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TO THE LIGHTHOU

How a couple realised a beautifully light home on a typically challenging site in St Ives See page 20



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Located in St Ives, Trelas takes its name from the Cornish word for homestead - but this house is more than that. Built on a steep and skinny strip of land, it's a light-filled feat of engineering and architecture overlooking one of the UK's most sought after locations



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That most traditional British method of masonry house construction, good oldfashioned brick, remains popular with self-builders. As the Brick Development Association's Andrew Eagles says, that's down to the material's creative flexibility as well as its aesthetics and durability

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Cover image of Trelas House © Ewen MacDonald. See pages 20 - 25 for more.



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editor's lette



As the Chinese proverb says, 'May you live in interesting times,' – and following the recent referendum result, we certainly are.

Almost immediately following the country voting (narrowly) to leave the EU, £8bn was wiped off the market capitalisation of the country's four biggest homebuilders – Berkeley, Barratt, Taylor Wimpey and Persimmon. The drop was so

drastic at Taylor Wimpey, it triggered a five-minute suspension in trading.

What does the Leave vote mean for self and custom-builders? The chair of the NaCSBA Michael Holmes commented that in the short-term some will wait and see what happens to the economy before making big purchasing decisions, but if there is limited change he hopes that things will stabilise fairly quickly.

It is really still too early to say, but as the English proverb says, 'The proof of the pudding is in the eating.'

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Ask an Architect 27 August, Swindon

NSBRC's Ask an Architect events are held every month and offer self-builders the chance to attend a session with a RIBA chartered architect to discuss matters such as the design of your project, creating extra storage and adding value to your home. www.nsbrc.co.uk/ask-an-architect.html

Selfbuild & Design Show (South West) 10-11 September, Exeter

The Selfbuild & Design Show offers those involved with a self-build project the chance to meet

exhibitors and see product demonstrations, sit in on seminars lead by industry experts and talk to suppliers, designers, manufacturers, builders and more. selfbuildanddesignshow.com

Top Drawer

11-13 September, London

Top Drawer is one of the UK's leading design-led events. The show features a Home section, divided into Interior accessories, Kitchen & Dining, Furniture & Lighting and Outdoor living, presenting products from internationally known brands to small start-up companies and "everything in between." www.topdrawer.co.uk/home

London Homebuilding & Renovating Show 23-25 September, London

The Homebuilding & Renovating Show is one of the biggest events on the calendar for self-builders. Visitors can see the latest products, attend seminars, masterclasses and workshops and get inspiration and personalised advice on every aspect of their self-build project, such maximising their budget or interior decoration. **Iondon.homebuildingshow.co.uk**



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Construction industry concerns after Brexit

The weeks following Britain's shock decision to leave the European Union have seen a good deal of uncertainty expressed in the construction industry over what the future holds. The immediate effects of the referendum result were felt across the industry, with construction being one of the sectors hardest hit, and experts highlighting concern around mortgage rates, house prices and the sustainability of the supply chain.

Michael Holmes, chair of NaCSBA explained how he believed the decision will affect self and custom-builders: "In the shortterm some people will wait to see what happens to the economy. If we remain in the single market and retain freedom of movement, then I suspect things will stabilise fairly quickly, as long as we also retain passporting (which allows UK-based firms to operate in and offer services to other European Economic Areas) for financial services."

Speaking on the day after referendum Richard Donnell, insight director at Hometrack said: "The immediate impact of Brexit is likely to be a rapid deceleration in house price growth as buyers wait and see what the short term impact is on financial markets and the economy at large."

On the other hand John Elliott, managing director of Millwood Designer Homes welcomed the vote saying: "The EU's Mortgage Credit Directive effectively means that housebuilders cannot lend money to buyers unless they register as a regulated financial adviser. When times are difficult, this has been a traditional way for housebuilders to help buyers overcome mortgage downvaluations and other issues, and keep the market moving.

"Our exit from the EU will stop the continual red tape and see our housing market grow and flourish without unnecessary constraints placed on building much needed new homes."



Paula Higgins, CEO of the HomeOwners Alliance had a different view: "The current uncertainty is bad news for financial markets and will probably impact interest rates longer term, so mortgage holders will want to watch this space.

"House sales fell ahead of the referendum and we can expect people to continue to watch events unfold before making any big financial decisions. We can expect the rate of house price growth to slow nationwide, while in London the limited housing supply could reduce the impact on house prices."

Arcadis UK chief executive officer, Alan Brookes said: "Construction markets are likely to become more volatile in the short term, and we need to consider a joined-up approach to sustaining the capacity and capability of the industry. Although demand is likely to fall in some sectors this could actually take some of the pressure off over-stretched markets. Ultimately the UK needs to keep building." Highlighting what she saw as the dangers for the green agenda, the UK Green Building Council's CEO Julie Hirigoyen commented: "Both economic and political uncertainty will have some people asking whether the green agenda needs to be de-prioritised while business goes into fire fighting mode. This must and need not happen."

lain McIlwee, the British Woodworking Federation's chief executive said he had concerns for the supply chain: "For the UK, its people and its economy, we are entering a new chapter in history. What matters now is that firms in the construction supply chain are well informed and well prepared to assess risk.

"Some of the risks will be immediate, such as fluctuating currency. For example, the impact on material and component imports must be factored into joinery estimates and companies must ensure they are not caught out on projects that they have already quoted on, but materials have not been secured."

Startup Plentific announces Planning Portal partnership

Plentific, said to be one of the UK's fastest-growing property technology startups, has secured a partnership with key planning information website Planning Portal. Following a tender, Plentific's 'Find a Pro' platform will now be available via the Planning Portal. It will give homeowners seeking planning advice access to a platform hosting over 75,000 professionals, spanning 350 services.

The Planning Portal provides clear, accessible information to guide homeowners through the planning process for home improvement projects. By working in partnership with local authorities across England and Wales, it delivers content that clarifies planning and Building Regulations and is regarded as the home of the national planning application service. The Planning Portal currently receives over 30,000 visits everyday and more than 85 per cent of all

planning applications in the UK are submitted via the website.

Cem Savas, co-founder of Plentific, commented: "The values of the Planning Portal mirror those of Plentific in terms of striving to make processes clear, informative and simple. This partnership is a further boost to our home improvement marketplace and will deliver highquality leads to our trade professionals."

Sarah Chilcott, commercial director at Planning Portal commented: "The UK's national Planning Portal works to transform the planning and building system across England and Wales. We are delighted to be working with Plentific on our new 'Find A Trade Professional' service which will make it easier for our homeowner customers to get their home improvement project designed and built."

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awards

Passivhaus winners show the way for low energy self-build



The Passivhaus Trust (PHT) has announced the winners of the UK Passivhaus Awards 2016 which celebrate individual eco house design.

Passivhaus buildings are designed with scrupulous attention to detail in order to minimise the energy required to heat or cool the property. The awards aim to encourage uptake of the Passivhaus standard within the self-build market.

PHT members voted online and at an awards ceremony on 7 July in London to determine the winners of the competition.

Lansdowne Drive by Tectonics Architects (pictured right) and Tigh na Croit by HLM Architects (pictured above) were named as winners in the Urban and Rural categories.

Lansdowne Drive is a zinc clad two-storey home which is the first Passivhaus certified dwelling in Hackney, east London. The practice created a building "with the generic simplicity, flexibility, light and character found in industrial or studio spaces."

The structure was prefabricated in cross laminated timber and erected in two days. Internally, the structural materials and their assembly are left exposed, from concrete and timber to galvanised conduits and ducts.

The Rural category winner Tigh na Croit nestles into an area of former crofting land in Gorstan in the Scottish Highlands. This contemporary low energy building is inspired by



the rural landscape and is one of the most northerly certified Passivhaus UK schemes.

The primary material used for the house's exterior is white render with limited areas of stained timber cladding. Recognisable details of highland rural forms are used such as chimneys, roof pitch, verges, eaves and carefully placed openings.

This year's shortlist also featured RDAs' Chiswick Eco Lodge – a bespoke semi-sunk Passivhaus home set in a dense urban space; Anne Thorne Architects' L-shaped brick Meeting House built within a York conservation area; Green Building Store's detached Golcar Passivhaus – a home with clean, simple lines and narrow timber windows; Gresford Architects' Old Water Tower in rural Newbury and Parsons + Whittley's curved Lime Tree Passivhaus built on a tight arc-shaped garden plot near a protected lime tree.

The shortlist for the awards was compiled by a jury which included the CEO of the PHT Jon Bootland, as well as expert researchers in the field and journalists.



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Reports of financial armageddon post-Brexit have been exaggerated, and the future remains rosy for self-builders



aving worked through three major recessions, the last one dragging on for some considerable time, the uncertainty around the possibility of us not remaining a part of the European Union was just what the house building sector wasn't looking forward to.

As we woke up on 24 June and switched on the news, all of a sudden the reality kicked in that we were no longer going to be part of the European Union. Reactions ranged from joy, to trepidation to sadness, but no one knew for sure the implications; we all just made our best guess.

The financial markets reacted like a seesaw – they appeared to have no better idea, the Governor of the Bank of England made his speech, and it was all high drama with no clear picture emerging. In reality we all just went off to work getting on with our usual routines. (What didn't surprise was our swift exit from the UEFA Euro football tournament – it's comforting to know some things are still predictable!) Now the dust has had time to settle – and by the way the predicted immediate financial meltdown didn't happen – how has the property market reacted? The key post-Brexit facts are there has been no evidence of a financial crisis, and no clamming up of the consumer credit markets in the residential sector.

TSB quoted that within four working days of the Brexit vote, mortgage activity had returned to normal. I have been speaking to and working with developers, and the common theme is that sales and reservations have not been affected by the EU referendum.

The HBF (Home Builders Federation) along with Greg Clark, the Government's then Communities Secretary and Brandon Lewis, the then Housing and Planning Minister, reaffirmed their commitment to upping supply and increasing the number of new home owners. Greg Clark clearly stated that housing was a top priority for the Government.

So where does this leave the self-builder? With over 30,000 projects in planning or under construction, the future is looking very rosy. Government Ministers are only too aware that the self-build community will make a very important and significant impact on the housing industry as it has the potential to deliver more units than any of the major developers; this is crucial for the strength of the housebuilding industry.

Generally the whole housebuilding industry is upbeat, supported by consumer, Government and financial market confidence. All the indicators are pointing to good times for the self-builder.

Andy Patmore is a housebuilding project manager and author of Build Your Own House

New online design and build help for custom builders

igitising Custom Build is a collaborative R&D project which is intended to provide digital tools and methods to help those wanting to buy, design, build and live in a custom-built home.

Funded by Innovate UK, the project combines the skills of NaCSBA, Stickyworld, Slider Studio, HTA Design, Axis Design Architects, Facit Homes and Commusoft. The new website will be regularly updated with news and blogs, technology developments and events from the partners offering an exclusive insight into the project and the technology it is producing. In addition, there will be video interviews from project partners as well as footage of recent events. Shortly after the launch the website was being hailed as a success – within its first week, the DCB team says it was "approached by a variety of people, including local councils, expressing their interest in the project and in testing the technology on their own projects." www.customisehomes.com

passivhaus

Potton presents plots with planning for Passivhaus homes

Potton, Kingspan's timber self-build arm, is working on a new custom-build project located on the former Silver Sands Garden Centre, just outside Faversham in Kent.

The scheme, which consists of 14 units, will be constructed on the site of the disused garden centre and has been designed by Inside Out Architecture. However, unlike other Potton custom build schemes Silver Sands already has full planning permission and the house designs will meet the performance requirements of the Passivhaus standard.

By adopting the Passivhaus standard the

development's custom-builders can be assured that their new homes – with built in energy efficiency – will benefit from life-long low fuel bills. The standard also ensures that the risk of summertime overheating is addressed, indoor air will be good quality and the properties will remain draught free, creating a home with an even internal temperature distribution and good acoustic performance.

The houses will be arranged around a central communal woodland space, which provides paths that meander across the site and towards the peripheral planted space. The communal space will be shared equally between pedestrians and vehicle traffic. These shared communal spaces will be constructed using permeable green roadways, which will reinforce the natural setting within the site and signals priority to pedestrians.

The nature of the scheme design means, however, that the external appearance and layout of the properties will remain largely fixed with less opportunity for customisation. Despite this, there will be opportunity for "extensive internal design," according to Potton.

Open event for biggest self-build site in the South East

ivic leaders and industry experts were among the guests visiting what is thought to be the South East's largest new self-build development, Hammill Park, in Kent, which covers 14 acres.

The brownfield site in a rural setting between Canterbury and Sandwich has been transformed with 19 homes, "providing a boost to the local rural economy," said developer Quinn Estates. Once connected to the East Kent Light Railway, the site's iconic locomotive sheds remain and have planning to be converted into houses and offices.

The site is Quinn Estates' first volume self-build development, which offers the advantage of serviced plots together with site infrastructure. Buyers were attracted by the opportunity to purchase a self-build housing plot on which to build their own 'grand design.'

Visitors at the open day were able to view the first inhabited property and speak to the owner, plus view another property that has recently been completed. The new homes at Hammill Park are a mix of four and five bed properties, many of which feature the latest green technologies such as air-source heating.

Mark Quinn, managing director of Quinn



Estates said: "There are two fundamental reasons that people are put off self-builds – the first is the issue of the land itself; finding a plot and paying too much for it. Then it's the risk and worry of negotiating the planning process.

"As an enabling developer, we offer sites that have already gone through the necessary processes and have the assurance that you're doing it alongside an experienced developer. Therefore, you are buying so much more than a plot of land. There is a phenomenal demand tor sites like these which take the risk away. By removing the barriers to people building their own home we can turn dreams into reality.

"In our experience local authorities are open to discussing self-build opportunities and we see this aspect of the market as being an important element of keeping larger sites dynamic and viable. And we can help a greater number of people towards being able to build their dream home, it's a win-win situation."

