



The Climate Challenge: Taking stock of the impacts of climate change on the industry



Cardiff Council's first modular housing programme with Wates Residential gets the green light



The Industry Advocate: Berry says Government needs to go carefully with New Homes Ombudsman

09.19

HOUSEBUILDER & DEVELOPER



A SPECIAL RELATIONSHIP

The former US Embassy in Grosvenor Square, Mayfair is transformed into the ultimate London pads by Lodha Group, Eric Parry Architects and interior designers Yabu Pushelberg



New thinking in new build marketing



Housebuilder marketing: all under one roof

For your first* marketing order placed, we will provide a 1-minute edited drone video of your development

completely FREE of charge!
(value = £2,000)

**Orders over £10,000*

engage will showcase your new build developments magnificently and help to sell them faster!

- Complete marketing solutions exclusively for housebuilders
- Hi-tech services to differentiate your new homes
- Better value for money

Please contact us

🌐 yourkeysengage.com

☎ +44 (0) 20 8088 2355

✉ info@yourkeys.com

09.19 CONTENTS



10

THE INDUSTRY ADVOCATE

THE NEW HOMES OMBUDSMAN: CONCERNS ON IMPLEMENTATION

Brian Berry, chief executive of the Federation of Master Builders (FMB), welcomes the Government's introduction of the New Homes Ombudsman, but says it needs to tread carefully on its implementation.

FEATURES:



24

CASE STUDY

BE ON THE SQUARE

Located in the centre of Mayfair, London, No.1 Grosvenor Square is set to open early next year – after having its historic brick facade painstakingly de- and then re-constructed. Charlie Walsh, sales director at Lodha UK, spoke to *Housebuilder & Developer's* Jack Wooler about the project's exceptional attention to detail.

47

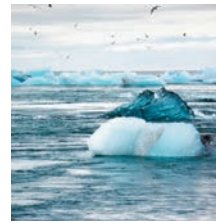
ASSISTED LIVING

RISING TO THE CHALLENGE OF THE FUTUREPROOFED HOME

Home lifts can offer mobility solutions for multigenerational living and add a design statement to flexible family homes of the future, but safety and sustainability are just as important as aesthetics, says David Schill of Aritco Lifts.

PRODUCTS:

Appointments & News	44
Assisted Living	47
Building Fabric	50-56
Finance & Insurance	56-58
Groundworks	58
Heating, Ventilation & Services	59-65
Insulation	62-64



36

THE CLIMATE CHALLENGE

GLOBAL CHANGE, LOCAL IMPACTS

The effects of climate change are being felt across the world, and closer to home. Beginning a new section on addressing the challenge, Jack Wooler takes an in-depth look at the construction sector impacts, and practical solutions.

59

HEATING, VENTILATION & SERVICES

DEMYSTIFYING VENTILATION

With the growth of whole-house ventilation systems, ducting products and systems abound, specifying and installing them has become considerably more complex. Penny Jones of Domus Ventilation answers specifiers' commonly asked questions when it comes to domestic ventilation ducting.

67

INTERIORS

MAKING SMART HOMES FIT FOR THE FUTURE

Matt Nimmons of CEDIA EMEA discusses how to install smart home installations that can stand the test of time, and details the elements that need to be considered when designing a wider home integration project.

69

INTERIORS

CONTEMPORARY TILING

Interest in tiling as a stylish, hygienic and durable finish for domestic walls and floors has never been stronger. Here, The Tile Association (TTA) outlines some of the issues which housebuilders and developers need to be aware of.

Interiors	64-71
Landscaping & External Works	70-72
Plant & Workwear	72
Structural Elements	73-74
Classified & Directory	75

ALSO IN
THIS ISSUE:

4-8

INDUSTRY NEWS

10-20

COMMENT

22

NEW DEVELOPMENTS

24-28

CASE STUDY

31-32

UK CONSTRUCTION
WEEK SHOW
PREVIEW

36-43

THE CLIMATE
CHALLENGE



James Parker

FROM THE EDITOR

A blog post from a leading tools supplier caught my eye this month, as it unashamedly laid out the concerns of the construction sector when it comes to the looming Brexit deadline, which is fittingly on Halloween.

Des Duddy, director of Protrade, says that company bosses of the tens of thousands of organisations in our industry are in a very uncomfortable situation, that of “making a number of assumptions and provisions based on the comments and posturing of our Prime Minister.” He says, with some understatement, that “it’s difficult to know whether certain comments and news are an expectation of reality.” It feels as if there is a large amount of denial going on at no. 10 around the potential impact of the increasingly likely outcome of a no deal Brexit, and the fact Ministers had to be forced to reveal Operation Yellowhammer findings speaks volumes.

As ever, clarity is in short supply. As Duddy says, everyone is forced to have to prepare for multiple scenarios – “essentially, preparing for the unknown.” By its nature, this is very hard to do with any real rigour, and surely impossible to cost with any certainty. The only certainty, Duddy suggests, “is that no segment of the industry will come out unscathed”.

It’s not just confusion around whether we will be facing a deal or no deal, but also about the likely exacerbation of already keenly felt problems across the industry. These are well known, however to what extent Brexit will make them worse is hard to predict.

Ending freedom of movement means that the UK could lose around 200,000 construction workers, and we are already in a skills crisis, with one in five roles currently left unfilled. Losing EU workers will push up staffing costs, as Duddy says, it’s simply supply and demand. And with the UK importing over 25 per cent of its materials, it’s widely accepted not only that tariffs will drive up costs further, but that delivery times will also be compromised – companies will have to drastically change the way they plan work.

When times are challenging enough for many SME housebuilders, having to scenario plan for various Brexit outcomes is not something most will be doing with enthusiasm. This is particularly the case when they are repeatedly being told by the PM that a deal is being sought.

It remains to be seen whether Boris Johnson will be the person to take us over the cliff with no deal – as ever we are waiting for the true scenario to be revealed. But in the meantime, how much firms can work to protect themselves from an uncertain future is debatable.

James Parker

HOUSEBUILDER & DEVELOPER

Joint Publisher
Anthony Parker

Managing Editor
James Parker

Assistant Editor
Jack Wooler

Editorial Assistant
Roseanne Field

Senior Sales Executives
Sheehan Edmonds
Nathan Hunt

Sales Executives
Suzanne Easter
Kim Friend

Studio Manager
Mikey Pooley

Production Assistants
Georgia Musson
Kimberley Musson

Audience Development Manager
Jane Spice

Managing Director
Simon Reed



Cointronic House,
Station Road,
Heathfield,
East Sussex TN21 8DF

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

Editorial features
Tel: 01435 863500
jparker@netmagmedia.co.uk

Press releases
editorial@netmagmedia.co.uk

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 transmitted in any form or by any means, electronic, mechanical, including photocopying, recording or stored in any information retrieval system without the express prior written consent of the publisher. Although every effort is made to ensure the accuracy and reliability of material published in Housebuilder & Developer, the publisher can accept no responsibility for the claims or opinions made by contributors, manufacturers or advertisers. Editorial contributors to this journal may have made a payment towards the reproduction costs of material used to illustrate their products.

Printed in England



ON THE COVER

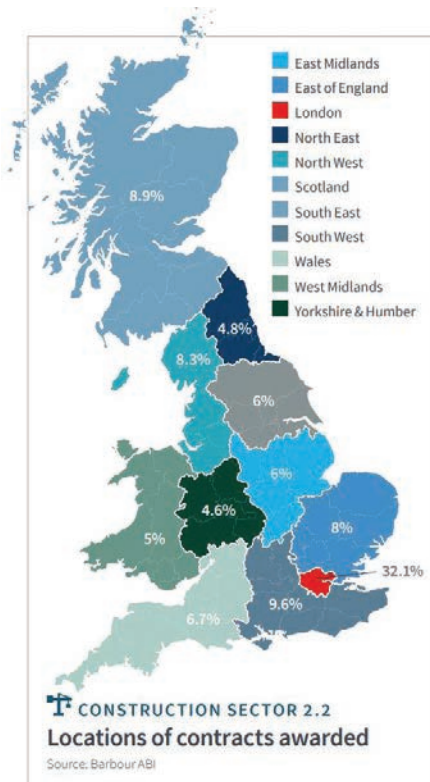
09.19

HOUSEBUILDER & DEVELOPER

A SPECIAL RELATIONSHIP
The former US Embassy in Grosvenor Square, Mayfair is transformed into the ultimate London pads by Loda Group, Eric Parry Architects and interior designers Yabu Pushelberg

Lodha, No.1 Grosvenor Square go to page 24

Construction contract awards up 11 pc year on year



Yearly comparisons indicate that contract awards values in July 2019 were 11.0 per cent higher than July 2018, although the value of all construction contract awards in July 2019 was £5.1bn based on a three-month rolling average – which is a slight decrease of 1.8 per cent on June.

As reported in the latest edition of the Economic & Construction Market Review, from industry analysts Barbour ABI, in the three-month period ending July 2019, total construction contract awards were valued at £15.3bn, which is an increase of 14 per cent on the previous quarter, and 13.8 per cent higher than for the comparable quarter ending July 2018.

The number of contract awards in July was reportedly 1,011, which is an increase of 38.5 per cent on June, and is also 3.7 per cent higher than July 2018. Regional analysis shows that London was the leading region for contract awards in June with a 32.1 per cent value share.

Analysis by sector showed that the

largest share of contract awards in July was held by the residential sector, at 39.9 per cent. Commercial and retail was the second largest sector in this month, with 16.0 per cent of contract awards, and was followed by the industrial sector, with a share of 13.6 per cent.

London had the highest total of contract awards in July, and was also the location for the 3 largest contract awards. The largest contract award for the month was in Southwark – the Stoney Street Commercial and Office development, which is part of the Borough Yards redevelopment, and is valued at £300m.

Commenting on the figures, Tom Hall, chief economist at Barbour ABI, said: “The planning pipeline continues to defy recent negative economic news. We have seen significant activity for contact awards across the UK for the past three months, with a 13.8 per cent increase on the comparable quarter ending July 2018. Over the next three months, we will be rolling steadily towards the Brexit deadline which may impact figures as uncertainty once again sets in.”

July sees dip in new home registrations

The number of new homes registered to be built in the UK during July was 9 per cent lower than a year ago, according to the latest NHBC registration figures.

14,262 new homes were registered in July 2019, compared to 15,719 a year ago, with 10,398 new homes registered for the private sector (11,877 in 2018) and 3,864 in the affordable and rental sector (3,842 in 2018).

Although down on last July, this year’s total for the month is reportedly still above the average seen over recent years.

For the rolling quarter, between May and July, 44,163 new homes (30,584 private sector; 13,579 affordable and rental sector) were registered compared to 43,199 in 2018 (30,841 private sector; 12,358 affordable and rental sector) – an increase of 2 per cent.

The upturn in London continues with 6,513 registrations over the last three months: 21 per cent more than what was registered a year ago. The East of England (+26 per cent) and the West Midlands (+21 per cent) also enjoyed buoyant quarters.

Commenting on the new figures, NHBC chief executive Steve Wood said:

“Although new home registrations for July are down compared to 12 months ago, we are still seeing signs of growth coming through with the rolling quarter.

“Despite the uncertainties and concerns around Brexit, the industry remains resilient and you can see that in these figures.”

£600m infrastructure boost announced

£600m of new Government money is to be released to support the building of 50,000 new homes, according to the Chancellor, Sajid Javid.

The funding is set to be made available through the Housing Infrastructure Fund (HIF), intended to help deliver five new projects in London, Central Bedfordshire and Essex.

The projects identified are the ‘Beaulieu Station and North-East bypass’ bid from Essex County Council (£218 m), the ‘Meridian Water’ bid from Enfield (£156m), the ‘Tendring Colchester Borders Garden Community’ bid from Essex County Council (£99.9m), the ‘Transformational Growth in Biggleswade’ bid from Central Bedfordshire (£69.6 m), and the ‘East London Line – Growth Capacity’ bid from the GLA (£80.8m).

Javid commented on the announcement: “I want to see more homes built in the places people want to live, so more people realise the dream of homeownership – but we need the roads, rail links, and schools to support the families living in those homes, which is why I set up a fund to put in place the infrastructure to unlock new homes in these areas.”



NFB says Government should focus on climate successes



Key areas the Government should be focusing on to meet the 2050 zero carbon target have been identified in a recent report from the Science and Technology Committee, which has been welcomed by The National Federation of Builders (NFB), while noting that it is “frustrated by the lack of focus on successes and barriers.”

“New homes,” said the NFB, “are incredibly energy efficient and air tight, to the point that air quality and overheating have become design challenges.” According to the Federation, the solutions, “often championed using Passivhaus standards,” add more technology to a building, consequently requiring more electricity and maintenance – which it believes is counterproductive.

The NFB has argued that it would be more effective to focus on older housing, which it says is “the real elephant in the room”. The Government could, for example, consult on allowing councils to use section 106 funding to insulate older properties, or reform planning to ensure homes with cavity-less single brick walls have permission to install external cladding.

The latter of these solutions draws parallels with onshore renewables, such as wind and solar, where visual impact often decides whether action is taken. “Many onshore renewables are rejected for this reason,” it says, “under the banner of localism, which is well evidenced by so few councils including guidance and site

allocations in their local plans.”

The Federation has stated that, if the Government wants to meet its zero carbon commitment, that “it must work with the industry to understand why progress can be so hard to achieve.” It also would encourage those making recommendations to the Government to do the same.

Rico Wojtulewicz, head of housing and planning policy at the NFB, commented: “Localism is a huge barrier in making sure we’re able to meet the 2050 zero carbon commitment and politician’s needs to be honest about that. In the short term, the Government must act quickly and focus all efforts on fixing old leaky housing, not new homes which many say can be heated by a lightbulb.”

Changes to Help to Buy and shared ownership

Changes to the shared ownership and Help to Buy schemes have been unveiled by Housing Secretary Robert Jenrick, alongside promises of planning reform.

He said that Government is to review a new national model for shared ownership to make it easier for people to buy more of their own home, including allowing them to buy in 1 per cent increments – as opposed to the 10 per cent chunks necessary at present (often leading to what’s known as “staircasing”).

The Housing Secretary also announced that he will look to reform the planning system to increase housing delivery and make home ownership more affordable for people looking to buy their first property, particularly in areas which are least affordable.

Alongside this, homeowners buying a property under Help to Buy will reportedly be given new freedoms which will make it easier to take out a 35-year mortgage, and the Government has closed a loophole that prevented people from taking out a mortgage with a term of more than 25 years.

“My mission is to increase the number of homes that are being delivered, and to get more young people and families onto the housing ladder, particularly those on lower incomes,” said Jenrick.

He continued: “I will be looking at ensuring young people from Cornwall to Cumbria aren’t priced out of their home

areas, and how we can build public support for more housebuilding and better planning.”

Retirement housing key to fixing crisis, says report

The key to alleviating the pressure on the housing market is better development of later living accommodation, according to a new survey, but only if ‘bold’ action is taken, according to a report.

Research undertaken by law firm Shakespeare Martineau and the Housing Learning and Improvement Network (Housing LIN) revealed that a re-think of the UK’s later living sector is urgently needed, and will free up space in the already-stretched housing market.

The research, surveying over 200 senior figures in the UK later living sector, showed that pressure from the UK’s growing ageing population is well-recognised in the housing sector.

Planning regulation was highlighted as an area in need of change, with 89 per cent of respondents calling for an overhaul – something that has recently been recently recognised, with new planning guidance around housing for disabled and older people published by the Government.

Alongside planning, 90 per cent of respondents believe that more capital funding incentives from central Government are necessary to stimulate development and fuel investment activity in the later living market.

93 per cent of respondents also believe that ‘rightsizing’ is set to increase in popularity over the coming years, and 73 per cent of respondents believe that the demand for later living accommodation will increase over the next five years.

Jeremy Porteus, chief executive of the Housing LIN, said: “For a market segment of such importance, national policy has been largely silent on the topic of later living. There has been little government oversight or market insight into how the sector perceives both itself and the needs of its consumers.

“More vibrant discourse – and decisive action – from policymakers and stakeholders will without doubt help the industry to deliver a range of better and more attractive homes, in places that people want to live.”



H2 Lite

- > 105 lm/W+
- > Rolled insulation coverable
- > IP65 (from the front)
- > Easy-fit connector for ease of installation
- > Comes in Brushed Steel, Chrome and Matt White
- > Complete with intergrated bezel for a straight forward fit
- > Single point source technology to replicate a halogen look
- > Available in 4000K and 3000K
- > 4 year extended warranty available



Easy-fit connector

For our full product range visit www.collingwoodlighting.com or call 01604 495 151

Mastering light together
collingwoodlighting.com



@collingwoodLED



/collingwoodlighting



collingwoodled



COLLINGWOOD
LIGHTING

Collaboration calls for better accessibility standards for new builds



All new homes should be built to higher accessibility standards, according to a new campaign factsheet from Age UK and Habinteg.

The call has come after reports that there are currently 6.5 million people with mobility problems and 13.9 million disabled people in the UK – with only seven per cent of the existing housing stock having the features necessary to make homes viable for disabled or older people with restricted mobility. The campaign says that unless homes become more adaptable, future generations will be forced to ‘make do’ in homes that fail to meet their needs.

The new factsheet ‘Home Truths – rebutting the 10 myths about building accessible housing’ aims to challenge perceptions around accessible housing, including that it is too difficult or simply undesirable for buyers. It argues that an ageing population and increasing numbers of people with mobility problems means that new homes need to be accessible and adaptable to ensure that they work for everybody, supporting independence, health and wellbeing.

Among the 10 myths being confronted in the report is that building to this accessible and adaptable standard is more expensive. A report commissioned by the Government estimated that it would only cost an extra £521 to build an average three-bedroom standard semi-detached house to the M4 (2) standard with a further space cost of £866 - £1,387 per

dwelling. In the long run, accessible and adaptable homes save money because they help reduce demand on the NHS and care services and make it easier to remain healthy and independent.

The report authors are calling for regulation to ensure that all new homes are built to accessible adaptable standard (Category 2) as a minimum, for 10 per cent of new homes to be built to wheelchair-accessible standards, and in the interim, for the Government to amend planning rules to protect the discretion of local authorities to decide the number of accessible homes built in their area.

Caroline Abrahams, charity director at Age UK said: “A well designed home can work across a whole lifetime or for any generation, so it just makes common sense to make sure that all new homes are accessible, flexible and adaptable regardless of whether they are initially built for first time buyers. If not, we’re creating swathes of housing stock that won’t be appropriate for a big part of the population.”

She concluded: “We know there are huge benefits to people being able to stay in their own home as they get older – and if we make it harder for people to do this then it will have a detrimental impact on people’s health and wellbeing as well as a financial impact in the terms of the costs to the NHS.” All new homes should be built to higher accessibility standards, according to a new campaign factsheet from Age UK and Habinteg.

Partner appointed for first phase of Wimbledon regeneration



Hill has been appointed as partner in delivering the first phase of homes for the estate regeneration at High Path, Wimbledon, by Clarion Housing Group.

The project will see the redevelopment of over 600 homes, as well as an additional 1,000 new homes and amenities created on the doorstep of South Wimbledon Station.

The first phase of homes at High Path will comprise 134 homes – 125 apartments and nine houses. Both existing and future residents have been carefully considered throughout the planning stages, with the proposal including a variety of energy efficient properties and replacement homes for current residents.

A variety of styles such as flats, duplexes, maisonettes and houses, as well as new homes with wheelchair access and a new neighbourhood park providing residents with outdoor space, are also planned. Each aspect of the project has been included as a result of direct feedback from a series of public consultations.

Cain Peters, regional director at Hill, explains: “Having previously worked on a number of regeneration projects across London, we’re confident that our highly experienced team are going to successfully deliver quality homes, whilst remaining respectful of the existing residents on the estate. Community engagement is so important with these projects – we’re not just redeveloping their homes, but their livelihoods too.

“We’re looking forward to providing energy efficient homes built to an excellent standard, that meet the needs and requirements of the community. We’re delighted to be working alongside Clarion again to grow this new and flourishing area in Wimbledon.”



DESIGNED FOR CHALLENGING GROUND CONDITIONS

Perfectly suited to brownfield sites and difficult ground conditions, Insulslab comprises a series of interlocking expanded polystyrene pods, forming a rigid 'waffle' foundation system/slab. Steel fibre reinforced concrete is poured over the top to form the finished foundation.

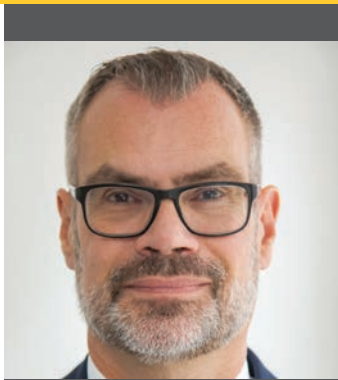
As an alternative to traditional foundations, Insulslab offers:

- Fast and easy installation
- Typical U-Values of 0.11 - 0.13 W/m²K
- Excellent thermal performance
- Significant cost savings



T 0161 447 8321
E info@insulslab.com
W www.insulslab.com

INSULSLAB is part of the
PTG PERFORMANCE
TECHNOLOGY
GROUP
www.PerformanceTechnologyGroup.com



Brian Berry, chief executive of the Federation of Master Builders (FMB)

THE INDUSTRY ADVOCATE

IMPLEMENTING THE NEW HOMES OMBUDSMAN

Brian Berry of the Federation of Master Builders explains why he believes Government needs to tread carefully when implementing the New Homes Ombudsman – while welcoming its introduction.

