

Comment: Patrick Mooney asks 'where are the people to implement the White Paper?' Page 20



Comment: Brian Berry says that the recent Government focus on planning resourcing is not 'job done'. Page 18



Work begins on 203home Perth scheme which is key to the local regeneration project. Page 26

03.17

HOUSEBUILDER & DEVELOPER



HIGH STYLE IN DOCKLANDS

Ecoworld Ballymore's Millwall development promises high-end living overlooking Canary Wharf, for London residents with the resources. Page 23





03.17 CONTENTS



18

COMMENT

REGULARS & GUEST COLUMNISTS

Includes the FMB's Brian Berry and Patrick Mooney looking at the impact of the White Paper, and a new regular column from Tarmac's Mike Lomax on waste on sites



26

CASE STUDY

BREAKING GROUND ON SCHEME TO DELIVER 200 HOMES IN PERTH

Urban Union marked the beginning of its new development with the help of a councillor cutting the first sod

ALSO IN THIS ISSUE:

04-14

INDUSTRY NEWS

17

EVENTS & AWARDS

15

INDUSTRY MOVERS

16

HOUSEBUILDER NEWS

18-22

COMMENT

23-25

NEW DEVELOPMENTS

26

CASE STUDY

28

PRODUCT FOCUS

49

FIT SHOW PREVIEW

FEATURES:

35

DOORS, WINDOWS & CONSERVATORIES

IT'S WHAT'S INSIDE THAT COUNTS

JB Kind's Simon Johnson reveals how specifiers can now match internal doors precisely to properties and appeal to buyers.

45

FLOORS & FLOOR COVERINGS

SEEING THE WORLD IN 3D

With BIM Level 2 now mandatory for Government projects, what are the advantages of the design method for housebuilders? Graham Hewitt of Raised Floor Solutions reports.

51

RAINWATER & GREYWATER PRODUCTS

CAPTURING SAVINGS

Rainwater harvesting is now a serious option for tackling drought and surface water. Gary Wheatley of Wilo UK explains the options.

54

STAIRS, BALUSTRADES & BALCONIES

A GLASS ACT

Baltimore Wharf, a landmark development in London's Docklands, required balustrades that were stylish as well as affordable.



56

STRUCTURAL INSULATED PANELS (SIPS)

PRE-PREPARED TO ADDRESS THE HOUSING CRISIS

Robert Clark of Fusion Building Systems explains the benefits of offsite manufacturing, explaining how the SIPs panels could help to alleviate the UK's housing shortage.

PRODUCTS:

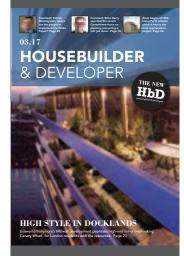
Appointments & News	27
Bathrooms & Wetrooms	
Building Products & Services	31-32
Doors, Windows & Conservatories	34-39
Finance & Insurance	39-41
Floors & Floor Coverings	43-47

Heating & Renewable Energy	47
Insulation	48
Landscaping & External Finishes	41
Pools & Spas	52
Roofing	49
Classified & Directory	



James Parker Editor Housebuilder & Developer james@netmagmedia.eu

ONTHE



FROM THE EDITOR

Welcome to your new and greatly improved Housebuilder & Developer. We hope you enjoy our colourful new layout, which we have designed to clearly define the wide range of content within the magazine, from news, comment and case studies to events, product news, and appointments.

By contrast, Chancellor Philip Hammond has had a few problems clearly defining how the Tories didn't break a manifesto pledge on not raising national insurance in his Budget. Unfortunately he also said precious little about housebuilding – somewhat bewildering given the recent White Paper and the acknowledgement of the housing crisis. But was this because that document is supposed to have fixed all the problems?

Perhaps he was advised to steer away from housebuilding, given that the hike in NI (of 10 per cent) is going to sting many SME builders, the White Paper having hinted that they would instead be getting a leg up.

Hammond also scarcely mentioned Brexit, despite later saying there was a need to protect the UK against its possible effects. He suggested this was part of the reason for bringing the self-employed closer to salaried workers, but gave the main reason as finding £2bn for social care, all very worthwhile and important, but constituting a broken promise.

Yes the wealthier SMEs are the ones affected, but having little concrete help in the White Paper, many smaller builders will be feeling aggrieved. Funding has to come from somewhere, but is it impossible to intervene further to, for example, tackle tax evasion by larger corporations?

Possibly most enervating is that there was is no sign of a cut in stamp duty, that mysterious cousin of VAT in the 'what is it actually for?' stakes.

James Parker

PICTURE OF THE MONTH

Housebuilder Churchill Retirement Living has raised more than £280,000 for Macmillan Cancer Support since 2009, and also scooped a top award (page 16)



HOUSEBUILDER & DEVELOPER

Publisher Lesley Mayo

Managing Editor James Parker

Assistant Editor

Editorial Assistants

Senior Sales Executive Sheehan Moir-Edmonds

Sales Executives Suzanne Easter Kim Friend

Production Assistants Mikey Pooley Shelley Collyer Rob Duncan

Designer Gabrielle Vinyard

Circulation/Reader Enquiry Service Jane Spice

Managing Director Simon Reed Cointronic House, Station Road, Heathfield, East Sussex TN21 8DF



Advertising & administration
Tel: 01435 863500 info@netmagmedia.eu www.hbdonline.co.uk

Editorial features Tel: 01435 863500 james@netmagmedia.eu

Press releases editorial@netmagmedia.eu

The manufacturer of the paper used within our publication is a Chain-of-Custody certified supplier operating within environmental systems certified to both ISO 14001 and EMAS in order to ensure sustainable production.

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

All rights reserved

No part of this publication may be reproduced or trans-mitted in any form or by any means, electronic, mechani-cal, including photocopying, recording or stored in any in-formation retrieval system without the express prior written consent of the publisher. Although every effort is made to ensure the accuracy and reliability of material oublished in Housebuilder & Developer, the publisher can accept no responsibility for the claims or opinions made by contributors, manufactur ers or advertisers. Editorial contributors to this journal may have made a payment to wards the reproduction costs of material used to illustrate

Printed in England





© EcoWorld Ballymore

Wardian London

– go to page 23

Vast majority of families cannot afford new homes, says Shelter

Eight in ten families cannot afford a new home, and more than half of those that can have experienced major problems with their properties, according to a new report from the housing charity Shelter.

The report revealed that, even when utilising the Government's Help to Buy scheme, typical new homes are out of reach for eight in ten (83 per cent) of working, private renting families across the country. The West Midlands ranked as the worst hit region, with 93 per cent of families not able to afford an averagely-priced new home.

Alongside being unaffordable, it appears that many new build homes are also of a low quality. In a YouGov survey for the charity, half (51 per cent) of new home owners said they had experienced major problems with their properties, including issues with construction, unfinished fittings and faults with utilities.

The Shelter report warned that the current

housing system will never work for ordinary families because it rewards developers and land owners more interested in trading land at high prices than in building homes.

Graeme Brown, Shelter's interim chief executive, commented on the release: "Big developers and land traders are making millions from a rigged system, while families struggle with huge renting costs and have to give up on owning a home of their own."

"For decades," he continued, "we've relied on this broken system and, despite the sweeteners offered to developers to build the homes we need, it simply hasn't worked."

He said that the only way to fix the crisis is "for the Government to champion a bold new approach which responds to communities." "Until this happens," he added, "millions of ordinary families across the country will continue to pay the price."

Unaffordable across the country **North East** North West Yorks & Humber East Midlands West Midlands East £445.000 London South East South West England Average New Build House Price (ONS) % of working renting families who

SHELTER'S 'NEW CIVIC HOUSEBUILDING' MANIFESTO

Following its research on the struggle to achieve home ownership, Shelter has unveiled a 'manifesto' entitled New Civic Housebuilding, promising a "new model of housebuilding to deliver genuinely affordable, high-quality homes.

Shelter commented: "It often feels like nothing can solve England's housing shortage. The choices seem too drastic, too unpopular, and too expensive. Even where tough reforms are made and political capital is spent, the results don't seem to change. To build enough homes - beautiful, locally affordable homes with appropriate infrastructure - we need a new vision. New Civic Housebuilding is a way to build the homes we need, enabled by a fairer trade-off between windfalls for landowners and benefits for communities."

Barwell "in need of allies" at White Paper event



Housing and Planning Minister Gavin Barwell recently discussed the housing White Paper at an industry event held in Medway, where he called for "allies" in solving the housing crisis.

In addition to speaking at the event, which was co-hosted by CIH and HouseMark, the Minister also toured three development sites across Kent and Essex which "demonstrate the diversity of the measures set out and their potential to deliver a housing market that, works for everyone," said DCLG.

In a brief introduction, the Minister reiterated his desire to work with all organisations to solve the housing crisis.

"I am a man in need of allies," he told delegates. "I have spoken to many organisations and individuals since I became Housing Minister, and the key thing I have learned is that there is no silver bullet to solve the housing crisis, and that a series of interventions are required."

Held on 21 February, the event in Birmingham was part of a regional tour of events following the launch of the White Paper.

THE SITES

As part of the tour, the Minister visited housebuilding sites across Kent.

Commenting on the tour, Barwell said: "It has been a great opportunity to visit three exciting developments across the South East of England today.

"All of these sites reflect the key priorities for this Government, and these developers are leading the way in efforts to fix our broken housing market."



ISUZU D-MAX YUKON

FROM ONLY

PER MONTH +20% VAT. BUSINESS CONTRACT HIRE

INITIAL RENTAL E2,335.80 +VAT. 23 MONTHLY RENTALS OF £194.65 +VAT. EXCESS MILEAGE CHARGE OF 10.95p PER MILE +VAT AND RETURN CONDITIONS APPLY. PROVIDED BY ISUZU CONTRACT HIRE.



THE ONLY PICK-UP THAT OFFERS:

3.5 TONNE

4X4 SHIFT-ON-THE-FLY 38.7 MPG COMBINED 125,000 MILE 5 YEAR WARRANTY

Call 03303 335119 or visit isuzu.co.uk

101



Cluster D-Max Tuken Hancel First consumption in mag (L/100km). Unbed 31.7 (E.F). Extra Unber 44.7 (4.1 Cambined 36.7 (7.1), CO' emissions 1923/dent. MPG figures are inflicial EU test figures for congeniative purposes and may not reflect rest driving results. For model specific figures above contact as directly or visit www.locate.co.uk

yongerteer information. Bestman aware spile. Proted arranges placed and year Public Discrete all Experienced Unique to The Stock with manual incremenyous, excluding special pand Reads. Discrete finances of the protection of the spile of the part of the spile of the

Hard Brexit will leave workers' future in doubt

The future of over a quarter of London's construction workforce, who come from the European Union, is uncertain if the Government goes ahead with a 'Hard Brexit,' according to a report released by London Mayor Sadiq Khan.

The 'Housing in London' report reveals that, of those working in London's construction sector, 95,000 are from the EU. Figures showed that 350,000 people work in London's construction sector, meaning 27 per cent are from the EU, with just over half from the UK.

The Mayor of London, Sadiq Khan, said: "When I speak to businesses – both large and small – one of the biggest issues they raise with me is the skills gap. They tell me that maintaining a skilled workforce is absolutely crucial to their future and the future of the whole economy.

"You can't escape the fact that a 'Hard Brexit' could leave a quarter of the skilled construction workforce in the capital high and dry, which would have a crippling effect on our plans to build the homes Londoners desperately need." He added that fixing the housing crisis "is going to be a marathon, not a sprint."

Industry experts have suggested that London needs an extra 13,000 new workers each year until 2021 in order to plug the skills gap and meet the additional demands on the construction industry, highlighting the importance of London's continued attraction to talent post-Brexit.

Mark Farmer, CEO of Cast Real Estate & Construction Consultancy, said: "It's very clear that the construction industry is far more reliant on migrant labour than anywhere else in the UK. To safeguard against this, London will require at least short to medium term continued access to EU migrant labour, and early protections given to its existing migrant workforce."

FIXING THE HOUSING CRISIS "IS GOING TO BE A MARATHON, NOT A SPRINT

Mortgage lending hits £18.9bn

Gross mortgage lending reached £18.9bn in January, according to The Council of Mortgage Lenders (CML).

This is 6 per cent lower than December's lending total of \$20bn, but 2 per cent higher than the \$18.6bn lent in January last year. This is the highest lending total for a January since 2008 (\$25.2bn).

Commenting on the market conditions, CML economist Mohammad Jamei said: "Overall, mortgage lending continues to hold up pretty well, but we seem to have a twin-track market. Weakness in buy-to-let and home movers has been offset by an increase in first-time buyers and remortgage lending.

"A continuing acute shortage of homes being offered for sale is one aspect of a broken housing market that looks unlikely to be resolved in the near term."

HCA quarterly survey published

The social housing sector has shown strong operating cashflows overall and sufficient funding for its forecast capital investment, according to the latest quarterly survey by the Homes and Communities Agency.

\$4.3bn of new facilities were said to have been agreed, including the re-financing of existing debt as \$1.8bn was repaid.

Investment in new housing supply was reported at \$2bn in the Q4 of 2016, and revenue from sales activity was found to be higher than in the September quarter.

Fiona McGregor, HCA's director of regulation, said the report suggested that the sector "has sufficient liquidity, and is well placed to respond to changes in the wider economic environment. Increasing levels of refinancing, both as a result of the maturity profile of existing debt and active treasury management, demonstrate the sector's ability to raise the finance it needs."

She continued: "Although we can see that providers are managing income collection risks and maintaining cashflows within business parameters, the pipeline of outright sale and shared ownership properties is significant for some providers. In this context, it is timely to reinforce our expectations around the quality of stress testing across the sector. We would like to see more evidence of boards having a clear idea of the triggers for implementing any mitigation plans."

The report, covering the period 1 October to 31 December 2016, is based on responses from 236 private registered providers (PRPs) and PRP groups who own or manage more than 1,000 homes.

Starts at nineyear high

The number of new build home starts last year reached the highest level since 2007, according to new figures from the DCLG.

The housebuilding data showed that 153,370 new homes were started in the year to December, up 5 per cent on the previous year. Research also showed that more than 140,500 homes were completed in the year to December 2016.

The figures also showed growth across the country, with Islington and Manchester experiencing high levels of starts in the year to December 2016, with an annual increase of 296 per cent and 323 per cent respectively.

Gavin Barwell, Housing and Planning Minister, commented: "We've got the country building again, with the highest number of housing starts for nine years. However, we know there's more to be done."

Meanwhile, figures from the Council of Mortgage Lenders showed that first-time buyer lending totalled 338,900 loans in 2016, up 8 per cent on last year.





Industry makes a strong start to 2017

The construction industry has started 2017 strongly, according to research from Barbour ABI. Figures showed an increase in activity levels as the value of new building contracts awarded in January reached &6bn, spearheaded by strong numbers from the housebuilding sector.

The latest edition of the Economic & Construction Market Review from Barbour ABI claimed that housing figures increased sharply across January, with construction contract value reaching £2.7bn, a substantial 83 per cent increase compared with January 2016.

Private housebuilding dominated in January, with 91 per cent of the total construction value compared to just 66 per cent a year ago. Market conditions for private housing were also favourable for housebuilders in 2016, with Crest Nicholson recently reporting a 27 per cent increase in full year profits.

Commenting on the figures, Michael Dall, lead economist at Barbour ABI, said: "While the housebuilding sector is performing admirably, we expect to see its growth continue to flourish across 2017. However, other sectors now need to start producing more auspicious figures, such as the commercial and retail sector, which saw a year-on-year decrease of 40 per cent last month. Infrastructure, another traditionally big performing sector, is also in a slump,

THESE FIGURES ARE **ENCOURAGING, AND WOULD SUGGEST THAT WORK IS MOST CERTAINLY** ON THE WAY

Michael Dall, lead economist at Barbour ABI

with January figures being the lowest for 12 months.

"On the positive side, the number of projects awarded in January jumped by 50 per cent compared with December, and 25 per cent when looking at January last year. These figures are encouraging, and would suggest that work is most certainly on the way."

Barbour reported that there are also £5.8bn worth of housebuilding contracts that are nearing award status, suggesting this month's growth is likely to continue over the next few months and beyond.

London led all regions based on total construction contract value in January, accounting for 26 per cent. This was helped greatly by the £900m One Nine Elms Twin Towers development, the largest recorded contract award of the month.

11 buyers chasing every property

An increase in house hunters and a decrease in properties has led to an average of 11 buyers chasing every property in the UK, according the NAEA Property Mark's (National Association of Estate Agents) January Housing report.

The report revealed that the average number of prospective buyers registered per member branch in January was 425, a 10 per cent rise from December 2016, when estate agents registered 386 on average.

Figures showed that the number of properties available to buy on estate agents' books in January was 38, a decrease from December, when 41 properties were available.

More than one in every 20 properties (seven per cent) were also seen to have sold for more than the original asking price in January, the highest amount since April 2016, when nine per cent sold for more than the asking price.

Mark Hayward, chief executive, NAEA Propertymark, said: "January saw a surge in buyers looking to kick off the New Year with a new home, but competition is rife," with an "average of 11 buyers chasing each property."

