

New column: BRUFMA's Simon Storer says that insulation has the off-site answers



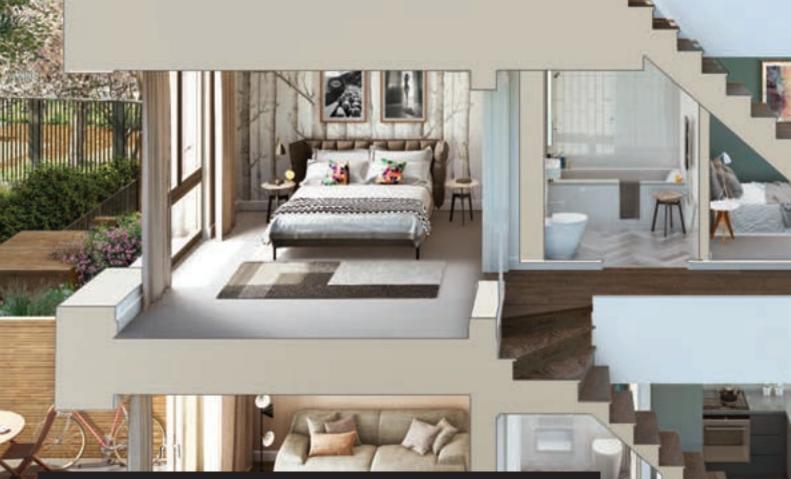
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The nHouse promises a new standard of factorybuilt homes – case study page 22

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HOUSEBUILDER & DEVELOPER



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Lendlease unveils its Futurehome concept in Elephant & Castle to offer advanced low-energy homes that will stand the test of time. Page 20

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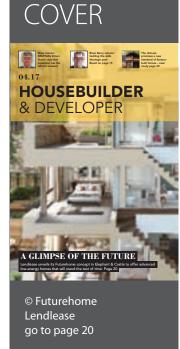
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James Parker james@netmagmedia.eu

ONTHE



FROM THE EDITOR

It seems fairly fanciful to expect construction, of all industries, to quickly redress its gender imbalance on numbers but also wages. The problem cuts across many sectors but construction is one of the worst, with women making up only 11 per cent of all staff, and a startling 1 per cent on site. Also, I fail to understand how anyone can justify recent ONS stats of female supervisors being paid 43 per cent less than male counterparts.

Clearly, some concerted interventions are needed to fix this. With the skills crisis looming ever larger in coming years post-Brexit, the need to encourage committed and talented women to enter what can be a very rewarding as well as challenging profession is only going to be more crucial in future. So it might not be a case of doing the right thing, more of a case of it being absolutely core to business to ensure women take a bigger role in the industry.

Arguably, the industry does need to be careful to ensure that any previous macho behaviour, on site but also in the office, is stamped out, and things like wolf-whistling are consigned to the past. The many examples of positive work raising awareness of the gender issues around the recent International Women's Day are not the same as a root-and-branch re-look at appropriate ways of working however. Perhaps a bigger emphasis being put on respect is not too much to ask, and doesn't need to be dismissed as 'PC gone mad'.

By the same token, organisations need to guard against being patronising and in fact, tokenistic as they seek to recruit more women. It's not about saying women can do anything men can do in construction, it's more about acknowledging that in the current skills crisis, if a candidate has the ability, enthusiasm and/or expertise, gender should never be an issue.

James Parker

PICTURE OF THE MONTH

12 students from St Anne's Catholic High School for Girls in Enfield visited a Lovells site recently to learn from women in construction. More on page 9



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Industry group formed to address supply issues

A pan-industry group of housing professionals is calling on the Government to take bolder steps to secure increased housing supply over the longer-term.

The Housing Forum believes that politics should be taken out of housing, suggesting that all planning applications with fewer than 250 homes should be determined by the officers, not the elected officials. It also supported greater cross-party political and industry consensus going forward.

Its report, 'Future proofing housing supply' offers 10 solutions which it says would help the Government reach the targeted 250,000 homes a year. The 10 solutions range from strengthening leadership and financial mechanisms in local authorities, to doing more to boost capacity in the sector and direct commissioning and investment.

Stephen Teagle, chief executive at Galliford Try and deputy chairman of the Housing Forum, said the Government's focus on supply through a broad range of measures is "welcome" and will "contribute to lifting the supply of homes we need."

"This report takes that ambition a stage further," he continued, "calling for renewed leadership at a local level, greater investment and a strengthened platform for collaboration to future-proof delivery over the next decade."

Shelagh Grant, chief executive of The Housing Forum, added: "If the housing supply is truly to be turned on to full, then still more needs to be done to overcome the challenges that exist in the market and create a benign and sustainable environment for housebuilding."

Speaking of the "radical departures" the forum's solutions will produce, Shelagh believes "we have been tinkering at the edges for too long."

"We need to lift housing output to levels not seen since the 1970s," she commented; "that needs bold actions and brave decisions."



THE HOUSING FORUM'S 10 SOLUTIONS TO BOOST HOUSING SUPPLY

- Housing should be depoliticised. Take party politics out of housing strategy and delivery by creating cross-party housing groups and removing elected members from decision making on some planning applications
- Government to appoint a Housing Minister to the Cabinet and directly commission new homes on public sector land
- 3. All local authorities must become more pro-active leaders of housing supply. The housing sector needs all local members and council officers to capitalise on this position and drive housing supply
- 4. Create a single voice for the housing industry. A single message delivered by a new housing industry body would enable clear, powerful and effective communication with Government
- 5. Government and industry to implement the Farmer Review's call for

- modernisation of housebuilding skills and technology to address the looming skills crisis
- 6. Local authorities should be encouraged to sell land by judging potential buyers against 'best value' factors including the speed of delivery of new homes
- 7. Central and local Government to revise the planning system so it favours increased supply including PRS / Build to Rent and encourages the allocation of sites of different sizes so as to attract interest from a range of builders
- 8. Government to agree a long-term, large-scale capital investment plan for housing for the next 10 years
- Give local authorities the financial mechanisms to directly commission new housing and greater freedom for risk sharing with the private sector
- Create a centre of excellence for procurement expertise for use across the sector

8 per cent of construction workforce at risk post-Brexit

The UK construction industry could lose almost 200,000 EU workers post-Brexit if Britain's access to the single market is compromised, putting some of the country's biggest infrastructure and construction projects under threat, according to the Royal Institution of Chartered Surveyors (RICS).

RICS has cautioned that for Brexit to succeed, it is essential to secure continued access to the EU single market or to put alternative plans in place to safeguard the future of the property and construction sectors in the UK.

Latest RICS figures have shown that 8 per cent of the UK's construction workers are EU nationals, accounting for some 176,500 people. 30 per cent of the construction professionals surveyed revealed that hiring non-UK workers was important to the success of their businesses.

The UK is already in the midst of a construction skills crisis. While some overseas professionals such as ballet dancers are regarded as critical by the UK government, and are therefore prioritised during the visa application process, construction professions have not yet been added to the 'UK Shortage Occupations List'.

RICS is warning that this could already be placing the UK's predicted \$500bn infrastructure pipeline under threat, and must be addressed as a priority.

RICS head of UK policy, Jeremy Blackburn says that while it is in all our interests to make a success of Brexit, "a loss of access to the single market has the potential to bring the UK's \$500bn infrastructure pipeline to a standstill."

Jeremy explained: "that means that unless access to the single market is secured, or alternative plans are put in place, we won't be able to create the infrastructure needed to enable our cities to compete on a global stage."

He suggested that a "simple first step" could be to "ensure that construction professions such as quantity surveyors feature on the Shortage Occupations List."

"Ballet dancers won't improve our infrastructure or solve the housing crisis," he quipped, "yet their skills are currently viewed as essential, whereas construction professionals are not."

£45m HCA loan for major Cambridgeshire scheme

A £45m loan from the Homes and Communities Agency has been announced to give a major boost to a site near Huntingdon, Cambridgeshire, which will provide over 4,500 new homes to the area.

The investment from the Home Building Fund will help developers Urban&Civic accelerate the delivery of the site by funding the provision of vital infrastructure across the 1400 acre former airfield at Alconbury Weald.

Announcing the deal at international property conference MIPIM, HCA chief executive Nick Walkley said: "Alconbury Weald is a major development of recognised quality, and we will work closely with Urban&Civic to accelerate the new housing and community facilities that this site can deliver."

Alongside thousands of new homes, the former airfield near Huntingdon in Cambridgeshire will provide up to 300,000 m2 of floorspace for new businesses within the GCGP LEP's Enterprise Zone and a range of community facilities, including a

secondary school and three new primary schools, of which the first opened last year. This is alongside hundreds of acres of green space.

Housing and Planning Minister, Gavin Barwell lauded the £3bn Home Building Fund for "unlocking large housing sites like Alconbury Weald."

He said: "Having visited the development last year, I understand that it will not only provide much-needed homes, but also space for new businesses, as wells as schools and community facilities."

Chief executive of Urban&Civic, Nigel Hugill also commented on the news: "The HCA and Urban&Civic are fully aligned from our experience of large sites to our ambition to accelerate the delivery of housing from them.

Hugill added: "At the Alconbury Weald development we have brought forward infrastructure spend as a direct consequence of the HCA's involvement and look forward to working in partnership with Nick and his team."





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Tower Hamlets CMA to Mayor: "The rest of London needs to pull its weight"

Almost 400 residents attended two Ask the Mayor events about planning and development on the Isle of Dogs and South Poplar between February and March, at which the Tower Hamlets Mayor implored the City of London to "pull its weight."

The Mayor of Tower Hamlets, John Biggs, organised the events to ensure residents could tell representatives from the Greater London Authority (GLA), the Council's planning team and the Neighbourhood Forum, about their views of growth and development in those areas, as the organisations develop housing and commercial plans.

Mayor Biggs supported the views of residents and called for the Mayor of London, Sadiq Khan, to listen to residents' views about development in their neighbourhoods. He said: "With the scale of development that is happening in the Isle of Dogs, we must do all we can to ensure that new infrastructure supports our existing and new communities."

"That means," he continued, "that developments should support accessible green space, prioritise genuinely affordable housing that meets local needs, and deliver infrastructure like schools and GP surgeries."

The Mayor commented that there are "clearly concerns" about the scale of the housing planned for the area, saying the City of London "needs to understand that the island can only take so much growth, and the rest of London needs to do more to pull its weight."

In a question and answer session, residents raised concerns about the impact of future development and challenged GLA housing targets for Tower Hamlets. They also welcomed the Neighbourhood Forum's video, which summarised the opportunities and challenges of population growth on the island.

The GLA and Transport for London are working together to prepare an Opportunity Area Planning Framework (OAPF) for the Isle of Dogs & South Poplar in consultation with Tower Hamlets Council.

review NHBC undertakings

The Competition and Market Authority (CMA) is to review long-standing undertakings relating to the National House Building Council (NHBC) on whether its rules restricted competition.

The undertakings were given in 1995, following an investigation by the Monopolies and Mergers Commission (MMC), which found that some NHBC rules restricted competition from other warranty schemes, following which NHBC amended its rules to remove restrictions.

NHBC has now requested that the CMA review the undertakings. It has argued that there is now more competition from other providers and that housebuilders purchasing new homes and structural warranties have greater choice than before. The company also said that changes to regulation and consumer protection have removed the need for it to approve other home warranty schemes used by the NHBC's registered builders, which it is currently required to do.

Crest told to pay £1.3m tax

A tax tribunal has ruled against a Stamp Duty Land Tax (SDLT) avoidance scheme used by Crest Nicholson, meaning it will have to pay the £1.3m in owed taxes.

HM Revenue and Customs (HMRC) challenged the artificial and complex arrangements made by the FTSE 250 listed company to avoid paying SDLT on three purchases of development land near Rochester in Kent, for a total of \$32m.

The avoidance scheme tried to use the transfer of property between two subcompanies to avoid SDLT. It is believed that the First-tier tribunal decision is likely to have an impact on more than 700 other cases, potentially covering £65m of tax revenue.

Crest Nicholson argued that HMRC didn't have a legal right to make assessments of the tax due because it was out of time to do so, and that it had not carried out its assessments properly.

The judge disagreed with these arguments and found HMRC had acted correctly throughout.

Events & awards

2017

Materials

25 - 26 April, London www.materials2017.co.uk

UK Housing Awards

26 April, London ukha.secure-platform.com

RESI Awards

10 May, London www.resiawards.com

CIH South West Conference

10 – 11 May, Bristol www.cih.org/events

Social Housing Finance Conference

11 May, London www.socialhousing.co.uk/events

FIT Show

23 - 25 May, Birmingham www.fitshow.co.uk

Housing Excellence Awards

25 May, Manchester awards.housingexcellence.co.uk

Plantworx

6 - 8 June, Leicestershire www.plantworx.co.uk

CIH Housing

27 - 29 June, Manchester www.cihhousing.com

Housing Design Awards

10 July, London www.hdawards.org

National Housing Awards

7 September, London www.nationalhousingawards.co.uk

RESI Conference

13 – 15 September, Newport www.resiconf.com

NHF Annual Conference & Housing Exhibition

19 – 20 September, Birmingham annual.housing.org.uk

UK Construction Week

10 – 12 October, Birmingham www.ukconstructionweek.com



Constructive ideas for closing the gender gap

Just 12 per cent of the UK's housebuilding workforce is female, with less than four per cent in a skilled trade role. One of the key findings of the recent NHBC Foundation report, 'The gender and age profile of the house-building sector' was that girls are put off entering the sector because it is still seen as a stereotypical male-dominated industry.

With the UK experiencing a critical skills shortage in construction, housebuilders can no longer ignore the importance of recruiting women. In the words of NHBC, the country needs to "do more to attract women and young people if the industry is to avoid a workforce crisis."

At the same time society's attitude to gender 'roles' are shifting, and women are arguably experiencing greater levels of equality than ever, however careers remain an uneven playing field. According to the McKinsey Global Institute, in the UK gender inequality is low in childhood, but women confront increasing divergence as they progress through their lives. A particular bone of contention among these challenges is the gender pay gap.

THE PAY GAP

In December 2016, an online tool was created by Government and the Office for National Statistics (ONS) which allowed anyone to investigate the gender pay gap in their occupation. It revealed the painful truth that construction and the building trades had the highest pay gaps between men and women.