In October 2018, the then Secretary of State for Housing James Brokenshire MP announced plans for a 'New Homes Ombudsman' that all developers would have to be part of, as a measure to help improve consumer redress in the new homes market. The Government has since consulted on the technical details of the Ombudsman and is currently drafting legislation to implement it.

The FMB welcomes the idea of a New Homes Ombudsman as it is clear some consumers do not feel they currently have adequate redress if something goes wrong once they have bought a new home. We also recognise the confusion for those who are looking to make a complaint as there are so many different consumer codes. Having one single consumer code, with a single body to deal with complaints, makes sense. However, the Government needs to tread a careful line to ensure that the Ombudsman has enough

power to be effective but that at the same time it doesn't end up being too costly and bureaucratic for small and medium-sized (SME) housebuilders.

We agree that the Ombudsman should be free to use for the consumer and funded by industry. However, the funding model needs to be fair and proportionate, reflecting company size. We have proposed that there should be a combined funding system, which is based on the number of units built by the firm, but also on the number of complaints received. That means the smaller housebuilders will pay less than larger volume housebuilders, and those who received more complaints should pay more. This is not only fair to SMEs, but will also provide an incentive for good customer service.

Also, the Ombudsman shouldn't create too much of an administrative burden for the builders. Small housebuilders don't have in-house complaints departments or legal

SOME CONSUMERS DO NOT FEEL THEY CURRENTLY HAVE ADEQUATE REDRESS IF SOMETHING GOES WRONG





UTTERLY BRILLIANT

Sympathetically designed with full consideration to original features, dimensions and detailing, Brett Martin's Cascade is a cast iron style rainwater and soil system that provides heritage style aesthetics without compromising the architectural integrity of traditionally-designed building and renovation projects.

CONTACT US TODAY TO FIND OUT HOW YOUR NEXT PROJECT CAN BE ENHANCED WITH CASCADE.

Tel: 01246 280000
 Email: building@brettmartin.com
www.castironstyle.co.uk



Cascade

CAST IRON STYLE RAINWATER AND SOIL SYSTEM



Plumbing & Drainage



teams who deal with such issues. In fact, often it will be the builders themselves who deals with any complaints. Any time away from site to address administrative demands could delay projects and create stress.

SME housebuilders already feel overwhelmed by the burdens they face

from planning blockages, accessing finance, and material prices raising, and having to deal with challenging letters from an Ombudsman would exacerbate this angst. There should therefore be a streamlined and tailored service from the Ombudsman for SMEs. A good example to look to would be the approach Homes

England takes with its Investment Management System (IMS) for Help to Buy.

But let's not forget that the Ombudsman must have teeth. There is no point having an Ombudsman if it doesn't lead to tangible improvements in the quality of new build homes and customer service. This means it needs to be statutory, so that it is illegal to sell a home without the builder being registered with the Ombudsman. It should also be linked to warranty provision. There should be a publicly available list of those registered with the Ombudsman, that a warranty provider can check against, before agreeing to cover a development. This would therefore make it very difficult for any developer to sell a new home without being part of the Ombudsman.

Finally, while this is a step in the right direction, the Ombudsman ultimately will only intervene when something goes wrong. What is needed is to make sure things don't go wrong in the first place, through ensuring quality workmanship and professionalism. This is why, ultimately, we believe there should be a mandatory licensing scheme in place, that covers the whole construction industry – to ensure all those involved in building new homes meet a certain level of competency and professionalism.

reflex

Thinking solutions.

Servitec Mini

Vacuum spray-tube degassing for domestic heating systems

- Reliable and permanent degassing for optimum heat transfer
- Long-term system safety thanks to excellent water quality
- Save energy, heating costs and reduce CO₂ emissions

With easy
app
control!

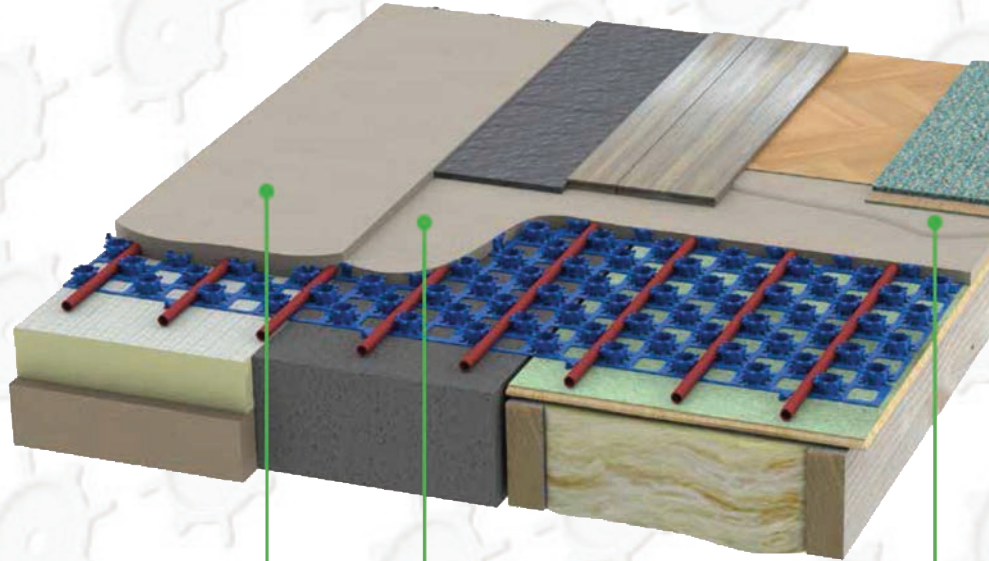


→ Learn more at: www.reflex-winkelmann.com/en



PROFIX™ PLUS – PIPE IN SCREED SYSTEM

**NEW
PRODUCT**

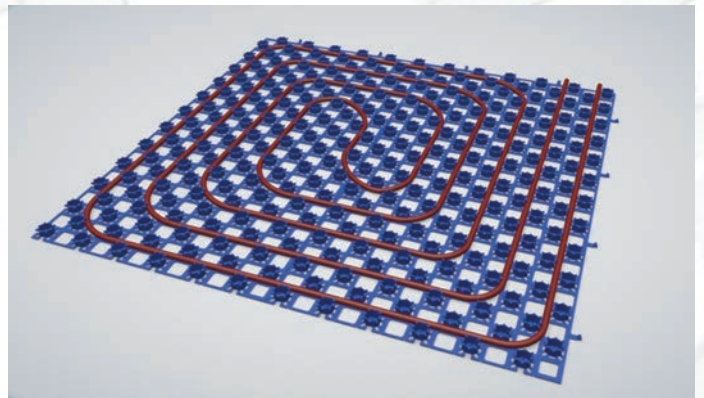
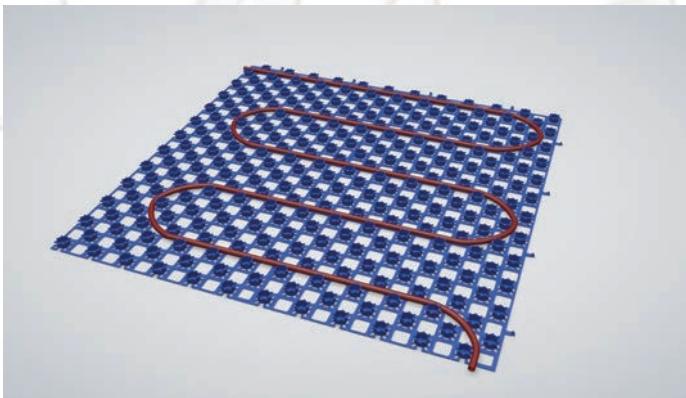


**VERY LOW PROFILE
SELF-ADHESIVE · HIGH HEAT OUTPUT
14mm to 17mm DIAMETER PIPE
NEW BUILD OR RETROFIT**

- Overall screed thickness as thin as 20mm for tiles and engineered wood flooring
- Overall screed thickness as thin as 25mm for carpet and LVT
- Overall screed thickness as thin as 30mm over rigid insulation*

*150 kPa compressive strength @ 10% compression (minimum) and taped joints

The Profix™ PLUS Pipe in Screed System is a very low profile (as thin as 20mm) warm water underfloor heating system capable of delivering high heat outputs even at low water temperatures making it an ideal floor heating solution for both new build and retrofit projects. The independently tested self-adhesive backed interlocking pipe retention panels enable rapid installation of 14mm to 17mm diameter pipe in either serpentine or snail pattern with pipe centres starting at 50mm and increasing in 50mm increments (100mm, 150mm etc....).



01923 725180 | sales@epicinsulation.co.uk | www.profixpanel.co.uk

Registered Office: 22 Wycombe End, Beaconsfield, Bucks, HP9 1NB Registered No. 7702051 VAT No. 121 5128 60



Patrick Mooney, housing consultant and editor of *Housing, Management & Maintenance*

THERE ARE OVER HALF A MILLION CHILDREN IN ENGLAND WHO ARE EITHER ALREADY HOMELESS, OR ARE AT RISK OF BECOMING HOMELESS

THE SOCIAL NETWORK

TEMPORARY HOUSING UNDER INVESTIGATION

Patrick Mooney looks at the crisis around temporary accommodation for homeless people and children in particular, including problems around the use of shipping containers and office conversions

The scale of the country's homeless crisis was laid bare by the shocking revelation that thousands of children are growing up in converted shipping containers and former office blocks due to a nationwide shortage of affordable housing.

While these might be acceptable short-term alternatives (in an emergency) to grimy and overcrowded Bed & Breakfast hotels, a new report has highlighted that many families are being housed for months on end in wholly unsuitable accommodation.

The Children's Commissioner Anne Longfield has deliberately borrowed the title of a Dickens' novel, for her report 'Bleak houses – tackling the crisis of family homelessness in England'.

Based on analysis of official figures, she estimates there are over half a million children in England who are either already homeless, or are at risk of becoming homeless in the near future.

Her estimate of between 550,000 and 600,000 is made up of:

- 120,000 children who are officially homeless and living in temporary accommodation (an 80 per cent increase on 2010)

- Roughly 90,000 children in 'sofa surfing' families
- An unknown number housed by children's services, for which no data is available
- Around 375,000 children living in households that have fallen behind on their rent or mortgage payments, putting them at financial risk of becoming homeless in the future.

"Something has gone very wrong with our housing system when children are growing up in B&Bs, shipping containers and old office blocks," said Longfield. "It is a scandal that a country as prosperous as ours is leaving tens of thousands of families in temporary accommodation for long periods of time, or to sofa surf."

HARMFUL TO CHILDREN

Launching the report on family homelessness, Longfield said the main causes were a lack of affordable housing and financial instability created by welfare changes, cuts to universal credit and a four-year freeze on housing benefit.

The literary theme of the comments was continued by the NSPCC's head of policy Almudena Lara, who said such conditions were harmful to children. "These descriptions of pokey, dangerous conditions belong in a Dickensian novel, but instead they paint a picture of life in the 21st century for many families," said Ms Lara.

For several days after the report's publication, the print and digital media was full of headlines and articles highlighting the dangers of using such squalid accommodation and placing families in places a long way from their families, friends and support groups. They also revealed the largely unseen and hidden problem of homelessness which the majority of the population has thankfully never experienced.

But the real test will be seeing what if any



NOW.

PUMP TECHNOLOGY OF THE FUTURE.



Wilo-SiClean Comfort:

Wilo-SiClean Comfort removes particles from heating systems using natural physical phenomena. For installation in commercial properties (office buildings, hotels, hospitals, shopping centres, schools,...) and heating and air conditioning systems for district heating.

Features & Benefits:

- High efficiency via combination of physical effects: centrifugal forces, magnetophoresis and vortex effect
- Easy to handle thanks to fully automated operation
- Rapid and easy installation via “plug & play” design
- Very convenient thanks to fully automated and adjustable disposal of collected particles in the desludging tank
- Highly functional thanks to removal of all magnetic and non-magnetic particles, free air and micro-bubbles in the fluid, as well as support for the degasification process.

For further details please visit:
www.wilo.co.uk



changes are made in the long-term, when the immediate reactions of horror and shame from commentators and spokesmen alike have died down and the plight of the homeless families continue.

It is certainly hard to argue with the report's conclusion that as a country we are putting the health and wellbeing of these homeless children at serious risk. The analogy of jumping from the frying pan into the fire appears to have almost been coined specifically for this problem.

'HOT SPOT'

One of the localities identified as a 'hot spot' for having a high number of converted former office blocks is Harlow in Essex. In response the council's leader has demanded the Government changes its policy on permitted development rights (dating from 2013), which allows office blocks to be converted to residential use. He also called for the freeze on welfare benefits to be lifted and for extra funding for the building of new council houses.

Councillor Mark Ingall said: "The report backs up the serious concerns we have been voicing for many months about national policies that have resulted in London councils and others placing children and adults into former office blocks in the town. The independent commissioner's findings cannot be ignored and it is time Ministers acted to address the issues.

"These office-to-residential conversions in Harlow are private developments, which have been actively promoted to councils in London and other areas as a cheap answer to social housing shortages. Sadly we have been powerless to stop these developments as full planning permission is not needed due to permitted development rights."

Councillor Ingall said steps to require full planning permission for any future conversions are being investigated, but it is a lengthy process and will not address

existing conversions.

"We know of a case where a mother and two children are living in a bedsit in one office block conversion in Harlow, with only a single bed and a single mattress on the floor for them to share, and with no bathroom or toilet of their own to use.

"We also know of parents and children that have been forced by other councils to move into these permitted developments in Harlow removing them from familiar surroundings, moved miles away from their communities, families and where they go to school, socialise or play. There is no doubt that this, along with living in often unsuitable accommodation, disrupts a child's development, their wellbeing, and their ability to succeed in school, and ultimately it will have a considerable impact on their future potential.

SUSTAINABLE SOLUTIONS NEEDED

Similar messages were given by the Local Government Association, whose housing spokesman, Cllr Martin Tett, said: "The severe lack of social rented homes available in which to house families means councils have no choice but to place households into temporary accommodation."

He said councils' homelessness services are facing a £159m funding gap next year (2020/21). He urged the Government to use the upcoming Spending Round to ensure councils have long-term sustainable funding to prevent homelessness, and that councils are given the tools they need to resume their historic role of building homes with the right infrastructure.

"This includes allowing councils to keep 100 per cent of receipts of council homes sold under Right to Buy, so that they can be reinvested in new replacement homes, and the ability to set Right to Buy discounts locally.

"It should also scrap the permitted development right which is taking away the ability of local communities to shape

the area they live in, and ensure homes are built to high standards with the necessary infrastructure in place, and have resulted in the potential loss of thousands of desperately-needed affordable homes."

Polly Neate, chief executive of the housing and homelessness charity Shelter, said no child should be spending months or even years, living in a shipping container, office block or emergency B&B.

She said the charity constantly heard of struggling families being forced to accept "downright dangerous accommodation" because they had nowhere else to go.

SUITABILITY & LEGALITY ISSUES

One advantage of shipping container units is that they are self-contained – they each have their own front door, kitchen and bathroom facilities, while providing more space than traditional units of temporary accommodation. They can also be erected fairly quickly on land awaiting development, which is only available for relatively short periods.

However, the containers are criticised for poor levels of insulation, being very hot in summer but too cold in the winter. They are often not properly designed with children in mind. Ovens and other dangers can be too close to the ground so that they are in reach of very young children.

The report also highlighted ongoing problems with the use of Bed & Breakfast hotels despite the introduction of a legal limit in 2003 which means that families should only be housed in B&Bs for a maximum period of six weeks, after which they must be moved on to suitable accommodation.

In December 2018 there were 2,420 households with children living in B&Bs according to Government statistics. Of the 2,420 families, a third had been there for more than six weeks, meaning that the councils involved were breaking the law. The National Audit Office has reported hearing of families being housed in B&Bs for as long as 30 months.

The six-week legal limit on B&B use applies only to families housed in private B&Bs, not in council-owned B&Bs. In 2018, it was found that 1,641 families were living in council-owned B&Bs, with nearly two thirds having been there more than six weeks, a much higher proportion of families than in private B&Bs.

The Commissioner's report contains 21 recommendations for Government to act upon. Meanwhile we await details of the new Government's housing policies in the shape of draft legislation and the Autumn spending review. It will be interesting to see how many of Ms Longfield's recommendations make it into new policies adopted by Boris Johnson and his ministers.

urban | front[®]

#doorcuture

steel reinforced natural
hardwood doors

entrance doors

internal feature doors

garage doors

oversized doors

passive house

certified doors

made and designed in UK

+44 (0)1494 778787

info@urbanfront.co.uk

www.urbanfront.com

For beautifully handcrafted
contemporary handles visit
pushpull.co.uk

**PULL
HANDLE**

Secured by Design



Official Police Security Initiative



Dave Sheridan, executive chairman of ilke Homes

MODULAR
CAN BE THE
FORCE THAT
BRINGS
BALANCE
BACK TO THE
INDUSTRY

THE FUTURE IS MODULAR

Modular housing is seen as a potential solution to the housing crisis – here, Dave Sheridan of ilke Homes and Wayne Oakes of engineers Dice explain why they agree.

It's no secret that the UK is suffering from a housing crisis, but modular homes could be the answer. Modular homes are designed to be incredibly energy efficient, with some costing just £1 per day to run, and efficient to manufacture, with some developments boasting a one-week onsite build time. What's not to get excited about?

It's not just architects and contractors who are having all the fun in developing this new approach to housing. Engineers are also challenging the norm when it comes to creating eco-friendly and efficient-to-erect homes.

Wayne Oakes, director at civil and structural engineering practice Dice, explained further: "Compared to the design of standard residential homes, modular homes are a completely different product and require a wholly new approach.

"During our first modular project we spent a considerable amount of time liaising directly with the manufacturer regarding specific details and design standards – most notably with regards to National House Building Council (NHBC) requirements for the substructure. This was a requirement of specialist offsite manufacturing partner ilke Homes' properties, to ensure that each of the plots met the requirements of building control.

"Since then, we've learnt a lot. Perhaps the biggest challenge we have faced to date is attempting to retrofit a brownfield site on behalf of a developer who purchased the site, prior to fully understanding the constraints and nuances associated with the product.

"Modular units have specific requirements in terms of their sub-structures and external works designs – particularly in the case of sites with gradients and surface water management requirements, which would not be considered 'the norm' for standard residential units."

Dave Sheridan, executive chairman of ilke Homes, added: "Offsite modular manufacturing's time has finally come. The traditional construction industry is in desperate need for modernisation and we must do everything we can to pull it into the 21st century.

"Modular can be the force that brings balance back to the industry, creating new homes, new jobs and new investment opportunities."

He continued: "With greater collaboration between government bodies, housing associations and private companies, housebuilding in the UK can get the jolt of energy it needs to ramp up supply and deliver high-quality

homes to everyone. Whether they're a first-time buyer or a family needing social housing, the pace at which we can deliver offsite manufactured homes means that housing shortages could become a thing of the past."

Although modular homes are a relatively new product, technology is quickly making the process easier. But in an industry that's traditionally been seen as slow to adapt – can construction keep up?

Wayne answered this: "In short: yes. Undoubtedly the technology is already here – and more is developing every day. In the past, there have been question marks over the build quality and durability of modular type systems. However, with increased product innovation also comes greater flexibility, and some of the products now available on the market are fantastic.

"As engineers, we've certainly realised technology's potential. Whereas we were once seen as reluctant to change – we're now driving it, thinking creatively to develop new concepts of living."

He added: "It all comes down to time saving. Offsite construction enables phases of work to be undertaken concurrently. Onsite substructure and infrastructure work can be taking place while the superstructure is being built in a factory. Factory conditions also mean that there are no delays due to inclement weather – a common issue in the UK."

The efficiencies relating to modular housing are now catching the attention of big businesses. Places for People has recently pledged £100m – the biggest investment in modular by a housing association to date – to acquire 750 new units from ilke Homes.

Homes England has also announced that it will be delivering 400 modular homes by regeneration specialist Urban Splash, alongside the Japanese modular specialist Sekisui.

Even the likes of Goldman Sachs is getting involved, investing £75m into TopHat's modular housing product.

"Big businesses are seeing the investment potential in modular homes – which is a huge vote of confidence for the industry and will mean big things for the future of the sector," added Oakes.

"But we're particularly proud to have also worked with small, eco-focussed and private developers – as well as multi-national housebuilders."

Dice recently worked with developer Positive Homes, which claims to build houses



STILL USING TRADITIONAL BUILDERS' MERCHANTS?

How terribly, terribly quaint!

Sign up today at cmotrade.co.uk for a credit or cash account and get double rebates this year.

These days, efficient builders use cmotrade.co.uk to get their materials. With over 75,000 items available to order instantly, helpful specialists on the phone and reliable delivery, it's a quick and easy way to save money and time. **Sign up today at cmotrade.co.uk to get double rebates this year.**



Order today, the modern way.



which cost just £1 per day to run. Martin Valentine, managing director of Positive Homes said: “Our bespoke development in the heart of Nottinghamshire will see the creation of nine new properties – which each require a four-day onsite build time.

