# selfbuilder & homemaker

January/February 2016

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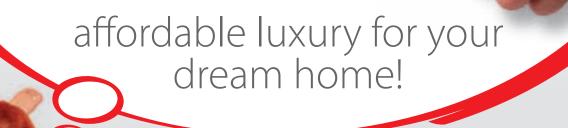
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Cover image of Scandia-Hus Show Home. See pages 28 -32 for more.



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## editor's lette



I know it is a little late, but on behalf of the Selfbuilder & Homemaker team may I wish all our readers a happy and prosperous New Year.

Looking back, last year was certainly eventful.

Based on the realisation that the country needs an additional 230,000 homes per year to keep up with the number of new households being formed the government has thrown itself behind the increased construction of new homes. Part of this activity was the Self-build and Custom Housebuilding Act 2015, which received

Royal Assent on 26 March and is now an Act of Parliament.

Looking forward David Cameron has already announced that the government will directly commission 13,000 affordable 'starter' homes and a £1.2 billion starter homes fund for smaller builders. Councils are now setting up registers to measure demand for self and custom build and the government's target is to double the amount of sel-built properties by 2020.

The next big step in this necessary catch up exercise will be the Housing and Planning Bill 2015 -16, which will make provision about housing, estate agents, rent charges, planning and compulsory purchase.

So - interesting times ahead, which we will of course keep you informed of.

(Xun Mole

## RIBA recognises the Flint House

The RIBA House of the Year was awarded to the best new house designed by an architect in the UK. The award, sponsored by Hiscox Home Insurance, was presented to Skene Catling de la Pena Architects' Flint House.

The house is clad with pieces of flint and was designed for one of the world's richest families. Commissioned by Jacob Rothschild, head of the historic banking family and lord of the Waddesdon Manor estate where the house is located, the Flint House is a wedge-shaped home for a visiting art curator.

The award judges described the building as: "A marvel of geological evolution and construction Flint House is a celebration of location, material and architectural design at its best.

"The building rises from the ground as dark, fashioned flint and slowly changes in construction and texture until its refined white chalk blocks disappear into the sky."



Build It Live! 6 - 7 February, Kent builditlive.co.uk

Build It Live! 20 - 21 February, Manchester builditlive.co.uk Ecobuild 8 - 10 March, London ecobuild.co.uk

The National Homebuilding & Renovating Show 14 - 17 April, Birmingham homebuildingshow.co.uk Grand Designs Live 30 April - 8 May, London granddesignslive.com

Build It Live! 11-12 June, Oxfordshire builditlive.co.uk

## NaCSBA hosts high-level summit at Downing Street

t the beginning of December the NaCSBA hosted a high-level summit at Downing Street where Council Leaders were urged to become 'champions' of self and custom build housing. The Council Leaders that attended the

The Council Leaders that attended the Summit heard from a number of senior politicians including the Housing and Planning Minister, Brandon Lewis, and the chair of the All Party Parliamentary Group that supports self-build, Richard Bacon. TV presenter and self/custom build champion, Kevin McCloud, also addressed the Summit, together with the chair of the Local Government Association, Lord Gary Porter.

Richard Bacon welcomed the guests before setting out the key messages, which included the need to boost housing supply. He confirmed that potential new homeowners want to build their own properties because it provides them with homes they cannot purchase from a standard developer. He claimed there is a huge demand by people who want to stay in communities much longer and create homes that are more innovative, support local economies, small builders and jobs.

The Housing and Planning Minster, Brandon Lewis, reinforced the government's commitment to double the number of custom and self build homes built in the UK. He also outlined the various measures the Department for Communities and Local Government (DCLG) has taken to help meet this target including the Right to Build and the new Housing and Planning Bill.

Kevin McCloud stressed that we have a lot to learn from the self and custom build homes that are being built abroad. He welcomed the government's support and the work of NaCSBA's R&D to develop the sector.

Local Government Association (LGA) Chair Lord Gary Porter confirmed the LGA's growing support for custom and self-build housing. He introduced Barry Wood From Cherwell District Council and Jeremy Christophers from Teignbridge District Council who explained the steps taken by both councils to help develop the custom and self-build sector. Both stressed the importance of strong political backing for local initiatives, and the positive impact they are getting from their electorates.

Closing the Summit Richard Bacon reminded Council Leaders of their key role and encouraged them and their planning and housing teams to look at the recently launched Custom & Self Build Toolkit, covered on page ten.



## selt-build development

## Self-build development for South London

RUSS, a community self-build group that aims to provide homes for those priced out of the housing market, has been named preferred bidder by Lewisham Council to deliver homes in Lewisham, South London. RUSS will develop a scheme of 30 new, high quality, sustainable homes on the site of an old school in Ladywell, Lewisham. This follows six years of work led by volunteers in the community to secure the bid.

The project will create a mixed community made up of people from diverse backgrounds. The development will include onebedroom to four-bedroom homes, available on a range of tenures including social rent, affordable rent, shared equity and shared ownership. It will include properties aimed specifically at providing training opportunities through the construction of shared-flats for young people. The specific mix of properties and tenure will be tailored to suit the mix of residents that come forward for the scheme. People interested in the project will be able to get involved in the self-build process and learn new skills, regardless of their skill level at the outset.

RUSS founder, Kareem Dayes, who grew up in Lewisham's early self-build housing scheme in Walter's Way in Honor Oak, said: "It is brilliant that RUSS has been chosen as preferred bidder. After five years of planning and negotiating we are now able to begin the real work of building a truly affordable and sustainable community. We can now move a step closer to empowering local people to create an alternative to private ownership and private rented housing.

"We aim to establish a new precedent, a replicable model in community-led housing that will benefit people currently unable to access housing on the open market. As a Community Land Trust we invite all local people to get involved, become a member of RUSS and participate in the realisation of this project. People can get in touch via our website and come to our public meetings and we'll be opening for official expressions of interest soon.

"This project is one step of many towards creating a better housing market that offers people high quality sustainable homes that they can afford. Thank you to all the people who have supported RUSS over the years. We look forward to the continued development of our partnerships within the local community and Lewisham Council to create a space we can all be proud of."

Councillor Damien Egan, Lewisham's

Cabinet Member for Housing, said: "This is an exciting initiative that follows co-operative housing principles. It shows that there are many ways in which we can creatively address our housing need. This is an aspirational, ambitious and affordable scheme from a passionate group who have got the local community behind them. Lewisham were pioneers of self-build housing in the 1980's and we're proud to welcome a new generation of self-builders."

RUSS will now work with Lewisham Council to finalise the development agreement and lease. The RUSS project team will facilitate the members, local community, neighbours and the council to bring forward a sustainable design. The target for starting on site is spring 2017 with a view to completing by 2020.

Ladywell site





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## Home security – still a low priority for homeowners

espite approved document Q – Security – Dwellings taking effect from 1 October new research from Toolstation, the trade and DIY supplier, has revealed that home security is a low priority for British homeowners.

UK homeowners actually rated fitting draught excluders as more important than upgrading or having simple security measures installed. This is despite thefts rising by 38 per cent in the five months after the clocks go back at the end of October, and the average burglary costing homeowners £2,178.

Director of Marketing at Toolstation, John

Meaden explained: "It's surprising that home security is such a low priority for Brits, especially when you consider the significant rise in house burglaries during the dark winter months. For anyone building or commissioning their own home or even refurbishing an existing structure the relatively modest cost of installing some simple but effective precautions, such as safety cameras, security lighting, burglar alarms and locks around the property, has to be a worthwhile investment against the cost and stress of being burgled in the future".



# Hand housing back to communities to solve the building crisis

A new report from cross-party think tank Demos calls on the government to support local authorities and help them do more to tackle the UK's housing crisis, by encouraging community-led developments and pushing for greater transparency in decision-making.

The report, 'Community Builders' finds that many Councils, particularly those in rural areas, are 'dragging their heels' on approving new planning applications. This includes some Councils where a third of all proposals for large developments are being rejected in the face of significant population growth.

Rather than arguing for Whitehall to step in to drive projects forward, the report argues that it is only through empowering communities to be more involved in housing projects that sufficient homes will be built.

Developed following extensive qualitative and quantitative analysis, including focus groups with residents throughout the country, 'Community Builders' shows that concern for collective, community goods, such as local aesthetics, green spaces and community facilities are the primary drivers of opposition to development. Many participants in the research focus groups cited a lack of trust in the planning process, and a skepticism over whether local people would benefit from the availability of new housing, as their motivating factors in resisting new projects.

By contrast, the report finds that when sufficiently democratic, transparent and inclusive in their structure, projects driven by community-led building schemes can help local residents to feel greater ownership over developments.

The report found that the legitimacy of these groups in the eyes of residents and Councils have meant that community-led projects are more likely to gain planning permission. However, they are also slower to be approved, suggesting that the sector could benefit from more professional expertise and greater understanding of their benefits amongst council officers.

Overall, urban districts were found to approve the highest proportion of planning applications, and more quickly than their rural counterparts. However, local hostilities towards housebuilding are stopping many much-needed developments from even reaching application stage. Of the modest number reaching councils, almost 20 per cent of applications are being rejected nationally, in the face of one of the most acute housing shortages in our history.

To encourage greater local support for housebuilding, across both metropolitan and rural districts, 'Community Builders' recommends that:

• Local authorities should be supported to create hyper-local housing waiting lists, to ensure people in need in the immediate vicinity are prioritised for housing

• Community-led groups should have formal, democratic decision-making structures that enable the wider community to participate through community-shared schemes.

• Those groups that have gained support among local residents should become more involved in the planning process, as their visible participation, such as being formally named as the applicant for planning permission, can help to generate active support among residents;

• The Government should ensure that all community-led schemes are exempted from the extension of Right-to-Buy

• Councils should ensure they have formal policies in place that encourage planning decisions to be made in consideration of the wider benefits of community-led schemes.

Commenting on the report, its author, Charlie Cadywould, said: "The shortage of affordable housing is one of the biggest problems we face. It's good to see that the Chancellor is committed to building more homes, with the doubling of the housing budget. However, money is just one side of the equation. We also have to find a place to build all these new homes. At the moment, the government's will to get building is rarely matched by local residents who will be most directly impacted by new developments. By engaging local residents, by being democratic and acting as a credible, representative voice, community-led groups can ensure new developments match the needs and desires of local residents, and in doing so turn concern for the community into active support for more local housing."

## Analysing local planning data between 2010 and 2015, Demos found:

Local authorities in the North of England are granting a much higher proportion of planning applications for large housing developments than those in the South (89 per cent in the North East compared to 75 per cent in the South East) where the housing market is suffering most from a shortage of supply.

Northern councils are also more likely to meet the 13-week target for making decisions, compared to those in the South (68 per cent in the North East compared to 57 per cent and 59 per cent in the South West and East).

Metropolitan districts are approving a far higher percentage of residential applications (90 per cent) than shire districts (78 per cent), although London boroughs (81 per cent) were found to be performing relatively poorly

# Recent study shows BREEAM 'Excellent' building saves in excess of 30 per cent $CO_2$

new briefing paper gives an overview of sustainability standard BREEAM's contribution to global carbon reduction in buildings. Published during global climate change conference COP21, the paper also gives details of how BREEAM has evolved since the standard was created 25 years ago and how it might develop in future so it continues to challenge the industry to go beyond standard practice.

The paper also includes an analysis of assessment data (from 2011 onwards), which shows that BREEAM assessed buildings achieve an average 22 per cent reduction in CO<sub>1</sub> emissions compared to buildings designed to regulatory minimum performance requirements. BREEAM 'Excellent' buildings save more than 30 per cent and 'Outstanding' rated buildings in excess of 50 per cent. To date over 530,000 buildings and homes have applied the standard in over 70 countries around the world.

One of the main aims of the BREEAM energy strategy moving forward is to strengthen the links between schemes covering different life cycle stages, with a particular focus on the relationship between the New Construction and In-Use schemes, and opportunities for addressing the 'performance gap'.

The British Research Establishment (BRE) made a pledge to reduce further reduce  $CO_2$  emissions over the next five years by 900,000 tonnes, by certifying a further 9000 commercial buildings to the BREEAM standard. This pledge, together with other pledges from leading organisations in the built environment, forms part of the

'Collective Commitment' created by the World Green Building Council as part of COP21 Paris talks on climate change. BREEAM Director, Gavin Dunn explained: "Over 150 world leaders recently gathered in Paris to discuss how to drive down carbon emissions and manage rising temperatures due to climate change. Given that buildings and homes together account for over 40 per cent of the UK's total carbon emissions, it's more important than ever that standards like BREEAM are used to drive down emissions and reduce running costs over the life time of a building."

BREEAM has recently turned 25, and has experienced a quarter century of setting the standard for sustainability globally, with well over half a million buildings now certified in 70 countries and a robust and comprehensive assessment system.

## self-build community

## Housing Minister visits Self-Build Community

ousing Minister Brandon Lewis MP recently visited Stoke-on-Trent to support the city council's ambitious plans for new housing.

He visited Farm View, in Penkhull, a council-owned parcel of land that the authority cleared, constructed a road through and created six serviced plots, which were then auctioned for local people to buy

Once on site the Minister took the opportunity to announce that the city council would be rolling out even more plots for self-builders in the city, extending an award-winning scheme that has already helped families to build their dream homes. He said: "The Penkhull self-build scheme is exactly the sort of innovative initiative which we want to see across Britain. The city council is managing its assets carefully to provide hard working local people with the chance to build a brighter future for themselves and their families.