Mark commented that the increase in the number of properties selling for the more than the asking price in January "could be a result of heightened interest, and the fact that there is simply not enough housing to meet demand."



Sunspaces enhance living standards



A brownfield site on a main road into Ayr is now home to 22 new flats and terraces. Designed by John Gilbert Architects, the residences incorporate Windoor System 1000 Light balcony enclosures with frameless glazing. In addition to energy saving benefits gained through passive solar energy, enclosing a balcony on such an arterial route in a highly populated area, means that residents can enjoy noise reduction of around 17db when closed, increasing their enjoyment of home.

By choosing a Windoor balcony enclosure it means that when the weather allows, it can be opened up fully and enjoyed as a traditional open balcony. Windoor, a member of the WinGroup, is one of Europe's leading balcony manufacturers. Our ethos is that all products are manufactured, supplied and installed with design, functionality, quality and budget in mind. We work hand in hand with our clients to provide the perfect solution.

www.wingroup.ch

cpd provider



Windoor UK Limited. 12 Newmarket Business Centre, 341 Exning Road, Newmarket, Suffolk CB8 OAT Phone: 0870 067 8810 Email: windoor@windooruk.co.uk www.windooruk.co.uk



Pidgley says "criminal" red tape is stopping builders tackle crisis

Berkeley Homes' chairman Tony Pidgley fiercely criticised planning 'red tape' which was preventing housebuilders delivering the homes needed to address the housing crisis as "ridiculous" and a "crime."

He told a conference audience at Ecobuild: "Government bogging us down in red tape once planning has been decided needs to be challenged. We are talking about affordability and place-making, and to spend anything between one and three years signing a 106 agreement is a crime when we have a housing crisis."

Pidgley challenged the Government, in the wake of its Housing White Paper: "Let's deal with the red tape and the bureaucracy, and put the onus back on the industry. Why do we need 800 planning conditions for the one [firm] that misbehaves?'

He added: "I'd like to see them put more planning officers and more technical people in so that we can get on with the jobs, after we have had the debate about where we will build. Once that planning permission is given, the industry should be forced to get on with it."

Pidgley was responding to a challenge from the chair of a session at Ecobuild, UK-GBC's Julia Hirigoven, on whether there was a "dichotomy between the number of new homes required and the standard to

which they are built."

Pidgley refuted the idea that standards were being compromised to deliver on the numbers and density of housebuilding required: "We are doubling on the densities, and most of the homes we are building don't really need heating."

He suggested that if a "cross-section" of 20 people across the industry who care about place-making was assembled you "could come up with a standard set of conditions." He said that despite the existence of Building Regulations existed, it "didn't stop planning departments adding hundreds of planning conditions, which they don't have the staff to deal with."

Modular housebuilding factory opens in Shoreham

A new state-of-the-art volumetric modular manufacturing facility, capable of creating over 1,000 new homes a year, has opened up at Shoreham-by-Sea, West Sussex.

Customers visiting the Futureform factory will be able to pick a home "just as they would a car." They can choose from a range of different house types, with life size show homes on display at the factory.

The company plans to invest over £5m in the new facility, along with two more assembly plants planned over the next two years. This is as part of its \$450m development programme, creating more than 300 skilled jobs within the new off-site construction plants and roles, such as sales

and support, engineering, architecture and design, planning, construction and logistics.

Steven Barrett, CEO and managing director at Futureform, commented that the opening of the facility comes at a "critical point for housebuilding in the UK." He said that while it's clear the "UK needs more homes," the company believes that the "way forward is the diversification of the housing market."

Steven continued: "We are delighted that [the Government] have announced their intention to promote more modular volumetric and factory built homes. We hope that any new measures will assist in our partnerships with local authorities, and ultimately we hope that this will usher in a new era of affordable home ownership in this country."

The Futureform group is now a developer in its own right, and currently has a development programme of mixed development projects across the UK in its pipeline. The company is offering homes under the House Beautiful Homes brand, in partnership with the Hearst Group.



BUILDING PLOT FOR SALE ON SCOTTISH ISLAND

Heylipol, Isle of Tiree, Argyll, PA 77 6TY

Please send all enquiries via E-mail - ailigachiobair@aol.com

Building Plot 0.25ha (half acre approx) with outline planning permission for a dwelling house in open countryside on the Scottish island of Tiree which is situated on the

West Coast of Scotland.

All services nearby - mains water, electricity and telephone/broadband.

Daily connections to the mainland by air and sea.



DISCOVER MORE ABOUT TIREE

Population around 700 – boosted in summer by tourists.

Good medical services - 3 GPs work in rotation and a resident optician.

2 Food shops & 1 Hardware store.

3 Restuarants, 2 Hotels, & 1 upmarket Guest House. 2 Daily scheduled 45min subsidised return flights from

Glasgow to Tiree. Regular free Air Ambulance flights to Glasgow. Golf Course (9 hole), Wind surfing clubs etc.





Mental health in mind

Mindfulness teacher Ann-Marie McLeod reports for HBD on the recent Mental Health in Construction summit

January this year marked the second Mental Health in Construction summit. aiming to raise occupational mental health to the high level of its counterpart, safety.

300 industry bosses and occupational health and safety executives witnessed the launch of Mates in Mind, alongside workshops designed to build on the lessons learnt in 2016.

With one in four people experiencing a mental health issue in their lifetime, the Centre for Mental Health estimates that 91 million working days are lost each year, a cost equivalent to employers of around £26bn.

The Mates in Mind programme, which aims to raise awareness of mental illness in the construction industry, will be rolled out to 100,000 employees in the first year. A structural parallel training programme for managers will equip them with the knowledge to spot the early signs of stress and depression in the working environment.

The Minister for Public Health and Innovation, Nicola Blackwood said: "Everyone needs support and care from those around them, and it is great to see such attention given to mental health within the construction industry. We spend so much of our time at work, so I welcome the work that Mates in Mind is doing to raise awareness and understanding, particularly as suicide is a major cause of death in the industry."

She continued: "This Government is determined to address the struggles faced

by people with mental ill health, and our recently updated suicide prevention strategy will make sure help is given to those who need it most."

Clive Johnson is one of the founding members and Chair of the Health in Construction Leadership Group. On the back end of the success and this year's summit, Johnson paraphrased a quote by the playwright Tom Stoppard: "A healthy and safe attitude is contagious, but don't wait to catch it from others, be a carrier."

The construction industry is one of the main players leading the way in occupational health. The Health in Construction Leadership Group advocates integrating a positive and healthy attitude towards health within the workplace.

Modern methods hub launched

A new online resource centre has been launched by NHBC to keep the housebuilding industry informed of the latest developments in relation to modern methods of construction (MMC).

The website lists current building systems that NHBC has accepted as meeting its standards. It also has an online



application facility for manufacturers to submit their MMC systems and sub-assemblies for an assessment, to determine whether they satisfy the requirements of NHBC technical standards, as well as answers to frequently asked questions.

The site also provides free access to MMC research from the NHBC foundation and other industry organisations, alongside in-focus sections of various types of building systems, including panellised and volumetric systems.

NHBC standards manager, Paul Cribbens, commented on the launch: "For decades, NHBC has supported the industry in engaging with and deploying innovative forms of construction. Because our approach to acceptance of MMC/off-site construction is rigorous, it provides confidence to all involved that if a home benefits from an NHBC warranty, then the system has been thoroughly assessed.

He continued: "We hope that the new hub will act as the leading resource for manufacturers wanting to apply for a review, with details of the building systems currently accepted, together with the very latest research."

News bytes

Visit www.hbdonline.co.uk and enter the reference number for more information on these stories

March budget responses Ref: 40053

Meet the women working hard in housebuilding Ref: 93047

New study will assess whether high-rise accommodation could help ease UK housing shortage Ref: 15461

Give your homes a smarter edge

Add value to your luxury homes. To build the latest AV, lighting and security systems into your developments, call in our award-winning team at the design stage.

Find out more at www.cyberhomes.co.uk/smart-developers

Lighting control systems • Home automation • Multi-room audio and video • CCTV and security Home cinema design/installation • Robust data networks • Occupancy simulation • Climate control

















BRE's flood resilient home makes TV debut

A flood-resilient prototype home has been launched by the BRE to show the most effective ways to protect homes against flood damage and limit disruption.

The 'Resilient House,' which was featured on the BBC's Countryfile is intended to show how practical measures can be installed in a home to prevent flood water entering a property. The solutions include flood resistant doors and windows, water resilient walls and insulation, a resilient kitchen with moveable kitchen units, floor and wall membranes to channel water towards floor drains, an automatic sump pump that stops water rising through the floor and disperses water quickly if it gets in, and one-way valves fitted to the toilets and sinks to prevent flooding via sewers.

The Countryfile team were taken around the home by Dr Peter Bonfield, chief executive of the BRE, and Emma Howard Boyd, chair of the Environment Agency. With the help of the local fire service, the team attempted to flood the house from the outside, before allowing the water into the house to see how quickly it flooded.

John O'Brien, BRE Construction Innovation expert, stated that the practical applications of resilience were the most important aspects of the project. He said: "The BRE wanted to reflect these values in practical demo homes, the homes including both measures of resilience, and measures to get water out of a home." John

added: "It's about healthy, happy homes."

According to the BRE, making properties more resilient to flooding can be hugely beneficial to individuals, families and businesses. The innovative measures displayed in the house not only help prevent flood water entering a building, but also aid rapid recovery after any flooding, reducing the costs of repairs and helping people to get back on their feet quickly and easily.

Emma Howard Boyd, chair of the Environment Agency, stressed that property protection is an "invaluable" defence when flooding occurs. She said: "There's no doubt that it's more cost-effective to make your home or business as resilient as possible, rather than pay for the damage afterwards. I know the



devastating impact that flooding can have, and urge people to keep themselves safe and to adapt their homes so that they are able to recover as quickly as possible."

Different types of water resilient insulation have been used in the house, including injected cavity wall insulation, thermal board and PUR spray foam. Other practical issues have also been addressed, such as how to improve floor insulation, where to place electric sockets and home appliances, and how to seal off areas where water could enter the property.

The project has been funded by the BRE Trust and partners AXA Insurance, British Damage Management Association, Cunningham Lindsey, Defra, Natural Cement Distribution, and Property Care Association.

BRE has also announced a new certification scheme and training courses aimed at property flood resilience surveyors, that will provide them with a framework for achieving resilient repairs to homes and other types of property.

NHBC under fire from CRL

Structural insurace CRL has welcomed a Guardian story which raised questions about the independence and credibility of the NHBC.

Responding to the article, 'New homes warranty firm pays millions to leading homebuilders,' Steve Mansour, CEO of CRL, said: "We have found the sector to be a very closed market due to the dominance of NHBC, who work closely with so many of the big developers."

He continued: "We are concerned by the revelations in the Guardian article about the way the NHBC structures its relationships with developers, as it raises many questions about the independence and credibility of the warranties provided."

"At the same time," Steve added, "we welcome many of the recommendations outlined in the 'More homes, fewer complaints' report, put together by the All-Party Parliamentary Group on new build properties, in particular, the introduction of an independent ombudsman to oversee complaints about new homes.

"Greater competition in this sector, with a wider range of warranty specialists operating, can only be a good thing for the consumer, ultimately giving the owner of a new build home increased confidence in the validity of their warranty."



The 'Infinite House,' a set of contemporary housing prototypes designed by Openstudio Architects, has won Taylor Wimpey's Project 2020 Open Design competition, held in partnership with RIBA, to design a new house typology for the future.

Jennifer Benningfield, principal of Openstudio Architects, commented on the win: "There are many pressures on housing — cost, delivery methods, sustainability and context — but fundamentally a house should provide joy to its inhabitants and fulfilment of their needs.

"We believe that our Infinite House project truly offers the flexibility and customisation that home owners are looking for, and we look forward to working with the team at Project 2020 to realise and test the prototypes in the near future."

Project 2020 involves exploring and evaluating trends, changes and new innovations in design, architecture, technology, materials and methodology. The aim is to shape, design and future-proof the Taylor Wimpey design range for 2020 and beyond, fully reflecting customer lifestyles, needs and expectations.

Open studio Architects' Infinite House prototypes are designed to offer maximum flexibility, customisation and cost efficiency, and to maximise levels of natural light and

the perception of space. The Infinite House's external envelope allows it to adapt to suit different contexts without appearing to be a repeated house type, while still maintaining the efficiency and cost-effectiveness of prototyping and serial fabrication.

CEO of Taylor Wimpey, Peter Redfern congratulated the team: "This has been an engaging process, and we have been delighted by the level of interest and the quality of the entries. The standard of the six finalists was very high, which made our final decision a difficult one. After meeting the architects, much debate was had on the merits of each entry, but ultimately we were impressed by the way in which Openstudio interpreted the brief, and the simplicity, effectiveness and appeal of the winning designs."

SHORTLISTED TEAMS

- Artform Architects, Manchester
- Igor Russo with Flanagan Lawrence, London
- · More Design, London
- Newground Architects, London
- Openstudio Architects, London (Winner)
- Origin 3 Studio, Bristol



INDUSTRY MOVERS



David Hudson

CRL

CRL has appointed David Hudson as chief financial officer, completing the company's executive team.

Having worked in finance for 25 years, he joins CRL from the Global Home Group where he was managing director of Corndell Furniture.

David brings considerable experience of finance having previously worked in the City of London as a Partner at both Begbies Traynor, a business recovery practice, and accountancy and business advisory firm Baker Tilly. He has a strong background in finance, risk control, systems and structure.

David said: "I'm delighted to have joined CRL at a pivotal juncture in business which has experienced exponential growth in the past 12 months. I was attracted to the entrepreneurial drive of the senior management team and how they are moving the business forward. I look forward to continuing to build on the solid foundations that are already in place and make sure that the business is in the best place to progress with the next phase of its growth."

CEO Steve Mansour said: "I am delighted to add someone of David's calibre to CRL. He has extensive finance experience and strengthens our executive team. CRL is a growing company and David's appointment further demonstrates CRL's commitment to further establishing its place in the market."



James Barnes

Churchill

Churchill Retirement Living has appointed James Barnes as regional managing director for its South West region. He joins Churchill's main Board, working closely alongside Chairman & CEO Spencer McCarthy and Group COO Martin Young, to develop the group's strategic growth plans for its most wellestablished geographic region.

James will bring a highly disciplined approach to the role, having spent 10 years as an Army Officer before entering the property development market in 1998. Since then he has built a successful career in the sector in a variety of senior roles, including leading the launch of Battersea Power Station's redevelopment plans in 2013, and more recently as Sales Director for Redrow Homes Southern Counties.

James' appointment follows a highly successful 2016 for Churchill Retirement Living, with a number of industry award wins and continued strong growth.

Churchill's chairman and CEO Spencer McCarthy said: "I'm delighted to welcome James to the Board. He joins us on the back of an excellent year in 2016, when we became the first ever retirement specialist to win the WhatHouse? 'Housebuilder of the Year' Award. To maintain our success we need the very best people, and I look forward to working with James to achieve our ambitious goals for the South West region in 2017."

HCA

Four new appointments to the Homes and Communities Agency's Board have been confirmed by Communities Secretary Sajid Javid, as the agency takes a leading role in delivering the new homes the country needs.

Stephen Bell, Richard Blakeway, Councillor Simon Dudley and Councillor Teresa O'Neill OBE have been appointed following a recruitment process in line with the Office of the Commissioner for Public Appointments.

The HCA is going through a period of change as it helps deliver a significant increase in housing supply and the Board will establish the overall strategic direction of the Agency, ensure it carries out its functions effectively and meets its targets.

The new appointments strengthen the HCA Board following the recent departures of Kevin Parry and Ian Robertson.

Pulse Modular Homes

Specialist modular housing developer Pulse Modular Homes has appointed Elaine New to the management team as chief financial officer.

Starting with a Cambridge education and PwC ACA training, Elaine has experience in finance and business operations. She successfully co-launched Harrods' airport operations and helped create a new brand for Sears Plc.

Elaine commented: "The opportunity at Pulse is really exciting as offsite modular construction is going to be a significant part of fulfilling the Government's aim of building one million homes by 2020."

GI A

Juliemma McLoughlin has been appointed assistant director of planning at the Greater London Authority, a crucial role in leading City Hall's planning team and delivering the Mayor's manifesto pledges on planning and development across the capital.

Juliemma is currently director of planning and growth at the London Borough of Hammersmith and Fulham, a role she has held for the last ten years. Prior to joining Hammersmith and Fulham, she held senior planning posts in London and Sydney.

Deputy Mayor for planning, regeneration and skills Jules Pipe said: "Juliemma stood out from a strong field and I am looking forward to working with her to deliver high quality design and good growth in London, which must include building more new and genuinely affordable homes for Londoners."

BSRIA

BSRIA has announced the appointment of Zoltan Karpathy as its Operations Manager in its WMI Department.

The appointment of Zoltan highlights BSRIA's commitment to designing, implementing and managing the effective and efficient operation of the department to ensure delivery of business objectives.

