HbD

Housebuilder & Developer



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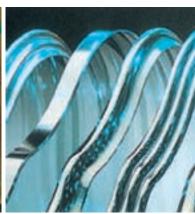




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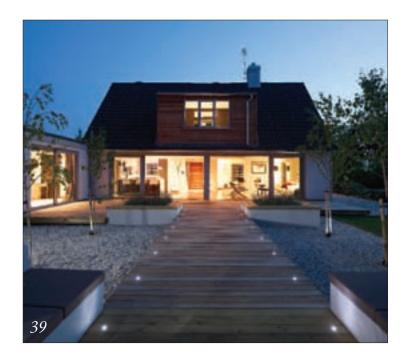


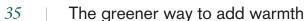




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Subscription costs just £48 for 12 issues, including post and packing. Phone 01435 863500 for details. Individual copies of the publication are available at £5 each inc p & p.

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Printed in England





Editor's comment

James Parker



Hello and welcome to your October issue of HBD. The year is flying by, and that means that we will soon be hearing what Brexit means in practice, or will we?

In the meantime, we have been hearing some positive ideas on how to tackle the housing crisis from David Orr, chief executive of the National Housing Federation, who told his association's conference recently that the Government needed to think about a different sort of 'tenure-blind' building of homes. He welcomed Theresa May's foregrounding of housebuilding as part of her focus on a fairer society, however he said "It's time to do things very differently."

While Orr believed that homes for the under-forties, on brownfield sites or shared ownership were all good things, he told the conference that "we need to turn this completely on its head. We need to build homes, then worry about the tenure next." This more flexible approach might not chime well with some housing associations, however it may well be music to the ears of housebuilders wanting to free up constraints to building, particularly in London.

Talking of London, a recent bit of news showed that the city's developers aren't always just about maximising revenue and building as high as they can wherever they can. The firm developing Centre Point in west London, Almacantar, has retreated from plans to replace a 12-storey building on Shaftesbury Avenue in Soho with a 30-storey skyscraper. Almacantar reportedly said that the plans would "inappropriate" following impact assessment which decided key views would be compromised, and opted for refurbishment instead. I would be interested to hear from you if you have a view on this bit of developer conscientiousness - email me at james@netmagmedia.eu



Call for collaboration to solve skills crisis

ccording to a new report, greater collaboration is essential between housebuilders and their subcontractors if the industry if to address its skills crisis.

'The case for collaboration in the supply chain' is the first major piece of work to be undertaken by the new Home Building Skills Partnership (HBSP). The report goes on to say that providing subcontractors with better visibility on future work, prompt payment, and sharing training resources will help enable them to grow, increasing industry capacity.

While housing output has increased by around one-third in just two years, to around 155,000 homes a year, following five years of general decline, this is still some way short of the estimated 230,000 homes a year required - meaning tens of thousands more skilled workers will be required. With the industry reliant on subcontractor labour, the report says that to achieve this, housebuilders need to shift from a 'procurement' to a 'development' approach to its supply chain.

Based on research conducted with 20 large UK Housebuilders and 204 subcontractors, who in total employ up to 150,000 workers, the report revealed that:

- Two thirds of subcontractors want to grow through housebuilding
- Builders and subcontractors have the same objectives - profitable work, positive reputations, safe and productive sites
- 57 per cent of subcontractors are planning to increase direct employment in the next year
- Only 50 per cent of subcontractors are

- confident they can meet housebuilders needs
- Critical shortages include ground workers, plumbers, electricians, bricklayers, carpenters, plasterers, roofers and painters
- Without greater collaboration, supply chain capacity increases will be limited

For housebuilders, the report recommends that companies give greater visibility to their future pipeline of work at regional levels, that they reduce the half year and year end pressures, pay promptly, make their training infrastructure available to subcontractors, and that they consider mandating subcontractor training.

The report calls on the HBSP and CITB to take the recommendations in the report forward, and develop solutions that will lead to increased cooperation and more joined-up training processes that will allow the industry to grow. In particular, this means increasing the number of apprentices.

Speaking at the report's launch, John Tutte, chair of the HBSP, said: "The industry faces a huge challenge in the years ahead as it looks to attract and train the people required to build the homes the country needs. The relationship between housebuilders and subcontractors is absolutely critical in terms of how the industry recruits and delivers, and it is imperative we work more closely together.

The report provides some key insight into how we can collaborate more effectively to deliver improved training processes and ultimately increase capacity. We will work more closely with industry stakeholders to act on the



recommendations as part of our wider drive to tackle the skills challenge we face."

Steve Radley, director of policy at CITB, said: "This research provides new insight into housebuilding supply chains and how they work, which is a crucial first step to tackling the skills challenge in homebuilding. The new partnership and the evidence it has brought together offers the best opportunity in years to foster much closer working in the sector, which will improve skills, help companies become more productive and cost effective, and ultimately help us build the homes we need to provide."

The HBSP is a pan-industry body, set up by the Construction Industry Training Board (CITB) and Home Builders Federation (HBF) in June, to ensure the industry has the skills it needs to deliver.

Khan launches London Living Rent scheme

ondon Mayor Sadiq Khan has set out the first details of his plans for the London Living Rent – a tenancy for newly-built affordable homes that will help average earners in the capital save for a deposit by offering them a below-market rent.

London Living Rent homes will have rents set at a third of average household incomes in each Borough. New homes will be offered to low and middle-income households, typically earning between £35,000 and £45,000, who are currently renting privately. Across London, this would see the rent for a two-bed flat drop below £1,000 compared to average private rents of £1,450.

Further details on the new programme will be released in the coming months, but the Mayor has already begun working on the scheme. The new Mayor of Hackney, Phil Glanville, has made a manifesto that Hackney will be the first Borough

to build 500 homes for London Living Rent.

The Mayor also signalled his intention to protect London's stock of social housing for those on low incomes. He has pledged to work with housing associations to put an end to so-called "rent conversions", whereby existing social housing is re-let at higher rents.

Sadiq Khan commented: "We know that fixing London's housing crisis won't happen overnight, and we need to do everything we can to help Londoners who are struggling to pay their rents."

Philip Glanville added that "it's vital that there are more homes which Londoners on middleincomes can afford to rent and buy."



Housebuilding figures exclude a fifth of all completions, HBF reports

ccording to a HBF report, The Government's most publicised measure of housebuilding "loses" a town the size of Stevenage every year. The report released that around a fifth of all new build completions every year are excluded from Government data.

The HBF's analysis shows that the Housebuilding Statistics, released on a quarterly and annual basis by the DCLG under-report new build completions in 75 per cent of Local Authorities, with an average of 153 new homes lost in each of those areas.

More than half of new build homes in areas such as Birmingham, Liverpool, Leicester, Salford and many London Boroughs are completely unaccounted for in the quarterly series, says HBF. As a result, over the course of a Parliament, in which Government is targeting a million homes, a city larger than Nottingham, Coventry or Newcastle simply vanishes.

The Net Supply of Housing data series, which the HBF said are "arguably more reliable figures," show that more than 181,000 homes were added to the housing stock in 2014/15 - the last numbers available - of which 155,000 were new build, up 20 per cent year on year.

At a time when the housebuilding industry is rapidly increasing output, largely as a result of some significant Government policy successes, the HBF said the shortfall is giving industry and Government critics, and those opposed to development generally, ammunition to criticise it.

Stewart Baseley, executive chairman of the Home Builders Federation, said: "Housebuilding has increased significantly in recent years, but the continual publication and use of inaccurate statistics is painting a negative picture that is undermining the progress being made in tackling the housing shortage. The Government's housing policies and the industry are delivering, and it is incredibly frustrating that official statistics are not reflecting what is happening on the ground but instead presenting an open goal for critics."

The report also puts forward additional reliable indicators of housing delivery, including the official Council Tax Base statistics, counting net additional homes at a later point in the year than that covered by the Net Supply statistics,

and the issuance of Energy Performance Certificates for new build properties. Both report that construction levels are vastly outstripping the wildly inaccurate 'House Building Statistics'.

According to HBF the data excluded:

- At least 75 per cent of the London Boroughs of Brent, Wandsworth, Hammersmith and Fulham and Kensington and Chelsea
- 1,280 new homes in Birmingham (twothirds of all new build completions)
- 920 new homes in Liverpool (63 per cent of all new build completions)
- 640 new homes in Salford (half of all new build completions)
- 570 new homes in Leicester (6 out of 10 new build completions)
- 570 new homes in Sheffield (40 per cent of all new build completions)
- 400 new homes in Chester West and Chester (29 per cent of all new build completions)

10,000 new homes planned in Barking

The master plan for up to 10,000 new homes - up to 50 per cent of which could be affordable - has been approved by London Mayor Sadiq Khan.

The 180-hectare brownfield site on the northern banks of the River Thames would be the single largest regeneration site in the capital.

The development will include a minimum of 35 per cent affordable homes from the outset, with provisions to raise this to 50 per cent over time, through additional investment and viability reviews. The homes include affordable homes to rent and those for first-time buyers, across a mixture of one, two and three-bedroom homes.

The site is owned by Barking Riverside, a joint venture between the Greater London Authority (GLA) and the housing association L&Q. Until the 1990s, it was home to three power stations and a large amount of landfill.

Khan said: "Barking Riverside has enormous potential to deliver thousands of the muchneeded homes Londoners so urgently need.

"I've made it clear that tackling London's housing crisis is my number-one priority. Fixing this problem will be a marathon, not a sprint, but developments like this one will play a huge part in our efforts to provide genuinely affordable homes to buy and rent.

"Our next task is to ensure this development includes the facilities and infrastructure which will make this a fantastic place to live and visit, rather than simply a housing development."

David Montague, chief executive of London & Quadrant (L&Q), said: "The potential of Barking Riverside is enormous and for L&Q it is a significant step forward in delivering on its promise to build 100,000 homes over the next decade. We are delighted to be at the forefront of making this exciting vision a reality."



SME housebuilders "have nowhere to build" says FMB

A ccording to research conducted by the Federation of Master Builders (FMB), two thirds of SME housebuilders are struggling to identify land for development.

For the second year in a row, the FMB's annual House Builders' Survey has shown that the lack of available and viable land is the biggest barrier to SMEs delivering more new homes.

Research showed that half of SMEs see the planning system and difficulties accessing finance as other serious challenges. The survey revealed that 40 per cent of SMEs believed that the construction skills crisis is now presenting a major impediment to building more homes. The under-resourcing of local authority planning departments was said to be the most important cause of delays in the planning process. However a high proportion of SMEs said they believed that consumer demand for new homes homes was resilient, even in the wake of Brexit.

Brian Berry, chief executive of the FMB, said:

"The biggest challenge facing SME housebuilders is the planning process. Councils need to find a way of allocating and granting planning permission for more small sites. The current focus on large sites is squeezing out smaller developers, which is reducing competition in the housing market at a time when we need more, not less choice.

"The limited supply of opportunities for small scale development is one of a number of key structural constraints that has seen the number of homes built by SMEs decline from around two thirds in the late 1980s to less than a quarter today.

He continued: "It is absurd that the planning system treats a 300 home application in largely the same way it treats a three home application. While the Government has attempted to remove red tape in its drive to increase the number of homes being built, it would appear that its reforms have yet to make a difference. 95 per cent of SME

house builders report that the information demands being placed on them during the planning application process have either increased or remain as bad as they were before. Our survey shows that the primary cause of unnecessary delays is the planning process, with the under-resourcing of planning departments being the most important concern.

"SME house builders must be seen as a key component of the Government's housing strategy. This means a renewed focus on granting planning permission to small sites. At the same time, the Government needs to press ahead with its proposed planning reforms, including a presumption in favour of small scale development. Planning departments also need to be adequately resourced so that they have the capacity to engage more closely with SME house builders and ensure planning applications are processed through the system as speedily and efficiently as they can be."

Big drops in resi prices recorded pre-Brexit

M Land Registry recently released its data for the second quarter of 2016, revealing that residential markets across the UK were already suffering, pre-Brexit.

The only exception to this was Prime Central London's mainstream private rented sector, where quarterly price growth was robust (+6.6 per cent) despite recent tax changes and global economic uncertainty.

Demonstrating the distorting effect of recent changes in legislation, sales volumes fell dramatically everywhere in Q2, following a rush of activity during the previous quarter, as buyers sought to beat April's 3 per cent Additional Rate Stamp Duty deadline.

The UK's domestic markets witnessed dramatic falls in prices and transactions in Q2, despite record low mortgage rates and Government efforts to decrease basic rate Stamp Duty. In Greater London as a whole, average prices fell 7 per cent over Q1 to £552,082 with a corresponding 44.5 per cent decrease in sales.

Across the rest of the country, average prices fell 4.5 per cent over Q1 to £268,713 with only 115,895 sales taking place, a 30 per cent decrease over Q1 and the lowest quarterly number of sales on land registry record. This is down from a pre-credit crunch average of 245,173.

Naomi Heaton, CEO of London Central

Portfolio (LCP), commented: "While we have seen falls in mortgage rates and reductions in basic rate stamp duty for the majority of the market, the surge in prices experienced over the last few years in Greater London has stuttered.

The market has suffered this year in the face of the new additional 3 per cent on Stamp Duty and a brewing new-build market crisis, which has seen a 43 per cent fall in sales compared with last year.



R&D tax credits claims rising year-on-year is evidence of industry innovation

ew statistics from the HMRC have revealed there was a 26 per cent yearon-year rise in the number of claims for research and development tax credits submitted by construction firms in 2014-15.

The latest data shows that construction companies submitted 480 claims for research and development tax credits in 2014-15, up from 380 in 2013-14. The total amounts claimed in the period rose from £20m to £35m, a rise of 75 per cent.

First introduced in 2000, R&D tax credits are designed as a tax relief to encourage greater R&D spending and innovation. They work by reducing a company's tax bill by an additional amount, depending on the company's allowable R&D expenditure. Since launch, over 140,000 claims have been made, with almost £14bn claimed in tax relief.

Over time, the rate of relief has become more generous, and is now worth up to 230 per cent for SMEs. This means that for each £100 of qualifying costs, the corporation tax paid by SMEs on income could be reduced by an additional £23.

"With an increase in R&D claims of 26 per cent in the construction sector and an uplift of 76 per cent in claim value, the sector appears to have recognised the R&D element in building innovation" - Kelly Boorman, head of construction, RSM

Commenting on the figures, Kelly Boorman, head of construction at financial consultant RSM said: "With an increase in R&D claims of 26 per cent in the construction sector and an uplift of 75 per cent in claim value, the sector appears o have recognised the R&D element in building innovation.

"With more emphasis on working in an environmentally friendly fashion and as well as on making efficiency gains through innovation, projects involve more R&D than ever. Given the increase in the use of BIM technology and the trend towards seeking alternative environmentally friendly solutions, we expect



to see a continued rise in both claim rates and values."

She added: "There is nothing to lose, and potentially much to gain."



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Baby boomers would take a cut to help young

▼he National Housing Federation (NHF) has released research revealing that despite having the most housing wealth, the baby boomer generation is surprisingly relaxed about slowing or falling house prices.

NHF research shows 62 per cent of homeowners aged over 55 say that they would accept either no growth or a fall in price over the course of two years, if it would help young people to buy a home, in comparison to 52 per cent of those younger than them. Over 55s were also twice as likely to accept a fall of 10 per cent than younger homeowners - 35 per cent compared to just 15 per cent of under-35s.

David Orr, chief executive at the NHF, said: "Contrary to political opinion, the British public are no longer obsessed with perpetual house price growth. The overwhelming majority would now accept a less buoyant market if it made life easier for the next generation. Nobody wants a crash, and we are certainly not advocating one, but politicians need to hear this." He added: "More flexibility from Government would allow housing associations to build even more homes."

Largest inquiry yet into overseas investors to launch

ondon Mayor Sadiq Khan is to launch a comprehensive inquiry into the scale of overseas property investment and ownership in London, which is reported to be unprecedented in terms of its scope

According to The Guardian, Khan said the inquiry would tackle the growing issue of 'gentrification,' leading to affordabity problems for homebuyers. The newspaper reported Khan as saying there were "real concerns" about the rapid increase in homes being bought by overseas investors, and that the inquiry would map the scale of the problem for the first time.

He told the paper: "It's clear we need to better understand the different roles that overseas money plays in London's housing market, the scale of what's going on, and what action we can take to support development and help Londoners find a home."

He said that the inquiry would be the most thorough research on the issue ever undertaken in the UK, and would enable the GLA to "figure out exactly what can be done."

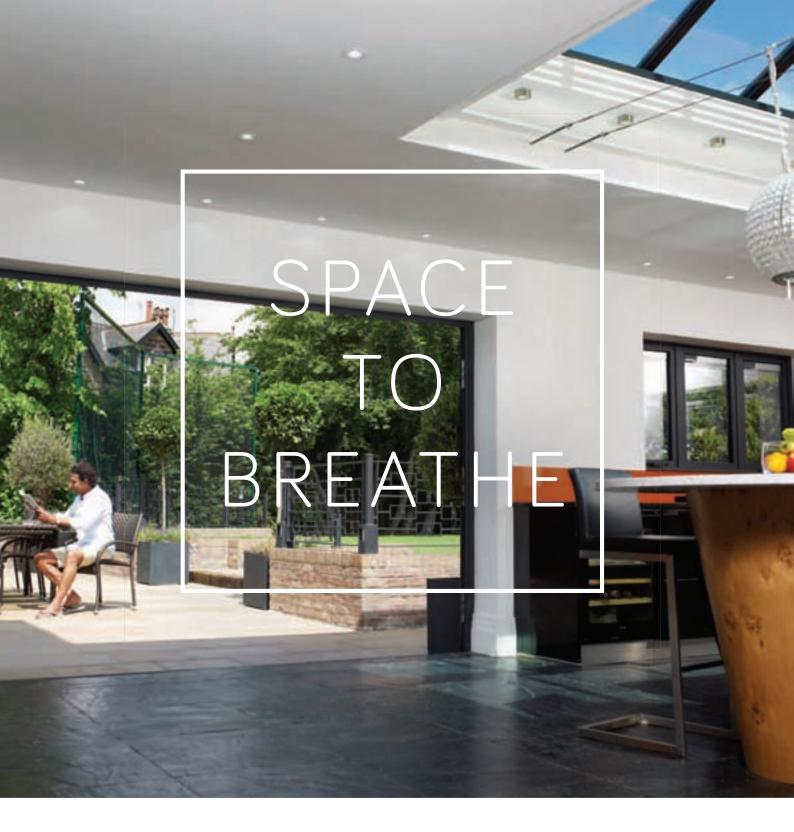
Khan's inquiry will focus on the scale and impact of different types of overseas investment in London. It will examine how money from overseas has changed the housing market across the board, from high end to low-cost homes, covering the whole of London. It will also explore how other international cities are tackling the problem.

