- are addressed. "There is no harmonised European standard for fire testing of plenum boxes. However, it is the crucial element in retaining the fire compartment. The lack of a definitive Standard makes it difficult for fire officers to sign off a detail. By providing them with a tested one-hour fire and thermal rated plenum box they have the peace of mind that they have a sensible choice," explains Gilberts' technical director Roy Jones. "We believe it will be the 'go to' solution for consultants and contractors to achieve building compliance in non-domestic or multi-occupancy settings."

01253 766911 info@gilbertsblackpool.com

### Building in water sustainability

he easiest way to have an energy efficient home, is to build it that way. Recognising the need to reduce our environmental impact, improvements in energy efficiency are now built in as standard.

However, especially in the UK, water usage is often neglected in considerations of environmental impact. The anticipated UK water deficit is projected to be 4017 megalitres per day by 2050. To offset this projected deficit, major water companies have been developing plans to upgrade the UKs water supply and reduce current usage from 150 litres per person per day to 110.

Water efficient homes are the key to achieving this reduction in use. Combining surface mounter smart water meters and built in water efficiency, the new building wave could contribute to not only to the housing crisis but offsetting the future water deficit.

#### SMART SYSTEMS - LOCATION IS THE KEY

Smart meters are seen as a significant part of the solution to reducing domestic water usage. Thames Water have recorded post installation savings of 12-17%. Following multiple trials, all water companies are now working on plans for Advanced metering infrastructure, where all new connections or meters use the latest generation of smart meters.

The issues raised in the early trials has led much of the UK water industry to recognise that the most effective methods of installing the advanced metering infrastructure is to locate



the meter above ground.

The use of the Groundbreaker water management system co-locates the water meter on the exterior wall of the dwelling, alongside gas and electric meters. It has the advantage of providing a better environment for smart technology, extended signal transmission and easy meter exchange.

In addition, the unique location of the Groundbreaker water management system allows for an unjointed water supply. The use of an uninterrupted supply has been recognised

as best practice by Water UK and the Home Builders Federation. It future proofs the network by maintaining the integrity of the supply and minimising the risk of future leaks.

### WATER EFFICIENT HOMES

United Utilities have recognised that water efficient homes are the key reduce consumption further. In all new properties, developers will be encouraged to design in water conservation measures, including the installation of a flow regulator. These modulate the flow entering customer premises, so limiting the amount used by the customer and creating a 'natural' reduction in consumption.

These products are fitted to the main water supply, and not each individual outlet. This removes any risk of consumer interference and ensure that minimum standards of water supply are maintained as specified within the Water Industry Act and Water Fittings Regulations.

Groundbreaker supply products suitable for metered, NRv2 LoFlo and unmetered properties, LoFlo InLine.

In either unit, several flow modulation ranges are available which enable the perfect balance between usage reduction and service provision. As an added benefit, the Groundbreaker's LoFlo Check Valve systems have the unique property of providing whole site protection against contamination by back flow (up to fluid category 2) as standard.

01379 741993 www.groundbreaker.co.uk



### Crystal keeps faith with Wykamol-Triton range inside & out

Crystal Damp Proofing & Basements is working close to its base in Croydon, Surrey while also employing a selection of products from the Wykamol-Triton range with which it is fully familiar. And while the company has undertaken many larger scale projects across the South-East since it was set up three years ago, the 40-year-old residential property its team is currently making progress on, is unusual in featuring existing basement areas both beneath the house and to the rear. The curved outside lightwell and the main sub-structure had both suffered long-term problems with damp and are receiving similar treatments in the form of the C20 and CM8 studded drainage membranes, installed across the concrete floor slabs and blockwork walls respectively: offering a permanent remedy to penetrating damp. Any water which does seep through the masonry is directed into perimeter drains formed using lengths of Aquachannel, which connect to a sump and one of the manufacturer's Aqua Pump kits with battery back-up. The BBA approved Wykamol-Triton CM8 and CM20 Waterproofing Membranes - manufactured from high density polyethylene - are routinely specified as an extra layer of protection for the walls and floors of cellars and basements, with their studded form allowing any water to be directed into perimeter channels and then a sump, which is automatically emptied by an electric pump.