Many occupations reported parity on pay between males and females, with waiters and waitresses, bar staff, nurses and fishmongers seeing no difference. Numerous occupations with pay gaps favouring women were also revealed, such as male midwives earning 61.8 per cent less, male probation officers at -25.3 per cent and fitness instructors at -22.9 per cent. Construction, however, was on the other end of the scale. In line with many male-dominated industries, construction and building trade supervisor wages were 45.4 per cent higher for men. By way of comparison, financial managers and directors were 36.5 per cent in favour of men, printers 35.1 per cent and assemblers 33.5

Apart from addressing the clear social injustices, the benefits to the industry and wider economy of increasing and rewarding the contribution made by female employ-

ees are vast. A report from the McKinsey Global Institute, 'The power of parity: Advancing women's equality in the United Kingdom', explored the economic potential of addressing gender disparity across the UK. According to the report, bridging the gap has the potential to add an extra \$150bn to the UK economy.

If the parity were to be addressed, the report claims, all 12 regions of the UK would have the potential to gain 5-8 per cent in GDP. Reportedly, some 38 per cent of this added GDP could come from increased female participation in the labour force. This is along with 35 per cent from extra women working in the more productive sectors, and 27 per cent from a rise in women's working hours by an average of 25 to 30 minutes a day.

The Institute revealed that women currently tend to work in less productive sectors, in lower-paid jobs. Their lowest representation is in high-productivity sectors, including science, technology, engineering and mathematics (STEM) and higher-salaried occupations, including skilled trades and managerial/leadership roles.

The latest survey by RICS and Macdonald & Company echoed these figures, reporting that male property professionals earn, on average, £11,000 more than female counterparts (£7,000 in 2016).

SKILLS SHORTAGE

With the UK seeing a sustained countrywide skills shortage, it has been made very clear the industry urgently needs to encourage more women as well as young people into the industry.

The Farmer Report estimated that the sector needs to recruit 700,000 more people in the next five years just to replace those retiring or moving on. The report's author Mark Farmer commented that if the UK doesn't address the crisis, "we will see a long term and inexorable decline in its fortunes."

"This is not just another 'must do better' school report," Farmer added, "this review warns of potential marginalisation and deterioration that might not be recoverable."

With the NHBC's stark findings on the low levels of women in UK housebuilding, including skilled, technical and managerial positions, the challenge is clear. Brian Berry, chief executive of the Federation of Master Builders (FMB), puts it straighforwardly: "Until we start to appeal to 50 per cent of



Students from St Anne's Catholic High School for Girls in Enfield visited Lovell's Electric Quarter development in Ponders End recently to learn about possible careers

the population, we won't be able to plug the skills gap."

"It is my hope," he adds, "that women will inspire the next generation of daughters to think differently about what is an acceptable career path for girls. There is no reason why young women can't become the next generation of brickies and sparks, and it's our job to remind them of that."

EMPLOYEES' STORIES

Despite the task confronting the industry, there are signs that things are improving, and among the relatively small numbers of women who have made it into the industry, many are thriving.

In celebration of International Women's Day on 8 March, housebuilder Countryside recognised some of its female employees. Samantha Simmonds (26) an assistant quantity surveyor who joined Countryside comments on her career path: "I started in construction at the age of 18 – it is a demanding industry but it offers so many varied career opportunities."

She began as a technical administrator because she didn't have a surveying degree, but was offered the chance to enter a house-builder graduate scheme. Development manager at Countryside Emma Hewitt (29) believes the industry is changing, and welcomes the prospect of more women joining the profession. "When I first started," she says, "I worked predominantly with male colleagues. However, in my department, there are now more women that men."

She adds however: "I don't think working in the construction industry is promoted as much as it could be, or enough emphasis given to the different roles available within the housebuilding sector."

Commenting on her win of Redrow Homes' 2016 Pride in the Job Seal of Excellence site manager Zara Fairman said: "It's a privilege to be able to show that women can do well in housebuilding. It's also important to know that you don't necessarily have to be from a trade or engineering background — there are lots of transferrable skills needed."

Supply chain is under-resourced and fragmented, say experts

Jack Wooler reports

A Round Table discussion was held recently at London's Sky Garden (pictured, below), asking a range of experts from across the sector the question, "Is the supply chain fit for purpose?"

The panel at the event, hosted by Jablite, discussed the key aspects of the supply chain that need attention, as well as how it can help deliver the Government's ambitious new homes targets, and how innovation may suffer in this rush to build.

Greg Hill, deputy MD of housebuilder Hill, saw "two fundamental challenges" as most pressing to the industry. The first, widely agreed across the panel, was "a lack of resource," and second, the "extremely fragmented" nature of the supply chain.

The problem of capacity dominated the conversation, with the rising skills crisis being echoed by several panel members as a critical issue. Fear of uncertainty caused by Brexit was also prevalent, with the possible loss of EU workers exacerbating the already dire skills climate.

The "impact of tariffs" following Brexit was a concern raised by Peter Andrew, deputy chair of HBF. He referred to materials such as timber, which can't be grown in England to the same extent it's imported, and said that possible trade tariffs with the EU are bound to "cause issues." There was agreement that adding any more uncertainty to the process would inevitably slow the sector down.

It was generally accepted that schools do not promote the industry enough. Even though there are a huge range of well-paid positions in the sector, it's not glamourised in the same way in which a lawyer is, for example. David Jervis of Spitfire Homes agreed, adding that "we've got to attract the youngsters," referring to the industry's crisis of image.

Prejudices involving construction were also accepted as a part of this, with a lack of diversity in both gender and ethnicity. To prove this point Geoff Pearce, executive director of Swan Housing Association pointed to the room, which included relatively few women and a vast majority of "white men in suits." With the growing crisis in skills and the shortage of housing, he said "it's clearly unsustainable to ignore 50 per cent of the population."

Bringing the conversation back to the supply chain, chair Rupert Bates (of Showhouse magazine) asked the panel, "Do you think by using the term supply chain we're implying a subservience to housebuilders?" Rebecca Larkin, senior economist at the Construction Products Association commented, "We're a cyclical industry, so it works both ways." It was made clear that more could be done to improve the relationship and efficiencies between housebuilders and the supply chain. "We could certainly work a lot closer together," added Peter Andrew.

Innovative companies were involving the supply chain much earlier on in the house-building process, panel members agreed, and it was also suggested that the supply chain should be more widely involved in the planning process.

Imperative to all this however, it was argued, is a stable economic background from which to work. The panel agreed that a huge amount of reassurance is needed in the industry, with major investments made three to five years in advance of actual builds. Rebecca Larkin referred to the industry's need for "greater flexibility to deal with economic challenges," with all members of the board recognising the toll the 2008 crash took on the industry.

A member of the audience later spoke up, claiming that buildings in Britain are boring, and that we could do much more offsite. The range of UK housebuilding is something akin to "50 shades of beige," he quipped. Andrew Burgess, group land and planning director at Churchill Retirement Living heartily disagreed with this, saying housebuilders "build for the customer and to context," he replied, providing whatever the buyers ask for, and ensuring that their developments don't look out of place in their surroundings.

Offsite construction however was, overall, accepted as the most promising innovation in construction, but was not agreed as the sole solution to fix the industry. Geoff

Pearce of Swan Housing, who are investing in their own modular housing factory, said that "necessity is the mother of invention." He believed that all big housebuilders, "whether they've realised it or not," are looking at offsite construction schemes and its future within the industry.

Offsite is still an emerging force, and some housebuilders are unwilling to risk investing in such small companies. It was argued that the off site sector needs to be grown sustainably, and should perhaps be adopted first by SMEs and those who can build their own facilities.

Large scale developments are often sold in waves, allowing time for excitement to be built and sales to be made while constructing each phase. This of course prevents empty homes stagnating. The 'instant' nature of off site builds however would work against many housebuilders' sales strategies, but would perhaps benefit HAs, who would have more to gain from speedy builds and move-ins.

Financing of SMEs was another key topic covered by the panel. Peter Andrew of HBF noted: "there is a lot of money around, but it's just not finding its way to SMEs." The question was aired of small builders' equities could be stretched to more than a few projects? There was litter clarity on how to achieve this, but Andrew was certain that "we need more players on the pitch."

While many suggestions were aired at the event, two messages were clear. Firstly, there's no catch-all answer to fixing the housing crisis, and also, the relationship between supply chain and builders needs to improve.

MORE COULD BE DONE TO IMPROVE EFFICIENCIES AND THE RELATIONSHIP BETWEEN HOUSEBUILDERS AND THE SUPPLY CHAIN





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Enq. 104



INDUSTRY MOVERS



Willmott Residential

Willmott Residential is strengthening its senior team by appointing Liz Catchpole as non-executive director on the main board.

A qualified accountant,
Catchpole will bring her
experience from both the
property and finance sectors to
support main board strategy and
decision making. Her previous
experience includes being chief
financial officer at Swiss Re Life &
Health UK, finance director at
Chelsfield Partners and group
finance director of Avant Homes.
She is currently non-executive
director and audit chairman of
Investec Wealth and Investment

It's another senior-level hire for Willmott Residential after it appointed former Greater London Authority deputy mayor for housing and advisor to the Prime Minister Richard Blakeway as strategic advisor in October.

Willmott Residential was formed by Willmott Dixon in May last year to grow its residential development pipeline. In January, Willmott Residential became a standalone company.

Catchpole said: "This is a fantastic opportunity to play an important part in Willmott Residential's growth. Its ability to blend developments with a mix of build for rent and sale gives it a strong position to work with land owners and joint venture partners to create a substantial pipeline of development."



Beal Homes

Beal Homes has appointed its next eneration of leaders to new roles as associate directors.

Chairman and managaing director Richard Beal made the appointments following the successful completion of the first Beal Academy, an intensive 18-month development programme for 12 of the company's rising stars.

The executive appointed to the East Yorkshire-based company's first associate director positions have a total of 30 years' service with Beal between them. They are Guy Jewitt – promoted to associate technical director from technical manager, Chris Murphy – promoted to associate land director from land manager and Jason Williams – promoted to associate finance director from group accountant. In addition, quantity surveyor David Bennett has been promoted to technical manager, taking over Jewitt's responsibilities.

All four took part in the Beal Academy with other colleagues from departments across the business. The programme involved one or two days a month away on leadership and management training, followed by work in teams on key projects relevant to their disciplines.

Rapleys

Property and planning consultancy Rapleys has appointed Steve Sulston as head of strategic land. He will advise on strategic site indentification and acquistion as well as the project management of sites from planning through the development process.

Sulston joins from Avant Homes where he was head of strategic land for the midlands and Yorkshire region. "I am excited to be joining Rapleys at a time when they are enhancing their development offering and am delighted to be playing a key role in this," he commented. "The strategic land sector is becoming increasingly more attractive."

Generator Group

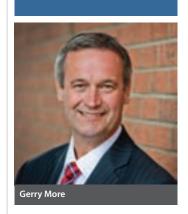
London-based niche developer Generator Group has promoted development manager Frank Amato to associate director. He will help to identify new land investment opportunities, while also managing the planning process and overseeing the projects through to a successful conclusion.

Amato joined the group in 2015 from Taylor Wimpey, where he was land manager. He said: "Since I joined the business we have built up a strong pipeline of opportunities and I am proud to be part of the next chapter of this growing business."



Churchill

Churchill Retirement Living has appointed Andrew Burgess to the newly-created role of group land and planning director. The new position will run alongside his current role as managing director of Planning Issues Ltd, Churchill's in-house planning and design consultancy. Burgess will work closely with Churchill's chairman and CEO Spencer McCarthy and COO Martin Young to oversee and develop the company's national land buying strategy.



Stewart Milne

Gerry More has been appointed managing director of Stewart Milne Homes in Central Scotland. He took up his new position at the beginning of April and is responsibile for growing Stewart Milne Homes' presence in and around Edinburgh and Glasgow.

A qualified chartered accountant, More has extensive sector and UK-wide experience.



Pupils build better futures with Barratt

Edinburgh high school pupils have been learning about roles in construction, thanks to a new initiative with Barratt Homes.

Pupils from Portobello High School were joined by the housebuilder to take part in an interactive session, which sought to demonstrate the range of skills involved in managing a property development site.

The activity, based on a board game, saw groups of pupils act as a project managers, working together to make decisions on which land to buy, the customers they were building for, as well as building materials and trades required for a successful development.

As well as showcasing the vast range of careers in the industry, the session was useful in helping to develop skills in teamwork and budget management. As part of the activity, each decision the group made had an impact on the teams' costs and income.

Ruth McKay, head teacher at the high school, commented: "At a time when many of our senior students are still considering which route to choose after school, experiences such as these help bring roles to life, and hopefully inspire young people to find out more."

"It was so useful for our pupils to get an insight into the sheer number of career options available," said Ruth, listing "bricklayers and electricians to designers and planners."

The activity is part of Barratt's 'Building Better Futures' campaign, which works with community groups, schools and colleges in the areas in which the company works.

'Building Better Futures' aims to support community development and champions construction as a career through its role as a community partner.

The board game was created as a result of an activity that a cohort of employees from the graduate programme were tasked to design and deliver, and is only the third time it has been trialled in Scotland.

Charles Church puts £8.1m into local amenities

More than \$8m has been invested into the local environment and amenities by Charles Church, as part of a new development in Burgess Hill, West Sussex.

The Croft is a collection of 2, 3, 4 and 5 bedroom properties, suitable for first-time buyers and young professionals through to families looking to upsize.

Martyn Clark, managing director of Charles Church Thames Valley, was "delighted" to be bringing the much needed homes to the area.

"As part of the delivery of new homes," he said, the company is "pleased to be injecting a financial contribution of £8.1m

into the local economy, which will include a new access from Kings Way."

"Money will also go towards a neighbourhood centre and high quality accessible informal open space," added Martyn, "including a new park, landscape buffer and green pedestrian and cycle routes."

The first phase of new homes has sold out, but planning permission has been secured for a further 105 properties. When complete, the development will comprise 480 homes, delivered in partnership with Sunley Estates.

Located on the eastern side of Burgess Hill and on the edge of the South Downs National Park, the development borders onto Ditchling Common Country Park.

Taylor Wimpey invests in its employees

Thanks to an exciting new training programme, Taylor Wimpey is helping its production staff across the UK to further their careers.

The Production Academy is a structured learning and development programme, aligned to job levels and career paths, which has been specifically designed to enhance the skills of the company's site management teams.

Approximately 100 employees comprised the first enrolment, starting the scheme in August 2016, and the second group, a further 60 employees, were enrolled in February and March of this year.

Employees completing the initiative will gain a Taylor Wimpey Production Diploma (TWPD), a recognised qualification made up of an enhanced National Vocation Qualification (NVQ), supplemented by complementary and key training modules.

As they progress in their careers, employees can re-enter the Academy at the next level and work towards enhancing their qualifications.

Taylor Wimpey has selected the NHBC as the training provider and assessor for the enhanced NVQ.

Andy Wyles, divisional manager for Taylor Wimpey, believes the initiative is a "unique and original programme," demonstrating the company's "commitment to improving the skills and knowledge of our employees to help them continuously improve."