Find interior inspiration at 100% Design in September

1 00% Design is returning to Olympia London from 21-24 September. The show forms the heart of London Design Festival, presenting leading national and international exhibitors with ideas, products and innovations for domestic environments, alongside a special focus on emerging brands.

Reflecting 100% Design's focus on quality and inspiration, this year's theme is 'Experience', which will be explored across the show through specially commissioned installations, immersive experiences and sensory experiments. Visitors can physically engage with the latest product innovations.

A key feature of the event for self-builders, Talks with 100% Design will be curated by the Design Museum as part of its 'on loan' campaign including activity around the Kensington area before the museum opens there on 24 November.





Focusing on quality and depth, the talks present thought leaders in the industry, deliver agendasetting keynotes alongside panel discussions exploring trends in contemporary practice as well as the future of design.

New for 2016, a cinema area will showcase products, designers and studios as well as providing reflective, intellectual engagement with current and historical design agendas.

Making its debut at London Design Festival 2016 is LuxuryMade, a new show dedicated to contemporary decorative interiors. Staged alongside 100% Design close to the



site of the new Design Museum, it is the latest addition to the West Kensington area's burgeoning design offer.

100% Design comprises five sections, the longest running of which is Interiors. It presents brands exhibiting everything from furniture and lighting to fabrics and accessories. The other sections are Workplace, Kitchens & Bathrooms, Emerging Brands and the show's largest section Design & Build - featuring technology and home automation, a materials showcase and an architectural lighting showcase. 100percentdesign.co.uk

House envy? 20 extraordinary British homes in the running for the 2016 RIBA House of the Year

The Royal Institute of British Architects (RIBA) has announced the longlist for the 2016 RIBA House of the Year Award, one of the UK's most prestigious awards for a new house or extension.

Among the 20 architect-designed homes in the running for the award are a contemporary part-house part-gallery on the beach in Brighton & Hove (The Narrow House), a Japanese inspired terraced house extension (House of Trace), and a new family home in Jersey rising from the huge granite walls of an earlier building on the site (Le Petit Fort).

There's also a beach house in Dungeness that echoes the area's former fishing huts, a contemporary take on a traditional lean-to in Harrogate (Contemporary Lean To) and a house in Cornwall that hovers dramatically over a cliff to take in the enviable views across the Fal Estuary (The Owers House).

The 20 homes on the longlist for the award are:

- Ansty Plum, Coppin Dockray
- Contemporary Lean-to, Doma Architects
 Contour House, Sanei Hopkins Architects
- Covert House, DSDHA
- Edge Hill, Sutherland Hussey Architects
- Garden House, Hayhurst & Co.
- House of Trace, Tsuruta Architects
- Le Petit Fort, Hudson Architects
- Modern Mews, Coffey Architects
- Murphy House, Richard Murphy Architects
- North Vat, Rodic Davidson Architects
- Outhouse, Loyn & Co
- Private House in Cumbria, Bennetts Associates
- The Cheeran House, John Pardey Architects
- The Narrow House, Sanei Hopkins Architects
- The Owers House, John Pardey Architects
- House 19, Jestico + Whiles
- Private House 1109, GA Studio Architects
- Tin House, Henning Stummel Architects
- Zinc-House, LJR+H Chartered Architects

The RIBA House of the Year award will be broadcast as part of a special Channel 4 *Grand Designs* series, presented by Kevin McCloud. Now in its second year, *Grand Designs: House of the Year* is to be broadcast weekly for four weeks later in the year. Featuring a selection of properties from the longlist, it will reveal the shortlisted and winning homes.

To see images of all the longlisted homes, visit www.sbhonline.co.uk and enter the reference number 75211.







Hörmann opens the door to energy efficient living

n January 2015, Nick Cvetkovic from Market Bosworth began a self-build journey that he hoped would change his life for the better. Although Nick had experience in renovating properties, this would be his first new build project so he had a challenge on his hands. This would be made even more complex by his desire to build a low carbon, energy efficient home.

Mr Cvetkovic was keen to move away from the stereotypical British brick house and take a more contemporary approach with his home's design. He opted for non-traditional materials, such as western red cedar timber and slate cladding for the external walls and a steel roof.

However, aesthetics were not Nick's only priority. In order to meet the desired insulation standards and U-values, building materials and components all had to be carefully considered during planning to maximise the property's efficiency.

Contrary to popular belief, three times the amount of heat is actually lost to infiltration and air leakage than through walls and ceilings. Ensuring that the building is completely airtight is one of the principle requirements of a low carbon home.

After much consideration, Nick decided to incorporate a mechanical ventilation system into his new home that filters, changes and then recirculates the air, while extracting any dampness. However, to successfully seal his





home, Nick had to verify that every component selected for the build would keep air leakage to the absolute minimum.

The property's various doors, for instance, called for a highly insulated, airtight composition. Nick required a set of doors that would be energy efficient and secure without having to compromise on style. Having had a Hörmann garage door in his previous property, Nick approached the leading door manufacturer again with his request.

Nick decided on a ThermoPro steel door for the property's entrance door. Offering an excellent Up-value, i.e. the U-value of the fitted door, of just 1.1 W/(m2.K) and benefitting from a 46mm rigid steel polyurethane-filled door leaf, the ThermoPro was the perfect solution for Nick's energy-efficient home.

The door also features multi-point locking and additional security bolts on the hinge side making it practically impossible to force open. Capable of withstanding common breakin tactics, this particular range from Hörmann is also available with Police approved Secured by Design status.

Three further doors were required, one of which would be installed two metres below the property in an underground store. All the doors required larger openings than usual so standard door dimensions would not have been appropriate. Hörmann, however, produces doors that are available in a wide selection of standard and special sizes, so can accommodate virtually any opening.

Hörmann's insulated sectional door seemed the ideal choice for the new garage opening.

This door is particularly well suited for integral garages where heat loss needs to be minimised. Thanks to the wide selection of colours and finishes available, Nick was able to select a style that fitted in perfectly with the contemporary look of his new home.

Nick enlisted the help of garage door experts at Doorfit Products for further guidance and to safeguard an accurate installation. Working with Nick's architect and builder was key to ensuring that the fitting was a success.

David Close, general manager at Doorfit Products commented: "Our job was made easier by having access to not only the client but also his architect, enabling us to understand the vision whilst ensuring the installation and specification were practical in relation to the build. We take great pride in our role as a Hörmann dealer, it was a pleasure to be involved in such an interesting and bespoke project."

Mr Cvetkovic was impressed by the service provided by Doorfit Products: "The team worked quickly and efficiently, nothing was too much trouble. The doors are highly efficient and fit in perfectly with the style of our home, we're very pleased with the end result."

The external work on the property was completed in December 2015 with just landscaping and internal work left to finish in the early part of this year. Nick and his wife Susie are both looking forward to settling in and making the most of their new low energy home.

01530 513000 www.hormann.co.uk



top tips



You're getting warmer...

There are a variety of acoustic and thermal insulation products on offer from suppliers large and small, but what should buyers look for when trying to find the right solution? Cellecta's Ben Banks offers some tips

Know what is expected of you

In construction today there are a plethora of regulations to follow – even underfloor heating has regulations for thermal performance. Ensure you know what is expected of you and what you are governed by in terms of Building Regulations, local building control and your warranty provider.

Don't be afraid to ask questions

There are many acoustic and thermal insulation products available on the market today, and this can be confusing. Don't take at face value what you see on websites, in brochures or trade magazines. Ask questions and seek advice from the manufacturer based specifically on what you are trying to achieve. Are you working on a refurbishment or new build? Every build has to be taken on its own merits to achieve the best results. Don't be afraid to ask for technical support. What dB value are you trying to achieve? What are the U-values for a unit? If you have high loadings, how can you still comply?

Ensure you have the correct product for the job

Various products within the acoustic and thermal industry go through multiple test environments to ensure performance is 100 per cent accurate and in accordance with regulations. Ask a company's technical team for test reports and certificates against other suggested products. It's easy to be misled and continue to follow traditional methods or practices, but it's worth checking for alternatives which may enhance the overall performance of the build.

Watch out for hidden costs

Headline costs may seem either cheap or costly in comparison to another product or system, but do you know exactly what you are getting? Have you considered that there may be a knock-on effect to the rest of your build? For instance, you may have chosen to lay acoustic battens but by supplementing those with an overlay board you could reduce your floor heights and therefore save on brick coursing.



Look out for the added-value services

Ask if a member of the technical team could visit your plot to discuss options available. For example, you may be nearing the end of your self-build and have restrictions on the depths of the floor and ceiling – in this case a site visit could determine an alternative solution quickly and simply, potentially meaning a noticeable saving. It is important to talk to the manufacturers who know their products inside out and can provide solid, appropriate advice on what needs to be implemented on the project. Ask if the manufacturer will provide free calculations for you, such as U-values, condensation, risk, imposed load etc.

Time = money

Modern products and methods of construction are usually introduced to make life easier for you on site, so why not use the latest products – especially when these can cut installation processes and consequently save you time and, more importantly, money. For example, replacing a traditional wet screed solution for a dry one will allow other construction trades to arrive on site at an earlier stage during the build programme.

Has this been done before?

Suppliers and manufacturers should be open and honest about past experiences to aid you in decision-making and help you avoid mistakes – ask for case studies or examples of previous self-builds they've worked on or situations that they have overcome. This will in turn give you peace of mind that you have chosen the right product from the right company.



Quality of products

Many manufacturers of acoustic and thermal products will have an extensive product range that offers different pricing levels in order to meet the needs of different market sectors. If a product is cheap, ask yourself why. Does it meet the necessary performance levels? Is it third party accredited? A product may cost more initially, but in the long run may require much less maintenance. Everyone loves to save money, but not at the risk of future expenditure due to the use of inferior products.

Consider how your site will affect product deliveries

The chance of a working self-build plot having acres of space to store products is slim and you probably don't have a team of 20 to help you move products around when needed. It's worth asking the supplier if there is a possibility of calling in the product when you need it – you may just need to give them a certain amount of notice for delivery. It's also important to ask the supplier if the products you're ordering conform to the one-man lift recommendations within the national Health & Safety guidelines.

Asking for advice before your self-build gets fully underway could save you valuable time and money – make the most of the knowledgeable technical teams available. Questions can be asked through multiple channels – so far this year we have received hundreds of questions through multiple channels from architects and screeders through to underfloor heating specialists and contractors.

The main thing to remember is, don't be afraid to ask difficult questions.

Ben Banks is technical manager at Cellecta

Introducing the new Bond



Acting on intelligence out in the field, undercover fixing specialist **Ancon** has launched a new super-Bond, ultra-low thermal conductivity wall tie that even *Spectre* would find hard to crack! The new Teplo-BF basalt fibre wall tie features specially moulded safety ends that improve buildability and enhance mortar bond strength by up to 80 per cent. The Teplo-BF is created by the setting of innovative pultruded basalt fibres in a resin matrix. This

composite material provides a combinatinon of high strength and outstanding thermal efficiency. The wall tie also carries BBA and NHBC technical approvals.

0114 275 5224 www.ancon.co.uk

Mendip's Woodland stove wins at Hearth & Home



The new Woodland stove from Mendip Stoves is an award-winning design, voted 'Best Stove Under 5kW' at June's Hearth & Home Show in Harrogate. It won top marks for the high quality of its design, in particular the large viewing window, which, for a stove with a low output of 4.5kW, is rather unusual. It was also praised for having 100mm to combustibles on both sides and rear of the stove, a feature of most Mendip Stoves which enables them to be placed closer to

combustible walls at the rear, a great feature for modern timber frame building construction methods.

01934 750500 www.mendipstoves.co.uk

Enq. 105



Freefoam guarantees on the up

Enq. 104

Freefoam Installers have got 2016 off to a cracking start, recording up to a 26 per cent increase in work registered for its Lifetime Guarantee. Installers from around the country are seeing the benefit of offering a 50 year guarantee on all white roofline products. One of the strongest weapons in any tradespersons armoury is the good old-fashioned guarantee and Freefoam installers have one of the best in the business at their disposal – an enhanced 50-year lifetime guarantee. Why 50 years? Firstly, Freefoam have lifetime data built up over a 20-year period via testing and accelerated ageing tests, advanced technology and trouble-free experience from Ireland to Germany and North of Scotland to the South of France where scorching sun and sizzling UV light soon finds the fault lines in roofline products. Secondly, Freefoam know that products can deliver over that period of time. Lead free advanced tin based formulations, for example, do not suffer pinking or other problems and other formulations also have extra TiO2 to withstand high-intensity destructive UV light. Lastly, 50 years sends a clear message to customers that Freefoam stands by its products over the long-term and that they can trust the company to deliver the quality and value they expect. If you're interested in finding out more about Freefoam products go to Freefoam's dedicated website.

01604 591110 www.freefoam.com

Enq. 106



TTA promotes high hygiene of tiled surfaces



The Tile Association and its members are promoting the hygiene advantages of correctly installed tiled surfaces, especially in commercial kitchens and food preparation environments. Tiled surfaces are entirely safe to install and use in hygiene-sensitive installations, particularly if large format porcelain tiles are used with epoxy grouts. Brian G Newell, chair of the TTA's Technical Committee, points out that porcelain tiles are impervious, with less than 0.5 per cent porosity and that epoxy grouts at they can have an approval for use in

are also impervious, to the extent that they can have an approval for use in nuclear power stations, since they are not porous to radioactivity.

0300 365 8453 www.tiles.org.uk

Enq. 108

Marc Overson joins Panasonic UK



Panasonic is delighted to announce the appointment of Marc Overson to Panasonic Heating & Cooling, who joins our team as the Country Manager for the UK & Ireland. Marc Overson joins Panasonic from the European air conditioning division of Samsung Electronics, where undertaking the role of the European B2B & Distribution Sales Manager, he gained a broad understanding of the European heating and air conditioning market. Marc succeeds in this position

from Marc Diaz, who returns to the Panasonic operation in Spain. Marc will focus on building market share within the commercial air conditioning arena, a key growth target area for the company in the UK & Ireland.

