

Case study: Over 80 homes are being constructed on a brownfield site in Folkestone



Case study: A new site in Hastings introduces mixed-use offerings behind a retained facade



Climate Challenge: James Parker reports on a house prototype that can rise and fall when a flood occurs

HOUSEBUILDER & DEVELOPER AUGUST/SEPTEMBER 2022

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HASTINGS ROCKS A new site in Hastings introduces mixed-use offerings behind a retained facade.



Jack Wooler

ON THE COVER



SEASIDE SPECIAL MEASURES Reporting from a Brighton conference which reputige the bring of sease constrained towns and other on delivering tog floating trapits

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FROM THE EDITOR

In 2019, the Conservatives won a majority with their self-reportedly "greenest" manifesto ever, which also included targets to help address the country's stifling housing crisis with a commitment to build 300,000 new homes a year.

In 2022 however, these promises are wavering.

At the time of writing, the contentious leadership challenge to replace Boris Johnson as PM is nearing its close, and two runners remain – Rishi Sunak, and Liz Truss.

Along a lengthy campaign, which has seen multiple televised clashes between hopefuls, many arguably progressive moves in the housebuilding industry of the last few years have been called into question as each challenger sought to score points with their voter base.

Early on in the race, Truss reported in a Sunday newspaper that, if elected, she would abolish "top down, Whitehall-inspired Stalinist targets," in reference to the 300,000 homes goal. More recently, Housing Today reported that Sunak has followed suit, saying his team does not believe in "arbitrary top-down numbers."

Meanwhile, despite the sweltering heat wave we experienced in recent weeks – leaving little to the imagination when it comes to climate change – the Government's 2050 legal net zero commitments are also being questioned.

In what has been described by climate experts and other commentators as a "race to the bottom," both PM hopefuls have put out rhetoric against green spending, with Sunak moving against onshore wind farms and heat pump subsidies, and Truss hoping to suspend certain green levies.

Whatever political position you take on such issues, however it is arguable that when it comes to your businesses, the instability of this current turmoil will be the cause of most stress, and stalling progress.

Flip-flopping and pledge-abandoning are likely to see long held promises of levelling up "peter out," as our regular columnist Brian Berry of the Federation of Master Builders puts it. As he notes in this issue, it is looking likely that September will bring our thirteenth Housing Minister since 2010 – and 22nd since 1997 – more 'revolving door' than stable platform.

In a time of skills and materials shortages, as well as rising prices, inflation and a slowing economy, signs of stable growth are craved by all businesses. As such, Berry argues that these crises and the achievement of a better future are intrinsically linked.

In order to 'level up' – or whatever new slogan is introduced to describe better, fairer environments across the nation, a more climate-friendly, resilient built environment for our growing populace, and the infrastructure, jobs and economies to support them – it is to builders that politicians should look.

What those builders need most is stability.

Jack Wooler

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Greg Clark replaces Michael Gove as Housing Secretary



Before announcing his resignation in early July, Boris Johnson appointed Greg Clark as Secretary of State at the Department for Levelling Up, Housing & Communities, with Johnson declaring his intention to stay on in a 'caretaker' role.

Clark replaces Michael Gove, who was fired for directly advising the Prime Minister to resign. The quick appointment signals the importance of the role, in terms of housing and in particular furthering the 'levelling up' agenda.

Clark is returning to the Ministry he served in between 2015 and 2016 when it was known as the Department for Communities and Local Government, and when he was part of Theresa May's Cabinet. He was Business Secretary between 2016-2019, and most recently chair of the Commons' Science and Technology Committee following the 2019 election.

Unlike many fellow Tory MPs, Clark did not publicly call for Boris Johnson to resign.

Nick Leeming, chairman of property agents Jackson-Stops, welcomed the appointment of a Minister experienced in the housing sector: "What is good about Greg Clark is that his previous stint on the front line as Business Secretary as well having previously served as Secretary of State for Communities and Local Government should put him in good standing when examining the deadlock between housebuilders and government, to encourage rather than impede the swift delivery of new homes to meet rising demand."

Passivhaus Bill proposed for Scottish Parliament



A proposed Private Member's Bill has been put to the Scottish Parliament which would require all new housing to be built to Passivhaus standard.

The Domestic Building Environmental Standards (Scotland) Bill was out for consultation until 27 July. Alex Rowley, MSP for Mid Scotland and Fife, proposed the Bill which calls for all new housing in Scotland be built to the Passivhaus standard or to "a Scottish equivalent." The Bill would apply to every new home built by councils, housing associations or the private sector.

Rowley (pictured above centre) is a Labour MSP who has developed the Bill in response to the recommendations of the Scottish Climate Assembly set up by the Scottish Parliament, in which 97% of the Assembly voted in favour of adopting the standard for new build projects in Scotland.

Alex Rowley MSP commented on the importance of the potential change: "A move to the Passivhaus 'gold standard' for all new-build homes would be radical, ambitious, practical and forward-thinking. It would futureproof homes and prevent them from having to be retrofitted in the near future, upskill the construction sector and make Scotland a leading player with exportable skills and knowledge."

Sarah Lewis, research and policy director at the Passivhaus Trust, commented on the timely nature of the proposal in the current context: "When many are worrying about the cost of living and the accelerated cost of household energy bills, this proposal could not come at a better time for the country."

The Bill is reportedly being opposed by the SNP and, somewhat bizarrely, by the Scottish Green Party.

Tilia wins quadruple gold at RoSPA awards

Tilia Homes has won four gold accolades at this year's RoSPA Health and Safety Awards 2022, with all four of the housebuilder's regions being presented with a Gold Medal.

For the business' Central and Eastern regions, this is the ninth consecutive year that each has achieved Gold within the internationally-renowned scheme run annually by the Royal Society for the Prevention of Accidents. Meanwhile, it's an eighth consecutive win for the housebuilder's Western region and a seventh for its Northern team.

The RoSPA Awards scheme, now in its 66th year, receives almost 2,000 entries annually from organisations across nearly 50 countries and recognises companies and people for their safety performance, policies and procedures. Tilia says it picked up the awards for "working hard to ensure safety plays a pivotal role at every touchpoint with its customers, staff and contractors each and every day."

Nigel Greenway, chief executive officer for Tilia Homes, commented: "We are extremely proud to win four of RoSPA's prestigious Gold Medal Awards.

"Safety is at the heart of everything we do within Tilia Homes, extending from our construction sites and regional offices, right through to our field-based team. This recognition is a testament to the diligence of our team and I would like to thank them for upholding these standards day by day."

Housebuilder donates £1,000 to Milton Keynes hospice

Willen Hospice in Milton Keynes has received a £1,000 donation from Barratt Homes which will help ensure it can continue to assist people with "personal and



compassionate end of life care."

The donation will help the hospice "make sure those with life limiting illnesses have access to specialist support and care from their dedicated team of staff and volunteers," said Barratt.

Willen Hospice also offers bereavement support for loved ones, including specialist support for children and young people.

Amer Alkhalil, managing director at Barratt Homes Northampton, commented: "We are so pleased to be able to support Willen Hospice and the important work it is doing.

"It is important to us as a leading housebuilder to recognise and support local charities and organisations which help the communities near our developments."

Persimmon recognised as top 100 apprenticeship employer



Persimmon Homes is celebrating after being recognised as a Top 100 Apprenticeship Employer in the Government's annual rankings for the first time.

First launched in 2020, the annual employer rankings are developed by the Department of Education, in partnership with High Fliers Research, which independently assesses and ranks the nation's top employers. The programme is intended to "help future apprentices, parents, and careers advisers to identify good apprenticeship opportunities at the country's leading employers," said the housebuilder.

Richard Latham, Persimmon's Group HR director, commented: "We're very pleased to be listed as one of the country's most outstanding apprenticeship employers for 2022 and recognised for our vital work boosting career opportunities for more people.

"This accolade acknowledges both our success at training traditional site skills such as bricklaying and joinery and also our commitment to growing talent throughout the business."

This Land appoints CEO David Lewis



Cambridgeshire-based developer This Land has promoted its acting chief executive David Lewis to CEO.

David will be responsible for ensuring the company continues its strong growth building quality homes and communities, and providing a strong financial return for its shareholder, Cambridgeshire County Council.

David joined This Land in 2019 as Strategic Land Director, and has reportedly demonstrated proven leadership throughout his tenure as acting chief executive, leading to his new appointment.

According to This Land, with a wealth of experience in delivering complex developments and managing large teams, David's role as CEO will see him continue to meet the developer's business plan objectives and help drive the development of affordable homes, quality homes and new sustainable communities across Cambridgeshire and the surrounding counties.

David Lewis said: "I am delighted to be confirmed as CEO. We have an exciting future ahead as we strive to be a leading developer in the region that builds high quality, design-led homes."



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Can cities like Brighton be expected to deliver a 35% housing uplift?



Flo Powell of Midnight Communications reports from a recent housing event held in Brighton, which looked at the feasibility of the city producing the required 35% housing uplift for its residential demand, in the context of the need to protect office space.

eeting at the brand-new Projects space – so new, in fact, this was the first event to be held in the shiny building on Nile Street in Brighton – the latest Construction Voice event, which was hosted by the Brighton Chamber of Commerce, was held on 20 July.

Ed Alison-Wright of Haydon Consulting chaired the panel which included Liz Hobden, head of planning at Brighton & Hove City Council (BHCC), Will Poole-Wilson, MD of architects Will & Partners, Kelvin MacDonald, specialist adviser to current Select Committee inquiries into planning, and Peter Foster, public policy editor at the *Financial Times*. Kelvin is also chair of the Brighton Housing Trust and a senior fellow at the Dept. of Land Economy, University of Cambridge.

The panel's aim was to discuss recent planning reforms, as well as increased housing targets in Brighton and Hove, and how achievable this will be in the near future, especially among the current political upheaval.

To try to get more housing built in the UK, recent planning reform made it easier for developers to turn old buildings (often offices) into residential buildings without going through the usual planning permission requirements. Article 4 directions give local authorities the power to push back on this and protect certain buildings and in Brighton, much of the city centre's office space has been protected under Article 4.

The other important factor to note is that Brighton's housing needs were recently raised due to a "fall back on government set needs" with a 35% uplift, along with many other cities around the country, taking our target from 660 a year to 2,300. Given that the city has only once met the 660 target in the last decade, to say this raised a few eyebrows would be an understatement.

Will kicked off proceedings by setting the scene that since the pandemic, the world has fractured. Working from home is not the norm in other countries like it has become in the UK. He said there is no evidence to say that working from home is a good idea, and until there's evidence, we're living in a "weird paradigm of assumption that the 3:2 working week works – and given that we're not asking the same of schools, we're not teaching the future generation that this is the norm, and the trend could well be reversed."

Liz explained that in December 2020, the UK Government had 44,000 responses to its planning reform White Paper and many conservative districts were concerned about the number of homes they'd need to provide.

The Government therefore came up with a way to deliver its target of 300,000 new homes a year by increasing the housing targets of 20 cities by 35% – which included Brighton & Hove – to reduce the pressure on smaller towns.

In the last four years, BHCC has permitted more than 1200 homes a year, but these take a while to get through planning and, once consented, to actually get built. So while there are developments happening, we'll never achieve this lofty target without a more realistic plan.

In 2018, BHCC introduced Article 4 to protect office space in the city centre, to try to make sure we have a balanced and sustainable city with a strong economy. In 2013, Brighton lost a lot of affordable office space to permitted development – although this wasn't Grade A by any means, this space could've supported more of the city's SMEs.

In August 2021, Class E buildings (often retail and leisure units) were granted permitted development rights to convert straight to residential use without planning permission, although there is a size limit of up to 1500 m². Brighton is a highly constrained city, so there's a lot of pressure for non-residential space to be converted into homes.

When asked 'does the national housing target still exist'? Kelvin said it does but it could all change depending on who gets the PM job. Liz Truss has said she wants to abolish top-down, Whitehall-inspired targets, reduce red tape and introduce tax cuts. Michael Gove (before he left post) said the Government will take steps to ensure the planning directive doesn't impose housing targets on local communities that can't be met.

According to Peter Foster of the *FT*, the manifesto housing targets were 'back of a fag packet' figures and, given that most cities vote Labour and most towns are Conservative, the 35% uplift reflected the political reality that for Tory politicians it is easier to build in urban rather than rural areas. Unfortunately, for some cities the targets are utterly unachievable. In Sheffield, for example, the Government's own projections for population growth would have to increase significantly by 40% just to have enough people to house if the 35% increased housing target was met. The Tories are convinced that densifying cities is the way to go and as long as they are in charge, this situation is unlikely to change.

This is what we may well be faced with, especially in a Rishi Sunak-run country, while Liz Truss, who has a more supplyside approach, might be more likely to look to build on green belt land.

Will described his work with Tower Hamlets which, in the beginning, didn't see Canary Wharf as a good thing until the local authority realised they could get more from business rates than they ever could from council tax from residents.

With the projection that 50% of the world's population will live in urban centres by 2050, it's going to be all about placemaking – creating places for future generations to live, work and enjoy.

According to Will, Brighton is often an immediate 'pin in the map' for corporates looking for bases outside London but we simply don't have the square footage of Grade A space available, so many of them choose Birmingham or Cambridge instead.

In Brighton, the pressure for affordable housing is huge, with 9,000 people on the waiting list. For hospitality consultant and local resident Bridget Baker, having 3,000 Airbnbs listed in the city was something that should be looked at

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with restrictions put in place, especially as many are apparently only let once a week. Liz explained that several council CEOs from around the country, including BHCC's Geoff Raw, had written to the Government about this and a proposal is open regarding a registration system so local authorities can monitor the quality and number of short holiday lets.

On the subject of affordable housing, Kelvin commented that the Government seems to think it can 'build itself out' of the situation but we'll never be able to build enough housing to make house prices fall. Instead, other interventions need to be made such as restricting buyto-let mortgages.

Bringing the discussion to a close, Ed asked the panel for a short response to the question 'do you believe Brighton and Hove's housing target can be delivered?': • Kelvin MacDonald: "No, the targets aren't achievable."

• Liz Hobden: "In theory we could deliver the 660 home target but the recession, Brexit and Covid etc haven't helped, so our shortfall keeps getting rolled forward. The answer has to lie in a more strategic approach to housing across a number of authorities."

• Peter Foster: "Not achievable in the current political situation."

• Will Poole-Wilson: "We'll struggle to achieve it, maybe we should create a competition to architects to come up with solutions?"

Flo Powell is joint managing director of Midnight Communications



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Rising to the challenge of future floods



As building on flood plains continues to be an uncomfortable necessity, James Parker reports on a project to develop a house prototype that rises and falls as and when a flood occurs, thereby unlocking previously unviable sites across the UK.

27% OF ALL NEW HOMES ARE BEING BUILT ON A FLOOD PLAIN

Spiralling UK housing demand, coupled with the shortage of available land and exponential climate change, presents a thorny problem leading to an equally uncomfortable conclusion. The current 300,000 homes per year target means that the industry needs to continue to build on flood plains. The increased likelihood of serious flood events in coming years means that high water levels must either be grappled with by developers and their customers, or sites will remain unbuilt.