Zoltan joined BSRIA WMI in 2010 and has until recently been leading WMI Building Controls and Smart Energy programmes.

Zoltan said: "I am thrilled to have been given this new role which is a great opportunity to further develop the department. In these certainly interesting and challenging times, I'm keen to support BSRIA in its effort to provide help and the best services to the construction industry."



Achieving its highest ever position of 13th place, Ringwood-based Churchill Retirement Living has been named in the Top 100 Best Companies to work for by the Sunday Times.

The retirement housebuilder once again achieved a three-star accreditation from Best Companies, the top accolade for excellence in employee engagement, recognising the company as being an "extraordinary place to work."

This is the sixth time Churchill Retirement Living has been named in a Top 100 listing, having recently moved up into the Mid Size Companies category, competing against companies with up to 3,500 employees. Churchill was once again the only housebuilder to feature on

Spencer McCarthy, chairman and CEO of Churchill Retirement Living (pictured, above with his brother and MD, Clinton) commented: "I've always had the philosophy that if you treat people well, and help them feel a true connection with the business, you get a lot more from them. The culture of any company is its lifeblood, and I believe that happy and motivated staff are the key to Churchill's success."

He said that to be recognised once again by the award is something "every single member of the team can be proud of."

The Sunday Times Best companies survey has been produced and published annually since 2001 to measure and acknowledge excellence in workplace engagement.

group praises new homes

A community group representing residents living near a £6.1m regeneration scheme in Rising Brook, Stafford, has praised new homes built by Stafford and Rural Homes (SARH).

Members of the Burton Manor Community Association were treated to a tour of the new Hesketh Village development as the scheme nears completion.

SARH customers started moving into the first of 63 homes in Hesketh Road last month, and the remaining one and two bed apartments are set to be finished in March.

As an organisation representing the interests of local residents, the Community Association was kept up to date on developments throughout the construction process. Its secretary, Mo Matthews, said they were "delighted" to be among the first to see the completed homes.

She commented: "The new apartments look fantastic and the scheme has provided a huge lift for the area, making it a much more desirable place to live."

The scheme, which has been supported by £1.26m of funding from the Homes and Communities Agency and £315,000 of funding from Stafford Borough Council, is set to provide 25 one bedroom apartments and 38 two bedroom apartments for rent across five buildings.

The tour was led by Nick Powell, who managed the project on behalf of SARH. He said it was "fantastic to see how much work has been done over the past year in the development of these stylish, energyefficient apartments."

Persimmon helps children

The National Autistic Society's Bristol Branch has been gifted \$800 to help children with autism go climbing.

The housebuilder's Severn Valley branch awarded the Society the donation as part of the company's Community Champions initiative.

The National Autistic Society improves the lives of those affected by autism in the Bristol area. In 2017, the charity aims to launch a Super Climbers Club, an initiative which will help children develop balance,

spatial body awareness and improve their overall muscle tone and motor skills.

The charity relies entirely on its team of volunteers and donations. The cash donation from Persimmon will provide personalised t-shirts and caps to give the Super Climbers Club "a genuine identity" and help fund several monthly sessions.

Jack Whittaker, the Bristol NAS Branch treasurer, commented on the donation: "These items are so important to us, as autistic children are often excluded from clubs and normal life. They will give the children a sense of belonging to a real club and will empower them to be a champion climber."

The Persimmon Community Champions initiative is a national programme where charities and groups can apply for funding up to the value of £1,000 to match money they have already raised themselves. Nationwide the company has donated a total of £1m.



Barratt Homes invests in apprentices

Barratt Homes North Thames is recruiting two new trade apprentices to work in the region, ahead of National Apprenticeship Week.

Apprentices will be based on site on a development four days a week, where they will learn from experienced tradespeople in their chosen field, such as bricklaying, carpentry or joinery. They will spend one day a week at college studying for a qualification in their field.

Ian Sadler, managing director at Barratt North Thames, said: "This is an exciting time for people with an interest in housebuilding to join the company.

"Apprenticeships are a great way for young people to develop new skills and learn about their trade."

Events & awards

2017

Housing Finance Conference & Exhibition

22 - 23 March, Liverpool www.housing.org.uk/events

Materials 2017

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, Birmingam 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 Conference & Housing Exhibition

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

UK Construction Week

10 - 12 October, Birmingham www.ukconstructionweek.com

Build Show

10 - 12 October, Birmingham www.ukconstructionweek.com/build-show

London Build Expo

25 - 26 October, London www.londonbuildexpo.com

Women in Housing Conference

2 November, Manchester www.womeninhousingconference.co.uk

Women in Housing Awards

2 November, Manchester www.womeninhousingawards.co.uk

Homes

22 - 23 November, London www.homesevent.co.uk





THE INDUSTRY ADVOCATE

Brian Berry considers whether or not the much-anticipated Housing White Paper was worth the wait

n 7 February, the Government's long-awaited Housing White Paper finally emerged. Was it worth the wait? The build-up was certainly protracted and some commentators saw this as a sign that the Government had something radical up its sleeve. As it turned out, there were no major fireworks in Sajid Javid's speech, as he unveiled the contents of what the Government intended to do to fix the country's "broken" housing market.

This shouldn't be too much of a surprise. The idea that Theresa May was going to fire the starting pistol for a mass public sector building programme, or concrete over vast swathes of the green belt, was always a bit fanciful. Yes, Javid did not mince his words and delivered a White Paper that was frank about the failures of previous Governments when it came to housing. Nevertheless, the responses were more measured. Sensible steps forward on a wide range of different fronts, was the order of the day.

From a developer's perspective, there's plenty to be encouraged by in what was announced by Javid, particularly for those heading up small housebuilding firms. For starters, councils will now be required to ensure that at least 10 per cent of the sites allocated for housing in their local plans should be 'of half a hectare or less.' In other words, there will be an obligation to provide the sort of sites smaller scale housebuilders need.

Research conducted by the Federation of Master Builders (FMB) in 2016 found that 47 per cent of councils either had no up-to-date local plan or were set to deliver less than 20 per cent of their housing through sites of less than 1.5 hectares. This will match the experiences of many developers and underlines the importance of embedding the virtues of small scale development in the minds of planners. The measure will

go hand-in-hand with others, including what is in effect a presumption in favour of small sites within settlement boundaries to improve the supply of, and reduce the risks of, bringing forward smaller sites.

Further underpinning all of this is perhaps one of defining measures in the White Paper, the Housing Delivery Test. This will require councils, each year, to demonstrate that housing is being delivered at roughly the rate at which it should be according to their local plan. If it is not, then a series of measures will kick in, ranging from the immediate allocation of a buffer stock of new sites to a presumption in favour of development. This is potentially a real game-changer, as it will force councils to be more realistic about where and at what rate housing will actually be delivered. Local plans minus the wishful thinking, you might call it.

There was more good news in the form of some common sense on planning department resourcing. Our research has shown that two-thirds of SME developers now see the chronic under-resourcing of planning departments as a significant impediment to increasing their output. So, in what seems like a reasonable move, the Government has proposed that councils be allowed to raise planning fees by 20 per cent, if they agree to ring-fence the funds to improve planning services.

However, it's critical that the Government does not see this as a case of 'job done.' The National House Building Council recently released its housebuilding stats for 2015/2016 and they were undoubtedly disappointing, showing that the number of SME developers in the UK continued to decline. If the set of reforms around the White Paper don't bring about any reversal in this situation, then it may well be time for something more radical.



THE IDEA THAT THERESA MAY WAS GOING TO FIRE THE STARTING PISTOL FOR A MASS PUBLIC SECTOR BUILDING PROGRAMME, OR CONCRETE OVER VAST SWATHES OF THE GREEN BELT, WERE ALWAYS A BIT FANCIFUL

So efficient,

reduce the cost of building it!



The new Home range of boilers from Vaillant are designed and built exclusively for the new build market. Its high SAP performance means you can actually reduce costs elsewhere on your build - and hit your DER targets!

Don't take our word for it, ask your SAP assessor to check the PCDB numbers. They'll confirm that Home is the perfect boiler to specify for the homes you're building.

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

The good feeling of doing the right thing.











Patrick Mooney, managing director at Mooney Thompson Consulting

TIME WILL TELL IF THEY HAVE THE CAPACITY & INCLINATION TO STEP UP TO THE PLATE AND DELIVER, BUT THE INITIAL SENSE IS WE ARE A LONG WAY SHORT

THE SOCIAL NETWORK:

WHERE ARE THE PEOPLE TO IMPLEMENT THE WHITE PAPER?

Patrick Mooney's regular look at the developments across the social housing sector

As the dust settles on the launch of the Housing White Paper, it is becoming increasingly clear that a huge amount of responsibility is being placed on the shoulders of staff working for councils and housing associations.

Only time will tell if they have the capacity and inclination to step up to the plate and deliver, but the initial sense is we are a long way short. The Government is asking an awful lot from these staff and should remember that voting in favour of something doesn't automatically mean that something actually happens as you wanted it to.

Ministers have told us the housing market is broken and it needs fixing now. But simply telling local authority planning departments that they can increase their fees by 20 per cent, will not in itself provide an overnight cure or panacea for the mess we are currently in. Planners do not grow on trees. They take years of training, much of it initially done at university, and in work experience before they can deal effectively with the complications thrown at them.

The Communities Secretary has rejected the 'easy option' of allowing new development on the Green Belt, insisting that new homes should be built on brownfield sites and at higher densities than currently. These developments typically require higher levels of experience and skills – both from architects and planners.

PLANNERS

Local authority planning departments have been starved of resources since the downturn in 2007/08. Staffing numbers in planning have been stripped right back to the bone and this is an area where you can't just turn the tap back on. Talented people need to be recruited, trained and helped to gain appropriate experience. This all takes time – something we haven't got the luxury of, if the housing market is to be fixed in time for today's generation of tenants and potential first time buyers to benefit from.

In a recent report called 'Small is beautiful: Delivering more homes through small sites', produced by the Federation of Master Builders (FMB) and the Local Government Information Unit (LGiU), they highlighted this very problem. Drawing upon the experience of local authorities and SME housebuilders from right across the UK, they confidently stated the national target of one million new homes by 2020 will not be met.

Although builders are willing to pay higher planning fees, provided the money is ring-fenced and used to improve local planning services, they fear that without more experienced staff employed in council planning departments, the targets for housebuilding (of all tenures) will remain aspirational and out of reach. The report's authors also discovered the following findings:

- 64 per cent of builders and 45 per cent of local authorities see lack of planning resources as a barrier to developing more small sites;
- More than half of councils deliver fewer than 40 per cent of homes on small sites.

Brian Berry, chief executive of the FMB, commented on the report: "The Government's aim to build one million new homes by 2020 won't be realised unless more housebuilders can enter the housing market. Too often small sites are dealt with entirely by inexperienced officers. There simply aren't enough senior and experienced planners to make the system work effectively. Unless planning departments have enough experienced planners on the ground, our housing targets will be nothing more than aspirational."

Jonathan Carr-West, chief executive, LGiU, said: "There is a large untapped potential in small sites, but resource and capacity pressures in planning departments make it difficult to unlock. We need new approaches and new partnerships to build the homes we need."

ROGUE LANDLORDS

A similar argument can be put forward in respect of Environmental Health Officers who are responsible for checking conditions in privately rented properties and taking action against rogue landlords. The Government has been promising action on poor or dangerous living conditions for several years and has featured this prominently within the White Paper, but this has been a Cinderella service for a long time.

The reason why more action is not being taken against private landlords guilty of carrying out retaliatory evictions on tenants who complained about unsafe or unacceptable conditions, is usually because councils do not have enough people on the ground to do this work – it can be complex, time-consuming and challenging. Good EHOs need to be resilient and confident in their knowledge and skills.

It is extremely welcome that politicians want to prioritise work in the areas of planning and enforcement, but they also need to help with the urgent recruitment, training and on-going support for staff to carry out these important functions.

Another area coming under huge pressures are the rent and income collection teams in housing associations, councils and ALMOs. The Government has held out the prospect of allowing rents to rise after 2020, presumably to fund the building of new homes, but until then the annual one per cent rent cuts remain in place.

Also remaining in place are the welfare benefit reforms that are cutting the income of needy tenants and pushing up rent arrears. The introduction of Universal Credit (UC), which merges six different benefits into a single payment, was hailed as a major advance, as it has simplified the benefit system and it simulates the world of work for claimants, by giving them a single payment each month. Out of this, they are responsible for paying all of their bills and living expenses.

However, this ignores the simple fact that all landlords (whether in the private or social rented sector) require rent to be paid in advance, but the Department of Work and Pensions insist on paying benefits in arrears. Add to this the fact that the first UC payment is normally paid up to six weeks after it has been claimed, when most tenants will already be in debt just in order to feed and clothe themselves and other family members.

ARREARS

Universal Credit continues to be rolled out across the country and as it does, so it appears more tenants are racking up rent arrears, while those already in arrears are seeing their debts grow and grow.

MPs on the DWP select committee were recently given an insight to the problem when Nick Atkin, chief executive of the Halton Housing Trust appeared before them. Halton HT is a medium sized social landlord with nearly 7,000 homes in the

Cheshire towns of Widnes and Runcorn, near the River Mersey.

He revealed that of the 12,091 tenancies covered by the four main housing associations operating in Halton, 1,058 of them are in receipt of UC and of these, some 920 now have rent arrears.

UC claimants total nine per cent of all Halton tenancies but they account for 37 per cent (\$586,000) of the rent arrears. The average rent arrear per person is now \$602; an increase of \$160 (36 per cent) since the tenants first moved on to UC.

There are four times as many UC claimants in receipt of a Notice of Seeking Possession as non-UC claimants. As a result, these people are now at an increased risk of losing their home as well as the additional legal costs from recovery action. Not surprisingly Mr Atkin says all of this is preventing him from getting a good night's sleep.

Unfortunately, in its current form, it appears that Universal Credit is not fit for purpose and yet the Government is continuing with its roll out across the country in order to meet an arbitrary timetable, rather than slowing it down and ensuring the systems and processes are working properly and able to cope.

The National Federation of Arm's-Length Management Organisations and the Association of Retained Council Housing recently estimated the number of tenants on UC who were in rent arrears, had shot up to 86 per cent.

This compares with 39 per cent of tenants in arrears who do not receive UC. The average arrears total has also increased, from \$321 to \$616. Research has also revealed that 59 per cent of UC claimants living in council homes have arrears that equate to more than one month's rent.

Addressing the same select committee, Lord Freud who was one of the main architects of the scheme, defended UC and said he estimated the number of tenants in arrears was much lower at one in four, or 25 per cent.

All of these figures represent a real challenge to both the tenants and their landlords. How can they possibly cope with debts running up at these totals? It might also explain why a growing number of private landlords are unwilling to accept tenants who are dependant on benefits for their income.

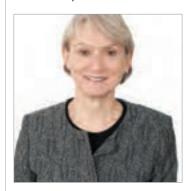
The Chartered Institute of Housing welcomed many of the measures included in the White Paper, but were critical of the Government's failure to address problems associated with its programme of welfare reforms and cuts in public spending. The Housing Benefit bill nationally has ballooned out of control to something like \$28bn a year, but at least 10 per cent of that

is being paid to rogue landlords in the private rented sector, providing unsuitable and dangerous properties for vulnerable and needy people to live in.

Now if only we had sufficient numbers of environmental health officers to tackle these rogue landlords, but that's another story entirely!

BUT IT'S JUST A FOOTPATH!

Carol Ramsden, from solicitor Birketts LLP, discusses the impact of public rights of way on development



ootpaths, bridleways and byways traditionally traverse golden fields and green lanes, providing shortcuts and leisure walks for local residents and countryside visitors. These recreational routes are public rights of way, a type of public highway recorded on mapping by highway authorities, and as well protected in law as the road network.

A developer should be aware that planning permission does not make any change to a public right of way within a development site. Houses subsequently built over routes, even when in accordance with approved layout plans, become illegal obstructions of the highway. Such houses are likely to prove difficult, or even impossible to sell. Recent changes to property search questions bring the existence of public rights of way to the attention of prospective purchasers.

In assessing the potential of a development site, public rights of way are an

DEALING WITH
RECORDED OR
CLAIMED ROUTES
AFTER A
DEVELOPMENT HAS
STARTED, OR EVEN
FINISHED, IS TIME
CONSUMING,
EXPENSIVE AND
CARRIES NO
CERTAINTY OF
OUTCOME

important item for the checklist. First, there should be a check of the legal record of public rights of way (known as the Definitive Map and Statement) and then a site survey to identify any evidence of public access, especially any at odds with the legal record.

Problems can be two-fold. Firstly, a lack of visible evidence of a recorded public right of way does not diminish its existence in law. The maxim: 'once a highway, always a highway,' warns that lack of use of a route, or even its previous obstruction by a building, lake or destruction by a quarry, has no impact on its legal status or location.

Conversely, informal use of an unrecorded route can mean that a new public right of way exists. Such a route will have the same status and protection as one recorded on the Definitive Map. In such cases the matter sometimes only comes to a head when the site boundary fencing challenges the public's right of way. What follows in an application to the highway authority by the users for the addition of the route to the Definitive Map, effectively blighting the affected part of the site until the matter is resolved.