Khan was quoted as saying: "We welcome investment from around the world in building new homes, including those for first-time buyers. At the same time, as more and more Londoners struggle to get on the property ladder, there are real concerns about the prospect of a surge in the number of homes being bought by overseas investors."

One key aim of the research will be pinpointing who is investing and where their money originates from, with the aim of achieving greater transparency in the market.

Khan said: "We urgently need more transparency around overseas money invested in London property. Ministers must now make all property ownership in London transparent so we can see exactly who owns what."





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Comment

Thought leadership from experts across the construction sector.

The industry advocate

The chief executive of the Federation of Master Builders Brian Berry says that the organisation's recent market survey shows confidence among housebuilders remains strong, but concerns linger over access to finance for SMEs.

√he FMB recently published its annual House Builders' Survey - the only survey that takes a detailed look at the challenges facing the thousands of small local housebuilders in England. The survey has been carried out for five consecutive years and so also provides some insight into the trends we are seeing among SME housebuilders. With an ever-increasing awareness among policy makers of the stark difficulties SMEs face, the survey has come to be a well respected and important snapshot of the sector's health, shining a light on the challenges that exist and giving a hint of what solutions are needed.

What is encouraging is that the findings suggest that housebuilders remain confident that there is still strong market demand, despite some of the more apocalyptic forecasts about the effect of a Leave vote on the market. Most businesses are - for the moment at least - reporting only marginally lower levels of buyer demand than they were this time last year. Furthermore, the overwhelming majority haven't seen any real changes made to their projects in the wake of the referendum result. This may change quickly of course, but for now, it means that the challenges SMEs were facing pre-referendum remain the same post-referendum. And those challenges are substantial.

As I discussed in my last article, the limited availability of suitable and viable small sites remains a key structural constraint on SME housebuilders and unsurprisingly, it was cited as the number one barrier to SMEs increasing their output. In interests of enabling greater participation by smaller housebuilders, as well as speeding up the delivery of new homes, we need a sustained focus by local authorities on both allocating and permissioning more small sites. The FMB is currently conducting research in partnership with the Local Government Information Unit (LGiU) on how local government and smaller scale housebuilders can work

together more effectively to achieve this.

The survey also underlines the extent to which a lack of access to development finance continues to stymie lower volume housebuilders. However, it's worth noting that there has been some progress from previous years, with nearly one in five respondents reporting improved lending conditions. Respondents now rate unfavourable loan to project value ratios as the most important finance-related barrier to their growth.

Tellingly, concerns over access to finance are most acute with either very small scale house builders, or those who have experience of building houses but aren't currently doing so. This 'lockout' of new market entrants, or firms looking to re-enter the housebuilding sector, constitutes a real threat to the long-term health of the housebuilding industry. It effectively pulls up the ladder on a potential new Taylor Wimpey or Persimmon making their first foray into

The survey would not be complete without a more detailed look at the planning system. The survey asked respondents to rate the most important causes of extra cost within the planning system and 'excessive information requirements' clearly came out on top. As many as 43 per cent of respondents believe that information requirements are continuing to increase - and that is despite the clear intention of successive Governments to encourage greater proportionality. Other causes of additional cost were 'overall complexity and the cost of consultants' and 'costs caused by delays in the system'.

Many housebuilders I've spoken to have some sympathy with local planning departments in terms of the chronic under-resourcing they face and it is recognised that this is the cause behind many of the delays and frustrations experienced by developers. This was reflected in the survey findings. Respondents cited a lack of resources as the primary cause behind delays on decision making. This would suggest that as much as



Whitehall might play with the margins of the planning system by simplifying this or that, councils still need the necessary manpower to implement the changes.

In the dog days of the last Government, there were proposals to allow local authorities to raise planning application fees, provided they guaranteed these funds would be spent on delivering an improved service. When speaking to the new set of Ministers, I will be making clear that they should press ahead with this. We need a properly resourced and far more accountable planning system – any encouragement to greater innovation and professionalism which gets us there will be welcomed by our industry.

"This 'lockout' of new market entrants, or firms looking to re-enter the sector constitutes a real threat to the long-term health of the housebuilding industry"

Three months on from Brexit where are we now?

Paula Higgins of the HomeOwners Alliance looks at how the residential property market has held up since Brexit.

early three months on from the vote, the haze of uncertainty surrounding how Brexit will play out appears slightly less opaque than before, as consumers remain confident.But just where are we now in terms of house prices, construction and mortgage finance?

Housebuilding and construction

Some of the UK's biggest housebuilders insist it's all back to "business as usual" this month. That's chiefly because long-term housing under-supply has meant that the hiccup following the uncertainty of Brexit was just that - a hiccup. The demand for housing throughout the UK remains unaffected.

Consumer confidence

Fewer houses were purchased both pre-Brexit and in its immediate aftermath, as potential buyers waited to see what effect the decision would have on house prices, employment and the economy at large. Sellers, fearful of this lack of interest, lowered prices in order to secure a sale. The ball has landed just inside the buyer's court for the first time in years and it looks likely to remain there for some time.

Also, as predicted, the introduction of the three per cent Stamp Duty on second homes in April this year has played its part in curbing the enthusiasm (and finances) of many buy-to-let investors.

Finance lending

The Bank of England's reduction of its base rate to 0.25 per cent in August has meant mortgage rates are the lowest they've been for a number of years (it was 5.25 per cent back in 2008 at the start of the Credit Crunch). This means it's an extremely good time to remortgage. The biggest bargains are on the two, five and 10 year mortgages currently on the table.

First-time buyers may not feel quite so buoyant, however. That's because the number of 95 per cent mortgages has fallen considerably (although admittedly this began a couple of months pre-Brexit). According to Moneyfacts, lending on small deposit mortgages has fallen 3.5 per cent compared to the same time last year.

House prices

Prices are similar to what they were before the Referendum, but the number of transactions continues to decline. But continued under-supply means they are expected to rise in the coming months, says the Royal Insstitution of Chartered Surveyors - albeit at a much slower rate than at the beginning of the year. The member organisation predicts an increase of 3.3 per cent per annum over the next five years. The cost of an average home in the UK in August was £213,930. This was an increase of 6.9 per cent compared to the same period in 2015.

Prices in the upper echelons of London housing continue to experience a drop while the rest of the region is expected to remain stable for some time (up to a year, according to some property analysts).

Impact of foreign investors

With the pound performing poorly in terms of the exchange rate, UK property - and that of London in particular - continues to remain extremely popular for foreign investors especially those from China and the Middle East.

The focus of these Asian, American and European investors isn't the same as it was this time last year though. They too are feeling the effects of the Stamp Duty charge on second homes to the extent it has encouraged many to lower their property price point. This means many overseas investors are proving strong competition for first time buyers from the UK, as well as existing property owners looking to move up the property ladder.

Conclusion

How will things work out for the property market as the Brexit juggernaut continues? It remains difficult to tell. From where things currently stand, there doesn't look to be a lot of change and if there is, it may take time to filter through. Life does look to be a bit more comfortable if you're a buyer than previously, especially with those impressive fixed rate mortgage deals out there at the moment. One thing is for sure, if you happen to have a house to buy or sell, there doesn't seem any point in hanging around - unless you have a spare two-three years to see how things have worked out post-Brexit.



Paula Higgins, CEO of the HomeOwners Alliance

"Fewer houses were purchased both pre-Brexit and in its immediate aftermath, as potential buyers waited to see what effect the decision would have on house prices, employment and the economy at large"

SuDS is the main weapon in the War on Water

Turrou Landesmann, brand manager, Drainage Superstore on the power of SuDS

6,000 homes flooded last year, in what was the wettest December on record, wringing in the New Year with the promise of more to come. Britain's drains couldn't cope with the deluge of heavy rain, and this winter is a grim prospect for thousands of homeowners.

The country's drainage system is archaic and overwhelmed, built for an era which had drastically fewer homes and a drier climate. Increasing urbanisation, aided by a rise in new developments, means infrastructure is no longer up to the job. With lobbyists now pressing for sustainable drainage systems as a viable means of long term flood management, should developers be taking responsibility and applying this now to mitigate future disaster? Are SuDS the solution for a nation plagued by rainfall?

As it stands, surface water simply has nowhere to go; with the concreting of large land areas, it is left with no alternative means of absorption. Green areas have now been replaced by roads, asphalt and roofed structures, meaning some areas have lost the ability to drain rainwater effectively, resulting in the overloading of surface systems.

Flooding doesn't just affect homeowners, it also severely impacts the surrounding environment, potentially contaminating groundwater sources. With the 2015 flood damage bill nearly £5bn, it is no surprise that construction professionals, along with the Government, are now seriously looking to more sustainable means of drainage which mimic natural processes.

"It's not a perfect solution; SuDS requires frequent maintenance, and for developers looking to build in an area surrounded by traditional drainage, the cost of adaption is relatively high"

Currently developers are able to connect new homes to existing sewage and water networks, without having to adapt or upgrade them. This puts both homes and nearby communities at the threat of overloading and flooding, with sewage outflows making for unpleasant after-effects. With the Government promising 300,000 new homes annually, the problem is only likely to accelerate.

Sustainable Urban Drainage Systems (SuDS) is one of the most hotly debated infrastructure topics. It provides an alternative to the channelling of surface water through piping networks, instead providing natural systems of drainage, reducing the impact of flooding by up to 30 per cent.

By slowing the flow, SuDS seek to capture, delay and absorb rainwater, encouraging it to seep naturally back into the ground - coming in a variety of forms including, green roofs, permeable paving, wetlands, swales and ponds. Typically costing less than half as much to implement as traditional drainage systems and without any affect to quality, SuDS can safeguard entire communities from the risk of flooding.

Continued overleaf...



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SuDS can increase property values, enhance water quality, protect wildlife habitats, reduce pollution and limit the demand placed on historic drainage systems. Even quality of life in developments can be drastically improved, with some experts stating that SuDS makes an area more 'visibly attractive', by improving air quality and reducing noise.

It's not a perfect solution; SuDS require frequent maintenance, and for developers looking to build a structure in an area surrounded by traditional drainage systems, the cost of adaption is known to be relatively high. When looking at the small print, it also doesn't guarantee complete safety from flooding, but instead reduces the risk and limits the overall impact. This would likely be warmly welcomed by insurers, who paid out £500m in the aftermath of Storm Desmond.

Watering down the problem

For developers, building new homes that are naturally resilient from the outset would mean big savings compared to dealing with consequences later. So why are SuDS still not a common sight in new developments? It comes down to politics.

The Government expects local authorities to lead on planning applications relating to major developments, to ensure that sustainable drainage

systems for managing run-off are put in place, unless demonstrated to be "inappropriate." This is only an expectation, not a legal requirement.

Under the current voluntary system, developers are encouraged to follow the principles of sustainable drainage "where appropriate." The publication of the CIRIA Manual, outlining the planning, design, construction and maintenance of SuDS also aims to support uptake and general flood management within new developments.

Now in 2016 with no official provisions made for SuDS, the issue appears to have been watered down so much that it is no longer a high priority. With Britain expecting to face more cases of 'extreme weather' in the future, as a result of climate change, we are potentially sending the country underwater.

Working with nature

It is difficult to establish a new way forward when there is already a proven, and easier way of adapting current drainage systems. However, homeowners are quickly becoming more educated on building processes, particularly when it comes to eco-friendly alternatives. Developers now face pressure to make homes as attractive and as flood-resilient as possible.

Planning authorities, along with the Environment Agency, look favourably on developments with robust flood defences, as well as sustainability features. Whilst SuDS are not lawfully required, ensuring that buildings are fully resilient and resistant to the impact of flooding, will go a long way both in terms of attracting buyers, and receiving planning approval quickly.

Raising floor levels, realigning or altering river flow, plant irrigation, green roofs or walls, and the recycling of rainwater can help to manage flooding at its source, whilst reducing the risk to both the structure and its residents.

There are already some good examples of sustainable drainage in Britain, with a nature reserve in Doncaster absorbing over 200,000 cubic metres of floodwater in 2007, savings thousands of homes from destruction. But with legislation preventing widespread adoption of sustainable infrastructure development practices, it will be a while before we see SuDS as an industry staple.

The benefits of SuDS are undeniable, with developers having the opportunity to drive it on to both the political and public agenda – something which the Government has failed to do. It also provides a chance to change historic construction processes for the better, as well as having the potential to improve quality of living in over populated, urban areas. As a nation plagued with persistent rainfall, the problem isn't going anywhere – we just have to become better at coping with the consequences.

Being Mindful of workforce potential

Ann-Marie McLeod on how construction firms are embracing Mindfulness

ith more than 230,000 new construction jobs predicted in the UK over the next five years, there is an increased focused on promoting a more supportive, nurturing culture – in an industry which has been perceived as lacking in these areas.

"Mindfulness is not new, it is part of what makes us human"

The general perception of the UK industry has long been of a highly charged, male dominated environment, and a recent survey carried out by the CITB found that three-quarters of employers think the industry is still perceived as sexist.

So with this in mind, how can the industry bridge the gap? The key for organisations to promote a more flexible working environment that supports the wellbeing of their employees. Mindfulness training helps people develop the skills to cope better with stress in demanding working environments and also encourages an empathetic, supportive culture which is essential in attracting and retaining a committed and pro-

ductive workforce.

It often viewed as 'the latest fad,' but many are not aware of the fact that the 'hype' is backed up by hard science.

Mindfulness is not new, it is part of what makes us human; the capacity to be fully conscious and aware. It helps us recognise the connection between thought patterns, physical body sensations and habitual reaction, and understanding better how we react to events (pleasant and unpleasant) opens us up to choice in terms of how we respond.

A January 2016 study Contemplating Mindfulness at Work highlighted that the practice positively impacts human functioning overall, and research in such disciplines as psychology, neuroscience and medicine provide a wealth of evidence that it improves attention, cognition, emotions, behavior and physiology. More specifically Mindfulness has shown to improve three qualities of attention – stability, control and efficiency, helping staff stay focused.

Initial evidence suggests that it also benefits interpersonal behavior and workgroup relationships, improving empathy and compassion. This suggests mindfulness training could enhance workforce processes that rely on effective leadership and teamwork.

Organizations such as Google, Apple, Ebay and Unilever have all utilised mindfulness training to improve how their workforce functions, benefitting key aspects such as decision-making. A small but growing number of construction companies are embracing the idea, one of which is Network Homes.

Fiona Deal, executive director of people and culture at Network Homes comments: "Mindfulness is part of a comprehensive programme of wellbeing initiatives we offer to practically support the wellbeing and personal development of staff. A more self-aware, calm and clear headed team has got to be good thing!" Network homes is one success story, having undertaken an eight week programme at its Wembley Office. Many participants praised the initiative for bringing benefits, and it is now being extended to their Herford Office.

Vicky Savage, executive director of development at Network homes attended Mindfulness sessions and said she found them: "Life changing, both professionally and personally. Mindfulness brings a sense of calm and promotes good 'cool headed' commercial judgments in a fast paced business environment."



eading property and construction consultant McBains Cooper has been given the green light to help build a new 48 unit apartment development with a ground and first floor retail showroom in West Hendon, with the scheme granted consent on 8th September by Barnet Council.

The eight-floor development at 60 West Hendon Broadway involves the demolition of an existing tile and bath retail store and the delivery of the new 48 apartments and showroom.

This area of Barnet is undergoing significant change as a result of the plethora of new developments either in the pipeline or already progressing, including Hendon Waterside, Beaufort Park and the proposed plans for the redevelopment of the Brent Cross Shopping Centre by Hammerson and Standard Life Investments.

Mark Leeson, director of design at McBains Cooper, said: "We had to work hard with Barnet to develop a scheme which balanced the need for new housing with the very urban nature of the site, bounded by the A5 to the west and the M1/ Thameslink main line into Kings Cross.

"We're very pleased that the Council recognised the high standard of design that we have achieved and look forward to working with the client now to implement the scheme over the course of the next year or so."

The housing consists of 30 one bedroom apartments, 12 two bed

apartments and six studios flats. All have been designed to meet the London Plan and Housing Design Guide. McBains Cooper has provided architectural design, cost management, strategic monitoring and evaluation, along with structural and civil engineering advice for the project.

The design of the elevations is a direct response to the acoustic conditions that exist on site and include innovations to reduce noise while enhancing light and views for residents. By developing a layered approach with an outer 'carapace' in front of an inner skin along with carefully specified windows and doors onto balconies, noise from the road and train tracks is mitigated, whilst maintaining light into and views out of each apartment.

Carefully integrated balconies provide private external space to each apartment, delivering dual aspect views to the south east and south west of

Likely sales values and the specific constraints of the site meant that no affordable housing could be provided on site in this instance, following a detailed financial viability assessment. So McBains Cooper is focusing on delivering a high quality design and offering financial contributions to offsite provision of affordable housing, and contributions to play space, highways improvements and community initiatives.

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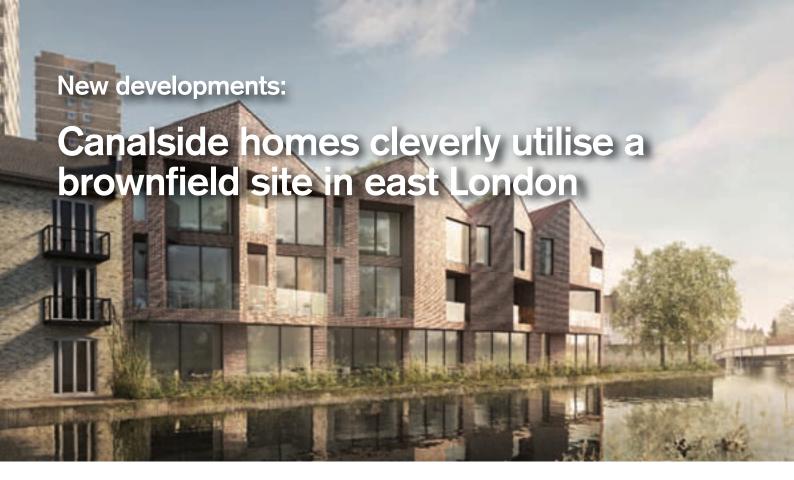




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canalside scheme for eight dwellings maximising privacy and outdoor space in a clever 'folded' design by pH+ architects, has been granted planning permission.

Acting on behalf of Old Ford Road LLP, pH+'s design comprises of three houses, three duplexes and two flats for the constrained site of 465 square metres in the Victoria Park Conservation Area in east London.

This contemporary terrace of inner city housing replaces three vacant buildings on a previously overgrown piece of land. The scheme is accessed directly from the street between the Hertford Union Canal and Old Ford Road.

The scale of the scheme, with three storeys topped with a habitable roof level, sympathetically responds to both the scale of the Georgian Houses, which it fronts, and the adjacent apartment blocks along the canal. The project's distinctive gabled profile references the rhythm of neighbouring terraces. Simple, robust forms feature large openings which maximise daylight to the interior living spaces and echo the industrial vernacular of the historic canal area.

