



Broadoaks Park, built around a restored Surrey mansion, offers rural setting and short London commute



Dr Jones of Changing Streams explores the consequences of plastic waste in construction



Government U-turns on 'mutant' planning algorithm after pressure from Tory back-benchers

01.21

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PUBLIC CONNECTIVITY

The green light for 400 new homes at Clayton Road in Hayes, west London, has been granted to property group A2Dominion, bringing connectivity to the Grand Union Canal.



It's what's underneath that counts

01.21

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Jack Wooler

FROM THE EDITOR

Happy new year, as they say. With Boris warning the coming weeks will be the “hardest yet,” the majority of the country has plunged back into lockdown.

For many in the industry, however, life will go on as near normal as possible. Sites remain open and, as in much of 2020, the industry will push on.

Despite these challenges, December PMI activity data indicated a sustained recovery in UK construction, led by the fastest rise in new orders since October 2014, and with housebuilding the best-performing category.

Unfortunately, employment trends remained relatively weak, stretched supply chains resulted in a “sharp increase” in average cost burdens, and construction has seen a slowdown in activity since the summer.

While the pandemic rages on, the desperate need for increased housing delivery of course remains as strong as ever. Looking back to 2020, even with activity having approached pre-08 levels at times, the industry still fell woefully short of the 300,000 homes per year target.

The Government tried make some headway towards addressing this last August with its planning White Paper, though its formula for allocating land was met with controversy both from the industry and Parliament. Following recent backlash from Conservative MPs (including former PM Theresa May) however, the Government U-turned on this so-called “mutant” algorithm.

As discussed on the following pages, the DCLG is now jettisoning the formula, which would have seen many more homes built in rural areas, and instead is prioritising housebuilding in urban centres and on brownfield.

The news was generally welcomed. With many authorities being staunchly protective of greenfield and disused industrial land widely available, brownfield initiatives are positive news.

Not everyone was happy, of course. The Land Promoters and Developers Federation (LPDF) called the announcement “very disappointing,” arguing that homes will now be built “where a group of Conservative backbenchers in the south east think they should live.”

Even aside from this fight over land yet to be allocated, a report from the Local Government Association (LGA) showed that more than a million homes on land earmarked for development by councils haven’t been put in for planning by developers. The LGA has again argued that this means planning is not the barrier it’s made out to be.

Others have criticised the Government’s direction entirely, believing the DCLG to be chasing numbers to the exclusion of all else – leading some larger developers to ‘run rampant’ at the cost of quality, ecology, and suitability.

The pandemic has already seen an exodus from cities, and the uptake in the facilitation of working from home will only see this increase. Has the recent U-turn taken this into account?

Whichever side you sit on, while the Government and our slogan-fond PM focus on trumpeting statistics from large-scale, infrastructure-led developments, it is clear that the rest of the industry has a huge task in achieving quality, sustainable housing at pace through difficult times. Perhaps it is time to consign the planning scapegoat to the past?

Jack Wooler, deputy editor

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ON THE COVER



01.21 HOUSEBUILDER & DEVELOPER



PUBLIC CONNECTIVITY

The green light for 400 new homes at Clayton Road in Hayes, west London, has been granted to property group AZZIMUT, bringing connectivity to the Grand Union Canal.

Clayton Road:
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Government U-turns on 'mutant' planning algorithm



New planning regulations prioritising housebuilding in urban centres and brownfield land rather than rural areas have been announced by Housing Secretary Robert Jenrick, in a U-turn on the 2020 Planning White Paper and its resulting "mutant algorithm."

Following a backlash from Conservative MPs, particularly in the south-east, the Government is to move away from its planned formula to calculate local housing supply needs. This would have seen disproportionate numbers of homes constructed in 'greener' areas, particularly in the south east, it is claimed.

Instead, proposals will now encourage city councils to plan more family-sized homes and "to make the most of vacant buildings and underused land to protect green spaces," focusing on England's 20 "largest cities and urban centres," and in particular empty office and retail units.

Jenrick has said the updated method will "help councils to enable the delivery of 300,000 homes a year by the mid-2020s, while prioritising brownfield sites and urban areas," and pledged that the DCLG would review the '80-20' rule dictating how much funding is available to local authorities to help build homes and balance funding across the country.

Jenrick added: "We are reforming our planning system to ensure it is simpler and more certain without compromising standards of design, quality and environmental protection."

MIXED REACTIONS

The move to abandon the planning formula has received mixed reactions in the industry, following controversy around the launch of the Planning White Paper itself last year.

Federation of Master Builders chief executive Brian Berry welcomed the news,

saying that building on brownfield land will help to "protect green spaces while unlocking the new homes that we desperately need."

"Under the 80:20 rule," he continues, "the majority of Homes England's funding went to the least affordable, and often most affluent, areas."

Melanie Leech, chief executive of the British Property Federation, echoed this sentiment, saying it is "hugely positive the Government will revise the 80/20 rule," as well as "make the best use of brown-field land."

She said that the challenge however, was that "housebuilding alone will not level up the north."

David Renard, Local Government Association (LGA) housing spokesperson, said the organisation had been "clear all along" that algorithms and formulas can never be a substitute for local knowledge and decision-making by councils and communities "who know their areas best."

He added however: "It is good to see that future Government investment will support the building of new homes, where they are needed."

Conversely, Paul Brocklehurst, chairman of the Land Promoters and Developers Federation criticised the announcement, believing that the system proposed in August "sought to find a fairer, more robust" method of targeting housing.

Now, he has argued, instead of "fine tuning" the new formula to target new housing where it's most needed, homes will be built "where a group of Conservative backbenchers in the south east think they should live."

He said the announcement was a "very disappointing day" for those seeking a way onto the housing ladder, and where housing demand has been impacted most by the housing crisis.

A million homes still await planning permission

More than a million homes on land earmarked for development by councils are yet to be brought forward by developers for planning permission, new research by the Local Government Association has suggested.

The LGA's new analysis, compiled following a survey of council heads of planning, found that more than a third (1,003,600) of the 2,676,200 homes allocated in current local plans in England had not been submitted into the planning system. This amounted to an additional 4.4 years' worth of housing supply, in addition to those already granted planning permission, and schemes under construction.

The LGA said these are houses on sites which do not yet have planning permission but have formally been identified as suitable for housing by local councils through the local plan process. Drawn up by councils, local plans allocate the number of homes to be built in local areas in consultation with local communities.

The LGA stated that its research provides evidence that councils are allocating enough land to deliver a housing pipeline "for many years ahead," and that planning is "not a barrier to building the homes the country needs."

Cllr David Renard, LGA housing spokesperson, said this is "another example of a broken housing delivery system," and argued that councils need to be given further powers to ensure homes are brought forward by developers.



'Radical' consultation launched to broaden permitted development



The Ministry of Housing has launched a "surprise" consultation for a new permitted development right allowing all 'Class E' buildings to change use to 'Residential.'

If passed, the legislation could reportedly broaden the scope of the existing residential conversion rights significantly. The rights would apply not only to offices, light industrial and retail for possible conversion, but also to restaurants, gyms, medical facilities and crèches.

The new regulations would apply to all Class E buildings, regardless the size of the property in question. They are also intended to apply in Conservation Areas, except for Areas of Outstanding Natural Beauty, National Parks, areas specified by the Secretary of State under the Wildlife and Countryside Act 1981, and World Heritage Sites.

The usual exclusions for listed buildings, sites of special scientific interest, scheduled monuments, safety hazard areas, military explosives storage areas and sites subject to an agricultural tenancy would continue to apply, however.

The proposed list of matters under discussion which will be subject to the prior approval process has been deemed "remarkably short" by some in the industry. Currently all that is proposed are Prior Approvals relating to:

1. Flooding, to ensure residential

development does not take place in areas of high flood risk

2. Transport, particularly safe site access
3. Contaminated land or buildings
4. Impacts of noise from existing commercial premises
5. The provision of adequate natural light in habitable rooms
6. Fire safety
7. The impact on the intended occupiers in an area important for heavy industry and waste management

The application process is intended to be similarly light, with the list of required documents being limited to detailed floor plans showing dimensions and proposed use of each room, including the position of windows, any information necessary for the consideration of the matters for prior approval, and fees appropriate. MHCLG are proposing a fee of £96 per dwelling, capped at a maximum of £4,800.

Nicola Gooch, planning partner at Irwin Mitchell, commented: "Given the impact that Covid 19, and the associated restrictions, have had on the economy, there will be a real temptation for commercial landlords to flip vacant units to residential before looking at other, more traditional, commercial uses for them.

"If this is enacted, unless councils are very quick off the mark with their Article 4 directions, the future of many high streets may very quickly become predominantly residential."

Green retrofit strategy needed to accelerate construction

The slowdown in construction activity since summer 2020 needs to be boosted by a national strategy to upgrade existing homes to make them greener and more energy efficient, according to the Federation of Master Builders (FMB).

The organisation made the comment in response to recent Construction PMI data, showing that the construction recovery "softened" compared to the summer high, and employment had continued to fall since the first lockdown.

Brian Berry, chief executive of the FMB, has argued that due to the continued challenges, "now is the time for the Government to take action and instigate a National Retrofit Strategy."

Berry believed this could stimulate work and employment throughout the sector, while supporting the Prime Minister's latest carbon emission reduction targets.

"As we emerge from the difficulties faced during the past year, 2021 should be seen as a year of significant opportunity to move the dial further towards Net Zero and build back greener," said Berry.

"A retrofit strategy would provide economic, environmental and social benefits throughout all regions, supporting the Government's levelling up agenda."



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Brian Berry, chief executive of the Federation of Master Builders

COMMENT

CHALLENGING THE GOVERNMENT IN 2021

The FMB's Brian Berry considers the state of the housebuilding industry as the new year begins in a time of national crisis, and what the Government needs to do to ensure its recovery.

What a year 2020 was. I applaud the resilience of SME builders during one of the toughest years on record. And we know that sadly, we are not out of the wood yet. The Chancellor announced at the Spending Review that this year is set to be a very difficult one economically, and that we will not see signs of recovery until 2022.

This economic analysis chimes with the findings of the FMB House Builders' Survey 2020, which saw members predicting that buyer demand would only start growing from 2022. Of those surveyed, 16 per cent said that they would not recover pre-coronavirus activity levels until at least 2022.

Government interventions to support the housing industry during the second lockdown, including the Stamp Duty Land Tax holiday,

have proved successful, with anecdotal evidence from members suggesting that the market has been buoyant since September. Clarity of messaging, including the joint letter to the housing industry signed by the Secretary of State for Housing, Communities and Local Government, the Federation of Master Builders and the Home Builders Federation, has also addressed business concerns about the impact of the ongoing economic uncertainty on construction. Notwithstanding this, access to materials and lower workforce productivity continue to hamper output.

Ahead of the Spending Review, the FMB called on the Government to place local builders at the heart of their plans to "build, build, build" our way to recovery. SME housebuilders build high-quality, beautiful

THE NEXT STEPS WILL BE FOR THE FMB TO WORK WITH HOMES ENGLAND TO ENSURE THE FUND IS AS ACCESSIBLE AS POSSIBLE TO SMALL BUSINESSES





and sustainable homes in each community across the country. However, the proportion of SMEs actually building has been in decline since the late 1980s. This is due to a range of disproportionate barriers that these firms come up against compared to the volume housebuilders. They include planning delays, a lack of available and suitable sites, the construction skills shortage, and expensive financial products.

Speaking to the Government's ambition to increase the number of SMEs building homes, as set out in Planning for the Future, and Homes England's strategic objective to support diversification, much more needs to be done to remove these barriers.

I was therefore pleased to welcome the Chancellor's announcement of the National Home Building Fund, a multi-year commitment of extra funding which will provide greater long-term confidence to SMEs. I am pleased to see the Government placing their

money where their mouth is, especially as I know that builders have been struggling more and more to acquire finance at an affordable price. The next steps will be for the FMB to work with Homes England to ensure that the fund is as accessible as possible to small businesses.

While the Chancellor referenced the Government's proposed reforms to the planning system, he missed an opportunity to address the single biggest barrier that SMEs face daily. Bottlenecks and slow decision making in under-resourced local authority planning departments are putting the brakes on development.

Local authorities need urgent up-front additional funding to help them make faster determinations on small sites. It is not unusual for our association's members to report waiting a year for a determination on a non-controversial application. Meanwhile, according to Planning for the Future, spending on

planning per person has declined by 60 per cent. This is unacceptable and urgent action is needed.

We need to go further to tackle the housing crisis, and we need to go further to tackle climate change. That a 'green recovery' only featured briefly in the Chancellor's speech cannot be right, at a time when we need to urgently invest in job creation in emerging green sectors. With unemployment forecast to rise to 7.7 per cent in 2021, a well-supported SME housing sector would create employment across the country.