Public rights of way legislation is complex and archaic. Dealing with recorded or claimed routes after a development has started, or even finished, is time consuming, expensive and carries no certainty of outcome. An astute developer collects the information needed and manages the situation from the outset. While dealing with a route can be demanding, selling houses with a public footpath through the kitchens and sitting rooms can prove impossible.

Carol Ramsden is a senior associate at solicitor Birketts LLP

THE VIEW FROM THE SITE

Mike Lomax from Tarmac looks at how to change building site culture when it comes to dealing with the thorny issue of dealing with waste on construction sites



WASTING LESS CEMENT

While we can wax lyrical about the variety of products out there that are more sustainably-made, reducing waste starts on the building site. We already know that changing one simple practice can reduce waste by 11 per cent. This is the practice of buying 25 kg bags of cement and splitting them in half with a spade for a standard general purpose (1:5) mortar mix. Cement is often wasted spilt when the bag is split, and the remaining cement is exposed to the elements.

This left-over cement "goes off" if it is exposed to the weather and not used straight away, which creates a problem. Waste cement is an irritant, and in large quantities must be disposed of as hazardous waste. Swilling it down the drains with a hose pipe can come back to haunt builders when the cement sets. Any leftovers should instead be tipped onto a board and left to go hard before being disposed of.

Most local authority waste transfer and recycling sites will accept limited amounts of construction and demolition waste. Skip hire companies can also dispose of (DIY) waste cement and other construction waste, but for all sites, producing less waste in the first place is a much less expensive option.

WASTE NOT, WANT NOT

Buying smaller bags of cement which have the right amount for a mortar mix for example, eliminates the problem of wasting cement from splitting bags open. This also means that builders can order the exact quantities that they need, as they know that one bag creates one batch of mortar, rather than getting caught short or over-ordering.

INDUSTRY INCENTIVES

The construction industry is turning increasingly towards sustainable and green solutions, and builders need to understand the origin of the materials they use and ensure they're responsibly sourced, in line with industry standards. Also, many building and construction firms have sustainability targets to meet, and receive extra credits for using low environmentally impacting materials. With the industry incentivising builders, it will get much easier to be greener and reduce waste.

CAN WE FIX IT?

As builders face increasing pressure to champion sustainable construction methods, it is vital they select and use responsibly sourced building materials (BES 6001). This will help to meet building legislation and add real value to their business. The construction industry is awake to the needs of builders to produce less waste, and is innovating to ensure that products can help builders to achieve this and hit their targets. Builders should keep up to date with all developments to ensure they are using the products most suited to their needs.

Mike Lomax is marketing communications manager at Tarmac

THE CONSTRUCTION INDUSTRY IS TURNING
INCREASINGLY TOWARDS SUSTAINABLE AND GREEN
SOLUTIONS, AND BUILDERS NEED TO UNDERSTAND THE
ORIGINS OF THE MATERIALS THEY USE AND ENSURE
THEY ARE RESPONSIBLY SOURCED

High style at **Docklands** development



s featured on this issue's cover, the latest properties have been released for sale at Wardian London, a development in Millwall by Ecoworld Ballymore.

The newly released two-bedroom 'Hortorium' apartments will have their own individual garden terrace up to 37.2 m² in size, looked after by an onsite gardener.

The atria and communal

areas in the buildings, including the swimming pool, will be surrounded by greenery, with over 100 different species of exotic plants for residents to enjoy.

Situated close to Canary Wharf, Wardian London is inspired by botanicals and the legacy of Nathanial Bagshaw Ward. A doctor, Bagshaw Ward created the 'Wardian case' to transport exotic plants back to the UK during the British Empire.

Designed by Glenn Howells Architects, the architecture adopted on Wardian incorporates nature, with every apartment featuring a beautiful sky garden. These will slowly transform with the seasons, promoting an enhanced sense of wellbeing.

1,100 lpswich homes approved



resolution to grant planning permission for Henley Gate, a large mixed-use development in Ipswich, has been received by Crest Nicholson.

The developer's proposal will deliver a new neighbourhood modelled on garden suburb principles. The scheme

will provide 1,100 homes, in addition to a 30-hectare Country Park with a visitor centre, a local centre, a two-form entry primary school, sports pitches, a community centre and retail units. Around 15 per cent of the homes, expected to be 165 units, will be allocated as affordable housing and available on a joint equity scheme.

Andrew Dobson, managing director for Crest Nicholson Strategic Projects, said the company was "thrilled" to able to move ahead with the plans.

The Henley Gate scheme is supported by a draft allocation in Ipswich Borough's Local Plan and is the first neighbourhood to receive a resolution to grant planning permission from the wider Ipswich Garden Suburb scheme, which will ultimately provide up to 3,500 new homes.







AMBITIOUS PLANS ARE
UNDERWAY TO DELIVER 10,000
NEW HOMES, CREATE 5,000 JOBS
AND 1 MILLION SQ FT OF
EMPLOYMENT SPACE BY 2025



THE WALLS OF APIS COR'S
HOME HOWEVER WERE PRINTED
FULLY ONSITE, BACKING ITS
CLAIM AS THE WORLD'S FIRST
3D PRINTED HOUSE

Revitalising Purley

n example of how landmark developments can be the key to revitalising communities, while acting as an anchor for larger regeneration projects, is the upcoming mixed-use development Mosaic Place in Purley, Surrey.

Located on a south London brownfield site, which had stood empty for three decades, Mosaic Place is intended to transform Purley into a local 'hub'. In addition to a 17-storey residential tower, the scheme will also include a new sports centre, retail and parking facilities, a 500 seat auditorium, and 220 new homes (39 of which are affordable).

Having secured planning permission from Croydon Council on behalf of Purley Baptist Church and the Thornsett Group, Nexus planning identified key benefits that the project could bring to the area.

The scheme's tower will occupy the only site earmarked for a tall tower in the Purley district, under the London Borough of Croydon's local plan. The developers hope that the project will greatly enhance the local area's commercial and leisure offering, providing Purley with "a new sense of place and purpose."

Marlon Johnson, chair of Purley Business Improvement District, commented on the project: "The Island site has stood empty for too long, and is in need of regeneration."

He said: "Mosaic Place will not only bring the site back into use," but will "help drive shoppers to the high street and show that Purley is open for business."

The community were a strong driving force behind the plans, best demonstrated by the \$5m donation from the congregation of Purley Baptist Church. Dr James Collins, senior minister at the church, said the donation was "motivated by a deep desire to bring renewal to the heart of our community."

As with any such project, some local residents were understandably apprehensive about disruptions caused by construction works and the transformation of a familiar area. While it is often difficult to strike a balance that is pleasing to all, it falls to the applicants to communicate the outstanding benefits these developments can have. In undertaking this task, Thornsett group, working with their partners (including Nexus planning), were able to raise support from key local organisations, such as Purley and Woodcote Residents' Association and Purley Business Improvement District.

A home in 24 hours

house in Russia has been 3D-printed in 24 hours, by specialist company Apis Cor. The firm, based in Russia and San Francisco, built the house using a mobile printer on-site.

The project cost just over \$10,000 to build, including the foundation, roof, exterior and interior finishing, wall insulation, windows, floors and suspended ceiling. The building is located on one of the company's sites in Russia.

Apis Cor has reported that the house will last up to 175 years. The compact home includes a hall, bathroom, living room and kitchen, and in total spans about 38 m².

Previously, 3D-printing offsite was difficult and costly. It also subsequently required assembling on site, with only sections at a time being printed. The walls of Apis Cor's home however were printed fully onsite, backing the company's claim for it as the world's first 3D printed house.

The technology consists of a mobile construction 3D printer and an automatic mix and supply unit. These are combined to automate the construction process as much as possible.

Cost efficiency never looked so good

Calor gas gives developers a low-cost, hassle-free energy solution that provides rural homes with all the benefits of mains gas:

- Average installation costs of £500 per plot
- Underground tanks improve site aesthetics
- LPG boilers fit easily within standard house designs

Call us today on **0345 6038095** to find out more about the benefits of Calor gas for housing developments without mains gas.



Breaking ground on 200-home Perth scheme



THE NEW COMMUNITY
WILL FORM AN
IMPORTANT PART OF THE
REGENERATION OF THE
SITE AT MUIRTON, AND
FOLLOWS EXTENSIVE
COMMUNITY ENGAGEMENT
IN THE DEVELOPMENT OF
THE MASTER PLANS

rban Union, in partnership with Caledonia Housing Association and Fairfield Housing Co-operative, has marked the beginning of its new largely affordable homes development on the outskirts of Perth.

Councillor Dave Doogan (pictured right), Housing and Health Convener for Perth & Kinross Council, broke the soil with a gold spade, marking the start of the final phase of the Muirton site.

An audience of local councillors and representatives from the surrounding schools were also in attendance to support the occasion.

The site, next to the original St Johnstone F.C. home ground at Muirton, will see a total of 203 new houses built in the project, including 102 affordable homes and 101 for private sale.

Neil McKay, managing director of Urban Union, told Housebuilder & Developer that the acquisition of the Muirton site was "through a competitive tender process," and "bidders were evaluated not only on price, but on design, project management and added value."

He said the challenges in acquiring the site were therefore "to balance to the commercial and quality aspects of the tender, adhering to the existing masterplan while delivering value, applicable design and tangible benefits to the community."

A COMMUNITY FOCUS

McKay commented that there was a strong focus on community aspects in the projects the developer gets involved with: "At Urban Union, we don't just build homes, we build communities," adding "local engagement is a major priority for us."

"One of the main ways we do this," said McKay, "is by developing an arts strategy, which is then implemented in each of our locations – Pennywell (Edinburgh), Laurieston (Glasgow) and Muirton (Perth). This involves working closely with local residents and the local council so we contribute to enhancing the area."

Asked how the local community has reacted to the scheme, McKay told

Housebuilder & Developer that the response was "positive," explaining "there was a warm initial reception when planning permission was granted, and we received great local support at the official start of the project."

He continued: "From the outset we have tried to engage with people in the area, and used the fact that the site sits on the old St Johnstone FC ground as basis to run a competition in the local paper, which gave people the chance to name the new houses we were planning to build."

The multi-million pound project was granted planning approval by Perth & Kinross Council in July 2016, with Urban Union appointed by Caledonia Housing Association to deliver the new homes.

TRANSFORMING MUIRTON

A wide range of accommodation types will be on offer, with one, two, three and four bedroom properties available. Each property comes with either private or shared gardens alongside attractive outdoor space and car parking facilities.

Grant Ager, chief executive at Fairfield Housing Co-operative, said the company was "proud to see this milestone being reached," and that, having been involved in the project for over a decade, "it's rewarding to see the fruition of the master plan created by the Muirton Community all those years ago."

He continued: "The area has changed completely, and is now a highly desirable place to stay. The partnership approach adopted by Fairfield, Caledonia, Perth & Kinross Council and the Scottish Government has been highly effective."

Grant added: "We have great confidence in Urban Union, not only in completing Muirton Park, but in giving the added value that large-scale construction affords in employment and training."

The new community will form an important part of the regeneration of the site at Muirton, and follows extensive community engagement in the development of the master plans.

The project is scheduled to be completed by the end of 2018.

Designer Contracts continues to expand



UK flooring contractor, Designer Contracts, has expanded its regional facilities in the North West, North East and Scotland. The North West has now increased its current warehouse and office space to include an adjacent unit. The North East has almost trebled in size; having out-grown its previous

location the move to much larger premises will accommodate its growing business. And Scotland has taken an additional unit at its current location. The expanded regions now have additional high rise carpet racking, giving a considerable increase in the amount of storage space.

01246 854577 www.designercontracts.com



The Grundfos SCALA2 is second to none



Grundfos SCALA2 is a new compact, variable speed, water booster pump that has been specifically designed and built to deliver perfect water pressure to wherever it is needed in the home. Recently launched and WRAS approved, each unit is a fully integrated water booster pump that will provide the perfect water pressure to up to eight water outlets – even

with multiple taps and showers running at the same time. The SCALA2 combines the pump, motor, tank, sensor, drive and non-return valve in one neat package. The units also offer intelligent pump control as they adjust their operation to ensure perfect water pressure at all times.

01525 850000 www.grundfos.co.uk



Norbord launches new nationwide campaign



Following a successful 30th birthday year in 2015, 2016 also saw great results from the nowestablished SterlingOSB brand campaign; sales increased by 24 per cent. The new offering continues in the same successful vein with a new campaign designed to optimise sales of the stalwart panel through builders' merchants in 2017. The industry-wide, national A Great Deal Better campaign

again gives builders and merchants alike the tools they need to maintain the Sterling job in 2017 and encourage sales. Designed to highlight SterlingOSB's strengths in a host of general construction tasks, Norbord's 2017 campaign comprises nationwide advertising and POS support along with PR activities in the media and in branch.

Innovative design provides solution



Metropolitan, a leading independent energy and utility provider, has provided a solution to the problematic wastewater requirements of Castle Hill, the new town being built in Ebbsfleet, Kent. By designing and building an onsite, above-ground wastewater treatment plant, Metropolitan has resolved cost and

technical issues, maintaining the area's protected groundwater status, as stipulated by the EA, thus enabling the development to progress. The onsite plant will deliver a controlled release of treated wastewater, meeting EA exacting standards to protect the environment. The plant should be fully operational by late 2017.

01359 758757 www.met-i.co.uk



Proud to help Rachel get home for Christmas



When The VEKA UK Group heard, last year, how a Bedlington woman was left stuck in hospital after a devastating fall, the team were keen to help. Rachel Rudd, whose husband Darren works for Renolit, fell down the stairs at their home in April. Rachel suffered severe bruising to her spinal cord; which sadly left her

paralysed from the shoulders down. Darren tried to secure a grant to cover the cost of modifying the house to Rachel's new circumstances, but was unsuccessful. The VEKA UK Group quickly offered to provide the PVC-U profile required, and VEKA customer BMW Windows kindly volunteered to fabricate and install the new windows and doors free of charge.

01282 716611 www.vekauk.com



Vent-Axia wins at prestigious CIBSE Awards



A leading British ventilation manufacturer Vent-Axia is celebrating winning 'Energy Efficient Product or Innovation of the Year' at the prestigious Chartered Institution of Building Services Engineers Building Performance Awards 2017. Scooping the award for its revolutionary Sentinel Kinetic Advance Mechanical Ventilation

with Heat Recovery (MVHR), the Sussex-based company received the accolade at Grosvenor House, Park Lane. The Judges were impressed by the Sentinel Kinetic Advance's ingenious use of very modern technology, its ability to 'deliver strong performance' as well as 'ease of installation' and that internally it is made from all recycled materials.

0844 856 0590 www.vent-axia.com



The Burning Issue



UK tax payers may have been subsidising power stations to burn wood in a way that creates more carbon emissions than burning coal, says Norbord, a leading UK manufacturer of engineered wood panel products. Although burning wood is often hailed

as being a sustainable source of energy, the Government report, 'Life Cycle Impacts of Biomass Electricity in 2020', confirmed the potential for a negative environmental impact. Norbord is raising the issues surrounding the misuse of wood and the message that prioritising reuse and recycling ahead of burning for energy delivers clear and tangible benefits in respect of resource efficiency, carbon storage and employment.





Encon Insulation is delighted to announce that it has been named Supplier of the Year at the South West Redrow Awards. The regional Redrow Awards honour firms that have done great work in the industry. It also recognises companies that are committed to sustaining and enhancing local communities around

the country. Encon Insulation was named Supplier of the Year, an acknowledgement of its outstanding contribution as a buildings material provider within Redrow's supply chain. During the last 12 months, Encon Insulation has supplied a range of products to multiple major Redrow projects both nationally and regionally.

01937 524200 www.encon.co.uk



PRODUCT FOCUS



Hambleside Danelaw

Hambleside Danelaw is excited to announce the launch of its new environmentally friendly, lead alternative flashing, Fast Flash! Designed with a fully self-adhesive reverse to minimise waste, Fast Flash is 50 per cent quicker to install than lead, extremely flexible, malleable and requires no specialist tools to fit. Fast Flash can be installed on most common roof coverings and multiple applications, including; valley head and eaves; wall abutments; chimney perimeters and dormers and rooflights. For more information contact Hambleside Danelaw. Eng. 118



HiB

With a license to thrill retailers and consumers, HiB's latest innovative mirror collection, Spectre, showcases the ultimate in luxury, style and practicality.
Featuring a decorative mirror profile and unique mirror-on-mirror design complete with chamfered LED lighting between it, the Spectre range has a striking style and includes lighting which changes from warm to cool white light. It's also fitted with a heated pad to de-mist condensation from the centre of the mirror.
Spectre is available in H70 x W50 x D5cm, H60 x W80 x D5cm, H80 x W60 x D5cm and H60 x W100 x D5cm

Enq. 119



SIPS@Clays

Established over 12 years ago by lan & Alison Clay on the back of the family house-building business, SIPS@Clays has established itself as one of the leading suppliers of SIPs in the UK. Using the Kingspan TEK Building System they design, engineer, fabricate and erect the SIPs from their factory at Skipton in North Yorkshire. Over the years they have worked in many sectors including self-build homes, private residential developments, extensions, schools, medical centres, offices, outdoor pursuit's centres and even a temporary cathedral! The company has numerous case studies to view on its website.