Floods are of course hugely disruptive and damaging – the Environment Agency says that the average time for a family to return to a home after it is flooded is over nine months, disrupting work, schooling and mental health, and causing millions of pounds of insurance claims nationwide. The average cost of flood damage to homeowners is £30,000. However, the Government currently remains committed to its new homes numbers, and the risk of homes flooding, despite SuDS and flood resilience measures, is made more likely by those developments on flood plains.

Currently, one in six existing homes have been built in what is now a 'flood risk area' – a total of 2.4 million homes. However, a further three million are at risk of surface water flooding, exacerbated by climate change. Perhaps most concerning, 27% of all new homes (60,000 per annum) are currently being built on a flood plain.

With housing developers having to look "further and wider" to meet demands – not least from home buyers wanting to live in certain areas – this sometimes means "venturing into less than ideal land," as light gauge steel frame manufacturer Hadley puts it. With millions of homes at risk and millions being spent on temporary flood prevention, the company is proposing a more permanent solution in the form of its FloodSAFE House concept.

SAFE AS HOUSES

Currently under testing in a giant water tank at HR Wallingford – the largest 'wet'







water testing facility in Europe – the FloodSAFE House concept is proving its inventors' claims of being a practical solution to avoid damage to a property. Based on an adapted Hadley light gauge steel frame, the three-bedroom (although roofless) replica detached home has been developed in partnership with Floodjack International, inventors of a mechanical steel jacking system purpose-designed for raising buildings in flood emergencies.

Now a fully-functioning test prototype, the process will result in a Flood Protection Certificate before it sees a 'live' test with occupants to see how it performs as a home. Part of what enables this model to be easily lifted by the Floodjack is that while a traditionally built three-bed house weighs between 120-150 tonnes, Hadley's brick slip-clad model is currently down around the 40 tonne mark.

The system is driven by sensors in, around and beneath the building, which activate the jacks to steadily lift the lightweight structure – at the same speed as the flood waters rise – and lower it gently once they have subsided. According to the project team, it will "keep contents safe and dry at precisely the moment it is needed," therefore reducing both damage to the fabric, and the time needed for people to return home following a flood.

The Environment Agency-approved water sensors will trigger a control panel within 15 seconds of detecting a "significant water-related event." The house takes 15 minutes to reach its full 1.5 metre height – UK floods are typically 500 mm, according to consultant WSP who are working with Hadley and the University of Liverpool to develop the system. WSP has liaised with both the Environment Agency and insurers to "help them understand how the house would work and what the implications would be for them." They have also spoken to local authorities and housing associations about the ways in which the FloodSAFE House "could open up previously unsuitable sites for social housing development."

The system's control panel sits unobtrusively beneath the ground floor, and keeps the structure at its elevated level until "it is safe for the structure to return to ground level," says Hadley. If any obstructions are detected, the jacks will automatically stop. As well as the steel frame, the house consists of offsiteconstructed SIPS (structural insulated panels) modules, which are all shipped to site in a single day, and which offer sustainability benefits over traditional home construction, according to Hadley.

INDUSTRY PIONEERS

Ben Towe, group MD at the Hadley Group, explained at the demonstration event why the steel frame company has jumped wholeheartedly into the initiative. It's partly a commercial imperative; the commensurate potential numbers of homes which could be created in previously unviable sites give it "opportunity to achieve scale in the housing market."

"It's not just about what you build, it's how fast," he says. With the highly accurate, as well as rapid 'Advanced Methods of Construction' approach it is using to create offsite buildings, "we could steal a bit of a march against the rest of the world" with the FloodSAFE House, he believes.

"Ultimately, the opportunity for us and developers is huge, because you can put more houses on the same site, which can make each site stack

"THERE IS NO SILVER BULLET FOR FLOOD RISK MANAGEMENT," SIMON GILLILAND, ASSOCIATE, WSP

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up commercially." This is reportedly leading to large amounts of interest among housing developers already. Towe told Housebuilder and Developer, "If you have a solution like this in your back pocket," (as a result of being able to build out more of a site), "you can potentially bid more on the land, and be more competitive." This can also mean being able to build a higher value house or houses with an unobstructed view of countryside, potentially more than offsetting the increased investment of including the FloodSAFE system. Currently unviable developments (e.g. of 50-100 homes) might be able to achieve an extra 20 units, therefore making them a commercially realistic prospect.

He says that with occupants being able to stay in their homes for "two or three days" in a major flood (depending on utilities being working etc), the system also gives first responders a considerably wider window in which to operate. "The opportunity is not just to build things, it's to give people in them a better quality of life." Towe concluded however by wondering why housing has been the only sector that hasn't embraced such advanced offsite concepts yet – "it's been a real journey to understand it, but we are now seeing exponential growth."

At an event where the prototype house was demonstrated slowly rising above a giant water tank at HM Wallingford, Andrew Parker, founder of Floodjack International, explained how the University of Liverpool was keen to collaborate, in order to gain detailed data from the various sensors placed around the house to assist with its research.

The university researchers have created a Digital Twin of the house which will be able to take the data from the prototype and incorporate it in their model to see how the structure behaves, and feed back into the project to see where the testing



THE HOUSE TAKES 15 MINUTES TO REACH ITS FULL 1.5 METRE HEIGHT



parameters might need tweaking.

An ex-builder Parker developed the straightforward Floodjack system following the 2007 floods, when a friend's family were uprooted from their home, with worse to come in 2009 when he had another, this time uninsured flood, devastating the family finances. He explains there is a 'social value' element to investing in a new, low-cost solution, and is particularly keen to target it at local authorities: "Most of the people affected by flooding are underprivileged, and have no choice of where to live."

He said that 300 local authorities were forced to still build in flood zones with "little to no flood defences," and said that the FloodSAFE project offered the chance to "put the accountability on the developer, and take the responsibility away from the local authorities." It enables them to offer "affordable, practical properties which are safe for the property and the people who live in them."

Simon Gilliland, associate at WSP, reckons that the time is right for a solution like this, given that there is "no silver bullet for flood risk management, particularly in light of the impact of climate change. He stresses: "We need to think holistically and harness new approaches like the FloodSAFE House."

The project's instigators believe that the system offers a far more reliable solution than building "ever higher defences," which even the Environment Agency admits will not be a long-term answer. It is also less expensive than installing resilience measures which need time before occupants can reenter the property after floods. According to a recent report, the FloodSAFE House instead provides a 'social value forecast' of a "£2 return for every £1 spent," partly also because occupants would generally be able to remain in their houses for longer

during a flood. They also believe such an innovation should enable insurance companies to offer a reduction in premiums for new homes in flood zones, which doesn't exist currently.

Simon Gilliland says that the concept also has a wide potential application internationally, with 29% of the world living in flood plains. The house "unlocks so many opportunities" for planners, he says. And, against other more costly, carbon intensive mitigation measures, it's a "low carbon, futureoriented development solution." Taking a house completely out of the water, the system shifts the paradigm away from resilience or mitigation to "complete flood avoidance." In this way, he believes it is "one of a kind."

CONCLUSION

The next stage of the project is a test planned at Wirral Waters in conjunction with developer Peel L&P, which will see the team construct – and flood – a house in a somewhat less controllable 'real world' environment than the indoor test provides. The design forms part of a wider bid by Merseyside Strategic Flood and Coastal Erosion Risk Management Partnership to an innovation programme by the Environment Agency, focusing on how smart technology and data analysis could reduce the impact of flooding in the area.

As we approach another winter flooding season, it's inevitable that as the climate warms, we will see more serious flood events, causing untold misery for communities already crippled by a cost of living crisis. While housing developers remain forced to build on unsuitable flood plains, a pragmatic, although unusual solution such as this may be the necessary way forward. Hadley certainly thinks so, and is also confident that Defra is keen to give its support to the approach.



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COMMENT

Brian Berry

POLITICAL AIMS HITTURBULENCE

Brian Berry, chief executive of the Federation of Master Builders (FMB) wonders whether the UK's current political turmoil will halt the 'levelling up' ambitions.



ECONOMIC UNCERTAINTY IS SETTING IN AND THE PLANS FOR LEVELLING UP ARE LIKELY TO STAGNATE The constant political turbulence over the last few years continues in earnest with a government on its way out and a drawn-out leadership contest underway. It will be some time until certainty is restored. None of this leaves small, local housebuilders in a positive place. Economic uncertainty is setting in and plans for levelling up and housebuilding are likely to stagnate under an interim government.

It's clear for the next few months at least that we'll see little input to support the sector, but will the new Government hit the ground running and what will they need to do to support my members?

TAKING STOCK

Given the recent rumblings in Westminster, I thought now was the perfect time to take stock of what I laid out as my wish list in my first article of this year. I called it a 'year of great potential'! Looking at it now, it hasn't been an easy six months by any means, and it continues an unfortunate trend of political turbulence that we are struggling to shake off. Therefore, where do we stand now, with inflation still high, construction materials at eye watering prices, and skill shortages plaguing small, local builders.

So, is this still a year of great potential? It could still be, but that's the optimist in me. I had hoped to see ambitious planning reforms, a fully-fledged levelling up agenda and comprehensive skills plan. Some of this has come to pass, albeit limited. Unfortunately, even though the ambitions in the Department for Levelling Up, Housing and Communities (DLUHC) were high, the output has been cautious. My members, local housebuilders, were set to gain from levelling up, as were the communities they work in.

However, will the next Government pick up









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the baton, or will it all just peter out?

WHERE DO SME HOUSEBUILDERS STAND WITH THE 'GATEKEEPER GOVERNMENT'?

I had pinned hope on a resurgent DLUHC under Michael Gove, with ambitious plans for levelling up and tying this together with housebuilding. But, ultimately I still had doubts over his Department's output, such as the Levelling up and Regeneration Bill.

The Bill has merit, but doesn't seem to do enough to boost the ever-declining

housing delivery of small builders. However, I will reserve final judgement for when it's fully implemented. Now, we look towards a new government and potentially new plans, but ultimately what our industry needs is stability and a long-term vision.

In September we will very likely see our thirteenth Housing Minister since 2010 (and the twenty-second since 1997), that's if newly appointed Marcus Jones doesn't stay in place. There has never been much certainty for the housing sector; I can only hope this trend will stop until the next election, at least. What the industry needs is stability, especially as the economy turns sour, and consumers become much more careful with their finances. We've seen the repair, maintenance and improvement market start to decline in output, and that is often the early warning sign for a wider sectoral problem.

WHAT WILL A NEW GOVERNMENT NEED TO BRING TO THE TABLE?

As with all business sectors, small, local housebuilders will not benefit from the malaise which grips Whitehall. Ambitious, hard-hitting policy and its delivery will turn the SME housing sector around, but also deliver net zero ambitions and levelling up.

As I've said in these articles time and time again, if there is a genuine want to boost local economies and unlock new opportunities, look no further than your local housebuilder. They enable people in local communities to train locally, work locally and ultimately stay local, which uplifts every part of the nation in equal measure, which is the ultimate deliverable of levelling up. Come September, the new Government has an opportunity to make it a reality and the industry as well as the public will ultimately judge them on what they deliver.

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Patrick Mooney

THE NEW HOUSING SECRETARY'S CATCH 22

Patrick Mooney, housing consultant and news editor of Housing, Management & Maintenance magazine, discusses the Government's 'transitioning' housing policies.

The Government has sensibly accepted that its long-standing commitment to build 300,000 new homes each year by the mid 2020s is not going to be met – Michael Gove (before being replaced by Greg Clark) tried to refocus attention away from numbers and targets.

But of course the need for more housing still exists, with over one million people on local authority waiting lists, hundreds of thousands of people living in wholly inadequate temporary accommodation and the private rented sector now houses a record number of families.

Indeed the scale of the problem is reflected in recent polling by Ipsos which found that seven in 10 people agree there is a housing crisis in Britain, with the percentage who think there is also a crisis in their local area having risen from 39% to 49% in the past two years.

This change is also reflected in the fact that only 22% now oppose more local housebuilding, down from 27% two years ago. Support for more housebuilding increases if the new homes are to be affordable and designed to look right in their surroundings.

PROBLEMS & SOLUTIONS

The above finding suggests that the cult of NIMBYism may be rapidly receding, even if it is not entirely dead. People are prepared to see more housing built in their back yard, particularly if measures are taken to ensure the new housing is genuinely affordable. But it also has to look good and be in keeping with the locality to get their support.

Over half of the adults who responded to the Ipsos survey (taken in May for the New Statesman) agreed that unless more homes are built in Britain, then the country's housing problems will never be solved. They also agreed that building more homes was preferable to encouraging older people to move out of their larger homes, in favour of bigger families with a greater housing need. The pressures for more affordable housing were acknowledged by Michael Gove before he was fired by the PM, when he said: "We've reached a situation where the availability of social housing is simply inadequate for any notion of social justice or economic efficiency."

Which is why the Government's proposal to extend the Right to Buy to housing association tenants appears to be odd, and counterintuitive. Given the desperate need for more genuinely affordable rental housing, surely the priority should be on reversing the long-term net loss of social housing, not in adding to it.

But that would be ignoring the political machinations at work whereby increasing levels of home ownership are usually associated with long term support for the Conservative Party. Messrs Johnson and Gove were pursuing a political agenda, rather than looking to resolve the housing crisis identified in the Ipsos polling.

AN IMPRACTICAL REMEDY

Delivering an extension to the Right to Buy might be more difficult though, as it appears



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to be beset with innumerable practical difficulties. This is after all an issue that has been looked at before and abandoned because pilot schemes and modelling by the Treasury showed it could not be made to work.

Developers and social landlords have already had to scale back their plans to build new homes due to the impact of (this is not an exhaustive list, just the main issues!) the pandemic, shortages of labour and materials, rising construction costs and expected changes in financial markets and planning policies.

Extending the Right to Buy to housing association tenants looks like it could only work if money is diverted away from existing budgets, in order to fund the cost of discounts on the market valuations which are necessary to tempt the tenants into taking the huge step into home ownership. (Maximum discounts available to council tenants currently exceed £100,000 depending on the property valuation and the length of their tenancy.)

Given the parlous state of public finances, it is extremely unlikely that new money will be found for the scheme, which logically means that less money will be put towards building new affordable homes. In order to achieve a different outcome, The new Housing Secretary Greg Clark will have to come up with a previously unseen piece of financial magic – as well as a very large money tree.

ASSOCIATED PROBLEMS

In its 2022 UK Housing Review, the Chartered Institute of Housing found that 40% of council-owned properties sold off under the Right to Buy ended up as homes in the private rented sector. So instead of being lived in long-term by owner-occupiers, they are bought as buy-to-let investments and rented out at rents far higher than those charged by the councils who originally owned them.

As a result, the amount of housing benefit paid to private landlords has soared over the last decade, and is now estimated to total more than £9bn. Ipsos also found that public support for extending the Right to Buy has markedly grown in the last couple of years, but how likely is it that those who answered the pollsters' survey questions were aware of the costs associated with it, and what could be achieved if this money was instead used for building more homes of all types and tenures?

The pressures on the housing market, particularly towards the more affordable end were further demonstrated by recent analysis produced by the BBC which found that the number of holiday lets in England has risen by 40% in the past three years. Once a phenomenon of tourist areas on the coast, the second or holiday home trend has now moved inland since the beginning of the Covid pandemic with more areas witnessing properties being bought up by 'outsiders,' squeezing the supply for local residents and forcing up house prices.