Three decades of quality and innovation



The VEKA UK Group is marking its 30th year of manufacturing in the UK with a host of celebrations. The company has now become one of the UK's largest supplier of PVC-U window profile and of one of the local area's biggest employers. MD Dave Jones believes, "If we're not providing the perfect products for the market, we don't deserve to succeed." The VEKA UK Group marks the anniversary with a celebratory staff event at Burnley FC's Turf Moor (including a visit

from the Global VEKA Group's CEO Andreas Hartleif) and the official unveiling of the NEW M70 profile system.

01282 716611 www.vekauk.com

Enq. 110

Schueco's revamp of network centre completed



Building envelope specialist, **Schueco** UK Ltd, has announced that the refurbishment of the Schueco Network Centre in Milton Keynes is now complete. The revamp was designed to improve the Centre's facilities for main contractors, Schueco network partners and their customers. A major change is a newly created area with a mezzanine floor given over to a number of different exhibits of Schueco's residential range of products including Schueco AVVS windows, ASS sliding

and sliding/folding door systems and entrance doors. In addition, there are new informal meeting areas on both the mezzanine and ground floors.

01908 282111 www.schueco.co.uk



Enq. 112

New, improved and accessible on the move!



Remmers UK Ltd has given their website a fresh new look and the fluent, responsive design means that it can now also be viewed on both desktop and mobile devices easily. The new site enables all visitors access to a wide range of detailed information quickly and efficiently. Highlights include Remmers product catalogues, technical data sheets, in-house and NBS specification guides, literature and system specific project references along with a host of

other helpful product and system information. The website also has an up-to-date news section and integrated social media links.

01293 594010 www.remmers.co.uk

Enq. 111

Snickers' ALLROUND working clothes



Snickers' Next Generation Workwear symbolises the brand's commitment to delivering the very best in modern working clothes. The latest ALLROUND Workwear family has been designed to cope with just about everything in everyday working environments. For professional craftsmen, they are probably the most advanced working clothes of their kind with modern designs that ensure smart, professional looks and an amazing fit. Garments combine to deliver maximum,

hardwearing comfort and innovative functionality. They really are the ultimate choice for today's professional craftsmen in all kinds of everyday on-site environments.

Enq. 113

New cladding opportunities from Freefoam

Freefoam Building Products are pleased to announce the launch of a brand new website, mycladding.com. Designed to meet the growing demand from consumers for exterior cladding products the site acts as an online portal to share product information about PVC cladding, offer ideas and inspiration for homeowners and gives quick and easy access to a free no obligation fitting quote from a local installer. PVC cladding is one of the fastest growing home improvement products becoming the main alternative to wood. With volume sales up by 61 per cent year on year Freefoam are one of the first manufacturers to harness the power of the web to harness the online appetite for pvc cladding, to help grow business and generate leads for Freefoam Registered Installers. With a fresh, clean look the clever design of mycladding.com helps visitors quickly navigate around the site. Featuring information about different cladding finishes and information on the benefits of using cladding to improve insulation and reduce maintenance the site gives homeowner the information they need to make an informed decision. An online tool to help the homeowner visualise how cladding will enhance the look of their home with colour options superimposed on a variety of house types, this is backed up by a sample request service and a handy calculator to estimate the number of cladding boards needed for your project.

01604 591 110 www.mycladding.com

Eng. 114



Construction United welcomes Morgan Sindall partnership

Construction United, a coalition of some of the construction industry's key stakeholders which aims to change perceptions of the sector, has recently welcomed leading UK construction and regeneration group, Morgan Sindall plc, to its ranks. As one of the initiative's partners, Morgan Sindall will support Construction United in its three key objectives; improving public perceptions of construction, encouraging young people to consider careers in the industry and maximising the health and wellbeing of its workers. Formed in February 2016, Construction United has already gained the support of influential product distributor SIG, trade bodies including the Finishes and Interiors Sector (FIS) and the Thermal Insulation Contractors Association (TICA), and leading skills certification scheme, CSCS. The initiative has also selected The Prince's Trust, Crash and Time to Change as its key charities, which it will support through fundraising activities which will be held from the 17^{th} to the 23^{td} of October this year. Graham Edgell, Director of Sustainability and Procurement at Morgan Sindall plc said: "Public perceptions of the industry have an effect on all of us, and it's vital to address this if the sector is going to continue to grow. By becoming a Construction United partner we're showing our support to the wider industry and supporting worthy charity causes by hosting and participating in October's events."

@ConstructionUtd www.constructionunited.co.uk



omnitub

uxury soak

If you've only got a small bathroom, you don't have to sacrifice a tub thanks to the Omnitub, deep Japanesestyle baths

City dwelling can often mean space is at a premium. This is particularly so in apartment bathrooms, which rarely contain baths as they only have room for a

apartment battrooms, which rarely contain batts as they only have room for a shower. And while showers are great, particularly if you're in a rush, you can't beat the luxury of submerging yourself in a hot bath, soaking away the troubles of the day. But having that luxury isn't as out of reach as you may think. Omniub may have the answer. The company's Japanese-style tub is shorter and deeper than a traditional bath, so that you can have a proper soak, even in the timiset of bathrooms. The Japanese have never used lack of space as an excuse for poor design or styling, and the Omnitub is a classic example of this. These small but perfectly formed handmade bathrubs are taking the British market by storm. They provide a perfect solution for people who are style conscious, and want a bath tub, but are restricted by limited room dimensions.

dimensions. The Omnituk comes in four sizes: the Duo and Duo plus, made for sharing; and the Solo and Solo plus, for total self-indulgence. As simple to fit as a regular bath, the stylish Ormultib will suit modern bathrooms, and its lack of built-in seat means that you can immerse yourself completely.

Call Omnitub today on 01934 751200, email info@omnitub.co.uk or visit www.omnitub.co.uk for more information

Enq. 116

Wetrooms made easy



MAXXUS THE 3RD GENERATION WET DECK

With our featured Maxxus Wet Deck Kit (the strongest on the market), easy-to-use tanking kits or membranes, and a wide selection of drains, it's easy to install a luxurious wetroom anywhere in the home. Add on our designer grids and extensive range of stylish accessories and it's easy to find the right product for any environment. Ask for our latest Price List today!



www.wetroominnovations.com 01629 815500

Enq. 117



Completely waterproof, easy to install and easy to clean, grout free alternative to tiles.

Don't tile it. Multipanel it.

www.multipanel.co.uk

Trespa[®] Meteon[®] chosen for unique private dwelling



Steeple Morden, Cambridgeshire, has been designed and constructed by its owner using Trespa® Meteon® architectural cladding panels over the entire external, non-glazed surface.

The two-storey dwelling totalling some 10,000 sq feet is of steel frame construction set on concrete pads enclosed in SIPP wrapping. 635 square metres of Trespa® cladding in Loft Brown matt finish and a further 243 square metres of Nordic Black, also in matt finish, were used on the external elevations, installed by means of the TS200 invisible fixing system. The form of the building was created by owner/developer David Grainger with Trespa® in mind. He says: "Having seen this material used for offices in and around London and major apartment buildings I decided to use the product on the house." He adds: "It was well worth doing, particularly in respect of the low-maintenance requirements of the product."

The property is designed with energy-saving very much to the fore. It features triple-glazed window and door units, an air source heat pump, under floor heating and solar tiles for lighting which produce 15KVA output.

The building also boasts a water reclaim system by which all rainwater is captured for re-use within the home.

Trespa® specialises in decorative, highpressure compact laminates with an integral surface manufactured using Trespa's unique in-house technologies that utilise Dry-Forming and Electron Beam Curing. The panels perform exceptionally well outdoors with neither sun nor rain having any significant effect on the surface.

Trespa® offers a 10 year conditional product warranty on the entire range and with a broad



range of colours, finishes and tactile effects available, Trespa® Meteon® brings compelling aesthetic and nearly limitless design possibilities to next-generation architectural claddings.

0808 2340268 www.trespa.com



Home improvement ideas: Five remodelling tips



The latest home improvement report indicates that UK homeowners would choose to remodel their existing properties, rather than move to a new house. Hayley Fenn of **Granite Transformations** has five affordable tips for enhancing living space and adding value to property: add an ensuite; explore magical mosaics; go island style; transform a humble downstairs loo; modernise the shower. The best thing about these tips is that they can be mostly carried out within exist-

ing room layouts, without re-siting the plumbing and electrical connections, and by simply overlaying the worktops, tiles and bathroom surfaces.

0800 044 5393 www.granitetransformations.co.uk

Enq. 120

All round knee protection from Redbacks



Redbacks Cushioning Ltd, the manufacturers of the World's only 'leaf-spring', non-foam or gel kneepads offer a strapped version as an addition to its pocketed work trousers. Designed by a senior Ergonomist, Clinical Scientist and Biomedical Engineer, the kneepads retain the company's award winning cushioning technology which incorporates a flexible TPE (Thermo Plastic Elastomer) leaf-spring set within a unique honeycomb matrix. Durable and hardwearing, Redbacks strapped

kneepads give the user unrivalled, all-day comfort and long-term protection even in the harshest of environments.

01327 702104 www.redbackscushioning.com

Enq. 122

The Shower Tray – Evolved by JT



UK shower tray manufacturer, JT, has today launched a new addition to its award winning range. Evolved by JT is a first in the market that fuses both tray and wet room concepts. At 25mm deep, Evolved by JT has been designed to incorporate the simplicity of installing a shower tray with the stunning look of a modern wet room. This next generation product features a leading edge waste solution, powered by an exclusive partnership with global market-leading waste manufacturer n five stunning colours as well as gloss

Wirquin. Evolved by JT is available in five stunning colours as well as gloss and matt white. Evolved by JT is available in a range of sizes.

0113 201 5090 www.just-trays.com

Enq. 121

The Complete Package



For professional craftsmen and women, this summer is all about getting to know more about the top quality products from the **Hultafors Group's** Premium brands. Snickers Workwear's Next Generation working clothes and accessories are delivering the ultimate in on-site functionality, comfort, protection and safety. They are perfectly complimented by Solid Gear and Toe Guard safety shoes, which bring modern looks plus

uncompromising safety and comfort in a range of styles. Add that to the Hultafors range and you have a unique family products that makes craftsmen's workday safer and easier.

Interior inspiration: Bathrooms & wetrooms showcase

The bathroom is one of the most important rooms to consider in a new build or refurbishment, with more and more people looking to create a sanctuary to relax in and switch off from the world. Our showcase selects some of the latest products and technology which can help you make the most of the space

1



1. For the ultimate 21^{st} century bathroom, Frontline Bathrooms' luxury bathroom TV is the perfect gadget – enabling users to soak in the bath while catching up on their favourite TV shows. Comprising an ultrathin LG panel with touch sensitive controls, it has a built in Freeview tuner and a heated screen. The TV is waterproof and can also be connected with digital providers such as Sky. It has a mirrored finish so when it's not in use it doesn't look out of place and blends seamlessly into a bathroom. The 576 x 395 mm screen costs £995.

www.frontlinebathrooms.co.uk

Enq. 124

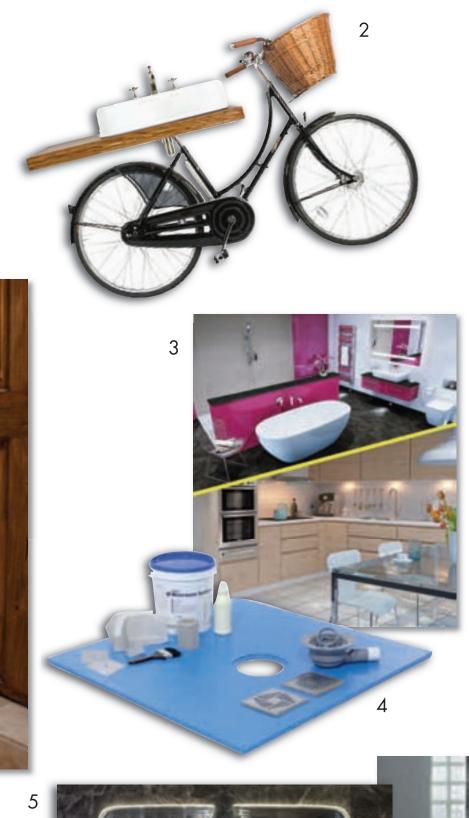
2. The iconic Pashley Bicycle Basin from Arcade is perfect for those that wanting to make a style statement. With its authentic 19th century Belle Époque deco era styling the unique Arcade Pashley Bicycle Basin has been beautifully crafted from the finest materials. The basin comes with an Arcade traditional nickel three tap hole basin mixer tap, finished in a special PVD nickel coating which gives a superior finish and guarantees durability. All Arcade products carry a 10 year guarantee. The Pashley Bicycle Basin is priced at just over £2,000.

www.arcadebathrooms.com

Enq. 125

3. Multipanel is claimed to be "the UK's number one bathroom interior solution," offering a "luxurious alternative to tiles that is completely waterproof, easy to clean and grout free." Through providing long-lasting design and quality, Multipanel is making it possible to quickly transform spaces via its easy installation method. Opening the door to a whole new world of flexible home improvement, Multipanel's lavish wall panels, floors, ceilings and vanities are claimed by the manufacturer to be "transforming the way we design our interiors forever."

www.multipanel.co.uk



4. The Maxxus from Wetroom Innovations is a structural deck designed to span over joists without any deflection. The Maxxus is one of the quickest and easiest types of deck to fit, as well as the strongest available in its thickness (22 mm). It can take loads up to 470 kg over 400 mm joist spacing so you know your tiles and grouting are going to stay in one piece. The kits can be used for either tile or vinyl floors. Visit the company website for further information and to see the full range of Wetroom Innovation products.

www.wetroominnovations.com
Eng. 127

5. Luxury porcelain manufacturer, Porcelanosa has collaborated with Zaha Hadid Design to offer a new collection that will give a bathroom a 'starchitect' makeover. The collection 'Vitae' is made up of sleek handcrafted ceramic pieces that include a bathtub, basins, shelving, and wall-hung toilet with bidet. Zaha's signature curves can be seen throughout each piece, merging the practical with cutting edge design from one of the world's great architects. Be one of the first to incorporate this new series and its astounding elements into your self-build. www.porcelanosa.com/uk

Enq. 128

6. Omnitub is not only space-saving, it has other practical advantages, too. Made of lightweight fibreglass, it has pre-drilled waste and overflow holes, so it's quick and simple to install. Its extradeep dimensions mean there is a lesser surface area, which means that the water stays hotter for longer. And the tub's smooth bottom and higher sides mean that it's also suitable for showering. And if that's not enough for you, these stylish tubs can also be used for the ultimate luxurious bubble bath, as you can choose to have waterjets fitted as an optional extra. www.omnitub.co.uk





To the light house



Words and pictures by Ewen MacDonald

Located in St Ives, Trelas takes its name from the Cornish word for homestead – but this house is more than that. Built on a steep and skinny strip of land, it's a light-filled feat of engineering and architecture overlooking one of the UK's most sought after locations The stunning Cornish harbour of St Ives offers a lifestyle many of us dream of – endless light (thanks to its peninsula position), a picturesque harbour that has remained largely unchanged since the days of Poldark and golden, sandy beaches at every turn.