"This is one of only 11 National Vanguard schemes from across the country exploring innovative approaches to meeting the housing challenge. It has proved a real success.

"Stoke-on-Trent is a city which is breaking the chains of low aspiration and limited ambition which has held it back. This is a city with big ideas and a growing sense of purpose, energy and enterprise. Today I can announce the roll out of the scheme, with another 50 plus plots on their way.

"From self-build through to major investment funded quality residential developments the city has the land, the political commitment and the entrepreneurial energy to deliver the housing growth this country needs."

Cabinet Member for Housing, Councillor Randolph Conteh said:"This is a diverse city with people from all walks of life working hard together to improve prospects for themselves, their families and future generations. Housing is an essential part of the formula for success in this city and we are determined to get the city building again."



## online self-build toolkit

## NaCSBA launches online Custom and Self-build Toolkit

Promoted at the NaCSBA Council Leader Downing Street Summit the new customandselfbuildtoolkit.org.uk website carries advice about self-building to help councils support and advance custom build sites. The Toolkit is the culmination of the NaCSBA's 12-month nationwide research and development programme, led by NaCSBA R&D team leader Mario Wolf.

The online toolkit is aimed at anyone

interested in custom and self-build, with the remit to remove some of the barriers to growth through sharing information. Councils, developers, builders, housing associations and community groups are all expected to benefit, with the extensive content covering a range of site models, the practicalities of bringing developments forwards and UK and foreign case studies.

Speaking about the Toolkit, Kevin McCloud

MBE, Chair of HAB Housing and presenter of Grand Designs said: "The new Toolkit will help councils understand the numerous ways they can facilitate more opportunities. It will also be invaluable to housing associations, communities that want to build together and to small builders and developers that are keen to support this emerging sector."

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## news

# Plum Pictures producing new six part Channel 4 series on building your dream home, mortgage free

Plum Pictures, the creators of George Clarke's Amazing Spaces, are producing a new six-part television series for Channel 4 following individuals from across the UK who are building their properties themselves in the hope of living in their dream home mortgage free. Whether they've sold their house to pay off the mortgage and are using the profit or are using their deposit savings instead, this series will demonstrate alternative routes to traditional mortgaged home ownership as the participants do all they can to escape the label of 'Generation Rent' and own the home of their dreams debt free. Expertise will be provided by a leading British architect and designer who will be on hand to guide the self-builders through the challenges and rewards of building their own homes.

# Building your own home - what can Councils do to help?

Many self-build registers are now set up, and the government's self-build portal lists much of the country as having minimal plots available. Writing before the government announced its plan to directly commission the construction of 'starter' homes on publicly owned land Partner and Head of Planning at Ashfords LLP, John Bosworth and Trainee Solicitor, Lee Ward discuss what Councils can now do to help potential self-builders

Building your own home is commonplace in countries including Austria, Belgium and Germany. In fact in Austria self-build properties make up 80 per cent of the new homes constructed there each year. In contrast, self-build properties in the UK account for just 10 per cent of all annual new builds.

Why the UK has failed to follow the trend of its European counterparts is unclear, especially since a self-build can prove a cheaper alternative to buying from a developer or private individual. Therefore, in the midst of a housing shortfall, a private members bill has recently been put before Parliament to help address this issue.

## Right to build initiative

The result was the enactment of the Self-build and Custom Housebuilding Act 2015 which gained Royal Assent on 26 March 2015. The Act requires 'certain public authorities to keep a register of individuals and associations of individuals who wish to acquire serviced plots of land...[and] to have regard to those registers in carrying out planning and other functions.'

## Self-build registers

Whilst many of the registers are now set up, the government's self-build portal lists that much of the country, specifically the South West, South East, Greater London, East Anglia and the West Midlands as having minimal plots available, or as it terms it: "Good plots can be hard to find". Understandably, local authorities do not have sites just sitting around waiting for self-build development and the Act does not go so far as to require local authorities to make land available. To do so could prove problematic where land just is not available.



The Act however, makes two key provisions, which are summarised in the explanatory notes, which accompany the Act:

 Relevant authorities to maintain a register of people who are seeking to acquire a serviced plot in their area in order that they may build houses for them to occupy as homes; and

• Certain authorities (broadly, local authorities) to have regard to the demand for custom build housing as evidenced by the registers when exercising certain functions including those relating to planning and housing.

The first question is, whether or not these registers will be utilised by the public? Only time will tell. However, on the assumption the registers are widely used and that a large number of people wish to build their own home, rather than buy 'off the rack', the important question will be the impact that the second provision will have on the functions of local authorities.

The functions, which relate to planning and housing also extend to 'the disposal of any land of the authority and regeneration'. Local authorities could find that when they sell off surplus land they are required to at least consider whether the terms of the sale should include an element of self-build.

### Public sector buildings

In addition to this, the Act could also have an impact on the disposal of public sector buildings. Public bodies could find themselves, where there are unused or dilapidated public sector buildings within its control, making these available for demolition and allocating some or all of the land for self-build development.

Will the Act have any real and noticeable impact on the UK housing shortage? It seems unlikely, at least in the short-term. One effect it may have is to shift allocation of the re-use of public sector buildings to the self-build sector and/or make land disposal decisions, which fail to take account of the needs of the self-build sector to be unlawful.

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Reader Enquiry **104** 

## Concerns for self-build property market remain despite modest increase in planning applications in 2015

Self-build planning applications for new homes continue to lag with just under 18,000 submitted in 2015, 30 per cent below the historic 2010 peak figure.

The latest data from construction industry analysts Barbour ABI shows that self-build planning applications in 2015 were the second lowest for eight years, with only 2014 faring worse. These figures are more surprising considering the apparent turnaround over the last two years within the housing market.

The custom home build industry turns over £4 billion a year and provides a substantial amount to the national economy. The government released a new Housing and Planning Bill which they hope will spark a national transformation from 'generation rent into generation buy' with a target of building 20,000 self-build homes a year by 2020.

Commenting on the figures, Michael Dall, lead economist at Barbour ABI, said: "With a government backed £350 million boost to funding for self-build and a commitment to removing the main barriers that hold back many thousands of custom build projects every year, the news is not encouraging that self-build planning applications are still below the levels that they were in the midst of the recession."

"However with the recent changes that have come into force, such as councils

freeing up more land for self-build and an increase in grants available, this should have a positive effect on the forecasted number of self-build applications in 2016. While the modest increase in 2015 is welcome there is still a long way to go for these types of properties to make any significant impact on the current housing crisis in the UK."

"The government's target is to double the amount of self-built homes by 2020. Only time will tell as to whether the recent removal of red tape will develop into an increase of spades in the ground for self-build properties."

# Say goodbye to the design trends of 2015 – Lamudi announces top trends for 2016

ccording to the Lamudi trend forecast report, people can expect more artisan goods, and a further emphasis on sustainable materials, while mix metallics and metals will be embraced.

Lamudi's in-house design expert, Daniel Carrasco Lara, said: "It's time to say goodnight to calming blue interiors, and vintage tubs. Modern and geometric designs will be popular in the new year, with au natural minerals expected to really take off. Watch out for a return to fresh modern hues, combined with beautiful bold simplicities."

## Top Three House Designs for 2016

Trend One: Geometric Tiles. While decorative backsplashing grew in popularity in 2015, 2016 will take this trend to the next level. Smooth wood and cement will be key components to interior design. Whether it is intricately patterned tiles or countertops, fluidity of design will grow in popularity. Think outside of the box when it comes to geometric designs for the floor, backsplash or countertop. 1920's color combinations are back, so embrace the roaring twenties.

Trend Two: Minerals Are Back. Au natural is the hottest design trend for minerals. Smooth, polished geodes attached to transparent plastics were popular in 2015 but the time has come for the understated elegance of pyrite bowls on tables or unpolished stones used as door knobs. Expect quartz to raise its humble head, featured in display pieces in living rooms and bedrooms.

Trend Three: Artisan Goods. Consumers should welcome a mix of vintage and artisanal items paired with simple Ikea goods. Marrying a Mongolian Lambskin pouf and Moroccan rug with an-off-the shelf coffee table, will delight and surprise guests to your home. Weaving is back on trend, whether that is tassels and basketry or crochets, there is a movement for the traditional weave. Get inspired by local craft shops and support the local economy in the process.

#### Waving Goodbye to 2015

Trend One: The Deep Blue. You

would be a rich man if you received a penny on Pinterest for every saturated blue room with a couple of hundred likes. Blue has always been popular, providing a calming effect on the chosen room. People think of the ocean when they see blue, endless possibilities, uncharted waters. For children, blue is probably the first colour you enjoy, from the skies to the sea. 2016 will see a move away from using sea blue in living rooms, toward the more sombre black and charcoal. The year of the monkey will see more classic interior designs.

Trend Two: Vintage Baths.

While it seemed the tub was the last thing bucking the trend for smart technology, 2015 will see the trend for vintage tubs replaced by high tech baths in modern styles. It is predicted the early adopters of new technology will welcome temperature-regulating baths into ever-smarter homes. The latest tubs will gently remind you when it's time to get out, collaborating with the latest smart health trends. They will also warm the water to the perfect temperature. These high-end units will even have a cupholder to relax with your glass of wine after a long day.



# editor's focus



Designing your garden can be a tricky undertaking, Latin plant names, 2d pencil drawings and 3d sketches. To undertaken an implementation based on your imagination can be risky, the finished product may not look exactly like you thought it would. Which is why we design in 3d, we realise that in order to explore all the different possibilities you need to see different design. We don't just design 2 - 3 designs, but 5 different concepts. Our free design service has caused quite a stir amongst the garden design community, we hope it proves how confident we are.

GARDEN DESIGN

We're all concerned about quality in our constructions, especially when renovating older buildings. But Reynaers, a specialist in facade systems, builds quality into everything it does. Its most recent example: Slim Line 38 – an upgrade to its CS 38 window and door series. With an ultra-slim profile, clean lines and minimalist looks designed to complement existing aesthetics, its high-quality, highly insulated three-chamber system dramatically improves thermal characteristics and weather performance – making older buildings perform as well as new builds without compromising their character.





Rizistal is a UK manufacturer and supplier of industrial grade, repair and protect products for use by DIY and professional tradesmen alike.Rizistal has formulated a range of easy-to-use mortars, fillers, paints and cleaners for floors and surfaces, which are designed for residential, commercial and industrial, construction and engineering projects. Each product has been tested to ISO 9001:2008 Process Control for Manufacturing standard, and is backed by over 50 years of manufacturing, contracting and installation experience with high performance resin screeds, coatings and mortars.

## Northcot Brick wins prestigious self-build award



Northcot Brick, one of the UK's foremost independent brick manufacturers, has received a 2015 'Build It Award' for the quality of its brickwork. As this year's outright winner in the 'Best Masonry Home' category, Bridge House, a traditional brick and flint family house in Norfolk, was highly praised by the judges for its outstanding craftsmanship and brick detailing, which 'could not be faulted'. Over 65,000 of Northcot's Strafford Mellow handmade bricks were specified for

the house and gardens, with many being cut on site and laid in a traditional Flemish bond. Northcot's latest brochure is available to download now. For more information, please visit the company website.

Enq. 108

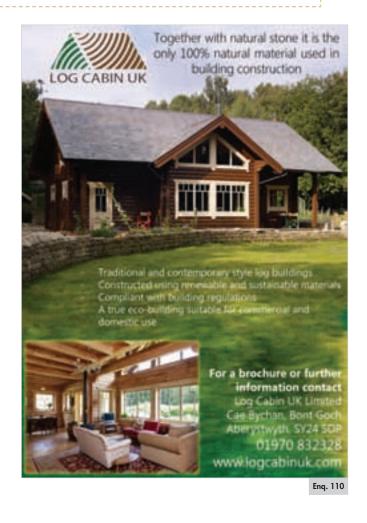




Compact and handy to use, cordless vacuum cleaners are great; but they are definitely not a replacement for the traditional corded machine. They are both fantastic, but at different jobs! **Sebo's** corded, mains-operated vacuum cleaners score highly because of their power and their ability to make light work of the tough challenges of everyday cleaning. Both upright and cylinder machines are available; they offer excellent reliability day after day without ever needing to be recharged.

With many models, their light weight and ergonomic design means that they are easy to use for long periods. They are versatile, often come with a wide range of accessories and are able quickly to clean large areas.

Enq. 109



# Interior inspiration: Living rooms showcase

Whether you're choosing furniture for your new living room or restyling, be inspired by our choice of the latest innovations in living room furniture to suit traditional homes or modern living.

1. Lapiaz inspired this unique coffee table. The french word is the name given to the typical formations produced by surface dissolution of limestone or dolomite rocks. It can also be caused by freezing and thawing in cold climates and this is how the Lapiaz coffee table emerged. Imagine a stone frozen and freshly cracked to show a rich, golden interior. The polished brass details and mirrored sides complement this luxury design artwork – a statement piece for the most luxurious interior designs.