The folding facade creates intersticial balcony spaces whilst opening up and framing views along the waterway and across to the park beyond. Ground floor terraces are generously planted to create porous edges encouraging the bio diversity of the canal's green corridor to thrive. These

are supplemented by rooftop gardens cut into the serrated profile to create sheltered outside space whilst maintaining the sculptural quality of the overall form.

Stock bricks are mixed with a reddish-purple variant in the scheme's facades, stitching together the brick tones and materiality of both the recently developed area and the industrial past of its canal side warehouses. The use of different bonding techniques to define upper and lower storeys adds scale and texture to the facades.

"Our bold but sympathetic design on such a prominent site along the canal aims to positively contribute to the surrounding community and respond to its unique context. As with our 2014 scheme at Orsman Road we seek to encourage biodiversity by enhancing the green corridor of the water's edge," commented Andy Puncher of pH+.

This sustainable development of homes provides high-quality, low energy living in an inner city area and follows on from previous pH+ schemes, such as that at Acton in West London granted planning permission in March 2016, which reutilise and revalue underused and undeveloped plots of land adjacent to infrastructure. As such, in line with the London Plan 2015, the architects deliver housing in the inner city to help sustain and enhance economic and demographic growth, as well as at local community level, improving the neighbourhood and enhancing the public realm.



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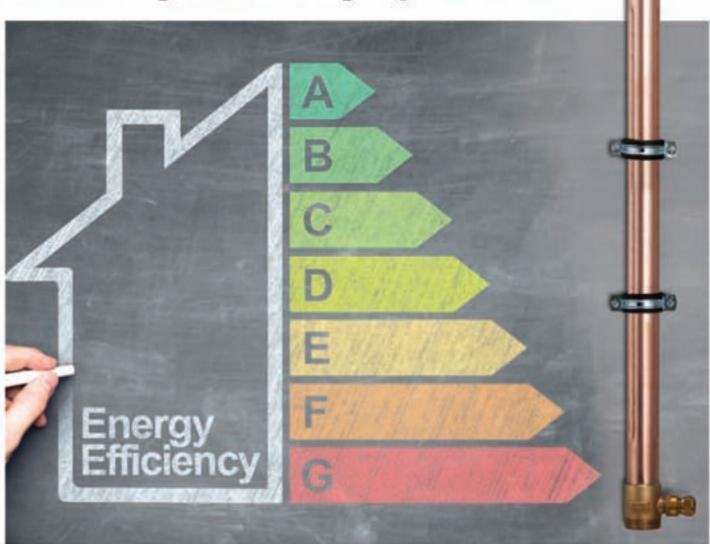
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Events & awards

Key upcoming events, conferences and awards

British Construction Industry Awards 12 October, London

bcia.newcivilengineer.com

Women in Housing Conference South

13 October, London www.womeninhousingconference.co.uk

British Homes Awards

14 October, London britishhomesawards.co.uk

UK Construction Week

18 - 20 October, Birmingham www.ukconstructionweek.com

The Build Show

18 - 20 October, Birmingham www.ukconstructionweek.com/build-show

Grand Designs Live

19 - 23 October, Birmingham www.granddesignslive.com/nec

London Build Expo

26 - 27 October, London www.londonbuildexpo.com

Housebuilder Awards

3 November, London www.house-builder.co.uk/awards

Smaller Housing Associations' Conference and Exhibition

3 November, London smalls.housing.org.uk

Women in Housing Conference North

3 November, Manchester www.womeninhousingconference.co.uk

Women in Housing Awards

3 November, Manchester www.womeninhousingawards.co.uk

CML Annual Conference

9 November, London www.cml.org.uk/events

16 - 17 November, London www.homesevent.co.uk

WhatHouse? Awards

18 November, London www.whathouse.com/awards

Scotland Build Expo

23 - 24 November, Glasgow www.scotlandbuildexpo.com

Care Homes & Retirement

Living

24 November, London www.carehomesconference.com

National Painting and Decorating Show

29 - 30 November, Conventry www.housing.org.uk/events

London Development Conference

6 December, London www.housing.org.uk/events



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Barratt Homes named an 'Animal Hero'

arratt Homes has been awarded the prestigious Outstanding Business Award at the annual Animal Hero Awards, in partnership with The Daily Mirror and the RSPCA.

The company was named an 'Animal Hero' for putting animal welfare and wildlife at the heart of its new developments, creating space for wildlife to flourish during and after the build process.

Barratt Homes has been working in partnership with the RSPB to ensure that people and wildlife can live alongside each other at its new development. This partnership has led to the nature-friendly development of Kingsbrook on Broughton Lane, near Aylesbury.

The RSPB, Aylesbury District Council and Barratt have been in consolations to explore the ways in which nature can be preserved in the development. As part of this initiative, a number of show homes will include wildlife houses, bird boxes and bee-friendly plants. The housebuilders will also integrate wildlife corridors between the residential and green areas. Sustainable urban drainage systems will mean rainwater will be directed along rills and swales on the surface, rather than being channelled straight into underground pipes.

Ian Sadler, managing director of Barratt Homes North Thames, said: "We are delighted to receive this award as we have been working hard across all of our sites to make sure we are helping wildlife as the developments are

The Animal Hero Awards recognise the most inspiring examples of bravery, dedication and resilience in the animal world.

William Davis

illiam Davis has taken nine new apprentices on to its award-winning training scheme.

Joining the Loughborough-based housebuilder are bricklayers Callum Gamble and Max Harrington, joiners Daniel Axten and Joshua Wallis, plumbers Jacob Keogh and Isaac Harper, electricians Sam Hubbard and Joe Hill, and quantity surveyor Lewis Ingram. Each of the new recruits will undertake a three or four year apprenticeship to achieve an NVQ Level 3 or HNC with on-site training being supported by academic studies at Leicester College or Loughborough College.

As part of their first week's training, the new apprentices spent time on William Davis' flagship development at Grange Park, Loughborough with site manager Simon Smith.

Gary Long, training supervisor, explained: "Our aim is to give the new apprentice intake opportunities to learn right from the outset, and taking them onto a live building site does

"Immediately, they get to see the day-to-day activities taking place as well as meet and speak to the site managers and tradespeople they will be working alongside."

Following completion of their induction, the new apprentices are all now working with their mentors on the company's sites across the Midlands.

Berkeley announces west London apprentice scheme

Berkeley Group recently announced the launch of a local apprenticeship programme, in partnership with Ealing, Hammersmith and West London's College, with the support of Ealing Council. The Berkeley Apprenticeship Scheme will offer valuable career opportunities to local people helping to increase the level of skilled workers throughout west London.

Construction apprenticeships attract, retain and develop talented people into a rage of careers, including bricklaying, carpentry, electrical engineering and plumbing. The scheme is designed to take that work one step further by offering training for progression to supervisory and management levels, helping to provide the industry with a qualified and sustainable workforce, and supporting the Government's pledge to have three million apprentices in the UK by 2020.

Karl Whiteman, divisional managing director of Berkeley Homes, added: "We are proud to be partnering with West London's College to launch the Berkeley Apprenticeship Scheme. As a key component of delivering our vision for Southwall Waterside, we will be offering young people living locally the chance to get involved in shaping their futures, that of their community and also the opportunity to learn lifelong skills."



The scheme forms a part of Berkeley Group's 2016-2018 commitment to provide training to 1,500 people through construction apprenticeships, its graduate schemes, or for those working on NVQ or equivalent qualifications. It follows the successes of an earlier commitment to increasing the number of apprenticeships and staff in work-based learning by 50 per cent from May 2014 to April 2016. This target was exceeded with an increase of 127.5 per cent.





'Roman brewery' discovered on new homes site

■ vidence of a Roman malting house was among the historic remains Juncovered by archeologists from MOLA (Museum of London Archeology) spent around eight months conducting investigations of land on Burcote Road, ahead of a new Redrow development.

The remains of a number of buildings were identified, two of which contained evidence indicating they were used to prepare grains for malting and brewing. Pottery and other artefacts recovered from among the surviving elements of the buildings revealed that the process was being carried out during the 2nd and early 3rd centuries AD.

Mo Muldowney, archeological project man-

ager at MOLA, explained: "The site at Wood Burcote lies close to the Roman town of Towcester, known as 'Lactodurum', and Watling Street, a major transportation and communication link to London and other Roman towns."

Tonia Tyler, sales director for Redrow Homes (South Midlands), said: "The archeological works carried out at our Burcote Park site have uncovered a fascinating insight into the area's past. It's interesting to think that there were people living in this part of Northamptonshire more than a thousand years ago."

Now that the archeological excavations are complete, the artefacts will be conserved and kept in the Northamptonshire County archives.

Industry movers

The latest movements and appointments within the housebuilding industry

CRL

nsurance specialist CRL has further strengthened its executive management team with the appointment of a chief operating officer (COO).

Oliver Sanders has joined the appointed representative to improve the company's processes and procedures to boost efficiency and to make the business more effective for customers and employees.

The 47-year-old brings a wealth of experience to the newly created role having spent 13 years working for AXA, three years of which were spent as COO of an AXA direct insurance company based in Brussels.

HUB

id-market developer HUB has restructured its business and promoted key staff in order to consolidate its position in London's residential

Founding Partners Robert Sloss, Tim Barlow and Edward Cartwright will become chief Executive, chief operating officer and chairman respectively, while development director Steve Sanham will join the board and become managing director.

Larkfleet

ousing and development company Larkfleet Homes has strengthened its sales team with the appointment of Samantha Hart as head of sales.

She has joined Larkfleet Homes to lead the sales department and her role will include managing the growth of the team as the company cements its reputation as a developer with expertise in developing larger sites. Sam will also be responsible for the appraisal of new and potential developments and planning successful marketing campaigns which are key to ensuring sales are secured.

Bancon Homes

ndependent Aberdeenshire housebuilder, Bancon Homes, has strengthened its senior team with the appointment of an experienced sales and marketing director.

Joanne Skinner has joins the firm with more than 16 years' experience in the property sector.

Bancon Group chief executive, John Irvine, welcomed Jo to the company saying: "In a challenging market, it's even more important to have the best skills and experience. With an impressive track record in customer service and in-depth knowledge of the local housing market, Jo is a valuable addition to our team."

A graduate of Robert Gordon University, Jo joins Bancon Homes from Barratt Homes, where she held the post of sales manager. She also spent 10 years with Stewart Milne Homes, initially as a sales negotiator before becoming area sales manager for Grampian.

Jo said: "I have long admired Bancon Homes



and am looking forward to working with the team to achieve our sales targets. Despite the current challenges in the marketplace, I continue to have confidence in the local property market and, with exceptional products to sell, I know I will relish the opportunity this position presents."

Millwood Designer Homes

♥onbridge-based luxury residential developer Millwood Designer Homes has appointed Rob Sisley as its new finance director. Sisley joins at a time when the company is pursuing a rapid growth plan, having recently acquired seven new sites in prime areas across Kent, Surrey and Sussex.

Sisley is an accomplished FD with a background spanning private, public and international organisations. A Chartered Accountant, Sisley qualified at top firm Coopers & Lybrand (now PwC), and has since acquired broad commercial experience at a senior level across a wide range of industries. He most recently held the position of group finance director at MCL Group for 10 years, owning responsibility for the finance function during a period of reorganisation and improve-



ment to group performance.

John Elliott, managing director of Millwood Designer Homes, commented: "We are very pleased to welcome Rob to the board. He has worked across a variety of roles and industries and has considerable capital market experience, so he will be a valuable asset in what is an exciting time for our rapidly growing business."







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total of 14 eco-friendly homes have been announced as part of the regeneration of St Margaret's at Cliffe in Kent, developed by East Kent Sustainable Homes. The scheme promises to set new standards in the design of healthy, low-energy lifetime homes.

The properties proposed for the land, owned by The Bay Trust, are a mix of two, three, four and five bedroom homes. Using timber frame structures, residents are able to mould interiors to their changing needs as they grow older. Together with the planned climate adaptive features, these qualities aim to make the properties 'future-proof'.

A planning application for St George's Place has now been submitted to Dover District Council. If approved, work is expected to begin by the end of the year.

As part of providing 'healthy' homes, existing mature trees will be retained and re-planned to create a forest garden. The site will also be enhanced for wildlife, with new planting strengthening the boundary vegetation, and roosting features being added for bats and nesting birds. A portion of the current green at the front of the site will remain as open space.

Working with the community

East Kent Sustainable Homes are seeking to recruit local people to work on the project, with an emphasis on involving the younger generations. An innovative training programme will be created by working with contractors, the supply chain and local schools and colleges. This is expected to help raise awareness of the development, its sustainability and its green credentials. It also hopes to inspire the younger locals into careers in architecture, construction and development.

Rod Springett, who has years of experience in designing low-energy homes in the UK and overseas, will be the project's architect. Rod is a resident of the village and has created a landscaped layout to follow The Bay Trust's own strict environmental requirements. The charity has stipulated that any scheme must result in an actual enhancement the of biodiversity of the site. This will be monitored and supported by the Trust's own team of experienced ecologists and horticulturalists, going above and beyond the statutory environmental requirements.

Separate proposals are being created for traffic calming measures, addressing congestion and safety concerns involving the local school and its pupils. The new public space on Sea Street is nearly twice the size of the current private open space site in St George's Place, and is part of an area of farmland that, since 2009, the Bay Trust has managed organically for enhanced biodiversity and diversified local food production.

Sustainable drainage

Sustainable Drainage Systems (SuDS) will be a strong feature of the development, creating an environment around the homes that allows surface water run-off through collection, storage and cleaning, before allowing it to be released slowly back into the earth, such as into water courses or into the water table. A shallow wetland area is proposed along one boundary, providing a great habitat for wildlife.

Pete Halsall, a highly experienced sustainable developer working on the project, commented: "The proposed SuDs combine porous paving with a natural swale feature at the lower end of the site. The site overlays chalk strata, making it highly suitable. The porous paving will be interspersed with grass to create a more natural and softer appearance, as well as to enhance the permeability effect."

Building fabric

The properties will be built to level 4 of the Code for Sustainable Homes, using a high-performance breathable timber frame system, clad with a combination of local brick and timber weatherboarding. The walls will have landscape and planting features such as 'lavender panels', green wall features and window boxes.

Pete Halsall said: "The external wall insulation will be manufactured from wood fibre, which is an effective insulant in both winter and summer. It has a high decrement delay, which means that it takes longer for heat to pass through it, thus keeping the homes cooler in the summer and warmer in the winter.

"For ventilation, we have chosen the Renson Healthbox system, which provides control of ventilation in each space, bringing in fresh air via

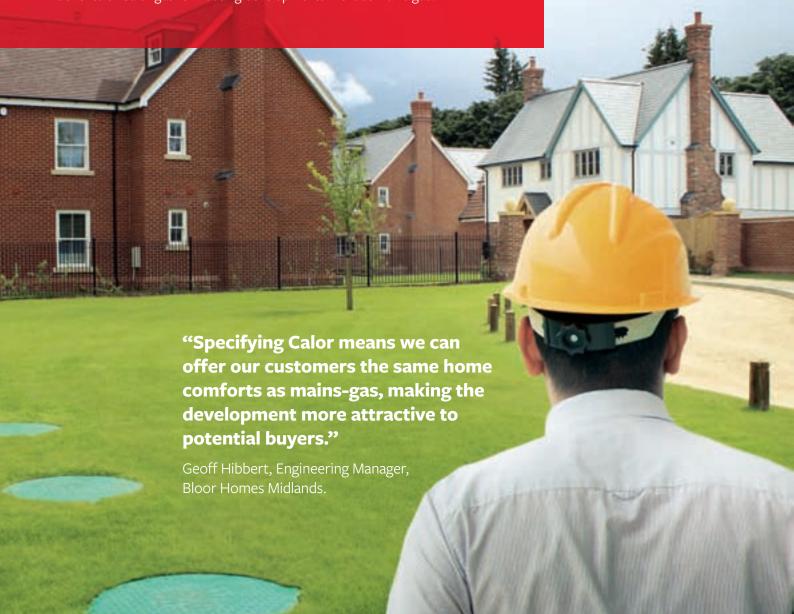
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a series of high level window grilles. The Healthbox is linked to a sophisticated controls and monitoring system, which measures CO2 and moisture levels. The fresh outside air is mixed with warm room air, which is then extracted via the unit."

High levels of natural daylight have been integrated into the design, with good ventilation and air quality, good space standards and a number of interesting architectural features being integral to the scheme. Each property will provide a very high-efficiency heating system and a PV panel, which will feed into a dedicated smart grid system.

Planning modifications

Halsall explained that the application is a scaled-down version of the original proposal.



When plans were first drawn up three years ago, they included 27 homes on the St George's Place site, but the scheme has been remodelled following extensive consultations with residents.

He said: "Concern was expressed about the number of homes, insufficient parking, traffic levels and the loss of green space on the site. We have listened very carefully to this and made significant changes to the plans.

"The number of homes has been cut to 14, which will reduce traffic flow, plus ease any concerns about parking for residents. And, while the private green space has had limited public use, the land being provided by the trust on Sea Street will be available for a wider range of community uses and events.

Concluding, Pete Halsall commented: "There is a clear need for additional housing in the village, and feedback to these modifications has been very favourable. These will be the first of a new generation of low-energy and sustainable housing projects in the UK, creating a new model for others to follow."



Using roofing systems with Glass Lanterns and Orangeries

hen deciding on an extension or separate addition to a home, orangeries are becoming an increasingly popular option. Unlike common conservatories, orangeries maintain a steady temperature throughout the year, so they won't get too hot in the summer or too cold in the winter.

If you're planning to add a new orangery onto a house, using a specialised flat roofing system with a warm roof build up can help regulate the interior temperature further. These are designed to keep the right amount of heat in while also keeping the orangery or extension flat roof leak free, so even in the middle of winter residents will still be able to enjoy it.

If an orangery isn't a practical option for the extension but you still want some form of natural lighting, why not add a glass lantern to the new flat roof, as this will let in plenty of natural light illuminating the interior. These also help to boost the dimension of a room, making it appear much



larger than it actually is, which is ideal for smaller, more compact areas that need something extra to reach their full potential. These can also be added to existing flat roofs, helping to transform the current interior.

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Product Focus

Screedflo

Screedflo liquid screed is a CE certified product comprising of anhydrite binder mixed with selected sharp sand and water. It can be installed at a depth of 40mm on insulation, or 50mm with under floor heating. Screedflo Extra can be laid on timber floors as it has a higher flexural strength.