“We anticipate that these homes will

be sold off-plan due to the high-quality finish, unique design and environmentally-friendly aspects – without the ‘eco-premium’ price tag. These are the real benefits of modular housing.”

Oakes continued: “Where engineering can benefit is through working closely with the manufacturer

to ensure that the groundworks packages are fully coordinated with the modular units before they arrive onsite.

“Our remit has focused on sub-structures – designing a foundation that is fully co-ordinated with the offsite manufacturers’ superstructure and service locations – and the development of the associated civil and infrastructure – designing roads and drainage to cater for developments which can range from nine bespoke units to hundreds of affordable, standardised properties.

“Engineers need to be agile, responsive and willing to adapt to clients’ modular requirements, responding to site-specific factors, and being bold when it comes to challenging a design.

“Yes, modern methods of construction have perhaps been slow to get off the ground. But now that the right people have bought into these principles, I think we’ll be seeing a flurry of projects which incorporate these low carbon, offsite build methods.

Oakes concludes: “We’re a relatively new business – opening in 2018 – but we’ve already completed 100 modular units and are now the recommended engineer for ilke Homes. This is a sign of things to come. The future is very much modular.”

SEE YOU THERE.

YOUR **INDEPENDENT** NATIONAL TIMBER DISTRIBUTOR

MEET US AT UK CONSTRUCTION WEEK

8TH – 10TH OCTOBER 2019, NEC BIRMINGHAM, STAND B434

PLACE YOUR ORDER TODAY
 **SNOWSTIMBER.CO.UK**

 **Snows Timber**

THERMOMUR®

ICF building system

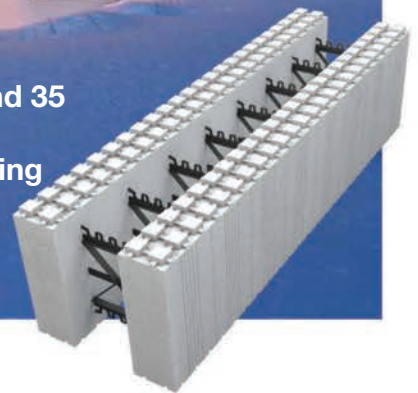
JACKON UK Limited
Unit 5 Ormside Close
Hindley Industrial Estate
Hindley Green
WN2 4HR

THERMOMUR® Scandinavia's leading ICF building system

THERMOMUR® is an insulated concrete forms (ICF) building system based on moulded blocks of expanded polystyrene (EPS), JACKOPOR®. With THERMOMUR® you have a versatile ICF building system which is very easy to work with and healthy to live in.



THERMOMUR® features high quality, excellent insulation properties and 35 years of experience in the harshest of Nordic winters. Architects, builders and planners appreciate in particular the outstanding material properties; such as low weight, optimum insulation value, the wide product range and the flexible, but simple, practical use of THERMOMUR®.



Tel: +44 (0) 1204 2210 89
Fax: +44 (0) 1942 2537 11
E-Mail: info@jackon.co.uk
www.jackon-insulation.co.uk





NEW DEVELOPMENTS

First home finished at pioneering Northamptonshire 'commuter village'

The first home in what has been described as London's only modular commuter village, Utopia Corby, has been completed inside out, according to Project Etopia.

The superstructures of the three-storey townhouses in Corby, Northamptonshire, were completed in 34 days, and the first house – the scheme's showroom – has been decorated and furnished.

The homes are part of a 47-home eco project in Priors Hall Park consisting of 31 houses and 16 apartments. They are all equipped to produce their own energy, coupled with an earth energy bank/GeoStore system, which stores heat energy while batteries store electricity. This means residents enjoy little or no energy bills.

Project Etopia homes are designed to deliver performance similar to the Passivhaus energy efficiency standard, to complement their eco-friendly technology. The developer uses a panelised build system, which means wall panels are produced in a factory and delivered to site for assembly. This reduces construction time, lowering the cost to homebuyers. The panels have a thermal efficiency U-value of 0.13, which is superior to the 0.16 U-value for a typical well-insulated wall in a new build brick property. Most importantly, the panels' air tightness is markedly more effective at maintaining heat within the home than traditional build solutions.

Also key to the Etopia Corby project is the energy storage system married to each dwelling. The scheme embraces the CHESS SETUP (Combined Heat Supply System by using Solar Energy and Heat Pumps). This is a programme (under the 'Horizon 2020' banner) which aims to implement a reliable and efficient heating system that can supply buildings via renewable energy sources.

The Corby project is thought to be the only UK location working with the CHESS SETUP. The technology reduces emissions by using hybrid solar panels to generate heat that can then be stored and used by the ground source heat pump for hot water and heating. The energy earth bank/GeoStore system stores heat energy while batteries store electricity.

The system has been optimised to meet the specific demands of the Corby site, and the installation monitors key data such as available heat energy, weather forecasts and electricity prices to optimise the energy flows within the systems. It is also connected to an independent electric grid owned by utility network provider GTC, and the energy produced on site can be diverted to the grid if necessary, ensuring nothing goes to waste.

Homeowners have access to a smart control tool which can be optimised to take into account electricity prices and the users' requirements.

KEY TO THE ETOPIA CORBY PROJECT IS THE ENERGY STORAGE SYSTEM 'MARRIED' TO EACH DWELLING

When you carry out more than
a million inspections every year

You know build quality
when you see it



Raising Standards. Protecting Homeowners

Leading the way since 1936

www.nhbc.co.uk



CASE STUDY

No. 1 destination

Located in the centre of Mayfair, London, No.1 Grosvenor Square is set to open early next year – after having the former US Embassy’s historic facade painstakingly removed and re-constructed. Charlie Walsh, sales director at Lodha UK, spoke to *Housebuilder & Developer’s* Jack Wooler about a project with exceptional attention to detail.

No.1 Grosvenor Square from Lodha UK is a 45 residence luxury development situated in one of not just the UK’s, but the world’s most iconic addresses.

Set to open in early 2020, the former US Embassy will offer residents opulent apartments, but also round-the-clock bespoke concierge services, state of the art security, valet parking and reportedly “unrivalled” lifestyle amenities.

In order to adequately retain and enhance the project’s rich history, the design by award-winning British architects Eric Parry included the meticulous deconstruction of the building’s neo-Georgian facade, to then re-build it brick by brick, in order to produce all the benefits of classic design allied to modern construction methods.

Alongside the architects, Yabu Pushelberg has created contemporary



interiors to complement the building design, with frequent nods to the heritage of the building and impressive attention to detail.

LOCATION AND HISTORY

One of the largest garden squares in London, near equally prestigious Mount Street and Bond Street, Grosvenor Square gives immediate access to some of the world's most desirable streets, boutiques, Michelin-starred restaurants and exclusive private members' clubs. Originally a popular address among dukes and earls, the square continues to attract an international crowd.

Charlie Walsh, sales director at Lodha UK, explained why this site was chosen for the project: "Grosvenor Square is the jewel in the crown of the Grosvenor Estate and the very heart of Mayfair, and the heritage of the square and the building is so important to us. There are only a handful of residences actually on the square, and these very rarely come to market."

He continued: "Owners of such residences prefer to hand them down to the next generation rather than see them come to the open market. This is the only building to have served as the U.S. Embassy [from 1938-1960] and then the Canadian High Commission, and this rich depth and history is really important for us to maintain."

This history stretches back to the

eighteenth century, when aristocrat Sir Richard Grosvenor commenced developing Mayfair – constructing Grosvenor Square in 1731. No.1 Grosvenor Square was home to John Adams, appointed US Ambassador in 1785, prior to his becoming the second President of the United States. A young JFK lived there when his father Joseph P. Kennedy was appointed US Ambassador to the UK in the 1930s. Reportedly, No.1 Grosvenor Square is the only building to have served both as the US Embassy and the Canadian High Commission.

DECONSTRUCTION

When the team first arrived at this historic site, the building's quality had dipped significantly from its grand roots. "The building was in somewhat of a tired state, having been used as offices and an embassy for a number of years, and therefore required a significant amount of stripping out before works could be undertaken," said Walsh.

One of the most complicated parts of the planning process was to bring this entire building down, brick by brick, creating a new frame, and then replacing the original bricks back in the right order and sequence – as Walsh puts it, "effectively bringing the old building back to life."

After securing planning permission for the structure, Lodha UK appointed Mace, one of the UK's largest construction firms,

ERIC PARRY ARCHITECTS' DESIGN METICULOUSLY DECONSTRUCTED THE NEO-GEORGIAN FACADE OF THE BUILDING, TO THEN RE-BUILD IT BRICK BY BRICK



“LODHA’S RECOGNITION OF THE RICH HISTORY THAT NO.1 GROSVENOR HAS FROM ITS TIME AS A US EMBASSY IS MAINTAINED THROUGH PERIOD FEATURES, SUCH AS KEEPING THE REPLICA OVAL ROOM”

to construct the development. Following this, reconstruction and restoration of the facade building began.

More than 2,000 pallets of stone and brick were removed and transported to a secure off-site location for storage during the deconstruction process. Reconstructing the facade in this manner allows for ceiling heights of between 3.1 and 4.2 metres, which reportedly will be among the highest of any new residential scheme in London.

The deconstruction process also meant that the remaining work did not have to be done behind the retained facade, giving the team much greater flexibility in terms of layouts. “When designing the layout,” said Walsh, “discretion and security were at the very heart of our design process. For example the drop-off area is extremely discreet and secure, under cover and away from any prying eyes.”

DESIGN PROCESS

It was an important part of the design process that the building’s history be retained. Walsh explained how the project put this at the core: “Mayfair is about discreet wealth, and we’ve tried to interpret that in our design and build. We’ve taken the look and feel of the original

building and combined contemporary interiors with a classic English house.”

He added: “Lodha’s recognition of the rich history that No.1 Grosvenor has from its time as a US Embassy is meticulously maintained through period features, such as keeping the replica Oval Room – built by the Kennedys – as an important feature for residents to enjoy and use, while reminding them they are in a very special building with amazing history.”

When designing the building, the architects have carefully considered this heritage, maintaining the proportions of the neo-Georgian structure to ensure the rooms’ gracious sizes, and that period features are retained throughout.

The main structure is built using post-tensioned concrete slabs which are typically thinner than traditional reinforced concrete – maximising the floor to ceiling heights.

A lot of complex details also were required to integrate the original brick and stone facade with the new concrete structure, while also bringing it up to modern standards.

In order to enact this detailed design, “the supply chain for the project is truly global,” said Walsh, “from traditional

SL8
ROOF TILES



Forticrete



Accentuate, SL8.

Easy on the eye and easy to lay... a housebuilders' dream for roof tiling. The SL8 roof tile has a wider format and a thin leading-edge to replicate what's great about natural slate; effortless interlocking and a natural, sleek finish. Looks great, must be SL8.

For more information or to request a sample of SL8, visit forticrete.co.uk/SL8 or call 01525 244 904 quoting SL8HBD02.



10 large format tiles = 8 SL8 tiles



Ibstock
At the heart of building



sash windows and slate tiles produced in the UK to stone sourced from Italy, Portugal, Turkey and Brazil.”

This global supply chain of course extends to the development’s interiors. Project interior designers Yabu Pushelberg used their “unique creative ability to source the most interesting materials in the world for their compelling interiors,” said Walsh – those materials include Italian marble and American black walnut.

He continued: “Their exceptional attention to detail delights the most discerning of tastes, and by selecting an exceptional variety of textures and a light contemporary palette, the understated elegance showcases effortless luxury within each home in the development.”

END PRODUCT

When completed, No.1 Grosvenor Square will offer more than just meticulously crafted design; the project will boast

views across the London skyline as well as a dedicated lifestyle floor with a 25 metre pool, state-of-the-art gymnasium with a personal training room, private spa and treatment rooms, private screening room, lounge bar (with billiard table), onsite restaurant operated by a world-renowned chef, private library and business meeting room, secure off-street gated parking, and 24-hour concierge plus full ‘lifestyle services’.

With all of this on hand, as well as its prime location, historic background and lavish qualities, the building is well suited to the luxury market as a grand refurbishment appropriate to its surroundings.

Walsh concluded on the team’s ethos for the development: “We felt it was very important not to simply re-create another ‘5-star’ hotel, but very much focus on creating a ‘home’ for our buyers that they will be proud of, and will enjoy showing to their family and friends.”

Saniflo Kinedo feature in luxury development



Saniflo Kinedo shower cubicles are the showering solution of choice for Lancashire-based Tustin Developments' project in the seaside town of Lytham St Ann's, where former tax offices once used by HM Customs & Excise, have been transformed into a block of 36 luxury apartments called Tustin Heights. Owner of Tustin Developments, Andrew Roberts comments: "The cubicles have proved to be popular with the whole installation team. Malcolm Young is our

contractor and he's very hard to please, but he's absolutely sold on them. The team of plumbers have said how straightforward the whole installation process is – in fact many of us would like one of these in our own homes."

020 8842 0033 www.kinedo.co.uk

Forward-thinking flexibility in luxury housing



The Lower Mill Estate, a development of sustainable holiday homes in the Cotswolds, is offering holiday homemakers the best in bespoke, energy efficient properties with the help of the **Kingspan TEK Building System**. The diverse selection of residential properties have benefited from the Kingspan TEK

Building System's scope for individual design and off-site construction, which has improved construction efficiency. The Kingspan TEK Building System, which comprises a high-performance insulation core sandwiched between two layers of OSB/3, was selected as it allowed a high level of design flexibility and exceptional out-of-the-box fabric performance, as well as creating minimal site waste as kits are designed and cut off-site.

01544 387 384 www.kingspantek.co.uk



Penthouses offer personal storage with Salice's Pin display system

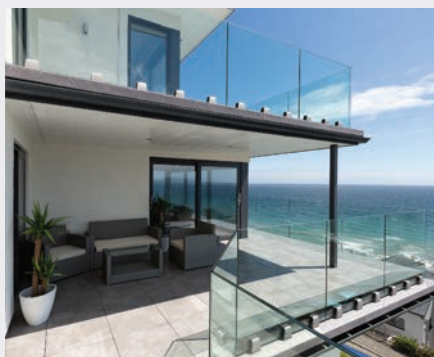
Salice UK are delighted to have worked in partnership with Euro Cucina, supplying their Pin display storage system for installation at Landmark Place, a development by Barratt Developments of 165 one-bedroom suites, one, two and three-bedroom apartments and penthouses. Euro Cucina are established as one of the leading kitchen and wardrobe suppliers for the contract sector in the UK, supplying many of the most prestigious UK housing developments with high quality European kitchens. For Landmark Place, the Pin system complemented the beautifully crafted, high end kitchens within the penthouses, enabling flexible, personalized storage of bottles, knives and shelves. The elegant design and highly refined Pin has streamlined aesthetics with a rapid and intuitive assembly, and is available in steel and titanium finishes. In addition, the Pin brackets can be moved simply and positioned anywhere with an ingenious fixing system that is strong and stable. For stylish wine bottle storage, Pin offers many configurations including Pin Wine supports which are fixed in tiered pairs, each carrying up to 3 bottles. The Pin Wine brackets 'made to measure' option enables both standard, small and even 'magnum' bottles to be displayed securely, and the versatile design can even be used to create bespoke arrangements to integrate into kitchen units.

www.saliceuk.co.uk

Mapei's Mapetherm System adds to the scenery

Two of Mapei's complete external wall insulation and protective coating systems have been specified and installed on an impressive house renovation on the coast of Donderry in Cornwall.

Mapei provided RGB Supplies with a specification for installers F. D. Hall & Son Ltd., which required delivering a uniform finish across two very different substrates. On-site training and support was provided throughout the project duration, where Mapei worked closely with the contractor and client/project manager Jim Lockyer of civil and structural engineers James Lockyer Associates Ltd who undertook the multi-disciplinary planning, design and specification of the project.



To provide thermal benefits and to align the original timber frame substrate, Mapetherm EPS Plus insulation board, with Mapetherm AR1 GG insulation adhesive and smoothing render reinforced with Mapetherm Net was used over the existing masonry construction.

A new timber framed structure was added to the building and finished with a Mapetherm Thin Coat render only system; consisting of Mapetherm AR1 GG with reinforcing mesh (Mapetherm Net) and Mapetherm Plus System, which incorporates Silancolor Base Coat and Silancolor Tonachino Plus 1.2mm applied to a cement board.

To provide a uniform finish, both systems were completed using Mapei's protective and decorative coatings, Silancolor Base Coat and Silancolor Tonachino Plus 1.2mm, the ideal solution for a structure exposed to the extreme elements of a coastal location. Mapei's standard White, an off-white colour, was selected to complement the geographical setting along the coastal road.

Mapei's Silancolor Tonachino Plus is a trowel-applied, textured and coloured finish available in a range of grain sizes. Containing BioBlock® anti-mould and DropEffect® water-repellent properties, the product is favoured for damp climates where the potential



for mould and algae growth is prevalent. Silancolor Base Coat, applied to AR1 GG Reinforced Coat, provides a matching colour undercoat. It is used to even out the absorption of the substrate and promote bonding of materials from the Silancolor range.

Mapei's protective and decorative coatings are available in an infinite range of colours available with the ColorMap tinting system.

0121 508 6970 www.mapei.co.uk



FROM THE GROUND UP

SOLUTIONS FOR YOUR HOUSE BUILD

BEAM AND BLOCK
CONCRETE



FLOOR
SCREEDS

Supaflo

READYSCREED®

SELF COMPACTING
CONCRETE

evolution

WATERPROOF
CONCRETE

Permatite

BRICKS &
MORTAR



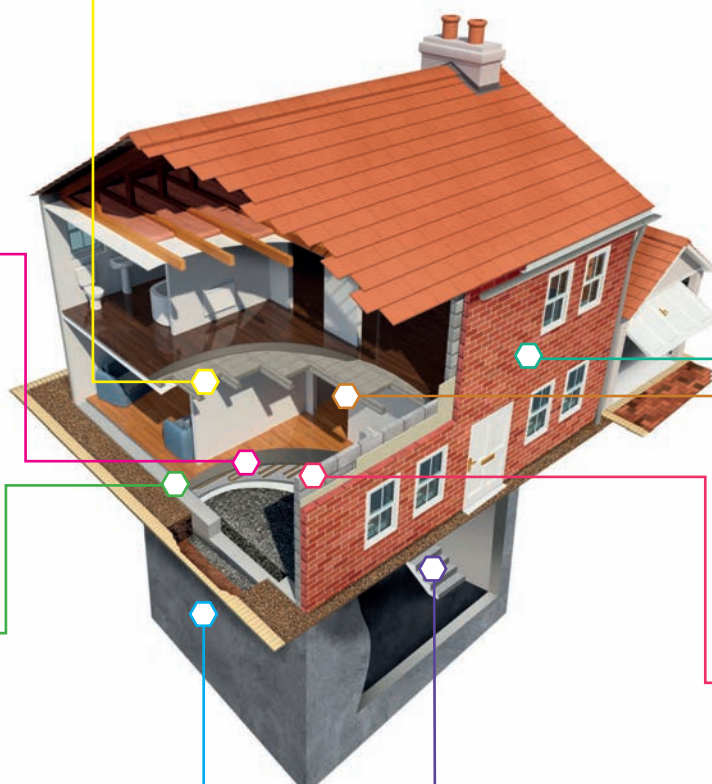
BEAM AND BLOCK
FLOORS



CONCRETE
BLOCKS



PRECAST CONCRETE
STAIRS



Visit CEMEX at UK Construction Week 2019, stand C320

CEMEX have a wide portfolio of house building products and services designed to save time and money for your project. Backed by our technical expertise and our materials design, our innovative products make us one of the UK's leading construction materials solutions providers. To find out more about our products scan the QR code to visit our website.



www.cemex.co.uk 0800 667 827

SHOW PREVIEW

SEVEN REASONS NOT TO MISS UK CONSTRUCTION WEEK 2019

If you're not yet registered to attend the UK's largest construction event, here are seven things that might convince you to head to the NEC next month.

1. PRODUCTS

New products are always being developed to meet different and emerging needs. Staying up to date with all the latest technology is essential to find the right product for the job.

If you need to source a new heat pump, find a new sustainable material, discover new roofing products or even new BIM software, then look no further than UKCW.

With over 10,000 products being showcased at the event, UKCW is the ideal marketplace to source your new product, and with eight different sections ranging from build to timber and from surfaces to civils, everything you need is right there under one roof.

2. THAT LUCKY ENCOUNTER

Year after year, visitors at UKCW say they won new work as a result of a planned meeting

or a chance encounter at the show. People do business with people – and with 35,000 visitors set to attend UKCW, that is a lot of potential leads.

Meeting face to face is the most engaging way to do business, and UKCW can facilitate that. If you have spotted a business that you want to connect with, contact them through the exhibitors' portal and arrange the meeting in advance. 4,000 business meetings were booked by UKCW visitors prior to the show last year, and exhibitors reported that they had generated 70,000 new business leads at the event. To help with meetings, there's also a new business and networking lounge with free Wi-Fi.

3. GENUINE INNOVATION

You could leave the future of the industry as a surprise. But where's the business sense in





that? Disruptors are now present in many different markets, so this year UKCW is shining a spotlight on the serious change-makers in construction. To aid the search, a new Innovation Zone has been established in partnership with the Construction Innovation Hub (the Hub).