The Department of Digital, Culture, Media and Sport is looking at whether holiday lets should be registered, or even licenced. It has now launched a call for evidence, promised in its Tourism Recovery Strategy in June 2021, on the impact of short term lets on England but it will be some time before any actions feed through to local markets and in the meantime residents will continue to struggle in their quest for affordable housing.

POPULATION TRENDS

Meanwhile, figures from the 2021 Census have revealed that the population of England and Wales has reached 59.6 million, an increase of 3.5 million on 10 years ago, but for the first time ever the number of over 65s in the population (11.1 million) is greater than the number of under 15s, at 10.4 million. The number of people aged over 90 has risen above half a million.

These and other changes in the population will be pored over by statisticians, planners and politicians for years to come and will inevitably result in changes to policies at a national and local level concerning everything from housing and social care, to education and health services.

One statistic that really caught my eye was that there are 11.1 million more people living in England and Wales than there were in 1981, when the Right to Buy (RTB) was introduced by Margaret Thatcher, as one of her flagship privatisation policies.

REPLACING SOLD HOMES

The CIH's UK Housing Review of 2022 revealed that fewer than 5% of the estimated two million council homes sold off under the RTB have been replaced, which has contributed hugely to a reduction in the availability of social homes. It is no wonder that when he opened the Institute's annual conference, CIH chief executive Gavin Smart said: "We absolutely must build more if we are to shift the dial on this housing crisis," before adding "You could say that we're at a pressure cooker moment."

Local government leaders have been lobbying Ministers for years asking that any houses sold must be replaced quickly, in the same local authority area and on a like for like basis. They also want to keep 100% of the receipts and to set discounts locally. We can be sure that the Housing Secretary has heard the arguments, but whether he is inclined to take action along the lines requested is another matter entirely. The public purse has recently been run dry, and the favoured political solution requires money which he may not have.



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Balcony Fire-safety Remediation Project in London, 3D & CGI Concept Artwork Crucial to Planning

The construction industry continues to be driven by the urgent need to remediate multi-storey, multi-occupancy buildings, with many leaseholders facing severe levels of uncertainty regarding the fire safety of their homes. Aluminium has proven to be an ideal solution, offering many building owners a costeffective and future-proof alternative. We spoke to Richard Izzard, managing Director of aluminium decking manufacturer AliDeck, to find out more about a recent remediation project in London.

There are thousands of buildings across the UK currently in need of improved fire safety standards following the Grenfell disaster. With Building Regulations under continual review, meeting the demands of compliance requires precise attention to detail.

River View Heights in London, located on the south bank of the River Thames, is a beautiful apartment block with some unique details in the external walls. Distinctive Juliet balconies alongside curved walk-on balconies create a bespoke presentation.

The timber decking on the existing balconies was in dire need of replacement. The building owner took the pro-active decision to switch to aluminium, a non-combustible and fire-safe material, preventing any future remediation to the balconies.

HIGH-END CONCEPT ARTWORK PROVES THE CASE FOR ALIDECK ALUMINIUM DECKING

An in-depth proposal for the replacement of the combustible material, included the use of 3D animations and CGI renders to demonstrate the design, functionality, and versatile nature of the AliDeck System.

This concept artwork also proved that the use of AliDeck boards in the Juliet frontages would



allow for the visual styling of the building to be uncompromised, a crucial factor due to the prominent location in a key conservation zone near Tower Bridge.

Richard Izzard, managing director of AliDeck, said, "As the curved Juliet balconies on the building are highly bespoke this was no easy feat. Thankfully, our first-rate design team were able to produce the visual collateral required to bring our proposal to life. Suitably reassured, the building owner felt happy to move forward with AliDeck."

Animations highlighted how the existing, non-compliant timber decking could be removed leaving the frame in place, and how colour-matched aluminium boards could act as a direct replacement. AliDeck were able to specify the precise material required to achieve the best outcome in the most cost-effective way.

"Our in-house resource for product visualisations was crucial for this project," Richard continued. "With a 3D artist and animator in our marketing team working closely with our engineering team, the process of creating detailed renders and animations for the project proposal also managed to identify problems that wouldn't have otherwise been picked up on ahead of installation."

HELPING ANOTHER BUILDING BECOME FIRE SAFE

AliDeck aluminium decking boards are fully compliant to the latest Building Standards and have a Fire Resistance rating of A2-s1, d0 & A2fl-s1, which will pass an EWS1 certification.

New drainage systems were introduced to the balconies by using drainage channels, directing rainwater away from the building and to the balcony edge for controlled evacuation, eliminating the possibility of water ingress into the building and avoiding nuisance to people below.

"Our Approved Installers, Alu-Installations Ltd, were contracted to replace the timber decking and replaced them with our aluminium decking boards," concluded Richard. "We take a great sense of joy in supporting their continued growth and success. Their first-rate level of workmanship is highlighted in the complex nature of this project."

It's great to see the excellent outcome on this headline project. Clearly, the close collaboration between AliDeck and all stakeholders in the planning and preparation of the works paid dividends and should be used as a template for others to work within in the future to ensure project success.

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CASE STUDY

Shoring up Folkestone



As part of the wider regeneration of Folkestone, over 80 homes are being constructed on the site of a former car park on the town's historic beachfront. Ella Brocklebank and Chris Page of contractor Jenner explain to Jack Wooler how it offers a modern approach for a younger demographic. Situated at the foot of the Leas Lift and Coastal park on the beachfront of Folkestone, Kent, the £44m Shoreline development is set to be instrumental in the wider regeneration of the area.

Comprising 84 luxury homes, the project brings a mix of apartment living and townhouses to town, all for private ownership.

Constructed with a reinforced concrete frame, the homes are split between two structures at the east and west ends of the site, reaching seven storeys at its highest point, alongside further homes sandwiched between them.

The ends of this structure together offer 60 apartments in total – including penthouse terraces – with the joining central block consisting of 20 townhouses and four duplexes. Private roof terraces are included for the townhouses and penthouse apartments, and all units have



the exclusive use of a private communal garden above the undercroft car park, which brings in natural daylight through carefully placed openings to provide a secure and pleasant environment, with EV charging points and sufficient headroom for larger vehicles.

"Undoubtedly," says Ella Brocklebank, head of communications and business development at main contractor Jenner, "this will be a landmark building for the region – a conceptually modern building, reflecting its generation."

STRIKING LANDSCAPE

Maximising the benefits of the striking landscape, each property promises uninterrupted views over the English channel, and the individual homes and wider scheme alike have been designed to be built with quality "unequivocally at their core."

According to Chris Page, senior project manager at Jenner, the overall masterplan of the development endeavours to create a unique waterfront environment for people to both live and work, while complementing the existing Victorian and Edwardian architecture of the neighbouring region.

"Take a glance at the striking visuals prepared by the scheme's architects," says Chris of London-based practice ACME's designs, which "showcase the development in all its glory."

"You would be forgiven for believing the new homes were destined for far-off winter climes given its beachscape location, high-rise nature, and glamorous, white-bricked facade, with a definite feel of the new middle east to the building's style and structure."

Ella chimes in here: "Creating intrigue and capturing attention from far and wide, the project is bold in its intent and is certainly pushing the boundaries of design and construction."

AN AMBITIOUS PLAN

The highly bespoke development is the first phase of an ambitious 1000-unit masterplan for Folkestone seafront on behalf of developer client, the Folkestone Harbour and Seafront Development Company, backed by local philanthropist Sir Roger De Haan (founder of the Saga Group). It is intended to revitalise the overall seafront and Harbour Arm promenade area of the town's ongoing regeneration programme.

"The Folkestone Harbour & Seafront Development Company has been responsible for extensive renovations of the harbour area of the town," explains Ella Brocklebank.

The Harbour Arm has been open since 2014 and is "one of the most popular tourist attractions in Kent," she continues.





THE PROPOSED FACADE SYSTEM NEEDED TO ENSURE DURABILITY WHILE ALSO OFFERING THE CLIENT LOW MAINTENANCE

"It's a wonderful place for visitors and residents to enjoy, and is an integral part of the long-term plan for residential and business premises in the harbour area."

With planning permission granted in 2018 for the overall masterplan, Jenner Group (one of Kent's largest regional contractors) were engaged to build this key project in their hometown, delivering phase 1.

Completion is programmed for early 2023, when carefully planned phased handovers will see the new homes ready to welcome their occupants.

"The bold investment – made in a quintessential seaside town – represents regeneration in its truest form, bringing a disused area back to life that will serve to boost both society and the economy, and ensures Folkestone continues its renaissance," says Ella.

A CONTENTIOUS SITE

Given the project's prominent location on the beachfront, Chris tells me that Shoreline has been a "contentious" site, with Jenner working "tirelessly" from the outset to overcome the initial opposition from the local community. This was demonstrated by the scheme scoring 43 out of 45 in its latest 'Considerate Contractors' score with full marks in the community engagement category.

"By proactively engaging with the community through organised beach cleans and litter picks, alongside regular schools and college engagement, we ensured that we are socially responsible and accountable in our actions," he says, adding "we have been described as creating an incredibly positive image of construction."

Formerly, the site housed Victorian amusement arcades, rides and a boating lake before the dilapidated buildings were cleared to allow for car parking space, and the land was subsequently reclaimed and remediated to create the new beach scene in recent years, on which the new homes are now being built.

During excavations, Jenner had to remove quite a few obstructions which had been left below the surface. "Interestingly," explains Chris, "these included the base of the former boating lake and the foundations for some of the theme rides and attractions."

"It has been fascinating to recall the former site as we progress with the new," adds Ella.

"For many locals," Chris continues, "the area and what it used to resemble was already long forgotten by the time these remediation works were carried out anyway, but for others we often heard that the works had been done so well that it overcame any qualms. He adds that it "sympathetically transformed the area by creating the beach frontage, which was in place prior to construction activity commencing, replacing a mass of concrete slabs and tarmac."

FLOOD RISK

Given the development's proximity to the sea, flood risk had to be a "huge consideration" for the team here, but, with remedial works undertaken to recontour areas of the site, and to raise the foreshore, 200 years of possible flooding has been accounted for, minimising future risk for the homes.

"In addition to building well above the water table, where flooding risk is most prominent," details Chris, "there are a host of measures in place to further protect the area from flooding."

Under the beach area, for example, which is beyond the boardwalk and closer to the sea, there is an "enormous" sand-filled 'sock' that sits 30 metres below the beach.

30 metres deep and 6 metres wide, this structure has been placed to reduce the likelihood of future flooding and was implemented when the client team remodelled the beach, before the boardwalk was installed.

VISUAL IMPACT

As well as mitigating for potential flooding, Chris says it was key that, "given the likely exposure to extreme weather conditions and highly corrosive salt spray," the proposed facade system needed to ensure durability while offering a low maintenance system that remains aesthetically pleasing, and thereby "ultimately, posed one of the biggest design considerations."

"Original aspirations for a crushed glass finish render to create a sparkling finish were shelved for safety reasons, and new options that would offer the same visual impact were explored," he continues.

As an alternative to rendered insulation, many options were considered, but it was glazed white bricks and a white mortar that were chosen with the final brick being sourced from La Paloma in Spain.

"Standardised was never going to be an option," explains Chris, noting the over 24 different specialist bricks required to achieve the complex geometry.

With a bespoke 70 mm high brick, "sourced to respond to the convex and concave waves of the brick facade, rigorous testing has been carried out to ensure quality would never be compromised and full compliance to all required standards of fire safety."

STRUCTURAL CHALLENGES

Behind this brick facade, the semi-circular building – with its 'bookend' structures



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proved too heavy for the designers' original intention of providing raft foundations. Instead, the building sits upon robust footings consisting of over two hundred piles descending to a depth of 27 metres. This means the foundations "are as deep as the building is high," Chris explains.

The next challenge faced by the team were the balconies proposed for each home, which also "proved problematic in terms of their load bearing weight."

"Many avenues were explored," continues the contractor, "with a lightweight aluminium solution ultimately identified and implemented."

In order to overcome these challenges, all aspects of the build have been tested and subjected to thorough quality control to make sure it will last the lifetime of the building, and outperform all other buildings in the local area.

The reinforced concrete, for example, is covered with a minimum of 30 mm of concrete to protect from any corrosion, "which is more than you would normally expect to see in a building such as this," says Chris.

"All the materials chosen on the external facade, such as windows, balconies etc, are being made from non-ferrous materials so that they will not rust – and any other materials that have the potential to corrode, will have an enhanced level of protection."

Ella adds: "The lengths our client has gone to making this such a unique development is unlike most developers, with such an attention to detail and commitment to overall quality."

HEATING

In order to reduce emissions and raise the sustainability of the project, a communal boiler will serve all the units internally. Additionally, each dwelling will offer underfloor heating – both serving to maximise internal space.

The main system was specified due to its high efficiency, and because it can be maintained by the company rather than being the individual resident's responsibility.

It also provides the added benefit of resident's only needing to pay for what they use, and, given new ways of working since the global pandemic, the building will have an efficient system to 'supply on demand' for each individual unit.

In terms of solar gain, all south-facing windows have solar control coatings to prevent overheating. Some areas are triple glazed as well, while other facades are double glazed, depending on their elevation and orientation.

"Because of the exposed location of this build, the highest specification of glazing is in place," says Ella. "Seasonal weather conditions and the exposed seafront location have been carefully considered and designed to ensure comfort all year round."

SUCCESS

With completion approaching early next year, looking back on the project so far Ella believes that it is in terms of its quality that Shoreline is already finding true success.

"With a brief to deliver contemporary new homes that ooze opulence and class and that stand the test of time, every aspect of the project has been designed with a 100-year lifespan to ensure longevity and that the quality of the finished product is never compromised by its exposure to the coastal elements," she says.

"And this bespoke finish is most certainly not limited to what the public eye can see," adds Chris, "with communal areas clad with acoustic walls and terrazzo floors to ensure quality radiates throughout."

Ella concludes: "First impressions count," and with the likelihood of future phases of the masterplan reliant on the appetite and appeal created by this multi-million-pound investment's first phase, the 'wow' factor it conveys is fundamentally important."

"STANDARDISED WAS NEVER GOING TO BE AN OPTION," SAYS CHRIS – THERE WERE 24 SPECIALIST BRICK VARIETIES USED



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CASE STUDY

Hastings rocks







A mixed-use development is bringing new homes and commercial space to a brownfield site on Hastings' revitalised seafront. Patrick Hanlon, founder and CEO of Roost People, explores how the developer retained the building's historic facade while replacing everything behind it. Set on the scenic seafront of Hastings, East Sussex, a new development is soon to release nine one-, two- and three-bedroom modern apartments with uninterrupted coastal views to a once derelict site.

Retaining its heritage, the historic facade of the building will be kept intact, complying with the stringent local conservation rules, while the rest of the building has been demolished and the new project built behind it, adding not just the homes – which includes two penthouses front and back – but a courtyard and commercial units.

Aiming to reach a high standard of amenity and finish, most of the flats will offer private balconies – with the front penthouses facing towards the sea, and the rear flats looking onto a cliff face featuring a natural spring – as well as underfloor heating throughout (powered by air source heat pumps).