In addition, the Screedflo dB acoustic floor system, which comprises of a 24mm Screedflo dB board, a 10mm dB foam and an edge isolation system, provides a floor which performs like a solid concrete floor in a lightweight structure. Enq. 112



T-T Pumps

T-T one of the UK's leading manufacturers and suppliers of a wide range of pumps for sewage and drainage, have designed and supplied the largest bespoke model of their Trojan above ground package pumping station. This particular model was for a client who was completing a conversion of an office block into apartments. As the location of these apartments is in Central London, the client required a solution for a limited space application, therefore the Trojan was perfect for the job! The Trojan is a package pumping station available with grinder, channel or vortex pumps, supplied complete with pumps, valves and control panel.



Origin Global

Origin has unveiled its latest product launch – the Origin Residential Door – where security and aesthetics are innovatively combined. Available in the UK to trade from 1st September 2016, or consumers from 1st October 2016, the Origin Residential Door can either be used as a front or garage door for an integrated front of house look. Manufactured with a high-grade aluminium, there are 35 panel choices on offer, available in over 150 different RAL shades; the Residential Door has been designed with heightened security and thermal efficiency in mind, with no compromise on kerb-appeal. Enq. 114



Vent-Axia celebrates 80 years of innovation



Vent-Axia the UK's leading ventilation company is celebrating 80 years of innovation. Founded by Joe Akester in 1936 when he invented the world's first electrically-operated window fan Vent-Axia has been a leading British manufacturer ever since. Now a multimillion pound company, the Vent-Axia brand has become a household name

featuring annually in the UK Superbrands league table and holding the prestigious Royal Warrant. The focal point of the 80th Anniversary celebration was the burial of a metal time capsule.

0844 856 0590 www.vent-axia.com

Enq. 115

Panasonic announces Pro Awards deadline



Panasonic has announced a deadline extension for submitting entries into the PRO Awards 2016. Installers, Architects, Consultants, Distributors and Engineers will now have until 31st October 2016 to put their best projects forward. The PRO Awards are free to enter and open to projects featuring Panasonic heating and cooling systems, in a residential, public

authority or commercial environment. A panel of judges from across Europe with expertise in architecture, building services and the heating/cooling industry will be looking for applications. For more information contact Panasonic directly.

Enq. 116



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Smoke ventilation maintenance the hot issue for HAs and LAs



By Simon North – Service and Maintenance Division Manager with SE Controls

ngoing budgetary pressures and a lack of familiarity by local authorities and housing associations about the strict regulations that govern the maintenance of smoke ventilation systems, has given rise to a worrying trend that will leave them exposed to prosecution for non-compliance unless it is addressed.

In an effort to integrate fire systems maintenance and save money in the process, many HAs and LAs are 'bundling' smoke ventilation maintenance into a multi-disciplined 'fire service' contract, where the contractor is responsible for all fire and smoke system maintenance, often across several locations and

However, under the scope of various British Standards, including BS9991, BS9999 and BS7346 Part 8, together with Building Regulations ADB; the European EN12101 standard and best practice guidance documents from the Smoke Control Association, there

are specific maintenance requirements and procedures that must be followed.

The real 'teeth' behind this complex and vital legislative framework is the Regulatory Reform Order (RRO). This gives fire service officers an extensive range of enforcement powers in situations where smoke control systems have been inadequately maintained under the demands of the various pieces of legislation.

The penalties for non-compliance can be significant, including the prosecution of companies, building owners, landlords and individuals responsible for building maintenance, resulting in punitive fines as well as custodial sentences.

At SE Controls, we have already been directly involved in a significant number of projects to correct problems caused where general fire contractors have found themselves out of their depth and unable to maintain the smoke control system within the demands of the regulations.

In one instance the maintenance company had

failed to notice a smoke vent that had been 'nailed shut' rendering it in operable and dangerous, while another recent case or poor maintenance from an inexperienced contractor resulted in an automatic smoke vent falling out of the building. A major internal review followed, together with the involvement of the HSE and prosecutions are now being considered.

On a number of other remedial projects, fire officers or building control have already imposed close notices on the buildings, resulting in disruption, the removal of tenants and large unbudgeted costs for the housing association. Clearly, these could have been avoided if the specialised smoke ventilation maintenance contract was kept separate and handled by a specialist company with the necessary skills, experience and expertise.

01543 443060 www.secontrols.com

Enq. 117



Tarmac launches new cutting-edge cement

Tarmac, has unveiled a new, state-of-the-art cement packing facility at its Tunstead cement site, near Buxton, Derbyshire. The launch comes as the site celebrates its 50th anniversary of cement production. As the first of its kind in the UK, the bespoke Haver and Boecker 10spout Adams 2000 plant enhances Tarmac's packing capacity, which strengthens its existing nationwide production and packing capabilities. The plant will manufacture Tarmac's leading range of plastic packed and tubbed cement products for merchant and retail customers. With significant storage capacity, the plant will also be used to house the company's new 12.5kg mixer bags. Launched earlier this year, the bags bring a new concept to the market. At half the size of regular bags, they are designed to be a 'perfect mix', providing the exact amount needed for a cement mixer – saving users from needing to split 25kg bags in half and waste material.

0800 1218 218 www.tarmac.com

Ena. 118



FDS to improve image of construction

As part of its efforts to tackle key industry issues, the FDS Group is pleased to announce that it is now an official partner of Construction United, a leading initiative aimed at improving public perceptions of the sector. Consisting of award-winning smoke ventilation contractors Fire Design Solutions, and leading experts in fire engineering FDS Consult, the FDS Group will work with Construction United on the initiative's three main objectives; improving the overall image of the sector, tacking the skills gap and raising awareness on mental health in the workplace. Over the coming months, the FDS Group will collaborate with a number of Construction United's partners including leading building products distributor SIG, Morgan Sindall, and the Construction Industry Council (CIC) – as they look at some of the most pressing issues facing the industry today, whilst also raising money for its charity partners.

01322 387 411 www.firedesignsolutions.com

Eng. 119

RIBA gives seal of approval for Kingspan



Kingspan Insulation are thrilled to announce the launch of their latest RIBAcertified Continuing Professional Development (CPD), 'Facades and Fire Safety: Routes to Compliance'. The new CPD discusses rainscreen and masonry facades in habitable high rise buildings of 18m or above, and how to comply with the fire safety requirements of the

Building Regulations and Standards. By the end of the CPD, it should be clear what is deemed acceptable by fire safety engineers, BCBs, as well as warranty and insurance providers.

01544 387 384 www.kingspaninsulation.co.uk

Enq. 120

Join the conversation with new BAL forum



BAL - market leaders in full tiling solutions - have launched a new online forum for tiling professionals. Available to registered YOU+BAL Partners, the forum gives tilers, contractors and specifiers the opportunity to discuss the latest products, fixing techniques and services, as well as getting technical help from BAL staff, share site stories and lots

more. Signing up to YOU+BAL gives BAL Partners an even greater opportunity to be at the heartbeat of BAL: to instantly benefit from the full support the company can offer.

01782 591100 www.bal-adhesives.com

Enq. 121

Sentinel Kinetic Advance MVHR shortlisted



Vent-Axia is celebrating reaching the final shortlist in the prestigious Electrical Industry Awards 2016, which recognises, celebrates and rewards companies leading the way in the UK electrical sector. The leading British ventilation manufacturer is delighted its award-winning Sentinel Kinetic Advance is a finalist in the Innovative Residential / Domestic Product

of The Year category. The Advance is the best performing MVHR unit in its class and offers near silent, energy efficient and high pressure operation.

0844 856 0590 www.vent-axia.com

Eng. 122

ECOBAT – The strength behind BLM



In 2017, BLM British Lead will celebrate its 85th birthday. The company has seen many significant changes within the industry, with legislation and within its own organisation during its time but none have been greater than its acquisition by ECOBAT Technologies in 1994. ECOBAT Technologies are the world's largest producer and recycler of Lead. The

combined group recycles and processes in excess of one million tonnes of lead every year, primarily through recycling spent lead acid batteries. The strength of ECOBAT has got BLM to where it is now.

01707 324595 www.britishlead.co.uk

Enq. 123

Osmo is awarded Ethical Accreditation



Osmo UK, the eco-friendly wood and finishes expert, is celebrating its tenth year of being awarded Ethical Accreditation. The company has once again scored highly in an analysis of its approach to Corporate Social Responsibility, demonstrating Osmo's continued commitment to customers, staff, trade colleagues and shareholders. Ethical

Company Accreditation is awarded to organisations which obtain an outstanding overall score in an evaluation of their Corporate Social Responsibility record, and which are successfully screened against other companies within their market sectors. Eng. 124

Abode Tanto – a timeless classic



Abode Tanto - a simple, elegant and easy to operate range, designed and created especially for the UK market giving a clean, slick and contemporary look to all bathroom styles. Tanto has a cylindrical body with pencil slim handles giving it a strong yet versatile design. The Tanto collection includes a wide variety of basin mixers as well as a very modern mixer with

side lever and swivel spout. There's also a choice of a deck mounted bath filler or a deck mounted bath shower mixer with shower handset for low pressure environments.

01226 283434 www.abode.eu

Enq. 125

New NICEIC ventilation training course



Johnson & Starley is the first UK manufacturer to offer a new NICEIC Certification Training and Assessment Course for installers of ventilation systems. The course assesses installers against set criteria which have been formed from the relevant National Occupational Standards and approved by SummitSkills - the Sector Skills Council

for the building services engineering sector. The qualification lasts for five years. Running over two days, the course looks at the different methods used to ventilate domestic buildings.

01604 762881 www.johnsonandstarley.co.uk

Enq. 126

ALLROUND 37.5® Insulated Work Jacket



Top athletes have long enjoyed the benefits of performance wear - now craftsmen and women can too. Snickers Workwear is one of the first manufacturers of working clothes to introduce 37.5° Technology into its clothing. This new 37.5° ALLROUND Insulated Work Jacket is just what the name suggests. A jacket that has all the

features and functionality of the other Next Generation working clothes, but without the heavier weight fabrics. It's a super-light, quick-drying garment that will keep you looking and feeling comfy wherever you are on site in colder weather.

Eng. 127

Estimating Software Easy, Accurate, Save 80% of time spent pricing

Estimating Software Benefits

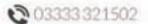
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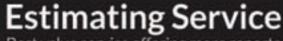
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Fix In 5 is the latest addition to Everbuild - A Sika Company's adhesive range, bringing a truly universal construction adhesive with an ultra-strong final bond strength which has to be seen to be believed. Curing in just five minutes, Fix In 5 combines an advanced PU formula with fibre reinforced technology giving gap filling properties allowing it to be used

on the most demanding of jobs, bonding virtually all materials including timber, metals, natural stone, concrete, plastics and much more. Fix In 5 is also chemical and water resistant.

0113 240 3456 www.everbuild.co.uk

Enq. 129

Thompson's launches building chemicals

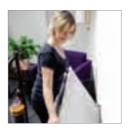


It's been an exciting few months for the Thompson's brand. Known for its famous waterproofing range, with the launch of a new range of Building Chemicals products, plus a redesigned website has moved the brand into several exciting new categories. With more than 40 new products, the Building Chemicals range caters to six key areas including; roofing,

admixtures, flooring, cement and mortar repair, cleaners, and putties and adhesives. The Thompson's website has also been relaunched with nine new categories and easy access to technical data sheets.

0114 240 9469 www.thompsonsweatherproofing.co.uk

Decorating made easier with Rotarad



The Rotarad radiator valve kit enables easy access to the space behind the radiator, for decorating and for cleaning with no need to turn off the water or get the plumber in to remove the radiator. The Rotarad radiator valve kit is an easy retrofit for existing radiators and an obvious benefit when having new radiators installed. It enables the radiator

to be lowered away from the wall to a 45 or 90 degree angle for easy and safe access with no need to disconnect the radiator from the central heating system.

01782 385152 www.rotarad.com

Enq. 131

Red cedar creates an architectural home



Western Red Cedar Trim Boards have always been immensely popular with Landscapers and Garden Designers building stunning slatted screen fences however they are a perfect option for cladding purposes too. Silva Timber's Western Red Cedar 19 x 38mm Trim Boards were used extensively on the exterior of a residential project in London.

By using Western Red Cedar rather than a man made material, the home was given much warmth and character. The defined horizontal lines give the structure a strong urban presence.

01514 953111 www.silvatimber.co.uk

Enq. 132

Racking solutions revisited

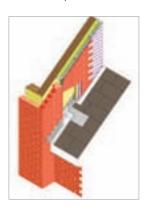


Autumn 2016 sees the re-launch of Simpson-Strong-Tie's unique racking solution for timber frame structures - new products, improved performance and increased availability. Since the launch of Strong-Portal and Strong-Wall, more than 400 timber framed homes have benefitted from increased build flexibility in terms of wider openings (and more of them), yet with none of the issues surrounding racking resistance that goes with them. The updated range features the all new Steel Strong-Portal, which can be attached to adjacent timber studs with ease, the Steel Strong-Wall has been modified to give increased performance and like the Steel-Strong-Portal, can be integrated into a standard timber frame design. Steel Strong-Portal comes in two sections (left and right) to create a reinforced opening up to 3.6 metres wide – useful for garages, patio doors for example. The Steel Strong-Wall is a single panel which can be added to a structure to reinforce the structure. Both are available as kits with all of the necessary fastenings and adhesives to complete the installation. The new catalogue 'Racking Solutions for Timber Frame Buildings' is available from Simpson Strong-Tie on request and can be downloaded from the website.

01827 155600 www.strongtie.co.uk

Enq. 133

Brick slip finish for flying gables



Building contractors and housing developers seeking a brick finish on flying gables in timber frame buildings, have found the ideal solution thanks to leading brick slip cladding specialist Eurobrick Systems. The lightweight and easyto-install alternative to traditional brickwork provides a seamless finish to intersecting rooflines, eliminating the potential cost of complex engineering detail. Eurobrick's X-Clad system has been specified by house builders in such circumstances for over 25 years. Managing director of Eurobrick, John Mayes, explained: "The slim line profile of our X-Clad system makes it the perfect choice for gable ends. The backer panel is easy to handle and cut to shape and is lightweight so avoids adding too much additional weight to the timber structure. We stock brick slips in a wide of colours and textures, but crucially, we also provide a brick cutting service where we collect whole bricks from site and have them cut to fit our panel system and returned to site for installation. This ensures continuity with the adjoining traditional brickwork, something which is very important to our customers." Eurobrick's X-Clad system, used extensively on new build projects, is a tried and tested product with third party certification from the British Board of Agrément (BBA). It has a system weight starting at 36kg/m² and a profile thickness from 33mm.

0117 971 7117 www.eurobrick.co.uk

Enq. 134



With Garador sectional doors!

In modern buildings, space is always at a premium and driveways are noticeably shorter. So it is no surprise that Garador's Sectional garage doors are now a top seller.

These superbly engineered doors open vertically then horizontally on tracks back into the garage, eliminating the problem of losing driveway space through standard up and over doors which 'kick out' on opening. There is also no loss of width in the garage, giving maximum parking space for wider vehicles such as 4 x 4s.

Garador's Sectional garage doors also add great looks and style. They come in a wide variety of surface finishes, designs and colours and in a full range of size options, including standard and purpose made. Find out more about Garador's Sectional garage doors by calling the company directly or visiting the website.

01935 443794 www.garador.co.UK

Eng. 135

Eng. 136



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Visionary styling from Premdor

Inspired by the latest interior design influences and fashion colour trends, Premdor has launched Portfolio, a range of luxury veneer internal doors created around four distinctive themes, Natural, Exotic, Contemporary and Classic. All ranges utilise Premdor's Veneer Match technology which engineers real veneers into a consistent grain and colour yet still allows for natural variation within each door. All Portfolio door designs may be enhanced by adding glazed models, the ideal solution when more light is required in a room, corridor or entrance. A large selection of contemporary glazing styles exist with both commercial and domestic options available, as are glazed FD30 and FD60 Fire doors complete with wired, clear or obscure glass styles available to specify. Non-fire doors with clear glass are toughened to BS EN 12600.

0844 209 0008 www.premdor.co.uk/portfolio



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All Skaala windows and doors are custom-made Finnish products. The stylish glazing shades give the finish to knot-free quality wooden surfaces. In addition to the standard colours, you can choose painted colour options from a colour chart.

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frameXpress a reputation for excellence



frameXpress is a leading trade fabricator with an established reputation for excellence, supplying premium windows, doors and conservatories to the building industry. The portfolio includes a diverse range of 'A+' rated high performance pvcu products as well as aluminium options including bifold doors, Composite Doors and Guardian Roofing systems. BSI

industry standard, 16 colour foils, Secured by Design accreditation as we as tailored solutions make the range a popular choice for architects, specifiers and builders.

01952 581100 www.frameXpress.co.uk

Enq. 139

Loxta brings something new to the market



Loxta - a new door hardware brand, based in Lancashire – is prompting retailers, door manufacturers, installers and homeowners to re-evaluate the competition, with its stylish, bright and technically advanced suite of handles, plates, escutcheons, fasteners, locks, accessories and more. While the Loxta name is new, the family-owned business

behind the brand has over 30 years' experience in door hardware manufacturing and ironmongery, and is looking for partners to help maximise its channels to market throughout the UK.

01282 902 135 www.loxta.co.uk

Enq. 140

Crest Nicholson chose NorDan



Leading UK developer Crest Nicholson chose energy efficient Scandinavian timber windows from NorDan for its development at Bath Riverside Victoria Bridge Road. From studios to penthouse apartments, the development has transformed Bath's western riverfront into a modern residential quarter. NorDan's 1.2NTech inward opening tilt and turn

windows and inward/outward pairs of doors have an additional aluminium cladding finish to extend their life in use. The aluminium protects the timber and is easy to replace if damaged.

01452 883131 www.nordan.co.uk

Enq. 141

Crittall best thing since sliced bread



A historic flour mill in Ramsgate has been transformed into luxury apartments with Crittall windows meeting the strict requirements of local planners. Architect Chris Chambers said "We had long discussions with the planning authority who were resistant to the inclusion of double glazing. We put the case for the W20 window from Crittall showing there

could be a much better performance without damaging the fabric of the building." The architect's case was persuasive, "We looked at several different products and Crittall won by a mile!"

01376 530800 www.crittall-windows.co.uk

Enq. 142





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Enq. 143 Eng. 144



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Polyflor launches new Camaro collection



Polyflor is proud to announce the launch of the brand new Camaro PUR luxury vinyl tile collection designed for the home. The updated Camaro domestic flooring range includes 30 stunning, authentically reproduced wood and stone effects which live up to the level of beautiful design and high performance that flooring contractors and customers alike have come

to expect from the Camaro brand. Polyflor's experienced product designers have hand selected a collection of 18 wood and 12 stone effects for the new collection.