4. YOUR OWN PERSONAL INDUSTRY MBA

Condense your strategic business learning into one, two or three days of insights. UKCW brings together more than 300 expert speakers including Mark Farmer, who is spearheading policy initiatives on modern methods of construction (MMC), Victoria Hills, chief executive of the RTPI, Nick Walkley, chief executive of Homes England, Chandru Dissanayake, director of building safety reforms at MHCLG, and Keith Waller, programme director at the

Hub. The UKCW main stage is the place to head to. It offers a programme of keynote talks and panel discussions on many of the big issues of the day.

And if that's all a bit too high level, get stuck into the details at a wide range of workshops. This year there will be more than 150 hours of CPD content available. The programme will take on a different theme for each day of the show, tackling fire safety, health and

wellbeing and sustainability. There are mini-theatres covering regeneration, MMC, digital construction, energy and HVAC, surfaces and materials, timber and the workplace.

5. MYTH BUSTING MMC

Everyone knows that modern methods of construction are back in vogue, but what is the reality this time? MMC is a strong theme at this year's UKCW.

Full-scale builds will be erected onsite with live demos of MMC technology in action, and head to the MMC Hub for other digital demos and simulations too.

Examples of the pre-manufactured structures at the show range from a modular care annex for the healthcare sector and a SIPs panel residential building, to a factory-finished modular bathroom pod for the high end hotel sector, and offsite solutions for the education sector.

6. HEALTH & WELLBEING

Launching at UKCW this year, the Mind Your Head campaign is designed to promote mental wellbeing for those working in the construction industry, with particular focus on men who are at greater risk of suicide. It is a straight-talking, no-nonsense and accessible way to reach this target audience.

As part of the campaign, Carwyn Lloyd Jones, the creator of the Tiny House at last year's UKCW will be using his talents to create an artistic installation of swings which has a mental health focus.

7. CELEBRATIONS & A BEER FESTIVAL

Everyone enjoys a good awards night and UKCW is no exception. The show hosts the UKCW Role Model of the Year, the new Building Trades Awards with Fix Radio and the new UKCW Construction Awards. Plus, to encourage young people into construction the iBuiltThis competition is back and the winners will be announced at UKCW. And if you're not involved in the celebrations, just unwind each day with a beer, some street food and a spot of music.

UKCW is one event with many sections, including Build sponsored by Easy-Trim, Building Tech, Civils, Energy and HVAC, Surface and Materials, and Timber. It also features Concrete Expo (8-9 October only) and Grand Designs Live (9-10 October only).

Single registration gives access to all areas of the show. For further information follow [@UK_CW](https://twitter.com/UK_CW) or search for the hashtag [#UKCW2019](https://twitter.com/UKCW2019)

Retro video games meet modern 'Smart' heat network solutions at UK Construction Week

Evinox Energy are gearing up to take part in UK Construction Week, which is running from 8th to 10th October at Birmingham's NEC and is the largest and most significant construction event of the year. UK Construction Week features an excellent programme with over 650 exhibitors covering every facet of the industry, CPD accredited seminars, networking events, an innovation zone and much more.

Visit Evinox at stand E317 where retro video games meet modern 'Smart' heat network solutions, with the launch of ModuSat® FUSION prefabricated HIU utility cupboard. The product will be on display and offers the 'perfect fit' for communal and district heat network developments.

Visitors can watch the ModuSat® FUSION



video (Styled on classic 80's video games) and experience first-hand the unique combination of ultra-compact design with 'smart' high-efficiency heat interface unit performance.

WIN A RETRO NINTENDO NES GAMES CONSOLE

Be sure to stop by at Evinox's stand and enter the Free ModuSat® FUSION competition, where you can win a retro Nintendo Classic Mini NES games console! A miniaturised version of the ground-breaking NES originally released in Europe in 1986.

If successful you can plug the Nintendo Classic Mini into your TV, pick up that grey controller, and rediscover the joy of NES games – in high definition at 60 Hz!

There will be 3 Nintendo Classic Mini NES's up for grabs, one on each day of the exhibition and entry is completely FREE of charge. Winner's will be announced at the end of each day. Visit Evinox's stand for full details.

'SMART' HEAT INTERFACE UNITS ON DISPLAY

Evinox will also display the latest range of



ModuSat® XR'Smart' Heating and Cooling Interface Units at the event. These units provide M&E Contractors and Consulting Engineers with a "whole lot more" for a "whole lot less" due to the myriad of hidden extras. Models on display will include the popular ModuSat® XR-ECO Twin Plate unit for heating and instantaneous hot water and the ModuSat® XR-ECO Combined Heating and Cooling interface unit, with new ultra-compact dimensions.

Find out more about the benefits of installing ModuSat® FUSION Prefabricated HIU Cupboards and Evinox's 'Smart' HIU technology by visiting Stand E317 at UK Construction Week 8th-10th October NEC.

01372 722277

www.evinoxenergy.co.uk/fusion

FROM OUR SITE, TO YOUR SITE...

IN A JIFFY
(or a box)

**OVER
17,500
PRODUCTS
IN STOCK
AVAILABLE
NEXT DAY**

**Delivered on
time - 7 days
a week!**

We won't let you down



Join the **THOUSANDS OF TRADESPEOPLE** who shop with us every day!



CALL: 7am-8pm 7 days a week

0808 168 22 79



ONLINE: Shop 24/7!

IronmongeryDirect.com

IronmongeryDirect

MASTERS OF OUR TRADE

Can you REALLY spot the difference?

Eagle-eyed builders are given the challenge: tell us which one is not traditional brick.

A challenge is being set for builders attending UK Construction Week – spot which facade is not made with traditional bricks.

The competition aims to promote a new, fast-fix brick system that is significantly faster to install than brick slips. It's the newest innovation in a range of MMC products launched for the UK housebuilding market.

weberwall brick from Saint-Gobain Weber is a lightweight brick effect product supplied on mesh sheets, in a range of realistic brick finishes.

Weber is so confident that even the most seasoned bricklayer will not be able to spot the difference, it is offering a prize draw* of an iPad Mini or £500 of Virgin Experience Day Vouchers at UK Construction Week to those who can guess which is which.

As a UK factory-manufactured product that falls into category six of the Government's recent MMC definition, weberwall brick is ideal for applications where a housebuilder wants to achieve a quality facade finish without having to use specialist labour.

Kelvin Green, product manager, Saint-Gobain Weber said:

"About half of all new builds in the UK have



brick facades, a clear indication that people find brick aesthetically appealing. With the cost of bricks increasing and expensive alternatives such as brick slips and acrylic bricks, meeting this demand is costing housebuilders dearly.

"Bricklayers are highly skilled and are often in short supply. We developed the weberwall brick as an alternative to traditional bricks and brick slips, enabling housebuilders to save skilled bricklayers for more complex jobs."

Available from autumn 2019, weberwall brick comes in a selection of colours and three designs to accommodate common design

requirements: wall, corner and soldier wrap. It is applied to the substrate with a specially formulated render before being pointed in the same way as a standard brick. It is also suitable for use in interior design.

To find out more and see live installation demonstrations, visit Saint-Gobain Weber's stand at UK Construction Week (B292 in the Build area, Hall 10).

*Terms and conditions apply, please see the Saint-Gobain Weber website.

01525 718877 www.uk.weber



COME AND SEE US AT UK CONSTRUCTION WEEK

Your trusted partner for all mechanical ventilation and duct systems



**8TH - 10TH
OCTOBER**

**VISIT US AT
STAND
E10!**

 DOMUS VENTILATION  DOMUSVENT
03443 715 523 | domusventilation.co.uk

DOMUS
VENTILATION

UK CONSTRUCTION WEEK | 2019



8-10 OCTOBER | NEC | BIRMINGHAM

BUILD

Sponsored by **easy-trim**



The UK's largest construction event for Builders

INNOVATIVE PRODUCTS

650+ EXHIBITORS

EXCLUSIVE DISCOUNTS



Roofing, Cladding & Insulation



Health & Safety



Tools



Doors, Windows & Glass



Fire Prevention



Modern Methods of Construction

ukconstructionweek.com

#UKCW2019 | @UK_CW

Register **FREE**

SPONSORS



SUPPORTED BY





THE CLIMATE CHALLENGE

Global change, local impacts

The wide-ranging effects of climate change have been monitored by scientists across the world for years; from more extreme weather events to sea level rises, it's a reality that's no longer in dispute. In the first of a series of articles in *Housebuilder & Developer* looking at the Climate Challenge, Jack Wooler takes an in-depth look at the wider impacts, as well as the responses the construction and housebuilding industry has made thus far.

As far as we know, the earth has experienced five mass extinctions in its history; it is believed that all of these events except the one that killed the dinosaurs was fuelled by climate change. Scientists across the world are convinced that we are this very moment experiencing the early days of such an event.

Prophecies of doom such as this are prone to doubters – climate change can seem like a far-away issue that will only be felt by subsequent generations (which in itself should have been cause for alarm).

The reality, however, is that our climate has already changed.

Two simple, evidenced examples of this are that it is now between 0.5-1 degrees celsius hotter in England than it was in the 1970s, and sea levels have been rising by an average of 3 mm each year.

While these facts may not be earth-shattering in their own right, the repercussions are more tangible – as temperatures rise, the more volatile our climate becomes. A total of 1.8 million people in the UK are already living in areas of significant flood risk, the water necessary to supply our homes is in short supply, rising temperatures are contributing to widespread overheating in homes, and this year has seen the UK hit by 100 large wildfires – before April – making it the worst year on record in just four months.

Humans are not the only ones affected of course. According to the journal *Nature Ecology and Evolution*, more than two plant species a year have become extinct since 1753, with 571 going extinct between then and 2018. This is thought to be an underestimate, but even this rate is said to be around 500 times faster than the rate that they would have, without human intervention. The insect population is also

plummeting, with 40 per cent of species currently in decline.

In countries at much greater risk than our own, changes have already been immeasurably more severe. At the time of writing, the Amazon rainforest is seeing thousands of blazing fires (the forest being a vital carbon store which produces around 20 per cent of the world's oxygen); multiple studies have cited climate change as a contributing factor to the civil war in Syria; and Indonesia is set to become the first territory to change its capital city (currently Jakarta) because of severe flooding and coastal erosion. The potential effects from the resulting mass migration due to such events could however prove problematic closer to home.

Freak weather has of course existed for as long as humans have recorded events, but it is widely accepted that global warming is exacerbating these events, and making them more frequent.

These changes have not gone unnoticed. There have been some high-profile campaigners grabbing the headlines recently, in particular Greta Thunberg, the Swedish teenage activist who has been spreading the word across the world through speeches and student strikes. More

controversially, direct action group Extinction Rebellion stopped traffic in several events earlier this year including on major roads in London.

The Government has been paying attention. In June, they committed to cutting greenhouse gas emissions to “almost zero” by 2050, following the previous target of reducing emissions by 80 per cent by the same date under the Climate Change Act in 2008.

Even if this can be achieved however, and other countries follow suit, according to the UN Intergovernmental Panel on Climate Change (IPCC), there is still thought to only be a 50 per cent chance of preventing more than 1.5 degrees of temperature change by 2100. It is not even a given that the UK’s targets will be met, with new coal mines still being opened in the UK (e.g. in

Cumbria), a serious performance gap between design and construction in new homes, and projects such as the potential extension to Heathrow airport all contributing to our carbon footprint.

As argued by the IPCC, The Committee on Climate Change (CCC), an independent body which advises the Government, says that even with “strong international action” to curb emissions, global temperatures still have a 50 per cent chance of rising above 2 degrees by the end of the century. It has been widely agreed that, while 1.5 degrees of warming will cause a shift in our environment, just half a degree more will prove to be disastrous.

With some level of impact looking to be inevitable, the dire situation can produce a feeling of powerlessness, and apathy. But notwithstanding that, the UK housing

industry faces the inescapable challenge of producing homes that must confront the consequences of the actions the world has already taken.

Former UK Prime Minister Theresa May, when announcing the net zero target, tacitly accepted the UK’s disproportionate role in addressing climate change impacts, given its early role in carbon emissions. She said: “This country led the world in innovation during the Industrial Revolution, and now we must lead the world to a cleaner, greener form of growth.”

On the following pages, we’re going to take a look at the key areas of the construction sector that climate change will hit. This will be followed up in future issues by features on practical solutions together with advice from industry experts from across the sector.

The built environment

What role does the construction sector have to play in mitigating climate change? What can be done to remedy the effects of climate change that we know are coming – and those which are here – and how can the industry reduce its carbon-hungry nature?

Many lifestyle-orientated suggestions on how individuals can make changes to aid the cause have been put forward, from eating less meat, to cycling or taking public transport, or avoiding air travel where possible. On an industry-wide level however, small factors could drastically rise or lower our emissions at a state level.

According to the UK Green Building Council (UKGBC), the built environment contributes around 40 per cent of the UK’s total carbon footprint, so developers face a big challenge in reaching Government targets – which some argue are themselves inadequate.

Homes in particular are a major factor in the UK’s emissions, with heating and hot water making up 25 per cent of our total energy use, and 15 per cent of our greenhouse gas emissions. Further to this, electricity for home appliances and lighting make up another 4 per cent.

Designing homes from the outset to meet stringent energy efficiency standards such as Passivhaus would be a big step towards reducing the industry’s contribution – but perhaps just as important is that homes new and old need to be readied for the almost inevitable outcomes of climate change.

In February this year, the Committee on Climate Change (CCC) released ‘UK housing: Fit for the future?’, which reported: “Greenhouse gas emission reductions from UK housing have stalled, and efforts to adapt the UK housing stock for higher temperatures, flooding and water scarcity are falling far behind the increase in risk from the changing climate.”

The report states that it is essential that homes are adapted for the current and future climate: “Around 20 per cent of homes (4.5 million in England) currently overheat even in cool summers; 1.8 million people live in areas which are at significant risk of flooding; and the average daily water consumption per person across the UK is around 140 litres, above the sustainable level in a changing climate and higher than many other European countries.”

It proposed what it believes should be the five priorities for Government action. These are as follows:

- Performance and compliance, in terms of design standards and the performance gap
- The low-carbon skills gap, likely worsened by the general skills crisis the industry is undergoing
- Retrofitting the 29 million existing homes across the UK to be low-energy as well as resilient to the changing climate
- Building new homes, and ensuring they are efficient and resilient in their inception
- Ensuring local authorities have the funding they need for building control, and low-carbon heating be funded past the current commitment to 2021, alongside green loans and fiscal incentives.

While it can be hard to put such

warnings and advice into perspective, the impacts they are having on the industry are tangible, and every sub-sector will have a part to play in the future of our climate.

There has however been criticism of the measures already taken – such as in the report ‘Bricks and Water’ by the Westminster Sustainable Business Forum. It attacks English councils’ efforts (at least up until 2018): “Progress on adapting English communities to climate change has been very limited and any prior momentum has stalled. Fewer than half (42 per cent) of local authorities have a climate change strategy or adaptation plan.”

The report continues: “We are building hard urban catchments, thereby increasing the risk of surface water flooding in many places, as the water has nowhere to go. For example, urban green space in England has shrunk by 7 per cent since 2001, and in the last 10 years across UK 22,000 hectares of green spaces has been lost: an area of land twice the size of Liverpool has been turned from green space to hard surface.”

IT HAS BEEN WIDELY AGREED THAT, WHILE 1.5 DEGREES OF WARMING WILL CAUSE A SHIFT IN OUR ENVIRONMENT, JUST HALF A DEGREE MORE WILL PROVE TO BE DISASTROUS



Flooding & water shortages

Flooding is one of the most pressing issues regarding climate change for most people in the UK. In England, for example, one in six homes are currently at risk of flooding; annual flood damages cost around £1.1bn; and, according to one rescue equipment manufacturer, you are more likely to get flooded than burgled.

On the extreme end of things – while it may be a long way off yet – the ice caps will melt if temperatures increase by three degrees. Ocean chemist David Archer calls this the “long thaw,” and believes that ultimately, the sea will rise by at least fifty metres (the U.S. Geological Survey puts it at 80 metres). If this were to come to pass, most of London would be covered by the sea.

More immediately however, according to the CCC report approximately 1.8 million people are already in areas of significant flood risk. It reports that the impacts of flooding and coastal changes in the UK right now are significant, and that this will worsen as the climate warms.

“Improving protection for some communities will be possible through community scale defences, but others will face significantly increased risks,” the report reads. “If unmanaged, these risks will affect property values, business revenues, and in extreme cases the viability of communities.” It adds that warming of 4 degrees

celsius or more immediately implies “inevitable increases in flood risk across all UK regions, even in the most ambitious adaptation scenarios.”

It is often assumed – while they certainly will be at risk – that it is coastal towns that will feel the brunt of this in the form of rising sea levels and coastal erosion. London, for example, is well protected from predictable sources of flooding due to the Thames Barrier, and around 400 smaller barriers and moveable flood gates, plus over 300 km of river walls and embankments stretching into Essex and Kent. Unfortunately however, there are many sources of unpredictable flooding which even heavily protected areas like our capital may not be able to cope with.

Somewhat counter-intuitively, scientists expect that global warming will lead to more extreme rainfall. The IPCC has predicted that the UK and Europe are “very likely” to see more heavy rainfall throughout the century, and the Met office reported last year that nine of the UK’s 17 record breaking rainfall periods since 1910 have taken place since 2000.

The Met Office’s chief scientist Julia Slingo commented: “all the evidence suggests there is a link to climate change.” Though she makes it clear it is extremely difficult to determine a “definitive answer” as to what causes certain extreme weather, she said: “There is no evidence to counter the basic premise that a warmer world will lead to more intense daily and hourly rain events.”

As global warming causes this ever-heavier rainfall, and sea level rises lead to bigger storm surges, flood risk will grow dramatically. Unpredictable flash floods and freak weather occurrences will endanger even our most protected habitats and settlements.

CONSTRUCTION RESPONSE

The industry has already taken steps to alleviate the pressure of such flood risks. The CCC report said that investment in flood alleviation schemes have increased since 2015, and between April 2015 and April 2017, 97,000 homes in England benefitted from new or replacement flood defences.

The UK Green Building Council (UKGBC) reported that 83 per cent of BREEAM new construction projects completed in 2016 used flood resilient design measures, 10 per cent of all paving sales in 2013 were permeable, and 80 per cent of social housing is “relatively safe” from flooding.

However, it is becoming clear that our current system of collecting surface water from homes using pipes and then releasing it into local waterways is no longer proving adequate. Sustainable urban drainage systems (SuDS) are a rising trend to supplement and/or replace these. They form a more effective water management system, and help to mitigate the effect that human development has had on the natural water cycle, making it more resilient against storm surge overflows and other forms of flooding.

Some examples of SuDS include swales,

SOMEWHERE OUT ALONG THE TIMELINE IS THE ‘JAWS OF DEATH’ – THE POINT AT WHICH, UNLESS WE TAKE ACTION, WE WILL NOT HAVE ENOUGH WATER TO SUPPLY OUR NEEDS



basins, green roofs, and permeable paving, the latter proving to be a particularly popular and efficient measure. In essence, it's a system that allows water falling on hard landscaping to permeate to the soil below, usually via some kind of porous pavement material or structure.

Guidance and regulation on SuDS however has long been a contentious issue – it's been over three years now since Government abandoned dedicated requirements for SuDS in England using the 2010 'Flood and Water Management Act.'

In contrast, however, earlier this year the Welsh Government implemented Schedule 3 of the act, which includes measures to establish a SuDS Approving Body (SAB). Alongside this, SuDS systems as a whole in the UK have been given a regulatory boost by what's known as Sewers for Adoption 8 (SfA8) – official guidance set to come into force around April 2020 (which explicitly promotes the use of SuDS in schemes). As to the latter however, rather than seeming to be a silver bullet for sustainable drainage, neither permeable pavements or green roofs are covered in the document, and there have been some concerns as to how strongly these standards can be enforced.

So, there is technology available to adapt communities to protect against some flood risks, backed by official guidance, but the real question remains: will these measures be enough? While some developers may struggle to justify costs at this stage, and there is a question of whether the Government should intervene here, not doing so is a likely to be a false economy in the long run. Even now, the cost to the taxpayer of dealing with the damage caused by flooding is already over £1bn every year.

WATER SHORTAGES

Where flooding implies an abundance of water, water shortages are perhaps a more expected consequence of rising temperatures. As the CCC report found: "Population growth will increase the

demand for water, while climate change is projected to make summers drier," an issue which it states is in "urgent need" of co-ordinated action.

Surprisingly, flooding and drought go hand in hand. Alongside the more obvious fact that soil absorbs water far less efficiently when it is dry and compacted, droughts affect water vapour concentrations, clouds, precipitation patterns and runoff, and stream flow patterns – all of which have the potential to increase the risk of flash floods.

EACH SECTOR HAS A DIFFERENT PLANNING HORIZON, LEADING TO INCOHERENCE OF APPROACH

As to the increased demands for water – the potential for water deficits is most acute in London and the south east, but, the CCC found that "routine deficits between available water and demand may emerge in northern and western UK areas by mid-century."

Sir James Bevan, chief executive of the Environment Agency, has referred to what he has called "The Jaws of Death" in speeches this year. This is where, as if on an x/y axis on a graph, the predicted water demand that is expected to rise over the next several decades, and the water that will be available to supply those needs, meet.