#### www.bocadolobo.com/en Enq. 111

2. Furnish.co.uk's Basic Collection Modern TV Stand in High Gloss White lacquer frame finish features left and right opening doors in Anthracite finish with contrasting metal catches and internal storage space. What makes this TV stand unique is its open central space featuring a colour changing LED Spot light supplied with a remote controller and 16 light variations, as well as a glass shelf and AV access point. Ideal TV and Audio Storage, with maximum top weight 30kg, and centre shelf max weight 5kg. furnish.co.uk

Enq. 112

3. Influenced by the Art Deco Era, these particular pieces boast sensuous lines that are smooth and sleek in appearance, complemented with geometric high-glossed or lacquered finished arm rests, which feature elements of polished chrome. The club chair seat and back are quilted to ensure comfort. These striking chairs are an inspired addition to any large room with clean lines, filled with natural light; a simple, open space that will perfectly showcase this flawless furniture collection.

www.milleboutique.com
Enq. 113



4



**4.** Make your living room stand out from the crowd with this patterned sofa from Delcor. Hugely comfortable, the traditional Magnum is inspired by the classic Elizabethan Knoll sofa. Snuggle in and feel cocooned in luxury. Knoll sofas featured high arms and high backs to keep the nobles shielded and warm. Features include a sprung back and base unit for extra comfort, high density comfort cushions that don't lose their bounce and removable covers. The Magnum is priced at £2031.

5

www.delcor.co.uk Enq. 114

5. A quirky dirty brass industrial multi arm pendant light. Our molecular style LAB pendant will look great in an industrial chic styled room. Featuring five arms ready for your choice of bulbs. Alexander & Pearl's industrial LAB pendant light is constructed from iron and features a black coated body with dirty brass accents. Filament bulbs are a good choice with this pendant to add an even more industrial look. Dimensions: H: 78 W: 68 D: 68cm - Supplied with approx 3 metres of adjustable cable . www.alexanderandpearl.co.uk Enq. 115

6. These innovative Doppiafila bookshelves are made in Italy by Mogg and designed by Matteo Ragni. Their unique feature is the interior storage at each end, which can be used as part of a display of books (or anything else you like). Each shelf is a metre wide, made in lacquered metal, with a pure white, bronze, or mirror polish finish. Each order must include a minimum of two shelves, with extra single shelves also available. Dimensions: W100cm x H22cm x D30cm. Two shelves priced from £520. www.gomodern.co.uk

Enq. 116



# Future proofing



Damion and Melanie Rothner took the stress out of their self-build with good research, forward planning and a reliable PM

By Heather Dixon

Continued overleaf...

Frame Manufacturers, Designers and Project Managers of Mr & Mrs Rothner's self-build home

Whatever your self-build aspirations, Benchmark Self Build is here to help you realise your own dream self-build home.

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HIGH POINT There were three: Getting the land and walking on it for the first time, knowing it was ours; reaching the day it was all finished and we finally moved in, and spending the summer in the caravan – which was brilliant fun and a bit like posh camping ot everyone gets to see their house built at a national trade show before it arrives on their plot of land, but that's

exactly what happened to Damion and Melanie Rothner when they bought a timber frame for their new-build home near Newport.

The company, Oakworth Homes, were erecting a 'showcase' house in the NEC, and offered the couple a discount if they could base it on the Rothner's bespoke design, then transport it directly to site at the end of the show.

"We had already asked Oakworth to supply the frame, so it just meant a few weeks' delay," says Damion. "It meant we could see the structure of our house in advance, which was really exciting. It was a very surreal feeling to walk round our new home along with hundreds of other people, who were commenting about its pros and cons."

As a result, Damion and Melanie already felt familiar with their new home when it was eventually dismantled and taken to their four-acre woodland site in Shropshire, where it was reassembled within days.

Damion and Melanie chose a timber frame to reflect the bungalow that had originally been built there. The single storey house - the last

Continued overleaf...



OAKWORTH HOMES OFFERED THE ROTHNER'S A DISCOUNT FOR LETTING THEM BASE THEIR SHOWCASE HOUSE DESIGN ON THE ROTHNER'S BUILD THEN TRANSPORTING IT DIRECTLY TO THEIR SITE



# Are you protecting your valuables?

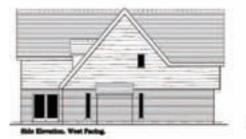


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Rear Elevation. Nouth Facing.



"We had to make a few compromises," says Damion. "The house size was restricted by planners to 2,500 sq feet and the height of the eaves to 7.9 meters, but if you are prepared to work with the planners you are more likely to get the house design you want" surviving one of several similar properties built for ex-servicemen – had fallen into a poor state of repair by the time the couple bought the land in October 2011.

"We had renovated and extended properties but never self-built," says Damion, who is National Sales Manager for Travis Perkins. "We had been looking for a plot of land for a long time but everything we saw was either too small or too expensive. We had often walked past the bungalow on the way to see my in-laws and one day saw the owner clearing away the weeds to reveal this beautiful plot of land."

Damion wrote to the owner to express an interest in buying it and they agreed, on a handshake, a price of £250,000. The provison was that Damion and Melanie – who works in the Biotech industry – could have six months in which to sell their home of seven years, a Duke of Sutherland cottage with small rooms and low beams.

"We had two young children at this point and had outgrown the cottage," says Damion. "We wanted more space and a bigger garden, and this was our chance to achieve that. Fortunately we sold our last house within three months."

But just as they sold the cottage, the Rothners faced a major crossroads. Melanie had been offered a job in Australia and they had to choose between self-building, or emigrating. "In the end we shared a bottle of wine and tossed a coin," says Damion. "I think we were both relieved when it came up on the side of building."

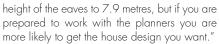
The family bought a 27,000 caravan (which they later sold on for 26,000) and pitched camp on the plot, then hired a project manager to take on the build.

"We were both working full time and looking after two young children and we didn't want the stress or hassle of trying to manage a build at the same time," says Damion.

The plot came with outline planning permission for a new house, but Damion and Melanie wanted something completely different and went back to planning with their design for a modern four-bedroom property. As part of the Oakworth group of companies, Benchmark Self Build can take a project right through from concept to completion, and in this instance the company were responsible for the design, planning application, consent, building control and construction drawings. The house would be built in the same red brick, red roof tiles and faded timbers that had given the bungalow its distinctive style. "We had to make a few compromises," says Damion. "The house size was restricted by planners to 2,500 sq feet and the



Damion and Melanie invested most of their budget on the fabric of the building, including softwood window frames, five kilometers of cabling set into the walls, heat revovery and ventilation systems and water-based underfloor heating



With planning passed in August 2012, the next hurdle was to remove three large elecricity poles which cut across the land in the path of the new build. Western Power quoted  $\pounds27,000$  to have them taken down , but when Damion investigated further he discovered that the original wayleave, or contract, had run out meaning that the power company had to remove them at their own cost.

By the time building work began there was ice on the ground, but the foundations went down swiftly. Two wells had to be filled in, but a layer of sandstone just a few feet below the surface created a solid base for the concrete, beam and block foundations. The timber frame was then brought on site and assembled, the brick walls built and the heavily insulated roof put on to make the building watertight within just three months of starting.

"We bought reclaimed roof tiles because we didn't want them to look really bright and new," says Damion. "The roof includes insulation panels cut to fit the spaces between the timbers, plus a layer of plastic and a silver space blanket to seal it. Unfortunately we put the silver blanket on during the summer and the reflection from the sun was so bright we got burnt."

Damion and Melanie invested most of their budget on the fabric of the building, including softwood window frames, five kilometers of cabling set into the walls, heat revovery and ventilation systems and water-based underfloor heating with pipes laid close enough together to accommodate a ground or air source heat pump at a later date.

"We have future proofed the house," says Damion. "It is all prepped for green technology, even though we haven't fitted everything yet due to costs. We had a £10,000 contingency fund and wanted to stick within our limits, so the bulk of the expense went into the build itself. A lot of the interior fixtures and fittings, the cosmetic

Continued overleaf...



CURVED LINES IN THE CEILING, SHOWER AND FREE STANDING BATH SOFTEN THE EDGES OF THE MODERN ANGULAR BATHROOM

# LOW POINT

I did the decorating myself and was the most demoralising job I' ever done in my life – especiall painting the first wash to seal th plaster. It took a month of solid painting to get it done and it was ightmare. We saved about £4,00 as a result, but it's not to a great standard. Next time I would get it professionaly decorated



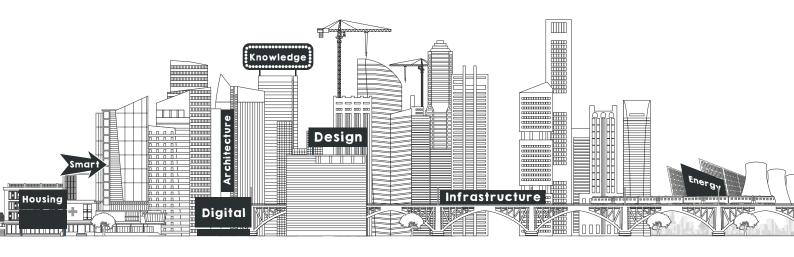
THE BEDROOM OVERLOOKS THE LARGE GARDEN



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THE SPACIOUS OPEN PLAN KITCHEN PROVIDES A LIGHT, BRIGHT FAMILY AREA WHERE THE ROTHNERS SPEND MOST OF THEIR TIME

## **Project summary**

Renovation cost: £275,000 Current value: £650,000 - £700,000

## Cost breakdown

Project manager: £20,000 Fees: £3,000 Foundations: £9,000 Windows & doors: £19,000 Timber frame: £30,000 Roof: £11,000 Oak Cladding: £2,900 Kitchen: £10,000 Plumbing: £10,000 Electrics: £10,000 Bathroom fittings: £2,000 Floor coverings & underfloor heating: £8,000 MVHR System: £2,500 elements of the house, will be upgraded over time."

The house continues to evolve. Eighteen months ago Damion and Melanie got planning permission to build a linked double garage with rooms above, which they have still to build.

"It was great to be able to let someone take over the project management so that we didn't have the day to day stress of it all, but I think it takes two or three goes to get it just right," says Damion. "There are a few things about this house we would change, like the position of some of the interior doors and one or two aesthetic adjustments, but nothing we can't live with."

Damion particularly enjoyed their spell in the caravan. "The summer months were great because of the location, although it got a bit wearing through the winters with two small children and a big dog living in a small space – the labrador trashed everything in sight! When we finally moved into the house it seemed so big it took weeks to adjust to the space."

For a few months in the caravan they were also living virtually mortgage-free, although securing funds for the project was a huge challenge.

"It was incredibly difficult to get a self-build mortgage because so many building societies have very strict guidelines about what they will

## **Contacts/suppliers**

Strcutural engineering/timber frame: Oakworth Homes www.oakworthhomes.co.uk

Heavy materials & second fix: Travis Perkins www.travisperkins.co.uk

Floor screed: Salop Mixed Concrete www.smcminimix.co.uk

UFH system: Tailored Heat www.tailoredheat.co.uk and will not cover," says Damion. "The most stressful period for us was when the money started flowing out and we were getting right up to the budget limit. We ended up using credit cards and personal loans to see us through the final stages. My advice to anyone self building would be to take out a mortgage for more than you think you will need so you have something to fall back on."

> "My advice to anyone self-building would be to take out a mortgage for more than you think you will need"

– Damion Rothner

But nothing would put Damion off building again. "We are here for the long term, and I'm not so sure Melanie would want to build again, but I would do it all again tomorrow if another great plot came up for sale," he says.

MVHR system: Villavent www.systemair.com/xen/Villavent-UK

Oak cladding: Venables Oak www.venablesoak.co.uk

Bi-folds and windows: Arden Windows www.ardenwindows.net

Design and planning: Benchmark Self Build www.benchmarkselfbuild.co.uk

# An energy-efficient show home

Scandia-Hus have recently opened their new Show Home, located in West Sussex. The property has a stunning contemporary style and is extremely energy-efficient with high levels of insulation

## Design

The new show home showcases the quality of the Scandia-Hus specification and incorporates stunning design features and new technology. The timber frame structure is energy-efficient, with triple glazing, superior levels of insulation and air-tight construction.

Many customers prefer traditional designs but contemporary style is becoming increasingly popular. Over the next couple of years another two houses will be constructed – one a traditional style and another a chalet style to showcase the flexibility of timber frame design and construction technology.

## Entrance hall

The first thing that strikes you as you walk into the Adelia main entrance is the double height, vast, light and inviting entrance hall. For many show home visitors this is an unexpected surprise; to see a building that has been constructed to maximise every available amount of space, right up to the apex of the roof. The





bank of veluxes, which are solar powered, and have rain sensors, flood the entrance hall with

light, even on a damp, dull, winter day. A focus on the importance of the lighting in the overall house design has been closely considered. The veluxes have LED strip lights against the backdrop of the sky and the external lighting accentuates the stunning design features.

Using the glazed Swedish internal doors maximises the light transfer throughout the house into the living room.

Swedish internal pocket doors facilitate the transition from entrance hall to the family room and kitchen. The pocket doors allow for continuous flow of the room creating the open plan living on the ground floor, with the ability to close off when required. They are a great space saving alternative to traditional internal doors.