The full TWPD will take up to 12 months to complete, and the first employees will gain their diplomas in the summer.



Brian Berry, chief executive of the Federation of Master Builders

IT'S MORE
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THAN EVER THAT
THE UK
HOUSEBUILDING
SECTOR BEEFS
UP ITS OWN
HOME-GROWN
SKILLS BASE

THE INDUSTRY ADVOCATE

ARE WE SET UP TO PROVIDE SKILLS?

Brian Berry, chief executive of the FMB, tackles the growing skills crisis in the UK

ackling the skills crisis is one of the biggest challenges facing the house-building industry. Ask any housebuilder – large or small – and they will state that a lack of skilled labour is one of the greatest barriers they face when attempting to build more new homes. This challenge has been drawn into sharper focus due to the ongoing uncertainty over what the UK's immigration system will look like post-Brexit. It is estimated that 12 per cent of the industry's workforce are non-UK citizens and undoubtedly, EU labour has played a significant role in helping plug the skills gaps we face, particularly in London and the south east of England.

The prospect of the EU tap being turned off, or the flow reduced, means it's more important than ever that the UK housebuilding sector beefs up its own home-grown skills base. However, the number of new apprenticeship starts in construction dropped off a cliff in the wake of the financial crisis and the number currently coming into the industry is still nowhere near where it needs to be, with the 21,000 apprenticeship starts in 2015/2016 likely to be insufficient.

Reforming the apprenticeship system and the way we train, so that it's both appealing to young people and has the confidence of industry, is vital. Two thirds of all construction apprentices are trained by SMEs but these firms have become increasingly disillusioned with apprenticeship standards in recent years. Over half of construction SME bosses believe that the current standard of construction apprenticeships is failing to produce tradespeople who are adequately skilled. A worrying three quarters were of the opinion that if the standards to which apprentices are being trained does not improve, the skills base in the construction industry will not be sufficient to meet the demand for quality new homes, schools, hospitals and other infrastructure projects.

This is an alarming outlook. If construction apprenticeships don't have the backing of SMEs, then there is little hope of solving the skills crisis, as too many of those firms will simply opt out of training altogether.

We're hopeful that the imminent introduction of new 'Trailblazer' apprenticeship standards for the key trades of bricklaying and plastering will help restore confidence. The standards were developed by FMB members in partnership with the Government and the wider industry and what makes them different from what's currently offered is quality, duration and thoroughness. These apprenticeships will take longer to complete – they'll include skills that are not currently taught at Level 2 – and they'll raise the bar in terms of the minimum skill level of the apprentice. These new standards could be a game-changer given that 72 per cent of construction SMEs would be more likely to train an apprentice if the standards were increased.

Of course, reform will need to extend beyond apprenticeship standards. There's a definite need to improve the perception of vocational training in the eyes of teachers, parents and young people. Whether the Government's decision to introduce technical education qualifications in the form of 'T Levels' will achieve this remains to be seen.

The future of the Construction Industry Training Board (CITB), and indeed the question as to whether it has a future at all, is pivotal in terms of how the industry responds to the current skills shortage. As CITB seeks to secure support from the construction industry as part of the consensus process, it's made a conscious effort to focus on raising apprenticeship numbers, reflecting Westminster's drive to boost apprenticeship numbers. This is welcome but it's important that CITB retains the confidence of the whole industry. To do this, it must remain fully focused on improving standards and ensuring that apprenticeship training is seen as the gold standard - in my mind that means increasing quality, duration and the breadth of skills.

The Federation of Master Builders is the largest trade association in the UK construction industry, representing thousands of construction firms in England, Scotland, Wales and Northern Ireland. Established in 1941 to protect the interests of small and medium-sized (SME) construction firms, the FMB is independent and non-profit making, lobbying for members' interests at both the national and local level.





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Simon Storer is the chief executive of BRUFMA

IN RECENT
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SIMON STORER

SOLUTIONS TAKE PRIDE OF PLACE OFFSITE

The advantages of offsite construction in mitigating the housing crisis is once again flavour of the month, says Simon Storer, chief executive of BRUFMA (the British Rigid Urethane Foam Manufacturers' Association).

ur need to build more homes coupled with a skills shortage has meant house-builders will need to embrace newer and faster methods of construction, which in turn will enable them to comply with more stringent energy efficiency demands.

In recent years the UK has fallen behind its European neighbours by depending on skilled trades at the expense of any mechanised processes or components that reduce onsite working. Offsite manufacturing can provide better working conditions for workers, less time onsite and improved environmental performance in the construction process.

There's a number of ways in which offsite construction can help to ensure the in-use energy performance of a building meets the asdesigned performance. Whether it's through structurally insulated panels (SIPs), modular building construction or pre-manufactured roofing components, the insulation industry is constantly looking at innovative ways to ensure buildings meet the ever more stringent energy performance requirements.

Offsite solutions can also reduce the detrimental impact of bad weather on build times, while faster weatherproofing of structures will reduce delays for follow on trades.

Higher levels of insulation

SIPs are perfect for offsite construction and can offer several clear benefits over more traditional methods. They reduce reliance on wet trades and provide a fast track construction programme, as well as maximising space and reducing site waste. The inherently high thermal performance of SIPs also reduces reliance on renewables, which can be expensive to install and maintain.

At a time when we urgently need more housing, SIPs can play an important role in achieving these targets.

Room-in-a-roof insulation system

In a further bid to address the challenges faced by housebuilders, an innovative prefabricated roof system enables the installation of a fully insulated pitched roof in just a matter of hours. The self-supporting system enables a safe and fast method of creating a watertight structure, as seen recently on a two storey property in Burley, Hampshire. This provided a prefabricated system with superb thermal performance that quickly waterproofed the partially built house and helped speed up the construction process. The application was so simple the construction of the pitched roof was completed in just seven hours.

Low U-values

Offsite construction provides consistent performance levels with fewer construction defects or wasted materials. These solutions can reduce the build time with a marked increase in the thermal performance of the building.

The renewed interest in offsite construction may not be the panacea for the housing crisis, but as an alternative to traditional building techniques offsite solutions are expanding rapidly and will take an increasingly important role in the future of UK construction.



NOT IN MY BACK YARD?

Michael Fry, senior associate in DLA Piper's Real Estate Group provides an update on the progress of Neighbourhood Development Plans

Pirst introduced in the Localism Act 2011 and with further support for neighbourhood planning expected in the near future, developers need to understand the effect of neighbourhood plans and engage with their processes to ensure their sites are not left behind.

Neighbourhood planning gives local communities direct power to formulate and shape development in their local area. Through development and implementation of Neighbourhood Development Plans (NDPs), local communities can now set planning policy which, once established, will become part of the Local Plan for that area – with the same legal status.

Decisions on planning applications must now take into account both the Local Plan and the NDP, unless material considerations indicate otherwise. In housing terms, communities with NDPs can allocate their own development sites, effectively pushing the development into certain places and limiting it in others.

SUCCESS SO FAR

The Government has been quick to declare neighbourhood planning a success. Over 230 NDPs have come into force since 2012 and the Government often claims that, in areas with an NDP in place, there has been a 10 per cent increase in housing allocations. Additional support and funding is also likely to increase. The Neighbourhood Planning Bill 2016-17, for example, will further strengthen neighbourhood planning by "ensuring the planning decision-makers

take account of well-advanced NDPs and by giving NDPs full legal effect at an earlier stage."

As it stands, neighbourhood planning can cause frustration for locals and developers. If the local planning authority cannot demonstrate a five year supply of deliverable housing sites, the National Planning Policy Framework (NPPF) says that relevant policies for the supply of housing should not be considered up to date. In other words, housing policies in the NDP may be given significantly less weight in the planning balance without a five year supply.

Currently, housing applications in areas without a five year housing land supply are considered, in the context of the presumption, in favour of sustainable development. As a result, planning permission should be granted, unless other NPPF policies block development, or the adverse impacts of the development significantly outweigh the benefits of the provision of housing.

FURTHER FRUSTRATION AHEAD

At the end of 2016, Gavin Barwell MP made a Ministerial statement setting out new policy which significantly tilts the balance towards NDPs.

This new policy means the local authorities will only need to provide evidence that they have a three year housing land supply, rather than the current requirement to show a five year housing land supply. The lowered burden on local authorities will, in effect, make it much harder for developers

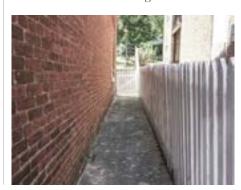
to secure planning permission for new housing developments which are not in full compliance with policies of the Local Plan. This puts developers at a significant disadvantage. A group of 25 housebuilders and land promoters has recently launched a judicial review against the statement, describing the policy as "illogical and irrational".

Announcments in the housing White Paper in February proposed no more than a gloss on the policy, adding that to qualify for the protection, "neighbourhoods should be able to demonstrate that their site allocations and housing supply policies will meet their share of local housing needs."

STAYING AHEAD OF THE CURVE

With increasing momentum shifting towards neighbourhood planning, developers should stay up to date with policy changes, both nationally and locally. They need to engage fully with neighbourhood planning processes, and there are likely to be significant benefits from being a local developer familiar with the neighbourhood. NDPs also have to meet a number of conditions and are subject to various consultations and examinations before approval, which gives developers numerous opportunities to object and raise their concerns, or to propose development sites.

NDPs are adopted through a referendum of local people – and local people might need to be reminded of the social and economic benefits to a neighbourhood.



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FUTUREHOME

Lendlease launches CLT eco home of the future

Luturehome, hailed as a pioneering concept that delivers advanced, low-energy homes designed to stand the test of time, has been introduced by Lendlease. The Futurehome collection launches later this year, consisting of 15 properties as part of the company's regeneration project Elephant Park in Elephant & Castle, London.

Futurehome is thought to offer the first homes in London's zone one to be designed to the Passivhaus standard. A low-energy construction standard developed in Germany, the Passivhaus certification is the world's most highly regarded accreditation scheme for ultra energy-efficient living.

Integrating Passivhaus' modern requirements into a timehonoured Victorian townhouse style, the 15 homes look beyond technology and typical build methods to create homes that embrace a sustainable vision of urban living in a single design solution.

The designed is centred on cross-laminated timber (CLT),

Leadlease's preferred quicker and greener alternative to concrete or steel structure frames. Made from readily available timber sections of renewable softwoods, they are formed into larger structural panels which are both light and strong. Building with CLT is largely conducted off site, reducing waste and improving delivery efficiency, meaning the construction process is cleaner, quicker and safer

Dan Labbad, Lendlease's CEO, International Operations, commented: "Futurehome marks a significant milestone in how technology and design have evolved in recent years."

"For the first time in London's zone one," he continued, "we have used cutting-edge construction methods to bring the highest energy-efficiency standards together with traditional aesthetics."

Dan concluded: "As the only UK project in the C40 Cities Climate Positive Program, Elephant Park is set to be one of the most sustainable major urban regeneration projects in the country."

BUILDING WITH CLT IS LARGELY CONDUCTED OFF SITE, REDUCING WASTE AND IMPROVING DELIVERY EFFICIENCY



CASE STUDY

Affordable, modular, fast and flexible?

Housebuilder & Developer looks at the potential of the nHouse prototype to offer spacious, flexible homes constructed in three days

OFF SITE CONSTRUCTION
HAS LONG BEEN HAILED AS
THE UP AND COMING
SOLUTION TO SPEEDY AND
EFFICIENT BUILDS, BUT
HOUSEBUILDERS HAVE
BEEN SLOW TO TAKE UP
THE METHOD

House is a new flexible, modular home design being pioneered by award-winning architect Richard Hywel Evans, who is hoping to make waves in UK housebuilding with a contemporary style allied to short build times and affordability.

The nHouse modular solution was launched recently at MIPIM in Cannes. With prefabricated housing again high on the agenda as a much-vaunted solution to the volume housing needed to solve the UK's housing crisis, reports are that the house received positive industry acclaim in the south of France.

With the 'n' in the name standing for new, the nHouse is being hailed as a genuinely innovative design model for offsite construction. Unlike many of what Hywel Evans describes as "spacerestricted, often featureless" homes of the present, the nHouse offers not only spacious but "tech-packed" accommodation, with what he claims are 'Grand Designs' levels of styling.

Aimed firmly at addressing the UK's housing problem in the mainstream however, the nHouse has been designed to cost £190,000, and takes just three days to construct once on site.

OFF SITE BENEFITS

The team behind the nHouse, which will be built in a factory in "the East of England" argues that little has changed from Victorian brick-built design in modern housebuilding, and that it offers what is claimed to be a fresh approach.

Britain certainly retains an adherence to bricks, and while many customers appreciate that their house has been built quite literally brick by brick, this is a relatively slow and arduous process. It is also one which many countries have long since begun to leave behind, making way for the modular housing revolution.

Off site construction has long been hailed as the up and coming solution to speedy and efficient builds, but house-builders have been slow to take up the method. While other countries have time and time again proved the benefits of building modular houses, housebuilders in the UK have been, as ever, reserved when introducing the new technology. In Germany for example, over 100,000 homes are built this way every year.

THE ARCHITECT'S VIEW

With the housing crisis growing, many in the industry believe it is no longer viable to rest on our laurels, and progress must be made to speed up builds if the UK is to reach its ambitious target of 250,000 homes a year. This is where innovators such as Evans and his nHouse are leading the way towards a speedier, efficient delivery future.

The architect explains his ethos behind the project: "Often I see standard houses being produced which are mostly built on a budget with an eye on the bottom line, rather than focusing on the happiness of the occupier." He asserts: "A home isn't just a machine for living in, it's somewhere that captures your heart and shapes your life, so it needs to be special."

He continues: "There seems to be little thought put into to how a home must be at the heart of a community," with builders and designers often forgetting "how a good home helps a family and supports its occupants realise and fulfil their dreams."

A NEW APPROACH

Richard Hywel Evans holds that nHouse has some key benefits that set it apart: "I designed the nHouse as I wanted to put design first and see if we can build a home





WITH THE HOUSING CRISIS GROWING, MANY IN THE INDUSTRY BELIEVE IT IS NO LONGER VIABLE TO REST ON OUR LAURELS, AND PROGRESS MUST BE MADE TO SPEED UP BUILDS

that makes people happy and yet still allows the building industry to make a significant profit."

"By utilising the latest technology and materials," he continues, "we have built a home which puts space, light and design at the forefront."

He concludes: "The nHouse could help provide more homes by significantly speeding up the building process and providing cost-effective homes that people genuinely want to live in."