He told the Water Industry Forum in Birmingham in May this year: "Somewhere out along the timeline, usually around 20 years from now, those lines cross. Those are the 'jaws of death' – the point at which, unless we take action to change things, we will not have enough water to supply our needs."

He said: "This risk is being driven by climate change. In the UK we will have

hotter and drier summers. That will mean more water shortages and a higher risk of more frequent and more extreme droughts."

This is not just a 'special interest group'-held belief – the Westminster Sustainable Business Forum (WSBF) produced many similar findings in its 2018 report 'Bricks and Water'. It predicts that by 2050, "water demand could exceed supply by up to 22 per cent."

It estimates that "an extra 4 billion litres of water will be needed every day by 2050 to ensure that the water network is resilient, and there is currently a planned resilience shortfall in the water sector of 1,000 ML/day."

The WSBF points out that the homes we are building will be around for the next 50-100 years "at least." The report adds: "Unless these houses are designed to be water efficient and flood resilient, it will be future generations who have to pay, and the costs of retrofit or crisis responses are inevitably higher."

The organisation cites cuts as a danger to alleviating the situation, saying that The Environment Agency has suffered 19 per cent staff cuts in the past five years, including 40 per cent of its 'planning and development control' staff. It adds that the government agency Natural England's budget has been cut 60 per cent since 2009, "losing many of its policy specialists."

Continuing on the structural issues in the housebuilding sector, the report says: "Relationships between water companies, housebuilders and local authorities are complex and disjointed, with no designated forum to initiate strategic discussions about how to tackle problems at scale or nationally. Each sector has a different planning horizon, leading to incoherence of approach. There is palpable distrust between some housebuilders and water companies, which is evidenced by their breakdown in communication, and this is causing costs and delays to both parties."

It also claims that homes "aren't as water efficient as we think they are," citing evidence from Thames Water that "suggests that new homes built to a standard of 105 litres per person per day actually tend to be using between 5-25 per cent more than expected."

One way in which this can be remediated is through the use of 'water-responsible' products. Such products aim to offer low water use, where many suffer from high water consumption and energy usage. The European Unified Water Label has helped to drive this forwards, providing a standardised labelling system for bathroom manufacturers to clearly display a products water and energy usage at a glance.



Overheating & bridging the 'performance gap'

Among its many suggestions, the CCC's 'Fit for the Future' report asserts that it is vital that homes be climate-resilient. One of the more obvious examples of climate change is rising temperatures, and as such, there is a rising necessity to improve the heat resistance of our homes, as well as to provide the necessary cooling.

Overheating has been on the rise, exacerbated by what The House Builder's Association has termed 'the ever-exacting standards' of Building Regulations Part L, which stipulates airtightness levels that are argued to be too high without mitigating measures. A warming climate will of course add to the problem.

In 2003 we experienced one of the most significant heatwaves recorded – more than 2,000 people lost their lives – but such events are expected to be the norm in summer by the 2040s. Another warning was given this summer, with France seeing temperatures of 45.9 degrees celsius, the highest ever recorded in the country.

According to the CCC's report, 20 per cent of homes in England already overheat. It states, "In the absence of action," annual UK heat-related mortality is projected to increase from a current baseline of 2,000 deaths per year to 5,000 per year by 2050 (or 7,000 if accounting for projected population growth.)

Unfortunately, there would still be around "41,000 cold-related deaths per year," says the organisation.

With the proportion of urban green spaces in England dropping from 63 per cent in 2001 to 55 per cent today, the 'Urban Heat Island Effect' will increase, further adding to already increasing temperatures in cities.

While there has been some clarification in the National Planning Policy Framework in England to address some issues foregrounded by climate change, such as overheating and flooding, the CCC report details that "the revisions have removed the requirement for local authorities to give active support to energy efficiency improvements to existing buildings, and have failed to clarify how far local and regional authorities are permitted to go in setting their own tighter standards for new-build homes."

There are many ways in which house-builders can combat these issues however, usually through insulation and various HVAC products. Ventilation and air conditioning are also obvious solutions – but often come with their own problems.

As the industry well knows, as buildings have become more airtight and efficient in terms of heat loss, air quality has taken a hit. Air conditioning systems don't generally provide ventilation, instead recirculating the air and running it through a cooling coil, though MVHR (mechanical ventilation with heat recovery) can provide a solution to this. Some air conditioning units can also be expensive to run, and, being energy-hungry, many units will significantly add to a home's carbon output.

'Passive cooling options' are another potential way to mitigate this issue, with building orientation, shading, thermal insulation and construction materials all being factors to consider during the

design and build of homes that can prove extremely effective in reducing heat impacts.

As to insulation, while higher levels of insulation has historically contributed to the overheating of homes, research from the Building Research Establishment (BRE) has shown that providing thermal insulation to the walls and roof of a home can help to prevent solar gain through the structure.

Such design focused elements can be extremely potent at zero carbon cost, however, even when buildings are designed to be efficient and climate resilient, they do not always end up the case in practice.

THE PERFORMANCE GAP

When discussing making homes more climate resilient, as well as efficient, it is important to remember that even now the building regs have been adapted towards reaching fossil fuel free heated homes by 2025 (as dictated by the Future Homes Standard 2025), there is a significant performance gap in energy usage between building design and operation currently.

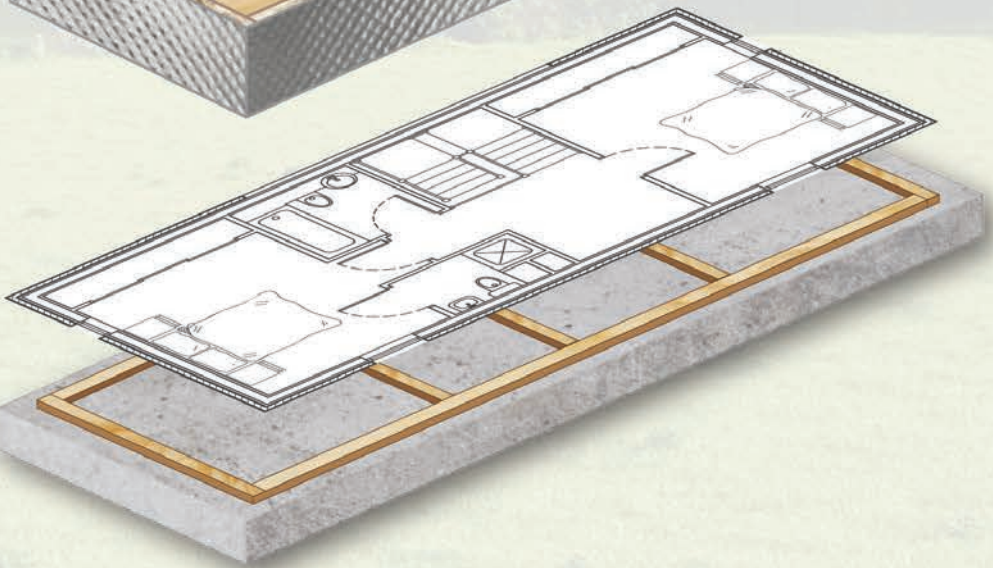
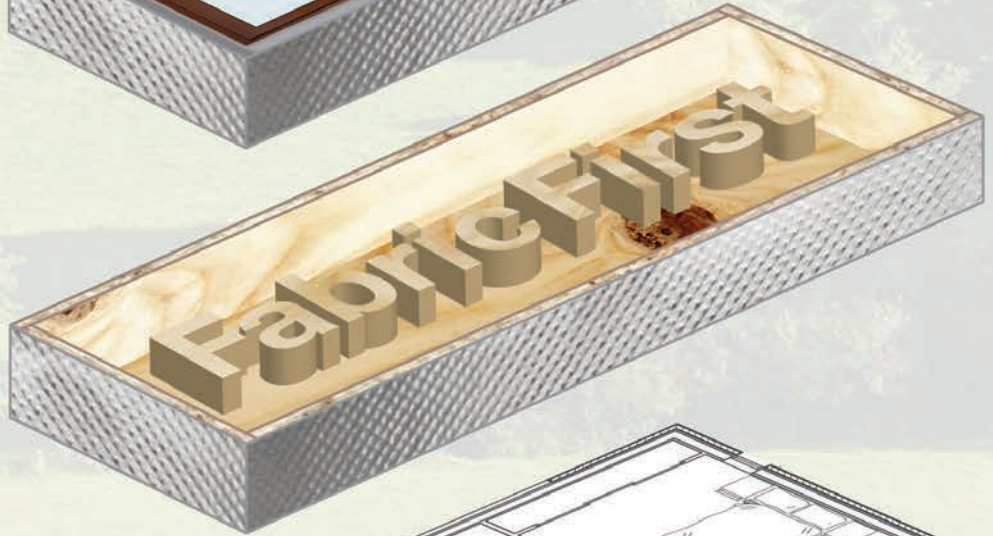
As raised by Dr Gavin Dunn from the Chartered Association of Building Engineers (CABE) in the June issue of *Housebuilder & Developer*: "The construction industry has long grappled with the challenges of closing the performance gap between as-designed and as-built building performance."

Dunn discussed how, since 2006, energy efficiency requirements were tightened within the Building Regulations and shifted towards a target of lowering carbon emissions. He said that subsequent step stages in both 2010 and 2013, related to the way that energy compliance is calculated, have "clearly changed the performance of new homes," while having "unintended consequences" on our built



Val-U-ThermPLUS® achieves low U values, is exceptionally thermally efficient and virtually airtight thereby dramatically reducing your space heating energy costs.

- Fully design flexible
- Quicker build & less labour costs
- Quality controlled factory production
- Lower space heating costs
- Unequaled energy efficiency
- Advanced thermal performance



AIRTIGHTNESS



THERMAL PERFORMANCE



ENERGY EFFICIENCY



SPEED OF CONSTRUCTION





environment's performance gap.

He splits the main issues into three areas. These are 'known knowns' – assumptions and estimations we understand and acknowledge; 'known unknowns' – the difference between what is designed and the reality of it being used by real people; and what Dr Dunn deems "the most significant" area of concern, 'unknown unknowns' – the gap still present even when the other two categories are accounted for. "This excess energy use can only be as a result of product substitution on site, poor detailing, and build quality," he wrote.

On the performance gap, the CCC's 'Fit for the Future' report says that the compliance and enforcement framework must be overhauled to focus on the performance of homes once built, with accurate performance testing and reporting made widespread. It also recommends a nationwide training programme to upskill the existing workforce in order to increase high 'as-built' performance, and that the industry undertake a large-scale study to provide "robust quantification and benchmarking of the performance gap for energy, water and ventilation."

If the industry is struggling to address these efficiency measures already, and designing a home as efficient currently does not ensure its efficiency once built, what hope do housebuilders and developers have of curbing their damage? Perhaps CAD software and factory built homes could bring higher standards that construction workers alone can't?

The housing market, labour & migration

While it is impossible to say for certain, unskilled migration, made more prevalent by climate change, may have a negative impact on the housing market – by putting more pressure on housing availability, for example. Controversial remarks from Conservative MP and unsuccessful leadership candidate Dominic Raab purported in April last year that "based on the ONS data, advice from the Department [DHCLG] is that in the last 25 years [1991-2016] we have seen immigration put house prices up by something like 20 per cent."

Being based on originally unpublished data however, this statement was widely questioned and criticised. The complexity of the housing market, for example, placed doubt on the veracity of Raab's analysis, with even the Department admitting its research "was not intended to be exhaustive in its explanatory power and throughout this release references are made to limitations."

Whether any price growth at all can be attributed to migration however [though of course this is no bad thing for housebuilders and developers], the housing crisis is set to worsen. We are struggling to build homes enough for our current population, and when the industry is struggling, quality falls. Will the rising technologies of modular housing be enough to maintain quality standards at the pace necessary? And even if so, will the available sites be enough to home new populations – how will we free up the green belt if not?

Perhaps – as Brian Berry of the Federation of Master Builders has often argued in his monthly column for *Housebuilder & Developer* – we should put our energies into helping SMEs, on environmental grounds. For example, procuring more environmentally friendly small sites across the country or thinking outside the box with schemes such as town centre roof-space developments. A key benefit of SME building is firms' tendency to develop smaller sites that respond to key local demand.

Housebuilders and Government know well the challenge ahead of them to build the homes the country needs, and whatever climate change brings, the issue is becoming acute. It is near-impossible to

accurately predict what the future housing market will look like, but it is clear that builders are going to have to face up to predictable realities. Shutting our eyes and ears to the troubles of others (as well as borders) would be a particularly depressing outcome in light of the difficult changes to come.

Construction labour is another factor hit by climate change – an issue that will further exacerbate the sector's rising skills crisis. While the increase in unskilled migration that may be caused may mop up some of the shortfall in staff caused by Brexit (according to CITB in a 2018 report, most roles in construction taken up by migrants were "unskilled or semi-skilled"), there are other impacts on existing labour forces that could prove problematic.

Hotter weather will likely make work days onsite shorter as workers won't be able to stay in the open weather for as long – and likely won't work as efficiently even when onsite – and unpredictable weather, flooding and heavy rainfall can put projects back significantly. Advances in workwear could be a viable solution for some firms however, using modern materials that can retain or cope with heat far more efficiently.

Modular housing could again provide another solution here. With most of the work done offsite in factories, the working climate can be managed, and freak weather events won't hold projects back to anywhere near the same degree.

Modular also has the potential to greatly increase our housing output – with units installed in a matter of days rather than months. Still, however, we are still struggling to build enough homes for our current population, and climate change could add a further dimension to our existing demographic challenge.

MIGRATION

The UK population is growing at around 0.6 per cent per annum – not as fast as it has in some recent decades – but climate change could also bring with it vast increases in migration, while the UK looks to tighten its borders post-Brexit.

The IPCC reported that climate-related risks to health, livelihoods, food security, human security, and economic growth are projected to increase dramatically if the world warms by 1.5 degrees, and becomes more acute at 2 degrees. One symptom is migration caused by adverse weather such as droughts leaving land untenable, resulting in 'climate refugees'.

The results are set to be more severe in countries outside of Europe. In Somalia, increasingly severe and frequent droughts are threatening the lives of millions of inhabitants. Even one of the richest places

in the world, New York City, is looking to undertake extreme measures to protect its heavily at-risk residents, including a five-mile seawall and protective sand dunes, and even reportedly paying residents to move out of especially problematic areas.

Climate has even been shown, in multiple studies, to have been a contributing factor in the Syrian Civil War. Droughts caused severe water scarcity, driving farmers to abandon their crops and migrate into cities. The resulting population influx placed an unsustainable burden on water resources, and triggered an agricultural collapse – contributing heavily to the growing social unrest.

Journalist and author David Wallace-Wells in ‘The Uninhabitable Earth,’ comments on how Bangladesh could see a much greater number of ‘climate refugees’: “The likely flooding threatens to create 10 times as many [as the Syrian Civil War], received by a world that will be even further destabilised by climate chaos. And then there will be the refugees from sub-Saharan Africa, Latin America, and the rest of South Asia – 140 million by 2050, the World Bank estimates, meaning more than a hundred times that of the Syrian crisis.”

He adds: “UN projections are bleaker: 200 million climate refugees by 2050. Two hundred million was the entire world population at the peak of the Roman Empire.”

If the world’s emissions continue on their current track, whatever our politicians proclamations of limiting it or reducing immigration, some level of mass migration is looking likely.

Notwithstanding the economic or human toll, how will the housing crisis be worsened as a result? If we can’t build houses quickly enough currently, what evidence is there that we will be able to as the world economy weakens while the nation’s population increases and ages?

THE WORLD IS BURNING 80 PER CENT MORE COAL THAN WE WERE IN THE YEAR 2000, AND OVER HALF OF THE CARBON EMISSIONS WE HAVE SENT INTO THE ATMOSPHERE THROUGH FOSSIL FUELS HAVE BEEN EMITTED IN THE PAST THREE DECADES

Conclusion: the good, the bad, and the realities

When considering these difficult realities, it can be easy to look accusingly back towards our ancestors at the rise of the industrial age, in the search for someone or something to blame. A fact that may surprise many however, with the general assumption that two centuries of rampant industrialism and the carbon the developed world burnt in the process are at fault, is the unsettling knowledge that the vast majority of the damage that has been done since climate change has been a known effect.

The world is reportedly burning 80 per cent more coal than we were even in the year 2000, and over half of the carbon emissions we have sent into the atmosphere through the burning of fossil fuels have been emitted in just the past three decades. If the world can increase emissions at this pace, then logically it can reduce them at a similar pace, if some kind of ‘world war’ level of action against carbon emissions is engaged in.

It is important to consider however that whatever efforts the UK makes, our country only contributed around 1.02 per cent of the world’s CO₂ emissions in 2017, and even the US only contributed around 13.77 per cent. China, despite concerted recent efforts to reduce emissions, still produced around 29.34 per cent of the world’s CO₂ emissions that year.

An interesting point brought up by David Wallace-Wells in ‘The Uninhabitable Earth’ is that some territories could even be set to gain from climate change. He believes that countries in colder climates such as Canada and Russia stand to gain slightly, mainly economically, with the raised temperature providing benefits such as increased crop growth. While Wallace-Wells makes the point that countries like Canada are likely to align with partners in maintaining climate measures, it could prove an advantage that a country such as Russia in unlikely to ignore, leading it to continue burning fossils fuels.

Despite all this doom and gloom however, at least climate change is finally widely understood, and the world is taking it more seriously than ever before.

Outgoing Prime Minister Theresa May was right in saying that the UK has made some decidedly positive steps.

The UK’s 2050 emissions target is in itself something that would have been sniffed at by many not too long ago, however in 2017 renewables made up almost a third of the UK’s electricity generation. This April this year Britain broke its record of the longest continuous period without generating electricity from coal – 90 hours. Carbon removal technology is rising, solar technology is getting vastly cheaper, the benefits of green walls, garden cities, and abundant planting is being adopted in cities and towns across the country, and in areas across the world, the Ozone layer is healing – with scientists predicting a full recovery by 2060.

If the construction sector can continue to change its attitude towards the built environment’s carbon output, and Government can provide the funding and infrastructure necessary to enable this, we can vastly reduce the impending damage. A huge part of this is making sure that UK homes are dry, cool, and efficient, not just for future generations, but for the near-term too.



Designer Contracts wins big at recycling awards



Designer Contracts has been named 'Take Back Partner of the Year' for the fourth time by Carpet Recycling UK (CRUK) at the annual awards and conference held at Edgbaston Stadium in Birmingham. Its national distribution manager, Glen Mitchell, who made a presentation to the conference

about the company's recycling initiatives, was also named 'Recycling Champion of the Year'. The company's 'Take Back Scheme' works by diverting 90 percent of unfitted carpet waste through waste solution companies who convert it into a sustainable resource. The company has invested heavily in its equipment, which includes a £40,000 bailing machine that helps to recycle over 70 tonnes of cardboard and over 20 tonnes of plastic each year.

01246 854577 www.designercontracts.com

Celebrating long serving employees



Designer Contracts has acknowledged 70 long-serving members of staff with special recognition awards. Three of the longest-serving – those celebrating 20 years with the business, joined members of management at the company's AGM for a celebratory meal at the Casa Hotel in Chesterfield, where Designer Contracts is headquartered. Md Peter Kelsey presented Louise Walters, Louise Barrett and Angie Cresswell with engraved iPad Pros as a token of gratitude for their dedication and loyalty over the past two decades. Said Peter: "As a business we are incredibly lucky to have such a loyal workforce. As a thank you, each year we are acknowledging every member of the team who celebrates in excess of five, 10, 15 and 20 years."

01246 854577 www.designercontracts.com



Easy Stair – site staircase

Easy Stair is a temporary site staircase which is now extremely popular and in widespread use across the UK housebuilding industry.

Easy Stair increases productivity by allowing SAFE, FAST access to upper floors from the very earliest stages of construction, allowing construction activities to speed along prior to the installation of the finished stairs. They are particularly popular in faster build methods such as timber frame but they have benefits across all methods of construction as shown in the picture.

Safety is also improved by removing the need to climb up and down ladders whilst carrying tools or materials.

Easy Stair is now available for hire when short term site requirements dictate. This can also allow for new users to trial the product without committing to the purchase cost. Visit **Safety Platforms** website for more information.

01924 420820 www.safetyplatforms.co.uk



TARGET TIMBER SYSTEMS

Traditional Values using Modern Methods of Construction






If you are a Property Developer or Builder looking at Timber Frame structures for Houses and Apartments, or a family looking for their dream Self-build Home Target Timber Systems are here to help.

We offer a professional service which includes fully certified design and engineering, supply and erect of factory insulated panels, engineered floor beams and floor deck, roof trusses and bracing along with full chain of custody certification."

For further information please contact Gary Gooch or Nick Whittle on **01403 782600** or email info@targettimber.com

Target Timber Systems Ltd, 29 High Street, Billingham, West Sussex RH14 9PP

Peace of mind with Tata Steel's new Confidex®



Designed to provide homeowners and builders with added peace of mind, **Tata Steel** has announced the launch of its new Confidex® Home Guarantee, established as being one of the most comprehensive guarantees on offer for pre-finished steel when used for residential roof or wall constructions. The new Confidex®

Home Guarantee is valid for 25 years. It provides homeowners with assurance of the building material's performance when purchased as a standing seam system from one of four supply chain partners, including SSR2® from Catnic, Colorcoat Urban® from Tata Steel, Vieo from Euroclad Group, and Seamlock®/Seamlap® from Euro Quality Cladding.