Eng. 120

Numbers you can trust

All too often advertisers accept publisher's statements on their performance. Our ABC Certificate shows we have been independently audited and gives added credibility to support our claim.

Justify your marketing spend and get the exposure you've been promised. As you can see from our ABC Certificate our circulation is 15,000 for every issue.

See it, believe it, trust it.

To advertise, call 01435 863500 or email advertising@netmagmedia.eu





For more information visit www.abc.org.uk or email info@abc.org.uk

HOUSEBUILDER & DEVELOPER

Mulberry Grove features Vortice Quadro fans



High specification was uppermost in the mind of developer Walton Homes when it was deciding on the best way to ensure great indoor air quality at its latest development Mulberry Grove in Little Aston, Walton Homes works with the Vortice technical team to ensure the most

efficient ventilation systems for its new properties and the choice for Mulberry Grove was Quadro, a range of centrifugal extractor fans for the ventilation of medium or large rooms including bathrooms, showers, toilets, utilities and kitchens. The Vort Quadro has 13 models to choose from, with inbuilt and surface mounted installations possible.

01283 492949 www.vortice.ltd.uk



Fans detained in police station!



Polypipe Ventilation, manufacturer of energy-saving domestic ventilation systems, has had its Silavent Sapphire dMEV (Decentralised Mechanical Extract Ventilation) centrifugal fans specified

and installed into a highly unusual new residential conversion – a former police station in Harrogate. As part of the conversion, energy efficient heating and ventilation has been installed throughout. This includes Silavent Sapphire dMEV centrifugal fans to provide continuous ventilation to bathrooms. Silavent Sapphire centrifugal dMEV fans boast excellent performance and contemporary design, at an affordable price. The Sapphire dMEV was the natural choice for a project where the latest ventilation technology and heritage are paramount.



Marmox Showerlay³⁶⁰ Drain

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 is fully rotatable to enable use in horizontal as well as vertical outlet connections – or any angle in between - for total flexibility. For even greater ease and adaptability of installation, the compact drain measures just 80mm deep with a 50mm water seal. It can be utilised with both of Marmox's Showerlay trays, which are tileable sloping bases for a shower area on either a wooden or concrete sub-floor. Two options are available: a 20mm or 24mm version which is supplied with a traditional square drain or a 40mm thick version which features a stainless steel linear drain. Both can be used to create level access showering areas, or wet rooms.

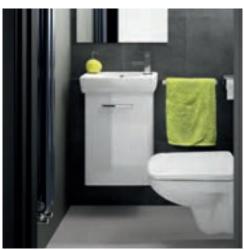
01634 835290 www.marmox.co.uk





Innovative bathrooms for modern living







Whatever style of home you're building, the bathroom is one of those key elements that can make all the difference. Whether it's outstanding choice for bathrooms on a budget, or clever features to make the most of every inch, Twyford have inspirational designs to suit every size, shape and style of bathroom. Long lasting solutions for modern living.

For a brochure call 0800 007 5133

Email: twyford@web-response.co.uk or visit: www.twyfordbathrooms.com



One-stop shop wet room kit experience



AKW - a leading UK manufacturer of accessible bathroom and mobility support solutions for older people, the disabled and people with reduced mobility – has proven itself to be the go-to company for robust, leak-proof, reliable wet room solutions. Expanding its already extensive

range still further, AKW has used the latest design techniques and exceptionally high grade materials to further enhance its popular TuffForm wet room formers. AKW's ultra-strong TuffForm wet room formers now support up to 60 stone in weight, which means they can accommodate a user with a wheelchair and two carers.

01905 823 299 www.akw-ltd.co.uk



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 brickeffect FastStack chimney, can also be built to match virtually any brick type blending seamlessly with existing brickwork.

0844 736 0350 www.ibstock.com





Simpson Launches BIM Library

Leading construction connector manufacturer Simpson Strong-Tie is pleased to announce that a wide range of high quality Building Information Modelling (BIM) content is now freely available for download from its website.

Hundreds of 2D & 3D Revit files containing item codes, dimensions and links to the product web pages have been added to our already extensive CAD library, providing the data you need for our timber, masonry and steel connectors in an easy to use format.

lan Harrison, European Technical Director for Simpson Strong-Tie says, "With Building Information Modelling set to shape the future of construction, we've made it a priority to ensure we meet our customers' BIM requirements. Our Revit files are compatible with a range of CAD software packages, making it really simple for specifiers and construction professionals to include our extensive range of connectors in their 3D building models."

BIM Revit files can be found in the resources on the website.

01827 155600 www.strongtie.co.uk





Shop now at glendining.co.uk



Building it better at Bridgewater Road



Building contractor T G Sowerby Limited has selected a range of products from Catnic's new Thermally Broken Lintel range, for an eco-friendly social housing development in Scunthorpe. Bridgewater Road will be the first major development in the UK to benefit from the company's new lintels, which deliver industryleading Psi values. The project also calls for bespoke, 150mm wide cavity lintels, which are being specifically manufactured to help provide a high performance solution. Bridgewater Road is

scheduled for completion in May 2017.

0292 033 7900 www.catnic.com

SolidGear and ToeGuard's new catalogue



Packed with the very latest information about market-leading safety footwear technology. The 2017 Product and Price Catalogue has full details of the complete range of the UK's most stylish Safety Shoes, Boots and Trainers from Hultafors UK's own SolidGear and ToeGuard brands. With four very different types of products there's a product to suit almost every footwear need on site. There's also loads of other information on all the important product features -

Comfort and Safety, Fabrics and Linings, BOA System Technology, Caps and Plates, Water Repellency, Oil- and even Heat-resistance – to get you working and walking safely, effectively and in comfort wherever you are on site – and whatever trade you're in.

Snickers Classic Series 3 WorkTrousers



A classic to rely on with superb fit and functionality – whatever work you're doing on site. Available in a choice of hard-wearing, but comfortable DuraTwill, Canvas+ or Rip-Stop fabrics from Snickers for longlasting durability, the stylish cut in these garments has an advanced Twisted Leg design for a modern fit that delivers outstanding working comfort in every move you make on site. The tough Cordura reinforcements on the knees and inside the holster pockets give extra

durability, while the kneepad pockets are designed for the special KneeGuard positioning system for superior protection and comfort. With styles for both professional tradesmen and women, the trousers also feature a range of handy pockets.

Time-saving ceiling grid: another innovation



The recently introduced **Knauf** Slimgrid suspended ceiling system promises a 30 per cent reduction in installation time: a promise that has now been fulfilled in early UK installations. The speed secret is contained in the patented click feature clip design, a quick and simple method of connecting components during installation. This,

coupled with pre-punched slots for accurately spaced grid installations without the need for measurement and alignment on site, makes for quick and hassle-free installation that is welcomed by contractors. Knauf Slimgrid is a concealed grid system for plasterboard ceiling linings which provides a low-void ceiling ideal for maximising room height.

01795 424499 www.knauf.co.uk





STAIRS &



















PRECAST BUILDING SOLUTIONS

FP McCann is the UK's largest supplier and manufacturer of precast concrete solutions. Our 12 modern manufacturing facilities give us an unrivalled ability to serve the construction industry throughout the UK and Ireland.

LINTELS 01335 361269 / 028 6772 1286 STAIRS/LANDINGS/FLOORING 01335 361269 SALES@FPMCCANN.CO.UK | FPMCCANN.CO.UK

Get creative with colour



Freefoam, a leading manufacturer of a wide range of innovative products for the building industry, announces the launch of a brand new colour roofline visualiser – an online tool to help choose the colour of fascia, soffit and guttering that is right for any project. A clear image of a roofline installation enables users to simply select from a colour swatch and get an instant representation of each colour on every element. With a wide range of solid colours and a stunning choice of

woodgrain finishes Freefoam now gives you the ability to bring colour to life before your eyes.

01604 591110 www.freefoam.com



Boxed rooflight specified for clock tower



Situated within the converted clock tower of the former Lancaster Moor Hospital, Glazing Vision's three wall box rooflight was key to unlocking the spectacular views from the triplex apartment. The former asylum has been transformed as part of a multi-million pound housing development by the PJ Livesey Group. Initially, Glazing Vision's Skydoor rooflight was specified before PJ Livesey decided upon their innovative box rooflight, which was seen as offering superior head height and removed the requirement for installing a

balustrade around the opening. Find out more about specifying box rooflights or download our Part K whitepaper.

01379 658 300 www.glazingvision.co.uk





RENOLIT EXOFOL PX Light Ivory

RENOLIT EXOFOL PX Light Ivory is added in to the RENOLIT exterior grade range as a stock range item. Light Ivory which is a yellowy cream colour (similar to RAL 1015) is a complementary addition to cooler Ice Cream B and warmer Cream White widening the scope for designers, home owners and installers. Cream windows have universal appeal creating a sophisticated and pleasant installation which suits both traditional and heritage windows alike and also most building exteriors from stone, buff, red or multi-brick. Windows in this colour area have the ability to portray an elegant high quality image which has led to the demand for cream coloured exterior films increasing year on year. Ivory Cream produced as a RENOLIT EXOFOL PX grade material is a patented advanced exterior film which also benefits from the addition of SST (RENOLIT's solar shield technology). RENOLIT EXOFOL PX was developed to enhance weatherability, reduce heat build-up and extend guarantees.

01670 718222 www.renolit.com/exterior/en/sample-ordering













Enq. 139

Enq. 140



Made to inspire

The Made to Measure range from JELD-WEN

Bring projects to life with our Made to Measure timber windows, external doorsets, patios and staircases – made to the exact size and specification.

To find out more visit www.jeld-wen.co.uk or call 0845 122 2892

to discuss your specific project requirements.



Then fitting out homes, there are of course many different factors to consider. One element that doesn't always get the attention that it deserves is a development's choice of doors.

It's a well-documented fact that consumers judge a home on first impressions, and given that buyers are likely to regularly use most if not all doors in the house, it's no surprise that housebuilders and developers want to find the most desirable doors for their target market.

Just like any other market, door designs are subject to consumer trends and it can be a careful balancing act between installing doors that have the most buyer appeal and taking care not to rack up the costs and bust the budget.

Traditionally, housebuilders have always defaulted to moulded panel doors 'as standard.' Over the last five years however, developers have begun to demand distinctive designs, seeking out doors that will really catch the consumer's eye. A door can heavily impact the look and feel of a home, as well as influencing an individual's buying decision.

PAINTED FINISHES

Painted finish doors are rapidly growing in popularity, particularly because they are available in many colours (mimicking wood veneers) - in addition to a uniform finish - ensuring that a housebuilder can co-ordinate the colour with their property's interior.

Alternatively, the housebuilder or buyer may choose pre-finished white doors. The fresh, clean look of white doors combined with a wide range of stylish designs and cost effective options means that they are a regularly sought-after choice for buyers and builders alike.

LAMINATE AND TEXTURE

There is a growing desire to move away from painted doors, while staying within the same budget range. Laminate doors can provide the answer, offering different colours and a uniform finish. Unlike their painted counterparts, many laminate doors also offer a timber grained textured effect. With the trend for texture permeating into every aspect of interior design, such textured doors are becoming increasingly popular. Laminate doors are only one type of textured door; many other varieties on offer, such as a moulded ripple effect.

POCKET DOORS

The demand for pocket doors has increased in the last few years, with both buyers and builders craving more space within the confines of the same square footage. Happily, developers don't have to compromise on design as most doors can be converted easily into a pocket door system.

This means that a consumer or

IT'S WHAT'S INSIDE THAT COUNTS

Most doors purchased in the UK are for the interior of a property. JB Kind's Simon Johnson reveals how specifiers can now match doors precisely to properties and capture that all-important interior appeal.



DRAWING IN NATURAL LIGHT THROUGH GLAZED DOORS IS ONE WAY TO GIVE PROPERTIES THE 'WOW FACTOR'

housebuilder's choice is not limited, and the ability to create private spaces alongside an open plan environment is certainly a vote winner.

NATURAL LIGHT

Drawing in natural light through glazed doors is certainly one way to give your properties the wow-factor. Historically, developers have been cautious about offering glazed options because they tend to have a slightly higher price tag than a standard door. However, in terms of encouraging a sale, glazed doors are a winning combination. With a range of glazes available, consumers can still have their privacy as well as their natural light, and this light can make a property far more appealing.

TIMBER VENEERS

If a development is targeted at a more affluent market, timber veneers alongside higher quality fixtures and fittings are likely to be the most popular choice. Oak and walnut finishes have a track record of being popular with a wealthier demographic, offering a striking first impression.

DISTINCTIVE DESIGN

Housebuilders often find that providing buyers with a wider choice of doors can add



value to their sale. They may choose to offer a particular type of door as standard, but also provide a selection of upgrade options. This can encourage a buyer to create a personalised vision for their home.

Most door firms offer a range of bespoke options, that can in turn be offered to the purchaser. For example, you can change

veneers on different door designs, change the types of glaze and even create pocket, bi-fold and fire doors, should the buyer wish. Offering such a wide range of options without an impact on your budget will certainly set you apart.

Simon Johnson is sales director at JB Kind Eng. 142



Affordable wooden looks with Deco Paint

Garador's hugely popular GaraRoll roller door comes in an assortment of colours, with a breadth of choice for specifiers and homeowners alike. There are nine colours and two timber effect finishes for GaraRoll; the latter applied using a foil coat. But the timber effect is now also available in Deco Paint, a style offering real timber effect but with a serious cost advantage over the foil coated options. Using the latest paint technology, the Deco Paint finish has been designed specifically to cover GaraRoll's aluminium laths enhancing their durability and appearance. Rosewood and Golden Oak are the two timber effects on offer in the GaraRoll range; shades designed to complement both modern and traditional homes. The Deco Paint finish comes at a significant cost advantage and with its hardwearing timber effect, GaraRoll doors supplied in this colour are an excellent new choice for new builds and existing garages across the UK.

01935 443794 www.garador.co.uk



3 things Theresa May's strategy was missing

Government's latest attempt at an 'industrial strategy' looks good on paper but still lacks some fundamentals needed to turn the UK into Singapore without the sunshine. This is the view of Michele Wietscher, Director of Newview Windows and Conservatories – a home improvement company based in Worthing. Theresa May's announcement is designed to boost the UK economy post-Brexit and comes at a time when regional leaders across the UK are mapping out their own regional strategies. The strategy includes a commitment to invest in science, research and innovation; a new emphasis on vocational skills for non-graduates and investment in the poorer regions of the country. But Michele says that although it included sensible ideas, it lacked three key fundamentals that are necessary to boost productivity in the UK economy. Michelle comments: "What I would have liked to have seen alongside the big-ticket items is a plan to tackle the UK's housebuilding crisis, as the country fell well below its 2016 target of 240,000 homes. Secondly, I would have expected more focus on the need to equip students with business skills and thinking at an earlier age. There was an emphasis on vocational skills for non-graduates but I believe it needs to go further."

01347 825200 www.itpltd.com



FULLY RECYCLABI LOW DOOR

LOW WINI

WEATHE









PURe **GENIUS**

Future-proof your building

The patented PURe® aluminium door and window range incorporates high insulation polyurethane foam (PUR) as an innovative thermal barrier - preventing cold from getting in and heat from getting out.

PURe® aluminium doors and windows exceed current and will meet future Building Regulations, with U-values* as low as 0.71 W/m²K for windows and 0.93 W/m²K for doors; making it the perfect choice for both domestic and commercial applications.





Find out more and request a sample www.seniorarchitectural.co.uk/pure





VBH launches new 'Coastline' range



Hardware specialist **VBH** has added a new range of stainless steel door hardware to its greenteQ range. The suite will be branded 'Coastline'. greenteQ Coastline comprises 92PZ door handles, letterboxes, butt hinges and door knockers and has been developed in direct response to feedback from customers who required a stainless steel

furniture suite for installations in aggressive coastal and/or industrial regions. All Coastline furniture is produced from corrosion resistant and hard-wearing austenitic stainless steel and is subjected to in excess of 1000 hours neutral salt spray testing to BS EN ISO 9227:2012.

01634 263300 www.vbhgb.com



Tracey Ervine provides the best customer care



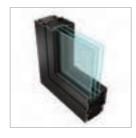
Victorian Sliders have promoted Tracey Ervine to fulfil a newly-created role of Customer Care Manager, based at the company's manufacturing headquarters in Carmarthenshire, South Wales. Having studied extensively at Neath Port Talbot College and Swansea University and gained post-graduate qualifications at the

University of South Wales, Tracey's work experience as a former Assistant Tutor at Swansea University and a Project Assistant at local South Wales charity community resource centre Canolfan Maerdy has well-prepared her for this dynamic new hands-on role at Victorian Sliders.