Due to be released early next year, White Rock Heights is the newest project in the 500-strong portfolio of Roost People. The locally-based property developer and management firm has a particular focus on the private and public rental sector.

Once complete, all of the high-spec flats will be released for public sale, and the commercial units will be let by the landlord, who will maintain the freehold of the building, with a communal power supply sourced through solar panels on the building's roof.

HISTORY

Founded in 2004 by Patrick Hanlon himself, Roost People are a subsidiary of the group – property owners and developers, with the group managing a number of Hanlon-owned partnerships and companies in Hastings and the surrounding areas.

According to Patrick, the properties the company owns span a period of nearly 400 years, starting in the Stuart era – a 1664 pub in the old town of Hastings – and spanning through to the Georgian, Victorian and Edwardian eras.

"We pride ourselves on refurbishing, renovating and restoring original housing stock, from Grade II listed accommodation through to properties located in the many conservation areas in our towns – often bringing unsympathetically converted apartments into the 21st century," he says.

The company's main clientele so far have been the NHS and local authorities, with the group providing a range of furnished accommodation for key workers, asylum seekers, temporary accommodation and private rental.

Looking towards the White Rock project, Patrick considers what it will bring to the table: "Our new build offering gives us the opportunity to build properties using all the amazing modern methods of building and materials to provide low cost accommodation for the modern era."

ACQUISITION

As the offices of Roost People are also located directly on Hastings seafront, just adjacent to the previously dilapidated building that would become White Rock



Heights, the team had long been aware of the site.

According to Patrick, the property had been derelict for some time, which both the team and others had long noted, and hoped to do something about.

Helping things along, the previous owners were reportedly parents of a friend of Patrick's, and they in fact approached him directly with the opportunity. As such, the site was never even advertised openly on the market before the project was theirs.

As soon as Patrick and his business partner purchased the property, the team began to submit planning applications for the development, which as they stand today include nine flats – made up of four one-bed apartments, three two-bed apartments, and two three-bed apartments – two commercial units, a communal courtyard, and a link building with lift and staircase for residential access.

PLANNING

While the acquisition of the property was very straightforward, the planning process was less so. According to Patrick, the main challenges here related to the retaining of the front facades, and the materials used throughout.

"Planning complications were introduced by the site being in a conservation area, restricting what could be upgraded and how everything should look on the front of the building."

Cast iron had to be specified for all guttering and downpipes, for example, and timber windows had to be specified on the front facade – "which cost significantly more than the aluminium windows throughout the rest of the project."

Thankfully, these restrictions have been overcome over frequent meetings with





CONTRIBUTORS

Michael George – CADtech Paul Marlow – technical designer at Marlow Technical Patrick Hanlon – founder & CEO of Roost People Laura Field - project quantity surveyor

CAST IRON HAD TO BE SPECIFIED FOR ALL GUTTERING AND DOWNPIPES, AND TIMBER WINDOWS HAD TO BE SPECIFIED ON THE FRONT FACADE – WHICH, SAYS PATRICK, COST "SIGNIFICANTLY MORE"

Hastings Borough Council's conservation officer, with all now having agreed both what materials are deemed "acceptable by the council, but also feasible on the construction side of things."

CAREFUL DEMOLITION

In order to begin construction of these designs, careful planning had to be undertaken to ensure the safety of both the front facade and its neighbours while the rear half was demolished.

To achieve this, a structural scaffold engineer designed a bespoke scaffold structure, and with this in place the team were able to demolish the majority of the building, leaving a spine wall supporting the front facade.

Following this, the scaffold structure was then erected, 'pinning' the front facade so the remaining wall could be demolished. A steel frame was then designed to be tied into the front facade holding this in place, so the scaffold could be removed.

Other repairs to the front facade involved repointing and new lintels, and the new shop front (replacing the dilapidated building's former shop front) was recreated to replicate the traditional features of the previous incarnation.

A NEW BACK

While the retention of the front facade during demolition proved complex, the installation of the new building also posed some interesting design challenges.

The design of the building behind the facade for instance still had to remain sympathetic to the previous structure.

One way in which this was achieved was through the specification of a cobbled floor in the communal courtyard and residential entrance, with a glazed brick wall to fit the local vernacular.

"This has been complimented by more modern elements," adds Patrick, such as glazed balustrades and balconies behind the front facade. The two penthouses themselves display an innovative tiered configuration to achieve uninterrupted sea views from each. Another inspiration of its locale, according to Patrick, many of the materials used here were "heavily influenced" by the proximity of the sea and the salt air.

For example, when planning was initially granted, the roof was to be copper, but the team soon realised that this would not suit the location. "We quickly agreed that, considering where the property resides, we should find an alternative material to avoid the quick discoloration copper would have seen in such a location."

Throughout this process, Patrick says the build has been carried out with "meticulous attention to detail and rigorous design and construction methods," from the "extremely efficient" heating systems to the high thermally rated double glazing systems used (This was supplied by Tradestar, who are a local double glazing and window specialist).

A BRIGHT FUTURE

According to Patrick, while the project is yet to be completed, the development has already been "well received" by the community.

Looking to the future, he believes it is in quality and efficiency that the company will continue to invest. This is already highly apparent at White Rock, with air source heat pumps and enhanced insulation throughout ensuring as high scoring an EPC as is possible, plus any materials sourced for the project being environmentally friendly and carbon neutral where possible.

"Our properties are always designed and built with extremely low energy consumption and low carbon output, providing a high level of occupant comfort while using very little energy for heating and cooling [through our partnership with Mitsubishi air cooling systems]," explains Hanlon.

"We are constantly working towards upgrading our portfolio," he adds, "with the aim of making all our properties even more energy efficient."
MORGAN CONSTRUCTION WALES WITH FASSA BORTOLO RENDER

Fassa Bortolo is delighted to announce our on-going partnership with building developer, **Morgan Construction Wales**. The leading Italian render manufacturer has recently completed work on one of the Welsh housebuilder's most prestigious developments to date; the Cornfields Estate in Sagestone, Pembrokeshire.

Fassa Bortolo's specialist team has worked with the developer on the luxury estate to provide a suitable facade which ensures the best level of protection for the properties.





Covering a total surface space of over 10,000 m², **KC 1** was used as a base coat, followed by a priming undercoat of **FX 526** and a layer of **PX 505** acrylic-siloxane paint in shade Pastel white, SA22 and TS03 to finish.



To find out more about Fassa Bortolo and its range of render systems and building products,



visit http://www.fassabortolo.co.uk/en or call 01684 218 305

It's Official - EOS Gain BOPAS Accreditation



ollowing on from the announcement that EOS Framing has reached the finals of the Construction News Specialists Awards and has an unprecedented seven entries shortlisted in the Offsite Awards, the leading steel framing innovators have reported that the company has been awarded Buildoffsite Property Assurance Scheme (BOPAS) Accreditation.

BOPAS Accreditation is recognised by principal mortgage lenders as providing the necessary assurance underpinned by a warranty provision that the property will be readily mortgageable for at least 60 years.

WHY IS THIS IMPORTANT?

For funders and lenders BOPAS provides assurances that EOS Framing's light steel systems are fit for purpose and eliminates the uncertainty surrounding the construction for valuation purposes. It also removes the risk for developers of mortgages being declined on construction grounds and improves business opportunities for EOS as a manufacturer of offsite systems. BOPAS demonstrates to funders, lenders, valuers and purchasers that homes built from non-traditional methods will be durable, delivered to high quality standards and stand the test of time. Managing Director of EOS, Steve Thompson stressed the importance of certification and accreditation:

"We take our responsibilities as a manufacturer extremely seriously. Our light steel frame systems are rigorously tested, manufactured under ISO 9001:2015 quality management standards and are now backed by BOPAS Accreditation. Our aim is to deliver confidence and certainty in the construction process and empower specifiers to be technical forerunners in the offsite sector.

"This achievement has only been made



possible by our dedicated team who share our vision and values. My thanks and appreciation goes out to all those involved."

Against a backdrop of government targets to build 300,000 homes a year combined with increasing construction costs and poor quality conventionally constructed houses as well as a huge shortfall in traditional skills - the demand for innovative offsite construction methods has never been greater.

COMPLETE AND COMPLIANT SYSTEMS

Specialising in advanced light steel framing technologies, EOS is taking the construction industry forward by pioneering a new certified systems approach, helping specifiers to comply and compete in challenging markets. EOS are committed to technical competence and as part of Etex, have some of the best building performance experts in the UK on their team. They work closely with certification bodies to jointly develop and design advanced technical solutions.

To discover how EOS systems are delivering certified, predictable and warrantied performance, go to the EOS website.

01325 303030 www.eosframing.co.uk



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Designer Contracts boosts showhome & team



Designer Contracts has boosted its longestablished showhome and design team to meet a record-breaking surge in new business. The Chesterfield-based team, which works with leading national and regional developers across the UK, has taken on an additional 10

people. The new appointments follow a record breaking three months of business this Spring and grows the existing team by around a third. Said Fay Sykes, who heads up the design division: "The team has totally smashed it over the past three months with a number of new client wins along with increased business from existing clients. It has been an incredible few months with more showhome project completions than ever before."

01246 854577 www.designercontracts.com

Reinforcing commitment to safer cladding



ROCKWOOL is pleased to announce the promotion of Hedley Thompson to a newly-created position within the company. The role – Recladding and Facades Sector Manager – is the first step in the creation of a new team which will focus on working with housing associations, local authorities and housebuilders on the remedial action needed to address fire safety and other issues for

the thousands of buildings in the UK which fall short of required standards. Hedley, already a ROCKWOOL veteran of eight years, is moving to the new position from his previous role as Technical Specification – Facades. Prior to joining ROCKWOOL in 2014, Hedley held a variety of technical and operations roles with the construction sector.

01656 868 490 www.rockwool.com/uk

New Specification Sales Director



Mark Glasspool has been appointed to the post of Specification Sales Director at **Domus Ventilation**. Mark has responsibility for new business development through the specification channel, managing a team of experienced engineers who work closely with consultants, architects, and developers in the residential new build sector. Commenting on his move to Domus Ventilation,

Mark said: "I like the fact that Domus Ventilation has its manufacturing base here in the UK. Having a close link to the factory will enable us to keep close control on quality, and react to the market changes in relation to air quality legislation. It allows us to be in charge of our own destiny in product development and delivery of our products well into the future."

vent.info@domusventilation.co.uk www.domusventilation.co.uk

A brand new look for an old favourite



West Fraser (trading as Norbord) has given its wellloved MDF range a makeover. Still the same great products but with a bold new look! One of the most comprehensive ranges on offer to the UK construction industry, five grades are available from the basic lightweight general-purpose grade, CaberMDF Trade,

to the top-of-the-range, CaberMDF Industrial, a hard-working, deep routing, moisture-resistant product with uniform density all the way through the board. Also available is CaberMDF Pro, CaberMDF Pro MR and CaberMDF Trade MR. With each product designed for a specific range of projects, the five products in the CaberMDF range offer unbeatable quality. The new orange branding is coming to a builders' merchant near you!

01786 812 921 uk.westfraser.com



Magply gains coveted BBA Certification

Magply magnesium oxysulfate (MOS) boards have recently undergone a stringent testing programme by the British Board of Agrément (BBA), which helps clients validate their processes and mitigate risk offering greater confidence for specifiers of the products tested. After a painstaking two year process, Magply's faith in the multipurpose panel was justified by the BBA's issue of a much-coveted Agrément certificate no. 22/6050. Stages involved the BBA carrying out a full audit of Magply's existing testing regime – along with undergoing a number of the authority's own rigorous trials. These included a six-month evaluation of the board for leeching, which thanks to the material's inherent stability resulted in a zero score. The certification – now published – comes in two parts: the first covering the board as a sheathing solution, the other when Magply is used in rainscreen cladding with a render finish. These in turn cover considerations such as Magply's compliance with Building Regulations, independently verified technical specification, regular surveillance of the production process and verifying installation guidance. Behaviour in relation to fire, moisture resistance and durability were also assessed.

01621 776252 www.magply.co.uk





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WWW.SURFACE360.CO.UK 0118 391 4120 | INFO@SURFACE360.CO.UK











Pyroguard and AMI reach new heights



Pyroguard's fire safety glass was the product of choice on the Quantock House development, one of the first UK projects to feature a compliant A2-s1 glass balustrade system on its apartment balconies. Appointed by AHH, AMI was tasked with developing a fire-rated glass balustrade solution. Working closely with

Pyroguard's technical team, this collaboration resulted in the development of AMI's Fire-Tek Balustrade system, featuring Pyroguard Balustrade fire safety glass. The system, fully backed by site specific structural calculations, is compliant with all the latest building regulation requirements for residential buildings over 18 metres tall (11 metres in Scotland).

info@pyroguard.eu www.pyroguard.eu

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

links to advertisers' sites, as well as daily email alerts to keep you as informed as possible.

www.hbdonline.co.uk



Cut-to-falls Multiboard helps drain top floor balcony

An experienced builder and roofing contractor has made use of some 300 standard and tapered **Marmox** Multiboards to complete a complex refurbishment of a large, top floor balcony on an apartment building in North London. Lightwood Construction carries out work for mainly residential clients right across the capital and has used Marmox Multiboards on many occasions in the past for both interior and exterior applications. In this instance, long term exposure to the weather and ponding had caused the original waterproofing system to deteriorate, and leaks to occur. Having stripped off all of the rotten felt and boarding, Lightwood Construction's operatives installed 90 sheets of 20mm thick 1250mm x 600mm standard Multiboards, along with 200 of the 1200mm x 1200mm cut-to-falls variant which taper from 33mm down to 10mm: enabling subtle gradients to be created in draining the balcony to multiple outlets. Managing Director Niaz Choudhury commented: "We originally started using Marmox Multiboard about seven years ago for refurbishing bathrooms and shower areas – often tanking the spaces. They are easy to cut and install with the special tape and 360 adhesive. The good thing is, normal cut-to-falls insulation boards tend to compress, but Marmox is higher density so much more stable."

01634 835290 www.marmox.co.uk



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Sika moves Parex Monorex GM production to the UK

K leader in construction chemicals Sika, has moved production of its most popular colours in the Parex Monorex GM render range from France to the UK to match the expectation and growth in demand from its customers and drive down lead times.

Sika Ltd has confronted supply chain challenges for some key Sika Parex product ranges and has made the step to produce the three most popular colours of Monorex GM – G00, G10 and G20 - in the UK. This will see the production of Monorex GM with the same excellent performance and results as users expect. Monorex GM is a one-coat, through coloured weather resistant decorative render for masonry and concrete substrates.

Darren Bunting, Business Unit Manager for Sika Everbuild said: "The construction sector has faced many challenges in the last two years as a result of Covid-19 and Brexit. Sika continually look to identify opportunities to improve customer service and satisfaction and our decision to produce our key product, Monorex, in the UK is a great example of that - enabling us to reduce lead times and supply chain risks for our customers."

For distributors and applicators, Sika Parex's product offering consists of a range of quality render system and solutions. With its expertise in mortar solutions for renovation and new builds, Sika participates in all phases of the construction life cycle.