The firm behind the project, nHouse Commercial, claims that the house includes more windows, higher ceilings and more space than any other newly built home in its price range. It's also eco-friendly with low running costs. Its forward-looking styling, plus "lifestyle-embedded" technology and generous proportions, will make it an attractive prospect for many buyers.

FEATURES

The finished product is a roomy, contemporary two storey, three bedroom home with high ceilings. It incorporates lots of natural light and extra embedded technology, unusual in other standard builds. It includes a master bedroom, en-suite bathroom, a spacious balcony (including a mini-bar), a double bedroom, a single bedroom and a family bathroom (including a touch sensitive screen mirror which allows Fitbit connection). The nHouse also has a large open plan living space and modern designer kitchen, with a utility room.

The 100 m² floor space offers 20 per cent more than the UK average of 80 m² for new build homes. Each home features high ceilings, a large balcony and open plan living areas to suit modern lifestyles. An nHouse can fit on a plot with dimensions of 10 m x 18 m.

The house includes solar PVs linked to underfloor heating, inbuilt rainwater harvesting and greywater recycling, underfloor heating, internal heat pumps, and even a delivery drone landing pad which facilitates what will, it is believed, be an everyday feature of future living.

By only offering one off-site product, nHouse intends to provide a "greater focus on quality and cost reductions," to ensure value for money. The firm says a house will be ready to occupy five months after order. "The single design avoids costs and hassle for developers who are often faced when having to commission new expensive architectural designs for each planning permission application."

nHouse will be able to mass-produce the house – which comes in four separate completed parts. This means the kitchens, bathrooms and even the plasterwork is precompleted. Even the light bulbs are screwed in before the house makes its way to the site. Not included in the price is a separate carport which for £25,000 offers "future-proofed luxury," including a recharge point for electric vehicles.

Constructed using structural crosslaminated timber panels, what's claimed to be a unique design includes "superior construction details" that minimise acoustic and impact sound. In addition to its various eco-friendly solutions the house will also have less wastage of materials during its construction.

Repeated technical specialism and quality control processes means a 'snag free' final product, says the firm, backed up by a a 10 year warranty and 80 year guarantee on core building materials.

FLEXIBILITY

To offer flexibility to developers, as well as housing associations and local authorities who want to supply good quality mass housing, the nHouse can be set up as a detached house, semi-detached or as a terraced property.

nHouse Commercial which has designed the project was launched by Studio RHE, a firm of architects, developers and project managers based in central London. The firm has been building award winning, innovative homes for over 20 years.

The first nHouse is currently in development and will be available to visit and explore in July 2017.

Why develop an nHouse?

Faster delivery: An nHouse can be fully available for occupation five months after order. Only three days are needed on site to finish the house, thanks to patent-pending 'Quad Click' technology

Flexibility: Its design enables the nHouse can be set up as a detached, terraced or semi-detached house, helping to create communities and maximise density

Adaptability: The nHouse is designed to be placed in any environment (urban to rural)

Quality: The nHouse is constructed in 'precision' factory conditions. Technical specialism and consistent application of quality control processes promise a 'snag free' final product with a 10 year warranty and 50 year guarantee on core building materials

Pre-existing design: Avoids the cost and hassle of commissioning new designs for each new planning permission application

Green: The nHouse is designed to be more environmentally friendly, with less wastage of materials

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VEKA UK Group secures Secured by Design



Industry-leading PVC-U systems supplier, The VEKA UK Group, has been awarded membership once again of the national crime prevention initiative, Secured by Design (SBD), for both its VEKA and Halo brands. The VEKA UK Group partnered with Secured by Design several years ago and has maintained its strong relationship with the team, thanks to a shared ethos of designing out crime at the product development stage. Mark Barsby, Accreditation Manager of The VEKA

UK Group, explains: "'Designing out crime' means that security features are incorporated within products during the design and development stage, rather than being an 'add on' to the finished product".

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VEKA UK Group flourishes at Red Rose Awards



The VEKA UK Group is proud to have won a coveted Red Rose Award after being short-listed in not one, but two hotly contested categories at the 2017 event. The industry-leading PVC-U systems supplier was delighted to win the 'Large Business Award' as well as being shortlisted for the 'Manufacturing Business Award' at this year's Lancashire Business View Red Rose

Awards. The trophies were presented during a black tie ceremony in the Empress Ballroom at Blackpool's Winter Gardens which was well attended by businesses from across Lancashire.

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Howarth Timber celebrates reopening



Howarth Timber and Building Supplies marked the grand reopening of its Doncaster branch with a three-day celebration complete with offers, competitions and giveaways. The store, which is located on Churchill Business Park on Churchill Road, has

been extensively refurbished and regular customers and newcomers were invited to take a look at the bigger and better branch. The store's new look includes a specialist plumbing and heating department and an impressive kitchen showroom displaying a range of modern and traditional kitchen combinations. As well as browsing the store, customers were able to take advantage of exclusive deals, meet the suppliers, enter an array of competitions and even enjoy a free breakfast.

Howarth gets cooking for Cancer Research UK



Howarth Timber and Building Supplies recently cooked up a treat for customers across the country – all in the name of charity. Between 20 and 24 March, each of the company's 30 branches hosted a breakfast morning and raised hundreds of pounds in aid of Howarth's 2017/18 charity partner,

Cancer Research UK. As well as filling up on a tasty cooked breakfast, customers were able to take part in competitions and meet Howarth Timber's suppliers, with extra fundraising events taking place at selected throughout the week. The funds raised will support the life-saving work that Cancer Research UK carries out.

EMBEDDING ACCESSIBILITY

As the population ages and the number of people living with disabilities increases, it is crucial that developers incorporate accessibility into properties now to prepare for the future. The kitchen, says Stuart Reynolds of AKW, is the ideal place to start.

here are challenging times for the UK housebuilding sector. Not only are developers trying to operate in England's struggling housing market, facing mounting pressure to build more properties to accommodate for the growing UK population, but they are also trying to meet the increasingly diverse requirements of a demographic that is both ageing and changing.

People aged 65 years or older made up 17.8 per cent of the UK's population in 2015, and by 2045 that figure is expected to have grown to nearly a quarter. Old age can also trigger a number of debilitating conditions, meaning the number of older disabled people is likely to increase by about 40 per cent between 2002 and 2022, placing even greater strains on housing.

Additionally, it is not just the number of older people living with impairments that is forecast to rise. The proportion of children and young people who are disabled is anticipated to grow to more than 1.25 million by 2029, and disability among those in their 50s is estimated to increase from 43 per cent in 2004 to 58 per cent in 2020.

Most worrying, however, is the fact that despite the projected increase in disability, only 12 per cent of properties are likely to be truly accessible by 2020, the vast majority of homes predicted to fall short of the Lifetime Homes Standard and BS 9266:2013. There is also a shortage of

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AND CARE SERVICES

homes that are specifically designed with disabled people's varying needs in mind. In fact, 15 per cent of households with one or more disabled residents currently feel their home is not suitable.

Appropriately designed homes can enhance wellbeing and independence, as well as reduce the demand on health and care services. As a result, it is vital that the housebuilding sector meets the changing demand for properties, both by ensuring new developments are accessible, and adapting existing housing stock.

With regards to the latter, even small changes to one room at a time can dramatically increase its accessibility. The kitchen is often considered to be the heart of a home, and adaptations to make kitchens more welcoming and understandable can substantially improve the ease with which day-to-day tasks can be performed by the disabled and elderly.

When creating an accessible kitchen, it is important to understand that the end result can look very different from one user's home to another, in line with their unique needs. There are, however, a few key design principles that apply regardless of individual requirements. The room must be inclusive to ensure comfort for multiple users with various abilities, it needs to be convenient, responsive and flexible to changing needs over time and, above all, it needs to be safe, protecting all residents within a home.

The process of achieving these goals begins with assessing each user's needs and this can be done by asking questions during the design stage. It is critical to determine the physical and cognitive



strengths and weaknesses of the users so that these can be supported for maximum benefit. For example, if the homeowner or tenant is a wheelchair user, the most appropriate layout may disregard the traditional 'working triangle' to give plenty of room for safe manoeuvring.

Once the most suitable layout has been established, the specific requirements of critical appliances and accessories within the kitchen need to be examined. Raised height recessed plinths, for instance, are typically a pre-requisite in all accessible kitchens as they allow the height to be adjusted and set for the resident, whether they are ambulant or a wheelchair user.

Units and cupboards will also need to be designed at the right height for the user. Base units should ideally have a reduced height of approximately 588 mm, while wall units should be fixed at 350 mm rather than the standard 450 mm above the worktop. They must be robust enough to withstand frequent contact with mobility aids, and all doors must be fitted with 170° hinges for ease of access. Sinks are also better if they are shallower in depth than standard, with 125 mm to 130 mm being ideal. Equally, drawers should be fitted with metal sides and runners for greater durability if the user leans on them for support and the choice of handles must accommodate for the dexterity of the resident. In terms of flexibility, adjustable devices provide the optimum solution. Rise and fall units and worktops allow a kitchen to be altered at any time with the touch of a button. They come in a range of configurations and sizes to suit any room, and can be used to create flexible sinks, cupboards, hobs and preparation surfaces. With the option for multiple heights, this type of technology can make a room accessible for every user, truly future-proofing a home.

The design of appliances can also have a huge impact on the accessibility of a kitchen. Consider installing tall oven housing units, where the centre shelf is set at the same height as the work surface, to allow for safe transfer. Models with slide-away doors are particularly useful for improved access. The choice of hob also requires thought, with induction options being especially safe as they can feature shut offs, shatterproof glass and residual heat indicators.

Finally, colour and lighting are critical factors when designing an accessible kitchen, especially for the visually impaired. Contrast is extremely important, and using colours that have a light reflective value of greater than 30 will help to differentiate an object from its surroundings. Moreover, task-specific lighting, such as installing bright lights underneath cupboards to illuminate worktops where food is prepared, can



boost visual acuity (clarity) tremendously. Accessibility needs to be built into kitchens now to overcome the housing challenges ahead for the elderly and disabled. By designing a room around the needs of the user rather than the space available, it is possible to create a kitchen that will improve independence and wellbeing, as well as make the property comfortable and inclusive for all users in the years to come.

Stuart Reynolds is product manager at AKW

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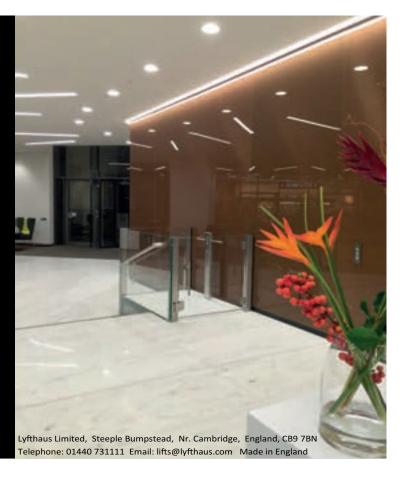
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Ideal Standard adds to Concept Freedom range with new accessible bath for all ages

deal Standard, the leading provider of innovative and design-driven bathroom solutions, has extended its successful 'accessible bathroom range', Concept Freedom, with the addition of a new, multi-functional, accessible bath that is suitable for the whole family.

Concept Freedom's new inclusive bath tub has been designed to make bathing anxiety free for users with mobility issues, while still delivering a beautifully designed aesthetic and a tranquil space in which to bathe.

It also aims to offer an alternative to the somewhat stigmatised requirement to replace a bath with a shower in the hope, just because a user has mobility issues.

The intelligent and versatile design of the bath combines luxury with multi-functionality, meaning its features are relevant for the different needs of the different types of users in the bathroom - with many of its features, such the lower ledge, also making bath time simpler for those bathing children and pets, for example.

Other key features of the bath include a reinforced ledge for stability, a lowered height



controlled entry and exit, an inside step ledge to aid movability, a gel headrest to support the neck and support rails for manoeuvrability.

Ideal Standard teamed up with experts in design and care for older people. Led by Ideal Standard designer Robin Levien, the team comprised Design Council member, Colum Lowe, from specialist healthcare organisation, Red and Yellow Care, and well-respected occupational therapist, Anava Baruch, from Design for Independence.

Developed with accessibility in mind, the Concept Freedom range aims to include those of limited mobility through a collection of ceramics, brassware and showers that are welldesigned, elegant and functional to meet a



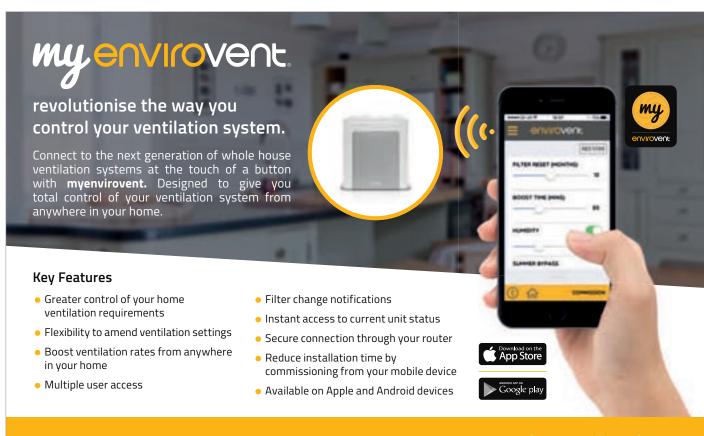
range of access needs.

Bathrooms can be adapted to users' changing needs, whilst still looking modern and stylish ensuring that the space deals with the demands of modern households and the diversity of occupants, including less abled and older generations.

Concept Freedom's collection includes raised height WCs for easier, more comfortable access, accessible basins with wide side rims, wet-room panels with extended brackets and easy to use shower valves and kits.

01482 346 461 www.ideal-standard.co.uk





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Studor has a million on its mind

rainage ventilation expert Studor is on target to supply more than one million of its products worldwide this year.

Studor is the market leader for Air Admittance Valves (AAVs) and other specialist drainage ventilation products. It supplies customers through its own ByStudor brand, as well as OsmaVent through Wavin Plastics, and the Pleura range through Terrain.

"The other one million figure which caught our eye is the Government's target to build one million new homes by 2020," says Studor's UK Managing Director Stephen Taylor. "This should open up huge opportunities as our knowledge and expertise in drainage ventilation technology, acquired over 40 years, should make our products particularly relevant."

Founded in 1975, Studor's development and growth has been driven by its innovative approach to product and system development. The company has consistently focussed on 'inventive technology' and has numerous patented designs with patent protection in over 50 countries.

Studor's expertise in drainage ventilation is supported by its close association with Heriot-Watt University research teams, which has led to new product developments.



Studor also has an active presence within the international specifiers and construction communities and plays a part in many standards and building code committees.

"We place huge emphasis on the technical support and assistance we offer our customers to ensure we provide the right product for their drainage needs," comments Taylor. "This support extends to providing free in-house technical advice on drainage system design."