01269 846200 www.victoriansliders.co.uk



Innovation delivered



Comar 10 offers a new departure; a Passivhaus Certified 'B' product with U-values as low as 0.66 coupled with processes that cut manufacturing costs by up to 70 per cent. The Comar 10 window range includes: inward opening, tilt & turn and fixed lights and are internally beaded and glazed; U-values as low as 0.66 W/m2K; cut manufacturing costs by 70 per cent; certified

by Passivhaus Institute for cool temperature areas; future-proof & energy saving; high thermal insulation with ground breaking technology; 90mm deep outer frames and minimal care & maintenance.

020 8685 9685 www.comar-alu.co.uk



Charcon landscaping products BIM-enabled



The Charcon range of more than 200 commercial hard landscaping products has been delivered to market BIM-enabled, almost a year ahead of the government's June 2016 deadline. With the largest and most varied BIM-enabled product offering in the commercial hard landscaping sector, Charcon has ensured that it is best placed to meet the needs of those specifiers who have adopted the

technology ahead of schedule. BIM documentation for these products can be easily downloaded from the Aggregate Industries website. For more information, please visit the company website.

Window security - a clear solution

By Martin Oates - Commercial Director with SE Controls



design requirement with all market leading systems tested to the PAS 24 standard to meet the demands of the Secure By Design

(SBD) initiative and Building Regulations Approved Document Q (ADQ).

Automated windows that are utilised for ventilation strategies will also need to comply to the standard, which requires the actuators to resist 3000N of negative force when the window is closed. This is becoming commonplace in applications such as school refurbishment where facade automation remains a popular and cost effective solution of providing improved ventilation performance over manually operated windows.

The SECO N 24 25 twin actuator from SE Controls has successfully passed the PAS 24 test and in addition to presenting physical resistance to intruders, it also provides a signal to the controller, should the window fail to close fully, to maintain the integrity of the security system, as requested by the SBD schools standard. Two locking points in one neat enclosure with programmable gasket relief optimise weather performance and security to meet BS 6375 parts one, two and three in addition to the PAS 24 test.

Bespoke fixing brackets and reinforcement to the window is often required to provide sufficient strength for the fixing, which is usually the weakest point of resistance, as the actuator provides two x 4000N of resistance to forced opening.

The ability to manufacture bespoke body lengths allows SE Controls to locate the locking points on different size windows exactly as tested, relative to the corners, to maintain consistency of performance and compliance. Test conducted with an actuator located at the centre of a vent will either not pass the test or can only be utilised for different widths.

Similar to EN12101-2, the fabrication and installation solution requires a process that is



audited by an independent notified body and must be re-tested annually.

If you have requirements for SBD or ADQ certified automated windows, please contact the SE Controls team for further information.

01543 443060 www.secontrols.com

Eng. 151



COMMERCIAL AND RESIDENTIAL HOUSING WARRANTIES

10 Year Structural Warranties backed by A Rated insurer for any sized project

- New Homes
- Custom and Self Build Homes
- Social Housing/ Commercial Projects
- Housing already under Construction or Completed
- Renovation/Conversion/Distressed and Receiver Projects



Call the Build-Zone team on 0345 230 9873 or visit www.buildzone.com



WE OFFER A TRANSPARENT & CREDIBLE ALTERNATIVE TO NHBC BUILDER REGISTRATION

WE ARE CRL.



NO SECURITY REQUIRED

EARN UP TO

100

DISCOUNT WITH LOYALTY
CASH REWARDS*

* BASED ON 5
YEAR LOYALTY

Join the CRL Approved Network for:

- Simple, flat rate membership fees
- Listing on the CRL Approved Network Register
- Free CPD training
- ♦ Loyalty cash rewards
- Branded Welcome Pack and marketing materials
- Dedicated customer service

UNLIKE CERTAIN COMPETITORS THERE IS

NO security required on sign up

NO extra fees applied for plot registrations

NO company grouping of SPVs

NO fees for cover you don't need

153

∜CRLAPPROVED

For more information or to sign up today

NETWORK

CALL 0808 252 5503 VISIT CRLAPPROVED.COM/SWITCH/AD

Luxigraze: a brand new artificial grass range



Launching for 2017, Natural Paving Products (UK) Ltd has introduced Luxigraze, a range of premium artificial grass and supporting installation, care and maintenance products to offer a complete low-maintenance landscaping portfolio. Currently available in four different specifications,

20 Premium (20mm pile height), 30 Premium (30mm pile height), 32 Luxury (32mm pile height) and 27 Super Luxury (27mm pile height), the Luxigraze range is composed of polyethylene (PE) monofilament with polypropylene (PP) texturized root zone, providing outstanding durability.

0330 333 8030 www.luxigraze.co.uk



Crest Nicholson chose NorDan



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

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

01452 883131 www.nordan.co.uk





Creative solution for reducing visual pollution

DW Support Services provide property maintenance to housing associations, local authorities and the private sector. When they began the refurbishment of a housing estate in Surrey, they chose Powerclad Vented Sheeting to create visually pleasing perimeter fencing for the project. "We recognise that reducing our impact during major works contracts is a significant issue for our clients and we are committed to playing our role in addressing it," said Ben Malton, Business Improvement Director at DW Support Services. Industrial Textiles & Plastics Ltd is the only supplier of scaffold and perimeter fence sheeting in the UK to offer in-house, largescale digital printing. "Having this facility means we can offer a quick turnaround on custom printing," explains Marc Van Der Voort, ITP's Managing Director. "There is no minimum order for digital printing, which opens up marketing opportunities for smaller projects and contractors." DW Support Services intend to roll out custom-printed perimeter fencing across other refurbishment contracts. "We've had very positive feedback from local residents and also the operatives working there, who are more engaged and find the site is a pleasure to work in," said Malton.

01347 825200 www.itpltd.com







Housebuilders and Contractors Construction Insurance Scheme

- Exclusive site based Liability and Contractors All Risks Insurance Scheme approved by Housebuilders
- Bespoke industry relevant wordings with cover enhancements
- In-house specialist Construction team
- Free interactive access to our Risk Solutions website









For further information visit www.mpwbrokers.com



Contact our Construction team directly at construction@mpwbrokers.com



7/8 Tolherst Court, Turkey Mill, Ashford Road, Maidstone, Kent ME14 5SF

Tel: 01622 683913

Authorised and regulated by the Financial Conduct Authority

Protek Structural Warranty for Builders & Developers



Structural Warranty solutions for the residential development sector

New Build | Conversion | Renovation | Extension

Go online for more information or call the warranty team.



www.protekwarranty.co.uk | 0845 217 7059



SHOW PREVIEW

FIT SHOW: THE SHOWCASE FOR GLASS & GLAZING

The FIT Show, the UK's premier trade exhibition dedicated to the window, door and glazed extension industry opens its doors at Birmingham's NEC in May. A showcase for innovation, products and services, it promises to be a mustsee event for housebuilding professionals.

indows and doors are constantly evolving and, as such, the fenestration industry has changed immeasurably over the past 30 or 40 years, with products that are increasingly more secure and energy efficient. With that in mind, the aspirations of homeowners have also become more demanding.

For professional housebuilders, the performance of windows and doors has always been important, thanks of course to ever more demanding Building Regulations and also because a warm and secure home is a big selling point. But while it's always made sense to ensure that they look as attractive as possible, it is now evident that consumers are more 'style conscious' than ever when it comes to their homes. They don't just want their windows and doors to keep them warm and safe, they want them to look good. In fact, they want to show them off!

It's a phenomenon that has perhaps become most apparent at the FIT Show, the UK's premier trade exhibition for the window, door and glazed extension market. The FIT Show, which first appeared in 2013, quickly established itself as an essential event for the glass and glazing industry, and while it primarily 'sells to itself', it is also a fantastic showcase for specifiers and designers of all types of residential buildings.

After a 2016 event that played host to some of the most important product launches seen in over a decade, including four entirely new window systems, the FIT Show promises to be bigger and better than ever for its next outing in 2017. The previous show at the Telford International Centre featured 180 exhibitors and was bursting at the seams, so a new home at Birmingham's NEC, which can accommodate closer to 250, has really given the exhibition space to grow. This of course means there's potential to not only discover more new companies, products and services, but explore more business opportunities as well.

Nickie West, FIT Show event director explains: "Exhibitions offer much more than just a platform to launch new product – everything is new to somebody. Having said that we do have a very large number of exhibitors launching new products and, of course, it's important to remember that around 30 per cent of the exhibition space (on current figures) will be occupied by companies who didn't exhibit in 2016 so there will be acres of 'new'."

So, whether it's to see new products and innovations, sample the expert seminar programme, or take the opportunity to meet new and existing suppliers, the FIT Show represents a fantastic opportunity for housebuilding professionals to gain an insight into all the fenestration market has to offer. And with 'Big Tuesday' being introduced for 2017 – which will see opening hours on the Tuesday extended to 8pm to allow more time at the show and for some to enjoy a more relaxed 'party' atmosphere – it could also allow them to sample the industry's famous social scene as well.

For more info and to register visit **WWW.FITSHOW.CO.UK** and follow Fit Show 2017 on Twitter for the latest news **@FITSHOW**

Introducing frameXpress Ltd



frameXpress Ltd is a leading trade fabricator with an established reputation for excellence, supplying premium windows, doors and conservatories to the building industry and self-building sector. The range includes a diverse range of 'A++' rated high performance pvc-u window, door and conservatory products with

aluminium options as well bifold doors and Guardian Roofing available. BSI industry standards, 16 colour foils, Composite doors, Secured by Design accreditations as well as tailored solutions make the portfolio a popular choice for builders and self-builders.

01952 581100 www.framexpress.co.uk



Flowcrete UK wins FeRFA Award



Flowcrete UK took home a coveted prize at the FeRFA Best Practise Awards 2016, winning the Highly Commended Small Industrial Project category in partnership with Resin Coating Specialists. The award, presented during a glittering ceremony held in the Woodlands Suite of the Belfry Hotel, was in recognition of a flooring project at Larton Livery, which was building a new, high-end cattery. Flowcrete

UK supplied 180m² of Flowfresh SL and 210m² of Flowshield FX, which was installed by Resin Coating Specialists over the course of a week. The robust characteristics of Flowcrete's industrial flooring range meant that the new finish would not deteriorate with the realities of daily use.

01270 753 000 www.flowcrete.co.uk



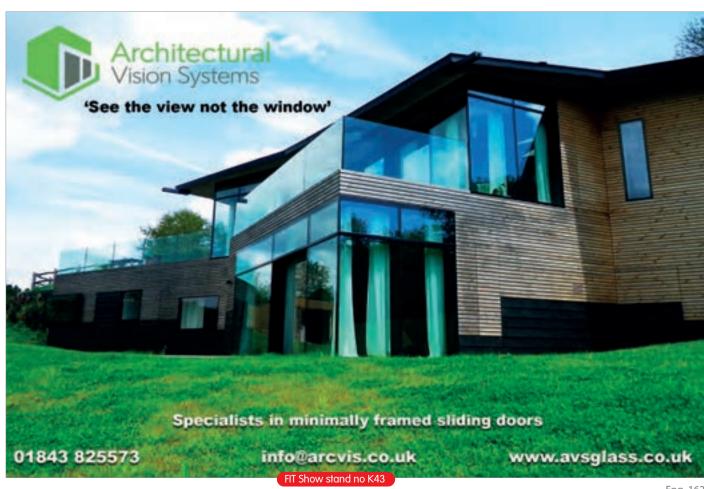


Stixall floors the rest

Stixall is a name already known and loved by many, and now **Everbuild** – A Sika Company bring you Stixall Multi-Purpose Wall and Floor Adhesive, designed to be trowel applied for larger surfaces. As you would expect from the popular brand, Stixall Multi-Purpose Wall and Floor Adhesive can be used to bond virtually all materials, even in wet and damp conditions. Trowel applied, it has many uses including bonding wood floor, tiles, lino, vinyl and hygienic panels to porous or non-porous substrates. Stixall Multi-Purpose Wall and Floor Adhesive is based on the very latest hybrid polymer technology, is totally water and solvent free and has an extended opening time of up to 30 minutes, allowing large areas to be covered and adjusted with ease. For more information on Stixall Multi-Purpose Wall and Floor Adhesive or any other product in the Everbuild or Sika ranges, contact your local sales representative.

0113 240 2424 www.everbuild.co.uk







LEVATO MONO porcelain paver system

The Levato Mono porcelain paver system is the pinnacle of external raised flooring technology; enabling the specification of lightweight, slip resistant and attractive raised flooring solutions, combining incredible technical properties with uncompromising aesthetics; making them the ideal choice for commercial and domestic use alike.

- 20mm porcelain pavers 40x80 45x90 60x60 75x75 30x120 40x120 60x120
- 'Floating floor' installation over single ply membranes
 Eternal product zero maintenance required offering massive over-life savings
- Highly abrasion and stain resistant
- Highly slip resistant; R11 and achieved up to +65 wet in the BS pendulum test

- Lightweight 45kgs per m²
 High load bearing and impact resistance
 Timber & stone effects; 40+ finishes available
- Completely non porous
- Ideal for balconies, roof terraces and piazzas, for both commercial and residential use
- Fire & frost proof
- Height-adjustable supports from 9mm up to 550mm

www.thedecktileco.co.uk

t: 0845 2700 696 e: info@thedecktileco.co.uk

The industry is finally starting to pivot from traditional design methods into the digital age – a shift that many say is long overdue. But what is it about BIM that's so appealing to the industry?

WHAT IS BIM?

Building information modelling is a process in which components of a building project can be manipulated and adjusted in the digital world. Each phase of the construction project can also be mapped out. There are a few programmes out there that operate BIM, including Revit, ArchiCAD, and Vectorworks, each of which help save time and allow for much more accurate work.

BIM has various 'levels of maturity.' Level 0 uses unmanaged computer aided design, Level 1 signifies managed computer aided design in either 2D or 3D, and Level 2 is that of building information in a 3D environment collaboratively with data attached.

SIMULATION

One clear advantage of working digitally in design is that it offers a much wider functionality set than traditional 2D drawing methods ever could. Using BIM software, a designer, engineer or architect can recreate real world elements like sunlight or the wear and tear that flooring endures. This simulation allows for a much higher standard of finish and can give consultants a much deeper understanding of how a building will react to real world elements.

Many flooring manufacturers also provide 3D building information modelling files, allowing a designer to visualise how a specific material will look in a completed project. A huge variety of products are available to download and use in BIM models, allowing a team to understand the exact quantities of a product they need to order and which product is best suited to their build. This also gives largescale housing developers an opportunity to try out different floors for both aesthetics and practicality in a virtual environment, rather than purchasing products to try in a real world project, which would be both costly and time consuming.

AUTO SAVES & CHANGE TRACKING

BIM software has the key benefit of allowing a user to track the changes in each model, meaning that if an error is made they can switch back to a previous version of that same model without having to compromise on the advancements in design. Traditional 2D drawings, on the other hand, would require a consultant to scrap the current design and force them to

SEEING THE WORLD IN 3D

In 2016 the Government made it mandatory for all public sector construction work to be designed in BIM Level 2. However what are the advantages of building information modelling for housebuilders? Graham Hewitt of Raised Floor Solutions reports



BIM, OF COURSE, IS BY NO MEANS PERFECT - IT HAS ISSUES THAT SOME BUSINESSES SEE AS SO LARGE THAT THEY HAVEN'T YET ADOPTED IT

go back to an earlier drawing when an error is made. The software also provides autosaving functions, helping consultants to steer clear of a risky loss of file or corruption problem.

COLLABORATIVE WORK

Construction work involves a range of different consultants and disciplines. BIM allows for these varying teams to work collaboratively throughout the duration of the project. This approach helps reduce a risk of error, as all team members can 'notate' their expertise and provide input as the project evolves.

SUB-MODELS

Every phase of construction can be broken down into a sub-model of BIM. Each submodel can then be used by a project manager to navigate every step in a construction. The sub-models can also be adjusted as the project goes on, making for a much more streamlined form of design and modelling.

PRESENTATION

BIM models include all intricate details of the design, making presentation a lot easier. The digital elements allow users to present a building plan and project like

never before. It is now possible to create walkthroughs of a building, add decoration, implement stores, and show off selling space – all digitally. This ability to visualise a building in real-time helps a team present the project with much more clarity.

These features of BIM demonstrate how it can transform construction, especially at scale. Large scale housing developments could be designed much quicker and more effectively by utilising BIM, with one model being used and adapted for the various challenges that such a build creates, such as flooring.

BIM ISSUES

BIM, of course, is by no means perfect. It has its issues – issues that some businesses regard to be so large that they haven't yet adopted it as an industry standard.

One problem that's often brought up among critics of BIM is that of authorship. As more and more consultants and teams of various disciplines get involved, the distinction of who authored what becomes blurred. The mark of where one consultant's work on the plan ends also loses clarity, which can quite easily muddy waters when it comes to an issue of liability, for example.

Another common issue among teams and consultancies that haven't yet adopted BIM is the practicality of actually imple-



menting it. BIM software comes with a steep learning curve and finding time to educate employees on how they can use it and implement into their day-to-day work can seem a big task.