We also need to focus on adapting our existing homes so that they are greener and more resilient to climate change. I was disappointed by the lack of commitment to a long-term national energy efficiency retrofit strategy that would be the key to achieving this step-change in the industry. But this has to be a challenge we all set the Government going into 2021. The future can be brighter, but it will take bold action.



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Patrick Mooney, editor of
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NO NEW
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HOMES WERE
BUILT LAST
YEAR IN 162
ENGLISH
LOCAL
AUTHORITIES

A CRISIS OF SUPPLY

Patrick Mooney, housing consultant and Housing, Management & Maintenance news editor, says the tiny increase in overall numbers of low rent housing is masking a growing affordability problem in England

Further evidence of a crisis in the supply of affordable housing has been revealed in official data, as calls for reform of the 'broken model' grow with the Government's focus on building shared ownership and unaffordable rentals in the firing line.

Latest figures from the Housing Ministry show that a total of 57,644 new affordable homes were delivered in England in the 12 months to April, but only one tenth (6,566 homes) of these were built for letting at social rents to low-income households.

Most of the affordable homes were built either for sale on shared ownership terms or for letting at 'affordable rents' or intermediate rents (typically set at 80 per cent of market rents), which most housing professionals say are well beyond the reach of households reliant on Universal Credit (UC), or other welfare payments.

The housing benefit element of UC is calculated to cover the cost of the lowest 10 per cent of rents in the private rental market. If tenants want to move into properties with higher rents they have to somehow make up the difference, either from 'other elements' of their UC payments, or from other income, such as loans from friends or family members.

The fall in the supply of social homes at the lowest rents is in stark contrast to the situation 25 years ago when between 50,000 and 60,000 new low rent homes were being built each year by councils and housing associations.

NEW LOW RENT HOUSING

Worryingly, detailed figures released by the Ministry of Housing show that no new social rent homes were built last year in 162 English local authorities, with counties as diverse as Cheshire, Derbyshire, Norfolk, Kent and Surrey showing zero completions in most districts.

In the whole of the north east there were only 58 social rent completions across all 25 council areas, with North Tyneside and Redcar & Cleveland accounting for 60 per cent of the total, while Newcastle, Middlesbrough and Sunderland managed just nine new social rent homes between them. Given the poverty and poor conditions in many parts of the private rented sector, these figures offer little hope to the local populations.

Better news came in the size of the new build starts figure, which showed that 68,346

new affordable homes were started, an increase of almost 20 per cent on the completions figure, but even then this good news was tempered by the fact that shared ownership and affordable rental properties accounted for 70 per cent of the total, albeit this was down from 77 per cent in the previous year.

However, there are growing calls from the social housing sector and from campaigning groups and charities like Shelter and Crisis for a far greater share of the affordable housing budget to be diverted away from shared ownership and affordable rents, with the former being increasingly highlighted as a 'broken' model.

THE FOCUS ON SHARED OWNERSHIP

Anecdotally, people point to things like one and two bed shared ownership properties in the capital being marketed at values of between £500,000 and £600,000, while the shared ownership market has also been badly hit by the cladding scandal, with many shared owners being stuck in properties they cannot sell or re-mortgage, as their homes 'attract' zero valuations.

At the same time many of the shared owners are facing demands for contributions running into tens of thousands of pounds for cladding removal costs and paying for 'waking watch' patrols. The new building safety draft legislation has done little to resolve the problem or to satisfy shared owners who feel they have been badly let down by policy makers and developers, while their landlords claim they lack the





funds to pay all of the removal costs.

There does not appear to be the prospect of an early change in direction from the Government, with a spokesperson for the MHCLG saying: “The number of new affordable homes built has increased for the fourth year in a row. We’re going to keep on delivering, increasing the supply of affordable housing. That’s why we are investing over £12bn in affordable housing over five years, the largest investment in a decade.”

However, the overall figure for affordable completions last year is only one third of the total number of new low cost homes needed each year to meet demand, according to experts at the National Housing Federation. The NHF, which represents housing associations who build the vast majority of affordable

homes, has estimated that 145,000 new affordable homes are needed each year to satisfy demand.

STRONG CRITICISMS VOICED

Polly Neate, the chief executive of Shelter, commented: “A few thousand social homes is a drop in the ocean. It is unbelievable that in the middle of a nationwide housing emergency over half of the country saw no new social homes built at all.

“Every day our services pick up the phone to more and more people desperate for the security of a social home. With so many families facing homelessness already and the economic impact of the pandemic only just starting to be felt, more social housing is our only way out of this crisis.”

The official Government figures came out as homelessness charity Crisis warned that more than 200,000 households face the worst forms of homelessness this winter, including sleeping on the streets, in sheds and garages, in unstable accommodation such as bed and breakfast hotels or sofa-surfing with friends and families. Another concerning statistic is that 52 per cent of the new homes were delivered via Section 106 agreements with developers, and this source of new homes is due to dry up shortly if the Housing Secretary’s plans for planning reform come to fruition.

One ray of hope for low-income households is the growing trend among housing associations for them to convert the higher affordable rents charged on most newer homes to the lower social rents. However, the transfers come at a price, as the reduced income is being reflected in smaller development programmes with fewer new rental properties being built in total.

Another positive sign from the figures is that the proportion of completions in rural local authorities has increased, easing some of the housing pressures in the countryside. Historically, rural areas have accounted for only around 30 per cent of all completions, but it has increased steadily since 2014/15 and last year they represented 45 per cent of all completions.

In addition, in 2019/20 one third of all local authority delivery of new affordable housing was done by London boroughs, representing a significant increase compared to around a quarter in the preceding four years. But these positive signs are being generated within an overall housing programme which is wholly insufficient to meet the pressing demands for new truly affordable housing, which can only be met by increased Government funding and allowing local authorities to spend Right to Buy receipts on building new houses for rent at below market rents.



THE CLIMATE CHALLENGE

Waging war on plastic waste

Plastic waste is ubiquitous in construction, and the consequences are becoming increasingly apparent. Dr Wendy Jones of Changing Streams spoke to Jack Wooler about what is being done to address this key industry challenge

Plastic is everywhere in construction, with a reported 23 per cent of the plastic produced in the UK consumed by the industry alone. This also makes the construction industry the second largest producer of plastic waste in the UK after packaging, generating an eye-watering 50,000 tonnes of plastic packaging waste each year. Only a small proportion of this is currently recycled.

Increasingly, however, climate-conscious individuals and firms within the industry and beyond are decrying the harmful effects this legacy is having on the environment.

Despite the many benefits plastic brings, according to Dr Wendy Jones, science engagement lead at non-profit waste campaigning group Changing Streams, the inherent dangers are just not worth the savings.

PLASTIC PREDOMINANCE

"There is no denying that plastic has its advantages," admits Dr Jones, noting its versatility, light weight, durability and its cheapness to produce.

In terms of the environment however, she says, "that all comes at a big cost."

Plastic materials are largely produced from fossil fuels, and over the last 70 years human ingenuity has developed countless ranges of products, with production growing exponentially. In fact, according to Dr Jones, half of the total world production of plastic (derived from fossil fuel) has occurred in the last

15 years, and this is expected to triple by 2050.

The most common sources of plastic waste in construction include packaging (accounting for 25 per cent of packaging waste in construction), unused materials from over-ordering and off-cuts, improper storage and handling, over-specified project design, and workforce food packaging and utensils.

According to Jones, one of the main problems here is that strategies for disposal have not kept up with the rate of production, and, although some is recycled or converted to fuel sources, "the stark reality," she says, is that less than 10 per cent of plastic worldwide is currently recycled – the majority ending up either in landfill or the world's oceans.

THE IMPACT OF DEPENDENCE

It is estimated that approximately 8 million tonnes of plastic ends up in the oceans every year, bringing 'immediate implications' for wildlife, and potential dangers to humans.

"The effects have received increasing attention in programmes such as Blue Planet, where turtles have been seen entangled in plastic, birds getting caught in plastic nets, or large sea mammals having huge amounts of plastic in their stomachs," Jones explains.

She tells me that larger land animals are also impacted, as high concentrations of plastic can inhibit the growth and reproduction of the small organisms that provide food for larger creatures both on land and in the ocean, as they are unable to distinguish between food and plastic particles.

These particles are also a danger to humans, she says, getting into rainwater and being found in fruit and vegetables as a result. 'Microplastic' particles are even being found in the air we breathe, says Jones.

"The long-term health implications of these findings are not yet fully understood," she tells me, "but it is known that there's a higher incidence of lung disease among those who work in plastic manufacturing, and there's

growing evidence of disruption of the body's endocrine system from plastics."

"We also know that some of the chemicals used in plastics manufacture to confer the specific valuable properties of plastics, such as flexibility, are highly toxic."

These chemicals are released into the environment when plastic degrades, as well as during situations such as wildfires or building fires. They cause atmospheric pollution and risks to firefighters and those living nearby, beyond the devastation of the fire itself.

Alongside all this, the environmental damage to marine ecosystems as a result of plastic pollution is estimated to equate to £10.5bn per year. Related economic costs include those linked to clean-up operations, litter removal, the repair and replacement of damaged vessels and gear, reduced fishing catches, and a decline in coastal tourism and impact on related industries.

POSSIBLE SOLUTIONS

It's not all doom and gloom, however – there are some practical actions that can be taken by housebuilders and developers to begin to change the default approaches to using plastic.

Jones explains her organisation's mission: "We want housebuilders and developers to recognise the issues, and take steps to reduce their dependence on plastic."

She says there are many paths available to achieve this, including the reduction of single use plastics, reduction of plastic packaging, minimisation of wasteful use of plastic materials, and evaluation of sustainable alternatives.

Jones tells me that some initial practical options that companies can explore



**PLASTIC PACKAGING
ACCOUNTS FOR 25 PER
CENT OF PACKAGING
WASTE IN CONSTRUCTION**

include creating a site waste management plan, providing and using sustainable materials, and avoiding single-use plastics. In addition, initial approaches include educating the workforce through workshops, and introducing circular economy principles.

GOVERNMENT'S ROLE

Ultimately, however, Jones says policy change will be needed at industry and government level. Changing Streams for one hopes to develop a cross-party alliance to address this, as the political drive continues towards a low carbon economy.

She says that reducing plastic use is intrinsic to meeting the carbon goals – it is estimated that 10 per cent of fossil fuel production is used either as raw materials or energy for production of plastic.

Jones argues that as this proportion will actually increase as alternative energy sources become available, “reducing dependence on plastic will be a necessary part of the drive to zero carbon.”

Jones points out relevant law and legislation already in place to reduce plastic and packaging waste, which have been outlined in the Considerate Constructors Scheme's Best Practice Hub.

The 25-Year Environmental Plan ('25-YEP'), for example, outlines the Government's ambition to minimise waste, and states that the Government is working towards a target of eliminating avoidable plastic waste by the end of 2042.

BRIDGING THE GAP

Aiming to reduce this plastic use in the construction industry, Changing Streams was established in 2018, by property entrepreneur Neal Maxwell, in partnership with The University of Liverpool.

Dr Jones tells me that, following a trip to the Arctic, Neal became aware of the extent of plastic pollution even in those parts of the world which are generally regarded as pristine, “and decided he had to do something to address the problem.”

As such, the company “aims to bridge the gap between industry and academia,” hoping to create a lasting change based on in-depth research and innovation.

To achieve this, it is bringing together experts from across the construction, scientific and environmental communities to facilitate innovation, research and development programmes which will drive a reduction in plastics in buildings, and throughout the built environment supply chain.

The organisation is running a series of workshops, for example, which can be delivered online and customised to any organisation. These workshops explore

the issues of plastic use and waste and help empower organisations and individuals to develop plans to address the issue head on.

“Our ultimate mission is the eradication of plastic at source, starting with the construction industry,” says Jones.

CASE STUDY

Jones cites a key example of the organisation's work in the housebuilding sector as its partnership with Your Housing Group, which has an ongoing mission to create sustainable communities across the country. Some of the measures it has committed to over the coming years will include simple ‘swap-outs,’ such as changing fixtures and fittings, and reducing the use of plastic wrapping for building materials, such as bricks and cladding. But it's also engaging in more complex long-term strategies to phase out materials containing plastic.

Your Housing Group is also reportedly looking to embed the Changing Streams Charter across an “ambitious” programme of new housing developments it is currently rolling out across the country, in which all new contractors will be obliged to adhere to its plastic reduction pledge before being appointed.

“This will ensure positive changes cascade throughout the supply chain, including contractors, suppliers and manufacturers, which will help drive change at every level of the construction process,” says Jones.