The whole show house has been designed to inspire visitors with ideas on internal and external finishes.

## Living room

Having a formal sitting room is a design feature that many customers like to incorporate. This house has full height Swedish aluminium clad triple glazed sliding patio doors that open up onto the rear patio letting the outside in, making the room feel spacious and light. All the windows and doors fitted in the house are triple glazed delivering a 'U' value of 1 W/m<sup>2</sup>k, which increases the thermal efficiency of the property.

## Kitchen

The sleek, curved Schuller kitchen features stylish gloss slab-doors and a generous sized white worktop, with a metallic grey glass splashback, a signature element of modern kitchen design. The curved units are enhanced by chrome plinths which contain colour changeable lighting – an interesting feature that Scandia-Hus have chosen to bring a splash of

Continued overleaf...









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colour and depth to the kitchen design. Contemporary clean lines, high gloss cabinets and integrated appliances unite in this bright open space, which has been designed for modern family living as well as relaxed entertaining. A flush fitted induction hob with extractor that rises from the worktop and an innovative boiling and chilled water tap completes the installation.

As part of the open plan kitchen/dining/ family area, the snug seating area has been created. Further Swedish triple glazed patio doors open out onto surrounding patio areas, with electronic blinds and voiles filtering through the sunlight.

Adjoining the kitchen is a generous utility room which houses the washing machine, a separate sink and a cloak/boots cupboard.

#### Staircase

The Show House staircase has a soft combination of birch treads and risers, painted strings and glass balustrade. Scandia-Hus offers a range of Swedish staircase styles ranging from very contemporary light birch wood with glass balustrade to traditional oak with banisters.

Scandia-Hus' architects work with the space to find the best staircase solution to transition from ground to first floor whilst in keeping with the whole property design.

## Bedrooms

A striking feature of the rooms on the first floor is that all have high ceilings and triple glazed windows that go right up into the apex of the roof. For the master bedroom, this has enabled Scandia-Hus to suspend an impressive chandelier light fixture in the middle of the room. A generous sized master ensuite and a Juliet balcony finishes off this master suite.

In the third bedroom, one wall has been prepared into a magnetic feature wall using British Gypsum's Thistle Magnetic Plaster to create an interactive study space. Scandia-Hus design houses around customers lifestyle so thought this product should be showcased to customers.

## Heating system

An attractive outbuilding has been designed to accommodate the hot water cylinder and boiler. A Vaillant Ground Source Heat Pump (with two boreholes of over 100 metres each) powers the underfloor heating and the hot water system.

The Heat Recovery Ventilation System is housed in the utility cupboard. The extract fan within the ventilation system extracts stale, moist air from the wet rooms (kitchen, utility and bathrooms). This stale air is passed through a heat exchanger, which is then used to pre-warm incoming fresh air. This ensures a fresher, warmer and more comfortable environment. The system reduces your heating bills and improves your air quality.

## First floor construction

Scandia-Hus often use chipboard flooring on the first floor, but in the Show House the company *Continued overleaf*...











The new show home incorporates stunning design features and new technology. The timber frame structure is energy-efficient, with triple glazing, superior levels of insulation and air-tight construction

has used a pug screed. This is a thin biscuit layer of screed. It is often chosen for use with low-temperature heat sources such as Ground Source Heat Pumps, as it acts as a thermal store and conducts heat more evenly to the surface above.

The screed is 28mm in depth and flush with the top of the joists for best heat transfer. This ensures that it penetrates fully underneath the underfloor heating pipe and sits level with the top of the batten. As the screed is directly below the covering board, heat conductivity is increased.

## **Project summary**

Construction method: Timber frame Total external floor area: 260.8 sq.m / 2806 sq.ft

Estimated main contractor build route: £500,000

Estimated project management build route: £450,000

## **Contacts/suppliers**

Architect/Designer/Manufacturer: Scandia-Hus Ltd www.scandia-hus.co.uk / 01342 838060

Render: Parex www.eco-rend.co.uk

Windows and Sliding doors: Tanums Fonster www.tanumsfonster.co.uk

Staircase: Drom Trappor www.dromtrappor.se/en

Sanitaryware and kitchen: East Grinstead Bathrooms and Kitchens www.egbandk.com

All floor and wall tiles: Barge Tiles, Lingfield www.bargetiles.co.uk

Ground Source Heat Pump: Vaillant www.vaillant.co.uk

Boreholes for GSHP: Nicholls Boreholes www.nichollsboreholes.co.uk

Underfloor heating: Robbens www.underfloorheating.co.uk

Plasterboard: British Gypsum (products from from the Rooms Made For you range) www.british-gypsum.com

Driveway: Addagrip Terraco Ltd www.addagrip.co.uk

Balcony: Balcony Systems www.balconette.co.uk

Furnishings: Rusdens www.rusdens.co.uk

Guttering: Lindab www.lindab.com/uk

#### The online community to improve the working day



The Hultafors Group has always had a close connection with what tradesmen and women are thinking and doing at work – through its tools, workwear and accessory brands – talking to them and working with them to get the job done more effectively, efficiently and to the highest possible standard. Now the relationship is becoming even more tangible through the launch of a new online community – MyCrowdCraft – in which Hultafors

is continuing its mission to make sure craftsmen get the most and best out of their workday. It's a wholly interactive forum where news and views can be discussed and exchanged. The month's best idea will be recognised and rewarded with prizes.

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#### Silva backs campaign to wipe out illegal trade



Silva Timber Products has become the first company in its field to pledge its backing for a campaign demanding tougher action against the trade in illegal and unsustainable timber. The firm has joined WWF-UK's Forest Campaign, which aims to put pressure on governments and the EU and has so far attracted over 100,000 signatures to its #SaveForests petition. Silva only sources timber which is harvested legally and sustainably. It imports certified wood from across the globe, ow cedar from Canada Siberian larch

including western red cedar and yellow cedar from Canada, Siberian larch from Russia and hardwoods from Bolivia.

#### 01514 953111 www.silvatimber.co.uk

Enq. 121



# selfbuilder & homemaker



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# Breathe Easy...

Clarissa Youden, of Total Home Environment Ltd, discusses the various forms of ventilation available on the market and how Heat Recovery Ventilation can offer the most dramatic health benefits and substantial fuel savings

Ventilation in homes is essential. As Building Regulations tighten-up, so do homes; homes are now being so well insulated and sealed-up to save energy, that they can barely breathe. Think of all the VOC's (Volatile Organic Compounds) that naturally occur in your home, leaching out of soft furnishings, chipboard, paint, plastics, scented room sprays... and what if you're in a Radon Gas area? You spend 70 per cent of your time at home and you breathe over 10,000 litres of air a day – don't you want the cleanest, healthiest air in your home for you and your family?

In perspective, to live in comfortable conditions, an adult needs approximately  $30m^3/hr$ of fresh air. In a typical bedroom of say  $36m^3$ with two adults sleeping in that room, you've got less than an hour before CO<sub>2</sub> and water vapour will build up with condensation and mould spores forming... not great for Asthma and allergy sufferers.

Why are we then 'ventilating' the property by poking holes through the skin everywhere with archaic technology – draughty unfiltered tricklevents in window frames (that people then shut because they're too cold) and noisy extractor fans in kitchens and bathrooms (which are never cleaned, so block-up). In both instances we're just throwing away vital heat. This ventilation contributes between 50-60 per cent of the typical heat-loss of a home – half your heating bill goes to mitigating the effects of ventilation.



So, how do we guarantee good indoor air quality but not lose any heat? We know trickle vents or extractor fans won't cut the mustard, but what about other types of ventilation?

## Controlled Natural Ventilation

AKA 'opening windows'! To meet the 0.44 air changes per hour, set by Building Regulations in England, you'd need to open all the windows for 10 minutes, seven times throughout the day! If you're in a town, do you want to let the pollution in? Besides, most people are out in the day and then don't want to open windows at night.

## Passive Stack Systems

These systems work via natural air movement, motivated by a temperature difference between the inside and outside of the house. Pipework goes from ceiling vents in wet rooms up through the roof, but you still have to have some background ventilation in the form of trickle vents and extractor fans, meaning more cold unfiltered air. Also, it tends to work best, in the colder months of the year, when you have the bigger temperature difference, so it can get a bit stuffy in warmer weather.

## Positive Input Ventilation (PIV)

A fan unit brings fresh filtered air from outside into common areas and forces stale air out of the building via natural leakage in homes which are not so airtight. Although it can be set up to take air from a cold roof as well, (warmer air than outside) mostly air will be introduced at whatever the temperature is outside, plus you are still throwing heat away with this system.

#### Mechanical Extract Ventilation (MEV)

Economical and easy to install, especially in a retrofit installation. A fan unit located remotely extracts air out of wet rooms through ductwork. Designed to work at a low level with an occasional boost when required, it again needs the dreaded heat removing trickle vents. Research has also suggested that MEV doesn't give enough clean air ( $CO_2$  was found to be above the recommended maximum of 1,000 parts



per million).

Phew – 'Is there any answer to my problems?' I hear you say. By George, yes there is.

## Heat Recovery Ventilation (HRV/MVHR)

This is whole house ventilation at its best, completely controlled to provide the correct amount of fresh air, when it's needed and with great heat recovery. A fan unit located remotely continuously extracts stale air out of wet rooms while drawing fresh filtered air from outside. They pass each other in a heat exchanger (not mixing) and up to 96 per cent of the heat from the stale air is transferred to the fresh air being put into the habitable rooms of the home.



Good HRV systems will be PassivHaus certified, have an automatic summer bypass (no heat recovery in hot months), trap pollen and allergens down to 0.01 microns and save about a third on your heating bills.



Even with the best HRV systems, there is still heat available to recycle. If your home is really well insulated and airtight, you could take advantage of a premium ventilation unit which integrates a micro heat pump within the HRV unit to harness far more energy from the outgoing air. They can recover 100 per cent of indoor heat, allowing users to obtain 4kW of heat energy from 1kW of power.

This premium HRV unit with integral heat pump can therefore form part of a low-energy heating solution for your home. Whether combining with a wood burning stove and towel radiators, or by reducing underfloor heating to the ground floor only, this system can increase the flexibility and reduce the capital outlay of your heating system. In the summer months, the heat pump can be reversed to provide fresh cooled air for those sticky summer nights. There are also compact service units on the market, for smaller homes, with heat recovery ventilation, space heating and domestic hot water all from one unit – great for off-gas homes. site by others. Small bore flexible ducting, restricts airflow so much, that however efficient the MVHR unit appears on paper, it won't be in practice. Ducting also needs to be insulated correctly otherwise heat will be lost.

There's no point having the most efficient HRV system, if you only have an on/off button. The best HRV units should have a controller that ensures the system is perfectly set up for your house and your lifestyle with:

- 24/7 timer
- Room and external temperature monitors
- An SD card for data collection
- Cold weather, reduced supply rate function
- Boost function in several increments



With regards to the veins of the system, it is very important to get the ducting to each room right. 100-200mm rigid metal ducting is best for airflows and hygiene (plastic ducting isn't naturally antibacterial) and is unlikely to be damaged on



The principle behind heat recovery ventilation is firmly grounded in the drive for sustainability and reducing our reliance on fossil fuels. Obviously, the more heat we recover, the less we need to generate... Main benefits of HRV

Constant fresh air, filtered for pollen and allergens down to 0.01 microns

Reduced VOC's/CO<sub>2</sub> for a healthier environment in which to breathe

It's quiet, with no noise from extractor fans or from outside

More secure living as windows won't be left open overnight

Reduced humidity levels, so less inviting for dust mites

Cost savings, with heat recovered in winter, comfort cooling in summer

No mildew or mould as stale air is removed, prolonging your house life

Constant odour removal replaced with fresh filtered air

Exceeds Building Regs Part F, SAP Appendix Q & Passivhaus certified.



## Solid Gear & Toe Guard - new Safety Shoes brands



With a premium product portfolio that already includes Tools and Workwear in the form of the Hultafors and Snickers brands, the Hultafors Group is now launching a top quality range of Safety Shoes for the UK market to complement these market leaders. Now owned by the Hultafors Group, the Solid Gear and Toe Guard brands are the fastest growing in Scandinavia where demands for safety, quality and value keep their shoes and boots one step ahead of the competition. With

23 different safety shoes available across the 2 brands, the footwear is available in trainer, shoe and boot styles - all with in-built hi-tech designs that combine top quality materials, ultimate comfort and maximum safety.

Enq. 125

#### Ward off the worst of wet, winter weather



Developed and proven in the worst that arctic weather can deliver, **Snickers**' 'Foul Weather' Winter Jacket provides the best in protection from snow, wind and rain. It's the ultimate, no compromise jacket with hi-tech waterproof protection and Snickers' guaranteed Advanced Protection System functionality that will keep you, dry and working well when the weather's at its worst. Its design combines dry and ventilated comfort with freedom of movement and built-in functionality. Plus there's

enhanced protection with a high-vis hood, woven reflective strips and waterproof seams that prevent moisture penetration. Snickers' products provide European Standard EN343 protection against foul weather.