01244 892449 www.colorcoat-online.com/confidexhome

Norcros Adhesives is a winner!



Norcros Adhesives, the tile adhesive, grout and preparation products manufacturer, has just won the Gold Award for Best Environmental Initiative at the recent Tile Association Awards. This achievement is impressive enough in its own right, but is even more so, since this is now the third year in a row that the company has won this prestigious accolade.

The company's work on environmental improvement goes back to the time of its founding. Since the earliest days it has been the intention to eliminate waste going to landfill.

www.norcros-adhesives.com



CALOR

LPG

LOW

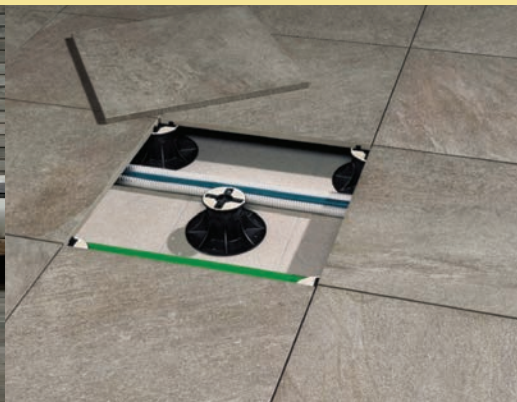
BUILD

COSTS

Typical rural installation costs less than £500 per plot, based on a 30-home off-grid development. Calor LPG. **It's a no-brainer.**



Surface360.co.uk formerly The Deck Tile co. has 50+ ranges of Levato Mono™ 20mm porcelain paving and now with coordinating internal tiling, offering seamless visual transition between internal and external spaces.



LEVATO MONO™

Porcelain paver system and coordinating internal tiling

Low cost ongoing maintenance/fade and wear resistant • High slip resistance (R11C) & load bearing
Vast choice for any Design scheme • Support system enabling a 'floating' floor installation over delicate waterproofing • Ideal for balconies, roof terraces, garden decks and piazzas

WWW.SURFACE360.CO.UK
0118 391 4120

SURFACE **360**

RISING TO THE CHALLENGE OF THE FUTURE-PROOFED HOME

Home lifts can offer mobility solutions for multi-generational living and add a design statement to flexible family homes of the future, but safety and sustainability are just as important as aesthetics, says David Schill of Aritco Lifts

Dramatic sociological shifts are shaping the way we build and design the homes of the future.

The middle classes and their disposable income are increasing, but so is the cost of land, which means more of us will be living in apartments with smaller footprints on multiple levels. According to UN estimates, over 25 per cent of the UK's population will be aged over 60 by 2025, so no doubt regulations governing accessibility will be tightened up as an ageing population finds that standard staircases are no longer fit for purpose. Add to that other factors – unattainably expensive mortgages, exorbitant rent, and dwindling social care resources – and we will soon find the increasing prevalence of multi-generational living, a trend that's already common in Asia and the Middle East.

The key to unlocking value in new-build flats by catering to this new lifestyle is the installation of a home lift. Sales of home lifts in some regions are already increasing by as much as 15 per cent per year, but this extraordinary surge in demand goes beyond catering to those

HOME LIFTS HAVE EVOLVED FROM AN INDUSTRIAL EYESORE TO BECOME ELEGANT, CUSTOMISED PIECES OF FURNITURE

with mobility issues.

Imagine a young family with three children and a busy lifestyle living in a three-floor apartment, with a roof terrace where they enjoy summer barbecues and the kids spend hours painting alfresco. Getting strollers, children and grocery bags from the weekly shop up the stairs to the kitchen can become a quandary. What to take first? Leave the children (let's say aged two, four and seven) in the garage and take the grocery bags first? Or take the

children first, leave them in the kitchen on their own, and then go down and pick up bags and groceries? Then add grandma into the mix – she lives with them and wants to join them for lunch on the roof terrace and admire the children's creations, but needs sticks or a wheelchair to get around. These daily challenges just disappear if they have a home lift. And this key to modern, multi-generational living has evolved from an industrial eyesore to become an elegant, customised piece of furniture.

In recent decades we have all become more design-aware, so it's no surprise that when consumers purchase a home lift, aesthetics are a top priority, trumping price, reliability and speed. Top designers have transformed the home lift from a functional steel box into a glass cube crafted from sheets of scratch-proof acrylic that's an unobtrusive design statement. Customisation has become key to couples for relaxing, so LED lighting should be adjustable to suit a mood – a soft, white glow for an intimate dinner, or a perhaps a hot pink light for a party. Every plane of the lift should offer opportunities for personalisation, from bespoke flooring to a back wall which can be clad in mirrored glass, a graphic artwork, or oversized photography to suit the interiors of the customer's home.

Good design should extend beyond aesthetics and embrace functionality, and look to ergonomic design solutions found in the car industry and home electronics. Why have clunky buttons when you can have intuitive handles, knobs and touchscreens? And with smart



SO QUIET

WE HAD TO SHOUT ABOUT IT

Ultra Quiet Ecodan The **NEW LOW NOISE** Air Source Heat Pump

- An 8 dB(A) drop in sound output
- Virtually eliminates the need for planning permission
- Allows installation under Permitted Development

ultraquietecodan.co.uk



Heat Pump Product of the Year
(Ultra Quiet Ecodan)

H&Vnews
AWARDS 2019
WINNER

Domestic HVAC Product
of the Year – Heating Units



Manufactured in the UK



Search #ultraquietecodan



and it needs an emergency exit for a worst-case scenario. Belt-driven lifts can occasionally fail and fall, but those designed with a screw and nut system are safer as they will simply stop.

This screw and nut system is a better option for the developer too, as the gearless motor is contained within the shaft – installation is simple, no machine room is required, and it fits into a smaller footprint. In the long-term, maintenance nightmares need to be minimised, so builders need to keep an eye on the longevity of any home lift. Technology that can be updated remotely, self-lubricating parts and corrosion-resistant coatings will cut engineer call-outs, and a home lift that lasts longer has a smaller carbon footprint.

In the near future, consumers will demand transparency around all aspects of sustainability for every product they purchase, from the carbon emissions and recyclability of component parts to packaging and distribution – and home lifts are no exception. A home lift needs to be a design statement that's safe and easy to install and maintain, but it also needs to do its bit to secure a future for our planet as well as the future of generations to come.

David Schill is marketing director of Aritco Lifts

homes already a reality, the lift should be controlled via a smartphone app. No-one wants a noisy, rattly lift in their living room – it needs to glide up and down silently, and it should account for limited floor space with double doors that take up minimal space. Why use a steel structure when aluminium is stronger and lighter? And customers don't want to see the mechanics of their home, they don't want to see screws and

fixings so these need to be hidden away.

As children will play in and around a lift in a multi-generational home, safety is critical. A lift's control panel needs a child lock and built-in 'collision intelligence' which senses tiny fingers and feet and prevents doors from closing.

Unexpected power cuts should never risk home-owners being stranded in a lift, so back-up batteries and an alarm system linked to mobile phones are essential,



Scotts offers a market leading service for the supply of bespoke Car Barns and Porches.

- Bespoke design to meet your specific house styles
- High quality workmanship and excellent service
- Short lead times to fit in with project deadlines



 Call Scotts of Thrapston today on **01832 732366** or send your enquiries to **info@scottsofthrapston.co.uk**
www.scottsofthrapston.co.uk/hbd



BESPOKE
REPUTABLE
HIGH QUALITY




Garador's new duragrain sectional doors



Garador has introduced an entirely new range of sectional garage doors.

The new Duragrain range is a completely fresh concept using brand new technology which prints a realistic timber, natural stone or metal illustration onto the outside

steel surface of the garage door, offering a graphical alternative to the paint and timber effect finishes currently available.

Duragrain is only available on Garador Premium Linear Large door styles.

01935 443794 www.garador.co.uk

Housing gets a new outlook thanks to Senior



Regeneration and the local community have been put at the heart of a vibrant new housing project in Hull. The Hugh Webster Place housing scheme features bright and colourful cladding which has been complemented by the use of Senior Architectural Systems' slim profile SPW600 aluminium

doors and windows. The fenestration package has been designed, fabricated and installed by Glass & Framing Solutions Ltd for main contractor Houlton & Sons. Framing the residents' views are Senior's versatile SPW600 aluminium windows which are ideally suited to the housing sector as they are cost-effective, durable, robust and easy to maintain.

www.seniorarchitectural.co.uk







Freefoam help Key Partnership Homes reduce wastage



With statistics regularly quoted about the amount of waste we are all sending to landfill, businesses are looking to play their part in reducing waste and operating more efficiently. The housebuilding industry are working to meet these challenges throughout the whole construction process. There are three basic strategies for dealing with waste: reduce, reuse and recycle. Waste reduction is the ideal, identifying possible waste streams early on in the build process. Scheduling and estimation play a big part. Better communication between building professionals to ensure exact calculations of materials can mean that waste is prevented at source. Freefoam have recently helped Key Partnership Homes do exactly this at their new site at Caleb Close, Luton. Freefoam Commercial Director Colin St John summarised "Listening and responding to the needs of our customer is part of our DNA. As responsible manufacturers we were delighted that on this occasion we were able to support our Customer to make a significant contribution to the reduction of site waste. This project is just one more example of how Freefoam are willing to work in partnership with our suppliers and house builders to adapt products that will meet the needs of all parts of the supply chain and deliver long lasting sustainable benefits."


01604 591110 www.freefoam.com

EXPERTS AND INNOVATORS IN CAST LEAD PRODUCTION












MidlandLead

www.midlandlead.co.uk

Follow us: 



WALK ON GLASS FLOORS & ROOFLIGHTS



STRUCTURAL GLASS DESIGN

Manufacturers
&
Installers
of Walk on Glass
T: 0333 577 7177

www.structural-glass.com

MILBANK



Insulated Thermal Ground Flooring

WarmFloor
PRO

milbank.co.uk | 01787 223931

WarmFloor Pro by Milbank Concrete Products utilises thermally efficient EPS panels and precast concrete beams to offer home builders a simple, cost-effective solution to quickly assemble an insulated beam and block style ground floor.

- Simple and fast to install
- Cost Effective
- Sustainable
- Compatible with underfloor heating
- Industry Compliant



WINDOWS • DOORS
PATIO DOORS • BIFOLDS
ARCHED WINDOWS





MANUFACTURERS OF ALUMINIUM WINDOWS & DOORS

Designed to replicate 1920 Crittall Art Deco style windows & doors





ALL TRADES WELCOME

Builders • Architects • Developers • Window Installers • Direct Trade Suppliers

0800 707 6954 | heritage-windows@hotmail.co.uk



Authorised Manufacturer

Anthracite Grey: Trendy gutters from Marley



With a velvety warmth and subtle hint of luxury, the anthracite grey shade has taken the construction industry by storm. Rainwater systems from **Marley Plumbing and Drainage** in the popular anthracite grey now perfectly match Pantone colour 7016, allowing specifiers to create a sleek and uniform finish and ensure an exact colour match with other external fixtures and fittings, such as doors and window frames. The anthracite shade is available in Marley's Deepflow, Clipmaster, Flowline and Regency profiles, which offer classic and contemporary aesthetics. The chosen systems are suitable for a variety of property types, from residential buildings to large commercial properties.

01622 858888 www.marleyplumbinganddrainage.com

Brett Martin adds to the Cascade range



Brett Martin Plumbing and Drainage has launched a new colour option to the Cascade Cast Iron Style Rainwater and Soil Systems range, adding Chartwell Green to the mix of eight heritage colours, allowing self-builders to capitalise on this increasingly popular and

harmonious colour on windows and doors on both new build and renovation projects. Sought after for its tranquil aesthetic and historical appeal, Chartwell Green will bring a touch of country charm to homes and is a welcomed addition to the Cascade Cast Iron Style Rainwater and Soil System. The complete colour range delivers the traditional appearance of Cast Iron with the convenience of modern plastic materials.

028 9084 9999 www.brettmartin.com



F.H. BRUNDLE

SERVING THE TRADE SINCE 1889



For more information
01708 25 35 45
sales@brundle.com
www.fhbrundle.co.uk

SQUARE & ROUND POST SYSTEM



ALUMINIUM HANDRAILING SPECIALISTS

- Long lasting
- Lightweight & easy to handle
- Ready to install pre-assembled posts
- Panels can be cut to size on-site
- Just cut, glue & screw

CONTEMPORARY SYSTEM



SIMPLICITY SYSTEM



HORIZON SYSTEM



MARANO®

LIGHT • STYLE • VISION

24/7 ONLINE ORDERING

COMPETITIVE PRICES

HUGE RANGE FROM STOCK

FREE DELIVERY OVER £150*

TRADE COUNTER COLLECTION

DURATION
WINDOWS

Established 1985

33^{MM}
FRAME
DEPTH

Steel Replacement HERITAGE RANGE

Easy Installation - No Cutting Back
High Quality Hardware
PAS 24 Security Tested

**GET A
QUOTE
TODAY**

01268 681612
sales@duration.co.uk

GARADOR

The Garage Door People

New Duragrain Doors with Real Wood and Natural Stone Effects

Choice of 24 unique and stylish garage door designs, imitating real wood, natural stone and metal. Designs are printed directly to the exterior of the sectional garage door and feature a scratch resistant surface coating.

**CALL
01935 443794
TO REQUEST
A BROCHURE**



The Ultimate in Roof Coating Technology

With over 20 years' experience of bringing quality roofing products into the market, Cromar's latest new product HYDROSIL is no exception.

Hydrosil is the ultimate high performance premium roof coating – silicone based it has been specifically formulated to deliver outstanding direct bond adhesion over most common roof substrates and membranes. With superior coverage Hydrosil covers over one and a half times that of a standard PU coating giving great money saving benefits.

This fast curing 100 per cent silicone roof coating has been developed to form a durable, vapor permeable, watertight and weatherproof barrier that provides long term resistance to degradation from natural weathering (including extreme temperatures, UV, rain and snow – handy for the UK weather). Not only that but it is easy to apply, whether by brush, roller or spray, and is shower resistant within 60-120 minutes and suitable for foot traffic after 24 hours.

The list of benefits seems to be endless, Hydrosil, also has excellent UV resistance, drying to a grey finish which keeps roof surfaces cooler preventing thermal shock and extending the life of the roof. Cromar have spent a great deal of time developing this product to ensure Hydrosil will become a firm favourite with the trade.



Hydrosil Silicone Roof Coating is being launched as part of a system with complimentary products including Hydrosil Seam Sealer & Detailer and Hydrosil Heavy Duty Reinforcement Roll. Which when used together provide a base on which to apply the Hydrosil Silicone Coating, although the coating can be used alone. All together they provide a superior

quality coating that Cromar are so confident in, the product comes with a 10 year warranty.

For more information on Hydrosil or to book a demonstration day contact your local Cromar Sales Representative.

01977 663 133
www.cromar.uk.com



ARCHITECTURAL GLASS

Glass floors
Balustrades and Staircases
Automatic Doors
Splashbacks
Complete supply and fit service

Please contact us for details
01903 733206
www.demon-designs.co.uk
info@demon-designs.co.uk



Design with daylight, design with VELUX®

Let VELUX help you design the most comfortable homes for your customers – flooded with daylight and fresh air.

From initial design to site handover, we will support you every step of the way.

Get in touch with us at velux.co.uk/housebuilders to discover how VELUX can provide a tailored solution for your business.

Bringing light to life™



Latest Schöck BBA Certification raises the bar.
Thermal break technology you can trust.

No need to compromise on performance, quality or service. Schöck products meet full compliance with relevant UK building regulations, are approved by the BBA, LABC registered and classified as fire resistance class REI 120.

Protek Structural Warranty

FREE Registration



New Build | Permitted Development | Commercial

Structural Warranty solutions that enable residential and commercial development



www.protekwarranty.co.uk | 0333 456 5040

Victorian building gets a new lease of life



Restoration work is almost complete on a historic building in the Gorbals that forms part of a city-wide urban regeneration project in Glasgow to bring the area back to life. **Midland Lead**, is an innovative lead manufacturer that produce BBA and NHBC approved lead, worked closely with Glenbuild Ltd to create specialist leadwork to ensure that the finishing touches would be as historically accurate as possible, according to the original drawings. George Gargan, project manager at Glenbuild played a major role in this project since its inception early in 2018, he said; "Working with Midland Lead has been fantastic and they share the same passion for heritage and restoration as I do and their attention to every detail has made such a big difference."

www.midlandlead.co.uk

First fix 11 windows in just 23 minutes



Timber frame and SIPs panel manufacturers can speed up the installation of windows and doors by using the **Sidey Kitfix system**. "With the Sidey Kitfix System, windows and doors can be accurately fitted at the factory stage," says Steve Hardy, Managing Director of

fenestration and offsite construction specialists Sidey Solutions. "It's quick too – 11 windows can be first fixed in 23 minutes. They are installed when the walls are horizontal in the factory and the innovative Kitfix brackets are twist fitted to the window or door frame. Air tightness, thermal and acoustic seals can also be included at this stage."

www.kitfix.co.uk

Arden *"Tailored Timber Solutions"*

Arden Windows provide a first class solution for Timber Windows and Doors for all of our customers. Weather your requirement is for Flush Casements, Sliding Sash, Mock Sash, Bi-Fold Doors or Entrance Doors we have a product that is fully compliant and of the highest quality.

Furthermore if required we can provide a full sub-contract installation package facilitated by our regional network of approved installers.

Our customer base includes: Berkeley Homes, Morris Homes, Taylor Wimpey and Crest Nicholson to name but a few.

Please contact us with your requirements.



- 100% FSC Certified Timber
- Secured by Design License Holders
- ISO 9001, ISO 14001, BS6375, BS5713
- Win-Mark Enhanced Security
- CHAS & SMAS Accredited



Tel: 02476 632423 / Email: sales@ardenwindows.net / Website: www.ardenwindows.net



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

A Development Lender *That's With You ALL THE WAY...*



Site Acquisition



Ongoing Build



Finished Product




- ✓ Development Loans starting from £27,500 to £25m
- ✓ All development types considered - New Build Homes, New Build Apartments, Conversions (including PDR), Refurbishments
- ✓ No Valuations
- ✓ 100% cost funding considered
- ✓ We offer funding throughout England, Wales and mainland Scotland

Call us today on **0161 833 3470**


or email Propertydeals@goldcrestfinance.com

www.goldcrestfinance.com

Goldcrest Finance provides Non-Regulated transactions for business purposes only. Your property may be repossessed if you do not keep up repayments on your mortgage or any other debt secured on it.






MPW
INSURANCE BROKERS
part of The CLEAR Group



Chartered

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

Scheme Policies Underwritten by 'A' Rated Insurers


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




SEWAGE TREATMENT
ESTABLISHED 1987

THE MODERN 'ENVIRONMENTALLY FRIENDLY' ALTERNATIVE FOR SEPTIC TANKS AND CESSPOOLS WHERE 'MAINS DRAINAGE' IS NOT AVAILABLE

ECONOMICAL 'ODOUR FREE' OPERATION

'T' RANGE BIODIGESTERS EIGHT SIZES 6-42 PERSONS

RECOMMENDED FOR VARIABLE LOADINGS



WET GROUND ANCHORS →

EXTENDED EMPTYING INTERVAL

CE MARK CLASS A APPROVAL - USA


WORLDWIDE EXPERTISE

SIMPLE UNDERGROUND INSTALLATION

WIDE RANGE OF LARGER BIODIGESTERS ALSO AVAILABLE

SIMPLY THE BEST!

BURNHAM ENVIRONMENTAL SERVICES LTD
BURNHAM-ON-SEA SOMERSET TA8 2HW
TEL: 01278 786104 EMAIL: SALES@BIODIGESTER.COM WEBSITE: WWW.BIODIGESTER.COM




UNITED TRUST BANK

Huw understands

1

FUNDING THROUGH THE PROPERTY CYCLE:

- Acquisition Finance
- Development Finance
- Sales period Finance




Huw Jenkins and his colleagues are experienced, adaptable, approachable and dependable funding partners who will look for reasons to say 'Yes' to your projects. That's why in uncertain times our book stays open.

House builders, developers & private clients • Coverage - England & Wales • Loans from £0.5m to £30m

Huw Jenkins Senior Manager, Property Development
T: 07825 220 036 E: ehjenkins@utbank.co.uk

we understand specialist banking



There are four types of plastic ventilation ducting systems to choose from: the original flat channel, which is effective and space saving; the round pipe, which offers improved flow rates but can be problematic where space is at a premium; the low cost flexible hose; and the latest addition – the radial.

Radial ducting is specifically designed for use with continuous mechanical ventilation systems. Unlike traditional branch style ducting, radial uses 75 mm semi rigid ducting to connect directly from each room vent to a central distribution system, negating the need for various duct bends and connectors. This system benefits from less air leakage and improved air flow, which also makes for easier commissioning and a quieter system, as well as it being quicker to install than traditional branch ducting.

Other ducting systems come in a variety of sizes, and can be used for whole house ventilation or just for bespoke ventilation in the kitchen and bathroom.

WHICH TYPE IS SUITABLE?