So it is perhaps unsurprising that every morsel of land here is snapped up for development – prompting the occasional outcry that these land grabs will ruin the very charm that buyers seek to enjoy. This concern reached fever pitch this year when residents voted overwhelmingly in favour of a ban on second homes.

But one of the newest – and possibly now last – second homes on the block is Trelas, a clever piece of subterranean architecture that clings to a tall, skinny, steep slice of south-facing land high above the picturesque harbour.

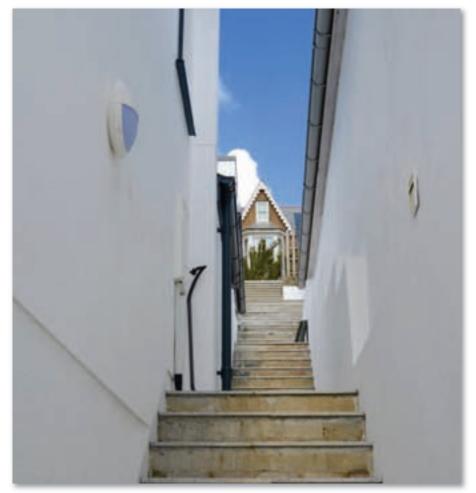
Completed in April 2016, Trelas is the future full-time home of the Green family. Currently calling Sheffield their home, Sara and Stuart and their children Alice, Tom, Joe, Sam and Jack began their journey to fulfil a life-long dream of creating a permanent abode in this idyllic slice of Cornwall back in 2012.

Sara had grown up on stories of St Ives' charms as her uncle had been evacuated there during the war. Coupled with this was Stuart's long-held dream of building his own house. But they got on with the business of family life and the dream may never have been realised if it hadn't been for a disaster: in 2012, Sara was

The ups and downs, steep alleys and sharp turns of St Ives creates notoriously awkward spaces that means few houses sit on naturally level ground – and this piece of land was no different

diagnosed with a life-threatening illness. The family consequently moved more than 350 miles south west and rented a house in St Ives while she underwent chemotherapy. It was here that their dream began to take shape. From the window of their rented accommodation, Stuart had spotted a plot of land for sale – which he later discovered already had planning permission. "It seemed as though it was meant to be and the thought of spending time rehabilitating in the magical, spiritual place that is St. Ives was just exhilarating," says Stuart.

The ups and downs, steep alleys and sharp turns of St Ives creates notoriously awkward



spaces that means few houses sit on naturally level ground – and this piece of land was no different. "We knew from the outset that this would require an ingenious design," explains Stuart. "Our vision was for a clean, modern, open-plan style. We realised that this wasn't going to be a conventional design, and knew that much of the accommodation would have to be subterranean to fit everything that we needed into the space available while meeting the height restrictions."

Local design knowledge

Recognising the need for an architect with local knowledge, the family turned to Chris Strike of St Ives-based RA Design. "Long before we purchased the plot, we set out to find a professional who we were confident would share our vision for the development and guide us on the journey," says Stuart. "Chris met all our requirements, and was able to accommodate four bedrooms, three bathrooms, lounge, kitchen/dining room and utility room over three stepped levels naturally following the contours of the hillside."

He adds: "We wanted to be sympathetic to the feel of the local area; Chris proposed a green roof section that would create a pleasing, nature-friendly softening of the building when viewed from the top of the site."

Their first delay came in buying the property, which took almost a year. "There was a section of wall at the top of the plot belonging to a house opposite that would have to be removed if we were to have vehicle access for construction and to subsequently allow on-site parking for two vehicles," Stuart explains. "After multiple surveys, structural engineering calculations and many design iterations we were finally ready to go to tender by autumn 2014."

Managed at a distance by Stuart to help keep the costs down and shelter a still recovering Sara from unnecessary stress, building work finally began in early 2015. The next issue encountered was access. Deciding against the option of a crane – which would cause massive disruption to the neighbouring homes – the builders came up with an ingenious solution. "We approached the owners of the garden adjacent to the plot and came to an agreement with them to use their land for access during construction in return for landscaping it at the end of the project," explains Stuart.

Further delays occurred during the build: construction work had to be halted after a badger sett was discovered close to the site to allow a survey to be carried out by environmental experts. Only when the sett turned out to be abandoned could work begin again, until the famously inclement winter weather of Cornwall contrived, with the steep gradient of the site, to cause a landslide. And despite the careful planning, they had to deal with other unforeseen construction issues that required structural redesigns along the way.

In the end Stuart worked closely with architect Chris Strike who acted on their behalf. "We came to an arrangement with Chris that he would act as our eyes and ears for the project, visiting the site regularly to confirm that work was proceeding to plan and being done correctly."



Clever design

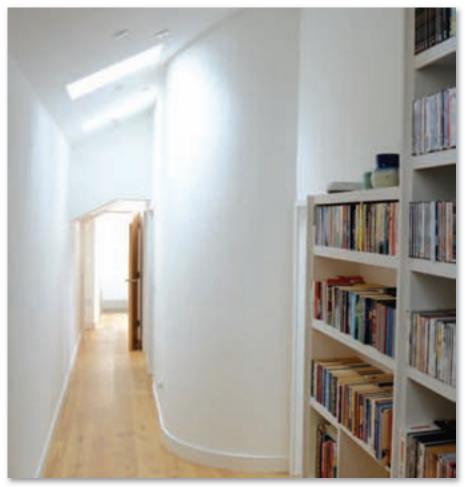
The finished house is incredibly clever, set across three storeys of varying sizes to anchor it to the natural sloping landscape which boasts a gradient of around 25 per cent. Parking sits almost level with a sedum roof that tops the lightfilled atrium on the small top floor where a door leads to the only room on this level – the first of two master bedrooms with an en suite.

The middle floor has the largest floor space and houses three bedrooms, a family bathroom and the living room. The bedrooms have double height ceilings to access light wells and internal windows from the light-filled top floor as well as Velux windows in the sloping roof operated by touchpad controls in each room.

The living room sits at the southern end of the house and features a sloping ceiling rising to double height with four Velux windows set into the beamed ceiling, which Stuart likens to an art gallery. But the main feature here is the picture window, the width of the room and taking in a panoramic sweep of the town.

A simple colour scheme throughout the house ties the three floors together with white walls, engineered oak floors and varying tones of grey in the decor – from black chairs in the kitchen and a charcoal sofa and cushions in the living room to the grey feature walls and light grey sheepskin rugs in the bedrooms, wool throws on the bed and silver-grey tiling floors of the family bathroom and around the kitchen units.

The bottom floor houses the kitchen/diner and a small utility room. Here the main attraction is



HIGH POINT

Finding architect Chris Strike: "Drawings and photographs of past projects immediately told us he was our man!"





once again the view: the dining area features full width bi-fold doors that can be opened out to encompass a glass encased sun deck and create one continuous space. Despite the extreme gradient of the ground, landscapers cleverly used wire cages filled with local granite to retain earth, while providing a natural look and feel. A gate leads down to the second storey garden where an outdoor shower and two built-in storage rooms offer space for water sports equipment and beach paraphernalia, as well as providing structural support for the extended sun deck above. At the bottom of this final level, there are stairs down to an alleyway that leads directly to St lves harbour.

When the Green family are not there, Trelas is rented as a holiday let to help pay for the cost. "We spend as much time there as our finances allow," admits Stuart.

On the self-building experience, Stuart admits: "It is not for the faint-hearted. Firstly, assume that the project will overrun in both time and cost. And for it to work well it really needs to operate like a partnership with the architect, builder and interior designers, so it's essential to find people who you can trust."

Project summary

Current value: £ 750,000

Cost breakdown

Fees (design, planning): £9,000 Garden works: £50,000 Siteworks: £180,000 Substructure and drainage: £30,000 Steelwork: 15,000 Roof: £39,000 Windows and doors: £15,000 Stairs: £6,000 Wall, floor and ceiling finishes: £15,000 Sanitaryware: £9,000 Kitchen (with appliances): £10,000 **Plumbing:** £14,000 Underfloor heating: £13,000 Electrics: £12,000 Joinery: £20,000 Internal walls: £20,000 External walls: £80,000

Contacts/suppliers

Architect (including planning): Chris Strike of RA Design www.radesign.org.uk

Main contractor: VA Construction 07773 330 185

Interior design: Mint House Interiors www.minthouseinteriors.co.uk

Party wall: RTP Surveyors 01326 318 599

Environmental surveys: Ecological Surveys www.ecological-surveys-ltd.co.uk

Mechanicals: Piran Plumbing Heating and Gas Services www.piranplumbing.co.uk

Pizza oven: The Stone Bake Oven Company www.thestonebakeovencompany.co.uk Electrical: Phil Thomas Electrical philt70@john-lewis.com

Bauder Roofing supplied by DFR Roofing www.dfrroofing.co.uk

Velux windows supplied by Travis Perkins www.travisperkins.co.uk

Flooring supplied by Howdens www.howdens.com

Windows supplied by St Ives Window Co. www.stiveswindows.co.uk

Internal doors supplied by Doors of Distinction www.doorsofdistinction.co.uk

Structural Engineering: Richard Holbrook Ltd 01326 270751

Planning Consultant: Roy Curnow Planning 01736 362445

product focus



Stone Federation

The beautiful Frelan range of Crystal and Glass Door Knobs and Cupboard Handles feature classical and contemporary designs. Manufactured to the highest quality using solid brass combined with Swarovski Elements they add a touch of glamour to any door, or piece of furniture. The Faceted Cut Door Knobs will really catch the light and truly sparkle as a stand-out feature of your design. The cabinet door knobs can be coordinated in different sizes to suit all cupboards and drawers and also to match with full size door knobs. Priced from £4.06 and available from More Handles.

More Handles

lotal Home

The Natural Stone Source Book is designed to be both inspirational and educational, providing the information and visual stimulation required for successful completion of your natural stone project. Whether you are involved in a new build or a self-build project, a large bathroom job or a small kitchen space, this source book is your comprehensive reference point.

The Source Book contains a directory of all of Stone Federation members, as well as project profiles and products case studies, acting as both a source of information and inspiration. To claim your free copy of this publication please go to the Stone Federation website.





Decisions, decisions! Having gone through the process of completing new builds and renovations itself, Total Home Environment knows the plethora of decisions you have to make on such a project. Total Home Environment is happy to guide you on just how far to go on your sustainability journey and it's not afraid to say "No, actually, we wouldn't buy this!" From room-by-room heat loss reports through to commissioning, the company is here to assist you every step of the way. It will help to successfully combining heat recovery ventilation, exhaust-air heat pumps, underfloor heating, air-source heat pumps and central vacuum systems into your home.



Flue & Ducting Ltd is the manufacturer of UK's No1 chimney liner DURA FLUE and wholesaler of all chimney related products. With depots in Stockport, Somerset, and West Yorkshire, the company provides a UK wide same day and next day delivery service. It has fully-stocked trade counters in all depots. Please contact Flue & Ducting to register your online account. Once logged in you'll benefit from fantastic discounts, loyalty points and much more.



All its depots are open Monday to Friday from 8am to 4.30pm. Please feel free to contact the company directly or visit the website with any queries.



Perhaps the most important recent stylistic influence in room decor is that of lighting ambience. Huge improvements in LED value and technology has allowed much greater freedom and functionality in designs to achieve a subtle, relaxed mood atmosphere. The biggest shift has seen a consumer led drive from harsh central pendants to that of room perimeter lighting by use of uplighting or downlighting cornice troughs. Recognising this demand, Davuka have introduced the largest range of purpose designed profiles, from very small, discreet and modern, through to the larger and luxurious styles that would grace any period mansion, boardroom or hotel.

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The best of both worlds

A two-up two-down Victorian house in Nottingham was the subject of an upgrade on a limited budget by interior designer Joyce Moore. She reports for Selfbuilder & Homemaker on how it now offers warmth and energy efficiency as well as good living spaces



an a standard 'two up – two down' terraced house provide desirable, clean living accommodation for today's lifestyles?

The Victorian terraced house has become a popular choice for first time buyers, single professionals and even young families. Its modest style, manageable size and price are attractive qualities, as is the plentiful supply in most towns and cities.

The traditional construction of such houses does present certain drawbacks. Internal space is not the issue – most traditional houses offer better room sizes in general than modern equivalents. The main compromise which buyers have to deal with relates very much to environmental issues; houses built around the 1900s, as well as for most of the early 20th century, are severely lacking when compared to current energy efficient standards. Not only do they fail to comply with Building Regulations for energy use – they also present owners with the prospect of high energy costs and wasted resources. Inefficient heating and ventilation can lead to other problems such as poor air quality and deterioration of the structure due to excessive dampness.

I saw an upgrade of a 1910 constructed house in Bulwell, Nottingham as a way of demonstrating what could be achieved in a small two-up two-down Victorian house on a limited budget, with a view to looking at further enhancements in the future.