LONG-TERM SOLUTIONS

While Dr Jones accepts “there is a long journey ahead,” and that there may be some essential components which may not be easy to replace with non-plastic alternatives, she says there are many ‘easy’ fixes which should immediately be adopted by the industry.

“Recycling does a lot to help the problem, but is not the ultimate long-term solution,” she continues.

At present, approximately only 10 per cent of all plastic produced is recycled in any form, and even recycled material can only be recycled a limited number of times (around five). So, recycling only extends the life of fossil-fuel plastic, it does not eliminate the problem of disposal.

Jones also adds that the options to convert plastic to fuel would reduce the burden of microplastic pollution, but can have the unwanted side-effect of producing carbon or carbon dioxide, and volatile compounds.

“As such,” she asserts, “a longer-term solution needs to be actioned, and that is exactly what Changing Streams aims to address.”



HALF OF THE TOTAL WORLD PRODUCTION OF PLASTIC HAS OCCURRED IN THE LAST 15 YEARS, AND THIS IS EXPECTED TO TRIPLE BY 2050

NEW DEVELOPMENTS

400 canalside homes in Hayes get go-ahead

The green light for 400 new homes at Clayton Road in Hayes, west London, has been granted to property group A2Dominion. The design by Assael Architecture has undergone extensive consultation with Hillingdon Borough Council, and an “appropriate scale of redevelopment for the site has been mutually agreed,” the project team said. The scheme has been designed as part of a wider masterplan that includes the neighbouring Crown Trading Estate site.

As a key objective of the design, the scheme achieves “public connectivity” to the Grand Union Canal where it was previously inaccessible. In addition to the canal edge, the project sees a large amount of additional public amenity being introduced in the form of parks, lawns, seating and gardens, with the landscape and public realm designed in partnership with the Crown Trading Estate site.

The homes themselves include a variety of tenures, with a particular focus on affordable family homes comprising four-bedroom townhouses, and three-bedroom duplexes and apartments. The scheme also includes a mix of one and two-bedroom apartments for sale, each with its own private amenity in the form of projecting or inset balconies.

The site benefits from being close to the new Crossrail train station, offering quick access to central London. Other benefits include electric car parking spaces, biodiverse green roofs with renewable energy in the form of PV panels, an ASHP (air source heat pump) hybrid heating strategy, and over 1,300 m² of commercial space.

The individual buildings have been orientated to maximise views to the canal with a high number of apartments and houses being dual aspect. Residents will also benefit from large communal podium gardens, in excess of 3,200 m², that include children’s play areas with views to the Grand Union Canal, and the newly designed waterfront edge.

The architectural design comprises three “character areas.” The “industrial” buildings reference the site’s history with features from the existing warehouses transferred to the new buildings, such as generous window openings and transom bars. The “residential” buildings respond to the existing architecture on Clayton Road, with building heights lowered to a more appropriate scale and “identifiable” front doors accessed directly from the street. Lastly, the “canalside” buildings “respond directly to the waterside,” commented the architects, with full height windows to maximise views and a contemporary design that includes sash windows, recessed panels and a “clear horizontal datum banding.”

Danny Lynch, director of land and development at A2Dominion, commented: “This scheme will give a real lift to the area and provide excellent homes and facilities for a diverse mix of people, including local families and young professionals.”

“THIS SCHEME WILL GIVE A REAL LIFT TO THE AREA AND PROVIDE EXCELLENT HOMES AND FACILITIES FOR A DIVERSE MIX OF PEOPLE, INCLUDING LOCAL FAMILIES AND YOUNG PROFESSIONALS”



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CASE STUDY

A luxurious blend

Broadoaks Park is a new high-end development that includes a restored mansion in Surrey, offering a taste of rural living within commuting distance of London and a mix of styles. Tim Banks of developer Octagon explains more to Jack Wooler

Broadoaks Park, a development including 125 luxury homes in West Byfleet, Surrey, has been labelled “unique in both scale and setting” by the project’s developer, Octagon.

The Octagon element of the multi-developer project comprises 115 new build homes and 10 restored properties within the Grade II Listed red brick Broadoaks Mansion and its out-buildings, which became a major focal point for the project and informed the design process throughout.

As well as within the 1876-built mansion, the restored and refurbished homes on the site also include lodges and a coach house.

Set in 25 acres of green space, the completed development is claimed by Octagon to offer “cohesive design in a neighbourhood that’s unrivalled due to its modern day country living and close proximity to the capital.”

The homes range from two-bedroom apartments through to six bedroom family houses, each finished to a high specification. Alongside these, the project also includes 54 affordable homes by Paragon Housing, a care home by Hamberley, and a retirement development by Pegasus Life.



The first phase of Broadoaks Park is now 100 per cent reserved, and the first residents have already moved in. Phase 2, which includes a mix of four to six bedroom family homes, is now 50 per cent reserved, and the third phase is due to launch this spring.

POTENTIAL

The mansion was originally built in the heart of Broadoaks Park, to a design by Ernest Seth-Smith in 1876. From a distinguished line of Scottish architects responsible for building large areas of London's Belgravia, from Eaton Square to Wilton Crescent, Seth-Smith designed the mansion and grounds at Broadoaks to be the "ultimate country retreat," commented Octagon. The surrounding lodges and summer houses were added over the subsequent 40 years, contributing "further gravitas and character to the site."

"We chose this site first and foremost for its location," explains Tim Banks, Octagon's CEO. "We already knew West Byfleet well, and our name was recognised in the area thanks to our extensive experience on the nearby St George's Hill Estate (Cobham and Esher)."

The location's main attraction for the developer was its close proximity to West Byfleet village centre and in particular its train station, with journeys to Waterloo taking only 30 minutes. This makes it "a fantastic location for city commuters," says Banks.

The developer says the team saw the potential of the site "from day one," and knew it had the range of skills required for the restoration of Grade II listed buildings, as well as the extensive landscaping around the 300-year-old oaks on the main green. The key challenge was to deliver "top specification, luxurious homes to a keen, affluent local market."

THE 'RIGHT PRODUCT'

Historically, Banks says Octagon uses "flagship" luxury properties to underpin its developments, and this project was no different. "They provide a level of financial stability to the project, and offer buyers a slightly more accessible home than the supermansions which are associated with our brand."

He says that in general, when Octagon are offered the "right land and the right price," they take the opportunity, and this was the case at Broadoaks Park.

The team spent years developing plans for the project to make sure they created the right product for this particular market, and Banks believes the "exceptional sales activity" they've had so far is testament to success.

Octagon started this planning process in 2016, accompanied by extensive public consultation. By July 2018, the team was given the green light to begin construction on the development as it is now being realised.

As part of the plans, the team were required to widen the nearby Parvis Road to help with traffic flow, as well as widen and extend the existing footpath into the village centre and add a 'Toucan' crossing, the infrastructure improvements benefiting the local community as well as Broadoaks Park residents.

CHALLENGING, BUT EXCITING

When it came to the construction stage, Banks says that the existing Grade II buildings provided some of the "most challenging, yet exciting" parts of the project.

When Octagon acquired the site, he says the buildings were in a "desolate" condition, so important consideration had to be paid to how the team would restore and convert them, while of course making them commercially viable.



“WE HAVE BEEN INSPIRED BY THE VICTORIAN ARCHITECTURE OF THE EXISTING BUILDINGS TO CREATE A CHARACTERFUL NEIGHBOURHOOD”

The coach house, for example, which is being converted into six two-bedroom apartments, had to go through a careful planning application process with input from English Heritage. Banks however reports that Octagon’s “extensive experience” in this field prevented any hiccups. The team has also converted the Grade II listed West Lodge into a new sales and marketing suite due to open this month, which will showcase the development’s heritage and character to potential buyers.

The construction process involved in the road widening, as well as the creation of a new entrance to the development, came with its own challenges due to the high traffic levels on Parvis Road and the accompanying congestion. Seeking to minimise disruption as much as possible, the developers maintained “clear communication” with the local community throughout the construction process, and now the road is reportedly far less congested.

Tackling surface water run-off was also “particularly difficult” on this site, says Banks. The developer had to install underground SuDS crates to attenuate the flow of surface water, storing it before releasing it into the existing ditch bordering the site.

Lastly, with the majority of construction work taking place in 2020, there were inherent Covid-related challenges that needed navigating, from keeping the site

and staff safe, to managing delays in the supply chain.

“Thankfully, as a medium sized developer,” says Banks, “we were able to adapt quickly, and disruptions were kept to a minimum, pushing back construction on the project by only two months.”

LUXURY

Now completed, the homes, both inside and out, clearly reflect their luxury standing, having been carefully specified to that end as well as harnessing the mix of old and new architecture. “A trademark skill of Octagon’s is our ability to blend the new with the old, building new homes that match the location they inhabit,” says Banks.

“Nowhere has that been more important than at Broadoaks Park, where we have been inspired by the Victorian architecture of the existing buildings to create a characterful neighbourhood that feels as one.”

Pitched roofing, intricate brick detailing and large sash windows provide strong external examples of this, giving each home a neo-Victorian style, with a mix of red and yellow brick finishes.

Inside, homes are suitably contemporary, featuring spacious living spaces specified with the latest top-of-the-range appliances. High tech features come as standard, such as a boiling water taps in kitchens, remote-control operated automatic garage doors, and underfloor



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THE DEVELOPER WAS REQUIRED TO OBTAIN A BAT LICENCE TO ENSURE THE TEAM DID NOT DEMOLISH BUILDINGS DURING THE HIBERNATION SEASON

heating. The properties are built to be fully compatible with the latest home technology too, should buyers wish to install electric curtains or smart lighting, for example.

“Many purchasers have also been keen to use our interior design service,” says Banks. This involves buyers working with the developer’s in-house team to decide on elements from window treatments through to bespoke furniture.

Just as much attention has been paid to the outdoor space, with communal parkland interspersed throughout the development, including retaining the substantial green at the entrance to the site. Alongside this, accompanying all family homes are “lavishly” planted private gardens, adding to the estate’s “quintessential country feel.”

ECOLOGY

When it came to the development’s environmental properties, all the homes have been built to Octagon’s “customary high energy standards,” including an EPC ‘B’ rating.

As part of this, each property has been fitted with whole-house ventilation with heat recovery systems, helping to reduce energy loss. EV charging points have also been situated across the development for electric cars, fitted with three-phase electric current to support faster chargers.

Octagon carried out a number of ecological surveys with a specialist consultancy in order to evaluate the pre-existing wildlife on the development, to protect them throughout construction and re-introduce them once the development was complete.

The surveys informed the team of the presence of reptiles and bats on the site, and as such the developer was required to

obtain a bat licence. This informed the demolition process to ensure the team did not demolish buildings during the bats’ hibernation season.

Octagon also erected temporary bat boxes around the site to create alternative safe roosting sites. Similarly, all reptiles were removed from site prior to construction and the developer built a protective barrier around the perimeter of the site to ensure they were not put in danger.

“We are re-introducing this wildlife back to the site through our landscaping and installation of permanent bat boxes,” Banks adds, “providing habitats for the existing wildlife to return.”

SUCCESS

Looking back on the completed stages, Banks says he’s “very pleased” with the achievements thus far.

According to the developer, demand for the project has been “overwhelming” ever since it launched in September 2019, which is the ultimate barometer of success.

He remembers how the homes garnered near-instant interest when Broadoaks Park hosted over 350 guests at its off-site launch event, with all of phase 1 being reserved soon after. Now, “only a few” homes remain in phase 2, and reportedly, many buyers are now enquiring about phase 3.

“With future phases going through planning, we have been able to amend plans based on the demand and sales to date, giving us valuable feedback before we start construction,” says Banks.

He concludes: “From adding home offices to replacing semi-detached properties with detached homes, we are adapting our plans to create the most appealing homes for our target audience.”

Advanced selected as installer's preference for luxury apartments

An Advanced fire alarm control panel has been selected to protect Marsham House, a high-end apartment building in Gerrards Cross, Buckinghamshire.

Installed to ensure the safety of the 50 luxury apartments at Marsham House is a four-loop MxPro 4 panel covering all public areas and the underground car park of the six-storey building.

Hertfordshire-based Amida Fire – responsible for the installation, integration, programming, commissioning and handover of the fire system – specifically sought approval from the main contractor to use an Advanced solution.

In designing the system, Amida Fire has focused on ensuring false alarms are minimised. The MxPro 4's confirmation filter has been used in the basement areas of the building so that both heat and smoke need to be detected before an alarm is confirmed as genuine, thus avoiding unnecessary evacuation.