Enq. 127

## Snickers winter warmers



This new 100 per cent Wool Sweater is the ideal combination with Snickers undergarments to provide a truly warm and cosy wrapper when you're out on site in the chilly winter months. The special wool weave is really soft but also highly moisture-absorbant and breathable. It provides pure natural wool comfort to keep you warm in really cold conditions. What's more, it resists odour naturally and can be worn for long periods without washing.With a zip-up neck line collar

and polyamide-reinforced elbows and lower arms for enhanced durability, this really is a top quality, highly practical garment for keeping warm and looking smart at work.

Enq. 126

#### Osmo adds the finishing touches



Osmo UK's Polyx®-Oil wood has provided a high quality protective finish to a stunning TV and hi-fi wood cabinet, proving that the finish is suitable for use on all internal wood furniture. Woodwork expert and YouTube blogger, Peter Parfitt has been working with Osmo wood finishes for a number of years. Osmo Polyx®-Oil is resistant to water and dirt, is very durable and smoothens wood surfaces. The natural vegetable oils and waxes allow for even colouring. Another key benefit of this wax-oil is that Polyx®-Oil has a reduced solvent content making it virtually

odourless. Polyx<sup>®</sup>-Oil is a much healthier (and also more pleasant) wood care product, without any biocides or preservatives.

Enq. 128

# Wetrooms made easy



# **selfbuilder** & homemaker



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#### Broken-plan living on the rise



As it becomes more difficult and expensive to buy a house, many homeowners are opting to improve their current property rather than move. Mary Duggan, a judge for the RIBA House of the Year award has noticed an increase in the trend for a brokenplan layout, leading to a demand for snugs and private spaces. Fergus Pickard, Research & Development Director at P C Henderson comments: "By using our residential range of sliding and folding systems, homeown-

ers can combine both open and broken-plan living by neatly storing the room dividers when the spaces are opened for entertaining or socialising."

0191 377 0701 www.pchenderson.com

Enq. 130

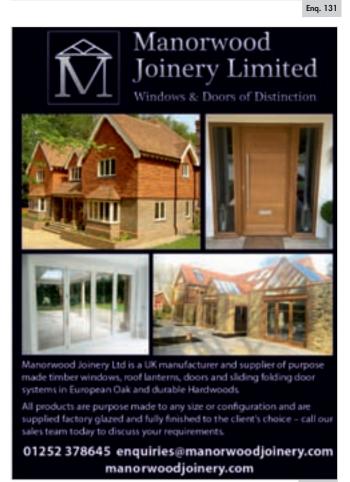
#### **Roof Maker launch ThermFold**



Roof Maker, one of the UK's leading manufacturers of skylights and roof lanterns, has launched ThermFold, a new super insulated aluminium folding sliding door system designed to perfectly match its high specification range of skylights and roof windows. The new bifold doors set new performance and design standards, with triple glazing and toughened safety glass offered as standard and a sleek contemporary look. Available with 48mm triple glazed frameless glass units structurally bonded to the outside of the door, they have a stunning flush glazed

and truly minimalistic appearance.

0116 269 6297 www.roof-maker.co.uk



Enq. 132

# Emperor Concealed



Flush Handles **Clean Lines Invisible Patented Hinges** 

Price Online: duration.co.uk Call Us: 01268 681612



# Bi-folding & Sliding Doors Showcase

#### ORIGIN

Origin, a British manufacturer, designs and builds exceptional quality products. The Origin Home, a complementary product range, includes bi fold doors that open-up rooms and merge inside with the out, elegant windows that are crafted specifically to let in more light, plus made-to-measure blinds to add a touch of inspiration to any surrounding. Origin's bi-fold doors and windows come with a 20 year guarantee and are available in 150 different RAL colours.

www.origin-global.com

Enq. 134





2 MANORWOOD JOINERY All Manorwood Joinery systems are purpose made to any configuration and size in either European Oak or durable Hardwoods available in both and bottom hung systems using the multi award winning Centor system. The system has a 3,000mm maximum panel height and almost limitless frame width (subject to configuration) incorporating the unique 69mm door sections. There are a wide variety of options available for sliding folding doors.

www.manorwoodjoinery.com Enq. 135

#### MADE FOR TRADE

Made For Trade has released a new brochure featuring its best-selling Visofold aluminium bi-folding doors. The brochure will display the various colour and design options available on doors, which meet new building regulations. The in-demand supplier has been causing a stir in the glazing industry in recent years, offering market-leading bi-folding doors and Global conservatory roofs at unbeatable prices, as well as excellent customer service.

www.madefortrade.co

Enq. 136





Improve your outlook with **ARBOR** sliding and folding timber doors. Manufactured to order in European Oak and durable hardwoods.

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#### Tel: 01454 270039

Fax: 01454 270049 email: sales@arborwinsys.co.uk









139

at home

## In this issue of Selfbuilder & Homemaker we look at recent trends in bi-folding and sliding doors



ARBOR Arbor manufactures sliding and folding doorsets, hinged doorsets, casement windows and glazed screens in European Oak and durable hardwoods. Bi-fold doors are available in standard sizes (the E60 range) and to bespoke dimensions and designs up to a maximum width of eight metres and a maximum height of three metres. Internal bi-folds are also manufactured in single or double glazed specifications. All products are designed and made at the factory in Bristol. Eng. 140

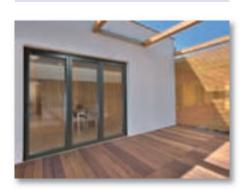
www.arborbifold.co.uk

#### DURATION WINDOWS

'Emperor Concealed' is the revolutionary aluminium bi-fold door from Duration Windows. By placing the hinges completely within the sashes the doors benefit from much cleaner, more contemporary looks without the clutter of visible hinges. The clean lines are further enhanced with a new design of flush, child friendly interior handle. The doors have been recently tested to PAS24 for security and the new super-low threshold is now weather rated.

www.duration.co.uk

Enq. 141





#### **IB KIND**

Space saving pocket door solutions that bring contemporary style to your self build. JB Kind Doors supply a quick fit pocket door framing system to suit their wide range of contemporary and classic door designs. Easy to install, the rigid framing system is pre-assembled and can be fitted in half the time of other brands. Suitable for single and double door situations with compatible sliding door hardware also available. Visit the company's website for more information.

www.jbkind.com

Enq. 142



#### Synseal group supports BBC DIY SOS



Synseal group companies Masterdor Ltd and Sheerframe Ltd have helped Nick Knowles and the BBC DIY SOS team to transform properties in Manchester, creating high quality homes suitable for British war veterans and local community residents. Masterdor Ltd supplied 15 composite residential doors with Sheerframe outer frames. Sheerframe Ltd provided PVC-U extrusions for energy-efficient windows in the 66 homes which were specially fabricated and fitted by

leading window, door and curtain walling manufacturer and installer, CMS Window Systems

01623 443200 www.synseal.com

#### Eng. 144

#### Enhanced choice of panels for Shueco's range



Customers of Schueco UK can now choose products from leading German door panel specialist, Adeco, a longtime supplier to Schueco customers in other European countries. This option will give UK clients a greatly improved choice of stylish, high-end design options for Schueco entrance doors. Adeco offers three panel types - infill, single sided leaf enclosing and double sided leaf enclosing, the latter two providing the most popular and visually attractive versions. These are com-

bined with purpose-designed Schueco profiles in frame depths that range from 65 mm to 90 mm depending upon the chosen configuration.

01908 282111 www.schueco.co.uk

## Is your supplier letting you down?

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 146
 Fax: 01642 671026

 WWW. madefortrade. co



from only

per leaf

#### Do-It-Yourself with P C Henderson's handy guides



An overwhelming 77 per cent of homeowners want to adapt their houses to accommodate growing families and children living at home for longer. A further 22 per cent plan to add more space to their property in the next five years. As more people seek to adapt their homes rather than move, P C Henderson has introduced a range of step-by-step video guides to help make home improvement projects easier. The videos are a free and simple resource that enables home-

owners to save time and money while being productive. They are compatible with a range of devices such as tablets and smartphones.

#### 0191 377 0701 www.pchenderson.com

Enq. 147

Enq. 149

#### Celsius Solid Roof granted LABSS approval



The recently-introduced Celsius Solid Roof system from Synseal is now fully approved and registered by the LABSS (Local Authority Building Standards . Scotland) as checked for compliance with Scottish Building Regulations under certificate number EWS550 Construction of a completely new solid roof or replacement of an existing conservatory roof with a retrofit solid roof involves a statutory obligation to submit a Building Regulations application. The scope of Synseal's updated certifi-

cate number EWS550 now covers England, Wales and Scotland to facilitate mandatory legal technical compliance procedures.

#### 01623 443200 www.synseal.com



Enq. 151

#### Introducing the specifiers guide from Sheerframe



An informative new Specifiers Guide has been published by Sheerframe Ltd to provide a handy product specification reference source for use by architects and designers, residential or commercial building applications, trade fabricator partners and professional window industry installers. The new Specifiers Guide summarises the calcium organic stabilised PVC-U window and door product range with Sheerframe 8000, Sheerframe 7000 and Sheerframe 6000 options clearly

presented. Flood door solutions and hands-on design service support for curtain walling and structural items are also itemised in this helpful guide.

01623 443200 www.synseal.com

Enq. 148

#### WarmCore Installation Video now available



A WarmCore installation video is now available on YouTube, detailing exactly how to fit a new "warm alu-minium" folding sliding door. Featuring two highly experienced engineers from Synseal, this informative eight-minute video shows the removal of an old inline sliding patio door and its replacement with a brand new 3-2-1 bi-fold door in popular RAL 7016 Grey finish. The production follows a stepby-step approach and handy captions are used to support the voice-over. Glass unit toe and heeling and WarmCore's straightforward glazing method

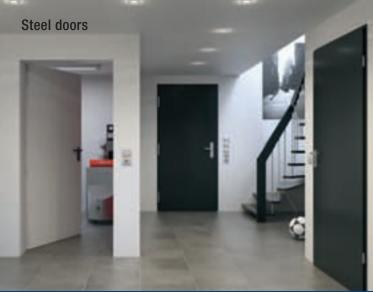
using handy push-fit beads with integral gaskets is also clearly demonstrated.

01623 443200 www.synseal.com









## When the Build Matters the Doors are Hörmann

- Widest range of garage and entrance doors in the UK
- Precision German engineering
- Excellent security and outstanding reliability
- Large selection of designs to match every home







# Reynaers at Home's hypoallergenic handles: Purity

Reynaers at Home's range of hypoallergenic designer handles, Purity, is proving more popular than ever thanks to stunning aesthetics, durability and innovative material and coating.

For the design and development of Purity, Reynaers at Home joined forces with the Italian designer Leo De Carlo, who worked for Philippe Starck's agency in Paris for several years. He drew inspiration from his home town of Venice for Purity's innovative and minimalist design. Leo De Carlo said: "Reynaers is known for its technical competence,

attention to detail and environmental awareness.

"The material used in Purity is a compatible alloy, which doesn't contain any toxic elements, such as lead, nickel or chrome. What's more, it is made using a production process that ties into Reynaers' environmental credentials."

Purity handles are crafted using a recently developed, highly durable alloy called PURA™ and advanced technology makes it possible for it to be protected. The handles are coated using an innovative production process called BIOV™ (Bioecologic Ion Overlay). This is an evolution of the old PVD coating process, which requires no galvanic chrome, doesn't produce toxic waste and means the designer handles are 100 per cent recyclable.

The surface hardness is more than double that of a standard surface treatment and the corrosion resistance is on a par with that of the highest quality stainless steel. Even more impressive is the fact that the coating is hypoallergenic.

Quayside



Available in a range of three striking standard colours, plus five more available on demand, the Purity handles are suited across a range of Reynaers at Home aluminium windows and doors.

Reynaers at Home is a premium brand dedicated to offering the very best architectural glazing products and service to the discerning householder.

0121 421 9707 www.reynaersathome.co.uk

Enq. 154

#### Durable, Stable & Sustainable

- Specialist trade manufacturers of bespoke, quality hardwood orangeries, conservatories, windows and doors
- Fully factory presprayed in various shades of microporous waterbourne system
- Hardwood with powder coated aluminium external roof elements for minimal maintenance.

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> > Enq. 155

## **selfbuilder** & homemaker



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# Visit Wallbarn at Ecobuild

#### iDecking Revolution

Wallbarn also announces it is the exclusive UK distributor of the iDecking "EasyClick" and "EasyChange" timber decking systems.

Top quality hardwood and composite decking is installed in the fastest and easiest manner, giving the most luxurious finish on the market.

The ingenious design means no more treated softwood joists, no screws, no drilling, no measuring and no fixing. Simply press the boards down to install the decking.

"EasyClick" & "EasyChange" are manufactured with grooves on the underside, which click into specially design fixing clip fixed on the aluminium battens. It is all pre-measured so is impossible to install this system incorrectly.



#### Synseal will focus on innovation at Ecobuild 2016



Synseal will be exhibiting for a fourth year in succession at this year's Ecobuild, which is taking place at the London ExCeL exhibition centre 8th-10th March. Synseal's stand will seek to demonstrate the diversity of Synseal group window and door product solutions with a focus on true innovation. Stand E2006 will feature the new Celsius Solid Roof, a truly warm and quick fitting roofing solution for new build and retrofit projects, alongside the popular WarmCore "warm alu-

minium" folding sliding door which delivers low U-values of 1.4 W/m2K using 28mm double glass or 1.0 W/m2K using 44mm triple glass.