THE FUTURE OF BIM

Building information modelling is widely expected to become the norm in the construction industry over the next 10 years, and as it does so, a vast improvement on industry-wide skillsets will occur. We may also see a saturation in the market of BIM software, which could end up creating one 'industry standard' programme.

Many in the industry are also predicting

the future of BIM as aligned with virtual reality (VR). The possibilities of VR and BIM combined are an attractive prospect for designers. For example a virtual reality headset can allow a client to walk through a building design, 'experiencing' each area first hand.

The advent of building information modelling has changed the future of construction. It provides teams and consultancies with a scope and supply that traditional 2D design methods never could and over the next few years could transform the industry as we know it.

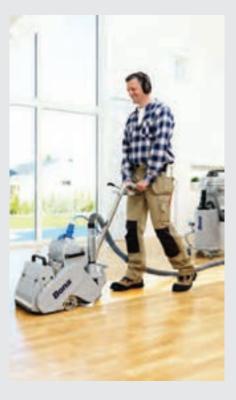
Graham Hewitt is managing director at Raised Floor Solutions Eng. 164

Wood floor expertise from Bona

Bona, the Swedish wood floor treatment manufacturer, has trained a UK network of independent wood floor contractors in the use of their oil and lacquer treatments. All are ready to help builders and developers bring out the best in all types of wood floors. Most Bona Certified Contractors provide a full wood floor installation service, others provide expert repairs and refinishing All are independent wood floor experts in their own right and are searchable at bona.com

Services include full or spot repairs to prefinished floors after other trades have damaged surfaces, expert cleaning of brushed and oiled surfaces to remove dust, full installations and finishing and colouring unfinished timber.

All Bona certified contractors have access to Bona's comprehensive and compatible range of high performance oil and lacquer finishes, adhesives and dust free sanding equipment. They can advise you on the best finish to choose depending upon the use of the area to be treated, the traffic levels, and the look you are trying to achieve. Choose from easy to maintain lacquers with a range of sheen levels or the natural look of a coloured or clear oiled surface.





Bona supports its certified contractors with expert technical advice and supplies wet and dry samples for matching existing floors and colour schemes.

Bona AB is a family-owned company founded in 1919. With its headquarters in Sweden, Bona is now present in almost 100 different countries all over the world through subsidiaries and distributors. We provide products for the installation, maintenance and renovation of wooden floors throughout their lifetime.

01908 525 150 www.bona.com info.uk@bona.com

The perfect heating solution where space is a premium and low costs required

th much discussion and debate on how to solve the UK's housing crisis, recent Government plans are considering Modular Homes as a solution. The design and build of modular homes might be simple and affordable but what heating source will be used to keep them warm? A gas grid connection or renewable heating source may not be economical therefore Electric Heating could be the answer.

The Electric Heating Company's SlimJim electric boiler could be perfect for Modular Homes. The compact design of the SlimJim boiler makes it ideal for heating applications where space is at a premium. The Slim Jim is a fully controllable electric flow boiler which is designed to maximise cupboard space. The SlimJim provides the flexibility and controllability that a gas fired central heating system offers. Using standard pipe-work, conventional wet system radiators and thermostatic radiator valves the boiler, being 100 per cent efficient and fully modulating, will take the same amount of time to heat the

property. As no flue is involved and no gas analysis required the installation of the system will be a lot quicker than that of a gas system boiler.

The SlimJim has a versatile range of outputs from 4kW to 14.4kW and therefore is adaptable to the size of Modular Home being built and insulation levels of the Modular Home. The SlimJim can be used in an 'S' Plan configuration to enable you to select Heating only, Hot Water or both at the same time. The SlimJim electric boiler is 100 per cent efficient, silent in operation, easy to fit and comes with a two-year manufacturers warranty meaning it ticks all the boxes for a Modular Home's heating requirement.

Should you wish to find out more about the SlimJim Electric Boiler or about any The Electric Heating Company's products, please call the number below or email info@electric-heatingcompany.co.uk.

01698 820533 www.electric-heatingcompany.co.uk



Enq. 166

Affordable homes benefit from acoustic floor



Profloor Levelling System from the A. Proctor Group has once again been specified to enable a level finished floor to be installed on uneven concrete floors. The Lincoln Court development consists of 22 new affordable homes available. Developed to allow a level finished floor to

be installed on a cambered, stepped, or uneven sub-floor, Profloor Levelling System is typically used to take out the irregularities in mortar screeded floors. The floor is levelled by inserting packers in each levelling base to adjust the level of the timber battens, and create a level finished floor with no need for wet trades in the process.

01250 872261 www.proctorgroup.com



Polyflor launches Secura luxury vinyl sheet



Polyflor, a UK residential and commercial vinyl flooring specialist, has launched its new Secura PUR collection of luxury vinyl sheet flooring, designed to create inspiring home interiors for modern living. Made in the UK, the Secura PUR range features 22 designs which authentically replicate the natural character of wood, stone and

abstract materials in a practical and durable sheet format. With 12 wood effects, nine stone effects and one abstract design in the collection, on-trend new additions include white and grey oaks alongside contemporary concrete and slate effects.

0161 767 1111 www.polyflor.com





Clearstone resin bound paves the way

Clearstone Paving Ltd has rejuvenated access roads to Queen Victoria's palatial home on the Isle of Wight by installing resin bound. The existing approach roads of loose gravel were in a poor state and caretakers English Heritage needed a durable and long-lasting surface to blend in with the colour and style of this stunning property. Clearstone laid resin bound in Mocha. "The resin bound surfacing is in keeping with this prestigious site and it looks great," says Tim Fagg, English Heritage's Maintenance Project Manager. Despite poor weather and the logistics of transporting people and materials across to the island by ferry, Clearstone craftsmen laid 2,000m² of resin bound in 11 days – on schedule for half-term visitors to enjoy beautiful Osborne House. Available in a range of colours and textures to suit any property, Clearstone resin bound is a blend of naturally sourced aggregates and recycled materials in UV-stable resin. Hand trowelled, it's flexible enough to incorporate curves, sharp corners and designs. Clearstone Paving Ltd provides a bespoke personal service from conception to completion, with the reassurance of a 10-year guarantee.

01273 358177 www.clearstonepaving.co.uk





Property developer transforms derelict loo



When property developer Charlotte Thomson and fiancé Joey Auger bought a derelict public toilet in Cornwall, they had their work cut out for them. The couple planned to turn the 200-year-old building into a romantic clifftop retreat. To get that cosy home feeling, one important step was to insulate the solid-wall

building. They installed Celotex GA4000 in the roof and spent around seven months overhauling the old loo to create a beautiful, modern abode. Celotex GA4000 is a multipurpose PIR insulation board that's ideal for pitched roof applications. It was supplied in boards measuring 1200 x 2400 mm, and Charlotte was able to cut them to size using a handsaw.

01473 822093 www.celotex.co.uk



Bracknell supports Kier Group and Lovell



National roofing contractor, Bracknell Roofing, is helping to transform over 150 properties in Leicestershire as part of a major refurbishment project taking place under the 'Decent Homes' scheme. Under the direction of North West Leicestershire District Council, and working with

main contractors Kier Group and Lovell, Bracknell's specialist expertise, roofing skills and proven project management, are now bringing a number of much-needed social housing properties built from the 1920s to the 1950s up to the standard expected for modern living. Work has included total re-roofing on each property, which has seen new tiles, guttering, downpipes, fascias and soffits installed.

08705 626800 www.bracknellroofing.com



Flexibility in action



National roofing contractor, Bracknell Roofing has helped ensure the successful completion of a new housing development for Countryside Properties UK. The 61-unit development in Boothstown, Greater Manchester has created a number of quality three, four

and five bedroom properties, as well as affordable units and a new substation to house power supplies. Bracknell Roofing not only made sure the roof aesthetics matched the quality designs specified by Countryside, it was also able to work with the developer to tackle logistic and design challenges which occurred over the course of the project.

08705 626800 www.bracknellroofing.com



Waterproofing simplified with Remmers



Multi-Tight 2K from Remmers is a new, flexible, mineral based waterproofing product which has all the performance properties of older technology polymermodified thick bitumen emulsions. whilst being 'bitumen free'. Using unique rubber granulate filler technology Multi-Tight 2K has a crack-bridging capacity which is five times more effective than

standard flexible mineral-based waterproofing systems. The versatility of the product allows it to be used to waterproof below ground offering excellent resistance to ground or water pressure.

01293 594010 www.remmers.co.uk





Hambleside Danelaw **Building Products**

Ensure peace of mind with the established market leader

Our range of GRP dry fix valley troughs have been keeping UK roof junctions durable and sound for 20 years.

Installed in up to half the cost and time of traditional lead installation and without any of the associated health risks - for a healthy roof, use our GRP dry fix valley troughs.

- 30 year guarantee
- BBA Certified
- Semi-skilled fitting
- Easy to handle
- Robust and durable
- Suitable for grey water systems

For more information, please contact us:

01327 701900 | sales@hambleside-danelaw.co.uk www.hambleside-danelaw.co.uk



Yeoman Rainguard Rainwater Systems chosen by **Persimmon Homes for luxury renovation**

estled in the foothills of the South Pennines near Rochdale, Lancashire, is the restoration and conversion, by Persimmon Homes, of the old Birch Hill Hospital into stunning apartments and town houses.

The use of the beautiful historic building, gracing Rochdale's landscape since 1877, has certainly changed starting out originally as a workhouse then run as an NHS hospital for

The dilapidated hospital, imposing clock tower, chapel and rectory required sympathetic restoration techniques by Persimmon Homes' team to maintain and restore the buildings grand architecture and design.

Yeoman Rainquard's XL Aluminium rainwater systems, with traditional style, textured finish and colour, were chosen to mirror the grandeur and luxury of the renovation scheme.

The exterior of what was the main hospital and clock tower, now exclusive and desirable apartments, was enhanced both visually and practically by the installation of Yeoman Rainguard XL Aluminium gutters and downpipes.

Finished in RAL7012 Basalt Grey, 150 x

100mm MOG XL Aluminium gutters were fitted with the addition of 100mm dia. downpipes.

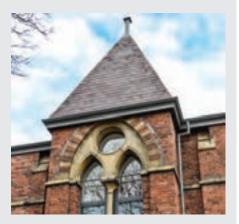
A bespoke GRP fascia detail, skilfully manufactured by Yeoman Rainguard at their facilities in Leeds, sits stylishly below the autters.

The Chapel has been tastefully remodelled into two semi-detached properties and now sports XL Aluminium 125x 100mm MOG gutters and 100mm dia. downpipes. Finished again in Grey the rainwater system dovetails perfectly with the overall exterior design.

The systems, all installed by a Yeoman Rainguard directly employed fixing operative, not only complement the character of the original buildings but offer an extremely functional and durable rainwater system which will give 30 years and upwards of maintenance free service.

Andrew Clarke of Persimmon Homes commented "The quality and authentic, traditional feel to Yeoman Rainguard Rainwater Systems reflect the quality of products and workmanship that Persimmon Homes have put into this prestigious development.

"In an area surround by nature we were also



keen to install eco-friendly products that were long lasting, so helping to reduce the time and money spent on the future up keep of the restored buildings, keeping them looking grand for many years to come."

For more information on Yeoman Rainguard rainwater systems to suit all building styles go to the website or call the number below.

0113 279 5854 www.rainguard.co.uk

Enq. 176

We have a style to match yours Aluminium **Cast Iron**



www.rainguard.co.uk







Ena. 177

CAPTURING SAVINGS

With parts of the UK now technically qualifying as deserts, rainwater harvesting has become a serious consideration among the Government and consumers alike. Gary Wheatley of Wilo UK explains the options.

n recent years, many areas in the UK have been surviving on much lower rainfall totals than they have been used to, or getting their rainfall in much higher quantities, if more infrequently. Because of this, rainwater harvesting is becoming an increasingly relevant option here in the UK, as the opportunities to include it in new build and refurbishment projects grow. Rainwater harvesting, put simply, is collecting rainwater which falls onto roofs, storing it, and using it as a free resource. Rainwater harvesting is the accumulation and storage of rainwater for reuse before it reaches the aquifer.

Currently, each person in the UK uses approximately 130-150 litres of water per day, and far from reducing year on year, figures appear to be increasing year on year. This is not sustainable going forward and the UK needs to find ways to reduce that usage and provide the water necessary. Rainwater harvesting offers a vital option to facilitate this.

Holistic considerations of the wider environment are key in discussions around rainwater harvesting. It is essential to both manage the demand for what is a finite resource and to learn to deal effectively with surface water run-off. The UK often gets a lot of rainfall in a short period of time and much of it is wasted. It's a strange fact that in homes, over one-third of potable water, and in offices, over twothirds of potable water, is simply flushed away. We spend a lot time and effort 'polishing' the water supply, and then we flush it down the toilet.

DEALING WITH EXCESS RAINWATER

There are three ways to deal with excess rainwater: infiltration – a system promoting the passage of surface water through a permeable surface into the ground, for example using soakaways; attenuation which involves a reduction of peak flow and an increased duration of a flow event, for example storm water storage linked to the

main sewer system; and thirdly there is rainwater harvesting – collecting rainwater from where it falls rather than allowing it to

There are a number of reasons why rainwater harvesting makes sense, including very sound financial motivations. It offers both significant reductions in water costs and also a reduction in capital costs of providing attenuation. There are also serious promotional reasons. Rainwater harvesting can enhance the image of the organisation involved, be it the Government, a developer, housing association or the owner of the land concerned, adding to a property's green credentials. Finally, there are good ecological reasons – rainwater harvesting helps reduce the consumption of potable water, resulting in a reduction in storm water discharge.

In a typical domestic rainwater harvesting system, rainwater is channelled via a filter into a storage tank and water is supplied using a pump to utilise the water harvested. Harvested water can be used for non-potable (non-drinking standard)

purposes such as toilet flushing, use in washing machines, irrigation, watering the garden, car cleaning and for industrial applications. Untreated water is not suitable for use where drinking quality water is required, such as for bathing, showering and dish washing.

CHOOSING A SYSTEM

When designing a rainwater harvesting system, the first steps should include determining the yield to work out the rainfall intensity specific to the location, by seeking the amount of precipitation per year (in litres per square metre). The calculation of rainwater yield per year is the amount of precipitation per year, multiplied by the roof area, multiplied by the discharge coefficient. This may give, for example, 72,000 litres per year, which over 365 days a year gives 200 litres rainwater yield per day.

To ascertain the demand, simply add up the consumption of the different application areas in the development or project - the number of toilet flushes, washing machine cycles and the volume of garden irrigation, for example. Experience has shown that a stocking capacity of about two to three weeks is optimal for rainwater harvesting.

It may seem obvious but it is important to emphasise that when selecting your rainwater harvesting system, only high quality products should be used. Select a rain system with a self-priming multi-stage horizontal high pressure centrifugal pump, complete with pressure and flow controller with integrated low water protection, an integral 11 litre fresh water make up tank, and a low water float.

Gary Wheatley is training and technical manager at Wilo UK



Ena. 178





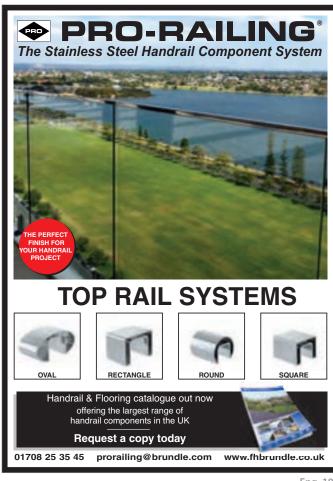
Wallbarn announces the launch of a new size of pedestal

Clients required a solution for paving or decking at extremely low heights. Wallbarn has developed the MINI MEGAPAD 10-20mm available for both paving and decking. These 100 per cent polypropylene pedestals are fully adjustable so split-millimetre differences in height are possible. These are tiny height adjustments, so this pad has a series of spokes around the circumference and a handle on one side so 'fat fingered' contractors can twist the stems effectively. The MINI MEGAPAD 10-20mm is ideal for retro fitting schemes. So long as you have a structural surface beneath, rather than take up and replace old terrace surfaces, just overlay them. The MINI TD MEGAPAD 10-20mm pedestal houses a 4 x 2" joist comfortably. Lay decking and stone paving onto existing patios and balconies. Wallbarn has the largest range of pedestals on the market, from tiny 10mm fully adjustable pieces up to heavy duty Megapads up to 1020mm high. Search www.wallbarn.com/products/mini-megapad-paving/

0208 916 2222 www.wallbarn.com









Enq. 182

Enq. 183





A GLASS ACT

Baltimore Wharf, a landmark development in London's Docklands, required balustrades that were stylish as well as affordable. Housebuilder & Developer reports on the successful results.

lass balconies, once the prerogative of high-end hotels, have become a popular choice for developers.

Around 7.5 per cent of all properties on the market now feature a balcony of some kind, along with 11 per cent of new properties in urban areas, with glass balustrading the favourite choice of enclosure.