info@wykamol.com www.wykamol.com



### Civils & Lintels adds to housing portfolio with Dandara win

Civils & Lintels has further strengthened its portfolio of housebuilding clients, having been named a 'supplier of choice' with Dandara to supply IG lintels to all its new home developments across the UK. With a focus on engaging with supply chain partners that can support its nationwide footprint of developments, Dandara conducted a procurement review into its lintels provision which resulted in Civils & Lintels' appointment. Daniel Knight, group procurement manager at Dandara, commented: "With a vision to deliver 1,400 new homes in the next year, it is vital that our supply chain partners share our commitment to the highest standards of quality and exceptional service. "The team at Civils & Lintels certainly met that brief and when coupled with their impressive product knowledge, I am excited to start working with them as we continue our journey as one of the country's most respected private housebuilders." Commenting on behalf of Civils & Lintels, Tim Slesser, added: "Having the opportunity to work with Dandara is a true honour and further strengthens our reach across the UK's best known and respected housebuilders." Already this summer, Civils & Lintels has announced significant contracts with both Vistry Group and Gleeson Homes and anticipates securing further contracts in the housebuilding sector this year.

www.civilsandlintels.co.uk www.dandara.com

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- · Fabric and decorative interlays
- · Structural interlays

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- · Acoustic reduction
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- Decoration
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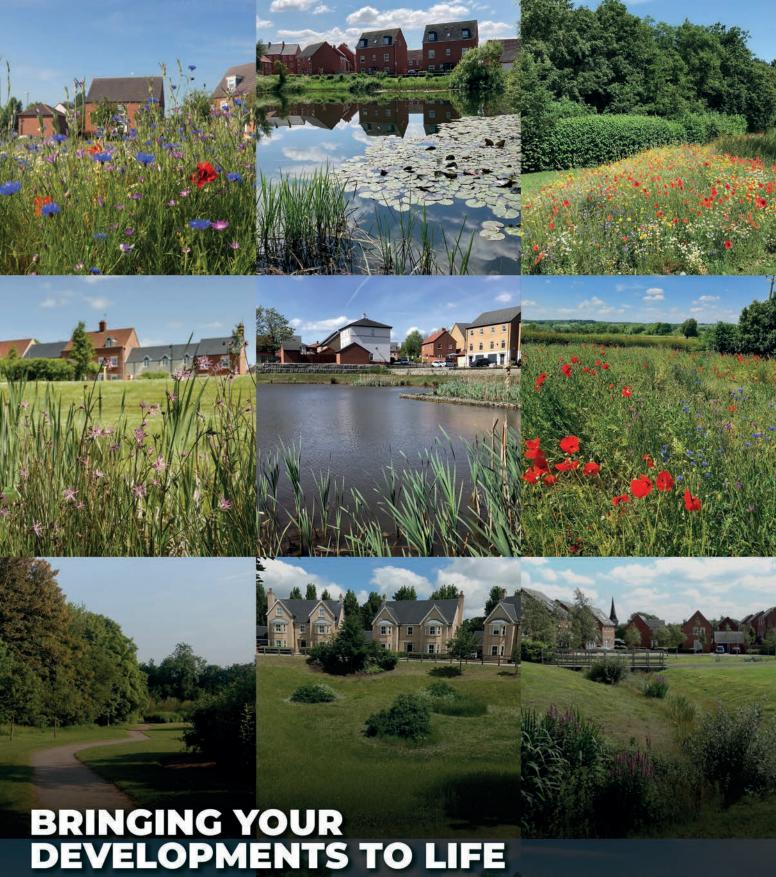
Further information is available from our sales and technical offices or visit www.firmanglass.com Firman Glass, 19 Bates Road, Harold Wood, Romford, Essex RM3 0JH Tel: 01708 374534 Email: sales@firmanglass.com











Protect the planet and leave a legacy of sustainable developments in partnership with Meadfleet Open Space Management.

With the introduction of Biodiversity Net Gain, our expertise in habitat management, ecological improvements, and adaptive management style ensure that together we create a brighter, more biodiverse future.



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