Available from local Business Development



Managers, the Sika Parex Housebuilder Pack outlines the "complete" package to customers and specifiers with industry sector experts available to provide unsurpassed levels of free technical advice, specifications and CAD details.

With sites in Welwyn Garden City, Wishaw

and Preston, Parex is a brand within Sika, a leading manufacturer of construction chemicals, mortars, specialist adhesives and sealants and render systems for use in construction, refurbishment and civil engineering.

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Hörmann doors light up garage project

An impressive new-build garage is all the more striking with the inclusion of fully glazed ART42 sectional garage doors from **Hörmann UK**. Chosen for their modern design aesthetic and German build quality the doors were specified and installed by Birmingham based Doorfit. Constructed from a lightweight, yet strong, alumiumum framework the three doors include narrow framed, large clear glazing panels featuring the unique Hörmann DURATEC scratch-resistance finish. An innovative surface coating, DURATEC protects the glazing panes from scratches and damage caused by cleaning over the long-term, helping to guarantee a permanently flawless appearance. Finished in a smooth, modern Anthracite grey the three doors complement the other materials used and complete an impressive building ideal for displaying the clients' extensive vehicle collection and offering a bright unimpeded view. Hörmann ART42 sectional doors are available with a selection of infill panels, including a range of coloured glazed options, textured and steel perforated panels, offering the opportunity to create unique and stylish garage doors.

01530 516868 hormann.co.uk



Meet BS5250 with fewer tile vents – with Ubbink!

Ubbink's UB19 Hooded Tile Vent and UB62 Inline Tile Vent each have the largest free vent areas available in their respective applications. So with Ubbink, fewer vents are needed for both high and low level ventilation, to meet B5525. The UB19 is suitable for most roof finishes with pitches above 20° and has a free vent area of 22,000mm². The UB62 provides up to 15,000mm² of free vent area and is suitable for use with profiles including Modern, Ludlow Major, Double Roman, Double Pantile and Ludlow Plus on roof pitches above 25°. Both vents are available in a range of colours and can be supplied with adapters allowing conversion into soil/vent terminals or for use with mechanical and natural ventilation. Ubbink products are available through a nationwide network of independent distributors text

01604 433000 www.ubbink.co.uk

DOORS & WINDOWS Supplement



Concealed multipoint locking



Recent development work carried out by **Steel Window Association** member company, Steel Window Fittings, means it is now possible to specify concealed multipoint locking on virtually all the different door and window systems available in the sector. Not only can this be aesthetically much more appealing, but it further enhances steel fenestration's renowned strength and security, while helping improve weather-tightness. Further development work by Steel Window Fittings and the SWA's Technical Committee has enabled the

advancements to be offered across the range.

www.steel-window-association.co.uk

Jack Aluminium achieves certifications



Jack Aluminium has secured certification for ISO 9001 and ISO 14001, illustrating its commitment to providing customers with exceptional quality and meeting environmental standards. The scope of certification was for the design, assembly, test, inspection and supply of aluminium systems for the manufacture of windows and doors. ISO 9001 is the international benchmark defining

the requirements for a Quality Management System and how it manages processes and systems to meet the needs of customers and other stakeholders. ISO 14001 assesses the status of a company's environmental management system against defined parameters.

024 7646 7449 www.jackaluminium.co.uk

Navigating the trickle vent conundrum



Trickle vents in windows have long been used in the background as a means of complying with Part F of the Building Regulations: ventilation. **Tradelink** are working to ensure they provide the best commercial offer for the customer and the right choice of trickle vent. Tradelink

have changed their vents to be able to provide ventilation through the use of a single ventilator. They have also worked hard to adapt their manufacturing details and have achieved good colour matching and pattern matching to ensure the vents are as unobtrusive as possible. While Tradelink cannot tell installers whether a particular window requires trickle vents, they can guide them through the regulations and equip them with the documentation and solutions to meet the new regulations.

tradelinkdirect.com

Sidey celebrates 90 years trading



Sidey is set to celebrate its 90th Anniversary in August and Sidey's Joint Managing Director, Steve Hardy reflects on how the business has changed over the years: "We were first established in 1932 as a small glazing firm based in Perth. I've been with Sidey for over

26 years, having originally joined the company in January 1996 in the retail sales department and then started the Trade, Newbuild and Commercial divisions in November 1998. In the time that I've been with Sidey we have expanded into the sectors I've previously mentioned. Our product range has vastly improved and increased over the years and can offer colours and solutions we could never have dreamed of 5-10 years ago."

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SUPER SOLAR

In a world that is steadily warming, and with energy bills also on the rise, solar control products are playing a vital role in maintaining the comfort for homeowners, says Paul Higgins of TuffX.



The average British person spends approximately 92% of their time indoors, which equates to less than two hours outside each day. Couple this with the pandemic-driven rise in flexi and full-time home working, and many homeowners now spend more of that time in their properties than ever before.

So, when it comes to building or home improvements, it is paramount that all products work hard to optimise the comfort of living and working spaces, and overall contribute to making the home as healthy and efficient as possible.

SAVING ENERGY

When temperatures soar during the summer months many see their energy bills spike, having relied on fans and air conditioning units to maintain comfortable indoor temperatures. An effective and achievable way to reduce the amount of heat entering the home is to opt for solar control window and door products. Essentially, these products work by reflecting incoming heat away from interior spaces, keeping them cooler with less need for expensive air conditioning.

HOME COMFORT

When it comes to designing the home, comfort is key. This should include considerations beyond just interior layouts, soft furnishings – and of course temperature control! Placing a priority on natural light flow and boosting ambient light levels should also be high on the list. Not only will this further reduce energy bills, but improved natural light levels carry a wealth of health benefits. Solar products are especially useful here, allowing for greater expanses of glass and light, without the added discomfort of increased heat or glare.

SUSTAINABILITY

Reducing our \rm{CO}_2 output, both globally and individually, is becoming ever more important. Not only is excessive energy use in the home costly to the homeowner but also to the environment. For the environmentally conscious, solar glass is a greener alternative to standard non-solar products. Certain solar counterparts can reflect up to twice as much heat away from the home while still allowing high levels of light transmission, again, doing away with the need for expensive air conditioning and additional artificial lighting.

BUILDING REGULATIONS

The growing need to prevent heat from entering our indoor spaces is now keenly recognised by the Government, and has been reflected in the recent updates to UK Building Regulations. Document O, which focuses specifically on the mitigation of heat, has introduced new thresholds for builders and installers to adhere to in this regard. Going forward, compliant solar control products will play an important part in allowing builders and installers to comfortably achieve these new standards.

Paul Higgins is commercial director at TuffX

FOR ENVIRONMENTALLY CONSCIOUS END CUSTOMERS, SOLAR GLASS IS A GREENER ALTERNATIVE TO STANDARD NON-SOLAR PRODUCTS

Senior makes waves at new development

A new luxury residential apartment scheme in Southend-on-Sea in Essex has combined a classic Art Deco design with a modern aluminium fenestration package, featuring doors, windows and curtain walling solutions from Senior Architectural Systems.

The new Clifftown Shore residential development boasts a stunning location close to both Southend-on-Sea's seafront and the nearby Conservation Area, which encompasses some of the coastal city's most celebrated local architecture including the 1912 built Cliff Lift funicular railway. Taking inspiration from the Art Deco style of the neighbouring buildings and the beauty of the natural landscape, the undulating 'waves' of the white concrete framed building have been further accentuated by the curved installation and slim sightlines of Senior's thermally-efficient SF52 aluminium curtain wall system.

The stunning views from the individual



apartments have been framed using Senior's patented PURe® tilt and turn aluminium windows, with PURe® SLIDE aluminium doors providing access to the outdoor terraces. The thermal efficiency achieved by Senior's PURe® aluminium system has been further enhanced with the use of energy-efficient triple glazing.

The main entrance to the development features Senior's aluminium PURe® Commercial Doors to provide safe and secure access. As well as contributing to a more energy-efficient building envelope, with all of Senior's aluminium windows and doors comfortably meeting the new lower U-value targets of Part L of the Building Regulations, the use of the PURe® system also offers improved acoustic performance.

Owing to the coastal location of the development, Senior's aluminium fenestration systems were powder-coated in marine grade Matt Black to offer additional protection from the elements and provide an attractive contrast with the white building design. The installation of aluminium brise soleil, also powder-coated to match the aluminium windows, is both an attractive and practical feature, and will provide solar shading and protection against solar gain.

Designed by LAP Architects and built by Cura Construction, all of Senior's aluminium fenestration solutions were fabricated and installed by supply chain partner Glass & General. Set on the former site of a pub and a fish and chip shop, the stunning new



Clifftown Shore residential development has breathed new life into the Western Esplanade in Southend-on-Sea. In addition to the 51 luxury one, two and three bedroomed apartments, the development also features a ground floor restaurant and cocktail bar.

01709 772600 www.seniorarchitectural.co.uk

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COMMERCIAL

SELF BUILD



Garador launches new and improved Gararoll



Roller doors are one of the most popular designs for modern garages, but over time a build-up of dust and dirt on the surface of the door can cause abrasion on the paintwork which can lead to scratches and unsightly markings. To combat this problem, **Garador** has developed DuraBelt. This is new technology

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The water mar

Rainwater Harvesting Stormwater Management

Electrorad introduces the Thermastore High Heat Retention Storage Heater



Lectrorads' newest edition to its family of electric heating has launched! Richard Brown, Managing Director at Electrorad says "the R&D team have worked tirelessly to ensure the BRE, BSRIA and LOT20 boxes are firmly ticked and that we are recognised on the SAP database within the high heat retention category. Our ThermaStore HHR Storage System really does bring all the great advantages of storage heating without any of the negatives".

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have heat whenever you want it throughout the whole of the day, unlike the more traditional heaters that can often only provide enough heat for start of the day then run out toward the end. The ThermaStore also has optional app control too which is compatible with Alexa and Google Home giving you voice control of your heating!

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SHOW PREVIEW

SHOWCASE OF RCI INNOVATIONS

Registrations for the Roofing Cladding and Insulation (RCI) Show, which is being held at Stadium MK, Milton Keynes 18-19 October, are now open.



The RCI Show will be celebrating its sixth year as the UK's dedicated roofing, cladding and insulation show this October at Stadium MK.

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

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

The seminar programme will be launching at the beginning of August – confirmed subject areas include: Modern Methods of Construction (MMC), Inflation, Brexit and moving to UKCA markings, Cladding Regulations, Building Safety Act 2022, Fire safety, Sustainability, Electric vehicles, Supply chain issues and more!

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

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There are many more still to come...see you there in October to find out!

Visit the website to find out more and secure your place at the show: WWW.RCISHOW.CO.UK

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Gaining momentum



PAUL Heat Recovery, an employee owned company specializing on domestic ventilation, has now become a community partner with Hibernian Football Club. "Based on strong company culture and strive for excellence, we are happy to give back into our community and support a club that has a similar ethos." Stefan Huber

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to help you tailor your stove to your tastes and your environment. This stove benefits from **Charlton & Jenrick's** state-of-the-art firebox combustion technology for Ecodesign 2022 ready, DEFRA exempt heating as standard, and the clearSkies Level 5 certification. Designed and engineered to be extremely efficient and environmentally friendly. To realise the full potential and low emission from the stoves, they recommend using top quality fuel.

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

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

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

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

By using THERMOMUR® ICF moulded expanded polystyrene (EPS) to create the formwork and JACKODUR® ATLAS extruded polystyrene (XPS) to create an insulated floor slab, as well as JACKOBOARD® insulated tile backerboard for internal tiling in bathrooms, wetrooms and other areas, developers can ensure that their projects are sustainable and energy-efficient.

JACKON THERMOMUR® achieves a u-value of



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SHOW PREVIEW

THE BIG ONE IS BACK

The Birmingham edition of UK Construction Week – claimed to be the UK's "largest event for the built environment" – returns to Birmingham's NEC from 4-6 October 2022.

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

Designed to "connect the whole supply chain and be a catalyst for growth," say the organisers, UKCW Birmingham is being hailed as the "must-attend construction event this autumn" and is expected to see around 25,000 attendees. Visitors will be able to find sections dedicated to Building Materials, Digitalisation, Infrastructure, Energy, HVAC, Surface & Materials, Timber, Offsite Construction and Skills & Careers.

SESSIONS

Officially opened by architect and Channel 4 presenter George Clarke, UKCW Birmingham will feature "sessions and seminars led by industry experts" across the show's six stages:

• UKCW Main Stage – tackling "overarching construction industry topics," with a mixture of keynotes, panel debates and case studies from industry leaders.

• Sustainability Hub – hosting the conference programme at the heart of Timber Expo, the hub programme will tackle the issues, layout strategies and present exemplar case studies to help the sector reach its net zero targets.

• Infrastructure Hub – the main feature content within Civils Expo, the Infrastructure Hub will deliver a three-day programme of case studies debates, networking opportunities, and keynote speeches.

• Digital Construction Hub – the show's "beating heart of innovation," the Hub will deliver a series of presentations and panel discussions including topics such as Information Management using BIM.

• CPD Hub – a mix of industry relevant CPDs delivered by industry experts, association partners, government departments and exhibitors.

• Offsite Alliance Hub – three days of debate, looking at how to change the way we think about construction to deliver high quality homes for future generations.

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

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

With more than 75% of exhibitor slots already taken, UKCW Birmingham is on track to be the biggest and best yet.

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

FEATURES

Key features for visitors to enjoy at this year's event include the following:

• UKCW Role Model Awards – celebrating the pioneers of construction. The award ceremony for this event will be taking place on the main stage on 5 October.

• Seminar programme – details of UKCW's "comprehensive seminar programme and CPD opportunities" will be revealed soon.

• Innovation Zone – a dedicated showcase of product innovation.

• UKCW Careers Fair – launched at the show in London and now coming to Birmingham for 2022, get free face-to-face career advice and meet and network with top employers. See you in Birmingham!

To register free for UKCW Birmingham, go to **WWW.UKCW-BIRMINGHAM-2022.REG.BUZZ/PR**





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Getting it right the first time

CHANGE TO THE DECENTRALISED LINE

With design and installation of ventilation systems increasingly essential for both new builds and renovations, Richard Poole of Siegenia looks at how decentralised systems can offer a important way around trickle vents.

A s we produce more tightly insulated buildings, window ventilation alone is no longer sufficient to ensure adequate air exchange and thus protect living spaces from moisture and pollutants.

On 15 June 2022, following several years of consultation, revisions to Part L, F & O of the Building Regulations finally came into force. This was the first update to these regulations in nearly a decade, and the next step on the road to a more sustainable future. The Future Homes Standard ensures that all new homes built from 2025 produce around 75% fewer carbon emissions than those constructed under current regulations, with a final goal of net zero in 2050.

The regulation changes set improved targets for air movement and notably the requirement for enhanced trickle vents in windows. Under this change, all new and replacement windows should be fitted with trickle vents. For two storey properties, habitable rooms and kitchens require window vent performance to 8000 mm² EA, and bathrooms (with or without a toilet) to 4000 mm² EA. There is however an important caveat within the new regulations that could ignite the uptake of heat recovery ventilation for those who do not wish to disturb the sealing and integrity of their windows by drilling holes through them. For homes with a balanced ventilation system i.e., whole-house decentralised or whole-house centralised, trickle ventilators are not required.