#### 01623 443200 www.synseal.com

ecobuild stand no E2006 Enq. 158

#### Envirovent set for new releases at Ecobuild 2016



**EnviroVent**, one of the UK's leading manufacturers of sustainable ventilation systems, will be launching its exciting new energiSava 200 heat recovery product at Ecobuild 2016. The company will also be showcasing its innovative new Aug Vent app, which uses Augmented Reality to enable an interior designer or specifier to clearly visualise what an extract fan would look like in the home. Rebecca McLean, Marketing and Product Director for EnviroVent, said: "We are

really excited to be the first UK ventilation manufacturer to be able to bring this latest technology to the market for the benefit of our customers." For more information, please visit the company website.

ecobuild stand no E2290 Eng. 159

#### The new deisgn for M-Tray™

Newly developed, improved modules for sedum green roofs.

Sedum green roof systems in modular form have been improved. Avoid the mess and potential damage caused by roll-out green roof systems by having all the required elements contained in a plastic module. Nothing spills out and the plants are less disturbed. M-Tray<sup>TM</sup> is pre-grown and fully established for fast and easy installation of mature plants. Everything has been measured and tested. It truly is an instant green roof.

Key advantages of the new design include:

- Deeper cavities for extra roof growth
- Optimum drainage
- Stronger, healthier plantsMade from
- recycled materialsStronger trays, easier to carry modules
- Easier clip system with more seamless connection
- Faster installation
- Available for export and licensing

Wallbarn's new M-Tray™

is made in Britain and is launching at Ecobuild. Visit the company on stands E5172 and E5174.

0208 916 2222 www.wallbarn.com



## **ICYNENE** THE EVOLUTION OF INSULATION

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





# Discover the latest in domestic smart technology

Self-builders can get to grips with the latest smart technologies that are forging an ever-closer and advantageous relationship between homeowners and their houses at Ecobuild, the UK's largest show dedicated to construction and energy

The show will provide homemakers with access to a wealth of practical expert advice and information through a mix of a high-level conference, CPD-accredited learning hubs and more than 800 exhibitors showcasing a wide range of new products, materials, solutions and services.

Day one of Ecobuild 2016 is the show's dedicated Homes day and explores the most pressing, divisive and important decisions the industry must take to deliver comfortable, efficient, resilient places and homes. Among the key questions to be addressed is 'What do newbuild and retrofitted homes and communities need to deliver, and at what cost?'

Attracting more than 40,000 industry professionals from across the whole supply chain each year, Ecobuild is the leading exhibition and conference for the UK construction and energy market. The 2016 event will see an evolved proposition for the event to focus on areas of industry growth and market priorities such as housing, infrastructure, next generation innovation, technology and people.

#### Examining housing challenges

The backbone of Ecobuild's Homes day is provided by a provocative and controversial conference programme that covers property issues ranging from the challenges of refurb and retrofit to the commercial viability of ultra-low cost and low energy homes.

The programme embodies state-of-the-art design and construction, leaving no stone unturned to establish what our future housing needs are and what can be done to deliver it.

Professor Phil Jones, Chairman of Architectural Science at Cardiff University, is one of the day's dynamic speakers. Prof Jones led the team which developed SOLCER, the UK's first purpose-built, low-cost energy smart house which is



capable of exporting more energy to the national electricity grid than it uses. The property was built for a mere £100,000. Prof Jones' teaching and research activities cover a range of subjects in the field of energy use, environmental design and sustainability in the built environment.

With each session designed to give a glimpse at the future of housebuilding and home creation, Colin Usher, director of John McCall Architects, provides a presentation on "Living for Tomorrow", in which he offers common sense solutions to low-energy, cost-effective future living. In 2014, John developed a house which runs on a utilities bill of just £15 per year.

Adhering to the theme of future housing performance and how the UK industry can work together to deliver it, Timothy Wates, Director of Wates Group, offers his intriguing view on what form the next generation of housing will take as part of a talk on the challenges of refurb and retrofit.

## Ecobuild's essential educational offering

Ecobuild 2016 will feature six CPD-accredited learning hubs; Building Performance, Design, Energy, #Buildcircular, Infrastructure Revolution and Digital Building. A highly provoking seminar programme, it will provide visitors and exhibitors with the know-how to make their projects better and help them make more informed decisions to address the challenges they face.

The programme will be delivered by industry

leading figures and organisations including Architype, Glenn Howells Architects, Marks & Spencer, British Land, Jones Lang LaSalle, BRE, Zero Carbon Hub and Willmott Dixon Energy Services.

#### Architecture and Next Generation

Ecobuild 2016 will focus on two further streams after the opening Homes day. The second day looks at Architecture, exploring the changing role of the architect, the importance of architecture across the built environment, the need for change and some of the most interesting and inspiring architectural projects.

Day three is devoted to Next Generation and looks at how smart technology, changing demographics and wellness will drive design and construction in the future as well as how we will address the skills gap and attract young talent to the industry.

These streams are supported by a number of initiatives, including SMART @ Ecobuild, an area dedicated to exploring how smart technology is bringing people and the environments we inhabit closer together.

Driven by ever-increasing demand – with the global market for smart building technologies forecast to triple to £14 billion by 2019 -SMART @ Ecobuild places the latest technological advances in the hands of visitors.

The shortlist for Ecobuild's Big Innovation Pitch 2016, an initiative in partnership with Marks &



Spencer to unearth innovation across the design, construction and energy sectors will be on display at the DISCOVER bar.

Each of the 15 shortlisted entries has been validated by a panel of judges and is vying for the opportunity to win a contract with M&S and roll their product/solution out in stores across the UK

Just five finalists from this group will be invited to make a final pitch to the judges, including Chris Marney, Head of Engineering and Energy



at M&S, in a special conference session hosted by Rachel Riley from the Gadget Show and Countdown on day three of the conference, before the overall winner is announced. Reflecting the construction industry, Ecobuild is constantly evolving; ensuring that it continues to provide relevant, dynamic content and create opportunities to make new connections. Self-builders will find a wealth of specialist support and solutions – and much more besides - at Ecobuild 2016.

Ecobuild 2016 is co-located with Resource, the leading resource efficiency event, both taking place from 8 to 10 March at London's ExCeL. For more information please visit www.ecobuild.co.uk

#### Ancon to launch new products at Ecobuild



Double winner of the Queen's Award Enterprise, Ancon Building for **Products**, continues to expand its range of high integrity structural fixings and will exhibit a number of new products at Ecobuild 2016. On stand number E3080, Ancon will showcase its latest fixing innovations, suitable for new-build construction including lowenergy residential developments. Products on show will include the light-weight Nexus® brick faced soffit system, a number of insulated balcony

connectors and an exciting new development within the Teplo range of low thermal conductivity wall ties.

#### 0114 2755224 www.ancon.co.uk

#### ecobuild stand no E3080 Eng. 161



Mapei - a leading manufacturer of adhesives and chemical products for building – will be exhibiting at Ecobuild 2016, stand E6030. Mapei's commitment to innovation and sustainable development will once again be the focus of the exhibition; with the entire stand from concept to build designed with a keen eye on recycling, reusing and reducing waste materials. At the end of the event, all materials not being re-used by Mapei including carpet, furniture, trees and

plants will be donated to local schools/charities. Mapei will also launch their new 'GREEN BY NATURE' campaign.

0121 508 6970 www.mapei.co.uk

ecobuild stand no E6030 Enq. 163

#### Johnson and Starley's Quantec boiler range



With some 2.5 million households in the UK not connected to mains gas and many using liquid petroleum gas (LPG) to heat their homes, Johnson & Starley has introduced the Quantec 28kW LPG combination condensing boiler. It offers exceptional efficiency in LPG consumption with its integral Passive Flue Gas Heat Recovery (PFGHR) function, which enables the production of domestic hot water to condense as well as the heating with savings up to 26 per cent. All this in a

case the size of a standard combi boiler. Its ease of installation and range of vertical and horizontal flueing options will be a major attraction.

01604 762 881 www.johnsonandstarley.co.uk

#### ecobuild stand no E3244 Enq. 162

#### Hitachi releases new heat pump product line-up



Completely redesigned to meet the needs of specifiers, installers and homeowners, and representing one of the widest ranges on the market, Hitachi Air Conditioning Europe is launching its expanded Yutaki air source heat pump product range at this year's Ecobuild (Stand No. E3264). Utilising common components, common outdoor units and simplified design to benefit both end users and installers, the extended line-up includes a total of 70 new

models which are more compact for small installation spaces and are lighter weight for easier handling.

#### 01628 585394 www.hitachiaircon.com

ecobuild stand no E3264 Enq. 165



## Are you planning on starting an Extension, Renovation, Conversion or New Build in 2016?

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Builder's/Tradesman Insurance! You need our Site Insurance.



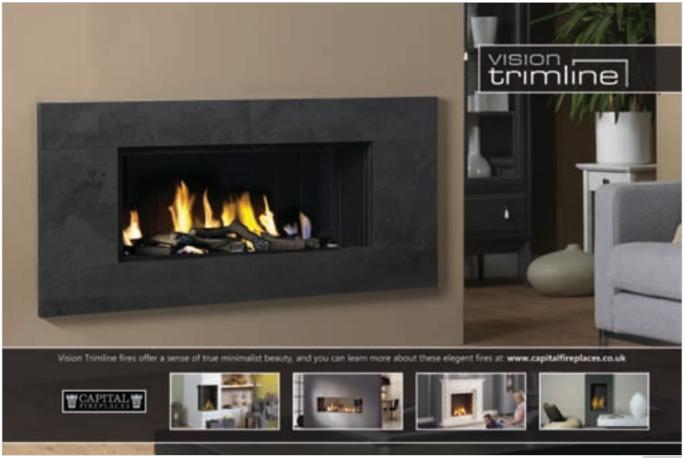
STRUCTURAL WARRANTY 10 Year Protection against defects in Design, Materials & Workmanship.



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For more information or to obtain a quotation go online at Or Call the Self-Build Zone Team on **WWW.SELFBUILDZONE.COM 0845 230 9874** 



#### Fireplace company join retailers House of Fraser



A fireplace company has become one of the first to stock bio-ethanol fueled heaters with House of Fraser's online store. SmartFireUK will be selling its eco-friendly heaters through the retail giant's online store and will include both Bromic and EcoSmart Fire products. The designs are sleek and stylish, lending in with a variety of outdoor spaces and perfect for the growing trend of beautifully crafted and stylised back gardens. Plus, the gas heaters

are fuelled with LPG gas, which not only lasts longer than traditional fuel but is environmentally friendly as well. For more information, please visit the company website.

020 7384 1677 www.smartfireuk.com

Enq. 168

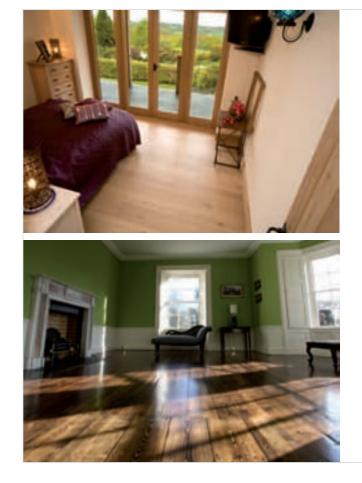
#### Eurostove has the X-Factor...



X-Factor viewers were recently treated to a sneaky peek inside judge Nick Grimshaw's beautiful Cotswolds retreat, interior designed by Kate Moss. With great taste in fashion and interiors, it was no surprise that Kate chose a cosy Eurostove wood burner as the focus of the living room. This star of the show was the Jide Décor 77 Plus wood burning stove, made to order in a choice of black, brown or grey steel, and either freestanding like in the TV show, or inset. Additional options include double-sided versions in 820mm or 1050mm sizes as well as wall-

hung, with a wood store or closed combustion, ideal for new airtight homes. For more information, please visit the company website.

Enq. 169





Enq. 170

#### Need help with your wooden floor?

For new installations or renovations speak to your local Bona Certified Contractor!

At Bona we are passionate about wood floors. Our range of oils and lacquers have been used worldwide for nearly a century to protect and finish beautiful wood surfaces.

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# Karndean Designflooring unveils new look 'Floorstyle' inspirational tool

ne of the UK's market leaders in luxury vinyl flooring Karndean Designflooring has revealed its new-look interactive Residential Floorstyle tool for homeowners looking for interior design inspiration online.

Mobile and tablet friendly, and available for free is a one stop, online design lounge for homeowners looking to try out new floor styles in their room of choice.

With access to Karndean's full catalogue of wood and stone effect designs to search, users can select a space from an impressive catalogue of room set images, and then choose a floor to see how it will look.

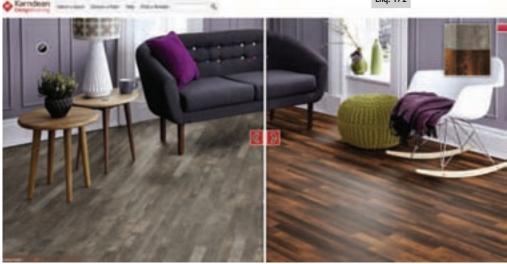
Giving homeowners the ability to become their own interior designers, users can also add in design strips, position their planks or tiles at different angles, compare floor designs side by side and order samples.