Michael Draper, Director, at Amida Fire, said: "The specification we received for the fire system at Marsham House contained some very particular requirements. Advanced has been our go-to choice of addressable fire panel for over a decade because of its versatility in a wide range of applications. We were confident that once

again Advanced would meet all the criteria and so specifically requested that it be installed."

Helping to ensure residents' safety, the MxPro 4, with built-in printer and zone indication, was integrated with the building's AOV system, BMS, basement air intake and extract control system. It also works seamlessly with the building's access control and lift systems and is linked to a central monitoring station.

Amanda Hope, UK Business Development Manager, at Advanced, said: "The power and performance of our fire alarm control panels mean they easily and effectively integrate with a wide range of third party systems – from smoke control and ventilation to BMS and remote monitoring, among others.

"Repeated false alarms cost money, cause panic and distress and lead to complacency. However, Amida Fire's project at the high-spec Marsham House is a fantastic example of how Advanced's built-in false alarm management solutions can be applied to simplify the complex process of designing effective false alarm management systems."

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Advanced is a world leader in the development and manufacture of intelligent fire systems. Advanced's reputation for performance, quality and ease of use see its products specified in locations around the world, from single-panel installations to large, multi-site networks. Advanced's products include complete fire detection systems, multiprotocol fire panels, extinguishing control, fire paging and false alarm management systems.

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Keyline announces new managing director



Dean Pinner has been appointed Managing Director of **Keyline Civils Specialist**. Dean brings with him an in-depth knowledge of the civils sector and over 30 years' experience in the building materials sector, including the past six years as part of the Travis Perkins Group. Dean has an impressive track record

of leading teams to deliver outstanding performance and with specific expertise in the specialist arena, is well-positioned to drive the company forward and elevate Keyline to the next level. On his new challenge, Dean commented: "I am very excited to be rejoining Keyline and at a time that provides an opportunity to take the business to the next level!"

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New sales & marketing personnel



Domus Ventilation has appointed two new members to the ever growing team: Russell Beardsworth as Specification Sales Manager for the Midlands / North England, and Megan Bennett as Senior Marketing Executive. Russell's experience as both a Project and Key Account Manager at Xpelair

and Vortice, and his work in developing the latter's specification range, made him an ideal candidate for Domus Ventilation. Megan may be new to the ventilation industry, but her marketing skills are tried and tested. Megan has spent the last eleven years in various marketing roles. Domus Ventilation has a well-deserved reputation for quality, supported by excellent technical support, from a market leading manufacturer and designer.

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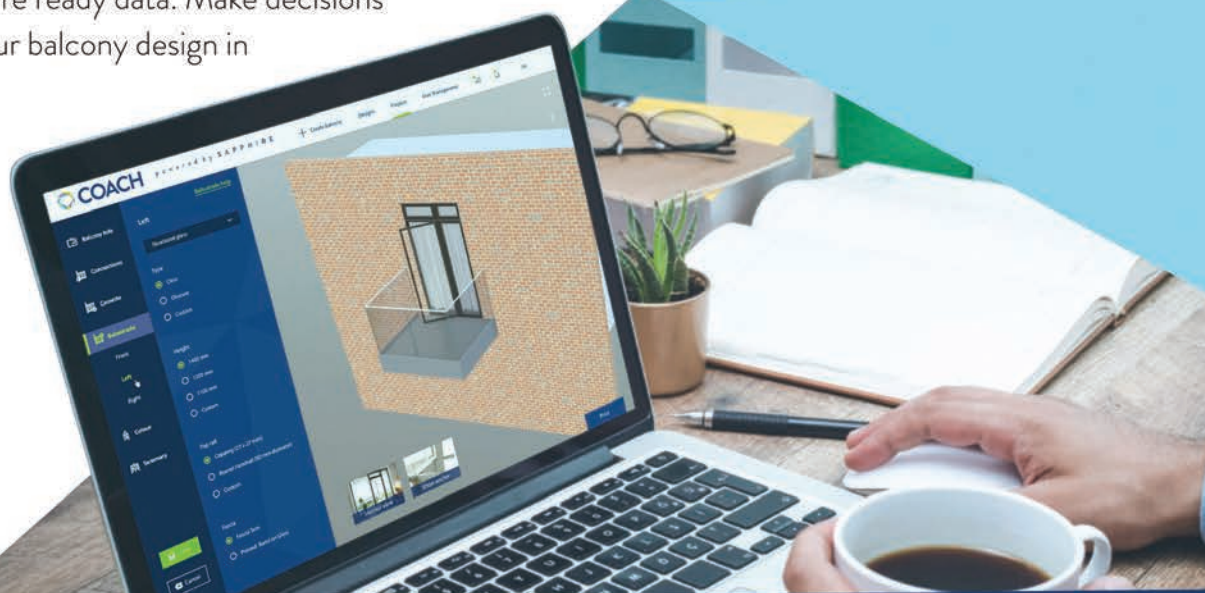
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Magply doubles up on shoreline property



A striking new three bedroom beachfront home on the East Sussex coast has been designed to not only respect its location within an area of Special Scientific Interest, but also withstand the challenging weather conditions as well as shifting sands, with **Magply** boards specified as part of both the roof and wall construction. The

building is making use of non-traditional construction methods, which features twin 12mm layers of the rugged and versatile Magply boards as a carrier for a render like finish, applied by the Micro Cement Company across the entire envelope. Magply offers a fire-safe and environmentally friendly alternative to conventional plywood or OSB products.

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Marmox Multiboards marble-mosaics



A strikingly modern residential property in one of Kent's most famous coastal towns is making articulate use of **Marmox** Multiboards as part of its cladding solution. Gerald Glover commented "Given the elevated coastal position the boards had to be fully waterproof,

while we also needed them to comply with fire regulations for exterior cladding use, but the lightness of Multiboard – enabling you to install large sections without difficulty – as well as the ease of cutting and fixing, were all additional attractions. We are now planning to use up the boards we have left over for fitting out the four en-suites, wherever there are areas of tiling or wet room situations. Multiboard is a very versatile product."

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Fireshield® used in upgrade of building



At Goldfinch Court, client Hills Partnership working with PCKO Architects undertook this project to replace and upgrade an existing residential facade comprising combustible ACM panels and rigid foam insulation. In addition to

mineral fibre insulation and non-combustible cladding panels, the architects specified the Fireshield vapour permeable membrane from the **A. Proctor Group Ltd.** Correctly installed in accordance with the A. Proctor Groups guidance by contractors Facade Cladding Solutions, Fireshield has a unique intumescent composition that actively reacts to prevent fire taking hold. This unique coating extinguishes fire rather than just resisting it, and significantly reduces the formation of droplets and smoke.

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Classic tile he turned. As Gordon says: "The tiles were originally Rosemary directly fixed to timber sarking and, after more than 80 years, some tiles were slipping due to nail fatigue, so it was time to consider replacing," he says. "And I really wanted to replace it like for like."

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TT Pumps gains ISO 14001:2015 during lockdown

The environment has always been important to T-T as much of its business is involved with pumping drainage and effluents, so the environment is of paramount importance. The company is very fortunate in being located in a rural location at Woore, South Cheshire on a 6-acre site with more than half the site being green natural space, having a small lake, woodland which being expanded by annual planting of British tree species, a further 250 trees were planted in early 2020.

To endorse the company's environmental ambitions the directors felt that it was appropriate to gain ISO14001.

The initial plan of getting full ISO14001 for early 2020 was put into total disarray by the Coronavirus epidemic, so much of the work had already been done during 2019 it was disappointing that completion would be delayed.

After some discussion with LRQA it was realised that not all was lost and that much of the final qualification could be done remotely. During early 2020 much of the detailed work was completed, only necessitating one surveillance visit to complete the process allowing T-T to gain the valued accreditation in the summer of 2020.

The accreditation will allow the company



to continue with its environmental policy while helping meet environmental regulations, improve efficiency and environmental performance.

Big thanks to LRQA for their positive

attitude in helping T-T gaining this important accreditation.

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Freefoam Building Products is delighted to announce that it is a founding member of CIRCULÉIRE, a National Platform for Circular Manufacturing that seeks to accelerate Ireland’s transition towards a net-zero carbon circular economy. A key objective of the programme is to demystify, de-risk and deliver a circular business model innovation for the Irish industry, and this is something Freefoam is extremely proud to be a part of. Freefoam is committed to operating a circular business model and manufacturing in a truly sustainable way. The company is looking forward to working with Circuléire to achieve this. Circuléire is a multi agency public-private partnership. Created by Irish Manufacturing Research, the Department of the Environment, Climate and Communications (DECC), the Environment Protection Agency (EPA) and EIT Climate-KIC. Freefoam are part of the 25 founding industry members. Circuléire will be working with manufactures and their supply chains over the next two years to move companies from a traditional linear to a circular business model to deliver significant reductions in greenhouse gas emissions and in waste production. Follow its progress on social media at twitter.com/circuleire and www.linkedin.com/company/circuleire

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Keylite Roof Windows take Margate housing development to new heights

Over 60 Keylite Roof Windows have been installed to new homes and flats in the Brooke Close housing development in Margate, offering clean and modern aesthetics as well as peace of mind for the building contractor, PCR Projects Ltd. The Roman Fields development situated in the village of Garlinge beside Brooke Avenue in Margate comprises 43 homes that come with integrated kitchen appliances, a ten year warranty, built in wardrobes and parking. Designed by architectural firm Urban Surveying and Design Ltd and built by well-respected local contractors PCR Projects, the development required 60 Keylite Polar White PVC Centre Pivot, Thermal Glazing Roof Windows to be installed in each of the houses, and two Keylite White Painted Centre Pivot, Thermal Glazing Roof Windows, with Smoke Ventilation Kits in each of the block of flats. Scott Ridgen, Managing Director at Urban Surveying and Design Ltd said: “We are very much a design led practice and so the aesthetics of Keylite Roof Windows really appealed to us, especially knowing how they would sit on the roof lines and create a point of differentiation for this particular project”. “We’ve actually gone ahead and specified more Keylite Roof Windows for another project we are currently working on, so it’s safe to say we are very impressed.”

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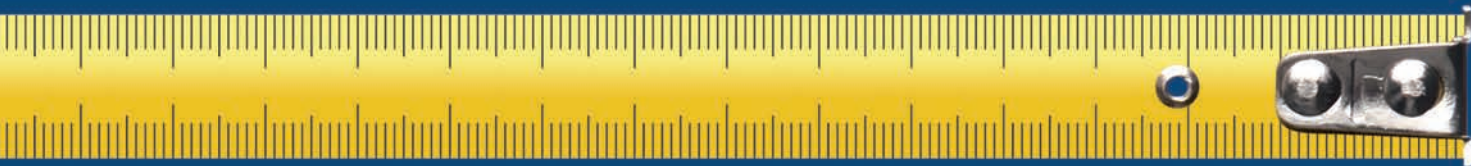
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HOW TO SECURE YOUR FUNDING IN 2021

Simon Chapman of Pluto Finance gives expert insights on the key steps developers need to take when attempting to secure finance for their residential schemes, and what challenges might be in store currently

In this extraordinary year, with many challenges facing us, there still remains a strong demand for more and more houses and growth in the housebuilding sector. But, what do you have to do, as a borrower, to be in the best position to secure funding for your project, and what are lenders looking for when funding property developments?

KEY POINTS

Regarding the development itself, lenders will expect the borrower's experience to filter through into the form and content, as they undertake a quick review of any scheme to gauge appetite. The site and geographical area itself are of key consideration. Have you studied the demand in the area for the scheme you are proposing? Whether that is demand for housing – and for what size of units – and for any

commercial elements of the scheme.

What are the costs of acquiring the site? What are the costs of development? Do you have a contractor in place? At what price will you sell or rent the units, and what is the projected end value of the scheme?

A TRACK RECORD

Lenders will look for housebuilders with a proven track record, demonstrating their ability to deliver schemes of similar nature. Ideally, you should provide details of at least two or three schemes that have already been built and sold.

Numbers are important here. Demonstrating the success of previous schemes will put you in good stead for providing the finance you need at each stage of development.

Most lenders will look to fund site

acquisitions, development costs and development exit, so that once your development is complete, you can start the next project with ease.

This kind of funding can additionally include exit bridge and equity release. Anecdotally, towards the end of 2020 there appears to have been an increase in these types of queries from developers, who are looking at gearing up completed schemes through development exit bridge loans to release equity and acquire new sites.

Some lenders will also look to provide bridging loan facilities, enabling for example the borrower to fund a deferred payment for site acquisition and provide additional funding for enabling works on the site, or allowing time for the borrower to obtain vacant possession and enhanced planning consent before



LENDERS WILL LOOK FOR HOUSEBUILDERS WITH A PROVEN TRACK RECORD, DEMONSTRATING THEIR ABILITY TO DELIVER SCHEMES OF SIMILAR NATURE

proceeding with the development finance for a project.