Centralised whole-house heat recovery systems have been around for some time and so are well accepted and understood. However, the installation of these systems does require careful design and planning due to the 'spaghetti'-like ducting network required to interconnect all rooms. For this reason, they are normally only considered for new build projects. But even for the new build sector, such an undertaking can be off-putting.

Decentralised whole-house heat recovery ventilation is less understood but offers some meaningful benefits over



its centralised cousin. Decentralised heat recovery ventilation is a great alternative, not only being quite possibly the only viable solution for refurbishment projects, but also offering a less labour-intensive and costly option for the new build market. So, let's look at this system in a little more detail, and the potential installer and consumer benefits.

HOW DO DECENTRALISED HRV SYSTEMS WORK IN HOMES?

Decentralised heat recovery ventilation consists of a wall mounted control panel, duct with an integrated ceramic heat exchanger or accumulator, bi-directional fan, external grille, and filter. Like an MVHR system, the purpose is to reclaim heat, provide fresh air and to extract

DECENTRALISED VENTILATION SYSTEMS ARE A FLEXIBLE SOLUTION IN WHICH COMPACT INDIVIDUAL DEVICES ARE INSERTED INTO THE OUTER WALL, WHICH WHEN CONFIGURED IN PAIRS GUIDE THE AIRFLOW THROUGH THE LIVING SPACE

damp and stale air to prevent condensation and mould.

These units run continuously and automatically switch between air extract and supply in approximately 1 minute intervals. When running in extract, warmed stale air from the room is extracted and heat is collected in the heat exchanger. The cycle then changes and the unit switches to air supply drawing in fresh air from outside and transferring the captured heat to the incoming clean air supply to raise the fresh air temperature before entering the room.

Using heat recovery units as opposed to conventional fans therefore reduces heat losses significantly, with some units able to recover as much as 90% of the heat. Single-room ventilation units also provide a constant supply of fresh air to help maintain a healthy home environment.

INSTALLER BENEFITS

Decentralised ventilation systems are a flexible solution in which compact individual devices are inserted into the outer wall, which when configured

in pairs guide the airflow through the living space. By installing units on a room-by-room basis, the designer can create a highly efficient decentralised whole-house HRV system with airflow rates tailored much more precisely to suit the occupant's needs.

In addition, as each unit is self-contained, there is no need to specify a loft-mounted centrally managed ventilation device – and the associated costly and time-consuming ducting – presenting a further benefit both for renovation work and new build projects. Once the wall opening is prepared, the installation of each ventilation unit is completed in less than one hour.

END USER BENEFITS

In a world of rising fuel and energy costs, the focus on energy conservation has never been greater. A study carried out by the open university in 2018 concluded that 30% of the heat lost in our homes is through conventional ventilation. To put that into context, 30p in every pound we spend on heating is being wasted.

Decentralised units have an integrated heat recovery unit manufactured from ceramic to limit moisture build-up and to provide heat recovery efficiency of up to 90%, thereby dramatically reducing these heat losses to as low as just 3p per pound.

Heat recovery ventilators can also be very economical to run, with the most energy efficient units consuming less than 4 Watts of electricity on the maximum setting and costing around £5 to run continuously for 365 days (based on typical energy costs as of June 22). Furthermore, unlike centralised systems, maintenance contracts are not necessary with decentralised ventilation; any cleaning requirements can simply be carried out by the homeowner.

With so many cost and efficiency benefits for installers and end users alike, it is sensible for developers to consider decentralised HRV systems as a credible alternative to both centralised systems and trickle vents.

Richard Poole is head of ventilation sales at Siegenia

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LOCAL SOLUTIONS FOR LOW-CARBON HEATING

Steve Richmond from Rehau Building Solutions looks at the key considerations when commissioning a district heating network – an key option to consider in the race to reduce carbon in residential developments.



Though the UK's green transition will likely be ushered in by a multitude of technologies, district heating has emerged as one of the forerunners of a low-carbon nation. Recent schemes such as the £288m Green Heat Network Fund (GHNF) as part of the wider £338m Heat Network Transformation Programme (HNTP) have demonstrated government faith in the technology as a key method of achieving net zero.

For this reason, many housing developers are beginning to explore the possibility of using district heating for their low-carbon housing projects. Here, it is important to examine the key considerations for integrating a district heating system into a low-carbon housing development in order to derive the maximum benefit.

SUCCESSORS TO THE GAS BOILER

There is much debate around which technology will succeed the traditional gas boiler come the introduction of the Future Homes Standard in 2025. Of these, heat pumps, district heating networks and hydrogen appear to be the most touted. However, it should be noted that with the latter currently early in its R&D phase, it won't be available come the scheme's introduction, meaning it remains a long-term potential solution.

For this reason, heat pumps and district heating networks remain the most sensible options. That said, many heat networks can make use of a large, centralised heat pump as a heat source, with the latest statistics from the Heat Networks Planning Database (HNPD) indicating that this is the case for over 70% of planned installations.

Naturally, this means that the question is not of heat pumps versus heat networks, but individual heat pumps versus heat networks. This subject should therefore be broached on a project-byproject basis, with both technologies able to offer a wide variety of benefits.

Initiatives such as the Boiler Upgrade Scheme (BUS) offer ample support for the uptake of domestic heat pumps, but do not extend to new build properties, unlike the GHNF. Regardless of which technology is opted for, it is critical that these alternatives are adopted sooner rather than later, ahead of the UK Government's ambition to phase out all new purchases of gas boilers by 2035.

THE GENERATION GAME

The first thing to be aware of before

undertaking a district heating installation is the fundamental differences between each generation of this technology, as the applications and benefits can vary wildly depending on the system specified.

At present, most district heating networks installed in the UK are third generation, circulating water at 70-95°C with a gas combined heat and power (CHP) system usually as the source. While these systems still make use of fossil fuels, distributing heat from a singular energy centre proves more efficient than heating homes individually, resulting in carbon savings.

That said, the true potential for district heating networks lies in fourth generation systems. This technology operates at a lower flow temperature than its predecessor, usually around 40-60°C, reducing heat losses and increasing energy efficiency. It should also be noted that due to this lower temperature, fourth generation heat networks are ideally suited to polymer pre-insulated pipework.

Moreover, this also presents an opportunity for the build to be heated by a number of more environmentally-friendly sources – a key consideration for any low-carbon housing development. This includes heat pumps, solar thermal systems and even waste heat recovery systems from nearby data centres. Fifth generation systems, using ambient loops and heat pumps in each building to boost the temperature are also in development, though the main focus remains on transitioning from third generation networks to fourth generation.

MATERIAL SPECIFICATION

One of the final considerations before commissioning a heat network for a housing project should be material specification – namely, polymer or steel pre-insulated pipework. The choice here can have a knock-on effect on network design and installation, so it is important to weigh up the applications of each.

Steel has traditionally been used for district heating networks, is available in larger sizes and can also withstand higher temperatures (above 100°C) and pressures. However, with newer low-temperature systems, these high temperatures are not typically needed anymore.

By its very nature, the installation of steel pipework is more complex, requiring wider trenches and specialist welding contractors. Moreover, due to the large forces involved, steel pipework requires expansion loops to be fitted, adding to the overall complexity of the build as more joints and pre-fabricated sections are needed.

Together, these factors result in a slower installation, which presents the risk of running over and impacting the wider build. Polymer pipework, on the other hand, facilitates a much quicker installation in order to minimise the impact on the rest of the project.

Large diameter polymer pipes made of PP-R can be used for the main spine of the network, creating a fully polymer system from the energy centre to each individual house. A whole polymer network will typically have lower heat losses than an equivalent size steel network as the lambda value of the polyurethane foam used in PE-Xa pipe is lower.

Lastly, and perhaps most critically, polymer pipework also provides the best level of corrosion resistance compared to rival solutions. This provides the housebuilder with the highest confidence level in the system's long-term performance.

CLOSING THOUGHTS

Entering the world of district heating can be a daunting prospect for any housebuilder, with multiple factors to take into consideration. The points outlined here offer only a glimpse into the vast potential of this technology, though THE FIRST THING TO BE AWARE OF BEFORE UNDERTAKING A DISTRICT HEATING INSTALLATION IS THE FUNDAMENTAL DIFFERENCES BETWEEN EACH GENERATION OF THIS TECHNOLOGY

should offer a good starting point for any developer looking to make use of a heat network for their housing project.

Primarily, housebuilders should consider fourth generation networks due to their synergy with low-carbon heat sources such as heat pumps, which will help the site achieve a lower carbon footprint once in operation. Here, specifying polymer pipework over steel might also be a sensible choice, as it is better suited to fourth generation networks and quicker and easier to install.

Steve Richmond is head of marketing and technical at Rehau Building Solutions



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Housebuilder specifies Stelrad Radiators



Radiators are the key sharer of heat around homes in the UK and many housebuilders are specifying designer radiators because they want their customers to benefit from a premium product as part of the new home's specification. One of these is Erris Homes, based in Leeds. The company has

chosen the Compact with Style design radiators from **Stelrad**. Purchasing radiators from a locally based manufacturer is definitely a plus for Erris Homes as it means it is not only supporting its local supply chain but also minimising its environmental impact due to the reduced distance of transport for the radiators from the National Distribution Centre alongside the Stelrad factory to the sites around Yorkshire.

0800 876 6813 www.stelrad.com

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

links to advertisers' sites, as well as daily email alerts to keep you as informed as possible.

www.hbdonline.co.uk

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FIND OUT MORE www.rockwool.com/uk/NyRock



Lower carbon impact of wall panel system



Fibo's leading waterproof wall system has been confirmed to have a total lifetime carbon footprint that is 37% lower when compared to tiles in a new independent study. This means that the Fibo waterproof wall system is not only five times faster to install, more

robust and more hygienic than tiles, but it is also the more environmentally conscious choice for new build and refurbishment projects. Fibo wall panels are constructed primarily from wood, in fact, the high-quality plywood core accounts for 80% of the panel weight. The wood captures carbon during the growth of the tree and stores it for the lifespan of the product. Customers can be assured of the sustainability of the material.

01494 771242 www.fibo.co.uk

Thomas Crapper supports Just One Tree



Thomas Crapper has teamed up with the impressive Just One Tree initiative; the luxury bathroom manufacturer has committed to plant one tree for every wooden toilet seat sold.

286 wooden toilet seats were

sold between January and April 2022 – which will ensure 286 trees planted as well as support for associated projects. For further information on the Thomas Crapper range, please visit the Thomas Crapper website.

www.thomas-crapper.com



OMNIE whole-house solution for Devon barn conversions

The conversion of three stone-built agricultural buildings near the beautiful Devon town of Totnes is employing a full selection of renewable and low-energy technologies from the range of Exeter based manufacturer, **OMNIE**, to create a comfortable living environment. The hundred year old buildings at Ritson Farm are being renovated and turned into highly desirable rural retreats by The Dartmouth Building Company. Each of the luxury homes is to be heated by an LV air source heat pump, which will be connected via multi-branch manifolds to OMNIE's Staple underfloor heating system across the ground floors with the company's LowBoard being specified to warm the upper levels. Then to maximise fuel efficiency and help guarantee a healthy indoor living environment, a constant supply of pre-warmed and filtered fresh air will be supplied via one of OMNIE's Zehnder ComfoAir mechanical ventilation with heat recovery (MVHR) units. As well as installing internal wall insulation, the vaulted roofs to the early 20th century buildings have been fitted with 150 mm of Celotex and a layer of TLS Gold Multifoil incorporating a breather membrane. Coupled with the ComfoAir MVHR units, the development also illustrates OMNIE's capabilities to design and deliver its 'Whole-House" concept.

projects@omnie.co.uk www.omnie.co.uk

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www.recticelinsulation.co.uk
THE RACE FOR SPACE

Kevin Gamble of Saint-Gobain Weber explains how steel frame construction with external wall insulation (EWI) can help to increase not only thermal efficiency but internal area when building new homes and extensions.

The shortage of skilled tradespeople to build homes in the traditional way has been a real problem for a number of years, and the situation isn't going to get better any time soon.

This is one of the reasons we will need to rely on the development of new systems, such as framed construction, to help us address the housing crisis.

Developers, housebuilders and housing associations are starting to realise the benefits of offsite and modern methods of construction – quicker build time, improved build quality, cost savings and less reliance on skilled labour. But until recently, little attention has been paid to the other obvious benefit associated with new methods of construction such as steel frames: more space.

Masonry construction is typically thick, heavy and slow. Several bricklayers, even with years of experience, could take weeks to construct a typical four-bedroom home. And there's also another important point which needs to be considered. As Building Regulations progress towards the Future Homes Standard in 2025, achieving the required U-values will likely become harder to reach with masonry construction.

Choosing a lightweight steel frame system can reduce the need for hefty foundations – significantly reducing build time and in turn cost. A high quality, prefabricated system can be installed by a less experienced workforce. In addition, constructing with a steel frame is not reliant on good weather, and there are fewer inherent concerns that may exist with a timber frame system for example, such as height limitations or the possibility of shrinkage.

EWI SYSTEMS

Steel frames are a very reliable form of construction and when used with a good EWI system there are huge benefits.

Using an EWI system improves the thermal performance of a building and therefore, the interior comfort. Because EWI is suitable for most building types, it can be used to add insulation to existing brick buildings and enables anyone renovating or upgrading a home to decorate and remodel with whatever





finish they require. It can even be finished with a brick slip system to give the appearance of traditional brick but is installed in a fraction of the time.

The whole concept of EWI means it's ideal for new build structures as it simplifies the wall construction and is very lightweight. And as it delivers great thermal efficiency with much narrower walls, with costs soaring, any gain on internal space is a win-win for both developer and homeowner.

A conventional masonry construction would require a 102 mm brick, 100 mm cavity and 100 mm block. Add to that a 12.5 mm plasterboard and a 3 mm layer



of skim and the total depth is around 330 mm. Moreover, the typical insulation material used in the cavity is likely to achieve an unimpressive U-value; typically around 0.3 W/m²K.

Contrast that with the walls at a recent project in the conservation area of Learnington Spa where a dilapidated department store has been extended to create a block of 26 luxury apartments and retail space.

Architect Tate Hindle opted for a steel frame extension and EWI system. The existing walls were of solid concrete and, including EWI, were 485 mm deep and achieved a U-value of 0.18W/m²K. The frame extension with EWI was designed to have an even lower U-value of 0.13W/m²K, with an overall depth of just 364 mm.

This was important for the project as a key goal was to maximise the internal space within the apartments without going beyond the original footprint of the property. For potential homebuyers and tenants any extra space is hugely desirable and for developers and housebuilders, it makes a home more marketable.

Assuming the same parameters for an average detached house with, for example, overall outside dimensions of 5.4 x 8.6 m on plan, using steel could potentially increase the internal floor area

USING AN EWI SYSTEM IMPROVES THE THERMAL PERFORMANCE OF A BUILDING AND THEREFORE, THE INTERIOR COMFORT

by an impressive 14.8%.