Karndean's exclusive roomset library covers all spaces of the home, and features various interior décor schemes including modern rustic, contemporary and traditional to name but a few.

"With so many trends, designs and styles available, our Floorstyle tool helps homeowners take control when it comes to their floor design," explains Heather Horton, head of digital and communications at Karndean Designflooring.

She said: "As well as being able to view a wide range of floor designs, users can also gain valuable feedback by sharing their designs via email and Facebook." For more information, please visit: www.karndean.com

#### 01386 820 100 www.karndean.com/floorstyle





# Floods, SuDS and paving

When you are planning a new or replacement drive, patio or other paving, whether around an existing home or as part of a new-build, you probably don't think about where the rainwater landing on it will end up. But taking a responsible approach to drainage helps the fight against flooding and satisfies planning rules, as the trade association Interpave explains

ontinuing growth of our towns and cities is causing an increasing amount of rainwater to be captured on streets, car parks, building roofs and drives, which then flows into sewers causing flooding of rivers and streams. Existing drainage systems simply cannot cope and the problem is made worse by heavy storms, highlighted again this winter, and more are predicted with climate change.

#### Pollution dangers

Roads, car parks and even driveways also collect pollution from car exhausts, tyre-wear, oil leaks and other sources – and when it rains this gets washed into sewers, rivers and streams. Older 'combined sewers' carrying both rainwater and 'foul water' from toilets, baths, sinks, etc., often have overflows that operate in heavy rain diverting all the flows, including raw sewage, into rivers and streams. With more rainwater running into these sewers, the overflows operate more often.

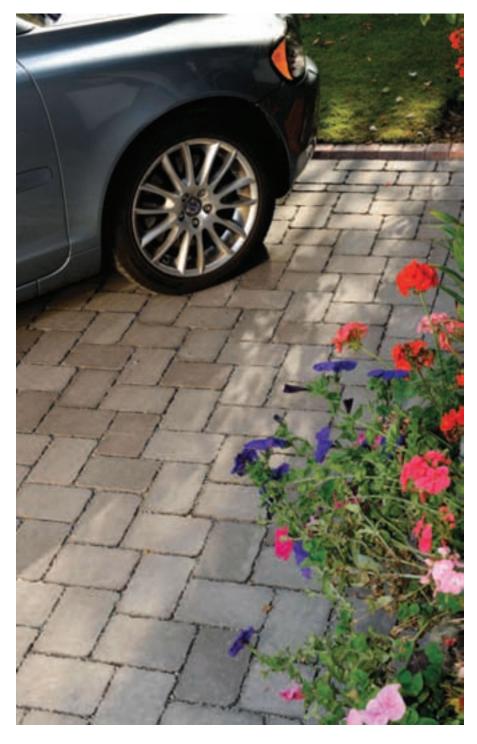
> Roads, car parks and even driveways also collect pollution from car exhausts, tyre-wear, oil leaks and other sources

The 'sealing up' of our towns and cities also stops rainfall soaking into the ground. The water table levels drop causing more water shortages, streams and ponds to dry up, and trees to be deprived of water. It could also affect the foundations of your home, particularly on clay soils, as they dry out and shrink.

#### Cumulative impact

All these problems are made worse if you cover your garden with impermeable paving and just let the water run straight into the sewers or onto the road – which is generally not allowed any-

Continued overleaf...



way. Of course, a small area of paving in isolation is not going to cause major flooding but the cumulative impact of lots of gardens being sealed up creates real problems. For example, the area of paving over front gardens for car parking that has already occurred in London is estimated as equivalent to around 5,200 football pitches. Just imagine the rainwater runoff in a storm from impermeable paving that big.

It is now well recognised that Sustainable Drainage Systems (or SuDS) must play a central role in curbing flooding and pollution from rainwater runoff. SuDS manage surface water by slowing it down and cleaning it up by filtering, and storing it temporarily. SuDS aim to replicate, as closely as possible, the natural drainage from a site before any work took place.

Concrete block permeable paving is one of the most important SuDS techniques. There is a growing choice of concrete blocks available, designed specifically for permeable paving. Essentially they have the same impressive performance as conventional precast concrete paving products, being slip resistant, durable, strong and sustainable. And today there are more shapes, styles, finishes and colours than ever to give you real freedom of choice.

#### Permeable paving

The difference with permeable paving is its enlarged joints, filled with a permeable aggregate specifically chosen for each product – but never sand (which is used with conventional block paving). This ensures that water will continue to pass through the joints over many years. The aggregates used below the blocks are also specifically selected to accommodate water, unlike conventional drive and road construction. Water can simply infiltrate into the ground if it is suitable or collected in pipes for gradual discharge after the storm. Alternatively, it can be stored for irrigation, washing cars, etc. Permeable paving is specifically designed for a dual role, acting as the drainage system as well as supporting vehicles. And it can be used to manage water from roofs as well. At the same time, many pollutants are substantially removed and treated within the paving layers before the water leaves it. Concrete block permeable paving can be laid level and still avoids puddles without the need for drainage gulleys and pipes. It also provides a safe, firm surface for everyone, including wheelchair users and people pushing prams.

> The area of paving over front gardens for car parking that has already occurred in London is estimated as equivalent to around 5,200 football pitches

#### Government requirements

New government requirements for SuDS on developments in England came into force in 2015 and are being implemented through local policies and plans, as well as planning application decisions on developments of 10 or more dwellings. However, local authorities are increasingly encouraging SuDS on smaller schemes as well, including single homes. In any event, changes in Permitted Development rules have been in place for some time to encourage permeable solutions for new or replacement paving around existing buildings, as part of the



fight against flooding.

Before the changes, paving anywhere in a garden related to a house or bungalow with any materials was considered to be 'permitted development' – effectively, automatic permission without needing a planning application. However, permitted development rights have been taken away from new or replacement drives or other hard surfaces, unless permeable paving is used or water drains onto a permeable area within the property. Otherwise, planning permission will be required and this could well be resisted on policy grounds.

#### Evidence of compliance

These measures took effect in October 2008 in England and Wales to paving over 5m<sup>2</sup> (although just for replacement paving in Wales) and in the front garden only. For Scotland, similar measures apply to areas of any size between the house and any street – therefore not just front gardens. Local authorities may ask homeowners for evidence of compliance.



# Making hard landscape soft

Grasscrete, Grassblock or Grassroad, providing Green permeable solutions



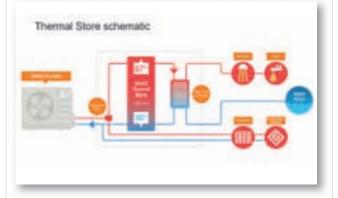
#### Grass Concrete Limited Duncan House, 142 Thornes Lane, Thornes, Wakefield, West Yorkshire WF2 7RE England Tel: +44(0)1924 379443 Fax: +44(0)1924 290289

www.grasscrete.com





#### New heat pump matches new-build requirements



Mitsubishi Electric has launched a new 4kW Ecodan air source heat pump, designed specifically to tackle the needs of new-build homes, with a system that matches the hot water requirements, while still meeting the lower heating demand of today's well insulated properties. New homes built today differ from previous ones because the requirement for hot water is likely to exceed the demand for heating for the first time. "What is needed is a new way of delivering energy-efficient heating and hot water", explains Jordan Jeewood, Ecodan technical expert for the company. "We have engineered the Ecodan QUHZ monobloc system to meet this need by providing exceptionally high efficiency in the production of how water, along with renewable space heating for the home". The Ecodan QUHZ unit is MCS-Approved and straightforward to install, delivering water at 70°C to a packaged 200 litre thermal store. From this thermal store, mains water is heated directly up to 65°C via Mitsubishi Electric's unique plate heat exchanger, meaning the homeowner receives hot water on demand.

#### 01707 282880

#### www.livingenvironmentalsystems.mitsubishielectric.co.uk

The Renewable Solutions Provider

Enq. 178

#### Funkyheat infrared heating



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a range of colours, shapes and sizes. Designer style for a surprising price. Please visit the company website for more information.

01484 303284 www.funkyheat.co.uk

Enq. 179

#### Panasonic generates significant savings



An abandoned water tower on the outskirts of Harrogate, Yorkshire, has been converted into a stunning family home by Carol and Majid Nadry from Bradford. Sustainability and energy efficiency were at the heart of the project, so they chose an air source heat pump from **Panasonic** to provide a low-Carbon heating and hot water solution. "We never have any prob-lems with the Panasonic T-CAP" says Brendon Uys of Heacol. "It is one of the most reliable heating systems I've ever come across, in three years of installing it I haven't had to do one repair

job, I would go so far as to say it's bulletproof. Another really important feature for me is how simple it is to install."

Enq. 180



## **Clearly an efficient** way to deliver hot water and heating to self build homes





youtube.com/mitsubishielectric2

\*Terms and conditions apply. Please see website for details

Our new Ecodan heat pump system combines market leading efficiency in hot water production, with reliable and renewable heating

This makes it the ideal solution for self build homes where strict building regulations drive down the space heating requirement, making hot water production the dominant load. Ecodan also operates with a market leading low noise output and in-built energy monitoring as standard.

#### Ecodan. Clearly efficient, clearly renewable.

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#### Healthy insulation can naturally do more



SheepWool Insulation, 100 per cent Pure SheepWool Insulation and Acoustic Underlay products ideal for healthy living. The benefits of this insulation are quite unique – not only can it insulate to a really high standard, but it can also absorb moisture and engage in air purification by way of taking in nasty chemicals like Formaldehyde and providing a healthy climate. The insulation is easy to handle and simple to install. The acoustic range consists of a Silentjoist strip, a SilentFloor underlay (for

under wooden flooring) and a SilentCarpet all'ideal for noise reduction. SheepWool Insulation range 100 per cent pure, 100 per cent natural.

#### 0871 218 5218 www.sheepwoolinsulation.com

Enq. 183

#### Cook it in style with BLANCO's top-of-the-range hob



BLANCO's new hob collection includes the very latest technology for high-speed, energy-efficient cooking at home. The fabulous new BH467831 (pictured) is a 78cm-wide ceramic induction hob with six different cooking zones, 14 heat levels, six sleek sliding controls and residual heat indicators. Highlights include a flexible induction zone that accommodates pans of varying sizes and a boost option which brings food/liquid to boiling point in seconds. Other clever touches an automatic bridge for different heat

include automatic pot localisation, an automatic bridge for different heat levels on the same pot or pan, a grill function, pause-and-recall, and three keep-warm levels. Each piece is rigorously factory-tested.

Enq. 185



- 100% solid wood kitchens no MDF, chipboard or ply
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Pineland is a privately owned, family company that has been established for over 20 years. We believe in listening to our clients, and our hand drawn plans, reflect our customers desires and opinions. The final design combines well planned functionality, with elegance and beauty, and our clients are often surprised how all this can be achieved at such a reasonable cost.

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> > Enq. 187

#### A Shaws of Darwen Classic



The **Shaws** Belfast sink, an original 'British made' deep Victorian model has a traditional integrated weir overflow, plus a unique patented overflow adaptor to accommodate a waste disposer or basket strainer.

Shaws Classic Collection contains an array of individually hand-crafted designs with details unique in fireclay ceramics which are robust with a nonporous glaze, giving an extremely hardwearing surface. All Shaws

hardwearing surface. All Shaws designs are available in both White and Biscuit finishes. For more information, please visit the company website.

01254 775111 www.shawsofdarwen.com

Enq. 184

#### Integral LED and Toolstation team up



Integral LED has announced a new retail partnership with Toolstation. Together, the manufacturer and retailer aim to promote new lighting technology and enable an easy transition for customers switching to LED lamps, spotlights and downlights. British brand Integral LED has earned a reputation for keen prices and product quality which has recently earned four Which? Best Buys and five star LUX Magazine reviews. Toolstation has been successively named as the IY products category for the last three

Which? top online retailer in the DIY products category for the last three years. For more information, please visit the company website.

#### 0208 451 8700 www.integral-led.com

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Enq. 188



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			NEW	NEW
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	galvanised mild steel will not rust		Please write, telephone, or visit or	ur website for more information

# Integrating technology into a project



Integrating technology into a self-build project is fast becoming the norm. CEDIA (the Custom Electronic Design & Installation Association) discusses what can be achieved by installing technology in the most important rooms in your house

#### Bedrooms

Comfort and style play key roles in the design of the latest technologies for the bedroom.Remote controls and smart panels fitted nearby mean that you can have full control of the technology in your room, and around your house for that matter, from the convenience of your bed.

Many people enjoy the luxury of TV in the bedroom, but find it hard to make it blend with the interiors. One option to make this more aesthetically pleasing is to hide it when not in use. This can be done through enclosing the TV in cabinetry with fold away doors or through a motorised mechanism when the TV is not being watched. These mechanisms are most popular in cabinets or chests above or at the foot of the bed in the ceiling and can be hidden at the click of a button.