The aim was to demonstrate what would be needed, as a minimum, to achieve an acceptable level of energy efficiency. The project's success has been demonstrated in the latest Energy Performance Certificate which showed a rise from 35 to 66, though further improvements have since been carried out which will further enhance the energy efficiency. The EPC score is thought to be as high as can be expected with a 1910 property without the addition of solar panels.

I was also keen to retain and utilise the inherent, favourable features of the house – room size, compact layout and solid

A lot of time and effort was contributed without charge, because of my enthusiasm to achieve something worthwhile as an exercise in property renovation. The ultimate aim has been achieved, namely creating a comfortable, practical home construction, and generally improving the interior environment. In particular I wanted to find out whether a 'one-off' project of this type would be feasible in terms of cost and practicality.

Secrets of success

The success of the project depended on a number of factors. Firstly reliable, local contractors were essential – builders and tradesmen who could follow the brief and specification precisely and handle the work efficiently. Materials needed to be selected which could be shown to achieve specified standards for the new insulation.

Specialists were needed for certain areas of the work, including damp proofing and roof repairs. The combination of the right trades, an agreed design plan and good time management were also key elements in the success of the project.

Improvements to the fabric of the building were a first priority. Twin brick walls with no cavity provide a good, solid base – but additional cladding is the only solution to upgrading the insulation level.

In this instance the internal space was found to offer another advantage. The room sizes easily allowed the small reduction needed to facilitate the internal wall insulation. A rigid PIR product was chosen which, when combined with the existing structure, could be shown to produce an overall U-value compliant with current Building Regulations.

The specified Celotex board was applied using cement dabs, with plasterboard cladding to window reveals, achieving a U-value of 0.27. New chemical damp proofing was installed in certain areas of the external walls, in advance of the new insulation. New internal cills to double glazed windows ensured a wellfinished look.

Further improvements

The slate and timber roof needed some repair to ensure water tightness. While further improvements could be made – with the introduction of felt for instance – priority was given to thermal insulation, which was added above the joists.

Internal floors at ground level are a combination of suspended timber and solid construction. At the start of the project the solid floors were quarry tile finished and presented damp penetration issues. These were replaced with new, insulated concrete, plus damp proof membranes in line with current upgrade methods. The addition of a new heating and hot water system with an efficient gas boiler further enhances the renovated home's efficiency.

The interior was generally improved – including new kitchen units and bathroom fittings, re-decoration and floor coverings. There is a small reduction in room size due to the internal wall insulation, but the impact on the internal space is minimal. From the outside very little has changed, apart from new windows. The attractive brickwork exterior presents what remains a modest, traditional 1910 house, but



this one encloses updated and energy-efficient living accommodation.

The project was undertaken over a period of six months, and within a budget of less than $\pounds100,000$. Whether this model would work as part of a larger project, or encompassing

multiple properties, is difficult to say. A lot of time and effort was contributed without charge, because of my enthusiasm to achieve something worthwhile as an exercise in property renovation. The ultimate aim has been achieved, namely creating a comfortable, practical home.

Products/suppliers

Main renovation contractor: Head2Toe Developments, Swadlincote

Damp proofing and timber preservation works: Peter Cox Preservation

Design and Project Management: J.M.Design, Leicester

Heating installation: Matt Taylor, Swadlincote

Insulation materials: Celotex PL4065 composite interior wall cladding, Knauf 100 mm and 170 mm loft roll

Kitchen fittings: Greenwich range from Howdens

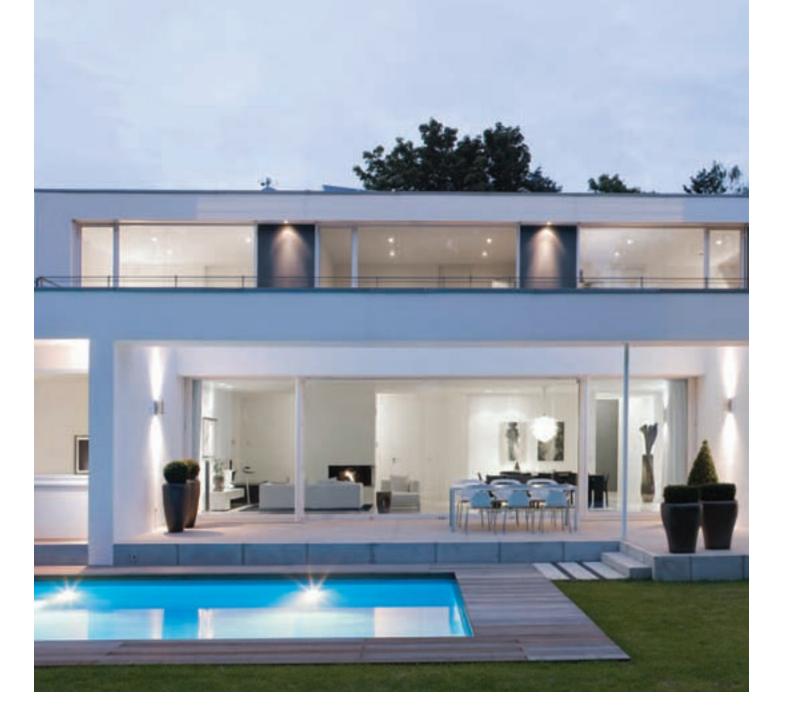
Bathroom fittings: Positano range from Wickes

Wall tiling: Satin white ceramic wall tiles from Wickes

Floor finishes: Tarkett Zenon vinyl, Tangier Berber carpet

Paint: Wickes Trade emulsion gardinia, Wickes interior white satin

Internal doors and door furniture: Lincoln solid pine door – white satin finished and brass finished Victorian scroll latch handles by Wickes



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Enq. 138

1920s council house transformed by Crittall



A glazing system from Crittall Windows has been used as the centre-piece for an intensive make-over project, dramatically transforming an uninspiring 1920s three-bedroom former council house, in Croydon. The owners worked closely with Jo Cowen, the project's architect, to extend and re-configure the property to make best use of space and bring-in much-needed light. A stunning, modern slooking, exterior was created with large areas of glass, echoing the company's original steel windows. A combination of double and single-

glazed Crittall steel screens using the W20 profile were installed.

01376 530800 www.crittall-windows.co.uk

Enq. 139

Taking the 'pane' out of troublesome conservatory



Bury St Edmunds-based Network VEKA member Frames Conservatories Direct (FCD) has stepped in to help a new customer solve an old problem. Adrian Lewis, MD at FCD explains: "A conservatory with a 'lean-to' roof had been constructed, with a projection that was far too long to support the considerable amount of glass involved. The panes were incorrectly fitted, and were shattering as they expanded and contracted with the weather. We were pleased to fit a completely new roof,

suited to the size of the conservatory, to ensure that Mrs White was able to enjoy the light and welcoming space she desired in the first place."

01282 473170 www.networkveka.co.uk

Eng. 140

Quality and innovative fittings



A new name in quality door hardware is set to make waves in the architectural ironmongery market. Total Door Hardware is the UK distributor for door hardware from OZONE, an India-based international architectural hardware brand. Offering certified hardware with innovative technologies and functionality, Ozone products are becoming established globally. The product portfolio includes the new generation of concealed floor spring, better known as the hydraulic patch,

along with fittings for commercial doors, shower rooms, balustrades and point-fixed frameless facades. Head of International Business says, "Ozone's portfolio has been designed to answer British design tastes.

Enq. 141



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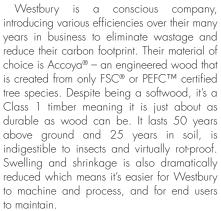
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Westbury is seeking sustainability

taff at Westbury are passionate that the use of tropical hardwood is no longer necessary and have set themselves a goal to be completely tropical hardwood free by the end of 2016 - a tough objective for a big player in the timber window industry. According to Director, John Mumford, "Timber industry technologies have advanced to a point where there is very little need to use unsustainable wood sourced from places like Africa and South America. However the association people make between hardwood and durability, and softwood and poor quality still exists. We are committed not only to eradicating tropical hardwoods from our manufacturing processes but replacing it with sustainable timber that is as good or even better performing in terms of durability and longevity. This is something we have been working on for a long time. We are at a stage now where only a very small percentage of our business incorporates the use of hardwood and we are making every effort to be completely tropical hardwood-free by the end of the year."



Founder and Director Jonathan Hey says "We are immensely proud of our progress so far and are excited to soon be tropical hardwood-free. We encourage all of our customers and specifiers to consider these credentials when they're considering new windows, doors, or an entire garden room".

01245 326 510 www.westburyjoinery.com

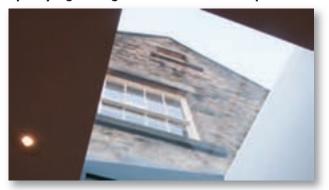
Eng. 143

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Eng. 145



Specifying rooflights to meet Part Q requirements



Recent changes to Building Regulations Approved Document Q: Security in Dwellings means that anyone wishing to install rooflights in 'easily accessible areas' will need to ensure that they specify a product which is compliant with Part Q. The document explains 'easily accessible' as "A window or doorway, any part of which is within 2m vertically of an accessible level surface such as ground or basement level, or an access balcony, or A window within 2m vertically of a flat or sloping roof (with a pitch of less than 30°) that is within 3.5m of ground level". These changes are most likely to affect domestic dwellings with flat roof single storey extensions featuring rooflights that fall within the criteria, although each project should be dealt with on a case-by-case basis. **Glazing Vision's** Secure and Secure+ rooflights have been tested to the latest LPS 2081:1 2015 standard, which is designed to replicate a typical stealth attack commonly carried out in residential areas. The range is accredited by the Loss Prevention Certification Board issued by the BRE. Secure and Secure+ rooflights are the first in the UK to be backed by the official police security initiative Secured by Design to LPS2081:1 2015.

01379 353 741 www.glazing-vision.co.uk

Enq. 146

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Enq. 147

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Extension design 'flows' from steel windows



Having found the house of their Robert dreams, Marcelle and Schogger, decided to create a spacious kitchen and dining area. They were determined that steel windows should be the key architectural feature of their project and appointed Steel Window Association member, Steel Window Service & Supplies, to supply and install a large window and door screen. The couple had first seen steel windows featured in a magazine and knew they fitted with their desire

to achieve a classic look within their early 1900s house. Steel windows also avoided the 'chunky' aesthetic that would come with other material while ensuring the maximum amount of the light entered an area.

Enq. 151

Part Q compliant with no compromise



VELFAC composite windows, external doors and patio doors deliver the safety performance required by the new Part Q regulations, without compromising the contemporary, slim aluminium/wood frame. The VELFAC system also meets the exacting standards of UK Police flagship initiative Secured by Design (SBD), adding further value to any residential or housebuilding project. To satisfy Part Q, the VELFAC system can resist damage inflicted by burglars using

common tools such as crowbars, and also withstand more serious attempts to buckle or deform entry or glazed doors. For more information, please visit the VELFAC website.

Enq. 152



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Doors of perception

Kloeber's Matt Higgs corrects some myths on sliding door performance, saying they are a thing of the past

The image in many people's heads when they think of a sliding door is a thermally inefficient metal door which sticks on the track and has condensation on the frame. These are the sliding doors of yesteryear, which may have left us with an unfair stigma.

The sliding door has seen a real resurgence recently and this is for all the right reasons – reasons that are contrary to the negatives of past doors. Modern sliding doors are 'thermally broken' to stop the cold penetrating through from the outside, and also to insulate and stop the heat inside escaping. They also have the mechanisms to cope with larger, heavier pieces of glass giving an unspoilt view for the homeowner and a smooth operation.

Many people are now seeing the benefits of a sliding door over a folding door in that when the doors are closed there is less framework and more glass. Sometimes sliding doors can also work out to be a more

With the main part of the door's area being glass, it is very important to remember that a sliding door is only as good as the glass that is put in it



cost effective option, compared with other types of doors.

The options for sliding doors in terms of materials are predominantly aluminium and composite (timber inside, aluminium outside). These are at the higher end of the market but there are also the options of timber and then PVCu at the more cost-effective end. Each material has its own merits.

Material options

Composite gives you the benefit of strength with the two material types combining to make a very robust profile. You also get the benefit of a low maintenance finish on the external face with powder coated aluminium and a warmer insulating timber inside.

Aluminium is the most common material for modern sliding doors and is very low maintenance, as well as being light and strong. This means large frames can be achieved, combined with cost effectiveness comparable with timber and composite.

As a material for sliding doors timber is a very good natural insulator, varying different timber types can give you different performance weights and cost, so this is a very versatile material.

Last but not least – PVCu. The main benefit of PVCu is its price, making it very cost effective for self-builds while also giving good thermal performance and providing a very light weight solution.

The crucial tip to remember when buying sliding doors is to make sure the mechanisms are of good quality and can cope with the weight of the glass. Also ensure the company you're buying from is experienced and



offers a comprehensive warranty.

With the main part of the door's area being glass, it is very important to remember that a sliding door is only as good as the glass that is put in it. Most modern sliding doors are fairly substantial, so would benefit from a higher specification of glass than in a standard sized window or door. Triple glazing should be considered to reduce heat loss from the building [measured as a 'U-value']. If the door is on a south facing elevation then solar-control glass is advisable to reduce the solar gain.

Modern architecture and our way of living is all about light and space so a sliding door is always a consideration in any new property. They bring natural light into the home as well as offering the aesthetic and lifestyle benefits of a connection between inside and out, and correctly specified modern sliding doors will perform for the long term.

There are also several options for sliding door configuration. The double track option gives greater flexibility of opening so that multiple doors can be provided. Alternatively, single track provides for a combination of fixed and sliding panels. The choice of single or double track will be dependent on the size of opening and what effect you are looking to achieve.

As with any major purchase, there's no substitution for seeing and operating the product for yourself and meeting the people from the company you're considering buying from. Clever marketing and good photography can easily make a product look better than it really is, so don't be fooled! It's very important to look at the company's history, warranties and verify the general quality of its products by seeing them first hand. After all, sliding doors are a fundamental part of the building – one you want to last and be admired for years to come.