Which duct type you use may vary according to the ventilation system specified, and be further dictated by the installation requirements. For example, best practice, in accordance with the latest Building Regulations, states differing uses of the low-cost flexible hose depending on if you are installing singular axial fans, or an MVHR system. Nevertheless, flexible duct should always be pulled taught to ensure that the full internal diameter is obtained and flow resistance minimised.

Whatever type you do opt for, one thing that is universal is that you should choose good quality ducting. Substandard ducting could result in the ventilation system not meeting Building Regulations, through to a room with an ugly stain in need of redecoration as a result of leakage from the ducting system.

IDENTIFYING GOOD FROM BAD

Sadly, there's no standard to look for to help differentiate between products or ranges. Ducting that has been designed to work in harmony as part of a system and has been third party tested for end-to-end system performance is a very good starting point. Such rigorous testing guarantees the system will meet the required level of extract performance dictated by Building Regulations (Approved Document F).

Exacting tolerances, i.e. the fit of rigid extruded systems, is a sure indicator of quality. If the channel or pipe bows or looks like it is concave, or the wall thickness appears uneven, the tolerances will be too wide. This is a problem because these systems are designed to push fit. If

DEMYSTIFYING VENTILATION

With the growth of whole house ventilation systems, ducting products, and systems abound, specifying and installing them has become considerably more complex. Penny Jones of Domus Ventilation answers specifiers' commonly asked questions when it comes to domestic ventilation ducting.

they don't retain their shape, they can be difficult to fit together, but more importantly they result in air loss, which reduces the system efficiency and increases the risk of moisture leakage around the connections – which can cause staining and damage to surfaces below.

ARE ACCESSORIES IMPORTANT?

It's important to consider not just the straight ducting available but also all of the accessories that you need to create the ventilation system as a whole, including moulded fittings and a range of bends from 90-45°.

Having a wide range allows for a variety of solutions to individual problems. It gives you the ability to specify the ducting system in the most economic and aerodynamically efficient manner if, for whatever reason, you cannot meet the designed layout due to unforeseen site circumstances.

QUIET SYSTEMS

A noisy ventilation system is more often than not a result of ducting that is too small for the volume of air extracted, or poorly installed. This creates excess noise and added strain on the motor and reduces life expectancy of the fan.

Where the ducting isn't the cause of sound, it can be the carrier of it. Sound can travel down the ducting from the fan, or from traffic noise or room-to-room-cross talk. Duct sound attenuators can be used, which effectively absorb sound over a range of audible frequencies.

INSULATION

Ducting insulation is required to meet Building Regulation requirements, as outlined in the Government's 2010 Domestic Ventilation Compliance Guide. The Guide states that ducting must be insulated where it passes through



unheated areas and voids – such as loft spaces – to reduce the possibility of condensation forming, which can lead to unsightly and unhealthy mould.

The Guide sets a minimum duct insulation standard, which is the equivalent of at least 25 mm of a material having a thermal conductivity of $\leq 0.04\text{W}/(\text{m}\cdot\text{K})$. Domestic duct insulation products on the market are often unable to meet this requirement, so it is important to search for ones that can.

FIRE SAFETY PRECAUTIONS

When a hole is made in a compartment wall for plastic ventilation ducting to pass through, the hole must be firestopped to restore the walls fire rating in accordance with Approved Document B of the UK Building Regulations. It is essential that the firestopping product you use for this has been specifically designed for this purpose.

Penny Jones is product and marketing manager at Domus Ventilation

Stelrad extends radiator ranges



Recent developments in the radiator marketplace have seen demand for specific radiator designs and sizes. Stelrad has responded almost instantly to customer demand by extending a number of its popular ranges and adding new sizes and types to meet the requirements. From 1st July, Stelrad has extended the Vita Compact range

further and introduced the Vita and Softline Concord ranges as well as supplying the very popular Concord Vertical in a K2 version, to add to the traditionally available K1 version of this stunning radiator.

0844 543 6200 www.stelrad.com

Grundfos COMFORT PM gets you into hot water



It is a concerning fact that every year in the UK, a typical family of three living in a household with a conventional one string plumbing system discharges up to 16,000 litres of clean water – straight down the drain – as they wait for hot water. However, this issue can simply be overcome by fitting a COMFORT PM hot water recirculation pump that will mean the delivery of instant hot water. These pumps efficiently eliminate the expensive and annoying wait, which is on average 60 seconds. The real tangible benefits of the COMFORT PM pump are not only the lower running costs and the increasing comfort levels, but the very important environment benefits from minimising water usage. Visit the **Grundfos** website for more information.

01525 850000 www.grundfos.co.uk

Vacuum spray tube de-gassing for domestic heating systems

The influence of water quality always has an immense influence on the performance of heating systems and we all know that only systems that are operated optimally work efficiently and economically. The **Reflex** 'Servitec Mini' makes a significant contribution to this, even for systems with small water content, with its sophisticated technology of vacuum spray tube degassing. Reflex 'Servitec Mini' is the economic energy efficiency product with additional value for all system operators and the environment. Economic in its operation with an efficiency of up to 90 per cent to reduce CO₂ emissions.

Here's how the 'Servitec Mini' works.

Installed in the return of the heating system, the 'Servitec Mini' cycles at a pre-determined time convenient with the occupant (set via the app). Gas rich system water is sprayed through a nozzle into the vacuum tube which forcibly draws any air out of the water. The de-gassed water is then reintroduced to the heating system and the cycle begins again until the pre-set time elapses.

0161 266 1043 sales@reflexuk.co.uk



Alleviating the very real problems of noise



Vectaire has three new models in its vertical whole house heat recovery range. The Midi, Maxi and Maxi Plus are now available with integral acoustic attenuation – lined with superior sound deadening materials for really low sound levels and tested by BRE. Sound pressure levels are down to <5.0, <5.0 and 6.9 dBA respectively.

They are easy to install – nothing extra is required other than the unit itself – they are the quietest, lightest and smallest on the market. Efficiency, performance and economy remain the same as the standard models. "BY-AT" models incorporate summer bypass and frost protection, and commissioning is via an integral LCD. Windows can be kept firmly closed while these MVHRs provide energy efficient ventilation and a comfortable environment.

01494 522333 www.vectaire.co.uk

Launch of VSH MultiPress System to UK Market



Manufacturer of integrated piping systems, **Pegler**, has announced the latest addition to its portfolio of brands with the launch of VSH MultiPress. A new multilayer pipe system, VSH MultiPress, incorporates many revolutionary features as part of both its design and molecular construction that set it apart from other

plastic piping systems. The secret of VSH MultiPress pipe lies in the aluminium layer with additional inner and outer layers of polyethylene (PE-X) and the way these layers are linked delivers enhanced resistance to loads generated by internal pressure and high temperature.

www.pegler.yorkshire.co.uk

Rust Free Heating

Our Dose & Fill unit protects pipes

Avoid the cost and disruption of a heating system shutdown with Advanced Pressurisation Unit c/w Fluid Category 5 protection

- > No annual testing
- > Comprehensive BMS controls
- > Self-test monitoring system alerting of pressurisation fault **before** heating system is shut down
- > High & low pressure cut-outs with boiler control output
- > Anti-seize pump and daily pulse
- > Integral water meter and excess filling alarm

Dose & Fill has all the features of the "Midi-Fill" Digital plus automatic inhibitor dosing during initial fill and top-up. No separate dosing pot required

Model DF - 15 & 22 mm

Tel: 01442 823 123 Email: enquiries@arrowvalves.co.uk

www.arrowvalves.co.uk

The Water Regulations Solution Specialist

CAPITAL

LEADING SUPPLIER OF LUXURY FIREPLACES

www.capitalfireplaces.co.uk





A GLIMPSE of the FUTURE

Murelle Revolution 30
The first completely integrated boiler and heat pump in a single cased product

- No external unit, installed inside and hung on the wall like a conventional boiler
- ErP A++ energy efficiency
- Suitable for natural gas or LPG
- Can be installed by any registered Gas Safe installer in a single process, no F-gas certification needed!
- Average seasonal heating performance of 134%

sime
VALUING YOUR CLIMATE

Telephone: 0345 901 1114
Email: enquiries@sime.co.uk

www.sime.co.uk

Flexconsole Plus gets rave reviews



One of Flamco's 'hidden secret' products is receiving accolades from installers up and down the country. The Flexconsole Plus contains a mounting bracket for an expansion vessel, a Flexvent auto air vent, a Prescor pressure relief valve and a pressure gauge. One of the key advantages is that the expansion vessel can be removed to service without draining down the system water. It offers a generally much neater install and offers a decent time saving from installation and servicing. Flamco has seen greatly increased take up of the product in recent months as awareness of the Flamco brand in the UK has grown – it's one of those pieces of equipment that seem to be an obvious 'no brainer'.

01744 744 744 www.flamco.co.uk

Therma V R32 Split launched by LG



Designed specifically for the new build and housing renovation markets, the highly efficient Therma V R32 Split is a versatile solution that can deliver effective space heating and hot water supply. The new model employs the low Global warming Potential R32 refrigerant and an advanced compressor to help it achieve the

most powerful heating performance yet from a Therma V product. Head for LG's website for more information.

uk.aircon@lge.com partner.lge.com/uk



Your partner for electrical spares



We have thousands of genuine manufacturers' electrical spares in stock.
We take pride in supplying the right part first time, saving you time and money.

Call or email our friendly team TODAY...
www.uk-spares.com or email sales@uk-spares.com
Tel: 01454 620500 [Twitter: @UKSpares](https://twitter.com/UKSpares)
Unit 1155, Aztec West, Almondsbury, Bristol BS32 4TF



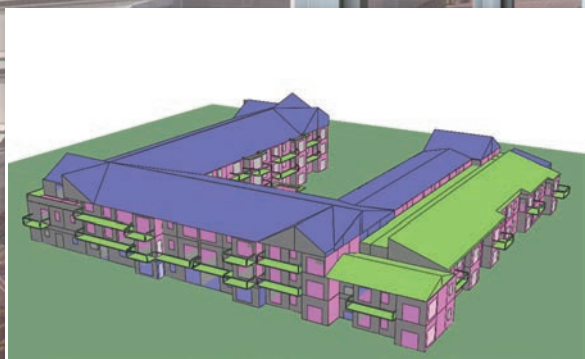
LOFT LEGS



- ✓ Loft Legs raise loft boards
- ✓ Avoiding insulation compression
- ✓ Saving you energy and money

WWW.LOFTLEG.COM

Limiting the effects of Overheating in Building Services Applications



Rising temperatures have highlighted issues with buildings overheating, and the contribution of building services to unwanted heat gains is coming under scrutiny.

Recent research from AECOM has suggested that the use of an enhanced specification of pipe insulation and insulated pipe supports on hot water and heating pipework can help reduce overheating in some buildings.

Kingspan offer a CIBSE Approved CPD seminar which examines the issues of overheating, including in void and corridor spaces, relating to building services insulation.

The seminar explores the benefits of going a step further than the base Building Regulation requirements, along with optimising the design and implementation of building services insulation systems.

To book a CPD seminar, please email presentations.uk@insulation.kingspan.com or call us on 01544 387471.



For further information:

+44 (0) 808 168736

hvactechnical@kingspaninsulation.co.uk

www.kingspanindustrialinsulation.com

Glossop, Derbyshire SK13 8GP, UK.



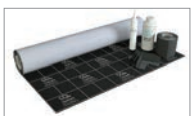
New Pro-Tek™ WPC engineered vinyl flooring



PRO-TEK™ WPC - the next generation engineered vinyl floor – has launched in the UK. Developed to meet the demands of the commercial and residential sectors, PRO-TEK™ WPC features the latest technology and offers superior performance, ease of installation and low maintenance, as well as reduced lifecycle costs and eco-benefits. Five collections offer a total of 40 designs, in wood and tile effects, with matching four-sided bevelled edges and a complete range of matching WPC vinyl-wrapped accessories. The new waterproof WPC engineered vinyl floor is a phthalate-free wood plastic composition design with a robust construction, measuring 7mm to 8.5mm in thickness and comprising seven individual layers.

www.pro-tek-flooring.com

CCL Wetrooms launch Tilesure Membrane



CCL Wetrooms have launched Tilesure, a new Butyl Waterproofing and Decoupling Membrane, suitable for waterproofing wetroom floors on timber and solid floors. Tilesure is an evolution of the RIW Tilesafe bitumen-based membrane. Tilesure is a

1.4mm self-adhesive membrane containing a copolymer layer and polypropylene top fleece. The new membrane has superior decoupling properties of up to 12mm, ensuring that any movement in the floor substrate is accommodated, preventing the grout and floor tiles from cracking. Thanks to butyl's durability and greater temperature tolerances, Tilesure can be installed simply and easily on-site at all temperatures. Tilesure is quick and easy to apply and once installed, is ready to be tiled upon immediately.

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

Kingspan TEK villas are ready for the summer



The **Kingspan TEK** Building System has been used to construct five luxury villas at the Porth Veor Manor Hotel near Newquay. The Kingspan TEK Building System of structural insulated panels (SIPs) was specified for the project for a variety of reasons. The Kingspan TEK panels feature a high-performance rigid insulation core which is sandwiched between two layers of OSB/3. The panels were factory cut to the villa's designs by SIP Hus Ltd. This allowed them to be installed quickly and efficiently once onsite, with the structural shells erected in just five weeks. The panels feature a unique jointing system which reduces thermal bridging and, in combination with their OSB/3 facing, also allowed air leakage to be reduced.

01544 387 384 www.kingspantek.co.uk

Get closer to nature with new BAL Micromax2



Colours have been used throughout history as an unspoken language understood by all humankind and are popularly connected to seasonality and to mood. Detail makes all the difference on tiling projects, which is why **BAL** have introduced a range of new shades to the

Micromax2 grout range that take influence from the natural environment and the changing seasons. The 11 new shades take inspiration from the world around us and nature through changing seasons. As urban design and nature collide and contrast, an ultra-modern vibe is guaranteed to delight the mind and senses and provide the perfect finish to any tiling project. Please visit mailchi.mp/building-adhesives.com/closer-to-nature

01782 591100 www.bal-adhesives.com

DRY-FIX IT. FORGET IT.

➤ **Quality ridge & verge kits – designed for simplicity & durability**



- Market leading, high performance and contractor approved
- Easy-to- install, secure and maintenance free
- Compatible with the majority of roofing tiles & slates
- Dry Verge is ambi-handed – less stock needed; simpler to install
- Dry Ridge is suitable for roof pitches up to 55°
- Complete range of compatible brackets & accessories

www.ubbink.co.uk

Call us on **01604 433000** or visit our website for more details.

**BS8612
compliant**

Ventilated Flexible Dry Ridge Kit



Universal Dry Verge Kit



We're the No.1 choice for new builds.



We work with the top homebuilders to provide warmth throughout the UK



Not just any rad. **Stelrad.**



Find out more at [Stelrad.com](https://www.stelrad.com)



From designer styles right through to energy saving radiators, our extensive No.1 ranges will add extra appeal to all new homes. We're not just any rad. We're Stelrad.



QUALITY PRODUCTS | EXTENSIVE RANGE | VALUE FOR MONEY | EASY INSTALLATION

Commodore Kitchens brings Style to the South Bank for Bellway

Contract kitchen specialist, Commodore Kitchens, has completed the design, fabrication and installation of 320 high specification kitchens for Bellway Homes' new flagship residential development in Nine Elms, The Residence.

The Residence is a luxurious development of one, two and three-bedroom apartments on London's South Bank with enviable river views. The former industrial area is currently undergoing a major transformation into a thriving residential and business district. Inspired by the architecture of New York, The Residence is a standout scheme in this regeneration area and the apartments' contemporary specification boasts high quality appliances and furnishings, including custom-designed, quality kitchens.

Commodore Kitchens designed and manufactured the bespoke kitchen units, which provide a sense of luxury and quality. The units are handle-less with high gloss, soft close doors and drawers and under cabinet LED strip lights. The kitchens feature Silestone work surfaces with matching full height splashbacks and include a range of high specification, integrated appliances including oven, microwave, touch control induction hob, wine

cooler and fridge-freezer.

Buyers were given the opportunity to choose from a palette of three kitchen colours and had the option to upgrade appliances from AEG to Miele. Providing the buyer with the opportunity to choose was an important part of the overall brief, enabling buyers to tailor their property to their personal taste and preference.

Henry Glendinning, project manager from Bellway commented "The Residence is one of Bellway's flagship developments and the kitchens play a crucial role in attracting prospective buyers. The capability of Commodore Kitchens to manufacture and install bespoke units which further enhance the high-specification of the development has been essential. Their input during the planning and design stage has helped enable us to meet the aspirations of our buyers and to allow them an element of choice over the final look and feel of their new kitchen. Consistently high levels of quality have been achieved and the completed kitchens complement the overall exclusivity of the development."

Commodore Kitchens' design director, Darren Mahoney commented:

"The scheme continues a long-standing



partnership between Bellway and Commodore Kitchens and builds on our understanding of the elegant interior style the developer requires for high prestige projects like this. We're delighted that our turnkey approach to design, production and installation has, once again, contributed to the success of a high-end Bellway development."

01 375 382323

www.commodorekitchens.co.uk

The Integrated Home – how to make your homes truly “smart”

The integration of smart technology is fast becoming the norm for households up and down the country. It is now more important than ever for design and build professionals to understand smart home technology and the latest audio-visual developments to provide the service that is now fully expected by the client. CEDIA® (the global association for the integrated home) members are perfectly positioned to explain the elements that should be considered when designing a wider home integration project.

WORKING WITH AN INTEGRATOR

Lighting and shading, heating control, security, and audio-visual systems can all be integrated

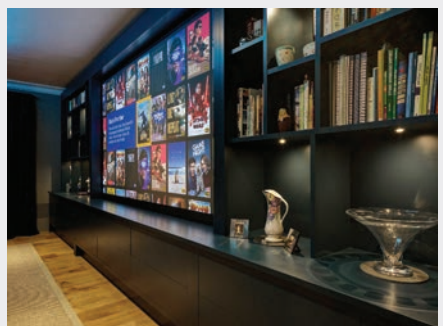


seamlessly in terms of operation and aesthetics with the right planning. By involving a CEDIA member in a project at the architectural planning stage, you'll end up with a more elegant living space.

In order to understand what's possible, try and visit one of the many amazing home technology showrooms and experience centres around. We've now passed the point of being impressed about being able to turn on your bathroom lights from the beach, we need to ask ourselves how useful the technology we're installing actually is. CEDIA members help their clients avoid technology for technology's sake and focus on what will genuinely make their lives better.

LEARNING MORE THROUGH PROFESSIONAL DEVELOPMENT

As experts in their field, CEDIA members offer professional advice and guidance in the design of a personalised system for the connected home. They provide information on the latest technology-and how to use it, as it becomes available, so working with a CEDIA member is the best insurance you have that the final system will meet yours and your



client's expectations.

CEDIA offers Continuing Professional Development (CPD) courses that are designed to help designers increase their knowledge of smart home systems. Through the CEDIA Outreach Instructor programme, CEDIA members deliver home technology education on a regional basis.

As well as this, CEDIA is partnering with a number of CEDIA members to provide dedicated educational events for design and build professionals. These free-to-attend events will include an accredited CPD course, a tour of state-of-the-art experience centres, and the chance to network with industry professionals. Join us for the next Designing the Connected Home event on 19th September at the Ideaworks Experience Centre in London.

01480 213744 www.cedia.org/cpd-events

MAKING SMART HOMES FIT FOR THE FUTURE

Matt Nimmons of CEDIA EMEA discusses how to install smart home installations that can stand the test of time, and details the elements that need to be considered when designing a wider home integration project.

The integration of smart home technology is fast becoming the norm for households up and down the country.

Every project is different, and every homeowner has different priorities and needs. For example, while one person may want to install multi-room audio, another may want to create a comprehensive AV system that integrates automated blind control, projection screens, multi-room audio, and integrated smart lighting to create an all-encompassing smart home. Each of these should be carefully considered and planned.

The key benefit is that all integrated technology can be controlled from one interface, either through control panels situated throughout the home or via mobile devices, proving simplicity and ease of managing home automation.

From finger-tip electronic control over any aspect of the home, to pre-programmed settings that turn on your lights and unlock your doors when your car pulls into the drive, home automation clearly represents the future of 21st century homes.

One of the most important factors to consider before starting any home integration project is to establish the level of technology you require for the property. The simplest way to do this is to look at a floor plan of the house and highlight the kind of technologies you'd like to install in each room. The best way to prepare any smart home installation project for the future is to ensure you have a wiring infrastructure in place that can deliver all current and new technology efficiently and reliably.

PLAN AHEAD

Any smart home system needs to be expertly planned out beforehand. This will provide a clear idea of how rooms will work once furnished, so TVs and speakers can be positioned in the optimum locations and all power points and cables can be terminated, so as not to be seen when the equipment is finally installed.

A properly designed wired and wireless infrastructure has the potential to deliver reliable content and services throughout the home for many years, but it is essential to work with a technology integrator, as they understand the requirements and can provide a solution that fits with your scheme and your expectations.

THINK CABLING FROM THE START

The basis of any smart home project is the infrastructure – i.e., the cables. Not all properties require technology at an early stage, but it is crucial for the correct

wiring to be in place so that it is ready for the future. A phrase heard commonly among the home technology industry is “the most expensive cable you have to install is the one that did not get installed in the first place.”