RESOURCED TO DELIVER

Due to land trading being at a premium, cost of materials being on the rise and a shortage of qualified labour, developers will have to ensure efficiency and deliverability is a key consideration.

Lenders will be looking for evidence that borrowers are not under-resourced to deliver the scheme, and that taking on another scheme won't stretch them too far.

To that end, details of the method of procurement and the proposed professional team project appraisal should be included in your project summary.



PERSONAL TOUCH

Last, but most certainly not least, many lenders will want to meet their borrowers, and preferably on site. This way they can really picture the proposed development as well as survey the area, to make sure the reality backs up the figures and detail proposed.

Despite this extraordinary year we

have been through, and the many challenges that Covid-19 has presented, the development finance industry is still very much open for business, and house-building is set for further growth in 2021.

Simon Chapman is lending director at Pluto Finance

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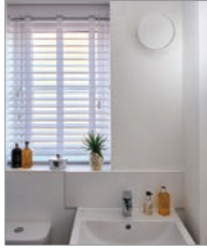
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www.mpwbrokers.com

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Titon develops the ultimate dMEV fan

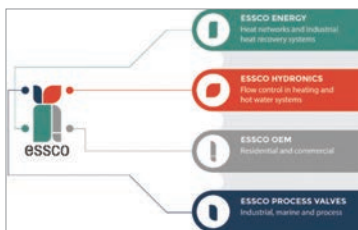


Titon are pleased to announce the release of a new revolutionary dMEV that ticks all the right boxes. The new Titon Ultimate™ dMEV is a constant flow fan that has been specifically designed to exceed ventilation demands, but meets current and proposed legislation. The high performing Titon Ultimate™ dMEV is an ultra quiet low profile fan, which is suitable for new build or refurbishment projects. It has a one fan fits all solution and is ideal for bathrooms,

kitchens and utility room applications, with adjustable continuous and boost speed settings available.

0800 970 4190 www.titon.com/uk/ultimate

A new dawn, a new day, a new Essco!



Essco are delighted to unveil their revitalised company branding, which includes a new name, look and website, and reflects the creation of the new 'Essco Group'. Richard Stammers, Essco Group Managing Director, comments: "We're striving to take Essco further, with a

mission to deliver the best energy efficient products and systems to the heating, ventilating, air conditioning and process industries, whilst inspiring our team to provide solutions that address the climate crisis"

01489 779068 www.esscogroup.co.uk

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- Wall-mounted
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- Variable thermostat and heating control options with compatible wireless controllers with DF2SL



The DF2 and DF2SL Heatflow fan heaters are ideal for bathrooms and kitchens.

NEW!



t: 01646 692172 sales@consortepi.com www.consortepi.com

New downflow fan heaters



Consort Claudgen have launched two new downflow fan heaters suitable for bathrooms or kitchens. Both provide rapid warmth and adjustable heat output of 1kW or 2kW at installation. The DF2 Heatflow has a pull cord switch that operates on a 30-minute run-back timer which can be deactivated before the timer expires. The DF2SL Heatflow has a variable thermostat and requires a separately purchased wireless controller to operate. It is compatible with Consort's SL run-back timers and

advanced wireless controllers offering a longer heating period as well as more efficient heat control.

01646 692172 www.consortepi.com

Heating controls for housebuilders



ESI offers a range of programmers from a simple one Channel version to a three channel Multi-Purpose Programmer which enables the housebuilder to comply with Part L of the Building Regulations by providing separate timed heating control for living and sleeping zones in a home, whilst also providing timed control of hot water. However, the ESI range all offer 24 Hour / 5/2 day and seven day programming options for each channel. With a large, easy to read LCD display and

being extremely simple to use, the ESRT4 provides genuine saving, as these models have Delayed Start and Optimum Start / Stop.

01280 816868 www.esicontrols.co.uk



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LIST OF BENEFITS:

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01709 581168
info@futurefires.co.uk
www.futurefires.co.uk

Heat pump technology



Housebuilders are taking a longer, harder look at air source heat pumps as a source of heating and hot water for their new homes. It's proven technology and installation is relatively simple. Already a number of housebuilders are selecting air source heat pumps as their chosen heating and hot water provider technology up and down the country – and it seems that at long last it's an option that is being taken seriously.

LG has a credible option on offer through its Therma V range of air to water heat pumps – AWHP – with monoblocs, split systems and high temperature options all available and already delivering heating and hot water comfort to home buyers.

0344 847 5454 www.lg.com/uk/heating-awhp

New range of K3 radiators



Recent developments in the heating system sector has seen a demand for larger radiators growing, to accommodate the increasing number of low temperature heating systems being installed across the country. These larger radiators are compatible with renewable heating systems, including heat pumps, as well as traditional boilers. Radiators are excellent emitters for

these lower temperature systems but as with all heating systems, for the radiators to be as efficient as possible requires the radiators to be sized properly at the outset. Stelrad has launched new versions of its popular Elite, Compact with Style and Planar series.

0844 543 6200 www.stelrad.com

Launch of the Adjusta boundary box



Aliaxis is delighted to announce the launch of its new Adjusta boundary box, adding to their water portfolio as part of a unique total system solution for water companies, developers and contractors. Designed to house the meter at the boundary between the water main and the domestic supply, the comprehensive range of Adjusta bound-

ary boxes has been developed with complete flexibility in mind. Compliant with WIS 4-37-01 and BS5834-2, the Adjusta boundary boxes are manufactured with an adjustable lid, enabling contractors to alter the height and pitch of the boundary box in accordance with the on-site conditions.

adjusta@aliaxis.com www.aliaxis.co.uk/adjusta

Marley system supplied to Slough project



A technically challenging redevelopment of a former office building in Bedfordshire, which has been transformed into high class apartments, has involved the specification of Marley Plumbing & Drainage's Solvent Waste system for use throughout the new apartments. Marley Plumbing & Drainage's

very versatile Solvent Waste system is suitable for use both inside and outside the property, while it is available in 32, 40 and 50mm sizes. There is also a full selection of bends, branches, couplings, adaptors or reducers and clips to suit virtually any application. The Solvent Waste system provides speed of installation with robust performance and reliability.

01622 858888 www.marleypd.co.uk

It's good to stand out from the rest



Introducing the new

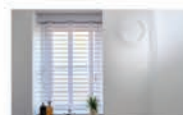
Titon Ultimate™ dMEV

The new high performing Titon Ultimate™ dMEV is an ultra quiet low profile fan, which is specifically designed for new build or refurbishment projects. With its one fan fits all solution, it is ideal for bathrooms, kitchens and utility room applications.

With adjustable continuous and boost speed settings available, the Titon Ultimate™ dMEV utilises an efficient DC motor and incorporates a uniquely designed impeller/guide vane combination to produce high flow rates and pressure.

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- Constant flow to guarantee ventilation performance
- Meets stringent 20 Pa back pressure requirement
- Quiet running, only 10 dB(A) at 3m, low speed
- Low profile aesthetic circular design
- 4 button and LED display to allow for simple control
- Quick and easy commissioning and set up
- Extremely low running costs
- High performance brushless DC motor
- Unique high performance impeller and guide vane design
- PCDB listed for inclusion within SAP

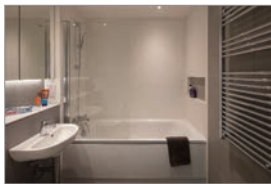
The Ultimate choice



www.titon.com/ultimate

Titon®
ventilation systems

Offsite Solutions awarded its largest project



Offsite Solutions has been awarded its largest bathroom pod contract this year – a £3.7m project to manufacture nearly 1,000 pods for a £105m build-to-rent residential scheme in Leeds. Offsite Solutions is manufacturing and fitting out 700 bathroom pods, and 288 ensuite shower pods for the studios, one, two and three-bedroom apartments at Monk Bridge. The project will use Offsite Solutions' recently launched enhanced GRP pods which offer numerous aesthetic features designed to appeal to prospective tenants, as well as significantly lower capital and operating costs.

www.offsitesolutions.com

Tim Spann from Keller Kitchens rounds up 2020



2020 has been a challenging year for Keller and the kitchen industry in general in the UK; yet we have been delighted with the huge levels of business – in particular, since the mid-point of the year. The second half of 2020 exceeded all expectations by a considerable margin. As a business which operates on an international basis, substantial year-on-year growth has been achieved for the fifth consecutive year. Overall, we are delighted to end the year where we are. As always, Keller Kitchens offers complete versatility for you; finishes comprise veneer, melamine or lacquered; while matt, silk, high gloss and structured lacquers are available in over 1950 NCS colours; and nine stain colours can be applied on veneer or solid wood.

www.kellerkitchens.com

On the level with Norcros Adhesives



Norcros Adhesives' latest addition to its comprehensive range of levelling products is proving very popular with specifiers and housebuilders. Norcros Pro AF Low Prep Self Smoothing Levelling Compound is an ammonia and latex-free, two-part levelling compound. It is suitable for use on most substrates without the need for priming.

Norcros Pro AF Leveller has been specially formulated for use over old adhesive residues including bitumen, historically a problematic material to bond to. There is no need to prime or remove firmly bonded residues. This greatly reduces the time usually required for preparation of the substrate to be levelled. The quick-drying formulation means that ceramic and porcelain tiles can be laid in just three hours. It also acts as a final floor finish for vinyl and other floorcoverings, which can be laid in four hours. Norcros Pro AF Leveller can be used from 0 to 12mm in one application. With the addition of coarse aggregates, the thickness can be increased to 30mm. The product is suitable for use in installations incorporating underfloor heating systems. Norcros Pro AF Leveller comes in grey and is supplied in a 20kg bag. It conforms to CT-C14-F6.

01782 524140 www.norcros-adhesives.com

A knock-out finish for tiling – a new simplified grout range from BAL



BAL – the market-leaders in full tiling solutions – have launched a streamlined grout family including new BAL Grout Flex. A pound-for-pound prize fighter, BAL Grout Flex is highly flexible grout with high strength and comes in five key colourways – packing a punch with a reliable finish. It comes in narrow or wide joint versions – Grout Flex and Grout Flex Wide Joint - for use from 2-5mm (narrow) and 3mm to 20mm (wide) joints. Easy to apply and mix up with colour consistency whatever the size of mix, it provides a smooth finish. BAL Grout Flex is available in 5kg and 10kg bags in White, Jasmine, Light Grey, Mid Grey and Dark Grey – with colour consistency in both narrow and wide joint versions. These have been identified as some of the most popular grout colours on the market and ensures that Grout Flex is suitable for a whole host of tiling designs and projects. Still best in class and staying the course is BAL Micromax2 – the undisputed champion of the UK market. Weighing in at 2.5kg, 5kg and 10kg pack sizes, BAL Micromax2 provides a perfect smooth finish on walls and floors in more than 35 colourways. Trusted for a crack-free, and efflorescence-free finish, BAL Micromax2 is also mould and mildew resistant with Microban anti-microbial protection. BAL's new focused range of grouts provide peace of mind with a fantastic finish to any tiling project.

01782 591100 www.bal-adhesives.com

Knauf Insulation Supafil® range first to earn DECLARE label



Knauf Insulation's Supafil® range has become the first blowing wool solution in Europe to be awarded the DECLARE 'Red List Free' label.

"DECLARE labels are new in the UK, but they'll make a big difference to housebuilders" said Matt Prowse, Director of Housing and Specification at Knauf Insulation. "For the first time, people can see the environmental impact of individual construction products at a glance. Using DECLARE labelled products – like the Supafil® range – ensures installer wellbeing and is a powerful point of difference to customers in a competitive market."

The DECLARE label presents a straightforward ingredient list, similar to familiar food nutrition labels. It shows other important details such as product life expectancy, end of life options and whether it contains chemicals featured on the DECLARE Red List.

"Housebuilders can also use DECLARE labels to verify their own sustainability and health and safety credentials" continued Prowse. "For example, it contributes to green building rating systems like LEED. This means you can use the Supafil® range to deliver buildings that are proven to be healthy and good for the environment."

01744 766 600 www.knaufinsulation.co.uk/why-knauf-insulation/sustainability#declare

BEYOND ENERGY EFFICIENCY

Paul Barrett of Rockwool explains why housebuilders need to consider insulation that delivers safety and acoustic performance alongside maximising onsite benefits for installers, not just thermal factors

Primarily driven by Approved Document L (ADL) of the Building Regulations, making homes more energy efficient is understandably a priority for housebuilders. As well as meeting specified standards, ensuring a home has good thermal performance also directly impacts future occupiers as they benefit from energy savings and reduced household bills.