Matt Higgs is sales director and co-owner of Kloeber

Enq. 155



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single door to seven opening panes offering 18 design variations and up to six metres in width, design flexibility is guaranteed, whatever the project.

028 9448 7777 www.metaltechnology.co.uk

Enq. 157

New-build home is first to use Ecodan QUHZ



A new-build home in Leicestershire is demonstrating how anyone can achieve a highly efficient property that provides a comfortable environment. . The Ecodan QUHZ 4kW air source heat pump by Mitsubishi Electric been specifically designed has standards with new-build of insulation and lower heating loads in mind. It 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 plate heat exchanger.

01707 276 100 www.mitsubishielectric.co.uk

Enq. 158



Omnie heat social services

Underfloor heating systems from the Omnie by **Timoleon** range have been employed in the refurbishment of a South-west community building, providing energy efficiency as well as helping to create a healthy indoor environment for the many members of the public as well as the staff who use the facility. The Wat Tyler building in Exeter is home to Colab, a wellbeing hub bringing together a host of specialist housing, voluntary sector, social enterprise and recovery providers to offer a unique range of opportunities for people looking to rebuild their lives and play a positive role in the community after periods of homelessness, re-offending, drug/alcohol abuse or long term unemployment. The main floor of the building where Omnie Foilboard underfloor heating panels and other equipment have been installed, is divided up into two consultation rooms, a treatment room and waiting rooms as well as circulation space. The five areas are served by a five port Axios manifold, supplied as part of the package and installed by local contractor, Steve Guppy Limited. In total 400 metres of the high performance heating pipe were laid across the Foilboard Floating panels, installed on top of the building's existing sub-floor. The zones – with individual pipe runs of up to 90 metres in length – were all connected back to the Axios manifold which is fed from the flow and return pipework, connected to the main boiler plant. Omnie based in Exeter, offers a choice of different underfloor heating systems suitable for installation within timber floors as well as over solid substrates and other situations.

Enq. 159



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Enq. 160

New retrofit underfloor heating system



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profile solution which lends itself to situations where minimal floor height adjustments are desired.

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Enq. 161

Impressive heat release and sleek design



Four years after launching the original FlatLine radiator, **Vasco** is now taking a step further in this success story with the introduction of the Vasco FlatLine Collection. Besides the well-known FlatLine (horizontal), this collection now includes the new vertical Flat-V-Line and the new Flat-Plinth-Line which is designed to fit horizontally beneath windows or other objects where space is limited. The FlatLine radiators have impressive heat release because the flat front plate is in direct contact with

the water channels in the radiator so the heat is released immediately, giving an excellent return. For more information on the Vasco FlatLine Collection, please visit the company's website.

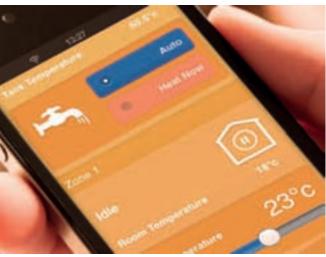
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Room to move

Strict Building Regulations relating to insulation can mean thick external walls that eat into the available living area. Kingspan Insulation's Adrian Pargeter explains how to comply without compromising on space

or many years, the major stumbling block for eager self-builders has been the challenge of finding a suitable plot. However, the introduction of the Self-build and Custom Housebuilding Act 2015 at the start of April should help to change things. The Act requires local authorities to keep a full register of interested self-builders within their catchment and to permission sufficient plots of land to meet that requirement.

Of course, once you have a plot, the key question is how to get the most from it? One of the primary reasons people choose to self-build is to gain a bit more space to stretch out and enjoy, but the home also has to meet the increasingly strict energy requirements in the Building Regulations and Standards. If you're planning on sticking with a conventional cavity walled construction, this could lead to a potential problem.

Walls closing in

The most recent changes to the regulations governing the energy performance of homes significantly raised the levels of insulation required for a building to reach compliance. As a result, the overall thickness of the external walls, and consequently the footprint of your building, could increase considerably. If you aren't able to increase the footprint size, or simply don't want to, then the only other alternative is to reduce the size of the internal space. This can lead to ugly compromises on the dimensions and layout of rooms, making them feel cramped and unwelcoming.

Beyond these considerations, there is an additional problem. Most contractors simply do not like traditional masonry cavity wall constructions to be much wider than 300 mm. Larger cavities have other knock-on effects, such as the need for longer wall ties and bigger foundations, all of which can add to the time and cost of construction.

Keeping it slim

A typical cavity wall construction would be a 100 mm medium density concrete block inner leaf with a 100 mm brick outer leaf. That leaves only a 100 mm void for the insulation and cavity. So what options are available to meet the regulatory requirements and keep within the preferred 100 mm void?

The first thing to look at is the thermal conductivity of the insulation to be used, otherwise known as lambda. The lower the lambda value, the more efficient the insulation is, so the thinner it can be to meet or exceed the required thermal performance, or U-value, for the construction.

For example, the table below shows the thicknesses required for commonly used insulation materials to achieve the same level of thermal performance (R-value).

Lambda W/m.K	Type of Insulation	Thickness
0.018	Advanced Phenolic	55 mm
0.020	Phenolic	60 mm
0.022	PIR	65 mm
0.038	Mineral Fibre	110 mm



Once you have your plot, the key question is how to get the most from it

There is a huge variation, and the solution to the issue of space is a simple one. Phenolic insulation cavity boards are already widely used throughout the UK construction industry; they are easy to handle, have a fibre-free core, are unaffected by air infiltration and offer excellent levels of thermal efficiency. Recent product innovations mean that the advanced phenolic cavity boards now have a lambda value of just 0.018 W/m.K. This latest development further reduces the insulation thickness needed to deliver a desired U-value for the entire cavity wall construction.

Much like existing phenolic cavity boards, these lower-lambda advanced phenolic cavity insulation boards are available with foil facings which are well-suited to partial fill applications. These facings are classed as low emissivity. Put simply, this means their shiny surface helps to reflect radiated heat back into a property. As a result, they can significantly increase the thermal resistance of the cavity and reduce the thickness of insulation required.

However, these facings still require a 50 mm clear cavity to be maintained, so a further development has been the addition of watertight polypropylene fleece facing. This helps to protect against moisture ingress, allowing the air gap to be reduced to just 10 mm. The gap between the board and the outer facing can be simply maintained with the use of a retaining clip which fastens to the wall ties and holds the insulation in place. A self-adhesive breather tape should be used to create a continuous water-tight facing.

The combination of lower-lambda phenolic insulation boards with this new facing can significantly reduce whole wall construction thicknesses. Take, for example, a traditional cavity walled construction, with a 102.5 mm brick outer leaf and a 100 mm medium density block inner leaf. A 90 mm thickness of lower-lambda phenolic insulation, together with a 10 mm air gap, is all that is needed to achieve a whole wall U-value of 0.18 W/m^2 .K. This construction could be applied to help meet the Building Regulation/Standard requirements right across the UK, even in Scotland where they are most stringent.

A well insulated approach

Any self-build is a project of passion and most owners are looking to create a property which will last them a lifetime. It's important to keep that in mind when it comes to decisions such as the insulation specification. While it can be tempting to scrimp on the thermal performance to reduce wall thicknesses, ultimately this decision could lead to much greater costs in the long run as a result of higher energy bills and may even lead to the property being deemed non-compliant.

Lower-lambda rigid phenolic insulation boards offer a straightforward solution. They allow homeowners to stick with the tried and tested masonry cavity wall construction approach while keeping the walls both slim and well insulated. This should help to keep you warm without burning a hole in your wallet.

Adrian Pargeter is head of technical and product development at Kingspan Insulation

Enq. 164



01634 296677 www.cellecta.co.uk technical@cellecta.co.uk



Enq. 165

INNOVATION IN INSULAT

Knauf plasters make light work of TV superhome



Fairways, the Isle of Wight superhome showcased in September's Grand Designs programme, features large areas of impeccable plastering made possible by spray-applied MP75 Readymix Plaster from **Knauf**. The effect, says designer Lincoln Miles, has been a resounding success. "It's a joy to see immaculate large surfaces of a contemporary house against the jaw dropping backdrop of the woodland and foreshore to the beautiful Solent". The spray-applied plaster was both an

aesthetic and pragmatic choice, as the project involved plastering 7,500ft² of concrete, blockwork and plasterboard to a tight schedule. For more information, please visit the Knauf website.

Enq. 166

Kingspan launch four more lower lambda products



The future path to energy efficient buildings will be revealed on 1st August when leading manufacturer, Kingspan Insulation, launches four advanced, low lambda insulation products for floors, walls and soffits. Kingspan Kooltherm K103 Floorboard K110 and K110 PLUS Soffit Board, and K118 Insulated Plasterboard feature an advanced, fibre-free insulation core, enabling them to achieve an outstanding thermal conductivity. As a result, the products

can facilitate buildings to be built to the upper levels of fabric performance with minimal thickness

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Enq. 168



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Enq. 170

Kingspan rises to the challenge



Products from Kingspan Insulation's Kooltherm and Therma ranges have helped to transform a derelict water tower in North Yorkshire into a striking family home, as featured on Channel 4's Restoration Man. Timber studwork was installed on the inner face of the brick external walls. 50mm thick Kingspan Kooltherm K12 Framing Board was then installed between the battens. The insulation boards offered a lightweight solution which could easily be cut to size. To insulate the

cavity walled construction of the extension the Nadrys installed 50mm Kingspan Kooltherm K8 Cavity Board.

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Enq. 167

Shaws launch Whitehall Butler sink



Shaws launch the new Classic Whitehall 600 Butler sink specifically manufactured for use with laminate worktops. The unique styled Whitehall is a deep, generous sink created for those wanting a fireclay farmhouse style sink which works perfectly with laminate worktops. This clever design gives a Classic Butler appearance from the front and protects the cut edges of the laminate from water by using a subtle lip on all exposed sides. The Classic Whitehall sink has stylish

slim side walls for a contemporary appearance, with no compromise to construction quality plus a hardwearing glaze designed for years of usage.

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Enq. 169

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LED by efficiency & style



Kitchens and bathrooms are increasingly being used for more than just their functionality. Dave Simpson of YESSS Electrical looks at how recent lighting developments can be harnessed to maximise a room's enjoyment

The 2016 Kitchen Trend Report, from interior design expert Houzz, highlighted that consumers are spending more time in their kitchen than ever before, and with bathrooms increasingly becoming a room to unwind in, there is a renewed interest in lighting and how it can be used to maximum effect.

Previously just functional spaces, the design of kitchens and bathrooms has vastly improved and both rooms are fast becoming statements of a homeowner's style. These rooms are also increasingly recognised by home style and DIY shows as a great way of adding value to a property's price. Despite this, the specification of lighting is often left until last, neglecting the fact that the right lighting can make an instant impact on the appearance of a room in the short term and help the owner save money in the long term.

It is therefore vital that manufacturers and retailers have a strong understanding of what customers are looking for in terms of lighting for their bathroom or kitchen space. Style and quality have always been of paramount importance, but energy saving properties have also improved, meaning LED lighting has grown in



prominence. LED technology has developed hugely over the past decade, and with LED products now representing nearly 50 per cent of new sales, this technology is fast becoming the first choice for consumers.

The long life span of LEDs means the technology is cost efficient and the latest developments ensure that LED chips are getting better and produce more lumens per watt. Coupled with its versatile aesthetic possibilities, this makes LED a key development for bathrooms and kitchens, due to the fact these rooms are always in use. From an end-user point of view, energy efficiency needs to translate into cash savings. Consumers should look out for retailers offering usage calculations. This allows them to choose the correct energy saving product that suits the solution which they require.

Due to the increase in awareness of new lighting technologies, consumers have become much more appreciative of the benefits of good quality lighting and this has encouraged manufacturers to produce more sophisticated products. At one time, bathroom lighting used to be practical and clunky and contemporary design was hard to find. Now, design features firmly in most massmarket products, which can include simply yet effective touches such as contemporary wall fixings with polished chrome accents.

LED is finding a wide range of applications across kitchen and bathroom lighting and is being used to great effect for task lighting, installed under cabinets to emit a bright beam of light to make food preparation easier and safer. LEDs are also being used to create mood-lighting to provide the right ambience for socialising. The kitchen lighting market has gone through some dramatic changes in the past few years and the technology offered has been forced to evolve in order to keep up with changing demand. While kitchen lighting used to be an afterthought in design, it is now rightly being recognised as an important factor in the design process. The recent preference for kitchen islands has brought about a number of changes in the kitchen lighting market. There has been a

> Style and quality have always been of paramount importance, but energy saving properties have also improved, meaning LED lighting has grown in prominence

shift away from simple utilitarian use of lighting towards its use as a key element of overall design aesthetic and to highlight key features or showcase a statement appliance.

As always, another factor driving change in the kitchen and bathroom lighting sectors is changing regulations, such as Part L of the Building Regulations (Conservation of fuel and power). These regulations are just some of many Government-led initiatives designed to help reduce the UK's energy usage and drive the country towards energy efficiency. What's crucial is that you no longer have to choose between style and efficiency; the majority of products now easily combine both.

Installers and contractors should use their knowledge and insight into these initiatives to ensure that customers are kept abreast of the latest changes to regulations and legislations. Combining that with an in-depth knowledge of what products are currently available or about to be launched means that customers are given the knowledge and tools to make a difference while also improving overall customer satisfaction. Products such as lighting controls and PIRs are just some of the latest energy saving innovations to capture the industry's attention.

Kitchen and bathroom technologies are developing faster than ever. As consumer confidence grows, more and more people are planning to upgrade their properties and are looking to make changes to their kitchen and bathroom designs. As such, they need to research the latest lighting products and how modern lighting technologies

can make a real difference, both in terms of design and energy usage.