To achieve the same thermal performance, a building with typical masonry construction filled with mineral fibre insulation would require a 180 mm wide cavity to achieve the U-value of 0.18W/ m²K, thereby reducing the internal floor area as a result of the thicker walls.

On the Leamington Spa project illustrated here, a multi-layer system was specified. The flexibility of EWI meant that on this particular project the perfect colour of finish could be used to ensure the building preserved the town's historic features, whilst providing modern, thermally efficient and spacious accommodation.

Kevin Gamble is technical and certification manager at Saint-Gobain Weber

New score & snap tile backer board from Euroform



new, lightweight, 'score & snap' tile backer board has been launched by construction materials supplier Euroform. Named 'Easyboard®', the fibre cement board is designed for use in areas of high moisture, such as kitchens and bathrooms, and has secured an A1 non-combustible rating.

Easyboard[®]'s 'score & snap' nature is an innovative development for a tile backer board – it is scored easily with a traditional utility knife and snapped to size without the use of specialist cutting equipment. In addition, its relative lightweight (approx. 13 Kg per 800mm x 1200mm sheet) means that it can be lifted and fitted by a single installer or DIY user. Easyboard[®] has been classified A1 "noncombustible" according to (BS) EN 13501-1.

Manufacture is via a unique process, combining Ordinary Portland Cement with a reinforcing matrix, that enhances workability and handling over traditional fibre cement boards.

Available in 12.5mm thickness Easyboard® is inorganic, making it very dimensionally stable compared with traditional wood-based boards.

Commenting on the new product, Mark Atkinson, Euroform's national commercial manager, said, "Easyboard® is lightweight and a handy size for a single person to install.





Its workability, with its ease of cutting, is a significant improvement over traditional tile backer boards. Competitive pricing is also going to make it an attractive new alternative."

Easyboard® is only available from Euroform. A video demonstrating the ease with which Easyboard® can be cut via the 'score & snap' method can be seen at: www.euroform.co.uk/ easyboard

Euroform recommends Easyboard® is installed in brick bond fashion with a flexible adhesive used when placing tiles. It can be used as a wall tile or floor tile substrate.

01925 860 999 www.euroform.co.uk

Launch of the new Genesis range



HiB Novum has entered the fitted furniture market with the launch of the new Genesis range. Designed for ease-of-fit, with a plethora of configurations, finishes and complementing accessories, customers can create a look to suit their needs. To enhance flexibility even further, Genesis's pre-built units are suitable for wall-hung and floor standing schemes, which are available in a carefully curated range of

finishes, with accompanying countertops, handles, underlighting with optional PIR sensors and the Aero rimless WC. To achieve a high level of customisation without added complexity, the new HiB Novum brochure has been structured using an easy to use, step-by-step approach.

sales@hib.co.uk www.hib.co.uk/product/genesis_fitted_bathroom_furniture

Launch of next generation underlayment



F. Ball and Co. Ltd. has launched Stopgap 1500 AquaPro, the latest addition to its range of highperformance, water-mix smoothing underlayments. Stopgap 1500 AguaPro uses the latest technology to create the next generation of water-mix smoothing underlayment and can be applied over old adhesive residues, including bitumen, carpet tile tackifiers and ceramic tile adhesives, eliminating the need for

mechanical preparation. In such applications, there is no need to prime beforehand, saving further time and expense. Fast-setting and fast-drying, it is walk-on hard in as little as 60 minutes after application and ready to receive floorcoverings from just four hours.

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

Reginox goes Dutch with its latest sink



With a nod to its Dutch roots, Reginox has launched Amsterdam, a stunning new range of granite sinks, available in a choice of three colours. The Amsterdam is simple in design and effortlessly chic. While its hardwearing and tough, visually it is stylish and effortlessly chic making it the perfect addition to any kitchen. The Amsterdam range is made of granite and composite resin making it very hygienic and easy

to clean and maintain ensuring that the beauty and strength of the sink can be maintained for longer. Available in three colours - black silvery, grey silvery, pure white- the Amsterdam range comes in a choice of two different sizes and is suitable for either inset or undermount fitting.

01260 280033 www.reginox.co.uk

The gold standard of BLANCO craftmanship



BLANCO UK has launched Satin Gold as the latest finish for their range of high-quality LINUS and LINUS-S tap designs. Gold represents many things: achievement, triumph, prosperity, prestige, and sophistication. It is a colour of great symbolism, epitomising the very ideal of luxury. BLANCO's Satin Gold taps are designed to evoke these same sensations of grandeur and extravagance. A Satin Gold tap is an attention-

grabbing statement piece, a source of opulence that nevertheless looks chic and modern in the kitchen especially when a part of a BLANCO UNIT. The BLANCO UNIT combines sinks, taps, in-cabinet waste and organisation systems to create innovative and flexible solutions for modern kitchens.

www.blanco.co.uk



for the base of walls



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Mix match and coordinate with Kaldewei

When creating a new bathroom, or undertaking a refurbishment many home owners want to design a room that isn't just practical and functional but reflects their own personal style.

For some that may mean mixing and matching, but more often a coordinated look is preferred. Kaldewei, manufacture their own superior steel enamel sanitary ware, so with their own coordinated colours they can match the shades and tones of a room with washbasins, shower trays and bathtubs.

From the classic monochrome variants of Alpine white and black through to softer tones of beige, plus multiple shades of grey including five cool shades and eight warner tones. The sanitary side is only one element, taps, showers, and showerheads are now available in other offerings black is popular along with shades of gold and bronze. With their Nexsys shower tray Kaldewei can match their flush design cover with whatever finish has been selected.

01480 498053 www.kaldewei.co.uk



Striking new colours in the Moores Affinity Collection

Moores have expanded their Affinity Kitchen Collection through the introduction of a sophisticated new colourway within two of their ranges – Vita and Porto. Always ensuring that their colour palettes bring on-trend styling to kitchens, this striking new shade embraces colour confidence in the home, pairing a statement tone with quality craftmanship and attention to detail. The new Indigo Blue colour is a contrast from the neutral hues and soft greys that have dominated homes for the past few years but offer an equally versatile look to create kitchens with maximum impact, as Neil McDonald, Design Manager at Moores, explains. "Spacious open plan living means that rooms are often lighter and brighter, which opens up the possibilities for dark kitchen cabinets that can be complemented by simple wall coverings and flooring. The expansion of our popular Indigo Blue shade gives housebuilders scope to tap into a trend which is eye-catching and dramatic. After all, homeowners are looking for kitchens which are practical and double up as a multifunctional entertaining space." Moores' Vita and Porto ranges are expertly constructed in the UK employing quality British craftsmanship. With an extensive range of doors and cabinets to choose from, it's never been simpler for housebuilders to create a bespoke look new developments.

01937 842394 www.moores.co.uk/affinity



Jarvis specifies Earthborn paints

Jarvis Homes, a family company for more than 250 years, set out to improve the sustainability of its building processes and specified **Earthborn** paints for its Chequers Green development near Ashford. Russell Jarvis, company director, said "We switched to Earthborn as part of a drive to make our houses healthier to live in and more environmentally friendly. Their paints do just that because they are made without oils or acrylics, which means they are virtually VOC free and do not give off any harmful emissions. It enables newly decorated rooms to be occupied quickly because there is no worry about emissions or odours."

"At Chequers Green we opted for Earthborn, applying it onto gypsum plaster, and we used Eggshell for the woodwork." Earthborn Lifestyle Emulsion has a hardwearing, classic low sheen finish. Earthborn Eggshell is water based and provides washability and scuff resistance. Both products are available in Earthborn's signature colour palette of 72 colours plus white and the 12 Modern Country Colours developed in partnership with Country Homes & Interiors.

01928 734 171 www.earthbornpaints.co.uk

Multiboard meets BS 5385 guidance on tiling substrates

Thanks to the continuing efforts of The Tiling Association (TTA), standards of training and workmanship across the industry have improved dramatically, while many specialist contractors and other building trades have made the switch to using high performance tilebacker boards, such as **Marmox** Multiboard, since BS 5385 Part 1 directed plywood was not a suitable substrate. The deterioration in quality of plywood – especially the cheaper imported types – has resulted in the commoditised wood product no longer being regarded as a "stable and rigid background" for tiling operations. In fact it is likely to delaminate and even rot if its moisture content changes. Multiboard, by contrast, is fully waterproof as well as offering a high thermal insulation value, with the polymer modified concrete covering to the XPS core offering an ideal surface for plastering or direct tiling. Available in a range of thicknesses, Multiboards are both light to handle and easy to cut, while still being able to sustain substantial loadings if required, including as part of a floor build-up or supporting up to 100 kg/m² across a wall. They can be fixed using the special plugs available while, Marmox 360 adhesive will seal the joints in situations like wetrooms, pool areas and even exposed situations like balconies.

01634 835290 www.marmox.co.uk

ONE STEP AT A TIME

Kevin Underwood of the British Woodworking Federation (BWF) discusses the key components of safe staircases.

reaction of the provides a functional role, but it's also a central feature of a property. While staircases are an important functional and aesthetic feature, they pose a major safety risk. The Royal Society for the Prevention of Accidents (RoSPA) found that every year there are over 700 fatalities and more than 300,000 A&E attendances due to falls on stairs in the home. In fact, 84% of injuries on stairs occur in the home.

Here we'll explore the key considerations of a safe staircase design, how building regulations are evolving to help reduce accidents in the home, and what this means for housebuilders and developers in meeting new standards.

SAFE STAIRCASE DESIGN

There are many factors that impact the safety of a staircase, revolving around two key areas: the rise and going. A general rule is that the dimensions of the rise and going should allow a natural stride – helping ensure that the user does not need to overstretch or take unnecessary small steps. The best way to do this is to keep the going over 250 mm, and the rise of the stairs as consistent as possible.

The nosing of each stair should also be visible so the user can easily identify each step. For patterned or tiled stairs, using a separate colour or material can help the nosing stand out. In addition, the nosing should not extend too far over the step beneath it, as this can produce a trip hazard.

The finish and slip resistance of the staircase should also be considered. If the going of the stair is 300 mm or more, the slipperiness of the surface is less of a safety factor, but for stairs with smaller treads, the slip resistance should be considered. The nosing is where first contact is made when descending the stairs and a slip resistant material can help prevent falls.

To help prevent accidents, handrails and guarding should also be incorporated into the staircase design. In addition to being an attractive design feature, handrails offer extra safety support and should be installed where there is a rise of over 600 mm. If the stair width is more than 1,000 mm then a handrail should be



fitted on both sides. The handrail should be within easy reach at all points on the staircase and positioned 900-1,000 mm above the pitch line of the stair or floor.

The handrail can also form the top of the stair guarding. Guarding helps prevent falling over the side of a stair and is required for staircases at any height over 600 mm, or where there are two or more risers. The guarding could be a screen or balustrade, but it must be high enough to stop people falling over it and strong enough to withstand someone falling into it. For buildings where the stair is used by children, the gaps in the guarding should be less than 100 mm to reduce the risk of children falling through or becoming trapped in the guarding.

Following these practices will help ensure a staircase is as safe as possible. In fact, research has shown that stairs produced in line with the British Standard code of practice for the design of stairs (BS 5395-1:2010) could result in 60%



fewer falls. Not only would this save many lives, but it would also reduce the burden on A&E departments and limit the impact that a serious accident on the stairs can bring.

TO HELP PREVENT ACCIDENTS, HANDRAILS AND GUARDING SHOULD ALSO BE INCORPORATED INTO THE STAIRCASE DESIGN.

EVOLVING REGULATION AND ITS POTENTIAL IMPACT

At the BWF we're working with the Department for Levelling Up, Housing and Communities (DLUHC) on a revision to Approved Document K (AD K) for Requirements K1 and K2. AD K covers protection from falling, collisions and impacts in and around buildings, while Requirement K1 states stairs shall be designed, constructed and installed to be safe for people moving between different levels. Requirement K2 outlines that stairs should be provided with barriers where it is necessary to protect people from falling.

Based on research by the Building Research Establishment (BRE) which demonstrated that stairs, including those that conform to existing building regulations, could be changed to reduce the number of accidents that occur on them, BS 5395-1 has been developed.

BS 5395-1 recommends several key changes for private stairs including that there should be graspable handrails on both sides of the stair, and that the minimum going for a private stair should be 250 mm and the maximum rise 200 m. In addition, the changes would set out a new maximum staircase pitch at 38.5 degrees, a minimum clear width measured between handrails of 800 mm as well as ensuring the walking line of the winder is centred on the newel post.

If these changes are introduced into AD K, housebuilders and developers will need to dedicate more space to the stairway as the stairs will become both wider and longer. In turn, this could mean that house designs would need to be revisited and plot sizes made bigger, or room sizes reduced.

By working in collaboration with stair manufacturers and housebuilders and developers, the BWF hopes to develop AD K guidance to maximise staircase safety, while minimising the impact on the housebuilding industry.

Kevin Underwood is technical director at the British Woodworking Federation (BWF).

Norcros Rock-Tite is a hit with landscapers!

N orcros Rock-Tite Exterior Porcelain & Stone System was developed specifically to appeal to landscape designers, tilers and DIYers who want an easy-to-use system for installing the increasingly popular 20mm porcelain tiles externally for patios and terraces. One of the latest recommendations from a landscaper indicates that the product is certainly making life easier for workers in that profession.

Landscaper, Brett Corcoran of TC Fencing & Landscaping, has recently used the product on a patio job in Staffordshire and was full of praise once the project was completed: "After using the Rock-Tite range of products throughout a recent project completed I can strongly recommend it," he said. "I can recommend the Rock-Tite products to not only the building trade but DIY customers too due to their simplicity to use."

This project was an ideal candidate for Norcros Rock-Tite. The home owner wanted to extend their living space into the garden with the installation of porcelain tiles to form a new outdoor leisure area, making the transition from internal to external space as seamless as possible.

The end-result is highly attractive and definitely a very worthwhile improvement to the property. The tiles on this project are Johnson Tiles, 20mm porcelain, 600 x 600, from their Boundary collection in colour Dune. Laying the tiles was made much easier than it would otherwise have been without the assistance of Norcros Rock-Tite.



The system comprises a Primer, a choice of Mortars (either with or without sand) and a Brush-In Grout. The product provides a high strength mortar for bonding concrete, natural stone and porcelain paving slabs to a hardcore or solid base. The Rock-Tite additives improve performance, workability and freeze/thaw resistance of the finished mortar mix. The choice of mortars allows customers to purchase their sand separately if they wish.

The full system includes Norcros Rock-Tite Porcelain Primer in three 5kg bags, supplied in a 15kg mixing bucket. Part 2a (without sand) is supplied in a 12.5kg bag, while the alternative Part 2 comes in a 25kg bag. The system includes a ready-to-use Brush-In Grout, in three 5kg bags supplied in a 15kg bucket. The grout colours available are Blanched Almond, Steel Grey and Tropical Ebony, matching other grouts from Norcros Adhesives.

All elements of the Rock-Tite system are covered by the Norcros Adhesives lifetime guarantee.