Studor has numerous installations across six continents, and its worldwide subsidiary and distributor network extends to more than 50 countries. Its products are found in some of the



most challenging buildings in the world such as the O2 Arena, Unite Stratford 1, Ford Field Stadium (Detroit, USA) and Ferrari World (Abu Dhabi, UAE).

While the Studor name might not yet be well known in the UK, its rich history and specialist knowledge makes it well placed to help architects, engineers, specifiers, plumbers, and end-users solve their drainage ventilation issues.

For more information call, email or visit the website.

0845 601 32 92 www.studor.net





Nuaire Offers Better IAQ

Ventilation designer, **Nuaire** has introduced a new range of in-line carbon filters called IAQ-BOX, a step forward in both air filtration and resistance levels for carbon filter technology. Designed to complement Nuaire's MVHR range, IAQ-BOX removes 99.5 per cent of nitrogen dioxide from the intake air, as verified by the BRE. It also removes other harmful pollutants produced by vehicle exhaust emissions and through industrial processes. IAQ-BOX filters have a two-year lifespan so maintenance is minimal. It offers optional PM10 and PM2.5 pre-filters that ensure up to 95 per cent of harmful particulate matter is removed. The range introduces an industry first in its double-width carbon filter – the IAQBOX-D. This option offers greater surface area which has a duel benefit. Even more NO2 is filtered from the air whilst the extra width helps lower the resistance for a guieterrunning MVHR system and better flow-rates.

02920 858500 www.nuaire.co.uk/iaqbox



Polypipe system announced as a Finalist



Polypipe Ventilation is pleased to announce its Silavent HRX-aQ Mechanical Ventilation with Heat Recovery appliance has made it as a finalist in the prestigious H&V News Awards, in the Domestic Ventilation Product of the Year category.

The H&V News Awards, now in their 23rd year, are an annual celebration of excellence, forward thinking and the highest achievements across the building services industry. The awards cover the entire HVAC and building services supply chain. Polypipe Ventilation believes its Silavent HRX-aQ MVHR appliance cut through the competition because of its ability to intelligently manage air conditions, for maximum comfort.

03443 715523 www.polypipe.com/ventilation



MVHR Wall Units now with Bluebrain control



Following the launch of its ceiling/void mounted HRX-aQ Mechanical Ventilation with Heat Recovery (MVHR) appliances with intelligent air management, Domus Ventilation, part of Polypipe, has introduced this same advanced 'Bluebrain' control to its wall mounted MVHR units. The new Domus

HRX-D and HRX-2D wall mounted MVHR units intelligently match ventilation rates to the internal environment and occupants' requirements, for maximum homeowner comfort. This is achieved through advanced AMIE (Air Management for Indoor Environments) technology.

03443 715523 www.bluebrain.co.uk



02 BATHROOMS & KITCHENS Supplement



Mermaid Ceramic. Checkmate.



We have always offered an intelligent easy to fit, mould free, alternative to tiles and with our new unique Ceramics range, we can now also offer the look and feel of genuine ceramic. We think that this truly gives us checkmate versus tiles.

Our decorative Ceramic shower panels are available in a range of unique designs and natural materials, all of which will give your bathroom a gorgeous traditional look. Not only does it look great but no grout is required, making it is easy and quick to fit. As no professional tiler is needed to install, this makes it the ideal solution for a developer seeking to eliminate trade disruption.

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and trades

Saves money versus tiles





Mermaid shower panels are a mould free alternative to tiles, designed to look good, fit quickly and most importantly stay waterproof.

Mermaid decorative shower panels are available in a range of unique designs and natural materials, all of which will give your bathroom a stunning modern look.

Not only do they look great but unlike tiles, no grout is required, making it easy and quick to fit and as no professional tiler is needed to install, this makes it the ideal solution for a developer seeking to eliminate trade disruption.



Wetroom Innovations Limited has been supplying high quality value for money wet room materials to the trade for over 10 years.

The company has a wealth of knowledge in every aspect of the process and as such can offer unparalleled levels of advice and service.

With large stocks, Wetroom Innovations Limited can provide easy to install kits with detailed instructions to you next day.

A world of inspiration & wet room ideas awaits you on the company's website.



Marmox, has added a new drainage solution to its range of Showerlay floor level shower bases, which has been designed to simplify the installation of plumbing in both new-build and refurbishment applications and is compliant with all relevant standards. Joining the company's extensive range of products, the new Showerlay³⁶⁰ Drain, as the superscript title suggests, is fully rotatable to enable use in horizontal as well as vertical outlet connections or any angle in between – for total flexibility. Manufactured from an extruded polystyrene foam (XPS) core, the boards also provide very good thermal insulation.



Several years ago Pineland Furniture recognised the demand that existed for traditionally jointed solid wood kitchens at sensible prices. Pineland feel that too many kitchens look synthetic, or have an odd design to fit in standard size units. All Pineland kitchens are bespoke and built to the exact size and shape to fit the shape of your room perfectly. Pineland supply fully assembled kitchens in modular form which combine to form fully AGA Kitchen fitted kitchens. Pineland kitchens are made of solid wood throughout including frames. No plywood or chipboard is used and all joints are mortised or dovetailed

Wake up and smell the coffee



Bring warmth into the bathroom with this aromatic, elegant Mocha shade from Lustrolite panels. Lustrolite's glass effect acrylic wall panels are the perfect way to update your bathroom and kitchen. Lustrolite's glass effect acrylic wall panels are available in nine amazing colours - Arctic, Glacier, Blue Atoll, Rouge, Mocha, Safari, Forest, Titan and Carbon; all of which can be used for both shower and bathroom walls and kitchen splashbacks. For further information on Lustrolite, please visit the website.

Vortice supplies Trio Square



Architects Hinton Cook and their client Trio Square, turned to Vortice to help solve ventilation challenges at a Ryton upon Dunsmore development. The site had two important issues to resolve. Part of the site had to comply to System 3 (MEV) of Building Regulations Part F and the other

part of the site had to comply with System 4 (MVHR) as well as complying with planning guidance on noise ingress. Tony Green-Hurst of Vortice said: "Hinton Cook and Trio Square understood the challenges they faced and allowed us to help them design the ideal ventilation system for each of their properties."

01283 492949 www.vortice.ltd.uk



Luxurious, flawless and modern



Reginox's Centurio Series is a range of high quality sinks offering simple but stylish design. Manufactured from 0.9 stainless steel, all sinks in the Centurio range feature a luxurious, highly polished finish, providing a strikingly consistent and flawless appearance. The linear-style

draining board offers a contemporary look whilst a deep 180mm bowl ensures plenty of space for washing up. The Centurio Series is ideal for developers seeking a stylish, quality sink that can be inset into a non-solid worksurface such as chipboard, although it is equally suitable for integrated or semi-integrated installation.

01260 280033 www.reginox.co.uk



BLANCO showcases innovative stainless steel



BLANCO boasts an extensive portfolio including sinks, taps, induction hobs, and extractors; and the company also provides innovative surfaces, including Durinox®. BLANCO Durinox® is the ultimate innovation in stainless steel. Extremely hard and highly resistant to scratches, Durinox® stainless steel

surfaces are given these special characteristics via a new finishing process that originates from the aerospace industry. Developed further by BLANCO, the material is shaped after being shot with around one billion stainless steel beads at a speed of around 300kph. The resultant unique BLANCO worktops set entirely new standards in look and feel.



Redring's hottest new kitchen gadget

For those in the house building industry looking to inject some kitchen wow-factor into a development without blowing the budget then Redring's new '3 in 1' boiling water tap, has the answer. Reditap offers an affordable option for those interested in a boiling water tap that dispenses both boiling water as well as conventional hot and cold water mixing. The idea of instant boiling water at the turn of a tap is an attractive one for many and with approximately 165 million cups of tea alone drank in the UK every year, the appeal of instant boiling taps is on the rise. Available from January 2017, Reditap is a '3 in 1' boiling water kitchen tap with a difference. An affordable option for those looking for a contemporary mixer tap that instantly dispenses boiling water for hot drinks as well as conventional hot and cold water for washing up and cleaning. Reditap also offers excellent flow rates, class leading heat-up and recovery times and a whirlflow controlled refill system.

0844 372 7750 www.redring.co.uk



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- Technical support specific to your project needs
- Total peace of mind with our lifetime guarantee



Enq. 308

The Geberit Acanto bathroom series combines everything that a modern bathroom needs. Ergonomics take centre stage, with cabinets at the perfect reach height for various family members and compartments of the right size and shape to store daily used products within an optimum reach zone. The series encourages the mixing of materials too, from glass and metal to painted and wood finishes, which can be combined in numerous ways to form a unique bathroom design. The series includes a wide range of washbasins and bathroom furniture, Rimfree® toilets, bidets and bathtubs.



Pegler Yorkshire, the leading UK manufacturer of fittings, valves and brassware has launched a new range of stylish taps. The 'Waterfall' epitomises style and elegance and offers consumers with another high end range of brassware from leading brand Francis Pegler. The design led Waterfall Tap range offers an undeniable elegance and panache to any bathroom. Its wider than average spout allows a lavish flow of water to cascade into the bath or basin, offering a sense of splendour. Inspired by deluges often experience in the rain forest this tap provides a controlled and comfortable flow of water to any bathroom.



MX Group continues to build its reputation for being a one stop shop for all thinas showerina. From the widest range of types and sizes of shower tray to its ranges of electric showers, thermostatic shower mixers, brassware, enclosures and shower accessories, MX offers a massive selection of shower related products that needs to be seen to be believed. Great quality and great warranties - visit the MX Group website or call the company directly for information on all the products available.



This heavyweight British made Shaker 800, from **Shaws of Darwen**, is a deep single bowl sink with traditional style square sides, perfect for new build or refurbishment projects.

The sink comes complete with a round overflow, a 3½" waste outlet and is manufactured with a durable glaze designed for years of usage.

Due to the weight of the sink, it's recommend that it is installed professionally with bespoke cabinetry. To see the full range of sinks, taps and accessories available, please visit the company website, or contact the company directly.







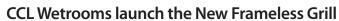
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Pineland is a privately owned, family company that has been established for over 20 years. We believe in listening to our clients, and our hand drawn plans, reflect our customers desires and opinions. The final design combines well planned functionality, with elegance and beauty, and our clients are often surprised how all this can be achieved at such a reasonable cost.

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CCL Wetrooms, the UK's leading
Wetroom Specialist have launched the
latest development in Wetroom
drainage - the new Frameless Grill incorporating the minimalistic beauty of
a Stone-Infill Grill, but without the
border of a metal frame. The new
Frameless Grill, which only has a 5mm

shadow gap visible around the perimeter of the drain and no visible frame, has been designed to complement all brassware finishes and sanitary ware designs, including the latest in luxury boutique trends such as brushed nickel, copper and rose gold.

0844 327 6002 www.ccl-wetrooms.co.uk



New Pro Ply Tile Backer Board from Norcros



Norcros Pro Ply Tile Backer Board is a high performance, mineral based, water-resistant backer board, which is both mould-resistant and exceptionally strong. The product is manufactured using a process that produces very little in the way of CO₂ emissions, unlike cement-particle and gypsum boards. The board is silica and asbestos–free and has a Class A1 non-combustibility fire rating making it ideal for use with underfloor heating and in

build-ups for fire resistant systems and firewalls. As with all Norcros Adhesives products, Pro Ply is covered by a lifetime guarantee.

01782 524140 www.norcros-adhesives.com





Geberit Bathroom Collection

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DESIGN MEETS FUNCTION Geberit Smyle brings harmony into family bathrooms. With its contemporary design and sophisticated lines, the bathroom series creates a relaxing and positive bathroom ambience. With a clear sense of order and efficient use of space, Geberit Smyle achieves the highest level of convenience in the bathroom from any structural situation. With the harmony of light and sophisticated lines.

→ www.geberit.co.uk/developerbathroomcollection

NEW COLOURS

Opting for coloured mortar can give housebuilders an edge and create buildings that stand out from the crowd. Iain Betts of Tarmac explains how.



apturing the interest and realising the aspirations of potential buyers continues to be a challenge for housebuilders. Combine this with a large proportion of consumers who have a fondness for properties with 'character', the growing popularity of self-build and the reluctance to take on a large financial commitment that will potentially last a lifetime, and housebuilders are finding that the new-build blueprint is not as simple or predictable as it used to be.

The solution for many UK housebuilders is to try and differentiate themselves through the design of their buildings, both internally and externally. These changes can range from bespoke doors that create a greater sense of space within rooms, to optional extras that improve acoustics. External features focus on maximising kerb appeal, which is logical considering the impact of first impressions on buyer interest and a resulting successful sale.

COLOURED MORTAR

A feature which is still regularly overlooked, despite having a huge impact on the look and appeal of a property, is the choice of mortar, and specifically its colour. Ideal for masonry and roof tile bedding on projects of all sizes, mortar colours that go above and beyond the standard natural or buff options can be beneficial to house-builders for a number of reasons.

Alternative mortar colours are seen much more often in commercial markets, where architects have more forgiving budgets and greater creative freedom, allowing them to consider the type of mortar being used, alongside a wider range of brick finishes. While natural or buff coloured mortars will blend in with the most common of brick choices, matching the mortar exactly to the brick type can create a sleek, uniform effect. This works particularly well with contemporary housing designs, which are continuing to grow in popularity, especially with first time buyers.

SHADES

As with interior trends, greys and dark tones are starting to become more common in the mortar world. They are successful at turning simple brickwork into a statement by reinforcing the shadow effect of a joint, especially when used alongside a lighter brick tone.

More daring colours, such as shades of red and yellow, can also provide a greater degree of creative freedom. This is essential for creating a building that will truly stand out from the crowd and grab the attention of potential buyers. Plus, if the property is in an area where the local stone or brick is very distinctive, such as the yellow stone found in the Cotswolds, then using a match service to find the correct colour may be necessary to complement the surrounding buildings.

A FEATURE WHICH IS STILL REGULARLY OVERLOOKED, DESPITE HAVING A HUGE IMPACT ON THE LOOK AND APPEAL OF A PROPERTY, IS THE CHOICE OF MORTAR, AND SPECIFICALLY ITS COLOUR

EXTRA BENEFITS

In addition to the beneficial aesthetics, a coloured mortar can help to maximise economies in other areas of a build. The nominal cost of coloured (in comparison to standard) mortar will enhance the appeal of a lower quality brick for instance. As mortar accounts for around 17 per cent of the brick work area, it has the ability to transform the appearance of the completed build at a much lower cost.