Cables cannot be easily retrofitted, nor can space for the essential boxes driving a system be easily found, once the property has already been decorated. A wired infrastructure can set up the home for future applications, which can then be easily upgraded and expanded at a later point.

Developers can enhance the value of their product by incorporating sufficient wiring that provides the basic infrastructure for a smart home. In a competitive situation a wired home with the potential for deep connectivity is likely to sell quicker than one without. It also allows developers to ‘upsell’ electronic products, systems and services to meet their customers’ requirements in an approach that can create extra revenue and bring about a more attractive, clutter-free space.

To achieve any degree of wireless technology implementation in the home, a certain level of cabling for power and communications for ‘wireless’ equipment will still be required.

TECHNOLOGY INTEGRATORS

When working on a project, it is important to build a relationship with a technology integrator from the ‘get-go’. They will be the best informed and trained in the latest technologies, design, project management and installation techniques, and will understand that technology in the home is a significant investment. Working with a technology integrator is the best insurance you have that the final system will meet your expectations.

Matt Nimmons is managing director of CEDIA EMEA





JACKOBOARD® provides the ideal preparation for tiling

Manufactured with an extruded polystyrene foam core and a special coating on both sides, JACKOBOARD® construction boards form an ideal base for tiling. The surfaces of the JACKOBOARD® system provide an extremely strong bond and can be used on virtually any substrate. The boards are moisture resistant, waterproof, thermally insulating, lightweight and very strong. JACKOBOARD® high performance construction boards provide the flexibility to meet modern requirements in bathroom design. What was once considered a mere washroom has now been elevated to a private wellness oasis. In recent years, the demands placed on bathroom finishes have changed dramatically to allow refurbished bathrooms to shine like new with flexible and high-quality renovations. Recent changes in British Standards for tiling require the wider use of more appropriate materials for construction, and for receiving tiles in water sensitive and wet areas. This has increased the demand for the JACKOBOARD® range in new build applications as well as in renovation works. JACKOBOARD® products including CANTO angled elements, WABO bath panels and FLEXO boards allow the bathroom designer to create customised dream bathrooms with exceptional speed and ease. Visit the JACKON website for more information.

01204 221089 www.jackon-insulation.com



ProColor from Vitra Tiles – design your projects in colour!

The ProColor range from Vitra Tiles comprises contemporary and attractive colour options for today's designers and specifiers. This range is ideally suited to the architectural specification market because it contains 38 RAL colours of fully-vitrified tiles, providing modularity and consistency for designers. The RAL system allows for standardisation of colour, including coordination and contrast where required. RAL colours in tiling allow architects and designers to coordinate colours throughout their residential and commercial projects and to build innovative and creative use of colour into their designs. ProColor includes all the most commonly used colours from white through different shades of green, red, greige, blue, lilac, brown and black.

Tiles are available in a choice of modular sizes from 2.5 x 2.5 through to 30 x 60. All sizes, except 30 x 30 and 30 x 60, come in gloss, as well as a matt finish, and are in a non-slip format. The full range is available for immediate delivery from stock via Vitra Tiles' distribution network.

"Our competence to produce RAL colours is a big advantage that we can offer to UK specifiers," says Ken Aston, UK & Ireland Sales Manager at Vitra Tiles.

01235 750990 www.Vitra.co.uk



Tilemaster Adhesives' extensive product range

Tilemaster Adhesives' extensive product range includes a wide variety of wall and floor preparation and fixing products, developed to help solve on-site challenges. The range includes systems for all substrates, setting requirements and surface finishes – from large format wood-effect porcelain tiles to stone mosaics. Latest innovations include Magix – a high-yield S1-classified tile adhesive, available in white and grey and as a rapid or standard setting formulation – and 'revamped' Grout 3000. Featuring a revolutionary formulation, Magix provides double the coverage of a traditional sand / cement based tile adhesive, with a 10kg bag giving equivalent to a 20kg unit. As well as being easier to lift and carry, there is also less weight of product on the back of a tile and less strain on the substrate. Tilemaster Adhesives' Grout 3000 range comprises 18 grout colours and its new formulation offers multiple benefits: it is easier to mix, easier to apply and easier to wash off the tiles. It also offers a quicker setting time, is efflorescence-free and provides mould and water-resistance. Tilemaster's colour-matched Silicone 3000+ range also includes 18 low modulus, neutral curing silicone sealants which have a flexible mould and water-resistant formulation, ideal for kitchens, bathrooms, wet rooms and leisure environments.

01772 456831 www.tilemasteradhesives.co.uk



Norcros Adhesives strengthens its capabilities

Norcros Adhesives announces the launch of Norcross Adi Flex S2 Additive, a polymer liquid adhesive enhancer. Norcross Adi Flex S2 Additive is used instead of water in the mix and gives the fixer or contractor the maximum flexibility in the choice of tile adhesive. In areas where the performance of an S2 adhesive is specified, an S1 adhesive is simply mixed with Norcross Adi Flex S2 Additive. Adhesive mixed with Norcross Adi Flex S2 Additive is suitable for both internal and external applications and can be used on virtually all substrates. These include cement: sand renders and screeds, anhydrite screeds, heated floors, timber floors and tile backerboards. It is also suitable for use in wetrooms and areas of total immersion. Norcross Adi Flex S2 Additive is supplied in a six-litre bottle to be mixed with a 20kg bag of Norcross S1 adhesive.

01782 524140 www.norcros-adhesives.com

DURABLE TILING STYLE

Interest in tiling as a stylish, hygienic and durable finish for domestic walls and floors has never been stronger. Here, the Tile Association (TTA) outlines some of the issues which housebuilders and developers need to be aware of.

Driven by consumer fashion and product innovation by manufacturers, tiling has an ever-increasing presence in our homes. Many consumers wish to replicate the tiled look that they have seen overseas or when leafing through home décor magazines. They also recognise the many benefits of tiling in the home – providing a long lasting finish and being hygienic and easy to maintain.

Product trends are helping to drive the growth. Laminated wooden flooring has been popular in domestic homes for many years, but the latest innovations in tile development mean that the aesthetic of natural wood can be combined with the hygiene and ease of maintenance offered by tiles. Currently the concrete, or ‘industrial’ look is also in vogue. Along with metro tiles (inspired by the shape and finish of tiles from London Underground stations) and an increasingly wide range of size, shape and texture options, it means more choice and inspiration is available to the consumer and the housebuilder than ever before.

The latest trend in tile sizes is towards the larger format versions – gone are the days when 4 inch x 4 inch wall tiles were the only option. Currently, the trend is towards increasingly large tiles and panels of up to 1,600 mm x 3,200 mm – use of these types of tiles reduces grout lines and maximises the impact of the tile design.

While the design opportunities in tiling are greater than ever, it is important that the technical issues associated with installing a tiled surface are fully understood and that all work is carried out to British Standards. Following the release of the latest British Standard BS5835-1: 2018 Wall & Floor Tiling, there are particular requirements regarding the need for mechanical fixing of large format tiles in certain installations. Other changes include the removal of plywood as a suitable background for tiling – installers should use a bespoke tile backer board instead.

This latest revision of the Standard also included a clause relating to workmanship (Clause 7.1.3). For the first time the Standard now recognises that the installation of ceramic or natural



stone tiling should be carried out with “efficient supervision and the employment of properly trained operatives, skilled to an appropriate level of competence, certified by a recognised authoritative body, e.g. The Tile Association”.

TTA is involved in the development of both UK and international Standards, through its participation in the BSI for British Standards and also ISO for International Standards. Further technical information on all aspects of tile installation and British Standards is available from the trade body.

With a wide range of technical documents, which members can download free-of-charge from the TTA website, TTA is an invaluable source of information for anybody involved in tiling. It also conducts training and technical seminars.

Another technical service offered is slip resistance testing of tiles. This is a very important area with obvious health & safety implications where tiles are used in bathrooms and wetrooms. The service, which is provided for manufacturers and distributors, uses the

pendulum test method, as favoured by the HSE.

For when things go wrong onsite, TTA offers a Technical Inspection Service, which is available to anyone who has concerns about tiling work. Under the terms of the service, an experienced technical inspector can visit a site to inspect the workmanship of any tiling installation. The inspector will assess the workmanship against relevant British and European Standards and provide a detailed written report of the inspection with their findings and a conclusion. This report can be used in court as evidence, should any dispute go to that level.

To encourage and stimulate quality and achievement in the industry TTA runs a national awards scheme. These have 16 categories, covering individual achievements, best new products and company initiatives. Entries are currently being accepted at www.ttaawards.com for the 2020 Awards, which will be held in March next year.

The Tile Association represents the entire UK and Irish tiling industry

Clearstone

BBA APPROVAL INSPECTION TESTING CERTIFICATION CERTIFICATE 18/5548

Agrément Certificate Number 18/5548

CLEARBOUND

Clearstone's BBA approved resin bound surfacing system

Resin Bound Specialists

Installed with Clearstone's Rock-solid BBA quality control

Tel: 01273 358177
clearstonepaving.co.uk

BBA ISO 9001 BALI SSIP Constructionline TRUSTMARK

H HURLINGHAM
The Bath Company

W: www.hurlinghambaths.co.uk
 T: 01400 263310 | E: sales@hurlinghambaths.co.uk

1. 2. 3. 4.



It's the sum of the parts that make up the whole

Marmox built-in waterproofing and insulation solutions for walls and floors



Marmox Building Boards

- + Wall and floor solutions
- + Fully waterproof
- + Insulating (Multiboard)
- + Quick & easy installation
- + Lightweight, easy to cut
- + Marmox Lifetime Guarantee

Marmox high performance walls and floors are fully waterproof, highly insulating and with our Lifetime Guarantee give you total peace of mind with your next project.



Request your copy of the Marmox Bathrooms and Wetroom Systems Brochure

T +44 (0)1634 835290 E sales@marmox.co.uk W www.marmox.co.uk



Complete control at the touch of a button

The TouchE3 touch screen control and App for Electrorads' Digi-Line range is proving a real winner.

Giving the ability to control the time AND temperature in every room individually, from anywhere in the world.

With the main control panel acting as the house hub, it can be simply linked to your radiators and router wirelessly, giving complete central heating control from inside the home.

By linking to a mobile device, pc or tablet it then enables all functions of the radiators including the temperature and modes to be altered to suit any lifestyle from any location! It's the smart way to control your heating!

0113 2746799 www.electrorad.co.uk



Closomat ready to help meet Parliamentary recommendations on housing

A Parliamentary inquiry into decent and accessible homes is highlighting the importance of utilising a universal design approach to make adaptation products appealing to all age groups.

Closomat, a leading manufacturer of toilet assistive technology, is already positioned to equip housing designers, developers and officers, to meet that challenge (at least in the bathroom).

Its brand-leading wash & dry (smart) toilets feature contemporary design to make them aspirational as well as assistive. Uniquely, they can be personalised to individual user preference and needs, not just at initial install, but retrospectively, as needs change.

0161 969 1199 www.closomat.co.uk



Kitchen in the Garden, based at Cedar Nursery in Cobham, Surrey, helps advise, inspire, supply and offer technical support for the build of outdoor kitchens.

With the ever-increasing popularity of outdoor cooking, we have a track record in providing a wealth of technical and functional expertise to enhance any of your client's outdoor space, offering ideas and guidance in what features can be integrated into outdoor kitchens using the leading brands that we sell.

Authorised UK Dealer



Kitchen in the Garden, Cedar Nursery, Horsley Road, Cobham, KT11 3JX

t: 01932 862473

e: kitcheninthegarden@landscaping.co.uk

kitcheninthegarden.co.uk

The Sky's the Limit with SMART FRAME

30 year service life timbers

- 30 year service life, C24 grade softwood
- Suitable for use in ground contact
- 25 year performance warranty
- Ideal for: Deck Posts | Composite Deck Framing | Garden Structures | Fencing | Sole/Binder Wall Plate

01992 578877
hoppings.co.uk

Hoppings
QUALITY PRODUCTS

MULTI-APPLICATION HIGH PERFORMANCE SOFTWOOD

Sizes: 45 x 95mm, 45 x 145mm in 3.6 and 4.8m lengths

Red carpet resin bound theatre entrance



Clearstone lays fun bold walkway for refurbished Troubador Wembley Park Theatre. The venue best known for live televised shows including The X Factor now features a flexible performance space, bar, restaurant and open-air terrace. The old floor of tarmac and patched grey concrete was not inspiring.

Chris Mortimer of Skyebuild, tasked with updating the theatre wanted a modern look. Chris teamed-up with Clearstone who created a number of colour options and Chris opted for bright red and grey resin bound surfacing. Creating a chic entrance and interior which is easy to clean and tough underfoot for the footfall of thousands of theatre goers each year.

01273 358177 www.clearstonepaving.co.uk

New Onyx Safety Shoes and Boots



Nowadays, good safety footwear is part and parcel of a comfortable day's work on site – just like good working clothes and quality hand tools. Combining maximum comfort and protection with a robust and durable design, **Solid Gear's Onyx** is available as a shoe or a

boot and ideal for different types of on-site work. This EN-accredited footwear has a modern-looking style that integrates a seamless upper and Cordura reinforcements with a poured polyurethane midsole, a breathable footbed and strong rubber outsole for maximum grip on slippery and uneven surfaces. Metal-free protection comes from the fiberglass toecap and penetration board for extra personal safety.

www.solidgearfootwear.com

Look what you can do with EverEdge...

Image provided by Kingston Landscape Group

Edging, rings and planters



Call for full details on 01630 417120
See them all at www.everedge.co.uk



Follow us on Twitter @EverEdge



JJI-JOISTS. SMARTER THAN YOUR AVERAGE I-JOIST.

JJI-Joists have an answer for everything built-in. No matter how demanding your job, JJI-Joists are in a class of their own. Solid timber flanges and OSB web make them light but very strong and easy to work with (creating service holes couldn't be simpler). Our environmental credentials are also second to none. Add to that our technical brains - on hand to answer questions - and our design software that gives smart cost-effective answers, and your choice has to be intelligent JJI-Joists. Well, you'd be daft not to.

WEB: www.jamesjones.co.uk/ewp EMAIL: jjj-joists@jamesjones.co.uk



**James Jones
& SONS LIMITED**
TIMBER SYSTEMS DIVISION



DML Expanded Metal Lathing – Hits 100,000 Sheets a year!

This summer, **Simpson Strong-Tie** is celebrating the production of its one hundred thousandth 'DML' Expanded Metal Lathing sheet. The UK's most versatile, reinforcement mesh option, available in a sheet size of 2400 x 700 x 0.40. The bead and mesh range from Simpson Strong-Tie is going from strength to strength, increasing in popularity as builders opt for a solution to suit a wider variety of applications. The DML is easy to install and comfortably capable for many internal and external purposes. UK Marketing Manager, Kyle Perry explains: "Our DML is something of a fan favourite; used as a general purpose reinforcement mesh, helping prevent cracking occur, when different materials meet. We can also provide this galvanised for internal use or stainless steel to fight those unforgiving weather conditions externally. Made in the UK at our head office and manufacturing facility in Tamworth, it's a marvel and a joy to watch the efficiency these are being made with by our very skilled team – making the DML an easy fit for most situations. The rate we're making them, we will be producing enough DML next year to go from our head office to Edinburgh, Scotland!"

01827 255 600 www.strongtie.co.uk

Lightweight and efficient solution for project



Hadley Group's rollformed light gauge structural framing systems have recently been incorporated in the design and build of two pre-fabricated homes. Constructed by **Totally Modular** in their Cradley Heath factory, the houses were then transported more than 30 miles away to the **WM Housing Group**

development in Littlethorpe, Willenhall. Hadley Group's expertise in steel framing solutions meant that the manufacturer could supply a complete load bearing stand-alone structure for the two-bedroom and three-bedroom houses. The components of the fast track, housing system were manufactured at Hadley Group's panelisation plant in Oldbury and then delivered to **Totally Modular's** factory in Cradley Heath, West Midlands.

0121 555 1300 www.hadleygroup.com

Structural solution helps cut costs



A survey and design exercise by a leading structural engineering practice has helped reduce costs and transform a disused mill into a luxurious new residential accommodation building. Greater Manchester-based **Rhodes & Partners** undertook the work on the Grade II

listed building in Derbyshire, and devised a solution which helped minimise the need for costly temporary work by utilising as much of the original structure as possible. **Rhodes & Partners'** Technical Director, Peter Graham explains: "Part of the structure had suffered a high degree of deflection, but we were able to design a detailed system of cross-bracing which stabilised the building and allowed the refurbishment to proceed."

0161 427 8388 www.rhodesandpartners.co.uk

Marley sponsors skillbuild to support tomorrow's roofers

As part of its ongoing commitment to investing in future roofing talent, Marley is sponsoring SkillBuild, the UK's largest running construction skills competition.

As sponsor of both the regional qualifiers and final, Marley has also donated JB Red battens and tiles which will be used by trainees and apprentices competing within the Roof Slating and Tiling category.

Rebecca Ball, Campaign Manager – Roof Systems at Marley, said: "As the construction industry continues to face an ongoing shortage of skills, including roofers, it is vital that we support the next generation coming into the sector. Competitions such as SkillBuild, not only work to develop competitors' technical abilities, but also their time management, confidence and self-esteem which help form the foundations of a long and successful career in the trade."

Chris Messenger, who is part of the team of lecturers who train students for competitions at Leeds College of Building, said: "SkillBuild is a fantastic opportunity for our apprentices to take the technical skills they've developed and compete among their peers, with the winners even having the chance to compete on an international level. Having the support from manufacturers, such as Marley, ensures those



taking part can get to grips with quality roofing products, gaining further practical experience which they will be able to use throughout their career."

Simon Dixon, Training Manager at the NFRC, has been working with the roofing competitors. He commented: "We're really excited to be working alongside the CITB again for this year's SkillBuild competition. With the ongoing construction skills shortage still impacting the roofing industry; competitions, such as SkillBuild, play an important role in

encouraging and showcasing our best young talent and creating role models to inspire the next generation."

SkillBuild, delivered by CITB, is the largest multi-trade competition in the UK for construction trainees and apprentices. The series of competitions sees the very best compete against each other to be crowned a winner in their chosen trade.

01283 722 588
www.marley.co.uk

Bricks, blocks & cement

Concrete Block Association
Tel: 0116 2325165
www.cba-blocks.org.uk

Building regulations

Building Energy Performance Ltd
Tel: (029) 20851111
www.bepltd.co.uk

Building products & services

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

Coatings, sealants & paints

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

Doors & windows

SASH WINDOW LOCKS

ROLA

ROLA

www.sashwindowlock.com

TEL: 0844 482 20 34 FAX 01708 768 825

1st Folding Sliding Doors
Tel: 0208 997 2448
www.1stfoldingslidingdoors.co.uk

Garador Ltd
Tel: 01935 443791
www.garador.co.uk

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

Electrical and Mechanical Design Consultants

BEM Services Ltd
Tel: 0115 7788227
www.bem-services.co.uk

Construction software

Integro Construction Software
Tel: 0117 916 7880
www.getbuildingworks.com

Finance & Insurance

Premier Guarantee
Tel: 0800 107 8446
www.premierguarantee.com

Moody Venture Capital
Tel: 01277 351860
www.mvcfinance.co.uk

Fires & fireplaces

Poujoulat UK Ltd
Tel: 01483 461700
www.poujoulat.co.uk

Glass & glazing

Structural Glass Design Ltd
Tel: 0333 577 7177
www.structural-glass.com

Whitesales
Tel: 01483 271371
www.whitesales.co.uk

Landscaping & external works

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

Wykeham Mature Plants
Tel: 01723 862406
www.wykehammatureplants.co.uk

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

Pumping stations

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

Rainwater products

Aluminium Roofline Products
Tel: 0116 289 44 00
www.arpltd.com

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

Roofing & cladding

Freefoam Building Products
Tel: 01604 591 110
www.freefoam.com

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

Temporary accommodation



Worcestershire Caravan Sales
Used caravans from £1,000

Up to 200 used static caravans to view.
Suitable for temporary accommodation.



From 28'x10' to 39'x13'.
Two & three bedrooms.
Some double glazed/central heating.
Open 7 days a week.

Guaranteed buy back.

www.worcestershirecaravansales.com
Tel 01299 878872
Email wcaravans@aol.com

EVEN MORE WAYS TO GET THE LATEST INFORMATION FOR HOUSEBUILDERS & DEVELOPERS! MORE WAYS TO GET THE LATEST INFORMATION!



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



BE WISE

WHEN YOU ADVERTISE

HBD IS INDEPENDENTLY VERIFIED BY ABC



SOFTENED WATER MAKES THE BEST TASTING COFFEE

True or False?



TRUE

Great news - getting up in the morning just got easier with that caffeine fix. Due to hot drinks reacting with the minerals in hard water, a film of scum floats on the top - so just think of what it is also doing to your kettle and other appliances. With a Dualflo Water Softener your hot drinks will brew quicker, taste nicer and appliances won't break down from limescale build up. The Dualflo range represents the very latest in water softening technology - powered by water pressure, it is non-electric, maintenance free and its twin cylinder design provides softened water 24/7.



Find out why so many developers choose
Dualflo Water Softeners, call:

01483 910 136

www.dualflo.co.uk

DualfloTM
Powered by Harvey Water Softeners