Systems can range from fully frameless balustrades using laminated structural glass to steel posted systems. The frameless styles are both more desirable and more expensive, requiring thicker laminated glass, with fixings often recessed into the floor. Their weight and difficulty of installation often leads to compromise, including the use of steel posted systems featuring multiple posts, lugs or clamps. While these can often be attractive and functional, architects and buyers lean heavily towards the more minimalist, frameless style that does not inhibit the view.

An innovative engineering design, developed for the landmark Baltimore Wharf development in London's Docklands, aimed to satisfy these aesthetic demands at a cost comparable with the cheaper options.

THE DEVELOPMENT

Designed by architects Skidmore, Owings and Merrill Inc, Baltimore Wharf is a £150m mixed use development on theformer site of the London Arena, comprising private and affordable housing, retail, leisure and community facilities built by international developer, Ballymore Group. Phase One of the development comprised more than 600 apartments in five separate residential blocks.

As a key architectural feature of the buildings' external facades, the design and installation of external balconies required a considered approach. Working closely with the architect and developer, the balustrading suppliers were asked to develop a bespoke solution to suit the exacting requirements of the multi-storey

THE ARCHITECTS WERE OFFERED A BRAND NEW DESIGN, USING A SLIM ALUMINIUM HANDRAIL WITH NO UPRIGHT POSTS AND ENABLING THE USE OF THINNER, LIGHTER GLASS

buildings and the £3m budget.

The architects originally wanted structural glass balustrades to sit on top of the

building's 377 steel balcony structures. As an alternative proposal, they were offered a brand new design of balustrading, using a slim aluminium handrail with no upright posts and enabling the use of thinner and lighter glass. The new design allowed the developers to achieve a similar aesthetic effect at a substantially lower cost. Not only are these clear glass balconies now a striking feature of the project, they also saved £500,000 on the original design.

The new balustrading system, christened 'Hybrid' by Surrey-based manufacturer Balconette, is built around complex internal geometry hidden within the handrail itself. For the balconies on the Baltimore Wharf development, it removed the need for any upright supporting pillars while still providing all the required strength and support and meeting all relevant Building Regulations.

Satisfying the architect's original balcony design criteria – to present a perfectly flat front fascia to seamlessly fit the main steel and the glazing track – was fundamentally important. The new anodised aluminium handrail was finished in Royal Chrome to look like shiny stainless steel, with a matching lower track extrusion allowed for relatively simple fitting to the main steelwork. Structural stability was achieved by anchoring the ends of the handrail directly to window



mullions using a special single stage cladding that clips on to the speciallydesigned lower track.

Clear structural glass was originally specified, but the new design required only 4 mm + 4 mm laminated glass to retain a clear view, without the need for posts.

An added advantage of the system, particularly for high-rise buildings, is that panel replacement, if needed, can be done quickly and safely from inside. Panels are supplied up to 1.2 metres in length for ease of transportation and installation.

LIVING SPACE

Ballymore Group's building envelope manager, Mark Jackson, comments that bal-

conies are a desirable addition to apartments, "as they create an additional, practical living space where occupants can sit outside and relax."

Jackson continues: "The clean lines of the aluminium hand railing and glass panels create sharp-looking balconies that really enhance the external facades."

According to Effi Wolff, managing director at Balconette, the company felt there was a gap between very expensive structural glass systems and the traditional posted balustrades. He comments: "The research we have undertaken with consumers told us overwhelmingly that their reason for wanting a balcony was to enjoy the view, so it made sense to try and re-

move the obstructions.

"The engineering for the new system was developed in-house, with what is effectively a concealed cantilever construction running through the handrail. We decided early on that aluminium had important advantages over stainless steel – not only in terms of weight but also in terms of longevity. Even marine grade stainless steel begins to show corrosion after a few years, but aluminium is virtually immune."

In addition to the 377 balconies, Balconette supplied a glass balustrade design for the scheme's social housing element, replacing the original wrought iron concept.

Enq. 185





PRE-PREPARED TO ADDRESS THE HOUSING CRISIS

Robert Clark of Fusion Building Systems explains the benefits of offsite manufacturing, explaining how time-saving but high-performance SIPs could help ease the UK's housing shortage

he UK is suffering from a lack of housing, with even the Government citing a 'broken housing market' in its heavily anticipated White Paper last month. Encouragingly however, the Paper assured a commitment to supporting the development of 'modern methods of construction.' Volume housebuilders are now beginning to incorporate offsite into their future plans, many seeing it as a step change in their whole supply chain process.

Of course, there's nothing new about offsite manufacturing (OSM), and for that matter, structural insulated panels (SIPs). Development of SIPs systems dates back to the 1940s, although the industry didn't really gain momentum until the 1970s. The products available now however can deliver a U-value of 0.2 W/m²K (which alone surpasses Building Regulations) or with further insulation installed during construction on site, up to 0.12 W/m²K or 0.15 W/m²K. Achieving such performance of course depends on the choice of product and the building fabric.

THE OPTIONS

Essentially, there are two options for OSM: panelised, with a choice of light gauge steel (LGS) or timber; and volumetric, or modular as the Government is terming it. Depending on which you choose, the insulation levels can vary enormously.

Some timber frame structures will be pre-insulated, others will be open, and for LGS, some will be loose-filled, while some specialised systems even offer fully wrapped panels.

If you opt for an LGS frame, then ensuring it's fully wrapped is pretty important if you're to avoid issues with cold bridging in achieving the required U-values. You can of course insulate the cavity on site using bead, wool or slab, but if the steel's been fully wrapped offsite in the first place, this problem is eliminated.

THE COST- AND TIME-SAVING BENEFITS OF THIS APPROACH ARE CLEAR IN THE HOUSING CRISIS, AS IS THE REDUCED RELIANCE ON SKILLED LABOUR

SUPPLY CHAIN INTEGRATION

Addressing insulation is only scratching the surface of what should be included in the OSM process. It all comes down to early supply chain integration. The specification

and positioning of doors and windows, the routing of M&E services, H&V systems and communications connections all need to be agreed early on. Even the positioning of brick ties or clad anchorage points must be agreed on. These should all be worked into the building's design and form part of the manufacturing process of the individual cassettes or panels for the building. Once on site, the (pre-insulated) frames can be erected in a matter of days and all other elements slotted seamlessly into their allotted positions. The cost and time saving benefits of this approach are clear, as is the reduced reliance on skilled site labour – another issue affecting the UK's housing crisis.

CASE STUDY

Putting this into practice, Fusion started working with Barratt Developments in 2015 as it began its evaluation for offsite supply chain partners. As part of this process, a trial project was run for the design, specification, manufacture and erection of nine residential properties at its Swanbourne Park development in Angmering, West Sussex.

The company successfully completed the project using a framework which had been manufactured using its patented technology. The trial required the integration of teams at all levels from both businesses, with the need to adapt Barratt's existing housing models to incorporate the new system. The erection process took just nine days, with only five men on site.

The trial was one of the smallest jobs the company has completed in its 16-year history, but by successfully demonstrating how a supply chain can be adapted to suit a much faster, safer and more cost-effective method of building, it will potentially be its most significant.

OPPORTUNITIES

In 2015 The Housing Forum issued a report, *More Homes Through Manufacture*, exploring how modern methods of construction could deliver more, better quality homes. In his closing remarks, Working Group chair Jim Martin commented on the numerous advantages OSM can bring to housebuilding in the UK, including the "Improved energy performance of buildings through enhanced specification and controlled factory processes."

The opportunities presented by OSM are vast, and with proper integration into the housebuilding supply chain, could go a significant way to towards reducing the UK's critical housing shortage.

Robert Clark is head of business development at Fusion Building Systems

Enq. 187





Air conditioning & ventilation

Beko Technologies Ltd Tel: 01527 575778 www.beko-technologies.co.uk

ESS Ventilation Tel: 01428 751646 www.esscontracting.co.uk

Nuaire Tel: 029 2088 5911 www.nuaire.co.uk

Wilo UK Ltd Tel: 01283 523000 www.wilo.co.uk

BUILDING REGULATION COMPLIANCE TESTING

Air tightness & testers



BSRIA

Eng. 501

Balconies & balustrades

Balco Balcony Systems Ltd Tel: 0800 652 4526 www.balcouk.com

Windoor UK
Tel: 0870 067 88 10
www.windooruk.co.uk

Bathrooms & showers

Lecico

Tel: 01234 244030 www.lecico.co.uk

Multipanel

Tel: 0131 290 2862 www.multipanel.co.uk

Building products & services

A. Proctor Group Tel: 01250 872261 www.proctorgroup.com

Alumasc Group Tel: 01536 383844 www.alumasc.co.uk

British Gypsum Tel: 0844 800 1991 www.british-gypsum.com

Everbuild Building Products Tel: 0113 200 9494 www.everbuild.co.uk

Building products & services

F H Brundle

Tel: 01708 25 35 45 www.fhbrundle.com

FP McCann

Tel: 0287 964 2558 www.fpmccann.co.uk

NHBC

Tel: 0844 633 1000 www.nhbc.co.uk

Norbord

Tel: 01786 812921 www.norbord.co.uk

Roger Bullivant

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

SIG plc

Tel: 0114 285 6300 www.sigplc.com

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

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

contact us today on
01435 863500
www.hbdonline.co.uk

Bridging & development finance

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

CAD & software

Standing Stone

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

Coatings, sealants & paints

Barrettine Group

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

Conservatory roofs

Made for Trade

Tel: 0844 335 1226 www.madefortrade.co

Decking

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

Doors & windows



Eng. 502

Garador Ltd

Tel: 01935 443791 wwww.garador.co.uk

Marlin Specialist Glazing Solutions

Tel: 01535 603909 www.marlinwindows.co.uk

SKAALA

Tel: 01224 224 567 www.skaala.com

Environmental reports

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

Finance & insurance

Business Lending Group – BLG Development finance Tel: 0845 465 6500

www.business-lending.co.uk

CRL Management Tel: 0207 127 5198 www.c-r-l.com

Hampshire Trust Bank Tel: 0207 862 6200 www.htb.co.uk

Holden Group Holdings Ltd Tel: 0208 974 4715

www.go-develop.co.uk

Moody Venture Capital

Tel: 01277 354222 www.mvcfinance.co.uk

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

United Trust Bank Tel: 0207 190 5555 www.utbank.co.uk

Fires & fireplaces

Clearview Stoves

Tel: 01588 650401 www.clearviewstoves.com

Specflue

Tel: 0800 9020220 www.specflue.com

Floors & flooring

Gerflor

Tel: 01926 622 600 www.gerflor.co.uk

Folding sliding doors

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

Glass & glazing

Selectaglaze Itd

Tel: 01727 837271 www.selectaglaze.co.uk

Heating, ventilation & plumbing

Begetube

Tel: 01463 246600 www.begetube.co.uk

Encasement

Tel: 01733 266 889 www.encasement.co.uk

Envirovent

Tel: 0121 685 2100 www.eaton.com

Rob Berridge Plumbing & Heating

Tel: 01923 778176 www.robberridge.co.uk

UK Plumbing Supplies

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

To get your company listed here, contact us today on

01435 863500

Insulation

Cellecta

Tel: 08456 717174 www.cellecta.co.uk

Greentherm Solutions (Icynene)

Tel: 01229 716039 www.uksprayfoam.co.uk

Kingspan Insulation

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

Knauf Insulation

Tel: 0844 8000135 www.knaufinsulation.co.uk

Ironmongery

Ironmongery Direct (Essex Fittings Ltd)

Tel: 0808 168 28 28 www.ironmongerydirect.com

Kitchens & appliances

Shaws of Darwen Tel: 01254 775111 www.shawsofdarwen.com

Lighting & electrical

Mitsubishi Electric Tel: 01707 276100 www.mitsubishielectric.co.uk

Natural stone landscaping products

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

Natural Paving Products (UK) Ltd Tel: 0845 072 1150 www.naturalpaving.co.uk

Oak products

Antique Buildings Ltd Tel: 01483 200477 www.antiquebuildings.com

Courtyard Designs Tel: 01568 760540 www.courtyarddesigns.co.uk

> To get your company listed here, contact us today on 01435 863500 www.hbdonline.co.uk

Plasterers & ceilings

Plaster Ceiling Roses Tel: 0161 408 2882 www.plasterceilingroses.com

Power tools

Robert Bosch UK Ltd Tel: 01895 838847 www.boschprofessional.com

Makita (UK) Ltd Tel: 01908 211678 www.makitauk.com

Product approval & inspection

British Board Of Agrement Tel: 01923 665300 www.bbacerts.co.uk

Professional services

Renault UK Ltd Tel: 0844 335 0000 www.renault.co.uk

Robust Details Ltd (NHBC) Tel: 0870 240 8209 www.robustdetails.com

Sky Tel: 020 7705 3000 www.sky.com

Pumping stations

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

Rainwater products

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

Rainclear Systems Ltd Tel: 0800 644 4426 www.rainclear.co.uk

Yeoman Rainguard Tel: 0113 279 5854 www.rainguard.co.uk

Roofing & cladding

Euroclad
Tel: 02920 790 722
www.euroclad.com

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

www.freefoam.com

Freefoam Building Products Tel: 01604 591 110

Kemper System Tel: 01925 445 532 www.kemper-system.com

Marley Eternit Tel: 01283 722588 www.marleyeternit.co.uk

Monier Redland Tel: 08705 601000 www.monier.co.uk

National Federation of Roofing Contractors (NFRC) Tel: 020 7648 7663 www.nfrc.co.uk

abc)

Be wise when you advertise

Look for the ABC stamp of trust. An ABC certificate provides accurate, independently verified circulation figures giving you confidence in your advertising investment.

www.abc.org.uk

Safety & security

Safetyworks & Solutions
Tel: 01487 841 400
www.safetyworksandsolutions.co.uk

Sprue Safety Products Tel: 02477 717 700 www.sprue.com

Sewage treatment

TT Pumps Ltd Tel: 01630 647200 www.ttpumps.com

Smoke & fire protection

Kidde Fire Protection Tel: 0800 917 0722 www.kiddesafetyeurope.co.uk

To get your company listed here, contact us today on 01435 863500

Stonework & masonry

Haddonstone Ltd Tel: 01604 770711 www.haddonstone.com

Sytex Uk Ltd Tel: 01483 234 885 www.sytex.co.uk

Temporary accommodation



Enq. 503

Timber products

Hoppings Softwood Products PLC (Q-Products)
Tel: 0800 849 6339
www.hoppings.co.uk

Tools & equipment

Muck Truck UK Ltd Tel: 01566 777140 www.mucktruck.co.uk



INFORMATION

EST

GET .

9

WAYS

DEVELOPERS! MORE

ఠ

HOUSEBUILDERS

FOR

LATEST INFORMATION

표

GET

WAYS TO

MORE

www.hbdonline.co.uk

The Housebuilder & Developer website is an online provider of past and present products and news items for housebuilders & developers. Regularly updated with hundreds of press releases hbdonline.co.uk is a one-stop source for all the latest press releases providing you with access to information about products and services you require for all projects as well as relevant news and case studies.



Digital Issue

The digital issue of Housebuilder & Developer provides all the same content as the print issue with the added advantage of being instantly available whenever and wherever you have access to the internet. In addition to its ease of access the digital issue of Housebuilder & Developer gives direct links to advertisers, allowing you to visit a potential supplier's website with the simple click of a mouse. Subscribe at www.hbdonline.co.uk



HBD Newsletter

Emailed on a fortnightly basis, the Housebuilder & Developer newsletter is designed to provide you with the latest information on products and services of interest, direct to your inbox. You can quickly gather a snapshot of information from up to 12 carefully selected companies and easily follow links through to further information on www.hbdonline.co.uk, or go direct to the company's own website. Brochures and videos are also regularly available. Subscribe at www.hbdonline.co.uk

Clean lines ✓ Cutting edge design ✓ Ultra High Definition ✓



Make incredible Sky Q available from the moment homebuyers walk in

Walk in working services appeal to 96% of homebuyers, with most wanting TV, phone and broadband in place within 48 hours of moving into a new home. We'll work with you during or after construction to make sure everything is up and running on moving day.

As well as future-proofing your developments, you'll also help maintain or improve your star rating. What's more, Sky is top choice over any other TV service – making Sky Q the perfect feature of your development.



OUTSTANDING ENTERTAINMENT

Get Sky Atlantic, the home of world-class storytelling plus over 350 addictively good Box Sets, documentaries, kids' shows and more.



STORE & RECORD MORE

We will provide you with our Sky Q 2TB Box at no cost, which stores over 1,000 hours of TV and lets you record four shows whilst watching a fifth.



WIRELESS MULTISCREEN

With Sky Q Mini you can enjoy TV and watch recordings in any room without the messy holes and extra cables.



Make your developments good to go from day one sky.com/walkinworking or call 08442 410 327



Fish set up from applie Cf month resonant term substitution. The Macketist 6 Samy Michards Takkyopan in M. All lights inserved. Bill LITTLE LISS G 2019 House lists of presented from a set of presentation of a feed of 2019 CC Comins, a \$2.00% House from Box. Effect intermediate in M. All lights inserved. All lights inserved