0161 767 1111 www.polyflor.com

Enq. 146

New Purevision Classic stove range



Following the successful launch of the Purevision™ multi-fuel stove range in 2014 Charlton and Jenrick our very pleased to announce the launch of their new Classic range of stoves. The Classic Purevision™ Multi-fuel stoves have all the features of the current range making them ultraefficient and designed to easily pass the strict Eco Design 2022 regulations. The

Classic version offers a more traditional look to the current modern looking Purevision™. There are two models available the CPV5 & CPV5W both with 5kW nominal inputs so usually there's no need for added ventilation in your room.

Enq. 147

Creation 30 'creates' the ultimate choice



Gerflor's Creation 30 is a brand new, design-orientated, luxury vinyl tile (LVT) flooring in three installation types, Creation 30 Adhered, Creation 30 Lock and Creation 30 X'Press, providing glued, interlocking and removable fitting options for housing projects. The 56 designs within the range showcase three leading decorative trends: traditional and creative

wood, mineral and textile effects. Creation 30 also has a durable 0.30mm wearlayer and a polyurethane PUR+ protective surface for lower maintenance, easy cleaning and lasting good looks.

01926 622620 www.gerflor.co.uk

Eng. 148

Designer Contracts is Recycling winner again



Designer Contracts has been named 'Take Back Partner of the Year' by Carpet Recycling UK (CRUK) for the second time at the annual awards and conference held at Leicester City Football Club. Graham Kempton, Designer Contracts' logistics director was also honoured with the Recycling Champion of the Year award, for an individual who has gone the

extra mile to ensure as much carpet as possible is recycled. The company initially trialled a recycling scheme in conjunction with CRUK before rolling it out to all 12 regional offices. For more information contact Designer Contracts directly. Enq. 149

QUALITY With stoves to suit every lifestyle and setting, we make it easy to put a warm glow at the heart of the home. For reliability and service you can trust, contact us today on 01297 35700 aradastoves.com

Enq. 150

The greener way to add warmth

In addition to adding a warm heart to a home, a woodburner can also add eco-credentials. Ariana Hardison-Moschopoulou of Stovax explains how to pick the stove or fire that works best for your development.

understanding esearching and heating choices is an important part of the journey in any project. Woodburners provide a 'je ne sais quoi' to a whole home as well as that special type of warmth that can only be found with a stove.

There are hundreds of options on the market to suit anyone's tastes and styles - from the minimalistic, modern designs to the more traditional-looking stoves. The heat outputs and efficiencies required also need to be decided upon in order to comfortably heat a room or living area. So why go for the woodburning option, and what are the eco-advantages it can offer?

Green living

Living a greener life is becoming an important and conscious choice for many people, and having the freedom to be able to plan this way of living into a development is an opportunity too good to miss.

Adding a powerful, carbon-neutral heat source in the form of a woodburning stove or fire adds not just a visual centrepiece, but also a warm heart to any home. Choosing the right eco friendly stove will also allow buyers to take the first step towards becoming an environmentally sustainable household. When wood is burnt, the carbon dioxide which is released during burning is about the same amount that is absorbed by



trees during growth, making it a carbon neutral heat source. In addition, when procured from sustainable plantations, it is also a renewable energy source.

There are many heating appliances on the market that have eco credentials, but only a few manufacturers have gone as far as minimising emissions to reduce the impact on air quality. These ultra-green appliances are some of the cleanest burning fires and stoves available, complying with Ecodesign standards by lowering emissions of organic gaseous compounds, particulates, nitrous oxide and carbon monoxide.

Glass-fronted fires

A woodburner is be able to add charm and efficient warmth to a property, with much more of the heat being directed into the room. This is why there has been a recent movement towards installing these types of fires in homes across the country. With an open fire, much of the heat is lost up the chimney due to their low 25 per cent efficiency. Stoves and close fronted fires that feature Cleanburn technology burn logs with outstanding efficiency meaning most of the heat is being transferred into the room at rates of as high as 81 per cent thermal efficiency.

Styles and options

In terms of what is available on the market, there are designs suitable for both the contemporary, minimalist look, as well as more traditionally styled homes.

When choosing something that's more traditional, there are many stoves that will fit within a standard-sized chimney breast and

Continued overleaf...



"Adding a powerful, carbon-neutral heat source in the form of a beautiful woodburning stove or fire adds not just a visual centrepiece, but also a warm heart to any home"

maintain a period look. These powerful stoves will be able to heat up a room with ease and keep everyone toasty. One trend has been to go for traditional premium quality stoves that feature cast iron in their construction, which maximises radiated heat over a period of time. These stoves are preferred because not only can the iron be cast more thickly through the stove where greater strength is needed, but it also allows for beautiful designs to be put into the panels for an authentic look.

Contemporary stoves that can fit within chimney breasts make for a perfect addition to an up-to-date household, but inset or hole-in-thewall fires are also available. These fires, also known as cassette fires, can be built in to the wall making for a striking, minimalist centrepiece.

A new stove or fire can update the look of a chimney breast or they can be installed freestanding in most rooms. If space is at a



premium, as it so often is in new developments, such appliances are ideal, often providing a stunning view of the flames.

Making a fire or stove the centre focus can be just the eye catching addition needed to appeal to buyers. Planning for it in a development can mean transforming a living or entertainment area. There are a range of options on the market which will make for a stunning centrepiece wherever they are installed.

Enq. 151



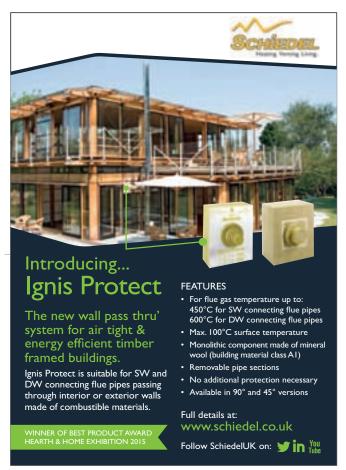


DRU launches new contemporary gas fire

DRU Metro is the original template for contemporary hole-in-the-wall gas fires. Originally launched in a classic one metre wide letterbox shape, with a realistic log display and generous flames, the Metro concept has now been developed further to include extra tall, two sided, three sided, and see-through tunnel models. All this has been achieved without compromising the original high standards of style, form, function and fireplace technology that enables DRU to maintain its position as the European market leader in contemporary gas fires. The latest model in the range is the Metro 200XT, which is available as a simple hole-in-the-wall or tunnel model for installation into room dividing walls and other room features. The Metro 200XT features the very latest DRU burner system, which generates high flames that dance around in a very realistic way. The exclusive DRU Eco Wave app allows the owner to control the fire using a tablet or smartphone.

0161 793 8700 www.drufire.co.uk

Enq. 153





Enq. 154





Em-Glaze moduar ridgelights save energy by flooding interiors with natural light.

For more than 25 years our fully compliant, easy-install rooflights have helped designers and builders make interiors feel more luxurious and spacious. The increased natural light and effective thermal insulation also help to lower energy use.

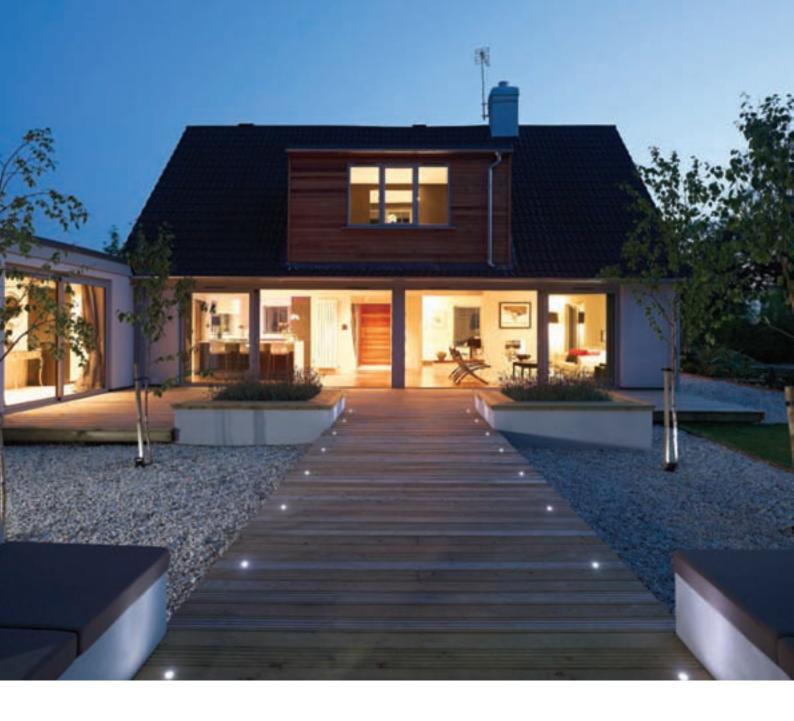
The Em-Glaze ridelight's low-profile aluminium framework is subtle enough to suit any residential building, while the increased glazing maximises daylight, reducing lighting costs and making rooms appear larger.

Options are available for thermally broken upstands and ventilation. Ordering is easy too, with six standard sizes available from stock for next-day delivery. Additional framework colours, glazing, ventilation and sizing options are available with our Em-Glaze Bespoke range.

For expert technical advice or to place your order, contact our team.







Opening up to bi-folding doors

Steve Bromberg of Express Bi-folding Doors describes the considerations to bear in mind when factoring bi-folding or sliding doors into property plans.

Bi-folding doors and expansive areas of glazing are now very much 'en vogue.' Open-plan living, light, space and access to the garden are sought after by homeowners, so housebuilders, developers, architects and designers are now incorporating them into their designs to accommodate for this growing trend. The days of French doors or French doors and sidelights are now confined to the past, with 90 per cent of architects' plans now

"Open-plan living, light, space and access to the garden are sought after by homeowners, so housebuilders, developers, architects and designers are now incorporating them into their designs to accommodate for this growing trend" incorporating bi-fold doors.

Colour, floor levels and the opening configuration of the doors are vital to consider. It's vital to plan how the layout of the home will flow out into the garden, as that will dictate how the bi-folding door will open. The number of panels is also an important consideration because the more panels, the more expensive the door will be. We always recommend the minimum number of panels possible because this will create

Continued overleaf...

a more panoramic view of the space outdoors. We find that the main requirement of people in the market for bi-folding doors is less panels and more glass, to create a more seamless look.

Affordability

Companies are now able to offer aspirational products at realistic prices, often because they manufacture them in the UK, which has helped make formerly unrealistic homes a viable prospect. As a result, they're more readily considered for residential projects. There has also been a notable rise in people turning to these types of products as a way of maximising existing space, as opposed to moving house.

Eco-friendly considerations

Glazing insulation

Glazing insulation is a vital consideration as it will ensure newly built homes are both ecofriendly and more energy efficient for the homeowner in the long run.

Glazing products which carry low U-values are more energy efficient. Such products often have an invisible metallic coating on one side, reflecting heat back into the room rather than letting it escape through the glass. They can even provide the same thermal benefits of triple-glazed sealed units but in a much lighter form, bearing less strain on the hinges.

Aluminium

One of the most eco-friendly metals, thermally broken aluminium is also incredible durable, lightweight and versatile. Aluminium can also be powder coated in a choice wide range of colours to achieve the effect of timber or other materials, meaning homeowners gain the benefits of resilient, eco-friendly material but without the maintenance problems of natural materials like wood.

Solar glass

Solar control glass needs to be factored in when building a conservatory or glass room. Special coatings are configured to manage solar radiation by controlling how much heat and light passes through the glass.

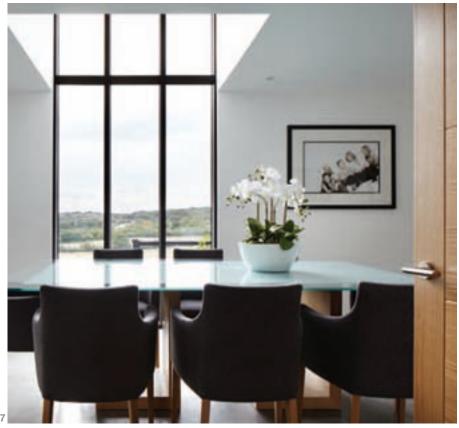
Warm edge spacer bars

Double glazed panels in windows and doors have spacer bars that sit between the two panes of glass. Up to 80 per cent of energy loss through a window happens at the spacer bar, so a warm edge spacer bar is an essential component of superior double glazing, ensuring thermal properties of the panel are not compromised. Benefits of installing this eco-friendly element are a heat loss reduction of up to 94 per cent, reducing condensation by up to 70 per cent, being up to 65 per cent warmer at the edge and reducing voice by up to 2 dB.

Steve Bromberg is general manager at Express
Bi-flding Doors Enq. 15



"Up to 80 per cent of energy loss through a window happens at the spacer bar, so a warm edge spacer bar is an essential component of superior double glazing"



The future trends in housing identified by Reynaers at Home survey

ndustry professionals have shared their predictions for the future of residential architecture in a national survey from Reynaers at Home.

The majority of respondents said that sustainability was high on the agenda for the houses of tomorrow.

Looking at the current industry, architects agreed that energy efficiency is still a critical consideration when designing a project, with 48 per cent of respondents citing it as the most popular trend.

When asked "What does the future hold for housing design?" almost half said more affordable homes for the younger population. More than one in ten also said that tech-based solutions for smaller spaces will be a prominent future trend.

Architects predicted that there will be more properties built to meet energy demands and budgets for all ages, with a focus on flexibility and

functionality supported by innovative design

One architect said: "The future in housing design needs more affordable housing for all ages, but there's not the political will to make this happen. Too many people are heavily invested in the inflated housing market."

Maximising space and light were mentioned as key trends for the future, as well as amenities and space planning, cost-effective repetitive grid facades and floating corners with bifold or sliding

Compared with Reynaers at Home's 2013 survey, there was a 12 per cent collective increase in popularity for panoramic window walls, bifold doors and floating ceiling corners.

A clear effort is emerging to streamline residential architecture into a landscape of sustainable, affordable and efficient homes which maximise space, light and energy usage.



Of the architects surveyed, 41 per cent of respondents designed for the domestic market and 38 per cent designed for commercial and domestic. The majority of respondents focused on a mix of new builds and extensions/refurbs.

Reynaers at Home is a premium brand dedicated to offering the very best architectural glazing products and service to the discerning householder. For more information please contact the company directly or visit the website.

0121 421 9707 www.reynaersathome.co.uk

Enq. 158

Senior secures its largest PURe® order!



Senior Architectural Systems has secured its largest order to date for its thermally efficient PURe aluminium window system after being selected by main contractor John Sisk & Son and fabricator Elite Aluminium Systems to deliver the full fenestration package as part of a £1.8m contract for a major new residential scheme in Manchester. Senior's patented

PURe® aluminium windows will become a key feature of developer Manchester Life's latest phase of 302 new rental homes on New Union Street.

01709 772 600 www.seniorarchitectural.co.uk

Enq. 159

Kawneer launches new brochures



New guides to its window and unitised curtain wall systems have been published by Kawneer. Advice on specifying window and unitised curtain wall systems is contained within two new brochures. Both the window and unitised curtain wall systems A4 brochures have been updated to include Kawneer's full window range and the manufacturer's new AA°265

unitised curtain wall system. The window brochure contains a product selector detailing the different window types, their features and performance, appropriate applications and accessories. For more information contact Kawneer directly.

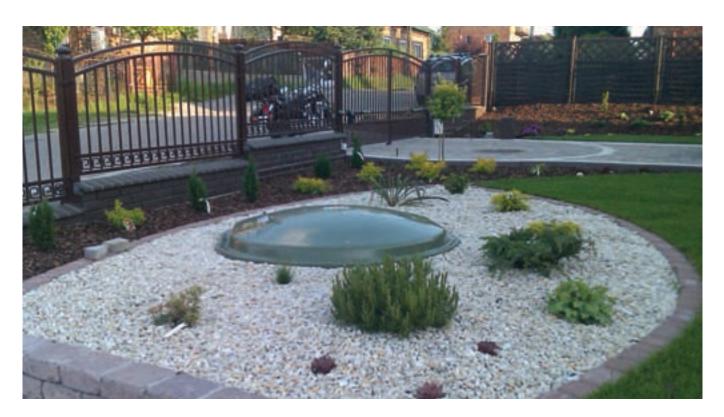
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- CE Marked and EN 12566-3 Certified
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01746 781782 www.webuildit-ltd.co.uk

Eng. 161



Septic tanks: not as simple as they seem

Dave Vincent of Kingspan Klargester warns that septic tank installations carry legal risks if done incorrectly.

The question of how to deal with wastewater from a homeowners bathroom and WC is one that all builders should consider very seriously - otherwise you could be prosecuted and face a heavy fine.

If a new home is not going to be connected to the main sewer, developers will need to look at options to deal with wastewater, and it's a fairly safe bet that the first thought will be installing a

Septic tanks are probably the most familiar private drainage solution (and, anecdotally, the most common off-mains product typed into Google). This is fine for some homes; given the right ground conditions and the addition of a reed bed, they may well be all that's needed. But, despite their widespread use across the UK, septic tanks are not always the best, or indeed legal solution for the property or its local environment.

Worryingly, reports from our accredited installers show that the number of pollution incidents is rising, and the vast majority of these are as a result of the inappropriate installation of

The legal responsibility for disposing of

wastewater lies with the property's owner. In the event of a local pollution incident, both the owner and the installer is at risk of prosecution under new regulations from the Environment Agency. Both parties face the prospect of a heavy fine and a large clean-up bill.

Recent changes to off-mains legislation in England and Wales have made off-mains drainage installation a less cumbersome and bureaucratic process for the majority of off mains properties, but these revisions should not be mistaken for permission to act irresponsibly, and personal liability remains unchanged.

UK Building Regulations

UK Building Regulations stipulate that, whenever possible, houses must be connected to the main sewer - if necessary using a pump station.

Pump stations may be the only requirement to access the drain or they may be part of a package of solutions. For example, an effluent pump-set may be required to make a sewage treatment plant work effectively, if the level of the outlet of the holding tank is too low to enable gravity flow to the discharge point or soak-away. The design

and use of private package pump station is covered in two principle regulations - Building Regulations H1 and British Standard EN 752-6.

A first step must be to arrange a site visit by a suitably qualified expert to consider all the alternatives before a decision is made. Again, this is in line with 2010 Building Regulations.

Their advice is vital because installing the wrong solution is a disaster waiting to happen think over-flowing toilets and blocked drains.

Sewage treatment plants

If, for any reason, it is impossible to connect to the main sewer even with a pump station, the only option will be to install private drainage.

There are a range of sewage treatment systems to choose from, each with an efficiency rating based on how effectively they break down the sewage. Sewage treatment plants (STPs) should always be considered as the preferred, default solution; they provide an environment where aerobic bacteria can break down sewage and are highly efficient, treating more than 97 per cent of the pollutants.

Packaged sewage treatment systems with

Continued overleaf...



tertiary treatment such as packaged reed beds are the current 'gold standard', bringing the efficiency rating up to 98 per cent. They produce a clear, odorless overflow that is environmentally friendly and suitable for discharging even on sensitive sites, including into a watercourse, but this is regulated and requires registration with the Environment Agency/Environmental Protection Agency.