While thermal performance is a given, with more homes being constructed in urban areas, homeowners are increasingly looking for dwellings that are also quieter and safer.

When considering insulation specification, solutions that deliver additional benefits beyond thermal performance offer an efficient and cost-effective route to achieving a competitive advantage, while improving comfort for the homeowner. For housebuilders, mineral wool insulation is one of the most efficient and effective ways of simultaneously addressing thermal, acoustic and fire protection.

WIDER BENEFITS

When it comes to specifying insulation, mineral wool does more than prevent heat escape. By regulating indoor temperatures, it helps a home to stay warm in winter and cool in summer –

AS THE DEMAND FOR HOMES INCREASES, DEVELOPERS ARE BUILDING IN AREAS OF INCREASED URBANISATION, WHICH BRINGS WITH IT THE CHALLENGE OF EXTERNAL NOISE, SUCH AS TRAFFIC

making the space more comfortable to live in.

From a fire protection perspective, mineral wool insulation is rated as Euroclass A1 non-combustible – meaning that the insulation will not contribute to a fire, helping to safeguard people and property. Moreover, manufactured from volcanic rock, it can withstand temperatures in excess of 1000°C and does not generate any significant levels of toxic smoke.

As the demand for homes increases, developers are building in areas of increased urbanisation, which brings with it the challenge of external noise, such as traffic. The inherent acoustic properties of mineral wool insulation can assist housebuilders with addressing this by dampening sound travel into the home. The manufacturing process of the

material means that within it are multi-directional strands of mineral wool which absorb sound waves and prevent the propagation of noise. Installing the insulation throughout the exterior envelope can therefore help to reduce unwanted sound in residential buildings.

HOMES THAT PERFORM

Specifying a product that can address thermal and fire requirements while also making homes quieter is a 'value-add' for both developer and homeowner.

While the performance benefits of mineral wool are well documented and underpinned by extensive test evidence, from an installation perspective it can achieve additional on-site advantages.

With solutions available for floor, loft, wall, ceiling and envelope applications, the insulation helps to save valuable time



onsite and accelerate project timescales. Efficient to install and easy to handle, mineral wool is simple to use yet effective. With ‘friction fit’ and fabricated products available for hard to reach areas, developers are able to streamline the installation process by removing the need for many ancillaries.

Considering the long-term performance of an appropriately ventilated house, mineral wool will not contribute to damp and mould. This is because it is vapour permeable with water-repellent properties and breathability capabilities, preventing the ingress of water, but allowing trapped moisture to escape.

Finally, with ever stringent sustainability targets in construction, specifying mineral wool insulation can make a quantifiable contribution. Manufactured from one of earth’s most abundant natural resources, it is a naturally sustainable solution, which is further enhanced by the ability for unused, off-cut waste to be easily recycled.

VALUE

Insulation has the potential to significantly improve the energy efficiency of a home by reducing heat loss and ultimately energy bills. However, by specifying a mineral wool



insulation solution, developers can install a product that embraces additional performance benefits.

This type of insulation has the power to deliver an all-encompassing solution that not only drives installation

efficiencies, but also adds value for the housebuilder by creating safer, warmer and quieter developments.

Paul Barrett is head of product management at Rockwool

Portaro and Easi-Fit doorkits, the fast way to achieve excellence

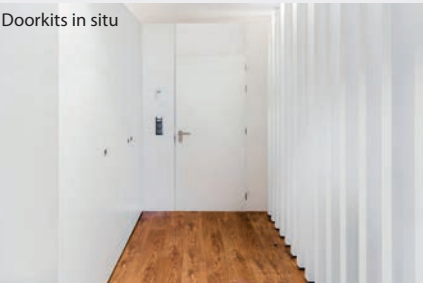
Interior door manufacturer Vicaima, have just introduced a totally new door kit and set brochure, which opens the way to assembly solutions for an ever increasing market diversity and performance criteria. In what has been seen as a dramatic extension to the Vicaima portfolio; these new kit and set solutions provide project specifiers with greater choice and flexibility to go beyond the realms of what was previously thought possible. With solutions in fire, security and acoustic performance, they present the fast way to achieve excellence.

With its striking yellow and black design, this new Vicaima technical guide contains 80 pages of inspiration and technical expertise for a wide scope of applications, ranging from residential living, hotel and leisure, together with education and medical situations among others. This handy and easy to reference technical brochure, spotlights two key brands from the Vicaima offering, to suit varying project requirements: Portaro Door Kits with their completely matching and finished, door and frame assemblies; together with the Easi-Fit Door sets which combines a choice of door with standard primed frames for on-site finishing.

Throughout the new brochure, doorkit and set solutions are sub-divided into four main categories for ease of specification and these include: Non-fire, Fire, Fire and acoustics and Security solutions. Within these categories, an array of configurations are made possible, with inverse, sliding and pocket systems among them. With regulatory performance being a hallmark of Vicaima, products also provide third party accreditation where applicable and are tested to BS and/or EN Standards. And as care for the environment is paramount, everything is covered by FSC® certification.



New Brochure



Doorkits in situ

This new brochure is certainly a must have tool for anyone looking to source door kits and sets that present rapid and simple installation, while at the same time meeting or exceeding some of the most demanding specifications the industry requires.

01793 532333 www.vicaima.com



BUBBLE BATHROOMS

Ash Chilver of HiB looks at how the need to maximise safety in the pandemic, coupled with the growth in multigenerational living, are driving bathroom design choices which will attract homebuyers of all ages.

Home life is changing across the UK. With an ever-ageing population and a growing number of young adults staying at their parental homes for longer, having numerous age groups cohabiting has for many, become the norm.

Now, factor in the coronavirus pandemic we have endured over the past 12 months, and the subsequent rise in isolation and loneliness as a result of the restrictions, and it's easy to predict that more large family bubbles will form in the future. So, how can we get ahead of the forecasts, and ensure that future builds and developments are fit for purpose?

When designing and building properties, accommodating homeowners' current needs and future-proofing for changing circumstances are key considerations. By incorporating multigenerational features into the design and planning of the home, plus investing in furniture and accessories with different age groups in mind, developers can attract a wider range of buyers and ensure that everyone's needs are accommodated.

The bathroom is one of the most important spaces for ensuring there is a blend of function and style for all ages. Often seen as a sanctuary within the home, a bathroom must provide a relaxing environment for all residents, while simultaneously meeting the practical needs of each user, from the young to the elderly.

Thankfully, there are plenty of solutions available which can create a multigenerational bathroom that is beautiful, functional and practical for all. From the structural considerations such as wetroom-style showering and suitable ventilation to ensure optimal hygiene and non-slip flooring, to the furniture and



accessories that will improve the quality of the bathroom experience, it's important for developers to consider all the options so they can create homes that deliver at every level.

DESIGN FOR SAFETY

Safety is often the key concern for households with less able residents. This can often mean installing wetroom facilities to allow those with limited mobility to move around the space without obstruction, and prevent difficulties stepping in and out of the bath or shower. However, key items such as shower seats, grab bars and grab rails can also have a huge impact. As more family units include people of all ages and abilities, it's important to install

accessories that have been designed with current interior trends in mind, but also include multifunctional features that can be adapted to suit each individual.

Bathroom aids such as grab bars and grab rails needn't get in the way of achieving stunning bathroom design. Gone are the days when large apparatuses are needed to ensure ease of movement. Manufacturers are continually developing and launching new, stylish accessories which can actually enhance the overall look of the space, with numerous finishes and options available.

For instance, products that offer practical, foldable systems that allow those who need additional support when showering can be hugely beneficial – the

THE BATHROOM IS ONE OF THE MOST IMPORTANT SPACES FOR ENSURING THERE IS A BLEND OF FUNCTION AND STYLE FOR ALL AGES



IT'S EASY TO PREDICT THAT MORE LARGE FAMILY BUBBLES WILL FORM IN THE FUTURE

shower seat being neatly stored away against the wall when other family members are in the shower, ensuring no obstructions. Products like this are worth being aware from the very beginning of the bathroom design process. With clever accessory selection and a little design know-how, it's feasible to construct a bathroom space that can be enjoyed by the whole family.

SORTING STORAGE

More people living in the same house means more items to find storage for. As a society, we love our lotions, grooming rituals and washing routines. Finding a space for everyone's essentials within easy reach can be difficult. Clutter can make a room look unsightly and also make it difficult to clean, not forgetting any potential hazards for more vulnerable family members.

Multi-functional storage such as recessed mirrored cabinets or wall-hung storage units mean function can be maximised without infringing excessively on space. For very small bathrooms or ensembles, compact furniture with a reduced depth is a growing trend, and can provide the ideal solution to maximise space without overwhelming the room.

For added flow through the room and

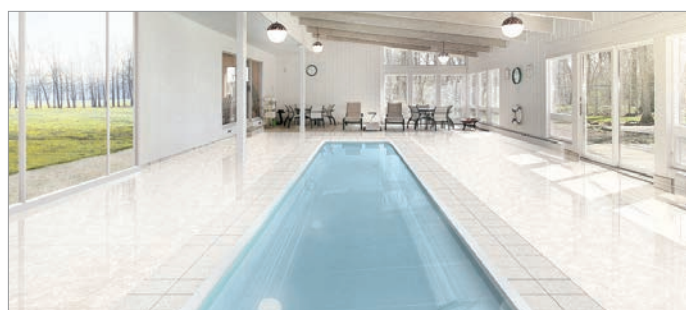
to bring the whole look together, it's also worth considering the placement of furnishings, avoiding tight corners which could be difficult to manoeuvre around. Vanity units with curved edges rather than corners can add a contemporary feel, and also ensure that where space is especially tight, there is less chance of someone catching themselves on any sharp edges. This is particularly important for a household with small children, as it minimises the risk of injuries in the event of slips, trips, or falls.

OPPORTUNITY

New homes and developments which clearly cater for multigenerational living are desirable for a growing number of families. It's not just parents with children looking for flexible space and room to grow anymore, we're now seeing an increasing number of households with multiple families, generations and relatives seeking suitable accommodation.

Producing architectural designs and interior choices that benefit those households can be a challenge, but it's also an opportunity to innovate and create spaces which the whole family can enjoy together for years to come.

Ash Chilver is sales director at HiB



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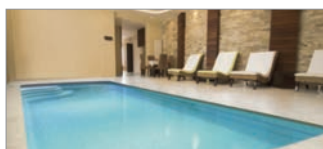


Reginox has launched a new range of super-quiet waste disposal units. Designed to unobtrusively grind and flush away food waste, the four models in the new collection are not only quieter, but also feature a more powerful motor than the company's previous WDU range.

In addition, they have an antibacterial coating for added hygiene, a removable splash guard for easy cleaning and a quick fit mechanism for fast and simple installation. Manufactured by one of the world's leading names in waste disposal technology, the new collection features four progressively powerful models – the RD50, RD60, RD70 and RD100 – all of which offer the same exacting quality combined with outstanding value for money.

01260 280033 www.reginox.co.uk

Supplying fibreglass pools for 20+ years



Fibreglass pools are now firmly established within the swimming pool industry and it's not difficult to see why. Installation can be carried out by your builder and completed within a fraction of the time and

cost of a concrete or liner pool. Our range of superior fibreglass pools are a one-piece reinforced construction with options for internal corner steps, roman ends and automatic cover chambers. Insulation is now available conforming to Part L of Building Regulations.

Please check out the **Bakewell Pools** website and visit our showroom.

01865 735205 www.bakewellpools.co.uk

PRODUCT OF THE YEAR

Supplement





JCB has launched its first ever electric Loadall model as the expansion of its E-TECH range of zero-emissions machines gathers pace. More than 43 years after the company pioneered the concept of telescopic handlers, JCB has taken the wraps off its brand new 525-60E model, a fully electric version of the popular Loadall. Designed to deliver the same performance as the conventional diesel-powered machine, the 525-60E offers a zero-emissions load handling solution. A further benefit of electric operation is a significant reduction in noise levels, making the Loadall suitable for extended operation in sensitive urban job sites.

www.jcb.com



January sees **Designer Contracts** launching an exciting multi-format luxury vinyl tile range, available in a rigid core and glue down option.

Designer Knight Tile is available in seven wood effect designs, it is manufactured to replicate the grain detail of natural timber, along with three stone effect tile options which feature a modern finish.

This unique multi-format proposition offers house builders the flexibility to select the most suitable installation method for their development through a design locked range.

www.designercontracts.com



The Biodigester 'T' range from **Burnham Environmental Services** caters for 6-42 people and larger Biodigesters are available for up to 2,000 people.

All Biodigesters are suitable for variable loading. The 'T' range Biodigester has been tested to EN12566 Pt 3 and has a CE Mark.