Dave Simpson is lighting and lamps product manager at YESSS Electrical

Enq. 175

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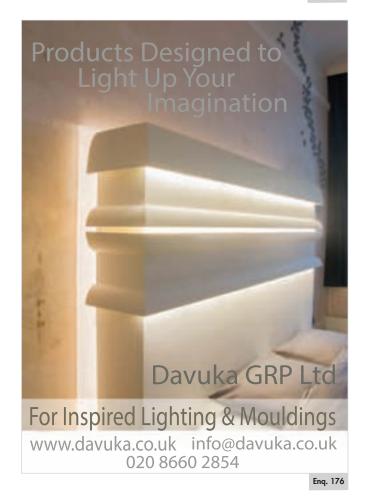
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Using adjustable pedestals with timber decking is ideal for areas around pools and spas by allowing water to drain away efficiently without compromising the decking in any way. The rot-proof plastic pedestals support a joist structure, which is then fixed to the decking boards. By suspending all the timber off the deck, water drains between the timber and runs away underneath. This reduces surface water radically and prevents slip hazards.

www.wallbarn.com

Enq. 178

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www.thedecktileco.co.uk Enq. 179



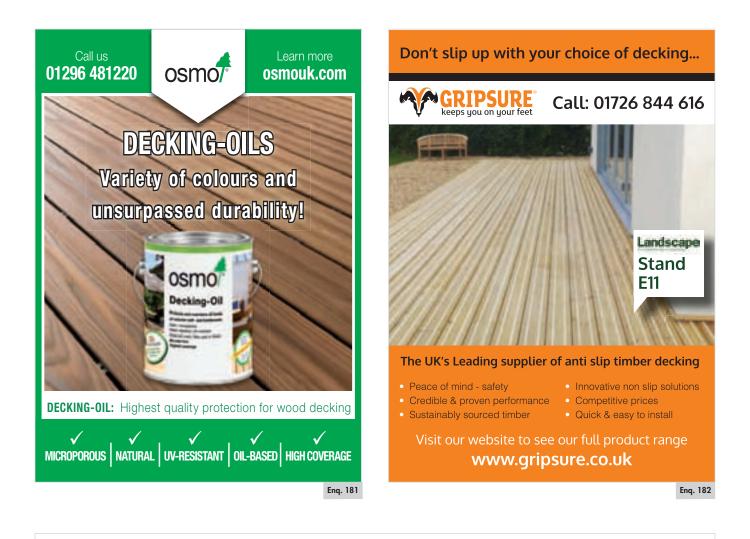


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www.ecoscapeuk.co.uk

SAIGE LONGLIFE DECKING SAiGE Longlife Decking are suppliers of Environmentally Sourced Composite Decking in a choice of colours in hollow or solid boards. With its anti-slip properties and resistance to mould and fungus this splinter free product is the ideal solution for decking around swimming pools and hot tubs alike. SAiGE Decking comes with a full 10 year warranty and expected lifespan of over 20 years, the boards are easy to install, easy to maintain and can be enjoyed for years to come.

www.compositedecking.co.uk Eng. 185



GRIPSURF

The award-winning Titanic Spa now includes an outdoor hot tub which benefits from innovative non slip decking. Gripsure Aquadeck™ was the perfect solution as the deck board allows water to drain through, and the non slip rubber crumb finish means the deck remains safe and is soft underfoot for barefoot use. Warrick Burton, Managing Director of Titanic Spa, said: "The decking is practical and compliments the design of the new outdoor area."

www.gripsure.co.uk





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www.osmouk.com

Enq. 191





Q-DECK 8 Q-Shades decking is pre-stained with translucent matt grey, brown or black colour-wash prior to Tanalith preservative treatment. The result is stylish shades whilst retaining the beauty of the wood. Homeowners benefit from an instant

impact of subtle colour that provides kerb appeal, adds value to their property and is easy to maintain. Pebble Grey provides a stylish alternative to plastic alternatives Autumn Brown provides a more colourfast alternative to tropical hardwood.

www.qualitydecking.co.uk

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Green Squares welcomes TimberTech Earthwood EasyClean, the very latest in domestic and commercial maintenance-free decking. Earthwood EasyClean's unique, impenetrable cap makes it the ideal solution for homeowners, landscapers, leisure businesses and garden designers seeking to maximise good looks and minimise maintenance. Earthwood Easyclean repels the ravages of the British weather and the rigours of a hectic domestic life

www.timbertechuk.co.uk Enq. 193



Safer decking from Osmo

Enq. 192



For those who want to extend their business outdoors this summer, Osmo UK, an eco-friendly wood and finishes expert, has developed a slip resistant finish for all wooden decking – Anti-Slip Decking Oil. A product that does what it says on the tin, a finish which provides a safe outside environment all year round. Anti-Slip Decking Oil is an oil based finish which increases the durability of the surface, protects it against mould, algae and fungal attack, and reduces the risk of slipping.

The clear, satin finish also offers a small amount of UV protection which will help protect against greying. Osmo's new Anti-Slip Decking Oil is designed to be applied over wood oils or Osmo's Natural Oil Woodstain.

Eng. 195

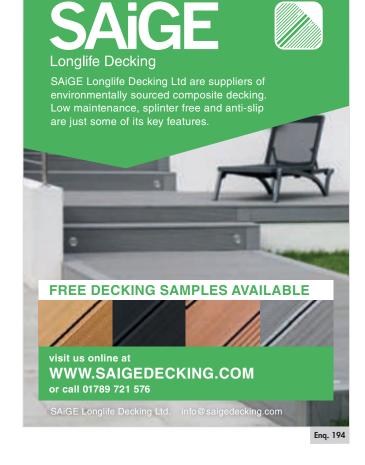
Copper rainwater system changes with the times



Lynnic Associates, a construction company specialising in high quality one off house builds, recently embarked on a development of seven units in Chesterfield, one of which being a new build project. The Dutch Barn was built on the site of an original barn which had burned down. Yeoman Rainguard's copper 125 x 70mm half round gutter and 80mm dia. downpipe were installed by Lynnic Associates to the Dutch Barn where joints were soldered rather than

using a sealant to ensure a longer lasting seal. Copper proves to be long lasting, sustainable and ecologically sound.

0133 279 5854 www.rainguard.co.uk



Canterbury handmade clay tiles the perfect match



A complex and sensitive re-roofing project in Surrey is amongst the first to use the Canterbury handmade clay tile range from Marley Eternit, which was re-introduced to the market to help architects and contractors achieve a genuine handmade finish when creating traditional clay roofs. Antiquecoloured Loxleigh Canterbury clay tiles were specified for the large 270m² roof, which was a complex design due to the interaction of multiple slopes, swept valleys and hips. Marley Eternit's

range of Canterbury tiles are handmade by skilled craftsmen generally accepted to be the finest clay for strength and durability.

01283 722588 www.marleyeternit.co.uk

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FAKRO roof windows for 'Building the Dream'



Allan Corfield Architects' SIPS ecohouse sought to create a traditional looking brick building with a contemporary twist. The project, featured on More 4's 'Building the Dream', has FAKRO's FTU-V US triple-glazed, white PU-coated roof windows. Two buildings are attached via a glazed atrium with a solid roof and roof windows. Project architect Iga Panczyna explained, "The client agreed that this Allon Confield Architects
Allon Confield Architects
provides an interesting light experi-ence, maximising views from the walkway. Fakro was chosen because airtightness was a critical factor, the

windows had to be vent-free and their U-values were the best available"

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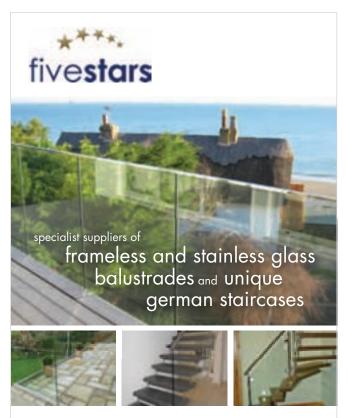
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Controlled spirals

Antonia Harding of British Spirals & Castings dispels the myth that spiral staircases are dangerous and explains how they can be used effectively and safely in your project

which their architectural beauty and space-saving benefits, spiral staircases can be the perfect feature in any style of home. However, it's these qualities that can lead some to worry about the potential safety issues of such a compact yet open design. Does the fact they take up less floor space make them steep and difficult to navigate? Does their openness, although visually striking, increase the likelihood of serious falls and injuries?

These concerns are understandable, but with careful planning that takes into consideration your individual household needs, it is possible to create a staircase that is as safe and functional as conventional straight stairs, without having to compromise on style.

Designing for your needs

As cumbersome as Building Regulations sometimes seem, BS 5395 Part 2 offers clear guidance on how to construct a safe staircase. By choosing a carefully designed bespoke spiral staircase and using a reputable firm with the right knowledge, you can ensure that not only does your staircase comply with all the necessary safety regulations, but also that every element blends seamlessly into your home and lifestyle.

Shape: It is vital to get the geometry of a spiral staircase right. Building Regulations state that a spiral staircase that services one habitable room should have at least 600 mm clear width, from the inside of the pole to the inside of the handrail, with a maximum rise (step height) of 220 mm. These measurements increase to 800 mm wide, or 900 mm in Scotland, if serving two habitable rooms. Evenly spaced treads at a consistent width will create a gentle and steady curve. This will give the

spiral its strikingly organic aesthetic and reduce the steepness, making it easier to navigate even when carrying awkward objects.

Indeed, the shape of the spiral can be considered a safety plus in itself as if you lose your footing, you would only fall one or two treads before meeting the balustrade or the spiral handrails.

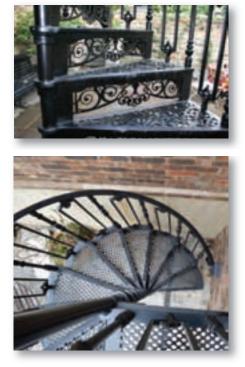
Materials: One of the first decisions to make when designing your spiral staircase is what it will be made of. There are a variety of materials and finishes to choose from, from powder coated metal to solid timber, or a combination of these options. In addition to allowing you to tailor the staircase to the look and feel you want to achieve, they can offer differing levels of grip. For example, a diamond or grated patterned cast metal tread can help to reduce the risk of slipping; particularly useful when used outside under the British weather.

There are also additional products you can consider to further reduce the risk of slipping. For example, if you prefer the exposed look or your staircase will be outside, transparent anti-slip tread tape adds traction without detracting from the natural quality and beauty of the material.

Risers: A key regulation to keep in mind when choosing the different decorative and structural elements of a spiral staircase is the '100 mm sphere rule.' This states that there must be no gaps greater than 99 mm anywhere on the staircase to stop the risk of limbs becoming stuck, or young children or pets falling through the gap.

This is particularly important to think about when choosing the style of riser. While it is, of course, possible to build a spiral staircase with closed risers as you would see on a standard staircase, for some the beauty of a spiral design is in its light and 'floating' appearance. A riser bar – a thin steel bar or a piece of timber planted to the front tread – reduces the gap between each rise/tread to less than 100 mm without compromising on the open look of the staircase. If you have chosen an ornate metal spiral design, you could complement this by using decorative fascias instead of the traditional plain fascias.

Balustrades: Balustrades are another element that are subject to the 100 mm sphere rule. In households with small children – who not only have a tendency to see anything with bars as a large climbing frame, but also use them to hold onto and lean against when using the stairs – it is especially vital to safeguard them from falling



through the space in between each balustrade. To comply, you will need two or three balustrades per tread. There is a huge amount of choice in balustrade styles and combinations, making it easy to achieve the feel you want for your staircase.

In some cases, having three balusters per tread could make the staircase feel too heavy. Instead, infill panels can be used to replace two of the three balusters on the tread. They are a wider type of baluster that come in a variety of styles to suit the look you are trying to achieve. Another increasingly popular alternative to balustrades is to use glass infill panels. While these do not offer the same places to grab as balustrades, they are a great way to close off the sides of a spiral staircase without stopping the light from getting through.

Handrail: The handrail is the most obvious safety feature on a staircase. Regulation states that the handrail height on a spiral staircase should start 900 mm above the stair tread. This is to ensure that it is at an easily accessible height along the entire length of the staircase. The handrail itself should be sturdy and allow for whole hand grip, to offer more protection from falling and to enhance the tactile experience of using the staircase.

The handrail on any landing balustrade that is needed also needs to be at least 900 mm high in a residential application.

Landing plates: Landing plates should be used on the upper floor to create a safe and smooth exit and entrance to the staircase by



keeping the staircase and floor at a constant level. A landing plate of some kind is required to connect the centre pole of the staircase to the finished floor level. These tend to be in the same design as the staircase but can be built in by others as a continuation of the floor if preferred. If your staircase is particularly high, they also can be incorporated as a rest stop part way up the staircase, which will be useful for elderly people or children.

If you have your heart set on a spiral design but still feel uneasy, don't be afraid to ask



manufacturers if you can go and try out some of their designs to see the quality of the materials and construction for yourself. While being safe on the stairs eventually comes down to common sense (we are all guilty of sometimes piling the bottom stairs with stuff we need to remember), having a design that's safe for you and your family, and right for your home, can make all the difference.

Antonia Harding is director at British Spirals & Castings Enq. 201



Pedestals and Megapads



Wallbarn pedestals, including the Megapads range, are the best way to construct high quality finishes on balconies and terraces and walkways. Heavy duty adjustable pedestals are available to support both flags and timber decking. The concrete deck will be built-to-falls and constructed lower than the door threshold. By using pedestals, installers can lift the slabs or decking up to the level of the doorway without compromising the structure. With decking, all timber is lifted off the deck so surface water can run between and beneath the boards and slip hazards are reduced. None of the timber is subject to standing water, improving its lifespan. These pedestals are free standing, so no mechanical fixings penetrate the deck. Concrete flags and natural stone paving can be laid onto the adjustable pedestals in creative patterns and are properly supported.

The plastic pedestals are rot-proof and moisture will not migrate through them. Their large base plates spread the weight evenly, avoiding point loading on the sub-deck. Installation is super-fast and straightforward. Multiple cuts and fixings are reduced and if the deck beneath ever needs to be inspected, the surface can be lifted easily without disruption.