Furthermore, choosing a reputable manufacturer which supplies factory produced mortar will ensure consistency and quality for an overall succeful finish. A reliable production method and the inclusion of synthetic iron oxide pigments also removes the potential risk of fading and wash-out, which can happen if a contractor decides to colour a mortar themselves with separately purchased pigments.

Factory produced mortar is also likely to be much more predictable and reliable in terms of the final colour once applied and dried. The industry-recognised and respected 'Y reference' is actually owned by Tarmac and was developed to help housebuilders achieve an accurate specification.

Ultimately, as housebuilders look to meet market demand and maximise return on the plots they have available, the building products being specified need to be





CHOOSING A REPUTABLE MANUFACTURER WHICH SUPPLIES FACTORY-PRODUCED MORTAR WILL ENSURE **CONSISTENCY AND QUALITY TO PROVIDE AN OVERALL** SUCCESSFUL RESULT

considered carefully. Rather than simply being components of a building, they need to be approached as tools for creating spaces that are appealing, affordable, and enjoyable to live in. Exploring different

options, such as coloured mortars, is a simple and achievable way of doing just that.

lain Betts is an expert in mortar from Tarmac's Building Products division

Enq. 122



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Updated brochure shows full Nexus range



Specifying modern brick-faced soffits just got easier, with the publication of **Ancon's** new 16page Nexus brochure. Developed by Ancon and Ibstock Kevington, specialists in structural support and prefabricated masonry components, Nexus is an advanced lightweight system that makes modern brick-

faced soffits and lintels simple and achievable, particularly in fast-track environments. Expanded and updated to include the full Nexus range of soffit units and lintels, the new brochure shows the various options now available for achieving different visual effects by varying the style and type of lightweight stainless steel carrier and real brick slip facing.

0114 275 5224 www.ancon.co.uk/Nexus



New FastStack chimney enhances range



The prefabricated, brick-effect FastStack chimney from **Ibstock**, one of the UK's largest brickmaker, helps builders to significantly reduce the time spent on installation. The new brick-effect chimneys are an enhancement to Ibstock's popular and varied FastStack range of prefabricated options. Manufactured using the latest in Glass Reinforced Polyester (GRP) technology, the new brick-effect FastStack chimney is a

lightweight option weighing 25kg on average, so it can be installed without the aid of specialist lifting equipment. Furthermore, the new brick-effect FastStack chimney, can also be built to match virtually any brick type blending seamlessly with existing brickwork. For more information visit the lbstock website.



New Simpson Strong-Tie catalogue

The 2017 edition of **Simpson Strong-Tie's** flagship catalogue is here. Alongside the UK's largest range of connectors for timber and masonry construction, sit over a dozen new products and several range extensions, including: Post Bases; I-Joist hangers; Angle Brackets; Structural screws and Masonry Ties. The catalogue is also brimming with installation advice and performance characteristics and safe working loads. Sales Director, Jon Head explains: "It's been a busy time for Simpson Strong-Tie, with all new ranges for Light Gauge Steel and CLT construction, as well as our significantly expanded nails and screws ranges. We've really pushed the boat out to increase our core range though, which, coupled with our rapid made-to-order service, we really can say that if we don't have it – you don't need it."The latest version 'Connectors for Timber and Masonry Construction' is available from Simpson Strong-Tie on request and can be downloaded fro the website.

01827 255600 www.strongtie.co.uk

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Snickers advice on 'what to wear on site'



Introducing the newest working clothes that will best fit your warm weather workdays. You'll find all need to know about the world's most innovative range of summer working clothes in this free 52 page magazine – plus the latest news on **Snickers**Wearable Technology revolution. There's plenty of information to help choose the right working clothes to suit your trade – shirts, lightweight jackets and unique summer WorkTrousers. Whether it's in the

RUFFWork, LITEWork, FLEXIWork or the ALLROUND workwear range, these are workclothes that deliver superb functionality, comfort, protection and are equipped for any task at hand. Whatever trade you're in, there's something precisely for you in the Snickers range.



Slim profiles win Chiswick Gate development



Rationel windows supplied the timber windows, entrance doors and window doors for this prestigious new housing development by Berkeley Homes in West London at Chiswick Gate. The top swing windows are from the AuraPlus range with its additional aluminium cladding to protect the

timber frames and extend their life in use. Berkeley specified Rationel because of the lead time the company could deliver from factory to site, and the aesthetics of the timber window product design with their slim profiles and good sound attenuation.

01869 248181 www.rationel.co.uk





Maximise your existing order book

All building companies are looking for ways to expand their business. Products to upsell to existing customers, opportunities to revisit previous customers and options to develop new markets – PVC cladding could be that opportunity. There has been a huge interest in external cladding products in recent years, partly driven by aspirational TV shows like Grand Designs where it seems that every new build project features cladding in some way. Timber is still popular but homeowners are now looking for more low maintenance options – many busy families have little time or skill for the on-going re-painting and repair that timber requires. Freefoam Building Products are specialist PVC manufacturers producing a wide range of long lasting, low maintenance cladding products. The Freefoam cladding range features a choice of a smooth woodgrain finish or Fortex® timber effect embossed boards in Shiplap, Double Shiplap and Weatherboard styles.

01604 591110 www.freefoam.com



The VEKA UK Group first to 'steal a March'

The VEKA UK Group has announced the transition of its entire range of PVC-U window and door products to PAS 24:2016, making it the first BSI Kitemark System Supplier of PVC –U to do so. Accreditation Manager, Mark Barsby explained: "We've been in discussions with our forward-thinking customers, BSI and Secured by Design since last July to ensure VEKA and Halo products meet the updated enhanced security standard, PAS 24:2016. The standard was published over a year ago and includes a number of changes, particularly related to doors. The previous version -PAS 24:2012 – has now been withdrawn from the BSI website, and while Document O will continue to reference it for some time, the latest Secured by Design Homes Guide already allows for compliance via the new standard. Many VEKA and Halo fabricators and installers use data cascaded from The VEKA UK Group for Document O compliance. They will instantly be able to demonstrate to prospective customers how far 'ahead of the game' they are."

01282 716611 www.vekauk.com

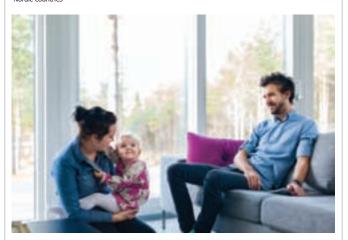




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SoundSecure apartment doorsets

Specifically created to meet the complex and demanding Building Regulations relating to apartment internal entrance locations, SoundSecure fully complies with all performance and legislative requirements where security, fire and noise reduction performance are of paramount importance. The factory hung doorsets are supplied with Premdor's accredited FD30 or FD60 fire doors, fully tested for fire performance against BS476 Part 22, Certifire approved and are supplied complete with intumescent and combined acoustic, smoke and draught seals as standard. Additionally, the doorsets carry Secured by Design approval, which is a nationwide Police preferred specification. Skillfully balancing practicality with aesthetics, Premdor's SoundSecure doorsets are available in a choice of standard door widths with any standard flush, Portfolio veneer match or moulded panel door design. To understand more call Premdor or visit the website.

0844 209 0008 www.premdor.co.uk



Let it shine with new Vicaima High Gloss

The characteristics of a High Gloss finish have long been valued by interior designers. Its ability to reflect light, the perception of luminosity and the illusion of space, all present a comfortable feeling of openness and elegance. The latest Vicaima finish, "High Gloss", is now available as an option across many of their popular veneered and painted door, frame and wall panel products, allowing specifiers to achieve a premium finish for interior decoration without the burden of premium cost. Luxurious appeal is a term that best describes the new Vicaima High Gloss finish. Enhancing the natural beauty of real wood veneer or taking lacquered paint finishes to new levels of quality, are the hallmarks of this latest innovation from the Vicaima brand. Once the preserve of a select few, this new high gloss finish enables a touch of refinement to be attainable for many more applications, and all with the superior quality you would expect from a Vicaima product. The new High Gloss finish can be applied to the wide range of Vicaima product components, including door and frame solutions, wardrobes and wall panels, creating sophisticated elements that connect with each other to fashion environments with character and personality.

01793 532333 www.vicaima.com





Construction 'scandal' shines light on decline in housing quality

A recent scandal involving a national housebuilder has further shone a light on the pressures put on firms to meet the government's housing targets. Bovis Homes is to pay £7m to repair poorly built homes sold to customers. Bovis, who built almost 4,000 homes last year, is accused of knowingly selling homes that had problems including faulty plumbing, no guttering and half-finished tiling. The revelations raise questions about the quality of new-build developments nationwide and regulation of the market. Michele Wietscher, Director of Newview Windows & Conservatories, comments: "There is a genuine need for more housing but we need to ensure it is of good quality. Buying a house is a big investment and it's evident some people are being sold the dream and getting a nightmare. There needs to be stricter and more transparent building regulations and people should be given the right to inspect their home prior to buying, to ensure they are getting quality accommodation."

01903 244 449 www.newview-homes.co.uk





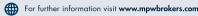
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A flawless finish at residential development

Bostik has supplied a range of subfloor preparation products and adhesives to deliver a high quality flooring finish at the Paddington Exchange development in Paddington, London. The Paddington Exchange project is a large residential development comprising of 123 stunning apartments in the heart of London. The project was carried out for main contractor, Bouygues UK. Working with Chelmer Group, the main flooring contractor on the project, Bostik supplied a subfloor preparation package to cover approximately 20,000m² of the new development. This included the Bostik Screedmaster Rapid DPM, One Coat Membrane and Universal Primer, as well as the Screedmaster Flow and Ultimate smoothing compounds. A wide variety of floor coverings were installed on the project, including ceramic and porcelain tiles, timber, carpet, LVT and vinyl. Bostik provided an adhesives package to cater for the different characteristics of each covering, which included Bostik MC250 Vitri-Flex and Bostik MC310 OPF for the ceramic and porcelain tiles, as well as Bostik Laybond Wood, Carpet and Vinyl adhesives.

01785 272625 www.bostik-profloor.co.uk



t's been almost two years since the Government chose to abandon dedicated requirements for SuDS on new developments using the 2010 Flood and Water Management Act. Instead, the National Planning Policy Framework (NPPF) requires sustainable drainage on new developments of 10 or more dwellings in England, and SuDS are also demanded elsewhere in the UK. In addition, existing NPPF prioritisation of SuDS in areas of flood risk, and requirements that developments should not make flood risk worse elsewhere (effectively by utilising SuDS), still apply to developments of any scale.

The onus for implementation has now moved to local planning authorities (LPAs), through local policies and planning application decisions. New guidelines and policies are gradually appearing, spelling out what LPAs expect from housebuilders and resisting cost arguments against SuDS. There is plenty of evidence to demonstrate that well-designed SuDS cost no more to install or maintain than conventional piped drainage, particularly when considered as multifunctional elements within the overall project design.

ESSENTIAL SUDS TECHNIQUE

By its very nature, concrete block permeable paving is uniquely placed as an essential, multifunctional SuDS technique. Of course, hard surfaces are necessary for housing anyway – whether for roads, parking, shared spaces or play. But permeable paving also provides an inherent drainage system that requires no additional land take for water storage, treatment or conveyance. It also addresses both flooding and pollution issues by storing and cleaning water runoff at source. This technology eliminates pipework, gulleys and manholes, and should therefore cost less than conventional drainage and paving.

In fact, concrete block permeable paving can also accept runoff from other impermeable paving and roofs, giving further savings. It can simply infiltrate rainwater falling on it straight into permeable ground, after removing pollutants. But, as is more commonly seen in the UK, less permeable conditions such as clay will limit infiltration and on brownfield sites existing pollutants may preclude infiltration. Here, permeable paving is used to collect and store water onsite during storms, before gradual discharge to surface water or combined sewers, or watercourses later, avoiding surcharging and flooding.

HIGH-DENSITY HOUSING

Riverside Court in Stamford, Lincolnshire, is a high-density (106 units/hectare) towncentre housing scheme, with SuDS designed by Robert Bray Associates. In the development, most public areas between

SUSTAINABLE DRAINAGE SAVINGS

Trade body Interpave explains how concrete block permeable paving is helping developers meet the latest regulatory requirements for sustainable drainage (SuDS), while cutting costs and minimising land-take.



PERMEABLE PAVING PROVIDES AN INHERENT DRAINAGE SYSTEM THAT REQUIRES NO ADDITIONAL LAND TAKE FOR WATER STORAGE, TREATMENT OR CONVEYANCE

the buildings are concrete block permeable paving, which also accept runoff from other hard areas and roofs. In addition to infiltration to the ground, stored and cleaned water also passes from the paving directly

into planted rills and canals, enhancing the courtyard environment. From here, any remaining water can eventually flow out into the adjacent River Welland. This SuDS scheme is made up almost entirely of concrete block permeable paving and eliminates any sewer connections.

Where a comprehensive SuDS scheme is planned to incorporate landscape features, concrete block permeable paving removes water-borne pollution and provides a gradual flow of clean water at the head of the 'management train'. Surface water in open SuDS features can then be used to enhance landscape design and biodiversity.

LOW-COST DRAINAGE

Following some 25 years of use in the UK and abroad, concrete block permeable paving has proved to be a predictable, reliable and low-cost SuDS technique. Its capability to attenuate water flow during rainfall for gradual discharge is well known. But, this principle is optimised for greater cost efficiency by considering distinct storage 'compartments' of permeable paving using straightforward flow control devices with an orifice (accessible for observation and adjustment if needed) on the outlet.

This technique enables water storage to be strategically deployed around a development within permeable paving compartments, each with a flow control demonstrating compliance to local authorities as part of the SuDS design approval process. It maximises the

potential for water to be stored onsite, beneath paving that is needed anyway. This avoids dedicated water storage structures on valuable land, as well as their associated excavation and construction costs.

Similar techniques maximise storage in permeable paving on sloping sites, using terraces of compartments separated by simple check dams that incorporate flow controls. Flow controls can also be used to retain water and make the most of available infiltration, in turn reducing discharge.

GREENFIELD RUNOFF RATES

A recent example of SuDS applied to a typical new housing scheme is Fleetwood Crescent – the 28-home first phase of a new development in Peterborough. It makes extensive use of concrete block permeable paving, reflecting Peterborough City Council's desire to incorporate SuDS in its developments. The permeable estate road will be adopted under the 'Section 38' process and is a trial project, with its performance being monitored.