Septic tanks do not treat waste, they simply produce soluble waste from solids which is then discharged and filtered through the ground. Poor quality septic tanks installed in the wrong location can pollute groundwater - our drinking water essentially - as well as streams, ponds and rivers. And, if the ground conditions don't allow efficient filtration, then sooner or later homeowners will know about it.

Is a Discharge Permit essential?

Once the decision has been taken to install private drainage, developers must apply for a permit to discharge into groundwater or surface water, under the Environmental Permitting (England and Wales) Regulations 2010 (known as EPP2), revised in January 2015 with the introduction of new binding rules.

Not everyone needs a discharge permit under EPP2 owners of small, domestic sewage tanks or plants may, under certain circumstances, be exempt. Instead they must comply with various conditions, which include:

- following the industry guidelines on the installation of septic tanks and sewage treatment plants
- incorporating manufacturers' operational guidance, the British Standard BS6297 regarding soakaway design
- following the advice given by British Water regarding de-sludging and servicing Most importantly, homeowners will only be exempt from requiring a discharge permit if they

have also purchased a product that has been performance-tested and certificated in line with European Standards (EN12566). If an uncertified product is used, then they will have to apply for a permit.

While there is no longer any need to register a septic tank, keep records of maintenance or notify the Environment Agency if the discharge ceases - homeowners still need to make sure their system is working well and not causing pollution.

If developers are in any doubt as to the suitability of their site to filter wastewater, then take the prudent course. Protect yourself by installing a fully compliant sewage treatment plant.

Dave Vincent is Kingspan Klargester's operations director



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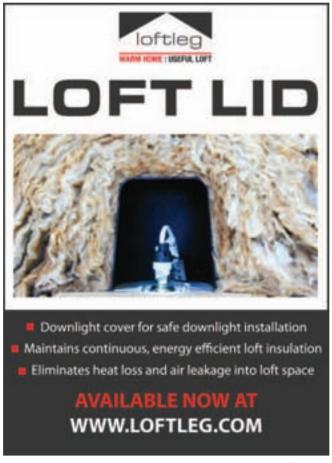


Interpave at Flood Expo

The trade association Interpave is exhibiting on Stand F270 at Flood Expo in ExCeL and hosting an important presentation by SuDS guru Bob Bray. As the driving force behind concrete block permeable paving, Interpave will be promoting the latest innovations with this important SuDS technique. Winner of the 2015 Exhibition News Awards' Show Rising Star, Flood Expo is the largest event of its kind in the world presenting solutions to flooding problems. It includes 80 seminars from leading experts in the field, 200 exhibitors showcasing cutting edge products and unparalleled opportunities for networking. Entry tickets are free and you can register online. The latest developments with SuDS and urban design are summarised in Interpave's new 'Hard Landscape Today' brochure and a video which dramatically demonstrates the performance of concrete block permeable paving.

0116 232 5170 www.paving.org.uk

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Guaranteed performance.

Now save yourself...



For the Full Facts on your next build and to find out just how much you could save visit:

knaufinsulation.co.uk/fullfacts





Full-fill glass mineral wool solutions can be the most cost effective option for external cavity walls in order to achieve compliance with Building Regulations.







Extend boiler life by 45 per cent

ard water affects around 15 million homes in the UK and most of these have no scale protection. Hard water wastes energy, shortens the life of boilers and appliances and causes the usual problems of hard water marks.



The Carbon Trust confirms that 1mm of scale on a heat transfer surface will increase energy usage by seven per cent. With no scale protection 2 or 3mm of scale on a heat transfer surface is easily achieved within two to three years, so with scale protection there is a saving of a minimum of £100 a year to the average household in reduced energy costs and substantial further savings on extending boiler and appliance life. Building regulations now recommend scale protection on hot water systems.

Increased boiler life

Extensive tests by a leading energy company proved that fitting Scaleguard increases boiler life by 45 per cent so treating hard water gives a very quick payback as well as saving energy and extending the life of appliances.

How an electronic water conditioner works

The Scaleguard electronic unit works by sending out a modulated electronic signal through a coil on the pipe which changes the physical properties of lime scale in the water. It alters the shape of the lime scale crystals so they can't form hard scale. Instead they just wash straight through the system and further build up of hard scale is prevented, and existing scale is gradually absorbed.

Tried and tested

The technology of Scaleguard has been proven over 20 years by numerous tests including Thames Water who recommend it to their customers.

Scaleguard features

As well as extending boiler life it also extends the life of appliances and saves around £100 a year in energy costs. Lime scale no longer builds up and existing scale is gradually absorbed. One unit on the incoming main protects the whole house even for stored water.

Scaleguard is UK made, costs less than £10 a year to run, has a 10 year guarantee and costs £94 plus VAT with bulk discounts available.

To find out more visit the Scaleguard website or contact the company directly.

0800 5283278 www.scaleguard.co.uk

Enq. 169

Kingspan installed on waterfront



Kingspan Kooltherm K15 Rainscreen Board has been specified as part of a new £42 million purpose built student accommodation project in Portsmouth, due to its outstanding thermal performance and ability to meet the stringent fire performance requirements for the project. Cooley Architects' design uses coloured Alpolic ACM cladding to

form an eye-catching cube at the top of the 240ft building. Kingspan Kooltherm K15 Rainscreen Board was installed as part of the rainscreen facade system.

01544 387 384 www.kingspaninsulation.co.uk

Enq. 170

Reginox adds new Ego sink to range



Reginox's new Ego sink is one of the latest additions to the company's Regi-Granite range of high quality granite sinks. Ego features contemporary styling that blends curved corners with right angles to create a distinctive look and is complemented beautifully by a designer-profile drainer and chrome waste. Suitable for either undermounting or insetting, the sink is

destined to prove popular with discerning homeowners seeking a hardwearing alternative to stainless steel and is available in a choice of black, white, cream or titanium.

01260 280033 www.reginox.co.uk

Enq. 171

Pegler Yorkshire completes static valve



To ensure heating and ventilation systems work to their optimum efficiency valves are a key element. Pegler Yorkshire with its foundations held in the development and manufacturing of valves, is increasing its Static Valve offering which incorporates ultra low and medium flow static products to compliment all flow variables. Within the Ballorex

Commercial Valves range the Pegler 1260 fixed commissioning double regulating valves incorporate a fixed plate orifice for accurate flow measurement and regulation. For further information please contact the comapny directly.

Eng. 172

World class ComfoAir Q heat recovery unit



Zehnder Group UK is proud to announce that its new ComfoAir Q range of MVHR units - the most efficient heat recovery system on the market - has been awarded Passivhaus certification. This new generation of heat recovery units offers outstanding energy and noise performance as well as smart technology that helps improve the installation

process and accuracy on-site. The range provides up to 96 per cent heat recovery efficiency, making it the most energy-efficient unit on the market. Systems can be monitored easily via remoted access on the Zehnder web portal. Eng. 173

The heart of the home

The kitchen is arguably one of the biggest selling points of a house. Lianne Butterfield of Richmond Kitchens explains how to achieve a durable and on-budget kitchen which can still provide a stunning, on-trend space for buyers.

enerally, the aim for any housing design should be to ensure that the internal environment is safe, comfortable, convenient and capable of accommodating the necessary furniture and equipment associated with specific room activities. It should also be suitable for the particular needs of the intended user groups.

Kitchens are not only the main workplace in a home but provide the focal point for much social activity. The design of the room should therefore recognise its use as a family room. The approaches to kitchen design are well documented and centre around meal preparation, including storage and preparation of food, cooking and serving of food, waste disposal, washing up and clothes washing/drying.

Developers need to consider the needs of the end user and the lifespan of the kitchen and its accessories within. With budgets in mind the specification of carcasses as well as fascia quality

Suppliers should be chosen wisely - they must show commitment to delivering a quality product on budget and show a true understanding of client requirements.

To ensure product is good quality, always check the supplier's credentials. Do they adhere and conform to the highest industry standards? Is their manufacturing process approved by ISOQAR or BS EN ISO 9001:2008 (which meets the exact requirements of the Furniture





Industry Association – FIRA – Gold Award). The FIRA Gold Award is the highest rating achievable for kitchen cabinet construction, workmanship and suitability for heavy domestic use.

Is the supplier part of the Furniture Industry Sustainability Programme (FISP)? This was established in 2006 as a response to the direct challenge from the Government for all industry sectors to show a strategic approach to sustainable development. FISP was created by the Furniture Industry Environment Committee (FIEC), with the backing of all the major trade associations and the wider industry.

The scheme has rapidly become established as the leading independent environmental and sustainability certification scheme for the furniture industry. It has developed into the industry forum on all environmental and sustainable issues relating to all aspects of the industry's business. FISP goes further than existing standards by addressing all areas, from purchasing and procurement right through to end of product life, also including social, ethical and employment concerns as well as waste, energy use and emissions.

Excellence is identified through a comprehensive initial audit and - as a commitment to continuous improvement is essential independent bi-annual audits are conducted.



FISP accreditation demonstrates that the supplier is taking its environmental and corporate social responsibilities seriously and ensures working policies and practices are fully

Benefits of purchasing from a member of the Furniture Industry Sustainability Programme (FISP) include:

- confidence that the organisation meets stringent environmental, Health & Safety and CSR standards through third party certification
- reassurance that the organisation will have a continuous improvement programme to meet on-going commitments to FISP
- confidence they are up-to-date on sustainability and Health & Safety legislation
- an ability to demonstrate the full range of sustainability accreditations required within many tender documents, simplifying the process

"Kitchens are not only the main workplace in a home but provide the focal point for much social activity"

Delivering a durable product need not be at the expense of style. For buyers the kitchen has become a style statement as well as providing all the functional requirements. This is where the most drastic changes are being seen – style is as high on the list as price and durability.

Recent trends include the use of texture, mixing wood grain effects and using contrast slab fascia colours to create feature units. Gloss kitchens still feature heavily but are being mixed with wood grain effects to add a 'wow factor' for

Utilising clever storage solutions you can make a limited space work more effectively; expecting the end user to cram all their worldly kitchen Continued overleaf...

goods into three cupboards is a thing of the past. Using a little imagination you can create the perfect space that can be both functional and fashionable. Wirework and corner units provide ways to make the most of the space.

For larger developments kitchen islands are also high on the consumer wish list, serving a number of purposes. In addition to being a visual anchor they also help increase the room's functionality and efficiency. According to a survey by the National Association of Home Builders more than 70 per cent of buyers want an island in their kitchen, and of those, 50 per cent consider it a must-have.

The size and shape of an island will be determined by the room's layout. Allow for at least 36-48 inches between the perimeter of the island and the surrounding cabinets so there's enough room for people to move around.

Choose the finishing touches wisely - a stunning work top and splash back can completely transform the look and feel of a kitchen. On price, laminate can't be beaten, and now with new designs, square edges and manufacturers striving for innovation, it no longer needs to be a product that compromises on style. With clever design, innovation and the right kitchen supplier, your development, no matter how restrictive the budget, can still have Eng. 174 the wow factor.





London Build Show stand no F88

Enq. 175

London Build's got construction covered

London Build returns to Olympia for its second year on 26 and 27 October.



ondon Build is a leading construction event focusing exclusively on construc-Ition projects and opportunities in London and the South of England. London Build is attended by thousands of movers and shakers in the UK's construction industry, including contractors, developers, architects, local councils, property developers, suppliers, solution providers and more.

The free-to-attend exhibition will feature a wide range of leading companies working across the construction industry in London, including Balfour Beatty, Bouygues UK, Mercedes, HP, Davlay, TfL, HS2 and Heathrow, among others. The show will also see two days of conference sessions led by the London Chamber of Commerce, Chartered Institute of Building, Greater London Authority, Crossrail, Battersea Power Station and many more.

In addition, London Build is launching a wide range of fantastic features, including an official Pecha Kucha night in The Architects Hub and dedicated zones for sustainability sponsored by the Carbon Trust, and Skills Development supported by the CITB.

"Tickets to the show are limited – visit www.londonbuildexpo.com today to secure your free pass"







Other features of the expo include:

- Conference sessions giving insight and case studies of the latest projects and investment opportunities across the capital, including top level speakers from the Greater London Authority, LCCI, Balfour Beatty, Transport for London, Lendlease, Peabody, Foster and Partners and Heathrow Airport
- CPD Accredited Workshop floors providing 30+ hours of CPD training from a wide range of industry experts
- A 200 booth exhibition featuring a wide and fascinating range of leading international solution providers, suppliers and project developers
- Multiple zones and feature areas including: the Architects Hub, Skills Hub, Tools & Tradesmen Show, Infrastructure Zone plus much more
- The Housing Summit including panel

discussions and case studies of London's major housing and regeneration products

- The BIM Summit featuring The BIM VIP Networking Lunch and conference sessions discussing BIM implementation, achievements and expectations for BIM Level 2.
- The Sustainability Summit with discussions into government initiatives for supporting sustainability in the built environment, sustainable materials, technology and best practice, and the future of sustainability in the built environment - what comes next?
- The Civil Engineering & Infrastructure Summit, giving insight to London's major infrastructure development plans and the future of engineering
- The Health & Safety Summit discussing the latest in CDM, technology and best practice, occupational health, the latest

legislation and more

- VIP Luncheon and Meet the Buyer sessions providing face-to-face meetings with a wide range of VIP attendees from leading contractors, architects, local councils, housing associations and developers (please note, attendance to Meet the Buyer sessions is limited to exhibitors only)
- The London Construction Awards and Jimmy Carr comedy evening - a prestigious Gala Dinner that features London's leading construction awards ceremony world-class entertainment (tickets still available for purchase)
- The construction industry's first-ever and very own Oktoberfest Beer Festival - network, unwind and have fun!
- Huge amounts of entertainment, competitions and prize give-aways Eng. 176

London Build Exhibition 2016



Evinox Energy are looking forward to exhibiting at London Build 2016. London Build provides a great opportunity to explore the latest construction projects in the capital; and the chance to network with thousands of industry professionals, including contractors, developers, local Authorities and Housing Associations. Sandra Slihte, Evinox Energy Technical

Design Manager, will also be presenting a CIBSE approved CPD seminar at the exhibition entitled "Next Generation Heat Networks -Key Considerations" which will take place from 1.15 -

2.10pm on the 26th October. Enq. 177

Flowcrete presents on polished concrete



At this year's London Build, Flowcrete UK (stand C64) will be giving attendees a sneak peek into its new polished concrete and coloured screeds range as well as showcasing its recently unveiled Comfort Resins collection. The resin-flooring manufacturer will be delivering a presentation on polished concrete during the event to inform attendees about the

possibilities and practicalities of this type of flooring material as well as what they can expect from Flowcrete UK's new line of polished concrete systems.

01270 753 000 www.flowcrete.co.uk

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Heat Mat showcases big city solutions



Heat Mat will be presenting their range of electric underfloor heating systems including a new easy-to-install and incredibly thin Combymat for laminate floors. This new system can also be used under a huge range of floor coverings including carpet, vinyl and Karndean without the need for levelling compound. The project team will also be on hand to

discuss ice and snow melting applications including trace heating, heated parking ramps and heated driveways. The show is the ideal event for Heat Mat to showcase their innovative solutions.

01444 247020 www.heatmat.co.uk

Enq. 179

Urmet shows its steel



Urmet has introduced a brushed stainless steel version of its market-leading Elekta door entry panel with a flush profile fascia. The Elekta INOX has minimal visual impact, thus preserving the aesthetics of a building's design. A visitor using the Elekta panel sees information displayed on a 3.5-inch screen. The panel's built-in wide-angle colour camera captures

images of the visitor and the resident views this on an internal monitor within their apartment. The Elekta INOX meets the performance requirements of the Equality Act.

01376 556010 www.urmet.co.uk

Enq. 180



State of the art drainage solutions

Water management specialists JDP will offer visitors to the London Build Show the latest in world-class drainage solutions.

Axedo is a state-of-the-art inspection chamber system, which is fast, versatile and provides a safer option than concrete. As an alternative to concrete chambers, the use of Axedo plastic chambers can lead to savings in installation time of up to 50 per cent, saving cost both in time and materials.

In addition, Axedo includes plastic chambers, which can be used for deeper installation depths, offering non-man entry access as defined in the requirements of Sewers for Adoption (SfA7).

Unlike concrete chambers, which will require a much larger excavation, Axedo chambers are lighter allowing for quicker and easier installation, without the need for heavy lifting equipment, and enabling a reduction in vehicle movements on site.

0800 195 1212 www.jdpipes.co.uk

Enq. 181



FDS appointed to Regeneration scheme

Fire Design Solutions (FDS), provide a number of its fire safety systems to one of the scheme's residential developments. The Morello development is the first phase of a wider £1bn project in the heart of Croydon, South London, which will include improved transport links as well as shopping and leisure facilities. Spanning across four blocks, Morello comprises a total of 297 one, two and three luxury bedroom apartments. Having been appointed to the project by Menta Redrow Ltd, FDS will design, install and commission a number of its systems to ensure the development meets all of the required fire safety Building Regulations. Over the coming months, the smoke ventilation contractor will install mechanical smoke ventilation systems (MSVS) in all four of the development's blocks. The team at FDS will also install its car park ventilation system to the development's one level basement car park. FDS started work on the development in October 2015.

01322 387 411 www.firedesignsolutions.com

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Blending the old and the new



Marley Eternit's Ashdowne handcrafted clay plain tiles have been used to help transform a derelict 17th century pub into a new fine dining restaurant and village centre. The challenge was to restore and extend the ageing building, retaining many of the existing features. Ashdowne handcrafted clay plain tiles are available in two weathered colours, making them the

ideal choice to enhance the beauty of a new build development or for a refurbishment project. The traditional handcrafted finish ensures each and every roof takes on a character of its own. For more information contact Marley Eternit directly.

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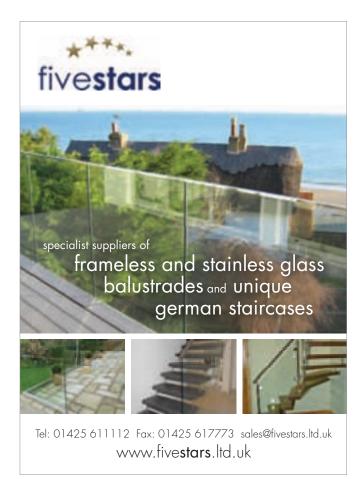
Sapphire installs all 20 balconies in one day



Sapphire's innovative offsite balcony system with glide-on connectors has enabled all 20 balconies for one of the new apartment buildings at North London's Woodberry Down to be delivered and installed in a single day. Sapphire's client, Berkeley Homes, was doubtful this could be achieved until it actually unfolded in front of them. Once

again, Sapphire's glide-on system has allowed record-breaking balcony installation speeds. In addition, Sapphire designed special first-fix bracketry to suit the apartment building's timber frame construction.