Owners are impressed by the limited maintenance required, infrequent emptying intervals and the 'Odour Free' totally aerobic process.


The Biodigester range is backed over 45 years experience.

www.biodigester.com



Marley has launched an enhanced Ashdowne clay handcrafted range. The new Ashdowne tiles feature subtle distressed edges and irregularities, replicating a hand-made tile aesthetic. The evolution of this popular tile enables contractors to achieve a unique, handmade look, with all the benefits and cost effectiveness of a machine-made clay tile. The Ashdowne range is fully compatible with the Marley full roof system, complemented by a range of fittings and accessories, and covered by a 15-year guarantee. Marley's Ashdowne handcrafted tiles have variegations and distressed edges, giving each one a unique character.

www.marley.co.uk/ashdowne



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Elegance with unrivalled system security

With the launch of the Fundo RioLigno, the thinnest linear shower element ideally suited for timber floors on the market, sophisticated wet rooms in wooden structures become a reality. wedi's wide range of products and system solutions provide a systemised insulation for wet areas, so there is no need to ensure compatibility of different brands or worry about security of the installation.

wedi's subconstruction elements are 100% waterproof to the core, decoupling, have the best thermal ($0.036\text{Wm}^2\text{K}$) and vertical weight loading capabilities (133kg/m^2) amongst common tile backers on the market and can be either tiled directly onto or plastered. No additional waterproofing or heat insulation is required.

Current trend shows increased popularity of walk-in showers but when it comes to suspended timber floors, it is imperative to evaluate between different brands in order to select the best solution that ticks all boxes. wedi products are developed with practicality, versatility and functionality in mind. Uniquely, all wedi Fundo shower elements have a sealing set developed especially for the all-round sealing of their perimeters and a 360° dry-fit drain technology that offers reassurance of their use in/on wooden floors.

For many years, wedi's Fundo Ligno shower element with point drainage was the ultimate solution for installing walk-in shower areas in timber floors. Answering market demand, wedi recently introduced a new shower solution with linear drainage especially for suspended timber structures. Both the wedi Fundo Ligno and Fundo RioLigno shower elements fit and sit flush in the wooden flooring, without having to cut into floor joists or build up further floor height. With their outer edges of just 20mm and 25mm respectively, keeping safety in focus above everything else, both shower elements are fitted with a support plate on the underside reinforcing the area around the drain opening to provide unrivalled peace of mind within the moisture sensitive and ever moving timber floor. Furthermore, to eliminate any possibility of failure, wedi offers a drain-substructure element for wooden floor installations that guarantees reliable support and accurate aligning of the drain.

Sufficient insulation of bathroom floor and wall surfaces is also imperative, especially in wooden structures. Coupling wedi Fundo shower solutions with wedi building boards and/or wedi Subliner Dry & Flex membranes, would not only result in a CE marked walk-in shower area but would also be awarded with a full wedi system guarantee. wedi building boards are famous for their suitability to be directly bonded onto timber or metal stud frames without the need for mechanical fixing -



with the elimination of laborious sealing measures over penetrations, they save time and offer further safety. wedi's Subliner range, as a complement to wedi building boards, is renowned for its reliability in waterproofing and/or decoupling of bathroom walls and floors.

Simple, safe, functional – this is wedi.

wedi has rolled out remote learning sessions for architects/planners and contractors/tradesmen on wedi Wet Room Solutions for timber floors. Do you have a project to discuss or would like to register for an online session? Please get in touch either by calling or emailing enquiries@wedi.co.uk.

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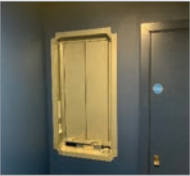
New website reflects expanded offering



A revised and updated website launched by workwear specialist **Ballyclare** – a leading supplier to the building and construction sector – gives full details of the many different ranges of garments, solutions and related services the company offers. The new website features enhanced navigation which makes it even easier for users to locate the information they require, while still giving easy access to the company's many ranges of high quality workwear and protective clothing. The website details Ballyclare's various different general and specialist workwear ranges which include T-shirts, jackets, coats, trousers, coveralls, sweatshirt, underwear and many other items.

0161 412 0000 www.ballyclarelimited.com

A new discovery in smoke protection



Students at University of Salford will discover a new approach to being safe when the campus re-opens in September. **Gilberts'** "first of its kind" Series 60 damper has been chosen by leading smoke control systems company Baiceir to protect the 14-storey Discovery Quay development. Some 26 dampers- each capable of providing up to two hours' fire integrity- have been incorporated into the common corridors to protect the two stairwells within the £24.5m building, comprising 400 student bedrooms and ancillary communal space. "We hope that our customers never have to use our systems, but if they do, they want the assurance they will work. Lives depend on it," says Baiceir managing director Andy Baker.

01253 766911 info@gilbertsblackpool.com

NEW FlexiWork Neon Jackets and Fleece



NEW Neon Jackets and Fleece from **Snickers Workwear** for the flexible working environment – delivering visibly superior comfort and freedom of movement. While Fabric, Functionality and Fit are hallmarks of Snickers Workwear, it's the innovation and fabric technology in the design of the new FlexiWork Neon Fleece Hoodie, Jacket and Gilet that really set these new garments apart. They're great for working outdoors in the colder months. Delivering superior flexibility and comfort, these lightweight four-way stretch garments come in a body-mapping design and are made from an Elastane/Polyester fabric with a water-and wind-repellent finish for comfort and durability when you need it most.

www.snickersworkwear.co.uk

C-TEC's fire system raising the grade



C-TEC's revolutionary Hush Pro BS 5839-6 Grade C domestic fire detection and alarm system has been chosen for three iconic tower block developments in Manchester. Selected for its cutting-edge technology and capacity to align with the building's fire strategy, Hush Pro will integrate with the site's BS 5839 part one landlord system to offer higher levels of fire protection than the Grade D unmonitored battery alarm systems typically used in domestic installations. Hush Pro reports open and short circuit faults and operation faults back to the fire panel and even allows management and maintenance companies to remotely monitor the system.

www.c-tec.com

Image provided by Kingston Landscape Group

Edging, rings and planters

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Enhanced thermal performance



The superior quality of Reflectashield® TF 0.81 breather membrane from the **A. Proctor Group** has been installed to ensure a highly efficient thermal performance for a series of new housing schemes on Salisbury Plain set to accommodate service personnel relocating from Germany. Derek Gough, Senior Estimator

for Taylor Lane explains: "We use Reflectashield TF 0.81 on all of our projects and in our experience believe it to be one of the best membranes on the market. Installed on the external face of the timber frame, foil side face out, the use of Reflectashield TF 0.81 enabled us to achieve the required U-value whilst using the minimum amount of insulation.

01250 872261 www.proctorgroup.com

Cavitray and Roof Abutment Ventilation



With an airflow rating of 25,000mm² per running metre, the Type RAV-FL Roof Abutment Ventilator from **Cavity Trays of Yeovil** opens like a book to permit direct fixing into a timber upstand battened off the wall.

When the Type RAV-FL is then closed, its higher section is secured directly to the wall and receives the flashing over-dressing from

the cavitray at higher level. The resultant detail satisfies ventilation and damp control measures demanded within the Building Regulations.

01935 474769 www.cavitytrays.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

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www.hbdonline.co.uk

Norbord helps create bespoke dream homes



Creator of beautiful dream homes, GMDL is a family-run architecture and construction company. **Norbord** products feature in most of GMDL's projects. This impressive building features market-leading CaberDek which has a tough, waterproof and slip-resistant film. This

protects the panels for up to 42 days – from laying the flooring to fixing the roof when laid in accordance with fitting instructions using CaberFix Pro. The heavy-duty film protects against spilled paint and plaster and the effects of wet weather and muddy work boots. When peeled off, the film reveals a clean surface ready for further floor covering. SterlingOSB Zero OSB 3 was used for the walls, timber frame kit, roof and internal racking.

www.norbord.co.uk/housebuilders

Exciting new innovations from Simpson Strong-Tie

Despite the unprecedented nature of 2020 the construction industry remains robust, and we've been working hard to bring you exciting new innovations across our product ranges.

In January our Connectors for Timber and Masonry Construction catalogue introduced the new Gable Panel Connector, a high movement timber frame tie, decorative and heavy duty post bases and an adjustable mini hanger.

Our mascot Rusty advised customers that building requirements only advocate the use of austenitic stainless steel or PVCu beads in UK external rendering applications, not galvanised.



In March we introduced our Premium Fasteners range; Europe's leading range of superior nails and screws, with structural options, including the new the SSH screw for use with connectors where high load capability is required, and a choice of superior stainless steel fasteners.

The range also features our Quik Drive collated fastening system, now available with a lifetime warranty, launched with a viral video game style feature on social media that saw almost 2 million views.

In May we published our Connectors & Fasteners for Cross Laminated Timber Construction catalogue featuring new structural angle brackets, hold downs, concealed beam hangers, and a timber frame Quik Drive solution.

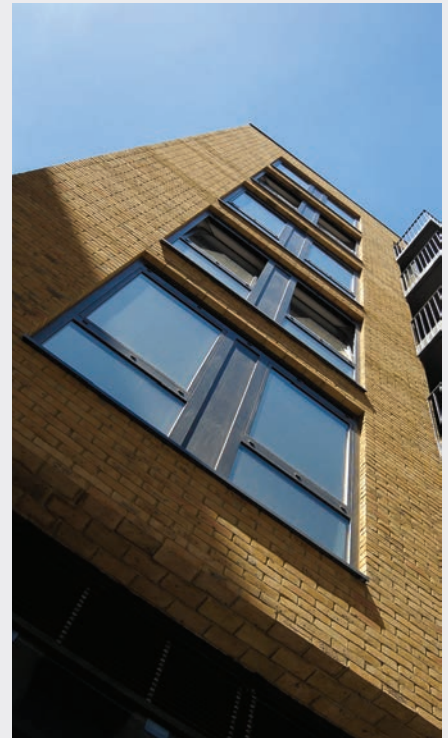
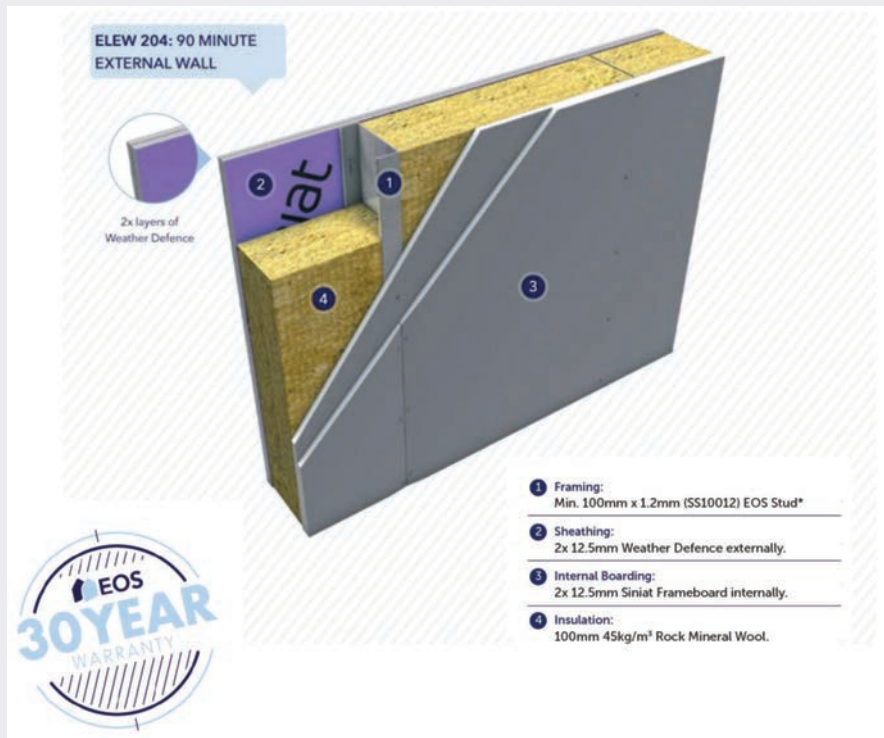
Autumn saw the release of our popular Building Safer Structures CPD webinar, followed by our Light Gauge Steel catalogue. Included in the range is the brand new LGSSC Splicing Clip, designed to connect the over-sail LGS studs to the primary structure, and the new RCKW Parapet Wall Bracket, designed to resist an over-turning moment at the base of exterior knee-walls and parapets.



"It's been an exciting year, with the launch of new products across our ranges" explains Sales Director Jon Head. "Coupled with new catalogues and first rate technical and customer support, we have everything you need to build safer, stronger structures."