01782 524 140 www.norcros-adhesives.com

Solution Fires bolsters management team



Solution Fires, a new generation of highly efficient, authentic and stylish electric fires has strengthened its management team with the appointment of Andy Macey, as Sales Manager. Andy joins the Solution Fires team with over 30 years' experience in the industry, holding senior roles with several major electric fire manufacturers

throughout his career to date. With his extensive knowledge of the sector, Andy will be responsible for growing the Solution Fires brand and its presence in the north of the country, by expanding its network of trusted retailers. Solution Fires launched in 2020 in response to a growing demand for modern electric fires and media walls, and its range is sold exclusively in the UK and Ireland with the help of its carefully selected retailers.

solutionfires.co.uk

Going with the flow



Sika Everbuild has introduced a new alternative packaging design for its SikaCeram®-621 FlowFix Jointing Compound to make life easier for both merchants and trade. SikaCeram®-621 FlowFix Jointing Compound is now available in sturdy

15kg buckets as well as bags, which will be easier for merchants to store and display outside. Trade customers will also benefit as it'll be easier to transport and, because each bucket contains three separate 5kg sealed pouches, it doesn't all have to be used at the same time, meaning it's less wasteful. The SikaCeram[®] FlowFix system is designed for use with porcelain tiles, and as the trend for installing patios using tiles rather than traditional stone flags takes hold, it is becoming a popular choice.

0113 240 3456 www.everbuild.co.uk



H+H achieves BES 6001 Excellent ranking

H+H is delighted to have achieved the much sought after "excellent" ranking under BES 6001 framework for responsible sourcing. The standard requires manufacturers to demonstrate compliance with and oversight of many aspects of environmental and sustainability performance. This includes energy efficiency, environmental stewardship, water management and ethical business practices. Critically, a manufacturer must also demonstrate that its own supply chain is similarly committed to continuous environmental improvement, which is achieved by continuous oversight of suppliers' certification to recognised environmental, quality and health and safety standards. Graham Sargeant, Development and Management Systems Manager at H+H commented: "This type of certification considers the supply chain as a whole, which makes complete sense. The degree of collaboration required for H+H to achieve its Excellent ranking sits very comfortably within our overall strategy to be "partners in wall building" and it is a way of working that needs to be embedded throughout the industry. "Never has there been as much focus on sustainability environmental standards and never has the need for this focus been so evident. As an industry we have to work together. Environmental improvement is no longer a "nice to have" – it is essential."

01732 886333 www.hhcelcon.co.uk

Advanced welcomes fire safety guidance for new high-rise residential buildings

Advanced, has welcomed the amended Approved Document B of the Building Regulations as a "positive step in the right direction to improve fire safety in new high-rise residential buildings".

Published on 1 June 2022, Part B (Fire Safety) offers new improvements to fire safety guidance to ensure tall buildings are made safer in England, as part of a wider package of reforms. A 'significant' addition to the document is the mandatory requirement for new residential developments over 18m to incorporate an evacuation alert system, offering new clarity for those involved in the design or construction of residential developments.

An evacuation alert system is vital to help fire and rescue services inform residents of a change in evacuation strategy during an incident. This gives fire and rescue services an additional tool to use on the ground, alongside existing methods of evacuation, improving safety for residents. To comply with the amended Part B, an evacuation alert system should be provided in accordance with BS 8629 Code of Practice for the design, installation, commissioning, and maintenance of evacuation alert systems for use by fire and rescue services in England.

Amended Part B is designed to meet recommendations from Phase One of the Grenfell Tower Inquiry. Currently the Part B requirement for an evacuation alert system only covers new build high-rise residential buildings. However, since the Grenfell Tower Inquiry also recommends evacuation alert systems for high-rise residential buildings "already in existence", further regulation may follow.

Ken Bullock, Business Development Manager for Evacuation Alert Systems at Advanced, said: "We welcome the amended Part B of the Building Regulations and the clarity it gives when it comes to fire safety. An evacuation alert system gives fire and rescue services a valuable tool which allows them to evacuate residents at risk in a safer, managed way. At Advanced our EvacGo Evacuation Alert System is designed as an easy way to meet BS 8629:19 and so can it offer peace of mind to those responsible for a building that by choosing this system they are complying with Building Regulations.

"We appreciate that new regulation can be confusing, so not only have we carefully designed the EvacGo to take away the hard work for building owners, end-users and importantly frontline fire and rescue services, we also offer a CPD presentation on evacuation planning and BS 8629 Code of Practice. The CPD is suitable for consultants, fire risk assessors and anyone else who needs a better understanding of the requirements of the British Standards Institution code of practice BS 8629."

The amended Part B forms a portion of a



wider update to tighten Building Regulations and provide clearer fire safety rules for the design and construction of residential developments. The Building Safety Act names HSE as the new Building Safety Regulator in England and as such will enforce compliance of the Building Regulations. The Building Safety Act will place formal responsibilities on those involved in the design, construction of any buildings to ensure compliance with building regulations, and will give the regulator greater powers to prosecute for non-compliance. It will be the duty of the people responsible for a building to put in place and maintain a golden thread of information, with their responsibility continuing for the life of the building.

0345 894 7000 uk.advancedco.com





Hydrogen Fired Clay Brick

Michelmersh is excited to announce a global flagship physical study to replace natural gas with hydrogen in brick manufacturing. Sponsored by the Department for Business, Energy & Industrial Strategy (BEIS) UK Government, phase 1 of the project will demonstrate the viability of fuel switching and will see hydrogen used in the clay brick production process at Michelmersh's Freshfield Lane site. The project aims to inspire radical change across the sector and present opportunities and evidence-based research to support manufacturers on their journey to heavily decarbonise the production processes.

To follow the project, or to sign up for your chance to receive one of the first hydrogen-fired clay bricks we produce, head over to:

www.mbhplc.co.uk/hybrick

MASONRY'S ROLE ON THE ROAD TO NET ZERO

Miles Hogg of Lignacite explores how concrete masonry has evolved to meet the demands of the 2050 net zero deadline.

ver the years, concrete masonry has evolved to meet many challenges, including carbon reduction targets for buildings and increasingly demanding acoustic standards. Now it is faced with a new challenge: to embrace and positively improve sustainability performance in its journey towards net zero.

Concrete masonry – a description for all types of concrete blocks and bricks – is the most widely used wall material in the UK. Masonry solutions in new housing account for around 80% of the housing market, but its use is not just confined to this sector. There is also strong demand in the commercial, educational, leisure and retail sectors.

CONCRETE & CEMENT EMISSIONS

According to the Mineral Products Association (MPA), concrete and cement currently account for around 1.5% of the UK's carbon dioxide emissions. Thanks to early action by the industry, this is five times lower than the global average (7%), but there is still far more that can be done.

The MPA has also reported that the UK's carbon dioxide emissions from concrete and cement stood at 7.3 million tonnes in 2018. This can be broken down into the following areas:

• Around 4.4 million tonnes of 'process emissions' from clinker production

 2.2 million tonnes from fuel combustion 0.7 million tonnes from electricity use and transport.

From this, it is easy to see that clinker production is the main source of carbon emissions in the cement and concrete industry. Clinker is the principal ingredient in cement, which forms one of the main components in concrete. Clinker's emissions arise from the combustion of fuels in the kiln and from process emissions, which are a by-product of the chemical reaction that produces clinker.

Compared with other industries, the masonry sector uses relatively little cement in its products. For example,



the cement content of a common dense block is usually between 6% and 10% of the total mix by weight, depending on the manufacturer. However, for every tonne of cement produced, around 622 kilograms of CO₂ is emitted, and it remains an important contributor to the masonry sector's carbon footprint.

To address these emissions, the cement industry has an ambitious plan to go beyond net zero by 2050. This will result in a significant reduction in CO_2 emissions, which will directly benefit all cement users, including the masonry sector. Below are just some of the initiatives planned or already underway for reduction in cement carbon emissions.

PROCESS IMPROVEMENTS

Process improvements include investment in new plant and manufacturing techniques, such as artificial intelligence (AI) and automation. This will help to reduce waste with more streamlined and carefully monitored production.

Alternative fuels, coupled with substantial investment in new technology, have already helped cement manufacturers to make significant reductions in their key emissions between 1990 and 2011.

More and more UK cement plants are now routinely using carbon-neutral fuels as a substitute for virgin fossil fuels, including treated household and commercial wastes, solvents, scrap tyres and pelletised sewage sludge. Each of these materials has a high caloric value and would otherwise go to landfill or incineration without energy recovery. Burning them in the extremely controlled settings of a cement kiln is safe and has a limited impact on the environment.

According to the MPA, decarbonising the electricity grid will encourage the electrification of the industry, reducing its reliance on fossil fuels. Using technologies such as plasma energy and CCUS (carbon capture, usage, and storage) could increase the industry's electricity use by 80% to 130%.

THE BENEFITS OF CARBON CAPTURE, USAGE & STORAGE

UK investment in infrastructure and successful industry research has enabled the use of CCUS. This transformative technology represents the most significant and technically disruptive investment in the roadmap, creating the potential for a massive CO_2 reduction of 61% by 2050. However, several hurdles need to be crossed first, including additional research, and the political issue of unfair carbon prices.

LOW CARBON CEMENTS

Traditionally, an effective way of reducing the carbon footprint of cement was to replace it with a proportion of supplementary cementitious materials (SCMs). These are primarily ground granulated blast furnace slag (GGBS) or pulverised fly ash (PFA). Used in abundance by the masonry industry, these industrial waste products are unfortunately declining in availability, which means that other SCMs need to be investigated.

REDUCING EMISSIONS IN CONCRETE MASONRY

The government's 'Net Zero Strategy: Build Back Greener' set out policies and proposals for decarbonising all sectors of the UK economy to meet the nation's net zero target by 2050.

The concrete masonry sector, part of the wider precast and concrete industry, has therefore adopted the UK Concrete and Cement Industry's 'Roadmap to Beyond Net Zero.'

Although roadmaps are vital in setting out the vision, it will be up to individual sectors and businesses to create their own micro strategies. With this in mind, what are some of the practical steps that can be taken by the concrete masonry sector to work towards net zero carbon targets?

AGGREGATES

Aggregates are the major component of concrete blocks and bricks by volume and are inherently low-carbon products. Most are naturally occurring materials requiring little processing and are usually locally sourced. In addition to primary aggregates, suitable materials for use in concrete products include air-cooled blast-furnace slag, crushed concrete aggregate (CCA), and manufactured and lightweight aggregates, as well as some by-products from the china clay industry, sometimes referred to as stent.

INCREASED EFFICIENCIES IN THE MANUFACTURING PROCESS

Carbon reduction will be supported by investment in more efficient production processes and projects to decarbonise the factories. The latter includes investing in renewable technology to reduce the demand for primary energy.

GREENER TRANSPORT

Generally, concrete blocks and bricks are delivered by road. Investment in new fleet vehicles and reduced road transport miles will help to lower carbon emissions. This endeavour will be aided by the government's pledge to phase out new fossil-fuel powered heavy goods vehicles by 2035.

Key properties of masonry can also contribute to beyond net zero during the operational lifetime of buildings.

TAKING ADVANTAGE OF CARBONATION

Over time, CO_2 in the atmosphere reacts with the calcium oxide in concrete to form calcium carbonate, a process called carbonation. This is recognised in UK accounting of greenhouse gases. In practical terms, this means that concrete products absorb CO_2 from the atmosphere during their lifetime of 100-150 years.

Over this period, carbonation will result in the reabsorption of around a third of the CO_2 emitted when making cement, significantly reducing the whole-life CO_2 footprint of both the cement and the concrete for which it is used. In lower strength concrete, such as blocks and bricks, carbonation is more rapid during its service life, as CO_2 permeates the material more easily.

Some masonry blocks (such as Lignacite) are also produced using a proportion of graded wood particles, which further increases its carbon sequestration over the course of its lifetime.

THERMAL INSULATION

The insulation properties of lightweight and aerated concrete products are not currently factored into lifecycle assessments. Once they are, they will enhance the net-negative potential.

THERMAL MASS

Thermal mass is a concept in building design that describes how the mass of the building can prevent internal temperature fluctuations. This is typically achieved through its ability to absorb unwanted heat during the day and then release it at night with the help of ventilation from cool night air.

Concrete masonry can provide a very useful level of thermal mass and, if appropriately designed, can help to eliminate the CO_2 emissions that would otherwise be used in the mechanical heating and cooling of buildings.

POTENTIAL

Overall, there is much to consider in the pathway to net zero by 2050. However, the process for carbon reduction in the concrete masonry sector is well underway and there is huge carbon-saving potential, all of which bodes well for the future.

Miles Hogg is national specification manager at Lignacite

Glidevale Protect joins forces with Countryside Timber Frame

K building products manufacturer Glidevale Protect has announced it has entered into a long-term Supplier Agreement with Countryside Timber Frame, a division of Countryside Partnerships.

The agreement will see Glidevale Protect supplying specialist construction wall membranes for use across Countryside Timber Frame's three UK timber frame manufacturing sites, located in the North West and East Midlands. The manufacturing facilities produce both open and closed panel systems for use across Countryside Partnerships' new housing developments and social housing collaborations across northern and central England.

The formal supplier agreement will strengthen Glidevale Protect's successful working relationship with Countryside Timber Frame which has seen the two companies collaborate on a range of projects over the last 16 years. Already a tried and trusted solution, Glidevale Protect will supply its low emissivity, reflective membranes, namely the insulating Protect TF200 Thermo external wall breather membrane as well as Protect VC Foil Ultra, the air and vapour control layer. This combination of wall membranes will help to improve energy efficiency, increase airtightness and manage condensation risk to support Countryside Timber Frame in creating healthy and sustainable homes.

Glidevale Protect is a subsidiary of Building Product Design Ltd, one the UK's leading forces in the development of building ventilation solutions and specialist building products. Building Product Design Ltd, which is well known for its commitment to building healthy solutions, is itself part of Wienerberger PLC, a leading provider of wall, roof and landscaping products for new build and renovation projects. As well as benefitting from a strong heritage, Glidevale Protect also shares its parent company's commitment to sustainable and innovative product design and development.

Glidevale Protect's specialist product solutions with market leading aged thermal resistance have been developed to support the 'fabric first' approach to housebuilding and help ensure compliance with the necessary Building Regulations, including the recent updates to Part L and the onward journey to the Future Homes Standard in 2025.

Graham Cleland, managing director at Countryside Timber Frame commented: "Supply chain collaboration is a vital part of our plan to build homes that are not only of exceptionally high quality but also have energy efficiency at their heart with a low-carbon footprint. Our investment in our timber frame manufacturing capabilities is helping us achieve this aim and as we embrace more modern methods of construction, we need to ensure that our supply



chain partners not only have the best product solutions but also share our values."

"Glidevale Protect is a trusted partner with a clear commitment to developing solutions not only to help deliver more energy efficient and sustainable buildings but also to add value to our factory manufacturing process, with a product and service offering that meets our needs. We look forward to continuing our work with Glidevale Protect and to demonstrate the benefits timber frame construction can bring to housebuilding."

Ben Gerry, commercial director at Building Product Design, Glidevale Protect's parent company, added: "A housebuilder working together within the supply chain is key to unlocking best practice and we are delighted to strengthen our existing relationship with Countryside Timber Frame by embarking on a new, long-term formal supplier agreement. As well as developing our product range, we are also building on our expertise in the offsite construction market and we are excited to collaborate with one of the biggest names in housebuilding".

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