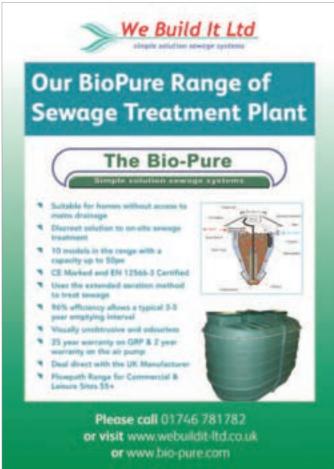
The drainage is designed to temporarily store rainwater runoff onsite and remove pollutants before gradually discharging to an existing surface water sewer that outfalls into a nearby watercourse. Water discharge from the development via the permeable

paving is restricted to 'greenfield' runoff rates by an orifice flow control chamber. Surface water storage volumes on the site are designed to cater for rainfall events exceeding the one in 100 year storm plus 30 per cent allowance for climate change.

Un-adopted driveways next to dwellings and shared parking areas are also concrete block permeable paving, linked to the permeable road construction with pipes below the footpath. Rainwater from all roofs drains into the driveway permeable paving. Services are generally accommodated in 'corridors' within the footpaths, with an impermeable block paved road crossing.

KERB APPEAL

Of course, paved surfaces help to define the character of any development. The growing choice of concrete block permeable paving products available, with numerous shapes, styles, finishes and colours, allows for freedom of design. At the same time, permeable paving can provide a completely level, well-drained, firm and slip-resistant surface accessible to all, without the need for cross-falls, channels, gulleys or other interruptions. Rainwater 'ponding' is eliminated, reducing the risk of ice forming on the surface and preventing splashing from standing water.





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liked the idea and decided the club should have their own, but bigger and bolder to create a real sense of arrival for the fans. Clearstone Paving Ltd was chosen for the project as they are a specialist resin bound surfacing company with expertise in producing custom paved logos. The crest was created in Vectorworks CAD program, from which intricate templates were laser cut for the seagull, its beak and the lettering, which were then carefully pinned in place by Clearstone's installation team. Then in-filled with white and blue RAL coloured pigmented quartz to match the team's home kit colours. Finally a seal coat of resin was sprayed on the crest and

anti-slip glass sand was applied as a finish. It took around eight

Resin bound Seagull crest by Clearstone

A giant resin bound Seagull crest welcomes B&H Albion football fans to

the Amex stadium in Brighton. Paul Barber, Chief Executive of the Albion noticed a crest (albeit on a much smaller scale) at Manchester City and

01273 358177 www.clearstonepaving.co.uk

days to complete.







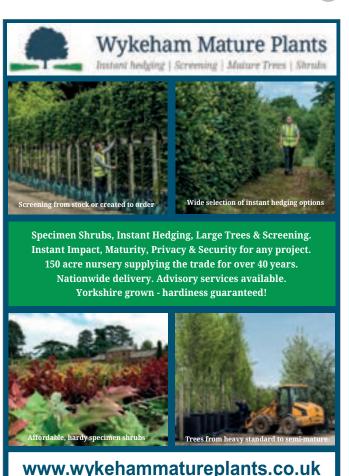




Exemplary public realm with concrete

Shortlisted for the 2016 Stirling Prize, Trafalgar Place near London's Elephant and Castle provides an exemplar for high density development and the exceptional public realm that helps define the project, featured in an important new case study from the trade body Interpave. The carefully designed external spaces which help define the project are a result of the close working relationship between landscape architects Randle Siddeley and an Interpave member paving manufacturer. The entrance square, central pedestrian street and access ways to dwellings are characterised by high quality concrete block paving set out in patterns using five different sizes for visual richness. With a combination of three shades of grey, the paving blocks have been shot-blasted for a sparkling, textured surface. For the more homely northern route and play area less formal, 'rumbled' concrete block paving style was used in warmer rustic colour tones.

0116 232 5170 www.paving.org.uk



Bespoke valve configurations



For any building service contractor, the key to a successful project is the efficiency of the installation – in short, time spent on planning and onsite. Integrated piping solutions manufacturer, **Pegler Yorkshire**, has developed a unique service that delivers bespoke valve arrangements for fan coils in a significantly reduced lead time from the

merchant's order. The process works by uploading drawings for take off preparation, Pegler Yorkshire's technical team can offer direct guidance on optimisation for efficiency and the most cost effectiveness for your proposal. Your preferred merchant receives the quote and once the order is received it will be fulfilled in line with the installation schedule.

01302 560 560 www.pegleryorkshire.co.uk



Digi-Line electric radiators – the smart choice



Cutting-edge energy management features available on the Digi-Line range of electric radiators from **Electrorad** serve to cement its position as a number one choice with contractors, installers and plumbers. Features that include unique independent double panel control, inbuilt energy monitoring (on the TouchE3

option), and virtual open window sensors, make Digi-Line the efficient and easy-to-control alternative to traditional central heating. It is also an ideal replacement for outdated storage heaters and panel heaters. Unlike competitor models that only feature a single panel, Digi-Line radiators are available with two heating panels.



Natural Stone Show Stand No. AA1

More than 60 new colours and finishes

CRL Stone will be unveiling its new ranges of quartz and porcelain surfaces at The Natural Stone Show. CRL Quartz is a highly durable engineered quartz stone, available in 32 colours, with a polished finish and in thicknesses of 20mm and 30mm. The extra-large slabs measure up to 3300 x 1650mm. Enabling designers and architects to respond to interior trends while meeting the demands of modern living, CRL Quartz is non-porous, stain, scratch, heat and shock resistant. Ceralsio porcelain is available in 27 colours and three thicknesses – 12mm for a slim worktop, 10mm for floor tiling and 6mm for wall cladding. With its many benefits including a strong resistance to wear and tear, scratch, stain and ultra-violet, Ceralsio is suitable for interior and exterior use. A highlight of the CRL Stone stand AA1 will be numerous large samples such as Ceralsio Calacatta Gris and Marquina, as well as two architect's desk presenting both full collections.

00800 0421 6144 www.crlstone.co.uk

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SHOW PREVIEW

RETHINKING STONE

If your view of stone is the same as it was a decade ago – stuck in an era of dark granite worktops and travertine floors – a visit to the Natural Stone Show at ExCeL London from 25-27 April is a must.

t the top of the housing market, where the richest 0.1 per cent are having their mansions built in the leafier parts of the UK, stone is de rigueur. It is not only the exterior walls that are stone – often an indigenous stone to be in keeping with the locality – but also the interiors, with granite kitchen worktops and marble and limestone bathroom vanity units, floors, walls and feature fireplaces. Stone is also favoured for swimming pool areas and gyms, and the latest must-have is an elegant stone staircase.

Further down the market, many people would not contemplate anything other than granite or quartz for their kitchen work surfaces and stone adorns many modest domestic kitchens, bathrooms and even living areas. The perception of stone floors has been transformed by underfloor heating, plus a heated stone floor retains and radiates more heat into living areas than wall radiators, saving energy.

Stone also lends itself to the blurring of barriers between interiors and exteriors because it has the combination of resilience and aesthetics that not only make it capable of performing well inside and out, but also make it desirable to use inside and out.

But while the often-subdued hues of indigenous stones remain popular, there has been a rapid rise in the use of marbles and the more figurative granites in interiors in recent years, and not just kitchens, but also bathrooms (in particular) and other living areas. Book-matched and quarter-matched marble feature walls in living areas add a splendid touch of nature's beauty to interiors.

Although named the Natural Stone Show, it is no longer just natural stone that the industry supplies, nor that is featured at the exhibition. Man's ingenuity has produced a growing number

of slab products that are processed in the same way by the stone industry as natural stone.

The blacks and dark browns first took the market by storm, but these days it is the veined materials that resemble the finest marbles, such as Calacatta, that are proving most popular.

White marble is seldom used as kitchen worktops because it is relatively easily marked and stained, and – being calcium carbonate – can be etched by the acids found in foods. Man-made materials, on the other hand, offer the much sought-after look of marble without its susceptibilities.

Porcelain and sintered products have been added to the quartz ranges that are being used not just for work surfaces but also (although to a lesser extent) for cladding, flooring, linings for bathrooms and showers and even paving. The Natural Stone Show provides the perfect platform for the latest launches of engineered stones.

Among the 200 stands at the Show – with companies exhibiting stone products from around the globe including Britain, China, Australia, Italy, Spain, India, Turkey, Romania and America – there will also be companies selling the machinery, tools and equipment for transforming this vast range of products with its diverse qualities and properties into finished products. Others will be selling the products needed for fixing, glueing, grouting, sealing, cleaning and otherwise using and maintaining natural and engineered stones. There's even an innovative underfloor heating system being introduced.

The Natural Stone Show is certain to make developers think anew about how else to use stone, or if it's not used already have them asking: why not?

For more info and to register visit **WWW.STONESHOW.CO.UK** and follow Natural Stone Show on Twitter for the latest news **#NATURALSTONESHOW**



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Hultafors Tools new product catalogue



Free to professional tradesmen and women around the UK, it's packed with details of the world's most innovative Hand Tools and accessories for working effectively - wherever you are on site. Everything you find in the **Hultafors** Tools range carries the hallmarks of a company that has over 100 years experience in knowing what it takes to get a job done efficiently, effectively and safely. Hultafors' ingrained quality and innovation is found in every Hand Tool. Ergonomically

crafted with built-in Fisco technology, there's a host of Tools for measuring and marking, chopping, striking and levelling. Whatever job you've got in hand, these Hand Tools deliver top-class solutions for making your workday easier.

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Rainclear have developed a stylish fascia and soffit system to match their Infinity Galvanised Steel Rainwater system. In keeping with the 4-layer, soft sheen colour coated Galvanised

Steel guttering, the fascia system comes with a 15 year manufacturer's warranty, although with its galvanised steel core, zinc/magnesium corrosion protection, primer coat and UV and scratch resistant polyester top coat it is expected to last well over 25. Even without Rainclear's introductory offer of 50 per cent off throughout April, this aims to be the most affordable metal Fascia & Soffit system on the market

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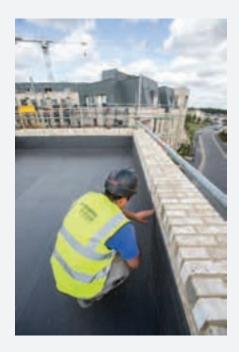
Natural Stone Show Stand No. G50

emper System's Kemperol V210 coldapplied liquid waterproofing membrane has been used to complete a mix of private and social housing at 'The Mount'; part of the 2,174 unit, multi-developer Millbrook Park scheme in the London Borough of Barnet.

Comprising a mix of eight four-storey apartment blocks and four blocks of three-storey town houses, the landmark scheme is part of a major regeneration project to create a new community in Mill Hill, which includes a new primary school and almost six hectares of green space.

Kemper System's Kemperol V210 membrane has been used as part of a brown roof build up on the apartment blocks, which also include a solar PV installation on the roof. It has also been used as the waterproofing membrane on the town house balconies.

Specialist contractor, Cawston Roofing was responsible for delivering the roofing scheme, applying Kemper System's Kempertec EP5 Primer to the concrete substrate before installing the Kemperol V210 membrane in a single wet-on-wet process. The cold-applied resin was rollered onto the roof and Kemper



System's 165g flexible reinforcement fleece was laid onto the wet resin, followed by more resin to ensure complete saturation prior to curing.

The inverted roof build up included installation of a double thickness of 180mm XPS (extruded polystyrene) insulation board onto the cured membrane, followed by a slimline deflection membrane and paving slabs to provide the base for the solar PV panels. The brown roof was then installed around the perimeter of each block.

The same inverted system was used for the apartments' terraces, with a lighter insulation. On the townhouse balconies, the Kemperol V210 was applied to the ply substrate, using the same wet-on-wet resin-fleece-resin process, as there was no requirement for insulation.

Comments Kevin Cawston from Cawston Roofing: "The Kemperol V210 system was ideal for this project as it was suitable for use across the roof, terrace and balcony areas. With excellent root resistance it addressed the needs of the brown roof specification and the inverted roof build up enabled trades to begin the interior fit out while work continued on the roof."

01925 445532 www.kempersystem.co.uk





Introducing the Stopper®Stations



The StopperStations from Safety Technology International are a unique range of multipurpose push buttons and key switches with numerous button activation choices, colours and label options enabling them to be used for a wide variety of applications around the World. Quick and easy to install, the StopperStation series is now suitable for flush applications. The mounting frame has been updated to fit a standard UK electrical box, as

well as the option to use a back box to accommodate surface applications. They incorporate a unique, patented design that helps dramatically stop accidental activations.

VMZINC transforms 60s office block



With a VMZINC Interlocking Panel facade and a standing seam and flat lock panel roof, the stunning £3m upgrade of Cambrian House in Shrewsbury has transformed a dreary town centre office block into a building with a distinctive visual aesthetic. The zinc facade has been installed over the existing concrete frame to the principle elevation, contrasting dark ANTHRA-ZINC® and engraved AZENGAR finishes having been used to complement

oak and render in the creation of 17 apartments and penthouses. For more information visit the VMZINC website.





Marley Eternit launches game changing new Universal Dry Verge

Marley Eternit has launched a ground-breaking new Dry Verge system that will make it quicker and easier for contractors and housebuilders to fit to NHBC and British Standards, whilst offering outstanding performance and durability. Unlike anything else on the market, the new Universal Dry Verge is compatible with all three major interlocking tile types - large standard, medium format (15" by 9") and large format thin leading edge, as well as Marley Eternit's own Lincoln clay interlocking pantile. This means contractors only need to buy and carry one type of dry verge for use with the majority of manufacturers' interlocking tiles and merchants can consolidate their stock holding with just one system instead of multiple versions. Marley Eternit's new system has also been designed to be much easier to fit than existing dry verge products. Developed in conjunction with roofing contractors, it includes a quick starter-verge fixing that can be installed even if the gutter is already in place. This provides an easy-to-install, robust method of securing the first verge unit – providing subtle, yet visible evidence to housebuilders and the NHBC of a correct and secure fix. While many dry verge products are sold as being universal, to date, none have been compatible with all three main interlocking tile types.

01283 722588 www.marleyeternit.co.uk/universaldryverge





ith the popularity of woodburning and solid fuel heating growing in recent years, stoves and fires have become a common sight in town and country homes alike. Gas and electric fires have also benefited from the increased desirability of solid fuel appliances, with many homeowners seeking the fireplace aesthetic without the additional considerations of fuel storage and chimney sweeping.

Offering visual appeal as well as a localised heat source which, unlike central heating, maintains its relevance outside of winter, the fireplace has become firmly established in the top five must-haves for buyers looking for their perfect home. With those in the property industry claiming a stove can increase a home's value by up to five per cent, it's worth considering including a fireplace in your builds.

FLUEING OPTIONS

Planning a fireplace into a build is much easier if you know the flueing options available, which is by far one of the most important considerations. In addition to the obvious chimney breast, there are other ways to install solid fuel and gas fires to be installed.