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A smarter approach to value

Martyn West of Altro explains why pursuing cheap flooring options in environments for social housing could prove to be a false economy, on the basis of safety, durability, cleaning and maintenance costs.

■ looring is vulnerable to wear and tear and ◀ specifiers have to tackle a range of criteria in housing developments to ensure long term value, as well as safety for users. Social housing has a particular set of criteria which can amplify the need to focus on floors.

Communal areas in social housing can be exposed to a lot of damage, for example buggies, motorbikes, bicycles and wheelchairs tracking in dirt and water, as well as causing bumps and scratches to floors and walls. On the other hand, bathrooms and kitchens in tenants' homes can spell danger, with the potential for slips and damage caused by water ingress, bacteria and mould. Both are areas that demand flooring as well as walling that are not only safe and durable but aesthetically pleasing, and need to be up for the robust demands of daily life.

With budgets under greater pressure than ever before, local authorities could be forgiven for trying to overlook the challenges and opting for the cheapest possible floor coverings, on the pretext that 'it will have to be replaced soon anyway.' However, that approach will almost always prove to be a false economy - and could even prove extremely costly in this modern litigation culture. Thankfully there are some practical solutions for making budgets work harder, in terms of performance and lifecycle costs, cleaning, hygiene and safety, without compromising on aesthetics.

Safe now... and into the future

First and foremost, landlords need to keep tenants, visitors and staff safe from harm. Older residents and those with challenges with mobility and balance can be massively affected by a fall. Minimising slips and trips should be an essential part of planning and risk assessment, and is particularly important in busy communal areas and higher risk areas such as bathrooms and



kitchens. Safety flooring is essential, but you'll need to ask some tough questions to ensure you get the best long term performance.

Choosing products with a guarantee of sustained slip resistance for the life of the flooring ensures specifiers continue to meet their responsibilities and also prevents spend on untimely replacement - always consider life cycle costings alongside initial outlay. Safety flooring with a slip resistance of PTV ≥36 (the HSE standard) makes the chances of anyone slipping or falling one in a million. However, sustained slip resistance for the lifetime of the flooring will need to be specified to keep it that way.

"With budgets under greater pressure than ever before, local authorities could be forgiven for trying to overlook the challenges and opting for the cheapest possible floor coverings"

Be wary of flooring that meets that HSE standard when fitted but loses slip resistance over time when in use - this can bring the odds of a slip or fall as high as one in two. Always ask to see manufacturers' figures for sustained slip resistance so you make an informed choice rather than a costly mistake.

Durable solutions

Surfaces in communal and entrance areas in particular have to withstand heavy traffic buggies, bike wheels, wheelchairs and walking aids. Walls often take a real battering with newly painted surfaces getting covered in scuffs, scrapes and knocks in no time at all. Corners and outer surfaces of doors are particularly vulnerable to damage.

Wall protection system developed specifically for use in high traffic areas will be tough enough to cope with what's thrown at it - quite literally, having been tested in some of the most demanding healthcare and education environments.

Flooring also needs to be tough, easy to maintain and look good. For longevity and improved life cycle costs, consider heavy duty 2.5mm safety flooring for communal areas as it is thicker and more durable than standard 2mm thick flooring. Good quality safety flooring will have very high resistance to damage and impact and should come with a long guarantee, so you can be confident it will stand the test of time.

Kitchens and bathrooms

Safety flooring is a must in social housing kitchens. The high risk of spillages, including contaminants such as greasy water, mean quality cannot be scrimped on. For bathrooms, look for safety flooring for use in wet and dry areas, for shoe and barefoot use - an ideal solution for these areas, particularly where carers may be providing assistance. This new type of safety flooring is an alternative to studded safety flooring, which can be difficult to clean in a domestic environment. The newest products have been developed specifically for this sector, with a 'homely' soft look.

Kitchens and bathrooms are both ideal places for hygienic wall cladding, which is available in a broad range of colours and finishes. Again, look for a flooring and wall cladding system designed to work together for the best results.

Homely interiors for all

While withstanding the impacts of daily use is crucial, visual impact is also important. The good news is that there's no need to choose between performance and aesthetics as the latest





generation of walling and flooring products combine both. Wall protection systems and hygienic wall cladding come in a variety of popular colours, while the range of safety flooring available has changed beyond recognition in recent years, with many now incorporating technologies to make them easier to clean, reducing time and costs for upkeep. Options now include wood effects for a homely feel, bright and bold colours to create a wow factor as well as many more subtle options. These include safety flooring without the traditional 'sparkle' which can be a disadvantage to someone living with dementia.

To ensure spaces are accessible to all, you should also consider tonal contrast between floors, walls, steps and doorways, ensuring a clear difference between the surfaces that can be easily identified by someone with visual impairment. Where different types of flooring are used alongside each other and there is no step between them, it's equally important to ensure that the materials are as similar in tonal contrast as possible to avoid creating the illusion of a step where there is none. Tonal contrast is measured in Light Reflectance Values (LRVs) - you can

find more information on this, as well as detailed guidance on inclusive design, at www.altro.co.uk

As in so many areas of life, it is important to avoid false economies when selecting wall and floor surfaces for social housing. Choosing hard working products designed to last the distance can unlock local authorities and social housing landlords from short maintenance cycles in areas attracting the greatest wear and tear, keeping them looking smarter, safer and more welcoming for longer.

Martyn West is specifications manager at Altro

Sovereign complete housing development



Sovereign Group Ltd has completed a significant project of window fabrication and installation for a sustainable home development, using PVC-U systems from The VEKA UK Group. Sovereign's client, Hastoe Housing Association manages over 7,000 properties across more than 70 local authorities, and has won numerous awards for the environmental credentials

of its homes. Sovereign installed a total of 110 outward-opening casement windows into the development of two and three bedroomed homes, with a value of around £34k.

01282 716 611 www.vekauk.com

Enq. 188

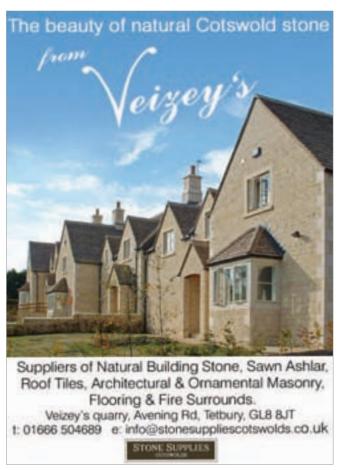
Yale launches the Partnership Pledge Plus



Window and door hardware manufacturer, Yale, has launched a new audited scheme, offering a 15-year warranty. As part of Yale's commitment to its partners, the Partnership Pledge Plus offers an audited warranty scheme to housing providers who specify Yale's hardware, including the austenitic stainless steel range. It has been designed

to help ensure that the hardware specified, is that which is supplied and fitted. Under the scheme, Yale will monitor individual contracts to ensure that the right components have been used and correctly installed.

Enq. 189



Ena. 190

New high temperature ASHP from LG



LG has received MCS approval for its Therma V High Temperature heat pump. This model of the popular Therma V range of air to water heat pumps from LG can deliver hot water at up to 80 degrees C for cascade dual refridgerant cycles of R410a and R134a and up to 65 degrees C for single refrigerant high temperature systems. A new installation should see the

current tariff of 7.51p per kWh of renewable heat generated paid by the Renewable Heat Incentive Scheme, paid quarterly for seven years from the date of installation.

01753 491500 partner.lge.com/uk

Enq. 191

Energy efficient small pumps



Wilo offers a family of energy efficient small circulating pumps that all comply with ErP and offer significant energy savings. There's a small pump for every application and they future proof your installations for many years ahead. The Wilo-Yonos PICO delivers great efficiency, integrating proven technology, backed by a five year warranty. It offers

an integrated LED display, tool free Wilo-Connector, a unique pump venting function and simple adjustment with pre-selectable speed stages.

01283 523000 www.wilo.co.uk

Enq. 192

Vita ECO offers energy saving



The new Stelrad Vita series of radiators has provided housebuilders and specifiers with a new concept in radiator buying options, with six selected radiator ranges under the Stelrad Vita branding that includes an entry level Stelrad Vita Value range, right through to the beautifully designed Ultra product with colour options. The Vita series has already

revolutionised the radiator market. One of the ranges is the Vita ECO range which offers energy savings of up to 10.5 per cent on energy bills. To take a closer look please visit the website.

0870 849 8056 www.stelrad.com

Eng. 193

EnviroVent extends heat recovery range



To meet growing demand for whole house heat recovery systems, EnviroVent, one of the UK's leading manufacturers of ventilation systems, has launched two new additions to its renowned energiSava range. The energiSava 300 and 400 are high efficiency whole house heat recovery systems that are ideal for new homes, providing a constant supply of clean air

and reducing humidity levels, therefore preventing condensation and associated issues. With maximum airflow capacities of 300 and $400 \text{m}^3/\text{h}$, these units feature a summer bypass facility, which creates an improved level of comfort in the summer months.

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The Icynene Insulation System is a series of soft, flexible spray foam insulation products that delivers up to 50% greater energy savings when compared to other insulation products. Icynene is perfect for loft insulation, cavity wall insulation, drylining insulation, sound insulation and more.

Icynene has been successfully tested and certified for applications directly to the underside of breathable and non breathable roof membranes and felts and recently received BBA certification for this application. Icynene absorbs the lowest amount of moisture and has the highest level of vapour resistivity of any soft foam on the market.





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Sustainable Housebuilding Showcase



A team working on a high tech science and development centre has chosen FP McCann's precast drainage products ahead of traditional site construct methods resulting in increased productivity and substantial savings on programme timings. FP McCann has supplied seven DN1200 catch pits together with wide wall chamber rings and a pre-benched DN1500 hydro-valve chamber unit, which was manufactured at the company's Ellistown plant and has two inlets and an outlet point cored to suit DN150 Ridgidrain pipe.



The Icynene Insulation System from Greentherm is a series of soft, flexible, vapour open spray foam insulation products. When sprayed in place Icynene expands to completely fill all cavities and voids creating a sealed building envelope eliminating air leakage. Unlike other foams, Icynene is 100 per cent water blown and therefore contains no harmful blowing agents, volatile organic compounds, HCFC's, HFAs or formaldehyde. Icynene has been certified for application directly to the underside of roof membranes.



Harrowden Turf Ltd is one of the UK's largest producers of quality lawn turf. The company also supplies topsoil, wild flower turf and green roofing materials. Harrowden Turf products are grown on three sites. All of the turf is grown to the same high standard on very similar but distinctive black soils. Black soil is not peat. It is fine textured, rich in organic matter nutrient and relatively low in sand, clay and other heavy particles. contact Harrowden Turf Ltd for competitive prices and good quality products.



Howarth Windows & Doors are one of the UK's leading manufacturers of high performance softwood windows. Timber can be key to a sustainable and environmentally friendly build; timber windows and doors have a life span that will achieve a minimum estimated service life of 60 years. The timber comes from wellmanaged forests with Chain of Custody procedures in place. Howarth Windows & Doors believes in its products and the range will meet with your requirements.



Eng. 201

Sustainable Housebuilding Showcase



Cost-effective and extremely efficient, heat pumps from Ice Energy Technologies use renewable energy to provide a total heating and hot water solution for any home. Heat pumps deliver exceptional heating standards while helping housebuilders and property developers meet sustainable standards within the properties they build. Ice Energy will use their 16 years of experience to specify the most suitable solution for each bespoke build from a market-leading suite of products.



There is an increasing popularity in the use of colour coated aggregates to create unique and decorative internal and external flooring designs. Long Rake Spar recently acquired the SightGRIP business and brand. This collection provides a choice of pigmented aggregates which can be applied to most surface substrates. They are now able to colour aggregates with high quality, durable coatings and also offer a colour matching service. All products are produced specifically to order from head offices.

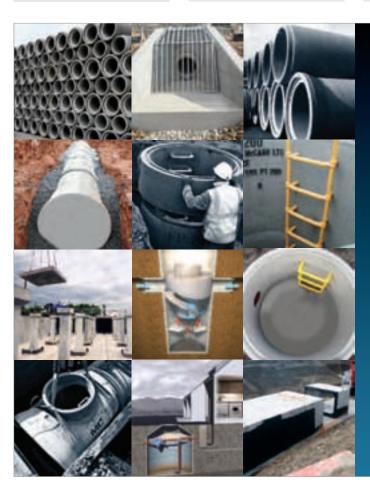


Combining high performance STEICO Joist and LVL with the durable, higher density new durelisdek in one package gives house builders and developers a simple specification choice and ensures the floor deck performs fully to its designed potential. The floor unit is a vital part of the new build structure and any on site problems due to excessive deflection, movement or exposure damage can result in expensive remedial work and dissatisfied customers. STEICO offers design support and works to ensure efficiency and provide excellence.



Consort Claudgen's new CRX1 wireless controller features a large easy-to-read backlit LCD display and offers up to six temperature settings a day, seven days a week. It has four different operating modes and features a 15-minutes Boost with temperature control to provide the maximum comfort quickly. The CRX1 wireless controller works with all Consort RX heaters and can operate different products at the same time, allowing total heating systems to be effectively controlled. Supplied with a security wall bracket.

Enq. 205



Precast fomccann Management Solutions

With one of the largest precast drainage and water management product ranges in the UK and Ireland, FP McCann has become the first choice for architects, developers and building contractors. Advantages include excellent physical performance, pleasing aesthetic appearance, reconstitution abilities and overall life-long cost-effectiveness.

01530 240000 | sales@fpmccann.co.uk Ellistown Depot, Whitehill Road, Ellistown LE67 1ET www.fpmccann.co.uk/drainage

Eng. 206

THE HEATING SYSTEM THAT'S AT HOME IN ANY HOME









Cost-effective and extremely efficient, heat pumps from Ice Energy Technologies use renewable energy to provide a total heating and hot water solution for any home.

Heat pumps deliver exceptional heating standards and can help housebuilders and property developers meet sustainable standards within the properties they build. They also provide a unique selling point for prospective buyers who can benefit from lower running costs and hassle-free, highly efficient heating.

Ice Energy will work closely with you to specify the most suitable systems for your developments from a market-leading range of products and deliver them at a time which best suits your build programme.

For a free, no obligation quotation, simply call our dedicated sales team today on 0808 145 2340







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The rise and rise of communal heat

Communal heating schemes are becoming more widely adopted, particularly for new build high rise apartments. Neville Small of Potterton Commercial explains how with regular system maintenance, they are helping building managers to hit energy targets and reduce carbon emissions.



nergy efficiency continues to be a major ★ consideration for the housebuilding ✓ sector, with growing pressure from the Government to reduce carbon emissions and make savings in energy costs. Part L of the current Building Regulations, which governs conservation of fuel and power, calls for a six per cent improvement on 2010's carbon emission targets for new build properties. What's more, the Energy Performance of Buildings Directive (EPBD) will require all new buildings to be nearly Zero Energy Buildings (nZEB) by 2020, meaning they will have to achieve very high energy performance.

Recent advances in the heating sector mean that it is now easier to select the most efficient solution. Product efficiencies have become more visible and easily understood thanks to the Ecodesign and Energy Labelling Directives commonly referred to as ErP - which were introduced in September last year. While the legislation covers a number of points, two of the main changes are that energy labels are

required for boilers up to 70kW, and manufacturers have to provide additional performance and efficiency data for products on their websites, helping customers to compare products in the same energy banding.

Heating appliances offer the most cost and energy saving potential when they are closely matched to the demand of the building in question. By considering how and when a building is used at the design stage, the heating system can be correctly sized to the predicted demand of the building, and can deliver to its performance capabilities.

One efficient approach building managers can take is to introduce a communal heating scheme (sometimes referred to as community heating, district heating or heat networks). This involves heat being supplied to individual properties from centralised plant, with the heat being delivered through a single pipework distribution arrangement. The concept is being used more widely, particularly in multi-occupancy high rise schemes, such as apartment blocks.

Central boiler plant coupled with Heat interface units (HIUs), also known as heat boxes, can be used to provide the heating, or heating with domestic hot water, to individual properties. The householder can then control their supply with either a room thermostat, a separate programmer or individual thermostat radiator valves. HIUs record the heat con-

"By considering how and when a building is used at the design stage, the heating system can be correctly sized to the predicted demand of the building, and can deliver to its performance capabilities"

sumed for accurate energy billing. Further guidance on metering can be obtained from The Heat Network (Metering and Billing) Regulations 2014.

In high rise developments, centralised schemes can offer benefits over the more traditional solution of installing separate heating systems (which would typically comprise gas-fired combi boilers or a form of electric heating) in each individual property.

For example, efficiencies can be increased and fuel consumption can be reduced. In fact, centralised plant systems are particularly well-positioned (compared to alternative solutions) to help developers meet their required targets in a cost-effective way.

Using centralised plant also reduces the issues associated with supplying gas to multi-dwelling, high rise buildings. It decreases the risks linked to gas distribution pipework and eliminates the need to fit numerous flue terminals and plume displacement and condensate drainage systems, hence reducing capital installation and whole

The system needs to be flexible enough to respond swiftly, accurately and efficiently to changes in heating and hot water demand, making the specification of correct controls essential. However, there is more to cutting emissions than just selecting an efficient and correctly sized boiler and controls. It's important to look at the bigger picture, taking into account how the

"In high-rise developments, centralised schemes can offer benefits over the more traditional solution of installing separate heating systems, which would typically comprise gas-fired combi boilers in each property"

system is operated and maintained to ensure it continues to run at optimum performance.

Consideration should be given to long term maintenance of heating systems. A scheduled maintenance and service regime must be implemented from the installation stage of any heating system to safeguard long term energy efficiency and performance. An important element of this is chemical water treatment, especially as heating systems will perform more reliably with good-quality water circulating in them. This is because water contains dissolved atmospheric gases, which can affect a heating system's components. Failing to invest in appropriate water treatment can result in corrosion and the build-up of lime scale, leading to inefficiencies, poor performance and potential boiler failure, even after a relatively short period of time.



Systems that are corroded become blocked with sludge and debris, which will cause the boiler to work harder and for longer, as the circulating water is unable to transfer the heat efficiently throughout the system. This drastically reduces energy efficiency, in turn increasing running costs as well as carbon emissions. Meanwhile, lime scale deposits on heat transfer surfaces compromise efficiency, as the boiler has to run hotter for longer.

Chemical water treatment should always be incorporated into both the commissioning and ongoing maintenance of a heating system, including a system clean/flush and regular doses of inhibitor as required. This is critical to ensure boiler efficiency and longevity in any heating system, large or small. Even completely new heating systems with new boilers and new pipework need to be chemically treated.