Babs Moore, the director of Amina Technologies Ltd, has a vast amount of expertise Many people enjoy the luxury of TV in the bedroom, but find it hard to make it blend with the interiors

and is hugely positive about the use of audio systems in the bedroom. She comments: "In this room, audio is most commonly used for listening to music and the radio, however surround sound should be considered to compliment this if a TV is in place. In-ceiling speakers provide a discrete solution which fills the room with sound but for better audio performance, then on-wall or in-wall speakers are an option. For the ultimate unobtrusive sound, invisible speakers can be plastered or wallpapered over."

As well as audio visual, there is a huge range of technology available for the control of the lighting, blinds and the curtains in the bedroom. Different 'scenes' can be set to allow you to change the feel of the room by one click of a button.

#### Bathrooms

There's a definite trend in adding built in TVs in the bathroom. They can be seamlessly integrated into a bathroom wall and the range available ensures it compliments any décor, including "mirror" screens that disappear from view when switched off. Obviously TV screens in a damp space or where there's risk of water damage should be waterproof.

For audio, in-wall docks are perfect as a sub-



tle and tasteful home for your iPod. They can be easily installed with minimum wires and fuss and connect through almost any local or home audio system.

A bathroom's interior can also be combined with lighting systems to create beautiful effects; colour-changing LEDs provide a beautiful and innovative setting. The scope of colours available means you can cater to any mood, and enjoy a contemporary energy-saving solution to illuminating your bathroom.

All in all, technology allows the bathroom to transformed into a relaxing environment where you can watch your favourite TV show or listen to your playlist.

#### Kitchens

The desire for tech pieces, such as flip-down or integrated TVs, which you can watch while you're in the kitchen so you don't miss your favourite show, or touchscreen family computers that work well on kitchen tables, so you can keep an eye on children doing their homework while you're preparing meals have become popular additions.

A smart kitchen also has the ability to hold professionally integrated audio. This can be installed so that users can play music through their existing iPod without any need for wiring or docking stations. Homeowners can hear their favourite song in rich, hi-fi quality instantly through invisible speakers. These types of speakers can be discreetly installed in ceilings and walls, built into units behind grilles to cabinetry or plastered in completely so they become totally invisible.

As we increasingly spend more of our time in the kitchen, it is also becoming important as a control centre for the home. Control systems allow homeowners to have control over and monitor the entire house through an iPad, iPhone or built-in custom design touch panel. A 3D representation of the whole house can be displayed in the kitchen and show where music is playing, lights and heating are on, doors and windows are left open and even if there is a fire breaking out.

#### Living space

For many, the living space can be important as it is the entertainment area. It is often an open plan space which means that it is a multi-functional space – used to watch TV, eat dinner, read a book or entertain a group of people.

Typically, the room centres around a TV. The TV can be fitted to a motorised bracket which allows it to be moved and achieve optimum viewing. For example, if you are cooking in the kitchen but still want to see the TV, the screen can be positioned accordingly.

Surround sound audio is preferred when watching a film. The placement of speakers in rooms is a science and can improve sound immensely. Generally speakers are situated By integrating the lights, curtains, video and audio entertainment into a control system, the perfect ambience can be achieved

above or to the side of the screen, which allows the sound to be directed right to a listener's ear.

Mood lighting can be achieved in this space. As a multi-functional room, lighting scenes can be set to reflect the current activity.Bright lights when reading a book, dimmed lighted when watching a film.

By integrating the lights, curtains, video and audio entertainment into a control system, the perfect ambience can be achieved in this space.

Babs Moore adds that: "The use of invisible speakers creates added flexibility allowing a stunning space for entertaining and living providing high clarity room filling sound for parties or full surround or 3D sound for watching films with zero visual intrusion." Eng. 192



"Best Whole House Integration" ITSA 2015 award winner

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#### Manage rainwater the Anthracite Grey way



Freefoam Building Products is delighted to announce the launch of a new range of rainwater products in the contemporary colour Anthracite Grey. With a 45 per cent increase in sales of Anthracite Grey fascia and soffit in 2015 and a growing overall market trend towards grey window frames, doors, fascia and soffit adding an Anthracite Grey Deep gutter range was the next logical step. Freefoam has created a product that allows customers to create a truly co-ordinated

roofline with the new rainwater range offering an exact match (Ral No.7016) to the already popular fascia and soffit products.

01604 591 110 www.freefoam.com

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Enq. 196

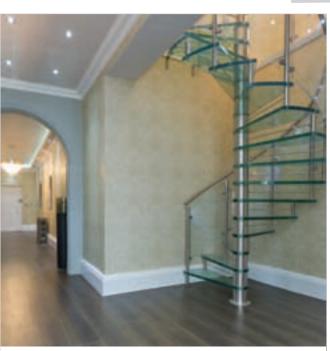
#### FAKRO roof windows incorporate Z-Wave



For those building a Smart Home, FAKRO FTP-V natural pine and FTU-V white, PU-coated roof windows have met the stringent conformance for Z-Wave wireless technology certification. Compatible appliances from 200 leading manufacturers such as Apple, Intel, Panasonic, GEC and Danfoss can "communicate" with each other via PC, mobile or tablet. Operation can be through single or multi-channel wall keyboards and programmable remotes which give users scope to

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#### 01283 554 755 www.fakro.co.uk



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#### British Spirals & Castings' staircase down under



British Spirals & Castings has helped an Australian family home rise from the ashes by providing them with one of their external Victorian aluminium straight staircases. Homeowner Michelle Thomas said: "The daunting Homeowner task of transporting it to Australia went smoothly, and the installation was also easy thanks to detailed instructions and photos. The end result is a unique, wow' factor entry point to our new, period home." British Spirals & Castings have been designing and manufacturing bespoke spiral stairs, straight staircases and balconies since

1980; all hand crafted here in the UK to each customer's requirements.

01663 750 716 www.britishsc.co.uk

#### Amina Technology Ltd



The most recent innovations in cinema audio technology are fully immersive, three dimensional sound systems, the main proponents of this being Dolby Atmos® and Auro-3D® which uses additional height layers of speaker channels. Amina Technologies have developed DMLs to a point far beyond peoples' expectations for hidden loudspeakers. By using flat, lightweight, rigid vibrating panel technology their speakers are designed specifically to be flush mounted and plastered directly

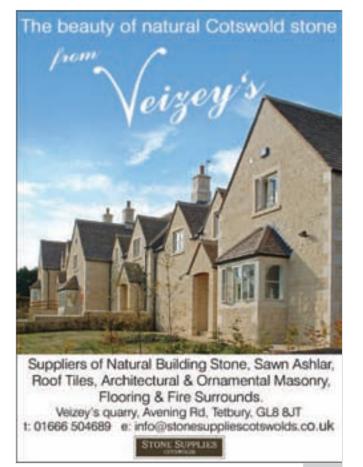
onto with standard 2mm thick trade finishes. Plus, against conventional perceived wisdom, the resulting sound quality is not "muffled". For more information, please visit the company website.

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Enq. 195



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Enq. 201

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# Nu-Heat showcases UFH solutions at Ecobuild

Arm water UFH is now so versatile it can be installed in virtually any property. It is fast becoming one of the most desirable heating systems as it offers a discreet solution with a comfortable heating profile.

Whether you're building or renovating Nu-Heat will be helpful and honest, giving you all of the information and advice you need to decide on an UFH solution that will work for you and your home.

## How does underfloor heating work?

UFH is an 'invisible' heating system that works by pumping a controlled flow of warm water from any heat source, such as a boiler or heat pump, through tubing hidden beneath or laid in panels directly on top of the existing floor. It is a very flexible solution that can be installed either throughout the whole house, on just one floor level or in a single room.

Because the surface area of the floor is so much larger than that of a radiator, UFH can run at a lower flow temperature and is therefore



cheaper to run – up to 25 per cent cheaper than a radiator system when used with a boiler and 40 per cent with a heat pump.

#### Expect more with Nu-Heat Know-How

Every design that Nu-Heat provides is bespoke; they work with you to provide an energy effi-



cient, cost effective system that matches your exact requirements. Offering on-site installation support through to post installation customer service – you can expect more with Nu-Heat's Know-How.

01404 540650 www.nu-heat.co.uk/ufh-explained Enq. 204







# Underfloor heating – not just a load of hot air

Nigel Sanger, Technical Manager at JG Speedfit, explains why underfloor heating systems should be embraced and why more people should consider this alternative to traditional heating methods

ver the last five years there has been a steady growth for underfloor heating installations. With continued advances in technology, underfloor heating is becoming easier to install and an increasingly viable and affordable option for many homeowners and housebuilders.

## Debunking the myths of underfloor heating

When discussing underfloor heating there are two concerns for both the end-user and installer: cost and ease of installation. Many homeowners feel that installing underfloor heating systems is a difficult process which has a really big impact on their bank balance, but this is not the case. Arguably a preferred choice among most self-builders, the continued increase in demand for underfloor heating shows that these two concerns are simply mythical.

While the initial outlay of underfloor heating is slightly higher in price than traditional radiator heating concepts, the benefits show that it is a long-term investment worth paying for. Like any home improvement project, it's going to incur a higher cost, such as installing a granite work surface in a kitchen. Underfloor heating systems are no different, but the results they offer go above and beyond the installation fee, with improved heat distribution, lower energy costs and added value upon resale.

The other concern – that underfloor heating is difficult to install – is also a myth. Underfloor heating allows pipework to be installed, filled and tested in one operation, while the controls are easy to install. As there are no moving parts with underfloor heating, and the pressure testing of pipes is made before installation (meaning any potential leaks are already identified and fixed) there is a low need for maintenance.

#### Energy-efficient systems

Once an underfloor heating system is installed, the end user can start to reap the benefits of having an energy-efficient heating system in their home. As energy-saving measures continue to play an increasingly important role for homeowners and househunters to reduce the rising energy bills, underfloor heating is becoming more influential for decision-makers.

With underfloor heating, the long-term running costs are lower than radiator-based systems *Continued overleaf*...

> With underfloor heating, the longterm running costs are lower than radiator based systems meaning significant savings are achieved

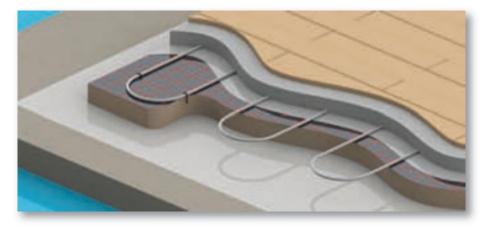
meaning significant savings can be achieved. These savings increase as time goes on, meaning installation of underfloor heating continues to deliver benefits even a decade after installation. This is due to an underfloor heating system being able to work with low water temperatures, making it particularly suited for condensing boilers and heat pumps, resulting in reduced energy consumption and lower heating costs.

Additionally, properly designed underfloor heating solutions incorporate multiple heating zones, which allows the end-user to control more than one system in the house. This results in a tailored heating solution, allowing different rooms to be heated at various temperatures to ensure rooms are not unnecessarily heated which provides the end user with complete control of the heat output in their home.

#### Adding value to a more comfortable building

Underfloor heating systems can be installed into both new-build properties and retrofitted to older homes, meaning there is a wide range of buildings that can have a system installed. Ensuring people are made aware of the flexibility of underfloor heating is important, as are the gains from installation. Arguably the biggest and most lucrative reason underfloor heating should be considered is the added value it brings.

Homes with underfloor heating command a higher resale than homes with standard radiators thanks to the luxurious properties and benefit



of adding more space to rooms. As underfloor heating is unobtrusive and saves significant space - with most homes saving up to 15 per cent of floor and wall space that would have been taken up by radiators – each room can be utilised, giving end users more freedom in the design of their interiors.

In addition to adding value to a property, underfloor heating generally brings more comfort to the end user as the heat can be distributed to suitable preferences. As cold air is denser than warm air - meaning the cold air will be pulled downwards by gravity - having traditional radiators means cold air is always pooled around the floor, and conversely the warm, less dense air is at ceiling height. However, with underfloor heating, the warm air starts on the floor and rises making it more comfortable to end users and ensures the warm air is not wasted. Additionally, the silent-running properties of underfloor heating means the end user experiences reduced noise, providing added comfort, while the fact that underfloor heating covers the whole floor means there are no cold spots in a room which may have previously occurred with conventional radiators.

As more people consider underfloor heating, it is important for self-builders and end users to understand the benefits of the various systems. While price may be a difficult hurdle to overcome, the overall benefits show that the initial cost is simply an investment to a long-term significant gain. As with many products, there are some better than others and it is important to ensure the system installed is reliable and, more importantly, futureproof.

Enq. 207



Easyflow is dedicated to providing its clients with the very best UFH systems, complimented by flowing screeds offering higher flexural and compressive strength, improved surface flatness and greatly improved heating perform-ance. Quality products and good advice ensure that you get the best possible results from your heating system. Once your UFH and screed are installed you will be provided with a two year workmanship guarantee that in the rare chance that any defects

Enq. 209

#### Developers choose DEVImat for their luxury home

Electric underfloor heating (UFH) from **Gaia** has been installed throughout the private residence of the directors of Lifestyle Design & Build. The DEVImat system is a popular choice for installation in bathrooms, shower rooms and other locations where rapid warmth is required all year round, including in the summer months when the main heating system is switched off. Installed just below the surface of the floor, the , DEVImat electric coils respond quickly,

including under carpeted floors in living rooms and bedrooms. The system was combined with 8mm and 12mm insulating boards to create level floors.

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