01827 255600
www.strongtie.co.uk

Taking a safety-first system approach to construction



It is a fundamental of good design that residential buildings should be safe and that measures to enhance their environmental performance should not compromise this essential requirement. Here Steve Thompson, Managing Director for specialist steel framing manufacturer EOS, considers taking a safety-first system approach to specification.

Improving levels of occupant safety together with increasing the quality of the build, is under the microscope. Risk, quality, time, costs and performance — need to be managed and controlled. The performance of building materials is under an unprecedented spotlight. Regulations tend to deal with individual products and how they perform in laboratory tests. However, we consider material providers should have full-scale testing regimes that study the performance of products working together to see how they interact in 'real' circumstances, like under fire conditions or when exposed to wind and rain.

We are committed to technical competence and as part of Etex, we have some of the best fire experts in the UK on our team. They work closely with certification bodies to jointly develop and design technical solutions.

A fragmented supply chain results in components being offered by a multitude of manufacturers, therefore warranties are complex, for very limited timescales or simply non-existent. This uncertainty also extends to the costs involved, the speed of build and the quality of the final outcome.

In response to these challenges, EOS has

developed a range of Thrubuild® light steel frame panelised systems, offsite manufactured to rigorous quality standards. Our Thrubuild® system range has been engineered for structural performance to the latest Eurocode and after completing rigorous fire, acoustic, weathering, airtightness and mechanical testing – are supported by a 30-year warranty.

Developed in collaboration with Etex brands – EOS, Siniat, and Promat, these fast-track

solutions make use of the latest products, technical know-how and manufacturing excellence of the combined team. The range of Thrubuild® systems deliver an 'all in one' walling and flooring solutions providing crucial time and cost benefits. A system approach ensures the outcome is more predictable and repeatable, eradicating the risk of onsite variability.

01325 303030 www.eosframing.co.uk

THRUBUILD® TESTING REGIME

The Thrubuild® range has multiple applications and can be used for external or internal walls together with internal and separating floors. The detailed structural design is carried out by qualified engineers in accordance with loadings to EN 1991-1 and building regulations, calculated to EN 1993-1-3 and EN 1993-1-5 and further relevant parts of the Eurocodes for robustness, stability and resistance. All specified fire performance is the result of testing to BS EN 1365-1 for walls and BS EN 1365-2 for floors.

The Weather Defence used in the panelised system is a revolutionary new external sheathing board, faced with water repellent material for superior weather protection. Designed exclusively by Siniat, it is strong, highly moisture resistant and A1 non-combustible. Weather Defence can be left installed and exposed for up to 12 months on site before the final cladding needs to be completed.

WARRANTY

All Thrubuild® systems are supported by a 30-year warranty. Only tested configurations are available for selection.

ADDITIONAL EVIDENCE

More information is available on the EOS website: www.eosframing.co.uk
The Thrubuild® System Specification Guide can be downloaded from the EOS Information Centre: www.eosframing.co.uk/information-centre

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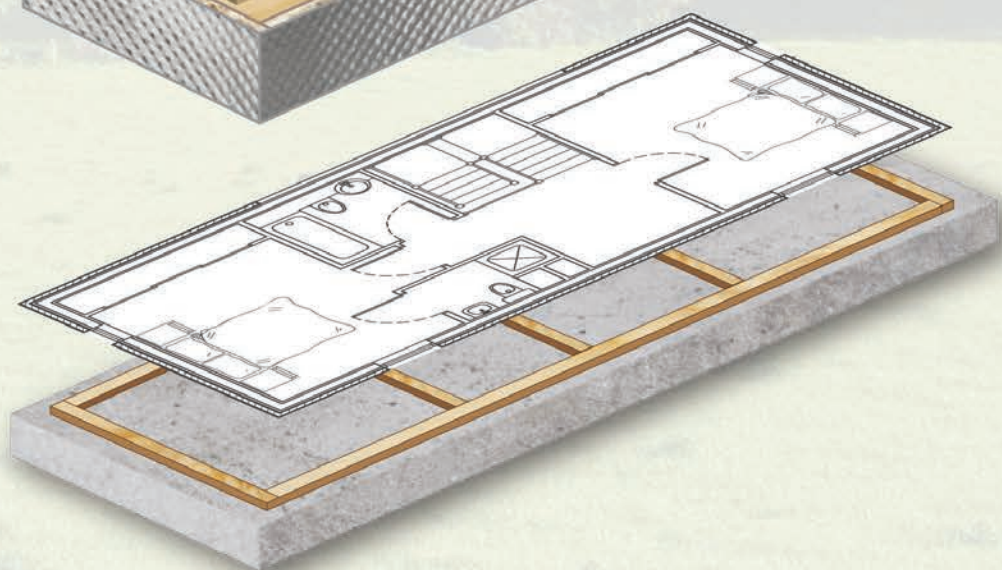
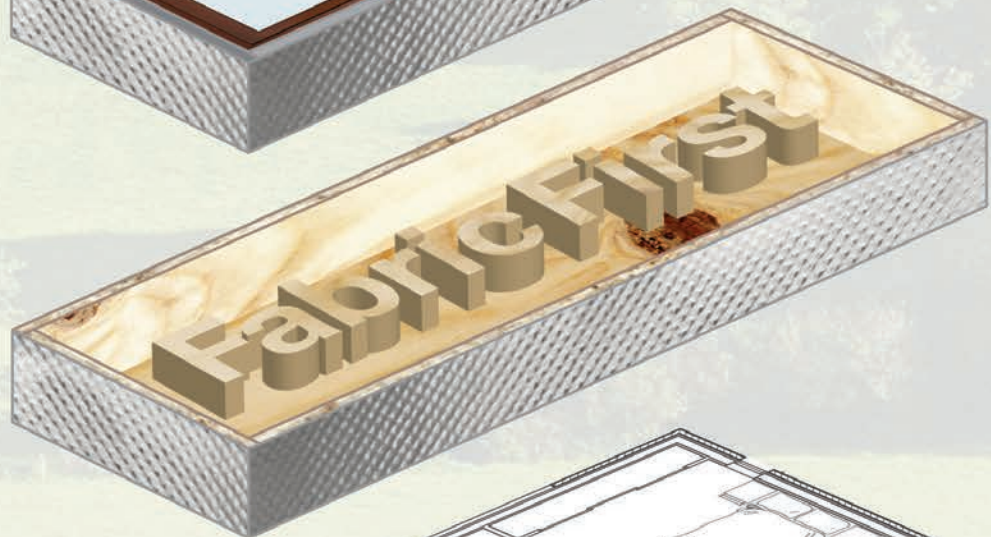
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PUT FABRIC FIRST

Ben Cheetham of Keystone Lintels considers how housebuilders can, by pursuing a fabric-first approach to energy efficiency and careful specification, avoid the problems of thermal bridging

Preventing heat loss by addressing thermal bridging is growing in importance – particularly with the Government aiming to create more energy efficient homes and attain its ultimate goal: i.e. carbon neutrality by 2050.

Indeed, research carried out by the BRE found that thermal bridging can account for up to 30 per cent of heat loss from buildings. To address this, architectural detailing and onsite construction practices have become the focus. In the first instance, however, it's important to understand what a thermal bridge actually is.

EXPLAINING 'THE BRIDGE'

A thermal bridge is a localised area in the building envelope where there is increased heat loss compared to the surrounding area. Two types of thermal bridge can occur: repeating thermal bridges and non-repeating thermal bridges.

Repeating thermal bridges are accounted for in the calculation of a building element's U-value (i.e. an external wall). Any material that interrupts the insulation layer in a 'repeatable and predictable' way would be classed as a repeating thermal bridge. Examples of these would be steel wall-ties in masonry construction or timber or steel studs in framed construction.

The remaining non-repeating thermal bridges are typically found in junctions located within the external envelope of the building and are measured in 'Psi' values. Examples of non-repeating thermal bridges would include a steel lintel above a window or door opening. Junctions such as these are assessed using thermal modelling software, and their impacts on the building's energy performance must be calculated independently in addition to U-values.

HEAT LOSS AND LINTELS

Today, the majority of lintels in domestic-scale dwellings are made from steel for a number of reasons, such as providing more design flexibility and easier onsite handling than other alternatives.

However, steel has a high conductivity value, and with lintels typically spanning across long lengths when you add them

all up in a building, it's no surprise they contribute significantly to heat loss via thermal bridging. Therefore, taking into account the thermal performance of lintels at the design and specification stage is more important than ever.

A lintel design which incorporates a thermal break will outperform and be much more thermally efficient than a standard lintel, and so housebuilders should look to achieve this from the outset.

PART L CHANGES – DRIVING EFFICIENCY

The Government is considering two options for an uplift in energy efficiency standards in Part L – now expected to be brought in during 2021 as part of the Future Homes Standard which comes into

force in 2025. It will be a challenge for builders to meet these ever more stringent energy ratings in a cost-effective manner.

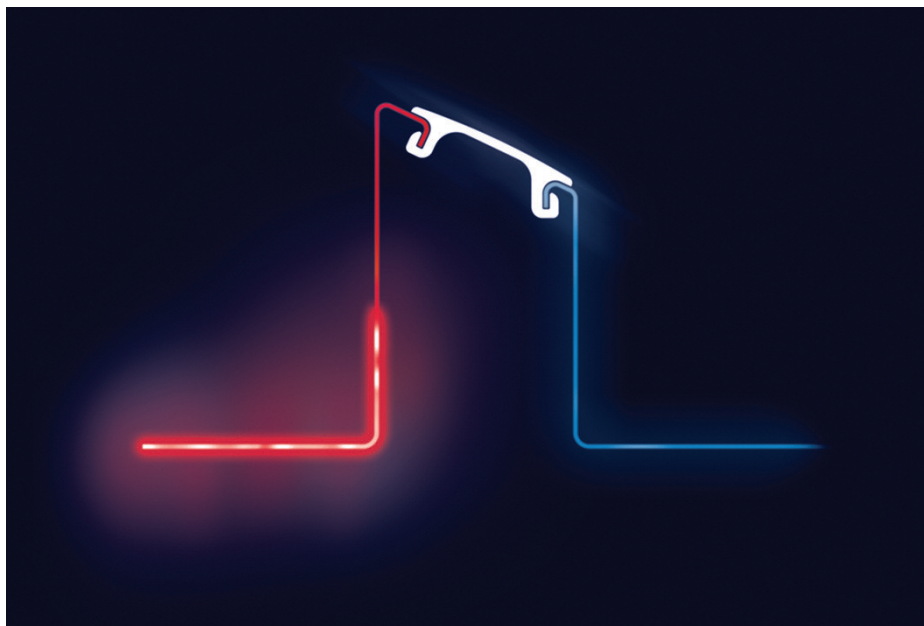
Both options suggest additional uplifts in fabric targets to further maximise energy savings that can be built in for the lifespan of the building – with thermal bridging again a pertinent issue.

Option 1 ('Future Homes Fabric') is intended to deliver a 20 per cent improvement on the current Part L standard. This is expected to be delivered predominantly by very high fabric standards, which means lower levels of heat loss from windows, walls, floors and ceilings.

Option 2 ('Fabric plus technology') is intended to deliver a 31 per cent improvement on the current standard. It's expected that this would typically be



EXAMPLES OF NON-REPEATING THERMAL BRIDGES WOULD INCLUDE A STEEL LINTEL ABOVE A WINDOW OR DOOR OPENING



delivered through a lesser increase to fabric standards, alongside use of low-carbon heating and/or renewables technologies.

FABRIC FIRST

Whatever the outcome, it's clear that improving the building fabric will be key to meeting these new regulations.

A fabric-first approach to property design concentrates finance and efforts on improving fabric U-values, reducing thermal bridging and improving airtightness. It is a first step before renewable, mechanical or electrical building services or technologies are considered to further reduce CO₂ emissions. A well-designed fabric can, on its own, reduce energy

consumption and therefore reduce bills in any building type.

The benefits of this approach are increasingly widely recognised, and ongoing research continues to reinforce the significant positive impact this approach can have – economically, environmentally and socially. The reduction in CO₂ emissions achieved through fabric measures is built-in for the life of the building, to therefore ensure that the energy demand and CO₂ emissions of a site remains low. Renewable technologies, on the other hand, have a limited lifespan and risk a significant increase in emissions from a development once they reach end-of-life, if not maintained or replaced at a cost to the homeowner.

With junctions above openings in buildings particularly vulnerable to heat loss through thermal bridging, paying close attention to the details and structural elements such as lintels is key to ensuring energy efficient buildings. A fabric-first approach to property design will provide the all-important framework to ensure 'as-designed' performance is achieved, while also futureproofing homes against regulatory changes.

Ben Cheetham is national specification manager at Keystone Lintels

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