It is worth noting that any water treatment chemicals used must be in line with the boiler manufacturer's recommendations, which can usually be found in the installation manual. As inhibitors need be applied on an ongoing basis as required, it is important for the person responsible for maintaining the heating system to be able to find and refer to this information - so the installer should point it out at handover.

Centralised plant rooms offer many benefits for developers and installation teams - including improved efficiency. However, it is also important to factor in regular maintenance and water treatment in order to extend the life of the system and improve reliability.

Neville Small is the national business development manager for Baxi Commercial



Eng. 210

Felmoor Park receives premium protection



The Scandinavian log cabins and lodges at the picturesque Felmoor Park in Northumberland have been given a striking new finish thanks to Remmers wood coatings. Remmers HK Stain was selected to provide not only effective weather protection but protection against blue stain, rot and insects. HK Stain is a "2 in 1" product which eliminates the

need for an additional wood preservative primer and is perfect for both soft and hardwoods. The product penetrates deeply into the wood while leaving it fully breathable and it doesn't flake or peel.

01293 594010 www.remmers.co.uk

Enq. 211

JB Kind Doors: 2016 Door Collection



JB Kind's packed 84-page 2016 Door Collection is an excellent combination of new doors, firm favourites and its trademark expert advice. The brochure continues to offer more than 200 traditional, contemporary and innovative door designs across the budgetary spectrum, as well as the exciting new textured Ripple door design that is

seriously affordable and at the forefront of interior design. JB Kind's easy to install, pre-assembled pocket door systems now offer all the accessories needed to fit this stylish space saving sensation. For more information contact JB Kind directly. Eng. 212

Underfloor heating explained

hen it comes to underfloor heating, you need a reliable system that is guaranteed to last the lifetime of the tile or stone covering. The two main types of system that are available include an electric system and a water based (hydronic) system, Schlüter-Systems provide an effective, innovative solution for both of these.

The electric system, Schlüter®-DITRA-HEAT-E

Schlüter®-DITRA-HEAT-E can be used in kitchens, wetrooms, bathrooms, en-suites and anywhere that tile and stone is to be installed. Due to the intelligent digital touchscreen thermostat you can easily control temperatures and heating times, creating warm tile and stone whenever and wherever you chose.

It is super quick to install as the uncoupling mat was designed with unique studs to allow the tile adhesive to mechanically lock into the dovetails. The cables fit directly between the uniform studs without the need for glue, tapes, marking, self-levellers and primers - therefore reducing the likelihood of mistakes, saving time and money.

Schlüter®-DITRA-HEAT-TB is the latest addition to the award-winning Schlüter®-DITRA-HEAT-E underfloor heating range. The integration of a thermal break fleece on the underside of the uncoupling membrane pushes 80 per cent of the heat to the surface for up to 70 per cent faster response time on concrete compared to other electric underfloor heating systems.

Main benefits of using the Schlüter®-DITRA-HEAT-E system include:

- Easy press to lay cable no tape or glue
- No self-levelling layer or primer laying time saved on application
- CE Marked waterproofing simply by sealing the matting joints
- Loose heating cable greater flexibility
- Uniform spacing even heat distribution
- Rapid heat response with Schlüter®-DITRA-HEAT-TB matting
- Can be tiled immediately no waiting time
- Integrated System Solution Kits all from one trusted manufacturer





The water based system, Schlüter®-**BEKOTEC-THERM**

Schlüter®-BEKOTEC-THERM is a low height, energy-efficient and quick-reacting modular underfloor heating assembly. This system can be used in new build and renovation projects, and it is a greener choice with economical, energy saving properties.

Its low supply temperature of approximately 30°C, compared to between 50-55°C in some systems, means Schlüter®-BEKOTEC-THERM is extremely effective both with conventional heat generation methods and regenerative energy sources, such as heat pumps or solar panels. Since the thinner screed requires much less material, the final construction is lighter and lower than traditional screed installations, saving considerable

As well as its performance and ease of use, what makes Schlüter®-BEKOTEC-THERM really stand out from the crowd is its five year covering and assembly warranty or an extended warranty if installed by a member of the Schlüter Approved Installer Network (SAIN), when installed with our screed system.

The Schlüter Approved Installer Network is new for 2016 and allows approved installers, who have completed full training with Schlüter, to install the system. The network not only gives accreditation to the individual as an expert but also to the company as a certified organisation. This provides reassurance to you as the specifier or architect that the system will be installed to the manufacturer's standards and best practice and minimises installation risks, ensuring a quick and reliable installation.

The system also features a new range of thermostat and control modules, this new generation of room sensors and control modules significantly increases the flexibility and convenience of regulating the temperature of the room. As the core of the system, the base module, can be connected to a timer module for energy-saving temperature reduction. The connection modules for wired or wireless room sensors can be freely combined with the base module, which enables the flexible expansion of existing systems at any time. Modern wireless and wired room sensors allow for individual room temperature control to suit requirements. The Schlüter®-BEKOTEC-THERM system can also be integrated with Building Management Systems (BMS).

For more information on Schlüter-Systems' range of underfloor heating systems, contact the company directly or visit the website.

01530 813396 www.schluter.co.uk

Enq. 213





UNDERFLOOR HEATING

Schlüter®-DITRA-HEAT is a system for electrical heating for floors and walls that creates comfortably warm tile and stone coverings.

Now available with the NEW Schlüter®-DITRA-HEAT-TB mat, including an integrated thermal break. This creates a faster response time, pushing heat to the surface, resulting in significantly more heat per meter compared to other systems.



Uncoupling



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The case for UFH laid out for developers

Installing water based underfloor heating (UFH) in a property provides many benefits to both housebuilders and homeowners. but many of these benefits are not widely understood. Andy Coy of Polypipe Underfloor Heating dispels some of the myths surrounding UFH.

any housebuilders specify traditional radiators when building a new home as standard, without understanding the many advantages of water-based under floor heating systems. Whether this comes from a lack of knowledge or a reluctance to recommend systems they have little experience with, housebuilders and developers are limiting the potential of their homes by specifying radiators.

The 1970s saw a boom in the use of electric underfloor heating, but these systems are miles away from the water-based solutions available today. These historic electric systems tended to be an expensive method of warming a floor rather than a viable method of heating a home from top to bottom. While water-based underfloor heating systems have been available for some time, they are now growing in popularity, with the understanding that they can act as a standalone home heating solution, eliminating the need for radiators or supplementary heat distributors.

The design freedom afforded by radiator free walls is potentially one of the greatest selling points for homeowners, something housebuilders can help facilitate through the use of water-based UFH in their builds. UFH removes the need for space, consuming radiators as the system is hidden below the floor. It's unsurprising then that buyers are increasingly opting to retrospectively install UFH systems in their

new homes once they have moved in. With UFH, there's no more negotiating cupboard space around bulky radiators or moving sofas to ensure heat sources aren't blocked - homeowners can have a blank canvas to make the space their own.

Homeowners are also becoming more environmentally conscious, with recycling facilities, solar panels and intelligent water conservation all $\ensuremath{\hat{k}}\xspace$ eyelling points of a modern property. This is no different when it comes to the heating of a home. Water-based underfloor heating much more energy efficient than radiators, offering a superior heat distribution and eliminating the hot and cold spots created by the convection heating of a radiator system.

Energy experts are increasingly recommending water-based underfloor heating over traditional heating options to fulfil household efficiency benchmarks, something housebuilders should also strive to achieve. UFH operates at an average water

"With UFH, there's no more negotiating cupboard space around bulky radiators or moving sofas to ensure heat sources aren't blocked, homeowners can walk into a blank canvas and make the space their own"

temperature of 50°C, rather than the 80°C degrees used by traditional radiators, and so requires a lower rise in termperature from the boiler. This means that to produce an equivalent heat output, the water can be stored at a much lower temperature, ultimately lowering household energy costs. The combined energy efficiency and reduced heating bills can prove important considerations.

As well as working perfectly with combi boilers, UFH systems can help to future-proof a home by working in conjunction with ground and air source heat pumps, which extract warmth from the air around the property or the earth in the garden. This process further reduces the amount of energy that boilers need to use, consequently improving the energy rating performance of a home and reducing its CO2 emissions – a definite positive for developers.

Water-based UFH also lends itself to the increasingly popular 'smart home'. Leading underfloor heating manufacturers have kept pace with this change, and have offered internet connected control systems for some time. Control offerings have now developed to the point where homeowners can completely personalise their home heating in order to create their own perfect environment, a further added benefit when selling a property.

As well as the numerous performance and design benefits for homebuilders and end users, underfloor heating can be installed under all floor

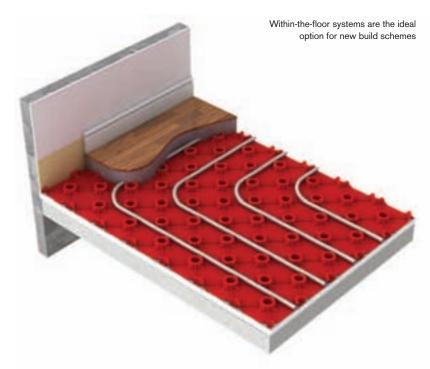
64 underfloor heating

coverings in new builds as well as being suitable for renovations. Ideally, a UFH system will be specified at the design stage of a project. The versatility of UFH however means that systems are available for installation at any stage of the build.

While screeded floor systems are ideal for new build projects where the floor is yet to be constructed, overlay systems are perfect for fitting over existing floors, and are well suited to renovation projects, or as a later addition to a new build project. Within-thefloor systems is the best option for new builds. The piping is installed on top of a floor construction's insulation layer. Floor construction then proceeds as normal with the screed being poured and floor covering fitted on top.

Overlay systems can be fitted over existing floors and are ideal for renovation projects, meaning there's no need to waste time and money on excavation work.

Finally, there are suspended floor systems which can be used in both new build and renovation projects wherever a floor with suspended timber or composite joists is present. As the system is installed between the joists and fully contained beneath the floor deck, suspended floor systems add no height to finished floors. Modular Heating Panels



offer a pre-configured solution for suspended floors that can easily be fitted and connected on site.

Housebuilders can work together with

UFH manufacturers to create custom made solutions for their builds, and provide homeowners an energy efficient way to pursue their interior design goals.



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AIR TIGHTNESS & TESTERS



Eng. 501

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Tel: 01786 812921 www.norbord.co.uk

Proctor Group Tel: 01250 872261 www.proctorgroup.com

Roger Bullivant Tel: 01283 511115 www.roger-bullivant.co.uk

SIG plc Tel: 0114 285 6300 www.sigplc.com

Swish Building Products Tel: 01827 317200 www.swishbp.co.uk

Tarmac / Lovell Tel: 0800 917 8888 www.tarmac.co.uk

BRIDGING & DEVELOPMENT FINANCE

Quivira Capital Tel: 0203 051 5298 www.quiviracap.com

CAD & SOFTWARE

Standing Stone Tel: 01661 886653 www.standing-stone.co.uk

COATINGS, SEALANTS & PAINTS

Barrettine Group Tel: 0117 960 0060 www.barrettine.co.uk

01435 863500

CONSERVATORY ROOFS

Made for Trade Tel: 0844 335 1226 www.madefortrade.co

DECKING

Saige Longlife Decking Tel: 01789 721576 www.saigedecking.com

DOORS & WINDOWS



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Marlin Specialist Glazing Solutions Tel: 01535 603909 www.marlinwindows.co.uk

SKAALA Tel: 01224 224 567 www.skaala.com

ENVIRONMENTAL REPORTS

GeoSmart Information Tel: 01743 276 150 www.geosmartinfo.co.uk

01435 863500

FINANCE & INSURANCE

Business Lending Group -BLG Development finance Tel: 0845 465 6500 www.business-lending.co.uk

Trade Direct Insurance Services Tel: 0800 028 0380 www.tradedirectinsurance.co.uk

Moody Venture Capital Tel: 01277 354222 www.mvcfinance.co.uk

FIRES & FIREPLACES

Clearview Stoves Tel: 01588 650401 www.clearviewstoves.com

Specflue Tel: 0800 9020220 www.specflue.com

FLOORS & FLOORING

IVC Group Tel: 07799 896522 www.ivcgroup.com

FOLDING SLIDING DOORS

Folding Sliding Door Company Tel: 0845 644 6630 www.foldingslidingdoors.com

GLASS & GLAZING

Selectaglaze ltd Tel: 01727 837271 www.selectaglaze.co.uk

HEATING, VENTILATION & PLUMBING



Enq. 503

Begetube

Tel: 01463 246600 www.begetube.co.uk

UK Plumbing Supplies

Tel: 01625 877222 www.uk-plumbing-supplies.co.uk

INSULATION

Cellecta

Tel: 08456717174 www.cellecta.co.uk

Greentherm Solutions (Icynene)

Tel: 01229 716039 www.uksprayfoam.co.uk

Kingspan Insulation

Tel: 01544 388 601 www.kingspaninsulation.co.uk

Knauf Insulation

Tel: 0844 8000135 www.knaufinsulation.co.uk

IRONMONGERY

Ironmongery Direct (Essex Fittings Ltd)

Tel: 0808 168 28 28 www.ironmongerydirect.com

KITCHENS & APPLIANCES

Indesit Company

Tel: 08000 921 922 www.indesit.co.uk

Shaws of Darwen

Tel: 01254 775111 www.shawsofdarwen.com

LIGHTING & ELECTRICAL

Eaton Electric Limited Tel: 0121 685 2100 www.eaton.com

Mitsubishi Electrical

Tel: 01707 276100 www.mitsubishielectric.co.uk

Panasonic Electric Works

Tel: 01908 231555 www.panasonic-electric-works.co.uk

01435 863500

NATURAL STONE LANDSCAPING PRODUCTS

Husqvarna

Tel: 0844 8444 570 www.husqvarnacp.com

Jacksons Fencing

Tel: 01233 750393 www.jacksons-fencing.co.uk

Natural Paving Products (UK) Ltd

Tel: 0845 072 1150 www.naturalpaving.co.uk

OAK PRODUCTS

INNERSE STOCKS ANTIQUE BUILDINGS LTD Tel: 01483 200477

Enq. 504

Courtyard Designs

Tel: 01568 760540 www.courtyarddesigns.co.uk

POWER TOOLS

Robert Bosch UK Ltd

Tel: 01895 838847 www.boschprofessional.com

www.hbdonline.co.uk

PRODUCT APPROVAL & INSPECTION

British Board Of Agrement

Tel: 01923 665300 www.bbacerts.co.uk

Sitesafe Ltd

Tel: 01293 529977 www.siteafe.co.uk

PROFESSIONAL SERVICES

Renault UK Ltd

Tel: 0844 335 0000 www.renault.co.uk

Robust Details Ltd (NHBC)

Tel: 0870 240 8209 www.robustdetails.com

Sky

Tel: 020 7705 3000 www.sky.com

PUMPING STATIONS

J T Pumps

Tel: 0844 414 5800 www.jtpumps.co.uk

RAINWATER PRODUCTS

Aluminium Roofline Products

Tel: 0116 289 44 00 www.arp-ltd.com

Rainclear Systems Ltd

Tel: 0800 644 4426 www.rainclear.co.uk

RENEWABLES

SCHOTT UK Ltd

Tel: 01785 223166 www.schott.com/uk

ROOFING & CLADDING

Euroclad

Tel: 02920 790 722 www.euroclad.com

Eurocell Profiles

Tel: 0300 333 6525 www.eurocell.co.uk

Freefoam Building Products

Tel: 01604 591 110 www.freefoam.com

Marley Eternit

Tel: 01283 722588 www.marleyeternit.co.uk

Monier Redland

Tel: 08705 601000 www.monier.co.uk

National Federation of Roofing Contractors (NFRC)

Tel: 020 7648 7663 www.nfrc.co.uk

Steadmans

Tel: 016974 78277 www.steadmans.co.uk

Steni UK Ltd

Tel: 01978 812111 www.steni.co.uk

SAFETY & SECURITY

Charter Specialist Security Tel: 020 8507 7717

www.charter-security.co.uk

Fibregrid Ltd

Tel: 01440 712722 www.fibregrid.com

Safetyworks & Solutions

Tel: 01487 841 400

www.safetyworksandsolutions.co.uk

SEWAGE TREATMENT

TT Pumps Ltd

Tel: 01630 647200 www.ttpumps.com

SMOKE & FIRE PROTECTION

Kidde Fire Protection

Tel: 0800 917 0722 www.kiddesafetyeurope.co.uk

STONEWORK & MASONRY

Worcestershire Marble

Tel: 08454 503300 www.coolgranite.co.uk www.coolsurfaces.co.uk

Haddonstone Ltd

Tel: 01604 770711 www.haddonstone.com

Svtex Uk Ltd

Tel: 01483 234 885 www.svtex.co.uk

TEMPORARY ACCOMMODATION



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TIMBER PRODUCTS

Hoppings Softwood Products PLC (Q-Products)

Tel: 0800 849 6339 www.hoppings.co.uk

TOOLS & EQUIPMENT

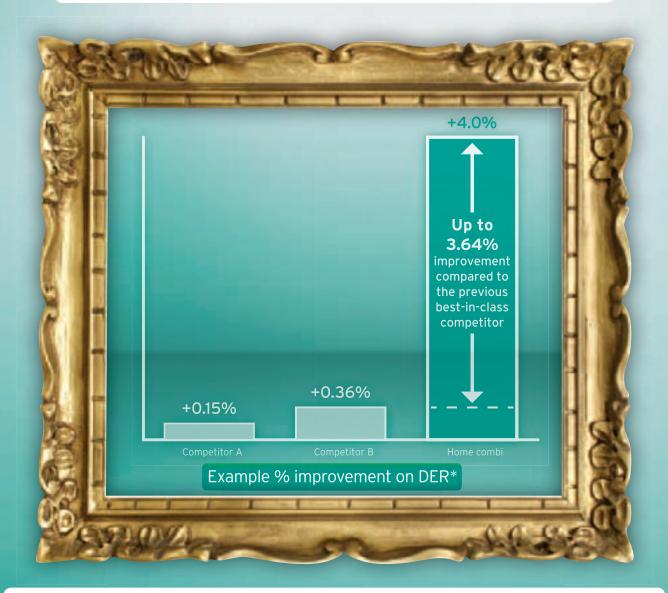
Leica Geosystems

Tel: 01908 513 451

lasers.leica-geosystems.com/uk

If we're talking efficiency

this picture speaks a thousand words



One glance at this picture and the discussion about which boiler to choose for a new-build comes to an end.

As you can see, the new Vaillant Home achieves the highest ever SAP performance rating, beating the previous best-in-class by a substantial 3.64%. Which means the amazing in-built efficiency will actually help you reduce your overall build costs.

Don't take our word for it, ask your SAP assessor to check the PCDB numbers. They'll confirm that if you're talking efficiency - there's no other boiler in the frame.

To find out more about the Vaillant Home range of boilers, visit www.vaillant.co.uk/home

The good feeling of doing the right thing.