The kind of fire specified will determine what kind of flue is needed, if any is needed. Stoves and fires that burn wood, solid fuel or gas will undoubtedly need some form of flue, such as a conventional brick or stone chimney, or a prefabricated system. Capable of drawing the combustion gases from the property, a conventional flue will need to rise above the roofline in order to circulate the combustion air and facilitate the appliance burning properly. For solid fuel appliances, clay, pumice or concrete liners can be used to form the flue or flues in the chimney stack, but also twin skin flexible stainless steel liners and single skin rigid liners can be added later, should an existing leaking chimney need attention.

An alternative to constructed chimney stacks, prefabricated solutions are available for solid fuel and gas appliances. Wood burning and solid fuel flue systems have the advantages of off-site production, uniform insulation and easy, speedy installation, and can even be added after the build has been completed.

Prefabricated flues are typically constructed from a series of weather-proof, twin walled stainless steel pipe sections and feature a mineral wool insulation which improves draw. Similar systems are also commonly available for conventional flue gas fires, increasing building and product options. Suitable for external or internal applications, prefabricated flue systems can either run through the property or up the exterior, offering a versatile solution for most builds, whatever the development stage. Flues that run internally and terminate through the roof can be fitted with a pitch appropriate flashing as well as a storm

MAKING FIRES WORK

Despite being increasingly popular among homeowners, fireplaces are still seen as a challenge by many housebuilders in new builds. Tim Pockett of Stovax examines the practical options.



collar to ensure the roof is not compromised.

While suitable for some areas, shiny stainless steel flues can sometimes be subject to colour restrictions imposed by local planning departments. To get around this, some manufacturers offer durable powder coating in almost any colour, enabling the flue system to meet any such restrictions by allowing it to blend in visually with the surrounding structures and landscape.

Some sealed gas appliances can be installed without a conventional flue, should a chimney stack or prefabricated flue be unworkable. Balanced flue models are completely sealed from the room they are installed in, minimising internal draughts and increasing heating efficiency. Designed to use a twin-wall flue pipe, which draws air from outside the property via the outer pipe and expels gases using the inner pipe, balanced flues can exit horizontally through an external wall or vertically through the roof, allowing for suitable fires to be fitted in almost any room. Taking advantage of this type of flue, specially designed slimline gas fires can be inset into a cavity wall by removing the internal leaf, allowing for cost-effective installation without a surround or faux chimney breast being constructed to house the fire.

BALANCED FLUES CAN EXIT HORIZONTALLY THROUGH AN EXTERNAL WALL OR VERTICALLY THROUGH THE **ROOF, ALLOWING FOR SUITABLE FIRES TO BE FITTED** IN ALMOST ANY ROOM

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SOLID ALTERNATIVES

Should gas or solid fuel be beyond the scope of the project, electric stoves and fires make a great visual alternative and are a viable option for dwellings where there is no provision for any type of flue, such as a flat. Recent advances in LED technology have meant that these types of appliances offer flame-effects on par with their wood and gas burning counterparts, and thanks to their design, many electric fires allow for the visuals to be enjoyed without the heat, for all year

round enjoyment. Premium brands offer versatile options, from authentic cast iron stoves to statement landscape fires with immersive mood lighting systems.

Due to their lower heat output, inset electric fires can be installed with plasterboard surrounds, making them easy to integrate into most rooms or living spaces, whether it's a faux chimney breast and mantel or something more contemporary. Wall hung models present an even easier option, and can make a great finishing

touch to a feature wall-adding a visual focal point and depth, without additional building work.

The best place to go for build-specific advice regarding fireplace options and installation requirements is your local expert retailer, who will have the knowledge to help you integrate a stove or fire into your project.

Tim Pockett is communications executive at Stovax Heating Group

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Glass balconies provide high-end aesthetics

Neaco's range of glass balconies has secured a specification at another prestigious apartment development. Located near York and surrounded by stunning scenery, the complex of 37 luxury properties features Juliet balconies and walk-on balconies with bespoke graphics on the glass panels. A combination of minimalist design and durability has made them a popular choice to enhance the kerb appeal of high-end residential developments throughout the UK. Neaco's National Sales Manager, Peter Melia, said: "Neaco has established an excellent presence in the residential market with many housebuilders repeatedly specifying our glass balconies. Their smoked or clear glass panels maximise the benefits of sunlight and provide a more visually appealing alternative to the cage-like appearance of meshed or railed balcony infills." Comprising modular components precision manufactured off site, Neaco's balconies provide fast installation using an internal connection system that requires no welding for assembly.



Enq. 163

JJI-Joists – the versatile answer for floors, walls and roofs

sing I-Joists in place of solid timber joists for floor installations in domestic housing is now so commonplace as to be unremarkable. A combination of light weight, resistance to bending and dimensional stability has made I-Joists a firm favourite with builders across the UK. And first choice amongst the builders is the James Jones & Sons Ltd JJI-Joist, which is the UK market leader with an estimated 40 per cent market share.

What is less well known however is the versatility of JJI-Joists in being used for much more than just floor systems. JJI-Joists are now commonly used as wall studs where the range of depths available and 9mm web make them ideal where thermal efficiency and depth of insulation are paramount. A lot of architects are turning to JJI-Joists when designing to Passivhaus standards for just these benefits.

JJi-Joists are also being increasingly used in roof structures as well. James Jones & Sons pioneered the Intelli-Roof concept over a decade ago; where cassette panels, formed using JJI-Joists and OSB sheets, are used to create a fully insulated 'room in a roof'. As the cassettes are craned into place in sections, the process of getting a watertight roof onto a building is much, much faster than conventional construction methods - the record, using Intelli-Roof cassettes is seven house roofs in one day on a site. Today the cassette roof principle has been widely adopted, and not just for houses. JJI-Joist based cassettes are ideal where larger spans - up to 12 metres - are required, such as schools and leisure facilities.

- UK Manufactured
- Market leader
- · FSC and PEFC Certified
- BIM compatible
- · Best resourced design and engineering back up



JJI-Joists offer the largest range of standard sizes on the UK market and come with full FSC and PEFC certification. For those designers and builders concerned about the carbon footprint of their project, uniquely JJI-Joist production has been independently audited to PAS 2050 standards, meaning that James Jones is able to advise the CO₂E negative figure embodied in the JJIs for every project. A typical three bed detached house from a mainstream builder will store around 400kg of CO₂E in the floor system alone. The high grade solid timber flanges and OSB3 web mean that JJI-Joists are easy to work with on site as you can nail and screw into the flange and service holes are easily cut in the

But it's not just the versatility and ease of use that make JJI-Joists so popular. The joists are manufactured in the UK at the James Jones' Forres plant. The plant has recently benefitted from over £4.5 Million investment, including a new high-speed finger-jointing line, resulting in greater manufacturing capacity and flexibility

and the ability to meet the needs of customers more efficiently. The JJI-Joist design and engineering teams are also based in Forres and, by working with the field based technical sales team means that James Jones & Sons is able to offer the best resourced support in the market.

The JJI-Joists themselves are sold through a network of distributors across the UK, as well as France and Benelux, all of whom have fully trained staff and full access to the bespoke James Jones Floormaster software which means they can give architects, engineers and builders an optimum design solution for any project. The software is also fully BIM compatible if required for larger buildings. To help customers JamesJones has produced a comprehensive technical manual which details layouts, fixing details and installation guides.

To find out more about using JJI-Joists in your project please visit the website.

01324 562241 www.jamesjones.co.uk/ewp









Omnie heating in offices-to-flats conversion

The conversion of a former office property into half a dozen high specification apartments in the sought after Tooting district of South-West London has featured the specification of a low profile underfloor heating system from the range of OMNIE, as part of a space-saving building services strategy. The development in Althorp Road, SW17 Has been focused on a three storey commercial unit which the contractors have successfully reconfigured to form six similar sized flats. While OMNIE's design department provide detailed layout drawings for the project, along with other comprehensive technical guidance, all of the installation work has been carried out by Locksbury Services Limited from Biggin Hill in Kent. Locksbury Services' operatives installed the 35mm deep FoilBOARD panels across the building's existing sub-floor. Then 400 metres or more of the 16mm diameter heating pipes were pressed into the unique OMNIE multi-directional channel designs, which simplified the onsite installation eliminating the need of assemble loop and straight panels, prior to being connected back to the OMNIE manifolds, which distribute the flow from the home's boiler. While the slightly more complex Flat three required a six-port manifold, the rest of the dwellings feature five-port versions supplying primary water at 55°C to the different zones.



New 'smart heat' wood floor designs

Timbertherm is now available in over 20 finishes. Recently attracting crowds at the Surface Design Show, Timbertherm features integral Far Infrared technology and conducts heat through built-in nano-carbon conductors. The all-in-one 'smart heat' solution provides a stylish - and cost effective - alternative to dual wood floor and underfloor heating specifications. It is simple to install, healthy and eco-friendly - and suitable for new builds, renovations and retrofits. A high performance engineered construction comprises eight individual layers; below the hard wood surface layer nano-carbon conductors are embedded into plywood core layers. Water resistant prefinishes, tested to IP65 (Ingress Protection), include matt, satin and gloss UV lacquer. The floor's Far Infrared heat conductors warm to $26^{\circ}c$ in less than five minutes. Like sunlight, the smart heat produced warms objects, rather than the air, minimizing temperature fluctuations.

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Underfloor heating ticks all the boxes!



When it comes to heating, there is no single off-the-peg solution that suits every situation and it is no longer a case of considering the individual components in isolation. Now the emphasis is on looking at the whole project design and mixing and matching various systems to achieve

the most appropriate overall solution. Simple to install and control, UFH wastes no heat at ceiling level and frees up valuable wall space, providing complete design freedom. Gaia offers total solutions for any sized project. The long established Gaia solution approach is one that includes design and installation of wet and electric underfloor heating, along with comprehensive specification advice.





In an age when nearly all building products are mass-produced, natural timber has a unique position in the industry. Timber is a natural product and like all products of nature it is neither consistent nor guaranteed free of defects. Yet today's building industry expects high levels of precision and for structures to be right-first-time. Natural timber cannot deliver reliably on this.

Though natural wood is still used in many building applications, engineered alternatives are taking over both in the development of MMCs and in traditional roles: "Particleboard flooring has almost completely taken over from sawn and planed floorboards," comments Norbord brand manager, David Connacher.





50 is the new 75

Attention all architects, developers and self-builders; 50 is the new 75!

Historically, a traditional sand and cement screed is specified at 75mm thick over underfloor heating. Innovations have meant that an anhydrite liquid screed can be laid at 50mm and special products as low as 40mm over underfloor heating!

This has meant many extra benefits for customers: A reduced screed depth improves drying times. If heated after 7 days a 50mm screed can be ready to receive your final floor finish within 30 days!

The 25mm reduction in screed depth means that this 25mm can be made up elsewhere with cheaper, more thermally beneficial materials such as floor insulation. A 50mm liquid screed will create a far more efficient floor; heating up and cooling down at a far quicker rate than a 75mm sand and cement screed.

Finally, and most importantly, when using a liquid screed there will be no voids that restrict the transfer of heat to the screeds' surface, leading to customers benefitting from a floor that offers superior thermal conductivity and a perfectly level surface.

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HOT KNOWLEDGE

Toby Howard-Willis of JG Speedfit explores some of the key considerations surrounding smart heating controls and how they vary between retrofit and new build projects.

s Government and the wider housebuilding industry work towards greater energy efficiency in housing, there has been a growing demand for properties which make use of underfloor heating and other intelligent heating products. That being said, the availability of retrofitcompatible products means there is still significant scope for developers to improve the energy efficiency of existing properties and, therefore, their desirability within the market.

An understanding of the key considerations surrounding smart heating controls in retrofit and new build projects can ensure that the most appropriate solutions are specified, thus maximising the overall value of the project and return on investment.

With rapidly evolving legislation and technology, the process for specification can be complicated. The key is to pinpoint the optimal solutions to meet the unique demands of retrofit and new build projects, and to understand how to overcome them.

THE DEMAND FOR HEATING CONTROLS

When discussing heating controls, the differences between retrofit and new build projects are significant. While the majority of the growth of the heating controls market is driven by increased demand for energy efficient new builds, an important share of smart heating demand is still expected to come from the retrofit market. This development has been attributed to a growing tendency in times of economic uncertainty to renovate rather than buying a new property, the hope being that investing in the property will deliver financial rewards further down the line.

At the heart of this discussion is the drive towards greater transparency around energy consumption and energy efficiency, two topics which continue to fuel demand for smart controls. Smart controls are consistently making strides in functionality, affording end-users total control over a whole manner of heating applications, from underfloor heating to radiators, at the click of a button. The good news is that there is a range of solutions on the market which enable property developers to pass on cost savings and provide greater control over

energy consumption to homebuyers.

UNDERFLOOR HEATING

Where new build and retrofit projects largely differ is in the floor construction, and the extent to which this will impact on the installation process. For any building more than twenty-years-old, this will most likely feature a joist made from solid timber, requiring the use of spreader plates. At 1mm thickness, these lie under the finished floor, be it floorboards or an alternative. In a retrofit scenario an installer would lift up the existing finished floor, exposing the joist below, before installing the spreader plates on top of the joists, running in the same direction. The floor would then be laid back on top. Conversely, an overfit system has a pre-grooved insulation board of 25mm in thickness. Suitable for use in both new build and retrofit applications, an overfit system is designed to be installed on top of a finished floor. This is only possible, however, if the design of the room can support a small addition to the floor height. Assuming the additional floor height isn't a problem, it eliminates the need for installers to carry out additional work on the

existing floor, shortening the installation time significantly.

In addition to satisfying the legal requirements around sustainability, energy efficient properties are more desirable as the energy-related running costs are inevitably lower. From a housebuilding perspective, such houses are significantly easier to sell. Underfloor heating eliminates the need for radiators, giving the homeowner and designer greater flexibility around how space is used. Furthermore, spaces can be more easily customised as required.

LEGISLATION FOR NEW BUILD

As mentioned previously, new build properties are subject to increasingly stringent legislation around energy efficiency. For example, developers now need to be aware of the requirement for zonal controls in spaces exceeding 150m2.

The smart control market is growing rapidly and the ability to offer added-value solutions can provide a real source of competitive advantage and improve overall profitability for developers.

Whether working on a retrofit or new build project, it may seem that the two require different levels of heating controls or underfloor heating systems. However, while the installation may be different, the end result doesn't have to be. With technical advice available from a leading manufacturer's support team, developers can help modernise Victorian homes and ensure that new builds are as efficient as possible, meaning the end result of both a retrofit project and new build can yield similar energy savings.

Toby Howard-Willis is technical sales manager at JG Speedfit Enq. 171



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