0208 916 2222 www.wallbarn.com

Enq. 203

Timbmet makes an entrance



Timbmet's solid walnut timber has been used to create a dramatic staircase for a multi-million pound new-build private home in Radlett, Hertfordshire. Aranee Lodge is a 6400 square foot, six-bedroom family residence, complete with formal reception rooms and a cinema room, as well as a master bedroom suite featuring a vaulted ceiling. Such a prestigious home deserves a suitably impressive entrance hall, and that is exactly the design-led solution which Timbmet and its customer, bespoke furniture maker M L Elliott, have achieved. The walnut entrance hall has been created using a stylish contemporary design and a mix of Timbmet's solid walnut timber in combination with veneered MDF, moisture-resistant flexiply and flexible veneers in walnut. The result is a sleek, streamlined, welcoming entrance area bathed in light from the glass atrium above the central curved staircase. Melbourne had no hesitation in choosing a Timbmet's position as a one-stop-shop for timber and related products, as well as the in-depth knowledge and expertise of its team.

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Enq. 204

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3a Spencer Park, Wandsworth, London by MG Architects

Fired up about brick's creative potential

That most traditional British method of masonry house construction, good old-fashioned brick, remains popular with self-builders. As the Brick Development Association's Andrew Eagles says, that's down to the material's creative flexibility as well as its aesthetics and durability

A ccording to the Traditional Housing Bureau, brick and block construction remains the most popular method for selfbuilders in the UK, with around 70 per cent of people building their own homes choosing masonry methods.

Brick in particular is a popular choice for specification of the building facade in many self-build projects. Its longevity is one valuable attribute compared with other facade materials - such as render - which often fail to maintain such a high level of performance over long periods of time, tending to be more adversely affected by the British climate. Many facing bricks (those that are designed for the facade of a building) are specifically designed to resist the damaging effects of frost and rain in exposed areas. The brick treatment used also has the benefit of giving them excellent thermal performance. But for most owners, the appeal of brick stems from its aesthetically pleasing qualities and its surprising ability to be manipulated for an almost infinite number of designs.

An unlimited range of shapes such as arches, curves, angles, plinths and decorative columns can be achieved using brick, adding value and injecting personality into a property

Creative potential

Indeed, many self-builders are attracted by the potential for creativity that brick provides. They can embrace these possibilities in a host of ways, depending on their budget – even incorporating decorative motifs and innovative brick patterns. While the familiar stretcher bond is the most commonly seen in house construction, due to its cost-efficiency and easiness for laying, other more complex and attractive bonds including Flemish, English and English Garden Wall are possible; these are often found on historic buildings.

Additionally, building designs from the past can inspire patterns for contemporary self-builds, such as herringbone or diaper (which comprises repeating diamonds). An unlimited range of shapes such as arches, curves, angles, plinths and decorative columns can also be achieved using brick, adding value and injecting personality into a property. Before deciding on a specific brick type, it is always important to take inspiration from the local architecture of the area

Which brick to choose?

There are two predominant types of facing brick; the volume-manufactured and the more traditional handmade variety. When choosing their facing bricks, self-builders are often drawn to the distinctive aesthetics of handmade bricks with their unique character. Being individually made, no two handmade bricks are the same, with each having variable tones, texture and creases or 'smiles,' which can make a home look truly stunning.

However, if you are working to a tight budget, there may be economic advantages to specifying mass produced manufactured bricks, which tend to be wire cut. These are now available in a wide choice of consistently produced colours and textures, with the precision of modern automated processes making them more regular and uniform in appearance.

Despite this, several manufacturers also produce not only genuine handmade bricks in the 3A Spencer Park is a new build house in Wandsworth. Situated in a conservation area the building replaced a modest 1960s house with a large four bedroom property with generous living spaces and a double height basement dining room. The building has achieved a code for sustainable homes level 3 with green technologies like ground source heat pump providing the buildings heating requirements.



age-old fashion, but have also developed highly sophisticated weathering techniques, which have enabled them to replicate some of the characteristics of handmade bricks across their wire cut ranges.

Local vernacular

Before deciding on a specific brick type, it is always important to take inspiration from the local architecture of the area. Planning committees often insist on using a closely matched reclaimed brick or an alternative which has been matched to the surrounding architecture. In the past, most towns would have their own brickworks, naturally tending to serve a small geographical radius due to the difficulty of transporting heavy bricks. As a result brick colour, style and formation would vary across different areas, giving each area a distinctive look, because locally dug clay tends to vary depending on the local geological climate.

These differences in local brick colouration can still be observed today by those with keen eyes. Houses tend to have bold red bricks in the north, whereas blue-toned bricks are the norm in the Midlands, orange hues are common to Lincolnshire, and yellow and cream-tinted bricks are prevalent in Cambridge and London.

Project considerations

Whatever your preference, all bricks should meet British Standards, including F2 – the maximum level of frost resistance – as this will enable your brickwork to maintain maximum quality against harsh weather conditions.

It can also be easy to make a mistake and underestimate the number of bricks you need for the build. When deciding quantities, the project manager must bear in mind potential brick wastage (up to five per cent), in addition to outbuildings and garden walls which are easy to forget when making calculations. Lead times must also be taken into account; these can vary by brick type and manufacturer, as special shapes and bespoke versions often take longer to supply than traditional or common brick.

Building a new home is inevitably about balancing cost with quality and aspiration with practicality. It's easy to compromise on things you can change later, such as the design of the kitchen or the layout of the garden, but bear in mind one key thing – the brickwork you choose will remain for the whole life of the building, so choose carefully!

Andrew Eagles is CEO of the Brick Development Association

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The benefits of brick for individual house construction:

- It has an attractive appearance that offers a wide range of colour, texture and pattern
- Brickwork masonry is versatile and its architectural character can reflect historical, traditional and modern design aesthetics
- Brickwork ages well and in many cases its appearance improves with age
- Brickwork has an exceedingly long service life. There are many good historical examples spanning several centuries. Bricks are often reclaimed for reuse because they are still valued as good looking and durable
- Maintenance costs are minimal; brickwork does not require routine cleaning or surface treatment. After considerable service – 60 years or more – some mortar joints may deteriorate due to harsh weather and require repointing, but it's not inevitable
- Compared with alternative materials providing external walls, the cost of brick is modest as is the cost of bricklaying
- Brickwork masonry is a well developed construction system that is well understood and capable of providing attractive and economical buildings

Create a modern home with traditional materials



Oak frames are perfect for anyone wanting to build a house with an instant wow factor and, as an increasing number of self builders are proving, they are flexible enough to create both modern and traditional-style properties. Increasingly, oak frames are used in conjunction with other materials such as SIPs brick & block and glass to help create a modern look and feel. At Welsh Oak Frame each oak frame is created by hand and with care by highly-skilled craftsmen. The company

combines traditional joinery skills with state-of-the-art technology to build beautiful bespoke designs to suit both modern and traditional tastes. For more information, visit the website.

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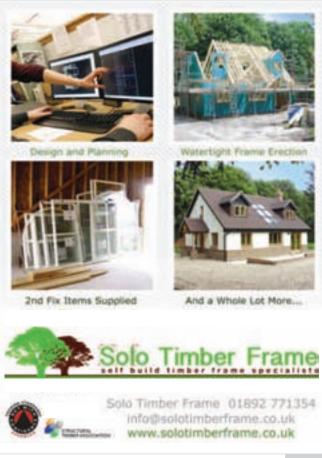
Bringing the outside in

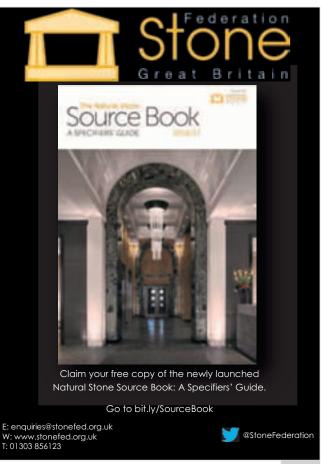


Building an oak framed Arboreta garden room creates a vast light-filled living space that will help make the most of your garden and help it become an extension of your home. As well as creating the perfect spot for you to entertain friends or to enjoy as a peaceful sanctuary, building a garden room can improve the overall atmosphere of your home, giving it a lighter, more airy feel. Arboreta is an oak frame design and manufacturing company specialising in garden rooms, orangeries, conservatories and annexes with over 20 years'

experience in the building industry, and offers a complimentary design consultation service in order to create bespoke oak framed structures.

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Web Directory

ADVICE & INFORMATION

NSBRC (National Self Build & Renovation Centre) 0845 2234455 www.nsbrc.co.uk

AIR CONDITIONING & VENTILATION

EnviroVent 01423 810810 www.envirovent.com

ARCHITECTURAL IRONMONGERY

Ironmongery Direct 0808 1682288 www.ironmongerydirect.com

BASEMENTS

Abtech Basement Systems 0870 801 0800 www.abtechbasements.co.uk

BATHROOMS & SHOWERS

Better Bathrooms 0844 4847678 www.betterbathrooms.com

Matki 01454 322888 www.matki.co.uk

Hansgrohe 01372 465 655 www.hansgrohe.co.uk

Victoriaplum.com 0844 8044848 www.victoriaplum.com

BUILDING PRODUCTS

Hultafors 01484 85 44 88 www.hultafors.co.uk



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BI FOLDING & SLIDING DOORS

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Express Bi-Folding Doors 0800 121 4809 www.expressbifoldingdoors.co.uk

Folding Sliding Door Company 0845 6446630 www.foldingslidingdoors.com

Sunfold Systems 01953 423423 www.sunfold.com

Web Directory

DOORS, WINDOWS & CONSERVATORIES

Made for Trade 0844 335 1226 www.madefortrade.co

Kloeber UK 01487 740044 www.kloeber.co.uk

Velfac 01223 897100 www.velfac.co.uk

Swish Window and Door Systems 0808 178 3040 www.swishwindows.co.uk

Apropos 0800 328 0033 www.apropos-conservatories.com

Jeld-Wen 0845 1222890 www.jeld-wen.co.uk

Internorm Windows UK 02082 059991 www.internorm.co.uk

FASCIAS & SOFFITS

FasciaExpert.co.uk 01254 918005 www.fasciaexpert.co.uk

FINANCE & INSURANCE

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FIRES & FIREPLACES

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Opies 01245 468977 www.john-opie.co.uk

SpecFlue 0800 902 0220 www.specflue.com

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Floors Of Stone 01509 234000 www.floorsofstone.com

FURNITURE

Vitra 01235 750990 www.vitra.com

Herman Miller 0845 2267202 www.hermanmiller.co.uk

GARAGE DOORS

Hormann (UK) 01530 513000 www.hormann.co.uk

Discount Garage Doors 01691 670394 www.discount-garage-doors.co.uk

GLASS & GLAZING

Saint-Gobain Glass UK 01977 666100 uk.saint-gobain-glass.com

GREEN ROOFS

Optigreen Ltd 0203 5899 400 www.green-roof-online.co.uk

HEATING & PLUMBING

Uponor 01455 550355 www.uponor.co.uk

21st Century Radiator Company 01767 627500 www.21stcenturyradiators.com

Discounted Heating 0844567 8884 www.discountedheating.co.uk

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Spirit Heat Pumps 0845 4753953 www.spiritsolar.co.uk

ICE Energy 08081 452340 www.iceenergy.co.uk

INSULATION

Superfoil Insulation 01636 639 900 www.superfoil.co.uk

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GED Chute Solutions 01613 001374 www.laundrychutes.co.uk

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Econoloft 0800 269765 www.econoloft.co.uk

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Domestic Mastics - Servicing London and surrounding areas 0208 7126142 www.domesticmastic.net

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Baufritz (UK) 01223 235632 www.baufritz.co.uk

Kingspan Potton 01767 676400 www.potton.co.uk

Scandia-Hus 01342 838060 www.scandia-hus.co.uk

Davinci Haus GmbH & Co. KG 02081 3339204 www.davinci-haus.com

Hanse Haus 0845 6589780 www.hanse-haus.co.uk

Flight Homes 01787 222336 www.flighthomes.co.uk

PLANT, TOOLS & EQUIPMENT

Brandon Hire 0870 5143391 www.brandontoolhire.co.uk

Machine Mart 0844 8801250 www.machinemart.co.uk

J T Pumps

PUMPING STATIONS

0844 414 5800 www.jtpumps.co.uk

ROOFING & CLADDING

Tata Steel (Corus) 01904 454600 www.tatasteeleurope.com

Greys Artstone 01484 666400 www.greysartstone.co.uk

Hoppings Softwood Products 01992 578877 www.timber-cladding.co.uk

ROOFLIGHTS

Vision Rooflights 01162 791900 www.visionrooflights.co.uk

SOFTWARE

Eleco 02074 228000 www.eleco.com

House Builder XL 0845 1234065 www.hbxl.co.uk

STAIRS & STAIRCASES

Meer End Staircases & Joinery 01676 534226 www.meer-end.co.uk

STONEWORK & MASONRY

Mandarin Stone 01600 715444 www.mandarinstone.com

STRUCTURAL INSULATED PANELS (SIPS)

SIPS Eco panels 01787 378567 www.sipsecopanels.co.uk

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TIMBER & JOINERY

Oakwrights 01432 353353 www.oakwrights.co.uk

Carpenter Oak & Woodland 01225 743089 www.carpenteroakandwoodland.com

Silva Timber Products 01514 953111 www.silvatimber.co.uk

Osmo UK 01296 481220 www.osmouk.com

Neatwood Homes 01981 240860 www.neatwoodhomes.co.uk

Carpenter Oak 01803 732900 www.carpenteroak.com

Maple Timber Frame 01995 679444 www.mapletimberframe.com

Taylor Lane 01432 271912 www.taylor-lane.co.uk

UNDERFLOOR HEATING

Nu-Heat 0800 7311976 www.nuheat.com

Schluter Systems 01530 813396 www.schluter.co.uk

Wunda Group 0800 0832677 www.wundafloorheating.co.uk

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